

Environmental Impact Assessment Checklist

Location: Within, and adjacent to, the rail corridor at Coniston	Timeframe: Construction works would take about 12 - 18 months from about mid 2022 to about the end of 2023
Project Name: More Trains More Services - Coniston Overhead Wiring Upgrades	
<p>Description of proposed activity <i>(Describe ancillary activities, duration of work, working hours, machinery, staffing levels, impacts on utilities/authorities, wastes generated or hazardous substances/dangerous goods used). Split into Construction and Operation sections, as required.</i></p> <p>Transport for NSW (TfNSW) proposes to deliver the Mariyung Fleet which are a state-of-the-art fleet of intercity trains that would provide a new level of comfort and convenience for the thousands of customers who travel between Sydney and the Central Coast and Newcastle, the Blue Mountains, and the South Coast. TfNSW proposes to undertake overhead wiring (OHW) upgrades at Coniston as part of the More Trains More Services (MTMS) Program, which once complete would facilitate the operation of the 10-car Mariyung trains on the south coast. The Proposal would be undertaken within, and adjacent to, the rail corridor between Wollongong Station to about 500m south of Coniston Station.</p> <p>The proposed scope would include:</p> <ul style="list-style-type: none"> - Non-destructive digging (NDD) and excavation for OHW footings - Trimming of trees and removal of vegetation - Installation of about 11 OHW footings - Installation of about five OHW structures - Installation of a "twin link from the Catenary insulator to accommodate twin catenary wires - Installation of a new 270 sq mm catenary wire - Replacement of all OHW cantilever insulators impacted by the works 	

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- Adjustment of OHW cantilevers or replacement where required
- Replacement of worn or life expired Catenary and Contact wires
- Re-dropping the OHW to support System 12
- Adjustment of feeding and potential jumpers or replacement where required
- Adjustment of existing OHW crossover wires
- Adjustment of existing OHW overlaps
- Adjustment/ replacement of any other OHW as required
- Works to existing feeding points to support an additional catenary wire
- Replacement of OHW bridge attachments on the Bridge Street overbridge with double insulation bridge attachments and replacement of spark gaps.
- Replacement of OHW bridge screens on the Bridge Street overbridge.
- Establishment of temporary construction compounds and laydown areas within the rail corridor.

Duration of Work

Construction works would take about 12 - 18 months from about mid 2022 to about the end of 2023.

Working Hours

The majority of the works would be undertaken over about six weekend possessions. Works within the live rail corridor (the 'danger zone') necessitate that these activities are completed under work site protection measures (e.g. track work authority) and therefore would largely be undertaken during scheduled track possessions, when trains do not operate for a set period of time, generally over the weekend. A portion of the scope of works may be undertaken outside possessions during standard construction hours (7:00am to 6:00pm Monday to Friday and 8:00am to 1:00pm Saturday), including occupation of the construction compounds/laydowns.

Equipment

The following types of plant and equipment would be used for the works:

- Vacuum trucks
- Excavators

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- Chainsaws
- Chippers
- Dumpys
- Hi-rail telehandlers
- Concrete pumps
- Concrete trucks
- Hand tools
- Elevated work platforms
- Franna cranes
- Hi-rail flat trucks
- Dump trucks
- Generators

Construction Traffic, Access and Staffing Levels

About 30 site vehicle movements would be required per day during possessions, with limited vehicle movements required outside possessions. The site works team would be about 30 personnel during possessions, with limited personnel required outside possessions. The site would be accessed via existing Sydney Trains access gates on Gladstone Avenue, Miller Street, Bridge Street, Old Springhill Road and through the western commuter carpark at Wollongong Station, as outlined in Appendix B.

Construction Compounds and Laydowns

All laydown and material storage would occur within the rail corridor. Laydown could occur anywhere within the project area. The main compound/laydown areas would be at four locations, compound 1 at the southern end of the Proposal area off Old Springhill Road, compound 2 immediately north east of Coniston Station, compound 3 immediately north west of Coniston Station, and compound 4 the Sydney Trains staff carparking area to the west of Wollongong Station extending 500m to the south on the western side of the tracks as shown in Appendix B. The compounds would be used from about two weeks before and two weeks after each possession. No compounds would be in continuous use for the duration of the proposal. During each possession about two to three compounds would be in use.

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No compounds will be permanent, just possession based. Probably two weeks before and after each possession.

Site Characteristics

(Describe the environment (i.e. vegetation, nearby waterways, landuse, surrounding landuse), identify likely presence of protected flora/fauna and sensitive areas)

The Proposal is located within the Wollongong Local Government Area (LGA) in the suburbs of Coniston and Wollongong. The Proposal would take place over about a 2km length within the rail corridor between Wollongong Station and about 500m south of Coniston Station as shown in Appendix B. The Proposal would also take place on the Bridge Street overbridge at Coniston.

The area of the Proposal is zoned SP2 Infrastructure under the Wollongong Local Environmental Plan (LEP) 2009. The surrounding land is zoned as R2 - Low Density Residential, R3 – Medium Density Residential, B1 – Neighbourhood Centre, B4 – Mixed Use, B6 – Enterprise Corridor, B7 – Business Park, IN1 – General Industrial, IN2 – Light Industrial, IN3 – Heavy Industrial and RE1 – Public Recreation in the Wollongong LEP and the State Environmental Planning Policy (Three Ports) 2013.

The area of the Proposal consists of cleared, planted and highly disturbed vegetation. Vegetation in the Proposal area consists entirely of the Plant Community Type (PCT) Urban Native/Exotic. The surrounding land consists of dense urban residential lots with several areas facilitating significant industrial work. There are no significant patches of native vegetation in the neighbouring landscape that might provide habitat connectivity with the vegetation within the Proposal area due to the highly developed nature of the adjacent land. No Threatened Ecological Communities (TECs) or threatened species were identified, or considered likely to occur, as detailed in the Ecological Assessment (Appendix C).

There are no natural waterways in the immediate vicinity of the Proposal. The closest waterway is Tom Thumb Lagoon in Wollongong Council’s Greenhouse Park about 200m to the east of the Proposal. The majority of the Proposal area would drain to track drainage. The Proposal area is not mapped as flood prone land in the Wollongong LEP.

The Proposal would take place within the curtilage of Coniston Railway Station Group, which is listed on the Transport Asset Holding Entity (TAHE) Section 170 Heritage and Conservation Register. The Proposal would take place adjacent to Wollongong Railway Station Group, which is listed on the State Heritage Register, TAHE Section 170 Heritage and Conservation Register and Wollongong LEP 2009, and a Row of Bungalows on Gladstone Ave which is listed on the Wollongong LEP 2009. There is also one archaeological item, the Wollongong locomotive turntable in the Proposal area.

Searches of the AHIMS register on 2 June 2022 and 23 June 2022 (Appendix G) did not identify any Aboriginal heritage items within the area of the Proposal.

The southern half of the Proposal area is mapped as Class 5 Acid Sulfate Soils (ASS) in the Wollongong LEP 2009, which is the lowest risk category.

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A search of the NSW Environment Protection Authority's (EPA) contaminated land register was undertaken on 2 June 2022 and identified the following contaminated sites near the Proposal:

- Greenhouse Park

A search of the list of the NSW contaminated sites notified to the EPA was undertaken on 2 June 2022 and identified the following contaminated sites near the area of the Proposal:

- Greenhouse Park

The Proposal includes four main compound/laydown areas (refer to Appendix B):

1. The southern compound/laydown area would be established in the southern end of the Proposal area off Old Springhill Road, which is a cleared gravel area.
2. The eastern Coniston Station compound/laydown area would be established immediately north east of Coniston Station in a cleared gravel and grass area.
3. The western Coniston Station compound/laydown area would be established immediately north west of Coniston Station in a cleared gravel area.
4. The northern compound/laydown area would be established in a Sydney Trains staff carparking area to the west of Wollongong Station extending 500m to the south on the western side of the tracks, which is a cleared gravel area.

