

Appendix C

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 as detailed in this Supplementary 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>Construction of the Proposal would result in short-term negative traffic and noise impacts to the local community as discussed in Section 6. Potential traffic impacts include an increase in the volume of heavy vehicles and local traffic changes. Construction noise impacts would be managed by adopting feasible and reasonable noise management measures identified in the DECCW Interim Construction Noise Guideline (2009) in order to reduce noise levels as much as practicable during construction.</p> <p>Long-term positive impacts would be associated with the construction of the Project and would include improved road capacity for freight and all road users, improved safety and improved connectivity and mobility on the Central Coast.</p>	<p>Short-term negative</p> <p>Long-term positive</p>
<p>b. Any transformation of a locality?</p> <p>The Proposal would result in the motorway having an increased footprint in the locality. It has been assessed that generally the Proposal would result in a negligible to moderate impact on the the character of the locality. Visual impacts of the Proposal on the locality would be reduced through the implementation of safeguards and management measures outlined in Section 6.7.</p>	<p>Long-term minor negative</p>
<p>c. Any environmental impact on the ecosystems of the locality?</p> <p>The Proposal would involve some clearing of native vegetation to facilitate activities associated with the additional ancillary sites and design amendments. The clearing of native vegetation would impact threatened ecological communities, threatened flora species and potential habitat for threatened fauna species. Assessments of significance have been prepared to address the impacts to threatened ecological communities and species and concluded that the Proposal is unlikely to have a significant impact. Ecosystem impacts would be minimised through the implementation of the safeguards and management measures in Section 6.8.</p>	<p>Long-term negative</p>

Factor	Impact
<p>d. Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?</p> <p>The Proposal would result in the M1 Pacific Motorway having an increased footprint in the locality. It has been assessed that the Proposal would have a visual impact ranging from 'negligible' to 'high to moderate', with most areas having a substantial buffer between the motorway corridor and the nearest sensitive receivers. The Proposal would provide improved capacity and safety on the motorway which would be beneficial to local road users, outweighing the additional aesthetic impact.</p> <p>Visual impacts of the Proposal on the locality would be reduced through the implementation of safeguards and management measures outlined in Section 6.7.</p>	<p>Long-term minor negative</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>The Proposal would not impact on any known Aboriginal or non-Aboriginal heritage items or sites.</p>	<p>Neutral</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 about 24 ha of native vegetation which is potential foraging and breeding habitat for protected fauna. There would also be about 30 ha of cleared and disturbed vegetation removed which provides habitat for fauna, though limited. Impacts on protected fauna would be minimised through the implementation of the safeguards and management measures in Section 6.8.</p>	<p>Long-term negative</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>The Proposal is unlikely to endanger any species or plant or animal. Assessments of significance have been prepared for threatened species and ecological communities with the potential to be impacted by the Proposal and concluded that the Proposal is unlikely to have a significant impact.</p>	<p>Long-term neutral</p>
<p>h. Any long-term effects on the environment?</p> <p>Long-term positive impacts associated with the Proposal would include an increase in the road capacity, improved road safety for all road users and improved accessibility for commuters and freight operations on the national highway network.</p>	<p>Long-term positive</p>

