3.7 CONCEPT DESIGN DRAWINGS

CONCEPT DESIGN PLANS
Concept design plans have been prepared in order to describe the Roads and Maritime concept road design, urban and landscape design and mitigation measures. The design would be further developed in subsequent design stages. (refer Figure 3-2).
Figure 3-2: Concept Design Plans

LEGEND - URBAN DESIGN
- Proposed Street Tree Planting
- Proposed Feature Tree Planting (subject to resident's discretion)
- Proposed答案 Landscape Area
- Proposed Pavement
- Proposed Low Retaining Wall
- Proposed Pedestrian Crossing

LEGEND - ROAD DESIGN
- Proposed Signalised Intersection
- Proposed Vehicular Access
- Proposed Pedestrian Crossing
- Stage 1 New Road Pavement
- Existing Kerb to be Removed
- Existing Trees to be Removed
- Retaining Wall (Cut)
- Retaining Wall (Fill)
- Proposed Pedestrian Path

1:1000 @ A3

URBAN DESIGN REPORT AND LANDSCAPE CHARACTER AND VISUAL IMPACT ASSESSMENT
NBH CONNECTIVITY AND NETWORK ENHANCEMENTS: STAGE 1

UPGRADED FOOTPATH
PATH = 1.5m
LANDSCAPE STRIP = 3m

EXISTING TURNING BAY
REMOVED AND
INCORPORATED INTO
SCHOOL GROUNDS

EXISTING CROSSING
REMOVED

MATURE LANDSCAPE
SCREENING TO SCHOOL
FRONTAGE

NEW BUS STOP
ARRIVALS OVER
FOOTPATH

EXISTING SHELTER &
JAMMING AREA
RETAIENED. CONNECTED TO
ENTRY WITH NEW
FOOTPATH

EXISTING SERVICE ROAD
ENTRY CLOSED

BOUNDARY FENCE, RETAIN GATED PEDESTRIAN ACCESS TO WARRINGAH ROAD

SERVICE ROAD
ENTRY CLOSED

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EXISTING SERVICE ROO
FOOTPATH UPGRADE
PATH = 1.5m
LANDSCAPE STRIP = 2m

LEGEND - ROAD DESIGN
- PROPOSED SIGNALISED INTERSECTION
- PROPOSED VEHICULAR ACCESS
- PROPOSED PEDESTRIAN CROSSING
- STAGE 1 NEW ROAD PAVEMENT
- EXISTING KERB TO BE REMOVED
- EXISTING STREET TREE RETAINED
- HERITAGE ITEM

LEGEND - URBAN DESIGN
- PROPOSED STREET TREE PLANTING
- PROPOSED TREE PLANTING
draining property boundary subject to
removal of symptoms
- PROPOSED FEATURE TREES PLANTING
- PROPOSED LANDSCAPE AREA
- Proposed drainage area
- PROPOSED PAVEMENT
- PROPOSED LOW RETAINING WALL
- PROPOSED PEDESTRIAN CROSSING

CONCEPT DESIGN - WARRINGAH RD
FOOTPATH UPGRADE
PATH = 1.5m
LANDSCAPE STRIP = 2m
CONCEPT DESIGN SECTIONS

A series of concept design sections (refer Figures 3-4 to 3-10) have been prepared in order to describe the Roads and Maritime concept road design, urban and landscape design and mitigation measures (refer Figure 3-3 for locations of sections). The detailed design would be further developed in subsequent design stages.

Figure 3-3: Cross section key plan
Figure 3-5: Section B: Frenchs Forest Road West at Forest High School (looking east)
Figure 3-6: Section C: Frenchs Forest Road West on approach to the intersection with Wakehurst Parkway (looking east)
Figure 3.7: Section D, Frenchs Forest Road East at the approaches to the intersection with Wakehurst Parkway (looking east)