Control Measures

Will a project and site specific EMP be prepared? **Yes** Are appropriate control measures already identified in an existing EMP? **No**

The overarching Transport for Tomorrow MTMS Construction Environmental Management Plan and associated subplans would be updated to include the Proposal at Coniston.

Climate Change Impacts

Is the site likely to be adversely affected by the impacts of climate change? If yes, what adaptation/mitigation measures will be incorporated into the design?

The site is unlikely to be adversely affected by the impacts of climate change due to the scale and nature of the Proposal. The works are to occur in the rail corridor, which is unlikely to be subject to flooding or inundation due to extreme weather events or sea level rise. During operation, climate change may cause increased extreme temperatures and an increase in storms and storm surges. These changes could increase exposure of infrastructure to damage and cause an increase in maintenance events. The design development would consider the materials used for the project and ongoing maintenance schedules. A climate change risk assessment will be undertaken and adaptations will be incorporated into the design.

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Legislative Framework

The *Environmental Planning & Assessment Act 1979* (EP&A Act) establishes the system of environmental planning and assessment in NSW. Division 5.1 specifies the environmental impact assessment requirements for activities undertaken by public authorities, such as TfNSW, which do not require development consent under Part 4 of the EP&A Act. Division 15, section 2.91 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (Transport and Infrastructure SEPP) allows for the development of 'rail infrastructure facilities' by or on behalf of a public authority without consent on any land. Consequently, development consent is not required for the Proposal, however the environmental impacts of the Proposal have been assessed under the provisions of Division 5.1 of the EP&A Act.

Section 171 of the EP&A Regulation 2021 defines the factors which must be considered when determining if an activity assessed under Division 5.1 of the EP&A Act has or is likely to have a significant impact on the Environment. The impact assessment tables of this checklist provide an environmental impact assessment of the factors in the Proposal and Appendix A specifically responds to the factors for consideration under Section 171.

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Consultation

Sections 2.10-2.15 of the Transport and Infrastructure SEPP require that public authorities undertake consultation with councils and other agencies when proposing to carry out development without consent. No consultation was undertaken as part of the preparation of the Environmental Impact Assessment as no consultation was triggered by the Transport and Infrastructure SEPP and this is reflected in Table 1 below.

Table 1: Transport and Infrastructure SEPP consultation details

Section	Relevance to the Proposal
2.10: Consultation with councils- development with impacts on council-related infrastructure or services	The Proposal does not include any development with impacts on council-related infrastructure or services as set out by this Section of the Transport and Infrastructure SEPP. Accordingly, consultation with Council under Section 2.10 is not required.
2.11: Consultation with councils- development with impacts on local heritage	The Proposal does not include development which is likely to affect the heritage significance of a heritage item, or a heritage conservation area. Accordingly, consultation with Council under Section 2.11 is not required.
2.12: Consultation with councils- development with impacts on flood liable land	The Proposal does not include development with impacts on flood liable land. Accordingly, consultation with Council under Section 2.12 is not required.
2.13: Consultation with State Emergency Service development with impacts on flood liable land	The Proposal does not include development with impacts on flood liable land. Accordingly, consultation with the State Emergency Service under Section 2.13 is not required.
2.14: Consultation with councils- development with impacts on certain land within the coastal zone	The Proposal does not include development with impacts on certain land within the coastal zone. Accordingly, consultation with Council under Section 2.14 is not required.
2.15: Consultation with public authorities other than councils	The Proposal does not include development of the kind specified in Section 2.15. Accordingly, consultation with the specified public authorities is not required.

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Impact Assessment - Construction

Aspect	Nature and extent of impacts (negative and positive) during construction if control measures implemented	Proposed Control Measures	Endorsed [for Rail Development and Delivery, E&S Branch use only]	
			Y/N	Comments
Flora and fauna	<p>The Proposal is located within the rail corridor and the Bridge Street overbridge, a previously disturbed environment that has been largely cleared.</p> <p>Areas that would be directly impacted by the Proposal include the location of the specific works, compound/laydown sites and access routes. Indirect impacts may occur in all remaining land within the Proposal area, compound/laydown sites and access routes (Appendix B).</p> <p>The Ecological Assessment (Appendix C) identified one PCT in the area of the Proposal:</p> <ul style="list-style-type: none"> Urban Native/Exotic <p>This PCT does not equate to any TECs. No TECs or threatened species of flora or fauna were identified during ecological field work or considered likely to occur in the area of the Proposal. Therefore, a referral of the proposed action to the Commonwealth Minister for the Environment is not required, nor is the preparation of a Species Impact Statement/Biodiversity Development Assessment Report.</p>	<ol style="list-style-type: none"> To the fullest extent practicable, minimise disturbance to any native vegetation surrounding the Proposal area. Where works occur within tree protection zones, as defined in Australian Standard AS4970 – 2009 Protection of trees on development sites, of trees to be retained, tree protection measures detailed in the Standard would be implemented. In the unlikely event that unexpected threatened species are identified during the project, works would cease, and an ecologist contacted. Soil transportation would be minimised within, into or out of the Proposal area to reduce the spread of weeds. Appropriate measures would be implemented to minimise the spread of 	Y	

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	<p>The Arboricultural Impact Assessment (Appendix D) did not identify any trees within the area of the Proposal that would be subject to a major encroachment. Hence no trees would require removal. Six native and exotic trees would be subject to a minor encroachment and require trimming. 21 trees were located outside the construction footprint and are proposed for retention. Three priority weeds were identified within the area of the Proposal.</p> <p>The Proposal would involve the following impacts to ecological features:</p> <ul style="list-style-type: none"> • Vegetation removal of 0.01 hectares of urban native and exotic vegetation, including no tree impacts. • Vegetation removal and trimming of 0.003 hectares of urban native and exotic vegetation, including trimming of three exotic Camphor Laurel <i>Cinnamomum camphora</i>. • Vegetation trimming of 0.02 hectares of urban native and exotic vegetation, including trimming of one native Flame Tree <i>Brachychiton acerifolius</i>, one 	<p>the three priority weeds identified in accordance with the <i>Biosecurity Act 2015</i> and TfNSW's <i>Weed Management and Disposal Guideline</i> - DMS-SD-110.</p> <ol style="list-style-type: none"> 6. Appropriate erosion and sediment control measures would be installed to avoid sedimentation of receiving water bodies or other indirect impacts to surrounding biodiversity values. 7. Construction of the Proposal would be undertaken in accordance with TfNSW's <i>Vegetation Management (Protection and Removal) Guideline</i> (9TP-SD-111) and <i>Fauna Management Guideline</i> (3TP-SD-113). 8. Vegetation removed would be offset in accordance with TfNSW's – <i>Vegetation Offset Guide</i> - DMS-SD-087. A replanting proposal would be submitted to TfNSW for endorsement. 9. All tree removal work would be carried out by an arborist with a minimum AQF 		

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	<p>exotic Camphor Laurel <i>Cinnamomum camphora</i> and one exotic Curry Tree <i>Murraya koenigii</i>.</p> <ul style="list-style-type: none"> Potential indirect impacts through use of access tracks and the use of construction compounds/laydowns. 	<p>Level 3 qualification in Arboriculture, in accordance with Australian Standard AS 4373-2007, Pruning of Amenity Trees, the <i>Work Health and Safety Act 2011</i>, and Work Health and Safety Regulations 2017.</p> <p>10. The mitigation measures identified in section 5. Tree Protection Plan of the Aboriginal Impact Assessment (Appendix D) would be implemented unless otherwise agreed with the Project Arborist.</p> <p>11. The Coniston Station Platform 2 garden would be landscaped at the completion of works.</p>		
Water	<p>The Proposal area does not contain any natural waterways and is not mapped as being within a flood prone area.</p> <p>The Proposal would have limited impacts on surface water during the construction phase. Surface water would be diverted around the Proposal, with existing</p>	<p>12. Prior to commencement of works, site-specific erosion and sediment control measures consistent with the 'Blue Book' <i>Managing Urban Stormwater: Soils and Construction Guidelines 4th Edition</i> (Landcom, 2004) would be detailed on the project Environmental</p>	Y	

