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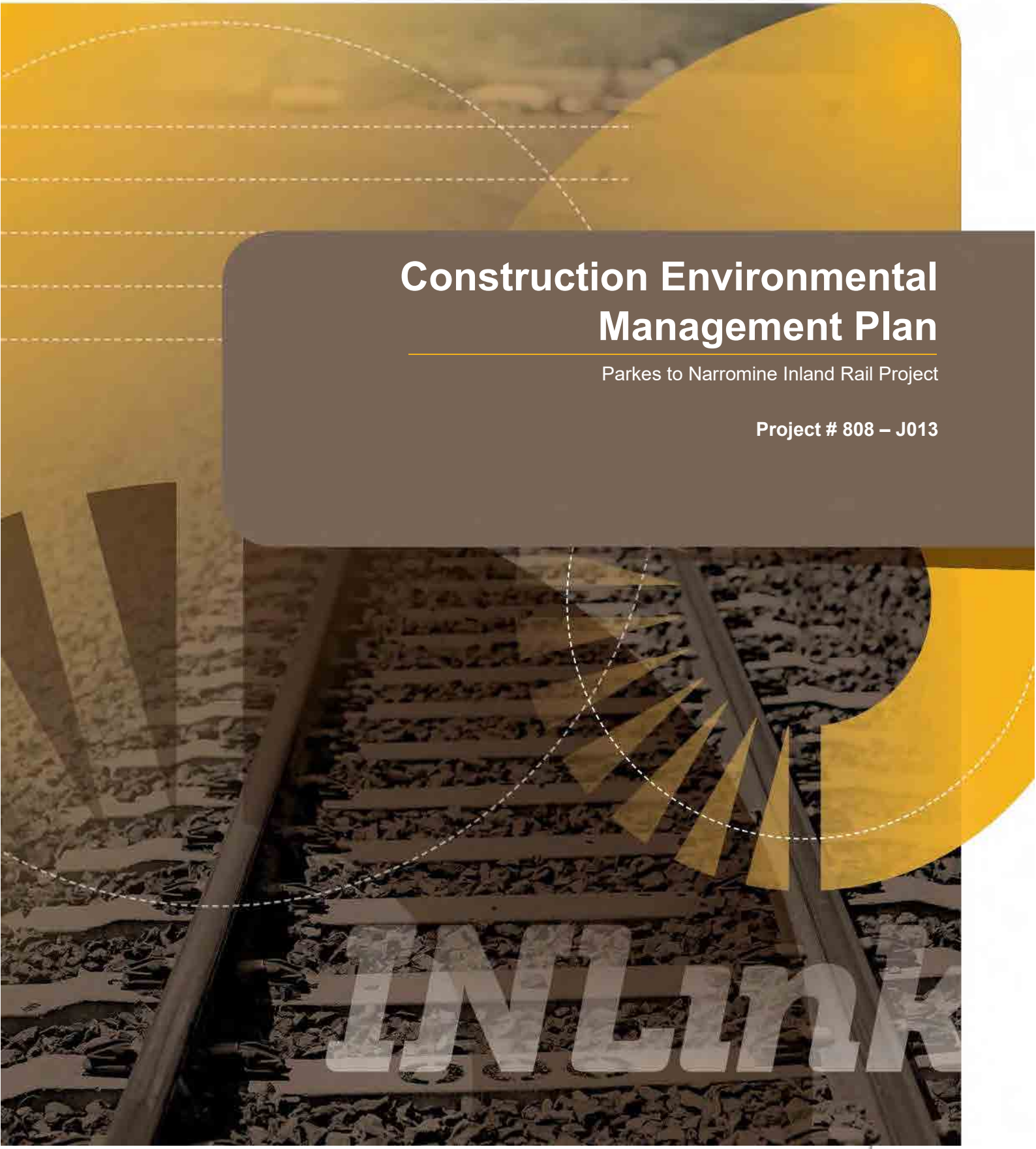
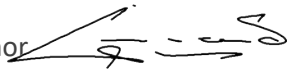
Construction Environmental Management Plan

Parkes to Narromine Inland Rail Project

Project # 808 – J013



Job No.:	808 - J013
Principal:	Australian Rail Track Corporation, (ARTC)
Authorised by:	Gerard O'Connor  Date: 28/06/2020
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Document Version Control

Version No.	Effective Date	Details of Document History / Change Trigger	Approved By
0	24/01/2019	Approved Base Document	GO
1	25/09/2019	Six Month Review	GO
2	13/12/2019	Incorporating ARTC Comments	GO
3	16/01/2020	Additional comments incorporated	GO
4	28/01/2020	Incorporating ER Comments	GO
5	28/06/2020	Six Month Review – no amendments required	GO

Compliance Matrices

Conditions of Approval

CoA	Requirement	Where addressed	How addressed
C1	A Construction Environmental Management Plan (CEMP) must be prepared in accordance with the Department's Guideline for the Preparation of Environmental Management Plans (DIPNR, 2004) to detail how the performance outcomes, commitments and mitigation measures specified in the documents listed in the EIS and Submissions Report will be implemented and achieved during all stages of construction.	This plan – Compliance Matrices	This CEMP has been prepared in accordance with DIPNR (2004) to identify the performance outcomes, commitments and mitigation measures specified in the documents listed in the Environmental Impact Statement (EIS) and Submissions Report (RtS), as outlined in the compliance matrices at the front of this CEMP.
C2	The CEMP must provide:	–	–
a)	a description of activities to be undertaken during construction (including the indicative scheduling of construction, and details on the layout and activities to be undertaken at each major construction ancillary facility);	Section 1.5.1	The description of activities to be undertaken during construction is outlined in Table 1-2 in Section 1.5.1.
b)	details of environmental policies, guidelines and principles to be followed in the construction of the CSSI;	Section 1.4 Section 2	Section 1.4 outlines the environmental policy which the INLink Project Team is committed to for continual improvement in environmental performance and compliance with applicable legal requirements. Section 2 describes the legislative requirements for the Project.
c)	a schedule for compliance auditing;	Section 7.3 Attachment G	As outlined in Section 7.3, compliance auditing of the EMP and Approval Conditions (internal) will be undertaken monthly. Compliance auditing of the AS/NZS ISO 14001 (external) will be undertaken annually. Refer to the Project Environment Audit Schedule in Attachment G.
d)	a program for ongoing analysis of the key environmental risks arising from the activities described in subsection (a) of this condition, including an initial risk assessment undertaken before the commencement of construction of the CSSI;	Section 3	Section 3 outlines the environmental risk assessment and on-going risk assessment for the construction activities of the Project.

CoA	Requirement	Where addressed	How addressed
e)	details of how the activities described in subsection (a) of this condition will be carried out to:	–	–
	i) Meet the performance outcomes stated in the EIS and Submission Report; and	Section 1.7	Section 1.7 describes the environmental performance targets and how they will be implemented throughout the CEMP and Sub-Plans through the mitigation measures presented in each the plans.
	ii) Manage the risks identified in the risk analysis undertaken in subsection (d) of this condition;	Section 3 CEMP Sub-plans	Section 3 identifies the risks associated with the Project. The mitigation measures to manage the associated risks are provided in the CEMP Sub-plans.
f)	an inspection program detailing the activities to be inspected and frequency of inspections;	Section 7.1 Section 7.2	Table 7-1 lists the type of inspection, frequency and form for the Project environmental inspection requirements.
g)	a protocol for managing and reporting any:	–	–
	i) incidents; and	Section 6.1	Section 6.1 outlines the protocol for environmental incidents.
	ii) non-compliances with this approval and with statutory requirements;	Section 6.2	In the event of any non-compliance, the non-compliance will be managed by the Environmental Manager and if required corrective action/s will be raised, as outlined in Section 6.2.
h)	procedures for rectifying any non-compliance with this approval identified during compliance auditing, incident management or at any time during construction;	Section 6.2	Section 6.2 states the procedure for non-compliances.
i)	a list of all the CEMP Sub-plans required in respect of construction, as set out in Condition C4. Where staged construction of the CSSI is proposed, the CEMP must also identify which CEMP Sub-plan applies to each of the proposed stages of construction;	Section 4	The CEMP Sub-plans are listed in Section 4.
j)	a description of the roles and environmental responsibilities for relevant employees and their relationship with the ER;	Section 5	The roles and responsibilities for the site personnel is outlined in Section 5.

CoA	Requirement	Where addressed	How addressed
k)	for training and induction for employees, including contractors and Subcontractors, in relation to environmental and compliance obligations under the terms of this approval; and	Section 9	Training and awareness for the site personnel is outlined in Section 9.
l)	for periodic review and update of the CEMP and all associated plans and programs.	Section 11	The CEMP and Sub-plans, its operation and implementation, and any elements of the overarching EMS will be periodically reviewed during Project delivery, as outlined in Section 11.
C3	The CEMP must be endorsed by the ER and then submitted to the Secretary for approval no later than one (1) month before the commencement of construction or where construction is staged, no later than one (1) month before the commencement of that stage.	Section 1.2	This CEMP will be approved by DPIE in accordance with this condition before the commencement of construction activities, as outlined in Section 1.2. This CEMP has been endorsed by the ER. Refer to Attachment H for the ER's endorsement letter.
C4	The following CEMP Sub-plans must be prepared in consultation with the relevant government agencies and relevant councils identified for each CEMP Sub-plan and be consistent with the CEMP referred to in the EIS.	–	–
a)	Traffic, transport and access - RMS and relevant councils (as appropriate)	TTAMP	The TTAMP outlines the management of traffic, transport and access associated with the Project, and includes consultation with RMS, Parkes Shire Council and Narromine Shire Council.
b)	Noise and Vibration - EPA and relevant councils	NVMP	The NVMP outlines the management of noise and vibration associated with the Project, and includes consultation with EPA, Parkes Shire Council and Narromine Shire Council.
c)	Flora and Fauna - OEH and relevant councils	FFMP	The FFMP outlines the management of flora and fauna associated with the Project, and includes consultation with OEH, Parkes Shire Council and Narromine Shire Council.

CoA	Requirement	Where addressed	How addressed
d)	Air quality - Relevant councils	AQMP	The AQMP outlines the management of flora and fauna associated with the Project, and includes consultation with Parkes Shire Council and Narromine Shire Council.
e)	Soil and water - relevant councils and Crown Lands & Water	SWMP	The SWMP outlines the management of soil and water associated with the Project, and includes consultation with Parkes Shire Council, Narromine Shire Council and Crown Lands & Water.
f)	Heritage - OEH	HMP	The HMP outlines the management of heritage associated with the Project, and includes consultation with OEH.
g)	Flood Emergency Management Plan - SES	FEMP	The FEMP outlines the management of flooding associated with the Project, and includes consultation with the SES.
h)	Hazardous and Contaminated Materials - EPA (as appropriate)	HCMMP	The HCMMP outlines the management of hazardous and contaminated materials, and includes consultation with EPA, where appropriate.
C12	Construction must not commence until the CEMP and all CEMP Sub-plans have been approved by the Secretary. The CEMP and CEMP Sub-plans, as approved by the Secretary, including any minor amendments approved by the ER, must be implemented for the duration of construction. Where the CSSI is being staged, construction of that stage is not to commence until the relevant CEMP and sub-plans have been endorsed by the ER and approved by the Secretary.	Section 1.2	As outlined in Section 1.2, construction will not commence until this CEMP has been approved by DPIE. This CEMP, as approved by DPIE, including any minor amendments approved by the ER, will be implemented for the duration of construction.
C19	Where a relevant CEMP Sub-plan exists, the relevant Construction Monitoring Program may be incorporated into that CEMP Sub-plan.	NVMP SWMP AQMP	Respective Construction Monitoring Programs are included in the AQMP, SWMP and the NVMP.

CoA	Requirement	Where addressed	How addressed
A28	Construction Compliance Reports must be prepared and submitted to the Secretary for information every six (6) months from the date of the commencement of construction, for the duration of construction. The Construction Compliance Reports must include: … (d) details of any review of, and minor amendments made to, the CEMP required by Condition C1 as a result of construction carried out during the reporting period.	Section 7.4	Requirements for the preparation and submission of Construction Compliance Reports has been included in the reporting requirements in Section 7.4.
A29	The Department must be notified in writing to compliance@planning.nsw.gov.au within seven (7) days after the Proponent becomes aware of any non-compliance. The notification must identify the project and the application number for it, set out the condition of consent that the project is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.	Section 6.2	Section 6.2 outlines the notification process for non-compliances.
A36	The Department must be advised in writing to compliance@planning.nsw.gov.au immediately after the Proponent becomes aware of an incident and in any event within 24 hours of the Proponent becoming aware of any incident. The notification must identify the CSSI, including the application number and the name of the CSSI.	Section 6.1	Section 6.1 outlines the notification process for incidents.
A37	Notification of an incident Condition A36 of this approval, must include the time and date of the incident and details on the incident.	Section 6.1	Section 6.1 outlines the notification process for incidents.
A38	All written requirements of the Secretary which may be given at any point in time, to address the cause or impact of an incident reported under with Condition A36 must be complied with within any timeframe specified by the Secretary.	Section 6.1	Section 6.1 outlines the notification process for incidents.

CoA	Requirement	Where addressed	How addressed
A39	If statutory notification is given to the EPA as required under the POEO Act, such notification must also be provided to Secretary within 24 hours after the notification was given to the EPA.	Section 6.1	Section 6.1 outlines the notification process for incidents.

RtS Mitigation Measures

REMM	Requirement	Where addressed
8.1.1 a)	ARTC's environmental policy, objectives, and performance targets for construction	Section 1
b)	Reference to all relevant statutory and other obligations, including consents, licenses, approvals, and voluntary agreements required	Section 2
c)	Management policies, procedures, and review processes to assess the implementation of environmental management practices and the environmental performance of the proposal against the objective and targets	Section 1.3 Section 1.4 Section 1.6 Section 1.7
d)	Requirements and guidelines for management in accordance with: i) the conditions of approval for the proposal ii) the mitigation measures specified in the EIS iii) relevant construction management guidelines (including those listed in Appendix K)	Section 2 CEMP Sub-plans
e)	Requirements in relation to incorporating environmental protection measures and instructions in all relevant standard operating procedures and emergency response procedures	Section 2.2 Section 10
f)	Roles and responsibilities of all personnel and contractors to be employed on site	Section 5
g)	Incident and contingency management procedures	Section 6
h)	Procedures for complaints handling and ongoing communication with the community	Section 8
i)	A monitoring and auditing program, as defined by the EIS and the conditions of the approval	Section 7 CEMP Sub-plans
D1.1	A CEMP would be prepared to detail the approach to environmental management during construction, as described in section 8.1 of the Response to Submissions Report and in accordance with the conditions of approval.	This plan

REMM	Requirement	Where addressed
D3.6	Pre-clearing surveys and inspections would be undertaken prior to construction. The surveys and inspections, and any subsequent relocation of species, would be undertaken and in accordance with the biodiversity management sub-plan in the CEMP.	FFMP
D7.2	A surface water monitoring framework would be developed as part of the soil and water management sub-plan in the CEMP. It would identify monitoring locations at discharge points, and selected locations in watercourses where works are being undertaken. The monitoring framework would include the relevant water quality objectives, parameters, and criteria from Technical Report 7, and specific monitoring locations which have been identified based on the hydrological attributes of the receiving watercourse, in consultation with DPI (Water) and the EPA.	SWMP
D8.6	An unexpected finds procedure would be developed and included in the CEMP to provide a consistent method for managing any unexpected Aboriginal and non-Aboriginal heritage items discovered during construction, including potential heritage items or objects, and human skeletal remains.	HMP
D10.7	The biodiversity management plan included in the CEMP would detail measures to minimise the potential for biosecurity risks during construction.	FFMP
D11.1	Key stakeholders (including local councils, emergency service providers, public transport providers, the general community, and surrounding land owners/occupants) would continue to be consulted regarding the proposal in accordance with the communication plan described in chapter 4 of the EIS.	Section 8
C1.1	Construction of the proposal would be undertaken in accordance with the approved CEMP.	This plan
C4.1	Any activities that could exceed the construction noise management levels and vibration criteria would be identified and managed in accordance with the Inland Rail NSW Construction Noise and Vibration Management Framework and the CEMP.	NVMP

Guidelines for the Preparation of EMPs (DIPNR 2004)

Guideline	Requirement	Where addressed	How addressed
4.3.1.1	Introduction	Section 1	The introduction in Section 1 includes the background, purpose, scope, EMS and environmental policy and identifies the overall Project.
4.3.1.2	Project Description	Section 1.5	The Project description is outlined in Section 1.5 and identifies the key features of the Project, construction schedule, construction activities, ancillary facilities, duration and capacity, site security, lighting and the location.

Guideline	Requirement	Where addressed	How addressed
4.3.1.3	EMP Context	Section 1.8	This CEMP is the overarching plan for delivery of the Project, and provides a structured approach to the management of environmental issues during construction of the Project. Section 1.8 lists the documents the CEMP has been developed in accordance with.
4.3.1.4	EMP Objectives	Section 1.6	The environmental objectives for the Project are outlined in Section 1.6.
4.3.1.5	Environmental Policy	Section 1.4 Attachment B	Section 1.4 describes environmental policy and the INLink Project Team's commitment to continual improvement in environmental performance and compliance with applicable legal requirements. A copy of the environmental policy is provided in Attachment B.
4.3.2.1	Environmental Management Structure and Responsibility	Section 5	A summary of the organisational structure illustrating the key roles and the relationship between members of the team is provided in Section 5.
4.3.2.2	Approval and Licensing Requirements	Section 2	Section 2 lists the Project's regulatory framework including the Project documentation, CoA, EPL and other legislations and regulatory requirements.
4.3.2.3	Reporting	Section 7.4	All reporting requirements for the Project are outlined in Section 7.4.
4.3.2.4	Environmental Training	Section 9	All training requirements for the Project are outlined in Section 9.
4.3.2.5	Emergency Contacts and Response	Section 10 Section 12	Emergency planning and response will be implemented in accordance with Section 10, and for further detail refer to the Pollution Incident Response Management Plan (PIRMP). Section 12 lists the Project contacts.
4.3.3.1	Risk Assessment	Section 3	The risk identification and assessment is described in Section 3 and includes the environmental risk assessments on-going risk assessment and environment risk identification.
4.3.3.2	Environmental Management Activities and Controls	Compliance matrices	The measures that will be used to prevent or minimise environmental impacts from the Project are outlined in the front of the CEMP in the compliance matrices.
4.3.3.3	Environmental Management Plans or Maps	Attachment A	The Environmental Control Maps are in Attachment A.

Guideline	Requirement	Where addressed	How addressed
4.3.3.4	Environmental Schedules	Appendix D Attachment F Attachment G	The following forms, reports and registers are included in the CEMP: Appendix D – Environmental Risk and Opportunities Register Appendix F – Weekly Inspection Checklist Appendix G – Project Environment Audit Schedule Refer to the CEMP Sub-plans for forms, reports and registers for specific environmental impacts.
4.3.4.1	Environmental Monitoring	Section 7.2	Details on environmental monitoring are included in Section 7.2. The Construction Monitoring Programs are included in each of the respective Sub-plan.
4.3.4.2	Environmental Auditing	Section 7.3	Auditing will be undertaken to verify compliance with the associated Project documentation, the relevant approvals and licences and the Parkes to Narromine: Environmental Audit Program, as outlined in Section 7.3.
4.3.4.3	Corrective Action	Section 6	Section 6 outlines procedures for dealing with non-compliance with environmental management controls and environmental incidents. All corrective actions and improvements will be entered into the Corrective or Improvement Actions Database and will be closed out as agreed by the Environmental Manager and Project Manager (to be reviewed during the Weekly Environmental Checklist).
4.3.4.4	EMP Review	Section 11	The CEMP and Sub-plans, its operation and implementation, and any elements of the overarching EMS will be periodically reviewed during Project delivery, as outlined in Section 11.

Environment Protection Licence Requirements

EPL No.	Requirement	Where addressed
M1.2	All records required to be kept by this licence must be: a) In a legible form or in a form that can readily be reduced to a legible form. b) Kept for at least 4 years after the monitoring or event to which they relate took place. c) Produced in a legible form to any authorised officer of the EPA who asks to see them.	Section 7.4

EPL No.	Requirement	Where addressed
M4.1	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.	Section 8.3
M4.2	The record must include details of the following: a) The date and time of the complaint b) The method by which the complaint was made c) Any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect d) The nature of the complaint e) The action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant. f) If no action was taken by the licensee, the reasons why no action was taken.	Section 8.3
M4.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	Section 8.3
M4.4	The record must be produced to any authorised officer of the EPA who asks to see them.	Section 7.4
R2.1	Notifications must be made by telephoning the Environment Line service on 131 555. The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.	Section 7.4
R2.2	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.	Section 7.4
G1.1	A copy of this licence must be kept at the premises to which the licence applies.	Section 2.2.2
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	Section 2.2.2
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	Section 2.2.2

EPBC Act Approval (EPBC 2016/7731)

Ref	Requirement	Where addressed
4.	Within 20 business days after the commencement of the action, the approval holder must advise the Department in writing of the actual date of commencement of the action.	Section 1.2

Ref	Requirement	Where addressed
5.	Unless otherwise agreed to in writing by the Minister, the approval holder must publish all management plans, reports, strategies and agreements referred to in these conditions of approval on their website. Each management plan, report, strategy and agreement must be published on the website within 1 month of being approved by the Secretary and remain there until at least 12 months following the completion of the action.	Section 8.2.1
6.	The approval holder must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the management plans, reports, strategies and agreements required by this approval, and make them available upon request to the Department. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media.	Section 8.3
7.	Within three months of every 12 month anniversary of the commencement of the action, the approval holder must publish a report on its website addressing compliance with each of the conditions of this approval, as specified in the conditions. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the Department at the same time as the compliance report is published. The approval holder must continue to make the report available on its website until such time as agreed in writing by the Minister.	Section 8.2.1
8.	Any contravention of the conditions of this approval (including contravention of a commitment made in a management plan, strategy, or agreement required by this approval) must be reported to the Department within 5 business days of the approval holder becoming aware of the contravention.	Section 6.2

Specific Environmental Performance Outcomes (RtS)

Key Issue	SEARS Desired Performance Outcome	Proposal specific environmental performance outcomes	Where addressed
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).	Air Quality Management Plan (AQMP)
6. Biodiversity	The project design considers all feasible measures to avoid and minimise impacts on terrestrial and aquatic biodiversity. Offsets and/or supplementary measures are assured which are equivalent to any remaining impacts of project construction and operation.	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, 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).	Flora and Fauna Management Plan (FFMP)

Key Issue	SEARS Desired Performance Outcome	Proposal specific environmental performance outcomes	Where addressed
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.	Flood Emergency Management Plan (FEMP)
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 regulatory requirements and Australian Standards.	Section 1.7 Hazardous and Contaminated Materials Management Plan (HCMMP)
10. Heritage	The design, construction and operation of the project facilitates, to the greatest extent possible, the long term protection, conservation 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.	Heritage Management Plan (HMP)

Key Issue	SEARS Desired Performance Outcome	Proposal specific environmental performance outcomes	Where addressed
11. Noise and vibration – amenity	Construction noise and vibration (including airborne noise, groundborne 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 are 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.	Noise and Vibration Management Plan (NVMP)
12. Noise and vibration – structural	Construction noise and vibration (including airborne noise, groundborne 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 heritage as defined in the Heritage Act 1977 during operation of the proposal are effectively managed.	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.	NVMP

Key Issue	SEARS Desired Performance Outcome	Proposal specific environmental performance outcomes	Where addressed
14. Socioeconomic, 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 uses 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.	Landscape and Visual Amenity Management Plan (LVAMP)
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).	Soil and Water Management Plan (SWMP) Landscape and Visual Amenity Management Plan (LVAMP)

Key Issue	SEARS Desired Performance Outcome	Proposal specific environmental performance outcomes	Where addressed
17. Traffic, transport and access	Network connectivity, safety and efficiency of the transport system in the vicinity of the project are 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.	Traffic, Transport and Access Management Plan (TTAMP)
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. The proposal is visually integrated with its surroundings.	LVAMP
19. Waste	All wastes generated during the construction and operation of the proposal are 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	Waste Management Plan

Key Issue	SEARS Desired Performance Outcome	Proposal specific environmental performance outcomes	Where addressed
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.	SWMP
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 marine waters (if applicable).	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. Impacts to water quality during construction and operation are minimised.	SWMP

Construction Environmental Management Plan (CEMP)

Parkes to Narromine Inland Rail
Project # 808 – J013

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Attachments

Glossary of Terms

Term	Definition
ABC	Activity Based Conversations
AQMP	Air Quality Management Plan
ARTC	Australian Rail Track Corporation
AS/NZS ISO 14001:2016	Australia and New Zealand Standard *Environmental Management Systems – Requirements with guidance for use*
AS/NZS ISO 19011:2003	Australia and New Zealand Standard *Guidelines for Quality and/or Environmental Management Systems Auditing*
AS/NZS ISO 31000-2009	Australian and New Zealand Standard *Risk management – Principles and guidelines*
CEMP	Construction Environmental Management Plan
CMS	Construction Method Statement
CoA	Conditions of Approval
CSSI	Critical State Significant Infrastructure
DPIE	NSW Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EMS	Environmental Management System
EP&A Act	*Environmental Planning and Assessment Act 1979*
EPA	Environment Protection Authority
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth)
EPL	Environment Protection Licence
ER	Environmental Representative
ESC	Erosion and Sediment Control
FEMP	Flood Emergency Management Plan
FFMP	Flora and Fauna Management Plan
HCMMP	Hazardous and Contaminated Materials Management Plan
HMP	Heritage Management Plan
HSEQ	Health, Safety, Environment and Quality

Term	Definition
JHA	Job Hazard Analysis
NVMP	Noise and Vibration Management Plan
P2N	Parkes to Narromine
PESCP	Primary Erosion and Sediment Control Plan
PIRMP	Pollution Incident Response Management Plan
POEO Act	*Protection of the Environmental Operations Act 1997*
PWMP	Pest and Weed Management Plan
SEP	Site Environmental Plan
SEMP	Site Establishment Management Plan
SEPP 2011	*State Environmental Planning Policy (State and Regional Development) 2011*
SWMP	Soil and Water Management Plan
TTAMP	Traffic, Transport and Access Management Plan
WMP	Waste Management Plan
WMS	Work Method Statement

1 Background

1.1 Introduction

The Australian Government will deliver the Melbourne to Brisbane Inland Rail as a vital piece of the National Freight Network and will provide a significant modal shift of freight from road to rail. On behalf of the Department of Infrastructure, Regional Development and Cities, the Australian Rail Track Corporation (ARTC) has been tasked with preparing a 10-year delivery strategy for Inland Rail.

The Parkes to Narromine (P2N) Project is one of 13 projects that comprise the Inland Rail Programme. The P2N Project is one of seven in NSW, and is approximately 103.708 km long. The Project is the first project within the Programme to be brought to market, representing a significant first step in ARTC delivering the Programme and will be delivered by INLink (a joint venture of BMD Constructions Pty Ltd and Fulton Hogan Construction Pty Ltd).

The P2N Project is generally located within the existing rail corridor between the towns of Parkes and Narromine, via Peak Hill (refer to Figure 1). A new connection to the Broken Hill railway line is also proposed outside of the existing Rail Corridor at the southern end of the Project near Parkes.

The P2N Project has been classified as Critical State Significant Infrastructure (CSSI) under the State Environmental Planning Policy (SEPP) (State and Regional Development) 2011 and is therefore subject to approval under Part 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). An Environmental Impact Statement (EIS) was undertaken to support the application and submitted to the Department of Planning, Industry and Environment (DPIE) in accordance with the relevant legislation. Public exhibition has been completed and ARTC has finalised its Response to Submissions. Project approval was granted in June 2018 and Conditions of Approval (CoA) included in the approval document CSSI 7475.

The Project is also a controlled action under the Commonwealth *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act) (referral reference 2016/7731) and requires approval from the Australian Government Minister for the Environment and Energy (granted 3 September 2018).

Figure 1 – P2N Project Location (refer to Attachment A for further detail)

1.2 Purpose and Scope

The P2N Project CoA requires preparation of a Construction Environmental Management Plan (CEMP) and supporting Sub-plans. INLink has developed this CEMP to provide a framework for management of all environmental aspects associated with the construction of the P2N Project. The CEMP Sub-plans are discussed in Section 4.

The primary purpose of the CEMP is to describe the management systems and procedures which will be adhered to in achieving Project environmental objectives and goals. The CEMP is the overarching project reference for environmental management throughout the construction phase. It describes how INLink proposes to manage and control environmental aspects and potential impacts of the project, through both project-wide and element-specific approaches. The CEMP prescribes all applicable procedures, processes and practices to be undertaken by INLink and its subcontractors to manage environmental risks, effectively minimising impacts on the surrounding environment, and ensuring compliance with regulatory and other obligations throughout Project delivery.

The CEMP and Sub-plans will be applicable to all Project works, staff and sub-contractors during construction of the Project. This CEMP is required to be approved by the DPIE no later than one month before the commencement of construction activities. This CEMP will be endorsed by the Environmental Representative (ER) prior to the commencement of construction as required by the CoA. Construction will not commence until this CEMP has been approved by DPIE. This CEMP and all the Sub-plans as approved by the DPIE, including any minor amendments approved by the ER, will be implemented for the duration of construction.

In accordance with the EPBC Act Approval, DPIE must be advised in writing of the actual date of commencement of the action within 20 business days after the commencement of the action.

1.3 Environmental Management System

INLink operates an Environmental Management System (EMS) accredited to the ISO 14001 Standard. The accreditation is audited by an external organisation on an annual basis. This EMS consists of several documents that may be utilised by the Project in the delivery of works and incorporated in this CEMP which are outlined in Table 1-1.

Table 1-1 – EMS Document Register

Document number	Document name
CRP-POL-00018	Environmental Policy
CRP-POL-00024	Sustainability Policy
CRP-GLE-00457	Management Systems Procedures Manual
CRP-PLN-01001	Management Systems Objectives and Targets
HEQ-STD-00005	Risk Management Standard
HEQ-STD-00051	Incident and Accident Management Standard
HEQ-STD-00006	HSEQ Communication Management Standard

Document number	Document name
HEQ-STD-00458	Workplace Inspection and Observation (Monitoring) Standard
HEQ-STD-00108	Emergency Response Management Standard
CRP-STD-01078	Documents and Records Management Standard
HEQ-STD-00004	HSEQ Training and Competency Management Standard
HEQ-STD-00940	HSEQ Leadership Commitment
CRP-STD-01025	Audit Management Standard
HEQ-REG-01030	Environmental Legal Register
HEQ-PCE-00509	Water Quality Core Operating Procedure
HEQ-PCE-00508	Waste and Recycling Core Operating Procedure
HEQ-PCE-00507	Energy Use Management Core Operating Procedure
HEQ-PCE-01431	Red Imported Fire Ant Management Core Operating Procedure
HEQ-PCE-01425	Vegetation Clearing Management Core Operating Procedure
HEQ-PCE-00508	Soil and Land Management Core Operating Procedure

1.4 Environmental Policy

The environmental policy describes the INLink Project Team's commitment to continual improvement in environmental performance and compliance with applicable legal requirements.

The environmental policy is displayed at the Project site office. The environmental policy is communicated to staff during the Project Induction which will be undertaken by all personnel and Subcontractors prior to commencement on the INLink Project.

A copy of the environmental policy is provided in Attachment B.

1.5 Project Description

The Project will consist of two major construction types – an existing rail upgrade (brownfield) and a new section of rail (greenfield). The brownfield section extends from chainage 449.142 km to 547.550 km on the existing Goobang Junction to Narromine line within the ARTC network between Parkes and Narromine. The P2N section also includes a greenfield North-West connection, including a fork at the Southern junction. The line is a single bi-directional track, running a variety of freight and grain.

The key features of the Project include:

- Upgrading the track, track formation and culverts within the existing Rail Corridor for 98.408 km including signal upgrade between Parkes and Narromine
- Providing three new crossing loops within the existing Rail Corridor at the nominated locations

- Providing a 5.3 km long rail connection between Inland Rail and the Broken Hill line to the west of Parkes ('the Parkes North-West Connection').

INLink has been engaged by ARTC to build the Project, as described above, in a construct-only contractual arrangement.

1.5.1 Construction Schedule and Activities

Construction is anticipated to take 18 months, commencing in late 2018. The schedule is dependent on the track possession strategy agreed with affected train operators, track stakeholders, and relevant government departments. It is anticipated that progress would be from south to north, and involve three main phases:

- Phase 1 – Parkes to Goonumbla
- Phase 2 – Goonumbla to Narwonah
- Phase 3 – Narwonah to Narromine.

Construction of the Parkes North-West connection and the Brolgan Road overbridge would be undertaken in parallel with the above phases.

For the works along the existing rail corridor, it is anticipated that it would take 8 to 10 weeks to construct a 4.5 to 5 km section of track. This does not include location specific works such as culverts or the relocation of services and utilities.

For each phase, construction would typically involve site establishment, major construction works (earthworks and drainage, track works, level crossings), testing and commissioning, and finishing works. The construction sequence is outlined in Table 1-2 below.

Table 1-2 – Construction Sequence

Construction sequence	Typical activities
Site Establishment Locations: 1. North-West Connection 2. Tomingley 3. Peak Hill	Install site environment management and traffic controls Establish site compounds and facilities Clear vegetation and erect temporary fencing Establish site access roads where required Utility relocations as required Material delivery and stockpiling Please refer to the Site Establishment Management Plan (SEMP) for further information of the site establishment locations and management 5-0012-240-EEC-00-PJ-0007.
Track Works	Track upgrading including skim reconditioning and track reconstruction Culvert removal and replacement Crossing loop construction Turnout construction Drainage construction

Construction sequence	Typical activities
Level Crossings	Remove existing controls and install new controls Consolidating crossings, remove signage and complete road works and track upgrades
Earthworks	Associated with main construction activities at formation upgrades, embankment works and drainage works Associated with ancillary works
Parkes North-West Connection	Earthworks and drainage Placing ballast, sleepers and track Tamping and profiling Signalling and communications Finishing works
Brolgan Road Rail Overbridge	Bridgeworks Earthworks, embankment and pavement works Finishing works
Testing and Commissioning	Testing and commissioning (checking) of the rail line and communication/signalling systems
Finishing Works	Return all construction sites, compounds and access routes to at least the same condition than prior to construction commencing. Progressive reinstatement and rehabilitation during works, including: • demobilise site compounds and facilities • remove all materials, waste and redundant structures from the works sites • forming, and stabilising of spoil mounds • decommission all temporary work site signs • remove temporary fencing • establish permanent fencing • decommission site access roads that are no longer required • restoration of disturbed areas as required, including revegetation where required.

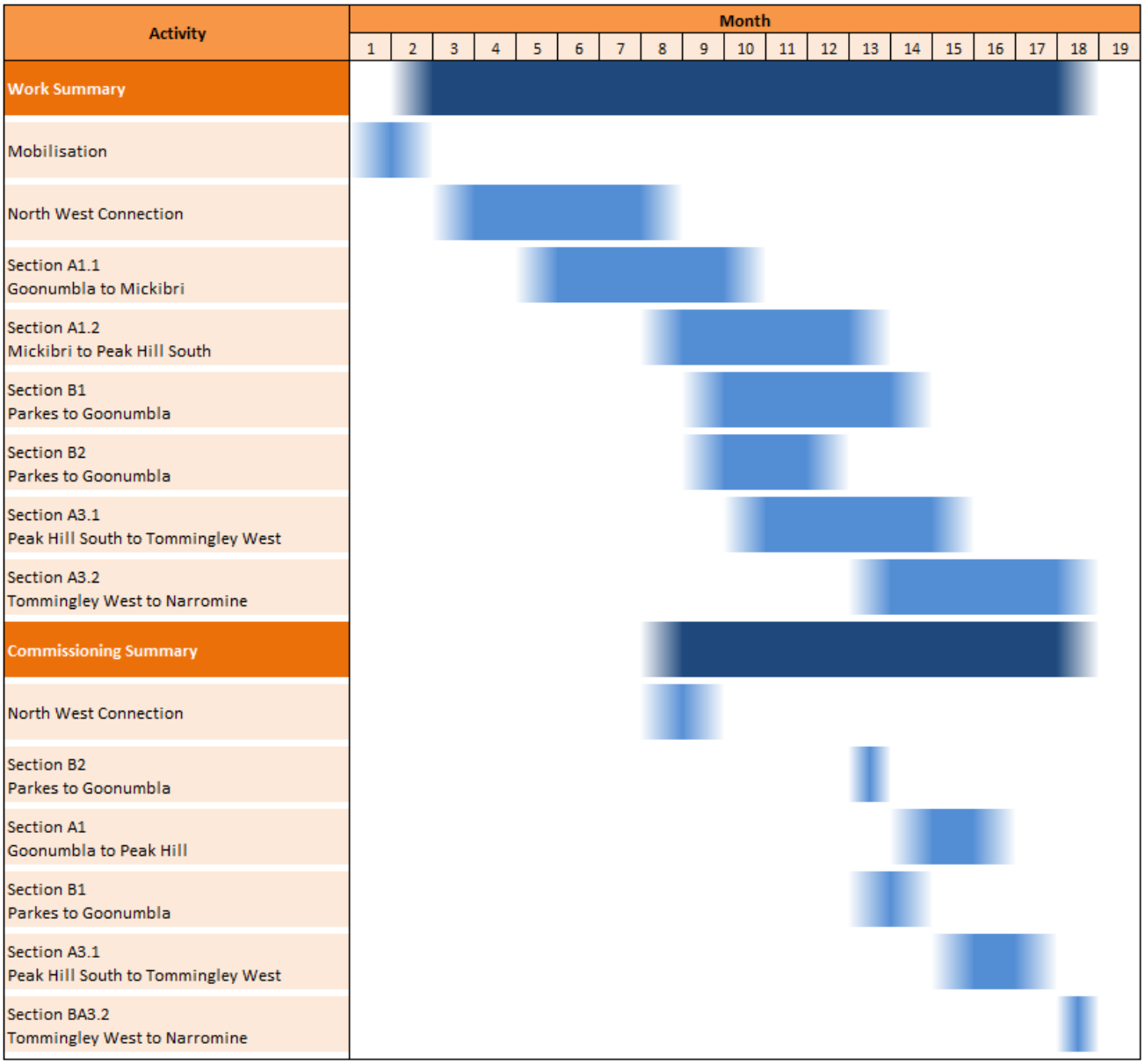


Figure 2 – Indicative Scheduling of Construction Activities

1.5.2 Major Construction Ancillary Facilities

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 of the SEMP). The site amenities are shown in Figure 3, Figure 4 and Figure 5 and include but are not limited to:

- Site offices and meeting rooms
- Change rooms
- Meal rooms
- Ablution block (both male and 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.

1.5.3 Duration and Capacity

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

Once works for the North-West Connection Project are complete, the Project personnel will commence works for the remainder of the alignment. As such, the construction ancillary sites at Tomingley and Peak Hill will be active for approximately 18 months while works for the remainder of the alignment is completed.

1.5.4 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. If the ancillary facility is located within 500 m of a sensitive receiver or land use the boundary fence will include screening to prevent offsite impacts such as dust, noise and impacts on visual amenity. Site lighting will be supplied and managed in accordance with the NSW Code of Practice and consulted with site plans and contractors to ensure lighting standards are met.

1.5.5 Location

The locations and layouts of the major construction ancillary facilities are illustrated in Figures 3 to 5 on the following pages.

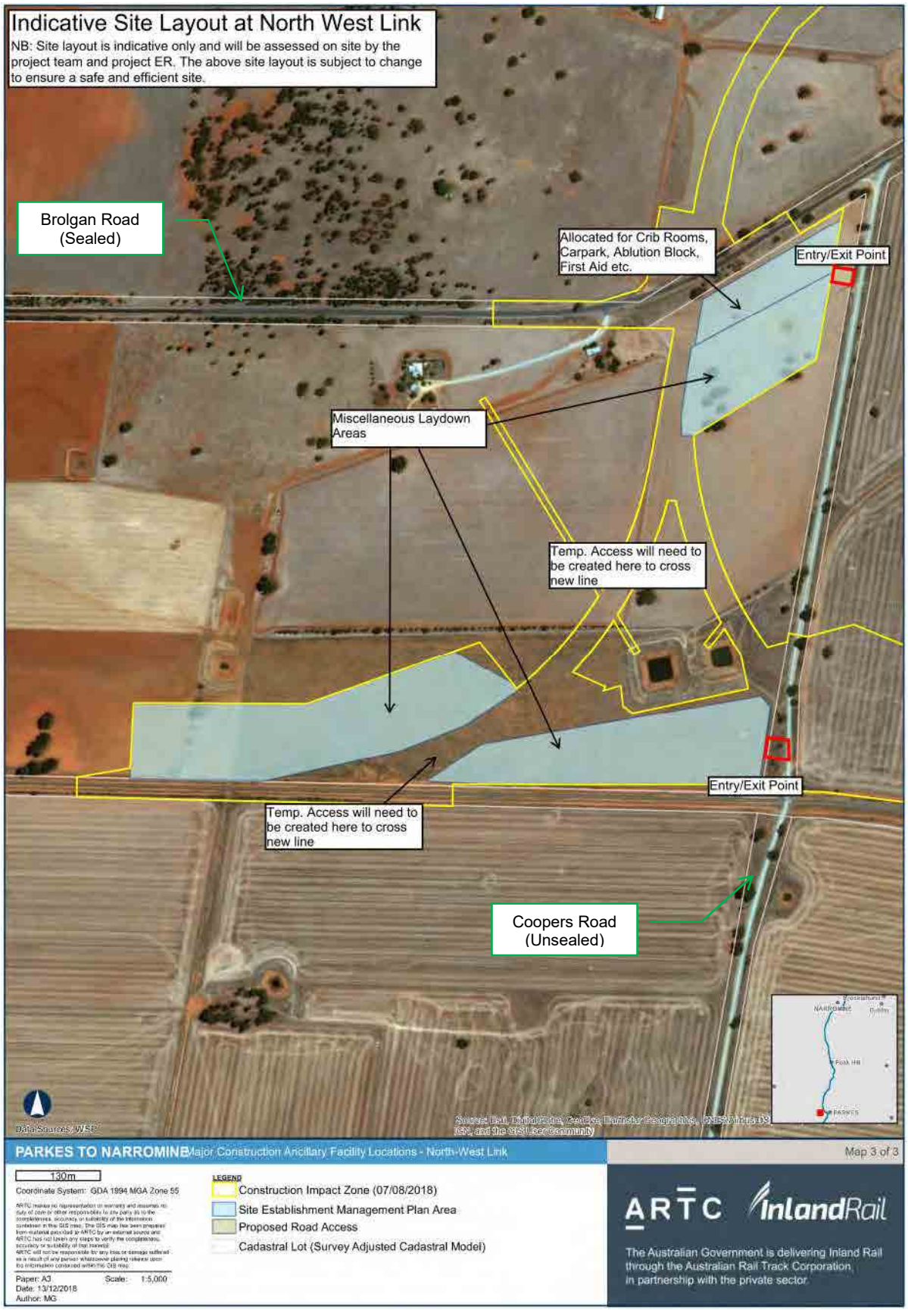


Figure 3 – Indicative Site Layout North-West Connection

Figure 4 – Site Layout Tomingley

Figure 5 – Site Layout Peak Hill

1.6 Environmental Objectives

The environmental objectives for this Project are:

- Comply with all environmental legislation applicable to the Project
- Meet or exceed all statutory obligations applicable to the Project
- Meet or exceed all licence, permit and approval requirements
- Promote respect for cultural and community values
- Foster a positive culture towards environmental management to contribute to overall environmental performance
- Maintain and integrate formal environmental management systems (including ISO 14001 conformance) into the Project
- Encourage ethical practices which reflect commitment to Duty of Care by all Project personnel, Subcontractors and suppliers
- Promote and record efficient use of resources.

1.7 Environmental Targets

The environmental performance targets are developed based on the outcomes of the environmental impact assessment in the EIS. Environmental performance targets outline the broader objectives to be achieved during the construction activities, as described in Section 1.5.1. The environmental performance targets will be implemented throughout the CEMP and Sub-Plans through the mitigation measures presented in each the plans. Specific environmental performance targets and how they will be implemented will be provided in each of the respective Sub-plans.

Environmental lead targets that will be applied to the Project and addressed in the INLink Monthly Report include:

- Zero environment incidents
- Two environmental communications (toolbox talks, meetings, alerts where environmental issues are specifically raised) per month
- Four environmental inspections per month.

1.8 EMP Context

This CEMP is the overarching plan for delivery of the Project, and provides a structured approach to the management of environmental issues during construction of the Project. This CEMP has been developed in accordance with the following:

- Department of the Environment and Energy Approval, Parkes to Narromine Section of Inland Rail, NSW (EPBC 2016/7731)
- Guideline for the Preparation of Environmental Management Plans (Dept. of Infrastructure Planning and Natural Resources (Department of Infrastructure, Planning and Natural Resources (DIPNR 2004])
- Inland Rail – Parkes to Narromine Submissions Report (February 2018)
- Parkes to Narromine Project Environmental Impact Statement.

2 Legislative Requirements and Compliance Obligations

A summary of the legislative requirements and compliance obligations, and how they have been addressed can be found in Attachment C - Obligations Register.

The P2N EIS and Response to Submissions identify key legislative requirements and how they relate to the construction of the Project.

All activities undertaken in the delivery of the P2N Project will comply with the CoA and the provisions of legislation. Legislation applicable to the Project are also outlined in each of the CEMP Sub-plans for each environmental aspect.

2.1 Project Documentation

This document addresses ARTC Project documents such as:

- ARTC Environmental Assessment Procedure 2-9000-PEN-00-PR-1001
- ARTC Construction Environmental Management Framework 3-2400-0001-EEC-PL-0001
- ARTC Sustainability Management Plan 3-2400-0001-ESS-PL-0001
- ARTC Waste Management Plan Phase 4-2400-0000-EEC-PL-0003
- ARTC Contaminated and Hazardous Materials Management 4-2400-0000-EEC-PL-0004
- ARTC Parkes to Narromine Environmental Approvals and Permits Management Plan 4-2400-0000-EAP-PL-0001
- ARTC Social Impact Management Programme Framework 0-9000-ESO-00-PL-1000
- ARTC Inland Rail - Social Performance Programme 0-0000-900-EAP-00-ST-0002
- ARTC Environmental Policy
- ARTC Inland Rail Environmental and Sustainability Policy.

2.2 Project Approvals

Table 2-1 outlines the key regulatory framework for the Project.

Table 2-1 – Key Regulatory Framework

Approval	Driver	Notes
Ministerial Determination (and project approval conditions)	Environmental Planning and Assessment Act 1979 Environmental Planning and Assessment Regulation 2000	Required for the construction phase of the Project. Determined from EIS and therefore obtained by ARTC with application being submitted prior to Project award. EIS are based on P2N section of alignment only. Conditions of Approval granted June 2018 (ARTC).
EPBC Controlled Action Approval	Environment Protection and Biodiversity Conservation Act 1999	

Approval	Driver	Notes
Environment Protection Licence	*Protection of the Environment Operations Act 1997*	POEO Act requires an EPL to be held for scheduled activities. Schedule 1 of the Act defines Railway System activities as a scheduled activity. Railway systems include". *The installation, on site repair, on-site maintenance or on site upgrading of track. Including the construction or significant alteration of any ancillary works. The operation of rolling stock on track.* The Project meets the definition and requires an EPL for construction and operation. A separate EPL will need to be obtained for construction and operation. This licence cannot be refused if necessary for carrying out an approved SSI project (in accordance with S115ZH of the EP&A Act). NOTE: The contractor will need to comply with ARTC's existing EPL to the extent that it has effect in relation to any of the contractor's activities. **Environmental Protection Licence granted October 2018 (BMD Constructions).**

2.2.1 Conditions of Approval

The Project is a controlled action under the EPBC Act and a CSSI under the EP&A Act. The Project has been assessed by the DPIE in accordance with the bilateral agreement made (NSW and the Commonwealth Governments) under Section 45 of the EPBC Act relating to environmental assessment. The Project Approval Documentation includes the Parkes to Narromine EIS, the associated technical assessments and the Submissions Report.

The CoA include the Primary Approval (Instrument of Approval) issued by the Minister of Planning (NSW) and the Minister of the Environment and Energy (EPBC Act). The requirements of the Primary Approval Documentation and Project conditions of approval are required to be complied with by INLink, where relevant to construction.

2.2.2 Environment Protection Licence

The Project meets the definition of a scheduled activity under Schedule 1 of the *Protection of the Environment Operation Act 1997* (POEO Act) and as such INLink is required to obtain an Environment Protection Licence (EPL) which includes the following:

- Obtain an EPL from the Environment Protection Authority (EPA) (granted 26 October 2018)
- Hold an EPL which covers the scope of works as necessary under the POEO Act
- Undertake the scope of works in accordance with the conditions of the EPL.

The following outlines the overview of the EPL conditions:

- Scheduled activity to be carried out under the EPL – Railway Systems Activities

- Nil discharge premises (no water discharge points) therefore all water discharge to comply with Section 120 of the POEO Act
- The licensee will not accept waste and will ensure all waste generated is disposed of in accordance with NSW EPA Waste Classification Guidelines
- Working hours defined as well as conditions for working outside of these hours (e.g. comply with noise levels, emergency works, negotiated with landholders)
- Conditions to ensure plant and equipment maintenance is undertaken
- Prevention of dust measures
- Conditions to ensure chemicals, fuels and explosives handling and storage
- How monitoring will be recorded and for how long records will be kept
- Recording of complaints including telephone complaints
- Reporting conditions to the EPA
- Notifications of environmental harm via telephone hotline and written reporting.

A copy of the EPL will be kept at the site office. The EPL must be produced to any authorised officer of the EPA who asks to see it and must be available for inspection.

2.3 Other Legislation and Regulatory Requirements

Table 2-2 outlines other requirements that apply to the Project which have been considered and noted in some cases as exempt.

Table 2-2 – Other Legislation and Regulatory Requirements

Approval	Driver	Notes
Road authority approval (including for temporary closure of level crossings)	*Roads Act 1993*	Under S138 approval from the relevant roads authority is required to impact or carry out certain work on or over public roads. This permit cannot be refused if necessary for carrying out an approved SSI project (in accordance with S115ZH of the EP&A Act).
Dewatering / Extraction Licence	*Water Act 1912*	A licence under Part 5 may be required for dewatering activity that would require extraction of more than 3 mega litres of groundwater per year.
Resource Recovery Exemptions (exemptions)	Protection of the Environment Operations (Waste) Regulation 2014	These exemptions allow some wastes to be beneficially and safely re-used independent of the usual NSW laws that control applying waste to land, using waste as a fuel, or using waste in connection with a process of thermal treatment.

Approval	Driver	Notes
Occupation Authorisation	*Crown Lands Act 1989*	Where Crown Land is to be occupied, an authorisation under the Act to allow occupation of Crown Land must be obtained. The Act sets out that Crown Land be managed in accordance with its principles - accordingly, it is to be occupied, sold, or dealt with consistent with these principles
Level Crossing closures	*Transport Administration Act 1988*	The Act provides for the administration and management of transport infrastructure and transport agencies in NSW. Under Section 99B, a rail infrastructure owner may close any level crossing provided that, prior to closing the crossing, it notifies RMS and the local Council and receives Ministerial approval. Approval for Closures if required would be obtained in accordance with requirements of the Act.
Temporary Level Crossing closures	*Road Act 1993* *Environmental Planning and Assessment Act 1979* Section 115ZH	Section 138 (of the Road Act 1993) states that works, and structures approvals does not apply to a public authority, on or over an unclassified road other than a Crown road. The contractor is to liaise with Road authority, prepare and lodge Applications (and associated plans) for crown roads. (i.e. Henry Parkes Way).
Fish passage	*Fisheries Management Act 1994*	**Exempt** SSI projects approved under Part 5.1 of the EP&A Act are exempt from permits required under sections 201, 205 or 219.
Part 4 approval, excavation permit	*Heritage Act 1977*	**Exempt** SSI projects approved under Part 5.1 of the EP&A Act are exempt from permits required under Part 4, and section 139.
Heritage Orders		**Exempt** Division 8 of Part 6 (making heritage orders) does not apply to prevent or interfere with the carrying out of an approved SSI project.
Aboriginal heritage impact permit	*National Parks and Wildlife Act 1974*	**Exempt** SSI projects approved under Part 5.1 of the EP&A Act are exempt from permits required under section 90.

Approval	Driver	Notes
Authority to Clear Native Vegetation	*Native Vegetation Act 2003*	**Exempt** SSI projects approved under Part 5.1 of the EP&A Act are exempt from permits required under section 12.
Water use / water management approval	*Water Management Act 2000*	**Exempt** SSI projects approved under Part 5.1 of the EP&A Act are exempt from obtaining water use approval under section 89, a water management work approval under section 90 or an activity approval (other than an aquifer interference approval) under section 91.
Hazardous goods license	*Dangerous Goods (Road and Rail Transport) Act 2008*	A licence is required for the storage (SafeWork NSW) and /or transport (EPA) of prescribed quantities of dangerous goods. Must obtain a licence where storage of dangerous goods would exceed licensable quantities.
Biodiversity Conservation Licence (or identified equivalent)	*Biodiversity Conservation Act 2016*	Granted under Part 2 of the Act, allows handlers to catch and release an animal that is a threatened species or part of an ecological community.
Class 1 Notice or Ministerial Order	*Heavy Vehicle National Law* (Oversize and/or over-mass vehicles and loads).	If vehicle or combination exceeds the general access mass or dimension limits they require appropriate Class 1 Notice or Ministerial Order.
Notice to an electricity entity of works near electricity works	*Electricity Supply Act 1995*	To be obtained by the INLink and ARTC prior to any works near electricity utilities.
Mining Lease and Environment Protection Licence	*Mining Act 1992* *Environmental Planning and Assessment Act 1979* Environmental Planning and Assessment Regulation 2000 *Protection of the Environment Operations Act 1997* *Water Management Act 2000* *Water Act 1912*	If new greenfield quarries are required for this project they may trigger and require appropriate planning, assessment and approvals under the relevant New South Wales legislation, if extracting material that triggers these relevant Acts.

3 Risk Identification and Assessment

3.1 Environmental Risk Assessment

Potential environmental risks associated with the Project have been identified during the tender phase of the Project. Risks that have been identified are surmised in the Environmental Risk and Opportunities Register (refer to Attachment D) that has been configured to match the risk management methodology of ARTC. Environmental risks are aligned with mitigation strategies and assigned rankings, and categorised as per the following:

- Environmental aspect
- Relative scale of potential impact
- Impact description
- Likelihood of occurrence.

A risk management approach will be used to determine the severity and likelihood of an activity's impact on the environment and to prioritise its significance. This process considers potential regulatory and legal risks as well as taking into consideration the concerns of community and other key stakeholders.

The objectives of risk assessment are to:

- Identify activities that have the potential to adversely affect the local environment and/or human health
- Qualitatively evaluate and categorise each risk item
- Assess whether risk issues can be managed by environmental protection measures
- Quantitatively evaluate and categorise each risk item
- Assess whether risk issues can be managed by environmental protection measures.

Risk assessments for the Project are based on AS/NZS ISO 31000:2009, the Australian and New Zealand Standard for Risk Assessments. The purpose of risk evaluation is to separate risk to be tolerated from those to be treated, by determining the severity of each risk and developing a prioritised list of risks that require treatment.

The Environmental Risk and Opportunities Register includes a list of activities associated with the Project, related aspects and corresponding risks. Measures to minimise the identified environmental risks are also provided. The severity of each risk is determined from the Environmental Incident / Accident Matrix (refer to Attachment E).

3.2 On-Going Risk Assessment

Environmental risk assessment will be on-going throughout project delivery. Emphasis will be placed on any changes to construction methodology, changes in materials used, and works within or adjacent to sensitive receiving environments. All Project staff are responsible for management of risk identification and assessment in consultation with the Environmental Team. Forums for facilitation of risk identification include:

- Project meetings

- Toolbox meetings
- Site inspections.

As per the standard for risk assessments, environmental risk assessment will be documented through the following:

- Work Method Statements (WMS)
- Job Hazard Analysis (JHA) Cards
- Activity Based Conversations (ABC)
- Site Environmental Plans (SEP).

The WMS will be reviewed every six months, or when activities or the environment changes. For each weekly task a JHA will be undertaken and will be reviewed daily and revised weekly. The JHA builds on the WMS with site specific or task specific risks. The JHA identifies the risks and the controls that must be implemented at the time of the activity. ABCs will discuss processes on site and the positive and negative actions or compliance with project conditions. These actions are recorded on an action register and each action is emailed to the responsible person at the time the action is entered into the system (web based). The Environmental Manager will manage the actions related to the CEMP and the Sub-plans through the action report which is generated by the Environmental Manger on a weekly basis.

If actions require further management, the Environmental Manager will undertake the following:

- Engage specialist
- Develop additional mitigation measures
- Stop works.

3.2.1 Site Environmental Plans

Various site plans are utilised during the different phases of construction activities which draw on the relevant and specific information related to the works. The project currently uses the following plans to identify key environmental requirements:

- Environmental Constraints Maps and Vegetation Mapping within Attachment E of the Flora and Fauna Management Plan (5-0012-240-EEC-00-PJ-0004)
    - The environmental constraint maps illustrate the project boundaries (EIS, design and temporary occupational boundaries), drainage lines and waterways, roads, earthworks, nominated compounds, laydown areas, heritage and Plant Community Types (PCT)
- Clearing and Grubbing Plans
    - The clearing and grubbing maps are a hold point items within the Clearing and Grubbing Inspection and Test Plan (ITP). These maps illustrate the project boundary, clearing extents within the boundary, no-go areas and trees which are required to be

removed. In addition to the clearing and Grubbing Plans, an arborist and ecologist attends site to undertaken further assessments on whether vegetation can be retained (e.g. will not impact the rail).

- Progressive Certified Erosion and Sediment Control Plans (ESCP)
    - Erosion and control plans are prepared for all areas of work which have the potential for sedimentation or erosion as a consequence of the work undertaken. The ESCPs will contain site specific details including laydown areas, erosion risk mitigation measures and sediment control methods.
- Parkes to Narromine – CIZ, Temporary Occupation, PCT and Heritage Maps
    - These maps illustrate the CIZ and temporary occupational boundaries and provide site specific information on the types of PCT within and outside the project boundaries. The maps also detail specific information on the type of heritage present (e.g. railway station heritage, scar trees and timber components of the underbridges).
- Global Information System (GIS)
    - The GIS provides an interactive online computer system which provides specific project information ranging from design components, environment aspects and land/property information.

3.3 Environmental Risk Identification and Management

Risk identification and management processes will be a key focus in developing and implementing all EMS documentation. The objective of these processes is to confirm that the Project is designed and constructed within acceptable limits of risk to personnel and the environment.

Environmental risks and opportunities are considered during all Project risk assessments, including:

- Principal risk assessment conducted during tender for major tangible risks
- Value engineering workshops
- Work Method Statements (WMS)
- Prestart meetings.

The Project's initial environmental risk analysis has been performed and documented in the Environmental Risk Register (refer to Appendix D).

This initial environmental risk analysis will not be updated as design and construction planning progresses, rather these risks have been utilised to inform the preparation of this CEMP and Aspect Specific Management Plans, as well as to input to the Project Risk Register developed in accordance with the Risk Management Plan. Further review of these risks will be incorporated into scheduled CEMP reviews.

The identified key risks are summarised in Section 7.

The Environmental Manager or delegate has approval authority for all other risk assessment types (except for WMSs and Prestart Meetings) to ensure environmental risks and opportunities are adequately raised and addressed. In addition, the Aspect Specific Management Plans identifies key aspects and potential environmental impacts, which has also been utilised to inform the development of specific management strategies to be applied across the Project. Environmental risks, controls and accountabilities identified will be communicated to all relevant personnel through the preparation and communication of the Environmental Procedures, SEPs, Work Packs, preparation of WMS and toolbox talks and prestart meetings.

4 Environmental Management Sub-Plans

As required by the CoA, CEMP Sub-plans have been developed for the P2N Project. The Sub-plans form part of the CEMP which is the overarching document to be used in conjunction with the Sub-plans. The Sub-plans contain detailed information on each environmental aspect. The environmental aspects and the elements included in each Sub-plan are as follows:

- Air Quality Management Plan (AQMP)
- Flood Emergency Management Plan (FEMP)
- Flora and Fauna Management Plan (FFMP)
- Pest and Weed Management Plan (PWMP)
- Hazardous and Contaminated Materials Management Plan (HCMMP)
- Heritage Management Plan (HMP)
- Noise and Vibration Management Plan (NVMP)
- Pollution Incident Response Management Plan (PIRMP)
- Site Establishment Management Plan (SEMP)
- Soil and Water Management Plan (SWMP)
- Primary Erosion and Sediment Control Plan (PESCP)
- Traffic, Transport and Access Management Plan (TTAMP)
- Landscape and Visual Amenity Management Plan (LVAMP)
- Waste Management Plan (WMP).

CEMP Sub-plan address applicable legislative requirements, key risks, monitoring requirements and mitigation measures to be applied to the Project. This CEMP and Sub-plans will be implemented to manage risks and achieve the performance outcomes.

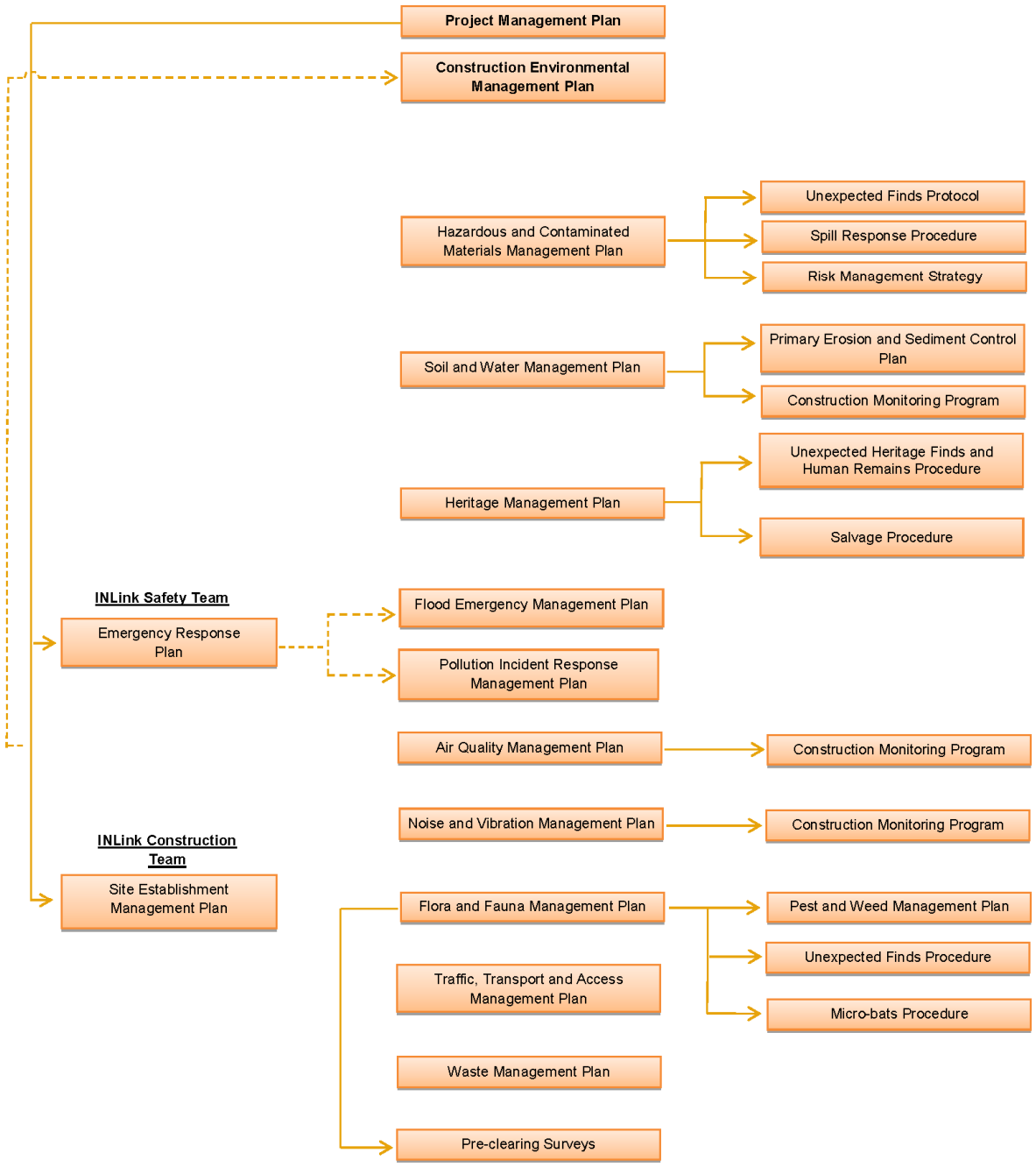


Figure 6 – Document Map

Figure 6 outlines the relationship between the CEMP, the Sub-plans and other relevant Project documentation.

5 Roles and Responsibilities

A summary of the organisational structure illustrating the key roles and the relationship between members of the team is provided in Figure 7. INLink will maintain an up-to-date version of the organisation chart.

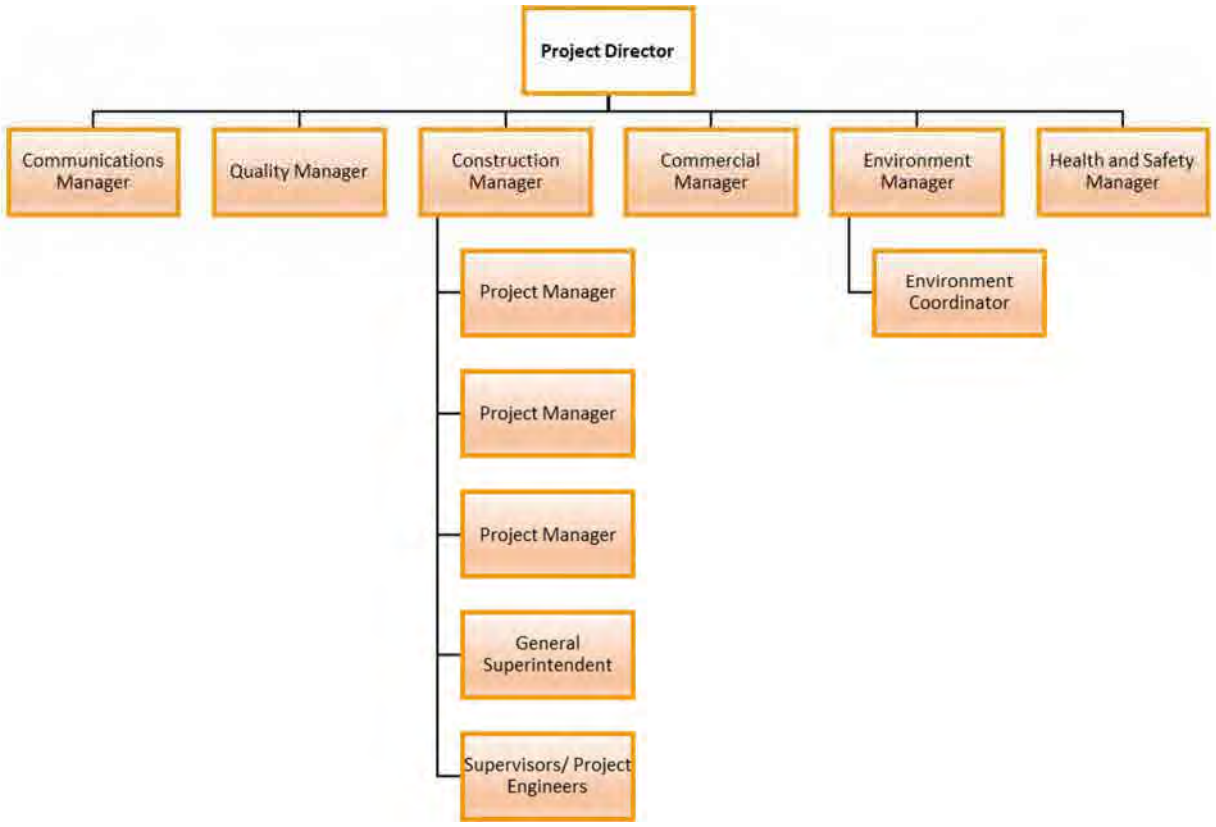


Figure 7 – Organisational Structure Site Responsibilities

5.1.1 Project Director

The roles and responsibilities of the Project Director include, but are not limited to:

- Familiarising themselves with their responsibilities within this document and the EMS
- Ensuring the Project is compliant with the requirements of the relevant environmental legislation, procedures, WMS, plans, job descriptions or any other environmental documentation
- Regular monitoring and ensuring that the company's environmental and risk management systems are implemented on the Project
- Monitor the effectiveness of the Environmental Policy and associated procedures, guidelines and work instructions and communicate changes as required
- Establishing and maintaining communication channels between management and the workforce, including those who have a shared duty of care

- Ensuring enquiries and/or investigation of hazards, incidents and near misses are reviewed and the outcomes are incorporated into better management practices, other relevant documentation and communicated to relevant personnel
- Ensuring that corrective actions (resulting from inspections, audits or incident investigations) that have been assigned to them or personnel under their control are completed in the agreed time frames
- Ensure relevant employees and sub-contractors are included in site inspections, reviews, audits, meetings etc. where changes are to occur that may affect their environmental responsibilities
- Ensuring environmental inspections on the Project are being conducted in accordance with agreed time frames or as required
- Ensuring Subcontractor compliance with the requirements set out in this document and other relevant documentation such as WMS and risk assessments, and their own CEMP where appropriate
- Ensuring that all procurement reflects the environmental objectives of the Project
- Participate or schedule environmental audits on sub-contractors and suppliers
- Reporting on the environmental statistics of the Project as required.
- Ensuring that environmental objectives and targets are being met
- Regularly monitor progress of the construction program, identify potential risks and discuss remedial options with all relevant personnel
- Monitor design changes and, ensure environmental aspects have been considered and managed where variations are to occur that have given rise to new environmental hazards or risks

5.1.2 Construction Manager

The roles and responsibilities of the Construction Manager include, but are not limited to the following:

- Lead and manage the delivery of the construction process, in relation to environmental management across all sites in conjunction with the Environmental Manager
- Authority to direct personnel and/or subcontractors to carry out actions to avoid or minimise unintended environmental impacts
- Review and approve key environmental management documents relevant to the construction of the Project
- Ensure sufficient resources are allocated to environmental and sustainability management to ensure compliance with this plan and associated sub plans
- Manage construction in relation to environmental management for their work activity in conjunction with the Environmental Manager and Environmental Coordinators
- Ensure the General Superintendent is familiar with the CEMP and related documents and the responsibilities allocated to the Superintendents within them.
- Ensuring all Project personnel attend an induction prior to commencing works

- Planning construction works in a manner that avoids or minimises impact to environment
- Stop work immediately if an unacceptable impact on the environment is likely to occur.

5.1.3 Project Manager

The roles and responsibilities of the Project Manager include, but are not limited to the following:

- Ensure the project and subcontractors meet the project environment and sustainability requirements
- Authority to direct personnel and/or subcontractors to carry out actions to avoid or minimise unintended environmental impacts
- Review and approve key environmental management documents relevant to the construction of the Project
- Ensure sufficient resources are allocated to environmental and sustainability management to ensure compliance with this plan and associated sub plans
- Manage construction in relation to environmental management for their work activity in conjunction with the Environmental Manager and Environmental Coordinators
- Ensure the General Superintendent is familiar with the CEMP and related documents and the responsibilities allocated to the Superintendents within them.
- Planning construction works in a manner that avoids or minimises impact to environment
- Stop work immediately if an unacceptable impact on the environment is likely to occur.

5.1.4 Field Supervisors / Supervisors

The roles and responsibilities of the Field Supervisors / Supervisors include, but are not limited to the following:

- Field implementation of environmental requirements and control measures
- Assist in the preparation of Erosion and Sediment Control Plans
- Ensure any required approvals are received prior to works commencing
- Implement all monitoring and reporting requirements of the Project
- Daily inspections of environmental protection measures and co-ordination of maintenance as required.
- Ensuring all site employees and sub-contractors are aware of the environmental protection measures outlined in the CEMP and Sub-plans
- Familiarising themselves with their responsibilities within the EMS and complying with environmental responsibilities assigned in relevant legislation, procedures, WMS, plans, job descriptions or any other environmental documentation
- On site planning of work area requirements associated with specialised equipment
- Responsible for driving efficiency and performance of work crew
- Undertaking Pre-Start Talks with site personnel and maintaining a Site Attendance Record

- Ensuring direct or indirect supervision is being provided in accordance with risks assessments and any legislative requirements
- Ensuring that Subcontractors are adhering to the environmental requirements of the CEMP and Sub-plans and rectifying actions immediately if identified
- Regularly monitoring all work areas for potential environmental hazards or risks and taking preventative actions
- Ensuring relevant WMS and Toolbox Talks are explained to personnel, and an understanding is obtained prior to personnel starting the activity
- Implementing or overseeing the implementation of corrective actions for non-compliance resulting from audits, investigations, incidents / accidents, hazards, injuries and near misses where nominated as the person responsible
- Reporting all incidents and high potential events
- Raising any environmental issues or concerns immediately or during meetings with the Environmental Manager or Project Manager

5.1.5 Project Engineer

The roles and responsibilities of the Project Engineer include, but are not limited to the following:

- Familiarising themselves with their responsibilities within this document and the EMS
- Assist in establishing the site in accordance with required environmental standards
- Develop and review WMS for high risk construction work activities
- Ensuring subcontractors meet the environment and sustainability requirements
- Undertaking risk assessments as circumstances change and adjusting the relevant WMS and the Environmental Risk and Opportunities Register to include the appropriate risks and control measures
- Liaising with the Environmental Manager or delegate on all relevant environmental issues
- Conducting environmental inspections to observe potential environmental problems
- Complying with all environmental responsibilities assigned in relevant legislation, procedures, WMS, plans, job descriptions or any other environmental documentation
- Raising any environmental issues or concerns immediately or during meetings with the Environmental Manager, Site Foreman or Project Manager

5.1.6 Environmental Coordinator

The roles and responsibilities of the Environmental Coordinator include, but are not limited to the following:

- Assist Environmental Manager in the development and implementation of site specific environmental documents and EPL applications and variations

- Assist in the implementation of the CEMP and relevant subplans
- Assist in ensuring compliance with the Conditions of Approval, Environmental Protection Licence and any other environmental regulatory requirements
- Assist in promoting environmental and sustainability objectives on site
- Lead the day to day management of all on-site environmental aspects including field monitoring/testing, site inspections, and any additional monitoring requirements applicable for the project
- Function as a key role in the construction team providing assistance
- Ensuring implementation of on-site environmental controls is undertaken (e.g. erosion and sediment controls, incident response and waste tracking)
- Assist the Environmental Manager in audits
- Assist the Environmental Manager in the investigation and close out of any environmental complaints
- Attend environment, sustainability and construction meetings as required

5.1.7 Environmental Manager

The roles and responsibilities of the Environmental Manager include, but are not limited to the following:

- Establishment and maintenance of the Project environmental management plans and documentation
- Implement all monitoring and reporting requirements including all regular site inspections to ensure all protection measures are in place and adequate
- Provision of adequate environmental training to all staff, sub-contractors and visitors to the site
- Coordinate and gain relevant approvals, permits and licences for the construction phase of the Project
- Liaise with relevant government authorities, client and stakeholders as required
- Liaise with the Project Manager on remedial and corrective actions in response to non-compliance or incidents
- Keep a register of environmental complaints and the subsequent remedial action.
- Familiarising themselves with their responsibilities within this plan and the EMS
- Arranging and conducting regular internal reviews of this document
- Posting, updating and removing, as required, all environmental policies, forms and notices on notice boards, in crib rooms, site office etc. as outlined in the CEMP and Sub-plans
- Provide communication notices in accordance with legislative requirements
- Establishment of systems for managing environmental actions on site (e.g. ensuring procedures, guidelines, forms, checklists)
- Distributing to relevant personnel any revisions or amendments to the company's environmental documentation

- Distributing environmental alerts for industry related incidents concerning environmental management
- Monitoring any legislative changes to government policies that influence this CEMP
- Provide environmental information and support to all site personnel, sub-contractors and Project Management Teams
- Developing, reviewing and conducting the Project induction, and ensuring it encompasses all the requirements of the relevant environmental acts, regulations, approvals, permits, CEMP and Sub-plans and client specifications
- Participating in site inspections, audits, reviews etc. with site personnel, sub-contractors and the Project Management Team as requested by the Project Manager
- Monitoring the implementation of environmental procedures, use of guidelines, forms, checklists.
- Complying with all environmental responsibilities assigned in relevant legislation, procedures, WMS, plans, job descriptions or any other environmental documentation
- Informing the Project Manager immediately of any situations that may place the Project, client, employees or others at risk where policies and procedures have failed to rectify the risk
- Implementing or overseeing the implementation of corrective actions for non-compliance resulting from audits, investigations, incidents / accidents, hazards, injuries and near misses where nominated as the person responsible
- Communicate with the ER on compliance with the CoA throughout the duration of the Project.

