

Appendix D

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

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>Construction of the proposal would result in some short-term negative impacts, such as on visual amenity, traffic and access disruptions, in addition to potential noise and air emission impacts. These could impact negatively on the local community as described in this REF.</p> <p>Potential visual amenity impacts during construction would include the placement and movement of construction vehicles and stockpile areas within the proposal area. Potential traffic impact during construction would include an increase in the volume of heavy vehicles, interruption of traffic flows along the Great Western Highway and temporary changes in speed limit potentially resulting in increased travel times. Impact to access may be experienced by residences and other sensitive receivers within the proposal area. Construction noise would be generated from construction plant and vehicles. Air quality impacts would result from dust and vehicle emissions. These impacts would likely occur for the duration of construction.</p> <p>The primary long-term positive impact of the proposal would substantially ease traffic congestion and improve travel efficiency during peak travel periods and enhance road safety by providing shoulders and turning lanes for future road users.</p> <p>The main visual impacts arising from the proposal would be the removal of vegetation within the road reserve. However, landscaping and replanting would be carried out when construction is complete. The visual impact would be temporary during construction, however the re-establishment of the plantings would affect the overall visual environment of the highway.</p> <p>Works proposed are consistent with the completed Great Western Highway upgrade works at Kelso. In the context of a journey, the proposal will create a landscape and visual consistency to the sections of highway to the west. Reinvigoration of this section of highway will form an important component to the gateway to Bathurst. This is expected to result in an overall low to potentially positive landscape character and visual impact.</p>	<p>Short-term, minor, negative</p> <p>Long-term, positive</p>
<p>b) Any transformation of a locality?</p> <p>Construction of the proposal would temporarily impact the existing locality, predominantly through a negative visual amenity impact, associated with the placement and movement of construction plant and equipment.</p> <p>In the longer term, the proposal would not result in a substantial transformation of the locality, as it is consistent with the completed Great Western Highway upgrade works at Kelso. The proposal includes landscaping as per an Urban Design and Landscape Plan considerate of the local landscape character, including planting to achieve key outcomes.</p>	<p>Short-term, minor, negative</p> <p>Long-term, minor, positive</p>

Factor	Impact
<p>c) Any environmental impact on the ecosystems of the locality?</p> <p>The proposal would occur within a modified and disturbed environment and would remove planted trees, shrubs and grassland dominated by exotic species.</p> <p>The vegetation removal includes nine apple trees (<i>Malus pumila</i>) which may provide suitable forage habitat for the Grey-headed Flying-fox, listed as Vulnerable under the both the BC Act and EPBC Act. This habitat within the proposal area is not considered important or a substantial foraging ground due to the limited food sources present.</p> <p>Assessments of significance carried out as part of the Biodiversity Assessment (refer to Section 6.1) found that the proposal is unlikely to have a significant impact to any threatened species, population or ecological community.</p> <p>With appropriate safeguards, the proposal would be unlikely to have a significant impact on any listed threatened species, populations or ecological communities (refer Section 6.1).</p> <p>The proposal would result in the loss and modification of aquatic habitat by the filling of existing farm dams/ponds with negligible aquatic ecology value, installation of new drainage pipes and the realignment of the unnamed tributary of Boyd Creek. This small loss and modification of habitat would be unlikely to significantly impact the aquatic ecosystems of the Boyd Creek environment.</p>	<p>Nil</p>
<p>d) Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?</p> <p>During construction, the proposal would have the potential to create a reduction in the overall aesthetic quality of the proposal due to the equipment associated with construction worksite, dust and noise generation as well as traffic and access disruption. No recreational or scientific qualities of the proposal area are anticipated to be impacted during the construction or operation of the proposal.</p> <p>No recreational or scientific qualities of the proposal area are anticipated to be impacted during the construction or operation of the proposal.</p>	<p>Short 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 area contains a locally listed heritage item Violet Hill (former Springdale and Abbotsford identified in the Bathurst LEP). This heritage item is partially located in the proposal area on the northern side of the highway between Napoleon Street and Locke Street. The principal heritage significant item is the homestead location about 700m north of the proposal.</p> <p>The former timber gate post at the entrance to the property would be impacted. There would be no direct impact on the homestead or its views or vistas. A statement of significance was carried out for this site (as described in Section 6.7.3) in which it was found that the heritage significance would not be impacted by the proposal. Specific mitigation measures are provided in Section 6.7.4.</p> <p>No Aboriginal heritage items have been identified within the proposal area. The proposal would not impact on Aboriginal heritage.</p>	<p>Long term, minor negative</p> <p>Nil</p>