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	<p>stormwater infrastructure to remain in operation throughout construction.</p> <p>Without the appropriate management of pollutants (such as fuel, chemicals or wastewater from accidental spills, and sediment from excavations and stockpiles), the Proposal has the potential to result in impacts on water quality in nearby stormwater infrastructure and downstream watercourses.</p> <p>Given the minor nature of the Proposal, risks to groundwater are expected to be minimal.</p> <p>Appropriate control measures would limit any potential impact and ensure that any sedimentation or spills are managed appropriately.</p>	<p>Control Map and updated throughout construction so they remain relevant to the activities.</p> <p>13. Erosion and sediment control measures would be established prior to any clearing, grubbing and site establishment activities and would be maintained and regularly inspected (particularly following rainfall events) to ensure their ongoing functionality. Erosion and sediment control measures would be maintained and left in place until the works are complete and areas are stabilised.</p> <p>14. Vehicles and machinery would be properly maintained and routinely inspected to minimise the risk of fuel/oil leaks. Construction plant, vehicles and equipment would also be refuelled offsite, or in a designated refuelling area.</p> <p>15. All fuels, chemicals and hazardous liquids would be stored away from drainage</p>		

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			Y/N	Comments
		<p>lines, within an impervious bunded area in accordance with Australian Standards, EPA Guidelines and TfNSW's <i>Chemical Storage and Spill Response Guidelines</i> (SD-066).</p> <p>16. Adequate water quality and hazardous materials procedures (including spill management procedures, use of spill kits and procedures for refuelling and maintaining construction vehicles/equipment) would be implemented in accordance with relevant EPA guidelines and the TfNSW <i>Chemical Storage and Spill response Guidelines</i> (SD-066) during the construction phase. All staff would be made aware of the location of the spill kits and be trained in how to use the kits in the case of a spill.</p> <p>17. In the event of a pollution incident, works would cease in the immediate vicinity and the Contractor would</p>		

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		<p>immediately notify the TfNSW Project Manager and TfNSW Senior Environment and Sustainability Officer in accordance with <i>TfNSW Environmental Incident Procedure</i> (EMF-FM-PR-0001).</p> <p>18. A fully stocked spill kit(s) would be present at all times during construction and situated around areas of high risk (such as drains).</p> <p>19. The existing drainage systems would remain operational throughout the construction phase.</p>		
Air quality	<p>The main air quality impacts that have the potential to occur during construction would be temporary and associated with dust generation and emissions from construction vehicles and equipment.</p> <p>Anticipated sources of dust and dust generating activities include:</p> <ul style="list-style-type: none"> Excavation for OHW footings. Dust generated from the loading and transfer of material to and from trucks. 	<p>20. Air quality management and monitoring for the Proposal would be undertaken in accordance with TfNSW's <i>Air Quality Management Guideline</i> (SD-107) as required.</p> <p>21. Methods for management of emissions would be incorporated into project inductions, training and pre-start/toolbox talks.</p>	Y	

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	<ul style="list-style-type: none"> • Movement of construction vehicles. • Vegetation clearing. <p>The Proposal would have minimal impact on air quality as it would not involve extensive excavation or other land disturbance with the potential to generate significant quantities of dust.</p> <p>The operation of plant, machinery and trucks may also lead to increases in exhaust emissions in the local area however these impacts would be minor and short term.</p> <p>Sources of a reduction to air quality associated with the Proposal are considered to be able to be appropriately managed with the implementation of standard mitigation measures.</p>	<p>22. Plant and machinery would be regularly checked and maintained in a proper and efficient condition. Plant and machinery would be switched off when not in use, and not left idling.</p> <p>23. Vehicle and machinery movements during construction would be restricted to designated areas and sealed/compacted surfaces where practicable.</p> <p>24. To minimise the generation of dust from construction activities, the following measures would be implemented:</p> <ul style="list-style-type: none"> - apply water (or alternative measures) to exposed surfaces (e.g. unpaved roads, stockpiles, hardstand areas and other exposed surfaces) - cover stockpiles when not in use, appropriately cover loads on trucks transporting material to and from the construction site and securely 		

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			Y/N	Comments
		fix tailgates of road transport trucks prior to loading and immediately after unloading - prevent mud and dirt being tracked onto sealed road surfaces.		
Noise vibration	<p>Construction works would take about 12 - 18 months from about mid 2022 to about the end of 2023. The majority of the works would be undertaken over about six weekend possessions. A portion of the scope of works would be undertaken outside possessions during standard construction hours (7:00am to 6:00pm Monday to Friday and 8:00am to 1:00pm Saturday), including occupation of the construction compounds/laydowns.</p> <p>To assess construction noise and vibration impacts a Construction Noise and Vibration Impact Assessment (CNVIA) was prepared (Appendix E).</p> <p>The Proposal's locality is considered a mixture of Suburban/Urban, Urban, and Urban/Industrial. Accordingly, RBLs of Day 45, Evening 40 and Night 35 for suburban/urban, RBLs of Day 50, Evening 45 and Night 40 for urban and RBLs of Day 55, Evening 50 and Night 45 for urban/industrial have been adopted in</p>	<p>25. Prior to any works outside of standard construction hours an Out of Hours Work application form would be prepared and submitted to TfNSW for approval via the OOHW online system.</p> <p>26. The community and relevant stakeholders would be notified at least 7 days prior to commencement of construction, unless otherwise agreed with TfNSW.</p> <p>27. Standard and additional construction noise and vibration mitigation would be carried out in accordance with TfNSW's <i>Construction Noise and Vibration Strategy</i> (CNVS) plus Addendum. Standard mitigation measures apply at all times where airborne Noise</p>	Y	

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	<p>accordance with the TfNSW CNVS. The dominant ambient noise environment is natural fauna, road traffic noise from the nearby Princes Motorway, rail traffic along the South Coast rail line, and the nearby Pacific Ocean.</p> <p>During construction, noise and vibration impacts would be caused by construction plant and machinery, as well as vehicles.</p> <p>Construction Noise</p> <p>NCA01 (Coniston west of the rail line) is comprised predominately of residential low to medium density housing with little to no natural barriers (such as topography benefits or large commercial buildings) to disrupt any line-of-sight noise the works are anticipated to produce. This results in a wider spread of the potential noise impact, as the terrain naturally slopes up away from the rail corridor; residential properties more towards the west do not benefit from the other dwellings as shields due to this, more noise is diffracted, hence triggering NML exceedances.</p> <p>NCA02 (Coniston east of the rail line) is comprised of a mixture of commercial, industrial, other sensitive, and</p>	<p>Management Level (NML) exceedances are predicted.</p> <p>28. The use of noise intensive equipment and the delivery and transport of goods, plant and equipment, as well as the use of stockpiles and compounds, would be concentrated in the daytime period where feasible.</p> <p>29. Attended noise monitoring would be undertaken where works are anticipated to be in close proximity to noise sensitive receivers along Gladstone Avenue and during site occupation/mobilisation and use of compound/stockpile areas during the night-time period.</p> <p>30. In the event of noise or vibration complaints or adverse community comments or concerns:</p> <ul style="list-style-type: none"> - Attended noise monitoring would be undertaken in accordance with 		