5.1.8 Communications Manager

The roles and responsibilities of the Communications Manager include, but are not limited to the following:

- Assist the Environmental Manager in consulting regulatory agencies
- Communicate environment initiatives and potential environmental impacts to the surrounding community
- Work collaboratively with the Environmental Manager to resolve environmental complaints.

5.1.9 Commercial Manager

The roles and responsibilities of the Commercial Manager include, but are not limited to the following:

- Ensure that relevant environmental and sustainability requirements are considered in procuring materials and services.

5.1.10 All Site Personnel

The roles and responsibilities of all site personnel include, but are not limited to the following:

- Familiarising themselves with their responsibilities within this plan and the EMS
- Attend the Project Induction and all Pre-Start talks and sign the Site Attendance Record

- Participate in site inspections, audits, environmental meetings, Toolbox Talks, and environmental forums where requested/required
- Compliance with all site environmental rules
- Use or follow all controls established for eliminating or controlling environmental risks including those found in environmental documentation (e.g. WMS, plans, work instructions, standard operating procedures etc.)
- Stop work if the environment is placed at risk and discuss strategies to rectify environmental concern(s) immediately with the Field Supervision. If it is not resolved satisfactorily, the Project Manager is to be contacted
- Reporting all hazards, incidents, near misses immediately to the Field Supervision as soon as it is safe to do so
- Actively participate in reviews of the JHA, WMS etc., and in risk assessments for task(s) where the environment is to be directly affected. Site personnel, through the induction process, are empowered to refuse to complete a task that puts the environment at risk
- When the circumstances of a work activity change, the site personnel must notify the Field Supervision. Should the change result in necessary changes to the JHA, WMS or any other environmental documentation, then these documents must be revised and approved by the relevant Project Engineer and Environmental Manger and communicated at the following Toolbox Talk to the necessary personnel
- All site personnel who sign onto a WMS are empowered to identify, implement and advise of adjustments to the WMS
- Complying with all environmental responsibilities assigned in relevant legislation, approvals, permits procedures, WMS, plans, job descriptions or any other environmental documentation
- Raising any environmental issues or concerns immediately or during meetings with Environmental Manager or Project Manager

5.1.11 Environmental Representative

For the duration of the works until the completion of construction, the approved Environmental Representative (ER) will:

- Receive and respond to communication from the Secretary in relation to the environmental performance of the CSSI
- Consider and inform the Secretary on matters specified in the terms of this approval
- Consider and recommend to the Proponent any improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community
- Review documents identified in Conditions C1, C4, and C13 and any other documents that are identified by the Secretary, to ensure they are consistent with requirements in or under this approval and if so:

  - make a written statement to this effect before submission of such documents to the Secretary (if those documents are required to be approved by the Secretary)
  - make a written statement to this effect before the implementation of such documents (if those documents are required to be submitted to the Secretary / Department for information or are not required to be submitted to the Secretary / Department).

- Regularly monitor the implementation of the document listed in Conditions C1, C4 and C13 to ensure implementation is being carried out in accordance with the document and the terms of this approval
- As may be requested by the Secretary, help plan, attend or undertake audits of the development commissioned by the Department including scoping audits, programming audits, briefings and site visits, but not independent environmental audits required under the CoA
- As may be requested by the Secretary, assist the Department in the resolution of community complaints
- If requested by the Project, assist in the resolution of community complaints.
- Assess the impacts of minor ancillary facilities comprising lunch sheds, office sheds, material lay down sites, areas used to assemble culverts and turnouts, and portable toilet facilities as required by Condition C21 of this approval
- Prepare and submit to the Secretary and other relevant regulatory agencies, for information, an ER Monthly Report providing the information set out in the ER Protocol under the heading “ER Monthly Reports.” The ER Monthly Report must be submitted within seven calendar days following the end of each month for the duration of the ER’s engagement for the CSSI
- Consider any minor amendments to be made to the CEMP, CEMP Sub-plans and monitoring programs that comprise updating or are of an administrative nature, and are consistent with the terms of this approval and the CEMP, CEMP Sub-plans and monitoring programs approved by the Secretary and, if satisfied such amendment is necessary, approve the amendment. This does not include any modifications to the terms of this approval.
- Communicate outcomes from inspections or audits taken by the ER to the Project Team

Communication to the ER will be from the Environmental Manager or Project Manager (or delegate) and ARTC Project Environmental Advisor will be on all shared communication.

5.2 Sub-Contractor Management

Environmental requirements and responsibilities are to be specified to Subcontractors in the contract documentation including the requirement to comply with this CEMP and Sub-plans, the EPL and CoA. As part of the selection process, consideration will also to be given to past environmental performance. The Environmental Manager, or delegate, will participate in the tender assessment and selection process where it is deemed necessary due to associated environmental risks. All Subcontractors will be required to complete a sub-contractor questionnaire or similar.

At the time of engagement, an assessment of a sub-contractor's suitability for the Project will be carried out in relation to environmental compliance, systems, monitoring and auditing procedures. Where Subcontractors are small or when their system is insufficient, they will operate under this CEMP and Sub-plans. All sub-contractors are required to work in accordance with the approved CEMP and Sub-plans.

All sub-contractors are required to attend the Project induction where the requirements and obligations of the CEMP and Sub-plans are communicated. A record of all sub-contractors inducted will be maintained as part of the Project induction and training register by the INLink Safety Team.

Subcontractors performance compliance of the CEMP and associated sub plans are undertaken through inspections, audits and monitoring identified within Section 7 of this CEMP.

5.3 Environmental Aspect-Specific Responsibilities

Roles and responsibilities pertaining to each environmental element are identified within each CEMP and Sub-plan.

5.3.1 Specialist Environmental Consultants

Table 5-1 identifies the specialist environmental consultants engaged for specific aspects of the Project.

Table 5-1 – Specialist Environmental Consultants

Aspect	Consultant	Scope
Contamination	Premise	Assist in the preparation and implementation of the Hazardous and Contaminated Materials Management Plan
Ecology	OzArk EHM	Assist in the preparation and implementation of the Construction Flora and Fauna Management Plan including Pre-clearing Surveys, and the Ecological Monitoring Program. Provide on call service in case of unexpected ecology finds.
Heritage	OzArk EHM	Provide on call service in case of unexpected heritage finds.
Noise and Vibration	Hutchison Weller	Assist with the implementation of the Construction Noise and Vibration Management Plan including preparation of Construction Noise and Vibration Impact Statements for out of hours work
Soil and Water	Topo Group	Assist in the preparation and implementation of the Construction Soil and Water Management Plan and the Primary Erosion and Sediment Control Plan

Aspect	Consultant	Scope
Approvals and Environmental Management Documents	Hutchison Weller	Assist with the development of Compliance Reports, Annual Returns, and review and updating of this CEMP and associated sub plans

6 Environmental Incidents, Non-Compliance and Complaints

6.1 Environmental Incidents

Environmental incidents will be investigated and reported upon in accordance with the CEMP. An environmental investigation includes the following basic elements:

- Identifying the cause, extent and responsibility of the incident
- Identifying and implementing the necessary corrective action
- Identifying the personnel responsible for carrying out the corrective action
- Implementing or modifying controls necessary to avoid a repeat occurrence of the incident
- Recording any changes in written procedures required
- Advising the environmental authority (i.e. EPA) if any serious or material environment harm has occurred.

Any environmental incident will be immediately reported to the Environmental Manager or Project Manager, who will report the incident to ARTC. Verbal notification will be provided within 2 hours (where practical) and initial incident investigation by written notification will be submitted within 24 hours to ARTC. All Class 1 and 2 incidents will be reported to the ER within 24 hours, and Report Only and Class 3 incidents will be reported to the ER during the fortnightly ER meeting.

Incidents will be reported to ARTC and the ER using the Environmental Incident Form (Attachment F) as set out in Section 7.4. Where extreme or major environmental incidents occur, a Flash Report will be generated through the Incident and Accident Database to alert INLink Senior Management.

In accordance with Condition A36, DPIE will be advised in writing to compliance@planning.nsw.gov.au immediately after becoming aware of an incident and in any event within 24 hours of becoming aware of any incident. The notification will include the application number, time, date and details of the incident. If statutory notification is given to the EPA as required under the POEO Act, such notification must also be provided to DPIE within 24 hours after the notification was given to the EPA.

An environmental incident / accident matrix is included in Attachment E and contains detailed information on incident descriptions. Details of all environmental incidents will be investigated and entered into the Incident and Accident Database.

The Project has requirements under the CoA and EPL to notify the regulatory authorities, DPIE and the ER of any incidents at the Project. The Project also has an obligation to other stakeholders depending on the scale and type of incident.

For reporting requirements of incidents refer to Table 6-1.

Table 6-1 – Reporting for Incidents

Description	Frequency	Reporting Details	Documentation
Incident	Immediately	Major or extreme	Report to ARTC & EPA (if breach EPL and CoA conditions)

Description	Frequency	Reporting Details	Documentation
Incident	Within 24 hours	All levels excluding major and extreme	Report to ARTC & EPA (if breach EPL and CoA conditions)

Where lessons are learnt from the investigation or current procedures are identified as being ineffective, the CEMP or associated sub plans will be revised to include the improved procedures or requirement.

6.2 Non-Compliances

The Environmental Manager, Project Manager and/or delegate is responsible for ensuring all the requirements of the CoA have been addressed, and where necessary approved by DPIE, prior to construction commencing. The Environmental Manager and/or delegate will undertake environmental inspections to develop and evaluate the effectiveness of environmental controls. The inspections will be recorded using the Weekly Environmental Checklist (refer to Attachment F).

In the event of any non-compliance (an occurrence, set of circumstances or development that is a breach of the approval conditions [CoA SSI7475 or EPL 21138] but is not an incident), the non-compliance will be reported to ARTC immediately and managed by the Environmental Manager and if required corrective action/s will be raised. A Non-Conformance Report (NCR) will be raised and submitted to ARTC for approval. All corrective actions and improvements from an NCR will be entered into the Corrective or Improvement Actions Database and will be closed out as agreed by the Environmental Manager and Project Manager (to be reviewed during the Weekly Environmental Checklist).

The database will be maintained by the Environmental Manager, with it being updated for each non-compliance event reported. This should be entered into the Corrective or Improvement Actions Database within 24 hours of the non-compliance being reported.

In accordance with Condition A29, DPIE will be notified in writing to compliance@planning.nsw.gov.au within seven days after the identification of any non-compliance. The notification will identify the Project and the application number for it, set out the condition of consent that the Project is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

For reporting requirements on non-compliances refer to Table 6-2.

Table 6-2 – Reporting for Non-compliances

Description	Frequency	Reporting Details	Documentation
Conditions of Approval	Immediately 7 Day Reporting	Breach of condition/s – Non-Compliance. To include: • Time • Date • Details • Cause or Impact	Report to ARTC & ER ARTC to report to DPIE within 7 days of the non-compliance
Conditions of Approval	Immediately 24 Hour Reporting	Breach of condition/s – Incident To include: • Time • Date • Details • Cause or Impact	Report to ARTC & ER ARTC to report to DPIE within 24 hours of the non-compliance

Where lessons are learnt from the investigation or current procedures are identified as being ineffective, the CEMP or associated plans will be revised to include the improved procedures or requirement.

6.3 Environmental Complaints

In the event of an environmental complaint (information provided to the Project via the 1800 number or a form of communication in which the information provided constitutes a breach of the CoA, EPL or nuisance under the NSW legislation), the complainant will be provided with relevant contact details to the INLink Community and Stakeholder Team. The INLink Community Manager will be responsible for recording and follow up of complaints in accordance with the ARTC Communications Strategy. The Project will liaise with the Community Manager wherever recommendations have been made to adjust work practices in response to a complaint and will take all reasonable and practicable measures to mitigate issues which may reduce the likelihood of further legitimate complaints.

The ARTC Communications Strategy will be followed when responding to environmental complaints. The ARTC Communications Strategy sets out ARTC's approach to stakeholder and community engagement during the construction phase of the Project and will be implemented by INLink where required.

A record of all complaints will be made and stored in relation to pollution arising from a construction activity to which the EPL applies and will include the details as listed in the EPL. The records will be kept for at least four years after the complaint was made.

6.4 Incident Prevention Management

Key effective incident prevention is undertaken by environmental inspections and monitoring for the duration of the Project. During the Project the following preventative strategies will be implemented:

- Daily informal visual inspections of active work sites
- Completion of the Weekly Environmental Checklist
- Timely close out of corrective actions as identified in the Weekly Environmental Checklist
- Prompt maintenance and repairs identified by daily visual checks or corrective actions as identified in the Weekly Environmental Checklist
- Environmental training (as per Section 9 of this CEMP)
- Environmental audits (as per Section 7.3 of this CEMP).

Preventative or corrective actions will be identified in response to an environmental incident, during daily visual inspections or through the Weekly Environmental Checklist. Preventative or corrective actions will be undertaken in accordance with the Environmental Risk and Opportunities Register as outlined in Attachment D.

6.5 Incident Investigation

All incidents will be investigated and the level of the investigation needed will depend on the incident classification as identified within the environmental incident / accident matrix (Attachment E). Corrective actions, including those required to assist in preventing future incident occurrences, are a key outcome of incident investigations. Any actions resulting from an incident will be recorded within the Corrective or Improvement Actions Database.

An Environmental Incident Form will be used to undertake an incident investigation if required. The basic elements of the environmental investigation include:

- Time and date of incident
- CSSI number for Project
- Identify the extent of the incident
- Identify the immediate corrective actions to prevent the impact from continuing including the personnel responsible for undertaking these actions
- Identify corrective actions to remediate the impacted area including the personnel responsible for undertaking these actions
- Undertake a root cause analysis
- Assess risk of reoccurrence
- Identify procedural deficiencies
- Implement investigation recommendations from root cause analysis or procedure deficiencies
- Report findings.

7 Inspections, Monitoring, Auditing and Reporting

The following section outlines the environmental inspections, monitoring, auditing and reporting requirements for the Project. These activities ensure the Project is compliant with the CoA, EPL and other legislative requirements and will identify all non-compliance issues. Such issues would be reported as outlined in Section 7.4. All Forms as described below in Table 7-1 will be completed using an online tool and database.

7.1 Environmental Inspections

The Environmental Manager and / or delegate will undertake environmental inspections to develop and evaluate the effectiveness of environmental controls. The inspections will be recorded using the Weekly Environmental Checklist (refer to Attachment F).

If any maintenance and / or deficiencies in the environmental controls are observed, they will be recorded on the Weekly Environmental Checklist. A register of all corrective actions including due date, close out date, item description and the responsible person will be recorded in the Corrective or Improvement Actions Database.

The inspections will be undertaken for the duration of the Project as described in Table 7-1.

Table 7-1 – Project Environmental Inspection Requirements

Type of Inspection	Frequency	Form
Informal – active work sites	Daily	Daily Dairy
Formal – active work sites	Weekly	Weekly Environmental Checklist
Cultural Heritage Exclusion Areas	Weekly	Weekly Environmental Checklist
Rain Event	Event	Weekly Environmental Checklist
Post rain for ESC Capacity (ensure > 75% capacity in ESC controls)	Event	Weekly Environmental Checklist
Incident Complaint	Event	Incident Form
Non-compliance	Event	Incident Form

7.2 Construction Monitoring Program

The Construction Monitoring Programs are included in each Sub-plan and are summarised in Table 7-2.

Table 7-2 – Construction Monitoring Program

Description	Frequency	CEMP Sub-plan
Water Quality –	Duration of Project	SWMP

Description	Frequency	CEMP Sub-plan
Surface Water and Groundwater	Event in relation to non-compliance or incident	
Water Use	Duration of Project	SWMP
Noise and Vibration	Duration of Project Event in relation to complaint and/or at sensitive receptors	NVMP
Dust	Pre-construction at designated locations Duration of Project Event in relation to complaint and/or at sensitive receptors	AQMP
Pre-clearance Flora and Fauna Surveys	Pre-construction	FFMP
Pre-clearance weed identification and removal	Pre-construction	FFMP

The Construction Monitoring Program implementation will be the responsibility of the Environmental Manager (or delegate), and will include the following:

- Sufficient training of personnel
- Arranging specialist consultants when required
- Coordination of monitoring equipment and materials
- Coordination of sample collection, documentation and delivery
- Ensuring frequency and methodology is in accordance with all licences, permits, approvals, Australian Standards and any other industry standards
- Data management and representation of results
- Reporting non-compliances or incidents related to monitoring and implementing corrective actions.

Field data will be recorded on Field Data Sheets and transferred into a Monitoring Results Register. In addition to measured parameter readings, the following information will be recorded on field data sheets:

- Date
- Time
- Photographs
- Sampling point / location (in the form of the name of the nearest road / property and GPS coordinates)
- Name of sampler.

7.3 Auditing

Auditing will be undertaken to verify compliance with the associated Project documentation, the relevant approvals and licences and the Parkes to Narromine: Environmental Audit Program (document number 3-0001-240-EEC-00-RP-0003 – Rev 0). The audits will include a review of compliance with each CoA, compliance with the CEMP and Sub-plans and / or review of prior audits and the associated corrective actions. Audits will occur as per the Project Environment Audit Schedule in Attachment G. The auditing requirements for the Project are included in Table 7-3.

Table 7-3 – Project Auditing Requirements

Description	Frequency	Parties Involved	Reporting Requirements
AS/NZS ISO 14001 Audit	Annually	External*	ARTC and ER Within 6 weeks of completing the audit.
CEMP and Sub Plans	Monthly	Internal	Reported within Monthly Construction Report

*External auditing if required or requested by the Regulatory Authorities will be undertaken by an independent environment auditor in accordance with ISO 19011:2003 - Guidelines for Quality and / or Environmental Management Systems Auditing.

Sub-contractors will be audited through the internal monthly audits to achieve compliance with the Project documentation, the relevant approvals and licences and the CEMP and Sub-plans.

7.4 Reporting

Reporting will be undertaken to validate the impacts predicted for the Project and to comply with the conditions as set out in the approvals, licences and this CEMP and Sub-plans. Reporting will be undertaken by the Environmental Manager.

In accordance with the EPL, all records will include the following:

- Be in legible form or in a form that can readily be reduced to a legible form
- Kept for at least four years after the monitoring or event to which they relate took place
- Produced in a legible form to any authorised officer of the EPA who asks to see them.

Reporting requirements for the Project are outlined in Table 7-4.

Table 7-4 – Project Reporting Requirements

Description	Frequency	Reporting Details	Documentation
Monthly Report	• Monthly • Pre-construction and during construction	• Forecast construction schedule • Daily inspections • Incident monitoring • Complaints • Daily rain monitoring • Discharge monitoring • Surface water monitoring • Groundwater monitoring	INLink Report to ARTC within 7 days following the end of each month ARTC to report to ER

Description	Frequency	Reporting Details	Documentation
		• Event monitoring • Environmental audits • KPI • Non-compliance • Compliance with legislation • Waste • Water usage • Concrete usage • Fill import or export • Contaminated land tracking • Pre-clearance surveys	
Monthly Compliance Report	Monthly from construction start date	• Summary of CSSI Activities • Results summary and analysis of environmental monitoring • Complaints • Summary of main areas of complaint • Actions taken • Response given • Proposed strategies for reducing • Details of any review of a minor amendment made to the CEMP required by Condition C1 • Register of any consistency assessments undertaken and their status • Results of any independent environmental audits as per Condition A32 to A35 and details of any actions taken in response to recommendations • Summary of all incidents notified in accordance with Condition A36 and Condition A39 • Compliance status summary for the reporting period including details of any non-compliances with the terms of the CoA	• INLink report to ARTC • ARTC to report to ER • ARTC to submit to DPIE and any other relevant stakeholders or government agencies • Contained within the Construction Progress Monthly Report

Description	Frequency	Reporting Details	Documentation
Construction Monitoring Program Report	Monthly	Results of Construction Monitoring Program	• INLink report to ARTC • ARTC to report to ER • ARTC to report to DPIE, Council (Six monthly) • Contained within the Construction Progress Monthly Report
Construction Compliance Report	Six-monthly	• Details of any review of, and minor amendments made to, the CEMP required by Condition C1 as a result of construction carried out during the reporting period.	INLink submit to ARTC ARTC to report to ER ARTC to submit report to DPIE and any other regulatory bodies as required by the CoA
Annual Return	Annual	• Monitoring results • Validated complaints • Summary of EPL Non-compliance • Director Approval	INLink report to EPA ARTC are required to report EPL breaches to DPIE
Complaint	• Within 24 hours (or next business day) • Upon request	• Non-compliance • Incident	INLink report to ARTC ARTC to report to ER with weekly complaints
Water Quality	Within 48 hours	Non-compliance with water quality monitoring limits	INLink report to ARTC & EPA (if breach EPL conditions) ARTC to report to ER
Noise and Vibration	Immediately	Notification of emergency works	INLink report to ARTC ARTC to report to ER
Pest and Weed	Within 48 hours	Significant weed or pest outbreak	Report to ARTC, ER ARTC to report to DPIE, DOEE and any other relevant stakeholders or government agencies
Cultural Heritage	Immediately	Any cultural heritage site or place not previously recorded Breach to exclusion area	INLink report to ARTC ARTC to report to ER ARTC to report to DPIE and any other relevant stakeholders or government agencies
Flora and Fauna	Within 48 hours	Clearing outside the Project boundaries Injury/ Death to Fauna Breach to exclusion area	Report to ARTC & EPA (if breach EPL conditions) ARTC to report to ER ARTC to report to DPIE, DOEE and any other relevant stakeholders or government agencies
Traffic Transport and Access	Within 60 days of completion	Level crossing performance report	INLink report to ARTC ARTC to report to ER

8 Communication and Records

8.1 Internal Communication

A program for formal internal correspondence will be implemented during the Project delivery. Regular project management and coordination meetings will be held to monitor progress, discuss issues and plan upcoming construction activities. Environmental management will be a mandatory agenda item at the meetings.

8.1.1 Pre-starts, Toolbox Talks

Pre-starts and toolbox talks will be undertaken and will include identified and potential environmental issues. The pre-starts and toolbox talks will include the following:

- Daily Pre-start Meetings – a forum where all construction personnel raise concerns, where specific environmental works can be discussed and delegated, and where general environmental issues can be relayed to the workforce. Topics and personnel attendance are to be recorded on the Site Attendance Record.
- Weekly / Fortnightly Toolbox Meetings – current Project environmental issues are to be discussed on a regular basis. Additionally, specific toolbox meetings may be held following an environmental incident to ensure site personnel are aware of the incident or non-compliance and preventative measures are communicated. Items are to be recorded on the Site Attendance Record. Toolbox Talks are also used to communicate environmental requirements within the Project and promote awareness of environmental matters.

8.1.2 Project Meetings

Environmental issues will also be discussed at Weekly Project Management Meeting, which are to be attended by key construction and management personnel, client representative and other relevant participants.

Minutes of all formal meetings will be recorded and distributed to relevant personnel.

8.1.3 Other Internal Communication

Noticeboards and emails will be used with all INLink Project personnel for routine communication and used to notify of Project updates and environmental alerts.

8.2 External Communication

8.2.1 Community and Stakeholders

In partnership with ARTC, INLink will endeavour to effectively manage consultation and liaison with the community as an important element of the Project. INLink acknowledge that the nature of the Project and direct interface with the public will require clear protocols and procedures to ensure minimal impacts on the community and ARTC's reputation, while ensuring the public are kept well informed of the Project and its progress.

All communication will be through the INLink Community and Stakeholder Team and the ARTC Community Representative in accordance with the ARTC Communications Strategy. All site staff will be informed of these contacts through the Project induction.

In accordance with the CoA and EPBC Act Approval, all required management plans, reports, strategies and agreements will be posted on the appropriate website – not all management plans, agreements etc need to be nor should be posted on the relevant company websites. Each management plan, report, strategy and agreement will be published on the website within 1 month of being approved by DPIE and remain there until at least 12 months following the completion of the action. In addition, within three months of every 12 month anniversary of the commencement of the action, a report will be published on the website addressing compliance with each of the CoA. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions will be provided to DPIE at the same time as the compliance report is published. The reports will be available on the website until such time as agreed in writing by the Minister.

8.2.2 Regulatory Authorities

Communication with regulatory authorities will be undertaken by the Environmental Manager and / or the ARTC Project Management Team as outlined by the delegation of authority for the approval or licence.

8.2.3 Media

All contact with the media will be through the Communications Manager as per the INLink Communications and Community Engagement Management Plan and the ARTC Communications Strategy. Under no circumstances are Project staff to engage with the media.

8.3 Record Keeping

All documents and records will be controlled and maintained on the internal INLink system (stored on a web based server), during the Project. All records contained within the reports, will be kept by the Project for a minimum of five years from the date of commencement of the Project and will be provided if requested as outlined by approval or licence conditions.

The types of documents to be controlled include:

- Approvals and licences
- Aspect-specific management plan
- Procedures

- Work instructions
- Knowledge and tools
- Smart forms
- Management plans
- Checklists
- Templates (e.g. audit template, training matrix).

The types of records likely to be generated, stored and maintained for the Project include:

- Environmental monitoring results
- Complaints and enquires received
- Notifications received by regulators
- Audit reports
- Completed inspections and observations
- Waste tracking certificates
- Induction records
- Training records
- Incident and non-compliance reports
- Calibration records for monitoring equipment
- Monthly reports
- EPL annual returns
- Meeting minutes
- Records as required under the *National Greenhouse and Energy Reporting Act 2007*
- Health Safety Environment Alerts.

The Environmental Manager is to authorise the access restrictions, editing and disposal of any environmental documents or records (full responsibilities descriptions are outlined in Section 5.1.6). This CEMP, and subsequent revisions, will be authorised by the Environmental Manager and approved by the Project Manager. All other new and revised environmental documents will be approved by the Environmental Manager.

9 Training and Awareness

9.1 Project Induction

All personnel including sub-contractors are required to attend a compulsory Project induction that includes an environmental component prior to commencement on site. This is done to ensure all personnel involved in the Project are aware of the requirements of the CEMP and Sub-plans and to ensure the implementation of environmental management measures. The Project induction will ensure all Project personnel, sub-contractors, consultants and visitors become familiar with the environmental management obligations and requirements of the Project. The environmental component of the Project induction has been developed to target the relevant environmental aspects of the site.

The Project induction will outline the following:

- General environmental responsibilities
- Requirements of this CEMP and Sub-plans including significant Project environmental risks and mitigation measures
- Legislation and permit / approval / licence / compliance obligations applicable to the Project
- Site incident reporting requirements
- Emergency procedures and response
- Locations of sensitive or protected environmental areas on and surrounding the site
- Cultural heritage obligations.

Short term visitors to site will be required to be accompanied by inducted personnel while on the Project site.

9.2 Training

Project personnel and sub-contractors will be provided training where appropriate to manage the level of risk associated with their works. Training will be provided by competent Project staff as determined by the Environmental Manager. A training register will be maintained by the Environmental Team and will include the following:

- Name of person trained
- Date of training
- Name of trainer
- General description of the training content.

The environmental training for the Project is outlined in Table 9-1.

Table 9-1 – Environmental Training Matrix

Position	Project Induction	ESC	Incident Response	Toolbox Talks
Project Director	✓		✓	✓
Construction Manager	✓	✓	✓	✓
Superintendent Foreman Leading Hands Engineers	✓	✓	✓	✓
General Workforce	✓		✓	✓
Environmental Team	✓	✓	✓	✓
Safety Manager	✓		✓	✓
Community and Stakeholder Relations Manager	✓		✓	✓

Additional training will be added to the matrix where a substantial environmental risk is determined by the Environmental Manager or the Project Manager.

All construction personnel and sub-contractors undertaking a specific task related to a CEMP Sub-plan will undertake the targeted environmental training and awareness as outlined in the CEMP Sub-plan.

9.3 Awareness Training through Toolbox Talks and Pre-starts

Environmental awareness training requirements of the CEMP and Sub-plans will also be undertaken through site toolbox meetings, conducted at pre-starts, or when determined as required by the Environmental Manager. Timing and content of such meetings will be aligned with the Project works programme and the significant risks at that time. This will also address any environmental issues that could potentially be impacted by, or on, during the day's activities.

For further detail on tool box talks and pre-starts, refer to Section 8.1.1.

10 Emergency Plan and Response

Emergency planning and response will be implemented in accordance with the Pollution Incident Response Management Plan (PIRMP) and has been developed for emergency situations which may impact upon the environment. The PIRMP addresses the procedure for managing response, classification, reporting and investigation of pollution incidents.

In emergency situations the INLink Emergency Response Plan is to be followed which outlines responsibilities of the Project Team members during an emergency response situation.

Project contacts for emergency planning and response are detailed in Section 12.

11 CEMP Review

11.1 Reviews

The implementation of the CEMP and Sub-plans (including the Construction Monitoring Programs) and any elements of the overarching EMS will be periodically reviewed during Project delivery.

Formal review of the CEMP will be implemented at least once every six months, while the Sub-plans will be reviewed annually or as triggered as stated below. The review will be undertaken by the Environmental Manager and Project Manager. Other triggers for review may include:

- Corrective or preventative actions as raised through the reporting process (i.e. incident reports/NCR's/investigations) requiring amendments to the CEMP and/or sub-management plans
- Changes to relative legislative, regulatory or compliance obligations
- Significant changes to any constituent of construction
- Request by the client or any regulatory authority
- Significant changes to the environment
- Changes to best practice environmental management
- Identification of new environmental risks.

Any minor amendments to be made to the CEMP and Sub-plans that comprise of updating, or are of an administrative nature, will be consistent with Condition A19 as outlined in Table 11-1.

Table 11-1 – Conditions of Approval Review Requirements

CoA	Details
A19	For the duration of the works until the completion of construction, the approved ER must:
A19d)	Review documents identified in Conditions C1, C4, and C13 and any other documents that are identified by the Secretary, to ensure they are consistent with requirements in or under this approval and if so: i) make a written statement to this effect before submission of such documents to the Secretary (if those documents are required to be approved by the Secretary); or ii) make a written statement to this effect before the implementation of such documents (if those documents are required to be submitted to the Secretary / Department for information or are not required to be submitted to the Secretary / Department)
A19j)	Consider any minor amendments to be made to the CEMP, CEMP Sub-plans and monitoring programs that comprise updating or are of an administrative nature, and are consistent with the terms of this approval and the CEMP, CEMP Sub-plans and monitoring programs approved by the Secretary and, if satisfied such amendment is necessary, approve the amendment. This does not include any modifications to the terms of this approval.

The Environmental Manager (or Project Manager's nominee) will be responsile for review and amendment of the CEMP and Sub-plans. If the CEMP and Sub-plans are updated a revised copy will be submitted for review to ARTC and the ER. If ARTC, the ER or the Contractor deem it necessary the

CEMP or Sub-plans will be provided to relevant stakeholders for review and comment if required and forwarded to the Secretary of DPIE for approval.

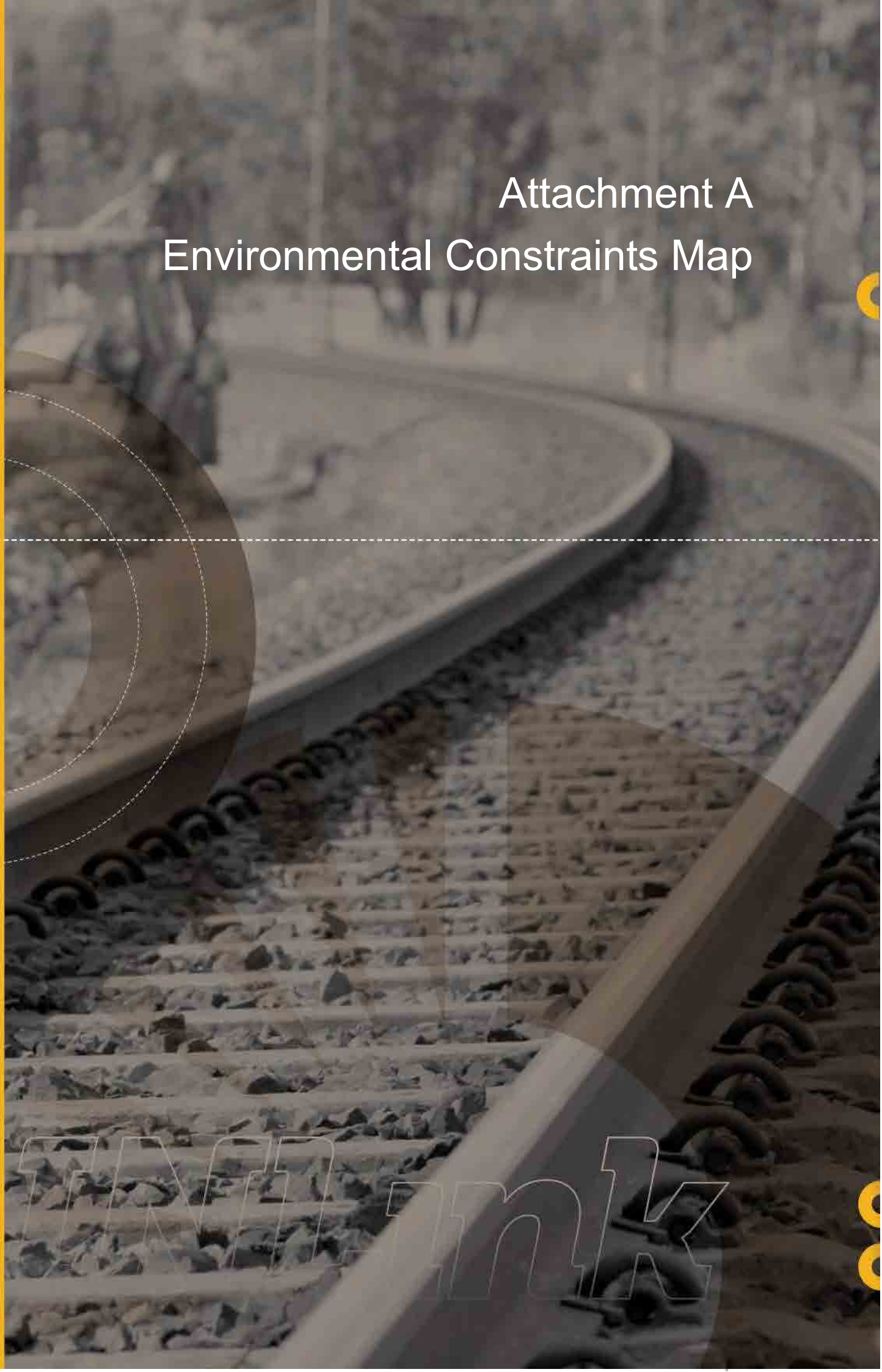
12 Project Contacts

The Project team involved with the delivery of the Project includes but is not limited to the personnel listed in Table 12-1. Further detail on the contact detail for emergency personnel will be detailed in the Emergency Response Plan (refer to the Safety Management Plan) and will be displayed in locations throughout the Project site.

Table 12-1 – Project Contacts

Internal Contact Position	Name	Telephone
Project Director	Gerard O'Connor	See Project Contact List for telephone numbers
Project Manager	Mark Goulevitch	
Construction Manager	Creag McLaren	
Environmental Manager	Alex Gale	
Health and Safety Manager	Tony Horton	
Superintendent	Gary Grant	
Community Manager	Angela Corbett	
External Contacts	**Name**	**Phone**
Parkes Veterinary Clinic	–	02 6862 2527
Narromine Veterinary Clinic	–	02 6889 4888 02 6885 5544
Wildlife Carer	WIRES	1300 556 686
Wildlife Carer	Wildlife Carers Network Central West	0408 966 228

Attachment A
Environmental Constraints Map



1. ABORIGINAL HERITAGE

1.1 ABORIGINAL ARCHAEOLOGICAL SURVEY UNIT

Several sites are identified as a moderate or moderate to high archaeological significant area, outside the rail corridor. If works are required within these areas, then archaeologic excavation works will be required where subsurface impacts will occur, prior to construction. These sites and the mitigation measures include the following.

Table 1 – Aboriginal Archaeological Survey Units

Survey unit	Adjacent CH	Potential rating	Proposed Phase 1 excavation transects	Maximum number of Phase 1 pits (50 x 50cm) *Note: To be updated based on completion of CHMP*
1 (Unnamed drainage)	452.6 – 452.7	Moderate outside rail corridor	1 transect on west side of rail corridor (max. length of 20m up track and down track from creek), with up to 6 test pits. Test pits to be spaced as least 10m apart	3
2 (Ridgey Creek 3)	461.1 – 461.3	Moderate outside rail corridor and level crossing	2 transects either side of rail corridor (max. length of 20m up track and down track from creek), with up to 4 test pits per transect. Test pits to be spaced as least 10m apart	4
5 (Burrill Creek North)	479.2 -479.4	Moderate	2 transects either side of the rail corridor (maximum length of 20 m up track and down track from the creek), with up to 4 test pits per transect. Test pits to be spaced at least 10 m apart.	4
7 (Ten Mile Creek)	490.4 – 490.6	Moderate to high on south side of creek outside rail corridor and area of existing works	2 transects either side of rail corridor (max. length of 100m south of creek) with up to 6 test pits per transect. Test pits to be spaced as least 10m apart	4
8 (Ten Mile Creek – Trewilga Rd)	Adjacent 490.6 (access road)	Moderate to high outside existing road formation and works for Newell Highway	2 transects (north side of road and south side of road) extending along road from MGA 614100 6371200 to 613970 6371190 with up to 6 test pits per transect. Test pits to be spaced as least 10m apart	N/A
9 (adjacent to Tweni Rd)	493.3 – 493.5	Moderate outside corridor on southern side of rail	1 transect on south –west side of rail corridor extending 40m south-east from creek bank with up to 3 test pits. Test pits to be spaced as least 10m apart	3
22 and 23 (Backwater Cowal)	552.5 – 552.8	High outside corridor	4 transects (2 either side of creek each with max. length 120m up track and down track from creek), with up to 4 test pits per transect. Test pits to be spaced as least 10m apart	32 (TBA)
24 (including area of compound south of road)	Adjacent 552.5 (access road), including site compound	High outside road and within up to 200m of Backwater Cowal	2 transects north and south of road (if road expansion required) containing up to 15 test pits. Test pits to be spaced as least 10m apart	15 (TBA)

1.2 SCAR TREE

Impact to scar tree at #35-3-0207 will be avoided. No go zone area within dripline of scar tree.

2. BIODIVERSITY

2.1 KEY FISH HABITAT

All works to be in accordance with *Why do fish need to cross the road? Fish passage requirements for waterway crossings* (Fairfull and Witheridge, 2003).

Table 2 – Key Fish Habitats

Watercourse name	CH	Habitat sensitivity type	Classification of watercourse for fish passage	Structure to be constructed	Minimum recommended crossing type	Minimum design requirements
Unnamed	455.2	Type 3 – minimal	Class 4 – Unlikely	Culvert	Culvert, causeway or ford.	Fish friendly waterway crossing design possibly unwarranted. Fish passage requirement should be confirmed with the local fisheries department or authority.
Unnamed	461.157					
Unnamed	472.04					
Stanfords Creek	489.844					
Gundong Creek	512.120					
Unnamed	517.418					
Unnamed	518.55					
Unnamed	478.26	Type 3 – minimal	Class 3 – Minimal	Culvert	Culvert.	Minimum culvert design using the “Low Flow Design” procedures; however “High Flow Design” and “Medium Flow Design” should be given priority where affordable (refer to Witheridge, 2002)
Ten Mile Creek	490.605					
Barrabadeen Creek	503.599					
Bulldog Creek	509.649					
Tomingley Creek	519.224					
Bradys Cowal	529.768					
Yellow Creek	546.542					
Backwater Cowal	552.631					
Burrill Creek	479.30	Type 2 – moderately sensitive	Class 2 – Moderate	Unlikely to require replacement TBC		High priority given to the “High Flow Design” procedures presented for the design of these culverts – refer to Design Considerations of “Why do Fish Need to Cross the Road?” (Fairfull and Witheridge, 2003) or engineering guidelines (Witheridge, 2002)

3. CONTAMINATION

3.1 POTENTIAL ASBESTOS

Site TP33 has been identified as potential asbestos building. Hazardous material survey is required.

4. NON-ABORIGINAL HERITAGE

4.1 TIMBER COMPONENTS OF UNDERBRIDGE HERITAGE ITEMS

There are numerous structures associated with underbridges identified directly adjacent to the site that may have potential non-Aboriginal cultural heritage value. The following sites and mitigations measures are shown below.

Table 3 – Timber Components of Underbridge Heritage Items

Site name	CH	Mitigation measure
Goobang Junction 1	453.403	• Avoid or minimise impacts, where possible • Heritage Photographic Archival Recordings will be required for potential heritage items associated with the existing rail line, in accordance with ARTC Archival Recording Standard.
Goobang Junction 2	454.844	
Goonumbla 1	459.676	
Goonumbla 2	460.698	
Goonumbla 3	461.157	
Goonumbla 4	468.565	
Mickibri 1	478.262	
Mickibri 2	484.829	
Peak Hill 1	498.870	
Peak Hill 2	503.599	
Peak Hill 3	505.502	
Peak Hill 4	509.64	
Tomingly West 1	513.671	
Tomingly West 2	515.011	
Tomingly West 3	515.601	
Tomingly West 4	519.224	
Wyanga 1	528.54	
Wyanga 2	529.4768	
Narwonah	546.542	

4.2 RAILWAY STATION HERITAGE ITEMS

There are numerous structures associated with railway stations identified directly adjacent to the site that may have potential non-Aboriginal cultural heritage value. The following sites and mitigations measures are shown below.

Table 4 – Railway Station Heritage Items

Site name	CH	Mitigation measure
Nanardine railway station	457.990	• Avoid or minimise impacts, where possible • Heritage Photographic Archival Recordings will be required for potential heritage items associated with the existing rail line, in accordance with ARTC Archival Recording Standard. • *For Peak Hill railway station: If possible, the intact timber faced loading bank should be retained in situ as an intact example of loading banks constructed as part of the rail line and associated grain rail sidings
Alectown West railway station	473.5	
Mickibri railway station	482.3	
Trewilga railway station	490.995	
Wyanga railway station	529.010	
Fairview railway station	539.000	
Peak Hill railway station*	498.500	

4.3 BUILDING HERITAGE ITEM

Wyanga Cottage is located within the buffer distance where vibration levels could cause impacts. The following mitigation measures will be required:

- Heritage Photographic Archival Recordings will be required for potential heritage items associated with the existing rail line, in accordance with ARTC Archival Recording Standard.
- Implement vibration management measures in accordance with the Inland Rail Construction Noise and Vibration Management Framework
- Site specific archaeological assessment to be undertaken if ground disturbance is proposed
- Condition of approval requires protection of Wyanga Cottage.

4.4 RAILWAY SIDING

Further assessment required and confirmation of mitigation measures.

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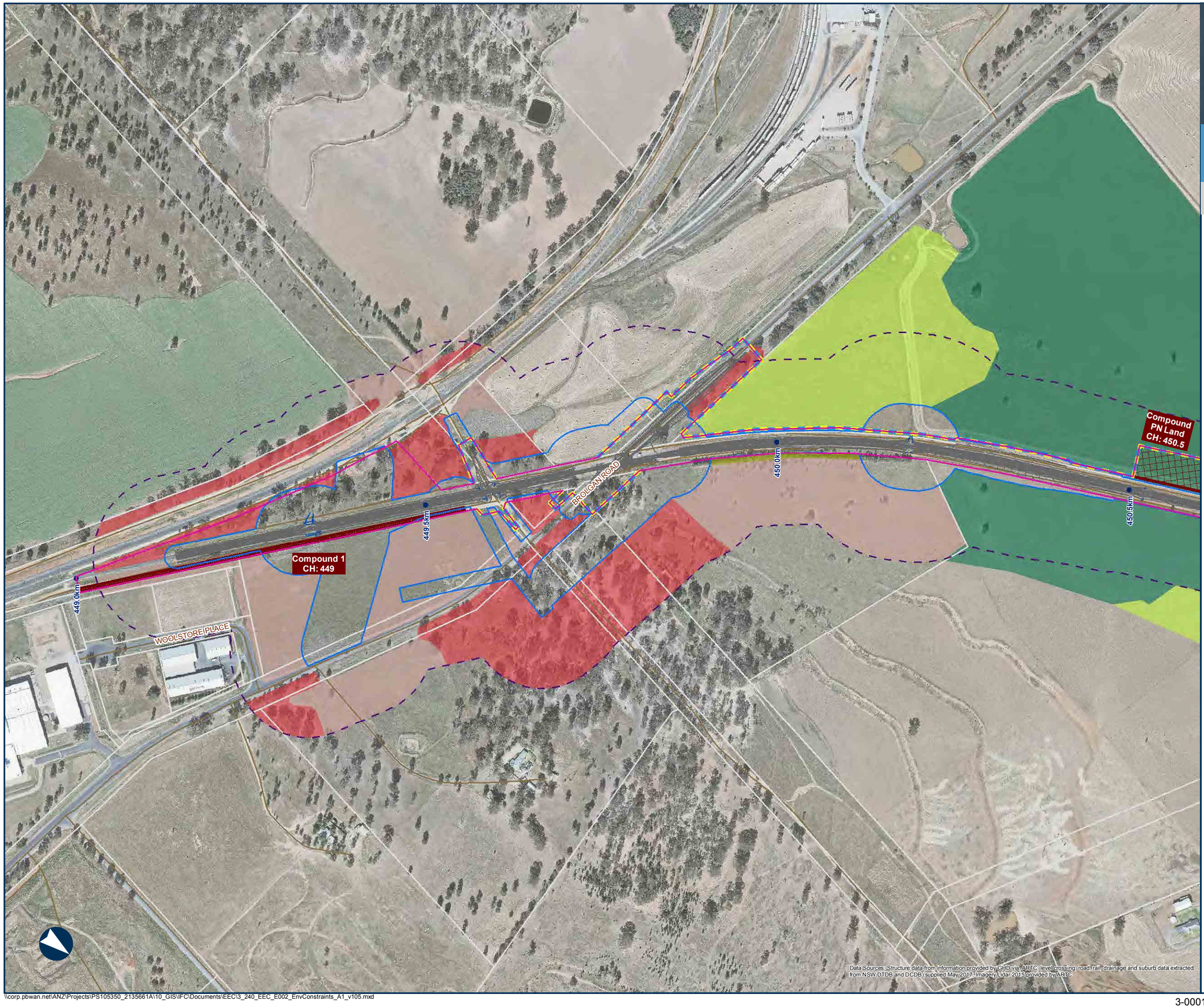
PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 1 of 71



LEGEND

- Nominated compound/Laydown area
- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT70 - White Cypress Pine Woodland, Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Low - Derived Native Grassland
- PCT796 - Derived grassland of the NSW South Western Slopes, Moderate/Good

Data Sources: Structure data from information provided by CHD via ARTC, level crossing, road / rail, drainage and suburb data extracted from NSW DTDB and DCDB (supplied May 2017), Imagery, Lidar 2015 provided by ARTC

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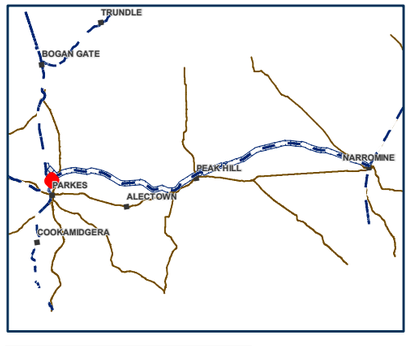

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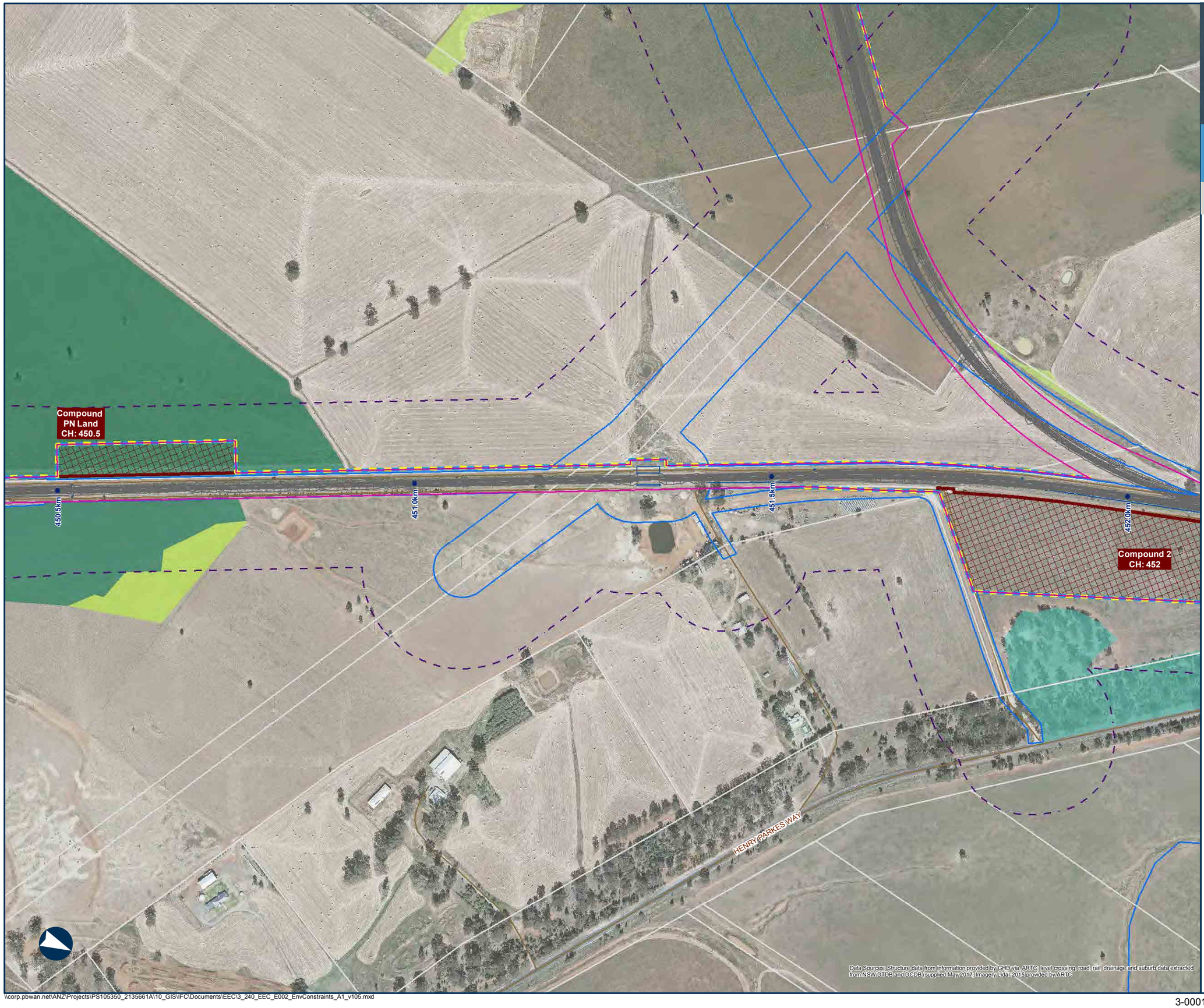

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 2 of 71

LEGEND

- Nominated compound/Laydown area
- Earthworks design
- Road
- Drainage line
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT267 - White Box - White Cypress Pine - Western Grey Box Woodland, Moderate/Good
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good
- PCT796 - Derived grassland of the NSW South Western Slopes, Moderate/Good

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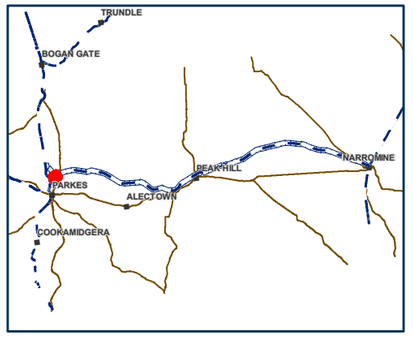

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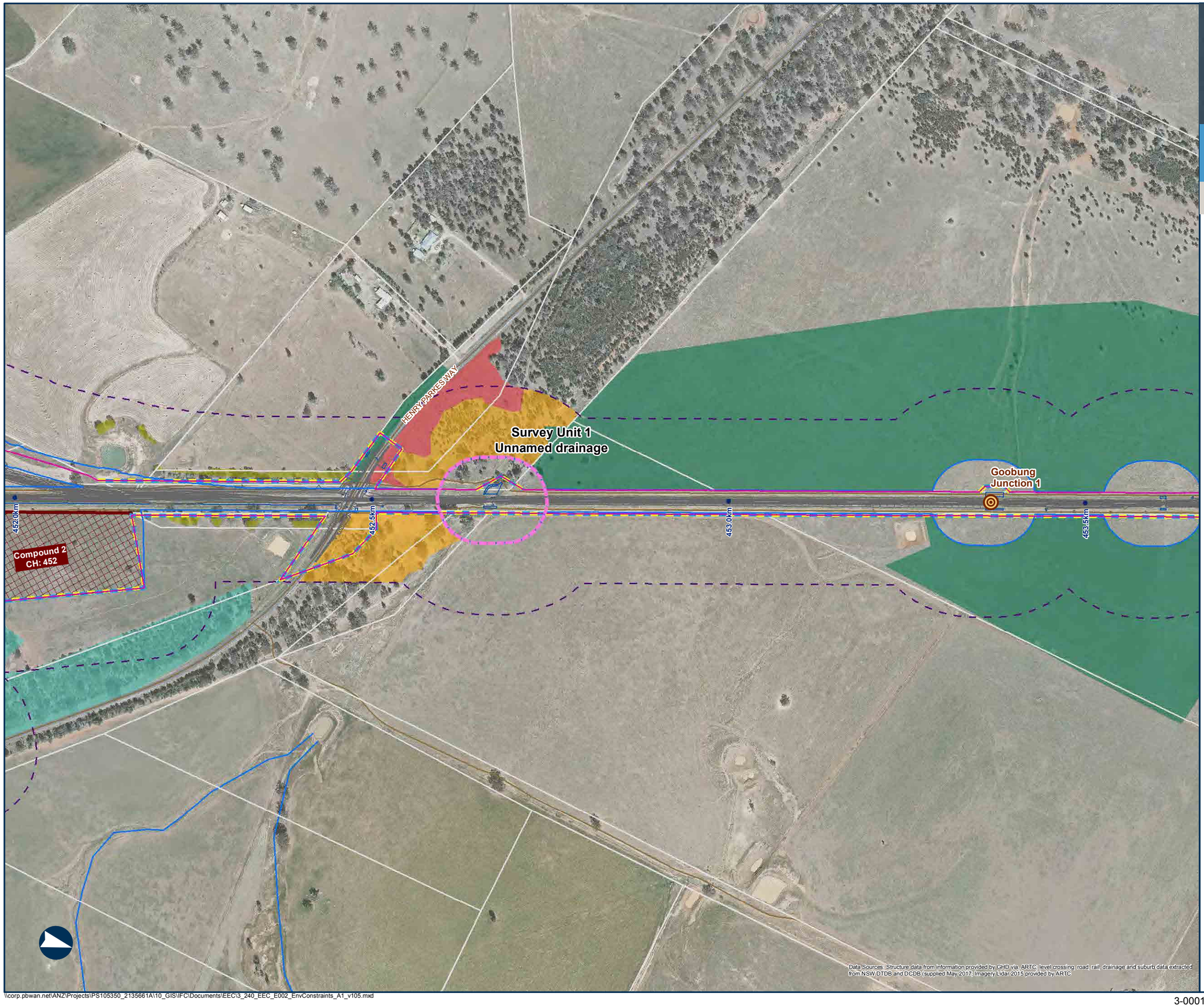
PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 3 of 71



LEGEND

- Timber components of underbridge heritage item (refer to Table 3)

Aboriginal archaeological survey units (refer to Table 1)

- Aboriginal archaeological survey unit
- Nominated compound/Laydown area
- Earthworks design
- Road
- Drainage line
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT267 - White Box - White Cypress Pine - Western Grey Box Woodland, Moderate/Good
- PCT276 - Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion (TEC), Moderate/Good
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good
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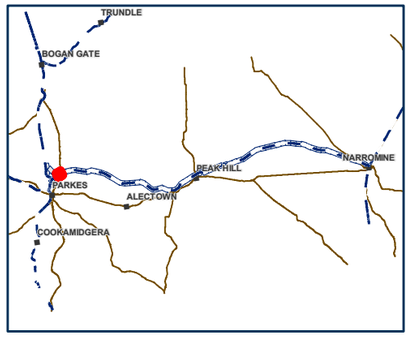

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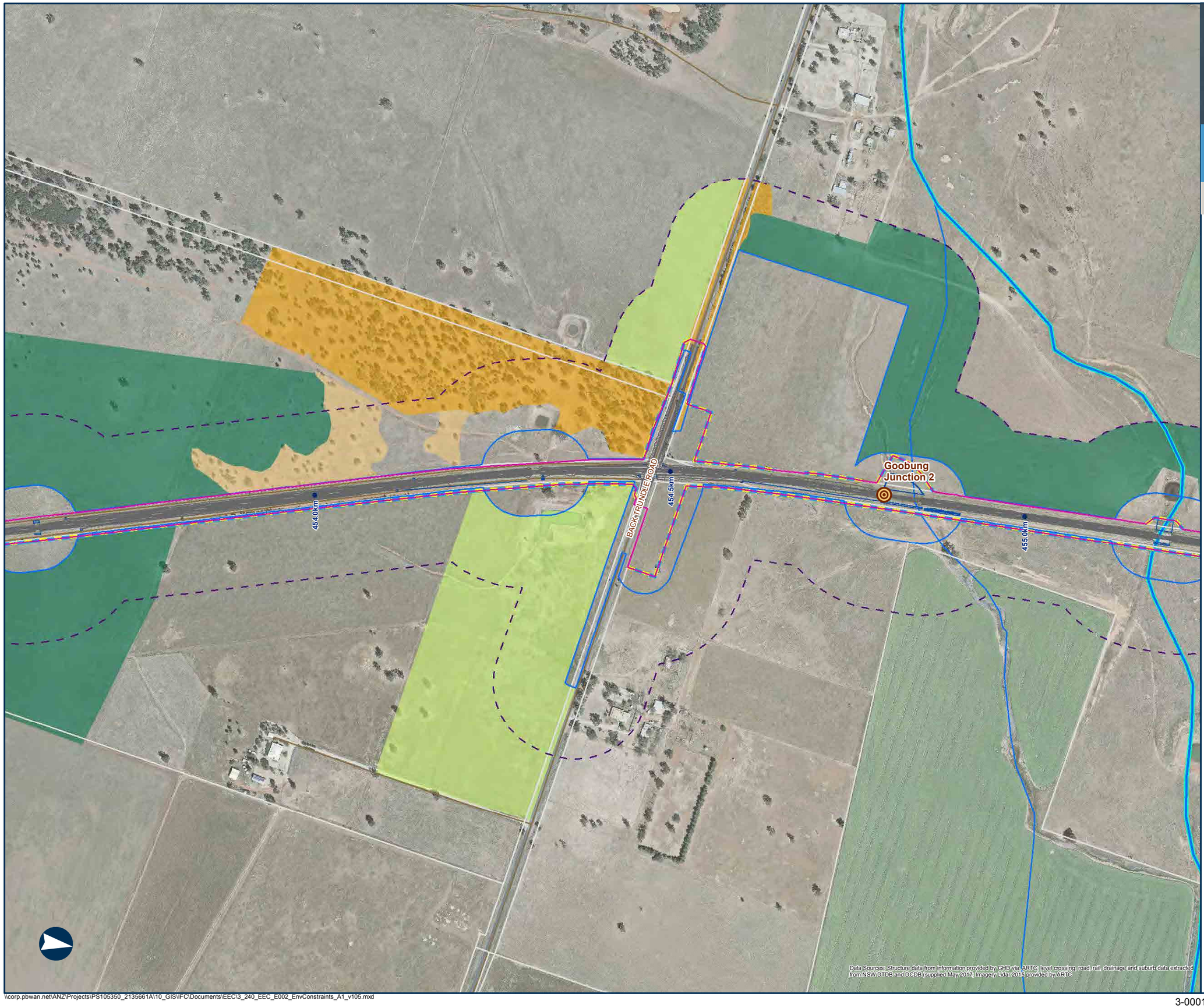

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 4 of 71

LEGEND

- Timber components of underbridge heritage item (refer to Table 3)
- Earthworks design
- Road
- Drainage line
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT276 - Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion (TEC), Moderate/Good
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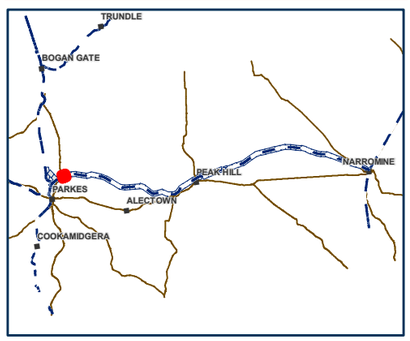

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 5 of 71

LEGEND

- Earthworks design
- Drainage line
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT276 - Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion (TEC), Low - Derived Native Grassland
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good

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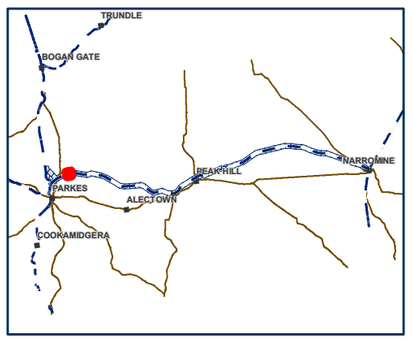

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Coordinate System: GCS GDA 1994

Paper: A3
Date: 7/08/2018
Author: WSP

Scale: 1:5,000

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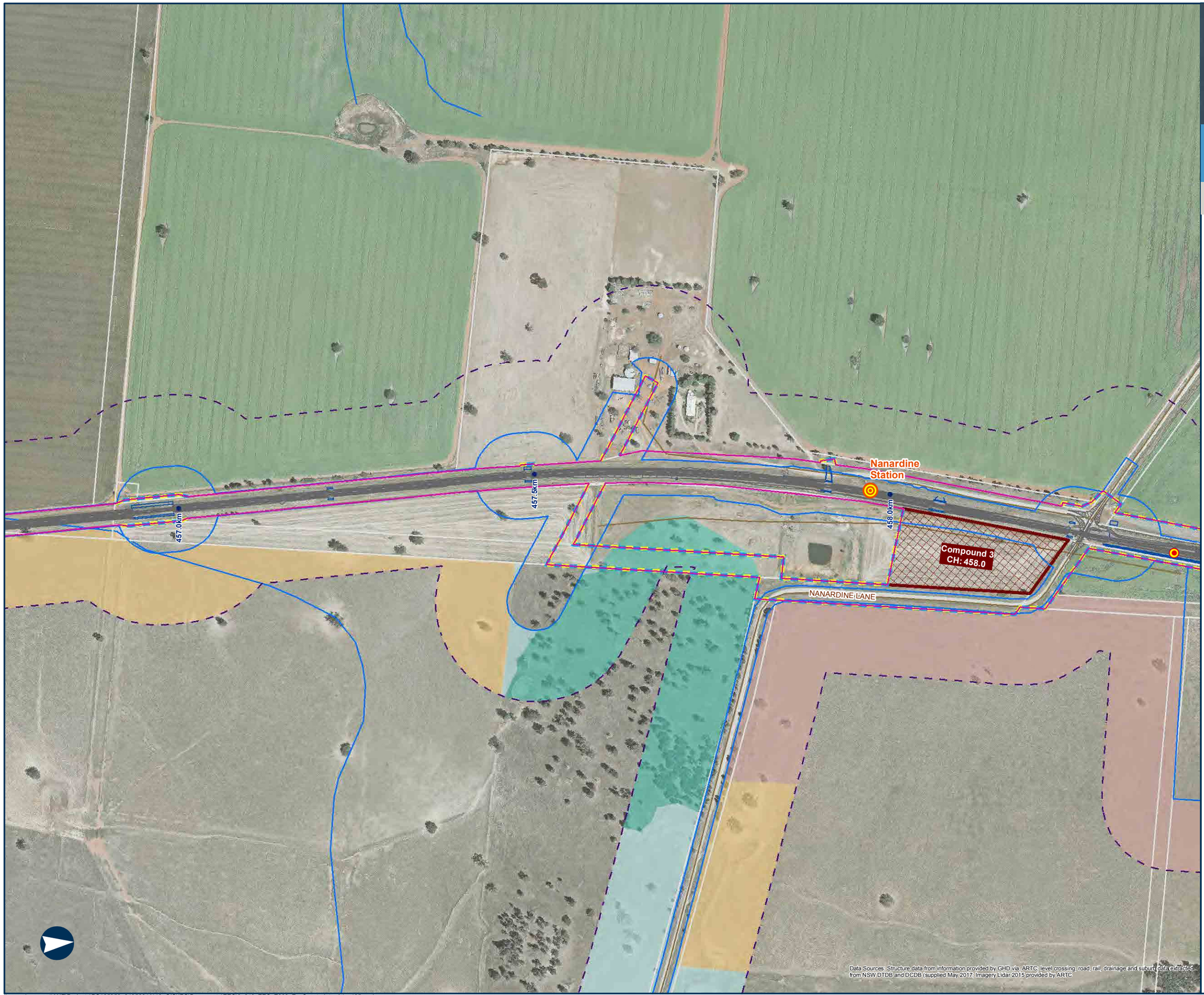

ARTC InlandRail

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 6 of 71

LEGEND

- Railway station heritage item (refer to Table 4)
- Brown Treecreeper (eastern ssp.)
- Diamond Firetail
- Grey-crowned Babbler (eastern ssp.)
- Spotted Harrier
- Nominated compound/Laydown area
- Earthworks design
- Road
- Drainage line
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT267 - White Box - White Cypress Pine - Western Grey Box Woodland, Moderate/Good
- PCT267 - White Box - White Cypress Pine - Western Grey Box Woodland, Low - Derived Native Grassland
- PCT276 - Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion (TEC), Low - Derived Native Grassland
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Low - Derived Native Grassland

**NOT FOR PUBLICATION.
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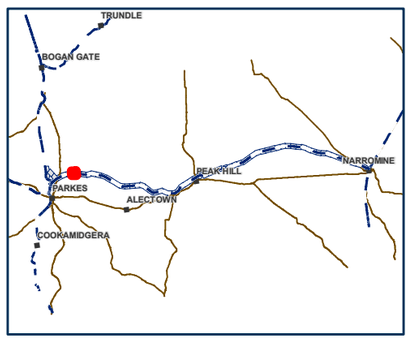

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ARTC InlandRail

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

PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 7 of 71

LEGEND

- Timber components of underbridge heritage item (refer to Table 3)
- Brown Treecreeper (eastern ssp.)
- Diamond Firetail
- Grey-crowned Babbler (eastern ssp.)
- Spotted Harrier
- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Low - Derived Native Grassland

Data Sources: Structure data from information provided by GHD via ARTC, level crossing, road, rail, drainage and suburb data extracted from NSW DTDB and DCDB (supplied May 2017). Imagery Lidar 2015 provided by ARTC

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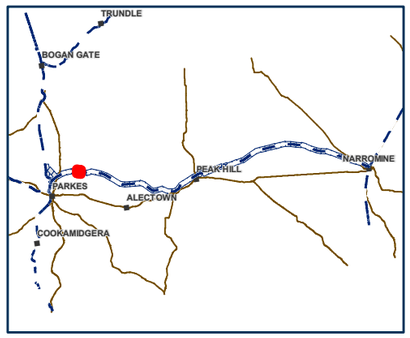

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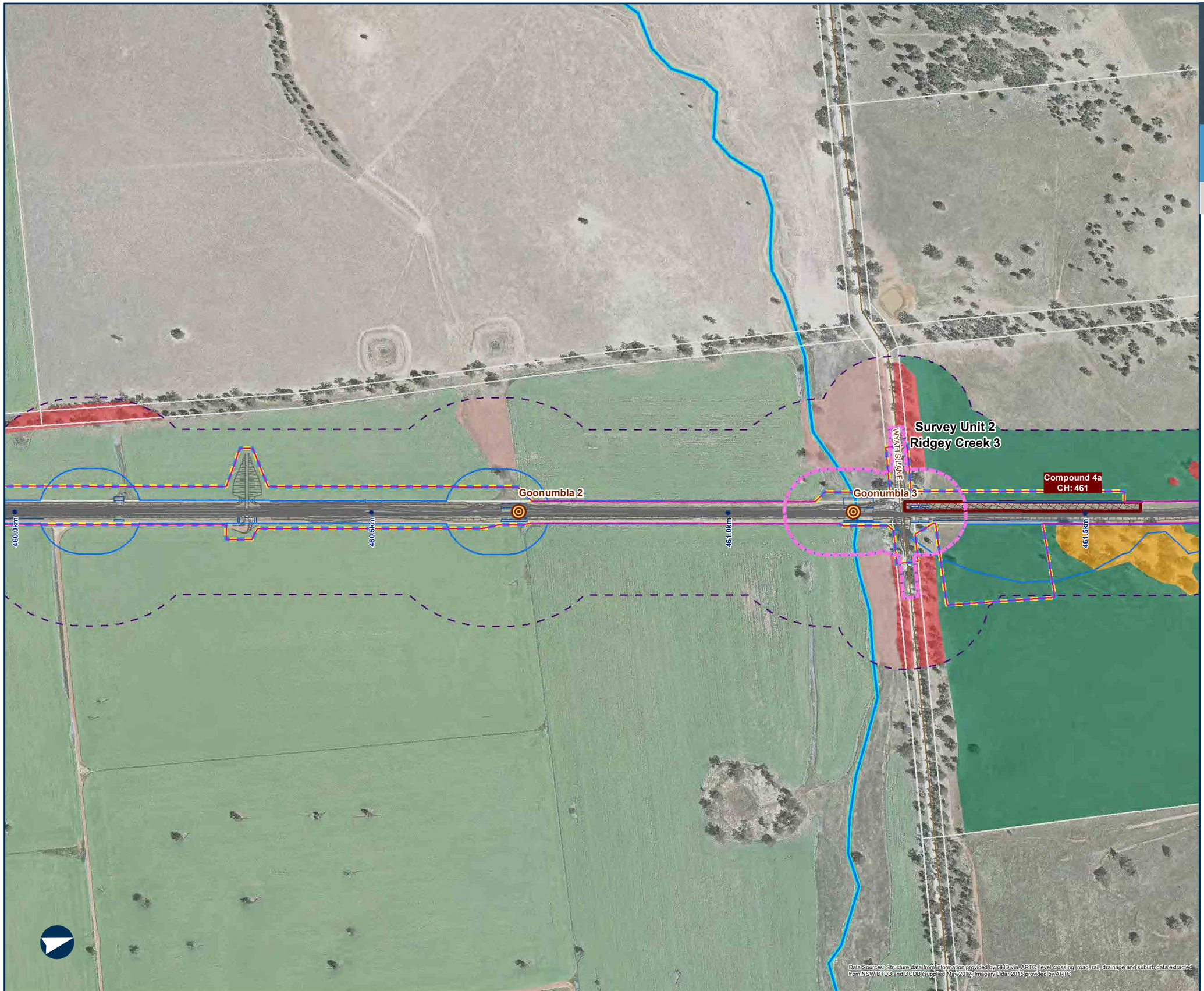

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 8 of 71

LEGEND

- Timber components of underbridge heritage item (refer to Table 3)

Aboriginal archaeological survey units (refer to Table 1)

- Aboriginal archaeological survey unit
- Nominated compound/Laydown area
- Earthworks design
- Road
- Drainage line
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT276 - Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion (TEC), Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Low - Derived Native Grassland

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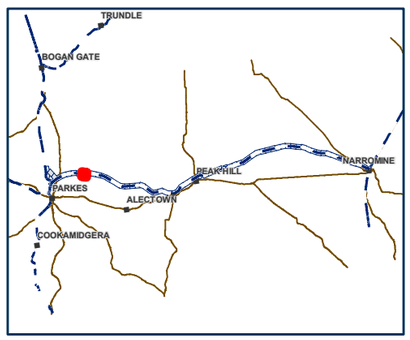

