

# **Proposed Clearways on Warringah Road, Roseville Bridge to Beacon Hill Road, Beacon Hill**

## **Submissions Report**

Roads and Maritime Services | April 2018

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**Roads and Maritime Services**

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# **Proposed Clearways on Warringah Road, Roseville Bridge to Beacon Hill Road, Beacon Hill**

## **Submissions report**

**April 2018**

Prepared by Aurecon for Roads and Maritime Services

Roads and Maritime Services: RMS.18.776


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## Document controls

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### Approval and authorisation

<b>Title</b>	Proposed Clearways on Warringah Road, Roseville Bridge to Beacon Hill Road, Beacon Hill Submissions Report
<b>Accepted on behalf of Roads and Maritime NSW by</b>	Hilary Johnson Director – Clearways Easing Sydney's Congestion
<b>Signed</b>	
<b>Dated</b>	5 April 2018

# Executive summary

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## The proposal

Roads and Maritime Services (Roads and Maritime) proposes to install new clearways, and extend the operating hours of existing clearways (the proposal) along Warringah Road (A38) from Roseville Bridge to Beacon Hill Road, Beacon Hill (the proposal corridor), for a length of 6.7 kilometres (in both directions).

Existing clearways along the proposal corridor include weekday clearways between 6:00am to 10:00am (westbound) and 3:00pm to 7:00pm (eastbound) between Roseville Bridge and Forest Way, Frenchs Forest. There is no existing clearway on weekends.

The proposal would introduce the following clearway conditions for the length of the proposal corridor:

- standard weekday clearway hours of 6:00am to 7:00pm in both directions
- standard short day weekend and public holiday clearway hours of 9:00am to 6:00pm in both directions.

A review of environmental factors (REF) for *Proposed Clearways on Warringah Road, Roseville Bridge to Beacon Hill Road, Beacon Hill* (Roads and Maritime 2017a) was prepared for the proposal to assess the potential impacts on the environment and identify mitigation measures and safeguards. The REF was placed on public display between Monday 27 November 2017 and Friday 15 December 2017. During this time the community and stakeholders were invited to review the REF and provide feedback. A physical copy of the REF was displayed at four locations and was also made available on the Roads and Maritime website.

In total 36 submissions were received from individuals in the community during the public display period raising 152 separate issues. No submissions were received from government agencies.

## Issues raised by the community and stakeholders

Submissions received from the community raised a variety of issues and sentiments. These included (but were not limited to) the following:

- need for the proposal – 30 issues
- alternatives and options – 11 issues
- stakeholder and community consultation – 16 issues
- parking and access – 27 issues
- socio-economic assessment and impacts – 14 issues
- traffic and transport assessment and impacts – 29 issues
- environmental assessment process – five issues.

There were also a number of suggestions/issues raised that were outside the scope of the proposal.

A summary of the key issues raised by the public in relation to the proposal, and Roads and Maritime's responses, are provided in the table below.

Issue category	Issue summary	Roads and Maritime's response
Need for the proposal	A number of submissions stated that clearways would not improve peak period	Warringah Road is an important public transport, commuter and freight route. During peak periods, existing parking restrictions including clearways

Issue category	Issue summary	Roads and Maritime's response
	<p>traffic issues and the proposal is not needed as 'No Stopping' and 'No Parking' zones are already in operation during peak hours. Existing clearways have not improved current traffic conditions, and the proposal should not be implemented until the Northern Beaches Hospital road upgrades have been completed.</p>	<p>are in place on Warringah Road, and are effective in improving the performance of the road corridor. However, traffic volumes currently experienced throughout the day and on weekends warrant extensions of clearway hours of operation.</p> <p>Clearway restrictions help to improve traffic flow and reduce delays by restricting parking and stopping, and allowing the towing of vehicles that illegally stop or break down.</p> <p>The traffic investigations carried out for the proposal (refer to Section 6.1 of the REF) show that traffic volumes are sufficient to justify implementation of a new clearway, and that overall, the proposal is considered justified due to the benefit to the local and regional community and its impacts can be managed with few residual adverse outcomes.</p> <p>The clearway traffic investigations were independent of the associated environmental impact assessment and traffic impact investigations carried out for the Northern Beaches Hospital (NBH) upgrade. The clearway traffic investigations assessed the current traffic volumes along the proposal corridor, and did not include the likely traffic changes to result from the operation of the NBH.</p> <p>More specific information about the NBH upgrade can be found at <a href="https://rms.nsw.gov.au/nbh">rms.nsw.gov.au/nbh</a>.</p>
Alternatives and options	<p>A number of submissions stated that the REF only considered an "all or nothing" approach. Options such as improved public transport, traffic light changes, overpasses/underpasses were not considered.</p> <p>Other clearway operating hours should be implemented, such as 24 hours per day, seven days per week, 365 days of the year, or only during the existing 'No Parking' period.</p>	<p>A number of alternatives and options were considered in Section 2.4 of the REF. This included six sub-options of different clearway operating hours, including weekday peak hours (6.00am to 10.00am and 3.00pm to 7.00pm) and 24/7 clearways operations.</p> <p>All options were assessed against the proposal objectives, identified in Section 2.3 of the REF and the <i>Sydney Clearways Strategy</i> (TfNSW 2013a). The proposal (preferred option) was selected as the best option to meet the <i>Sydney Clearways Strategy</i> (TfNSW 2013a) requirements for establishment of a clearway and the proposal objectives, and is discussed in Sections 2.3 to 2.7 of the REF.</p>
Stakeholder and	A number of issues were raised by the community in	Roads and Maritime consulted with community and other stakeholders during February 2017 and

Issue category	Issue summary	Roads and Maritime's response
community consultation	<p>relation to the stakeholder and community consultation carried out for the proposal, including the consultation process, public display period and proposal documentation.</p> <p>A number of respondents also stated that the public display period for the REF was too short, and was held at the busiest time of the year for the community being close to Christmas.</p>	<p>March 2017. All stakeholders were encouraged to provide their feedback/ comments via mail, email, and phone.</p> <p>As part of consultation activities for the proposal, 10,000 letters were distributed to local residents and businesses inviting feedback on the proposal. Roads and Maritime received 223 submissions from 193 people. A total of 70 people supported the proposal, 18 people were supportive but raised concerns and four were neutral. A total of 101 people raised a number of matters for Roads and Maritime to consider in determining how the proposal should progress. These matters include the need for extended clearways, loss of parking, and road and pedestrian safety.</p> <p>The Warringah Road Clearways REF display period started on 27 November 2017 and closed 15 December 2017, which is before the start of the Christmas holiday period.</p> <p>This arrangement is considered to be consistent with the intent of the EIA procedure, which is to provide stakeholders with adequate time to comment on the REF.</p>
Parking and access	<p>A number of issues were raised by the community in relation to parking and access, including impacts to residential parking, access and mobility, business parking, Warringah Christian Church, and the adequacy of the Parking Study.</p>	<p>Roads and Maritime seek to balance the needs of the community as well as road users. Warringah Road is a key arterial road, and its role in connecting people and moving goods across Sydney's north would continue as Sydney continues to grow.</p> <p>Roads and Maritime understands that the new and extended clearway operating hours would change parking conditions in front of residential properties, which may cause some inconvenience for residents and visitors.</p> <p>However, the primary purpose of a State Road such as Warringah Road is to move people and goods efficiently across Sydney. Any parking currently permitted on the State Road is not specifically allocated to residents or properties. Kerbside parking impacts the primary function of the road and Roads and Maritime modify parking restrictions across the State Road network to ensure they are meeting their primary purpose.</p>
Socio-economic assessment	<p>Several submissions stated that the REF does not adequately assess noise, air</p>	<p>Environmental impacts were identified and assessed in Chapter 6 (Environmental assessment) of the REF. Noise and air quality</p>

Issue category	Issue summary	Roads and Maritime's response
and impacts	quality and vibration impacts from increased usage of vehicles in the kerbside lane, or impacts on property values. The installation of a clearway would reduce property values fronting Warringah Road and this would have major impacts on the owners of these properties.	<p>impacts were discussed in Section 6.5 and Section 6.9 of the REF. The changes in traffic conditions along the proposal corridor are anticipated to provide mostly positive impacts to the community, primarily due to improved travel times and traffic flow. The REF also found that there would be no measurable increase of noise impacts on adjacent receivers expected, and no adverse air quality impacts are anticipated from the proposal during operation. Improved traffic flow and reduced congestion, and consequently reduced exhaust emissions, may have a beneficial effect onto air quality in the immediate vicinity of the proposal. Vehicles would not be required to stop and start as frequently as there would be no parked cars in the kerbside lane which may result in an improvement to overall traffic noise.</p> <p>As noted above, the introduction of new and extended clearways may cause some inconvenience for residents and businesses, however, does not change the land use, land size or development capacity of any private property.</p>
Traffic and transport assessment and impacts	A number of issues were raised by the community for traffic and transport, including the scope and methodology of the traffic study, the traffic data used, including bus dwell time data, impacts of cyclists, the metropolitan road freight hierarchy, road and pedestrian safety and public transport.	<p>During the 2015 investigation of the entire Warringah Road corridor, as nominated in the <i>Sydney Clearways Strategy</i> (TfNSW 2013a), traffic volume and travel time data was collected and analysed by an independent traffic consultant, Peopletrans. Additional traffic analysis was undertaken in 2017.</p> <p>The traffic investigations carried out for the proposal (refer to Section 6.1 of the REF) show that traffic volumes are sufficient to justify implementation of a new clearway, and that overall, the proposal is considered justified due to the long-term benefit to the local and regional community and its impacts can be managed with few residual adverse outcomes.</p>

Each submission has been assessed individually to understand the issues being raised. Every issue raised has been collated and summarised and corresponding responses have been provided in Chapter 2 of this report.