Factor	Impact
<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 proposed would require the clearing of remove planted trees, shrubs and grassland dominated by exotic species including nine apple trees (<i>Malus pumila</i>) which would provide suitable forage habitat for the Grey-headed Flying-fox, listed as Vulnerable under the BC Act and EPBC Act. The removal of habitat may impact threatened fauna, however, tests of significance (refer to Appendix H) have found no significant impact to these species as a result of the proposal. Mitigation measures to manage impacts to these species are summarised in Section 6.9.4.</p>	Nil
<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 not anticipated to endanger any species of animal, plant or other form of life. Biodiversity impacts associated with the proposal would be mitigated through the implementation of safeguards outlined in Section 6.1.4.</p>	Nil
<p>h) Any long-term effects on the environment?</p> <p>The proposal would have an overall minor negative long term impact on the existing environment through permeant clearance of planted trees, shrubs and grassland dominated by exotic species.</p> <p>The proposed creek realignment would have direct impacts on the unnamed tributary of Boyd Creek. The construction phase has the potential to temporarily decrease the water quality in the unnamed tributary of Boyd Creek due to channel realignment works and works within close proximity to the creek. Mitigation measures would be implemented to avoid and minimise these impacts.</p>	Long-term, minor negative
<p>i) Any degradation of the quality of the environment?</p> <p>The proposal has the potential to degrade the quality of the environment through accidental spills and erosion and sediment during construction. An Erosion and Sediment Control Plan and spill prevention and response procedures would be implemented to mitigate the impact.</p>	Nil
<p>j) Any risk to the safety of the environment?</p> <p>The construction work has the potential to temporarily decrease safety along the Great Western Highway and local roads within proposal area due to road work and movement of construction plant.</p>	Short-term, minor, negative
<p>k) Any reduction in the range of beneficial uses of the environment?</p> <p>The proposal would result in traffic impacts during construction which would include an increase in the volume of heavy vehicles, interruption of traffic flow and temporary change in speed limit. These impacts would reduce the beneficial use of the Great Western Highway and connecting local roads during construction.</p> <p>In the long-term, the proposal would be consistent with future uses and there would be no reduction in the range of beneficial uses of the environment that do not exist and would improve travel efficiency during special events, weekends and holiday periods.</p>	Short-term, minor, negative Long-term, positive

Factor	Impact
<p>l) Any pollution of the environment?</p> <p>The proposal would have the potential to result in some minor negative short-term water pollution risks including from sediments, soil nutrients, waste, and spillage of fuels and chemicals. Management of water quality impacts would be carried out in accordance with the safeguards and management measures outlined in Chapter 7.</p> <p>Short-term noise and air quality impacts (dust and exhaust emissions) would be expected during the construction of the proposal. Management of noise and air quality impacts would be carried out in accordance with the safeguards and management measures summarised in Chapter 7.</p> <p>The operation of the proposal would be unlikely to substantially alter the air quality from the existing conditions.</p>	Short-term, minor, negative
<p>m) Any environmental problems associated with the disposal of waste?</p> <p>Contaminated waste may occur as a result of the proposal. Ancillary sites would be managed in a way that minimise waste on site and manage excess materials.</p> <p>Waste associated with the proposal would be managed in accordance with the <i>Waste Avoidance and Resource Recovery Act 2001</i> and recycled where possible or disposed of by a license contractor at a license facility. Issues associated with the disposal of waste are not expected.</p>	Nil
<p>n) Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply?</p> <p>The proposal would require a number of resources as described in Chapter 3. None of these resources are or are likely to become in short supply as a result of the proposal. Resource use management measures are provided which would include reuse and recycling when feasible.</p>	Nil
<p>o) Any cumulative environmental effect with other existing or likely future activities?</p> <p>Construction of the proposal may overlap with other local development within the Bathurst LGA. There would be potential for short-term cumulative impacts when construction occurs simultaneously.</p> <p>Cumulative impact as a result of concurrent development would be managed according to safeguards outlined in Section 6.11.5.</p>	Short-term, minor, negative
<p>p) Any impact on coastal processes and coastal hazards, including those under proposed climate change conditions?</p> <p>The proposal is not located within a coastal area and would not result in any impact on coastal processes and coastal hazards.</p>	Nil

Matters of National Environmental Significance and Commonwealth land

Under the environmental assessment provisions of the EPBC 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 and Energy.

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
<p>a) Any impact on a World Heritage property? The proposal would not have any impact on a World Heritage property.</p>	Nil
<p>b) Any impact on a National Heritage place? The proposal would not have any impact on a National Heritage place.</p>	Nil
<p>c) Any impact on a wetland of international importance? There would be no impact to wetlands of international importance by the proposal.</p>	Nil
<p>d) Any impact on a listed threatened species or communities? The proposed would require the clearing of remove planted trees, shrubs and grassland dominated by exotic species including nine apple trees (<i>Malus pumila</i>) which would provide suitable forage habitat for the Grey-headed Flying-fox, listed as Vulnerable under the BC Act and EPBC Act. The removal of habitat may impact threatened fauna, however, tests of significance (refer to Appendix H) have found no significant impact to these species as a result of the proposal. Safeguards and mitigation measures to manage images to these species are summarised in Section 6.9.4. Given existing fragmentation within the proposal area, the proposal would be unlikely to further fragment existing habitat for the Grey-headed Flying-fox.</p>	Nil
<p>e) Any impacts on listed migratory species? The proposal would not impact any listed migratory species.</p>	Nil
<p>f) Any impact on a Commonwealth marine area? There would be no impact to Commonwealth marine areas by the proposal.</p>	Nil
<p>g) Does the proposal involve a nuclear action (including uranium mining)? The proposal does not involve a nuclear action (including uranium mining).</p>	Nil
<p>h) Additionally, any impact (direct or indirect) on the environment of Commonwealth land? The proposal does not involve any impact on Commonwealth land.</p>	Nil