1.5 EASTBOUND TRAFFIC
3.5 EXISTING ROAD WIDTH - 22m
3 NARROWING

1.5 WESTBOUND TRAFFIC
6.5 EXISTING ROAD WIDTH 18.7m
6.5 NARROWING - EXISTING CARPARK REMOVED

3.5 EASTBOUND 3.5 KFC CAR PARK WESTBOUND

VEGETATION CORRIDOR
FOOTPATH
TRAVEL LANES
CONCRETE MEDIAN
TRAVEL LANES
WIDENED FOOTPATH
EXISTING TREES REMOVED
NEW PLAZA AREA WITH SEATING & PLANTING

EXISTING ROAD WIDTH - 22m
NARROWING
NEW RETAINING WALL
EXISTING GROUND LINE
BOUNDARY

CH 1100: FRENCHS FOREST ROAD
1:125

CH 1900: FRENCHS FOREST ROAD
1:125
Figure 3-8: Section E: Frenchs Forest Road East at Skyline Shops (looking east)

**EXISTING ROAD WIDTH - 22m**

**NARROWING 17.2m**

**WIDENING**

**FOOTPATH TRAVEL LANES CONCRETE MEDIAN TRAVEL LANES WIDENED FOOTPATH**

**NARROWING - EXISTING CARPARK REMOVED**

**NEW PLAZA AREA WITH SEATING & PLANTING**

**EXISTING AWNING**

**EXISTING GROUND LINE**

**NEW STONE FACED RETAINING WALL**

**EXISTING PLANTING**

**SUPPLEMENT EXISTING PLANTING**

**EXISTING ROAD WIDTH 18.7m**

**EXISTING GROUND LINE**
**Figure 3-9: Section F: Forest Way at Forestway Shopping Centre (looking south)**
Figure 3-10: Section G Forestway at the Forest Alliance Church (looking south)
4. IMPACT ASSESSMENT

4.1 OVERVIEW

The following section of the report comprises a landscape character and visual impact assessment. This has been undertaken in accordance with the Roads and Maritime EIA N04 Practice Note: Guidelines for Landscape Character and Visual Impact Assessment V2.0 (Roads and Maritime, 2013) and in undertaken in parallel with development of the concept design. In some case, outcomes of the impact assessment have been incorporated directly into the concept design, others may be incorporated into the Reference Design, which reassesses the impacts in preparation for the commencement of the Tender Design.

Impacts on landscape character have been interpreted through the identification of landscape character zones distributed across the concept proposal study area. In this report, which is mainly focused on the Stage 1 project area, landscape character zones have been described where they fall within the Stage 1 project area followed by an assessment of potential impacts resulting from the Stage 1 project.

Visual impacts have been interpreted based on a series of visual assessment precincts that are located on key areas of the Stage 1 project. The areas have been determined by the amount of change that is likely to occur or by proximity to key stakeholders. An assessment of potential impacts is made for each precinct based on an assessment of several viewpoints within the precinct and determining an overall value. In both the landscape character and visual impact assessments, the Roads and Maritime impact grading matrix is employed.
4.2 LANDSCAPE CHARACTER ASSESSMENT

The landscape contextual studies have demonstrated that the concept proposal area, including the Stage 1 project, has an identifiable sense of place. The combination of bushland, cultural tree planting, low-density residential and open space exhibits the visual and landscape qualities that are consistent with the northern beaches of Sydney. The historical development of the area has seen recognizable cultural patterns on the landscape, juxtaposed with road alignments that respond to natural landscape features such as topography. Remnant bushland can be found in dedicated corridors and residual patches within the urban fabric of the area.

LANDSCAPE CHARACTER ASSESSMENT METHODOLOGY

The Roads and Maritime’s Guidelines for Landscape Character and Visual Impact Assessment (RMS, 2009) provides the following definition of landscape character - ‘Landscape character is the aggregate of built, natural and cultural aspects that make up an area and provide its unique sense of place. Landscape in this context is taken to include all aspects of a tract of land - the built, planted and natural topographical and ecological features.’ In applying this definition to the specific conditions within the study area and the features of the proposal, the landscape character assessment also considers how the road upgrade would be used and how it would function as a part of the region. The assessment has considered both existing landscape character and potential landscape character post-completion.

