Appendix A - Consideration of section 171(2) factors, section 171A factors and matters of national environmental significance and Commonwealth land

Consideration of section 171(2) factors

In addition to the requirements of the Guideline for Division 5.1 assessments (DPE 2022) as detailed in the REF, the following factors, listed in section 171(2) of the *Environmental Planning and Assessment Regulation 2021*, have also been considered to assess the likely impacts of the proposal on the natural and built environment.

Factor	Description of impact	Duration and extent
a) Environmental impact on the community.	Construction of the proposal would result in temporary environmental impacts including: • increase in construction vehicle movements • noise and vibration emissions • dust emissions from construction plant and vehicles • visual impacts from construction works • loss of parking within the commuter car parks and surrounding streets • loss of 47 trees. These impacts would be mostly temporary and managed with the mitigation measures outlined in the REF. Trees would be offset under Transport policy.	Short-term negative. Tree removal would be subject to offsetting in accordance with Transport policy.
b) The transformation of the locality.	Construction of the proposal would result in temporary visual impacts to sensitive receivers including commuters, nearby residents and people accessing the Moss Vale town centre. The most visually prominent changes resulting from the proposal include installation of three lifts, changes to the footbridges, removal of vegetation, changes to the footpaths and station entrances, potential installation of a noise barrier, and changes to the stabling yard infrastructure. These changes are considered appropriate given the benefit of the proposal in comparison to the low number of sensitive visual receivers that would see the changes. Overall, the design and materiality of the proposed elements would fit within the greater suite of architectural elements within the wider rail corridor and contribute a modern aesthetic to the town centre while protecting and enhancing heritage elements.	Long-term positive
c) Any environmental impact on the ecosystems of the locality.	The proposal is located in a highly modified and urbanised landscape with limited fauna habitat values, however the proposal would result in the removal of 47 trees. The mitigation measures provided in the REF, including landscaping provision would be implemented to minimise further potential impacts to biodiversity.	Long-term neutral
d) Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality.	The proposal would have some temporary impacts during construction associated with visual amenity, access arrangements for some commuters and noise and vibration. These impacts would be short-term and minimised through the implementation of the mitigation measures provided in the REF.	Short-term negative
e) Any effect on any 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 involve retrofitting for new facilities which would be designed to minimise impacts to original fabric, including preservation of original layout where possible and removal of intrusive modifications. The proposal design has evolved to be sympathetic with the heritage context and minimise fabric and visual impacts while enabling upgrades to allow access for all customers into the future. The proposal is located in an area that has been highly modified for a range of land uses and is not considered to be located within a high-risk landscape for Aboriginal heritage potential. An unexpected finds procedure would be carried out in the unlikely event that potential heritage items are found.	Long-term positive

Factor	Description of impact	Duration and extent
f) Any impact on the habitat of protected fauna (within the meaning of the *Biodiversity and Conservation Act 2016*).	The proposal would result in the removal of 47 trees, one of which is a listed endangered species under the BC Act 2016. Additionally, there would be removal of non-native vegetation which would involve the loss of local habitat connectivity. The proposal would also have the potential to spread weeds within and outside of the rail corridor and adjacent areas. The proposal is not likely to result in significant impact to threatened species or ecological communities or their habitats. Mitigation measures outlined in the REF are listed for potential impacts.	Long-term neutral
g) Any endangering of a species of animal, plant or other form of life, whether living on land, in water or in the air.	The proposal is not likely to result in a significant impact to threatened species or ecological communities or their habitats, within the meaning of the BC Act 2016 or FM Act 1994. As such, neither a Species Impact Statement or Biodiversity Development Assessment Report is required. The proposal is not likely to result in a significant impact to threatened species, ecological communities or migratory species, within the meaning of the EPBC Act. Mitigation measures outlined in the REF are listed for potential impacts.	Long-term neutral
h) Any long-term effects on the environment	Operation of the proposal would improve access to the station and its surrounding areas. The proposal would complement existing station architecture, protect and enhance heritage features, and minimise negative visual impacts. Providing an accessible transport option for all customers would enable the travelling public to access Moss Vale town centre more readily from the local and wider region. There would be no long-term effects on the environment.	Long-term neutral
i) Any degradation of the quality of the environment.	The proposal would have some temporary impacts during construction associated with visual amenity, dust and noise. Water quality may be temporarily impacted during the proposal as a result of erosion and sedimentation and potential fuel or chemical spills during construction. These impacts would be short-term and minimised through the implementation of the mitigation measures provided in the REF.	Short-term negative
j) Any risk to the safety of the environment.	During construction, an increase in heavy vehicle movements associated with the transportation of equipment and materials may decrease road safety. During excavation, tree removal, earthworks and associated stockpiling, there is potential for dust to be generated which may degrade local air quality. Excavations required for the proposal may intercept groundwater, which may require dewatering (depending on the volume of inflow) and may also be contaminated from previous rail activities. A dewatering procedure would be put in place to manage dewatering operations including avoiding releasing water that may impact soil or water quality values in the receiving environment. Mitigation measures are provided in the REF to reduce the above impacts.	Short-term negative
k) Any reduction in the range of beneficial uses of the environment.	The proposal would not alter the current land use or reduce the range of future beneficial uses of the environment.	Long-term positive

