

4 Description of the project

This chapter describes the project, the proposed scope of work, including the route alignment, corridor width, project elements, design standards and construction activities.

Director-General's Requirements	Where addressed
The Environmental Assessment must include a description of the project including:	
<ul style="list-style-type: none">Route alignment of the project, including an indication of areas for widened or new carriageways, on/off ramps, breakdown lanes and associated and ancillary facilities.	Section 4.1.2
<ul style="list-style-type: none">Key design elements of the project, including carriageway, bridging works and connections with existing road infrastructure.	Section 4.2
<ul style="list-style-type: none">Construction/ancillary facilities, including construction compounds, batching plants, lay-down areas and spoil stockpiling/management areas.	Section 4.4
<ul style="list-style-type: none">Resourcing (eg construction material needs, spoil disposal, natural resource consumption including water).	Sections 4.4.5, 4.4.6 and 4.4.7
<ul style="list-style-type: none">Staging (if proposed).	Section 4.1.2

4.1 Project scope

4.1.1 The project

The New South Wales Roads and Traffic Authority (RTA) is proposing to upgrade part of the Pacific Highway, 6.4 kilometres in length, located between 66 and 72.4 kilometres north of Grafton.

The general features of the project for the section 66 to 71 kilometres north of Grafton are:

- Five kilometres of class M (motorway standard) upgrade comprising a four-lane divided road (two lanes each way) with a 110 km/h posted speed limit and a minimum median width of 12 metres (from lane edge to lane edge) allowing for the future addition of a third lane in each direction when needed.
- The existing Pacific Highway would be retained as a service road to the motorway standard upgrade.
- Relocation of sections of Khans Road, a state forest access track, adjacent to the highway boundary and outside of the road reservation.
- Sections of additional service road to provide access to Mervs Road, Big Marsh Road, Khans Road, Mororo Road, Thompsons Road, Pine Road and adjacent properties.
- Permanent spill containment at environmentally significant water crossings.
- Fauna underpasses for terrestrial and aquatic fauna at waterway crossings and key habitat locations.
- Overhead rope crossings for glider and other arboreal species.

- Ancillary construction facilities, including compound sites, batching plants and stockpile sites.
- This five kilometre section is capable of being staged to suit available funding and project needs. The likely initial staging would include the following features:
 - Five kilometres of Class A road with a posted speed of 100 km/hr which utilises sections of the existing highway as part of the northbound carriageway.
 - A new southbound carriageway.
 - U-turn bays to enable improved and safe property access.
 - A rest area servicing heavy and light vehicles for northbound traffic using part of the existing highway.

The general features of the project for the section 71 to 72.4 kilometres north of Grafton are:

- A 1.4 kilometre Class A upgrade with a posted speed of 100 km/hr comprising:
 - A new two-lane southbound carriageway on the eastern side of the existing highway.
 - Converting existing two-lane highway as the new two-lane northbound carriageway.
 - This duplication would include construction of new bridges over Tabbimoble Floodways No. 2 and No. 3.
- This section is capable of being staged to suit available funding and project needs. The likely initial staging would comprise the following features:
 - The construction of road formation only using surplus material from the five kilometre section to the south, excluding the construction of new bridges over Tabbimoble Floodways No. 2 and No. 3
- A Class M approval (motorway standard) will be sought for this section at a later date as part of a future upgrade of adjoining sections of highway.

4.1.2 The upgrade proposal

Motorway upgrade alignment

As depicted in **Figure 4-4(a-c)**, the motorway upgrade would comprise:

- A Class M four-lane dual carriageway road, two lanes in each direction, about five kilometres long, with an additional 1.4 kilometres of new southbound carriageway.
- The new southbound carriageway would include new bridgeworks for the Tabbimoble Floodway No. 2 and No. 3.
- The median would be wide enough to accommodate future upgrading to three lanes in each direction if required.
- The existing highway would be retained as a two-way service road and additional sections of two-way service road would be constructed to the east of the highway alignment to cater for local traffic movements and access.
- All existing accesses and side roads within the project area would be modified to intersect with the service roads as opposed to the main highway. In addition, a section of the existing Khans Road would be reconstructed.

- Combined emergency crossover and emergency U-turn facilities would be provided at around Ch 68500. The location and configuration of crossover and U-turn facilities would be determined subject to detailed design requirements and safety assessments.