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	<p>residential premises (predominately high-density apartment blocks with some low-medium density housing). Large commercial buildings along the rail corridor block most of the transmission path of the works anticipated noise impacts, lowering the impact to these receivers east of the corridor.</p> <p>A total of two residential receivers are predicted to exceed noise levels of 75 dBA $L_{eq,15min}$ (highly noise affected). The predicted maximum noise level for any one residential noise sensitive receiver is 88 dB $L_{Aeq,15min}$ for the southern receiver along Bridge Street. This noise level is expected during vegetation management activities.</p> <p>Approximately 693 residential properties are predicted to exceed the sleep disturbance criterion of the prevailing background noise level +15 dB. This is likely due to the topography sloping up westward from the project site, allowing less built environment to act as shields to the houses further up the hill westward, and the low assumed background noise levels. About 115 residential receivers are predicted to have external LA1,1minute noise levels exceeding 65 dBA Lmax</p>	<p>the relevant standards, policies and guidelines</p> <ul style="list-style-type: none"> - NML or sleep disturbance exceedances would be responded to through review of equipment on site - Review of implemented mitigation (standard and project specific if relevant) - Review of sensitive-land use specific mitigation measures (if relevant) - Review of feasible and reasonable mitigation <p>31. Vibration monitoring would be undertaken:</p> <ul style="list-style-type: none"> - In the event of any one adverse community comment, complaint, or concern - Where any vibration intensive plant or equipment no longer operates 		

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	<p>resulting in the probability of at least one (1) sleep awakening event per night.</p> <p>The most noise intensive work activities during the most sensitive time periods are anticipated to be operation of the compounds and stockpile locations, and the general wiring and cable works which extend through the alignment. About 33 residential properties are triggered for alternative accommodation during night-time works with a smaller number also triggered on Sunday/Public Holiday evening works, predominately during site establishment and the use of the construction compounds.</p> <p>Up to 217 properties are triggered for respite offers during works occurring during evening out of hours, with the majority of triggers occurring on Sunday/Public Holiday evenings.</p> <p>OOHWs would be subject to future noise modelling of specific activities and OOHW applications submitted to TfNSW for approval prior to works commencing. These future OOHWs applications would determine the final number of residential premises triggered for respite</p>	<p>within the prescribed safe working distances</p> <ul style="list-style-type: none"> - Where any dilapidation report outlines conditional concerns for any structure, including heritage structures, and, where any vibration intensive plant or equipment no longer operates within the prescribed safe working distances of those structures. <p>32. A noise monitoring program would be implemented to confirm the anticipated construction traffic noise impact, with additional operator attended monitoring prior to site occupation to establish the existing ambient noise environment, and, determine if the predicted traffic noise levels are below the existing ambient noise levels during works. Noise monitoring during route use would be undertaken to establish the impact of construction traffic where ambient</p>		

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	<p>offers and/or alternative accommodation for each occasion of OOHWs.</p> <p>Construction Traffic</p> <p>The predicted construction traffic noise level indicates exceedances of the local road traffic noise targets, however the existing traffic noise levels have not been ascertained, therefore it's difficult to determine if the predicted level exceeds the existing level by 2 dB. The presence of the existing rail line which includes cargo and freight rolling stock from industry and local coal mines would have already existing relatively higher noise levels for receivers along Gladstone Avenue.</p> <p>Therefore, it is reasonable to conclude that the predicted truck noise levels are not anticipated to have any impact to the receivers in which a 2 dB increase above existing noise levels would be noticeable.</p> <p>The screening assessment is considered worst-case, however inconclusive as to the potential impact from any additional construction traffic. Appropriate mitigation measures in the form of noise monitoring would be carried out to confirm if construction traffic</p>	<p>monitoring shows exceedances of the screening criteria (i.e. existing ambient + 2.1 dB). Where monitoring of construction traffic shows exceedances of the screening criteria additional mitigation measures would be considered, where feasible and reasonable, including:</p> <ul style="list-style-type: none"> - Alternative route or access points to the corridor - Community notifications - No local road use during the night-time period - Deliveries and truck use scheduled during the daytime period. <p>33. Chipping of vegetation or use of chainsaws would not be undertaken during the evening or night time periods.</p>		

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	<p>noise levels would result in exceedances and require further mitigation.</p> <p>Vibration</p> <p>The Proposal is not anticipated to include any vibration intensive plant. If vibration intensive plant is proposed to be used, the observance of safe working distances would prevent potential vibration impacts. Any works within safe working distances would be subject to vibration monitoring to verify the safe working distances at specific locations. Where the vibration monitoring demonstrates exceedances of the structural/cosmetic damage criteria, an alternative construction methodology may be required, such as selection of equipment designed to produce less vibration (where feasible and reasonable). As such it is considered that structural or cosmetic damage impacts from vibration intensive works are generally unlikely for the adjacent receivers and the Proposal is not anticipated to cause any vibration impacts which would affect human comfort.</p> <p>Ground-borne Noise</p>			

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			Y/N	Comments
	No impacts are expected from ground-borne noise given no high-vibration intensive equipment would be used.			
Aboriginal heritage	<p>Construction of the Proposal would involve some minor excavation for OHW footings and clearing of vegetation. Ground disturbing activities and vegetation clearing have the potential to impact Aboriginal sites, if present, however this is considered unlikely as the Proposal area has been previously disturbed.</p> <p>Searches of the AHIMS register on 2 June 2022 and 23 June 2022 (Appendix G) did not identify any Aboriginal heritage items within the area of the Proposal.</p> <p>As no known Aboriginal heritage items are located in the vicinity of the Proposal and no sensitive landscape features are located at or near the Proposal, the potential for unknown items to be present is considered to be low. Additionally, the study area has been previously disturbed by the construction of the rail corridor.</p> <p>Construction of the Proposal would have the potential to impact on previously unrecorded Aboriginal heritage items. However, the potential for such items is</p>	<p>34. All construction staff would undergo an induction in the recognition of Aboriginal cultural heritage material. This training would include information such as the importance of Aboriginal cultural heritage material and places to the Aboriginal community, as well as the legal implications of removal, disturbance and damage to any Aboriginal cultural heritage material and sites. Training would also cover content within the TfNSW <i>Unexpected Heritage Finds Guideline</i> (SD- 115).</p> <p>35. If unforeseen Aboriginal objects are uncovered during construction, the procedures contained in TfNSW's <i>Unexpected Heritage Finds Guideline</i> (SD- 115) would be followed and works within the vicinity of the find would cease immediately. The Contractor</p>	Y	

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Aspect	Nature and extent of impacts (negative and positive) during construction if control measures implemented	Proposed Control Measures	Endorsed [for Rail Development and Delivery, E&S Branch use only]	
			Y/N	Comments
	considered to be low due to the previous use and disturbance of the area.	would immediately notify the TfNSW Project Manager and TfNSW Senior Environment and Sustainability Officer so they can assist in co-ordinating next steps which are likely to involve consultation with an Aboriginal heritage consultant, Heritage NSW and the Local Aboriginal Land Council. If human remains are found, work would cease, the site secured and the NSW Police and the Heritage NSW would be notified. Where required, further archaeological investigations and an Aboriginal Heritage Impact Permit would be obtained prior to works recommencing at the location.		
Non-Aboriginal heritage	A Statement of Heritage Impact (SoHI) (Appendix F) has been prepared for the Proposal. The Proposal would take place within the curtilage of Coniston Railway Station Group, which is listed on the TAHE Section 170 Heritage and Conservation Register. The Proposal would take place adjacent to Wollongong Railway Station Group, which is listed on the State Heritage Register,	36. A heritage induction would be provided to workers prior to construction, informing them of the heritage values of the Proposal area and the guidelines to follow if unanticipated heritage items or deposits are located during construction.	Y	