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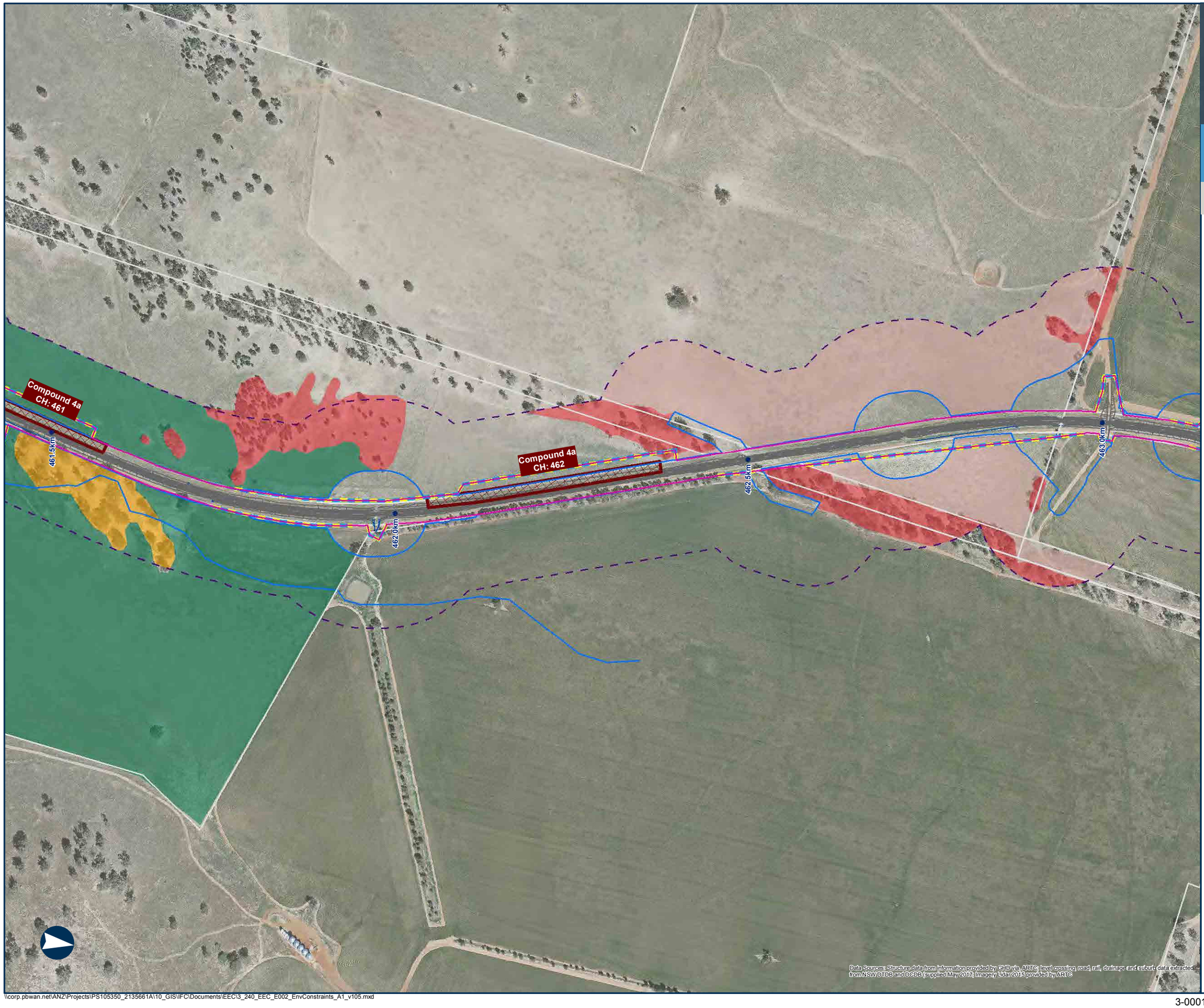

ARTC InlandRail

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 9 of 71

LEGEND

- Nominated compound/Laydown area
- Earthworks design
- Drainage line
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT276 - Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion (TEC), Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Low - Derived Native Grassland

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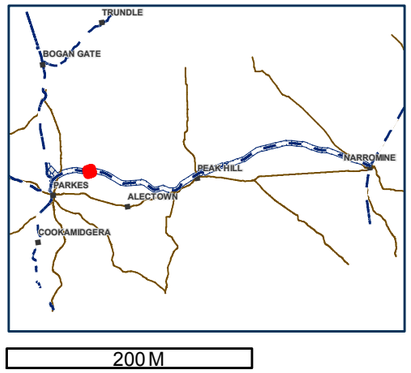

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ARTC InlandRail

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 10 of 71

LEGEND

- Nominated compound/Laydown area
- Earthworks design
- Road
- Drainage line
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Low - Derived Native Grassland

**NOT FOR PUBLICATION.
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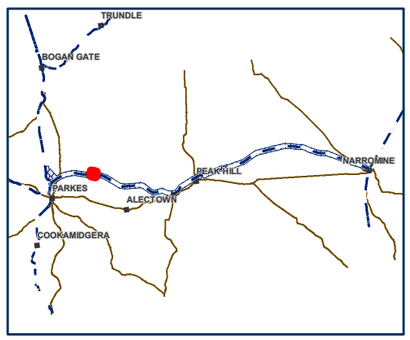

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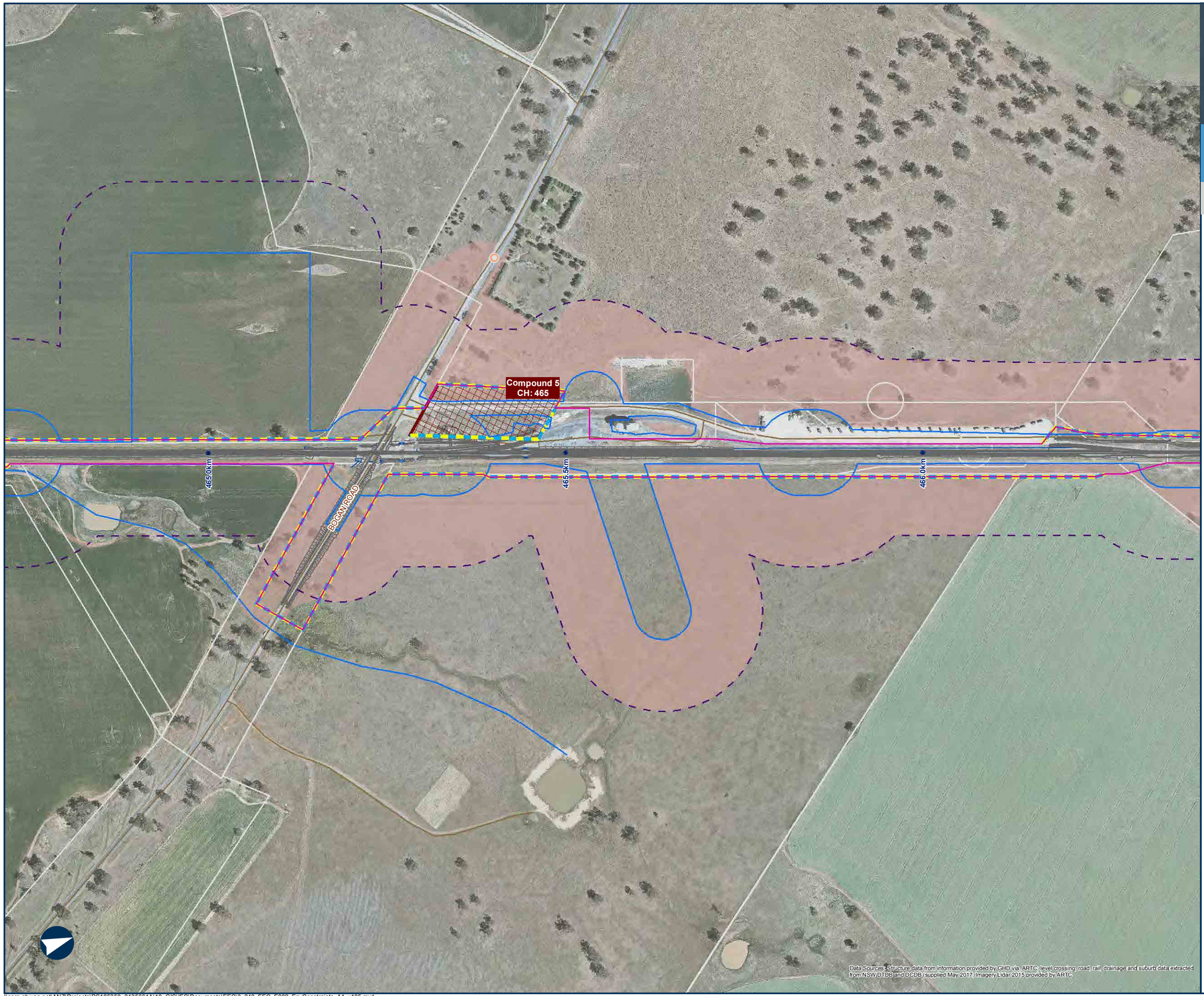
PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 11 of 71



LEGEND

- Spotted Harrier
- Nominated compound/Laydown area
- Earthworks design
- Road
- Drainage line
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Low - Derived Native Grassland

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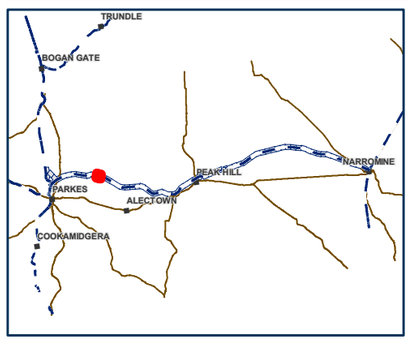

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Author: WSP

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Data Sources: Structure data from information provided by GHD via ARTC, level crossing, road, rail, drainage and suburb data extracted from NSW DTDB and DCDB (supplied May 2017), Imagery Lidar 2015 provided by ARTC

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 12 of 71

LEGEND

- Earthworks design
- Drainage line
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Low - Derived Native Grassland

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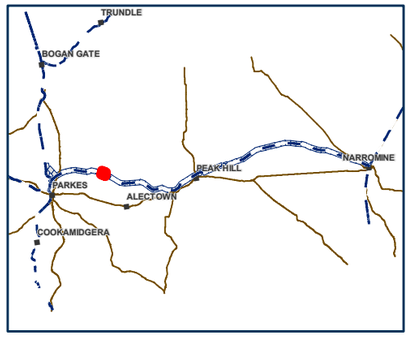

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ARTC InlandRail

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 13 of 71

LEGEND

- Timber components of underbridge heritage item (refer to Table 3)
- Nominated compound/Laydown area
- Earthworks design
- Road
- Drainage line
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT276 - Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion (TEC), Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Low - Derived Native Grassland

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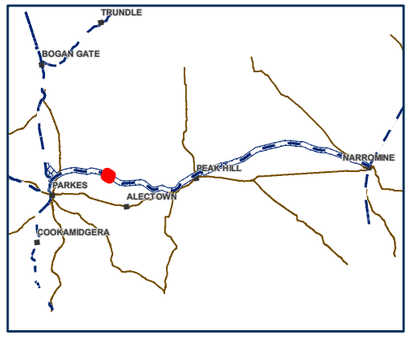

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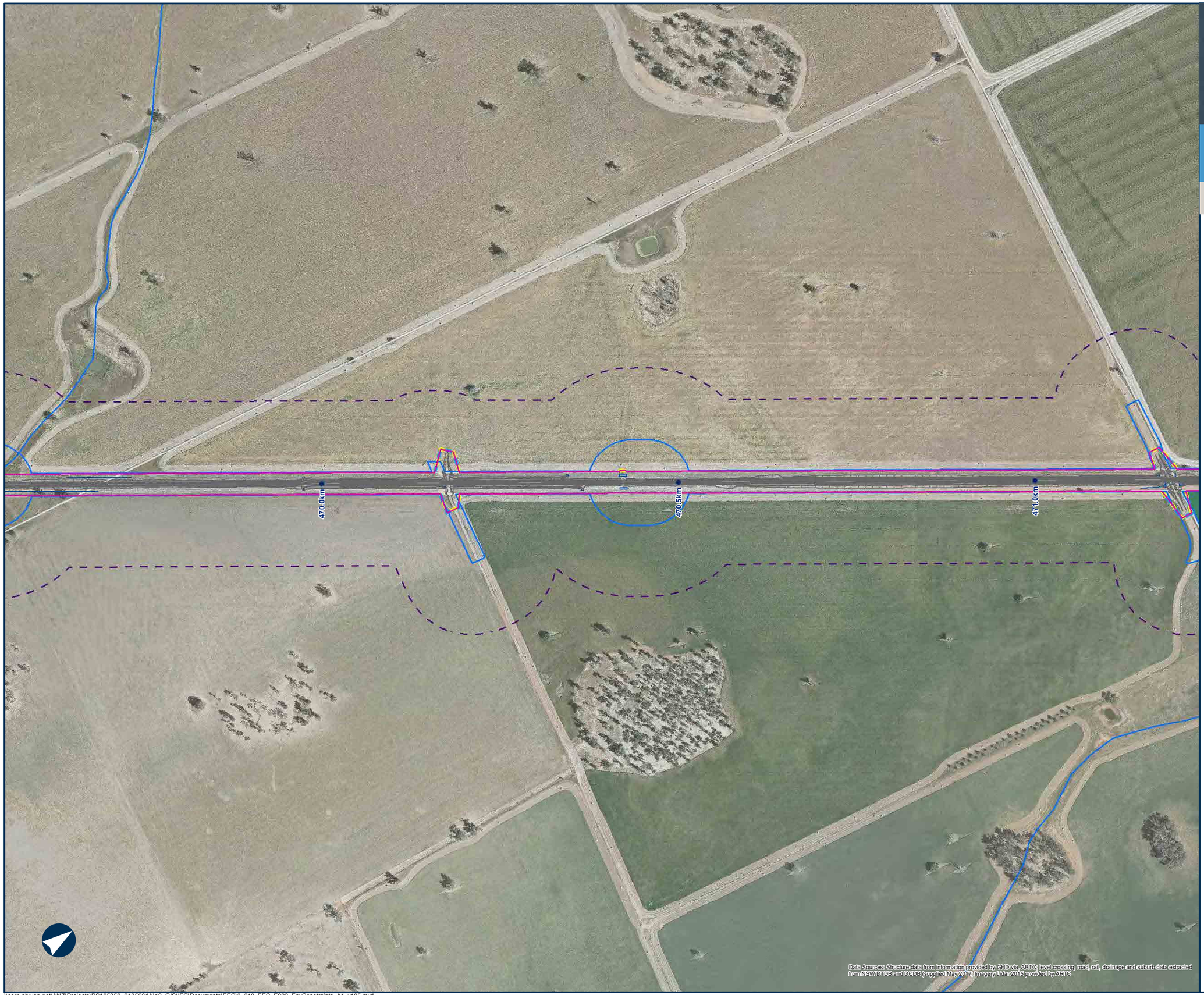

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PARKES TO NARROMINE

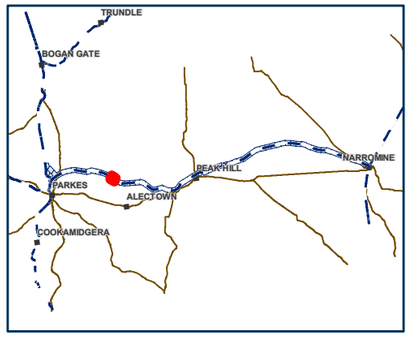
Figure 1
Heritage and Environmental Constraints

Map 14 of 71

LEGEND

- Earthworks design
- Drainage line
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good

**NOT FOR PUBLICATION.
FOR CONSULTATION PURPOSES ONLY.**



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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 15 of 71

LEGEND

- Earthworks design
- Road
- Drainage line
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good

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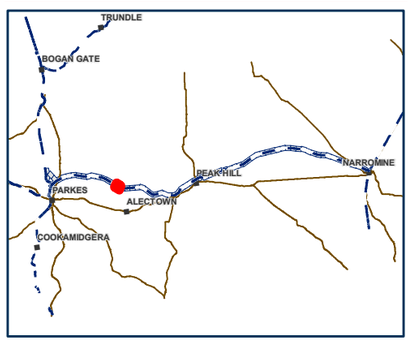

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 16 of 71

LEGEND

- Railway station heritage item (refer to Table 4)
- Nominated compound/Laydown area
- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT276 - Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion (TEC), Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Low - Derived Native Grassland

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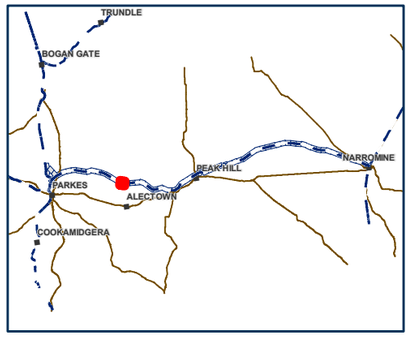

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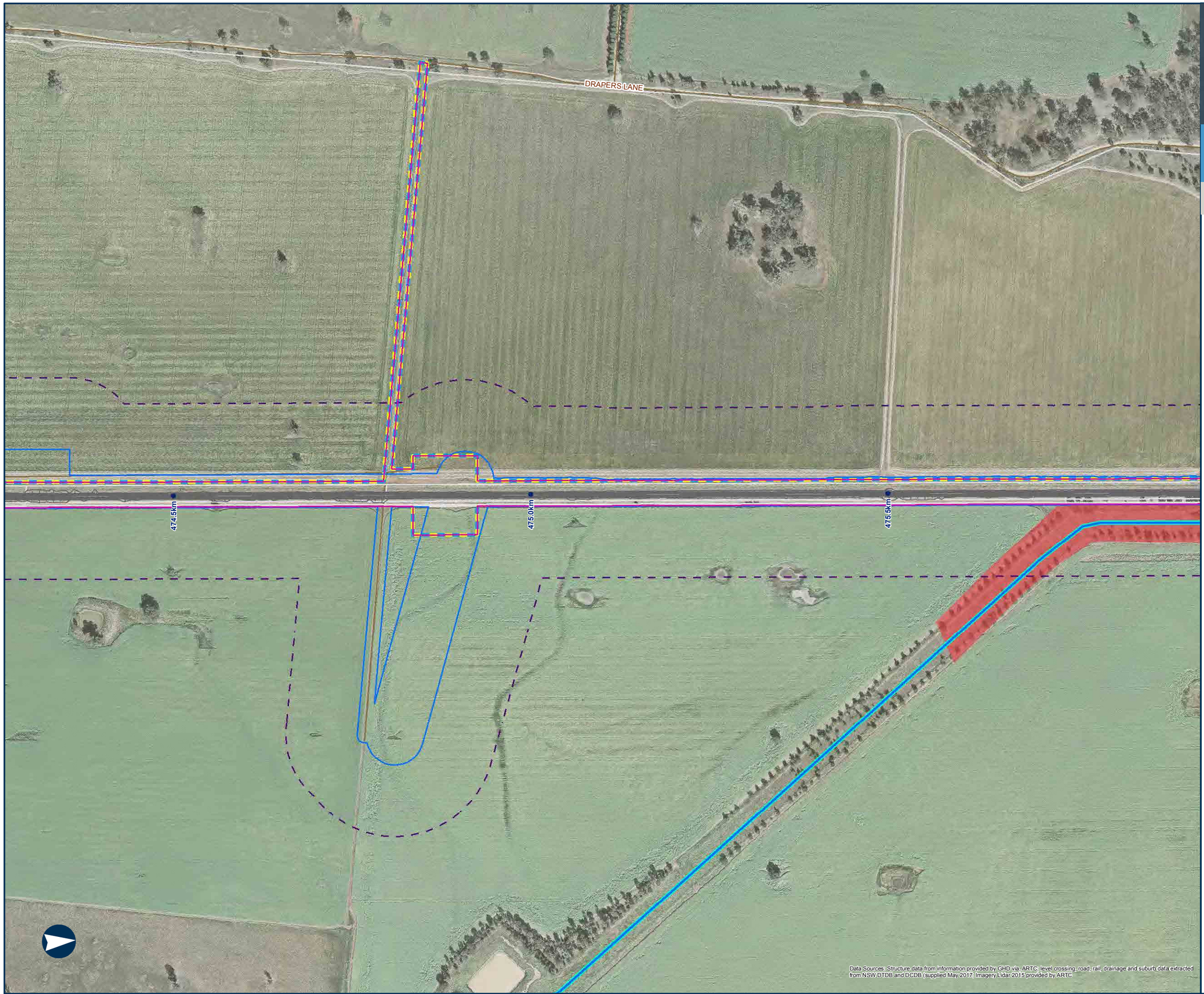

ARTC InlandRail

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 17 of 71

LEGEND

- Earthworks design
- Road
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good

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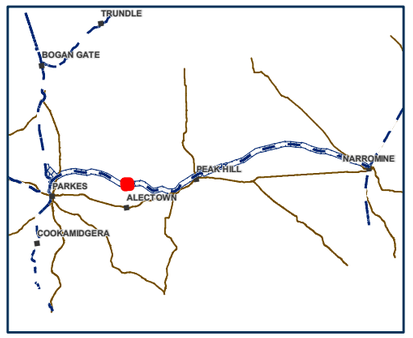

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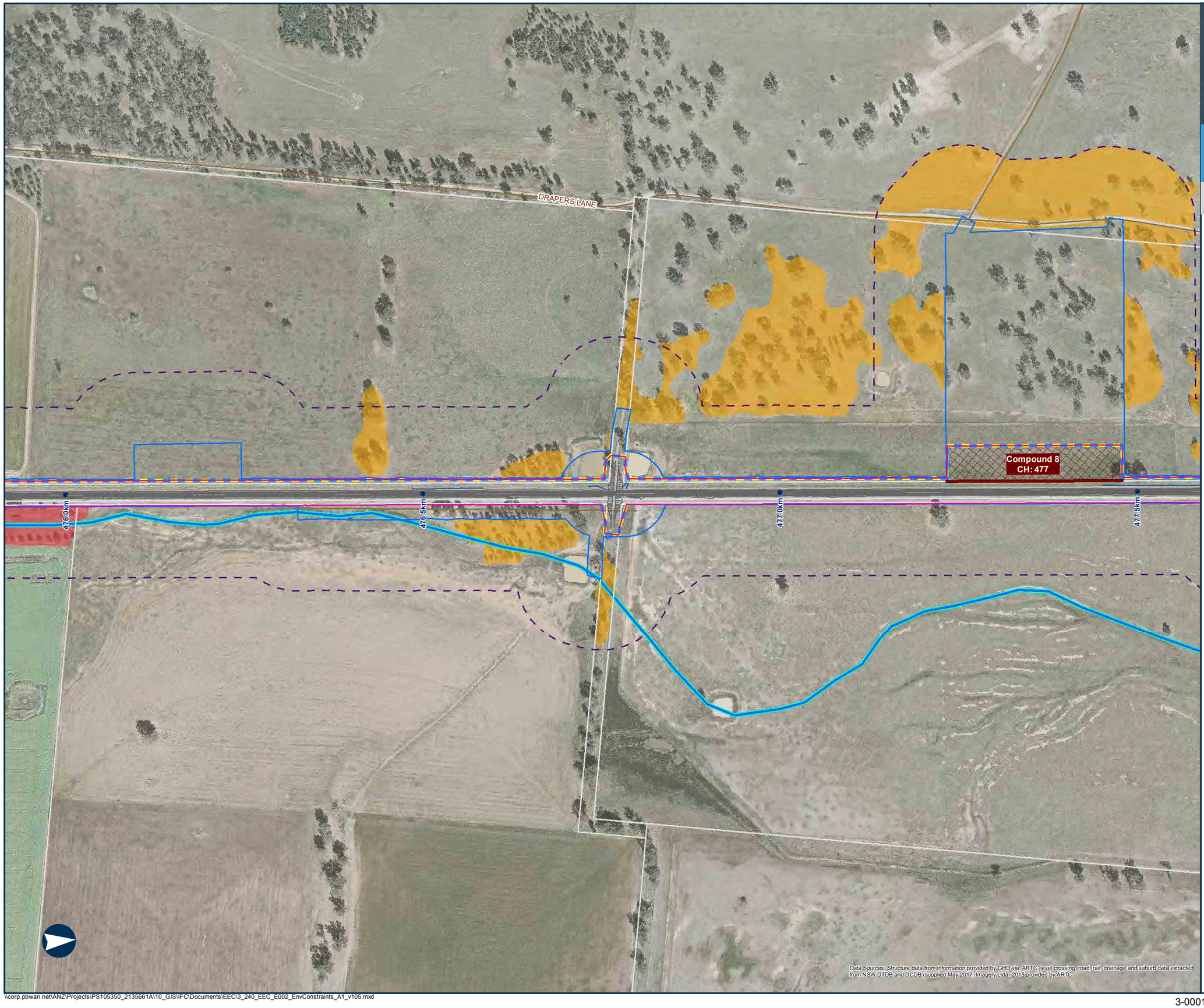

ARTC InlandRail

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 18 of 71

LEGEND

- Nominated compound/Laydown area
- Earthworks design
- Road
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT276 - Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion (TEC), Moderate/Good
- PCT276 - Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion (TEC), Low - Derived Native Grassland
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good

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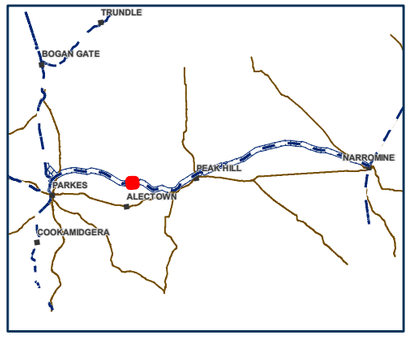

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ARTC InlandRail

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 19 of 71

DRAPERS LANE

Unnamed Creek
Type: 3
Class: 3
Mickibri 1

478.0km
478.5km
479.0km

Survey Unit 5
Burrill Creek North

LEGEND

- Timber components of underbridge heritage item (refer to Table 3)

Key fish habitat (refer to Table 2)

- Key fish habitat

Aboriginal archaeological survey units (refer to Table 1)

- Aboriginal archaeological survey unit
- Earthworks design
- Road
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT276 - Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion (TEC), Moderate/Good
- PCT276 - Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion (TEC), Low - Derived Native Grassland
- PCT36 - River Red Gum Tall to very Tall Open Forest / Woodland, Moderate/Good

Data Sources: Structure data from information provided by GHD via ARTC, level crossing, road, rail, drainage and suburb data extracted from NSW DTDB and DCDB (supplied May 2017. Imagery Lidar 2015 provided by ARTC

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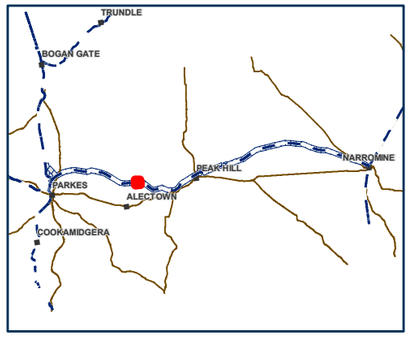

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Author: WSP

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 20 of 71

LEGEND

Key fish habitat (refer to Table 2)

- Key fish habitat

Aboriginal archaeological survey units (refer to Table 1)

- Aboriginal archaeological survey unit
- Earthworks design
- Road
- Drainage line
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT36 - River Red Gum Tall to very Tall Open Forest / Woodland, Moderate/Good
- PCT36 - River Red Gum Tall to very Tall Open Forest / Woodland, Low - Regeneration

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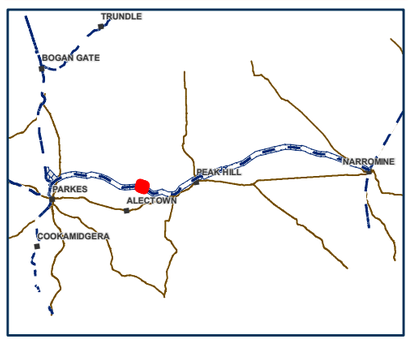

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 21 of 71

LEGEND

- Railway station heritage item (refer to Table 4)
- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Low - Derived Native Grassland

Mickibri Station

481.0km

481.5km

482.0km

MICKIBRI ROAD

Data Sources: Structure data from information provided by GHD via ARTC, level crossing, road, rail, drainage and suburb data extracted from NSW DTDB and DCDB (supplied May 2017), Imagery Lidar 2015 provided by ARTC

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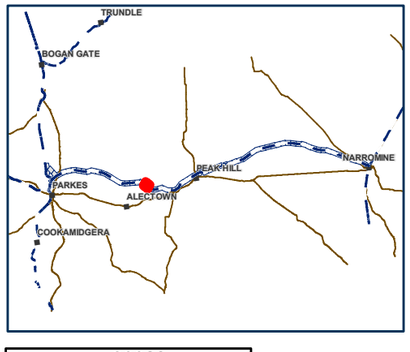

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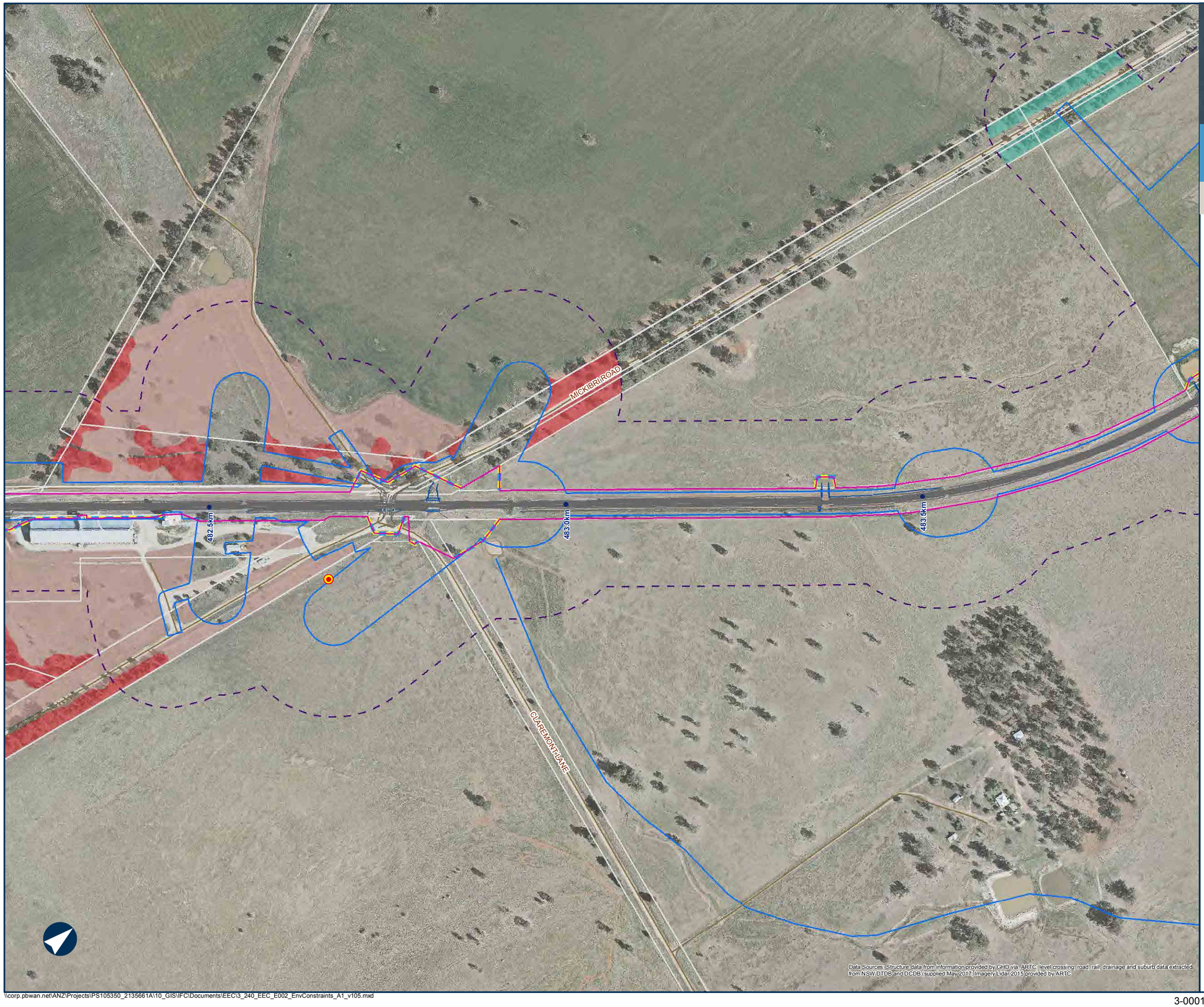

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 22 of 71

LEGEND

- Diamond Firetail
- Earthworks design
- Road
- Drainage line
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT267 - White Box - White Cypress Pine - Western Grey Box Woodland, Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Low - Derived Native Grassland

**NOT FOR PUBLICATION.
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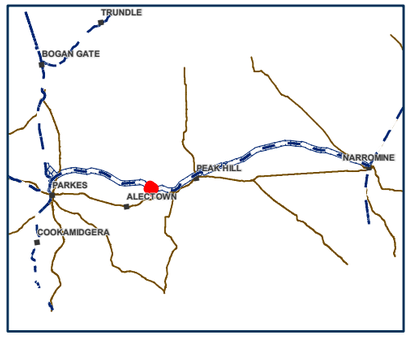

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 23 of 71

LEGEND

- Timber components of underbridge heritage item (refer to Table 3)
- Earthworks design
- Road
- Drainage line
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT267 - White Box - White Cypress Pine - Western Grey Box Woodland, Moderate/Good

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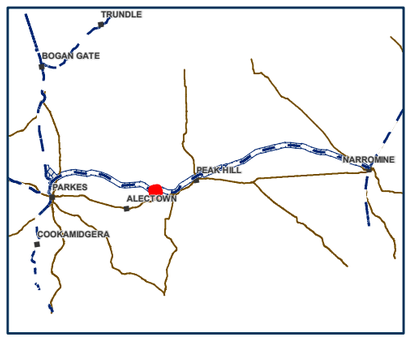

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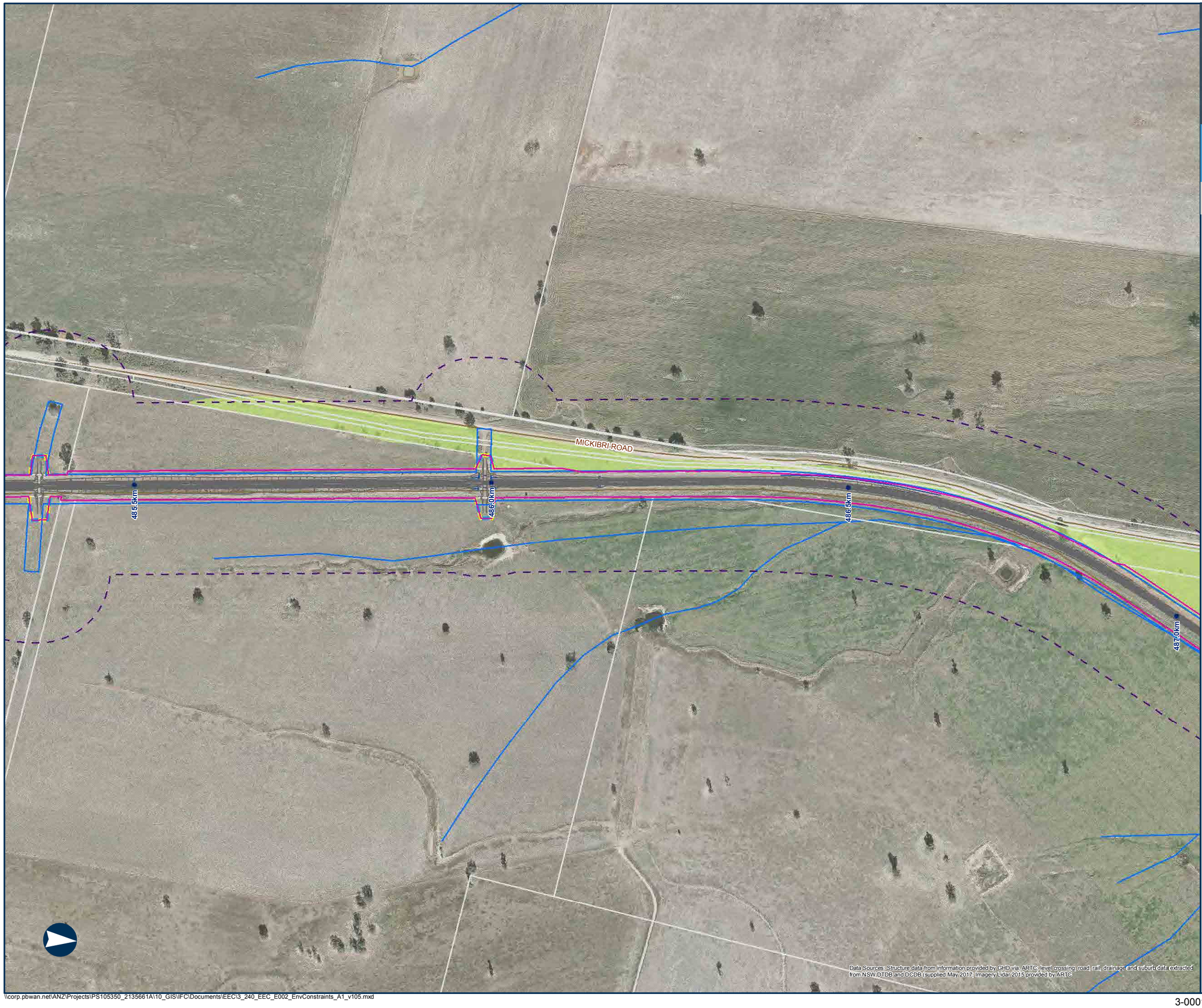

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 24 of 71

LEGEND

- Earthworks design
- Road
- Drainage line
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good

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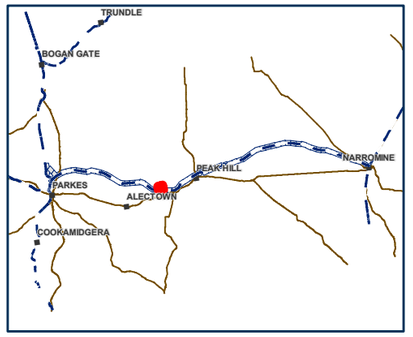

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 25 of 71

MICKIBRI ROAD

HALLINANS CREEK

487.0km

487.5km

488.0km

488.5km

LEGEND

- Earthworks design
- Road
- Drainage line
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good

Data Sources: Structure data from information provided by GHD via ARTC, level crossing, road, rail, drainage and suburb data extracted from NSW DTDB and DCDB (supplied May 2017). Imagery Lidar 2015 provided by ARTC

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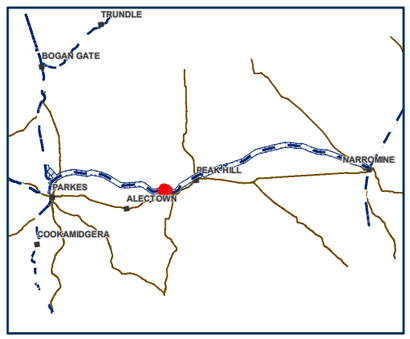

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 26 of 71

MICKIBRI ROAD

488.5km

489.0km

489.5km

490.0km

HALLINANS CREEK

STANFORDS CREEK

NEWELL HIGHWAY

Data Sources: Structure data from information provided by GHD via ARTC, level crossing, road, rail, drainage and suburb data extracted from NSW DTDB and DCDB (supplied May 2017). Imagery Lidar 2015 provided by ARTC

LEGEND

- Earthworks design
- Road
- Drainage line
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT201 - Fuzzy Box Woodland, Moderate/Good
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good

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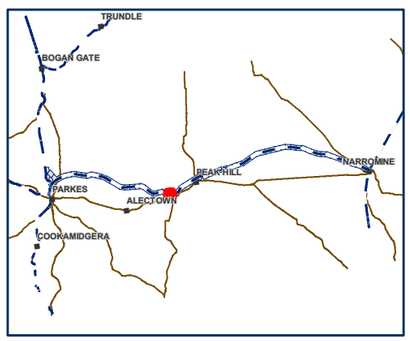

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 27 of 71

TEN MILE CREEK
STANFORDS CREEK
MICKIBRI ROAD
TREWILGA ROAD
490.0km
Survey Unit 7
Ten Mile Creek
Ten Mile Creek
Type: 3
Class: 3
490.5km
Compound 10
CH: 491
Trewilga
Station
491.0km
491.5km
Survey Unit 8
Ten MIle Creek - Trewilga Road
BALDRY-PEAK HILL ROAD
NEWELL HIGHWAY
PARKES STREET
FURNERS LANE
HUNTER AVENUE

Data Sources: Structure data from information provided by GHD via ARTC, level crossing, road, rail, drainage and suburb data extracted from NSW DTDB and DCDB (supplied May 2017), Imagery, Lidar 2015 provided by ARTC

LEGEND

- Railway station heritage item (refer to Table 4)

Key fish habitat (refer to Table 2)

- Key fish habitat

Aboriginal archaeological survey units (refer to Table 1)

- Aboriginal archaeological survey unit
- Nominated compound/Laydown area
- Earthworks design
- Road
- Drainage line
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT201 - Fuzzy Box Woodland, Moderate/Good
- PCT244 - Poplar Box Grassy Woodland, Moderate/Good
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good
- PCT80 - Western Grey Box - White Cypress Pine tall woodland on loam soil on alluvial plains of NSW South Western Slopes Bioregion and Riverina Bioregion, Moderate/Good

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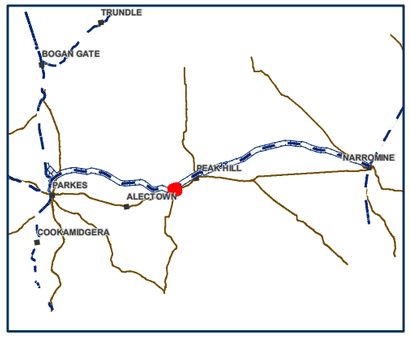

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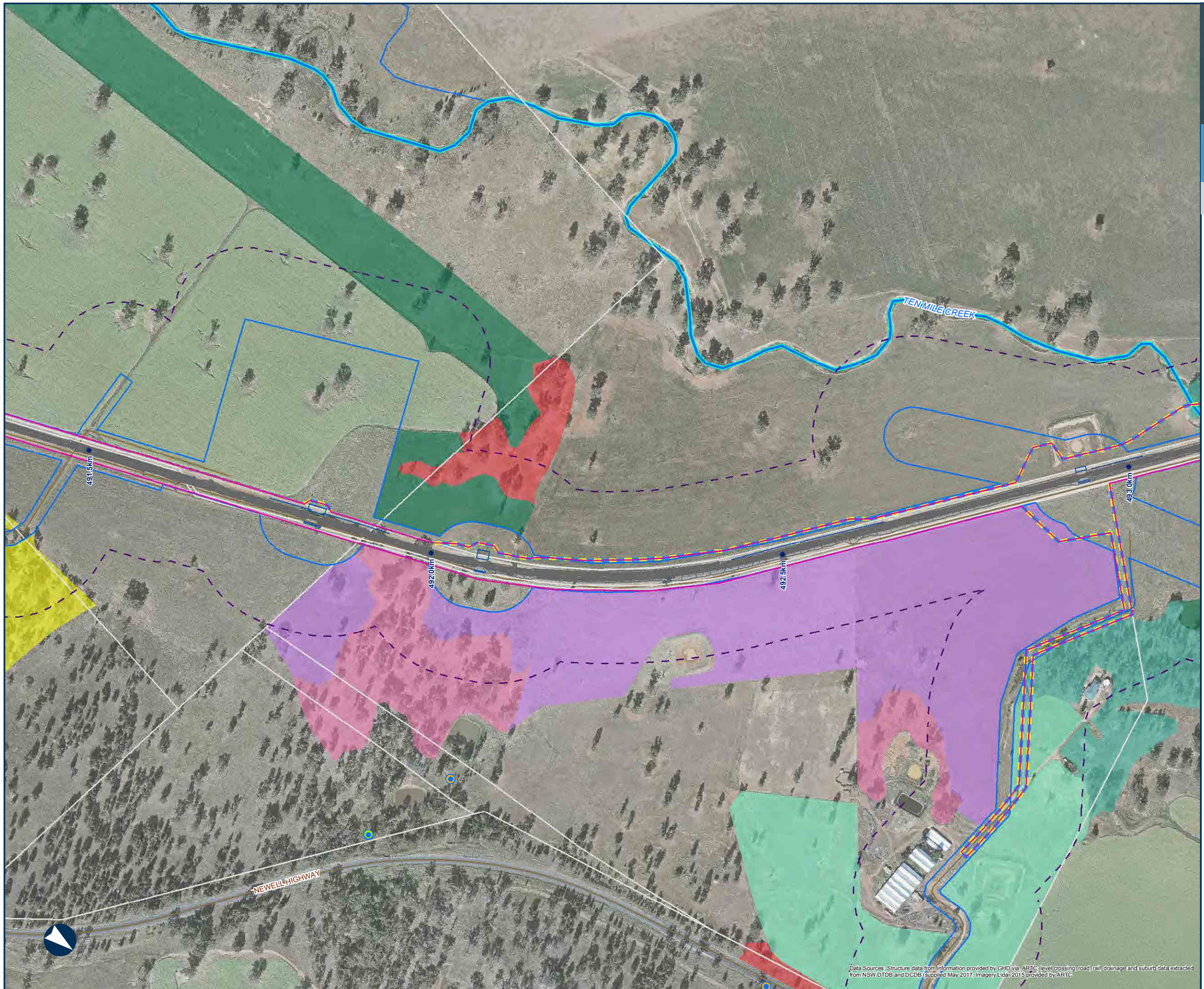

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 28 of 71

LEGEND

- Grey-crowned Babbler (eastern ssp.)
- Koala
- Earthworks design
- Road
- Drainage line
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT201 - Fuzzy Box Woodland, Moderate/Good
- PCT244 - Poplar Box Grassy Woodland, Moderate/Good
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Low - Derived Native Grassland
- PCT267 - White Box - White Cypress Pine - Western Grey Box Woodland, Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good
- PCT80 - Western Grey Box - White Cypress Pine tall woodland on loam soil on alluvial plains of NSW South Western Slopes Bioregion and Riverina Bioregion, Moderate/Good

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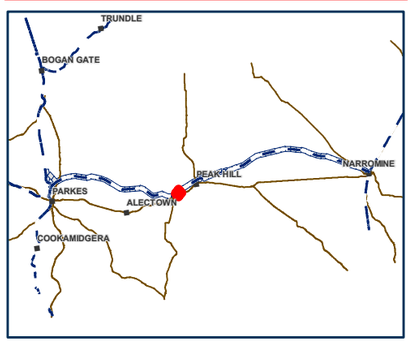

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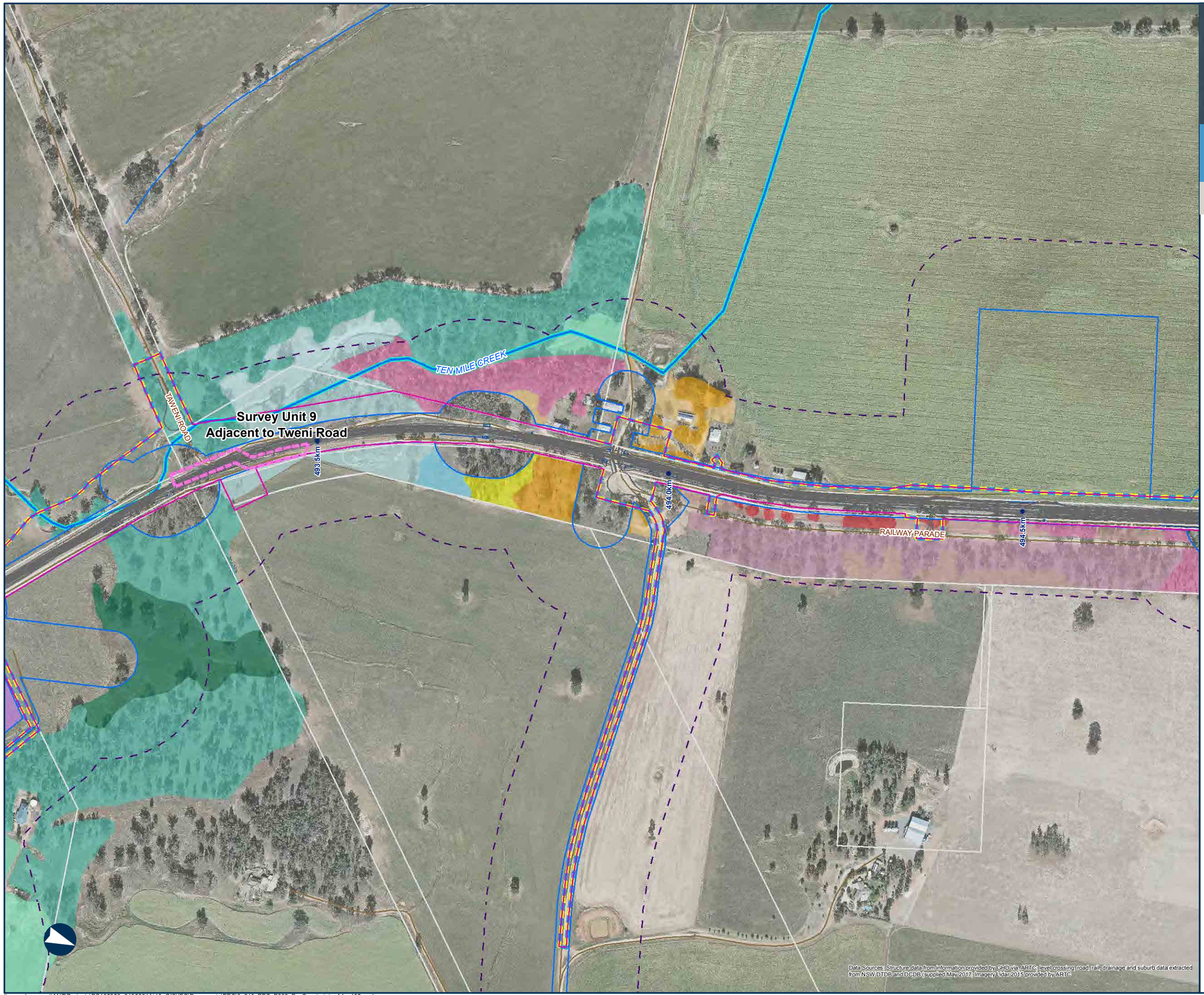

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 29 of 71

LEGEND

Aboriginal archaeological survey units (refer to Table 1)

- Aboriginal archaeological survey unit
- Earthworks design
- Road
- Drainage line
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT201 - Fuzzy Box Woodland, Moderate/Good
- PCT217 - Mugga Ironbark - Western Grey Box - Cypress Pine tall woodland on footslopes of low hills in the NSW South Western Slopes Bioregion, Moderate/Good
- PCT244 - Poplar Box Grassy Woodland, Moderate/Good
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Low - Derived Native Grassland
- PCT267 - White Box - White Cypress Pine - Western Grey Box Woodland, Moderate/Good
- PCT267 - White Box - White Cypress Pine - Western Grey Box Woodland, Low - Derived Native Grassland
- PCT276 - Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion (TEC), Moderate/Good
- PCT276 - Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion (TEC), Low - Derived Native Grassland
- PCT55 - Belah Woodland, Low - Derived Native Grassland
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Low - Derived Native Grassland
- PCT80 - Western Grey Box - White Cypress Pine tall woodland on loam soil on alluvial plains of NSW South Western Slopes Bioregion and Riverina Bioregion, Moderate/Good

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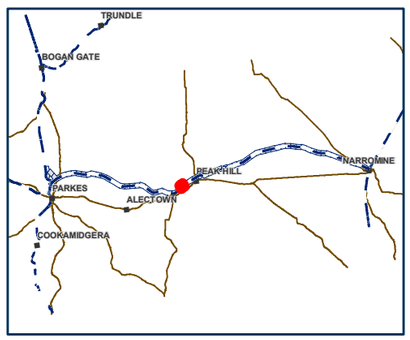

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 30 of 71

LEGEND

- Grey-crowned Babbler (eastern ssp.)
- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT201 - Fuzzy Box Woodland, Moderate/Good
- PCT217 - Mugga Ironbark - Western Grey Box - Cypress Pine tall woodland on footslopes of low hills in the NSW South Western Slopes Bioregion, Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Low - Derived Native Grassland
- PCT80 - Western Grey Box - White Cypress Pine tall woodland on loam soil on alluvial plains of NSW South Western Slopes Bioregion and Riverina Bioregion, Moderate/Good

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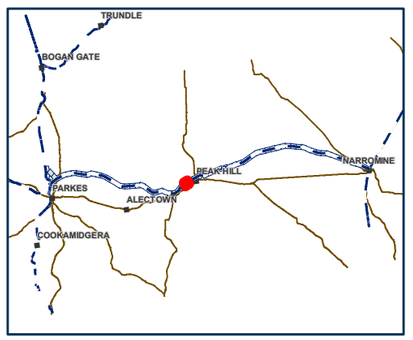

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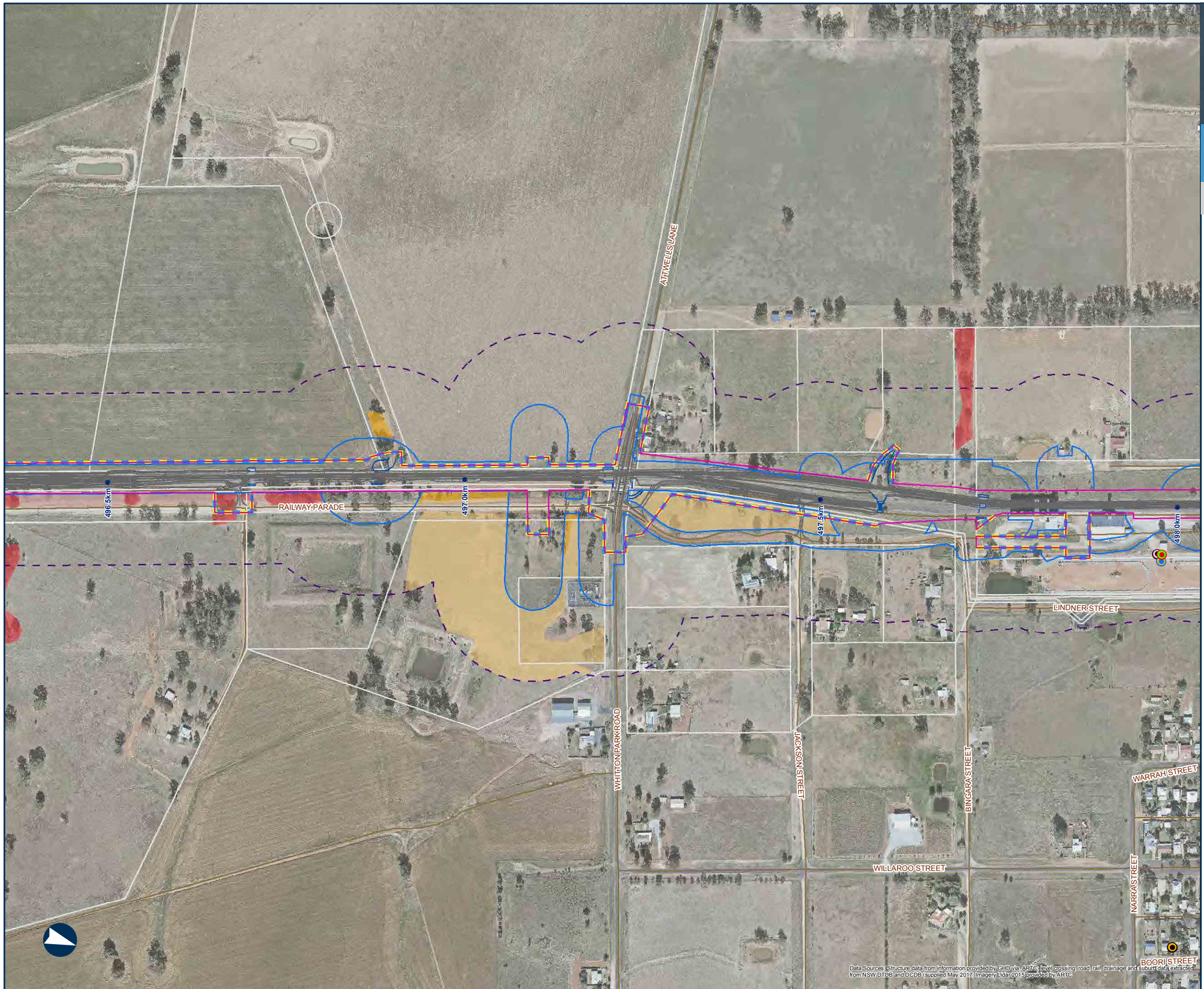

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 31 of 71

LEGEND

- Barking Owl
- Brown Treecreeper (eastern ssp.)
- Dusky Woodswallow
- Grey-crowned Babbler (eastern ssp.)
- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT276 - Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion (TEC), Moderate/Good
- PCT276 - Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion (TEC), Low - Derived Native Grassland
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Low - Derived Native Grassland

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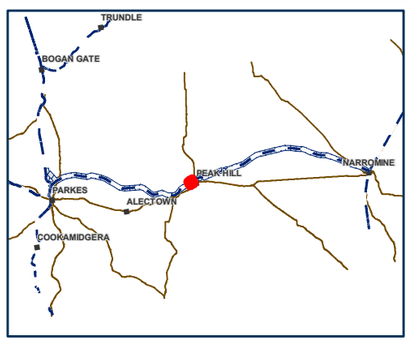

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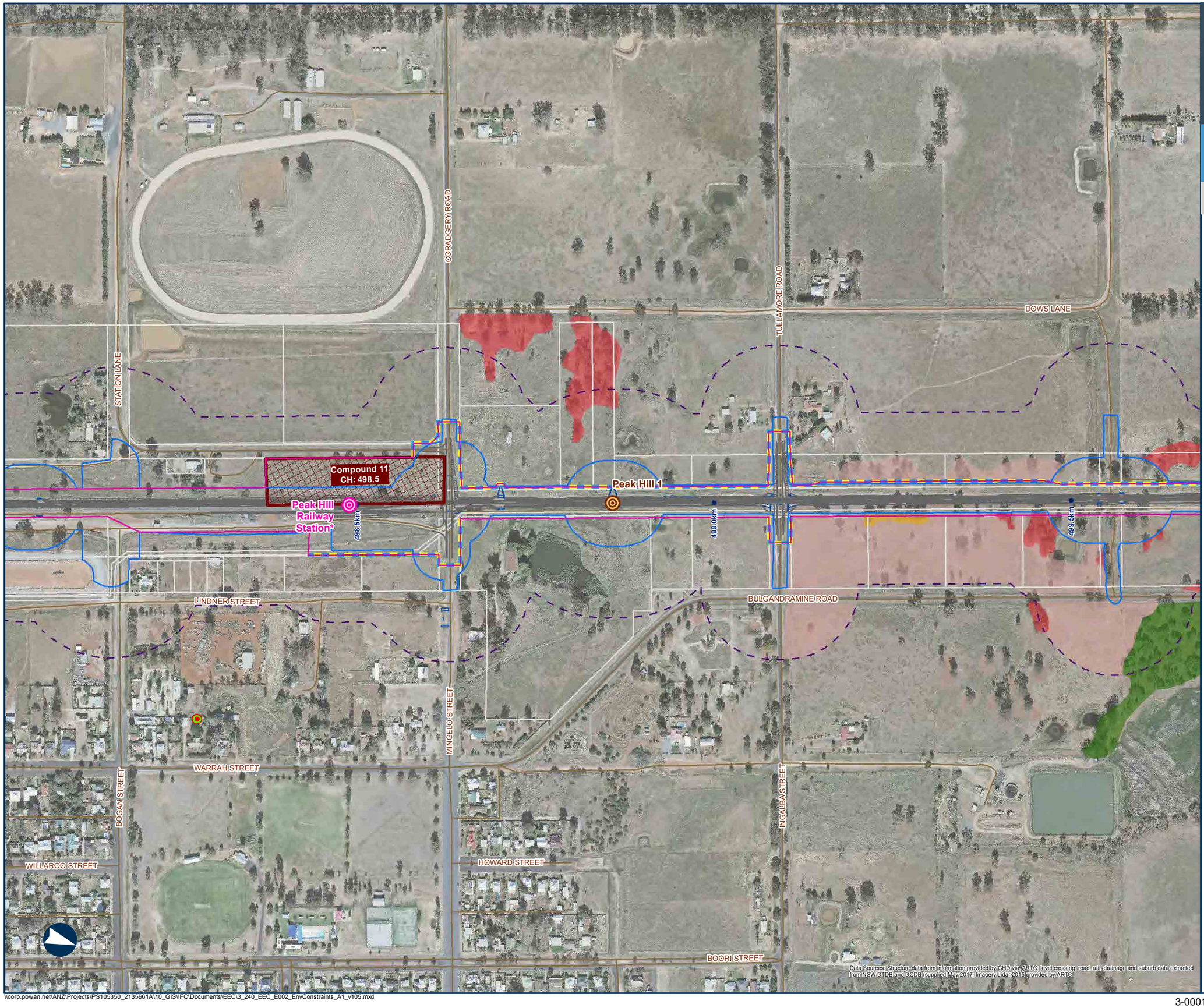

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PARKES TO NARROMINE

Figure 1

Heritage and Environmental Constraints

Map 32 of 71

LEGEND

- Timber components of underbridge heritage item (refer to Table 3)
- Railway station heritage item* (refer to Table 4)
- Dusky Woodswallow
- Little Eagle
- Varied Sittella
- Nominated compound/Laydown area
- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT26 - Weeping Myall Open Woodland, Moderate/Good
- PCT276 - Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion (TEC), Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Low - Derived Native Grassland

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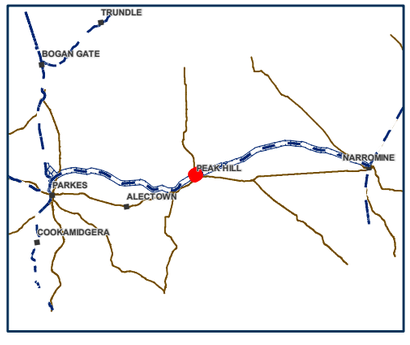

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Coordinate System: GCS GDA 1994

Paper: A3
Date: 7/08/2018
Author: WSP

Scale: 1:5,000

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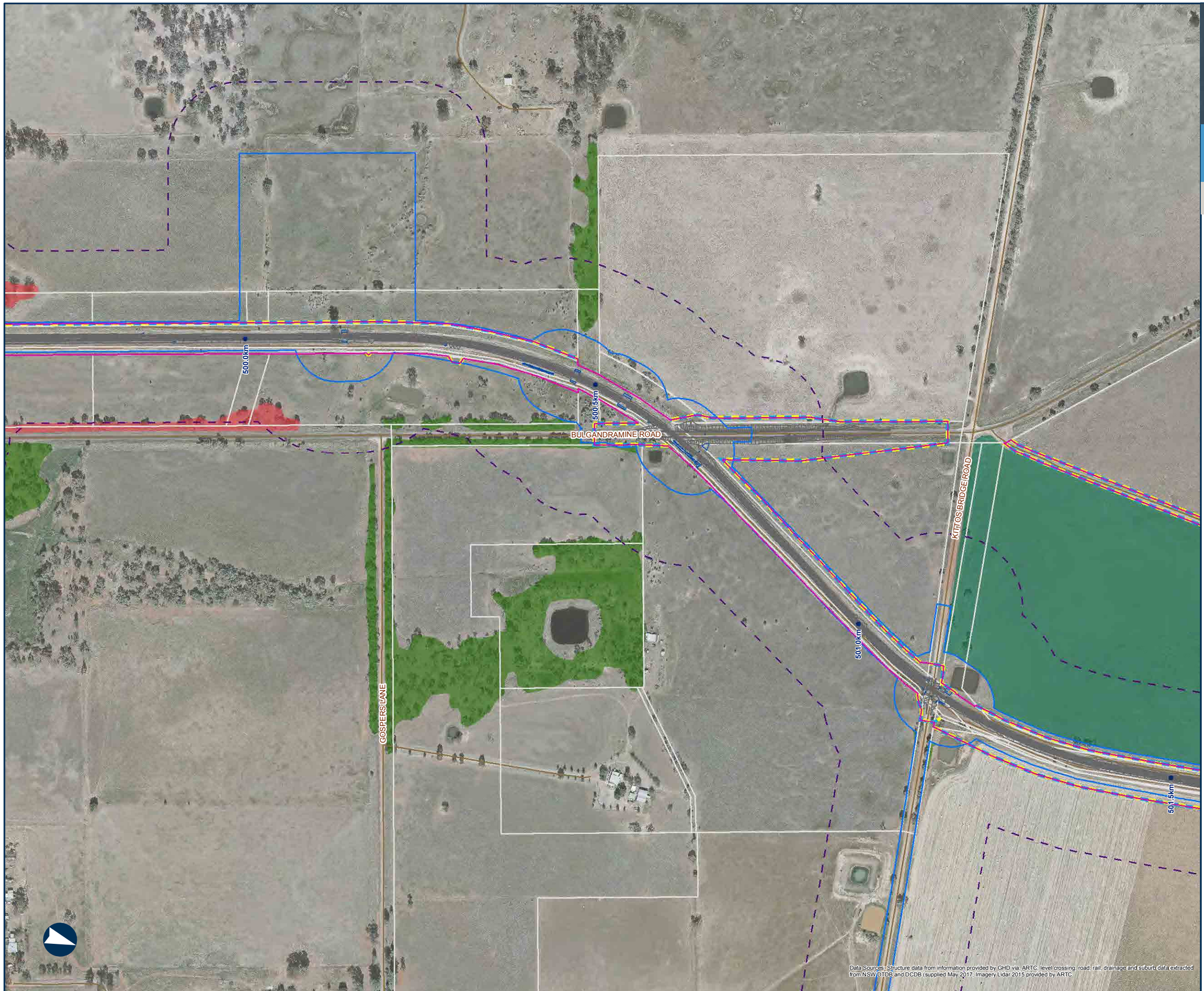

ARTC InlandRail

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 33 of 71

LEGEND

- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT26 - Weeping Myall Open Woodland, Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good

**NOT FOR PUBLICATION.
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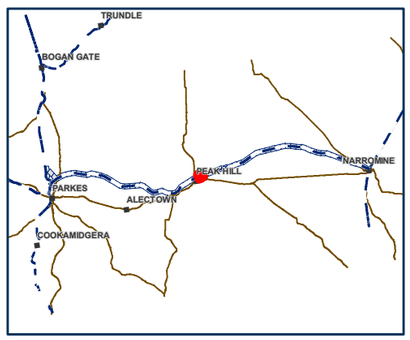

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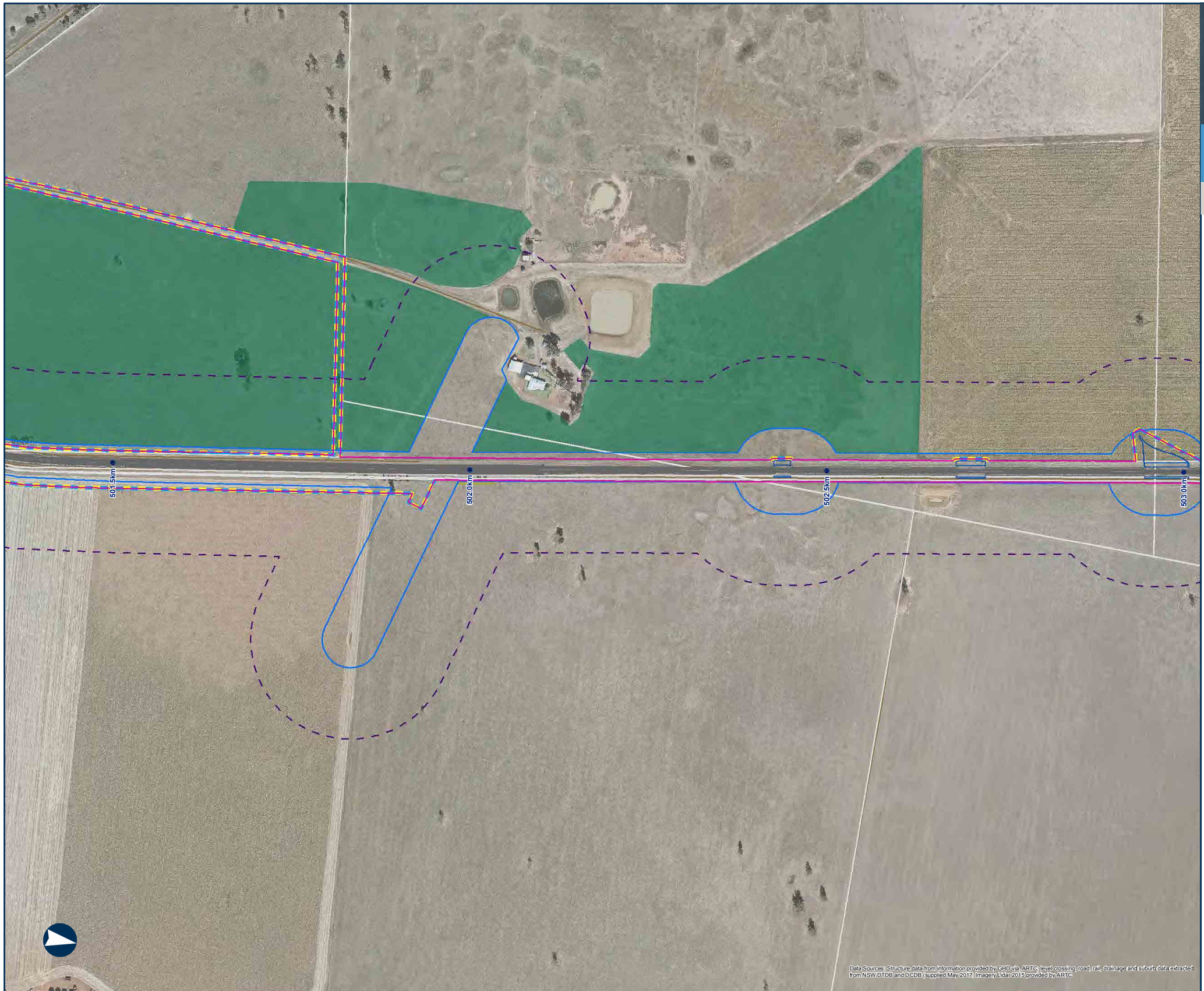

ARTC InlandRail

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 34 of 71

LEGEND

- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT70 - White Cypress Pine Woodland, Moderate/Good

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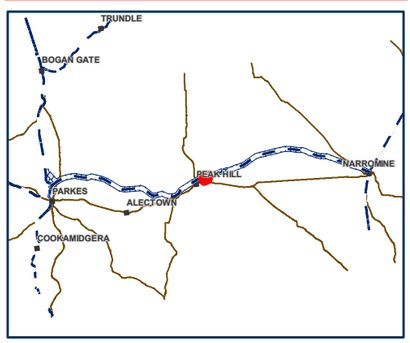
FOR CONSULTATION PURPOSES ONLY.**



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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 35 of 71

Compound 12
CH: 504

Peak Hill 2
Barrabadeen Creek
Type: 3
Class: 3

BARRABADEEN CREEK

503.5km

504.0km

504.5km

LEGEND

- Timber components of underbridge heritage item (refer to Table 3)

Key fish habitat (refer to Table 2)

- Key fish habitat
- Nominated compound/Laydown area
- Earthworks design
- Road
- Drainage line
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT36 - River Red Gum Tall to very Tall Open Forest / Woodland, Moderate/Good
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Low - Derived Native Grassland

**NOT FOR PUBLICATION.
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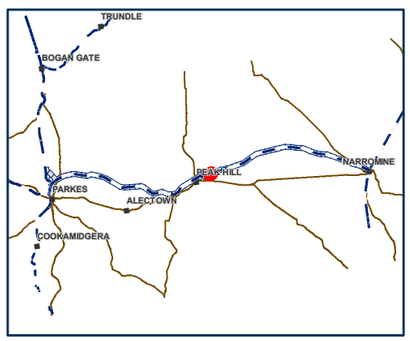

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Data Sources: Structure data from information provided by GHD via ARTC, level crossing, road, rail, drainage and suburb data extracted from NSW DTDB and DCDB (supplied May 2017), Imagery Lidar2015 provided by ARTC

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 36 of 71

LEGEND

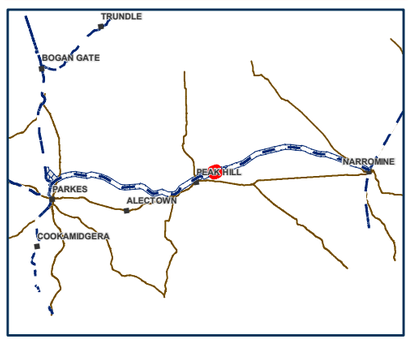
- Timber components of underbridge heritage item (refer to Table 3)
- Earthworks design
- Road
- Drainage line
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT26 - Weeping Myall Open Woodland, Moderate/Good
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good

Peak Hill 3

505.0km

505.5km

506.0km



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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 37 of 71

LEGEND

- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT244 - Poplar Box Grassy Woodland, Moderate/Good
- PCT26 - Weeping Myall Open Woodland, Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good

506.5km
507.0km
507.5km

Data Sources: Structure data from information provided by GHD via ARTC, level crossing, road, rail, drainage and suburb data extracted from NSW DTDB and DCDB (supplied May 2017), Imagery Lidar 2015 provided by ARTC

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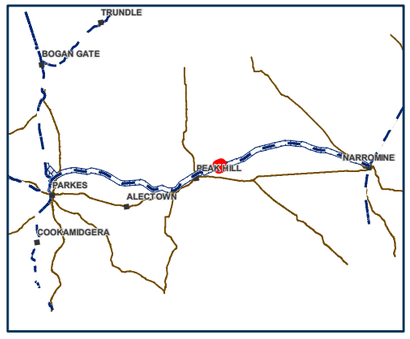

