Northern Beaches Hospital Road Connectivity and Network Enhancement Project

Stage 2 – preferred option for road upgrades along Warringah Road

Proposed road upgrades
The NSW Government is planning to upgrade roads around the new Northern Beaches Hospital with work planned to be completed in time for the hospital opening. These upgrades would provide customers with a better travel experience by car or bus, increase the capacity of the road network and improve access through the area, including for pedestrians and cyclists.

Roads and Maritime Services is planning to deliver the road upgrades in two stages:
- Stage 1 would provide essential access to the Northern Beaches Hospital
- Stage 2 would help increase capacity of the road network and reduce congestion.

Both stages of the project will be assessed in accordance with Part 5.1 of the Environmental Planning and Assessment Act 1979.
The Environmental Impact Statement (EIS) for the Concept Proposal and Stage 1 of the road upgrade project was recently displayed for community comment.

A separate EIS will be prepared for Stage 2 work and this will be displayed by mid 2015.

Roads and Maritime has consulted extensively on the project since March this year. We thank the community for your ongoing involvement and feedback.

After careful consideration, the next road upgrades will proceed with an underpass along Warringah Road with widening on the southern side of the road. This community update provides information on the option selection process and options explored.

**Stage 2 Network Enhancement Work**

In early 2014, Roads and Maritime assessed options to reduce the current and future congestion on the road network around the proposed Northern Beaches Hospital precinct. Roads and Maritime proposed to widen Warringah Road to the south as part of Stage 2 work. This would provide:

- An underpass on Warringah Road for through traffic extending from west of Forest Way to east of Wakehurst Parkway. This would travel underneath the intersections with Forest Way, Hilmer Street and Wakehurst Parkway
- Eastbound and westbound travel lanes at the surface level on either side of the underpass
- Turning movements at the Forest Way, Hilmer Street and Wakehurst Parkway intersections for surface traffic.

**Options for Warringah Road**

During consultation in July and August this year, the community raised concerns about the proposed widening of Warringah Road and the impacts on businesses and properties, particularly on the southern side of Warringah Road.

In response to this feedback, Roads and Maritime investigated alternative options to reduce or avoid impacts on businesses and properties.

These design investigations were carried out in collaboration with Transport for NSW, Health Infrastructure and the Department of Education and included an assessment of cost and impacts on local properties, businesses, The Forest High School and the new hospital.

Roads and Maritime considered options for Stage 2 work including:

- Two different tunnel options
- An underpass option with widening on the northern side of Warringah Road
- An underpass option with widening on the southern side of Warringah Road (as originally proposed).
### Tunnel (roadheader) option

Key features of this option include:

- An eastbound tunnel following the alignment of Warringah Road
- Westbound tunnel located to the south of Warringah Road
- A loop ramp from Wakehurst Parkway at Warringah Road to allow southbound traffic on Wakehurst Parkway to join the westbound tunnel
- Warringah Road would remain on top of the tunnel, allowing access to Hilmer Street and the hospital.

This option would:

- Avoid the need for major widening of Warringah Road, reducing the impacts on the Bantry Bay Road shops and neighbouring residential and commercial properties
- Require property acquisition on the southern side of Warringah Road between Fitzpatrick Avenue East and Maxwell Parade and east of Wakehurst Parkway
- Allow surface construction activities to be generally confined to the tunnel entry and exit locations west of Forest Way and east of Wakehurst Parkway.

### Two tunnel (cut and cover) option

Key features of this option include:

- A single ‘cut and cover’ tunnel, extending from west of Hilmer Street to Wakehurst Parkway with an underpass at each end of the tunnel. The tunnel would generally run under the existing alignment of Warringah Road, deviating slightly to the north between Hilmer Street and Wakehurst Parkway
- A ramp from Warringah Road at Wakehurst Parkway to allow southbound traffic on Wakehurst Parkway to join the westbound tunnel
- Warringah Road would remain on top of the tunnel to allow access to Hilmer Street and the hospital.

