

# Brian Road Intersection Upgrade

Review of Environmental Factors

January 2023



## Appendix A – Consideration of section 171 factors and matters of national environmental significance and Commonwealth land

## Section 171 Factors

In addition to the requirements of the Guideline for Division 5.1 assessments (DPE 2022) and the Roads and Related Facilities EIS Guideline (DUAP 1996) as detailed in the REF, the following factors, listed in section 171 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	Impact
<p><b>a) Any environmental impact on a community?</b></p> <p>The proposal would result in amenity impacts during construction, including noise and vibration. Construction mitigation measures are proposed to reduce amenity impacts.</p> <p>The proposal would improve the safety of Appin Road and Brian Road.</p>	<p>Short-term negative</p> <p>Long-term positive</p>
<p><b>b) Any transformation of a locality?</b></p> <p>Construction of the proposal would result in impacts associated with traffic, noise and vibration, visual amenity and air quality. These impacts would temporarily transform the locality surrounding the proposal site, however these impacts are not expected to be long-term. Management measures contained in the CEMP would be implemented to minimise these effects.</p> <p>The proposal would also result in minor, long-term impacts to landscape character and visual amenity for nearby residents associated with road widening and intersection upgrades.</p> <p>Overall, the proposal would be located in a similar corridor to the existing and therefore is not expected to substantially transform the locality.</p>	<p>Short-term negative</p> <p>Long-term negative</p> <p>Nil</p>
<p><b>c) Any environmental impact on the ecosystems of the locality?</b></p> <p>The proposal would result in impacts to biodiversity, with vegetation clearing across an area whose values are protected under State and Commonwealth legislation. Mitigation measures, including biodiversity offsets are proposed</p> <p>The provision of fauna crossing and other safety measures would improve fauna connectivity.</p>	<p>Long-term negative</p> <p>Long-term positive</p>
<p><b>d) Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?</b></p> <p>Construction of the proposal would result in impacts associated with traffic, noise and vibration, visual amenity and air quality. These impacts would temporarily transform the locality surrounding the proposal site, however these impacts are not expected to be long-term. Management measures contained in the CEMP would be implemented to minimise these effects.</p> <p>Vegetation would be removed as part of the proposal.</p> <p>The proposal would also result in minor, long-term impacts to landscape character and visual amenity for nearby residents associated with road widening and intersection upgrades.</p>	<p>Long-term negative</p> <p>Long-term negative</p> <p>Long-term negative</p>
<p><b>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?</b></p> <p>The proposal would not impact these types of places.</p>	<p>Nil</p>
<p><b>f) Any impact on the habitat of protected fauna (within the meaning of the <i>National Parks and Wildlife Act 1974</i>)?</b></p> <p>The proposal would result in the removal of 2.65ha native vegetation, including habitat for threatened species. Safeguards and mitigation measures have been proposed, including biodiversity offsets.</p> <p>The provision of fauna crossing and other safety measures would improve fauna connectivity.</p>	<p>Long-term negative</p> <p>Long-term positive</p>
<p><b>g) Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air?</b></p> <p>No species would be endangered as a result of the proposal and mitigation measures are proposed</p> <p>The proposal would improve connectivity for the koala and other native fauna.</p>	<p>Nil</p> <p>Long-term positive</p>