### Additional assessment and environmental management

The REF identified the framework for environmental management, including safeguards and management measures that would be adopted to avoid or reduce environmental impacts. After considering the matters raised in the submissions, no changes to the safeguards and management measures identified in the REF are proposed. These measures are in Table 3-1 of this report.

### Conclusion of this report



This report provides a summary of the submissions received in response to the display of the REF for the Warringah Road clearways proposal. The submissions have been categorised according to the issues raised, and responses have been provided for each issue.

Considering all submissions together with the REF, the impacts of the proposal are not considered significant. The identified impacts in the REF and the submissions would be appropriately managed by implementing the safeguards and mitigation measures identified in this report. The proposal meets the proposal objectives as detailed in Section 2.3 of the REF, while effectively minimising environmental impacts and considering community and stakeholder comments. Although, the proposal would still result in environmental impacts, on balance the proposal best meets the proposal objectives and is justified.

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# 1 Introduction and background

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## 1.1 The proposal

Roads and Maritime Services (Roads and Maritime) proposes to install new clearways, and extend the operating hours of existing clearways (the proposal) along Warringah Road (A38) from Roseville Bridge to Beacon Hill Road, Beacon Hill (the proposal corridor), for a length of 6.7 kilometres (in both directions).

Existing clearways along the proposal corridor include weekday clearways between 6:00am to 10:00am (westbound) and 3:00pm to 7:00pm (eastbound) between Roseville Bridge and Forest Way, Frenchs Forest. There is no existing clearway on weekends.

The proposal would introduce the following clearway conditions for the length of the proposal corridor:

- standard weekday clearway hours of 6:00am to 7:00pm in both directions
- standard short day weekend and public holiday clearway hours of 9:00am to 6:00pm in both directions.

Existing 'No Parking' and 'No Stopping' restrictions would continue to operate outside clearway times.

The proposal corridor also includes a section of major road construction works associated with the Northern Beaches Hospital (NBH) upgrade. Standard clearway operating hours (as outlined above) are proposed along this section and would be implemented in conjunction with this major project.

Subject to a final determination to proceed, construction of the proposal is expected to start in the first half of 2018 and would take about three weeks to complete. A more detailed description of the proposal is found in the *Proposed Clearways on Warringah Road, Roseville Bridge to Beacon Hill Road, Beacon Hill Review of Environmental Factors* prepared by Roads and Maritime in November 2017 (Roads and Maritime 2017a).

The location and layout of the proposal is shown in Figure 1-1 and Figure 1-2, respectively.

## 1.2 REF display

Roads and Maritime prepared a REF to assess the environmental impacts of the proposed works for the proposal. The REF was publicly displayed between Monday 27 November 2017 and Friday 15 December 2017 at four physical locations, as detailed in Table 1-1. The REF was placed on the Roads and Maritime project website and made available for download. The display locations and website link were advertised in the *Manly Daily* (29 November 2017) and the *North Shore Times* (30 November 2017).

In addition to the above public display, a community update, detailing an invitation to comment (and information for how to access the review of environmental factors) was sent directly to 180 stakeholders by email including all those who responded by email to the initial round of consultation in February/ March 2017.

A community update was delivered to 10,000 residents near to the proposal from Roseville Chase to Beacon Hill including all directly impacted properties on Warringah Road. Direct mail was sent to emergency services, schools, large businesses, religious centres and community groups in the area.

Table 1-1: Display locations

Location	Address
Northern Beaches Council Civic Centre	725 Pittwater Road, Dee Why, NSW, 2099.
Dee Why Library	725 Pittwater Road, Dee Why, NSW, 2099 (next to the Northern Beaches Council Civic Centre).
Forestville Library	6 Darley Street, Forestville, NSW, 2087.
Glen Street Library	Corner of Glen Street and Blackbutts Road, Belrose, NSW, 2085.

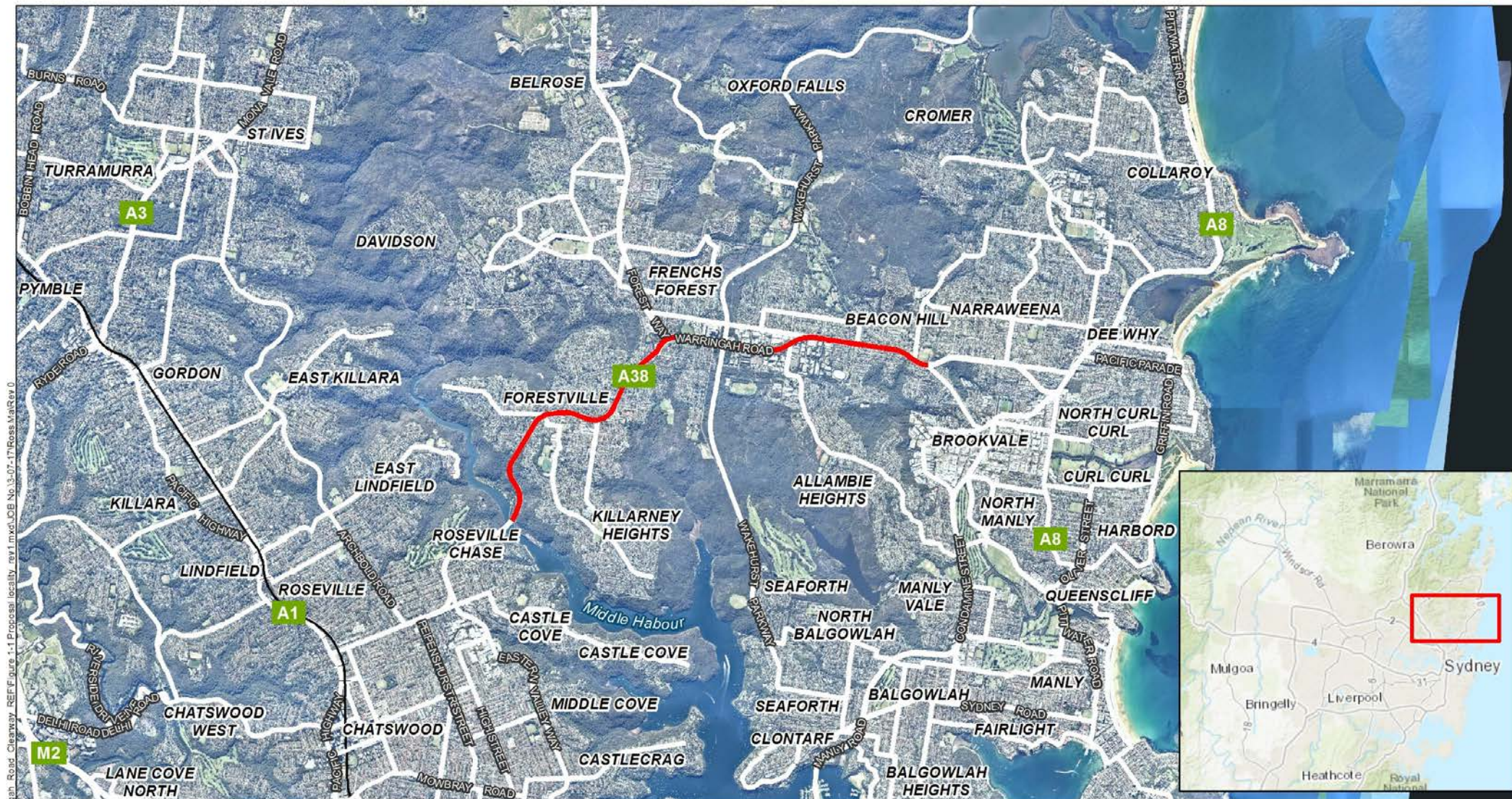
### 1.3 Purpose of the report

This submissions report relates to the REF prepared for the *Proposed Clearways on Warringah Road, Roseville Bridge to Beacon Hill Road, Beacon Hill* (Roads and Maritime 2017a), and should be read in conjunction with that document.

The REF was placed on public display and submissions relating to the proposal and the REF were received by Roads and Maritime. Chapter 2 (Response to issues) of this submissions report summarises the issues raised and provides responses to each issue. Chapter 3 (Environmental management) provides a summary of the environmental safeguards for the proposal as outlined in the REF and reconsidered in this report.

No revisions have been made to the assessment or environmental management measures as described in the REF.





- Proposal corridor
- Roads
- + + Railway

P:\GIS\Project\3\project\26575\_Warringah\_Road\_Clearway\_REF\Figure 1-1\Proposal Locality - rev1.mxd\JOB No.13-07-17\Ross.MatRev 0