This option would:

- Avoid widening of Warringah Road on the southern side between Hilmer Street and Bantry Bay Road, reducing the impacts on the Bantry Bay Road shops and neighbouring residential and commercial properties
- Require acquisition along the northern side of Warringah Road at the hospital site
- Require property acquisition on the southern side of Warringah Road between Fitzpatrick Avenue East and Maxwell Parade
- Result in construction activities along the entire affected length of Warringah Road.

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**Legend**

- At grade (surface) (Stage 1)
- At grade (surface) (Stage 2)
- Proposed underpass
- New traffic signals (Bus only)
- New traffic signals
- Existing/modified traffic signals
- All point access
- New connection

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**Underpass and road widening (north) option**

[Map showing the proposed underpass and road widening options]
Underpass and road widening (north) option

Key features of this option include:

- A centrally-located, Warringah Road underpass from just west of Forest Way to east of Wakehurst Parkway for through traffic
- Eastbound and westbound travel lanes at the surface level on either side of the underpass
- Turning movements at the Forest Way, Hilmer Street and Wakehurst Parkway intersections for surface traffic
- A ramp from Warringah Road at Wakehurst Parkway to allow southbound traffic on Wakehurst Parkway to join the westbound underpass.

This option would:

- Involve widening Warringah Road to the north, reducing the impacts on the Bantry Bay Road Bay shops and neighbouring residential and commercial properties
- Require acquisition of part of the hospital site, part of The Forest High School and some property on the southern side of Warringah Road between Fitzpatrick Avenue East and Maxwell Parade
- Result in construction activities along the entire affected length of Warringah Road.

Underpass and road widening (south) option

Key features of this option include:

- A centrally-located, Warringah Road underpass from just west of Forest Way to east of Wakehurst Parkway for through traffic
- Eastbound and westbound travel lanes at the surface level on either side of the underpass
- Turning movements at the Forest Way, Hilmer Street and Wakehurst Parkway intersections for surface traffic
- A ramp from Warringah Road at Wakehurst Parkway to allow southbound traffic on Wakehurst Parkway to join the westbound underpass.

This option is a slightly modified version of the proposal presented to the community in July and August 2014. This option provides the best value for money compared to the other options when assessed against a range of criteria and would:

- Avoid widening of Warringah Road on the northern side between Hilmer Street and Bantry Bay Road, reducing the impacts on the hospital and The Forest High School
- Require property acquisition on the southern side of Warringah Road including a number of businesses in Bantry Bay Road and neighbouring residential and commercial properties
- Require property acquisition on the southern side of Warringah Road between Fitzpatrick Avenue East and Maxwell Parade
- Result in construction activities along the entire affected length of Warringah Road.
Northern Beaches Hospital road upgrades – stage two

Key
- Upgrade area
- New hospital site
- Median
- Footpath
- Shared path
- Underpass
- Ramp into underpass
- Pedestrian overbridge
- Bus facility / bus lane
- Retaining wall
- Stage 1 works

Lengthen bus bay
New pedestrian overbridge
Changes in the design

Since consulting the community on this proposal in July and August this year, Roads and Maritime has completed further design work and traffic modelling. We found that there would be a heavy reliance on the westbound surface lanes between Wakehurst Parkway and Forest Way.

As a result, we are proposing to add a right hand turn lane via an on ramp from Wakehurst Parkway (southbound) into the underpass lane (westbound).

The proposed widening on the southern side of Warringah Road would bring the road closer to the rear property boundaries of a number of properties along the northern side of Karingal Crescent.

Some community members raised concerns about the visual and noise impacts associated with this proposed widening.

We have responded to these concerns by shifting the road alignment slightly further north in this location, providing a wider area for suitable landscaping and replanting and moving the road further away from property boundaries.

