

Consolidated assessment of impacts on Commonwealth land

Table 1 summarises the relevant considerations for the Hunter Transmission Project (HTP) in accordance with ‘Step 4: Are the impact significant relevant to the project’ of the *Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies - Significant impact guidelines 1.2 – Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth of Australia, 2013).

This assessment should be read in conjunction with the HTP Environmental Impact Statement (EIS) (and associated technical reports) dated August 2025, Amendment Report (and associated technical reports) dated February 2026, Submissions Report dated February 2026 and supplementary information provided to the NSW Department of Planning, Housing and Infrastructure (DPHI) in May 2026.

Table 1 Summary of assessment in relation to relevant considerations for the HTP as per the Commonwealth significant impact guidelines

Required consideration	How it has been addressed for the project
Impacts on landscapes and soils	
Is there a real chance or possibility that the action will:	
substantially alter natural landscape features	The project has been developed to avoid substantial alteration of natural landscape features through route selection, design refinement and limitation of vegetation clearing within the Singleton Military Area. <i>Technical Report 3 - Landscape character and visual impact assessment</i> of the EIS provides an assessment of the potential for the project to alter the landscape character of the Singleton Military Area in accordance with the methodology outlined in the <i>Transmission Guideline - Technical Supplement for Landscape Character and Visual Impact Assessment</i> (NSW DPHI, 2024) (the Technical Supplement). <i>Technical Report 3 - Landscape character and visual impact assessment</i> generally categorised the land within and adjoining the Singleton Military Area as landscape character zone (LCZ) 5 bushland and forested landscapes that was described as already being subject to longstanding military training activities, existing access tracks, cleared areas, and existing high voltage electricity transmission infrastructure. These existing conditions were used to establish the baseline landscape character sensitivity of the Singleton Military Area. The existing landscape character of the Singleton Military Area was assessed as having low landscape sensitivity during the daytime and night. The southernmost section of land within the Singleton Military Area was categorised as LCZ 8 forested hills, which was typified by steeply elevated, rugged ridges, densely vegetated closed forests and densely wooded private landholdings. Under existing conditions, the landscape sensitivity of this LCZ was assessed as being moderate during the daytime and high during the night-time. During construction of the project, localised vegetation removal and earthworks would result in a temporary and noticeable change within parts of the bushland and forested landscape. However, these changes were assessed as moderate in magnitude, spatially constrained and reversible, with construction areas to be rehabilitated on completion.

Required consideration	How it has been addressed for the project
	The landscape character impact of the project during daytime construction was assessed as very low for LCZ 5 and moderate for LCZ 8. During operation of the project, the assessment identified that permanent changes would be largely limited to the maintained transmission corridor and tower locations. While these elements would introduce linear infrastructure into the landscape, the surrounding vegetation, landform and distance would substantially limit broader landscape scale change. As a result, the project is not predicted to substantially alter the defining natural landscape features or overall landscape character of the Singleton Military Area. Consistent with the potential daytime landscape character impacts during construction, impacts during operation of the project were assessed as very low for LCZ 5 and moderate for LCZ 8.
cause subsidence, instability or substantial erosion, or	<i>Technical Report 9 – Soils and land impact assessment</i> of the EIS provides a soils and land capability assessment for the project, which was summarised in <i>Chapter 20 (Soils and contamination)</i> of the EIS and supplemented by <i>Section 5.14</i> of the Amendment Report. As part of the soils and land capability assessment, the project impact area was categorised into four soil management units (SMUs). The SMUs were derived from combining soil landscapes, soil types and land and soil capability classes which represented similar soil properties and susceptibility to project impacts. The project impact area where it intersects the Singleton Military Area was mapped as mostly occurring within land defined as SMU2 (Undulating mid lands). SMU2 is described as containing undulating rises, undulating low hills and foot slopes and is characterised as being extensively cleared and generally used for livestock grazing of cattle on native and modified pastures. Some remnant woodland and open woodlands were identified as occurring within the Singleton Military Area. SMU2 is also described as having high erosion risk where surface disturbance occurs due to the widespread presence of sodic soils which are prone to dispersion and erosion. The risk of substantial erosion from construction of the project would be minimised through implementation of mitigation measure SL2, which requires additional measures to be implemented should sodic soils be identified. This may include applying gypsum as an ameliorant to displace the sodium and provide the soil with a stronger aggregate and hold structure when wet. The potential for erosion or other soil impacts to occur during construction of the project would be managed through a project specific soil and water management plan (SMWP). The SMWP will identify foreseeable risks relating to soils erosion and water pollution during construction and describe how these risks will be managed. It will include a description of soil and water management approaches, methods for impact assessment and monitoring and mitigation measures. The soil and water management plan requirements are included as part of mitigation measure SW1. In addition, mitigation measure SW3 requires the development of erosion and sediment control plans (ESCPs), which will be implemented in consultation with a Certified Professional in erosion and sediment control for all disturbance activities. ESCPs will include additional consideration for areas identified as being high risk.

