**Clause 228(2) checklist**

In addition to the requirements of the *Is an EIS required?* guideline as detailed in the review of environmental factors, 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.

**Consideration of Clause 228(2) factors**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Any environmental impact on a community?</td>
<td>Short-term minor negative; Long-term minor positive</td>
</tr>
<tr>
<td>Construction of the proposal would result in short-term negative impacts from noise emissions, air emissions, and traffic disturbances which could impact on the local community as discussed in sections 6.4, 6.6, 6.8, 6.9, 6.10, and 6.11. Potential traffic impacts during construction include an increase in the volume of heavy vehicles, interruption of traffic flow and temporary change in speed limit. Construction noise would be generated from construction plant and vehicles, and air quality impact during construction would result from dust, vehicle emissions, and odour production. Long-term positive impacts would include improved road safety through improved road geometry and alignment at Lansdowne Bridge, provision of pedestrian and cyclist facilities and improved traffic and freight efficiency.</td>
<td></td>
</tr>
<tr>
<td>b. Any transformation of a locality?</td>
<td>Neutral</td>
</tr>
<tr>
<td>The proposal would not result in a transformation of the locality. The existing bridge would be replaced with a new bridge along the same alignment.</td>
<td></td>
</tr>
<tr>
<td>c. Any environmental impact on the ecosystems of the locality?</td>
<td>Short-term minor negative</td>
</tr>
<tr>
<td>The proposal involves the removal of about 9000 square metres (0.9 hectares) of introduced vegetation for the proposal. No native trees would be removed. There is the potential for native wetland and aquatic vegetation along the edges of the Mulwaree Ponds to be inadvertently damaged by machinery and the movement of materials due to its close proximity to the proposal site. The proposal is unlikely to have a significant impact on any species likely to occur in the area due to the marginal nature of the habitats in the study area, the small scale of the proposal, the habitat requirements of the species assessed and the safeguards to be implemented. Refer to section 6.3. Indirect impacts to aquatic species may occur during construction as a result of sedimentation and/or impacts to water quality from accidental spills etc. potential impacts during construction would be minimised with the implementation of safeguards provided in section 6.3.4.</td>
<td></td>
</tr>
<tr>
<td>The proposal would have negligible impacts on flora and fauna during operation.</td>
<td></td>
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</table>
### Factor