This has been achieved without impacting property on the northern side of Warringah Road.
Options assessment

Roads and Maritime assessed each option against six key criteria.

These criteria were developed to ensure the project meets its key objectives:

1. **Network performance**: This criterion was used to assess how effective each option would be at improving traffic conditions on the road network, reducing congestion and improving travel times during peak times.

2. **Cost and economic return**: This criterion was used to assess the benefits provided by the project and the cost involved in delivering the benefit. It also looked at the cost to deliver the option relative to the other options and whether the option could be delivered within the budget available.

3. **Engineering design and constructability**: This criterion was used to ensure options would meet the required safety and engineering standards.

4. **Environmental and community impacts**: This criterion was applied to consider the impact of each option on the local built and natural environment and the community, in terms of property acquisition and amenity impacts.

5. **Urban design and landscape**: This criterion was used to assess the visual impact of each option.

6. **Delivery risk**: This criterion was used to consider how quickly each option could be delivered and to ensure that there were no risks that could stop or substantially delay the delivery of the option in time for full operation of the hospital.

We considered the first two criteria and found:

- Each option provides similar network performance outcomes and all of the options would reduce congestion and improve travel times.
- The tunnel options would cost substantially more than the underpass options to achieve the same network performance outcomes.
- The ongoing maintenance cost for the tunnel options would be significantly more than the underpass options (as tunnels need ventilation, additional lighting and other ongoing operational management systems and resources).

On the basis of this assessment, it was concluded that the tunnel options do not present value for money, and these options were not pursued any further.

When considering the underpass options against the remaining criteria, some critical differences were found:

The underpass with road widening (north) would:

- Require property to be acquired from both Department of Education and Communities and Health Infrastructure.
- Health Infrastructure needs the land Roads and Maritime would acquire on the northern side of Warringah Road for future expansion of the hospital and would look to replace it by acquiring land currently occupied by The Forest High School. As a result, the high school would need to be redeveloped to accommodate this acquisition.
- Avoid impacts to the Bantry Bay Road shops and neighbouring properties.
- Impact utility adjustments already underway for the hospital and result in further negotiation (and costs) with utility providers. This could impact delivery timeframes for the road work and the hospital.
- Would cost slightly more than Option 4 as a result of the additional utility work, acquisitions required and costs of accelerating the work to complete it in the required timeframe.

The underpass with road widening (south) would:

- Have a direct impact on the Bantry Bay shops and several neighbouring properties on the southern side of Warringah Road around Hilmer Street.
- Avoid acquisition of land from the hospital and The Forest High School.
- Be able to be completed on time and within the allocated budget.
The preferred option

After careful consideration it was found that the underpass with widening on the southern side of Warringah Road provided the best balance for the wider community and future traffic needs. Compared to the other options, the preferred option:

• Has less impact on The Forest High School during and following construction
• Does not require the acquisition of land from The Forest High School or Health Infrastructure, or the redevelopment of the school
• Has shorter construction times and less complicated construction staging, allowing the upgraded road to be open in time for the hospital opening
• Eliminates the need for additional funding to accelerate construction to make sure that the road works are completed in time
• Does not impact the future development plans for the hospital site.

Roads and Maritime has published an options report for the Northern Beaches Hospital Road Connectivity and Network Enhancement Project. Section 8 of the report provides more detail on the options explored for the upgrades along Warringah Road.

Next steps for Stage 2 Network Enhancement Work

Some private property would need to be acquired in order for the preferred option to proceed. Roads and Maritime will work closely with impacted residents, property owners and tenants in the coming weeks and months to provide information on the process for property acquisition and next steps.

Roads and Maritime is preparing an Environmental Impact Statement (EIS) for the proposed Stage 2 road upgrades and expects to display the EIS for comment by mid-2015.

The EIS will outline the key features of the proposal and the potential environmental, social and economic impacts of the proposal during construction and operation.

It will also outline measures to manage and reduce the identified impacts.