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Aspect	Nature and extent of impacts (negative and positive) during construction if control measures implemented	Proposed Control Measures	Endorsed [for Rail Development and Delivery, E&S Branch use only]	
			Y/N	Comments
	<p>TAHE Section 170 Heritage and Conservation Register and Wollongong LEP 2009, and a Row of Bungalows on Gladstone Ave which is listed on the Wollongong LEP 2009. There is also one archaeological item, the Wollongong locomotive turntable, in the Proposal area.</p> <p>The Proposal would have a minor adverse direct physical impact on the Coniston Railway Station Group through the construction of new portals footings and structure at the southern end of the station platforms. While these footings will not directly impact the extant heritage elements of Coniston Railway Station Group (platforms and buildings) nor the potential archaeological remains of the 1941 ticket and parcel office, they are proposed within the cutting for the station and railway line. The Proposal would have a minor adverse indirect visual impact on Coniston Railway Station Group through the change in setting as a result of the new OHW structures. However, the impacts are limited as the works are consistent and in-keeping with the current overall setting of the railway corridor.</p> <p>The proposed works would have no adverse impacts on the Wollongong Railway Station Group or Row of</p>	<p>37. In the event that any unanticipated archaeological deposits are identified within the project site during construction, the procedures contained in TfNSW's <i>Unexpected Heritage Finds Guideline</i> (SD- 115) would be followed and works within the vicinity of the find would cease immediately. The Contractor would immediately notify the TfNSW Project Manager and the TfNSW Senior Environment and Sustainability Officer so they can assist in co-ordinating the next steps which are likely to involve consultation with an Archaeologist and Heritage NSW. Works in the vicinity of the find would not recommence until clearance has been received by TfNSW. Where required, further archaeological work and/or consents would be obtained for any unanticipated archaeological deposits prior to works recommencing at the location.</p>		

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Aspect	Nature and extent of impacts (negative and positive) during construction if control measures implemented	Proposed Control Measures	Endorsed [for Rail Development and Delivery, E&S Branch use only]	
			Y/N	Comments
	Bungalows, which are located adjacent to the study area, nor on the Wollongong locomotive turntable, which is located in the northernmost portion of the Proposal area.	<p>38. The existing Photographic Archival Recording of Coniston Railway Station Group would be updated with views to and from pre and post-vegetation works within the Coniston Railway Station Group TAHE Section 170 Heritage and Conservation Register curtilage, Gladstone Avenue and north of Bridge Street in accordance with the Heritage NSW, Department of Planning and Environment (Heritage NSW) guidelines <i>Photographic Recording of Heritage Items Using Film or Digital Capture and How to Prepare Archival Records of Heritage Items</i>.</p> <p>39. The existing Transport for Tomorrow Heritage Protection Plan would be updated to enable the protection of heritage values of Coniston Railway Station Group and the Wollongong locomotive turntable during the works.</p>		

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Aspect	Nature and extent of impacts (negative and positive) during construction if control measures implemented	Proposed Control Measures	Endorsed [for Rail Development and Delivery, E&S Branch use only]	
			Y/N	Comments
		40. Discrete fencing (for example, welded mesh fencing with screening often used on construction sites) and signage would be installed around the temporary compound sites within the curtilage of Coniston Railway Station Group.		
Community, Social and Economic	<p>The Proposal has the potential to temporarily impact the surrounding community as a result of:</p> <ul style="list-style-type: none"> Increased truck movements delivering materials and equipment and transporting waste. Construction amenity impacts such as noise, vibration, dust and visual impacts. <p>The above impacts on the community are expected to be relatively short term in nature given the Proposal would largely be completed in possessions.</p>	<p>41. Sustainability criteria for the Proposal would be established to encourage the Contractor to purchase goods and services locally, helping to ensure the local community benefits from the construction of the Proposal.</p> <p>42. A Community Liaison Management Plan would be prepared prior to construction to identify all potential stakeholders and best practice methods for informing these groups of upcoming work during construction.</p> <p>43. Contact details for a 24-hour Construction Response Line, Project Infoline and email address would be provided for ongoing stakeholder</p>	Y	

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Aspect	Nature and extent of impacts (negative and positive) during construction if control measures implemented	Proposed Control Measures	Endorsed [for Rail Development and Delivery, E&S Branch use only]	
			Y/N	Comments
		<p>contact throughout the construction phase.</p> <p>44. The community would be kept informed of construction progress, activities and impacts in accordance with the Community Liaison Management Plan to be developed prior to construction.</p>		
Traffic	<p>Traffic generated by construction activities for the Proposal would include heavy vehicles associated with construction plant, deliveries and removal of materials along with light vehicles used by construction workers for transport. Construction traffic would generally park within the rail corridor and construction compounds for the duration of the works.</p> <p>About 30 site vehicle movements would be required per day during possessions, with limited vehicle movements required outside possessions. The site would be accessed via existing Sydney Trains access gates on Gladstone Avenue, Miller Street, Bridge Street, Old Springhill Road and through the western commuter carpark at Wollongong Station as outlined in Appendix B. In general, these vehicle movements are not expected to</p>	<p>45. Prior to the commencement of construction, a Traffic Management Plan (TMP) would be prepared as part of the CEMP and would include at a minimum:</p> <ul style="list-style-type: none"> - ensuring adequate road signage at construction work sites to inform motorists and pedestrians of the work site ahead to ensure that the risk of road accidents and disruption to surrounding land uses is minimised - maximising safety and accessibility for pedestrians and cyclists 	Y	

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Aspect	Nature and extent of impacts (negative and positive) during construction if control measures implemented	Proposed Control Measures	Endorsed [for Rail Development and Delivery, E&S Branch use only]	
			Y/N	Comments
	<p>adversely impact local traffic or vehicle flows. However, temporary lane closures would be implemented on the Bridge Street overbridge at Coniston to enable NDD works and the replacement of bridge screens to occur. Impacts would be short term and the road would remain operational throughout. Appropriate Traffic Control Plans would be implemented on site to minimise impacts. Construction traffic is not anticipated to impact public transport including local bus routes or train replacement buses.</p> <p>Train movements are not expected during the majority of construction, as works would largely be completed during rail possessions. Therefore there would be no impacts to train movements from the Proposal.</p> <p>Pedestrian access would not be impacted except during the temporary lane closures on the Bridge Street overbridge.</p> <p>There would be minimal impacts to commuter carparks or street parking as construction vehicles would generally park within the rail corridor and at the designated construction compounds.</p>	<ul style="list-style-type: none"> - ensuring adequate sight lines to allow for safe entry and exit from the site - ensuring access to railway stations, businesses, entertainment premises and residential properties (unless affected property owners have been consulted and appropriate alternative arrangements made) - parking locations for construction workers away from stations and busy residential areas and details of how this would be monitored for compliance - routes to be used by heavy construction-related vehicles to minimise impacts on sensitive land uses and businesses. - measures to manage traffic flows around the area affected by the Proposal, including as required regulatory and directional 		

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Aspect	Nature and extent of impacts (negative and positive) during construction if control measures implemented	Proposed Control Measures	Endorsed [for Rail Development and Delivery, E&S Branch use only]	
			Y/N	Comments
		<p>signposting, line marking and variable message signs and all other traffic control devices necessary for the implementation of the TMP.</p> <ul style="list-style-type: none"> - Consultation with the relevant roads authorities would be undertaken during preparation of the construction TMP. The performance of all project traffic arrangements must be monitored during construction. <p>46. Communication would be provided to the community and local residents to inform them of changes to pedestrian access and/or traffic conditions including vehicle movements and anticipated effects on the local road network relating to site works.</p> <p>47. Road Occupancy Licences for temporary road closures would be obtained, where required.</p>		