<table>
<thead>
<tr>
<th>Factor</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>d. Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?</td>
<td>Short-term minor negative</td>
</tr>
<tr>
<td>During construction, the proposal would result in a reduction in the aesthetic quality of the locality as a result of dust generation and visual impacts. These impacts would be minimised through implementation of safeguards outlined in section 7.2. The proposal would result in a minor reduction in the aesthetic quality of the locality due to the alteration of the local landscape for the construction of the new road alignment and the new bridge. A range of mitigation measures to reduce visual impacts would be implemented (refer to section 6.8)</td>
<td>Long-term minor negative</td>
</tr>
<tr>
<td>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?</td>
<td>Long-term minor negative</td>
</tr>
<tr>
<td>The proposed demolition of Lansdowne Bridge would remove all of the heritage values of the bridge. With the demolition of the Lansdowne Bridge, three de Burgh timber truss bridges would remain on the Roads and Maritime s170 Register, and one timber truss bridge would remain in the Goulburn area. As there would still be representative examples of the de Burgh type of timber truss bridge in NSW and a surviving local example of a timber truss bridge, the removal of the Lansdowne Bridge is considered acceptable. The proposal would not involve major impacts to the heritage significance of the two SHR listed items located to the east and west of the bridge. Neither of these items has clear views toward the bridge. Refer to section 6.1.</td>
<td>Long-term minor negative</td>
</tr>
<tr>
<td>f. Any impact on the habitat of protected fauna (within the meaning of the National Parks and Wildlife Act 1974)?</td>
<td>Short-term moderate negative</td>
</tr>
<tr>
<td>The proposal would involve the removal of about 0.9 hectares of introduced vegetation. The proposal has the potential to temporarily affect the use of the study area by fauna as a result of increased disturbance during construction. The use of machinery may temporarily deter some fauna species from using potential habitat in the study area during construction and demolition. Potential impacts would not be significant and limited to the construction stage of the proposal, refer to section 6.3.</td>
<td>Short-term moderate negative</td>
</tr>
<tr>
<td>g. Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air?</td>
<td>Neutral</td>
</tr>
<tr>
<td>The proposal is unlikely to endanger any species of flora or fauna primarily due to the marginal nature of the habitats in the study area, the small scale of the proposal, the habitat requirements of the species assessed and the safeguards to be implemented. Refer to section 6.3.4.</td>
<td>Neutral</td>
</tr>
<tr>
<td>h. Any long-term effects on the environment?</td>
<td>Long-term moderate positive</td>
</tr>
<tr>
<td>The proposal would have a positive long-term impact on the environment through the improvement of the Mulwaree Ponds crossing and the road alignment approaching the crossing. This improvement would result in an increase in road safety, and traffic and freight efficiency.</td>
<td>Long-term moderate positive</td>
</tr>
<tr>
<td>Factor</td>
<td>Impact</td>
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</tr>
<tr>
<td>i. Any degradation of the quality of the environment?</td>
<td>Short-term minor negative</td>
</tr>
<tr>
<td>Construction activities have the potential to result in impacts to water quality as a result of pollutants such as sediment, soil nutrients, waste, and fuels and chemicals entering the waterway. Hydrology and drainage would be disturbed during demolition and construction of the bridge. Mitigation measures provided in sections 6.2.3 and 6.5.3 would be implemented to reduce impacts to water quality and hydrology. Construction would also result in air quality, noise and traffic impacts. These impacts would be minimised through the implementation of safeguards outlined in section 7.2.</td>
<td></td>
</tr>
<tr>
<td>j. Any risk to the safety of the environment?</td>
<td>Short-term potential negative Long-term potential positive</td>
</tr>
<tr>
<td>There is potential for road safety to be decreased during construction due to altered traffic conditions and detours. Traffic management safeguards including the preparation of a traffic management plan, would address safety risks. The proposal would result in an improvement to road safety from the realignment of Bungonia Road to the east and west of the bridge. This would reduce the potential for road accidents. The provision of dedicated pedestrian and cycle facilities on the bridge would also improve safety. Risk is specifically addressed in section 6.14.</td>
<td></td>
</tr>
<tr>
<td>k. Any reduction in the range of beneficial uses of the environment?</td>
<td>Short-term potential negative Neutral</td>
</tr>
<tr>
<td>The proposal would result in traffic impacts during construction which would include an increase in the volume of heavy vehicles and the temporary closure of Lansdowne Bridge during construction. These traffic impacts would reduce the beneficial use of Lansdowne Bridge during the work. The proposal would result in the permanent closure of Forbes Street, north of Bungonia Road. Although the closure may result in impacts to road users, it would result in an improvement to the safety of the roadway.</td>
<td></td>
</tr>
<tr>
<td>l. Any pollution of the environment?</td>
<td>Short-term minor negative Short-term minor negative Long-term minor positive</td>
</tr>
<tr>
<td>The proposal could potentially result in minor short-term water pollution from sediments, soil nutrients, waste, and spilt fuels and chemicals. Management of water quality impacts would be undertaken in accordance with the mitigation measures outlined in sections 6.2.3 and 6.5.3. The proposal would result in minor short-term air pollution from plant and machinery and the generation of dust during construction. Management of air quality impacts would be undertaken in accordance with the mitigation measures outlined in 6.10.3. The proposal would improve water quality through the elimination of the potential for lead contamination of the waterway from the deteriorating paintwork on the bridge.</td>
<td></td>
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<tr>
<td>Factor</td>
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<tr>
<td>m. Any environmental problems associated with the disposal of waste?</td>
<td>Short-term minor negative Nil</td>
</tr>
<tr>
<td>The proposal would require the management and disposal of hazardous waste (lead and polycyclic aromatic hydrocarbons). The implementation of controls listed in section 6.15.2 would ensure appropriate disposal of hazardous wastes. Other waste streams generated during construction are common and would pose no difficulty in their disposal. Waste would be recycled wherever possible. This includes the use of excess cut material as fill. Refer to 6.11.</td>
<td></td>
</tr>
<tr>
<td>n. Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply?</td>
<td>Short-term minor negative</td>
</tr>
<tr>
<td>All resources required for the proposal are readily available and are not in short supply except for water. Extraction of water from natural sources is not anticipated however any approvals under relevant legislation would be obtained if required. Refer to section 6.15.</td>
<td></td>
</tr>
<tr>
<td>o. Any cumulative environmental effect with other existing or likely future activities?</td>
<td>Nil</td>
</tr>
<tr>
<td>No local or major developments have been identified in the vicinity of the proposal. The potential for adverse cumulative impacts would be addressed through the application of individual project specific environmental safeguards and management measures as summarised in sections 7.2 and 6.16.1.</td>
<td></td>
</tr>
<tr>
<td>p. Any impact on coastal processes and coastal hazards, including those under projected climate change conditions?</td>
<td>Nil</td>
</tr>
<tr>
<td>The proposal is not located within a coastal area and therefore would not result in any impact on coastal processes and coastal hazards.</td>
<td></td>
</tr>
</tbody>
</table>
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.