Magnitude

In landscape character assessment, magnitude refers to the type of proposal and its compatibility with the existing landscape character. All anticipated elements of the proposal, including bridge and road infrastructure, shared paths, planting, lighting, etc., are considered. The scale of the element (height, length), as well as its location or setting, all have a bearing on the magnitude of the physical presence of the works.

A high magnitude results if the proposal is a major development or piece of road infrastructure and contrasts highly with the surrounding landscape, or entails heavy modification of the existing landscape, for example, the large-scale removal of existing vegetation. A moderate magnitude rating would result if the proposal is moderately integrated into the landscape. A low magnitude rating would occur if the proposal is of a small scale and integrates well into the landscape. The magnitude impact rating also considers whether the proposal has a positive or negative impact on the landscape character of the zone. For example, a proposal may be of a large scale but may provide beneficial outcomes such as increased open space, enhancement of the areas ‘sense of place’, and better connectivity.

Sensitivity
Sensitivity is assessed on the perceived value of the existing landscape character. A judgment has been made as to the quality of the landscape, its cultural and historical importance to the community, scenic quality, and overall composition of the place and its inhabitants. The following sensitivity judgments have been used as the basis for this assessment:

- Places with high social, recreational, and historical significance to local residents have higher sensitivity.
- Generally, water and natural environments are more highly valued than modified areas.
- Areas of unique scenic quality have higher sensitivity.
- A pristine environment would have greater sensitivity with less ability to absorb new elements in the landscape than modified landscapes or those areas with contrast and variety of landscape types.
- The number and frequency of viewers affects sensitivity, with retail, residential and open space.

**Impact**

Impact is the combination of the magnitude and sensitivity rating in accordance with the Impact Assessment Grading Matrix (refer Table 4-1).

### Table 4-1: ROADS AND MARITIME IMPACT GRADING MATRIX

<table>
<thead>
<tr>
<th>Sensitivity</th>
<th>High</th>
<th>Moderate</th>
<th>Low</th>
<th>Negligible</th>
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</thead>
<tbody>
<tr>
<td>High Impact</td>
<td>High</td>
<td>Moderate</td>
<td>Low</td>
<td>Negligible</td>
</tr>
<tr>
<td>Moderate Impact</td>
<td>Moderate</td>
<td>Low</td>
<td>Negligible</td>
<td></td>
</tr>
<tr>
<td>Low Impact</td>
<td>Moderate</td>
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</table>
LANDSCAPE CHARACTER ZONE IDENTIFICATION

Landscape character zones (LCZs) are defined for the purpose of gaining an understanding of land use, topography and vegetation in combination with other factors intrinsic to the local landscape. The landscape character zones facilitate detailed assessment of the character of the concept proposal study area, of the proposal within it, and of the magnitude, sensitivity and impact likely on the landscape character of each zone to be experienced as a result of these proposal works.

The Urban Design Framework report (KI Studio, 2012) identified eight landscape character types within the study area, namely ‘National Park Corridor’, ‘Parkway to Beaches’, Residential, Business park, Commercial Strip, School, Bushland and Disturbed Bushland. Sensitivity ratings for these zones ranged from high to moderate – low. These eight character types have been used as a basis for developing seven landscape character zones for the concept proposal area, five of which have been identified in the Stage 1 area (refer Figure 4-1 and Table 4-2).

Note: The LCZ identification is based on the entire concept proposal area, whereas their individual impact assessment ratings are only based on the Stage 1 project area.