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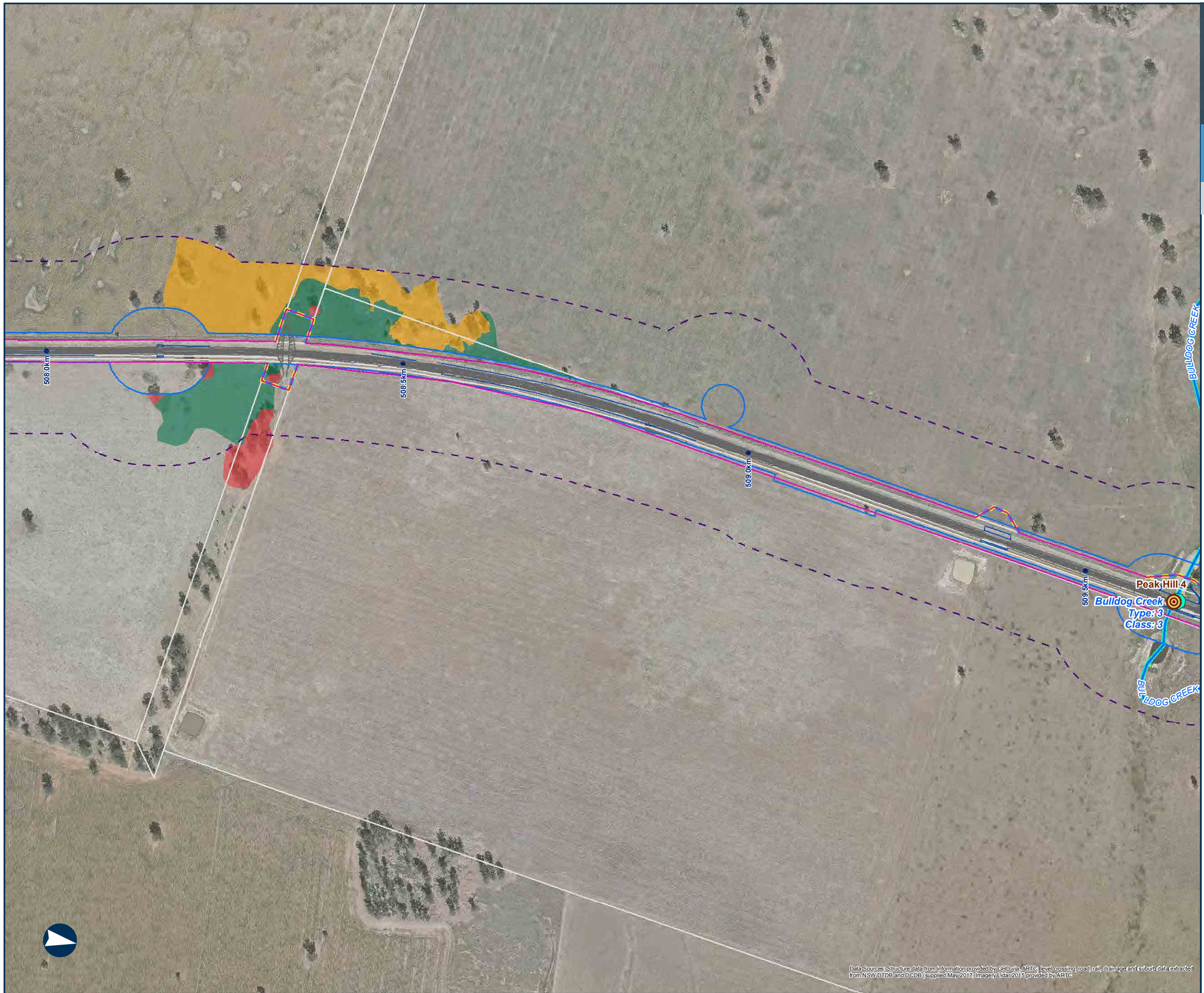

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 38 of 71

LEGEND

- Timber components of underbridge heritage item (refer to Table 3)

Key fish habitat (refer to Table 2)

- Key fish habitat
- Earthworks design
- Road
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT26 - Weeping Myall Open Woodland, Moderate/Good
- PCT276 - Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion (TEC), Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good

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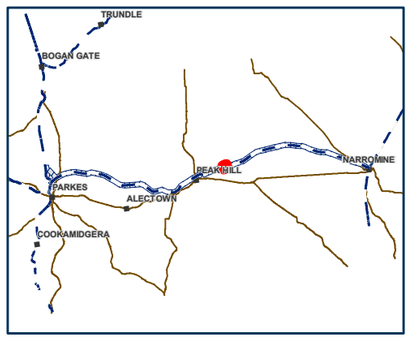

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 39 of 71

LEGEND

- Timber components of underbridge heritage item (refer to Table 3)

Key fish habitat (refer to Table 2)

- Key fish habitat
- Nominated compound/Laydown area
- Earthworks design
- Road
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT244 - Poplar Box Grassy Woodland, Low - Derived Native Grassland
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT26 - Weeping Myall Open Woodland, Moderate/Good
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good
- PCT176 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good
- PCT176 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Low - Derived Native Grassland

BULLDOG CREEK

510.0km

510.5km

511.0km

Compound 13
CH: 511

SHARAHS ACCESS ROAD

BULLDOG CREEK

Data Sources: Structure data from information provided by GHD via ARTC, level crossing, road, rail, drainage and suburb data extracted from NSW DTDB and DCDB (supplied May 2017, Imagery Lidar 2015 provided by ARTC

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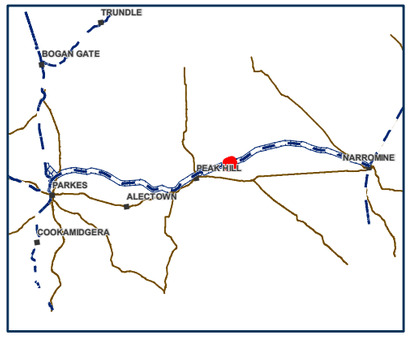

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 40 of 71

LEGEND

- Earthworks design
- Road
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT26 - Weeping Myall Open Woodland, Moderate/Good

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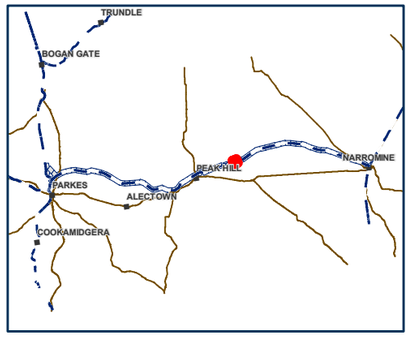

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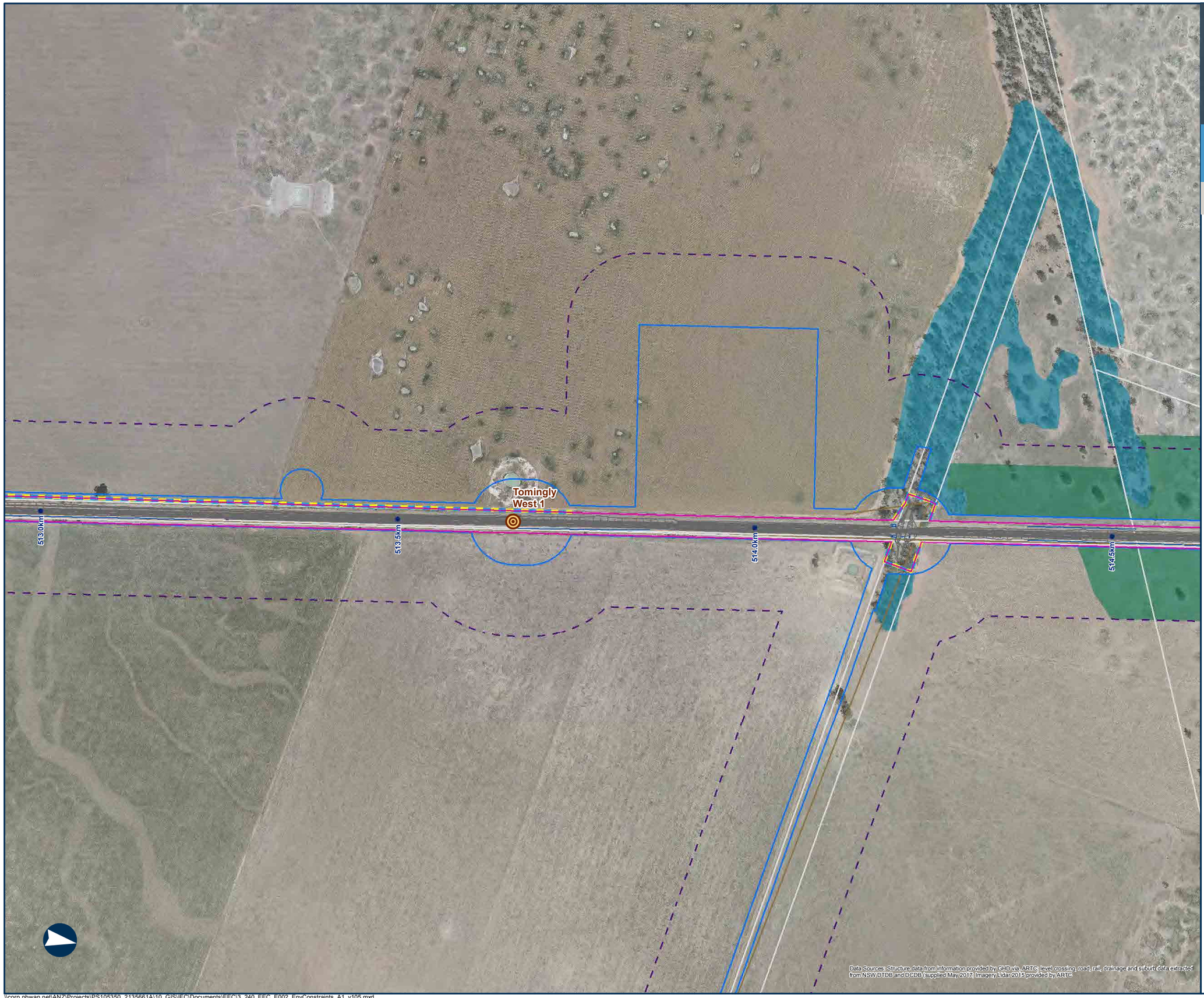

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 41 of 71

LEGEND

- Timber components of underbridge heritage item (refer to Table 3)
- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT55 - Belah Woodland, Moderate/Good

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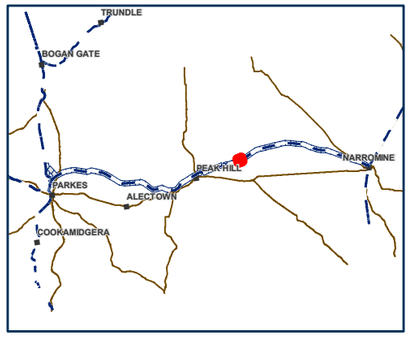

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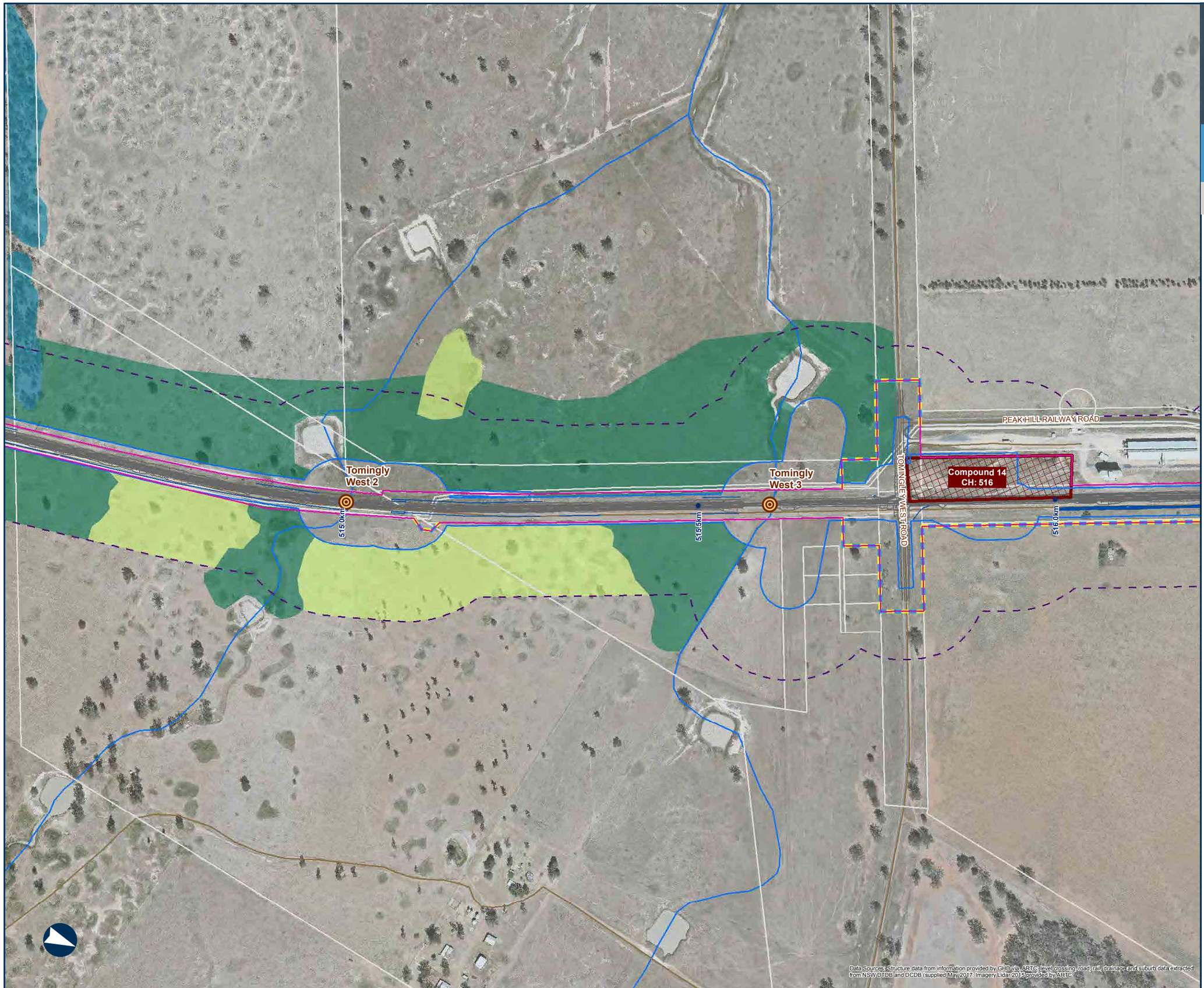

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 42 of 71

LEGEND

- Timber components of underbridge heritage item (refer to Table 3)
- Nominated compound/Laydown area
- Earthworks design
- Road
- Drainage line
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good
- PCT55 - Belah Woodland, Moderate/Good

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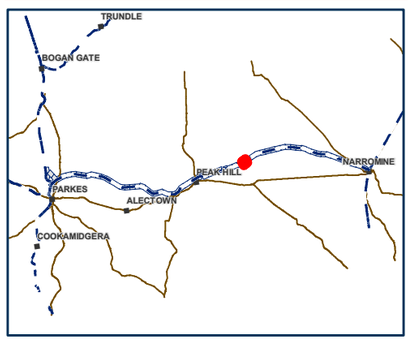

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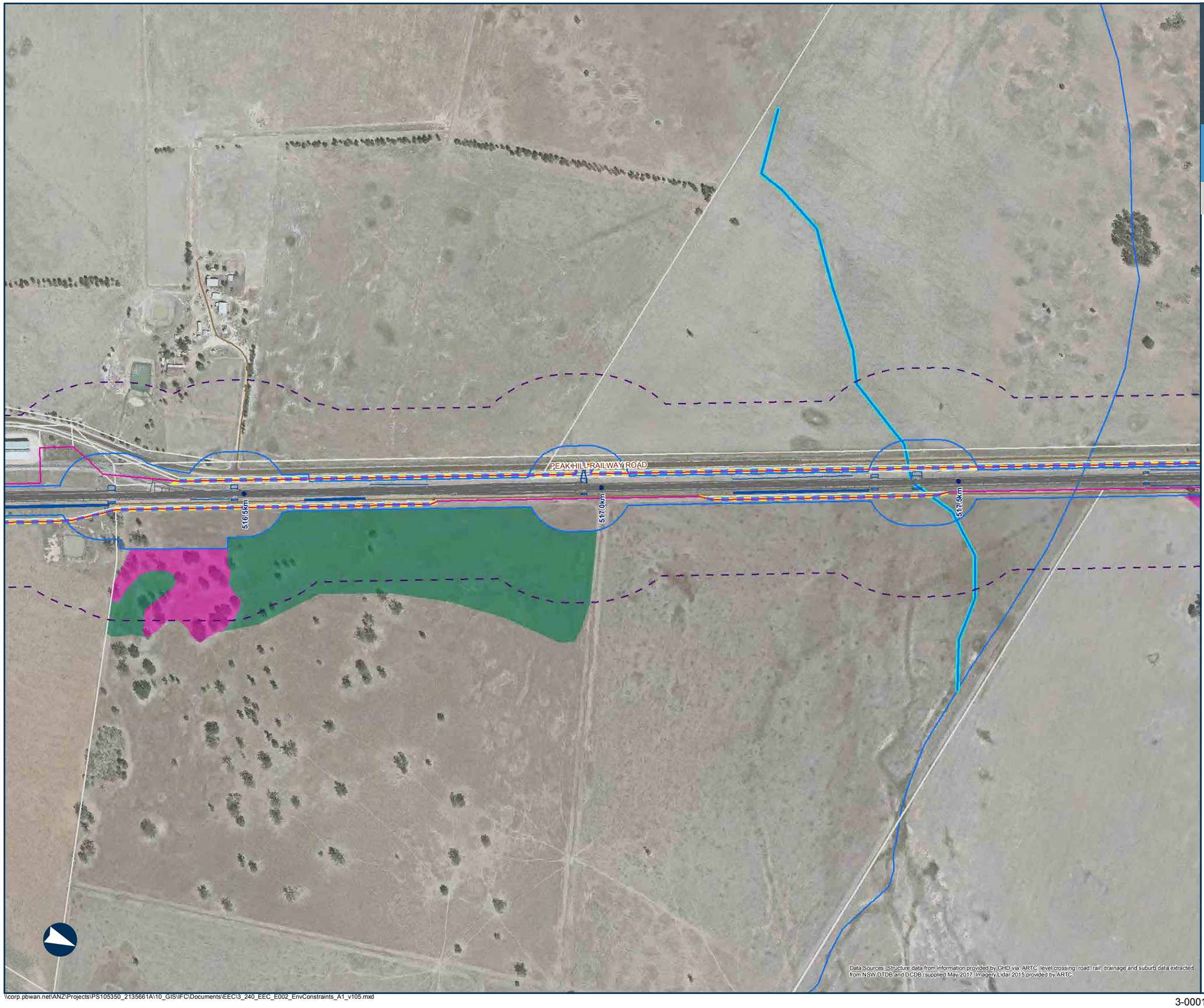

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PARKES TO NARROMINE

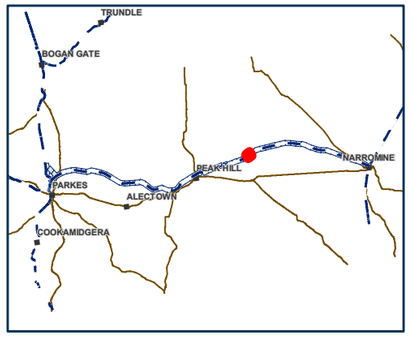
Figure 1
Heritage and Environmental Constraints

Map 43 of 71

LEGEND

- Earthworks design
- Road
- Drainage line
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT82 - Western Grey Box - Poplar Box - White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Peneplain Bioregion (TEC), Moderate/Good

**NOT FOR PUBLICATION.
FOR CONSULTATION PURPOSES ONLY.**



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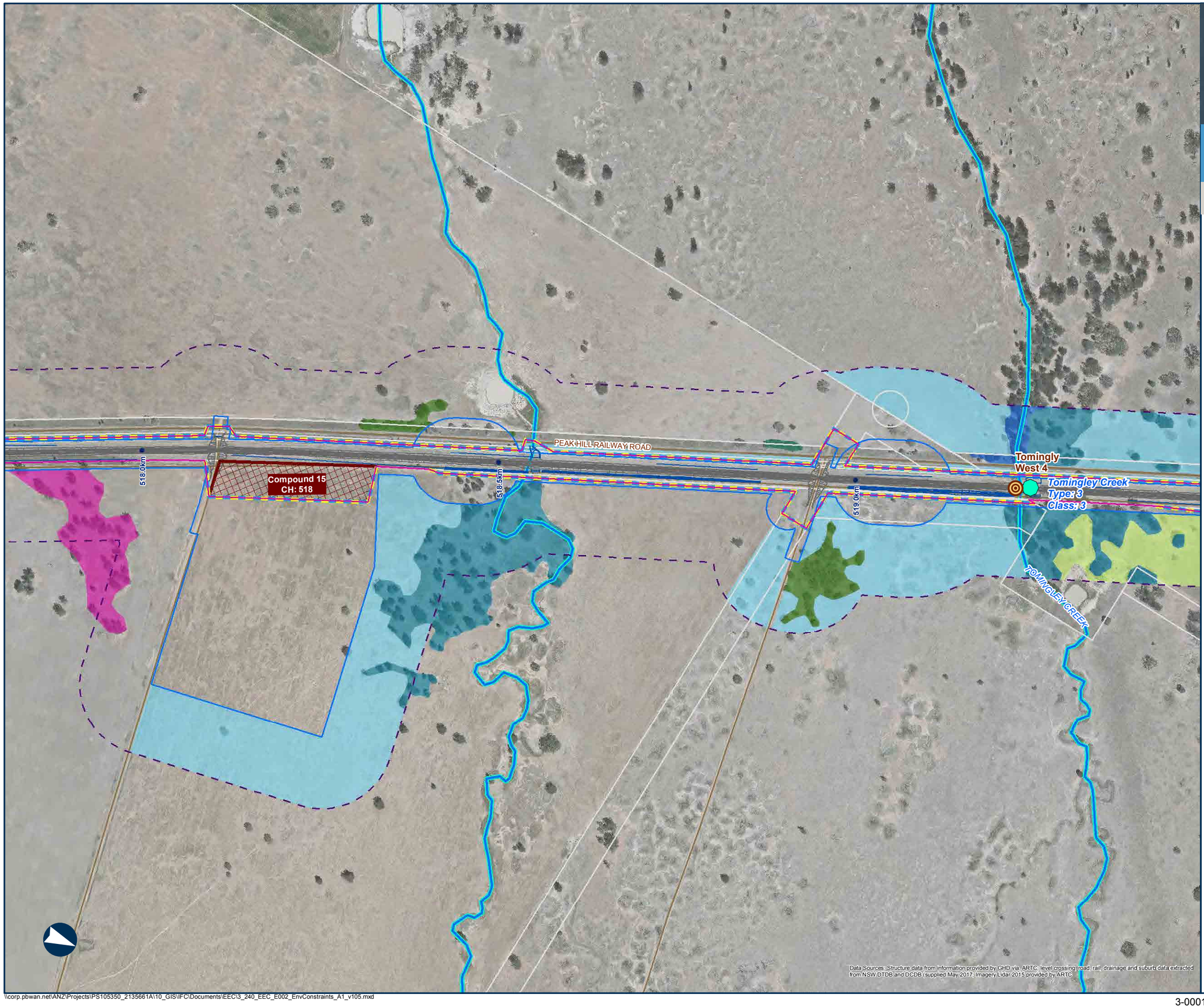

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 44 of 71

LEGEND

- Timber components of underbridge heritage item (refer to Table 3)

Key fish habitat (refer to Table 2)

- Key fish habitat
- Nominated compound/Laydown area
- Earthworks design
- Road
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT26 - Weeping Myall Open Woodland, Moderate/Good
- PCT36 - River Red Gum Tall to very Tall Open Forest / Woodland, Moderate/Good
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good
- PCT55 - Belah Woodland, Moderate/Good
- PCT55 - Belah Woodland, Low - Derived Native Grassland
- PCT82 - Western Grey Box - Poplar Box - White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Peneplain Bioregion (TEC), Moderate/Good

NOT FOR PUBLICATION.
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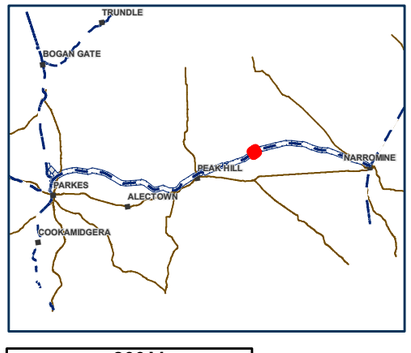

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 45 of 71

LEGEND

- Earthworks design
- Road
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT201 - Fuzzy Box Woodland, Moderate/Good
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good
- PCT55 - Belah Woodland, Moderate/Good
- PCT55 - Belah Woodland, Low - Derived Native Grassland
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good
- PCT82 - Western Grey Box - Poplar Box - White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Peneplain Bioregion (TEC), Moderate/Good

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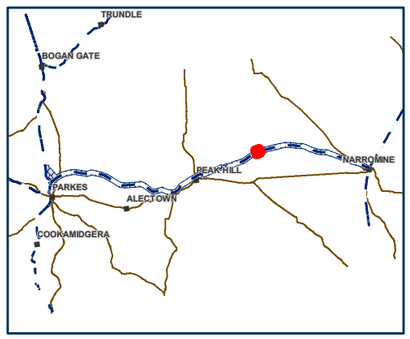

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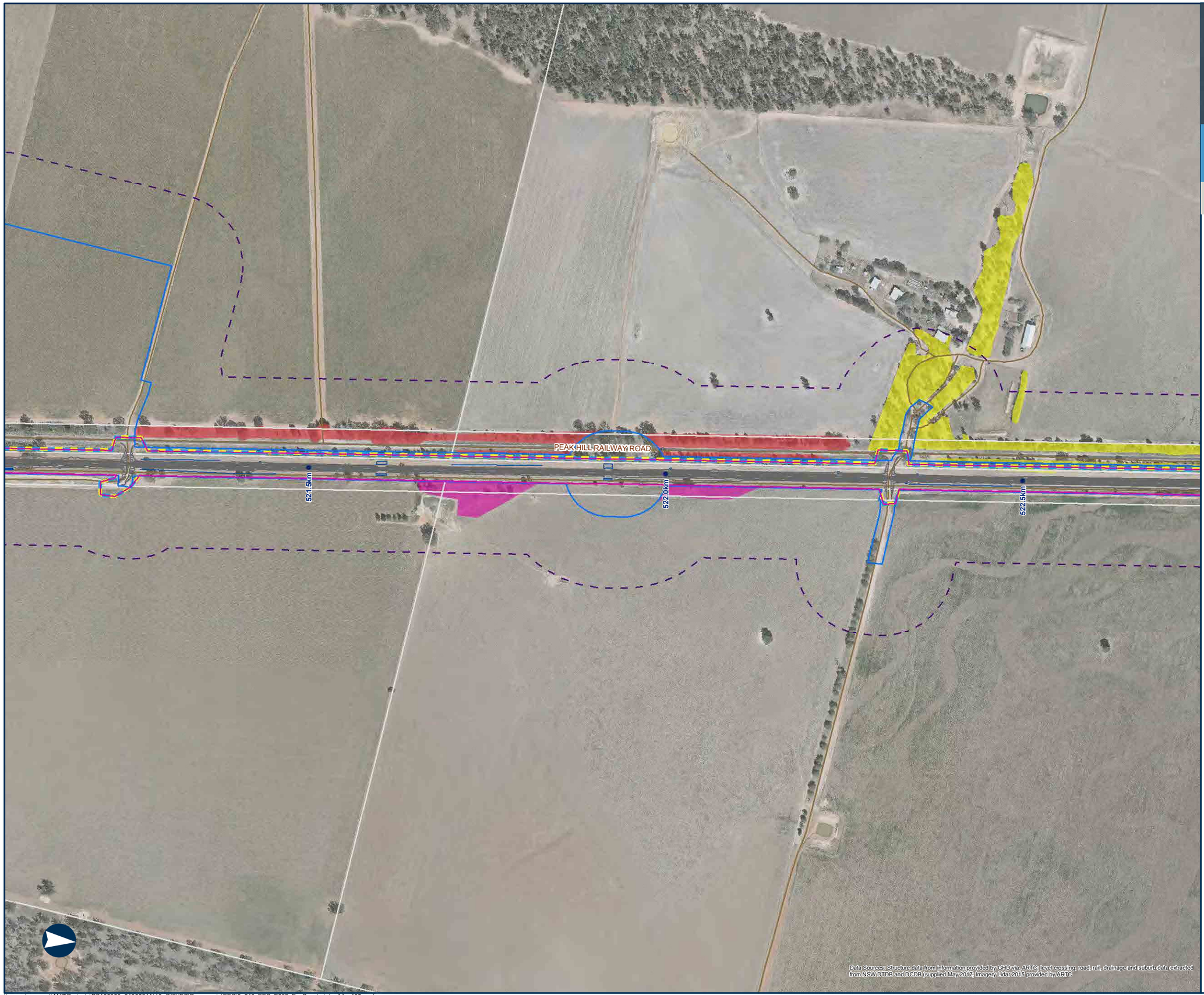

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 46 of 71

LEGEND

- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT244 - Poplar Box Grassy Woodland, Moderate/Good
- PCT244 - Poplar Box Grassy Woodland, Low - Derived Native Grassland
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good
- PCT82 - Western Grey Box - Poplar Box - White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Peneplain Bioregion (TEC), Moderate/Good

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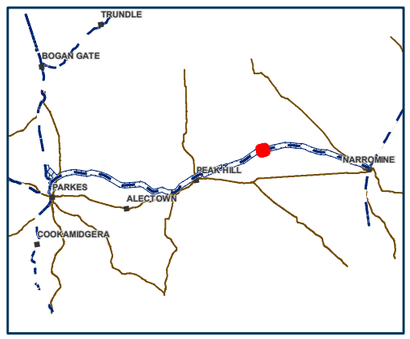

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 47 of 71

LEGEND

- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT244 - Poplar Box Grassy Woodland, Moderate/Good
- PCT244 - Poplar Box Grassy Woodland, Low - Derived Native Grassland
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good

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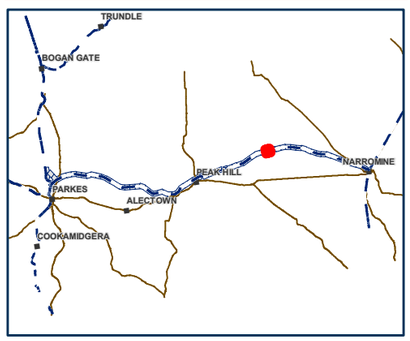

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 48 of 71

LEGEND

- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT244 - Poplar Box Grassy Woodland, Moderate/Good
- PCT244 - Poplar Box Grassy Woodland, Low - Derived Native Grassland
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good
- PCT82 - Western Grey Box - Poplar Box - White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Peneplain Bioregion (TEC), Moderate/Good

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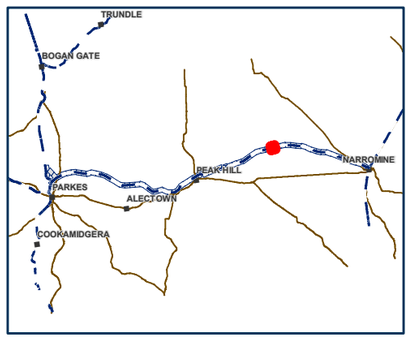

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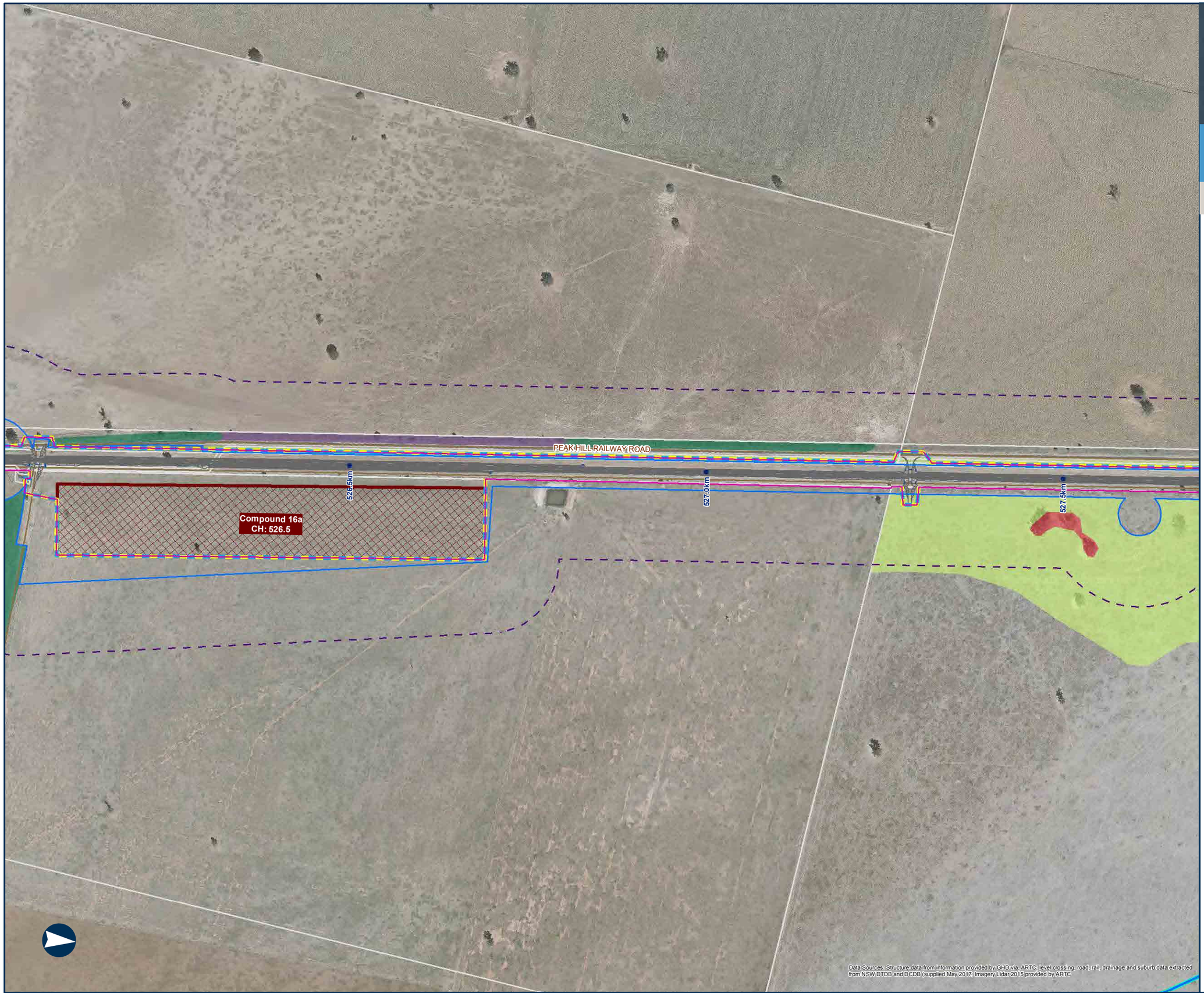

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

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LEGEND

- Nominated compound/Laydown area
- Earthworks design
- Road
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT27 - Weeping Myall open woodland of the Darling Riverine Plains Bioregion and Brigalow Belt South Bioregion, Moderate/Good
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good

Data Sources: Structure data from information provided by GHD via ARTC, level crossing, road, rail, drainage and suburb data extracted from NSW DTDB and DCDB (supplied May 2017), imagery Lidar 2015 provided by ARTC

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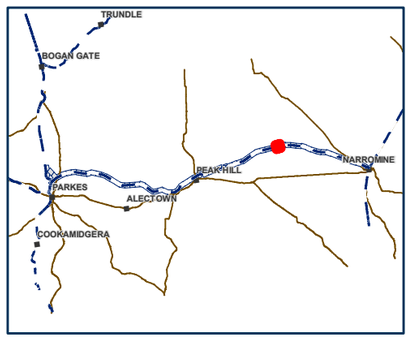

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 50 of 71

PEAK HILL RAILWAY ROAD
Wyanga 1
528.0km
526.5km
529.0km
Compound 17 CH: 529
Wyanga Station
WYANGA ROAD
FIDDLERS CREEK

LEGEND

- Timber components of underbridge heritage item (refer to Table 3)
- Railway station heritage item (refer to Table 4)
- Nominated compound/Laydown area
- Earthworks design
- Road
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT244 - Poplar Box Grassy Woodland, Moderate/Good
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good
- PCT796 - Derived grassland of the NSW South Western Slopes, Moderate/Good

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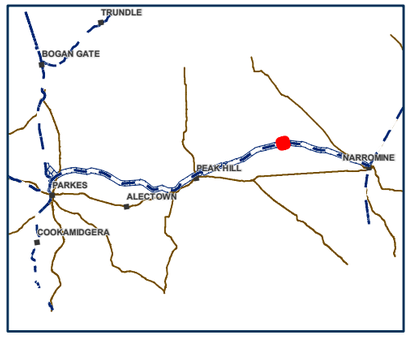

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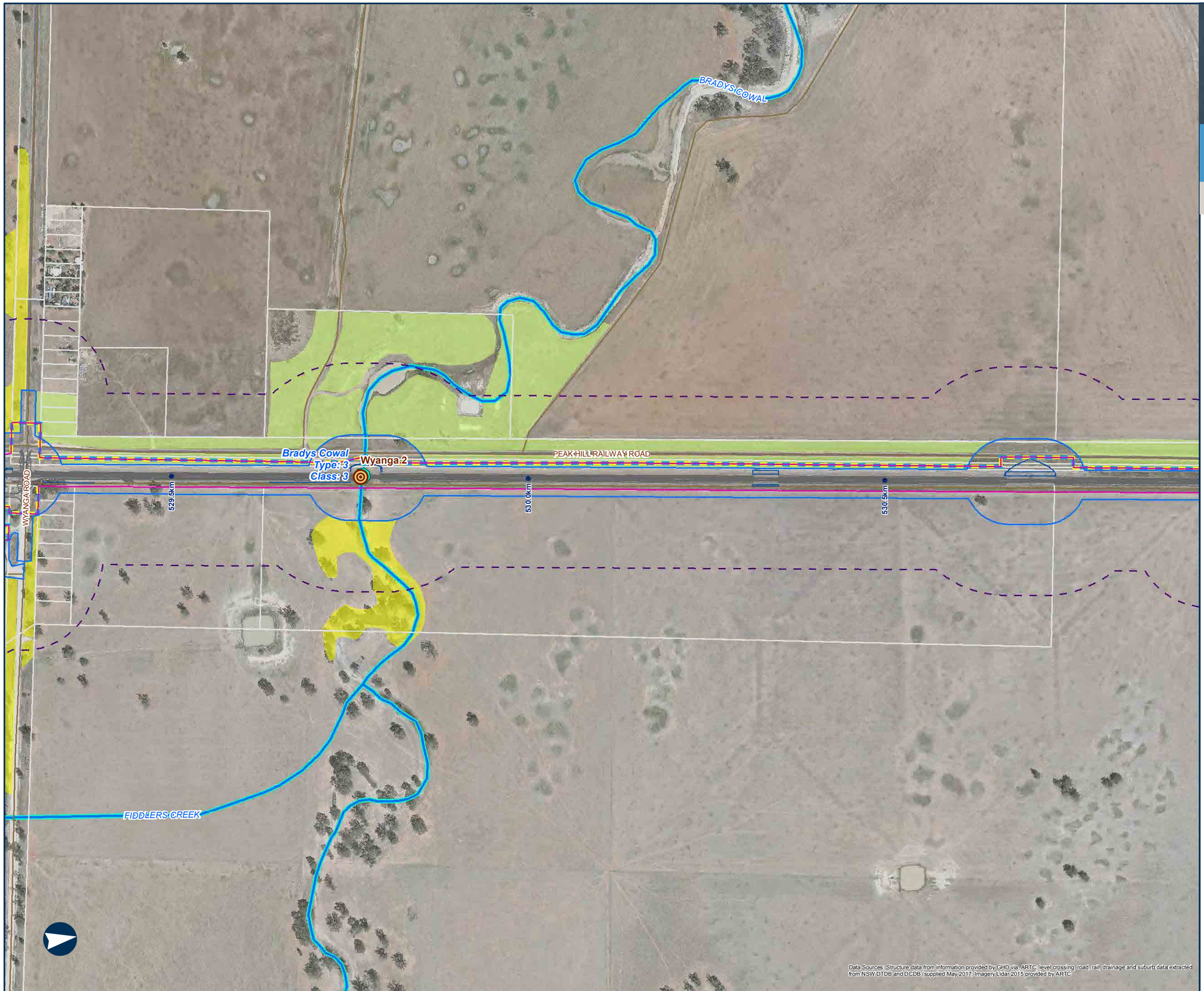

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 51 of 71

LEGEND

- Timber components of underbridge heritage item (refer to Table 3)

Key fish habitat (refer to Table 2)

- Key fish habitat
- Earthworks design
- Road
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT244 - Poplar Box Grassy Woodland, Moderate/Good
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good

**NOT FOR PUBLICATION.
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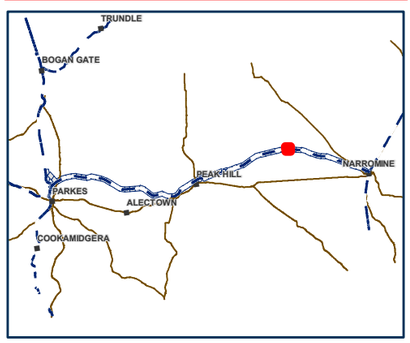

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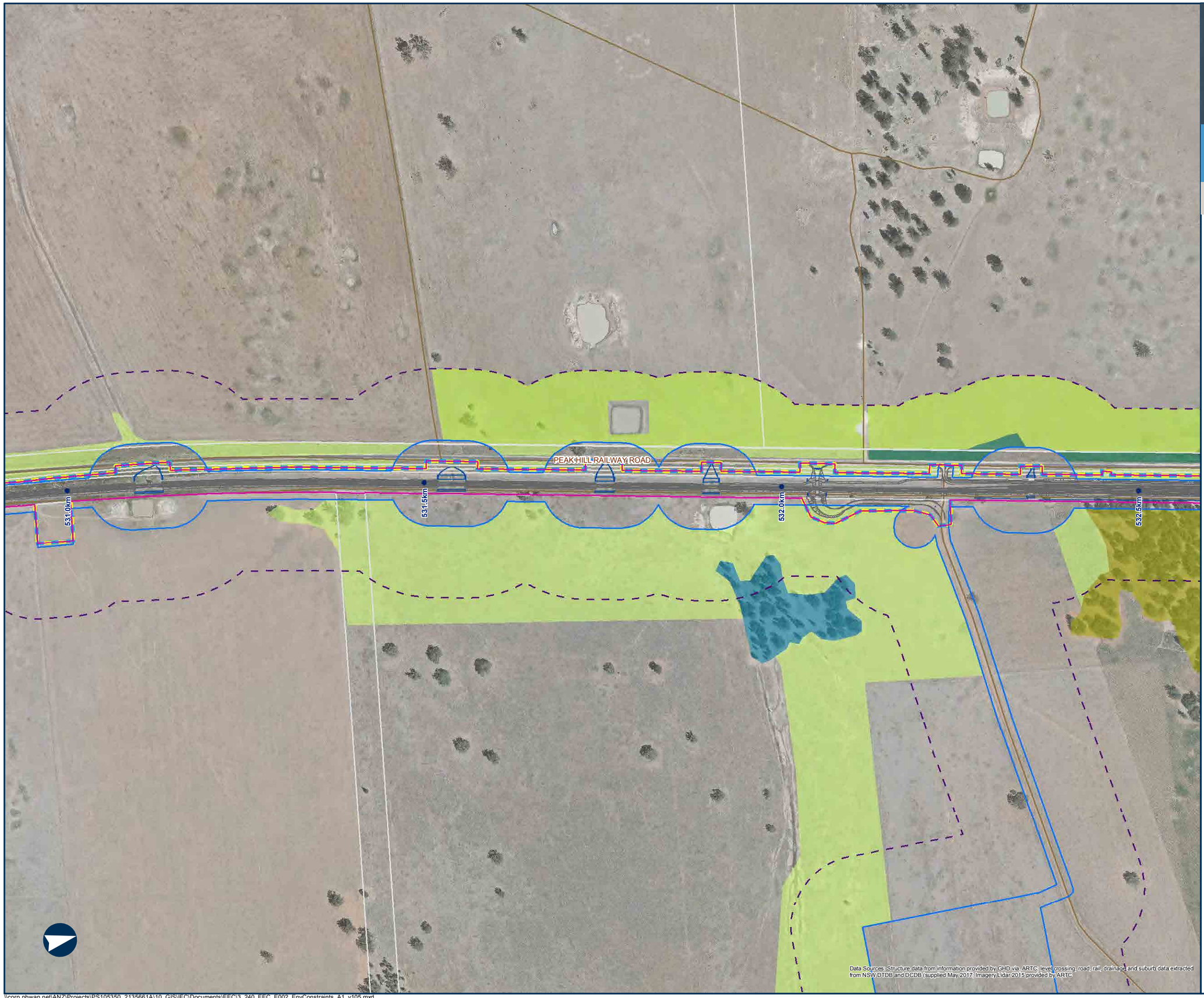

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 52 of 71

LEGEND

- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good
- PCT55 - Belah Woodland, Moderate/Good
- PCT70 - White Cypress Pine Woodland, Moderate/Good
- PCT796 - Derived grassland of the NSW South Western Slopes, Moderate/Good

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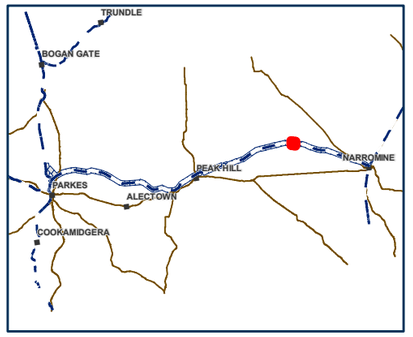

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 53 of 71

LEGEND

- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good
- PCT55 - Belah Woodland, Moderate/Good
- PCT70 - White Cypress Pine Woodland, Moderate/Good
- PCT796 - Derived grassland of the NSW South Western Slopes, Moderate/Good
- PCT82 - Western Grey Box - Poplar Box - White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Peneplain Bioregion (TEC), Moderate/Good

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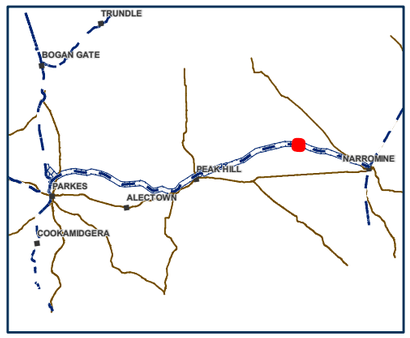

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 54 of 71

LEGEND

- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT27 - Weeping Myall open woodland of the Darling Riverine Plains Bioregion and Brigalow Belt South Bioregion, Moderate/Good
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good
- PCT55 - Belah Woodland, Moderate/Good
- PCT796 - Derived grassland of the NSW South Western Slopes, Moderate/Good
- PCT82 - Western Grey Box - Poplar Box - White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Peneplain Bioregion (TEC), Moderate/Good

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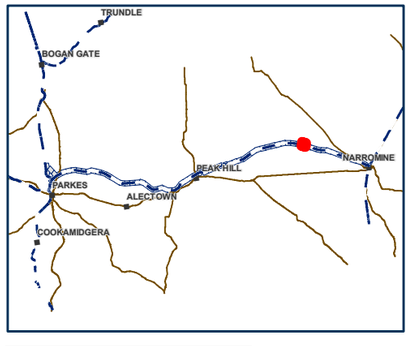

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 55 of 71

LEGEND

- Earthworks design
- Road
- Drainage line
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT27 - Weeping Myall open woodland of the Darling Riverine Plains Bioregion and Brigalow Belt South Bioregion, Moderate/Good
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good
- PCT55 - Belah Woodland, Moderate/Good
- PCT796 - Derived grassland of the NSW South Western Slopes, Moderate/Good
- PCT82 - Western Grey Box - Poplar Box - White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Peneplain Bioregion (TEC), Moderate/Good

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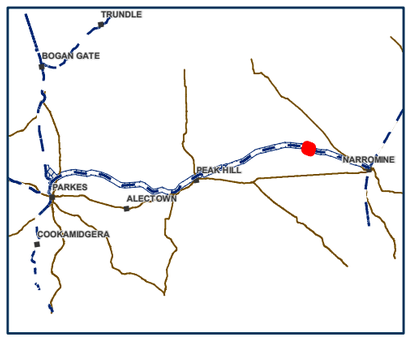

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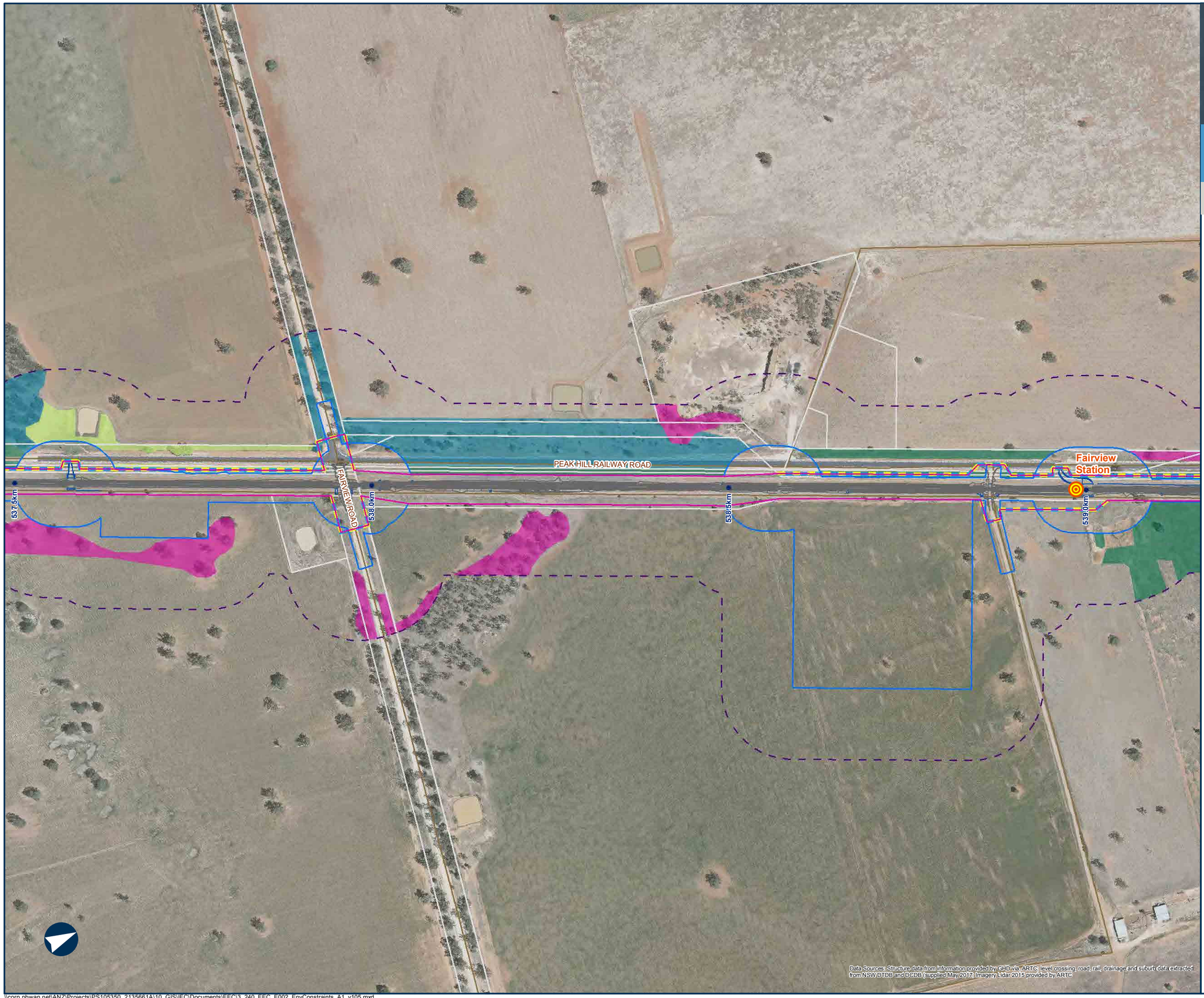

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 56 of 71

LEGEND

- Railway station heritage item (refer to Table 4)
- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good
- PCT55 - Belah Woodland, Moderate/Good
- PCT82 - Western Grey Box - Poplar Box - White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Peneplain Bioregion (TEC), Moderate/Good

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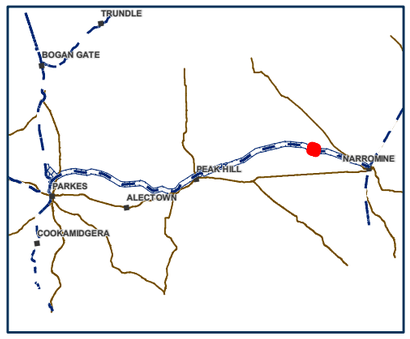

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 57 of 71

LEGEND

- Nominated compound/Laydown area
- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Moderate/Good
- PCT27 - Weeping Myall open woodland of the Darling Riverine Plains Bioregion and Brigalow Belt South Bioregion, Moderate/Good
- PCT82 - Western Grey Box - Poplar Box - White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Peneplain Bioregion (TEC), Moderate/Good

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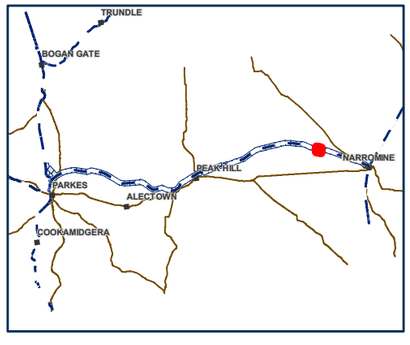

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 58 of 71

LEGEND

- Nominated compound/Laydown area
- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint

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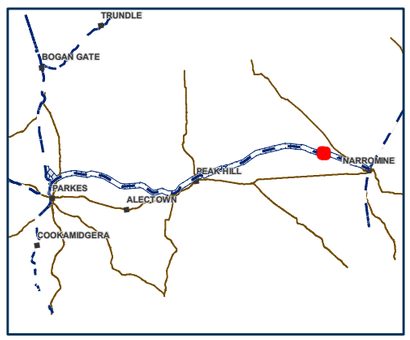

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 59 of 71

LEGEND

- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint

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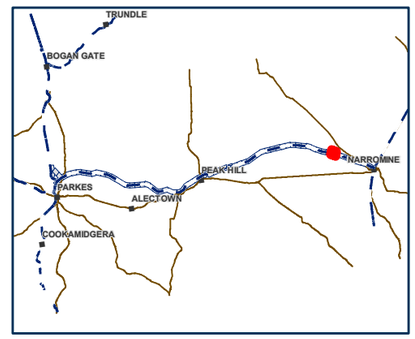

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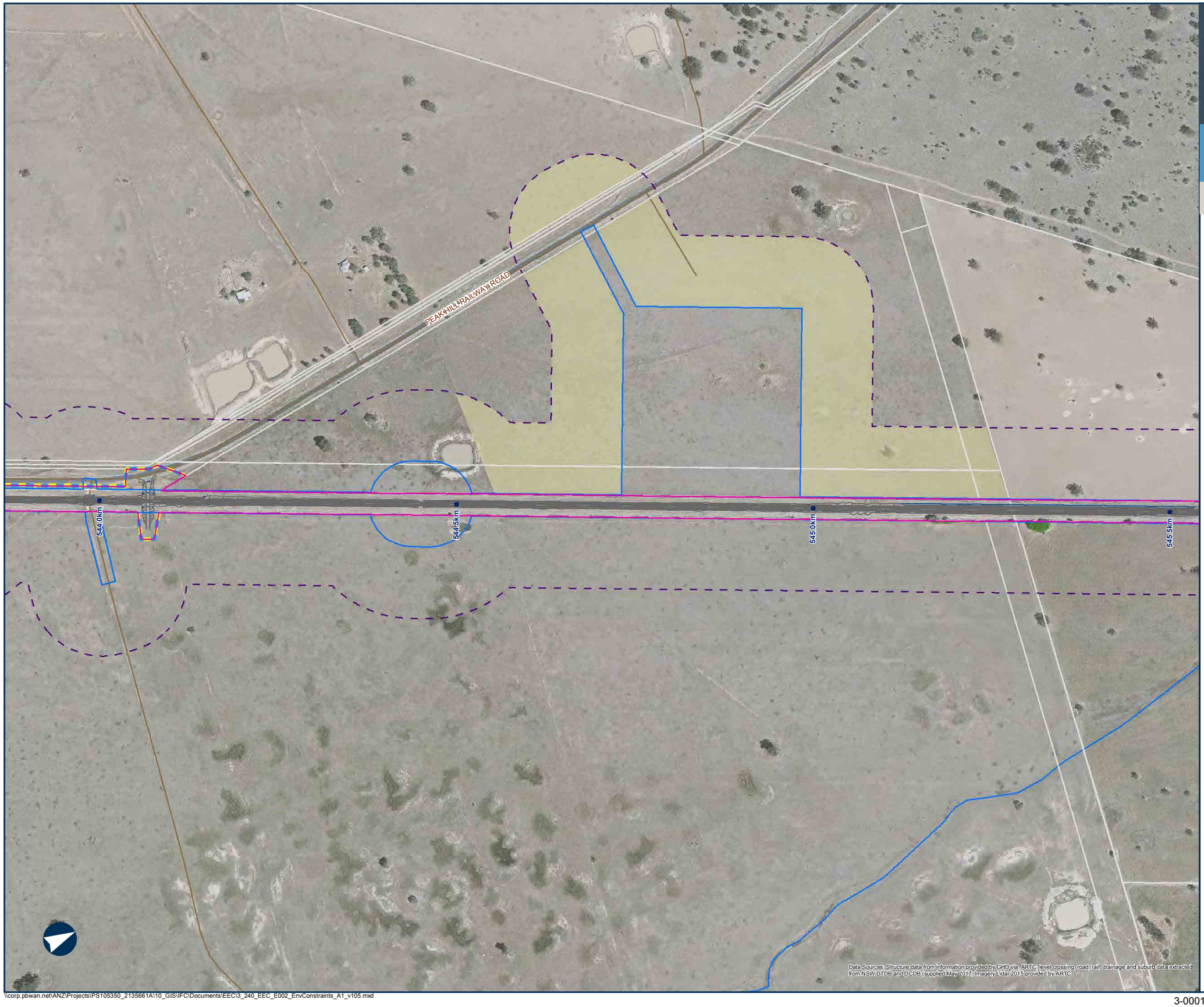

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

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LEGEND

- Earthworks design
- Road
- Drainage line
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT244 - Poplar Box Grassy Woodland, Low - Derived Native Grassland
- PCT26 - Weeping Myall Open Woodland, Moderate/Good

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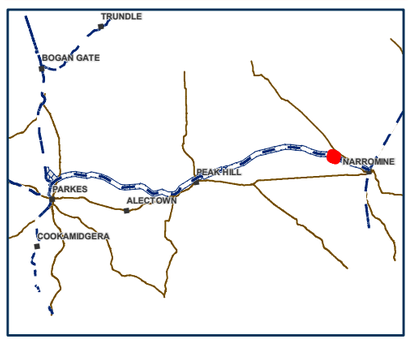

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Date: 7/08/2018
Author: WSP

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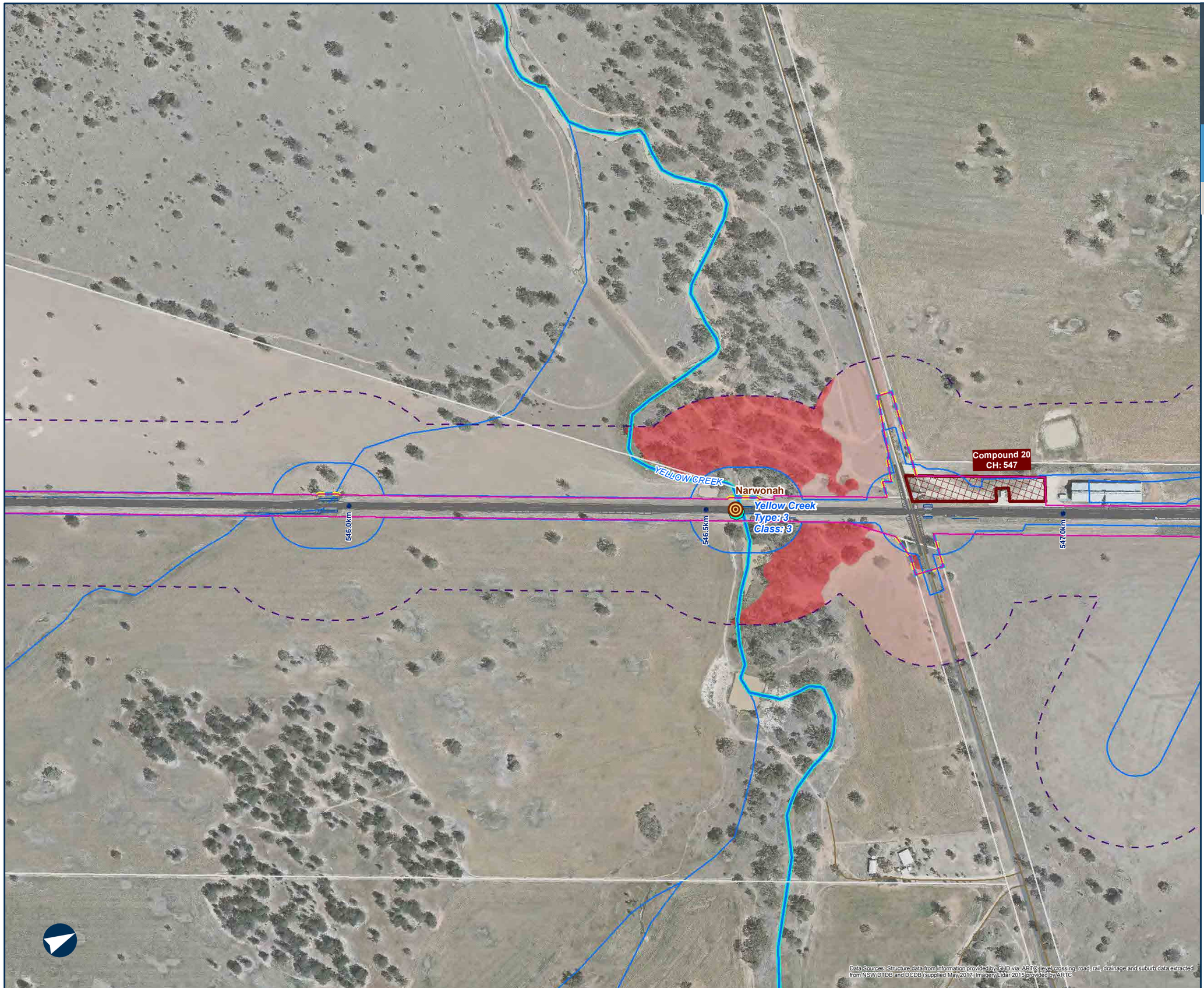

ARTC InlandRail

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 61 of 71

LEGEND

- Timber components of underbridge heritage item (refer to Table 3)

Key fish habitat (refer to Table 2)

- Key fish habitat
- Nominated compound/Laydown area
- Earthworks design
- Road
- Drainage line
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Low - Derived Native Grassland

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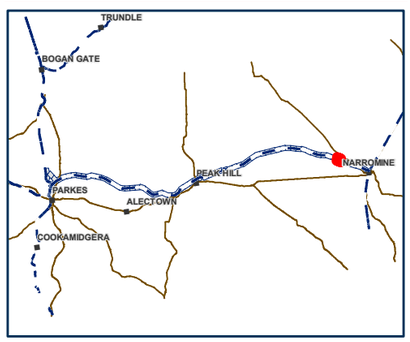

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 62 of 71

LEGEND

- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT26 - Weeping Myall Open Woodland, Moderate/Good
- PCT27 - Weeping Myall open woodland of the Darling Riverine Plains Bioregion and Brigalow Belt South Bioregion, Moderate/Good
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good

547.5km

548.0km

548.5km

TO NARROMINE.

INFORMATION INCLUDED IN FIGURES PAST CH547.55 CONTAINS INFORMATION EXTRACTED FROM, AND RELEVANT TO, THE EIS BUT CONTAINS NO DESIGN ELEMENTS

Data Sources: Structure data from information provided by GHD via ARTC, level crossing, road, rail, drainage and suburb data extracted from NSW DTDB and DCDB (supplied May 2017, Imagery Lidar 2015 provided by ARTC

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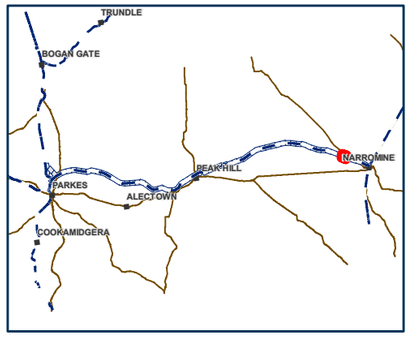

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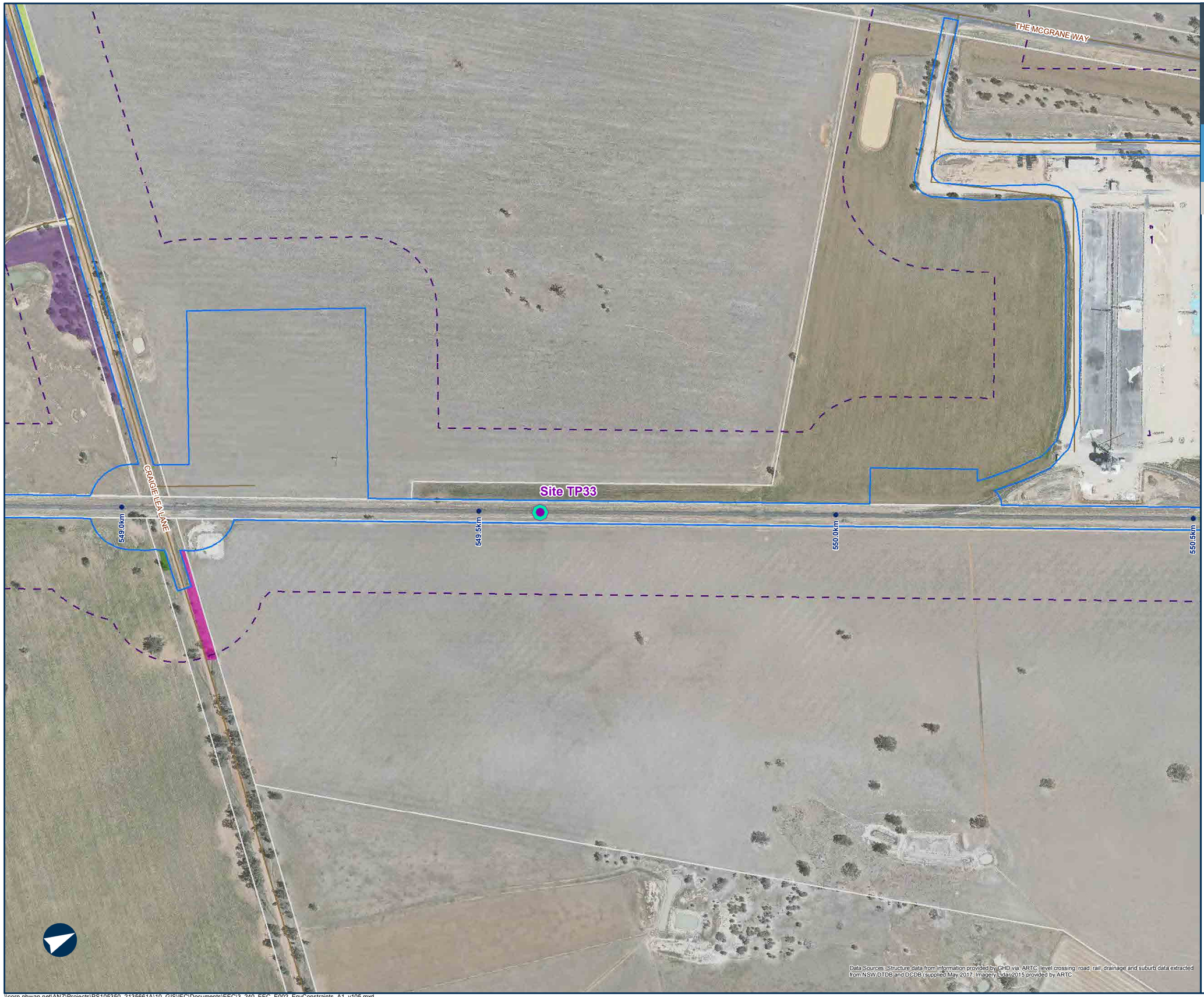

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

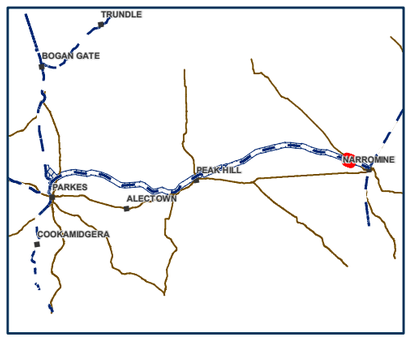
Map 63 of 71

LEGEND

Contamination sites (refer to Section 3.1)

- Potential contamination site
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Adjusted cadastre
- PCT26 - Weeping Myall Open Woodland, Moderate/Good
- PCT27 - Weeping Myall open woodland of the Darling Riverine Plains Bioregion and Brigalow Belt South Bioregion, Moderate/Good
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good
- PCT82 - Western Grey Box - Poplar Box - White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Peneplain Bioregion (TEC), Moderate/Good

**NOT FOR PUBLICATION.
FOR CONSULTATION PURPOSES ONLY.**



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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 64 of 71

LEGEND

Aboriginal archaeological survey units (refer to Table 1)

- High Aboriginal archaeological significant area
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Adjusted cadastre
- PCT70 - White Cypress Pine Woodland, Moderate/Good

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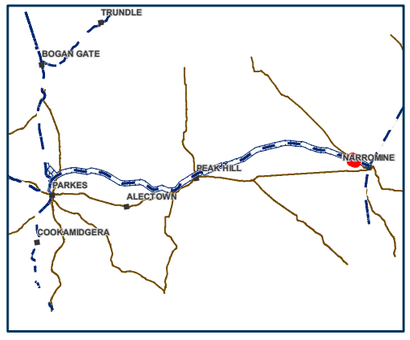
FOR CONSULTATION PURPOSES ONLY.**



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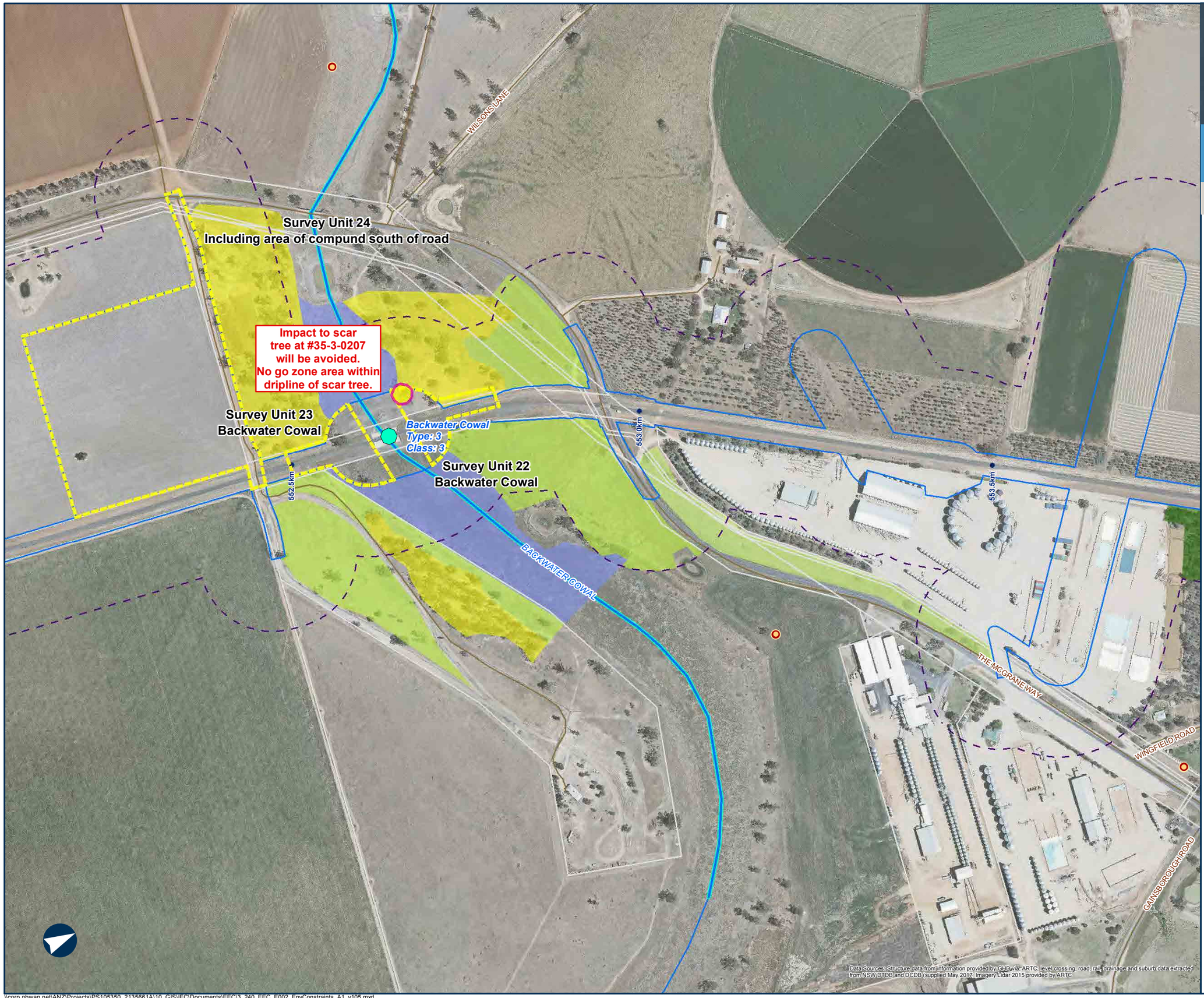

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 65 of 71

LEGEND

- Magpie Goose

Key fish habitat (refer to Table 2)

- Key fish habitat
- Scar tree (refer to Section 1.2)

Aboriginal archaeological survey units (refer to Table 1)

- High Aboriginal archaeological significant area
- Road
- Drainage line
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Adjusted cadastre
- PCT244 - Poplar Box Grassy Woodland, Moderate/Good
- PCT26 - Weeping Myall Open Woodland, Moderate/Good
- PCT36 - River Red Gum Tall to very Tall Open Forest / Woodland, Low - Regeneration
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good
- PCT796 - Derived grassland of the NSW South Western Slopes, Moderate/Good

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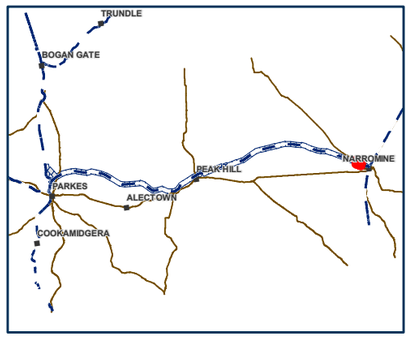

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 66 of 71

LEGEND

- Magpie Goose
- Road
- Key fish habitat
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Adjusted cadastre
- PCT26 - Weeping Myall Open Woodland, Moderate/Good
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good
- PCT70 - White Cypress Pine Woodland, Moderate/Good
- PCT796 - Derived grassland of the NSW South Western Slopes, Moderate/Good
- PCT796 - Derived grassland of the NSW South Western Slopes, Low - Derived Native Grassland
- PCT82 - Western Grey Box - Poplar Box - White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Peneplain Bioregion (TEC), Moderate/Good
- PCT83 - Yellow Box woodland on sandy loam soils on alluvial plains mainly in the upper Darling Riverine Plain Bioregion, Moderate/Good

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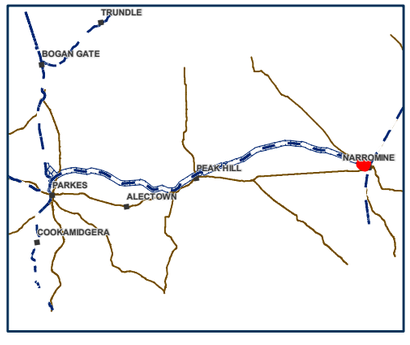
FOR CONSULTATION PURPOSES ONLY.



