

# Appendix A

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Consideration of clause 228(2) factors and matters of national environmental significance

## Clause 228(2) Checklist

In addition to the requirements of the *Is an EIS required?* guideline (DUAP 1995/1996) and the *Roads and Related Facilities EIS Guideline* (DUAP 1996) as detailed in the REF, the following factors, listed in clause 228(2) of the *Environmental Planning and Assessment Regulation 2000*, have also been considered to assess the likely impacts of the proposal on the natural and built environment.

Factor	Impact
<p>a. Any environmental impact on a community?</p> <p>During construction, there would be short term negative impacts on the community. Potential impacts include traffic and transport, noise and vibration and changes to landscape character. These impacts have been addressed in Chapter 6.</p> <p>The proposal would require full acquisition of one lot and partial (strip) acquisition of five lots. Property acquisition would be carried out in accordance with the <i>Land Acquisition Information Guide</i> (Roads and Maritime, 2012a) and <i>Land Acquisition Reforms</i> (Roads and Maritime, 2016c).</p> <p>Positive impacts would be achieved in the long term for road users, residents and local businesses through improved road design, improved road safety, access for buses and freight vehicles as well as active transport including a shared path along Empire Bay Drive, facilitating connections to the existing cycleway network. Empire Bay Drive would remain a convenient option as the only north-south link for several coastal suburbs.</p>	<p>Short term negative</p> <p>Long term negative</p> <p>Long term positive</p>
<p>b. Any transformation of a locality?</p> <p>The proposal would involve the partial acquisition of one lot and partial acquisition of five lots. This would result in the reduction of about 0.1 ha of land zoned RE1 – Public Recreation and 0.09 ha of land zoned R2 – Low Density Residential. As a result the proposal would result in a reduction in the range of beneficial uses of these parcels of land.</p> <p>During construction, there would be short term negative impacts on the Kincumber locality due to the introduction of construction vehicles and activities leading to disruption to noise and landscape character. These impacts would be temporary and mitigated with the implementation of safeguards discussed in Chapter 6.</p> <p>During operation, the proposal would improve the aesthetic, road safety and travel and freight times of the locality. Connections to the existing cycleway network would also be upgraded and improved. In the long term the locality would remain substantially the same as existing.</p>	<p>Long term minor negative</p> <p>Long term positive</p>
<p>c. Any environmental impact on the ecosystems of the locality?</p> <p>Works are generally located within disturbed areas. The proposal involves removal of 0.87 ha of potential foraging habitat would be cleared including 0.17 ha of TEC <i>Swamp Sclerophyll Forest on Coastal Floodplains</i>, which</p>	<p>Long term minor negative</p>

Factor	Impact
<p>provides potential habitat for threatened fauna, flora and ecological communities. Impacts would be considered to be low risk, given the existing disturbance and impact areas required. Impacts to ecosystems would be mitigated with the safeguards discussed in Chapter 6.</p>	
<p>d. Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?</p> <p>Public amenity impacts would be temporary, as discussed in Chapter 6. Construction would be temporary and with the implementation of safeguards, the works are not likely to reduce the environmental quality or value of the site in the long term. The proposal would improve the aesthetic, road safety and travel and freight times of the locality. Connections to the existing cycleway network would also be upgraded and improved.</p>	<p>Short term minor negative</p> <p>Long term positive</p>
<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?</p> <p>There would be no impacts 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, in the long term effects on aesthetic values would be positive.</p>	<p>Nil</p>
<p>f. Any impact on the habitat of protected fauna (within the meaning of the <i>National Parks and Wildlife Act 1974</i>)?</p> <p>The proposal would remove around 0.17 ha of native vegetation which is potential foraging habitat for protected fauna. Minimal breeding habitat for protected fauna is present within the proposal footprint. During construction, there is low to very low potential for impact on the habitat of protected fauna. Measures to reduce impacts have been recommended in Chapter 6, primarily confining the works areas and impacts as much as possible and restoring disturbed areas as soon as practical.</p>	<p>Long term negative minor</p>
<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?</p> <p>As noted in item (c), the proposal would result in the loss of 0.17 ha of potential habitat for threatened fauna, flora and ecological communities. Assessments have concluded that the proposal is unlikely to have a significant impact. Impacts on protected fauna and flora would be mitigated with the safeguards discussed in Chapter 6.</p>	<p>Long term minor negative</p>
<p>h. Any long-term effects on the environment?</p> <p>The proposal would improve road design, improve road safety, access for buses and freight vehicles as well as active transport including a shared path along Empire Bay Drive, facilitating connections to the existing cycleway network. Empire Bay Drive would remain a convenient option as the only north-south link for several coastal suburbs.</p>	<p>Long term positive</p>