Factor	Description of impact	Duration and extent
l) Any pollution of the environment.	The proposal would have some temporary impacts during construction associated with visual amenity, dust and noise. The proposal could also result in minor impacts to water quality from erosion and sedimentation impacts and from potential oil or fuel spills from construction machinery. These impacts would be short-term and minimised through the implementation of the mitigation measures provided in the REF.	Short-term negative
m) Any environmental problems associated with the disposal of waste	All waste would be managed and disposed of with a site-specific WMP prepared as part of the CEMP. Measures would be implemented to ensure waste is reduced, reused or recycled where practicable.	Short-term negative
n) Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply.	The proposal is unlikely to affect any resources (natural or otherwise) that are or are likely to become in short supply.	Nil
o) The cumulative environmental effect with other existing or likely future activities.	Cumulative environmental effects with other activities are discussed in Section 6.13. There are not anticipated to be cumulative impacts associated with the concurrent operation of the proposal and other projects.	Nil
p) Any impact on coastal processes and coastal hazards, including those under projected climate change conditions.	As the proposal is not located within a coastal area, it would not impact on coastal process and/or coastal hazards, including those under projected climate change conditions.	Nil
q) Applicable local strategic planning statements, regional strategic plans or district strategic plans made under the Act, Division 3.1	The proposal aligns with the Wingecarribee Shire Council's planning statement (Wingecarribee Shire Council, 2023b) as it provides a long-term planning framework to meet the economic, housing, social and environmental needs of the community through the provision of accessible public transport. The proposal also addresses the Community Strategic Plan – Wingecarribee 2041 as one of its goals is to provide accessible, efficient and interconnected public transport systems and infrastructure within and out of the Shire. The proposal also fits with Council's vision for the town centre set out in the Town Centre Master Plan (Wingecarribee Shire Council, 2014) with the stated aim to improve accessibility and pedestrian access within and around Moss Vale. Regionally, the proposal aligns with the Draft South East and Tablelands Regional Plan (NSW Government, 2022), in particular one of its key themes; 'support a connected and active region'. The proposal would improve access to public transport connections between key destinations and strategic assets providing support for people visiting and passing through the region.	Long-term positive
r) Other relevant environmental factors	In considering the potential impacts of this proposal all relevant environmental factors have been considered (refer to Chapter 6 of this assessment).	Nil

Consideration of section 171A factors – activities in catchments

SEPP Biodiversity and Conservation – Chapter 6 (Water Catchments)

Chapter 6 (Water Catchment) of SEPP (Biodiversity and Conservation) relates to the use of land within regulated catchments. In these catchments Transport is required to consider the environmental impact of activities to which Division 5.1 of the EP&A Act applies before carrying out the activity.

The four regulated catchments are:

a) the Sydney Drinking Water Catchment,

b) the Sydney Harbour Catchment,

c) the Georges River Catchment,

d) the Hawkesbury-Nepean Catchment.

In undertaking an activity in a regulated catchment Transport must satisfy sections 6.6(2), 6.7(2), 6.8(2) and 6.9(2) and consider environmental impacts listed in sections 6.6(1), 6.7(1), 6.8(1) and 6.9(1) of State Environmental Planning Policy (Biodiversity and Conservation) 2021. This includes specific consideration of water quality and quantity, aquatic ecology, flooding, and recreation and public access.

Water quality and quantity

Table C1 Water quality and quantity considerations, Biodiversity and Conservation SEPP

Section	Factor	Impact/Comment
The project must be satisfied the below before undertaking the activity:		
6.6(2)(a)	The effect on the quality of water entering a natural waterbody will be as close as possible to neutral or beneficial.	Nil
6.6(2)(b)	The impact on water flow in a natural waterbody will be minimised	Nil
The project must consider the below before undertaking the activity:		
6.6(1)(a)	Consider whether the development will have a neutral or beneficial effect on the quality of water entering a waterway,	During construction, the proposal has the potential to impact the quality of water entering the nearby waterway of Whites Creek. This risk would be somewhat naturally mitigated by the separation between the proposal area and Whites Creek about 160 metres south. However, suitable mitigation measures as mentioned in the REF would be put in place to avoid contaminants entering the waterbody.
6.6(1) (b)	Consider whether the development will have an adverse impact on water flow in a natural waterbody,	Nil
6.6(1) (c)	Consider whether the development will increase the amount of stormwater run-off from a site,	Nil
6.6(1) (d)	Consider whether the development will incorporate on-site stormwater retention, infiltration or reuse,	The proposal would include new drainage infrastructure including outlets near the new lift areas which would connect to existing stormwater pits and pipes. Run-off from the reconfigured station entrances would continue to drain to council's existing street stormwater system.