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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 67 of 71

LEGEND

- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good
- PCT796 - Derived grassland of the NSW South Western Slopes, Moderate/Good
- PCT82 - Western Grey Box - Poplar Box - White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Peneplain Bioregion (TEC), Moderate/Good

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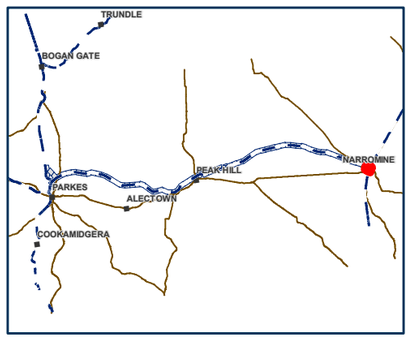

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Data Sources \Structure data from information provided by GHD via ARTC, level crossing, road, rail, drainage and suburb data extracted from NSW DTDB and DCDB (supplied May 2017), Imagery Lidar 2015 provided by ARTC

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 68 of 71

BROLGAN ROAD

COOPERS ROAD

LEGEND

- Nominated compound/Laydown area
- Earthworks design
- Road
- Drainage line
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Low - Derived Native Grassland
- PCT267 - White Box - White Cypress Pine - Western Grey Box Woodland, Moderate/Good
- PCT267 - White Box - White Cypress Pine - Western Grey Box Woodland, Low - Derived Native Grassland
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good

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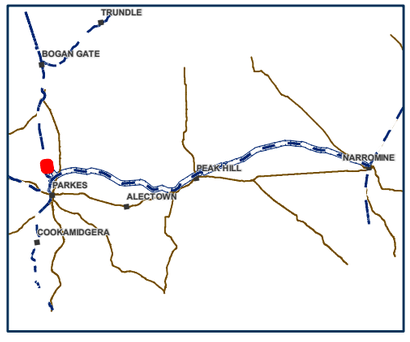

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 69 of 71

LEGEND

- Nominated compound/Laydown area
- Earthworks design
- Road
- Drainage line
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Low - Derived Native Grassland
- PCT267 - White Box - White Cypress Pine - Western Grey Box Woodland, Moderate/Good
- PCT267 - White Box - White Cypress Pine - Western Grey Box Woodland, Low - Derived Native Grassland
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good

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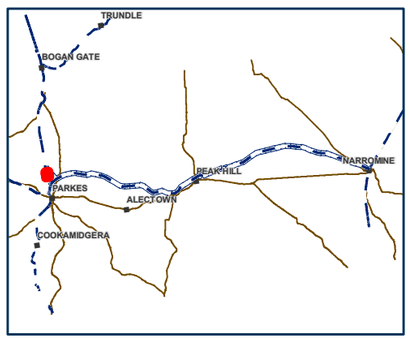

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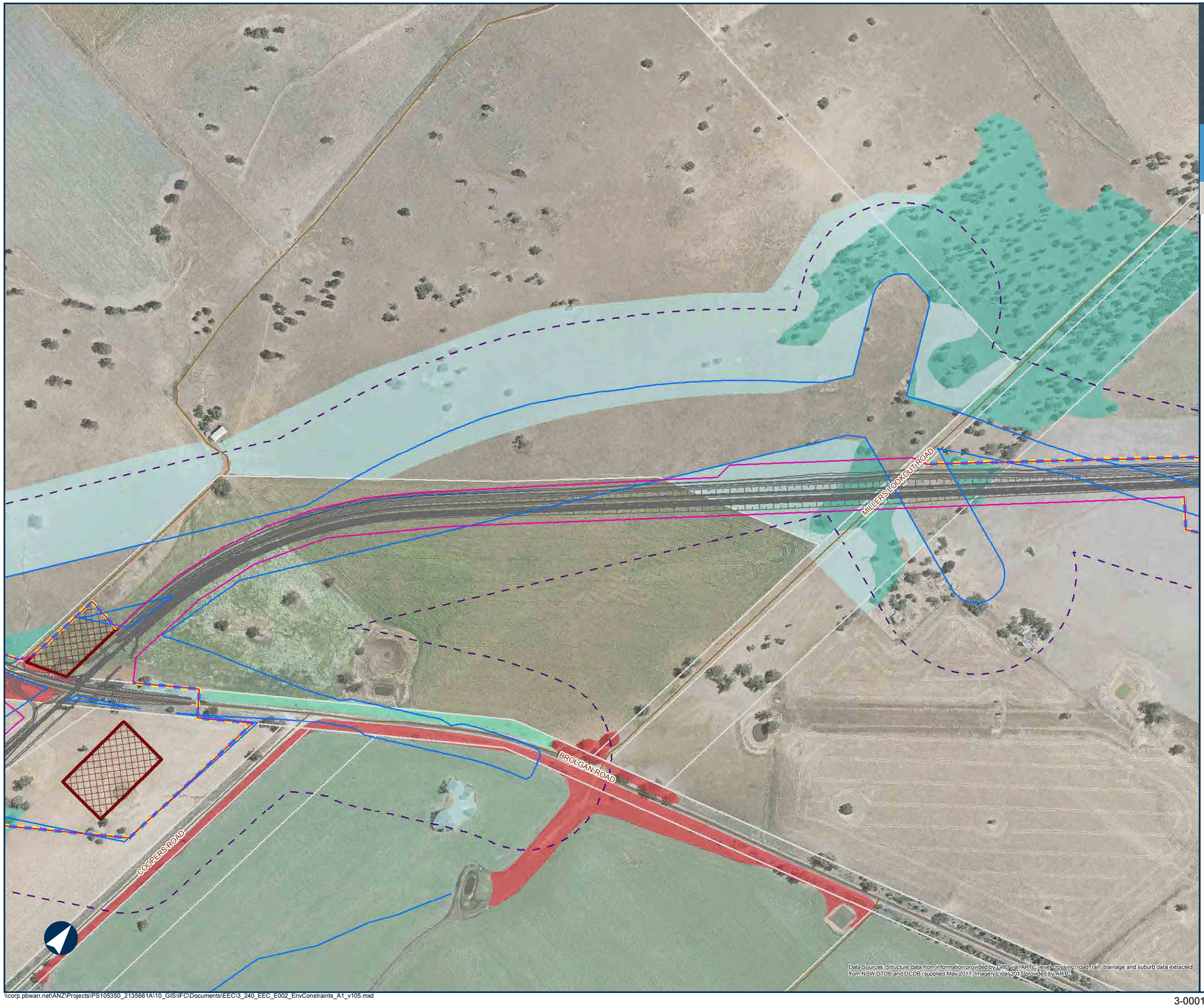
PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 70 of 71



LEGEND

- Nominated compound/Laydown area
- Earthworks design
- Road
- Drainage line
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT250 - Derived tussock grassland of the central western plains and lower slopes of NSW, Low - Derived Native Grassland
- PCT267 - White Box - White Cypress Pine - Western Grey Box Woodland, Moderate/Good
- PCT267 - White Box - White Cypress Pine - Western Grey Box Woodland, Low - Derived Native Grassland
- PCT76 - Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (TEC), Moderate/Good

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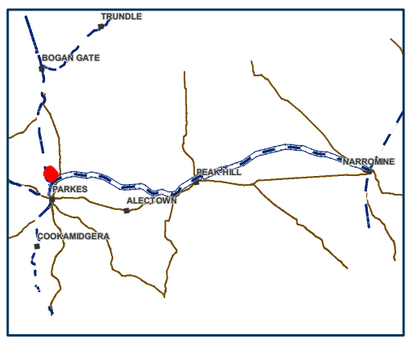

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PARKES TO NARROMINE

Figure 1
Heritage and Environmental Constraints

Map 71 of 71

LEGEND

- Nominated compound/Laydown area
- Earthworks design
- Road
- EIS Construction impact zone
- 100m buffer of EIS Construction impact zone
- Temporary occupation boundary
- Adjusted cadastre
- Detailed design construction impact footprint
- PCT267 - White Box - White Cypress Pine - Western Grey Box Woodland, Moderate/Good
- PCT45 - Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes Bioregion, Moderate/Good
- PCT70 - White Cypress Pine Woodland, Moderate/Good

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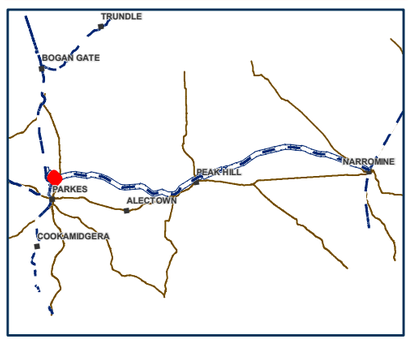

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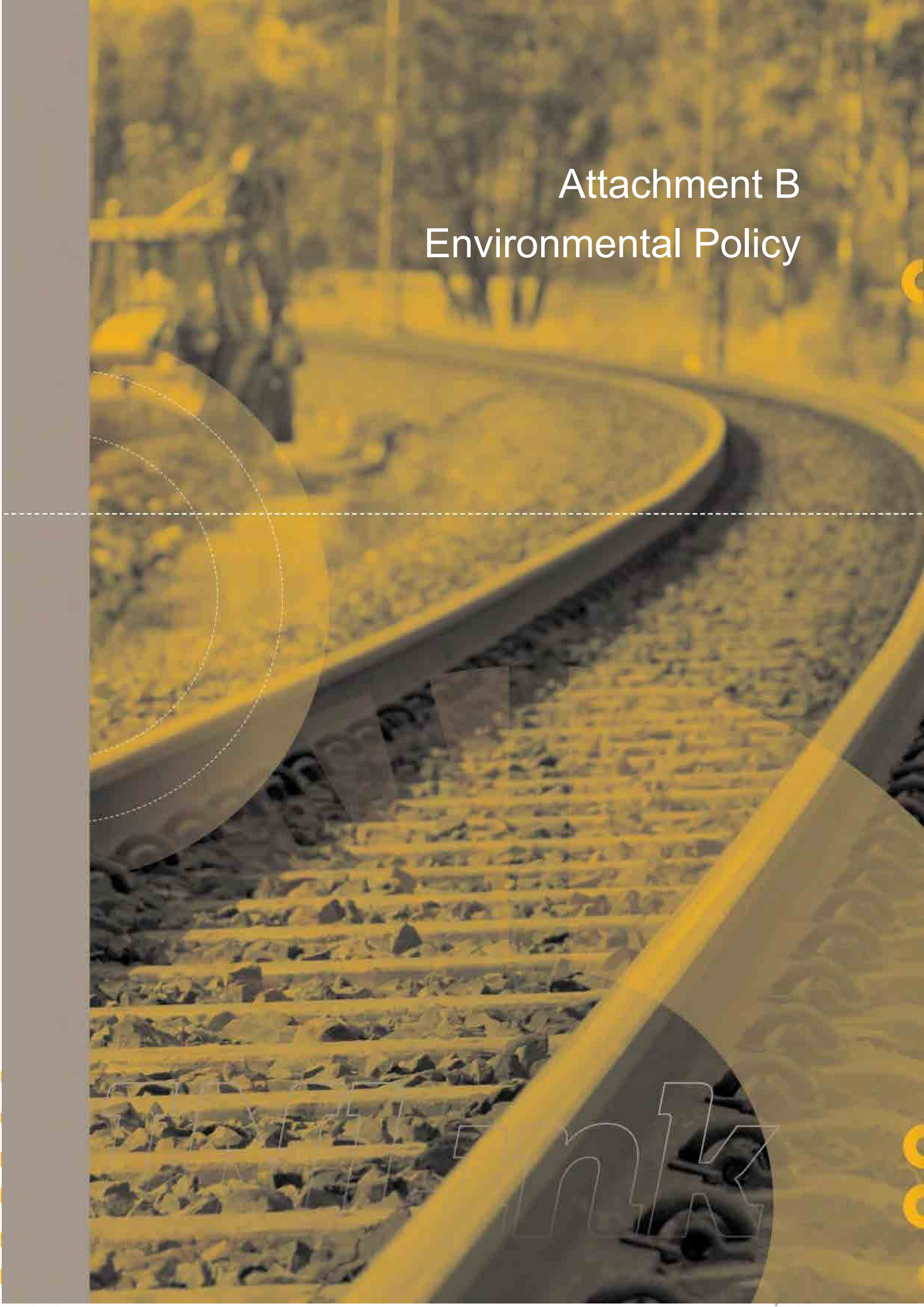


Attachment B
Environmental Policy

Environmental Policy

This policy encompasses all BMD Group subsidiaries including BMD Constructions, BMD Urban, Empower, JMac Constructions and Urbex. This Policy also applies to projects involving BMD being carried-out under a joint venture arrangement where no other policy of this type exists.

For ease of reference, the term 'BMD' is used throughout this policy to reference the BMD Group and its subsidiaries and/or joint ventures.

Based on the BMD Values and commitment to Zero Harm, we aim to provide best practice engineering solutions based on sustainable environmental management principles and practices.

The BMD Group is dedicated to preventing environmental harm to the ecosystems and communities in which we operate and continually improving our environmental performance.

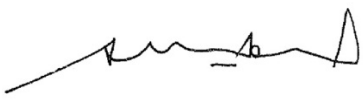
To ensure our objectives and targets are met and/or exceeded, BMD will:

- Ensure compliance with the relevant environmental management legislation, regulations and codes of practice mandated within the states and territories in which we operate;
- Develop and sustain a culture of environmental awareness within our workforce;
- Ensure compliance with project and client environmental requirements and specifications;
- Identify all environmental aspects and impacts relating to our operations and use a risk based approach to implement appropriate mitigation measures;
- Undertake continual monitoring, measurement and improvement of environmental controls across the Group;
- Undertake reporting of all environmental incidents;
- Develop environmental management systems that meet the ISO14001 standard and implement them across the BMD Group;
- Support all workers in the implementation of environmental procedures and processes; and,
- Increase the environmental awareness of workers and subcontractors through training and other programs.

This Policy applies to all workers, subcontractors and visitors to BMD sites. It is the responsibility of these parties to:

- Understand and apply the required environmental statutory obligations, business policies, procedures and associated documentation as it applies to their scope of work; and,
- Have input into the continual improvement of the Environmental Management System.

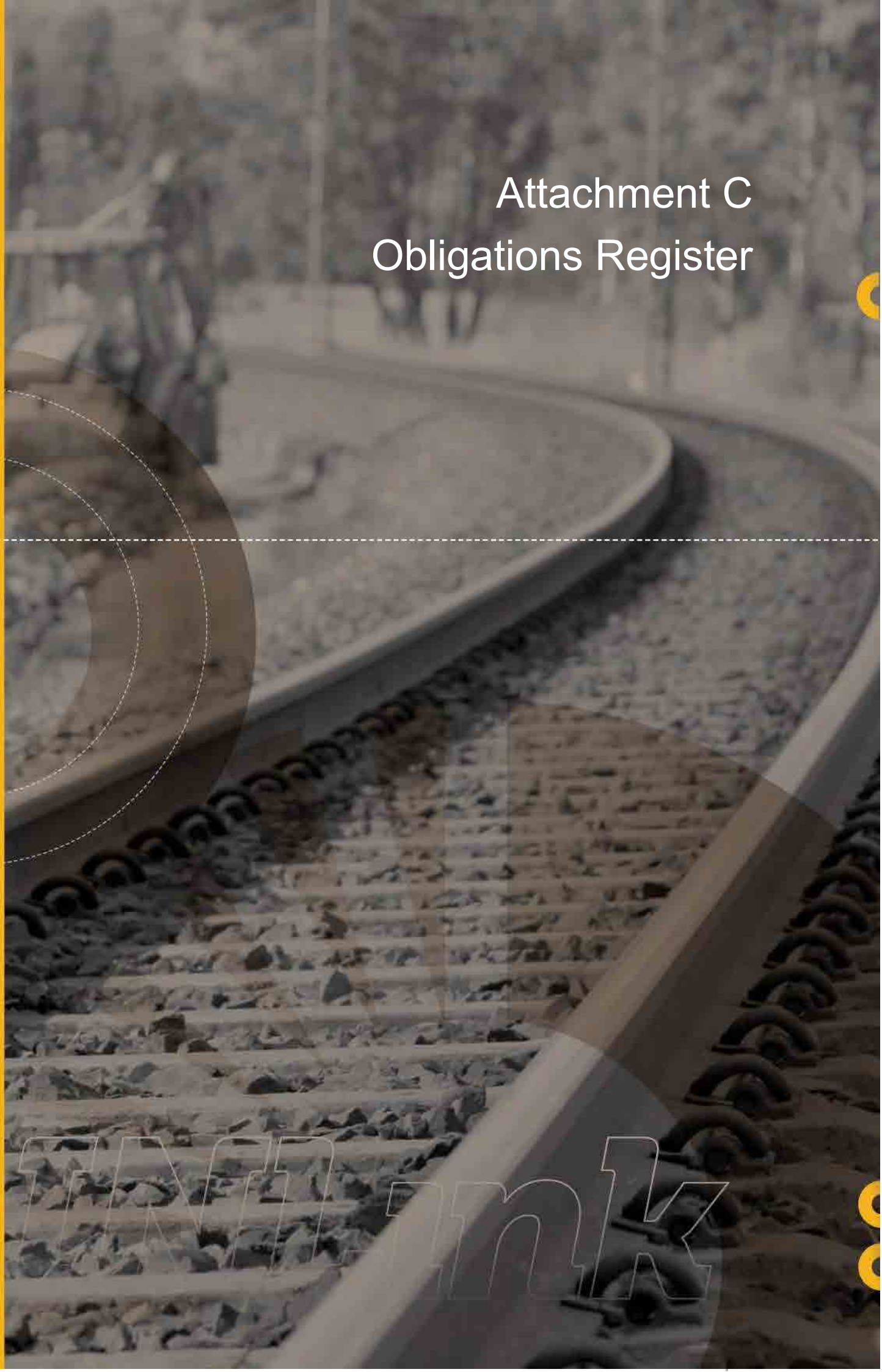
Through the leadership of its Senior Management, BMD shall strive to implement industry best practice across all operations.



Scott Power
Group Executive Director - Operations

Mick Power, AM
Group Board Chairman & Managing Director

Attachment C
Obligations Register



Minister's Conditions of Approval - June 2018

No	Condition	Responsibility			Where Captured	Section Where Addressed	Timing	Compliance Status	Compliance Details	Additional Output
		Principal	Contractor	Shared						
PART A - ADMINISTRATIVE CONDITIONS										
General										
A1	The CSSI must be carried out in accordance with the terms of this approval and generally in accordance with the description of the CSSI in the Inland Rail – Parkes to Narromine Environmental Impact Statement, Volumes 1-6 (prepared by GHD and dated June 2017) and the Inland Rail – Parkes to Narromine Submissions Report (ARTC, dated February 2018).			X	CEMP Sub-plans		Construction Operation	Draft		
A2	The CSSI must be carried out generally in accordance with all procedures, commitments, preventative actions, performance criteria and mitigation measures set out in in the EIS as amended by the Submissions Report unless otherwise specified in, or required under, this approval.			X	CEMP Sub-plans		Construction Operation	Draft		
A3	In the event of an inconsistency between the EIS as amended by the Submissions Report or any other document required under this approval, and a term of this approval, the term of this approval prevails to the extent of the inconsistency.				-		-	-		
	Note: For the purpose of this condition, there will be an inconsistency between a term of this approval and any document if it is not possible to comply with both the term and the document.				-		-	-		
A4	The Proponent must comply with all requirements of the Secretary in relation to:				-		-	-		
a)	the environmental performance of the CSSI;			X	CEMP Sub-plans		Construction Operation	Draft		
b)	any document or correspondence under the terms of this approval in relation to the CSSI;			X	CEMP Sub-plans		Construction Operation	Draft		
c)	any notification given to the Secretary under the terms of this approval;			X	CEMP Sub-plans		Construction Operation	Draft		
d)	any audit of the construction or operation of the CSSI;			X	CEMP Sub-plans		Construction Operation	Draft		
e)	compliance with the terms of this approval (including anything required to be done under this approval);			X	CEMP Sub-plans		Construction Operation	Draft		
f)	the carrying out of any additional monitoring or mitigation measures; and			X	CEMP Sub-plans		Construction Operation	Draft		
g)	in respect of ongoing monitoring and management obligations, compliance with an updated or revised version of a guideline, protocol, Australian Standard or policy required to be complied with under this approval.			X	CEMP Sub-plans		Construction Operation	Draft		
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:			X	Community Engagement Management Plan		Construction Operation	Approved		
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;			X	CEMP Sub-plans		Construction	Draft		
b)	log of the points of engagement or attempted engagement with the identified party(ies) and a summary of the issues raised by them;			X	CEMP Sub-plans		Construction	Draft		
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 requests;			X	CEMP Sub-plans		Construction	Draft		
d)	outline of the issues raised by the identified party(ies) and how they have been addressed; and			X	CEMP Sub-plans		Construction	Draft		
e)	a description of the outstanding issues raised by the identified party(ies) and the reasons why they have not been addressed.			X	CEMP Sub-plans		Construction	Draft		
A6	Where the terms of approval provide for Secretarial discretion (for example in relation to the timing of an action), the Proponent must provide supporting evidence so that the Secretary can consider the need, environmental impacts and consistency of any request.	X			-	-	-	-		
	Note: Inaction and/or expedience will not be supported as justifications for need unless it can be demonstrated that there is beneficial environmental impacts associated with the request.				-	-	-	-		

Minister's Conditions of Approval - June 2018

No	Condition	Responsibility			Where Captured	Section Where Addressed	Timing	Compliance Status	Compliance Details	Additional Output
		Principal	Contractor	Shared						
A7	Any document that must be submitted, or approval that must be obtained, within a timeframe specified in or under the conditions of this approval may be submitted within a later timeframe agreed with the Secretary. The Proponent must seek the Secretary's agreement at least 14 days before the date on which the document is required to be submitted, or approval must be obtained. This condition does not apply to the immediate written notification required in respect of an incident under Condition A36.	X			-	-	-	-		
A8	This approval lapses five (5) years after the date on which it is granted, unless works for the purpose of the CSSI are physically commenced on or before that date.	X			-	-	-	-		
A9	The Proponent is responsible for any breaches of the conditions of this approval resulting from the actions of all persons that it invites onto any site, including contractors, sub-contractors and visitors.			X	CEMP Sub-plans		Construction Operation	Draft		
Staging										
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).				-	-	-	-		
A11	The Staging Report must:				-	-	-	-		
a)	if staged construction is proposed, set out how the construction of the whole of the CSSI will be staged, including details of work and other activities to be carried out in each stage and the general timing of when construction of each stage will commence and finish;				-	-	-	-		
b)	if staged operation is proposed, set out how the operation of the whole of the CSSI will be staged, including general details of work and other activities to be carried out in each stage and the general timing of when operation of each stage will commence and finish (if relevant);				-	-	-	-		
c)	specify how compliance conditions will be achieved across and between each of the stages of the CSSI; and				-	-	-	-		
d)	set out mechanisms for managing any cumulative impacts arising from the proposed staging.				-	-	-	-		
A12	The CSSI must be staged in accordance with the Staging Report, as submitted to the Secretary.				-	-	-	-		
A13	Where staging is proposed, the terms of this approval that apply or are relevant to the works or activities to be carried out in a specific stage must be complied with at the relevant time for that stage.				-	-	-	-		
A14	Where changes are proposed to the staging of construction or operation, a revised Staging Report must be prepared and submitted to the Secretary for information no later than one (1) month prior to the proposed change in the staging.				-	-	-	-		
Environment Representative										
A15	Works must not commence until an Environment Representative (ER) has been approved by the Secretary and engaged by the Proponent.	X			-		Pre-construction	-		
A16	The Secretary's approval of an ER must be sought no later than one (1) month before the commencement of works.	X			-		Pre-construction	-		
A17	The proposed ER must be a suitably qualified and experienced person who was not involved in the preparation of the EIS or Submissions Report, and is independent from the design and construction personnel for the CSSI.	X			-		Pre-construction	-		
A18	The Proponent may engage more than one ER for the CSSI, in which case the functions to be exercised by an ER under the terms of this approval may be carried out by any ER that is approved by the Secretary for the purposes of the CSSI.	X			-		Pre-construction	-		
A19	For the duration of the works until the completion of construction, the approved ER must:				-	-	-	-		
a)	receive and respond to communication from the Secretary in relation to the environmental performance of the CSSI;			X	CEMP Sub-plans		Construction	Draft		

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No	Condition	Responsibility			Where Captured	Section Where Addressed	Timing	Compliance Status	Compliance Details	Additional Output
		Principal	Contractor	Shared						
b)	consider and inform the Secretary on matters specified in the terms of this approval;			X	CEMP Sub-plans		Construction	Draft		
c)	consider and recommend to the Proponent any improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community;			X	CEMP Sub-plans		Construction	Draft		
d)	review documents identified in Conditions in Conditions C1, C4 and C12 and any other documents that are identified by the Secretary, to ensure they are consistent with requirements in or under this approval and if so:			X	CEMP Sub-plans		Construction	Draft		
	i) make a written statement to this effect before submission of such documents to the Secretary (if those documents are required to be approved by the Secretary); or			X	CEMP Sub-plans		Construction	Draft		
	ii) make a written statement to this effect before the implementation of such documents (if those documents are required to be submitted to the Secretary / Department for information or are not required to be submitted to the Secretary/Department);			X	CEMP Sub-plans		Construction	Draft		
e)	regularly monitor the implementation of the documents listed in Conditions C1, C4 and C12 to ensure implementation is being carried out in accordance with the document and the terms of this approval;			X	CEMP Sub-plans		Construction	Draft		
f)	as may be requested by the Secretary, help plan, attend or undertake audits of the development commissioned by the Department including scoping audits, programming audits, briefings and site visits, but not independent environmental audits required under Condition A32 of this approval;			X	CEMP Sub-plans		Construction	Draft		
g)	as may be requested by the Secretary, assist the Department in the resolution of community complaints;			X	CEMP Sub-plans		Construction	Draft		
h)	assess the impacts of minor ancillary facilities comprising lunch sheds, office sheds, material lay down sites, areas used to assemble culverts and turnouts, and portable toilet facilities as required by Condition C21 of this approval;			X	CEMP Sub-plans		Construction	Draft		
i)	prepare and submit to the Secretary and other relevant regulatory agencies, for information, an Environmental Representative Monthly Report providing the information set out in the *Environmental Representative Protocol* under the heading "Environmental Representative Monthly Reports." The Environmental Representative Monthly Report must be submitted within seven (7) calendar days following the end of each month for the duration of the ER's engagement for the CSSI; and			X	CEMP Sub-plans		Construction	Draft		
j)	consider any minor amendments to be made to the CEMP, CEMP Sub-plans and monitoring programs that comprise updating or are of an administrative nature, and are consistent with the terms of this approval and the CEMP, CEMP Sub-plans and monitoring programs approved by the Secretary and, if satisfied such amendment is necessary, approve the amendment. This does not include any modifications to the terms of this approval;			X	CEMP Sub-plans		Construction	Draft		
A20	The Proponent must provide the ER with all documentation requested by the ER in order for the ER to perform their functions specified in Condition A19 (including preparation of the ER monthly report), as well as:			X	CEMP Sub-plans		Construction	Draft		
a)	the complaints register (to be provided on a weekly basis); and			X	Community Engagement Management Plan		Construction	Draft		
b)	a copy of any assessment carried out by the Proponent of whether proposed work is consistent with the approval (which must be provided to the ER before the commencement of the subject work).	X			-	-	-	-		
A21	The Secretary may at any time commission an audit of an ER's exercise of its functions under Condition A19. The Proponent must:	X			-	-	-	-		
a)	facilitate and assist the Secretary in any such audit; and			X	CEMP Sub-plans		Construction	Draft		
b)	make it a term of their engagement of an ER that the ER facilitate and assist the Secretary in any such audit.	X			-	-	-	-		
Compliance Tracking Program										

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No	Condition	Responsibility			Where Captured	Section Where Addressed	Timing	Compliance Status	Compliance Details	Additional Output
		Principal	Contractor	Shared						
A22	A Compliance Tracking Program to monitor compliance with the terms of this approval must be prepared, taking into consideration any staging of the CSSI that is proposed in a Staging Report submitted in accordance with Condition A10 and Condition A11 of this approval.	X			-	-	-	-		
A23	The Compliance Tracking Program must be endorsed by the ER and then submitted to the Secretary for information at least one (1) month prior to the commencement of works.	X			-	-	-	-		
A24	The Compliance Tracking Program in the form required under Condition A22 of this approval must be implemented for the duration of construction and for a minimum of one (1) year following commencement of operation, or for a longer period as determined by the Secretary based on the outcomes of independent environmental audits, Environmental Representative Monthly Reports and regular compliance reviews submitted through Compliance Reports. If staged operation is proposed, or operation is commenced of part of the CSSI, the Compliance Tracking Program must be implemented for the relevant period for each stage or part of the CSSI.	X			-	-	-	-		
Construction Compliance Reporting										
A25	A Pre-Construction Compliance Report must be prepared and submitted to the Secretary for information no later than one (1) month before the commencement of construction (or each stage of construction identified in the Staging Report).	X			-	-	-	-		
A26	The Pre-Construction Compliance Report must include:									
a)	details of how the terms of this approval that must be addressed before the commencement of construction have been complied with: and	X			-	-	-	-		
b)	the proposed commencement date for construction.	X			-	-	-	-		
A27	Construction must not commence until the Pre-Construction Compliance Report has been submitted to the Secretary.	X			-	-	-	-		
A28	Construction Compliance Reports must be prepared and submitted to the Secretary for information every six (6) months from the date of the commencement of construction, for the duration of construction. The Construction Compliance Reports must include:		X		CEMP		Construction	Draft		
a)	a summary of the project activities that occurred during the reporting period;		X		CEMP		Construction	Draft		
b)	a results summary and analysis of environmental monitoring;		X		CEMP		Construction	Draft		
c)	the number of any complaints received, including a summary of main areas of complaint, action taken, response given and proposed strategies for reducing the recurrence of such complaints;		X		CEMP		Construction	Draft		
d)	details of any review of, and minor amendments made to, the CEMP as a result of construction carried out during the reporting period;		X		CEMP		Construction	Draft		
e)	a register of any consistency assessments undertaken and their status;		X		CEMP		Construction	Draft		
f)	results of any independent environmental audits carried out in accordance with Conditions A32 to A35 and details of any actions taken in response to the recommendations of an audit;		X		CEMP		Construction	Draft		
g)	a summary of all incidents notified in accordance with Condition A36 and Condition A39 of this approval; and		X		CEMP		Construction	Draft		
h)	a compliance status summary for the reporting period including details of any non-compliances with the terms of this approval.		X		CEMP		Construction	Draft		
A29	The Department must be notified in writing to compliance@planning.nsw.gov.au within seven (7) days after the Proponent becomes aware of any non-compliance. The notification must identify the project and the application number for it, set out the condition of consent that the project is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.		X		CEMP		Construction	Draft		
Pre-operation Compliance Report										
A30	A Pre-Operation Compliance Report must be prepared and submitted to the Secretary for information no later than one (1) month before the commencement of operation. The Pre-Operation Compliance Report must include:	X			-	-	-	-		
a)	details of how the terms of this approval that must be addressed before the commencement of operation have been complied with; and	X			-	-	-	-		
b)	the commencement date for operation.	X			-	-	-	-		

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No	Condition	Responsibility			Where Captured	Section Where Addressed	Timing	Compliance Status	Compliance Details	Additional Output
		Principal	Contractor	Shared						
A31	Operation must not commence until the Pre-Operation Compliance Report has been submitted for information to the Secretary.	X			-	-	-	-		
Auditing										
A32	An Environmental Audit Program for annual independent environmental auditing against the terms of this approval must be prepared in accordance with *AS/NZS ISO 19011:2014 - Guidelines for Auditing Management Systems* and submitted to the Secretary for information no later than one (1) month before the commencement of construction.			X	CEMP		Pre-construction	Draft		
A33	The Environmental Audit Program, as submitted to the Secretary, must be implemented and complied with for the duration of construction and for the first two years of operation.			X	CEMP		Construction Operation	Draft		
A34	All independent environmental audits of the CSSI must be conducted by a suitably qualified, experienced and independent team of experts in auditing and be documented in an Environmental Audit Report which:			X	CEMP		Construction Operation	Draft		
a)	assesses the environmental performance of the CSSI, and its effects on the surrounding environment;			X	CEMP		Construction Operation	Draft		
b)	assesses whether the project is complying with the terms of this approval; and			X	CEMP		Construction Operation	Draft		
c)	recommends measures or actions to improve the environmental performance of the CSSI.			X	CEMP		Construction Operation	Draft		
A35	The Proponent must submit a copy of the Environmental Audit Report to the Secretary with a response to any recommendations contained in the audit report within six (6) weeks of completing the audit			X	CEMP		Construction Operation	Draft		
Incident Notification and Reporting										
A36	The Department must be advised in writing to compliance@planning.nsw.gov.au immediately after the Proponent becomes aware of an incident and in any event within 24 hours of the Proponent becoming aware of any incident. The notification must identify the CSSI, including the application number and the name of the CSSI.			X	CEMP		Construction	Draft		
A37	Notification of an incident under Condition A36 of this approval, must include the time and date of the incident and details of the incident.			X	CEMP		Construction	Draft		
A38	All written requirements of the Secretary which may be given at any point in time, to address the cause or impact of an incident reported under with Condition A36 must be complied with within any timeframe specified by the Secretary.			X	CEMP		Construction	Draft		
A39	If statutory notification is given to the EPA as required under the POEO Act, such notification must also be provided to Secretary within 24 hours after the notification was given to the EPA.			X	CEMP		Construction	Draft		
PART B - COMMUNITY INFORMATION AND REPORTING										
Community Information, Consultation and Involvement										
B1	A Communication Strategy must be prepared to facilitate communication between the Proponent, and the community (including relevant councils, government authorities, adjoining affected landowners and businesses, and others directly impacted by the CSSI).	X			ARTC Communication Strategy		Pre-construction	Approved		
B2	The Communication Strategy must:	X			ARTC Communication Strategy		Pre-construction	Approved		
a)	identify people and organisations to be consulted during works;	X			ARTC Communication Strategy		Pre-construction	Approved		
b)	set out procedures and mechanisms for the regular distribution of accessible information about or relevant to the CSSI;	X			ARTC Communication Strategy		Pre-construction	Approved		
c)	identify opportunities to provide accessible information regarding regularly updated site construction activities, schedules and milestones at each construction ancillary facility and at construction sites located adjacent to town centres;	X			ARTC Communication Strategy		Pre-construction	Approved		
d)	consider opportunities for the community to visit construction sites (taking into consideration workplace, health and safety requirements);	X			ARTC Communication Strategy		Pre-construction	Approved		

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No	Condition	Responsibility			Where Captured	Section Where Addressed	Timing	Compliance Status	Compliance Details	Additional Output
		Principal	Contractor	Shared						
e)	provide for the formation of issue or location-based community forums that focus on key environmental management issues of concern to the relevant community(ies) for the CSSI;	X			ARTC Communication Strategy		Pre-construction	Approved		
f)	set out the procedures and mechanisms for consulting with relevant councils and government authorities required by Condition A5, including procedures for repeated requests and nil responses;	X			ARTC Communication Strategy		Pre-construction	Approved		
g)	describe the method for broadcasting the 24-hour toll-free telephone complaints number and postal and email addresses for enquiries, as required by Condition B10;	X			ARTC Communication Strategy		Pre-construction	Approved		
h)	set out procedures and mechanisms:	X			ARTC Communication Strategy		Pre-construction	Approved		
	i) through which the community can discuss or provide feedback to the Proponent;	X			ARTC Communication Strategy		Pre-construction	Approved		
	ii) through which the Proponent will respond to enquiries or feedback from the community; and	X			ARTC Communication Strategy		Pre-construction	Approved		
	iii) to resolve any issues and mediate any disputes that may arise in relation to environmental management and delivery of the CSSI.	X			ARTC Communication Strategy		Pre-construction	Approved		
B3	The Communication Strategy must be submitted to the Secretary for approval no later than one (1) month before the commencement of any work;	X			ARTC Communication Strategy		Pre-construction	Approved		
B4	Work for the purposes of the CSSI must not commence until the Communication Strategy has been approved by the Secretary.	X			ARTC Communication Strategy		Pre-construction	Approved		
B5	The Communication Strategy, as approved by the Secretary, must be implemented for the duration of the works and for six (6) months following the completion of construction.	X			ARTC Communication Strategy		Pre-construction	Approved		
Complaints Management System										
B6	A Complaints Management System must be prepared prior to the commencement of any works in respect of the CSSI and be implemented and maintained for the duration of construction and for a minimum for six (6) months following completion of construction of the CSSI.		X		Community Engagement Management Plan		Construction	Draft		
B7	The Complaints Management System must include a Complaints Register to be maintained recording information on all complaints received about the CSSI during the carrying out of any works associated with the CSSI and for a minimum of six (6) months following the completion of construction of the CSSI. The Complaints Register must record the:		X		Community Engagement Management Plan		Construction	Draft		
a)	number of complaints received;		X		Community Engagement Management Plan		Construction	Draft		
b)	number of people affected in relation to a complaint; and		X		Community Engagement Management Plan		Construction	Draft		
c)	the nature of each complaint and means by which the complaint was addressed and whether and how resolution was reached.		X		Community Engagement Management Plan		Construction	Draft		

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No	Condition	Responsibility			Where Captured	Section Where Addressed	Timing	Compliance Status	Compliance Details	Additional Output
		Principal	Contractor	Shared						
B8	The Complaints Register must be provided to the Secretary upon request, within the timeframe stated in the request.		X		Community Engagement Management Plan		Construction	Draft		
B9	The following facilitates must be available within one (1) month prior to the commencement of works and for six (6) months following the completion of construction of the CSSI and appropriately broadcast to collect and manage community enquiries and complaints:									
a)	a 24 hour toll-free telephone number for the registration of complaints and enquiries about the CSSI;	X			-	-	-	-		
b)	a postal address to which written complaints and enquires may be sent;	X			-	-	-	-		
c)	an email address to which electronic complaints and enquiries may be transmitted; and	X			-	-	-	-		
d)	a system for managing unresolved complaints.	X			-	-	-	-		
	Note: The telephone number must be manned and not automatically divert to a message bank.									
B10	The method for broadcasting the information required by Condition B9 must be detailed in the Communication Strategy required by Condition B1. This information must also be provided on the website required under Condition B11 of this approval.	X			ARTC Communication Strategy		Pre-construction	Approved		
Provision of Electronic Information										
B11	A website providing information in relation to the CSSI must be established before commencement of works and maintained for the duration of works, and for a minimum of 12 months following the completion of construction of the CSSI or other timeframe as agreed with the Secretary. The following up-to-date information (excluding confidential, private and commercial information) must be published prior to the works commencing and maintained on the website or dedicated pages:	X			-	-	-	-		
a)	information on the current implementation status of the CSSI and monthly updates on proposed works to be undertaken in the upcoming month;	X			-	-	-	-		
b)	a copy of the documents listed in Condition A1 of this approval, and any documentation relating to any modifications made to the CSSI or the terms of this approval;	X			-	-	-	-		
c)	a copy of this approval in its original form, a current consolidated copy of this approval (that is, including any approved modifications to its terms), and copies of any approval granted by the Minister to a modification of the terms of this approval; and	X			-	-	-	-		
d)	a copy of the EPL, EPBC approval, any licences and approvals under the Water Management Act 2000, and any approvals to close level crossings.	X			-	-	-	-		
	Where a condition(s) of this approval requires a document(s) to be prepared prior to a work or construction or operational activity being undertaken, a current copy of the relevant document(s) must also be published on the website before the work / activity is undertaken.	X			-	-	-	-		
PART C - CONSTRUCTION ENVIRONMENT MANAGEMENT										
Construction Environmental Management Plan										
C1	A Construction Environmental Management Plan (CEMP) must be prepared in accordance with the Department's *Guideline for the Preparation of Environmental Management Plans* (DIPNR, 2004) to detail how the performance outcomes, commitments and mitigation measures specified in the documents listed in the EIS and Submissions Report will be implemented and achieved during all stages of construction.		X		CEMP Sub-plans		Construction	Draft		
C2	The CEMP must provide:									
a)	a description of activities to be undertaken during construction (including the indicative scheduling of construction, and details on the layout and activities to be undertaken at each major construction ancillary facility);		X		CEMP		Construction	Draft		
b)	details of environmental policies, guidelines and principles to be followed in the construction of the CSSI;		X		CEMP		Construction	Draft		

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No	Condition	Responsibility			Where Captured	Section Where Addressed	Timing	Compliance Status	Compliance Details	Additional Output
		Principal	Contractor	Shared						
c)	a schedule for compliance auditing;		X		CEMP		Construction	Draft		
d)	a program for ongoing analysis of the key environmental risks arising from the activities described in subsection (a) of this condition, including an initial risk assessment undertaken before the commencement of construction of the CSSI;		X		CEMP		Construction	Draft		
e)	details of how the activities described in subsection (a) of this condition will be carried out to:		X		CEMP		Construction	Draft		
	(i) meet the performance outcomes stated in the EIS and Submissions Report; and		X		CEMP		Construction	Draft		
	(ii) manage the risks identified in the risk analysis undertaken in subsection (d) of this condition;		X		CEMP		Construction	Draft		
f)	an inspection program detailing the activities to be inspected and frequency of inspections;		X		CEMP		Construction	Draft		
g)	a protocol for managing and reporting any:		X		CEMP		Construction	Draft		
	(i) incidents; and		X		CEMP		Construction	Draft		
	(ii) non-compliances with this approval and with statutory requirements;		X		CEMP		Construction	Draft		
h)	procedures for rectifying any non-compliance with this approval identified during compliance auditing, incident management or at any time during construction;		X		CEMP		Construction	Draft		
i)	a list of all the CEMP Sub-plans required in respect of construction, as set out in Condition C4. Where staged construction of the CSSI is proposed, the CEMP must also identify which CEMP Sub-plan applies to each of the proposed stages of construction;		X		CEMP		Construction	Draft		
j)	a description of the roles and environmental responsibilities for relevant employees and their relationship with the ER;		X		CEMP		Construction	Draft		
k)	for training and induction for employees, including contractors and sub-contractors, in relation to environmental and compliance obligations under the terms of this approval; and		X		CEMP		Construction	Draft		
l)	for periodic review and update of the CEMP and all associated plans and programs.		X		CEMP		Construction	Draft		
C3	The CEMP must be endorsed by the ER and then submitted to the Secretary for approval no later than one (1) month before the commencement of construction or where construction is staged, no later than one (1) month before the commencement of that stage.		X		CEMP		Construction	Draft		
C4	The following CEMP Sub-plans must be prepared in consultation with the relevant government agencies and relevant councils identified for each CEMP Sub-plan and be consistent with the CEMP referred to in the EIS.									
a)	Traffic, transport and access - RMS and relevant councils (as appropriate)		X		TTAMP		Construction	Draft		
b)	Noise and Vibration - EPA and relevant councils		X		NVMP		Construction	Draft		
c)	Flora and Fauna - OEH and relevant councils		X		FFMP		Construction	Draft		
d)	Air quality - Relevant councils		X		AQMP		Construction	Draft		
e)	Soil and water - relevant councils and Crown Lands & Water		X		SWMP		Construction	Draft		
f)	Heritage - OEH		X		HMP		Construction	Draft		
g)	Flood Emergency Management Plan - SES		X		FEMP		Construction	Draft		
h)	Hazardous and Contaminated Materials - EPA (as appropriate)		X		HCMMP		Construction	Draft		
C5	The CEMP Sub-plans must state how:									
a)	the environmental performance outcomes identified in the EIS and Submissions Report, as modified by these conditions, will be achieved.		X		CEMP Sub-plans		Construction	Draft		
b)	the mitigation measures identified in the EIS and Submissions Report, as modified by these conditions will be implemented.		X		CEMP Sub-plans		Construction	Draft		
c)	the relevant terms of this approval will be complied with; and		X		CEMP Sub-plans		Construction	Draft		
d)	issues requiring management during construction, as identified through ongoing environment risk analysis will be managed.		X		CEMP Sub-plans		Construction	Draft		
C6	The CEMP Sub-plans must be endorsed by the ER and then submitted to the Secretary for approval no later than one (1) month before the commencement of the construction activities to which they apply.		X		CEMP Sub-plans		Construction	Draft		

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No	Condition	Responsibility			Where Captured	Section Where Addressed	Timing	Compliance Status	Compliance Details	Additional Output
		Principal	Contractor	Shared						
C7	Any of the CEMP Sub-plans may be submitted to the Secretary along with, or subsequent to, the submission of the CEMP.		X		CEMP Sub-plans		Construction	Draft		
C8	The Flora and Fauna Management Sub-plan must include:									
a)	a weed management plan;		X		FFMP		Construction	Draft		
b)	a hygiene protocol which includes best-practice management measures for the prevention of contamination by pathogens, non-indigenous regenerative plant material and seed. The protocol must apply to the movement of all tools, vehicles, machinery and personnel; and		X		FFMP		Construction	Draft		
c)	measures to protect EPBC listed threatened species and ecological communities.		X		FFMP		Construction	Draft		
C9	The Construction Heritage Management Sub-plan must include:									
a)	identification of the Aboriginal objects that must be avoided and the protective measures to be put in place;		X		HMP		Construction	Draft		
b)	procedures for salvaging and safe keeping the Aboriginal objects identified in Chapter 17 of the EIS and their long-term management;		X		HMP		Construction	Draft		
c)	measures to prevent vibration and direct impacts to Wyanga Cottage; and		X		HMP		Construction	Draft		
d)	an Unexpected Heritage Finds and Human Remains Procedure prepared by a suitably qualified and experienced heritage specialist. The Proponent must consult with the Registered Aboriginal Parties in the development of the sub-plan with respect to Aboriginal objects.		X		HMP		Construction	Draft		
	Note: Human remains that are found unexpectedly during works are under the jurisdiction of the NSW State Coroner and must be reported to the NSW Police immediately.									
C10	The Construction Hazardous and Contaminated Materials Management Sub-plan must include an unexpected finds protocol which outlines the activities that would be undertaken should previously undetected soil contamination be identified.		X		HCMMP		Construction	Draft		
C11	The Flood Emergency Management Sub-plan must include measures for managing flood risks during construction and address flood recovery.		X		FEMP		Construction	Draft		
C12	Construction must not commence until the CEMP and all CEMP Sub-plans have been approved by the Secretary. The CEMP and CEMP Sub-plans, as approved by the Secretary, including any minor amendments approved by the ER, must be implemented for the duration of construction. Where the CSSI is being staged, construction of that stage is not to commence until the relevant CEMP and sub-plans have been endorsed by the ER and approved by the Secretary.		X		CEMP Sub-plans		Construction	Draft		
Construction Monitoring Programs										
C13	The following Construction Monitoring Programs must be prepared in consultation with the relevant government agencies and relevant councils identified for the Construction Monitoring Programs to compare actual performance of construction of the CSSI against performance predicted performance.		X		CEMP		Construction	Draft		
a)	Noise and Vibration - EPA and relevant councils		X		NVMP		Construction	Draft		
b)	Water usage - DPI water and relevant councils		X		SWMP		Construction	Draft		
c)	Air quality - Relevant councils		X		AQMP		Construction	Draft		
C14	Each Construction Monitoring Program must provide:									
a)	details of baseline data available;		X		NVMP SWMP AQMP		Construction	Draft		
b)	details of baseline data to be obtained and when;		X		NVMP SWMP AQMP		Construction	Draft		
c)	details of all monitoring of the project to be undertaken;		X		NVMP SWMP AQMP		Construction	Draft		
d)	the parameters of the project to be monitored;		X		NVMP SWMP AQMP		Construction	Draft		

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No	Condition	Responsibility			Where Captured	Section Where Addressed	Timing	Compliance Status	Compliance Details	Additional Output
		Principal	Contractor	Shared						
e)	the frequency of monitoring to be undertaken;		X		NVMP SWMP AQMP		Construction	Draft		
f)	the location of monitoring;		X		NVMP SWMP AQMP		Construction	Draft		
g)	the reporting of monitoring and analysis results against relevant criteria;		X		NVMP SWMP AQMP		Construction	Draft		
h)	procedures to identify and implement additional mitigation measures where results of monitoring are unsatisfactory; and		X		NVMP SWMP AQMP		Construction	Draft		
i)	any consultation to be undertaken in relation to the monitoring programs.		X		NVMP SWMP AQMP		Construction	Draft		
C15	The Construction Monitoring Programs must be endorsed by the ER and then submitted to the Secretary for approval at least one (1) month before commencement of construction.		X		CEMP Sub-plans		Construction	Draft		
C16	A construction activity must not commence until the Secretary has approved all of the required Construction Monitoring Programs relevant to that activity, and all the necessary baseline data for the monitoring program has been collected.		X		CEMP Sub-plans		Construction	Draft		
C17	The Construction Monitoring Programs, as approved by the Secretary including any minor amendments approved by the ER, must be implemented for the duration of construction and for any longer period set out in the monitoring program or specified by the Secretary, whichever is the greater.		X		CEMP Sub-plans		Construction	Draft		
C18	The results of the Construction Monitoring Programs must be submitted to the Secretary, and relevant government agencies and councils, for information in the form of a Construction Monitoring Report at the frequency identified in the relevant Construction Monitoring Program.		X		CEMP Sub-plans		Construction	Draft		
C19	Where a relevant CEMP Sub-plan exists, the relevant Construction Monitoring Program may be incorporated into that CEMP Sub-plan.		X		NVMP SWMP AQMP		Construction	Draft		
Construction Ancillary Facilities										
Major Construction Ancillary Facilities										
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		X		SEMP		Construction	Approved		
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;		X		SEMP		Construction	Approved		
	(ii) on lands as identified as “indicative compound locations” in Figures 8.2a to 8.2f of the EIS;		X		SEMP		Construction	Approved		
	(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;		X		SEMP		Construction	Approved		
	(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;		X		SEMP		Construction	Approved		
	(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;		X		SEMP		Construction	Approved		
	(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;		X		SEMP		Construction	Approved		

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		Principal	Contractor	Shared						
	(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;		X		SEMP		Construction	Approved		
	(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		X		SEMP		Construction	Approved		
	(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.		X		SEMP		Construction	Approved		
	Nothing in this condition prevents the landowner from refusing to allow the Proponent to use their land.		X		SEMP		Construction	Approved		
Minor Construction Ancillary Facilities										
C21	Minor construction ancillary facilities comprising lunch sheds, office sheds, material lay down sites, areas used to assemble culverts and turnouts, or portable toilet facilities, that are not identified in the EIS and Submissions must satisfy the following criteria:									
a)	be located within the rail corridor; and;		X		CEMP Sub-plans		Construction	Draft		
b)	have been assessed by the ER to -		X		CEMP Sub-plans		Construction	Draft		
	(i) have minimal amenity impacts to surrounding residences and businesses, after consideration of matters such as traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts,		X		CEMP Sub-plans		Construction	Draft		
	(ii) comply with the “noise affected” management levels for residences and noise management levels for other sensitive land uses in the *Interim Construction Noise Guideline* (DECC, 2009),		X		CEMP Sub-plans		Construction	Draft		
	(iii) have minimal environmental impact with respect to waste management; and		X		CEMP Sub-plans		Construction	Draft		
	(iv) result in no impacts on biodiversity, soil and water, flooding and heritage items beyond those already approved under other terms of this approval.		X		CEMP Sub-plans		Construction	Draft		
Site Establishment Management Plan for Major Construction Ancillary Facilities										
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:		X		SEMP		Construction	Approved		
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);		X		SEMP		Construction	Approved		
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		X		SEMP		Construction	Approved		
c)	details of how the site establishment activities described in subsection (a) of this condition will be carried out to -		X		SEMP		Construction	Approved		
	(i) meet the performance outcomes stated in the EIS and Submissions Report, and		X		SEMP		Construction	Approved		
	(ii) manage the risks identified in the risk analysis undertaken in subsection (b) of this condition; and		X		SEMP		Construction	Approved		
d)	(a) 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.		X		SEMP		Construction	Approved		
	Nothing in this condition prevents the Proponent from preparing individual Site Establishment Management Plans for each construction ancillary facility. This condition does not apply to minor construction ancillary facilities as defined in Condition C21.		X		SEMP		Construction	Approved		

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No	Condition	Responsibility			Where Captured	Section Where Addressed	Timing	Compliance Status	Compliance Details	Additional Output
		Principal	Contractor	Shared						
Access to Construction Ancillary Facilities										
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)		X		SEMP		Construction	Approved		
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 heavy the type of vehicle movements that are anticipated to be associated with the construction of the CSSI.		X		SEMP		Construction	Approved		
Boundary Fencing and Screening							Construction			
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.		X		SEMP		Construction	Approved		
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.		X		SEMP		Construction	Approved		
Part E - KEY ISSUE CONDITIONS										
Noise and Vibration										
Standard Working Hours										
E1	Works must be undertaken during the following hours:		X		NVMP		Construction	Draft		
a)	7:00 am to 6:00 pm Mondays to Fridays;		X		NVMP		Construction	Draft		
b)	8:00 am to 1:00 pm Saturdays; and		X		NVMP		Construction	Draft		
c)	at no time on Sundays or public holidays.		X		NVMP		Construction	Draft		
E2	Notwithstanding Condition E1, works affecting any one receiver may be undertaken during the hours of 6.00 am to 6.00 pm each day over a three (3) month period provided that there is no work between the hours of 1:00 pm on a Saturday and 7:00 am on a Monday every alternate week.		X		NVMP		Construction	Draft		
E3	Notwithstanding Conditions E1 and E2, works associated with the CSSI may be undertaken outside the hours specified under those conditions in the following circumstances:		X		NVMP		Construction	Draft		
a)	for the delivery of materials required by the NSW Police Force or other authority for safety reasons; or		X		NVMP		Construction	Draft		
b)	where it is required in an emergency to avoid injury or the loss of life, to avoid damage or loss of property or to prevent environmental harm; or		X		NVMP		Construction	Draft		
c)	where different construction hours are permitted under an EPL in force in respect of the CSSI; or		X		NVMP		Construction	Draft		
d)	where a negotiated agreement is in force, in accordance with Condition E4 and E5; or		X		NVMP		Construction	Draft		
e)	construction that causes $L_{Aeq(15\ minute)}$ noise levels:		X		NVMP		Construction	Draft		
	i) no more than 5 dB(A) above the rating background level at the façade of any residence in accordance with the *Interim Construction Noise Guideline* (DECC, 2009) or if between the hours of 10:00 pm and 7:00 am no more than 52 dB(A) or more than 15 dB(A)LA(Max) above the rating background level whichever is the higher, and		X		NVMP		Construction	Draft		
	ii) no more than the noise management levels specified in Table 3 of the *Interim Construction Noise Guideline* (DECC, 2009) at other sensitive land uses, and		X		NVMP		Construction	Draft		
	iii) continuous or impulsive vibration values, measured at the most affected residence are no more than those for human exposure to vibration, specified in Table 2.2 of *Assessing Vibration: a technical guideline* (DEC, 2006), and		X		NVMP		Construction	Draft		

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No	Condition	Responsibility			Where Captured	Section Where Addressed	Timing	Compliance Status	Compliance Details	Additional Output
		Principal	Contractor	Shared						
	iv) intermittent vibration values measured at the most affected residence are no more than those for human exposure to vibration, specified in Table 2.4 of *Assessing Vibration: a technical guideline* (DEC, 2006).		X		NVMP		Construction	Draft		
E4	The Proponent may reach negotiated agreements with sensitive receivers (owners and occupiers) to carry out works in accordance with the hours and noise limits specified in the negotiated agreements.		X		NVMP		Construction	Draft		
E5	All negotiated agreements must be in writing and finalised before the commencement of works.		X		NVMP		Construction	Draft		
E6	On becoming aware of the need for emergency works in accordance with Condition E3(b), the Proponent must notify the Department in writing to compliance@planning.nsw.gov.au, ER and the EPA of the need for that work. The Proponent must use best endeavours to notify all affected sensitive receivers of the likely impact and duration of those works.		X		NVMP		Construction	Draft		
E7	Except as permitted by an EPL, activities resulting in impulsive or tonal noise emissions must only be undertaken:		X		NVMP		Construction	Draft		
a)	between the hours of 8:00 am to 6:00 pm Monday to Friday;		X		NVMP		Construction	Draft		
b)	between the hours of 8:00 am to 1:00 pm Saturday; and		X		NVMP		Construction	Draft		
c)	in continuous blocks not exceeding three hours each with a minimum respite from those activities and works of not less than one hour between each block.		X		NVMP		Construction	Draft		
	For the purpose of this condition, 'continuous' includes any period during which there is less than a one hour respite between ceasing and recommencing any works that are the subject of this condition.		X		NVMP		Construction	Draft		
Construction Vibration										
E8	Mitigation measures must be implemented with the aim of achieving the following construction noise management levels and vibration criteria:		X		NVMP		Construction	Draft		
a)	construction 'Noise affected' noise management levels established using the *Interim Construction Noise Guideline* (DECC, 2009);		X		NVMP		Construction	Draft		
b)	vibration criteria established using the *Assessing Vibration: A Technical Guideline* (DEC, 2006) (for human exposure);		X		NVMP		Construction	Draft		
c)	Australian Standard AS 2187.2 - 2006 "*Explosives - Storage and Use - Use of Explosives*";		X		NVMP		Construction	Draft		
d)	BS 7385 Part 2-1993 "*Evaluation and measurement for vibration in buildings Part 2*" as they are "applicable to Australian conditions"; and		X		NVMP		Construction	Draft		
e)	the vibration limits set out in the *German Standard DIN 4150-3: Structural Vibration- effects of vibration on structures* (for structural damage).		X		NVMP		Construction	Draft		
	Any works identified as exceeding the noise management levels and/or vibration criteria must be managed in accordance with the Construction Noise and Vibration Management Sub-plan required by Condition C4(b).		X		NVMP		Construction	Draft		
	Note: The Interim Construction Noise Guideline identifies 'particularly annoying' activities that require the addition of 5 dB(A) to the predicted level before comparing to the construction Noise Management Level.		X		NVMP		Construction	Draft		
E9	Owners and occupiers of properties at risk of exceeding the screening criteria for cosmetic damage must be notified before construction that generates vibration commences in the vicinity of those properties. If the potential exceedance is to occur more than once or extend over a period of 24 hours, owner and occupiers are to be provided a schedule of potential exceedances for the duration of the potential exceedances, unless otherwise agreed by the owner and occupier. These properties must be identified and considered in the Construction Noise and Vibration Management Sub-plan required by Condition C4(b).		X		NVMP		Construction	Draft		
E10	This approval does not permit blasting.		X		NVMP		Construction	Draft		
Biodiversity										
E14	Any works associated with the CSSI must limit the clearing of native vegetation to the greatest extent practicable.		X		FFMP		Construction	Draft		

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<table>
<tr><th rowspan="2">No</th><th rowspan="2">Condition</th><th colspan="3">Responsibility</th><th rowspan="2">Where Captured</th><th rowspan="2">Section Where Addressed</th><th rowspan="2">Timing</th><th rowspan="2">Compliance Status</th><th rowspan="2">Compliance Details</th><th rowspan="2">Additional Output</th></tr>
<tr><th>Principal</th><th>Contractor</th><th>Shared</th></tr>
<tr><td>E15</td><td>Impacts to plant community types must not exceed those identified in the EIS and as amended by the Addendum to the Inland Rail – Parkes to Narromine Biodiversity Assessment Report comprising vegetation mapping amendments and inclusion of temporary impacts (Umwelt, dated 12 April 2018).</td><td></td><td>X</td><td></td><td>FFMP</td><td></td><td>Construction</td><td>Draft</td><td></td><td></td></tr>
<tr><td>E16</td><td>The Proponent must prepare and submit to the Secretary a Biodiversity Offset Strategy in accordance with the Framework for Biodiversity Assessment – NSW Biodiversity Offsets Policy for Major Projects, for the retirement of ecosystem and species credits as set out in Table 3. The Strategy must be prepared in consultation with OEH and DoEE, and submitted to the Secretary for approval within 12 months of the commencement of construction</td><td>X</td><td></td><td></td><td>Biodiversity Offset Strategy</td><td></td><td>Construction</td><td>-</td><td></td><td></td></tr>
<tr><td></td><td>
Table 3: Biodiversity Credits to be Retired
<table>
<tr><th>Credit Type</th><th>EPBC Act equivalent EEC or habitat of EPBC Act listed threatened species</th><th>Number of Credits</th></tr>
<tr><td colspan="3">Ecosystem Credits</td></tr>
<tr><td>PCT26 Weeping Myall open woodland of the Riverina Bioregion and NSW South Western Slopes Bioregion</td><td>Myall Woodland, Superb Parrot</td><td>219</td></tr>
<tr><td>PCT36 River Red Gum tall to very tall open forest/ woodland wetland on rivers on floodplains mainly in the Darling Riverine Plains Bioregion</td><td>Superb parrot</td><td>54</td></tr>
<tr><td>PCT55 Belah woodland on alluvial plains and low rises in the central NSW wheatbelt to Pilliga and Liverpool Plains regions</td><td>Superb parrot</td><td>1409</td></tr>
<tr><td>PCT70 White Cypress Pine woodland on sandy loams in central NSW wheatbelt</td><td>Superb parrot, Tylophora linearis</td><td>48</td></tr>
<tr><td>PCT76 Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions</td><td>Grey Box (Eucalyptus microcarpa) Grassy Woodlands and Derived Native Grasslands of South-Eastern Australia EEC, Superb parrot, Regent honeyeater, Swift parrot habitat</td><td>1793</td></tr>
<tr><td>PCT201 Fuzzy Box woodland on alluvial brown loam soils mainly in the NSW South Western Slopes Bioregion</td><td>Superb parrot</td><td>88</td></tr>
<tr><td>PCT244 Poplar Box grassy woodland on alluvial clay-loam soils mainly in the temperate (hot summer) climate zone of central NSW (wheatbelt)</td><td>Superb parrot</td><td>773</td></tr>
<tr><td>PCT267 White Box – White Cypress Pine – Western Grey Box shrub/grass/forb woodland in the NSW South Western Slopes Bioregion</td><td>White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC, Superb parrot, Regent honeyeater, Swift parrot, Tylophora linearis</td><td>366</td></tr>
<tr><td>PCT276 Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion</td><td>White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC, Superb parrot, Regent honeyeater, Swift parrot, Tylophora linearis</td><td>1161</td></tr>
<tr><td colspan="3">Species Credits</td></tr>
<tr><td>Koala</td><td></td><td>711</td></tr>
</table>
Note: Credits have been calculated using the Framework for Biodiversity Assessment.
</td><td>X</td><td></td><td></td><td>Biodiversity Offset Strategy</td><td></td><td>Construction</td><td>-</td><td></td><td></td></tr>
<tr><td>E17</td><td>Plant community types that provide habitat for impacted EPBC Act threatened species must be retired in a manner that achieves “like-for-like” habitat for the species.</td><td>X</td><td></td><td></td><td>Biodiversity Offset Strategy</td><td></td><td>Pre-Construction</td><td></td><td></td><td></td></tr>
</table>

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No	Condition	Responsibility			Where Captured	Section Where Addressed	Timing	Compliance Status	Compliance Details	Additional Output
		Principal	Contractor	Shared						
E18	The Proponent may review and update the ecosystem and species credit requirements in Table 3 to reflect the final impact zone and resulting extent and type of plant community types to be cleared. Amendments to the ecosystem and species credit requirements must be undertaken in consultation with OEH, DoEE and approved by the Secretary.	X			Biodiversity Offset Strategy		Pre-Construction	-		
E19	The review and update of credit requirements must be undertaken by:	X			Biodiversity Offset Strategy		Pre-Construction	-		
a)	using the vegetation mapping identified in the *Addendum to the Inland Rail – Parkes to Narromine Biodiversity Assessment Report* (letter from Umwelt dated 12 April 2018); and/or	X			Biodiversity Offset Strategy		Pre-Construction	-		
b)	completing verification surveys to confirm the extent, type and condition of native vegetation to be impacted	X			Biodiversity Offset Strategy		Pre-Construction	-		
	Where verification surveys are undertaken, they must be in accordance with the *Framework for Biodiversity Assessment – NSW Biodiversity Offsets Policy for Major Projects*. Any additional surveys must be undertaken at the time of year when the groundcover is most likely to be predominantly native.	X			Biodiversity Offset Strategy		Pre-Construction	-		
E20	Within 12 months of the approval of the Biodiversity Offset Strategy, or within another timeframe agreed to by the Secretary, the Proponent must retire the biodiversity credits. The retirement of the biodiversity credits must be carried out in accordance with the *NSW Biodiversity Offsets Policy for Major Projects* and can be achieved by:	X			Biodiversity Offset Strategy		Pre-Construction	-		
a)	acquiring and retiring "biodiversity credits" within the meaning of the *Biodiversity Conservation Act 2016*;	X			Biodiversity Offset Strategy		Pre-Construction	-		
b)	making payments an offset fund that has been developed by the NSW Government;	X			Biodiversity Offset Strategy		Pre-Construction	-		
c)	providing supplementary measures.	X			Biodiversity Offset Strategy		Pre-Construction	-		
	Note. *1. Following repeal of the Threatened Species Conservation Act 1995 on 25 August 2017, "biodiversity credits" created under that Act are taken to be "biodiversity credits" under the Biodiversity Conservation Act 2016 by virtue of clause 19 of the Biodiversity Conservation (Savings and Transitional) Regulation 2017.* *2. Payments under the offset fund (Condition E20(b)) do not apply to EPBC Act list communities.* *3. Any residual impact on EPBC Act listed threatened species and ecological communities must be offset in accordance with an offset process endorsed by the DoEE.*									
Flooding										
E21	Further flood modelling based on the detailed design of the CSSI must be undertaken for flood impacts (including downstream impacts of the CSSI). The results of the modelling must be detailed in a Flood Design Report. The Flood Design Report must be prepared in consultation with OEH and the relevant councils and include:									
a)	the results of the downstream flood assessment for the 5 year ARI event, 20 year ARI event, 100 year ARI event;	X			Design		Pre-construction	-		
b)	provide consideration of the consequences of extreme flood events greater than the 100 year ARI event;	X			Design		Pre-construction	-		
c)	flood height changes to a resolution no coarser than one (1) centimetre;	X			Design		Pre-construction	-		
d)	a comparison of the results with the requirements of Condition E22;	X			Design		Pre-construction	-		
e)	the mitigation and management measures that will be undertaken in the event that the assessment indicates that the flooding characteristics exceed the design objectives specified in Condition E22;	X			Design		Pre-construction	-		
f)	changes in the depths of inundation including locations where previously there would have been no inundation;	X			Design		Pre-construction	-		
g)	flow changes in all watercourses and overland paths;	X			Design		Pre-construction	-		
h)	an assessment of the impacts of the CSSI including impacts on sedimentation, erosion, scouring, and bank and stream stability;	X			Design		Pre-construction	-		

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No	Condition	Responsibility			Where Captured	Section Where Addressed	Timing	Compliance Status	Compliance Details	Additional Output
		Principal	Contractor	Shared						
i)	mitigation measures to minimise potential adverse impacts and respond to actual impacts in accordance with the DPI's Guidelines for Controlled Activities on Waterfront Land; and	X			Design		Pre-construction	-		
j)	a description of the cross-sectional dimensions and location of all proposed spoil mounds associated with the CSSI.	X			Design		Pre-construction	-		
	The Flood Design Report must be reviewed and endorsed by a suitably qualified and experienced hydrologist who is independent of the person who prepared the Flood Design Report and whose appointment must be approved by the Secretary. The hydrologist's endorsement must include a statement verifying that new and replacement culverts have been designed in accordance with the requirements of Conditions E29 and E30.	X			Design		Pre-construction	-		
	The Flood Design Report must be submitted to the Secretary and OEH for information at least one (1) month prior to the commencement of construction of permanent works that may impact on flooding.	X			Design		Pre-construction	-		
E22	The CSSI must be designed with the objective of not exceeding, by reason of the SSI, the following flooding characteristics on adjacent lands / properties during any flood event up to the 100 year ARI:	X			Design		Pre-construction	-		
a)	a maximum increase in inundation time of five per cent for houses, commercial premises and urban areas and 10 per cent for roads, agricultural (grazing and cropping) areas and public infrastructure (e.g. water and sewage pump stations and sewage treatment plants);	X			Design		Pre-construction	-		
b)	a maximum increase of 10 mm in inundation at properties where floor levels are currently exceeded;	X			Design		Pre-construction	-		
c)	a maximum increase in 50 mm in inundation at properties where floor levels are currently not exceeded;	X			Design		Pre-construction	-		
d)	no inundation of floor levels which are currently not inundated;	X			Design		Pre-construction	-		
e)	a maximum increase of 50 mm along the Newell Highway and 100 mm on all other roads; and	X			Design		Pre-construction	-		
f)	a maximum increase of 200 mm on agricultural areas.	X			Design		Pre-construction	-		
	Where the flooding characteristics cannot be met, the Proponent must achieve compliance through modified design of the CSSI, or achieve an acceptable level of mitigation of impacts through at-property design measures (e.g. raised access tracks, flood refuge, house raising) in consultation with affected landowners / infrastructure owners. The mitigation measures must be detailed in the Flood Design Report required by Condition E21 and implemented within the timeframes specified in the Flood Design Report.	X			Design		Pre-construction	-		
Flood Review										
E23	For the first 15 years of operation, the Proponent must prepare a Flood Review Report(s) after the first defined flood event for any of the following flood magnitudes that occur – the 5 to 10 year ARI event, 10 to 20 year ARI event, 20 to 100 year ARI event. The Flood Review Report(s) must be prepared by a suitably qualified and experienced hydrologist(s) and include:									
a)	a comparison of the observed extent, level, and duration of the flooding event against the impacts predicted in (or inferred from) the EIS, the Flood Design Report required by Condition E21 and the requirements specified in Condition E22; and	X			Design		Operation	-		
b)	identification of the properties and infrastructure affected by flooding during the reportable event;	X			Design		Operation	-		
c)	where the observed extent and level of flooding or other flooding or erosion impacts exceed the predicted impacts due to the CSSI with the consequent effect of adversely impacting on property(ies), structures and infrastructure, and / or exceed the requirements specified in Condition E22, identification of the measures that would be implemented to reduce future impacts of flooding related to the CSSI works, including the timing and responsibilities for implementation.	X			Design		Operation	-		
	A copy of the Flood Review Report(s) must be submitted to the Secretary for information and OEH and relevant council(s) within three (3) months of finalising the report(s).	X			Design		Operation	-		

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No	Condition	Responsibility			Where Captured	Section Where Addressed	Timing	Compliance Status	Compliance Details	Additional Output
		Principal	Contractor	Shared						
	Additional flood mitigation measures must be developed in consultation with the affected property / structure / infrastructure owners, OEH and the relevant council(s), as relevant, and implemented within the timeframes specified in the Flood Review Report(s).	X			Design		Operation	-		
E24	The Proponent must develop a methodology for spatially defining how the length(s) of the rail corridor impacted by a flood event will be determined for the purposes of Condition E23. The methodology must be developed in consultation with OEH and submitted to the Secretary for approval prior to the commencement of operation of the CSSI.	X			Design		Operation	-		
Information Sharing										
E25	Flood information including flood reports, models and geographic information system outputs, and work as executed information from a registered surveyor certifying finished ground levels and the dimensions and finished levels of all structures within flood prone land, must be made available to the relevant council(s), OEH and the SES upon request. The relevant councils, OEH and the SES must be notified in writing that the information is available no later than one (1) month following the completion of construction. Information requested by a relevant council, OEH or the SES must be provided within three (3) months.	X			Design		Operation	-		
Water Quality and Drainage										
E26	The CSSI must be designed to ensure hydrological flows remain consistent with existing (pre CSSI determination) environment for all rainfall events up to and including the 100 year ARI event.	X			Design		Pre-construction	-		
E27	The CSSI must be designed, constructed and operated so as to:									
a)	maintain the *NSW Water Quality Objectives* where they are being achieved as at the date of this approval; and		X		SWMP		Construction	Draft		
b)	contribute towards achievement of the *NSW Water Quality Objectives* over time where they are not being achieved as at the date of this approval, unless an EPL in force in respect of the CSSI contains different requirements in relation to the *NSW Water Quality Objectives*, in which case those requirements must be complied with.		X		SWMP		Construction	Draft		
E28	Drainage feature crossings (permanent and temporary watercourse crossings and stream diversions) and cess drains and depressions must be designed and constructed in accordance with relevant DPI guidelines.			X	Design SWMP		Construction	Draft		
E29	Replacement culverts must be designed with the objective that the exit flow velocity is no greater than the exit flow velocity through the existing culvert. Where this cannot be achieved due to engineering considerations, a higher exit flow velocity is permitted provided that it does not result in impacts on soil structure or condition, or cause scouring and erosion either outside the rail corridor, or beyond the area of scour protection works where an adjacent landowner has agreed to the installation of such works on their property in accordance with Condition E32. Where areas outside of the rail corridor currently show scour or erosion and this is directly attributable to a culvert that is to be replaced, mitigation measures be implemented to ensure stable downstream conditions, and further scouring or erosion resulting from flows exiting the replacement culvert are mitigated.	X			Design		Pre-construction	-		
E30	Where it is proposed to construct new culverts along the length of the CSSI, the new culverts must be designed with the objective that:									
a)	flows through the new culvert must not increase the downstream lateral flood extent by more than five percent for each magnitude flood event; and	X			Design		Pre-construction	-		
b)	flow velocities exiting the rail corridor must not exceed velocities that will result in impacts on soil structure or condition, or cause scouring and erosion outside the rail corridor, or beyond scour protection works where an adjacent landowner has agreed to the installation of such works on their property in accordance with Condition E32; and	X			Design		Pre-construction	-		
c)	if existing flow velocities at the boundary of the rail corridor are less that one metre per second, then design flow velocities must not exceed one metre per second, and where they are greater than one metre per second, then they must not increase by more than 20 percent	X			Design		Pre-construction	-		