Access to a Class M road is restricted to grade-separated (fly-over) interchanges, with no direct access to local roads or private property. There would be no direct access to the highway over this section of the upgrade. Grade-separated interchanges allowing connection between the service roads and the main highway would not be required until the adjacent sections of highway are upgraded to a Class M motorway. The interchanges would be located outside the project area.

Khans Road is a forestry road that services the Devils Pulpit State Forest on the eastern side of the proposed southbound alignment. A section of the existing Khans Road is located within a previously acquired RTA corridor designated for the motorway upgrade. It would therefore be necessary to realign a one-kilometre length of Khans Road by replacing it wholly within the State Forest property and adjacent to the boundary (between about Ch 69100–Ch 70200). This is shown in **Figure 4-4(a–c)** and **Figure 4-5(a–c)**.

The new section of Khans Road would be constructed to a standard no lower than that of the existing Khans Road. Additional detail regarding the treatment of existing accesses and side roads is given in Section 4.2.

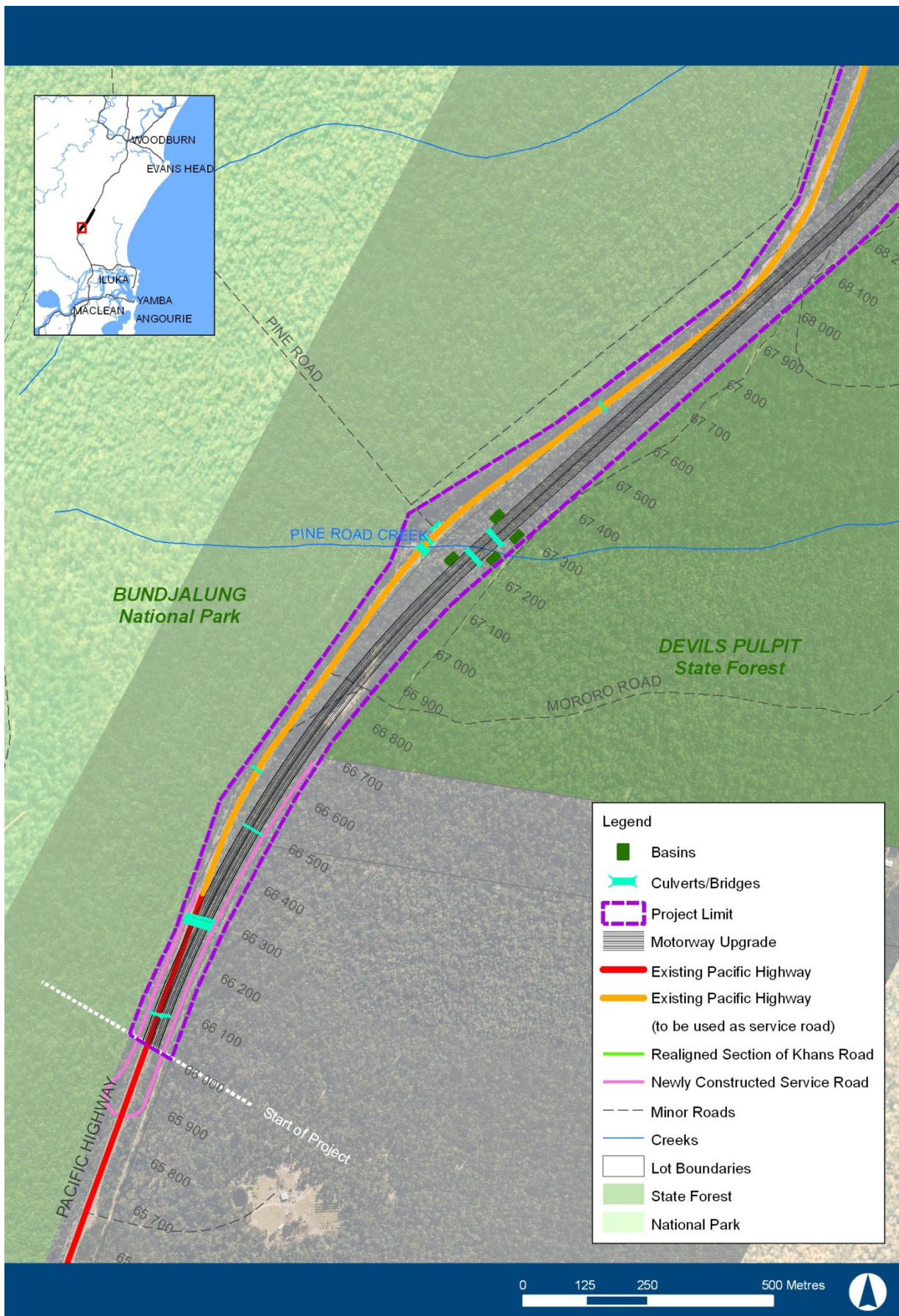


Figure 4-4a Key features of the motorway upgrade (Ch 66000-Ch 68000)

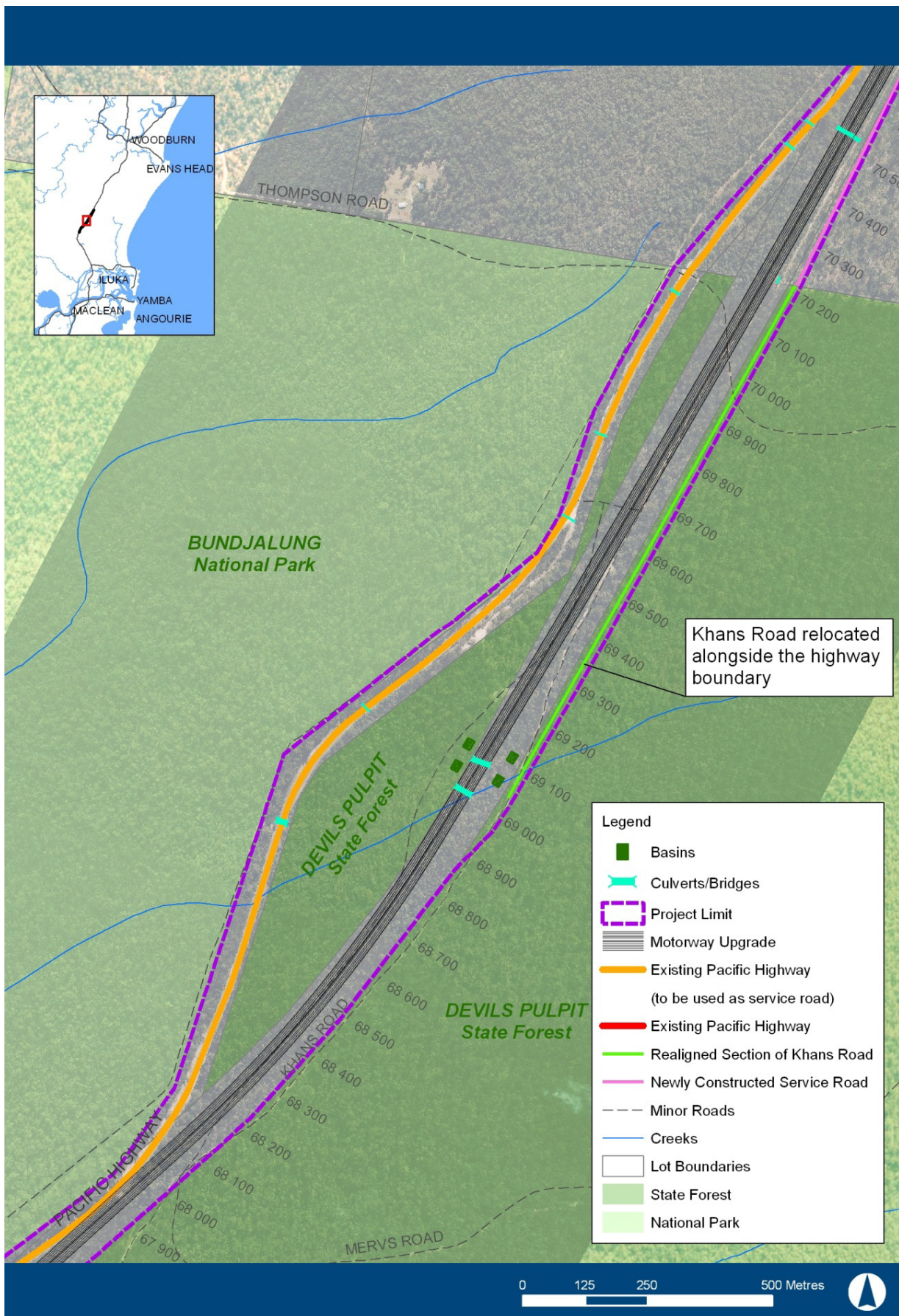


Figure 4-4b Key features of the motorway upgrade (Ch 68000-Ch 70500)