Source: Aurecon, LPI, Esri Imagery



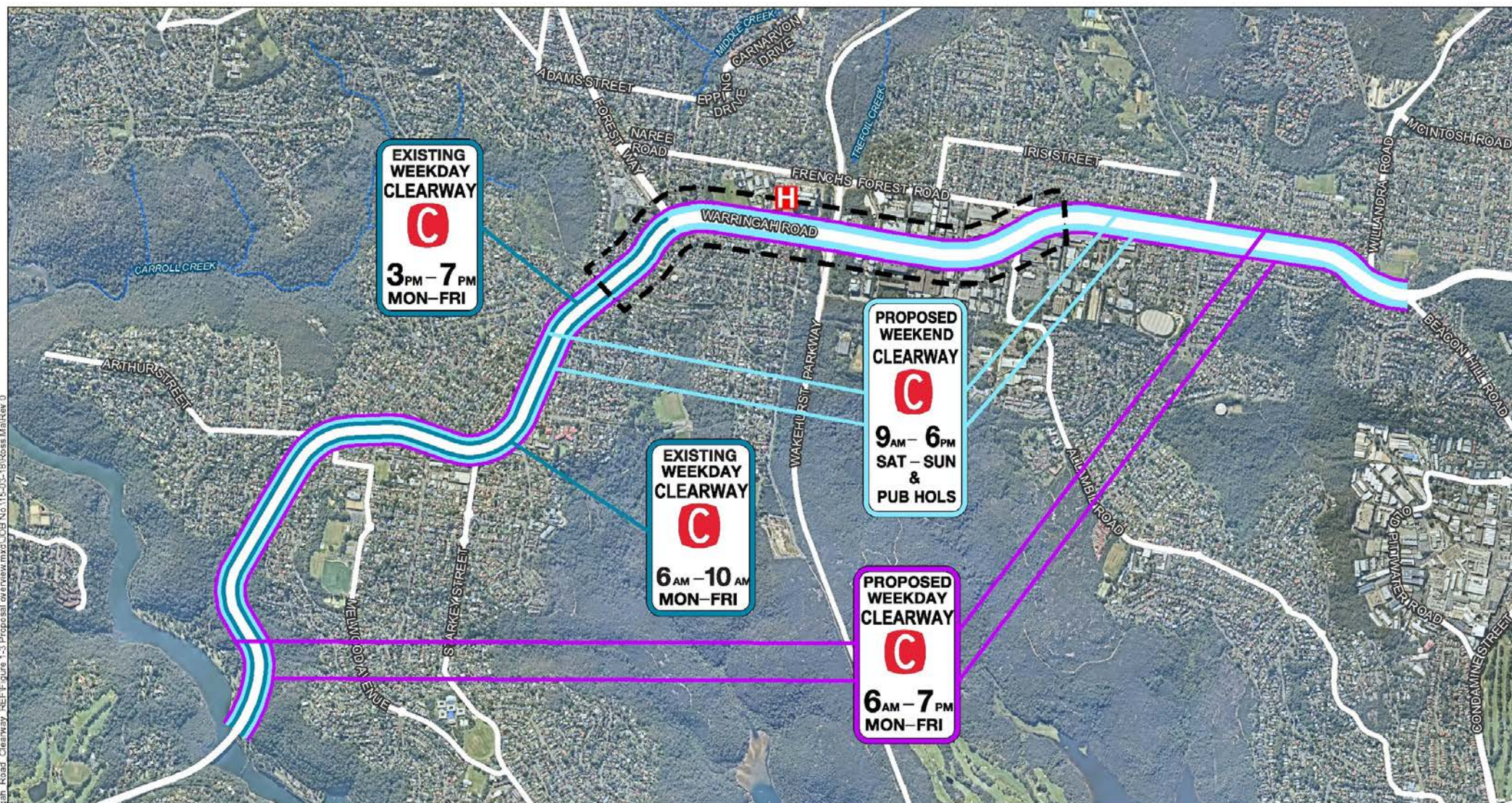
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Proposed Clearway on Warringah Road, Roseville Bridge to Beacon Hill Road, Beacon Hill Submissions Report

Projection: GDA 1994 MGA Zone 56

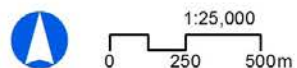
**FIGURE 1-1: Proposal Locality**





- Proposed clearways on weekdays
- Proposed clearways on weekends and public holidays
- Existing weekday clearway south-westbound 6am-10am north-eastbound 3pm-7pm
- Proposed clearways through the Northern Beaches Hospital area in conjunction with the major project
- H Northern Beaches Hospital

Source: Aurecon, LPI, Nearmap



Proposed Clearway on Warringah Road, Roseville Bridge to Beacon Hill Road, Beacon Hill Submissions Report

Projection: GDA 1994 MGA Zone 56

Figure 1-2: Proposal Overview



## 2 Response to issues

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Roads and Maritime received 36 submissions during the public display period of the REF. Table 2-1 lists the respondents and each respondent's allocated submission number. The table also indicates where the issues raised in each submission have been addressed in this report.

Table 2-1: Respondents

Respondent	Submission No.	Section number where issues are addressed
Individual	1	Section 2.3.1
Individual	2	Section 2.3.1, 2.3.2 and 2.6.1
Individual	3	Section 2.3.1
Individual	4	Section 2.2
Individual	5	Section 2.2
Individual	6	Section 2.4.2 and 2.10
Individual	7	Section 2.2 and 2.10
Individual	8	Section 2.3.1
Individual	9	Section 2.3.1, 2.4.2, 2.6.1 and 2.8.2
Individual	10	Section 2.6.1
Individual	11	Section 2.3.1
Individual	12	Section 2.6.1
Individual	13	Section 2.10
Individual	14	Section 2.10
Individual	15	Section 2.3.1
Individual	16	Section 2.6.1, 2.8.6 and 2.10
Individual	17	Section 2.6.1, 2.6.2 and 2.10
Individual	18	Section 2.3.3, 2.10
Individual	19	Section 2.3.1
Individual	20	Section 2.6.4 and 2.6.5
Individual	21	Section 2.10
Individual	22	Section 2.3.4, 2.3.5, 2.4.1, 2.6.5, 2.7.2, 2.8.2, and 2.9.1

Respondent	Submission No.	Section number where issues are addressed
Individual	23	Section 2.3.1, 2.3.6, 2.4.1, 2.5.1, 2.5.2, 2.5.3, 2.6.2, 2.6.5, 2.7.1, 2.7.2, 2.8.1, 2.8.2, 2.8.3, 2.8.4, 2.8.5 and 2.8.8
Individual	24	Section 2.3.1, 2.3.3, 2.3.4, 2.4.1, 2.5.1, 2.5.3, 2.6.1, 2.7.2 and 2.8.2
Individual	25	Section 2.3.1, 2.5.1 and 2.6.1
Individual	26	Section 2.2
Individual	27	Section 2.3.1, 2.3.3 and 2.8.7
Individual	28	Section 2.3.3, 2.5.1, 2.5.2, 2.7.2 and 2.10
Individual	29	Section 2.3.4, 2.4.1, 2.5.1, 2.6.5 and 2.8.2
Individual	30	Section 2.5.1, 2.6.1 and 2.7.2
Individual	31	Section 2.3.1, 2.3.4, 2.4.1, 2.4.2, 2.5.3, 2.6.1, 2.6.5, 2.8.2 and 2.9.1
Individual	32	Section 2.3.1, 2.6.1 and 2.8.7
Individual	33	Section 2.5.1, 2.6.3 and 2.8.7
Individual	34	Section 2.4.1, 2.5.1, 2.6.1, 2.8.6 and 2.8.7
Individual	35	Section 2.3.1, 2.4.1, 2.5.2, 2.6.2 and 2.10
Individual	36	Section 2.7.2 and 2.8.6

## 2.1 Overview of issues raised

A total of 36 submissions were received in response to the public display of the REF which raised 152 issues. All 36 submissions were from the community. No submissions were received from government agencies.

Each submission has been examined individually to understand the issues being raised. The issues raised in each submission have been extracted, summarised and collated, and corresponding responses to the issues have been provided. Where similar issues have been raised in different submissions, only one response has been provided. The issues raised and Roads and Maritime response to these issues forms the basis of this chapter.

The main issues raised by the public for consideration by the project team in relation to the proposal included:

- need for the proposal – 30 issues
- alternatives and options – 11 issues
- stakeholder and community consultation – 16 issues
- parking and access – 27 issues
- socio-economic assessment and impacts – 14 issues
- traffic and transport assessment and impacts – 29 issues
- environmental assessment process – five issues.



Some of the submissions included a number of suggestions/ issues that were outside the scope of the proposal (14 issues). Four submissions were in general support of the proposal.

These issues have been collated and summarised and responses provided in the sections below.

## 2.2 General support for the proposal

### Submission number(s)

4, 5, 7, 26

### Issue description

1. General support for proposal.

### Response

1. Roads and Maritime acknowledge support for proposal.

## 2.3 Need for the proposal

### 2.3.1 Traffic and transport

### Submission number(s)

1, 2, 3, 8, 9, 11, 15, 19, 23, 24, 25, 27, 31, 32, 35

### Issue description

1. Clearways would not improve peak period traffic issues and the proposal is not needed as 'No Stopping' and 'No Parking' zones are already in operation during peak hours. Existing clearways have not improved current traffic conditions, and changing it to clearways seven days a week would not improve traffic during peak hours.
2. The REF states that clearways would reduce congestion and improve travel times, however data within the supporting documents show the opposite. In particular, the Peopletrans report contradicts statements in the REF that clearways would work in speeding up traffic and reducing travel times.
3. The Traffic and Transport Assessment included in the REF does not provide enough evidence to show that clearways are required. The data presented has been manipulated to fit the *Sydney Clearways Strategy* (TfNSW 2013a).
4. The information provided in the REF does not support the justification of clearway implementation.

### Response

1. Warringah Road is an important public transport, commuter and freight route. During peak periods, existing parking restrictions including clearways are in place on Warringah Road, and are effective in improving the performance of the road corridor. However, traffic volumes currently experienced throughout the day and on weekends warrant extensions of clearway hours of operation.  
Clearway restrictions help to improve traffic flow and reduce delays by restricting parking and stopping, and allowing the towing of vehicles that illegally stop or break down. They also allow for the towing of vehicles that are stopped as a result of a crash. The current 'No Parking' and 'No Stopping' restrictions in place on the proposal corridor do not allow parked or broken down vehicles to be towed without the involvement of the NSW Police.

A post implementation review completed for new clearways installed on Mona Vale Road between Pacific Highway, Pymble and Kitchener Street, St Ives, found that there were

numerous benefits from the implementation of the clearway. These included, but were not limited to, travel time savings due to an increase in average travel speeds during clearway operating hours, and travel time reliability improved significantly across the day on weekdays and on weekends.