Section	Factor	Impact/Comment
6.6(1) (e)	Consider the impact of the development on the level and quality of the water table,	Nil
6.6(1) (f)	Consider the cumulative environmental impact of the development on the regulated catchment,	Nil
6.6(1) (g)	Consider whether the development makes adequate provision to protect the quality and quantity of ground water.	Excavations required for the proposal may intercept groundwater, which may require dewatering (depending on the volume of inflow) and may also be contaminated from previous rail activities. A dewatering procedure would be put in place to manage dewatering operations including avoiding releasing water that may impact soil or water quality values in the receiving environment. The proposal is unlikely to affect the deeper standing water levels recorded in the groundwater bores in the surrounding area.

Aquatic ecology

Table C2 Aquatic ecology considerations, Biodiversity and Conservation SEPP

Section	Factor	Impact/Comment
The project must satisfied of the below before undertaking the activity:		
6.7(2)(a)	The direct, indirect or cumulative adverse impact on terrestrial, aquatic or migratory animals or vegetation will be kept to the minimum necessary for the carrying out of the development	Nil
6.7(2)(b)	The development will not have a direct, indirect or cumulative adverse impact on aquatic reserves	Nil
6.7(2)(c)	If a controlled activity approval under the Water Management Act 2000 or a permit under the Fisheries Management Act 1994 is required in relation to the clearing of riparian vegetation—the approval or permit has been obtained	Nil
6.7(2)(d)	The erosion of land abutting a natural waterbody or the sedimentation of a natural waterbody will be minimised	As per the mitigation measures listed in the REF, a site-specific Erosion and Sediment Control Plan would be prepared in accordance with the 'Blue Book' *Managing Urban Stormwater: Soils and Construction Guidelines* (Landcom, 2004) and updated throughout construction so it remains relevant to the activities. The Erosion and Sediment Control Plan measures would be put in place before starting work and maintained throughout construction.
6.7(2)(e)	The adverse impact on wetlands that are not in the coastal wetlands and littoral rainforests area will be minimised.	Nil

Section	Factor	Impact/Comment
The project must consider the below before undertaking the activity:		
6.7(1)(a)	Consider whether the development will have a direct, indirect or cumulative adverse impact on terrestrial, aquatic or migratory animals or vegetation	The proposal is located in a highly modified and urbanised landscape with limited fauna habitat values, however the proposal would result in the removal of 47 trees. Any trees removed for the proposal will be offset as per the requirements of Transport's *Biodiversity Policy* (2022) which would minimise further potential impacts to biodiversity.
6.7(1) (b)	Consider whether the development involves the clearing of riparian vegetation and, if so, whether the development will require— (i) a controlled activity approval under the Water Management Act 2000, or (ii) a permit under the Fisheries Management Act 1994	Nil
6.7(1) (c)	Consider whether the development will minimise or avoid— (i) the erosion of land abutting a natural waterbody, or (ii) the sedimentation of a natural waterbody	The Erosion and Sediment Control Plan measures would be put in place before starting work and maintained throughout construction.
6.7(1) (d)	Consider whether the development will have an adverse impact on wetlands that are not in the coastal wetlands and littoral rainforests area	Nil
6.7(1) (e)	Consider whether the development includes adequate mitigations and rehabilitation measures to protect aquatic ecology	Nil
6.7(1) (f)	Consider if the development site adjoins a natural waterbody—whether additional measures are required to ensure a neutral or beneficial effect on the water quality of the waterbody. Example— Additional measures may include the incorporation of a vegetated buffer between the waterbody and the site.	Nil

Flooding

Table C3 Flooding considerations, Biodiversity and Conservation SEPP

Section	Factor	Impact/Comment
The project must satisfied of the below before undertaking the activity:		
6.8(2)(a)	On flood liable land in a regulated catchment, the development will not— If there is a flood, result in a release of pollutants that may have an adverse impact on the water quality of a natural waterbody, or	Construction of the proposal would not affect flood regimes within or surrounding the station. The proposal area would not be directly impacted by flood waters in a one per cent AEP flood event, however access to construction sites may be impeded due to flood waters affecting Argyle Street and Lackey Road near Whites Creek. The southern portion of the proposal area outside of the rail corridor may also be affected under the