Factor	Impact
<p>i. Any degradation of the quality of the environment?</p> <p>The Proposal would be constructed within the existing motorway corridor. The Proposal would require the removal of some vegetation for the design amendments and on ancillary sites. The safeguards and management measures in Section 6.8 would minimise the long term impacts of this activity.</p> <p>Water quality during construction could be reduced as a result of pollutants such as sediment, soil nutrients and waste entering drainage lines and waterways particularly during high rain events. Spillage of fuel during refuelling and leakage of hydraulic and lubricating oil from plant and equipment or rinse water from plant washing and concrete slurries would also have the potential to enter waterways. During construction, temporary mitigation measures would be implemented to reduce the potential impacts to water quality (refer Section 6.4).</p> <p>Air quality, noise and traffic impacts would result from the construction phase. These impacts would be minimised through the implementation of safeguards outlined in Section 6.1, Section 6.2 and Section 6.11.</p>	<p>Long-term negative</p> <p>Short-term negative</p> <p>Short-term negative</p>
<p>j. Any risk to the safety of the environment?</p> <p>There is potential for road safety to be decreased during construction due to the need for works on existing roads and for construction to be carried out adjacent to live traffic. Traffic management safeguards outlined in Section 6.1 include the preparation of a traffic management plan which would address safety risks.</p> <p>The Proposal would improve road safety during both construction and operation as the Proposal would remove contraflow arrangements during construction, increase the width of the median shoulders and provide additional capacity on a major national road and alleviate congestion.</p>	<p>Short-term negative</p> <p>Long-term positive</p>
<p>k. Any reduction in the range of beneficial uses of the environment?</p> <p>The Proposal would result in the temporary leasing of some private property to support construction activities which would reduce the potential uses of this land during construction, as discussed in Section 6.6.</p>	<p>Short-term negative</p>
<p>l. Any pollution of the environment?</p> <p>The Proposal would result in minor short-term air pollution from plant and machinery and the generation of dust during construction.</p> <p>There is potential for chemical and fuel spills to occur during construction. The risk of spills would be managed through the implementation of the safeguards and management measures outlined in Section 6.4.</p>	<p>Short-term minor negative</p> <p>Short-term negative</p>

Factor	Impact
<p>m. Any environmental problems associated with the disposal of waste?</p> <p>The Proposal would result in the generation of waste from the road surface replacement and other construction materials. The safeguards and management measures proposed in Section 6.17 and Section 7, including the requirement for the preparation of a Materials Management Plan which is to address re-use opportunities for recycled road aggregate and pavement, would minimise the environmental impacts associated with waste on the proposal.</p>	Short-term negative
<p>n. Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply?</p> <p>The upgrade would require aggregate, sand and asphalt. Some of this material would be sourced as recycled material from the removal of the existing pavement. All resources required for the Proposal are readily available and are not in short supply.</p>	Neutral
<p>o. Any cumulative environmental effect with other existing or likely future activities?</p> <p>The Proposal would provide additional road capacity to support the new proposed Warnervale Town Centre. There may be some short-term cumulative impacts from construction vehicle traffic.</p> <p>The safeguards and mitigation measures proposed in Section 6.14, including the preparation of a traffic management plan would minimise the potential cumulative impacts of the Proposal.</p> <p>There would also be a cumulative loss of native vegetation as a result of the Proposal and nearby developments. This would include impacts to threatened ecological communities, threatened flora and threatened fauna habitat, including hollow-bearing trees.</p>	<p>Long-term positive</p> <p>Short-term minor negative</p> <p>Long-term negative</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 any coastal processes or hazards.</p>	Nil

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.

Factor	Impact
a. Any impact on a World Heritage property?	Nil
b. Any impact on a National Heritage place?	Nil
c. Any impact on a wetland of international importance? The Proposal would not impact any SEPP 14 wetlands.	Nil
d. Any impact on a nationally listed threatened species or ecological communities? The Proposal has the potential to impact on Commonwealth listed threatened flora and fauna species. Assessments of significance have been carried out which concluded that the Proposal is unlikely to significantly impact any listed threatened species. No Commonwealth listed threatened ecological communities would be impacted by the Proposal.	Minor negative
e. Any impacts on listed migratory species? The Proposal has the potential to impact on migratory fauna species. Assessments of significance have been carried out which concluded that the Proposal is unlikely to significantly impact any listed migratory species.	Minor negative
f. Any impact on a Commonwealth marine area?	Nil
g. Any impact on the Great Barrier Reef Marine Park?	Nil
h. Does the proposal involve a nuclear action (including uranium mining)?	Nil
i. Any impact on water resources in relation to coal seam gas development or a large coal mining development.	Nil
j. Additionally, any impact (direct or indirect) on Commonwealth land?	Nil