2. The REF does not provide data comparing travel speeds on Warringah Road with and without clearways. Section 6.1.2 of the REF shows traffic volumes and travel times over a 24-hour period. While clearways are operational during peak periods, the higher traffic volumes experienced during these periods is not a result of the operation of the clearway. Peak hour traffic flows are typically driven by commuting, which occurs when people travel from residential areas to their place of work or study and vice-versa. Tables 6-1 and 6-2 of the REF highlight this by showing that westbound traffic volumes are higher during the morning peak period and eastbound traffic is higher during the afternoon peak. This reflects the general concentration of employment and educational areas to the west such as Chatswood, Macquarie Park and the Sydney CBD. It would be expected that if travel times were measured during peak periods while clearways were not operating, that average speeds would be lower if any vehicles were parked in the kerbside lane and restricting its use. There is anecdotal evidence of long delays when vehicles are broken down or stopped along Warringah Road during peak periods.

The Volume and Travel Time Analysis (Appendix D1 of the REF) examined traffic count and travel time data collected by Roads and Maritime for the proposal (refer to Section 6.1 of the REF). The data collected for the analysis shows that under existing conditions, directional traffic flows are sufficient for consideration of new clearways under the *Sydney Clearways Strategy* (TfNSW 2013a). The study does not predict travel times or vehicle speeds under implementation of the clearway.

In July 2017, a post implementation review was completed on new clearways installed on Mona Vale Road between Pacific Highway, Pymble and Kitchener Street, St Ives.

As a result of the clearways, the post implementation review found that:

- average travel time savings during clearway hours in the eastbound direction equate to about one minute in weekday AM and PM peaks and 40 seconds on weekends
- average travel time savings during clearway hours in the westbound direction equate to about 30 seconds in weekday AM peaks, two minutes in weekday PM peaks and 30 seconds on weekends
- average travel speeds during clearway hours increased
- travel time reliability has improved significantly across the day on weekdays and on weekends.

3. One of the key considerations for whether a new or extended clearway should be investigated to ease congestion on a major State Road is if directional traffic flow exceeds 800 vehicles per hour (vph) per lane. Section 6.1.2 of the REF provides the results of traffic volume surveys that were carried out to determine the amount of traffic travelling in each lane on Warringah Road. These surveys identified that 1600 vph was exceeded during almost all proposed clearway operating hours that would occur under the proposal. This includes out-of-peak hours and weekends.

While Warringah Road has three lanes, vehicles can park or stop in the kerbside lane in the absence of a clearway or other parking restriction. This means only two flow lanes of traffic can be relied on, meaning that with a combined traffic volume exceeding 1600 vph per direction on the road, 800 vph per lane is exceeded. This traffic volume guideline comes from relevant Australian Standards – *Parking facilities Part 5: On-street parking* (Standards Australia 1993). These guidelines are also relevant when 'No Parking' or 'No Stopping' restrictions are in place as illegally parked vehicles are unable to be towed promptly under these restrictions.

4. As discussed above, the traffic investigations carried out for the proposal (refer to Section 6.1 of the REF) show that traffic volumes are sufficient to justify implementation of a new clearway. The information contained within Section 6.1.2 of the REF is considered to be a true and accurate representation of data collected during the Volume and Travel Time Analysis (refer to Appendix D1 of the REF).

Overall, the proposal is considered justified due to the long-term benefit to the local and regional community and its impacts can be managed with few residual adverse outcomes.

### 2.3.2 Proposal cost

#### Submission number(s)

2

#### Issue description

1. Proposal is a waste of public money.

#### Response

1. The *Sydney Clearways Strategy* (TfNSW 2013a) identifies that traffic congestion costs Sydney residents an estimated \$5.1 billion per year. Clearways have an immediate positive benefit to road users at a much lower cost than other civil works such as construction of additional traffic lanes and are one way to make more effective use of existing public assets. A number of alternatives and options were considered for the proposal, as described in Section 2.3 of the REF. The proposal was selected as the best option in accordance with the *Sydney Clearways Strategy* (TfNSW 2013a) for establishment of a clearway, and met the proposal objectives. These are discussed further in Section 2.3 and 2.4 of the REF.

### 2.3.3 Consideration of Northern Beaches Hospital

#### Submission number(s)

18, 24, 27, 28

#### Issue description

1. Roadworks associated with major projects nearby such as the Northern Beaches Hospital have been the cause of existing traffic congestion in this location. Many of these projects have associated roadworks which would contribute to improving congestion when completed. Once these roadworks are completed, the road network would be improved and traffic congestion on Warringah Road would be reduced. Therefore, there is no need for the clearway in the long-term.
2. The proposal has come about as a result of the new hospital and potential traffic issues should have been dealt with during the planning phases for the hospital.
3. The proposal should be delayed until the hospital has been completed.

#### Response

1. As discussed in Section 6.1 of the REF, traffic investigations prepared for the proposal found that the current traffic volumes along Warringah Road exceed the guidelines specified in the relevant Australian Standard; *Parking facilities Part 5: On-street parking* (Standards Australia 1993) for the introduction of new and extended clearways. The traffic investigations were independent of the associated environmental impact assessment and traffic impact investigations carried out for the Northern Beaches Hospital (NBH) upgrade. The traffic investigations assessed the current traffic volumes along the proposal corridor, and did not include the likely traffic changes to result from the operation of the NBH (refer to Appendix D1 and D2 of the REF).

The investigation work carried out separately for the NBH upgrade found that traffic volumes in the three-hour AM and PM peak periods are forecasted to increase from the 2012 base case by 12 per cent and 11 per cent respectively in 2018 when the hospital opens. By 2028, traffic volumes are forecast to increase by a further 5 per cent in the AM peak period and 4 per cent in the PM peak period. Should traffic conditions substantially change in the future, the proposed clearway operating hours would be reviewed, as part of a future clearways assessment.

More specific information about the NBH upgrade can be found at [rms.nsw.gov.au/nbh](https://rms.nsw.gov.au/nbh).

It is expected that new and extended clearways along the Warringah Road corridor would help maximise the benefits of NBH enabling works and in conjunction may help to relieve some of the 'rat running' occurring within the local area surrounding the proposal.

2. The *Sydney Clearways Strategy* (TfNSW 2013a) provides a framework for the consideration of new clearway operations and recommends that these are investigated for a number of key arterial roads in Sydney (including Warringah Road) which frequently experience high traffic volumes and low travel speeds.

Based on the outcome of the traffic investigations carried out for the proposal, the proposed clearway operating hours are considered appropriate at this point in time. Traffic investigations carried out in 2015 and 2017 (refer to Appendix D1 of the REF) determined that new clearways are needed at present, even without the likely increases in volumes resulting from the NBH upgrade.

3. Delaying the proposal until the NBH upgrade roadworks are complete would be similar to the 'do nothing' option outlined in Section 2.4.3 of the REF. Traffic delays and congestion experienced on Warringah Road would continue to worsen leading to longer travel times and delays for motorists using the road.

The traffic investigations carried out for the proposal were independent of those carried out for the NBH upgrade and determined that new clearways are needed now, even without the likely increases in volumes resulting from the hospital upgrade.

### 2.3.4 Sydney Clearways Strategy

#### Submission number(s)

22, 24, 29, 31

#### Issue description

1. The *Sydney Clearways Strategy* pre-determines the solution to the issue (ie the proposal) and the outcome of the REF.
2. The proposal is inconsistent with the *Sydney Clearways Strategy* (2013) for clearways and is not considered justified or in accordance with the strategy.

#### Response

1. The NSW Government's *Long Term Transport Master Plan* (TfNSW 2012a) considers all forms of transport relevant to the State and defines 220 short, medium and long-term actions that would deliver a range of benefits to the NSW population.

The Plan identifies that 'getting Sydney moving again' is a major transport challenge faced by the State. The Plan provides a detailed strategic analysis of alternatives and options that can be implemented to address this challenge. As a result, the Plan includes a range of actions to reduce traffic congestion in Sydney, such as broad strategies for reducing reliance on car travel, supporting public transport, unblocking Sydney's constrained road corridors and improving arterial roads.

Warringah Road is recognised in the Plan as a 'highly constrained' road corridor that is critical to efficient public transport operations on the Northern Beaches.

Reducing congestion and better management of traffic is identified in the Plan as a priority action required to improve the flow and capacity of arterial roads such as Warringah Road. A number of short, medium and long-term actions are specified in the Plan to achieve this. These include implementation of clearways, on-street parking measures, transit lane systems, long-turn bays, additional traffic lights, bus bypass lanes and B-phasing at intersections.

In response to this Plan, the *Sydney Clearways Strategy* (TfNSW 2013a) provides a framework for the consideration of new clearway operations to improve traffic flows and capacity on arterial roads and recommends that these are investigated for a number of key arterial roads in Sydney (including Warringah Road) which frequently experience high traffic volumes and low travel speeds.

Following investigations, two primary options were identified for the Warringah Road corridor, as described in Section 2.4 of the REF. These were a) 'Do Nothing'/ retain current clearways restrictions, and b) introduce new or extended clearway operating hours. Following analysis of both options, and subsequent sub-options based on the *Sydney Clearways Strategy* (TfNSW 2013a) and proposal objectives, a preferred option was developed. Different operating times for the proposal were considered in Section 2.6 of the REF (refer to Table 2-3 of the REF). Six sub-options were considered which included evaluation of different clearway operating hours, including weekday peak hours (6.00am to 10.00am and 3.00pm to 7.00pm) and 24/7 clearways operations.

Following selection of the preferred option, an independent environmental assessment was prepared to consider the potential environmental impacts associated with the proposal and any management measures required to mitigate potential impacts.

2. The *Sydney Clearways Strategy* (TfNSW 2013a) provides a framework for the consideration of new and extended clearway operations and recommends that these are investigated for a number of key arterial roads in Sydney (including Warringah Road) which frequently experience high traffic volumes and low travel speeds.