Table 4-2: LANDSCAPE CHARACTER ZONES

<table>
<thead>
<tr>
<th>STAGE 1 LANDSCAPE CHARACTER ZONE</th>
<th>DESCRIPTION</th>
<th>KEY CONCEPT PROPOSAL ELEMENT</th>
</tr>
</thead>
</table>
| 01 Frenchs Forest Road East/ Allambie Road (north) | Frenchs Forest Road East and immediate curtilage | ◁ Widening of intersection with Allambie Road and Wakehurst Parkway  
 ◁ New signalised intersection at Romford Road |
| 02 Frenchs Forest West/ Naree Road | Frenchs Forest Road West and immediate curtilage | ◁ Widening throughout  
 ◁ New signalised intersection at Rabett Street  
 ◁ New widened footpath along southern verge |
| 03 Wakehurst Parkway | Wakehurst Parkway and immediate curtilage, including the intersection with Frenchs Forest Road including approaches | ◁ Widening of intersection with Frenchs Forest Road and approaches  
 ◁ Underpass of Warringah Road and widening  
 ◁ New intersection with Aquatic Drive  
 ◁ New footbridge |
| 04 Warringah Road East | Warringah Road and immediate curtilage from west of Allambie Road to Courtley Road in the east | ◁ Widening along southern verge  
 ◁ Street tree removal |
| 05 Warringah Road West/ Forest Way | Forest Way and immediate curtilage, from Forestway Shopping Centre to north of Naree Road | ◁ Open slot with underpasses of Forest Way and Hilmer Street  
 ◁ Two new footbridges (one replaced) |
| 06 Karingal Crescent/ Bantry Bay Road | Residential and commercial area bordered by Karingal Crescent, Fitzpatrick Avenue East and Bantry Bay Road | ◁ Widening and cutting, removal of parkland edge and local shops |
| 07 Aquatic Drive/ Allambie Road (south) | Commercial area along Aquatic Drive between and Allambie Road in the east and Wakehurst Parkway to the west | ◁ New intersection with Wakehurst Parkway  
 ◁ Widened intersection with Warringah Road  
 ◁ Compound site during construction |
Figure 4-1: Landscape character zones
LANDSCAPE CHARACTER ZONE 01: FRENCHS FOREST ROAD EAST/ALLAMBIE ROAD (NORTH)

Existing landscape character
This landscape character zone consists of a mixture of one and two storey commercial development on the southern side and residential development along the northern side straddles Frenchs Forest Road, between the eastern end and Wakehurst Parkway. The road is a connector between Forest Way and Warringah Road and is intersected in many locations by side streets and ‘business park’ access drives. The suburb of Frenchs Forest is generally well vegetated and being lined with street trees and mass planted areas, the road is a good example of this.

A small cluster of shops known as the ‘Skyline shops’ is located near the eastern end of the Road, is known to cause localised traffic issues due its proximity to the intersection with Allambie Road and a fast food outlet. A vacant lot nestled between the shops and residences is to be developed into a car park as part of the proposal. Impacts associated with this are to be further explored during the concept design stage.

Further west, a series of business parks, including Allambie Grove and Skyline Business Park, as well as a hotel establishment (the Parkway Hotel), are accessed via the road and typically have generous and well-vegetated setbacks. These vegetated setbacks typically comprise native trees in large turf areas and mass-planted garden beds containing a mixture of native and exotic feature planting.

Refer to Plate 4-1 for existing character images

The proposal
The proposal in this landscape character zone consists primarily of linemarking and minor widening in several locations. A signalised intersection is to be located at Romford Road, to assist with providing local resident access from the suburban street network with the upgraded Frenchs Forest Road. The intersection with Allambie Road is to be widened and reconfigured in order to improve the functionality of the intersection. On street parking next to the Skyline Shops is to be replaced with a small parking area located on an existing vacant lot.

Landscape character assessment
The impact on landscape character is described in Table 4-3.
**Table 4-3: LANDSCAPE CHARACTER ZONE 01 RATING**

<table>
<thead>
<tr>
<th>STAGE 1 LANDSCAPE CHARACTER ZONE</th>
<th>SENSITIVITY</th>
<th>MAGNITUDE</th>
<th>IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frenchs Forest Road East</td>
<td>High</td>
<td>Low</td>
<td>MODERATE</td>
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<tr>
<td></td>
<td>- Combined residential/commercial streetscape</td>
<td>- Some widening, mainly linemarking</td>
<td></td>
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<tr>
<td></td>
<td>- Minimal vegetative buffer strips between residential properties and roads</td>
<td>- Minimal vegetation loss</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Attractive vegetated suburban streets</td>
<td>- Streetscape improvements at Skyline Shops</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Mixture of local and regional traffic</td>
<td>- Two new signalised intersections.</td>
<td></td>
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</tbody>
</table>
LANDSCAPE CHARACTER ZONE 02: FRENCHS FOREST ROAD WEST/ NAREE ROAD