**Consideration of Matters of Environmental Significance**

<table>
<thead>
<tr>
<th>Factor</th>
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</tr>
</thead>
<tbody>
<tr>
<td>a. Any impact on a World Heritage property?</td>
<td>Nil</td>
</tr>
<tr>
<td>The proposal would not have any impact on a World Heritage property. There are no World Heritage properties within 10 kilometres of the proposal.</td>
<td></td>
</tr>
<tr>
<td>b. Any impact on a National Heritage place?</td>
<td>Nil</td>
</tr>
<tr>
<td>The proposal would not have any impact on a National Heritage place. There are no National Heritage places located within 10 kilometres of the proposal.</td>
<td></td>
</tr>
<tr>
<td>c. Any impact on a wetland of international importance?</td>
<td>Nil</td>
</tr>
<tr>
<td>The proposal would not have any impact on a wetland of international importance. There are no wetlands of international importance within 10 kilometres of the proposal site.</td>
<td></td>
</tr>
<tr>
<td>d. Any impact on a listed threatened species or communities?</td>
<td>Nil</td>
</tr>
<tr>
<td>The proposal would not have any impact on any threatened species or communities.</td>
<td></td>
</tr>
<tr>
<td>e. Any impacts on listed migratory species?</td>
<td>Nil</td>
</tr>
<tr>
<td>The significance assessment completed for three migratory species listed under the EPBC Act concluded that the proposal would be unlikely to have a significant impact on migratory species due to the marginal nature of the habitats in the study area, the small scale of the proposal, the habitat requirements of the species assessed and the safeguards that would be implemented. Refer to section 6.3.4.</td>
<td></td>
</tr>
<tr>
<td>d. Any impact on a Commonwealth marine area?</td>
<td>Nil</td>
</tr>
<tr>
<td>The proposal would not have any impact on a Commonwealth marine area. No Commonwealth marine areas occur within 10 kilometres of the proposal site.</td>
<td></td>
</tr>
<tr>
<td>g. Does the proposal involve a nuclear action (including uranium mining)?</td>
<td>Nil</td>
</tr>
<tr>
<td>The proposal does not involve a nuclear action.</td>
<td></td>
</tr>
<tr>
<td>f. Additionally, any impact (direct or indirect) on Commonwealth land?</td>
<td>Nil</td>
</tr>
<tr>
<td>Ten parcels of Commonwealth land are located within a 10 kilometre radius and would not be impacted by the proposal.</td>
<td></td>
</tr>
</tbody>
</table>
**Neutral or beneficial assessment**

*State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011* relates to the use of land within the Sydney drinking water catchment. In accordance with Clause 12 of the SEPP, Roads and Maritime is required to consider whether or the proposal would have a neutral or beneficial effect on water quality before carrying out the activity.

**Neutral of beneficial assessment**

<table>
<thead>
<tr>
<th>Factor</th>
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<tbody>
<tr>
<td>Are there any identifiable potential impacts on water quality?</td>
</tr>
<tr>
<td>Impact</td>
</tr>
<tr>
<td>What pollutants are likely?</td>
</tr>
<tr>
<td>During construction and/or post construction?</td>
</tr>
<tr>
<td>For each pollutant, list the safeguards needed to prevent or mitigate potential impacts on water quality (these may be SCA endorsed current recommended practices and/or equally effective other practices)</td>
</tr>
<tr>
<td>Will the safeguards be adequate for the time required? How will they need to be maintained?</td>
</tr>
<tr>
<td>Will all impacts on water quality be effectively contained on the site by the identified safeguards (above) and not reach any watercourse, waterbody or drainage depression?</td>
</tr>
<tr>
<td>Or will impacts on water quality be transferred outside the site for treatment? How? Why?</td>
</tr>
<tr>
<td>Is it likely that a neutral or beneficial effect on water quality will occur? Why?</td>
</tr>
</tbody>
</table>