The REF was prepared to determine the potential impacts of proposed new clearway operations on Warringah Road (the proposal). The REF assessed the proposal in accordance with the *Sydney Clearways Strategy* (TfNSW 2013a). This document was developed to ensure the consistency of clearway operations across Sydney. The proposal was found to help:

- contribute to the key objective of the *Sydney Clearways Strategy* (TfNSW 2013a) which is to assist in facilitating the use of the entire road corridor for longer periods of the day
- manage traffic congestion and improve travel time reliability on Warringah Road
- maintain consistent vehicle throughput on the A38 road corridor
- protect a key State Road corridor
- allow the timely removal of vehicles parked illegally within the clearway.

According to the *Sydney Clearways Strategy* (TfNSW 2013a), a clearway should be investigated where a State Road experiences the following:

- directional traffic flow exceeds 800 vehicles per lane per hour
- travel speeds are less than 30 kilometres per hour (km/h) during peak periods
- the road is a strategic bus or freight transport corridor for moving people and goods
- alternative public parking close to local businesses can be found.

The Volume and Travel Time Analysis (refer to Appendix D1 of the REF) indicates that 1600 vph is exceeded in both directions during weekdays and on weekends for the proposed clearway operating hours (refer to Table 6-1 of the REF). Travel times for weekend travel time data indicated variable travel speeds though included a number of occurrences where travel



speeds were below 30 km/h (Figure 6-12 of the REF). A review of traffic volumes and travel time data indicates that during peak weekend periods in both the eastbound and westbound directions, there is sufficient traffic volumes and travel speeds to warrant consideration of new clearways on Warringah Road between Roseville Bridge and Beacon Hill Road, Beacon Hill (refer to Section 6.1.2 of the REF).

The proposal is therefore consistent with the *Sydney Clearways Strategy* (TfNSW 2013a).

### 2.3.5 Towing of illegal vehicles

#### Submission number(s)

22

#### Issue description

1. Towing of illegally parked vehicles during hours of operation shouldn't be used as the primary justification for the proposal, as this option is available under other parking restrictions.

#### Response

1. The towing of illegally parked vehicles during clearway operating hours was not considered as the primary objective of the proposal. As identified in Section 2.3 of the REF, the proposal took into consideration a number of objectives. The key objectives of the proposal were to:
  - contribute to the key objective of the Clearways Strategy; assist in facilitating the use of the entire road corridor for longer periods of the day
  - manage traffic congestion and improve travel time reliability on Warringah Road
  - maintain consistent vehicle throughput on the A38 road corridor
  - protection of a key State Road corridor
  - allow the timely removal of vehicles parked illegally within the clearway.

The current 'No Parking' and 'No Stopping' restrictions in place do not allow parked or broken down vehicles to be towed without involvement of the NSW police. When vehicles do stop or park and block lanes they can cause congestion issues. Replacing 'No Parking' and 'No Stopping' restrictions currently in place with clearways during AM and PM peak periods are unlikely to result in travel time benefits by individual road users every day, but it would result in a substantial improvement when issues do occur.

Anyone can report vehicles parked in a clearway by calling 131 700, and the Transport Management Centre can authorise towing of vehicles to nearby side streets. This means vehicles can be towed from the State Road corridor without Police involvement, removing obstruction of traffic flows promptly.

NSW Police is responsible for monitoring the road network to ensure users comply with all road rules and regulations. We encourage members of the public to direct all concerns relating to illegal behaviour on the road network to the police.

### 2.3.6 Bus travel times

#### Submission number(s)

23

#### Issue description

1. There would be no improvement to bus travel times as a result of the proposal.
2. The REF has not considered alternatives such as bus pull in-bays.

## Response

1. Warringah Road is recognised as a suburban bus corridor within Transport for NSW's *Sydney's Bus Future* (TfNSW 2013b).

The REF identified that the proposal may contribute to an improvement in reliability of public transport services using the proposal corridor during clearway operation by providing a clear kerbside lane free of parked vehicles for buses to use when operating along the corridor (refer to Section 6.1 of the REF). Where clearways have been introduced at other locations, assessment of travel time reliability improvements for all traffic, including buses, have been observed (refer to Section 6.2.3 of the REF and Section 2.3.1 of this report).

2. While this is out of scope for the clearway proposal, it can be recognised that buses typically only stop for a short period of time to pick up and drop off passengers, and do not park in the kerb side lane.

A review of data for bus stop dwell time (ie the time that the bus stops at a particular transit stop) for Warringah Road was carried out for the proposal (refer to Section 6.1 of the REF). Additional bus dwell time data has been sourced by Roads and Maritime for the eastern end of the proposal corridor (bus stop 2100143 and 210071, Beacon Hill, during the month of November 2017). This indicated an average bus dwell time of 19 seconds. This is a very short duration and is not anticipated to substantially impact the efficiency of clearway operation.

Therefore, unlike parked vehicles which park for an extended period of time, the impact of buses stopping in the kerbside lane for short periods of time is not significant on the flow of traffic. Indented bus bays can help with the flow of traffic when warranted. Other than the changes to bus facilities as part of the NBH upgrade roadworks, there are no plans to indent bus bays on Warringah Road at this time.

## 2.4 Alternatives and options

### 2.4.1 Range of options considered

#### Submission number(s)

22, 23, 24, 29, 31, 34, 35

#### Issue description

1. The analysis of options and alternatives in the REF is inadequate being an "all or nothing" approach. Other options should be considered such as improved public transport, traffic light changes, overpasses/ underpasses. No evaluation of clearway options (ie all day on weekdays but not weekends, modified parking restrictions, other low-cost measures) was attempted in the REF.
2. The operating hours of the existing 'No Parking' arrangements provided a better balance between improving peak hour flows and allowing access to properties.

## Response

1. Section 2.4 of the REF provides an assessment of the options considered for the proposed clearway. This did not include consideration of major or minor engineering works, improved public transport services or broader transport improvement initiatives as these are addressed in the *Long Term Transport Master Plan* (TfNSW 2012a) and other associated plans and strategies prepared in response to this Plan, including the *Sydney Clearways Strategy* (TfNSW 2013a).

The *Sydney Clearways Strategy* (TfNSW 2013a) provides a framework for the consideration of new clearway operations and recommends that these are investigated for a number of key arterial roads in Sydney (including Warringah Road) which meet relevant Australian Standards

for high traffic volume and low travel speed (*Parking facilities Part 5: On-street parking*) (Standards Australia 1993).

As outlined in Section 2.4 of the REF, the only other alternative option to the proposal was to 'do nothing'. Under this option, the proposal corridor would continue to operate at its current state with inconsistent travel times for motorists and risk of delays due to parked vehicles occupying the kerbside lane during periods when the proposal corridor is near capacity. As such, the proposal objectives outlined in Section 2.3 of the REF would not be met.

For this reason, the 'do-nothing' option was not considered to be acceptable and the establishment or extension of clearways was determined to be preferable.

A range of sub-options were investigated for the proposed clearway and these are outlined in Section 2.6 of the REF. These included:

- sub-option A: 24/7 clearway
- sub-option B: weekday peak clearways (6:00am to 10:00am and 3:00pm to 7:00pm)
- sub-option C: weekday standard all day clearways (6:00am to 7:00pm)
- sub-option D: weekend standard short day clearways (9:00am to 6:00pm)
- sub-option E: weekend standard long day clearways (8:00am to 8:00pm)
- sub-option F: weekdays or weekends, non-standard clearway hours or days.

Table 2-3 of the REF provides a detailed analysis of these sub-options. Sub-options C and D were found to best satisfy the objectives of the proposal and were combined to form the proposal, as described in Chapter 3 (Description of proposal) of the REF.

2. Roads and Maritime seek to balance the needs of the community as well as road users. Roads and Maritime acknowledge that Warringah Road provides for local traffic and access to residential properties along the road corridor. However, as Sydney continues to grow, the NSW Government has reviewed its strategically important transport routes and identified how the existing road network can better perform to ensure the efficient movement of people and goods throughout the metropolitan area.

Roads and Maritime understands that the new and extended clearway operating hours would change parking conditions in front of residential properties, which may cause some inconvenience for residents and visitors. However, the primary purpose of a State Road such as Warringah Road is to move people and goods efficiently across Sydney. Any parking currently permitted on the State Road is not specifically allocated to residents or properties. Parking impacts on the primary function of the road and Roads and Maritime change parking restrictions across the State Road network to ensure they are meeting their primary purpose.

A number of alternatives and options were considered for the proposal, as described in Section 2.4 of the REF. This includes times when 'No Parking' restrictions are in place along the proposal corridor, as well as during inter-peak times and on weekends when justified by traffic volumes and when parked vehicles have an impact on traffic flows.

These options were assessed against the proposal objectives, identified in Section 2.3 of the REF and the *Sydney Clearways Strategy* (TfNSW 2013a). The proposal (preferred option) was selected as the best option to meet the *Sydney Clearways Strategy* (TfNSW 2013a) requirements for establishment of a clearway, helping to manage congestion of key roads in Sydney. The preferred option also meets the proposal objectives, and is discussed in Sections 2.3 to 2.7 of the REF.



## 2.4.2 Alternative clearway hours

### Submission number(s)

6, 9, 31

### Issue description

1. The proposal should implement a clearway 24 hours per day, seven days per week, 365 days of the year.
2. The proposal only needs to be implemented during the existing 'No Parking' period to satisfy the proposal objectives.