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Aspect	Nature and extent of impacts (negative and positive) during construction if control measures implemented	Proposed Control Measures	Endorsed [for Rail Development and Delivery, E&S Branch use only]	
			Y/N	Comments
Waste	<p>The construction of the Proposal would generate the following waste:</p> <ul style="list-style-type: none"> - NDD liquid waste - excavation spoil - excess concrete/concrete washout - various building material waste offcuts (metals, timbers, plastics, etc) - electrical wiring and conduit wastes (from electrical connections) - green waste from vegetation removal - general waste, including food and other wastes generated by construction workers. <p>Waste management would be undertaken in accordance with the <i>Waste Avoidance and Resource Recovery Act 2001</i> (WARR Act). A Waste Management Plan would be prepared that would identify all potential waste streams associated with the works and outline methods of disposal of waste that cannot be reused or recycled at appropriately licensed facilities along with other onsite</p>	<p>48. The CEMP and Waste Management Plan would address waste management and would at a minimum:</p> <ul style="list-style-type: none"> - identify all potential waste streams associated with the works and outline methods of disposal of waste that cannot be reused or recycled at appropriately licensed facilities - detail other onsite management practices such as keeping areas free of rubbish - specify controls and containment procedures for hazardous waste and asbestos waste - outline the reporting regime for collating construction waste data. <p>49. All spoil and waste must be classified in accordance with the <i>NSW EPA Waste Classification Guidelines Part 1</i>:</p>	Y	

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Aspect	Nature and extent of impacts (negative and positive) during construction if control measures implemented	Proposed Control Measures	Endorsed [for Rail Development and Delivery, E&S Branch use only]	
			Y/N	Comments
	<p>management practices such as keeping areas tidy and free of rubbish.</p> <p>Waste management targets would be developed for the Proposal through the application of the TfNSW <i>Sustainable Design Guidelines – Version 4.0</i>.</p> <p>These targets would include reuse and recycling.</p>	<p><i>Classifying Waste</i> (EPA, 2014) prior to disposal at a licensed facility.</p> <p>50. Any concrete washout would be established and maintained in accordance with TfNSW's <i>Concrete Washout Guideline</i> (SD-112) with details included in the CEMP and location marked on the ECM.</p>		
Visual	<p>Construction works would result in temporary visual impacts which may extend beyond the Proposal site. Visual impacts would be limited given the works would be temporary in nature and concentrated in possessions. Impacts may include the presence of hoarding, construction vehicles, equipment and workers, including vehicles travelling to and from site on the surrounding roads.</p>	<p>51. Temporary hoardings, barriers, traffic management and signage would be removed when no longer required.</p>	Y	
Urban design	N/A	N/A	Y	
Geotechnical	The construction of the Proposal would not result in any geotechnical impacts and therefore, mitigation measures are not required	N/A	Y	

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Aspect	Nature and extent of impacts (negative and positive) during construction if control measures implemented	Proposed Control Measures	Endorsed [for Rail Development and Delivery, E&S Branch use only]	
			Y/N	Comments
Land use	The Proposal would not result in any property acquisition. The majority of the Proposal is within the rail corridor on TAHE land, with the exception of the works on the Bridge Street overbridge. Traffic control measures detailed above would adequately manage impacts to the overbridge.	N/A	Y	
Risk	The construction of the Proposal would not result in any additional risk over and above the current risks present and therefore, mitigation measures are not required. The risk of unexpected finds are addressed above.	N/A	Y	
Climate Change	Construction of the Proposal would result in a minor contribution of greenhouse gas emissions associated with the operation of plant and machinery, including those used for transportation of material and personnel to the site. Climate change risk will be managed in accordance with the Transport Strategic Risk Management Plan – Climate Change Due to the scale and temporary nature of the construction works, the Proposal would not result in any additional risk of climate change impacts over and above	51. A climate change risk assessment would be undertaken to address climate change risk and adaptation measures addressed in the design and operation.	Y	

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Aspect	Nature and extent of impacts (negative and positive) during construction if control measures implemented	Proposed Control Measures	Endorsed [for Rail Development and Delivery, E&S Branch use only]	
			Y/N	Comments
	<p>the current risks and therefore, mitigation measures are not required during construction</p> <p>Climate adaptation measures will be adopted in the design and operation.</p>			
Sustainability	<p>Sustainability of the Proposal would be managed in accordance with the TfNSW <i>Sustainable Design Guidelines – Version 4.0</i>.</p> <p>Consistent with the Future Transport Strategy 2056, Transport is committed to managing impacts on the environment and operating in an environmentally sustainable manner. These commitments are set out in the Transport Environment and Sustainability Policy The proposal is being developed and would be delivered in accordance with Transport’s Sustainability Plan including Transport’s vision - that every journey is people and planet positive.</p> <p>The Transport approach is to drive sustainability through eight key focus areas. These key focus areas and the Sustainability Plan goals are aligned with the United Nations Sustainable Development Goals (UNSDGs) as part of best practice sustainability approaches.</p>	<p>52. The Proposal would be designed and managed in accordance with the TfNSW <i>Sustainable Design Guidelines – Version 4.0</i> and achieve a minimum Pass rating.</p> <p>53. A suitably qualified and experienced Sustainability Manager who is responsible for implementing the sustainability objectives for the Project must be nominated by the design Contractor. The nominated Sustainability Manager is to be endorsed by the Senior Manager Sustainability (SMS) or delegate prior to the preparation of the sustainability management plan (SMP).</p> <p>54. A Sustainability Management Plan (SMP) would be prepared and submitted by the design contractor to the SMS (or</p>	Y	

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Aspect	Nature and extent of impacts (negative and positive) during construction if control measures implemented	Proposed Control Measures	Endorsed [for Rail Development and Delivery, E&S Branch use only]	
			Y/N	Comments
		delegate) for approval at least 14 days prior to site mobilisation.		
Soils and Contaminated Land	<p>A search of the NSW EPAs contaminated land register was undertaken on 2 June 2022 and identified the following contaminated sites in the study area:</p> <ul style="list-style-type: none"> Greenhouse Park <p>A search of the list of the NSW contaminated sites notified to the EPA was undertaken on 2 June 2022 and identified the following contaminated sites near the area of the Proposal:</p> <ul style="list-style-type: none"> Greenhouse Park <p>Given the Proposal is about 200m from Greenhouse Park impacts from this site are unlikely.</p> <p>Railway corridors have the potential to contain various contaminated materials from historical and operational sources. Such sources relate to the long-term operation of the railway and the history of nearby contaminating activities. Possible sources of contamination may include:</p>	<p>55. An appropriate Unexpected Finds Protocol, considering asbestos containing materials and other potential contaminants, would be included in the CEMP. Procedures for handling asbestos containing materials, including licensed contractor involvement as required, record keeping, site personnel awareness and waste disposal to be undertaken in accordance with SafeWork NSW requirements.</p> <p>56. All spoil to be removed from site would be tested to confirm the presence of any contamination. Any contaminated spoil would be disposed of at an appropriately licensed facility.</p>	Y	

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Aspect	Nature and extent of impacts (negative and positive) during construction if control measures implemented	Proposed Control Measures	Endorsed [for Rail Development and Delivery, E&S Branch use only]	
			Y/N	Comments
	<ul style="list-style-type: none"> leaks and spills from fuels, oils, solvents and lubricants stockpiles of waste materials uncontrolled fill material fuels, oils, wash down solvents, lead and asbestos fines from former train brakes heavy metals pesticides associated with insect and weed control. The southern half of the area of the Proposal is mapped as Class 5 ASS in the Wollongong LEP which is the lowest risk category. As the Proposal involve minimal excavation and would not lower the watertable on adjacent Class 1, 2, 3 or 4 land, impacts from ASS are unlikely. 			
Cumulative impacts	A search of the Department of Planning and Environment’s (DPE) Major Projects Register on 23 June 2022 did not identify any major developments in close proximity to the Proposal area.	57. Works associated with the Proposal would be coordinated, as required, with construction activities nearby.	Y	

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Aspect	Nature and extent of impacts (negative and positive) during construction if control measures implemented	Proposed Control Measures	Endorsed [for Rail Development and Delivery, E&S Branch use only]	
			Y/N	Comments
	During construction, the works would be coordinated with other construction activities in the area where feasible.			
Management and mitigation measures	The Transport for Tomorrow MTMS Construction Environmental Management Plan (CEMP) would be updated to identify appropriate mitigation measures to manage the Proposal.	<p>58. The Transport for Tomorrow MTMS Construction Environmental Management Plan would be updated to identify appropriate mitigation measures to manage the Proposal for approval by the TfNSW Senior Manager Environment and Sustainability.</p> <p>59. An Environmental Control Map would be prepared by the construction contractor in accordance with the TfNSW <i>Guide to Environmental Control Map</i> - DMS-SD-015 for approval by the TfNSW Senior Manager Environment and Sustainability and updated following any revisions made throughout construction.</p> <p>60. Any modifications to the Proposal, if approved, would be subject to further assessment and approval by TfNSW. This</p>	Y	

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Aspect	Nature and extent of impacts (negative and positive) during construction if control measures implemented	Proposed Control Measures	Endorsed [for Rail Development and Delivery, E&S Branch use only]	
			Y/N	Comments
		assessment would need to demonstrate that any environmental impacts resulting from the modifications have been minimised.		