Existing landscape character
West of the intersection with Wakehurst Parkway, Frenchs Forest Road West continues its alignment along the former cadastral boundary of ‘Pearce’s 200 Acres’ or Rodborough, separating single-lot, one and two storey residential development on the northern verge from a variety of land uses on the southern verge. Land uses on the southern side consist of the NBH site (currently dense bushland), Forest High School (established 1961) and Frenchs Forest Police Station close to Rabett Road. The remainder of the road comprises residences on both sides and has a more suburban feel. A strong vegetative character underpins this section of Frenchs Forest Road.

At present, the high school, which is located on the site of former orchards, is the most dominant feature of this landscape character zone, with two storey block buildings set amongst large native trees, sealed carparks, and a large sportsfield. An existing access drive follows the eastern side boundary for about half its length before diverting in a westerly direction towards the school canteen. This access road, while infrequently used is an extremely important servicing road and is well screened by native trees. It also provides access to after-hours sporting facilities on school grounds.

In the future, this landscape character zone would be dominated by the NBH, with impacts felt visually in terms of the scale of the development, contemporary institutional architecture and in terms of impacts on traffic movements. The adjacency with the high school would cause conflicts in terms of access, which would need to be resolved during the detailed design stage.

Refer to Plate 4-2 for existing character images

The proposal
The proposal would see road widening on both sides of the road, including provision of wider pedestrian paths on both sides of the road, bus lanes and a new signalised intersection servicing the NBH. Access to the school would be impacted by the NBH and shared access would need to be considered in order to reduce the footprint of service roads and reduce the amount of vegetation loss – a major impact on landscape character.

Landscape character assessment
The impact on landscape character is described in Table 4-4.
### Table 4-4: LANDSCAPE CHARACTER ZONE 02 RATING

<table>
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<tr>
<th>STAGE</th>
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<th>IMPACT</th>
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<tbody>
<tr>
<td>02</td>
<td>Frenchs Forest Road West</td>
<td>High</td>
<td>HIGH TO MODERATE</td>
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<tr>
<td></td>
<td>- Combined residential streetscape with vegetated school property</td>
<td>Moderate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Minimal vegetative buffer strips. Between residential properties and roads.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Substantial widening and linemarking</td>
<td>Moderate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Substantial vegetation loss including street trees</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Two new signalised intersections.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Plate 4-2: Frenchs Forest Road West existing character images
LANDSCAPE CHARACTER ZONE 03: WAKEHURST PARKWAY

Existing landscape character
The main component of landscape character zone 03 is Wakehurst Parkway, which for much of its route is outside the Stage 1 area. Wakehurst Parkway comprises a single carriageway road for much of its length and is densely enclosed by predominantly native bushland. The dense vegetation reinforces the northern beaches character as many people enter the area via this gateway. On approach to landscape character zone 03, the landform rises sharply forming a distinct sense of arrival. The road, which bisects the Stage 1 area and connects the suburbs of Seaforth and Narrabeen, is heavily used in morning peak times causing the intersections with Frenchs Forest Road and Warringah Road to be heavily congested.

Aside from one residence located very close to the north-western corner and an overhead high voltage transmission line to the east of Wakehurst Parkway, there is virtually no development along this section of the road. Although pedestrian paths follow both sides of Frenchs Forest Road East, the crossing of Wakehurst Parkway is limited to the southern side of the intersection. This is largely due to the steepness of the western approach to Wakehurst Parkway and narrow verges. The intersection footprint is very large, particularly on the eastern side of Frenchs Forest Road.

Refer to Plate 4-3 for existing character images

The proposal
The Stage 1 project would see further widening of this intersection, including early work comprising the provision of a left turn slip lane from Wakehurst Parkway in Frenchs Forest Road east in order to reduce queuing times in the morning peak. The intersection would be raised in order to mitigate the steeply declining approach from the west and improve bus movements.