Factor	Impact
<p><b>h) Any long-term effects on the environment?</b> Vegetation would be removed as part of the proposal. Increased safety of Brian Road and Appin Road. Improved connectivity for the koala and other native fauna.</p>	<p>Long-term negative Long-term positive Long-term positive</p>
<p><b>i) Any degradation of the quality of the environment?</b> Short term impacts are likely due to the construction activity. Mitigation measures would reduce these impacts.</p>	<p>Short-term negative</p>
<p><b>j) Any risk to the safety of the environment?</b> There is potential for road safety to be decreased during construction due to altered traffic conditions and detours. Traffic management safeguards including the reparation of a traffic management plan, would address safety risks. The proposal would improve safety for road users improving the intersection and providing safety barriers.</p>	<p>Short-term negative Long-term positive</p>
<p><b>k) Any reduction in the range of beneficial uses of the environment?</b> The proposal would not result in the reduction in the range of beneficial uses of any property. During construction, minor traffic impacts due to an increase in heavy vehicle movements and interruptions to traffic flow would temporarily reduce the beneficial use of the local road network.</p>	<p>Short-term negative</p>
<p><b>l) Any pollution of the environment?</b> The proposal could potentially result in minor short-term impacts to water quality from sediments, soil nutrients, waste, and spilt fuels and chemicals. The proposal would result in minor short-term noise and air pollution from plant and machinery and the generation of dust during construction. Management of these impacts would be undertaken in accordance with the mitigation measures outlined in chapter 7</p>	<p>Short-term negative</p>
<p><b>m) Any environmental problems associated with the disposal of waste?</b> Waste streams generated during construction are common and would pose no difficulty in their disposal. Waste would be recycled wherever possible.</p>	<p>Nil</p>
<p><b>n) Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply?</b> All resources required for the proposal are readily available and are not in short supply.</p>	<p>Nil</p>
<p><b>o) Any cumulative environmental effect with other existing or likely future activities?</b> Temporary potential cumulative impacts may occur as a result of construction activities occurring simultaneously with the construction of the proposal. The long-term effect of upgrading Appin Road would have a positive cumulative impact of road safety.</p>	<p>Short-term negative Long-term positive</p>
<p><b>p) Any impact on coastal processes and coastal hazards, including those under projected climate change conditions?</b> Not relevant to the proposal.</p>	<p>Nil</p>
<p><b>q) Applicable local strategic planning statements, regional strategic plans or district strategic plans made under the Act, Division 3.1,</b> Review of applicable local strategic planning statements, regional strategic plans or district strategic plans is provided in chapter 2. The proposal is considered to be consistent with these documents.</p>	<p>Long-term positive</p>

Factor	Impact
r) <b>Other relevant environmental factors.</b>	In considering the potential impacts of this proposal all relevant environmental factors have been considered, refer to Chapter 6 of this assessment.

## 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.

A referral is not required for proposed actions that may affect nationally-listed threatened species, endangered ecological communities and migratory species. Impacts on these matters are still assessed as part of the REF in accordance with Australian Government significant impact criteria and taking into account relevant guidelines and policies.

Factor	Impact
<b>a) Any impact on a World Heritage property?</b> The proposal would not impact on a World Heritage property	Nil
<b>b) Any impact on a National Heritage place?</b> The proposal would not impact on a National Heritage place.	Nil
<b>c) Any impact on a wetland of international importance?</b> The proposal would not impact on a wetland of international importance.	Nil
<b>d) Any impact on a listed threatened species or communities?</b> The proposal would impact about 2.65ha of EPBC Act listed Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest. A significance assessment concluded that a significant impact is considered unlikely for any MNES and a referral of the proposal would not be required.	Long-term negative
<b>e) Any impacts on listed migratory species?</b> The proposal would not substantially modify, destroy or isolate an area of important habitat for the migratory species, and it would not seriously disrupt the lifecycle of an ecologically significant proportion of a population of migratory birds. While some migratory species of bird are likely to use the Proposal site and locality, the Proposal site would not be classed as an 'important habitat'.	Nil
<b>f) Any impact on a Commonwealth marine area?</b> The proposal would not impact on a Commonwealth marine area.	Nil
<b>g) Does the proposal involve a nuclear action (including uranium mining)?</b> The proposal would not include a nuclear action (including uranium mining)	Nil
<b>h) Additionally, any impact (direct or indirect) on the environment of Commonwealth land?</b> The proposal would not impact on the environment of Commonwealth land?	Nil