Required consideration	How it has been addressed for the project
involve medium or large-scale excavation of soil or minerals?	Within the Singleton Military Area, work would be limited to the construction of overhead transmission line infrastructure and associated access. The excavation volumes from this work would be limited to what is necessary to safely construct and stabilise individual tower structures. No excavation of soil or minerals would be undertaken for the purpose of extraction, processing or off-site reuse. While some localised excavation would be required to facilitate construction within the Singleton Military Area, the scale, extent and purpose of these works do not constitute medium or large-scale excavation of soil or minerals as typically understood in environmental assessment, Defence land use management, or land use planning contexts or as typically associated with extractive industries, bulk earthworks or mining activities. Potential impacts on soil from the project are described in <i>Chapter 20 (Soils and contamination)</i> and <i>Technical Report 9 - Soils and land impact assessment</i> of the EIS. Within the Singleton Military Area, impacts on soil would be localised, discrete and construction-related primarily associated with: - excavation for transmission tower footings - establishment of temporary laydown areas and construction access tracks - minor earthworks required to safely install structures adjacent to the existing 330 kV easement.

Required consideration	How it has been addressed for the project
Pollutants, chemicals, and toxic substances Is there a real chance or possibility that the action will:	
generate smoke, fumes, chemicals, nutrients, or other pollutants which will substantially reduce local air quality or water quality	<i>Technical report 18 – Air quality and greenhouse gas impact assessment</i> provides an assessment of air quality impacts for the project, which was summarised in section 22.1 of the EIS. Air quality impacts to the Singleton Military Area were considered through assessment of a 250 m buffer area of the project impact area as well as paved public roads which would be used by construction vehicles. Construction and operation of the project was assessed as unlikely to have a significant impact on local air quality in line with <i>Guidance of the Assessment of Dust from Demolition and Construction</i> published by the Institute of Air Quality Management (IAQM) in the United Kingdom (IAQM 2024). The potential impacts of the project on surface water are discussed in <i>Chapter 17 (Surface water)</i>, <i>Technical Report 10 – Surface water impact assessment</i> of the EIS and section 5.11 of the Amendment Report. The assessment of surface water quality noted that risks to water quality are higher where the topography is steep and where disturbance activities are located upstream of sensitive biodiversity areas. However, the assessment concluded that these risks would be effectively managed through the implementation of the proposed mitigation and management measures, including, but not limited to: - development of a project specific soil and water management plan - consideration of scour protection for any project infrastructure within a watercourse - development of ESCPs.
result in the release, leakage, spillage, or explosion of flammable, explosive, toxic, radioactive, carcinogenic, or mutagenic substances, through use, storage, transport, or disposal	As described in section 21.3.2 of the EIS, during construction, various hazardous materials and dangerous goods would be used and/or stored within the construction impact area at construction support sites and laydown areas. There are no construction support sites or laydown areas located within land that forms part of the Singleton Military Area. Notwithstanding this, the storage of dangerous goods at construction support sites and laydown areas within the construction impact area would be planned so that hazardous materials are stored appropriately and at a suitable distance from sensitive receivers, in accordance with the thresholds established under the Hazardous and Offensive Development Application Guidelines (Applying SEPP 33). With appropriate risk controls in place, the risks from hazardous materials and dangerous goods storage would be minimal. The site selection process and design of the project has been undertaken in consultation with the Department of Defence and has actively avoided key areas of land within the Singleton Military Area that are known to contain potential unexploded ordinance. Notwithstanding this, there remains a risk of unexploded ordinance being present within the sections of project impact area that are located within the Singleton Military Area as acknowledged in the EIS and Amendment Report.

