

## 6.13 Demand on resources

### 6.13.1 Potential impacts

The proposal would require the use of a number of resources, including:

- Resources associated with the operation of construction machinery, and motor vehicles (this includes a variety of resources, the major one being diesel and petrol).
- Material required for road surfaces and infrastructure (road base, paints, solvents, asphalt, spray seal, sand, concrete, aggregate, steel etc).
- Fill required to meet design levels, which would largely be generated from on-site excavation activities.
- Construction water (for concrete and dust suppression), which would most likely be sourced from construction sediment basins. If this water is not deemed suitable it would be sourced from the local potable supply located at the construction site.

The quantities of materials required for the proposal are estimated to be:

- 232,000 cubic metres of fill material, all of which would be sourced on-site.
- 10,600 cubic metres of sub-base materials.
- 11,200 cubic metres of base materials.
- 19,000 cubic metres of select materials, as described in Section 3.3.5. This material may be sourced from material excavated on site depending on its quality.
- 11,600 cubic metres of specialised material for the reinforced soil wall.
- 49,000 square metres of spray seal.
- Up to about 200 cubic metres of asphalt for the bridge sealed surface.

The materials required during the proposed construction works are not currently restricted resources. However, materials such as metals and fuels are considered non-renewable and would be used conservatively.

Materials would be sourced from local quarries and commercial suppliers, where possible. Excess materials would be disposed of in accordance with safeguards and management measures outlined in Section 6.11.3.

As outlined in Section 3.3.5, the amount of water required during the construction phase is not expected to exceed 15 megalitres. The impacts on water supplies during construction would be reduced through the use of water from dams and sediment basins where possible. Potable water would only be used in the event water in the dams and sediment basins is not sufficient either due to its quality or the quantity available. Water sources for the construction phase would be determined during detailed design, including any approvals required under relevant legislation.

### 6.13.2 Safeguards and management measures

Impact	Environmental safeguards	Responsibility	Timing
Demand on resources - resource consumption	<ul style="list-style-type: none"> <li>• Water captured in construction sediment basins will be reused for dust suppression, watering of landscaped areas and any other suitable construction activity where</li> </ul>	Project manager and contractor	Pre-construction and

Realignment of the Olympic Highway at Kapooka  
Including new road-over-rail bridge  
Review of environmental factors

Impact	Environmental safeguards	Responsibility	Timing
	feasible and appropriate. <ul style="list-style-type: none"> <li>• Procurement will endeavour to use materials and products with a recycled content where that material or product is cost and performance effective.</li> <li>• Excavated material will be reused on-site for fill where feasible and appropriate.</li> </ul>		construction