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No	Condition	Responsibility			Where Captured	Section Where Addressed	Timing	Compliance Status	Compliance Details	Additional Output
		Principal	Contractor	Shared						
E31	Prior to the installation of a new culvert, the Proponent must consult with the landowner that is located immediately downstream of the new culvert to determine the potential for impacts on the agricultural productivity of the land due to the introduction of flows. Where potential adverse impacts are identified, the Proponent must consult with the affected landowner on the management measures that will be implemented to mitigate the impacts.			X	ARTC Communication Strategy		Construction	Approved		
E32	All scour protection works associated with replacement culverts or the construction of new culverts must be restricted to the rail corridor, or as agreed to by the relevant land owner.		X		SWMP		Construction	Draft		
E33	The CSSI must not result in changes to the direction of watercourses or the direction of flood flows except within the rail corridor.			X	Design SWMP		Pre-construction Construction	Draft		
E34	The CSSI (including the cess drains adjacent to the new and upgraded rail track) must be designed and constructed to ensure that there is no permanent interception of, and/or connection with, groundwater.	X			Design		Pre-construction	-		
E35	All discharges from the cess drains adjacent to the new and upgraded track must be released at a controlled rate to prevent scour.			X	Design SWMP		Pre-construction Construction	Draft		
E36	Works on waterfront land must be undertaken in accordance with the DPI guidelines for controlled activities on waterfront land.			X	Design SWMP		Pre-construction Construction	Draft		
E37	Any recycled wastewater (including recycled/treated water) proposed for use by the project, must be fit for purpose and does not pose a risk to human health or the receiving environment.		X		SWMP		Construction	Draft		
Traffic, Transport and Access										
E38	Construction traffic must not use local roads or privately owned roads unless no alternative access is available. Use of private access roads must be in accordance with Conditions C19, C23 and C24. Local or privately owned roads used for access to construction ancillary facilities and construction sites must be identified in the Construction Traffic, Transport and Access Management Sub-plan required by Condition C4(a).		X		TTAMP		Construction	Draft		
E39	A Road Dilapidation Report must be prepared for local roads and roads on private property proposed to be used by construction heavy vehicles for works associated with the CSSI before the commencement of use by such vehicles. Copies of the Road Dilapidation Report must be provided to the relevant road authority(ies) and/or landowner no later than one (1) month before the use of local roads by construction heavy vehicles.		X		TTAMP		Construction	Draft		
E40	If damage to roads occurs as a result of the construction of CSSI, the Proponent must either (at the landowner's discretion):		X		TTAMP		Construction	Draft		
a)	rectify the damage so as to restore the road to at least the condition it was in pre-construction; or		X		TTAMP		Construction	Draft		
b)	compensate the relevant road authority(ies) and/or landowner for the damage so caused. The amount of compensation may be agreed with the relevant road authority(ies) and landowner, but compensation must be paid even if no agreement is reached.		X		TTAMP		Construction	Draft		
E41	During construction, measures must be implemented to maintain pedestrian and vehicular access to affected properties. Alternative pedestrian and vehicular access must be developed in consultation with affected landowners. Such arrangements must be outlined in the Construction Traffic, Transport and Access Management Sub-plan required by **Condition C4** and implemented prior to the disruption		X		TTAMP		Construction	Draft		
E42	Where bus stops (including school bus stops) are required to be temporarily closed or relocated during construction, such closure must not occur until relocated bus stops are functioning and are within walking distance of the original bus stop. The relocation of bus stops must be undertaken in consultation with the relevant council and bus operator, and details regarding the relocations provided to affected communities (and educational facilities in relation to school bus stops) at least 14 days prior to the relocation occurring.		X		TTAMP		Construction	Draft		
E43	The Proponent must liaise with RMS prior to, and at regular intervals during, construction with the aim of developing and implementing measures aimed at reducing any potential cumulative impacts arising from the simultaneous construction of the CSSI and Newell Highway upgrade works.		X		TTAMP		Construction	Draft		
E44	The Proponent must prepare a Public Level Crossing Treatment Report in consultation with Transport for NSW (including RMS) and relevant councils. The report must:									

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No	Condition	Responsibility			Where Captured	Section Where Addressed	Timing	Compliance Status	Compliance Details	Additional Output
		Principal	Contractor	Shared						
a)	illustrate the location of all public level crossings which traverse the CSSI;		X		Public Level Crossing Treatment Report		Pre-construction	Draft		
b)	list, and identify on a figure, any public level crossings that will be closed or upgraded, including the type of treatment proposed where a level crossing is to be upgraded;		X		Public Level Crossing Treatment Report		Pre-construction	Draft		
c)	where no works are proposed at a public crossing, provide reason for the decision; and		X		Public Level Crossing Treatment Report		Pre-construction	Draft		
d)	provide justification for any proposed closures.		X		Public Level Crossing Treatment Report		Pre-construction	Draft		
	The assessment of level crossings must utilise the Australian Level Crossing Assessment Model (ALCAM). The process for determining the type of level crossing treatment must be consistent with the methodology outlined in Appendix H of the Submissions Report.		X		Public Level Crossing Treatment Report		Pre-construction	Draft		
	The report must also include an assessment of the road risks, consistent with the guideline *Railway Crossing Safety Series 2011, Plan: Establishing a Railway Crossing Safety Management Plan* (NSW Roads and Traffic Authority, 2011).		X		Public Level Crossing Treatment Report		Pre-construction	Draft		
	The design of any level crossing on a public road must be endorsed by the relevant road authority.		X		Public Level Crossing Treatment Report		Design	Draft		
E45	The Proponent must prepare a Private Level Crossing Treatment Report in consultation with landowners whose access will be affected by the closure or upgrading of a private level crossing. The report must:		X		Private Level Crossing Treatment Report		Pre-construction	Draft		
a)	illustrate the location of all private level crossings which traverse the CSSI;		X		Private Level Crossing Treatment Report		Pre-construction	Draft		
b)	list, and identify on a figure, any private level crossings that will be closed or upgraded;		X		Private Level Crossing Treatment Report		Pre-construction	Draft		
c)	describe the treatments that will be implemented at upgraded crossings;		X		Private Level Crossing Treatment Report		Pre-construction	Draft		
d)	provide justification for any proposed closures and types of treatment, including decisions where no additional treatments are proposed; and		X		Private Level Crossing Treatment Report		Pre-construction	Draft		
e)	provide details on the consultation undertaken with the landowners.		X		Private Level Crossing Treatment Report		Pre-construction	Draft		

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No	Condition	Responsibility			Where Captured	Section Where Addressed	Timing	Compliance Status	Compliance Details	Additional Output
		Principal	Contractor	Shared						
	Closures, relocations or modifications of private level crossings, including the design of the crossing, must be agreed to by the relevant landowner prior to any work on a crossing.		X		Private Level Crossing Treatment Report		Pre-construction	Draft		
	The treatments at private level crossings must be in accordance with *AS/RISSB 7658:2012 Railway Infrastructure – Railway Level Crossing* .		X		Private Level Crossing Treatment Report		Pre-construction	Draft		
E46	The Public Level Crossing Treatment Report and Private Level Crossing Treatment Report must be submitted to the Secretary for information at least one (1) month prior to the closure or upgrade of a public or private level crossing, as relevant. Individual reports may be submitted for each crossing or address a group of crossings or the entire CSSI.		X		Private Level Crossing Treatment Report		Pre-construction	Draft		
E47	Within 12 months and 10 years of commencing operation of the CSSI, the Proponent must prepare a Level Crossing Performance Report to confirm the operational traffic impacts of the level crossings on the State and local road network. The review of the operation of the level crossings that interact with the State and local road network must be carried out in consultation with RMS and the relevant councils, and include:									
a)	updated traffic analysis of movements on these roads;	X			-		Operation	-		
b)	assessment of the level of service at these level crossings (queue length, queuing time delay);	X			-		Operation	-		
c)	assessment of the performance of the level crossing treatment outlined in the Public Level Crossing Treatment Report required by Condition E44;	X			-		Operation	-		
d)	all reported near misses and collisions at level crossings within the project area; and	X			-		Operation	-		
e)	mitigation measures to manage any actual or predicted road network performance impacts.	X			-		Operation	-		
	Mitigation measures to manage any actual or predicted road network performance impacts resulting from the construction and operation of the CSSI must be implemented within one year of the completion of each report. The Report must include an implementation plan of the identified mitigation measures. The Level Crossing Performance Report must be submitted to the Secretary, RMS and relevant councils for information within 60 days of its completion.	X			-		Operation	-		
Property Access										
E48	No part of any crossing loop may cross over any driveway, private road or public road unless agreed with the relevant landowner and any other adjacent landowner whose access is impacted by the crossing loop.		X		TTAMP		Construction	Draft		
E49	The Proponent must maintain access to properties during the entirety of works unless an alternative access is agreed with the landowner(s) whose access is impacted by the CSSI works.		X		TTAMP		Construction	Draft		
E50	Where construction of the CSSI restricts a property's access to a public road, the Proponent must, until their primary access is reinstated, provide the property with temporary alternate access to the same road at the landowner's desired location, at no cost to the property landowner, unless otherwise agreed with the landowner.		X		TTAMP		Construction	Draft		
E51	Where construction of the CSSI restricts the ability of a resident or landowner to access other parts of their property via a level crossing, the Proponent must, until the level crossing is reinstated, supply the property with a temporary alternate level crossing access at the landowner's desired location and at no cost to the property landowner, unless otherwise agreed with the landowner.		X		TTAMP		Construction	Draft		
Spoil Mounds										
E52	Spoil Mounds are to be located:									
a)	within the existing rail corridor;		X		SWMP		Construction	Draft		

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No	Condition	Responsibility			Where Captured	Section Where Addressed	Timing	Compliance Status	Compliance Details	Additional Output
		Principal	Contractor	Shared						
b)	at least 50 metres from any watercourse or culvert or where the rail formation is predicted to be overtopped during a flood event;		X		SWMP		Construction	Draft		
c)	at least 500 metres from any residence;		X		SWMP		Construction	Draft		
d)	outside the line of sight of drivers approaching level crossings; and		X		SWMP		Construction	Draft		
e)	outside the drip lines of trees located on private property.		X		SWMP		Construction	Draft		
	Note: For the purpose of Condition E52(e), the Proponent must not affect trees outside of the rail corridor for the purpose of preventing those trees' driplines overhanging spoil mounds.									
E53	Spoil mounds are to comply with the following requirements:									
a)	maximum height must not exceed the top height of the upgraded rail line;		X		SWMP		Construction	Draft		
b)	not result in the clearing or covering of native vegetation beyond that described in the EIS and Submissions Report;		X		SWMP		Construction	Draft		
c)	not result in heritage impacts beyond that described in the EIS and Submissions Report;		X		SWMP		Construction	Draft		
d)	not result in additional changes to the upstream flooding regime beyond those described in the EIS and Submissions Report;		X		SWMP		Construction	Draft		
e)	not affect the downstream flood regime;		X		SWMP		Construction	Draft		
f)	not impede the flow of water through culverts;		X		SWMP		Construction	Draft		
g)	not contain any contaminated soil classified as unsuitable for the proposed land use, acid sulphate soils or green waste;		X		SWMP		Construction	Draft		
h)	are to be stabilised during construction of the CSSI; and		X		SWMP		Construction	Draft		
i)	are to be stabilised prior to operation of the CSSI.		X		SWMP		Construction	Draft		
Landscaping and Visual Amenity										
E54	The construction and operation of the parts of the project located within 200 kilometres of the Siding Spring Observatory, must comply with the 'Good Lighting Design Principles' as described in the Department's '*Dark Sky Planning Guideline*'.		X		LVAMP		Construction	Draft		
E55	The Proponent must construct and operate the CSSI with the objective of minimising light spillage to residences. All lighting associated with the construction and operation of the CSSI must be consistent with the requirements of *Australian Standard 4282-1997 Control of the obtrusive effects of outdoor lighting.* Notwithstanding, the Proponent must provide mitigation measures to manage any residual night-lighting impacts to protect residences adjoining or adjacent to the CSSI, in consultation with affected landowners.		X		LVAMP		Construction	Draft		
E56	The Proponent must consult with all landowners whose visual amenity from their residence is identified highly impacted by the CSSI (as per Table 5 of Technical Report 10 in the EIS) to determine the mitigation measures that will be implemented to maintain visual amenity. The Proponent must come to an agreement with the landowner on the mitigation measures and implement the measures prior to the operation of the CSSI.		X		LVAMP		Construction	Draft		
Heritage										
E57	The Proponent must not destroy, modify or otherwise physically affect any heritage items, including human remains, outside of the CSSI construction boundary.		X		HMP		Construction	Draft		
E58	The Proponent must not to harm, modify, or otherwise impact human remains uncovered during the construction of the CSSI.		X		HMP		Construction	Draft		
E59	Identified impacts to heritage items must be minimised through both design and construction. The measures for ensuring this are to be detailed in the Construction Heritage Management Sub-Plan required by Condition C4(f).		X		HMP		Construction	Draft		
Non-Aboriginal Heritage										
E60	The Proponent must implement management measures to ensure that Wyanga Cottage is not directly or indirectly impacted by the construction of the CSSI.		X		HMP		Construction	Draft		

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No	Condition	Responsibility			Where Captured	Section Where Addressed	Timing	Compliance Status	Compliance Details	Additional Output
		Principal	Contractor	Shared						
E61	The Proponent must undertake Heritage Photographic Archival Recordings of potential heritage items associated with the existing rail line (including culverts/underbridges with timber components and former rail station sites) which have been identified for demolition in the EIS and Submissions Report. The photographic recording must be undertaken in accordance with ARTC's Archival Recording Standard.		X		HMP		Construction	Draft		
Aboriginal Heritage					HMP					
E62	The Proponent must not destroy, modify or otherwise physically affect AHIMS site 35-3-0207 (scarred tree).		X		HMP		Construction	Draft		
E63	The Proponent must implement measures to attempt to avoid impacts to AHIMS sites 35-3-0206, 35-3-0208 and 43-3-0111. If impacts to the sites cannot be avoided, the Proponent must provide for an appropriately qualified archaeological heritage consultant and registered Aboriginal stakeholder to record and collect any artefacts at the sites which will be affected by the construction of the SSI, prior to the commencement of any works that will impact on the sites. The artefacts must be lodged in a keeping place as required by Condition C8 and the safe keeping place must be identified in the Construction Heritage Management Sub-plan required by Condition C4(f).		X		HMP		Construction	Draft		
E64	In the event that the previously recorded AHIMS sites 35-6-0062, 35-6-0063 and 35-6-0065 are located within the CSSI boundary and will be directly impacted by the construction of the CSSI, the Proponent must provide for an appropriately qualified archaeological heritage consultant and registered Aboriginal stakeholder to record and collect any artefacts at the sites which will be affected by the construction of the SSI, prior to the commencement of any works that will impact on the sites. The artefacts must be lodged in a keeping place as required by Condition C8 and the safe keeping place must be identified in the Construction Heritage Management Sub-plan required by Condition C4(f).		X		HMP		Construction	Draft		
Land Use and Property										
Building Condition Survey										
E65	The Proponent must undertake dilapidation surveys on the current condition of surface and sub-surface structures owned by third parties and identified at risk from vibration. The dilapidation surveys must be prepared by a suitably qualified and experienced person(s).		X		TTAMP NVMP		Construction	Draft		
E66	The results of the dilapidation surveys must be provided to the relevant owners of surface and sub-surface structures for review prior to the commencement of potentially impacting works.		X		TTAMP NVMP		Construction	Draft		
E67	surface structures that may have resulted from the construction of the CSSI within three months of the completion of construction, unless otherwise agreed by the Secretary.		X		TTAMP NVMP		Construction	Draft		
E68	The results of the subsequent dilapidation surveys for each surface and sub-surface structure surveyed must be provided to the relevant owners of the structures within one (1) month of undertaking the surveys.		X		TTAMP NVMP		Construction	Draft		
E69	The Proponent must carry out rectification at its expense and to the reasonable requirements of the surface and sub-surface structure owner(s) within three (3) months of completion of the post-dilapidation surveys unless otherwise agreed with the owner of the affected surface and sub-surface structure.		X		TTAMP NVMP		Construction	Draft		
Sustainability										
E70	The CSSI must achieve a minimum 'excellent' rating for both 'Design' and 'As built', under the Infrastructure Sustainability Council of Australia infrastructure rating tool, or through the use of an equivalent process.			X	SMP		Design Construction Operation	Draft		
Soils					SWMP					
E71	All reasonably practicable erosion and sediment controls must be installed and appropriately maintained to minimise any water pollution. When implementing such controls, any relevant guidance in the *Managing Urban Stormwater* series must be considered.		X		SWMP		Construction	Draft		
Contaminated Sites					HCMMP					

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No	Condition	Responsibility			Where Captured	Section Where Addressed	Timing	Compliance Status	Compliance Details	Additional Output
		Principal	Contractor	Shared						
E72	In the event that soils suspected to be contaminated are unexpectedly found, the Proponent must engage a suitably experienced and qualified contaminated land consultant to undertake further investigations to determine the type and extent of any contamination. The investigation must be undertaken in accordance with guidelines made or approved under the *Contaminated Land Management Act 1997* (NSW). The results of the investigation must be documented in a Site Contamination Assessment Report.		X		HCMMP		Construction	Draft		
E73	Where the results of the site investigations indicate that the contamination poses unacceptable risks to human health or the environment under either the present or proposed land use, the Proponent must engage a suitably experienced and qualified contaminated land consultant to develop and implement any necessary remediation measures. The remediation measures must be documented in a Remediation Report.		X		HCMMP		Construction	Draft		
E74	If remediation is required under Condition E73, A Site Audit Statement and Site Audit Report must be prepared by a NSW EPA Accredited Site Auditor. Contaminated land must not be used for the purpose approved under the terms of this approval until a Site Audit Statement is obtained that declares the land is suitable for that purpose and any conditions on the Site Audit Statement have been complied with.		X		HCMMP		Construction	Draft		
E75	A copy of the Site Audit Statement and Site Audit Report must be submitted to the Secretary and relevant council(s) for information no later than one (1) month before the commencement of operation.		X		HCMMP		Construction	Draft		
E76	Nothing in Conditions E72 to E74 prevents the Proponent from preparing a single Site Contamination Report or Remediation Report or obtaining a single Site Audit Statement and Site Audit Report for the entire CSSI.				HCMMP					
Air Quality										
E77	In addition to the performance outcomes, commitments and mitigation measures specified in the EIS and the Submissions Report, all practicable measures must be implemented to minimise the emission of dust and other air pollutants during the construction and operation of the CSSI.		X		AQMP		Construction	Draft		
Waste										
E78	E1 Waste generated during construction and operation is to be dealt with in accordance with the following priorities:									
a)	waste generation is to be avoided and where avoidance is not reasonably practicable, waste generation is to be reduced;		X		WMP		Construction	Draft		
b)	where avoiding or reducing waste is not possible, waste is to be re-used, recycled, or recovered in accordance with the requirements of the *Protection of the Environment Operations Act 1997* and its regulations; and		X		WMP		Construction	Draft		
c)	where re-using, recycling or recovering waste is not possible, waste is to be treated or disposed of at a waste management facility or premise lawfully permitted to accept the materials or in accordance with a Resource Recovery Exemption or Order issued under the *Protection of the Environment Operations (Waste) Regulation 2014*, or to any other place that can lawfully accept such waste.		X		WMP		Construction	Draft		
E79	Waste generated outside the site must not be received at the site for storage, treatment, processing, reprocessing, or disposal on the site, except as expressly permitted by a licence or waste exemption under the *Protection of the Environment Operations Act 1997,* if such a licence is required in relation to that waste.		X		WMP		Construction	Draft		
E80	All waste generated during construction and operation must be classified in accordance with the EPA's *Waste Classification Guidelines*, with appropriate records and disposal dockets retained for audit purposes		X		WMP		Construction	Draft		

Environmental Impact Statement

No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
27.2	**APPROACH TO ENVIRONMENTAL MANAGEMENT**								
	The approach to environmental mitigation and management for the proposal involves:								
a)	Project design – as described in section 7.1, the proposal incorporates measures to avoid and minimise impacts.	X			Design	Pre-construction	-		
b)	Mitigation measures – mitigation measures provided in chapters 9 to 25 are identified as an outcome of the environmental impact assessment, and are consolidated in section 27.3.								
c)	ARTC's Environmental Management System – would be used to manage the construction and operation of Inland Rail, including the proposal. The management system would provide the framework for implementing the construction and operation environmental management plans described below, and any conditions of other approvals, licences, or permits.	X			Design	Pre-construction	-		
d)	Inland Rail NSW Construction Noise and Vibration Management Framework – describes how ARTC proposes to manage construction noise and vibration for Inland Rail in NSW as a whole, including management measures, processes, and the approach to additional assessment where required. A copy of the framework is provided in Appendix H.	X			Design	Pre-construction	-		
e)	Proposal specific CEMP and OEMP – prepared to guide the approach to environmental management during construction and operation, as described in sections 27.2.1 and 27.2.2. The CEMP and OEMP would:			X	CEMP Sub-plans OEMP	Pre-construction Construction Operation	Draft		
	i) outline the environmental management practices and procedures to be followed		X		CEMP Sub-plans OEMP	Pre-construction Construction Operation	Draft		
	ii) document processes for demonstrating compliance with the commitments made in this EIS, the submissions report (to be prepared), and relevant approval conditions		X		CEMP Sub-plans OEMP	Pre-construction Construction Operation	Draft		
	iii) be prepared in consultation with relevant agencies and in accordance with the Guideline for the Preparation of Environmental Management Plans (DIPNR, 2004).		X		CEMP Sub-plans OEMP	Pre-construction Construction Operation	Draft		
f)	Environmental performance outcomes – establishes the intended outcomes to be achieved by the project. The environmental performance outcomes are provided in 27.4.		X		CEMP Sub-plans OEMP	Pre-construction Construction Operation	Draft		
27.2.1	**CEMP**								
a)	ARTC's environmental policy, objectives, and performance targets for construction		X		CEMP Sub-plans	Construction	Draft		
b)	reference to all relevant statutory and other obligations, including consents, licenses, approvals, and voluntary agreements required		X		CEMP Sub-plans	Construction	Draft		
c)	management policies, procedures, and review processes to assess the implementation of environmental management practices and the environmental performance of the proposal against the objective and targets		X		CEMP Sub-plans	Construction	Draft		
d)	requirements and guidelines for management in accordance with		X		CEMP Sub-plans	Construction	Draft		
	i) the conditions of approval for the proposal		X		CEMP Sub-plans	Construction	Draft		
	ii) the mitigation measures specified in this EIS		X		CEMP Sub-plans	Construction	Draft		
	iii) relevant construction management guidelines (including those listed in Appendix K).		X		CEMP Sub-plans	Construction	Draft		
e)	requirements in relation to incorporating environmental protection measures and instructions in all relevant standard operating procedures and emergency response procedures		X		CEMP Sub-plans	Construction	Draft		
f)	roles and responsibilities of all personnel and contractors to be employed on site		X		CEMP Sub-plans	Construction	Draft		
g)	incident and contingency management procedures		X		CEMP Sub-plans	Construction	Draft		
h)	procedures for complaints handling and ongoing communication with the community		X		CEMP Sub-plans	Construction	Draft		
i)	a monitoring and auditing program, as defined by this EIS and the conditions of the approval		X		CEMP Sub-plans	Construction	Draft		

Environmental Impact Statement

No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
	An outline of the CEMP, including the required sub-plans and a guide to the general construction management measures required in each, is provided in Appendix K.								
27 2.3	**APPROACH TO DESIGN REFINEMENTS**								
	The design of the proposal as described in the EIS would be subject to ongoing refinements during the detailed design phase. Refinements may be made to:	X			Design	Pre-construction	-		
a)	avoid ground conditions or services that present significant construction difficulties in terms of logistics, time and/or cost	X			Design	Pre-construction	-		
b)	reduce the construction timeframe	X			Design	Pre-construction	-		
c)	avoid areas of environmental sensitivity identified following approval	X			Design	Pre-construction	-		
d)	reduce impacts on local residents	X			Design	Pre-construction	-		
e)	improve the operation of the project without increasing the potential environmental impacts	X			Design	Pre-construction	-		
	Such refinements may include, for example:	X			Design	Pre-construction	-		
a)	minor changes to the location of construction compounds and construction site access routes	X			Design	Pre-construction	-		
b)	minor changes to access roads as a result of changes to level crossings within the assessment area described in chapter 2	X			Design	Pre-construction	-		
c)	changes to culvert upgrade proposals within the assessment area described in chapter 2	X			Design	Pre-construction	-		
d)	changes to the level crossing upgrade proposals	X			Design	Pre-construction	-		
e)	minor changes to the location of key infrastructure, refinement or reorientation of site boundaries	X			Design	Pre-construction	-		
f)	minor changes in technology or the features of key proposal components. Refinements would not include significant changes to the proposal.	X			Design	Pre-construction	-		
	For design refinements a consistency review would be undertaken to consider whether the refinement:	X			Design	Pre-construction	-		
a)	would result in any of the conditions of approval not being met	X			Design	Pre-construction	-		
b)	be consistent with the objectives and operation of the proposal as described in the environmental assessment	X			Design	Pre-construction	-		
c)	result in a significant change to the approved project	X			Design	Pre-construction	-		
d)	would trigger the requirement for additional Aboriginal heritage surveys and mitigation measures as described in Technical Report 7	X			Design	Pre-construction	-		
e)	would result in any potential environmental or social impacts of a greater scale or different nature than that considered by the EIS.	X			Design	Pre-construction	-		
	A refinement that does not meet these criteria would be considered a design modification. Approval would be sought from the Minister for Planning for any such modifications in accordance with the requirements of Part 5.1 of the EP&A Act.								
Pre-construction and design mitigation measures									
D1	**Environmental Management**								
D1.1	A CEMP would be prepared to detail the approach to environmental management during construction, as described in section 27.2.1 and in accordance with the conditions of approval.		X		CEMP Sub-plans	Construction	Draft		
D2	**Traffic, transport and Access**								
D2.1 (a)	The detailed design of the proposal would minimise the potential for impacts to the surrounding road and transport network, property accesses, and access for emergency vehicles.	X			Design	Pre-construction	-		

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No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
b)	Where any legal access to a property is permanently affected and a property has no other legal means of access, alternative access to and from a public road would be provided to an equivalent standard where feasible and practicable. Where an alternative access is not feasible or practicable, and a property is left with no access to a public road, negotiations would be undertaken with the relevant property owner for acquisition of the property in accordance with the provisions of the Land Acquisition (Just Terms Compensation) Act 1991.	X			Design	Pre-construction	-		
D2.2 (a)	Input would be sought from relevant stakeholders (including Parkes Shire Council, Narromine Shire Council, and Roads and Maritime Services) prior to finalising the detailed design of those aspects of the proposal that impact on the operation of road infrastructure under the management of these stakeholders.	X			Design	Pre-construction	-		
b)	The traffic, transport and access management sub-plan would be developed in consultation with (where relevant) Parkes Shire Council, Narromine Shire Council, Roads and Maritime Services, and local public transport/bus operators.		X		TTAMP	Construction	Draft		
D2.3	Level crossings would be provided with warning signage, line marking and other relevant controls; in accordance with the relevant national and ARTC standards.		X		Private Level Crossing Treatment Report	Pre-construction	Draft		
D3	**Biodiversity**								
D3.1 (a)	The biodiversity offset strategy (phase 1) for the proposal would be finalised, in accordance with the requirements of the *Framework for Biodiversity Assessment* (OEH, 2014a) and the *NSW Biodiversity Offsets Policy for Major Projects* (OEH, 2014c).	X			Design	Pre-construction	-		
b)	The offset strategy would be approved by the Department of Planning and Environment prior to the commencement of construction work that would result in the disturbance of relevant ecological communities, threatened species, or their habitat, unless otherwise agreed.	X			Design	Pre-construction	-		
D3.2	Detailed design and construction planning would minimise the construction footprint and avoid impacts to native vegetation as far as practicable.	X			Design	Pre-construction	-		
D3.3 (a)	Compounds and stockpile sites would be located an appropriate distance from riparian vegetation to avoid impacts on aquatic habitat. This includes (for the proposal site) a minimum of 50 metres for type 2, classes 2 and 3 watercourses (Burrill Creek), and 10 to 50 metres for type 3, classes 2 to 4 watercourses (other watercourses).	X			Design	Pre-construction	-		
(b)	Direct impacts to in-stream vegetation and native vegetation on the banks of watercourses would be avoided as far as practicable.	X			Design	Pre-construction	-		
D3.4	Detailed design and construction planning would minimise the potential for impacts to fish passage. To ensure that fish passage is maintained, watercourse crossing structures would be designed in accordance with the guideline Why do fish need to cross the road? Fish passage requirements for waterway crossings (Fairfull and Witheridge, 2003) and the minimum design requirements specified in Table 4.1 of Technical Report 3.	X			Design	Pre-construction	-		
D3.5	A rehabilitation strategy would be prepared to guide the approach to rehabilitation of disturbed areas following the completion of construction. The strategy would include:	X			Design	Pre-construction	-		
a)	clear objectives and timeframes for rehabilitation works (including the biodiversity outcomes to be achieved)	X			Design	Pre-construction	-		
b)	details of the actions and responsibilities to progressively rehabilitate, regenerate, and/or revegetate areas, consistent with the agreed objectives	X			Design	Pre-construction	-		
c)	identification of flora species and sources	X			Design	Pre-construction	-		
d)	procedures for monitoring the success of rehabilitation	X			Design	Pre-construction	-		
e)	corrective actions should the outcomes of rehabilitation not conform to the objectives adopted.	X			Design	Pre-construction	-		

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		Principal	Contractor	Shared					
D3.6	Pre-clearing surveys and inspections would be undertaken prior to construction. The surveys and inspections, and any subsequent relocation of species, would be undertaken and in accordance with the biodiversity management sub-plan in the CEMP.	X			Design	Pre-construction	-		
D4	**Noise and Vibration**								
D4.1 (a)	The proposal would be designed with the aim of achieving the operational noise and vibration criteria identified by the noise and vibration assessment.	X			Design	Pre-construction	-		
(b)	Track features such as crossovers, turnouts, and rail joints would be avoided near vibration sensitive structures where practicable.	X			Design	Pre-construction	-		
D4.2	Where vibration levels are predicted to exceed the screening criteria, a more detailed assessment of the structure and vibration monitoring would be carried out in accordance with the Inland Rail NSW Construction Noise and Vibration Management Framework, to ensure vibration levels remain below appropriate limits for that structure.		X		NVMP	Construction	Draft		
D4.3	An operational noise and vibration review would be undertaken as described in section 11.5 to guide the approach to identifying feasible and reasonable mitigation measures to incorporate in the detailed design.	X			Design	Pre-construction	-		
D5	**Soil and Contamination**								
D5.1	Foundation and batter design would include engineering measures to minimise operational risks from shrink swell, dispersive, and/or low strength soils.	X			Design	Pre-construction	-		
D5.2	Prior to removal of this building (if required), the presence of asbestos would be confirmed, and any removal required would be undertaken in accordance with *How to Safely Remove Asbestos Code of Practice* (Safe Work Australia, 2016).		X		HCMMP	Construction	Draft		
D6	**Hydrology and flooding**								
D6.1 (a)	The design features listed in section 15.3.1 would continue to be refined to not worsen existing flooding characteristics, where feasible and reasonable, up to and including the one per cent AEP event. Detailed flood modelling would consider potential changes to:								
	i) upstream flood extents	X			Design	Pre-construction	-		
	ii) level crossing and road flood levels and extent	X			Design	Pre-construction	-		
	iii) overland flow paths and storage effects due to spoil mounds and other proposal infrastructure	X			Design	Pre-construction	-		
	iv) flood evacuation routes	X			Design	Pre-construction	-		
b)	Flood modelling to support detailed design would be carried out in accordance with the guidelines listed in EIS section 15.1.2.	X			Design	Pre-construction	-		
c)	Flood modelling and mitigation would consider future floodplain risk management plans, and would be undertaken in consultation with the relevant local council, the Office of Environment and Heritage, and State Emergency Services.	X			Design	Pre-construction	-		
D6.2	Where feasible, facilities and routes identified as being critical to emergency response operations would be protected from the probable maximum flood level.	X			Design	Pre-construction	-		
D6.3	Further modelling would be undertaken during detailed design to confirm the locations downstream of culverts that require erosion protection, and the extent and type of protection required.	X			Design	Pre-construction	-		
D6.4 (a)	Detailed design and construction planning would aim to minimise the use of potable water during construction.	X			Design	Pre-construction	-		
b)	Appropriate sources for construction water would be determined prior to construction in consultation with relevant stakeholders, and appropriate approvals and agreements would be sought for the extraction of water.		X		SWMP	Construction	Draft		
D7	**Water quality**								

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No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
D7.1	The design features listed in section 16.3.1 would continue to be refined and implemented to minimise the potential impacts of the proposal on water quality.	X			Design	Pre-construction	-		
D7.2 (a)	A surface water monitoring framework would be developed as part of the soil and water management sub-plan in the CEMP. It would identify monitoring locations at discharge points, and selected locations in watercourses where works are being undertaken.		X		SWMP	Construction	Draft		
b)	The monitoring framework would include the relevant water quality objectives, parameters, and criteria from Technical Report 7, and specific monitoring locations which have been identified based on the hydrological attributes of the receiving watercourse, in consultation with DPI (Water) and the EPA.		X		SWMP	Construction	Draft		
D8	**Heritage**								
D8.1	Detailed design and construction planning would avoid direct impacts to the identified items/sites of Aboriginal heritage significance where practicable.	X			Design	Pre-construction	-		
D8.2	Any works outside the proposal site would be subject to further review and assessment to avoid impacts on Aboriginal items.		X		HMP	Construction	Draft		
D8.3	An interpretation strategy would be developed for the proposal to provide a concept and framework for interpretation of the original rail line and rail infrastructure.	X			Design	Pre-construction	-		
D8.4 a)	Impacts to AHIMS listed sites 35-3-0206 and 45-3-0111 would be avoided where possible. These sites would be fenced prior to construction and their locations marked on all plans. A buffer of 10 metres around the sites would be applied to all fencing.			X	HMP	Construction	Draft		
b)	If these sites cannot be avoided, salvage of artefacts would be undertaken prior to construction in accordance with the procedures detailed in Technical Report 8.	X			Design	Pre-construction	-		
c)	Impacts to the scarred tree at 35-3-0207 and the artefact scatter at 35-3-0208 would be avoided. The sites would be fenced prior to construction and marked on all plans.			X	HMP	Construction	Draft		
D8.5 (a)	The detailed design of the proposal would minimise the potential for direct impacts to Wyanga cottage.	X			Design	Pre-construction	-		
b)	The management of potential vibration impacts at the cottage would be undertaken in accordance with the Inland Rail NSW Construction Noise and Vibration Management Framework.			X	HMP	Construction	Draft		
c)	Direct impacts to Wyanga cottage would be avoided by the installation of temporary fencing, and marking the cottage as a 'no go' area on plans.		X		HMP	Construction	Draft		
d)	A photographic/archival recording would be undertaken of culverts/underbridges with timber components, former rail station sites (as described in sections 6.4.1 and 6.4.2 of Technical Report 8), and Wyanga cottage, in accordance with Photographic Recording of Heritage Items Using Film or Digital Capture (Heritage Division, 2006).		X		HMP	Construction	Draft		
e)	The photographic recording would include contextual photographs showing the relationships between the rail line, station sites, and associated grain rail sidings and silos.		X		HMP	Construction	Draft		
D9	**Landscape and visual**								
D9.1	Detailed design would be undertaken in accordance with the design vision, objectives, and principles which underpin the concept design, and would take into account the guidelines listed in section 19.1.	X			Design	Pre-construction	-		
D9.2	Following completion of detailed design of the Parkes north west connection and Brolgan Road overbridge, artist impressions and perspective drawings would be developed for consultation purposes.	X			Design	Pre-construction	-		
D10	**Land use and property**								
D10.1	Individual property management agreements would be developed in consultation with landowners/occupants, with respect to the management of construction on or immediately adjacent to private properties. These would detail any required adjustments to fencing, access, farm infrastructure, and relocation of any impacted structures, as required.	X			Design	Pre-construction	-		

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No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
D10.2	All acquisitions/adjustments would be undertaken in consultation with landowners and in accordance with the requirements of the *Land Acquisition (Just Terms Compensation) Act 1991* .	X			Design	Pre-construction	-		
D10.3	Access to properties would be maintained and managed in accordance with the mitigation measures listed under item D2 above.	X			Design	Pre-construction	-		
D10.4	Local Land Services would continue to be consulted during detailed design to understand how impacts to travelling reserves routes can be avoided during construction and operation. Alternative access arrangements would be made as required.	X			Design	Pre-construction	-		
D10.5	Utility and service providers would continue to be consulted during detailed design to identify possible interactions and develop procedures to minimise the potential for service interruptions and impacts on existing land uses.	X			Design	Pre-construction	-		
D10.6 (a)	Property owners and occupants would be consulted in accordance with the communication plan for the proposal (described in chapter 4), to ensure that owners/occupants are informed about the timing and scope of activities in their area; and any potential property impacts/changes, particularly in relation to potential impacts to access, services, or farm operational arrangements.	X			ARTC Communication Strategy	Pre-construction	-		
b)	The results of consultation would be incorporated in the individual property management agreements as appropriate.	X			ARTC Communication Strategy	Pre-construction	-		
c)	Consultation would be undertaken with landowners affected by level crossing changes and agreement obtained, where required.	X			ARTC Communication Strategy	Pre-construction	-		
D10.7	The weed management plan included in the CEMP would detail measures to minimise the potential for biosecurity risks during construction.		X		PWMP	Construction	Draft		
D11	**Socio-economics**								
D11.1	Key stakeholders (including local councils, emergency service providers, public transport providers, the general community, and surrounding land owners/occupants) would continue to be consulted regarding the proposal in accordance with the communication plan described in chapter 4.			X	Communication and Community Engagement Management Plan	Construction	Draft		
D11.2	ARTC would continue to work with relevant stakeholders, including Parkes Shire Council, to identify opportunities to facilitate local access to Inland Rail via the Parkes intermodal facility.			X	Communication and Community Engagement Management Plan	Construction	Draft		
D11.3	A temporary workforce housing and accommodation plan would be developed and implemented during construction. This would include a requirement for consultation to be undertaken with local accommodation providers and councils regarding the availability of accommodation, and the need to maintain some availability for non-workforce accommodation.	X			ARTC Communication Strategy	Pre-construction	-		
D12	**Sustainability**								
D12.1 (a)	The potential sustainability initiatives identified for the proposal would be reviewed and updated during the detailed design stage.	X			Design	Pre-construction	-		
b)	A sustainability management plan would be developed to guide the design, construction, and operation of the proposal, to achieve an 'excellent' rating according to the ISCA infrastructure sustainability rating tool.			X	Sustainability Management Plan	Design Construction	Draft		
c)	The sustainability management plan would incorporate the updated sustainability initiatives, and the review and reporting requirements necessary to demonstrate how sustainability has been incorporated into the proposal during design, construction, and operation.			X	Sustainability Management Plan	Design Construction	Draft		
D13	**Climate Change**								
D13.1 (a)	The climate change risk assessment would continue to be refined as the design of the proposal progresses.			X	Sustainability Management Plan	Design Construction	Draft		
b)	The adaptation measures identified for the proposal would be reviewed and final measures would be incorporated into the design where practicable.			X	Sustainability Management Plan	Design Construction	Draft		

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		Principal	Contractor	Shared					
D14	**Waste**								
D14.1	Detailed design would include measures to minimise excess spoil generation. This would include a focus on optimising the design to minimise spoil volumes, and the reuse of material on-site.		X		WMP	Construction	Draft		
D15	**Health and safety**								
D15.1	A hazard analysis would be undertaken during detailed design to identify risks to public safety from the proposal, and how these can be mitigated through safety in design.		X		Safety Management Plan	Construction	Draft		
D15.2	The location of utilities, services and other infrastructure would be identified prior to construction to determine requirements for access to, diversion, protection and/or support.		X		Construction Management Plan	Construction	Draft		
Construction mitigation measure									
C1	**Environmental Management**								
C1.1	Construction of the proposal would be undertaken in accordance with the approved CEMP		X		CEMP Sub-plans	Construction	Draft		
C2	**Traffic, transport and Access**								
EIS Section 9.4.3 - Table 9.7	A traffic, transport and access management sub-plan would be prepared and implemented as part of the CEMP. It would include measures to minimise the potential for impacts on the community and the operation of the surrounding road and transport environment. It would address all the aspects of construction relating to the movement of vehicles, pedestrians and cyclists, and the operation of the surrounding road network, including:								
a)	construction site traffic control, parking and access arrangements		X		TTAMP	Construction	Draft		
b)	construction material, equipment and spoil haulage, including arrangements for oversize vehicles		X		TTAMP	Construction	Draft		
c)	road pavement and access road condition management		X		TTAMP	Construction	Draft		
d)	management of impacts to public transport, including school buses, pedestrian and cyclist access, and safety		X		TTAMP	Construction	Draft		
e)	management of impacts to access for surrounding residents and business owners/operators		X		TTAMP	Construction	Draft		
f)	arrangements for level crossings during construction		X		TTAMP	Construction	Draft		
g)	road and driver safety.		X		TTAMP	Construction	Draft		
C2.1	Property access would be maintained throughout the construction period, with suitable alternative access arrangements provided where required.		X		TTAMP	Construction	Draft		
C2.2	Access for emergency vehicles would be maintained along key emergency access routes throughout the construction period, with suitable alternative access arrangements provided where required.		X		TTAMP	Construction	Draft		
C2.3	Diversions of existing rail traffic would be undertaken in consultation with relevant stakeholders, and alternative arrangements would be provided.		X		TTAMP	Construction	Draft		
C2.4(a)	Consultation with relevant stakeholders would be undertaken regularly to facilitate the efficient delivery of the proposal and to minimise congestion and inconvenience to road users. Stakeholders would include the relevant local council, bus operators, Roads and Maritime Services, emergency services, and affected property owners/occupants.		X		TTAMP Communication and Community Engagement Management Plan	Construction	Draft		
b)	The community would be notified in advance of any proposed road and pedestrian network changes through signage, the local media, and other appropriate forms of communication.		X		TTAMP Communication and Community Engagement Management Plan	Construction	Draft		

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No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
c)	Where changes to access arrangements are required, ARTC would advise property owners/occupants and consult with them in advance regarding alternative access arrangements.		X		TTAMP Communication and Community Engagement Management Plan	Construction	Draft		
C3	**Biodiversity**								
EIS Section 10.4.3 - Table 10.7	A biodiversity management sub-plan would be prepared and implemented as part of the CEMP. It would include measures to minimise the potential for biodiversity impacts. The sub-plan would address:								
a)	a pre-clearance survey and tree-felling procedure		X		FFMP	Construction	Draft		
b)	procedures to manage micro-bats		X		FFMP	Construction	Draft		
c)	avoiding impacts on surrounding vegetation		X		FFMP	Construction	Draft		
d)	weed management		X		FFMP	Construction	Draft		
e)	dewatering of standing pools in watercourses		X		FFMP	Construction	Draft		
f)	measures to minimise impacts on aquatic ecology.		X		FFMP	Construction	Draft		
C3.1	Areas of biodiversity value outside the proposal site would be marked on plans, and fenced or signposted where practicable, to prevent unnecessary disturbance.		X		FFMP	Construction	Draft		
C3.2	Noxious weeds would be managed in accordance with the *Noxious Weeds Act 1993*. Weeds of national environmental significance would be managed in accordance with the *Weeds of National Significance Weed Management Guide*.		X		PWMP	Construction	Draft		
C3.3	Rehabilitation of disturbed areas would be undertaken progressively and in accordance with the rehabilitation strategy		X		LVAMP	Construction	Draft		
C4	**Noise and Vibration**								
C4.1 (a)	The Inland Rail NSW Construction Noise and Vibration Management Framework would be implemented, and the proposal would be constructed, with the aim of achieving the construction noise management levels and vibration criteria identified by the noise and vibration assessment.		X		NVMP	Construction	Draft		
b)	All feasible and reasonable noise and vibration mitigation measures would be implemented.		X		NVMP	Construction	Draft		
c)	Any activities that could exceed the construction noise management levels and vibration criteria would be identified and managed in accordance with the Inland Rail NSW Construction Noise and Vibration Management Framework and the CEMP.		X		NVMP	Construction	Draft		
d)	Notification of impacts would be undertaken in accordance with the consultation plan for the proposal.		X		NVMP	Construction	Draft		
C4.2	An out-of-hours work protocol would be developed to guide the assessment and management of works outside primary proposal construction hours.		X		Out of Hours Work Protocol	Construction	Draft		
C5	**Air Quality**								
EIS Section 13.5.4 - Table 13.3	An air quality management sub-plan would be prepared and implemented as part of the CEMP. It would include measures to minimise the potential for air quality impacts on local community and environment, and would address all aspects of construction, including:								
a)	Spoil handling		X		AQMP	Construction	Draft		
b)	Machinery operating procedures		X		AQMP	Construction	Draft		
c)	Soil treatments		X		AQMP	Construction	Draft		
d)	Stockpile management		X		AQMP	Construction	Draft		
e)	Haulage		X		AQMP	Construction	Draft		
f)	Dust suppression		X		AQMP	Construction	Draft		
g)	Monitoring		X		AQMP	Construction	Draft		

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		Principal	Contractor	Shared					
C5.1	Where sensitive receivers are located within 150 metres of construction works, or visible dust is generated from vehicles using access roads, road watering would be implemented.		X		AQMP	Construction	Draft		
C6	**Hydrology and flooding**								
C6.1	Construction planning and the layout of construction work sites and compounds would be carried out with consideration of overland flow paths and flood risk, avoiding flood liable land and flood events where possible.		X		SEMP	Construction	Draft		
C6.2	Monitoring would be undertaken during extraction to ensure volumes stipulated by license requirements and/or private landholder agreements are not exceeded.	-	-	-	-	-	-		
C7	**Water quality**								
EIS Section 14.4.3 - Table 14.2	A soil and water management sub-plan would be prepared as part of the CEMP. It would include a detailed list of measures that would be implemented during construction to minimise the potential for soil and contamination impacts, including:								
a)	allocation of general site practices and responsibilities		X		SWMP	Construction	Draft		
b)	material management practices		X		SWMP	Construction	Draft		
c)	stockpiling and topsoil management, including prompt stabilisation of spoil mounds and treatment of dispersive soils in mounds (for example, through mixing of gypsum)		X		SWMP	Construction	Draft		
d)	surface water and erosion control practices that take into account site-specific soil types (for example, dispersive soils).		X		SWMP	Construction	Draft		
C7.1	Water quality would be monitored during construction in accordance with the surface water monitoring framework.		X		SWMP	Construction	Draft		
C7.2	Discharge to surface water would be undertaken in accordance with the construction EPL, and would consider the hydrological attributes of the receiving watercourse.		X		SWMP	Construction	Draft		
C8	**Heritage**								
EIS Section 17.4.2 - Table 17.2	A construction heritage management plan would be prepared and implemented as part of the CEMP. It would include measures to minimise the potential for impacts, manage heritage, and procedures for any unexpected finds.		X		HMP	Construction	Draft		
EIS Section 17.4.2 - Table 17.2	With respect to the management of Aboriginal heritage, the plan would be prepared in consultation with registered Aboriginal parties, incorporate the recommendations of the Aboriginal Cultural Heritage Assessment, and take into account the outcomes of further investigations following detailed design.	X			Design	Pre-construction	-		
C8.1 (a)	In the event that unexpected archaeological remains, relics, or potential heritage items are discovered during construction, all works in the immediate area would cease, and the remains and potential items would be assessed by a qualified archaeologist or heritage consultant. If necessary, the Heritage Division of OEH would be notified in accordance with the requirements of section 146 of the Heritage Act 1977.		X		HMP	Construction	Draft		
b)	If potential Aboriginal items are uncovered, works within 10 metres of the item would cease. The item would then be assessed and managed by a suitability qualified person in accordance with the unexpected finds procedure in the construction heritage management plan.		X		HMP	Construction	Draft		
c)	During pre-work briefings, employees would be made aware of the unexpected finds procedures and obligations under the NPW Act.		X		HMP	Construction	Draft		
C8.2	In the event that a potential burial site or potential human skeletal material is exposed during construction, the procedure recommended by the historic heritage impact assessment would be followed in accordance with the *Policy Directive – Exhumation of Human Remains* (NSW Department of Health, 2008), *Skeletal Remains – Guidelines for the Management of Human Skeletal Remains under the Heritage Act 1977* (NSW Heritage Office, 1998), and the *Aboriginal Cultural Heritage Standards and Guidelines Kit* (NPWS, 1997).		X		HMP	Construction	Draft		
C9	**Landscape and visual**								

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		Principal	Contractor	Shared					
C9.1 (a)	Temporary lighting would be designed and sited to avoid light spill into residential properties and identified sensitive receivers.	X			Design	Pre-construction	-		
b)	Temporary and any permanent lighting would designed and sited to comply with:	X			Design	Pre-construction	-		
	i) AS 4282-1997 Control of the Obtrusive Effects of Outdoor Lighting								
	ii) Dark Sky Planning Guideline: Protecting the observing conditions at Siding Spring (Department of Planning and Environment, 2016).								
C9.2	Spoil mounds would be shaped to reduce their angular profile and ensure that they are integrated within the landscape. Sharp transition angles in the surface profile would be avoided, and rounded profiles would be used to provide a more natural form. Grass cover would be established over the surface area in accordance with the rehabilitation strategy.	X			Design	Pre-construction	-		
C10	**Land use and property**								
C10.1	Property owners/occupants would continue to be consulted during construction, in accordance with the requirements of item D10.6.			X	Communication and Community Engagement Management Plan	Construction	Draft		
C10.2 (a)	The rehabilitation strategy (item D3.5) would include measures to restore disturbed sites as close as possible to the pre- construction condition or better, or to the satisfaction of landowners.		X		LVAMP	Construction	Draft		
b)	Rehabilitation of disturbed areas would be undertaken progressively, consistent with the rehabilitation strategy and Individual property management agreements (where relevant).		X		LVAMP	Construction	Draft		
C11	**Socio-economics**								
EIS Section 21.4 - Table 21.1	A communication management sub-plan would be prepared as part of the CEMP including a detailed list of the measures that would be implemented during construction to communicate with and respond to community concerns. The plan would include, as a minimum:			X	Communication and Community Engagement Management Plan	Construction	Draft		
a)	requirements to provide details and timing of proposed activities to affected residents, the local community and businesses, and local bus operators			X	Communication and Community Engagement Management Plan	Construction	Draft		
b)	consultation actions in relation to access arrangements and servicing requirements			X	Communication and Community Engagement Management Plan	Construction	Draft		
c)	complaints handling procedure			X	Communication and Community Engagement Management Plan	Construction	Draft		
d)	procedure to notify adjacent land users for any changed conditions during the construction period such as traffic, pedestrian or driveway access.			X	Communication and Community Engagement Management Plan	Construction	Draft		
C11.1	Local residents, businesses and other stakeholders would be notified before work starts in accordance with the communication plan, and would be regularly informed of construction activities.			X	Communication and Community Engagement Management Plan	Construction	Draft		
C11.2	Access to individual residences, services and businesses would be maintained during construction. Where alternative access arrangements need to be made, these would be developed in consultation with affected property owners/occupants.			X	Communication and Community Engagement Management Plan	Construction	Draft		

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No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
C11.3 (a)	Where practicable, the workforce would include workers sourced locally, and opportunities for training potential local employees would be provided. This would include exploring opportunities for local Indigenous participation in consultation with local Indigenous service providers.			X	Communication and Community Engagement Management Plan	Construction	Draft		
b)	A zero tolerance policy relating to anti-social behaviour would be adopted for work sites.			X	Communication and Community Engagement Management Plan	Construction	Draft		
C11.4	Local suppliers would be identified and approached for procurement of goods and services where practicable.		X		Local Industry Participation Management Plan	Construction	Draft		
C12	**Sustainability**								
C12.1	Procurement would be undertaken in accordance with the *Sustainable Procurement Guide* (Australian Government, 2013) and the *NSW Government Resource Efficiency Policy* (OEH, 2014).			X	Sustainability Management Plan	Construction	Draft		
C12.2	Sustainability reporting (and corrective action where required) would be undertaken during construction in accordance with the sustainability management plan.			X	Sustainability Management Plan	Construction	Draft		
C13	**Waste**								
EIS Section 24.3.3 - Table 24.5	A waste management plan would be prepared and implemented as part of the CEMP. It would include measures to minimise the potential for impacts on the local community and environment.		X		WMP	Construction	Draft		
C13.1	Waste segregation bins (colour coded as listed in Table 24.7) would be located at key construction compounds where practicable, to facilitate segregation and prevent cross contamination.		X		WMP	Construction	Draft		
C14	**Health and safety**								
EIS Section 14.4.3 - Table 14.2	A contamination and hazardous materials sub-plan would be prepared and implemented as part of the CEMP. It would include:		X		HCMMP	Construction	Draft		
a)	measures to minimise the potential for contamination impacts on the local community and environment		X		HCMMP	Construction	Draft		
b)	procedures for incident management and managing unexpected contamination finds (an unexpected finds protocol).		X		HCMMP	Construction	Draft		
EIS Section 25.4.3 - Table 25.2	An emergency response sub-plan would be developed and implemented as part of the CEMP in consultation with relevant stakeholders. It would include measures to minimise the potential for health and safety impacts on the local community and environment.		X		HCMMP	Construction	Draft		
C14.1.(a)	Hazardous materials and dangerous goods would be stored, handled, and transported in accordance with relevant regulatory requirements and relevant Australian Standards, including SEPP 33 thresholds. This would include a requirement to provide a minimum bund volume of 110% of the largest single stored volume within the bund.		X		HCMMP	Construction	Draft		
b)	A risk management strategy would be developed to manage the potential for risks in situations where the minimum distance from sensitive receivers cannot be achieved, or the quantity of hazardous materials exceed SEPP 33 threshold levels.		X		HCMMP	Construction	Draft		
Environmental Performance outcome									
5	**Air quality**								
SEAR desire outcomes	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.		X		AQMP	Construction	Draft		

Environmental Impact Statement

No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
Proposal specific Enviro. Performance	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 POEO Act and relevant environmental protection licences. Dust generated during construction will not exceed the relevant criteria in the National Environment Protection (Ambient Air Quality) Measure and the Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (DEC, 2005).		X		AQMP	Construction	Draft		
6	**Biodiversity**								
SEAR desire outcomes	The project design considers all feasible measures to avoid and minimise impacts on terrestrial and aquatic biodiversity. Offsets and/or supplementary measures are assured which are equivalent to any remaining impacts of project construction and operation.	X			Design	Pre-construction	-		
Proposal specific Enviro. Performance	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, 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).	X			Design	Pre-construction	-		
7	**Climate Change Risk**								
SEAR desire outcomes	The project is designed, constructed and operated to be resilient to the future impacts of climate change.			X	Sustainability Management Plan	Construction	Draft		
Proposal specific Enviro. Performance	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.			X	Sustainability Management Plan	Construction	Draft		
8	**Flooding**								
SEAR desire outcomes	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.	X			Design	Pre-construction	-		
Proposal specific Enviro. Performance	Construction is undertaken in a manner that minimises the potential for adverse flooding impacts, through staging of works and the implementation of mitigation measures. The proposal makes a positive contribution to local flooding characteristics by replacing existing drainage infrastructure. 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.	X			Design	Pre-construction	-		
9	**Health and safety**								

Environmental Impact Statement

No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
SEAR desire outcomes	The project avoids, to the greatest extent possible, risk to public safety.		X		Safety Management Plan	Construction	Draft		
Proposal specific Enviro. Performance	Construction targets zero safety incidents. All dangerous goods are stored, handled and transported in accordance with relevant regulatory requirements and Australian Standards		X		Safety Management Plan	Construction	Draft		
10	**Heritage**								
SEAR desire outcomes	The design, construction and operation of the project facilitates, to the greatest extent possible, the long term protection, conservation 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.	X			Design	Pre-construction	-		
Proposal specific Enviro. Performance	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.	X			Design	Pre-construction	-		
11	**Noise and Vibration - amenity**								
SEAR desire outcomes	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 are effectively managed to protect the amenity and well- being of the community.		X		NVMP	Construction	Draft		
Proposal specific Enviro. Performance	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.		X		NVMP	Construction	Draft		
12	**Noise and Vibration - Structural**								
SEAR desire outcomes	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 heritage as defined in the Heritage Act 1977 during operation of the proposal are effectively managed.		X		NVMP	Construction	Draft		
Proposal specific Enviro. Performance	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.		X		NVMP	Construction	Draft		
13	**Protected and sensitive lands**								
SEAR desire outcomes	The project is designed, constructed and operated to avoid or minimise impacts on protected and sensitive lands.	X			Design	Pre-construction	-		

Environmental Impact Statement

No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
Proposal specific Enviro. Performance	The proposal does not impact on protected and sensitive lands as defined by the SEARs.	X			Design	Pre-construction	-		
14	**Socio-economics, land use property, agriculture and biosecurity**								
SEAR desire outcomes	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.	X			Design	Pre-construction	-		
Proposal specific Enviro. Performance	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. 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.	X			Design	Pre-construction	-		
15	**Soil**								
SEAR desire outcomes	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.		X		SWMP	Construction	Draft		
Proposal specific Enviro. Performance	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).		X		SWMP	Construction	Draft		
16	**Sustainability**								
SEAR desire outcomes	The project reduces the NSW Government's operating costs and ensures the effective and efficient use of resources. Conservation of natural resources is maximised.			X	Sustainability Management Plan	Construction	Draft		
Proposal specific Enviro. Performance	The design process targets an 'excellent' rating in accordance with the ISCA rating tool. Sustainability considerations are integrated throughout the design, 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.			X	Sustainability Management Plan	Construction	Draft		
17	**Traffic, transport and Access**								

Environmental Impact Statement

No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
SEAR desire outcomes	Network connectivity, safety and efficiency of the transport system in the vicinity of the project are 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.	X			Design	Pre-construction	-		
Proposal specific Enviro. Performance	The proposal provides for more efficient and productive freight rail operations. Impacts to traffic and transport are minimised. 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.	X			Design	Pre-construction	-		
18	**Visual amenity**								
SEAR desire outcomes	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.	X			Design	Pre-construction	-		
Proposal specific Enviro. Performance	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. The proposal is visually integrated with its surroundings.	X			Design	Pre-construction	-		
19	**Waste**								
SEAR desire outcomes	All wastes generated during the construction and operation of the proposal are effectively stored, handled, treated, reused, recycled and/or disposed of lawfully, and in a manner that protects environmental values.		X		WRMP	Construction	Draft		
Proposal specific Enviro. Performance	Waste is managed in accordance with the POEO Act and the WARR Act. 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.		X		WRMP	Construction	Draft		
20	**Water - Hydrology**								
SEAR desire outcomes	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.		X		SWMP	Construction	Draft		
Proposal specific Enviro. Performance	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.		X		SWMP	Construction	Draft		
21	**Water quality**								

Environmental Impact Statement

No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
SEAR desire outcomes	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 marine waters (if applicable).		X		SWMP	Construction	Draft		
Proposal specific Enviro. Performance	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. Impacts to water quality during construction and operation are minimised.		X		SWMP	Construction	Draft		

Construction Environmental Management Framework									
No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
3	**Environmental Management Requirements**								
3.1	**Construction Environmental Management Plan**								
	The construction contractor is required to prepare and implement a CEMP as outlined in the Works Description and Contract. The CEMP shall include a main document, issue specific sub-plans, activity specific procedures and site based environmental control maps. The CEMP shall illustrate the relationship between other plans required by the contract.		X		CEMP Sub-plans	Construction	Draft		
	The CEMP will:								
a)	Cover the requirements of the relevant Project approval documentation and Project conditions of approval,		X		CEMP Sub-plans	Construction	Draft		
b)	Address the conditions of all other permits, approvals and licences;		X		CEMP Sub-plans	Construction	Draft		
c)	Meet the environmental provisions of the contract documentation;		X		CEMP Sub-plans	Construction	Draft		
d)	Be compliant with this CEMF;		X		CEMP Sub-plans	Construction	Draft		
e)	Be consistent with the construction contractor's Environmental Management System and AS/NZS ISO 14001:2015;		X		CEMP Sub-plans	Construction	Draft		
f)	Be supported by a process for identifying and responding to changing legislative or other requirements;		X		CEMP Sub-plans	Construction	Draft		
g)	Include processes for assessing construction methodology changes for consistency against the Project conditions of approvals and other permits, approvals and licences;		X		CEMP Sub-plans	Construction	Draft		
h)	Include processes for tracking and reporting performance against sustainability and compliance targets;		X		CEMP Sub-plans	Construction	Draft		
i)	Include a procedure for the identification and management of project specific environmental risks and appropriate control measures; and		X		CEMP Sub-plans	Construction	Draft		
j)	Be consistent with the ARTC Inland Rail Environment and Sustainability Policy and ARTC Environmental Policy.		X		CEMP Sub-plans	Construction	Draft		
	As a minimum the CEMP must include:								
a)	A description of activities to be undertaken during construction;		X		CEMP	Construction	Draft		
b)	For each sub-plan, a compliance matrix of the relevant Project conditions of approval;		X		CEMP Sub-plans	Construction	Draft		
c)	For each sub-plan, identify objectives and targets, and identify measurable performance indicators;		X		CEMP Sub-plans	Construction	Draft		
d)	Accountabilities or responsibilities and key personnel, including any required competencies or accreditations;		X		CEMP Sub-plans	Construction	Draft		
e)	Assign responsibility for the implementation of the CEMP;		X		CEMP Sub-plans	Construction	Draft		
f)	Include induction and training requirements (as per training needs analysis requirement);		X		CEMP Sub-plans	Construction	Draft		
g)	Identify stakeholder and communication requirements;		X		CEMP Sub-plans	Construction	Draft		
h)	Management strategies for environmental compliance and review of performance of environmental controls;		X		CEMP Sub-plans	Construction	Draft		
i)	Processes and methodologies for inspections and monitoring, auditing and review, and reporting on environmental performance including environmental compliance tracking;		X		CEMP Sub-plans	Construction	Draft		
j)	Relationships and interactions with other CEMP or project documentation;		X		CEMP Sub-plans	Construction	Draft		
k)	Procedures for emergency and incident management, non-compliance management and corrective and preventative actions; and,		X		CEMP Sub-plans	Construction	Draft		
l)	A procedure for the control of environmental records.		X		CEMP Sub-plans	Construction	Draft		

Construction Environmental Management Framework									
No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
3.2	**Construction Sustainability Management Plan**								
	The construction contractor is required to prepare and implement a Construction Sustainability Management Plan (CSMP). The objective of the project is to achieve an ISCA 'excellent; rating. The CSMP will include (but not limited to):			X	Sustainability Management Plan	Design Construction	Draft		
a)	The requirements of the Project conditions of approval, and relevant conditions of other permits, approvals and licences, the construction contractors EMS, the Parkes to Narromine Sustainability Management Plan (3- 2400-0001-ESS-PL-0001), the Inland Rail Social Performance Programme (0-9000-000-EAP-ST-0002)the provisions of the contract and this CEMF;			X	Sustainability Management Plan	Design Construction	Draft		
b)	The sustainability management team structure, qualifications and competencies to meet ISCA requirements, and overall Project organisational structure;			X	Sustainability Management Plan	Design Construction	Draft		
c)	How the construction contractor proposes to achieve the sustainability benchmarks required by the contract;			X	Sustainability Management Plan	Design Construction	Draft		
d)	The construction contractors sustainability policy statement and relevant strategies for adaptation to climate change, resource management, workforce development, procurement and biodiversity;			X	Sustainability Management Plan	Design Construction	Draft		
e)	Sustainability initiatives to be implemented during the Project and how the initiatives will be identified and implemented;			X	Sustainability Management Plan	Design Construction	Draft		
f)	The processes and methodologies for assurance, monitoring, auditing, corrective actions, continuous improvement and reporting on sustainability performance;			X	Sustainability Management Plan	Design Construction	Draft		
g)	The processes and methodologies used to achieve the required rating under rating systems identified in contract documents;			X	Sustainability Management Plan	Design Construction	Draft		
h)	The processes and procedures for undertaking climate change risks assessments;			X	Sustainability Management Plan	Design Construction	Draft		
i)	The processes and procedures for identification and implementation of climate change adaptation measures;			X	Sustainability Management Plan	Design Construction	Draft		
j)	The approach to sustainable procurement;			X	Sustainability Management Plan	Design Construction	Draft		
k)	The processes and procedures that will be used to provide environmental and social improvement;			X	Sustainability Management Plan	Design Construction	Draft		
l)	The processes and environmental and social criteria that will be used for the selection of sub-contractors; and,			X	Sustainability Management Plan	Design Construction	Draft		
m)	Interfaces with other Project plans.			X	Sustainability Management Plan	Design Construction	Draft		
3.2.1	**Environmental Control Maps**								
	Environmental control maps are to be included in the CEMP. The environmental control maps are to represent a continuous representation of the site and should align with the relevant alignment (including maps/drawings) developed for construction of the Project. The environmental controls maps are to include (but not limited to):		X		CEMP	Construction	Draft		
a)	Indicates which Project condition of approval, other permits, approvals and licences are applicable;		X		CEMP	Construction	Draft		
b)	Illustrates the site showing significant or sensitive areas, work areas and boundaries;		X		CEMP	Construction	Draft		

Construction Environmental Management Framework									
No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
c)	Illustrates environmental control measures and environmentally sensitive receivers;		X		CEMP	Construction	Draft		
d)	Clear reference to any relevant design drawings or plans applicable to that section; and,		X		CEMP	Construction	Draft		
e)	Is endorsed by the construction contractors Environmental Manager or delegate;		X		CEMP	Construction	Draft		
3.3	**Additional Environmental Assessments**								
	Where the requirement for an additional environmental assessment is identified, this must be undertaken prior to undertaking any physical works. If any works are required outside the approved EIS footprint, then additional environmental assessment may be required. The environmental assessment must be carried out in accordance with law and must include			X	CEMP	Construction	Draft		
a)	Description of the surrounding environment;			X	CEMP	Construction	Draft		
b)	Details of the ancillary works and construction activities required to be carried out including the hours of works;			X	CEMP	Construction	Draft		
c)	An assessment of the environmental impacts of the works, including, but not necessarily limited to, traffic, noise and vibration, air quality, soil and water, ecology and heritage;			X	CEMP	Construction	Draft		
d)	Details of mitigation measures and monitoring specific to the works that would be implemented to minimise environmental impacts; and,			X	CEMP	Construction	Draft		
e)	Identification of the timing for completion of the construction works, and how the sites would be reinstated (including any necessary rehabilitation).			X	CEMP	Construction	Draft		
3.4	**Conditions Survey**								
	Prior to commencement of construction the construction contractor must offer Pre-construction Building Condition Surveys, in writing, to the owners of buildings where there is potential for construction activities to cause cosmetic or structural damage. If accepted, the construction contractor must produce a written and photographic condition report produced by a suitably qualified person prior to relevant works commencing. Prior to commencement of construction the construction contractor must prepare a Road Dilapidation Report for all local public roads proposed to be used by heavy vehicles.		X		NVMP	Construction	Draft		
3.5	**Hold Points**								
	The construction contractor will be required to implement the hold point requirements as they apply to their scope of work. Table 1 outlines the activities that are not to proceed without review and approval by the nominated Approval person. These activities are considered hold points. It is expected by ARTC, that a non-conformance will be issued if activities proceed without approval, as per contract conditions. The current hold points identified in this CEMF are preliminary and recommended for implementation. These must be reviewed upon receiving Project conditions of approval. Hold points will be documented in the CEMP.		X		Quality Management Plan	Construction	Draft		
	Hold Point Register - Preliminary		X		Quality Management Plan	Construction	Draft		
3.6	**Training, awareness and competence**								
	The construction contractor will be responsible for determining the training needs of their personnel. As a minimum this will include site induction, regular toolbox talks and topic specific environmental training. The site induction must be provided to all site personnel and must include, as a minimum:		X		CEMP Sub-plans	Construction	Draft		
a)	Purpose, objectives and key issues;		X		CEMP Sub-plans	Construction	Draft		
b)	Construction contractors environmental policy;		X		CEMP Sub-plans	Construction	Draft		

Construction Environmental Management Framework									
No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
c)	Due diligence, duty of care and responsibilities;		X		CEMP Sub-plans	Construction	Draft		
d)	Relevant Project conditions of approvals and other permits, approvals and licences;		X		CEMP Sub-plans	Construction	Draft		
e)	Site specific issues;		X		CEMP Sub-plans	Construction	Draft		
f)	Reporting procedures of environmental incidents and hazards;		X		CEMP Sub-plans	Construction	Draft		
g)	Any relevant cultural heritage management actions; and,		X		CEMP Sub-plans	Construction	Draft		
h)	Communication protocols		X		CEMP Sub-plans	Construction	Draft		
	The construction contractor must conduct a Training Needs Analysis which:		X		CEMP Sub-plans	Construction	Draft		
a)	Identifies that all staff are to receive an environmental induction and undertake environmental incident management training;		X		CEMP Sub-plans	Construction	Draft		
b)	Identifies the competency, qualifications or accreditations requirements of staff that hold environmental roles and responsibilities documented within the CEMP;		X		CEMP Sub-plans	Construction	Draft		
c)	Identifies appropriate training and frequency of training to achieve and/or maintain competency requirements; and,		X		CEMP Sub-plans	Construction	Draft		
d)	Implements and documents a training schedule as part of the CEMP and processes for implementation of the schedule.		X		CEMP Sub-plans	Construction	Draft		
3.7	**Emergency Incident response**								
	The construction contractor must develop and implement an Incident Response Management Plan in accordance with the requirements of the POEO Act, the Project Environmental Incident and Reporting Procedure (5-9020-0000-EEC-PR- 0001), any relevant project approvals or licences (i.e. EPL) and must include at a minimum:		X		PIRMP	Construction	Draft		
a)	Categories for environmental incidents and emergencies and notification and reporting protocols;		X		PIRMP	Construction	Draft		
b)	Identification of personnel who have authority to take immediate action, or to affect the environmental control measure; and,		X		PIRMP	Construction	Draft		
c)	A process for undertaking appropriate levels of investigation for all incidents and the processes for implementation and assessment of corrective actions.		X		PIRMP	Construction	Draft		
3.8	**Independent Environmental Representative**								
	ARTC will appoint an independent Environmental Representative, as required by the Project conditions of approval, to undertake the following (including but not limited to):	X			-	-	-		
a)	Review, comment on and endorse (as required) any relevant environmental documentation to verify it is prepared in accordance with relevant environmental legislation, Project conditions of approval, other permits, approvals and licences, relevant standards and this CEMF;	X			-	-	-		
b)	Monitor and report on the implementation and performance of the above mentioned documentation and other relevant documentation;	X			-	-	-		
c)	Provide independent guidance and advice to ARTC and the construction contractor in relation to environmental compliance issues and the interpretation of Project conditions of approval;	X			-	-	-		
d)	Be the principal point of advice for the Department of Planning & Environment in relation to all questions and complaints concerning the environmental performance of the Project; and,	X			-	-	-		
e)	Ensure auditing is undertaken in accordance with all relevant Project requirements.	X			-	-	-		
3.9	**Environmental Monitoring, Inspection and Auditing**								

Construction Environmental Management Framework									
No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
	Environmental monitoring will be undertaken as required and in accordance with any standards, as specified by a Project condition of approval or other permits, approvals and licences. The results of any monitoring undertaken as a requirement of the EPL will be published on the construction contractor's website as required by a condition of the EPL.		X		CEMP Sub-plans	Construction	Draft		
	Environmental inspections must include		X		CEMP Sub-plans	Construction	Draft		
a)	Surveillance of environmental mitigation;		X		CEMP Sub-plans	Construction	Draft		
b)	Periodic inspections of environmental mitigation by Construction Environment Manager (or delegate) to verify adequacy of environmental mitigation. This will be documented in a formal inspection record; and,		X		CEMP Sub-plans	Construction	Draft		
c)	Regular site inspections by the independent environmental representative and ARTC representatives at a frequency to be agreed with the construction contractor.		X		CEMP Sub-plans	Construction	Draft		
	The Construction contractor must undertake internal environmental inspections and/or audits to ensure compliance with:		X		CEMP Sub-plans	Construction	Draft		
a)	Project conditions of approval and other permits, approvals and licences;		X		CEMP Sub-plans	Construction	Draft		
b)	Project CEMP, SMP and other plans and procedures;		X		CEMP Sub-plans	Construction	Draft		
c)	Environmental training records;		X		CEMP Sub-plans	Construction	Draft		
d)	Relevant and applicable design requirements or specifications; and,		X		CEMP Sub-plans	Construction	Draft		
e)	Environmental monitoring and inspection results.		X		CEMP Sub-plans	Construction	Draft		
	ARTC (or an independent environmental auditor on behalf of ARTC) will also undertake periodic inspections and/or audits of the construction contractors Project CEMP and compliance with environmental components of the contract documentation and design, including this CEMF and any relevant statutory or approvals, licence or permit requirements.		X		CEMP Sub-plans	Construction	Draft		
3.10	**Environmental Non-Compliances**								
	The construction contractor must document and detail any non-compliances arising out of the above monitoring, inspections and audits. ARTC must be made aware of all non-compliances in a timely manner in accordance with the contract requirements and the ARTC Phase 5 Monthly Progress Report (5-9000-0000-PCM-TE-0001). The construction contractor is required to develop and implement preventative and corrective actions to rectify non-compliances, near misses and hazards identified or reported. The construction contractor should maintain an appropriate register to document these near misses, hazards, non- compliances, corrective actions and preventative actions. ARTC or the independent environmental representative may raise non-compliance against environmental requirements managed by the construction contractor as per the contract processes		X		CEMP Sub-plans	Construction	Draft		
3.11	**Roles and Responsibilities**								
	In relation to Roles and Responsibilities, the CEMP will:								
a)	Describe the relationship between the construction contractor, ARTC, key regulatory stakeholders and the independent environmental representative in accordance with the Project Construction Communications Framework (5-9020-000-PCS-PL-0001 – PCS);		X		CEMP	Construction	Draft		