Required consideration	How it has been addressed for the project
	Mitigation measure C9 specifies how the risks of encountering unexploded ordinance would be managed in consultation with the requirements of Department of Defence for locations where the project intersects the Singleton Military Area (refer to Appendix D (Updated mitigation measures) in the Amendment Report). In addition, EnergyCo (and ultimately the construction contractors (once appointed) and the Network Operator) will undertake construction of the project in accordance with a Deed of Access, developed and agreed to with the Department of Defence, that will include additional requirements relating to the management of potential unexploded ordinance contamination.
increase atmospheric concentrations of gases which will contribute to the greenhouse effect or ozone damage, or	<i>Technical Report 18 – Air quality and greenhouse gas impact assessment</i> and Chapter 22.2 (Greenhouse gas) of the EIS includes a quantitative assessment of GHG emissions associated with the construction and operation of the project. This estimate was updated as part of the Amendment Report (refer to section 5.18.3 of the Amendment Report). Total estimated emissions are around 650,000 tonnes CO₂-e per year during construction and about 1026 tonnes CO₂-e per year of operation. However, once operational, the HTP would facilitate the reduction of GHG emissions across NSW by enabling the connection and delivery of renewable energy generated within the Central-West Orana and New England renewable energy zones to the National Electricity Market. This contribution to decarbonising the electricity sector is expected to far outweigh the project's construction emissions over its operating life. EnergyCo will continue to pursue feasible emissions-reduction and efficiency opportunities during detailed design and delivery in accordance with the commitments outlined in the EIS.
substantially disturb contaminated or acid-sulphate soils?	The Singleton Military Area is listed in the NSW EPA PFAS investigation program. A PFAS Management Area Plan for the Singleton Military Area and the surrounding area has been completed by the Department of Defence. The defined PFAS management area is around three kilometres to the northeast, and outside of the project impact area. Groundwater flow direction from the PFAS management area is inferred to the north-northeast, and away from the HTP corridor. As such, interaction with areas of PFAS are not expected during construction of the project and would be managed in accordance with contamination management plan (mitigation measure C1) and an unexpected finds protocol (mitigation measure C7).

Required consideration	How it has been addressed for the project
Impacts on plants Is there a real chance or possibility that the action will:	
- involve medium or large-scale native vegetation clearance - involve any clearance of any vegetation containing a listed threatened species which is likely to result in a long-term decline in a population or which threatens the viability of the species - introduce potentially invasive species - involve the use of chemicals which substantially stunt the growth of native vegetation, or - involve large-scale controlled burning or any controlled burning in sensitive areas, including areas which contain listed threatened species?	A detailed assessment of potential impacts of the project to plants within the Singleton Military Area is provided in Chapter 5, Appendix C Matters of national environmental significance of the <i>Revised Biodiversity Development Assessment Report</i> (WSP, May 2026). In summary, two threatened plant species were recorded within the Singleton Military Area and one endangered population listed under the NSW <i>Biodiversity Conservation Act 2016</i> (BC Act). Based on the database searches and ecological surveys, a further eight species were assumed present based on associated plant community types. Five threatened ecological communities (TECs) listed under the BC Act and two TECs listed under the Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) were mapped within the Singleton Military Area. The project would require vegetation clearance and reduce the habitat for threatened species within the amended disturbance area within the Singleton Military Area.