Section	Factor	Impact/Comment
		Probably Maximum Flood event. Mitigation measures would include monitoring and contingency planning for large flood events including removal of materials if required.
6.8(2)(b)	On flood liable land in a regulated catchment, the development will not— have an adverse impact on the natural recession of floodwaters into wetlands and other riverine ecosystems.	Nil - The proposal area is located outside of the mapped flood planning area of Whites Creek.
The project must consider the below:		
6.8(1)	Consider the likely impact of the development on periodic flooding that benefits wetlands and other riverine ecosystems	Nil

Neutral or beneficial effect

Chapter 6 (Water Catchments) of SEPP (Biodiversity and Conservation) relates to the use of land within the Sydney drinking water catchment. In accordance with Part 6.5 of SEPP (Biodiversity and Conservation), Transport is required to consider whether or not an activity to which Division 5.1 of the EP&A Act applies will have a neutral or beneficial effect on water quality before carrying out the activity.

Factor		Impact
1	Are there any identifiable potential impacts on water quality? What pollutants are likely? At what stage do the impacts occur? (ie. During construction and/or post construction?)	Potential pollutants are sediments, debris, hazardous chemicals and contaminants such as oil/fuel. The proposal has the potential to increase pollutant loads within local waterways. This risk would be somewhat naturally mitigated by the separation between the proposal area and nearby waterways, including Whites Creek about 160 metres south. Sediment control measures would be put in place and maintained during construction to avoid contaminants such as sediment escaping from the proposal area. Control measures would include those for sediment and run-off control, avoiding work during periods of heavy rainfall, and storing fuel/chemicals in dedicated, contained locations. With adequate controls implemented, it is expected that the overall impact upon local waterways and their water quality would be negligible to minor.
2	For each pollutant, list the mitigations needed to prevent or mitigate potential impacts on water quality (these may be Water NSW endorsed current recommended practices and/or equally effective other practices)	Mitigation measures, that would be in place during the construction and operational stages of the project include: • a site-specific Erosion and Sediment Control Plan • routine inspections of construction plant, vehicles and equipment • refuelling offsite and storage of chemicals and hazardous liquids away from drainage lines/drainage inlets • implementation of water quality and hazardous materials procedures in accordance with relevant EPA guidelines and Transport's *Chemical Storage and Spill Response Guideline* (Transport for NSW, 2023) • cessation of work in the event of a pollution incident and notification of Transport's Project Manager and TESR • continued operation of existing drainage throughout the construction phase • implementation of a dewatering procedure in accordance with Transport's *Water Discharge and Reuse Guideline* (Transport for NSW, 2019) • monitoring and contingency planning for large flood events.
3	Will the mitigations be adequate for the time required? How will they need to be maintained?	The mitigation measures within the REF would be adequate for the construction phase of the proposal. They would be designed to cope with seasonal weather conditions.

Factor		Impact
4	Will all impacts on water quality be effectively contained on the site by the identified mitigations (above) and not reach any watercourse, waterbody or drainage depression? Or will impacts on water quality be transferred outside the site for treatment? How? Why?	Mitigation measures identified in the REF would effectively contain potential impacts on water quality so that potential polluted waters do not impact Whites Creek. Sediment controls would be put in place and monitored throughout the construction of the proposal to avoid contaminants such as sediment escaping from the proposal area.
5	Is it likely that a neutral or beneficial effect on water quality will occur? Why?	Operation of the proposal is not expected to generate any additional pollutants (including sediments or contaminants) that could impact water quality, resulting in a neutral effect.

Matters of National Environmental Significance and Commonwealth land

Under the environmental assessment provisions of the EPBC Act, the following matters of national environmental significance and impacts on Commonwealth land are required to be considered to assist in determining whether the proposal should be referred to the Australian Department of Climate Change, Energy, the Environment and Water.

Factor		Impact
a	Any impact on a World Heritage property? There would be no World Heritage properties within 1 kilometre of the proposal.	Nil
b	Any impact on a National Heritage place? There are no National Heritage places within 1 kilometre of the proposal.	Nil
c	Any impact on a wetland of international importance? There are no wetlands of international importance within 1 kilometre of the proposal.	Nil
d	Any impact on a listed threatened species or communities? It is unlikely that the development of the proposal would significantly affect listed threatened species of communities.	Nil
e	Any impacts on listed migratory species? It is unlikely that the development of the proposal would significantly affect any listed migratory species.	Nil
f	Any impact on a Commonwealth marine area? There are no Commonwealth marine areas in the vicinity of the proposal.	Nil
g	Does the proposal involve a nuclear action (including uranium mining)? The proposal does not involve a nuclear action.	Nil
h	Additionally, any impact (direct or indirect) on the environment of Commonwealth land? The proposal would not be undertaken on or near any Commonwealth land.	Nil