### Response

1. Different operating times for the proposal were considered in Section 2.6 of the REF. Six sub-options were considered which included evaluation of different clearway operating hours, including weekday peak hours (6.00am to 10.00am and 3.00pm to 7.00pm) and 24/7 clearway operations. Current road usage during the interpeak period (10.00am to 3.00pm) supports implementation of a clearway, however, traffic flows during the night-time period (7.00pm to 6.00am on weekdays and 6.00pm to 9.00am on weekends) do not currently warrant introduction of clearway restrictions and residents in the local area make use of kerbside parking during these night time hours.
2. Roads and Maritime seek to balance the needs of the community as well as road users. Clearway operating hours were derived based on current road usage which supports the implementation of clearway operating hours as described in Section 2.6 of the REF. A number of alternatives and options were considered for the proposal, as described in Section 2.4 to 2.7 of the REF. This includes times when 'No Parking' restrictions are in place along the proposal corridor, as well as during inter-peak times and on weekends when justified by traffic volumes and when parked vehicles have an impact on traffic flows.

These options were assessed against the proposal objectives, identified in Section 2.3 of the REF, and the *Sydney Clearways Strategy* (TfNSW 2013a). One of the key considerations for whether a new or extended clearway should be investigated to ease congestion on a major State Road is if directional traffic flow exceeds 800 vph per lane. The proposal (preferred option) was selected as the best option to meet the *Sydney Clearways Strategy* (TfNSW 2013a) requirements for establishment of a clearway, helping to manage congestion of key roads in Sydney, as traffic flows were found to exceed 800 vph (1600 vph combined lanes) in both directions during peak and inter peak periods. The preferred option also meets the proposal objectives, as discussed in Section 2.3 to 2.7 of the REF.

## 2.5 Stakeholder and community consultation

### 2.5.1 Consultation process

#### Submission number(s)

23, 24, 25, 28, 29, 30, 33, 34

#### Issue description

1. The REF and Community Consultation Report ignore community issues and have failed to adequately assess relevant impacts, and issues raised during the initial 'Have Your Say' community consultation period<sup>1</sup>. The consultation process was not genuine and a better solution could have been developed if residents had been properly consulted. The REF does

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<sup>1</sup> Opened for comment on 12 February 2017 and closed Monday 20 March 2017.

not adequately consider the issues raised by Warringah Road residents in the Community Consultation Report.

## Response

1. The REF has considered social, environmental and economic factors as well as community and stakeholder feedback received during the community consultation period (refer to Chapter 5 (Stakeholder and community consultation) and Chapter 6 (Environment assessment) of the REF).

Roads and Maritime engaged with the community to understand their concerns and needs, so that this feedback can be considered in addition to the technical data analysis in deciding a final clearway solution.

Roads and Maritime consulted with community and other stakeholders during February 2017 and March 2017. All stakeholders were encouraged to provide their feedback/ comments via mail, email, and phone. A summary of all community and stakeholder consultation activities carried out is provided in Table 5-1 of the REF. A Community Consultation Report, provided in Appendix B of the REF (*Community Consultation Report - Proposed New and Extended Clearways on Warringah Road from Roseville Bridge, Roseville Chase to Beacon Hill Road, Beacon Hill*), was also prepared by Roads and Maritime to provide a summary of community and stakeholder consultation carried out during the consultation period (prior to the public display of the REF) for the proposal and the consultation outcomes. The Community Consultation Report outlines the consultation approach used, a summary of matters raised by the community, Roads and Maritime's response to the matters raised, and the next steps to be carried out by Roads and Maritime, such as further consultation and consultation outcomes. A copy of the Community Consultation Report is also available in the community information section of the Warringah Road clearways project website at [rms.nsw.gov.au/clearways](https://rms.nsw.gov.au/clearways).

As part of consultation activities for the proposal, 10,000 letters were distributed to local residents and businesses inviting feedback on the proposal. Roads and Maritime received 223 submissions from 193 people. A total of 70 people supported the proposal, 18 people were supportive but raised concerns and four were neutral. A total of 101 people raised a number of matters for Roads and Maritime to consider in determining how the proposal should progress. These matters include the need for extended clearways, loss of parking, and road and pedestrian safety.

Roads and Maritime also received two petitions signed by a total of 270 people raising concerns about this proposal. After considering all submissions, along with the proposal's aims and design requirements, it was decided to progress the proposal and display the REF to further investigate and address the community feedback received.

## 2.5.2 Public display period

### Submission number(s)

23, 28, 35

### Issue description

1. The public display period for the REF was too short, and was held at the busiest time of the year for the community being close to Christmas.

## Response

1. The purpose of the REF is to ensure that Roads and Maritime has taken into account, to the fullest extent, all potential environmental impacts of the proposal and to meet legislative obligations under the EP&A Act. In most instances, the REF is also available for public display to help the public understand the proposal and its likely impacts and to provide the opportunity for input. There are no legislative requirements for the timeframes for public display of a Part 5 environmental assessment.

Roads and Maritime has an environmental impact assessment (EIA) procedure which has been developed to ensure consistency and quality in EIA. This is regularly reviewed and kept up to date to reflect best practice.

The REF was displayed for three working weeks. This arrangement is considered to be consistent with the intent of the EIA procedure, which is to provide stakeholders with adequate time to comment on the REF.

The EIA procedure notes that public display of an REF should aim to avoid display 'during the period of Easter or over the Christmas school holidays'. The REF display period started on 27 November 2017 and closed 15 December 2017, which is before the start of the Christmas holiday period.

Consultation on the proposal as described in the REF was also carried out by Roads and Maritime prior to the public display of the REF during February 2017 and March 2017. All stakeholders were encouraged to provide their feedback/ comments via mail, email, and phone. A summary of all community and stakeholder consultation activities carried out (prior to public display of the REF) is provided in Table 5-1 of the REF.

### 2.5.3 Proposal documentation

#### Submission number(s)

23, 24, 31

#### Issue description

1. The REF incorrectly states that two petitions were sent to Roads and Maritime regarding the proposal. Three petitions were sent.
2. The REF describes the proposal as 'weekends and public holidays'. The original consultation material for the proposal put to the community in early 2017 did not include public holidays. The REF does not highlight this change.

#### Response

1. Roads and Maritime has reviewed our records and can confirm that two petitions specifically related to Warringah Road were received and considered as part of the consultation process. One of these petitions included both handwritten submissions and an electronic component received at the same time (and therefore were treated as one petition). In addition, two separate form letters were received from members of the community. Other petitions relating to other clearways projects have also been received, however they are not considered in this submissions report or the REF.
2. Public holidays have been included in the proposal to provide consistency across the greater Sydney road network. It was included in consultation material for the REF to allow for comment from the community.

Introducing new and extended clearways on weekdays between 6:00am and 7:00pm and on weekends and public holidays between 9:00am and 6:00pm would help manage current traffic flow and would also increase road capacity, and help road users get to their destinations sooner and in a more reliable timeframe.

## 2.6 Parking and access

### 2.6.1 Residential parking

#### Submission number(s)

2, 9, 10, 12, 16, 17, 24, 25, 30, 31, 32, 34

#### Issue description

1. The proposal would have serious and unjustified impacts to residents from the removal of kerbside parking during clearway hours in terms of access, safety, mobility and amenity. The proposal would create an inconvenience for residents and their visitors by having to park further away in busy side streets and walk greater distances to get to properties, particularly in bad weather. It was also raised that it would be more difficult for service delivery vehicles to make deliveries to properties on Warringah Road.
2. The REF does not adequately assess residential parking requirements and loss of parking as a result of the proposal:
  - the Parking Study analysed a very small sample which is said to be representative of a 'typical maximum'
  - the Parking Study does not address the adequacy of existing parking available in side streets for residences as there is already insufficient space available
  - the Parking Study is presented as a preliminary study that concludes that it provides a good basis from which to start discussions on the implementation of clearways. It should not be seen as a final document
  - the *Sydney Clearways Strategy* (TfNSW 2013a) requires that alternative parking is identified
  - funding for alternative parking has not been addressed within the REF.
3. Side streets to Warringah Road would become more congested, impacting residents living on them which hasn't been adequately assessed by Roads and Maritime.
4. The REF and Community Consultation Report do not adequately address the parking and access/ amenity concerns raised by residents during previous consultation.

#### Response

1. Roads and Maritime seek to balance the needs of the community as well as road users. Warringah Road is a key arterial road, and its role in connecting people and moving goods across Sydney's north would continue as Sydney continues to grow.

Roads and Maritime understands that the new and extended clearway operating hours would change parking conditions in front of residential properties, which may cause some inconvenience for residents and visitors.

However, the primary purpose of a State Road such as Warringah Road is to move people and goods efficiently across Sydney. Any parking currently permitted on the State Road is not specifically allocated to residents or properties. Kerbside parking impacts the primary function of the road and Roads and Maritime change parking restrictions across the State Road network to ensure they are meeting their primary purpose.

Under the proposed clearway operations, public buses, taxis, and emergency vehicles would continue to be permitted to stop on Warringah Road when dropping off or picking up passengers. If residents expect any private deliveries, they would need to consider where the delivery vehicle could stop to unload. Forward planning for deliveries to ensure driveways and carports are available would provide on-site space for delivery drivers during clearway operating hours. This is similar to all other State Roads where clearways and 'No Stopping'

restrictions are in place. Deliveries can often be scheduled outside of the proposed clearway hours, for example, groceries can be delivered across the day from 5:00am until 10:00pm or major furniture retailers can deliver from 7:00am to 9:00am on weekends if required.

The proposal would also not alter any access arrangements to private property or businesses located along the proposal corridor during construction or operation. Removal of parked vehicles on the kerbside lane during the proposed clearway operating hours may improve the line-of-sight for vehicles exiting driveways and for vehicles travelling along the kerbside lanes.

It is recommended that residents explore options for parking either on-site in garages, car ports or driveways, and if not available, then using nearby local streets.

2. The *Sydney Clearways Strategy* (TfNSW 2013a) proposes that for access to local business: *'when parking is removed from a major road to extend a clearway, a similar quantity of alternative parking, based on parking demand should first be identified'*. The strategy includes a parking framework to guide this process. The framework consists of a process for business parking that requires:
  - quantification of the number of parking spaces to be removed
  - assessment of land uses and businesses in areas adjacent to the proposed clearway
  - review of prevailing parking conditions, including existing parking restrictions
  - consultation with the relevant local government authority about the need to change parking arrangements in adjacent streets through the introduction of timed parking restrictions, construction of new car parks or other means
  - consideration of any funding methods for any parking mitigation measures.