Required consideration	How it has been addressed for the project
Impacts on animals Is there a real chance or possibility that the action will:	
• cause a long-term decrease in, or threaten the viability of, a native animal population or populations, through death, injury or other harm to individuals • displace or substantially limit the movement or dispersal of native animal populations • substantially reduce or fragment available habitat for native species; • reduce or fragment available habitat for listed threatened species which is likely to displace a population, result in a long-term decline in a population, or threaten the viability of the species • introduce exotic species which will substantially reduce habitat or resources for native species, or • undertake large-scale controlled burning or any controlled burning in areas containing listed threatened species?	A detailed assessment of potential impacts of the project to animals within the Singleton Military Area is provided in Chapter 5, Appendix C Matters of national environmental significance of the <i>Revised Biodiversity Development Assessment Report</i> (WSP, April 2026). In summary, eighteen threatened fauna species were recorded within the Singleton Military Area during the ecological surveys, including nine mammal species, eight bird species and one reptile species. An additional 22 species were predicted as likely to occur based on database records and observations from fieldwork (i.e. presences of habitat features, habitat condition and connectivity). The Singleton Military Area has been mapped as important habitat area for the critically endangered Regent Honeyeater and Swift Parrot. Neither species were recorded during the ecological surveys. The project would reduce the habitat for threatened species within the amended disturbance area within the Singleton Military Area.

Required consideration	How it has been addressed for the project
Impacts on heritage Is there a real chance or possibility that the action will:	
permanently destroy, remove or substantially alter the fabric (physical material including structural elements and other components, fixtures, contents, and objects) of a heritage place	<i>Appendix J (Historic heritage impact statement addendum)</i> of the Amendment Report provided an assessment of historic heritage sites within the Singleton Military Area. Oakley Estate (SMA internal ID: 170126/170127) is located within the Singleton Military Area (SMA) and the curtilage is partially within the HTP corridor. As noted in section 5.1.1 of the Amendment Report, the construction impact area intersects the curtilage of Oakley Estate. However, the homestead and areas of archaeological potential would not be directly impacted by the project. The closest element of the project would be the new access tracks which are located around 100 metres from the homestead and visible remains. This is well beyond the safe working distances identified in the EIS with respect to potential vibration impacts that may occur during the construction of the access track. Further, mitigation measure HH2 would be implemented to manage the impact to the heritage curtilage through the erection of an exclusion barrier prior to construction activities.
involve extension, renovation, or substantial alteration of a heritage place in a manner which is inconsistent with the heritage values of the place	Warringah Stud/Old Myrtle (SMA internal ID: 170129) is also located within the SMA and the curtilage is partially within the project impact area. As noted in section 5.1.1 of the Amendment Report, while access track works are located within the curtilage of the site, direct impacts to archaeological resources would be reduced from minor to none and direct impacts to site curtilage would be minor. The significant elements of the Murinbin House complex heritage site are around 350 metres north of the Cessnock Road and Oakley Lane intersection upgrade, and as such there are unlikely to be physical impacts to the heritage site. Further research was undertaken as part of the <i>Appendix J (Historic heritage impact statement addendum)</i> of the Amendment Report to review heritage curtilages of the following historic heritage value sites within the Singleton Military Area that were previously identified as being partially within the project impact area: Blacksmith's shop and forge – Vere township (SMA internal ID: 170113), Unidentified site – Vere township (SMA internal ID: 170118) and Vere school and second range warden's residence (SMA internal ID: 170119). The further research revised their curtilages and concluded the revised curtilages are outside the amended project impact area. As noted in section 5.1.1 of the Amendment Report, there may be minor permanent direct impacts to archaeological resources of potential heritage significance however the project would not directly impact the built fabric of the historic heritage value sites.