Construction Environmental Management Framework									
No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
b)	For each role that has environmental accountability or responsibility, include key personnel and provide a description of the authority and roles of key personnel, line of responsibility and communication, minimum skill requirement, and their interface with the overall project organisational structure;		X		CEMP	Construction	Draft		
c)	Provide details of each specialist environment, sustainability or other consultant who is engaged by the construction contractor including their scope of work;		X		CEMP	Construction	Draft		
d)	Provide an overview of the roles and responsibilities of the independent environmental representative and other regulatory stakeholders as required; and,		X		CEMP	Construction	Draft		
e)	All sub-contractors engaged by the construction contractor will be required to operate under the CEMP and EMS of the construction contractor.		X		CEMP	Construction	Draft		
3.12	**Environmental Records and Compliance Reporting**								
	All environmental records and compliance reporting is to occur as per any relevant and applicable legislative, approval and permit, and contract requirements, including as per Phase 5 Monthly Progress Report (5-9000-0000-PCM-TE- 0001). All environmental records and documents required by legislative, approval and permit and contract requirements must be kept by the construction contractor for those time periods specified, and, provided to ARTC where ARTC as the proponent of the project is required to have and store those environmental records or documents.		X		CEMP Sub-plans	Construction	Draft		
3.13	**Review and Improvements of the Project CEMP**								
	The construction contractor must ensure review and improvement of the Project CEMP in response to:								
a)	Issues raised during environmental surveillance, inspections and monitoring;		X		CEMP Sub-plans	Construction	Draft		
b)	Expanded scope of works;		X		CEMP Sub-plans	Construction	Draft		
c)	Environmental incidents;		X		CEMP Sub-plans	Construction	Draft		
d)	Environmental non-conformances;		X		CEMP Sub-plans	Construction	Draft		
e)	Any relevant amendments or updates to relevant and applicable legislation, regulations, permits and approvals; and,		X		CEMP Sub-plans	Construction	Draft		
f)	As per ISO 14001 principles.		X		CEMP Sub-plans	Construction	Draft		
	A formal review of the Project CEMP by the construction contractor must also occur as per any licence, approval or permit requirements, contract requirements, or on an annual basis as a minimum. This review shall generate actions for the continual improvement of the Project CEMP and supporting management plans and relevant documentation		X		CEMP Sub-plans	Construction	Draft		
5	**General site works**								
5.1	**Working Hours**								
	Project working hours are in accordance with the Inland Rail NSW Construction Noise & Vibration Management Framework (0-9000-ENV-00-RP-0001), Project approval documentation and the contract. When available, the CEMF will be updated to include the Project conditions of approval.		X		NVMP	Construction	Draft		
5.2	**Site Layout**								
	The construction contractor must integrate the following in the layout of construction sites:								
a)	The project approval documentation;		X		SEMP	Construction	Draft		

Construction Environmental Management Framework									
No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
b)	The Project conditions of approval (when available); and,		X		SEMP	Construction	Draft		
c)	Other permits, approvals and licences (when available).		X		SEMP	Construction	Draft		
5.3	**Reinstatement and Rehabilitation**								
	Mitigation measures for reinstatement must be produced in consultation with ARTC, the community and stakeholders (as necessary). Mitigation measures for reinstatement will be incorporated into the CEMP. These should be in conformance with the Landform Construction Specification (9000-WF-000045).		X		Communication and Community Engagement Management Plan LVAMP	Construction	Draft		
6	**Air Quality Management**								
6.1	**Objectives**								
	The following air quality management objectives will apply to construction:								
a)	Minimise the occurrence and impact of particulate and odour emissions during construction;		X		AQMP	Construction	Draft		
b)	Minimise gaseous and particulate pollutant emissions from construction activities as far as feasible and reasonable; and		X		AQMP	Construction	Draft		
c)	Identify and control potential dust and air pollutant sources.		X		AQMP	Construction	Draft		
6.2	**Reference Documents**								
	As a minimum the construction contractor should consider the following:								
a)	ARTC EMS (to be specified once documentation is finalised);		X		CEMP Sub-plans	Construction	Draft		
b)	POEO Act; and,		X		CEMP Sub-plans	Construction	Draft		
c)	Protection of the Environment Operations (Clean Air) Regulation 2010.		X		AQMP	Construction	Draft		
6.3	**Air Quality Management Plan**								
	Develop and implement an Air Quality Management Plan, as part of the CEMP, which must include, as a minimum:								
a)	The air quality mitigation measures as detailed in the Project approval documentation and Project conditions of approval;		X		AQMP	Construction	Draft		
b)	The requirements of the applicable EPL conditions;		X		AQMP	Construction	Draft		
c)	Site plans or maps indicating locations of sensitive receivers and key air quality / dust controls;		X		AQMP	Construction	Draft		
d)	The responsibilities of key project personnel with respect to the implementation of the plan;		X		AQMP	Construction	Draft		
e)	Air quality and dust monitoring requirements and any monitoring locations specified by the project conditions of approval or applicable EPL conditions ;		X		AQMP	Construction	Draft		
f)	Identification and documentation of any competencies, training, experience or qualification of personnel undertaking works under this plan; and,		X		AQMP	Construction	Draft		
g)	Compliance record generation and management.		X		AQMP	Construction	Draft		
6.4	**Environmental Requirements**								
	Air quality and dust monitoring must involve the following as a minimum:								
a)	Meteorological conditions will be monitored and appropriate responses will be organised and undertaken periodically by the contractor;		X		AQMP	Construction	Draft		
b)	Regular visual monitoring of dust generation from work zones;		X		AQMP	Construction	Draft		
c)	Records of any air quality monitoring or sampling completed (including field observations, calibration records, field measurements and laboratory results); and,		X		AQMP CEMP	Construction	Draft		
d)	Monitoring emissions from plant and construction vehicles to ensure they have appropriate emission controls and are being maintained correctly.		X		AQMP	Construction	Draft		

Construction Environmental Management Framework

No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
	The contractor is to keep any required records and monitoring data and undertake reporting as specified by the project conditions of approval or applicable EPL conditions, the contractor and/or Phase 5 Monthly Progress Report (5- 9000-0000-PCM-TE-0001). It is recommended that the following compliance records will be kept by the contractor, as a minimum:		X		AQMP CEMP	Construction	Draft		
a)	Records of any meteorological condition monitoring;								
b)	Inspections undertaken in relation to air quality and dust management;		X		AQMP	Construction	Draft		
c)	Records of any management measures implemented as a result of adverse, windy weather conditions;		X		AQMP	Construction	Draft		
d)	Any required competencies, training, qualifications or experience required to undertake these works ; and,		X		AQMP	Construction	Draft		
e)	Records of any impacts avoided or minimised through construction methods.		X		AQMP	Construction	Draft		
6.5	**Air Quality Mitigation**								
	Examples of air quality mitigation that should be considered by the construction contractor include:								
a)	Plant and equipment will be serviced and maintained regularly to ensure compliance with relevant Australian Standards and/or manufactures specifications. With any manufacturer specified exhausts and/or baffles to stay installed and operational as per these specifications;		X		AQMP	Construction	Draft		
b)	Equipment, plant and machinery not left running or idling unnecessarily;		X		AQMP	Construction	Draft		
c)	Water and dust suppression techniques must be used for active earthwork areas, stockpiles, unsealed public roads and materials tracking from construction sites onto public roads;		X		AQMP	Construction	Draft		
d)	Implementation of appropriate and effective erosion and sediment control techniques, particularly ground cover and/or soil stabilisation techniques;		X		SWMP	Construction	Draft		
e)	Wheel-wash facilities or devices such as shaker grids or rock areas will be provided and used near the site exit points, as and where appropriate; and,		X		SWMP	Construction	Draft		
f)	Monitor meteorological conditions and modify dust generating works during high and windy conditions where the potential for dust nuisance is high, where reasonable and feasible.		X		AQMP	Construction	Draft		
7	**Fauna and Flora Management**								
7.1	**Objectives**								
a)	Minimise impacts on flora and fauna;		X		FFMP	Construction	Draft		
b)	Design waterway modifications and crossings to in accordance with relevant guidelines and best practice principles;		X		FFMP	Construction	Draft		
c)	Retain and re-use existing flora and fauna habitat wherever possible; and,		X		FFMP	Construction	Draft		
d)	Appropriately manage the spread of weeds and plant pathogens.		X		PWMP	Construction	Draft		
7.2	**Reference Documents**								
a)	Environment Protection & Biodiversity Conservation Act 1999;		X		FFMP	Construction	Draft		
b)	Biodiversity Conservation Act 2016;		X		FFMP	Construction	Draft		
c)	Biosecurity Act 2015;		X		FFMP	Construction	Draft		
d)	Fisheries Management Act 1994; and,		X		FFMP	Construction	Draft		
e)	Why do fish need to cross the road? Fish passage requirements for waterway crossings (Fairfull and Witheridge, 2003).		X		FFMP	Construction	Draft		
7.3	**Flora and Fauna Management Plan**								
	The construction contractor must develop and implement a Flora and Fauna Management Plan which must include, as a minimum:		X		FFMP	Construction	Draft		
a)	The ecological mitigation measures as detailed in the Project approval documentation; and Project conditions of approval;		X		FFMP	Construction	Draft		

Construction Environmental Management Framework									
No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
b)	The responsibilities of key project personnel with respect to the implementation of the plan;		X		FFMP	Construction	Draft		
c)	The identification and clear statement of any requirements for qualifications and/or competencies of fauna handlers. Meeting legislative or project approval conditions as a minimum;		X		FFMP	Construction	Draft		
d)	The identification and reference to any relevant approvals, licences and permits obtained (/to be obtained) to handle and relocate fauna, as per relevant legislative requirements;		X		FFMP	Construction	Draft		
e)	Procedures for clearing vegetation and relocation of fauna;		X		FFMP	Construction	Draft		
f)	Procedures for demarcation and protection of retained vegetation;		X		FFMP	Construction	Draft		
g)	Plan/s for areas impacted and adjoining areas showing vegetation communities, locations where threatened species, populations or ecological communities have been recorded;		X		FFMP	Construction	Draft		
h)	Identification of measures to reduce disturbance to sensitive fauna;		X		FFMP	Construction	Draft		
i)	Reinstatement and Rehabilitation details, including identification of flora species and sources, measures for the management and maintenance of rehabilitated areas (including duration of the implementation of such measures) and the targets and outcomes planned for the different landscapes/areas being reinstated and rehabilitated;		X		FFMP LVAMP	Construction	Draft		
j)	Weed management measures, focusing on early identification of invasive weeds and effective management controls;		X		PWMP	Construction	Draft		
k)	A procedure for dealing with unexpected EEC threatened species identified during construction;		X		FFMP	Construction	Draft		
l)	Details on the methodology for vegetation mapping and survey;	X			-	-	-		
m)	Ecological, reinstatement and rehabilitation monitoring requirements;		X		FFMP LVAMP	Construction	Draft		
n)	Appropriate details on the criteria used to determine suitably qualified person/s for the activities specified in this plan/s; and,		X		FFMP	Construction	Draft		
o)	Compliance record generation and management, as per the contract (and associated referenced document).		X		FFMP	Construction	Draft		
7.4	**Environmental Requirements**								
	The construction contractor must undertake pre-clearing inspections prior to any native vegetation clearing. These inspections must be undertaken by a suitably qualified person. The criteria used to determine a suitably qualified person for these activities should be documented within the relevant plan.		X		FFMP	Construction	Draft		
	The pre-clearing inspection must include, as a minimum:								
a)	Identification of hollow bearing trees and breeding places;		X		FFMP	Construction	Draft		
b)	Identification of threatened flora and fauna;		X		FFMP	Construction	Draft		
c)	A check and confirmation on the demarcation of vegetation;		X		FFMP	Construction	Draft		
d)	Confirmation that an approved erosion and sediment control plan for the work site exists and that it is up to date and relevant for the proposed works; and,		X		FFMP	Construction	Draft		
e)	Appropriate identification that the completion of the pre-clearing inspection will form a HOLD POINT requiring sign-off from the Contractor's Environmental Manager (or delegate).		X		Quality Management Plan	Construction	Draft		
	These pre-clearing inspections should be documented in an post clearance report for the relevant sections and/or stages on which these inspections occur.		X		FFMP	Construction	Draft		
	The following compliance records, related to flora and fauna management should be kept by the construction contractor:								
a)	Pre-clearing inspection;		X		FFMP	Construction	Draft		

Construction Environmental Management Framework									
No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
b)	Release of Hold Point; and,		X		Quality Management Plan	Construction	Draft		
c)	Records of environmental inspections		X		CEMP	Construction	Draft		
	Compliance records in accordance with any relevant applicable approvals, permits and licences, the contract and Phase 5 Monthly Progress Report (5-9000-0000-PCM-TE-0001) must be kept by the contractor.		X		CEMP	Construction	Draft		
7.5	**Flora and Fauna Mitigation**								
	Examples of flora and fauna mitigation that should be considered by the construction contractor include:								
a)	Clear identification and demarcation of exclusion zones. With clear identification of these on relevant project designs, drawings, maps, machinery guidance or GIS systems managed by the construction contractor.		X		FFMP	Construction	Draft		
b)	Implementation of appropriate barriers, signage, temporary protective fencing or flagging tape on the ground to identify 'no go' or 'no clearing/disturbance' areas, to avoid accidental clearing.		X		FFMP	Construction	Draft		
c)	Works within watercourses should be managed as per 'Fish Friendly Waterway Crossings, why do fish need to cross the road? Fish passage requirements for waterway crossings' (Fairfull and Witheridge, 2003).		X		FFMP	Construction	Draft		
d)	Clearing must be undertaken in accordance with the pre-clearing requirements identified in Project approval documentation.		X		FFMP	Construction	Draft		
e)	Appropriate land disturbances/clearing processes, so that any remnant native vegetation areas are cleared in a staged or on an as needed basis, prior to works occurring within them. It is recommended that they are not cleared too far in advance of works to minimise flora, fauna and erosion risks and impacts.		X		FFMP	Construction	Draft		
f)	An appropriate inspection program of any open excavations, pits and material storage areas for entrapment of fauna, meeting any legislative or project approval conditions as a minimum.		X		FFMP	Construction	Draft		
g)	Identification and proposed control measures for open excavations, pits and material storage areas to minimise the potential for fauna entrapment. (i.e. Fauna escape ramps/ladders, covers, etc.).		X		FFMP	Construction	Draft		
h)	Identification and clear documentation of any requirements for qualifications and/or competencies of fauna handlers. Meeting legislative or project approval conditions as a minimum.		X		FFMP	Construction	Draft		
i)	Identification, obtainment and implementation of any relevant approvals, licences and permits to handle and relocate fauna, as per relevant legislative requirements.		X		FFMP	Construction	Draft		
j)	Appropriate procedures and processes for the management of any injured fauna by a suitably qualified person, to meet any relevant and applicable legislative, permit or approval conditions/requirements (i.e. capture and removal of the injured fauna to an appropriately qualified wildlife carer or vet by a suitably qualified person/s).		X		FFMP	Construction	Draft		
k)	Weed management is to be undertaken in areas affected by construction prior to any clearing works in accordance with the *Biosecurity Act 2015* and associated regulations.		X		PWMP	Construction	Draft		
l)	All vehicles, machinery and equipment to be cleaned, inspected and certified prior to entry to the site or movement between project sites to meet the requirements of the *Biosecurity Act 2015* and associated regulations.		X		PWMP	Construction	Draft		
m)	Identification and clear documentation of any requirements for qualifications and/or competencies of persons undertaking works to meet Biosecurity Act 2015 or associated regulations commitments (i.e. weed management, vehicle/machinery/equipment weed inspections and certifications for site entry).		X		PWMP	Construction	Draft		
8	**Heritage Management**								
8.1	**Objectives**								
a)	Minimise impacts on items or places of heritage value;		X		HMP	Construction	Draft		

Construction Environmental Management Framework									
No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
b)	Avoid unauthorised disturbance to heritage sites and areas of significance;		X		HMP	Construction	Draft		
c)	Undertake all works in accordance with any relevant and applicable management plans or agreements in place;		X		HMP	Construction	Draft		
d)	Avoid accidental impacts on heritage items; and,		X		HMP	Construction	Draft		
e)	Maximise worker's awareness of indigenous and non-indigenous heritage.		X		HMP	Construction	Draft		
8.2	**Reference Documents**								
a)	Cultural Heritage Management Plan (Doc Number: TNC);		X		HMP	Construction	Draft		
b)	National Parks and Wildlife Act 1974 (NPW Act);		X		HMP	Construction	Draft		
c)	National Parks and Wildlife Regulation 2009 (NPW Regulation; and,		X		HMP	Construction	Draft		
d)	Heritage Act 1977		X		HMP	Construction	Draft		
8.3	**Heritage Management Plan**								
	The construction contractor must develop and implement a Heritage Management Plan which must include, as a minimum:								
a)	The heritage mitigation measures as detailed in the Project approval documentation and Project conditions of approval;		X		HMP	Construction	Draft		
b)	The responsibilities of key project personnel with respect to the implementation of the plan;		X		HMP	Construction	Draft		
c)	Identification and documentation of any competencies, training, experience or qualification of personnel undertaking works under this plan;		X		HMP	Construction	Draft		
d)	Details of management measures to be implemented to prevent and minimise impacts on heritage items (including further heritage investigations, archival recordings and/or measures to protect unaffected sites during construction works in the vicinity);		X		HMP	Construction	Draft		
e)	Procedures for unexpected heritage finds, including procedures for dealing with human remains;		X		HMP	Construction	Draft		
f)	Heritage monitoring requirements; and,		X		HMP	Construction	Draft		
g)	Compliance record generation and management.		X		HMP	Construction	Draft		
8.4	**Heritage Management Requirements**								
	The Contractor's regular inspections must include checking of heritage mitigation measures. Compliance records must be retained by the Contractor. These must include:								
a)	Inspections undertaken in relation to heritage management measures;		X		HMP	Construction	Draft		
b)	Any required competencies, training, qualifications or experience required to undertake these works;		X		HMP	Construction	Draft		
c)	Archival recordings undertaken of any heritage item;		X		HMP	Construction	Draft		
d)	Unexpected finds and stop work orders;		X		HMP	Construction	Draft		
e)	Records of any impacts avoided or minimised through construction methods; and,		X		HMP	Construction	Draft		
f)	Records of any mitigation measures or controls implemented, and their outcomes.		X		HMP	Construction	Draft		
	These records must be made available to ARTC as per any conditions of the contract or identified reporting requirements.		X		HMP	Construction	Draft		
8.5	**Heritage Mitigation**								
	Examples of heritage mitigation that should be considered by the construction contractor include:								
a)	Any heritage items not impacted by the works must be retained and protected throughout construction.		X		HMP	Construction	Draft		
b)	Undertake a vibration assessment as necessary in accordance with the Inland Rail NSW Construction Noise & Vibration Management Framework (0-9000-ENV-00-RP-0001) and project approval/licence conditions.		X		HMP	Construction	Draft		

Construction Environmental Management Framework									
No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
c)	Mature trees are to be inspected for cultural heritage scarring where mature tree clearance is proposed outside the current rail corridor (and in the areas in which a pedestrian survey was not undertaken).		X		HMP	Construction	Draft		
d)	Where works are proposed outside the assessed area (such as for location of ancillary infrastructure, or additional proposed access tracks), further review and assessment will be required to avoid impacts on potential Aboriginal or European Heritage items.		X		HMP	Construction	Draft		
9	**Hydrocarbon and Chemical Management**								
9.1	**Objectives**								
	Prevent adverse impacts on workers, the community and the natural environment from contaminants and hydrocarbon/chemical storage and use.		X		HCMMP	Construction	Draft		
9.2	**Reference Documents**								
a)	Parkes to Narromine Waste Management Plan (4-2400-0000-EEC-PL-0003_A);		X		HCMMP	Construction	Draft		
b)	Parkes to Narromine Contaminated and Hazardous Substances Management Plan (4-2400-0000-EEC-PL- 004_A)		X		HCMMP	Construction	Draft		
c)	Dangerous Goods (Road and Rail Transport) Regulation 2009;		X		HCMMP	Construction	Draft		
d)	National Code of Practice for the Storage and Handling of Workplace Dangerous Goods NOHSC 2017 (Safe Work Australia, 2001);		X		HCMMP	Construction	Draft		
e)	Australian Code for the Transport of Dangerous Goods by Road and Rail Dangerous Goods Code (National Transport Commission, 2016);		X		HCMMP	Construction	Draft		
f)	AS 1940—Storage and handling of Flammable & Combustible Liquids; and,		X		HCMMP	Construction	Draft		
g)	Model Code of Practice: Labelling of workplace hazardous chemicals (Safe Work Australia, 2015).		X		HCMMP	Construction	Draft		
9.3	**Hydrocarbon and Chemical Management Plan**								
	The construction contractor must develop and implement a Hydrocarbon and Chemical Management Plan which must include, as a minimum:								
a)	The hydrocarbon and chemical management and mitigation measures as detailed in the Project approval documentation and Project conditions of approval;		X		HCMMP	Construction	Draft		
b)	The requirements of the applicable EPL conditions or regulatory requirements;		X		HCMMP	Construction	Draft		
c)	The responsibilities of key project personnel with respect to the implementation of the plan;		X		HCMMP	Construction	Draft		
d)	Details of relevant equipment, controls and management measures to be implemented to prevent and minimise impacts on personnel, the community and the environment associated with hydrocarbon and chemical management;		X		HCMMP	Construction	Draft		
e)	A procedure for spill response, and any associated required training or competency in this procedure;		X		HCMMP	Construction	Draft		
f)	Identification and documentation of any competencies, training, experience or qualification of personnel undertaking works under this plan; and,		X		HCMMP	Construction	Draft		
g)	Compliance record generation and management.		X		HCMMP	Construction	Draft		
9.4	**Environmental Requirements**								
	The Contractor’s should implement a program of regular inspections, which must include appropriate checks of storage locations of hazardous and dangerous goods. Compliance records must be retained by the Contractor. These must include:								
a)	Inspections undertaken in relation to hydrocarbon and chemical management and storage areas;		X		HCMMP	Construction	Draft		
b)	Any required competencies, training, qualifications or experience required to undertake these works (i.e. engineering qualifications to confirm that bunding has been built/installed to specification); and,		X		HCMMP	Construction	Draft		
c)	Records of any impacts avoided or minimised through construction methods.		X		HCMMP	Construction	Draft		
	These records must be made available to ARTC as per any conditions of the contract or identified reporting requirements.		X		HCMMP	Construction	Draft		

Construction Environmental Management Framework									
No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
9.5	**Hydrocarbons and Chemical Management Mitigation**								
	Examples of hydrocarbon and chemical mitigations include:								
a)	Hazardous materials and dangerous goods will be stored, handled and transported in accordance with relevant regulatory requirements and Australian Standards (i.e. AS 1940), including SEPP33 thresholds;		X		HCMMP	Construction	Draft		
b)	Storage areas will be in an appropriate location (away from ignition sources and weather impacts), signed and secured against vandalism;		X		HCMMP	Construction	Draft		
c)	Hazardous materials and dangerous goods will be appropriately labelled as per *Model Code of Practice: Labelling of workplace hazardous chemicals* (Safework Australia, 2015);		X		HCMMP	Construction	Draft		
d)	A risk management strategy should be developed to manage the potential for risks in situations where the minimum distance from sensitive receivers cannot be achieved, or the quantity of hazardous materials exceed SEPP33 threshold levels;		X		HCMMP	Construction	Draft		
e)	A procedure for spill response, and any associated required training or competency in this procedure, plus any emergency response processes or additional procedures it may trigger;		X		HCMMP	Construction	Draft		
f)	Appropriate advice on the management and disposal of any waste generated through the response to and clean-up of spills; and,		X		HCMMP	Construction	Draft		
g)	Appropriate and fully equipped spill kits must be available in locations where chemicals are used and stored. Spill kit storage areas are to be appropriately signed and visible.		X		HCMMP	Construction	Draft		
10	**Water Management**								
10.1	**Objectives**								
a)	Minimise pollution of surface water through erosion and sediment control;		X		SWMP	Construction	Draft		
b)	Maintain existing water quality of surrounding surface watercourses;		X		SWMP	Construction	Draft		
c)	Minimise pollution of all groundwaters; and,		X		SWMP	Construction	Draft		
d)	Source construction water from non-potable supplies and sources, where feasible		X		SWMP	Construction	Draft		
10.2	**Reference Documents**				SWMP				
a)	Water Management Act 2000		X		SWMP	Construction	Draft		
b)	Water Act 1912		X		SWMP	Construction	Draft		
c)	National Water Quality Management Strategy (Department of the Environment and Energy 2015)		X		SWMP	Construction	Draft		
d)	Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC, ARMANZ, 2000)		X		SWMP	Construction	Draft		
e)	Narromine Shire Local Flood Plan (State Emergency Services, 2014)		X		SWMP	Construction	Draft		
f)	Parkes Shire Local Flood Plan (State Emergency Services, 2014);		X		SWMP	Construction	Draft		
g)	Approved Methods for the Sampling and Analysis of Water Pollutants in New South Wales;		X		SWMP	Construction	Draft		
h)	AS/NZS 5667.11:1998 Water Quality – Sampling guidance on Groundwater's		X		SWMP	Construction	Draft		
i)	ISO 5667 Water Quality – Sampling		X		SWMP	Construction	Draft		
10.3	**Water Management Plan**								
	The construction contractor must develop and implement a Water Management Plan which must include, as a minimum:								
a)	The water management mitigation measures as detailed in the Project approval documentation and Project conditions of approval;		X		SWMP	Construction	Draft		
b)	The requirements of other permits, approvals, licences, legislation and regulations, as required;		X		SWMP	Construction	Draft		
c)	The responsibilities of key project personnel with respect to the implementation of the plan;		X		SWMP	Construction	Draft		

Construction Environmental Management Framework									
No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
d)	Details of the proposed extraction, use and disposal of groundwater, and measures to mitigate potential impacts to groundwater sources, incorporating monitoring, impact trigger definition and response actions for all groundwater sources potentially impacted by the Project;		X		SWMP	Construction	Draft		
e)	Evidence of consultation with the NSW Office of Water;	X			SWMP	Construction	Draft		
f)	Procedure and regime for surface water quality monitoring;		X		SWMP	Construction	Draft		
g)	Procedures for treatment, testing and discharge of groundwater from the site;		X		SWMP	Construction	Draft		
h)	Compliance record generation and management;		X		SWMP	Construction	Draft		
i)	Identification and documentation of any competencies, training, experience or qualification of personnel undertaking works under this plan; and,		X		SWMP	Construction	Draft		
j)	Appropriate identification of the location, frequency, type and details of monitoring or sampling, if required		X		SWMP	Construction	Draft		
10.4	**Environmental Requirements**								
	The Contractor's should implement a program of regular inspections, which must include appropriate checks of water use, extraction and storage locations. Plus appropriate water monitoring program, if required.		X		SWMP	Construction	Draft		
	Compliance records must be retained by the Contractor. These must include:								
a)	Inspections undertaken in relation to water management, use, extraction and storage areas;		X		SWMP	Construction	Draft		
b)	Records of any water monitoring or sampling completed (including field observations, calibration records, field measurements and laboratory results);		X		SWMP	Construction	Draft		
c)	Any environmental incidents, hazards or near-misses documented in relation to water management; and,		X		SWMP	Construction	Draft		
d)	Records of any impacts avoided or minimised through construction methods.		X		SWMP	Construction	Draft		
10.5	**Water Management Mitigation**								
	Examples of water management that should be considered by the construction contractor and included in their CEMP, as appropriate, include:.								
a)	Minimise the use of potable water during construction e.g. use prefabricated concrete structure, non-potable water used for dust suppression;		X		SWMP	Construction	Draft		
b)	Use of appropriate land disturbance practices, erosion controls (i.e. soil binders) and dust suppressants to minimise the need for water use in dust suppression during construction;		X		SWMP	Construction	Draft		
c)	Use of water efficient devices, equipment and machinery, where relevant and applicable in their operations;		X		SWMP	Construction	Draft		
d)	Undertake water quality monitoring to inform its appropriate and fit for purpose use; and,		X		SWMP	Construction	Draft		
e)	Undertake groundwater monitoring during construction (levels and quality) in areas identified as 'likely' and 'potential' groundwater dependent ecosystems.		X		SWMP	Construction	Draft		
11	**Soil and Water Quality Management**								
11.1	**Objectives**								
a)	Minimise pollution of surface and ground waters through appropriate erosion and sediment control measures;		X		SWMP	Construction	Draft		
b)	Ensure the appropriate management of soil resources for reuse during reinstatement and rehabilitation; and,		X		SWMP	Construction	Draft		
c)	Maintain existing water quality of surrounding surface and ground waters.		X		SWMP	Construction	Draft		
11.2	**Reference Documents**								
a)	Parkes to Narromine Waste Management Plan (4-2400-0000-EEC-PL-003)		X		SWMP	Construction	Draft		
b)	Parkes to Narromine Contaminated and Hazardous Materials Plan (4-2400-0000-EEC-PL-0004)		X		SWMP	Construction	Draft		
c)	POEO Act		X		SWMP	Construction	Draft		
d)	Water Management Act 2000		X		SWMP	Construction	Draft		

Construction Environmental Management Framework									
No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
e)	Water Act 1912		X		SWMP	Construction	Draft		
f)	National Water Quality Management Strategy (Department of the Environment and Energy 2015)		X		SWMP	Construction	Draft		
g)	Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC, ARMANZ, 2000)		X		SWMP	Construction	Draft		
h)	Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom, 2004)		X		SWMP	Construction	Draft		
i)	Managing Urban Stormwater: Soils and Construction Volume 2C (DECC, 2008)		X		SWMP	Construction	Draft		
11.3	**Soil and Water Quality Management Plan**								
	The construction contractor must develop and implement a Soil and Water Quality Management Plan which must include, as a minimum:		X		SWMP	Construction	Draft		
a)	The soil and water mitigation measures as detailed in the Project approval documentation and Project conditions of approval;		X		SWMP	Construction	Draft		
b)	The requirement of the EPL and other permits, approvals and licences;		X		SWMP	Construction	Draft		
c)	The responsibilities of key project personnel as relevant with respect to the implementation of the plan;		X		SWMP	Construction	Draft		
d)	Details of construction activities which have the potential to impact on watercourses and their location identified on environmental control maps;		X		SWMP	Construction	Draft		
e)	Surface water impact assessment criteria consistent with the principles of the Australian and New Zealand Environment Conservation Council (ANZECC) guidelines;		X		SWMP	Construction	Draft		
f)	Management measures to be used to minimise surface water impacts, including identification of water treatment measures and discharge points, details of how spoil and fill material required by the SSI will be sourced, handled, stockpiled, reused and managed; erosion and sediment control measures; salinity control measures and the consideration of flood events;		X		SWMP	Construction	Draft		
g)	Management measures for contaminated material (soils, water and building materials) and a contingency plan to be implemented in the case of unexpected discovery of contaminated material, including asbestos, during construction;		X		HCMMP	Construction	Draft		
h)	A description of how the effectiveness of these actions and measures would be monitored during the proposed works, clearly indicating frequency of monitoring, the locations where monitoring would take place, how the results of the monitoring would be recorded and reported, and, how non-compliance would be rectified;		X		HCMMP	Construction	Draft		
i)	Requirements and procedures for the management, separation and reuse of topsoil and other soil horizons/earthen materials;		X		SWMP	Construction	Draft		
j)	Identification and documentation of any competencies, training, experience or qualification of personnel undertaking works under this plan;		X		SWMP	Construction	Draft		
k)	Procedures for the development and implementation of Erosion and Sediment Control Plans;		X		PESCP	Construction	Draft		
l)	The Erosion and sediment control plan must be approved by a Suitably Qualified Person as per the ‘Blue Book’ requirements (i.e. Certified Professional in Erosion and Sediment control (CPESC));		X		PESCP	Construction	Draft		
m)	Soil and water quality monitoring requirements; and,		X		SWMP	Construction	Draft		
n)	Compliance record generation and management.		X		SWMP	Construction	Draft		
11.4	**Environmental Requirements**								
	The Contractor’s should implement a program of regular inspections, which must include appropriate checks of soil and water management and mitigation measures. Plus appropriate soil monitoring program, if required.		X		SWMP	Construction	Draft		
	Compliance records must be retained by the Contractor. These must include:								
a)	Inspections undertaken in relation to soil management measures, including Erosion and Sediment Control aspects;		X		SWMP	Construction	Draft		
b)	Inspections in relation to water quality management measures;		X		SWMP	Construction	Draft		
c)	Unexpected finds;		X		HCMMP	Construction	Draft		

Construction Environmental Management Framework									
No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
d)	Records of any soil water monitoring or sampling completed as triggered by these plans (including field observations, calibration records, field measurements and laboratory results);		X		SWMP	Construction	Draft		
e)	Any environmental incidents, hazards or near-misses documented in relation to soil management;		X		SWMP HCMMP	Construction	Draft		
f)	Any redline updates, alterations or changes to Erosion and Sediment Control Plans; and,		X		PESCP	Construction	Draft		
g)	Records of any impacts avoided or minimised through construction methods.		X		SWMP	Construction	Draft		
11.5	**Soil and Water Quality Mitigation**								
	Examples of soil management that should be considered by the construction contractor include:								
a)	Appropriate land disturbances/clearing processes, so that any vegetated areas are cleared in a staged or on an as needed basis, prior to works occurring within them to minimise erosion risks and impacts.		X		SWMP	Construction	Draft		
b)	Erosion and sediment control must be installed prior to ground disturbance works and upgraded, as required.		X		SWMP	Construction	Draft		
c)	Erosion and sediment control must be regularly maintained and inspected until vegetation is established or permanent stabilisation measures are established;		X		SWMP	Construction	Draft		
d)	Erosion and scour protection must be installed on batters as per project design and Managing Urban Stormwater – Soils and Construction (Landcom 2008), to prevent and minimise potential erosion and minimise concentrated flow;		X		SWMP	Construction	Draft		
e)	Appropriate procedures or specifications on the use, installation, management and use of Erosion and Sediment Control devices, so that it occurs in accordance with any suppliers and/or Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom, 2004)/ Managing Urban Stormwater: Soils and Construction Volume 2C (DECC, 2008) specifications.		X		SWMP	Construction	Draft		
f)	Appropriate land disturbances/clearing processes, so that any vegetated areas are cleared in a staged or on an as needed basis, prior to works occurring within them to minimise erosion risks and impacts.		X		SWMP	Construction	Draft		
g)	Topsoil must be stockpiled separately to other soils/earthen material and clearly signed/marked on site drawings and maps, to allow for its reuse in any reinstatement and rehabilitation processes;		X		SWMP	Construction	Draft		
h)	All stockpiles are to be located as close as practical to the source of the material and should be clearly demarcated on the type of material they contain;		X		SWMP	Construction	Draft		
i)	Minimise duration and area of disturbance within watercourses;		X		SWMP	Construction	Draft		
j)	No maintenance of plant and machinery within 50 m of a watercourse. Maintenance area will be adequately bunded (as per relevant and applicable Australian Standard) within construction compounds; and,		X		SWMP	Construction	Draft		
k)	Reinstatement and rehabilitation is to occur progressively and as part of the completion of each construction stage, as per contract requirements. This should be in accordance with any relevant or applicable aspects of contract requirements, conditions of approval, licences or the Landform Construction Specification (9000-WF- 000045).		X		SWMP LVAMP	Construction	Draft		
12	**Construction Noise and Vibration Management**								
12.1	**Objectives**								
a)	Minimise the unreasonable impacts of noise and vibration during construction;		X		NVMP	Construction	Draft		
b)	Avoid structural damage to buildings and heritage buildings during construction; and		X		NVMP	Construction	Draft		
c)	Undertake active community engagement.		X		NVMP	Construction	Draft		
12.2	**Reference Documents**								
a)	ARTC EMS (to be specified once documentation is finalised)		X		NVMP	Construction	Draft		
b)	Inland Rail NSW Construction Noise & Vibration Management Framework (0-9000-ENV-00-RP-0001)		X		NVMP	Construction	Draft		

Construction Environmental Management Framework									
No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
c)	POEO Act		X		NVMP	Construction	Draft		
d)	Industrial Noise Policy (EPA, 2000)		X		NVMP	Construction	Draft		
e)	Interim Construction Noise Guideline (ICNG) (2009)		X		NVMP	Construction	Draft		
f)	NSW Road Noise Policy (RNP) (DECCW, 2011)		X		NVMP	Construction	Draft		
g)	NSW Industrial Noise Policy (EPA, 2000)		X		NVMP	Construction	Draft		
12.3	**Construction Noise and Vibration Management Plan**								
	The construction contractor must develop and implement a Construction Noise and Vibration Management Plan consistent with the Inland Rail NSW Construction Noise & Vibration Management Framework (0-9000-ENV-00-RP- 0001) which must, include as a minimum:								
a)	The construction noise and vibration mitigation measures as detailed in the Project approval documentation and Project conditions of approval;		X		NVMP	Construction	Draft		
b)	The requirement of the EPL;		X		NVMP	Construction	Draft		
c)	The responsibilities of key project personnel as relevant with respect to the implementation of the plan;		X		NVMP	Construction	Draft		
d)	Details of construction activities and an indicative schedule for construction works, including the identification of key noise and/or vibration generating construction activities (based on representative construction scenarios) that have the potential to generate noise or vibration impacts on surrounding sensitive receivers, in particular residential areas;		X		NVMP CEMP	Construction	Draft		
e)	Pre-construction compliance requirements and hold points;		X		NVMP Quality Management Plan	Construction	Draft		
f)	Records of any noise or vibration monitoring completed as triggered by these plans (including field observations, calibration records, field measurements and laboratory results);		X		NVMP	Construction	Draft		
g)	Any environmental incidents, hazards or near-misses documented in relation to noise or vibration management;		X		NVMP	Construction	Draft		
h)	Identification and documentation of any competencies, training, experience or qualification of personnel undertaking works under this plan; and,		X		NVMP	Construction	Draft		
i)	Compliance record generation and management.		X		NVMP	Construction	Draft		
12.4	**Environmental Requirements**								
	The Contractor's should implement a program of regular inspections, which must include appropriate checks of noise and vibration management and mitigation measures. Plus appropriate noise and vibration monitoring program, if required.		X		NVMP	Construction	Draft		
	Compliance records must be retained by the Contractor. These must include:		X		NVMP	Construction	Draft		
a)	Inspections undertaken in relation to noise and vibration management measures;		X		NVMP	Construction	Draft		
b)	Records of any noise and vibration monitoring or sampling completed as triggered by these plans (including field observations, calibration records, field measurements and laboratory results);		X		NVMP	Construction	Draft		
c)	Any environmental incidents, hazards or near-misses documented in relation to noise or vibration management;		X		NVMP	Construction	Draft		
d)	Community complaints in relation to noise and vibration, and the construction contractor's response;		X		NVMP Communication and Community Engagement Management Plan	Construction	Draft		
e)	Any noise or vibration abatement actions or controls implemented; and,		X		NVMP	Construction	Draft		
f)	Records of any impacts avoided or minimised through construction methods.		X		NVMP	Construction	Draft		

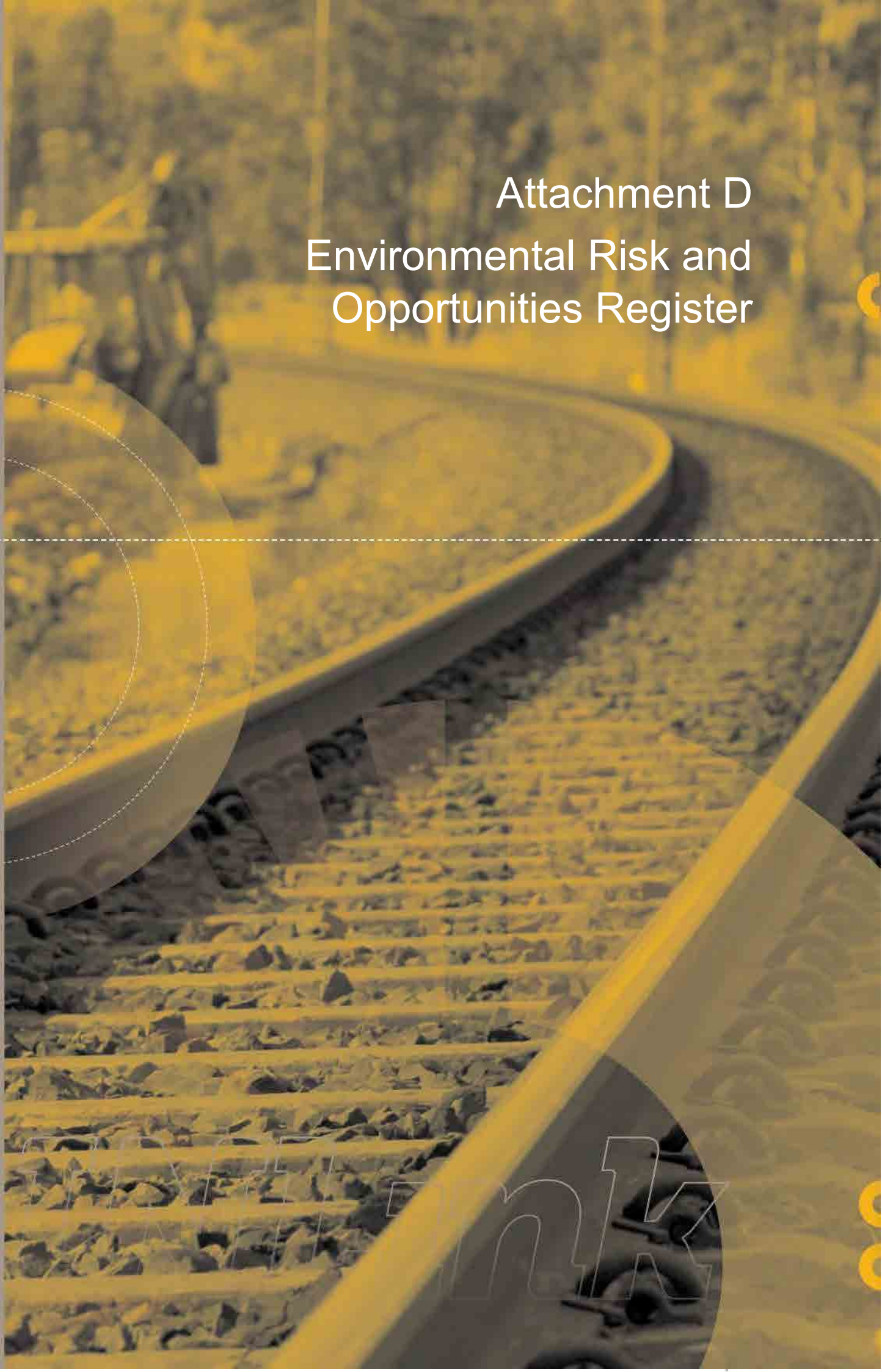
Construction Environmental Management Framework									
No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
12.5	**Construction Noise and Vibration Mitigation**								
	Examples of noise and vibration management that should be considered by the construction contractor include:								
a)	Working hours must be in accordance with the requirements of Inland Rail NSW Construction Noise & Vibration Management Framework (0-9000-ENV-00-RP-0001);		X		NVMP	Construction	Draft		
b)	Locate noise and vibration generating works/equipment away from residents and sensitive receivers, where practical e.g. unloading and loading areas, pumps and generators;		X		NVMP	Construction	Draft		
c)	Plant and equipment must be serviced and maintained regularly to ensure compliance with relevant Australian Standards and/or manufactures specifications. With any manufacturer specified exhausts and/or baffles to stay installed and operational as per these specifications to manage noise generation;		X		NVMP	Construction	Draft		
d)	Equipment, plant and machinery not left running or idling unnecessarily; and,		X		NVMP	Construction	Draft		
e)	Compounds to be located at least 1 km from the nearest residence or other noise sensitive receiver, where possible.		X		SEMP	Construction	Draft		
13	**Waste and Contaminated Material (Including Asbestos) Management**								
13.1	**Objectives**								
	Manage all waste as per relevant and applicable waste management		X		WMP	Construction	Draft		
13.2	**Reference Documents**								
a)	Contaminated Land Management Act 1997 (the CLM Act);		X		HCMMP WMP	Construction	Draft		
b)	Contaminated Land Management: Guidelines for the NSW Site Auditor Scheme (3rd edition) (EPA, 2017);		X		HCMMP WMP	Construction	Draft		
c)	Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites (OEH, 2011a);		X		HCMMP WMP	Construction	Draft		
d)	Contaminated Sites: Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997 (EPA, 2015a);		X		HCMMP WMP	Construction	Draft		
e)	Contaminated Sites: Sampling Design Guidelines (EPA, 1995);		X		HCMMP WMP	Construction	Draft		
f)	Managing Land Contamination Planning Guidelines SEPP 55 – Remediation of Land (Department of urban Affairs and Planning and EPA, 1998;		X		HCMMP WMP	Construction	Draft		
g)	National Environment Protection (Assessment of Site Contamination) Measure 1999, 2013 amendment (the NEPM);		X		HCMMP WMP	Construction	Draft		
h)	National Environment Protection (Movement of Controlled Waste between States and Territories) Measure 1998;		X		HCMMP WMP	Construction	Draft		
i)	Parkes to Narromine: Contaminated and Hazardous Material Management Plan (4-2400-0000-EEC-PL-003);		X		HCMMP WMP	Construction	Draft		
j)	Parkes to Narromine: Waste Management Plan (4-2400-0000-EEC-PL-004);		X		HCMMP WMP	Construction	Draft		
k)	Protection of the Environment Operations Act 1997 (POEO Act);		X		HCMMP WMP	Construction	Draft		
l)	Protection of the Environment Operations (Waste Regulation) 2014;		X		HCMMP WMP	Construction	Draft		
m)	Waste Avoidance and Resource Recovery Act 2001;		X		HCMMP WMP	Construction	Draft		
n)	Waste Classification Guidelines – Part 1: Classifying Waste (EPA, 2014a)		X		HCMMP WMP	Construction	Draft		
13.3	**Construction Waste Management**								
	The construction contractor must develop and implement a Construction Waste Management Plan in accordance with Parkes to Narromine: Waste Management Plan (4-2400-0000-EEC-PL-004) and its sub-plan, Parkes to Narromine: Contaminated and Hazardous Material Management Plan (4-2400-0000-EEC-PL-003).		X		WMP	Construction	Draft		
13.4	**Environmental Requirements**								

Construction Environmental Management Framework

No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
	The Contractor's should implement a program of regular inspections, which must include appropriate checks of waste and contaminated materials management and mitigation measures. Plus appropriate waste monitoring program, if required.		X		HCMMP WMP	Construction	Draft		
	Compliance records must be retained by the Contractor. These must include:				WRMP / HCMMP	Construction			
a)	Inspections undertaken in relation to waste and contaminated materials management measures;		X		HCMMP WMP	Construction	Draft		
b)	Records of any waste and contaminated materials monitoring or sampling completed as triggered by these plans (including field observations, field measurements and laboratory results);		X		HCMMP WMP	Construction	Draft		
c)	Any environmental incidents, hazards or near-misses documented in relation to waste or contaminated materials management;		X		HCMMP WMP	Construction	Draft		
d)	Community complaints in relation to waste or contaminated materials management, and the construction contractor's response;		X		HCMMP WMP	Construction	Draft		
e)	Waste and contaminated materials volumes managed, and their associated management approach;		X		HCMMP WMP	Construction	Draft		
f)	Waste and contaminated materials tracking, disposal and associated regulatory documentation;		X		HCMMP WMP	Construction	Draft		
g)	Waste and contaminated materials management objectives, and tracking against these; and,		X		HCMMP WMP	Construction	Draft		
h)	Records of any impacts avoided or minimised through construction methods.		X		HCMMP WMP	Construction	Draft		
13.5	**Waste Mitigation**								
	Examples of waste and contaminated materials management that should be considered by the construction contractor is outlined in the Parkes to Narromine: Waste Management Plan (4-2400-0000-EEC-PL-004) and its sub-plan, Parkes to Narromine: Contaminated and Hazardous Material Management Plan (4-2400-0000-EEC-PL-003)		X		HCMMP WMP	Construction	Draft		
14	**Construction Visual Amenity Management**								
14.1	**Objectives**								
a)	Minimise the impacts on existing landscape features as much as practicable; and		X		LVAMP	Construction	Draft		
b)	Reduce visual impact of construction to the surrounding community.		X		LVAMP	Construction	Draft		
14.2	**Reference Documents**								
	AS 4282-1997 Control of the Obtrusive Effects of Outdoor Lighting		X		LVAMP	Construction	Draft		
14.3	**Construction Visual Amenity Management Plan**								
	The construction contractor must develop and implement a Construction Visual Amenity Management Plan which must, include as a minimum:		X		LVAMP	Construction	Draft		
a)	The visual amenity mitigation measures as detailed in the Project approval documentation and Project conditions of approval;		X		LVAMP	Construction	Draft		
b)	The responsibilities of key project personnel as relevant with respect to the implementation of the plan;		X		LVAMP	Construction	Draft		
c)	The maintenance of outward facing elements of site/compound hoarding or noise barriers;		X		LVAMP	Construction	Draft		
d)	Apply the principles of *Australian Standard 4282-1997 Control of the obtrusive effects of outdoor* lighting and detail mitigation measures to minimise impacts on sensitive receivers for all temporary and mobile light sources; and,		X		LVAMP	Construction	Draft		
e)	Compliance record generation and management.		X		LVAMP	Construction	Draft		
14.4	**Environmental Requirements**								
	The Contractor's should implement a program of regular inspections, which must include appropriate checks of visual amenity management and mitigation measures. Plus appropriate noise and vibration monitoring program, if required.		X		LVAMP	Construction	Draft		
	Compliance records must be retained by the Contractor. These must include:		X		LVAMP	Construction	Draft		

Construction Environmental Management Framework									
No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
a)	Inspections undertaken in relation to managing visual amenity;		X		LVAMP	Construction	Draft		
b)	Community complaints in relation to construction lighting, and the construction contractor's response;		X		LVAMP	Construction	Draft		
c)	Any visual amenity abatement actions or controls implemented; and,		X		LVAMP	Construction	Draft		
d)	Records of any impacts avoided or minimised through construction methods.		X		LVAMP	Construction	Draft		
14.5	**Construction Visual Amenity Mitigation**								
	Examples of visual amenity management that should be considered by the construction contractor include:								
a)	Where feasible, existing vegetation around the perimeter of the construction site will be maintained; and		X		LVAMP	Construction	Draft		
b)	Temporary site lighting, for security purposes of night works, will be installed and operated in accordance with *AS4282:1997 Control of Obtrusive Effect of Outdoor Lighting* .		X		LVAMP	Construction	Draft		
15	**Construction Traffic Management**								
15.1	**Objectives**								
a)	To minimise the potential transport/traffic impacts on public roads;		X		TTAMP	Construction	Draft		
b)	Clearly communicate any impacts to road networks (i.e. temporary road closures, extra road entry's); and,		X		TTAMP	Construction	Draft		
c)	Meet all project approval conditions and statutory requirements in relation to traffic management and transport.		X		TTAMP	Construction	Draft		
15.2	**Reference Documents**								
a)	RMS Traffic Control at Worksites Manual;		X		TTAMP	Construction	Draft		
b)	AS 1742.3 Manual of uniform traffic control devices Part 3: Traffic control for works on roads;		X		TTAMP	Construction	Draft		
c)	Austroads Guides;		X		TTAMP	Construction	Draft		
d)	RMS Supplements to Austroads and Australian Standards		X		TTAMP	Construction	Draft		
15.2	**Construction Traffic Management Plan**								
	The construction contractor must develop and implement a Construction Traffic Management Plan for their scope of works. The Construction Traffic Management Plan must include, as a minimum:		X		TTAMP	Construction	Draft		
a)	The construction noise and vibration mitigation measures as detailed in the Project approval documentation and Project conditions of approval;		X		TTAMP	Construction	Draft		
b)	The requirement of the other permits, approvals and licences;		X		TTAMP	Construction	Draft		
c)	Set out the overall traffic management resources, processes and procedures for the management of traffic and transport during construction of the Project;		X		TTAMP	Construction	Draft		
d)	Identify types and volumes of construction vehicles and associated route and time restrictions;		X		TTAMP	Construction	Draft		
e)	Identify potential activities that could result in the disruption to traffic and transport networks, including pedestrian, cyclist and public transport networks and variations in traffic volumes due to seasonal activities;		X		TTAMP	Construction	Draft		
f)	Traffic control procedures including development and implementation of traffic control plans; temporary speed limit requirements and temporary road closures and detours;		X		TTAMP	Construction	Draft		
g)	Pre-construction compliance requirements and hold points;		X		TTAMP	Construction	Draft		
h)	Worker car parking;		X		TTAMP	Construction	Draft		
i)	Management of traffic under varying weather conditions;		X		TTAMP	Construction	Draft		
j)	Movement of oversize vehicles, if required;		X		TTAMP	Construction	Draft		
k)	Management of public transport impacts, including school buses;		X		TTAMP	Construction	Draft		
l)	The responsibilities of key project personnel as relevant with respect to the implementation of the plan;		X		TTAMP	Construction	Draft		
m)	Driver behaviour and code of conduct;		X		TTAMP	Construction	Draft		

Construction Environmental Management Framework									
No	Condition	Responsibility			Where Captured	Timing	Compliance Status	Compliance Details	Additional Output / Deliverable
		Principal	Contractor	Shared					
n)	Alternative access routes;		X		TTAMP	Construction	Draft		
o)	Pre-construction compliance requirements and hold points;		X		TTAMP	Construction	Draft		
p)	Any monitoring requirements; and,		X		TTAMP	Construction	Draft		
q)	Compliance record generation and management.		X		TTAMP	Construction	Draft		
	The traffic management plan will be developed in consultation with stakeholders (including Parkes Shire Council, Narromine Shire Council and RMS) and periodically reviewed with the stakeholders as appropriate.	X			TTAMP	Construction	Draft		
15.4	**Environmental Requirements**								
	The Contractor's should implement a program of regular inspections, which must include appropriate checks of any traffic management and mitigation measures. Plus appropriate traffic monitoring program (i.e. traffic volumes, routes used, etc), if required.		X		TTAMP	Construction	Draft		
	Compliance records must be retained by the Contractor. These must include:		X		TTAMP	Construction	Draft		
a)	Inspections undertaken in relation to traffic management measures;		X		TTAMP	Construction	Draft		
b)	Records of any traffic management monitoring completed (if required);		X		TTAMP	Construction	Draft		
c)	Any environmental incidents, hazards or near-misses documented in relation to traffic management;		X		TTAMP	Construction	Draft		
d)	Community complaints in relation to traffic, and the construction contractor's response;		X		TTAMP Communication and Community Engagement Management Plan	Construction	Draft		
e)	Any traffic abatement actions or controls implemented; and,		X		TTAMP	Construction	Draft		
f)	Records of any impacts avoided or minimised through construction/traffic management methods.		X		TTAMP	Construction	Draft		
15.5	**Construction Traffic Management**								
	Examples of traffic management mitigations that should be considered by the construction contractor include:		X		TTAMP	Construction	Draft		
a)	Minimise or avoid use of private properties and private property road access;		X		TTAMP	Construction	Draft		
b)	Minimise the need for local road and access closures and provide alternate access arrangement if access closures are required;		X		TTAMP	Construction	Draft		
c)	Where feasible and reasonable, contractors will provide its workforce with buses, vans or appropriate carpooling to transport them to the worksites;		X		TTAMP	Construction	Draft		
d)	Appropriate education, training and awareness programs for staff and contractors so that they are aware of the traffic management obligations;		X		TTAMP	Construction	Draft		
e)	Appropriate community and landholder engagement and consultation to inform them of potential traffic management changes (both increased use and road closures); and,		X		TTAMP	Construction	Draft		
f)	Minimise the use of heavy vehicles in peak traffic times.		X		TTAMP	Construction	Draft		



Attachment D

Environmental Risk and Opportunities Register

Environmental Risk & Opportunities Register												
Risk Identification				**Initial Risk Rating**			**Treatment Plan to Mitigate Risk**	**Risk Rating After Mitigation**			**Residual Risk Allowance**	
Discipline	**Description**	**Consequence**	**Potential Impact**	**Likelihood**	**Impact**	**Rating (1-25)**	**Treatment Plan**	**Likelihood**	**Impact**	**Rating (1-25)**	**Potential Cost/Savings**	**Comments**
General	Training	Direct or indirect Impact to the built and natural environment through the misinformation, inability or lack of information by personnel.	Risk	Possible	Minor	**Low - 2C**	All personnel are to complete a General Site Induction which is to include all aspects and impacts to the environment and mitigation and management measures required for best practice environmental management and compliance with the EMPC. Training will be provided to all personnel and relevant sub-contractors through general and specific inductions, toolboxes and targeted training. No ground disturbing activities are to take place with the exception of the installation of marking posts.	Unlikely	Minor	**Low - 2D**		
Cultural Heritage - ALL	Training	Untrained personnel causing impact to Cultural Heritage	Risk	Possible	Minor	**Low - 2C**	All personnel to undertake Cultural Heritage Induction. The Cultural Heritage Induction is to cover the importance of Cultural Heritage and the types of Cultural Heritage likely to be found in the area as well as the stop works procedure if personnel suspect that they have uncovered Cultural Heritage items.	Unlikely	Minor	**Low - 2D**		
Aboriginal Cultural Heritage	Exclusion Area	Impact to Cultural Heritage area of significance.	Risk	Possible	Moderate	**Med - 3C**	The contractor must not destroy, modify or otherwise physically affect: AHIMS site 35-3-0207, 35-3-0206, 35-3-0208, 43-3-0111, 35-6-0062, 35-6-0063, 35-6-0065 If impacts to the sites cannot be avoided, the Contractor must provide for an appropriately qualified archaeological heritage consultant and registered Aboriginal stakeholder to record and collect any artefacts at the sites which will be affected by the construction, prior to the commencement of any works that will impact on the sites. The artefacts must be lodged in a keeping place and the safe keeping place identified in the Construction Heritage Management Plan.	Possible	Minor	**Low - 2C**		
	Unplanned discovery	Discovery of buried Cultural Heritage items and subsequent damage	Risk	Possible	Moderate	**Med - 3C**	In the event that unexpected archaeological remains, relics, or potential heritage items are discovered during construction, all works in the immediate area would cease, and the remains and potential items would be assessed by a qualified archaeologist or heritage consultant. If necessary, the Heritage Division of OEH would be notified in accordance with the requirements of section 146 of the Heritage Act 1977.	Possible	Minor	**Low - 2C**		
European Cultural Heritage	Exclusion Area	Impact to Cultural Heritage area of significance.	Risk	Possible	Moderate	**Med - 3C**	The contractor must implement measures to prevent vibration and direct impacts to Wyanga Cottage including: • Undertake dilapidation surveys both prior to and following nearby works that may impact on structural integrity of the cottage • Maintain a maximum separation distance between construction works and heavy vehicle haulage and cottage • Direct impacts to the cottage would be avoided by the installation of temporary fencing, and marking the cottage as a 'no go' area on construction plans	Possible	Minor	**Low - 2C**		
	Records	Records not kept appropriately and impact to legal requirements.	Risk	Possible	Moderate	**Med - 3C**	The Proponent must undertake Heritage Photographic Archival Recordings of potential heritage items associated with the existing rail line (including culverts/underbridges with timber components and former rail station sites) which have been identified for demolition. The photographic recording must be undertaken in accordance with ARTC's Archival Recording Standard.	Possible	Minor	**Low - 2C**		
	Exclusion Area	Damage to heritage structure	Risk	Possible	Moderate	**Med - 3C**	The management of potential vibration impacts at the cottage would be undertaken in accordance with the Inland Rail NSW Construction Noise and Vibration Management Framework.	Possible	Minor	**Low - 2C**		
	Discovery of human remains	Breach of legislation Delay to program	Risk	Unlikely	Major	**Med - 4D**	The Proponent must not to harm, modify, or otherwise impact human remains uncovered during the construction of the CSSI.	Unlikely	Moderate	**Low - 3D**		
	Clearing of vegetation outside approved areas	Breach of legislation Delay to program	Risk	Possible	Major	**High - 4C**	Identification, obtainment and implementation of any relevant approvals, licences and permits to handle and relocate fauna, as per relevant legislative requirements.	Possible	Moderate	**Med - 3C**		
	Clearing of vegetation outside approved areas	Breach of legislation Delay to program	Risk	Possible	Major	**High - 4C**	Impacts to plant community types must not exceed those identified in the EIS and as amended by the Addendum to the Inland Rail – Parkes to Narromine Biodiversity Assessment Report comprising vegetation mapping amendments and inclusion of temporary impacts (Umwelt, dated 12 April 2018).	Possible	Moderate	**Med - 3C**		
	Clearing of vegetation outside approved areas	Breach of legislation Delay to program	Risk	Possible	Major	**High - 4C**	Appropriate identification that the completion of the pre-clearing inspection will form a HOLD POINT requiring sign-off from the Environmental Manager (or delegate).	Possible	Moderate	**Med - 3C**		
	Clearing of vegetation inappropriately	Loss of habitat	Risk	Possible	Moderate	**Med - 3C**	The management of trees near the construction zone would be consistent with the AS 4970-2009 Protection of trees on development sites (incorporating Amendment No.1 (March 2010)).	Possible	Minor	**Low - 2C**		

Environmental Risk & Opportunities Register												
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Discipline	Description	Consequence	Potential Impact	Likelihood	Impact	Rating (1-25)	Treatment Plan	Likelihood	Impact	Rating (1-25)	Potential Cost/Savings	Comments
Flora	Clearing of vegetation without protection of habitat that can be retained	Loss of habitat	Risk	Possible	Moderate	Med - 3C	The likely habitat resources and habitat trees would be identified and marked (including fallen timber/hollow logs and burrows). Habitat trees are those containing hollows, cracks or fissures and spouts, active nests, dreys or other signs of recent fauna usage.	Possible	Minor	Low - 2C		
	Clearing of vegetation without protection of habitat that can be retained	Loss of habitat	Risk	Possible	Moderate	Med - 3C	The location of sensitive areas (e.g.) trees/vegetation to be retained) would be clearly identified on environmental control maps, which would be supplied to construction managers and workers.	Possible	Minor	Low - 2C		
	Clearing of vegetation without protection of habitat that can be retained	Loss of habitat	Risk	Possible	Moderate	Med - 3C	Any works associated with the CSSI must limit the clearing of native vegetation to the greatest extent practicable.	Possible	Minor	Low - 2C		
	Clearing of vegetation without protection of habitat that can be retained	Impact on retained vegetation	Risk	Possible	Moderate	Med - 3C	Implementation of appropriate barriers, signage, temporary protective fencing or flagging tape on the ground to identify 'no go' or 'no clearing/disturbance' areas, to avoid accidental clearing.	Possible	Minor	Low - 2C		
	Clearing of vegetation without protection of habitat that can be retained	Loss of habitat	Risk	Possible	Moderate	Med - 3C	Identified tree hollows should be salvaged and erected in suitable host trees. This is to be undertaken by a suitably qualified and experienced ecologist (as determined by the Environmental Manager or delegate). Ongoing maintenance of salvaged hollows within host tree should also be implemented.	Possible	Minor	Low - 2C		
	Stockpiling of material following clearing activities	Impact on retained vegetation	Risk	Possible	Moderate	Med - 3C	In order to protect retained vegetation, the location of spoil and stockpiles will be outside the drip line of trees in accordance with requirements of SWMP.	Possible	Minor	Low - 2C		
	Placement of ancillary areas and stockpiles	Damage to riparian vegetation	Risk	Possible	Moderate	Med - 3C	Compounds and stockpile sites would be located an appropriate distance from riparian vegetation to avoid impacts on aquatic habitat. This includes (for the Project Corridor) a minimum of 50 metres for type 2, classes 2 and 3 watercourses (Burrill Creek), and 10 to 50 metres for type 3, classes 2 to 4 watercourses (other watercourses).	Possible	Minor	Low - 2C		
	Works within watercourses	Damage to riparian vegetation	Risk	Possible	Moderate	Med - 3C	Works within watercourses should be not commence during periods of rain or high flow events and should be managed as per 'Fish Friendly Waterway Crossings, why do fish need to cross the road? Fish passage requirements for waterway crossings' (Fairfull and Witheridge, 2003).	Possible	Minor	Low - 2C		
Fauna	Clearing of vegetation	Death to EVNT fauna species	Risk	Possible	Major	High - 4C	Reporting of any death or injury of state or Commonwealth listed fauna species to applicable government departments	Possible	Moderate	Med - 3C		
	Clearing of vegetation	Loss of habitat	Risk	Possible	Major	High - 4C	The potential presence of threatened fauna species, endangered populations and TECs would be identified by the identification of individuals that are suitable for translocation.	Possible	Moderate	Med - 3C		
	Clearing of vegetation	Injury or death to EVNT fauna species	Risk	Possible	Major	High - 4C	Where appropriate, the tree will be nudged by the tree clearing contractor prior to felling and the Project Ecologist will complete another visual assessment. All habitat trees would be subject to a visual inspection for fauna species. All reasonable attempts would be made to reduce the impact of felling on all fauna species. The lowering of hollow-bearing trees would be undertaken to reduce the impact to faun.	Possible	Moderate	Med - 3C		
	Clearing of vegetation	Injury or death to EVNT fauna species	Risk	Possible	Major	High - 4C	If fauna species is identified in a habitat tree on the day of felling, an ecologist or appropriately qualified fauna handler would advise the most appropriate method to minimise potential harm based on site specific considerations	Possible	Moderate	Med - 3C		
	Clearing of vegetation	Impact to uninjured fauna	Risk	Possible	Major	High - 4C	Uninjured animals would be released on the day of capture into nearby suitable secure habitat and would not be held for extended periods of time.	Possible	Moderate	Med - 3C		
	Clearing of vegetation	Impact to injured fauna causing death	Risk	Possible	Major	High - 4C	Injured animals would be taken to the nearest veterinary clinic or wildlife carer as soon as possible for assessment and treatment	Possible	Moderate	Med - 3C		
	Clearing of vegetation	Impact to Koalas	Risk	Unlikely	Major	Med - 4D	Any tree in which a koala is present, and any tree with a crown overlapping that tree, is to be left standing until the koala has vacated of its own accord. Felling of trees must not occur if the tree is occupied by a koala.	Unlikely	Moderate	Low - 3D		
	Clearing of vegetation	Impact to fauna in felled vegetation	Risk	Possible	Moderate	Med - 3C	Following this period felled timber would be removed from site to prevent recolonization by fauna. If felled timber if left for extended periods of time it will be rechecked by the Project Ecologist to ensure that fauna harm is minimised.	Possible	Minor	Low - 2C		
	Earthworks	Impact to fauna	Risk	Possible	Moderate	Med - 3C	Open excavations to be minimised to reduce risk of fauna entrapment using barricading or fauna ramps. Open excavations will be visually inspected prior to commencement of each day's work for entrapped fauna. Any entrapped fauna to be removed and relocated be authorised fauna handler.	Possible	Minor	Low - 2C		
	Earthworks	Impact to fauna	Risk	Possible	Moderate	Med - 3C	Minimise haulage vehicle travel speeds and plan haulage for daylight hours avoiding dawn and dusk when fauna more active.	Possible	Minor	Low - 2C		

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Discipline	**Description**	**Consequence**	**Potential Impact**	**Likelihood**	**Impact**	**Rating (1-25)**	**Treatment Plan**	**Likelihood**	**Impact**	**Rating (1-25)**	**Potential Cost/Savings**	**Comments**
Pests and Weeds	Project commencement	Breach of legislation Delay to program	Risk	Unlikely	Moderate	**Low - 3D**	The Contractor to ensure that noxious weeds would be managed in accordance with the *Biosecurity Act 2015* and Weeds of National Environmental Significance (WoNS) are managed in accordance with the Weeds of National Significance Weed Management Guide.	Unlikely	Minor	**Low - 2D**		
	Training	Untrained personnel unable to identify weeds causing interaction with pest fauna and uninformed of significance of spread	Opportunity	Unlikely	Major	**Med - 4D**	Environmental personnel will be trained on the identification of target weed species.	Unlikely	Moderate	**Low - 3D**		
	Project commencement	Spread of weeds	Risk	Possible	Moderate	**Med - 3C**	Weed management is to be undertaken in areas affected by construction prior to any clearing works in accordance with the Biosecurity Act 2015 and associated regulations.	Possible	Minor	**Low - 2C**		
	Clearing of vegetation	Spread of weeds	Risk	Possible	Moderate	**Med - 3C**	The contractor must ensure that identified weeds are managed in accordance with relevant State and Commonwealth regulatory requirements. This can include but is not limited to: • Spraying with herbicides; • Physical removal e.g. chipping, and/or • Minimisation of area available for weed infestation, through prompt revegetation of bare areas.	Possible	Minor	**Low - 2C**		
	Earthworks	Spread of weeds	Risk	Possible	Moderate	**Med - 3C**	The contractor must ensure weeds removed during construction are treated and / or disposed of in accordance with relevant state and commonwealth regulatory requirements. This includes adhering to transport and final destination disposal requirements, inspections and documentation. This can include but is not limited to: • Removal to a licenced waste facility; • Burial on site (location and depth to be approved by the Environmental Manager) and / or • Stockpiled and treated with herbicide.	Possible	Minor	**Low - 2C**		
	Earthworks	Spread of weeds	Risk	Possible	Moderate	**Med - 3C**	Removal of identified weeds with propagules prone to dispersal by wind to be undertaken during low wind conditions and to be transported for offsite disposal under cover	Possible	Minor	**Low - 2C**		
	Vehicle, plant and equipment movement	Impact to project corridor by weed species	Risk	Possible	Moderate	**Med - 3C**	Vehicles or equipment being brought onto the project site to be involved in ground disturbance activities and/or travelling around the site must be inspected and cleaned prior to commencing work to limit the spread of seeds and plant material between sites	Possible	Minor	**Low - 2C**		
	Earthworks	Spread of pathogens	Risk	Possible	Moderate	**Med - 3C**	If pathogens have been identified on the site a Pathogen Management Procedure will be developed and implemented. This will include but is not limited to: • Exclusion zones using fencing and signage • Hygiene washdowns for plant, light vehicles and personnel • Toolbox training in relation to location of pathogen and requirements for personnel	Possible	Minor	**Low - 2C**		
	Earthworks	Use of soil control techniques to prevent the germination of weed seeds	Opportunity	Possible	Moderate	**Med - 3C**	The contractor may use erosion and sediment control techniques to assist with the management of removed vegetation and subsequent exposed subsoils and to prevent further weed outbreaks. This may include but is not limited to: • On steeper slopes (as determined by the Environmental Manager in relation to soil type, gradient and receiving environment) and the banks of waterways erosion control techniques such as jute matting or geotextile fabric will be used; and / or • Seeding of exposed areas and long term long-term stockpiles (timing to be determined by the Environmental Manager) with a sterile exotic grass to assist in reducing erosion.	Possible	Minor	**Low - 2C**		
	Works within watercourses	Impact to aquatic habitats by weeds and pests	Risk	Possible	Moderate	**Med - 3C**	To avoid and/or minimise loss of native fish within any pools, streams or waterways in the project area the contractor must implement a dewatering procedure prior to drainage works commencing that includes: • Methods for collection and relocation of native fish and euthanasia and disposal of pest species. • Appropriate transport and disposal of water/vegetation either onsite or offsite so as not to spread aquatic weed species.	Possible	Minor	**Low - 2C**		
	Works adjacent to agricultural lands	Impact to adjacent property	Risk	Possible	Moderate	**Med - 3C**	The contractor must consider the principles of an Integrated Pest and Weed Management Strategy (IPWMS) that prevents spread of weeds and pest throughout both the project area and into neighbouring properties (including agricultural land) for implementation during construction.	Possible	Minor	**Low - 2C**		