Impact Assessment - Operation

Aspect	Nature and extent of impacts (negative and positive) during operation	Proposed Control Measures	Endorsed [Rail Development and Delivery, E&S Branch use only]	
			Y/N	Comments
Flora and fauna	There are no anticipated impacts to flora and fauna during operation of the Proposal.	N/A	Y	
Water	There would be no increased risks to surface water or groundwater from the operation of the Proposal. The Proposal would not change the hydrology of the area. The existing track drainage system would continue to manage stormwater in the area. There would be minimal increase to runoff, and therefore it is considered that the impacts to surface water and hydrology would be negligible and therefore, mitigation measures are not required.	N/A	Y	

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Aspect	Nature and extent of impacts (negative and positive) during operation	Proposed Control Measures	Endorsed [Rail Development and Delivery, E&S Branch use only]	
			Y/N	Comments
Air quality	There are no anticipated impacts to air quality during operation of the Proposal.	N/A	Y	
Noise and vibration	There are no anticipated impacts to noise and vibration during operation of the Proposal.	N/A	Y	
Aboriginal heritage	There are no anticipated impacts to Aboriginal Heritage during operation of the Proposal.	N/A	Y	
Non-Aboriginal heritage	There are no anticipated impacts to Non-Aboriginal Heritage during operation of the Proposal.	N/A	Y	
Community, Social and Economic	There are no anticipated community, social or economic impacts during operation of the Proposal.	N/A	Y	
Traffic	There are no anticipated impacts to traffic during operation of the Proposal.	N/A	Y	
Waste	There are no anticipated waste impacts during operation of the Proposal.	N/A	Y	
Visual	As the new OHW infrastructure would be similar to the existing OHW infrastructure in the area of the Proposal there are no anticipated visual impacts from the new infrastructure during operation. There would be potential minor positive visual impacts from vegetation clearing during operation of the Proposal due to improved	N/A	Y	

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Aspect	Nature and extent of impacts (negative and positive) during operation	Proposed Control Measures	Endorsed [Rail Development and Delivery, E&S Branch use only]	
			Y/N	Comments
	views of Coniston Station. There would be potential minor negative visual impacts from vegetation clearing during operation of the Proposal due to the removal of trees behind the Row of Bungalows on Gladstone Avenue.			
Urban design	N/A	N/A	Y	
Geotechnical	There are no anticipated geotechnical impacts during operation of the Proposal.	N/A	Y	
Land use	The operation of the Proposal would not result in any change to the current land use and therefore, mitigation measures are not required.	N/A	Y	
Risk	The operation of the Proposal would not result in any additional risk over and above the current risks present and therefore, mitigation measures are not required.	N/A	Y	
Climate Change	The Proposal would not result in any additional risk climate change impacts over and above the current risks. Climate change impacts across the network would be managed in accordance with the Transport Strategic Risk Management Plan – Climate Change.	61. Climate change impacts across the network would be managed in accordance with Transport Strategic Risk Management Plan – Climate Change	Y	

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Aspect	Nature and extent of impacts (negative and positive) during operation	Proposed Control Measures	Endorsed [Rail Development and Delivery, E&S Branch use only]	
			Y/N	Comments
Sustainability	There are no anticipated sustainability impacts during operation of the Proposal.	N/A	Y	
Other	N/A	N/A	Y	
Management and mitigation measures	N/A	N/A	Y	

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Are you confident that the impacts of the activity are known and understood?	Yes	
Are you confident that the impacts of the activity can be managed so as not to have an adverse impact?	Yes	
<p>I certify that to the best of my knowledge this EIA checklist:</p> <ul style="list-style-type: none"> • examines and takes into account to the fullest extent possible all matters affecting or likely to affect the environment as a result of activities associated with the project; and • is accurate in all material respects and does not omit any material information. 		
Name [REDACTED]	Signature [REDACTED]	Date
Title [REDACTED]		15/9/2022
Name [REDACTED]	Signature [REDACTED]	Date
Title [REDACTED]		16/09/2022
Name [REDACTED]	Signature	Date

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Title [REDACTED]	[REDACTED]	16/09/2022
Name [REDACTED]	Signature [REDACTED]	Date 16/09/2022
Title [REDACTED]		
Name [REDACTED] [REDACTED]	Signature [REDACTED]	Date 21/09/22
Title [REDACTED]		

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THIS SECTION FOR RAIL DEVELOPMENT AND DELIVERY, ENVIRONMENT AND SUSTAINABILITY BRANCH USE ONLY

Project Approvals

Planning Approvals (Refer to section 3 of the Guide to Planning and Environmental Approvals)

Is the project a part of an activity/development which has already been approved under the EP&A Act ?

Yes If yes, does the approval need to be modified to accommodate the project? If yes, identify requirements for modification.

No If no, is the project to be assessed under ~~Part 4~~ or Division 5.1?

If the project is to be assessed under Division 5.1, is it an activity that is likely to significantly affect the environment (including critical habitat) or threatened species, populations or ecological communities, or their habitats?

Yes if yes, the project is required to be assessed under Division 5.2 .

No, with the inclusion of the proposed control measures the project can be appropriately assessed under Division 5.1.

The environmental assessment has been undertaken in the context of Section 171 of the Environmental Planning & Assessment Regulation 2021 (refer to Appendix A), which includes 2 additional factors q and r.

Yes

No – further assessment required (planning approval cannot be granted).

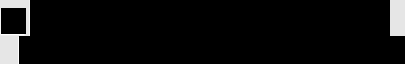

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Environmental Approvals (Refer to section 2 of the Guide to Planning and Environmental Approvals)

Identify all other approvals required for the project:

Tick appropriate box

No further assessment required.	✓		Further Assessment is required
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Approved		
<p>I have examined and considered the Proposed Activity outlined in this Environmental Impact Assessment Checklist. Under delegation from the Secretary Transport of New South Wales, I determine that the Proposed Activity may be carried out subject to the following conditions of approval.</p> <p>1. Works are to be undertaken in accordance with the Proposed Control Measures (including any Planning and Environment endorsement comments) identified in the impact assessment tables in this Environmental Impact Assessment Checklist</p>	<p>Signature </p> <p>Name </p>	<p>Date 21 Sept 2022</p>