The concept proposal would see widening along Wakehurst Parkway, south of Warringah Road and a new intersection with Aquatic Drive. An existing footbridge would be replaced connecting Fitzpatrick Avenue with Aquatic Drive via an existing pedestrian pathway. The intersection of Wakehurst Parkway with Warringah Road would comprise widening and an underpass. This will be discussed in more detail in the Stage 2 EIS report.

Landscape character assessment
The impact on landscape character is described in Table 4-5 (Note: Stage 2 has not been included in this assessment).
### Table 4.5: Landscape Character Zone 03 Rating

<table>
<thead>
<tr>
<th>MAGNITUDE</th>
<th>IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate</td>
<td>MODERATE</td>
</tr>
</tbody>
</table>

- Bushland edges
- Large pavement area at intersection
- Cutting
- Widening and linemarking
- Vegetation loss.

### Plate 4-3: Wakehurst Parkway existing character images
LANDSCAPE CHARACTER ZONE 04: WARRINGAH ROAD (EAST)

Existing landscape character

Warringah Road is an important transport corridor for the Northern Beaches and is situated on an east-west ridgeline. The road currently experiences heavy congestion at peak times of the day. In this section of the road, mature Liquidambar street trees and native trees dominate the road corridor and are associated with verge planting, business parks and further to the east, residential gardens. The road exhibits a parkway character as a result and in combination with its position on relatively high ground forms a gateway to the Forest. An opening and closing of vistas occurs due to the ridgeline position and the variations in density of roadside vegetation. This character continues west as far as the intersection with Forest Way, within the future Stage 2 proposal.

Refer to Plate 4-4 for existing character images

The proposal

The proposal would see widening of Warringah Road from west of Allambie Road to as far east as Courtley Road on both verges. This would entail the construction of new kerb and gutter, linemarking, as well as substantial removal of street trees and replacement of footpaths and landscape planting.

Landscape character assessment

The impact on landscape character is described in Table 4-6 (Note: Stage 2 has not been included in this assessment).
<table>
<thead>
<tr>
<th>STAGE</th>
<th>LANDSCAPE CHARACTER ZONE</th>
<th>SENSITIVITY</th>
<th>MAGNITUDE</th>
<th>IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>04</td>
<td>Warringah Road East</td>
<td>Moderate</td>
<td>Moderate</td>
<td>MODERATE</td>
</tr>
<tr>
<td></td>
<td>- Strongly vegetated parkway character.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Limited options for</td>
<td></td>
<td>- Widening and linemarking.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Vegetation loss including</td>
<td></td>
</tr>
</tbody>
</table>

Plate 4-4: Warringah Road East existing character images
LANDSCAPE CHARACTER ZONE 05: WARRINGAH ROAD (WEST) AND FOREST WAY

Existing landscape character

This landscape character zone comprises a highly urbanised road corridor located within a suburban landscape and is bisected by Forest Way, connecting Warringah Road to Mona Vale Road. Further north outside of the study area, Forest Way adopts a strongly vegetated parkway character. Another major feature of the landscape character zone is the Forestway Shopping Centre, a 3-storey structure, with entrances off Forest Way and Russell Avenue. The former Methodist Church, which is registered as a heritage item on the Warringah LEP, is located at the corner of Forest Way and Naree Road.

Mature tree cover lines the allotments on each side of the road for the length of the site and beyond. Directly next to the existing bus bay, the majority of vegetation is located within the road reserve and is a mix of mature native tree specimens of varying conditions intermingled with recent tree planting. The species predominantly consist of Melaleuca, Eucalypt and Corymbia, which are indigenous to and ubiquitous to the study area. The combination of this foliage provides a visual contribution to this section of the road, partially screening the carpark from adjacent dwellings, particularly mid distance views, and less so from road users who look underneath the canopy. The remainder of the vegetation within the landscape character zone area consists of turf areas and native shrubs and grasses often within raised planter beds.