Factor	Impact
The proposal would remove around 0.17 ha of native vegetation.	Long term negative
<p>i. Any degradation of the quality of the environment?</p> <p>The proposal would temporarily degrade small areas of the environment during construction, however, the potential impacts would be minimised with the implementation of the safeguards discussed in Chapter 6. In the long term the proposal would improve road design, improve road safety, access and the existing cycleway network.</p>	<p>Short term minor negative</p> <p>Long term positive</p>
<p>j. Any risk to the safety of the environment?</p> <p>The proposed works (construction and operation) are unlikely to pose a risk to the safety of the environment with the implementation of the proposed mitigation measures outlined in Chapter 6. The intersection upgrade would aim to reduce the risk of accidents or incidents in the future.</p>	Nil
<p>k. Any reduction in the range of beneficial uses of the environment?</p> <p>The proposal would improve road design, improve road safety, access for buses and freight vehicles as well as active transport including a shared path along Empire Bay Drive, facilitating connections to the existing cycleway network.</p> <p>During construction, as discussed in Section 6.1 minor traffic impacts and potential interruptions traffic flow would temporarily reduce the beneficial use of the local road network.</p> <p>The proposal would involve the full acquisition of one lot and partial (strip) acquisition of five lots. This would result in the reduction of about 0.1 ha of land zoned RE1 – Public Recreation and 0.09 ha of land zoned R2 – Low Density Residential. As a result, the proposal would reduce the range of beneficial uses of these parcels of land.</p>	<p>Long term positive</p> <p>Short term negative</p> <p>Long term negative</p>
<p>l. Any pollution of the environment?</p> <p>During construction the main sources of pollution are expected to be from plant and equipment, in particular from hydrocarbon spills, and pollution caused by sediment laden water from erosion and sedimentation. SEPP 14 wetlands are located downstream of the proposed works and there is low potential for a pollution incident to affect Kincumber Creek. A concept Soil and Water Management Report has been prepared. Impacts from pollution would be mitigated with the safeguards discussed in Chapter 6.</p>	<p>Short term negative</p> <p>Long term positive</p>
<p>m. Any environmental problems associated with the disposal of waste?</p> <p>The proposal would involve the removal and disposal of waste generated by construction works and vegetation removal, as discussed in Section 6.11. These risks would be confined to construction and would be mitigated with the safeguards discussed in Chapter 6.</p>	Short term negative

Factor	Impact
<p>n. Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply?</p> <p>The proposal does not require resources that are in short supply.</p>	<p>Nil</p>
<p>o. Any cumulative environmental effect with other existing or likely future activities?</p> <p>The cumulative impacts of this proposal are discussed in Section 6.12. Temporary potential cumulative impacts may occur as a result of construction activities occurring simultaneously with other projects in the local area, however, no significant other nearby projects are known or expected to occur simultaneously.</p>	<p>Nil</p>
<p>p. Any impact on coastal processes and coastal hazards, including those under projected climate change conditions?</p> <p>The proposal would not impact on coastal processes and coastal hazards. Projected climate change decisions have been considered in the project design.</p>	<p>Nil</p>

## Matters of National Environmental Significance

Under the environmental assessment provisions of the *Environment Protection and Biodiversity Conservation Act 1999*, 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 Government Department of the Environment.

A referral is not required for proposed actions that may affect nationally listed threatened species, populations, 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
<p>a. Any impact on a World Heritage property?</p> <p>There are no World Heritage listed items located near the proposal site that would be affected as part of the proposed works (refer to Section 6.11.1).</p>	Nil
<p>b. Any impact on a National Heritage place?</p> <p>There are no National Heritage listed places located near the proposal site that would be affected as part of the proposed works (refer to Section 6.11.1).</p>	Nil
<p>c. Any impact on a wetland of international importance?</p> <p>There would be no impacts on a wetland of international importance.</p>	Nil
<p>d. Any impact on a listed threatened species or communities?</p> <p>Assessment of whether the vegetation within the study area conforms with the preliminary draft conservation advice for <i>Coastal Swamp Oak (Casuarina glauca) Forest of South-east Queensland and New South Wales</i>, currently under assessment, was undertaken and determined; due to condition thresholds, it does not conform with the draft advice.</p> <p>No threatened EPBC listed flora were identified during the site survey, however, one (1) threatened fauna species, <i>Pteropus poliocephalus</i>, listed as Vulnerable under the EPBC Act, was observed flying and foraging within the study area. Additionally, some threatened and/or migratory species may utilise habitat within the proposed work area on occasion, however, this would be transient only and abundant and similar habitat is located within the surrounding local area.</p> <p>The Assessment of significance concluded that the proposal is unlikely to have significant impact.</p>	Potential long term minor negative
<p>e. Any impacts on listed migratory species?</p> <p>The proposal would not impact on a listed migratory species.</p>	Nil
<p>f. Any impact on a Commonwealth marine area?</p>	Nil

Factor	Impact
The proposal would not impact on a Commonwealth marine area.	
g. Any impact to the Great Barrier Reef Marine Park?	Nil
h. The proposal would not impact on the Great Barrier Reef Marine Park.	
i. Does the proposal involve a nuclear action (including uranium mining)?  The proposal does not involve nuclear action.	N/A
j. Any impact on a water resource, in relation to coal seam gas development and large coal mining development?  The proposal does not impact on a water resource and does not involve a coal seam gas or large coal mining development.	N/A
Additionally, any impact (direct or indirect) on Commonwealth land?  No direct or indirect impacts to Commonwealth land are expected.	Nil