Required consideration	How it has been addressed for the project
- involve the erection of buildings or other structures adjacent to, or within important sight lines of, a heritage place which are inconsistent with the heritage values of the place - substantially diminish the heritage value of a heritage place for a community or group for which it is significant	One historic heritage value site within the Singleton Military Area, the Oakley Estate, has been subject to an assessment of heritage significance against the current NSW heritage criteria in section 4.3.2 of <i>Appendix J (Historic heritage impact statement addendum)</i> of the Amendment Report. The assessment concluded that the remnants of the Oakley Estate is considered to have heritage significance at a local level. The condition and maintenance of the homestead, including ‘making safe’ works to Oakley Estate homestead by Defence (removal of unstable elements such as the timber frame which supported the roof which blew completely off in a storm event) and removal of asbestos additions to the homestead based on photographs taken by Iris for Appendix G (Landscape character and visual impact assessment addendum) in October 2025) have significantly reduced its value as an item of built heritage. While still an extant structure, the homestead is essentially a ruin. The hayshed has either collapsed or has been demolished, and the only building still standing in any kind of integrity is the garage, which is also in a very dilapidated condition. As such, its values are largely archaeological. While there remains a setting within which the homestead and outbuildings sit, the importance of this has been considerably reduced because the other elements are either no longer standing or are in a severely poor condition, and the more intact values are subsurface archaeological resources. The current dilapidated and damaged condition of the Oakley Estate homestead and other former outbuildings have resulted in a reduced level of heritage significance, downgraded to local heritage significance at most. Mitigation measure HH1 as per Appendix D (Updated mitigation measures) in the Amendment Report requires measures to be implemented to manage potential impacts on listed heritage items, including historic heritage value sites in the Singleton Military Area. The project may alter the site setting of Blacksmith’s shop and forge – Vere township, Unidentified site – Vere township residence and Vere school and second range warden’s residence. However, as the sites are archaeological sites, impacts to the setting are of reduced concern when compared to direct or indirect impacts to archaeological resources. Due to the nature of these heritage sites, visual impacts are limited. Murinbin House complex and Warringah Stud/Old Myrtle would only experience minor indirect temporary impacts associated with construction of the nearby intersection upgrade and access tracks, respectively. Given the distance from the project, visual changes from these sites would be minimal.

Required consideration	How it has been addressed for the project
substantially alter the setting of a heritage place in a manner which is inconsistent with the heritage values of the place, or	The primary values of Oakley Estate in its current condition have been reassessed in <i>Appendix J (Historic heritage impact statement addendum)</i> of the Amendment Report to be archaeological. While the setting still has some value, it has been significantly reduced by the loss of the homestead and outbuildings. The photomontage prepared as part of <i>Appendix G (Landscape and visual impact assessment addendum)</i> of the Amendment Report demonstrates proposed locations of towers and wires. While the presence of the towers would alter the landscape setting and views to and from the site, there would not be any mass visual obstruction due to the nature of the structures. Indirect impacts were assessed to remain as moderate. The project may alter the site setting of Blacksmith's shop and forge – Vere township, Unidentified site – Vere township residence and Vere school and second range warden's residence. However, as the sites are archaeological sites, impacts to the setting are of reduced concern when compared to direct or indirect impacts to archaeological resources. Murinbin House complex and Warringah Stud/Old Myrtle would only experience minor indirect temporary impacts associated with construction of the nearby intersection upgrade and access tracks, respectively. Given the distance from the project, the setting of these sites would not be permanently altered.
substantially restrict or inhibit the existing use of a heritage place as a cultural or ceremonial site?	The project would not substantially restrict or inhibit the existing use of any heritage places as a cultural or ceremonial site.