Stage 2 timeline

- PRELIMINARY INVESTIGATIONS AND PLANNING
- COMMUNITY CONSULTATION ON STRATEGIC DESIGN
- SUBMIT STATE SIGNIFICANT INFRASTRUCTURE APPLICATION TO DEPARTMENT OF PLANNING AND ENVIRONMENT
- DEPARTMENT OF PLANNING AND ENVIRONMENT ISSUE SECRETARY’S ENVIRONMENTAL ASSESSMENT REQUIREMENTS (SEARS)
- CONTINUE STUDIES ON OPTIONS FOR WARRINGAH ROAD
- NSW GOVERNMENT DECISION ON PREFERRED OPTION
- ANNOUNCE PREFERRED OPTION AND PREPARE EIS
- DISPLAY EIS FOR COMMENT
- PUBLISH SUBMISSIONS REPORT RESPONDING TO ALL ISSUES RAISED IN FORMAL SUBMISSIONS
- UPDATE COMMUNITY ON AVAILABILITY OF SUBMISSIONS REPORT
- STAGE 2 PROPOSAL CONSIDERED FOR APPROVAL BY THE MINISTER FOR PLANNING
- UPDATE COMMUNITY ON APPROVALS OUTCOME
- IF APPROVED, UNDERTAKE DETAILED DESIGN AND PROJECT CONSTRUCTION
- ONGOING CONSULTATION WITH COMMUNITY ABOUT FINAL DESIGNS AND CONSTRUCTION IMPACTS
- COMPLETE CONSTRUCTION
Other road upgrades in Sydney’s northern suburbs

Wakehurst Parkway flood mitigation – Roads and Maritime is investigating options to reduce the impact of flooding on Wakehurst Parkway in parallel with the planning for the Northern Beaches Hospital road upgrades.

Wakehurst Parkway left turn slip lane extension – Roads and Maritime is extending the southbound left turn lane for Wakehurst Parkway into Frenchs Forest Road East to improve traffic flow and safety for all road users. This work is currently being carried out and is due to be completed in early 2015.

Starkey Street and Warringah Road Intersection Improvement Project – Roads and Maritime is planning improvements at the Starkey Street and Warringah Road intersection at Forestville to improve traffic flow. Roads and Maritime is proposing to remove the signalised pedestrian crossing of Warringah Road at Starkey Street and install a new pedestrian bridge over Warringah Road to the east of Starkey Street.

The proposed intersection improvement of Starkey Street and Warringah Road would increase the transport efficiency on Warringah Road through Forestville, minimise delays, allow for road-based public transport and improve road safety. Roads and Maritime welcomes community and stakeholder feedback on this proposal and will consider all feedback as development progresses.

Mona Vale Road upgrade – Roads and Maritime is proposing to upgrade Mona Vale Road between Terrey Hills and Mona Vale to improve safety and traffic efficiency. The upgrade includes:

- **Stage one** – Intersection improvement of Mona Vale Road with Ponderosa Parade and Samuel Street, Mona Vale
- **Stage two** – Mona Vale Road East upgrade: Upgrade of 3.2 kilometres of Mona Vale Road from two lanes to four lanes between Manor Road, Ingleside and Foley Street, Mona Vale
- **Stage three** – Mona Vale Road West upgrade: Upgrade of 3.2 kilometres of Mona Vale Road from two lanes to four lanes between McCarrs Creek Road, Terrey Hills and Powder Works Road, Ingleside.

Roads and Maritime recently consulted the community on the proposed designs for Mona Vale Road East and West upgrade. Community feedback on the proposals is currently being reviewed.

### Have your say
We welcome your feedback on Stage 2 of the proposed road upgrades including the preferred option for the work along Warringah Road.

You can provide your feedback:

**By email:** nbhroadwork@rms.nsw.gov.au

**By phone:** 1300 367 459

**For more information**


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