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Abbreviations

Term	Meaning
AHIMS	Aboriginal Heritage Information Management System
AS	Australian Standard
APAS	Australian Paint Approval Scheme
ASS	Acid Sulfate Soils
BCA	Building Code of Australia
BC Act	<i>Biodiversity Conservation Act 2016 (NSW)</i>
CEMP	Construction Environmental Management Plan
CCTV	Closed Circuit Television
DDA	<i>Disability Discrimination Act 1992 (Cwlth)</i>
DES	TfNSW Director Environment & Sustainability
DPE	NSW Department of Planning and Environment
DSAPT	<i>Disability Standards for Accessible Public Transport (2002)</i>
E&S	Environment and Sustainability Branch of TfNSW
ECM	Environmental Controls Map
EMS	Environmental Management System
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979 (NSW)</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2021 (NSW)</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)</i>
EPL	Environment Protection Licence
Heritage Act	<i>Heritage Act 1977 (NSW)</i>
Transport and Infrastructure SEPP	<i>State Environmental Planning Policy (Transport and Infrastructure) 2021 (NSW)</i>
LEP	Local Environmental Plan
LGA	Local Government Area
NML	Noise Management Level
NSW	New South Wales
OEH	Former NSW Office of the Environment and Heritage
PoEO Act	<i>Protection of the Environment Operations Act 1997 (NSW)</i>

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Term	Meaning
SEPP	State Environmental Planning Policy
SHI	State Heritage Inventory
VOC	Volatile Organic Compounds

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Definitions

Term	Meaning
Concept design	The concept design is the preliminary design presented in this EIA Checklist, which would be refined by the Contractor (should the Proposal proceed) to a design suitable for construction (subject to Transport for NSW acceptance).
Construction	Includes all work in respect of the Project, other than survey, acquisitions, fencing, investigative drilling or excavation, building/road dilapidation surveys, or other activities determined by the TfNSW DES to have minimal environmental impact such as minor access roads, minor adjustments to services/utilities, establishing temporary construction compounds (in accordance with this approval), or minor clearing (except where threatened species, populations or ecological communities would be affected, unless otherwise agreed by the DES).
Contractor	The entity appointed by Transport for NSW to undertake the construction of the Proposal. The Contractor is therefore responsible for all work on the proposal, both design and construction.
Determining authority	A Minister or public authority on whose behalf an activity is to be carried out or public authority whose approval is required to carry out an activity (under Division 5.1 of the EP&A Act).
Disability Standards for Accessible Public Transport	The Commonwealth Disability Standards for Accessible Public Transport 2002 (as amended), authorised under the Commonwealth Disability Discrimination Act 1992 (DDA).
Out of hours work	Defined as work undertaken outside standard construction hours (i.e. outside of 7am to 6pm Monday to Friday, 8am to 1pm Saturday and no work on Sundays/public holidays).
Proponent	A person or body proposing to carry out an activity under Division 5.1 of the EP&A Act.
The Proposal	The construction and operation of the Coniston Overhead Wiring Upgrades.
Sensitive receivers	Land uses which are sensitive to potential noise, air and visual impacts, such as residential dwellings, schools and hospitals.

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Appendix A – Consideration of Section 171

The following factors, listed in section 171 of the *Environmental Planning and Assessment Regulation 2021*, have been considered to assess the likely impacts of the proposal on the natural and built environment.

Factor	Impacts
<p>(a) Any environmental impact on a community? The Proposal would result in a moderate, short term, negative impact on the community through construction noise and other potential minor impacts such as traffic and visual impacts.</p>	Moderate Negative Short term
<p>(b) Any transformation of a locality? The Proposal would not result in a transformation of the locality. The proposed OHW infrastructure upgrades are similar in nature to the existing OHW infrastructure.</p>	Nil
<p>(c) Any environmental impact on the ecosystem of the locality? The Proposal would result in minor, long term, negative impacts to the ecosystems of the locality due to the removal of vegetation. Given no TECs or threatened species of flora or fauna would be impacted, the vegetation to be removed consists of Urban Native/Exotic PCT, the impacts would be minor. The mitigation measures detailed in the Flora and Fauna section of this EIA would adequately manage the impacts.</p>	Minor Negative Long term
<p>(d) Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality? The Proposal would result in minor impacts to the aesthetic and recreational quality of the locality due to construction noise, traffic, vegetation and visual impacts.</p>	Minor Negative Short term Long term
<p>(e) Any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations? The Proposal would have a minor adverse direct and indirect impact on Coniston Railway Station Group. The mitigation measures detailed in the heritage sections of this EIA would adequately manage the impacts, as well as any potential impacts from unexpected finds.</p>	Minor Negative Short term Long term
<p>(f) Any impact on the habitat of protected fauna (within the meaning of the <i>National Parks and Wildlife Act 1974</i>)? The Proposal would result in minor, long term, negative impacts on the habitat of protected fauna due to the removal of vegetation. Given no TECs or threatened species of flora or fauna would be impacted, the vegetation to be removed consists of Urban Native/Exotic PCT, the impacts would be minor. The mitigation measures detailed in the Flora and Fauna section of this EIA would adequately manage the impacts.</p>	Minor Negative Long term
<p>(g) Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air? The Proposal would not result in the endangering of any species of animal, plant or other form of life given no impacts would occur to TECs or threatened species.</p>	Nil
<p>(h) Any long-term effects on the environment? The Proposal would not have a long-term effect on the environment with implementation of the management and mitigation measures identified in the EIA.</p>	Nil
<p>(i) Any degradation of the quality of the environment? The Proposal would not cause any degradation in the quality of the environment with implementation of the management and mitigation measures identified EIA.</p>	Nil
<p>(j) Any risk to the safety of the environment?</p>	Minor

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Factor	Impacts
<p>Construction of the Proposal would be managed in accordance with a CEMP to reduce any risks to the environment. The proposed construction works are of a type regularly undertaken within the rail corridor.</p>	<p>Negative Short term</p>
<p>(k) Any reduction in the range of beneficial uses of the environment? The Proposal is not anticipated to cause any reduction in the range of beneficial uses of the environment.</p>	<p>Nil</p>
<p>(l) Any pollution of the environment? During construction, the Proposal has the potential to result in short-term noise, air and water pollution. These impacts would be managed in accordance with the mitigation measures outlined in the EIA.</p>	<p>Minor Negative Short term</p>
<p>(m) Any environmental problems associated with the disposal of waste? The Proposal is unlikely to result in any environmental problems associated with the disposal of waste. All waste requiring off-site disposal would be classified in accordance with the <i>Waste Classification Guidelines</i> (EPA, 2014) prior to disposal at an appropriate waste facility licenced to accept waste of the relevant classification.</p>	<p>Minor Negative Short term</p>
<p>(n) Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply? The Proposal would not increase demands on resources (natural or otherwise) that are, or are likely to become, in short supply.</p>	<p>Nil</p>
<p>(o) Any cumulative environmental effect with other existing or likely future activities? The Proposal may have cumulative impacts due to the construction of other known developments within the locality, including other MTMS works at nearby Spring Hill. These impacts are expected to be minor and would be limited to the construction phase.</p>	<p>Minor Negative Short term</p>
<p>(p) Any impact on coastal processes and coastal hazards, including those under projected climate change conditions? The Proposal is not located on the coastline and has not been identified as within an area that would be subjected to sea level rise.</p>	<p>Nil</p>
<p>(q) Applicable local strategic planning statements, regional strategic plans or district strategic plans made under the Act, Division 3.1 The Proposal aligns with Section 7.1.1 Rail Transport of the <i>Wollongong Local Strategic Planning Statement 2020</i> (Wollongong City Council, June 2020) as it is a component of the MTMS program of works, which once completed would facilitate the operation of the 10-car Maryiung trains on the south coast. The Proposal aligns with Objective 26 of the <i>Illawarra Shoalhaven Regional Plan 2041</i> (NSW Government, May 2021) as it is a component of the MTMS program of works, which once completed would facilitate the operation of the 10-car Maryiung trains on the south coast.</p>	<p>Moderate Positive Long term</p>
<p>(r) Other relevant environmental factors In considering the potential impacts of the Proposal all relevant environmental factors have been considered, refer to the Impact Assessment section of this EIA.</p>	<p>Nil</p>

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