This process was followed for the proposal.

Section 6.2 of the REF summarises the results of a detailed Parking Study (Peopletrans 2017b) that was carried out for the proposal (refer to Appendix D2 of the REF). The objectives of this study were to determine parking demand and utilisation on Warringah Road as well as identify parking impacts and alternatives to parking on Warringah Road.

The Parking Study found that the establishment of new and extended clearway operating hours would change parking conditions in front of residential properties along Warringah Road, however, this is similar to all other State Roads where clearways and 'No Stopping' or 'No Parking' restrictions are currently in place. The Parking Study found that the proposal corridor was subject to a relatively low demand for parking most of the time during the proposed clearway operating hours (refer to Table 6-3 of the REF) and that no business parking was identified.

The Parking Study was based on an inventory of the parking supply along the proposal corridor, recorded by Peopletrans in May 2015. For this study, Peopletrans travelled the entire length of the route (two-way) and measured the available parking spaces. The methodology to determine the existing parking supply is provided in Section 6.2 of the REF.

All parking spaces on the proposal corridor were surveyed by driving along the entire road corridor at hourly intervals and recording vehicles parked on an in-car video camera. Hourly video surveys were recorded for nine days (a Monday to Friday weekday period and two weekends) between 23 May 2015 and 31 May 2015 on weekdays (6:00am to 7:00pm) and weekends (8:00am to 8:00pm). Across the nine-day survey period, four locations near Beacon Hill Road were identified as locations where State Road parking was used during the daytime survey hours. The Parking Study (Peopletrans 2017b) included a duration-of-stay parking survey along the proposal corridor in these four locations (shown on Figure 6-14 in the REF).

The Parking Study found that all of the properties surveyed between Allambie Road and Pittwater Road (where parking was observed) have some level of off-street car parking, and additional parking was available in nearby side streets throughout the week.

Because no areas of business parking demand were identified, Roads and Maritime determined that parking mitigation measures, such as introducing timed parking on side streets close to Warringah Road, was not suitable for this proposal.

3. Assessing parking removed from the State Road was considered as part of the Parking Study prepared for the proposal (refer to Appendix D2 of the REF). This study is also summarised in Section 6.2 of the REF. Relatively few vehicles were observed parked on Warringah Road during most of the survey period.

The proposal may result in some vehicles, currently parking on State Roads, using parking in nearby side streets. Given the relatively few vehicles which were observed to park on Warringah Road, it is not expected that existing traffic volumes in nearby side streets would be significantly impacted by additional traffic as a result of the proposal.

In addition, the proposal may contribute to road safety improvements as discussed in Section 6.3.2 of the REF. It is considered that the relocated parking from the State Road onto side streets may provide a safer parking environment than currently provided on Warringah Road as pedestrians are not getting in/ out of vehicles adjacent to a traffic lane.

4. Roads and Maritime invited feedback on the proposal through an extended consultation period across the months of February 2017 and March 2017. Feedback was received from 193 individuals and organisations who raised a number of matters for Roads and Maritime to consider in determining how the proposal should progress. Key matters raised included the proposed clearway operating hours, parking, safety, and the introduction of clearways on other roads.

Chapter 5 (Stakeholder and community consultation) of the REF summarises consultation activities carried out for the proposal, issues that were raised and how these have been responded to. Issues raised during the community consultation are discussed in the Community Consultation Report, which is included as Appendix B of the REF. Table 1 of that report details the issues raised through the consultation process and provides Roads and Maritime's response. This includes the parking and access issues that were raised through the consultation process. The Community Consultation Report is provided in Appendix B of the REF which is available in the community information section of the Warringah Road clearways project website at [rms.nsw.gov.au/clearways](https://rms.nsw.gov.au/clearways).

## 2.6.2 Access and mobility

### Submission number(s)

17, 23, 35

### Issue description

1. The REF has inadequately assessed the environmental issues of the proposal, in particular the socio-economic impacts of the proposal including impacts to local residents and the community in terms of accessibility which requires serious consideration. The proposal, specifically the removal of on-street parking would impact residents and visitors, and result in difficulties for elderly residents and those with a disability to access properties fronting Warringah Road, and travel to and from properties located adjacent to the proposed clearway if required to park further away on side streets.



## Response

1. Roads and Maritime seek to balance the needs of the community as well as road users. Warringah Road is a key arterial road, and its role in connecting people and moving goods across Sydney's north would continue as Sydney continues to grow.

Socio-economic impacts have been identified and assessed in Section 6.3 of the REF. This assessment determined that the proposal has been designed to minimise potential traffic, access and amenity impacts and therefore socio-economic impacts are anticipated to be minimal. Roads and Maritime understands that the new and extended clearway operating hours would change parking conditions in front of residential properties, which may cause some inconvenience for residents and visitors. However, the primary purpose of a State Road such as Warringah Road is to move people and goods efficiently across Sydney.

Vehicles which do not fit in existing on-site garages, car ports or driveways would be required to park on nearby side streets. It is recommended for residents who are less mobile or that have a disability, that they use their parking on-site in garages, car ports, and driveways to access properties as occurs during existing weekday parking restrictions on Warringah Road.

### 2.6.3 Business parking

#### Submission number(s)

33

#### Issue description

1. The proposal would cause further inconvenience and impacts to local businesses fronting Warringah Road as they would not be able to accept deliveries during clearway operating hours.

## Response

1. The majority of the road corridor where parking was observed is occupied and zoned for residential use, however, there are some sections along the proposal corridor that have industrial, commercial and business uses. The traffic and parking investigations carried out in May 2015 (refer to Appendix D1 and D2 of the REF) found that there was minimal demand for business parking along the proposal corridor and any loss could be accommodated by existing on-site parking at businesses or nearby in side streets with no changes to current parking restrictions.

The majority of the land along either side of Warringah Road is zoned 'R2 Low Density Residential' under the Warringah Local Environmental Plan (LEP) 2011. The R2 zone does not permit the operation of a 'business premise'. However, Roads and Maritime acknowledges that there may be some 'home occupations' or 'home businesses' which are permitted in the R2 zones.

The *Sydney Clearways Strategy* (TfNSW 2013a) allows for the provision of alternate business parking (based on existing demand and in conjunction with local councils) to assist in mitigating the impact of new and/ or extended clearways on local businesses. It is recommended that owners or visitors of businesses use existing on-site driveways, garages, car ports or nearby side streets to access any businesses located along the proposal corridor during clearway operating hours.

## 2.6.4 Impacts on Warringah Christian Church

### Submission number(s)

20

### Issue descriptions

1. Respondent is concerned about the loss of available overflow parking onto the State Road for users of the Warringah Christian Church which could impact on the number of members and visitors attending this church. This includes specific mention of high parking demand during Church events.

### Response

1. We understand that the new and extended clearway operating hours would change parking conditions in front of community facilities, such as the Warringah Christian Church, which may cause some inconvenience for members and visitors of the Church. Visitors and members of the Church would need to reconsider where they park during the proposed clearway operating hours. Visitors and members of the Church are able to use the on-site Church car park, or park on nearby local side streets such as Ellis Road, Oxford Falls Road, Dareen Street and Government Road. Visitors and members of the Church should also consider public transport options as there are a number of bus stops located nearby, car-pooling or setting up a 'drop-off' zone within the existing carpark at the Church. Outside the proposed clearway operating hours, existing parking restrictions would remain in place.

## 2.6.5 Parking study

### Submission number(s)

20, 22, 23, 29, 31

### Issue description

1. The traffic study used incorrect dates for the Warringah Community Markets. The markets were not operating on the days quoted and therefore parking was underestimated.
2. The Parking Study is out of date and based on anecdotal evidence and opinions. It is therefore inadequate and has been manipulated to suit the outcomes.
3. The Parking Study only examined impacts to business parking and did not consider other road users. Methods used for conducting the parking survey are questionable given that the surveys occurred over a nine day period, two years ago.
4. The REF does not provide adequate parking mitigation measures for the operational phase of the proposal.

### Response

1. All parking spaces on the proposal corridor were surveyed by driving along the entire corridor at hourly intervals and recording vehicles parked on an in-car video camera. Hourly video surveys were recorded for nine days (a Monday to Friday weekday period and two weekends in May 2015) on weekdays (6:00am to 7:00pm) and weekends (8:00am to 8:00pm). The Parking Study (refer to Appendix D2 of the REF) included a duration of stay parking survey along the proposal corridor (shown on Figure 6-14 in the REF).

Due to an equipment error on 23 May 2015, the parking survey was repeated on 13 June 2015, which coincided with the community market day at the Warringah Christian Church, which runs on the second Saturday of each month.

Using parking data from the survey, Section 6.2 of the REF states that 'A small number of vehicles were observed parked on the State Road outside the Warringah Christian Church



which was likely to be associated with the Warringah Community Markets held on the day of the survey (Saturday 13 June 2015)'.

2. In 2015, Roads and Maritime started initial investigations for the full length of Warringah Road which included the preparation of a Volume and Travel Time Analysis (Appendix D1 of the REF) and a Parking Study (Appendix D2 of the REF), which would eventually support the preparation of the REF.

During the 2015 investigation of the entire Warringah Road corridor, as nominated in the *Sydney Clearways Strategy* (TfNSW 2013a), parking surveys were carried out and analysed by an independent traffic consultant, Peopletrans.