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	Minimise habitat and food source for pest fauna	Impact to native flora and fauna Impact to agriculture adjacent landholders	Risk	Possible	Moderate	**Med - 3C**	The contractor must ensure waste (particularly putrescible waste) is stored within appropriate pest and vermin proof receptacles within site compounds awaiting collection for offsite disposal. Waste (particularly putrescible waste) must be removed from the project site at regular intervals and disposed of appropriately offsite.	Possible	Minor	**Low - 2C**		
Erosion and Sediment Control	Project commencement	Damage to the environment from sediment movement and erosion due to untrained personnel	Opportunity	Unlikely	Moderate	**Low - 3D**	ESC training as per the training matrix in the CEMP including workshops and toolbox talks	Unlikely	Minor	**Low - 2D**		
	Earthworks	Damage to the environment from sediment movement and erosion	Risk	Possible	Major	**High - 4C**	Land-disturbing activities will be undertaken in a manner that allows all reasonable and practicable measures to be undertaken to: - Divert any clean water around the site through appropriate devices such as segregated and lined clean water diversion drains - Allow stormwater to pass through the site in a controlled manner and at non-erosive flow velocities up to the specified design storm discharge - Minimise soil erosion resulting from rain, water flow and/or wind. - Minimise adverse effects of sediment runoff - Prevent, or at least minimise, environmental harm resulting from work-related soil erosion and sediment runoff	Possible	Moderate	**Med - 3C**		
	Earthworks	Damage to the environment from sediment movement and erosion	Risk	Possible	Major	**High - 4C**	Installation of erosion and sediment control measures will conform to the standards and specifications contained in: - The approved PESCP and supporting documentation.	Possible	Moderate	**Med - 3C**		
	Earthworks	Damage to the environment from sediment movement and erosion	Risk	Possible	Major	**High - 4C**	Land clearing will be delayed as long as practicable and will be undertaken in conjunction with development if each stage of works, unless otherwise approved by the State's Representative. No land clearing will be undertaken unless preceded by the installation of adequate drainage and sediment control measures, unless such clearing is required to install such measures to occur. Prior to clearing, areas of protected vegetation, and significant areas of retained vegetation must be clearly identified for the purposes of minimising the risk of unnecessary land clearing.	Possible	Moderate	**Med - 3C**		
	Earthworks	Damage to the environment from sediment movement and erosion	Risk	Possible	Major	**High - 4C**	Bulk tree clearing will occur in a manner that minimises disturbance to existing ground cover (organic or inorganic). Bulk tree clearing and grubbing of the site will be immediately followed by specified temporary stabilisation measures (e.g. temporary grassing, or mulching) prior to commencement of each stage of construction works.	Possible	Moderate	**Med - 3C**		
	Earthworks	Damage to the environment from sediment movement and erosion	Risk	Possible	Major	**High - 4C**	All fill material placed on site will be free of contaminants and free draining	Possible	Moderate	**Med - 3C**		
	Earthworks	Damage to the environment from sediment movement and erosion	Risk	Possible	Major	**High - 4C**	Site spoil will be lawfully disposed of in a manner that does not result in ongoing soil erosion or environmental harm. Sediment removed from sediment traps and places of sediment deposition will be disposed of in a lawful manner that does not cause ongoing soil erosion or environmental harm. Construction stockpiles will not be stored in drainage lines or within 50m of any known Creek, tributaries or drainage lines. ESC devices to be maintained to a minimum of 75% capacity and inspected regularly, including following any rainfall event. Any devices that are at reduced capacity must be maintained, repaired and/or replaced as soon as is practicable. ESC devices to remain in place until at least 80% vegetation cover has been achieved across the project corridor.	Possible	Moderate	**Med - 3C**		
	Earthworks	Scour of the project corridor and subsequent erosion	Risk	Possible	Major	**High - 4C**	Dewatering of pooled stormwater and sediment basins to include scour protection from the outlet point and inlet protection to avoid intake of sediment	Possible	Moderate	**Med - 3C**		
	Earthworks	Exposure of soils during vegetation clearing and earthworks - potential for offsite transport of eroded sediments and pollution	Risk	Possible	Major	**High - 4C**	Scour of LCA and subsequent erosion	Possible	Moderate	**Med - 3C**		
	Earthworks	Mixing of topsoil and sub-soils and loss of soil properties	Risk	Possible	Major	**High - 4C**	Ensure topsoil, and sub-soils with same physical and chemical properties are stockpiled separately - clearly mark out stockpiles	Possible	Moderate	**Med - 3C**		
	Earthworks	Exposure of sodic soils to overland flow	Risk	Possible	Major	**High - 4C**	Treat sodic soils with appropriate remediation (e.g. lime) and stockpile separately	Possible	Moderate	**Med - 3C**		
	Earthworks	Slope movement of surface soil and induced erosion or instability of subsoils	Risk	Possible	Major	**High - 4C**	Temporary stabilisation with topsoil, sterile grasses, or geotextiles (where appropriate) on any batter or stockpile during the construction phase	Possible	Moderate	**Med - 3C**		

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	Earthworks	Exposure of soils potential for offsite transport of eroded sediments and pollution	Risk	Possible	Moderate	**Med - 3C**	Engage street sweepers to prevent sediment reaching stormwater systems and/or watercourse	Possible	Minor	**Low - 2C**		
	Earthworks	Exposure of soils potential for offsite transport of eroded sediments and pollution	Risk	Possible	Moderate	**Med - 3C**	Use of rumble grids and/or ballast rock at exit points	Possible	Minor	**Low - 2C**		
Flood	Emergency preparedness	Inability to deal with flood emergency events (i.e. failure to mitigate human injuries, damage to the environment and impacts to the works)	Risk	Possible	Moderate	**Med - 3C**	All site personnel will be trained for emergency response duties and the Flood Emergency Management Plan will be prepared and implemented. Ongoing monitoring of the BoM flood warning for updated information and expected flood levels.	Possible	Minor	**Low - 2C**		
	Flooding during extreme rainfall from adjacent waterways	Overland flows from adjacent rivers/creeks entering the worksite	Risk	Possible	Moderate	**Med - 3C**	Temporary levees or bunds can be used to contain potential flooding impacts from adajcent waterways where practicable.	Possible	Minor	**Low - 2C**		
	Direct heavy rainfall on worksites	Flooding of excavations and overtopping of sediment basins	Risk	Possible	Moderate	**Med - 3C**	Surface water collected in sedimentation basins during previous rain events will be dewatered to avoid overtopping of basins. Inspect all sedimentation devices and water storage	Possible	Minor	**Low - 2C**		
	Localised flow paths causing nuisance flooding on the worksitte	Restricted access to affected areas	Risk	Possible	Moderate	**Med - 3C**	Temporary levees or bunds, or diversion drains can be used around the flow paths to contain potential flooding impacts on the worksite.	Possible	Minor	**Low - 2C**		
	Alterations to in-stream flow arrangements	Increased afflux results in flooding impacts in upstream and sedimentation in downstream	Risk	Possible	Moderate	**Med - 3C**	Instream works will be designed to cope with flooding activity.	Possible	Minor	**Low - 2C**		
Noise and Vibration	Working hours	Negative impact to the social environment through excess noise and vibration	Risk	Unlikely	Minor	**Low - 2D**	Maintain standard work hours from Monday to Friday between 7 am and 6 pm; 8am to 4pm Saturday and no time Sundays or public holidays (unless approved by ARTC and/or conducting emergency work).	Unlikely	Not Significant	**Low - 1D**		
	Plant	Negative impact to the social environment through excess noise and vibration	Risk	Unlikely	Minor	**Low - 2D**	Maintain vehicles to minimise rattling and unnecessary noise. Ensure machinery isn't turned on outside of these hours. Turn off machinery when possible such as break times and periods of non-use. Keep horn signals between drivers to a minimum. Ensure equipment is operated in the correct manner including replacement of engine covers, repair of defective silencing equipment, tightening of rattling components, repair of leakages in compressed air lines and shutting down equipment not in use. Plant or machinery will not be switched on before the nominated work hours. Where possible maintenance work on construction plant will be undertaken away from noise sensitive receiver All plant will be switched off during long periods of machinery being not in use to minimise annoyance when working near sensitive receivers	Unlikely	Not Significant	**Low - 1D**		
	Equipment	Negative impact to the social environment through excess noise and vibration	Risk	Unlikely	Minor	**Low - 2D**	Where possible, noise generating equipment will be placed strategically to take advantage of natural screening from geographical features or other structures to reduce the transmission of noise between the work site and sensitive receivers	Unlikely	Not Significant	**Low - 1D**		
Air Quality	Earthworks	Negative impact to the social environment through dust	Risk	Possible	Minor	**Low - 2C**	Primary dust suppression method will be the application of water If required use of chemical additives to water, spray seal access tracks, gravel entry / exit points will be used. Where possible minimise disturbance to topsoil and grass cover. Check weather forecasts and restrict high risk activities during extreme weather events (strong winds, hot dry weather) to limit dust generation. Minimise the height from which soil is dropped when being excavated or moved.	Possible	Not Significant	**Low - 1C**		
	Earthworks	Decreased environmental quality and aesthetics through waste generation or discovery of buried waste and/or inappropriate disposal of wastes	Risk	Possible	Minor	**Low - 2C**	Waste generated must be removed off site by a licenced waste contractor to a licenced waste facility. Waste generated must not be left on site if the waste is not in a secure location (e.g. skip bin). If waste generated is able to become wind blow it must be located so as to avoid pollution (e.g. skip bin with a lid). If buried waste is discovered it must be assessed by the Environmental Team prior to action being taken on disposal methods. If buried waste is unable to be identified it will be tested by an AQP prior to disposal. If buried waste is unable to be identified the surrounding area will also be tested by an AQP to determine extent of contamination.	Possible	Not Significant	**Low - 1C**		
	Training	Decreased environmental quality and aesthetics through waste generation and/or inappropriate disposal of wastes	Risk	Possible	Minor	**Low - 2C**	Raise environmental awareness and ensure good housekeeping measures are employed. Reinforce/reiterate potential environmental impacts of poorly managed waste on the surrounding community	Possible	Not Significant	**Low - 1C**		
	Permits	Damage to underground entities - water main and / or sewerage	Risk	Possible	Minor	**Low - 2C**	Ensure all dial-before-you-dig assessments are made and all personnel are aware of existing utilities in daily prestart meetings.	Possible	Not Significant	**Low - 1C**		

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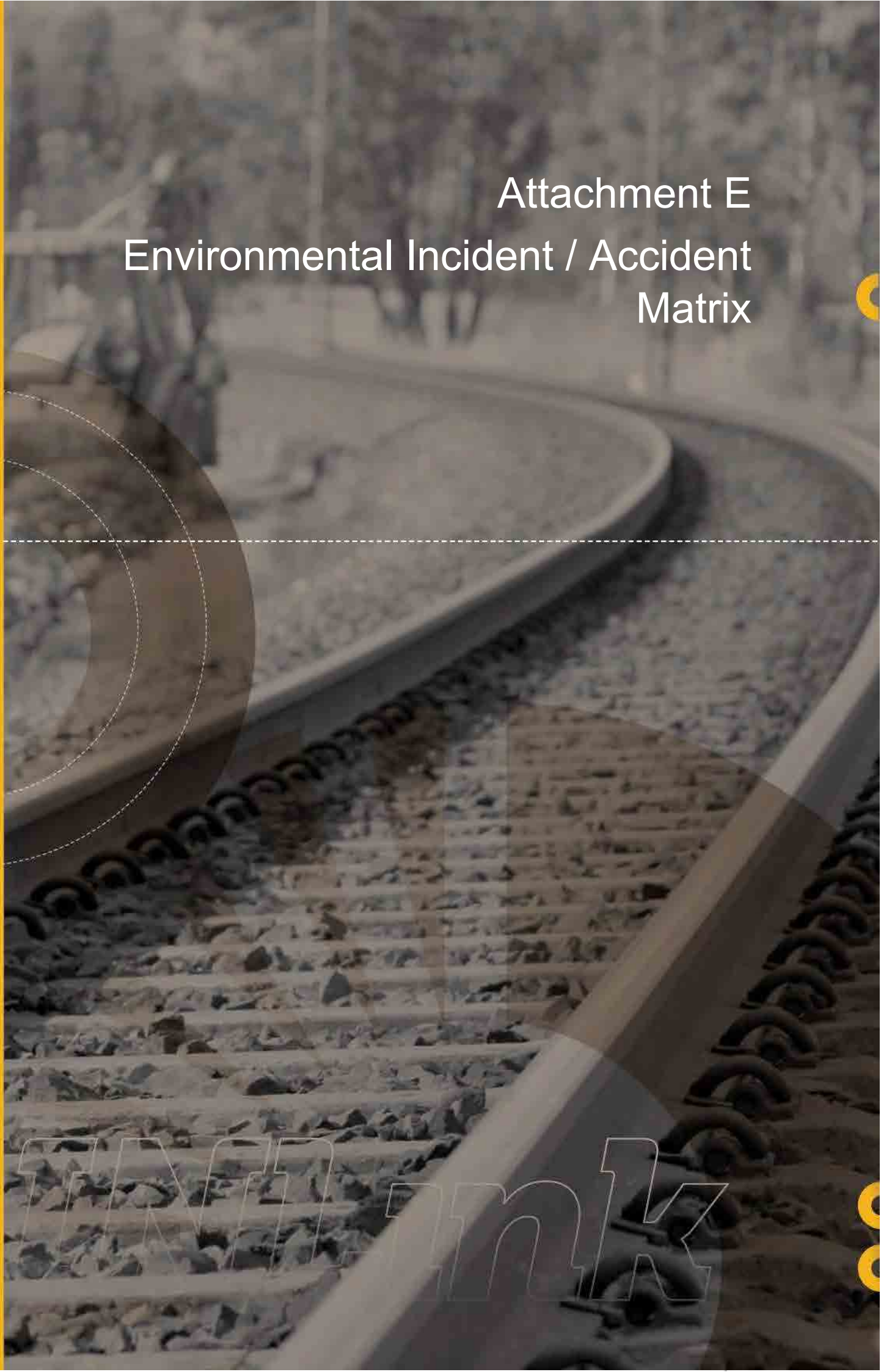
Waste	Earthworks	Contamination of the surrounding environment	Risk	Possible	Minor	**Low - 2C**	Cover all waste transported off site. If buried waste is discovered ensure that the material is identified and appropriately disposed. Chemicals, hydrocarbons and all other hazardous liquid waste will be disposed of at an approved facility. The relevant licences of waste facilities utilised for the disposal of project waste will be obtained to ensure they are legally able to accept that waste. All trucks transporting wastes off site will be appropriately licenced to carry the materials. All contractors are to be responsible for their own waste and remove everything off site.	Possible	Not Significant	**Low - 1C**		
	Earthworks	Direct negative impact to the environment through spills - Oil, hydraulic or other chemical spills	Risk	Possible	Moderate	**Med - 3C**	Inform personnel through General Site Induction and toolbox training types of spills that can occur and spill procedure, Ensure all machinery is maintained as per manufacturers guidelines to minimise potentials for spills.	Possible	Minor	**Low - 2C**		
	Permits	Damage to underground entities - water main and / or sewerage	Risk	Possible	Major	**High - 4C**	Ensure all dial-before-you-dig assessments are made and all personnel are aware of existing utilities in daily prestart meetings. Ensure all personnel are aware of procedure if utilities are adversely encountered. This will be undertaken through site specific training in conjunction with the Safety Team.	Possible	Moderate	**Med - 3C**		
Hazardous and Contaminated Materials	Training	Environmental harm caused by the exposure of contaminated land	Opportunity	Possible	Minor	**Low - 2C**	Toolbox talk in relation to contaminated land to include identification of contaminants through observation of staining, discolouration, odours, and construction/demolition wastes, asbestos and stop work procedure if any of the above identified. Potential contaminated land locations to be covered in General Site Induction including stop work / removal procedure.	Possible	Not Significant	**Low - 1C**		
	Project commencement	Environmental harm caused by the exposure of contaminated land	Risk	Possible	Major	**High - 4C**	Identify contaminated land pre-construction using the Contaminated Land Register (CLR) and Environmental Management Register (EMR).	Possible	Moderate	**Med - 3C**		
	Reuse of contaminated land	Environmental harm caused by the exposure of contaminated land	Risk	Possible	Moderate	**Med - 3C**	If contaminated land is reused it may be required to be treated prior to use using chemical amelioration to a level that is suitable for reuse. All contaminated land excavated and re-used will be tracked using a register.	Possible	Minor	**Low - 2C**		
	Treatment of contaminated land	Environmental harm caused by the exposure of contaminated land	Risk	Possible	Moderate	**Med - 3C**	Treated contaminated land may only be used on the original lot as fill, which must be covered with capping material.	Possible	Minor	**Low - 2C**		
	Stockpiling of contaminated land	Environmental harm caused by the exposure of contaminated land	Risk	Possible	Moderate	**Med - 3C**	Contaminated land stockpiles are to be placed on plastic lining and bunded using earth or similar to prevent leaching and runoff. Any build-up of water within contaminated land stockpile bunding must be tested (for parameters in which contamination occurs) and treated if required prior to dewatering.	Possible	Minor	**Low - 2C**		
	Disposal of contaminated land	Environmental harm caused by the exposure of contaminated land	Risk	Possible	Moderate	**Med - 3C**	Any contaminated land that is disposed of, off site or removed to another lot and plan requires a disposal permit from regulatory agency.	Possible	Minor	**Low - 2C**		
	Discovery of contaminated land	Environmental harm caused by the exposure of contaminated land	Risk	Possible	Moderate	**Med - 3C**	Site works to cease if any contaminated land is discovered until remedial actions are undertaken. The Environment Team to notify ARTC if/when contaminated land is discovered that was not previously assessed or known.	Possible	Minor	**Low - 2C**		
	Storage	Environmental harm caused by incorrect storage of chemical fuel or lubricants	Risk	Possible	Moderate	**Med - 3C**	Chemical, fuel and lubricant storage areas must be suitably located in a bunded, secure, protected area with an impermeable floor to minimise the impact of any spillage or contamination on the Site and adjoining areas. • The floor of bunds must be above the 1 in 20-year flood event and top of bunds must be above the 1 in 100-year flood event level. Storage areas will not be located within 50 metres of natural or built drainage lines, flood prone areas, or on slopes steeper than 1:10.	Possible	Minor	**Low - 2C**		
	Planning	Environmental harm caused by incorrect storage of chemical fuel or lubricants	Risk	Possible	Major	**High - 4C**	The location of utilities, services and other infrastructure would be identified prior to construction to determine requirements for access to, diversion, protection and/or support.	Possible	Moderate	**Med - 3C**		
	Transportation and storage	Environmental harm caused by incorrect storage of chemical fuel or lubricants	Risk	Possible	Moderate	**Med - 3C**	Hazardous materials will be transported, stored and used as per their SDS's.	Possible	Minor	**Low - 2C**		
	Storage	Environmental harm caused by incorrect storage of chemical fuel or lubricants	Risk	Possible	Moderate	**Med - 3C**	Hazardous materials and dangerous goods would be stored, handled, and transported in accordance with relevant regulatory requirements and relevant Australian Standards, including SEPP 33 thresholds. This would include a requirement to provide a minimum bund volume of 110% of the largest single stored volume within the bund.	Possible	Minor	**Low - 2C**		

Environmental Risk & Opportunities Register												
Risk Identification				**Initial Risk Rating**			**Treatment Plan to Mitigate Risk**	**Risk Rating After Mitigation**			**Residual Risk Allowance**	
Discipline	**Description**	**Consequence**	**Potential Impact**	**Likelihood**	**Impact**	**Rating (1-25)**	**Treatment Plan**	**Likelihood**	**Impact**	**Rating (1-25)**	**Potential Cost/Savings**	**Comments**
	Plant and equipment	Environmental harm caused by incorrect storage of chemical fuel or lubricants	Risk	Possible	Moderate	**Med - 3C**	Where refuelling on site is required, the following management practices will be implemented: • Designated refuelling point; and • At least 50m from waterways, drainage lines and sensitive areas; Where this is not practical additional spill containment measures will be implemented.	Possible	Minor	**Low - 2C**		
	Plant and equipment	Environmental harm caused by incorrect storage of chemical fuel or lubricants	Risk	Possible	Minor	**Low - 2C**	General servicing of vehicles and equipment shall not be undertaken on the work site.	Possible	Not Significant	**Low - 1C**		
	Plant and equipment	Environmental harm caused by incorrect storage of chemical fuel or lubricants	Risk	Possible	Minor	**Low - 2C**	Inspect all plant and equipment daily for leakages of fuel, oil or hydraulic fluid. Repair any leaks before using plant or equipment. Maintain records of Plant inspections.	Possible	Not Significant	**Low - 1C**		
	Emergency equipment	Environmental harm caused by incorrect storage of chemical fuel or lubricants	Risk	Possible	Minor	**Low - 2C**	An emergency spill kit shall be kept on site at all times. All staff shall be made aware of the location of the spill kit and trained in its use. If a spill occurs, the Pollution Incident Response Management Plan and Emergency Response Plan is to be followed and Project Manager notified immediately.	Possible	Not Significant	**Low - 1C**		
Traffic Transport and Access Management	Impact to local road users	Environmental nuisance and safety implications from incorrect traffic management strategies	Risk	Possible	Moderate	**Med - 3C**	Traffic control procedures including development and implementation of traffic control plans; temporary speed limit requirements and temporary road closures and detours to be implemented.	Possible	Minor	**Low - 2C**		

Likelihood	**Impact**					**Consequence**						
	Not Significant	**Minor**	**Moderate**	**Major**	**Extreme**	**Risk Category**		**Not Significant**	**Minor**	**Moderate**	**Major**	**Extreme**
Almost Certain	**Med - 1A**	**Med - 2A**	**High - 3A**	**VHigh - 4A**	**VHigh - 5A**	**Safety**	Safety Category is focused on impact to people	No Medical Treatment Required	Lost Time Injury Results (LTI) or Medical Treatment Required	Serious Injury Occurs	Single Fatality Occurs	Multiple but Localised Fatalities Occur
Likely	**Low - 1B**	**Med - 2B**	**High - 3B**	**VHigh - 4B**	**VHigh - 5B**	**Assets**	Asset category	Up to 6hrs Track Closure Minor impact on a programme/ project objective	>6hrs to 24hrs Track Closure Minor impact on more than one programme/project objective	>24hrs to 48hrs Track Closure Significant impact on a programme/ project objective	>48hrs to 5 Days Track Closure Severe impact on a programme/ project objective or significant impact on more than one objective	>5 Days Track Closure Severe impact on more than one programme/project objective
Possible	**Low - 1C**	**Low - 2C**	**Med - 3C**	**High - 4C**	**High - 5C**	**Financial**	$10,0000 minimum	Minor cost impact, that is able to be absorbed within existing project budget	Minor cost impact to project budget*	Moderate cost impact to project budget*	Major cost impact to project budget*	Significant cost impact to project budget*
Unlikely	**Low - 1D**	**Low - 2D**	**Low - 3D**	**Med - 4D**	**Med - 5D**	**Environment**	$20,000 minimum	Contained Environmental Damage - fully recoverable (no cost or ARTC action required)	Isolated Environmental Damage - minimal ARTC remediation required	Localised/Clustered Environmental Damage - requiring remediation	Considerable Environmental damage - requiring remediation	Widespread long term or permanent damage to the environment - remediation required
Rate	**Low - 1E**	**Low - 2E**	**Low - 3E**	**Low - 4E**	**Med - 5E**	**Regulatory**	Up to $20,000	Minimal or no Regulatory involvement	Notice to Produce Information	Improvement Notice or Threatened Action	Prohibition Notice or Fine/s	Prosecution of the company and/or its office holders
						Reputation	Up to $20,000	Isolated event able to be overcome	Management intervention	Tactical (Business Unit / Division)	Strategic intervention	Corporate Loss of Shareholder and/or Customer support
						Schedule	Up to $20,000	Schedule milestone exceeded with no	Schedule milestone exceeded with	Schedule milestone exceeded with	Schedule milestone	Schedule milestone exceed with Severe impact on business objectives &/or cost*

Likelihood		
Descriptor	**Description**	**Frequency of Occurrence**
Almost Certain	Is expected to occur in most circumstances	Once a Month
Likely	Will probably occur in most circumstances	Between once a month and once a year
Possible	Might occur at some time	Between once a year to once every 5 years
Unlikely	Could occur at some time	Between once in 5 years and once in 20 years
Rare	May occur in exceptional circumstances	Once in more than 20 years

Attachment E
Environmental Incident / Accident Matrix

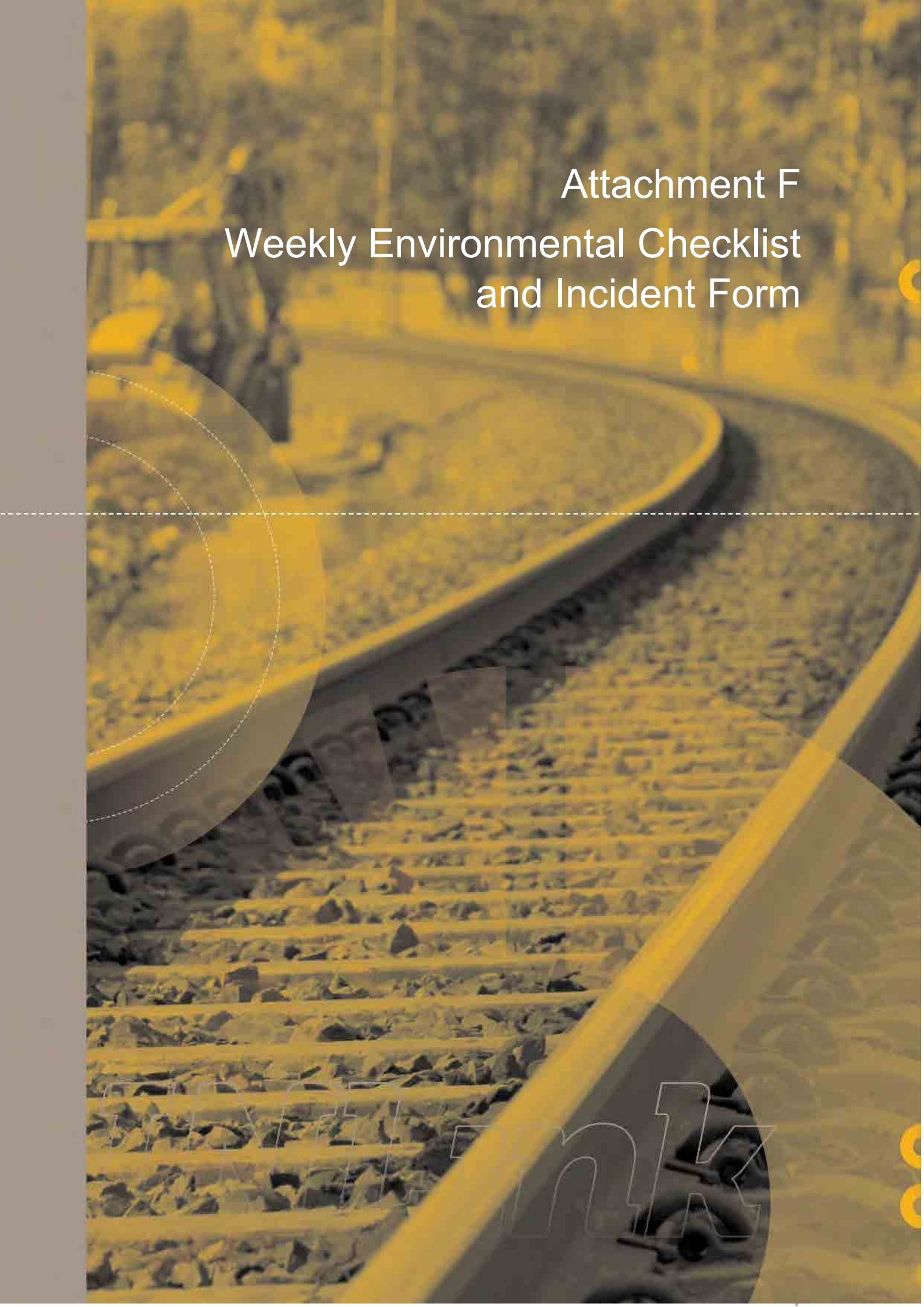


ARTC

ARTC EVENT SEVERITY MATRIX

	Actual or Potential Impact				
Safety: Impact to people	Injury or illness with no impairment (may or may not require treatment)	Injury or illness with short-term impairment (less than 1 month)	Injury or illness with moderate but recoverable impairment (more than 1 month but less than 6 months)	Injury or illness with long term (more than 6 months) to permanent impairment	One or more fatalities
Assets: Impact to network performance	Immaterial disruption to non-critical track section	Material disruption to non-critical track section or Immaterial disruption to critical track section	Material disruption to a critical track section recoverable in the short-term	Material disruption to critical track section not recoverable in the short term	Material disruption to critical track section not recoverable in the short term with significant long-term impacts on customers
Assets: Impact to organisational capability	Manageable impact to internal operations, which may or may not require internal reallocation of existing resources	Missing short-term targets which may or may not require use of additional resources	Reduced ability to achieve business goals with some business impact	Material failure to achieve business goal(s) with significant business impact	Failure to achieve business goals with lasting impacts
Environment: Impact to environmental factors	Minimal environmental impact	Limited and recoverable environmental impact	Significant and recoverable environmental impact	Permanent impact to area of less than high environmental significance	Permanent impact to area of high environmental significance
Financial: Impact of this event in terms of a total cost estimation	<250k loss or damage	$250K to $2M loss or damage	$2M to $5M loss or damage	$5M to $10M loss or damage	>$10M loss or damage

		Not Significant	Minor	Moderate	Major	Extreme
Status of Controls	**EVENT HAS OCCURRED**	**Level 4 Negligible**	**Level 3 Minor**	**Level 2 Major**	**Level 1 Significant**	**Level 1 Significant**
Not in place and will allow escalation to the potential outcome	**Likely**	4	3	2	1	1
Partially in place and may allow escalation to the potential outcome	**Possible**	4	3	3	2	1
Mostly in place and unlikely to allow escalation to the potential outcome	**Unlikely**	4	4	3	2	2
Fully maintained and only under exceptional circumstances allow escalation to the potential outcome	**Rare**	4	4	4	3	2



Attachment F
Weekly Environmental Checklist and Incident Form

Environment & Sustainability Site Inspection

Governing Management Plan or Procedure:	Inland Rail Programme Environmental Management Plan (0-0000-900-EEC-00-PL-0001)

TEMPLATE NO.	IR-ENV-001
REGION	NSW
PROJECT	Inland Rail Parkes to Narromine
AREA/STAGE	
CONDUCTED ON	
PREPARED BY	

Inspection Team

Question	Response/Details
Inspection Team	
Primary Inspector Name, Position & Company	
Additional members of Inspection Team	

Inspection Details

Question	Response/Details
Inspection Details	
Contractor	
Current Works/Activities	
Approvals in Place	
Weather	
Rain	
Inspection Location	

Environment & Sustainability Inspection

Question	Response	Details
1.0 – Documentation/Records		
1.1 – Required documents, permits/approvals in place?		
1.2 – Relevant inductions completed?		
Comments:		
Add Photo		
2.0 – Site Office and Amenities		
2.1 – Are offices and amenities correctly located?		
2.2 – Appropriate pedestrian/road access and signage?		
Comments:		
Add Photo		
3.0 – Air, Noise and Visual Quality		
3.1 – Are dust controls in place and effective?		
3.2 – Are appropriate exhausts, mufflers and baffles in place on all equipment/machinery?		
3.3 – Is equipment/machinery left idling or running unnecessarily?		
3.4 – Are noise, vibration and lighting controls in place and effective?		
3.5 – Are works occurring within permissible/approved hours?		
3.6 – Have measures been installed to ensure that there is no light spill/pollution occurring during night works or traffic control activities or at site compounds?		
Comments:		
Add Photo		
4.0 – Erosion and Sediment		
4.1 – Is there an up to date approved plan in place?		
4.2 – Have controls been correctly installed and as per the plan?		
4.3 - Are any erosion or erosion risks apparent?		
4.4 – Has soil or spoil been stockpiled correctly?		
4.5 – Has site dewatering been undertaken compliantly?		
Comments:		
Add Photo		

Question	Response	Details
5.0 – Water Quality & Watercourse Protection		
5.1 – Are waterway crossings installed correctly, as per site drawings and compliance requirements?		
5.2 – Are waterways free of contaminants?		
5.3 – Are concrete washout pits lined, signed & established away from watercourses?		
5.4 – Are water extraction/source locations installed, maintained and operated correctly?		
Comments:		
Add Photo		
6.0 – Land & Water Contamination		
6.1 – Are hazardous materials, chemicals and fuel stored and located correctly, with appropriate spill kits available and stocked correctly?		
6.2 – Is appropriate bunding in place and maintained/operated correctly?		
Comments:		
Add Photo		
7.0 – Waste		
7.1 – Is waste correctly stored, including correct containers, signage, location and any required bunding, including good housekeeping?		
7.2 – Are correct waste disposal records in place and complete?		
7.3 – Is waste handled, transported and disposed of by required legislative requirements (i.e. licensed and approved contractors)?		
Comments:		
Add Photo		
8.0 – Indigenous and Non-Indigenous Cultural Heritage		
8.1 – Are appropriate barriers, protection and signage in place for all Cultural heritage items?		
8.2 – Are appropriate clearances in place?		
Comments:		
Add Photo		
9.0 – Flora and Fauna		
9.1 – Are appropriate barriers, protection and signage in place for all protected areas?		
9.2 – Are appropriate clearances/approvals for disturbances?		

Question	Response	Details
9.3 - Are required fauna controls, including fauna spotter, in place for disturbance works?		
9.4 – Are appropriate pest plant/animal controls in place?		
Comments:		
Add Photo		
10.0 – Social & Sustainability		
10.1 – Are appropriate sustainability initiatives in place (i.e. renewables, solar power, reuse of materials, recycling strategies, reuse of water)?		
10.2 – Are appropriate site signage and activity progress/updates in place?		
10.3 – Are complaints/community enquiry process/records being followed?		
10.4 – Are there any access constraints or other potential impact to local businesses because of associated IR activities?		
Comments		
Add Photo		
11.0 – Greenhouse Gas Management		
11.1 – Is mobile and stationary plant/equipment regularly maintained and with evidence of maintenance schedule in place?		
11.2 – Is any mobile and stationary plant/equipment showing visual signs of excessive smoke or emissions?		
Comments		
Add Photo		

Overall Performance

Question	Response/Details
Overall Assessment	
General Notes	
Add Drawing/Sketch	
Add Photo	

DOCUMENT STATUS

Rev #	Date Approved for Use	Prepared by	Endorsed (Reviewed by related functional areas and SCG/SWG - If the document is cross-functional.)	Approved by Functional Manager
0	12/12/2018	**Position:** EMS Advisor **Name:** Jason Ellerby	**Position:** EMS Advisor	**Position:** Programme Environment Manager
			Name: Matthew Barrett	**Name:** Sarah Connelly
			Signature:	**Signature:**

Due for revision on 12 December 2019 or as required.

EVENT SUMMARY REPORT

Reference Number	#	
EVENT DETAILS		
Relates To	☐ WHS ☐ Environment ☐ Rail Safety	
Type	☐ Hazard ☐ Near Miss ☐ Improvement ☐ Incident	
Date and Time	Click here to enter a date.	
Location and Kilometres		.

EVENT DESCRIPTION AND ACTIONS TAKEN	
Description (include relevant images)	
Immediate Actions/ Controls Taken/ Solutions Identified	
Fatal and Severe Risk	Choose an item.
Reported By	
Team/Project	

CORRECTIVE ACTIONS (*do not include immediate actions or controls listed above*)

	Action	By Who	By When
1			Click to enter date
2			Click to enter date
3			Click to enter date

Confirm Notifications Completed (where required)	
Network Control (for TCR)	☐ N/A ☐ Yes #
Injury (Injury Hotline Ref # / Employer Notification)	☐ N/A ☐ Yes #
External (eg. Environment, WHS)	☐ N/A ☐ Yes #

INITIAL CLASSIFICATION		
Event Severity	Actual	☐ Significant (1) ☐ Major (2) ☐ Minor (3) ☐ Negligible (4)
	Potential	☐ Significant (1) ☐ Major (2) ☐ Minor (3) ☐ Negligible (4)
Classification		☐ Employee ☐ Contractor
Injury Classification		☐ Lost Time Injury ☐ Medically Treated Injury ☐ First Aid Injury ☐ Report
Environmental Non-Conformance Type		☐ EAI/ EMP ☐ Licence/ Permit ☐ Policy/ Procedure ☐ Regulation

EVENT SUMMARY REPORT

Leader Approval		Signature	
Team/ Project		Position	
Date and Time	Click here to enter a date.		
Is Investigation Commencing	☐ Yes *(Event Severity 1, 2 and 3 - Incident & Near Miss **Only**)*	☐ Nil Required *(Event Severity 4 and Hazards)*	

ONCE COMPLETED
Submit Completed Forms, including any attachments (photos, documents) to: (Hunter Level 1/2/3) internalincidentalerts@artc.com.au (Hunter Level 4) hv-sct@artc.com.au (Inland) inlandrailsafetyteam@artc.com.au; (Interstate) hazard@artc.com.au; (Other) safetymatters@artc.com.au

INVESTIGATION REPORT

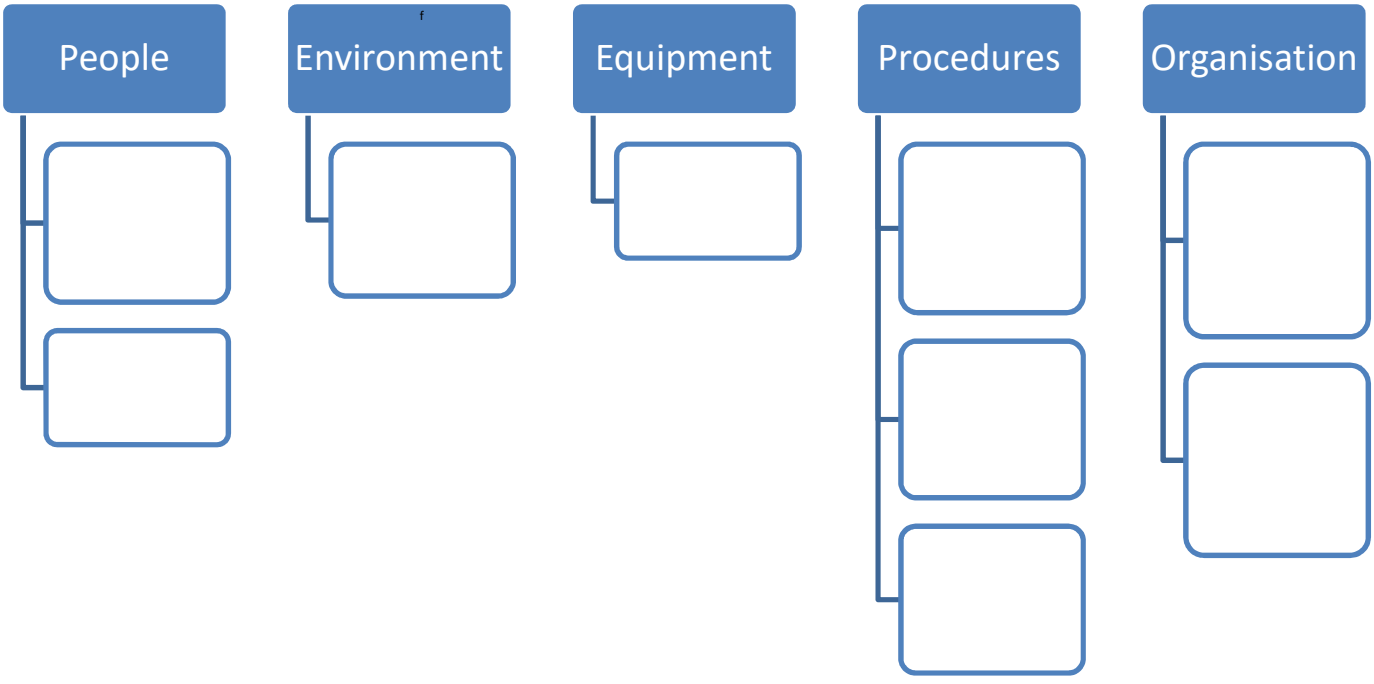
Report Reference Number: (TCR/ Injury Hotline/ EHS)		Incident Date:	Click here to enter a date.
Location and Kilometres			
Description of Event (include description from Part A of this event, updated if considered needed after investigation)			

CONFIRMED EVENT OUTCOMES			
Was a person injured	☐ Yes ☐ No		
Body location	Select Body Location of Injury		
Nature of injury	Select Nature of Injury		
Mechanism of injury	Select Mechanism of Injury		
Breakdown agency	Select Breakdown Agency		
Injury classification	☐ Lost Time Injury ☐ Medically Treated Injury ☐ First Aid ☐ Other		
Relationship to ARTC	☐ Employee ☐ Contractor ☐ Subcontractor ☐ Other		
List if other			
Were assets damaged	☐ Yes ☐ No	Asset Owner	☐ ARTC ☐ Third Party
Damage costs to asset/s			
Was the environment impacted	☐ Yes ☐ No (if yes, please provide details below)		
Environmental type	☐ Air Pollution ☐ Land Pollution ☐ Noise Pollution ☐ Water Pollution ☐ Vegetation damage ☐ Heritage Item ☐ Illegal/Incorrect Waste Disposal ☐ Other		
If other, please describe			
Quantity of spill			
Details of pollutants involved			
Is the event an environmental non-conformance	☐ Yes ☐ No		
Environmental non-conformance type	☐ EIA/ EMP ☐ Licence/ Permit ☐ Policy/ Procedure ☐ Regulation		
Details of environmental non-conformance (if applicable)			

EVENT TIMELINE	
Date / Time	What happened?

INVESTIGATION REPORT

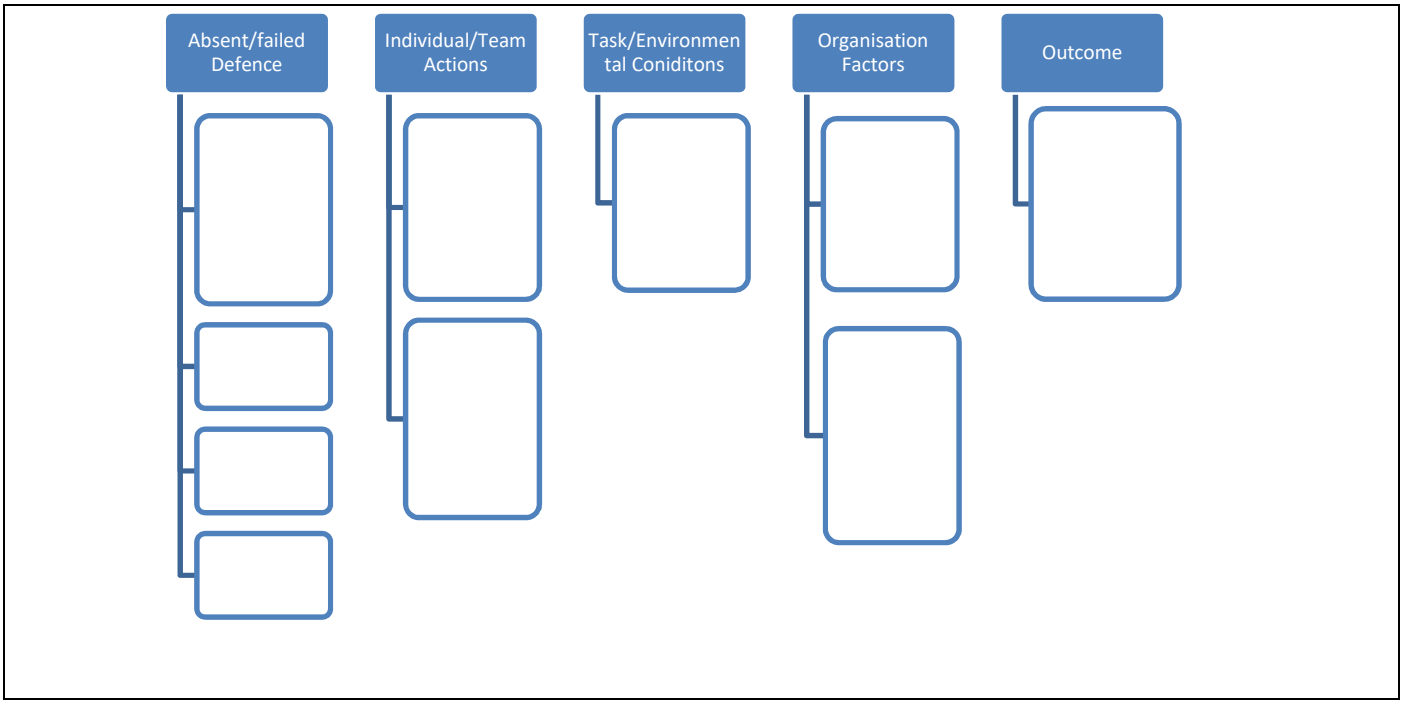
EVENT ANALYSIS (PEEPO)



Basic Root Cause		Confirmed Event Severity	3
ICAM Analysis	Taxonomy	Description	
Absent/ Failed defences	Awareness - Supervision		
Individual/ Team actions	Supervisory Error		
	Procedural Compliance		
	Procedural Compliance		

INVESTIGATION REPORT

	Operating Error	
Task/ Environmental conditions	Hazard Analysis / Job Safety Analysis / Take 5	
Organisational factors	Procedures	
	Procedures	



Key Lessons: (summary of lessons from this incident)
Supportive evidence: (provide any relevant documents, including photos to support this investigation)

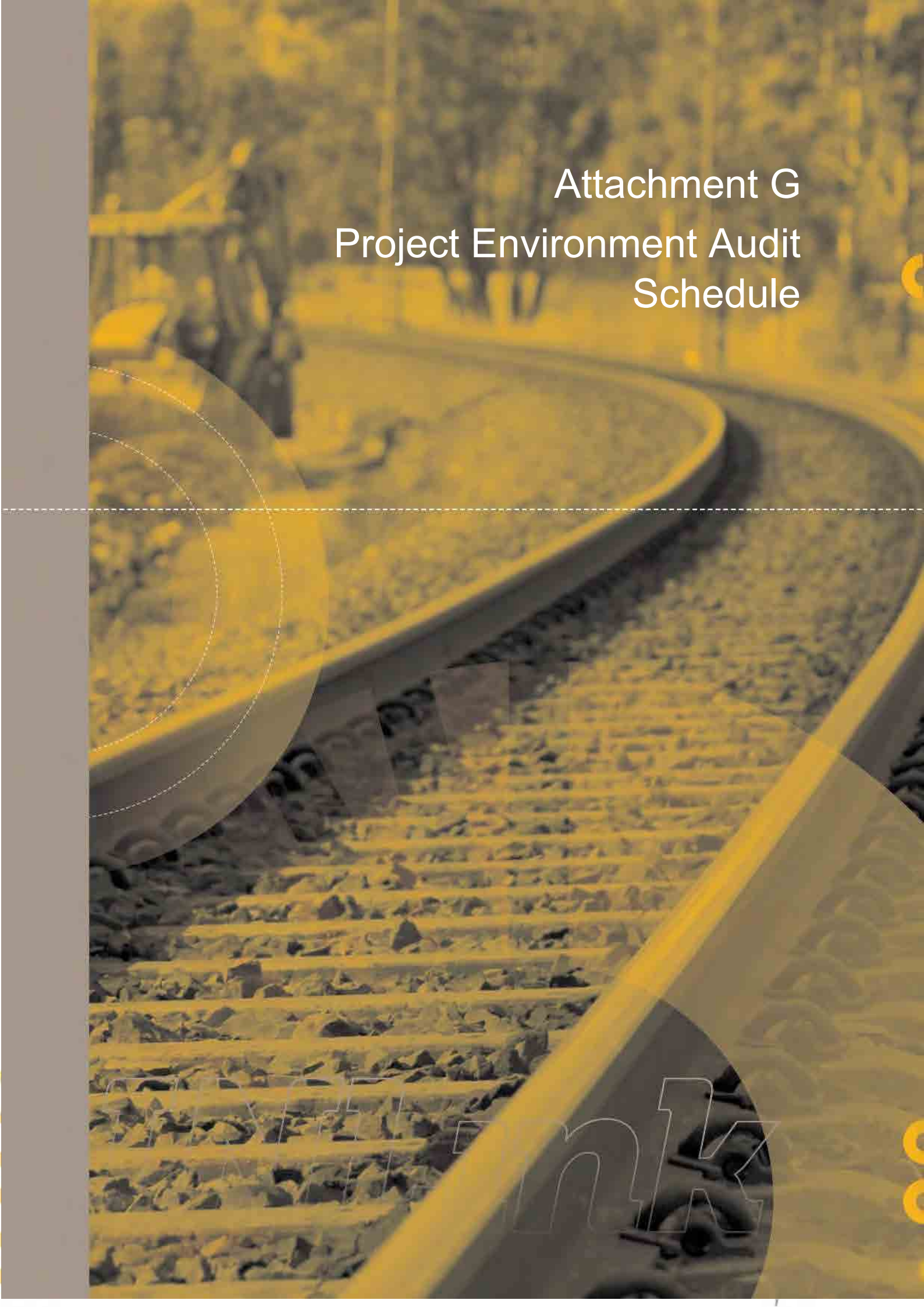
CORRECTIVE ACTIONS					
Corrective Action		**Hierarchy of Control**	**Accept/ Reject** (reasoning if rejected)	**Name of Person Responsible**	**Due Date**
1.		e. Administration	Accept/ Reject	Gerard O'Connor	10/04/2019
2.		e. Administration	Accept/ Reject		

INVESTIGATION RECOMMENDATION APPROVAL

INVESTIGATION REPORT

Investigation Team			
Lead Investigator Name		Position	
Signature		Date	
Approval Authority Name	Gerard O'Connor	Position	Project Director
Signature		Date	Click to enter date.
Are Lessons Learnt to be shared?	☐ Yes ☒ No (If yes, please complete Part C)		

ONCE COMPLETE
Send completed forms to: (Hunter) hv-sct@artc.com.au; (Inland) inlandrailsafetyteam@artc.com.au; (Interstate) hazard@artc.com.au; (Other) safetymatters@artc.com.au

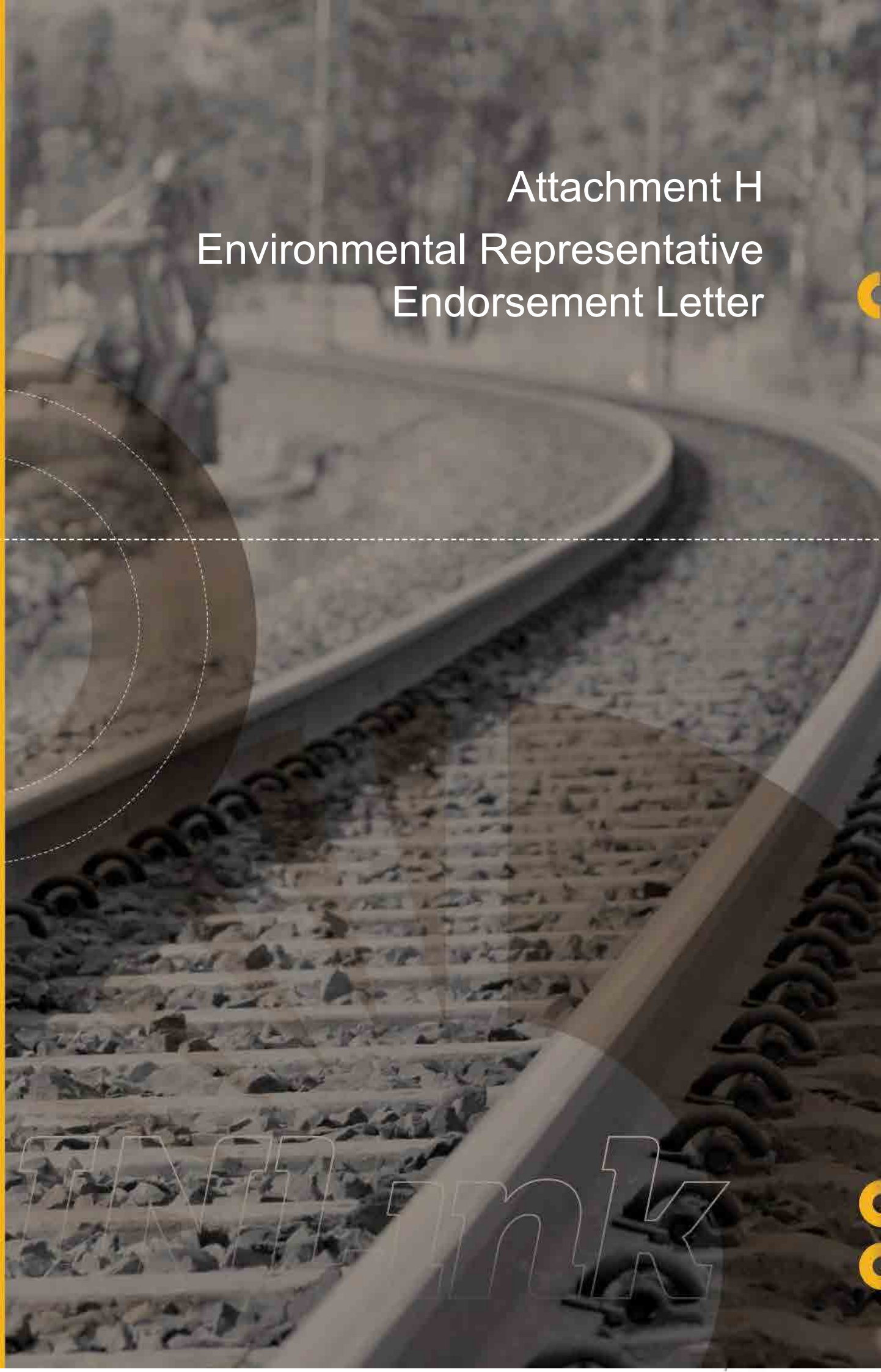


Attachment G
Project Environment Audit Schedule

Project Environment Audit Schedule

System Elements	Time from commencement of construction (months)											
	1	2	3	4	5	6	7	8	9	10	11	12
Environmental Policy						✓						✓
Environmental Risk Management						✓						✓
Legislative & Regulatory Requirements						✓						✓
Environmental Objectives & Targets						✓						✓
Roles & Responsibilities						✓						✓
Training & Awareness						✓						✓
Communication						✓						✓
Document Control & Records Management						✓						✓
CEMP Document Review						✓						✓
CEMP Sub-Plan Document Review						✓						✓
CEMP Approval Conditions	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CEMP Sub-Plan Approval Conditions	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Plans & Procedures						✓						✓
Incidents & Emergency Preparedness						✓						✓
Monitoring & Measurement						✓						✓
Audits						✓						✓
Non-compliance						✓						✓
PLANNED ✓			**Authorised By:**				**Project Manager**					
COMPLETED ●			**Date:**									

Attachment H
Environmental Representative Endorsement Letter



Roisin Feeney
Senior Environment Advisor – Parkes to Narromine Project
Inland Rail, ARTC
Level 16, 180 Ann Street
Brisbane QLD 4000
RFeeney@artc.com.au

WolfPeak Pty Ltd
Suite 2 | Level 10
189 Kent Street
Sydney 2000

Inland Rail - Parkes to Narromine (SSI 7475)

ER approval of minor revisions to CEMP & Sub Plans

Dear Roisin,

Condition of Approval (CoA) A19 (j) provides the Environmental Representative (ER) with the authority to approve minor amendments to the Construction Environmental Management Plan (CEMP) and its sub plans prepared under Conditions C1 & C2 (CEMP), and C4 (sub plans) of the Project Approval (SSI 7475) for the Parkes to Narromine Inland Rail Project.

I have reviewed the changes in the following revisions to the CEMP and sub plans and consider that they are minor amendments of an updating or administrative nature and are consistent with the CoA and versions of the CEMP and sub plans approved by the Secretary of the Department of Planning, Infrastructure and Environment.

Therefore, in accordance with the provisions of CoA A19 (j), I approve the following revisions to the CEMP and sub plans:

- CEMP, Revision 4, 28 January 2020;
- Waste Management Plan, Revision 3, 10 January 2020;
- Heritage Management Plan, Revision 3, 9 January 2020;
- Hazardous and Contaminated Materials Management Plan, Revision 2, 2 December 2019;
- Flora and Fauna Management Plan, Revision 5, 6 February 2020;
- Primary Erosion and Sediment Control Plan, Revision 2, 16 November 2019;
- Landscape and Visual Amenity Management Plan, Revision 3, 9 January 2020; and
- Flood Emergency Management Plan, Revision 1, 30 September 2019.

Should you have any queries or require further information please do not hesitate to contact me on 0417 170 645 or at sfermio@wolfpeak.com.au

Yours sincerely,

Steve Fermio
Environmental Representative – Parkes to Narromine Project
25 February 2020

Stacy Warren, Director Infrastructure Management
Department of Planning and Environment
Level 29, 320 Pitt Street
GPO Box 39
Sydney NSW 2001

WolfPeak Pty Ltd
Suite 2, Level 10
189 Kent Street
Sydney, NSW 2000

Dear Stacy,

Re: Inland Rail - Parkes to Narromine (SSI 7475) Conditions A19(d) and C3

On 7 June 2018, the Minister for Planning approved the Inland Rail – Parkes to Narromine Project (SSI 7475) (the Project) subject to a set of Conditions of Approval (CoA).

The proponent, Australian Rail Track Corporation (ARTC), has commissioned the development of a Construction Environmental Management Plan (CEMP) for the Project in accordance with CoA C1 and C2.

CoA A19(d) requires that I review the CEMP to ensure it is consistent with requirements of the CoA and, if so, make a written statement to this effect before its submission to the Secretary for approval. CoA C3 requires that the CEMP be endorsed by the ER and then submitted to the Secretary for approval.

I have reviewed the *Construction Environmental Management Plan - Parkes to Narromine Inland Rail Project # 808 – J013* (ARTC Document Number – 5-0012-240-EEC-00-PJ-0003_F (01/11/18)). The review is presented in Appendix A.

I am satisfied that the CEMP is consistent with the applicable requirements of the CoA and, as such, provide my endorsement of the document.

Please do not hesitate to contact me on 0402 403 716 should you require any further information.

Yours sincerely,

Derek Low
Environmental Representative – Parkes to Narromine Project
02 November 2018
Attachments

A. Review of CEMP

wolfpeak

Attachment A

ER endorsement review – CoA C1 and C2 Construction Environmental Management Plan - ARTC Document Number – 5-0012-240-EEC-00-PJ-0003 (RevD 16/10/18, RevE 26/10/18, RevF 01/11/18)

Item	Condition number and requirement.	ER Comment	Proponent Response 26/10/18	ER Assessment 30/10/18	Proponent Response 01/11/2018	ER Assessment
1	CoA C1. A Construction Environmental Management Plan (CEMP) must be prepared in accordance with the Department's Guideline for the Preparation of Environmental Management Plans (DIPNR, 2004) to detail how the performance outcomes, commitments and mitigation measures specified in the documents listed in the EIS and Submissions Report will be implemented and achieved during all stages of construction.	ARTC commissioned the preparation of a CEMP. The review against relevant CoA requirements is provided in items 1 – 14. The review against the elements set out in Guideline for the Preparation of Environmental Management Plans (DIPNR 2004) is provided in items 15 – 33.	-	-	-	-
2	CoA C2 The CEMP must provide:	-	-	-	-	-

Item	Condition number and requirement.	ER Comment	Proponent Response 26/10/18	ER Assessment 30/10/18	Proponent Response 01/11/2018	ER Assessment
3	CoA C2(a) a description of activities to be undertaken during construction (including the indicative scheduling of construction, and details on the layout and activities to be undertaken at each major construction ancillary facility)	A description of the activities to be undertaken is presented in Section 1.5. Information on the types of works and schedule is included. There is insufficient information on major construction ancillary facilities. A summary needs to be provided in order to meet the condition. It is recommended that a figure be provided showing sufficient detail for the reader to understand the location of the project and the major construction ancillary facilities.	26/10/2018 Section 1.5: Details on Major Construction Ancillary Facility added including map.	Adequate. Note that the Compliance Matrix refers to this section as Section 1.4 and is incorrect.		
4	CoA C2(b) details of environmental policies, guidelines and principles to be followed in the construction of the CSSI	The CEMP adequately details this information. The Project Environmental Policy is described in Section 1.4 and included in Attachment B. Other policies, guidelines and principles are described in Section 1.3, 1.6 and 2.	-	Adequate		

Item	Condition number and requirement.	ER Comment	Proponent Response 26/10/18	ER Assessment 30/10/18	Proponent Response 01/11/2018	ER Assessment
5	CoA C2(c) a schedule for compliance auditing	The CEMP adequately details this information. The schedule for compliance auditing is presented in Section 7.3 and Attachment F. It is not inconsistent with the Parkes To Narromine: Environmental Audit Program (document number 3-0001-240-EEC-00-RP-0003 – Rev 0). A reference to this audit program needs to be included.	26/10/2018 Section 7.3: Reference added.	Adequate		
6	CoA C2(d) a program for ongoing analysis of the key environmental risks arising from the activities described in subsection (a) of this condition, including an initial risk assessment undertaken before the commencement of construction of the CSSI	The CEMP adequately details this information. The program for ongoing analysis of risks is described Section 3.2. The process undertaken for the initial risk assessment is described in Section 3.1, with the risk assessment presented in Attachment D.	-	Adequate		

Item	Condition number and requirement.	ER Comment	Proponent Response 26/10/18	ER Assessment 30/10/18	Proponent Response 01/11/2018	ER Assessment
7	CoA C2(e) details of how the 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 (ii) manage the risks identified in the risk analysis undertaken in subsection (d) of this condition;	The CEMP refers the reader to Section 4, which shows that Environmental Management Sub-plans form part of the CEMP. A statement needs to be included to allow the reader to understand how the Sub-plans relate / would be applied to construction works to ensure risks are managed and performance outcomes are achieved. Section 4 sets out the elements that are addressed in each of the Sub-plans, however based on previous reviews, not all the Sub-plans would follow the elements specified. It is suggested that this section be reviewed (and potentially updated) so that the information presented is relevant to the requirements of this condition.	26/10/2018 Section 4: Updated description of CEMP Sub Plans. Updated dot points to reflect current CEMP Sub Plan headings.	The relationship of the sub-plans has been clarified and is adequate. There is still no statement about how the Sub-plans would be applied to construction works to ensure risks are managed and performance outcomes are achieved. As previously stated, not all the Sub-plans would follow the elements specified. It is suggested that this section be reviewed (and potentially updated) so that the information presented is relevant to the requirements of this condition.	**Section 4** Updated with: 'The CEMP and Sub-plans address applicable legislative requirements key risk and the monitoring requirements The CEMP and Sub-plans have been developed and will be implemented to ensure risks are managed and performance outcomes are achieved.'	Adequate
8	CoA C2(f) an inspection program detailing the activities to be inspected and frequency of inspections	The CEMP adequately details this information. The program for inspections is presented in Section 7. Table 7-1 details the type of activities to be inspected and the frequency of the inspection.	-	Adequate		

Item	Condition number and requirement.	ER Comment	Proponent Response 26/10/18	ER Assessment 30/10/18	Proponent Response 01/11/2018	ER Assessment
9	CoA C2(g) a protocol for managing and reporting any (i) incidents; and (ii) non-compliances with this approval and with statutory requirements	The protocol for managing and reporting incidents and non-compliances is presented in Section 6. Section 6.1 requires a review to ensure the information presented makes sense. Section 6 needs to be updated to include detail on reporting of incidents and non-compliances to the DPE in accordance with CoA A29 and A36-A39. Section 6.3 needs to be reviewed to ensure that it aligns with the Communication Strategy, prepared under CoA B1. Section 6.5 needs to be updated to ensure that the description of the incident is captured and considered as part of the investigation.	26/10/2018: Section 6.1 – A review has been undertaken. Table 7-4 – A29 &A36 updated Section 6.5 – A37 included Section 6.6 – A38 updated Section 6.6 – A39 included Section 6.3 – has been reviewed however the Communication Strategy is the ARTC document which is referenced in the CEMP as ARTC Communication Strategy. Section 6.5 – has been updated with an incident description determination.	It is still not clear why Section 6.1 discusses certain information about reporting, and then Section 6.6 discusses reporting. Suggest reviewing. Section 6.2 needs to have a reference to CoA A29, or refer the reader to Table 7-4. Its unclear why the CEMP doesn't include the details of the CoA A29, A36-A39.	**Section 6.6** Original paragraph moved to Section 6.1. **Section 6.6** Updated with new information on reporting. **Table 7.4** Updated with items from A36 to 39 for Reporting under the CoA for Incidents and Non-compliances.	Adequate

Item	Condition number and requirement.	ER Comment	Proponent Response 26/10/18	ER Assessment 30/10/18	Proponent Response 01/11/2018	ER Assessment
10	CoA C2(h) procedures for rectifying any non-compliance with this approval identified during compliance auditing, incident management or at any time during construction	The procedure for rectifying any non-compliances is presented in Section 6.2. Section 6.2 excludes incidents, yet incidents can also constitute non-compliances (as recognized by this condition). This section needs to be updated accordingly.	26/10/2018 Section 6.2: Incidents and Non-compliance are treated as 2 different occurrences. It is described in CEMP and all Sub-plans.	Sections 6.2 and 6.5 adequately address this requirement.		
11	CoA C2(i) a list of all the CEMP Sub-plans required in respect of construction, as set out in Condition C4. Where staged construction of the CSSI is proposed, the CEMP must also identify which CEMP Sub-plan applies to each of the proposed stages of construction	Provided the comments raised against CoA C2(e) are resolved, the CEMP adequately addresses this requirement. The list of all the CEMP Sub-plans required in respect of construction, as set out in Condition C4, is presented in Section 4. The project is not being staged.	-	Adequate.		
12	CoA C2(j) a description of the roles and environmental responsibilities for relevant employees and their relationship with the ER.	The roles and responsibilities are presented in Section 5. The CEMP needs to be updated to specifically detail the working relationship with the ER.	26/10/2018 Section 5.1.6: Updated with ER relationship.	The role of the ER has been described. The relationship with the ER has not been included. This needs to be updated. Refer also, ER comment against item 21.	**Section 5.1.6** Updated with a sentence on how the ER will communicate with INLink Project Personnel and ARTC.	Adequate

Item	Condition number and requirement.	ER Comment	Proponent Response 26/10/18	ER Assessment 30/10/18	Proponent Response 01/11/2018	ER Assessment
13	CoA C2(k) an outline of the training and induction for employees, including contractors and subcontractors, in relation to environmental and compliance obligations under the terms of this approval	The CEMP adequately addresses this requirement. Section 9 presents information on training and inductions.	-	Adequate		
14	CoA C2(l) the process for periodic review and update of the CEMP and all associated plans and programs	The process for periodic review and update of the CEMP and Sub-plans is presented in Section 11. This section, in particular the sentence before Table 11-1 and Table 11-1 itself needs to be reviewed. Table 11-1 contains a large amount of information not relevant to the requirements set out in this condition. It is recommended this section be simplified to outline how minor updates will be managed (ie: ER approval in accordance with CoA A19(j)), and major updates (ie: ER endorsement and DPE approval in accordance with CoA C3 and C6).	26/10/2018: Section 11 – Sentences have been reviewed and updated. Table 11 -1 – Updated to delete non-relevant items. Section 11.1 – Major updates are described in last paragraph of in which this will trigger 'issued for review' documents to be sent to ARTC and the ER. ARTC holds discretion on whether they want to re-submit to DP&E. C3 and C6 relates to prior to commencement of construction only.	Deferring responsibility to ARTC without explanation is not adequate. This CEMP is prepared in accordance with the CoA, which is for the project (not just for INlink). Please update this section to clearly state proposed method for approving major updates. This could be a simple as adding the following after the last sentence of Section 11.1: *Where the ER deems it necessary, the CEMP or sub-plans will be provided to relevant stakeholders for review and comment if required, and forwarded to the Secretary of DP&E for approval.*	**Section 11** Updated with: 'If ARTC, the ER or the Contractor deem it necessary the CEMP or Sub-plans will be provided to relevant stakeholders for review and comment if required, and forwarded to the Secretary of DP&E for approval.'	Adequate
15	A CEMP must be prepared in accordance with the Department's Guideline for the Preparation of Environmental Management Plans (DIPNR, 2004)		-			

Item	Condition number and requirement.	ER Comment	Proponent Response 26/10/18	ER Assessment 30/10/18	Proponent Response 01/11/2018	ER Assessment
16	4.3.1.1 Background - introduction	The CEMP adequately addresses this requirement. Section 1.1 of the CEMP provides an introduction and background.	-	Adequate		
17	4.3.1.2 Background - project description	Section 1.5 of the CEMP provides a project description. Refer comment raised against CoA C2(a). Additional information required by this requirement needs to be included.	As per item 3.	Adequate. Note that the Compliance Matrix refers to this section as Section 1.4 and is incorrect.		
18	4.3.1.3 Background - CEMP context	The CEMP adequately addresses this requirement. Section 1.2 of the CEMP provides a context.	-	Adequate		
19	4.3.1.4 Background - CEMP objectives	The CEMP adequately addresses this requirement. Section 1.2 and 1.6 of the CEMP provides purpose and objectives.	-	Adequate		
20	4.3.1.5 Background - Environmental Policy	The CEMP adequately addresses this requirement. Section 1.4 and Attachment B present the Policy. The Policy applies to all BMD projects.	-	Adequate		

Item	Condition number and requirement.	ER Comment	Proponent Response 26/10/18	ER Assessment 30/10/18	Proponent Response 01/11/2018	ER Assessment
21	4.3.2.1 Environmental management - Structure and responsibility	Section 5 presents roles and responsibilities. Additional information needs to be included to meet this requirement. An organisation chart needs to be included. Relationship with the ER needs to be included. The document map presented in Figure 2 is incomplete and unclear. For example: only one monitoring program is referenced and the reference to Site Specific Plans at the bottom of page does not assist in understanding the structure of the plans. This should be reviewed and updated.	26/10/2018: Section 5.1.6 – ER role description updated. Organisation chart has not been included in the CEMP and Sub Plans – not available at this time. However, will be included in Human Resources Management Plan. Figure 2 – Updated.	Figure 2 has been adequately updated. The ER role description has been adequately described. An organisation chart needs to be included. Relationship with the ER needs to be included.	Refer response to Item 12.	Whilst an organisation chart is not shown. The organisational structure can be understood through the roles and responsibilities in Section 5. Adequate.
22	4.3.2.2 Environmental management - Approvals and licensing framework	Section 2 presents the legislative requirements for the project. Additional information needs to be included to meet this requirement. The obligations register presented in Attachment C is in draft (eg referring to draft conditions) and incomplete (responsibilities columns not populated, legislation other than the CoA and EIS has not been captured).	26/10/2018: Attachment C – Updated Obligations Register. EPL will be included when approved.	Obligations register still incomplete. Refer Section 4.3.2.2 of the guideline as to what needs to be captured, over and above the EIS, CEMF, CoA, EPL.	**Section 2** New Table with legislative requirements added to Section 2 (please note not marked as a track change).	Adequate

Item	Condition number and requirement.	ER Comment	Proponent Response 26/10/18	ER Assessment 30/10/18	Proponent Response 01/11/2018	ER Assessment
23	4.3.2.3 Environmental management - Reporting	Section 7.4 presents the reporting requirements. The CEMP does not capture the reporting specified in Table 2 of the Project Approval, as relevant to construction. It does not capture incident and non-compliance reporting required under CoA A29 and A36-A39.	26/10/2018: Section 7.4 and 7.3 – Updated with reporting requirements from CoA Table 2 (excludes ARTC responsibilities). Section 7.4 – Incident reporting updated in (as per item 9).	Reporting required for CoA A29 and A36-A39 captured. The CEMP does not capture the reporting specified in Table 2 of the Project Approval, as relevant to construction. Deferring responsibility to ARTC without explanation is not adequate. This CEMP is prepared in accordance with the CoA, which is for the project (not just for INlink).	**Section 7.4** All requirements from Table 2 are in Section 7.4 – discussed and deemed adequate.	Adequate
24	4.3.2.4 Environmental management - Training	The CEMP adequately addresses this requirement. Section 9 of the CEMP provides training requirements.	-	Adequate		
25	Environmental management - Emergency contact and response	Section 10 of the CEMP deals with emergency planning and response. Project contacts are provided in Section 12. Section 10 should be updated to clearly state that the PIRMP and / or ERP contain the information specified in this requirement.	26/10/2018 Section 12: Updated with reference to project contacts.	Adequate.		

Item	Condition number and requirement.	ER Comment	Proponent Response 26/10/18	ER Assessment 30/10/18	Proponent Response 01/11/2018	ER Assessment
26	4.3.3.1 Implementation - Risk assessment	The CEMP adequately addresses this requirement. Section 3 of the CEMP presents information on risk assessment. The risk register is presented in Attachment D. Mitigation measures from the sub-plans are referred to.	-	Adequate		
27	4.3.3.2 Implementation - Environmental activities and controls	Section 7 of the CEMP outlines the inspections to be undertaken, along with an overview of the monitoring to be undertaken (as detailed in the aspect specific Sub-plans). Section 4 of the CEMP lists the Sub-plans. Mitigation measures and specific monitoring requirements are detailed in these aspect specific Sub-plans but this is not evident in the CEMP. The CEMP needs to be updated to inform the reader that this is the case.	26/10/2018 Section 4: Updated – as per Item 7.	Refer to comment on item 7.	Refer response to Item 7.	Adequate.
28	4.3.3.3 Implementation - Environmental control maps	Environmental control maps need to be provided.	26/10/2018 Revision E: ECM included as attachment.	Adequate.		

Item	Condition number and requirement.	ER Comment	Proponent Response 26/10/18	ER Assessment 30/10/18	Proponent Response 01/11/2018	ER Assessment
29	4.3.3.4 Implementation - Environmental schedules	Section 7 of the CEMP lists the inspections and forms to be used. It states that forms will use and online tool and database. It is assumed that these forms are printable. If so, examples need to be appended to the CEMP. If the form is particular to an aspect (eg: waste register or preclearance checklist) then these should be attached to the aspect specific Sub-plan.	26/10/2018 Attachment F: Updated with Weekly Environmental Checklist.	Section 7 refers to the following forms which are still yet to be attached: - Environmental inspection checklist (for post rain events) - Incident form. Please note, that forms for specific aspects will need to be included in sub-plans.	**Attachment F** Updated Attachment F with Internet Incident Form.	Adequate
30	4.3.4.1 Monitoring and review - Monitoring	The CEMP adequately addresses this requirement. Section 7.2 provides an overview of the monitoring to be undertaken.	-	Adequate		
31	4.3.4.2 Monitoring and review - Auditing	Section 7.3 and Attachment F provide an overview of the monitoring to be undertaken. The external auditing is not inconsistent with that presented in the audit program prepared under CoA A32. Section 7.3 should be updated to include a reference to the audit program.	26/10/2018 Section 7.3: Updated with reference to audit program.	Adequate		
32	4.3.4.3 Monitoring and review - Corrective action	Section 6 of the CEMP addresses management of incidents and non-conformances. Corrective actions are dealt with.	-	Adequate		

Item	Condition number and requirement.	ER Comment	Proponent Response 26/10/18	ER Assessment 30/10/18	Proponent Response 01/11/2018	ER Assessment
33	4.3.4.4 Monitoring and review - Review	Refer ER comment raised against CoA C2(l).	26/10/2018: Addressed in Item 13.	Deferring responsibility to ARTC without explanation is not adequate. This CEMP is prepared in accordance with the CoA, which is for the project (not just for INlink). Please update this section to clearly state proposed method for approving major updates. This could be a simple as adding the following after the last sentence of Section 11.1: *Where the ER deems it necessary, the CEMP or sub-plans will be provided to relevant stakeholders for review and comment if required, and forwarded to the Secretary of DP&E for approval.*	Refer response to Item 14.	Adequate

INLink