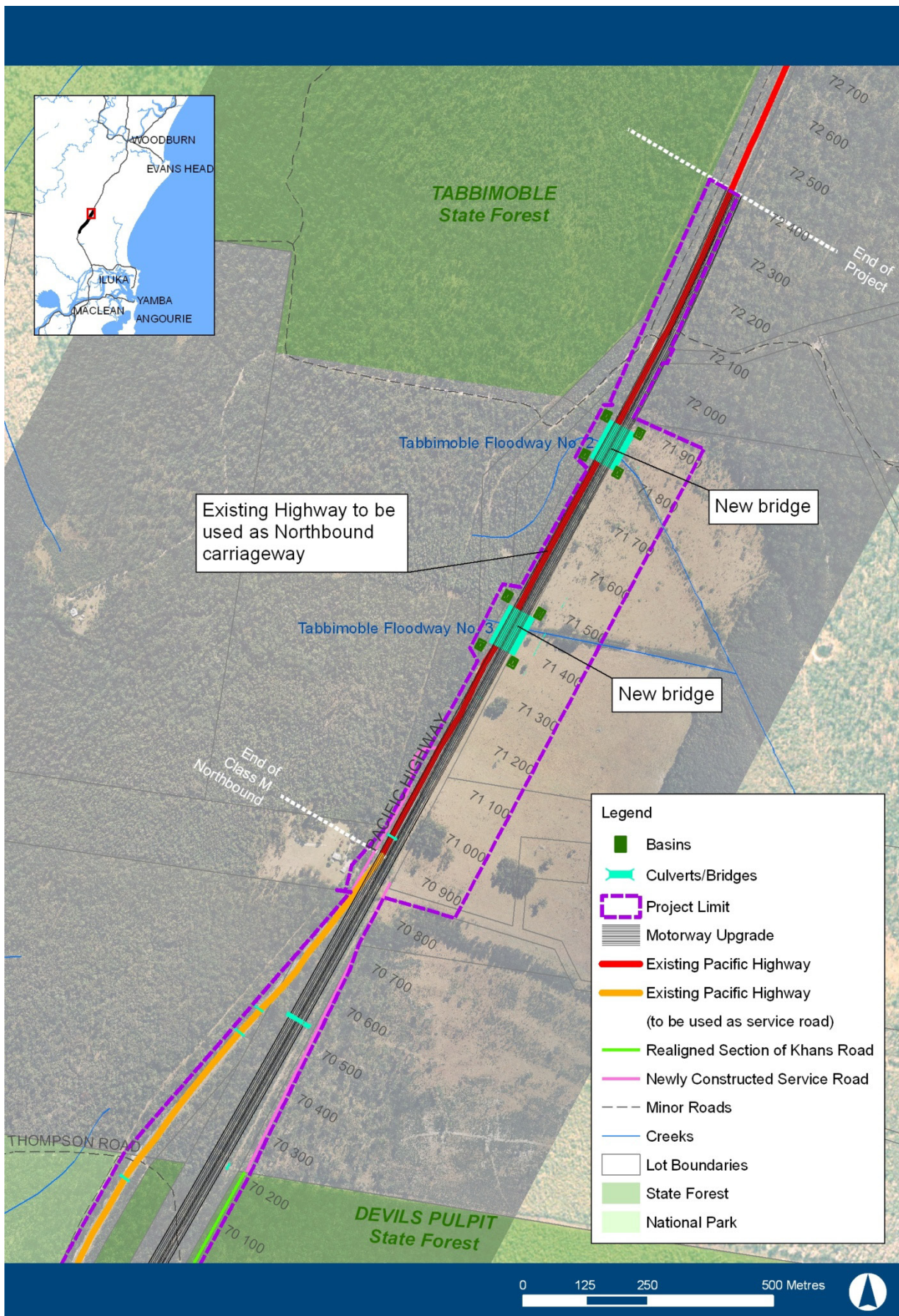


Figure 4-4c Key features of the motorway upgrade (Ch 70500-Ch 72500)