Refer to Plate 4-5 for existing character images

The proposal

In Stage 1, the proposal comprises widening, signalising of the intersection with Naree Road and improvements to pedestrian connectivity with the Forestway Shopping Centre. Widening immediately south of the Naree Road intersection would potentially impact the former Methodist Church building due to narrow verges. Much of the remainder of the road would have a higher capacity to absorb change due to the substantial development that has already occurred. It is noted however that as corridor width is limited, further widening of Forest Way would require a detailed assessment of impacts.

The concept proposal would see widening of the intersection of Warringah Road and Forest Way, an open slot (open cutting) roadway with several overpasses and two footbridges (one existing replaced, one new). This will be discussed in more detail in the Stage 2 EIS report.

Landscape character assessment

The impact on landscape character is described in Table 4-7 (Note: Stage 2 has not been included in this assessment).
Table 4-7: LANDSCAPE CHARACTER ZONE 05 RATING

<table>
<thead>
<tr>
<th>STAGE</th>
<th>LANDSCAPE CHARACTER ZONE</th>
<th>SENSITIVITY</th>
<th>MAGNITUDE</th>
<th>IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>05</td>
<td>Forest Way</td>
<td>Low</td>
<td>Low</td>
<td>LOW</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Urbanised character resilient to change</td>
<td>Substantial widening and linemarking</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corridor near capacity, part acquisition required</td>
<td>Vegetation loss including street trees</td>
<td></td>
</tr>
</tbody>
</table>

Plate 4-5: Forest Way existing character images
LANDSCAPE CHARACTER ASSESSMENT SUMMARY

The study area consists of residential villages populated by a high proportion of people who consider the bushland environment, recreational amenities and proximity to natural features as an important component of their day-to-day life. This is evident in the considerable attendance of local resident information sessions for both the NBH and Stage 1 proposal. The character of the study area is also experienced by the road-user, due to the stands of indigenous vegetation, occasional vistas to surrounding natural landscapes, street trees and the relatively low vertical scale of the surrounding development. In Stage 1, Frenchs Forest Road is partially enclosed by vegetation and a substantial section of the road is characterised by single lot housing and street trees, business parks with reasonable tree plantings and a high school with substantial open space and tree planting.

Road users of Warringah Road experience the bushland character immediately after crossing Roseville Bridge to the west of the study area, an experience that continues in an easterly direction, as well as to the north and south. In each case the road user experiences greater density and urban development on approach to the beachside suburbs. Wakehurst Parkway, which links Seaforth in the south with Narrabeen in the north, generally comprises a densely enclosed bushland character that is consistent with the northern beaches and similar to other arterial connections in the region such as Forestway and Mona Vale Road.

The landscape character impact of the Stage 1 project across the concept proposal area is summarised in Table 4-8. LCZ 06 and 07 will be assessed in the Stage 2 project report.

Table 4-8: LANDSCAPE CHARACTER IMPACT RATING

<table>
<thead>
<tr>
<th>STAGE 1 LANDSCAPE CHARACTER ZONE</th>
<th>SENSITIVITY</th>
<th>MAGNITUDE</th>
<th>IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 Frenchs Forest Road East/ Allambie Road (north)</td>
<td>High</td>
<td>Low</td>
<td>MODERATE</td>
</tr>
<tr>
<td>02 Frenchs Forest West/ Naree Road</td>
<td>High</td>
<td>Moderate</td>
<td>HIGH TO MODERATE</td>
</tr>
<tr>
<td>03 Wakehurst Parkway</td>
<td>Moderate</td>
<td>Moderate</td>
<td>MODERATE</td>
</tr>
<tr>
<td>04 Warringah Road East</td>
<td>Moderate</td>
<td>Low</td>
<td>MODERATE</td>
</tr>
<tr>
<td>05 Warringah Road West/ Forest Way</td>
<td>Low</td>
<td>Low</td>
<td>LOW</td>
</tr>
<tr>
<td>06 Karingal Crescent/ Bantry Bay Road</td>
<td>High</td>
<td>High</td>
<td>HIGH</td>
</tr>
<tr>
<td>07 Aquatic Drive/ Allambie Road (south)</td>
<td>Low</td>
<td>High</td>
<td>MODERATE</td>
</tr>
</tbody>
</table>