All parking spaces on the proposal corridor were surveyed by driving along the entire corridor at hourly intervals and recording vehicles parked on an in-car video camera. Hourly video surveys were recorded for nine days (a Monday to Friday weekday period and two weekends) in May 2015 on weekdays (6:00am to 7:00pm) and weekends (8:00am to 8:00pm). Across the nine-day survey period, four locations near Beacon Hill Road were identified as locations where State Road parking was used during the daytime survey hours. The Parking Study (Peopletrans 2017b) included a duration of stay parking survey along the proposal corridor in these four locations (shown on Figure 6-14 in the REF).

The Parking Study found that all of the properties surveyed between Allambie Road and Pittwater Road (where parking was frequently observed) have some level of off-street car parking, and additional parking available in nearby side streets throughout the week.

There has been no significant change to land use where parking was observed during the survey, and as such it is considered that the survey remains representative of the area.

3. The Parking Study was based on an inventory of the parking supply along the proposal corridor, recorded by Peopletrans in May 2015 (refer to Appendix D2 of the REF). For this study, Peopletrans travelled the entire length of the route (two-way) and measured the available parking spaces.

The methodology to determine the existing parking supply included:

- measurements of the available parking spaces
- where vehicles were parked, these were also used as the basis for calculating the car parking supply
- where no vehicles were parked, the car parking supply was calculated based on the Australian and NSW Road Rules and *AS2890.5-1993 On-street parking* as follows:
  - 10 metre 'No Stopping' restrictions at uncontrolled side street intersections
  - 20 metre 'No Stopping' restrictions on the approach and exit to traffic signals
  - 30 metre Bus Zones
  - assumed car parking space lengths of 5.4 metres for end spaces and 6.5 metres for midblock spaces.

Parking surveys were then carried out, and included:

- a standard survey period of nine days was used for the proposal corridor. This captures five weekdays and two weekends at hourly intervals in both directions. Due to an equipment error, a small number of surveys were repeated on a subsequent suitable, representative day
- surveys were carried out during daytime hours only. Weekdays (6:00am to 7:00pm) and weekends (8:00am to 8:00pm).

The parking survey considered all vehicles parked along the State Road and not just business parking requirements.

4. The Parking Study (refer to Appendix D2 of the REF) found that all of the properties surveyed between Allambie Road and Pittwater Road (where parking was frequently observed) have some level of off-street car parking, and additional parking is available in nearby side streets throughout the week.

The *Sydney Clearways Strategy* (TfNSW 2013a) provides for offsetting business parking if required.

Based on assessment of existing land use and parking demand on Warringah Road, availability for parking in existing on-site garages, car ports or driveways, and capacity in nearby side streets, no operational changes to parking (ie offsets) are proposed in the REF.

It should be noted that cars are currently removed from the residential areas along Warringah Road during existing weekday 'No Parking' restrictions.

## 2.7 Socio-economic

### 2.7.1 Scope of the assessment

#### Submission number(s)

23

#### Issue description

1. Noise, air quality and vibration impacts from increased usage of vehicles in the kerbside lane have not been adequately assessed.
2. The footpath issue previously raised was not addressed/ contradicts Council's response.

#### Response

1. Environmental impacts were identified and assessed in Chapter 6 (Environmental assessment) of the REF. Noise and air quality impacts were discussed in Section 6.5 and Section 6.9 of the REF. The changes in traffic conditions along the proposal corridor are anticipated to provide mostly positive impacts to the community, primarily due to improved bus travel times and traffic flow. The REF also found that there would be no measurable increase of noise impacts on adjacent receivers expected, and no adverse air quality impacts are anticipated from the proposal during operation. Improved traffic flow and reduced congestion, and consequently reduced exhaust emissions, may have a beneficial effect on air quality in the immediate vicinity of the proposal. Vehicles, including buses, would not be required to stop and start as frequently as there would be no parked vehicles in the kerbside lane which may result in an improvement to overall traffic noise.
2. A review of existing local footpath infrastructure in and around the proposal location indicates that Warringah Road has existing footpaths on both sides along the length of the proposal corridor. Many side streets, including Frenchs Forest Road East, Ellis Street, Government Road, Daines Parade and Cornish Avenue have existing footpaths on one or both sides.

Footpaths are owned and maintained by Council. If you experience any safety hazards or concerns regarding the public domain or network of pathways, it is recommended that residents contact Council and log a service request to have these investigated.

Roads and Maritime are discussing with Northern Beaches Council, council's footpath network in the local area.

## 2.7.2 Property value concerns

### Submission number(s)

22, 23, 24, 28, 30, 36

### Issue description

1. Impacts on property values have not been adequately considered or assessed in the REF or Community Consultation Report. The installation of a clearway would reduce property values fronting Warringah Road by at least \$100,000. This would have major impacts on the owners of these properties and compensation should be considered.

### Response

1. We understand that the new and extended clearway operating hours would change parking conditions in front of residential properties, which may cause some inconvenience for residents and visitors. However, the primary purpose of a State Road such as Warringah Road is to move people and goods efficiently across Sydney. Any parking currently permitted on the State Road is not specifically allocated to residents or properties. Kerbside parking impacts the primary function of the road and Roads and Maritime change parking restrictions across the State Road network to ensure they are meeting their primary purpose.

As noted in the previous section, the introduction of new and extended clearway may cause some inconvenience for residents and businesses, however, does not change the land use, land size or development capacity of any private property.

## 2.8 Traffic and transport

### 2.8.1 Scope and methodology of traffic study

### Submission number(s)

23

### Issue description

1. The traffic study assessed a different area to the REF and therefore is flawed. The scope of the Peopletrans report was from Pittwater Road, Brookvale to Pacific Highway, Roseville, while the scope of the proposal is from Beacon Hill Road to Roseville Bridge. The assumption that a clearway is not needed from Beacon Hill Road to Pittwater Road is flawed as it is based on a study that examined traffic from Pittwater Road to the Pacific Highway.
2. The traffic count locations used for the traffic study are not representative of the full extent of the study area and therefore the study is flawed. The tube survey location was on the approach to the Roseville Bridge (Northern Beaches side). This location has no relevance at all to residents living east of Allambie Road to Beacon Hill Road. Traffic volumes and times are completely different to the survey location as feeder roads such as Allambie Road, Wakehurst Parkway and Forest Way increase the flow at the survey site.
3. A new traffic and transport study should be carried out to address the issues raised in submissions. Multiple tube survey points should be used in the new traffic and transport study.

### Response

1. In 2013, Warringah Road, from Pittwater Road, Brookvale, to Pacific Highway, Roseville, was identified in the *Sydney Clearways Strategy* (TfNSW 2013a) for further investigation of possible new and extended clearways based on assessment of traffic volumes and travel times.

Roads and Maritime found that traffic volumes on Warringah Road in both directions generally were higher in the western end of the road corridor, with volumes near Roseville Bridge (75,000 vehicles per day) higher than at the Pittwater Road end of the road corridor. Volumes through

to Beacon Hill Road (60,000 vehicles per day) remained substantial and were sufficient to warrant extensions to the current clearway operating hours. Beyond this point, volumes distributed to other roads including Beacon Hill Road and Willandra Road. Traffic conditions to the east of Beacon Hill Road, Beacon Hill, and west of Roseville Bridge therefore did not warrant extended or new clearways, or clearways had already proposed to be introduced separately (ie from Pacific Highway to Roseville Bridge). As such, both the Pacific Highway to Roseville Bridge and Beacon Hill Road to Pittwater Road section were not included in the February 2017 proposal for new and extended clearways on Warringah Road.

The information provided in the Volume and Travel Time Analysis (Peopletrans 2017a) and Parking Study (Peopletrans 2017b) (refer to Appendix D1 and D1 of the REF) was still considered relevant as it covered the proposal corridor. Additional traffic volume data and analysis was used and provided in Section 6.1.2 of the REF to validate the original PeopleTrans report. A number of options and alternatives were therefore only considered for Warringah Road between Roseville Bridge and Beacon Hill Road.

2. Traffic volume data contained within Section 6.1.2 of the REF was taken from two locations within the proposal corridor.

At the western end of the proposal, a tube counter was taken south of Valley Road in Forestville which is considered to be representative of traffic conditions between Roseville Bridge and Forest Road, Frenchs Forest.

At the eastern end of the proposal corridor, a Roads and Maritime permanent traffic counter located at Beacon Hill near Daines Parade was used to assess traffic flows between Frenchs Forest Road East and Beacon Hill Road. 'No Parking' restrictions currently exist for other sections along the proposal corridor.

3. In 2015, Roads and Maritime started initial investigations for the full length of Warringah Road which included the preparation of a Volume and Travel Time Analysis (Appendix D1 of the REF) and a Parking Study (Appendix D2 of the REF), which would eventually support the preparation of the REF.

During the 2015 investigation of the entire Warringah Road corridor, as nominated in the *Sydney Clearways Strategy* (TfNSW 2013a), traffic volume and travel time data was collected and analysed by an independent traffic consultant, Peopletrans. A tube survey was carried out as part of the Volume and Travel Time Analysis (Peopletrans 2017a) to measure traffic volumes along Warringah Road, using a pneumatic counter east of Valley Road, Forestville.

Once the proposal corridor was refined (Roseville Bridge to Beacon Hill Road) additional supplementary traffic volume data was sourced by Roads and Maritime for the REF, for all lanes along the proposal corridor, and involved a review of Google and Sydney Coordinated Adaptive Traffic System (SCATS) data, to verify/ validate the earlier tube survey data (2015). In the REF, this data is identified as the 2017 traffic volume data and was sourced from the permanent traffic counter located near Daines Parade, Beacon Hill.

All data sourced for the REF, including the data and results of the Volume and Travel Time Analysis (Peopletrans 2017a) were published in the REF (refer to Appendix D1 and Section 6.1 of the REF).

The Community Consultation Report (Roads and Maritime 2017b) also included that data for both the 2015 initial investigation data and the 2017 verification data to present both sets of results (refer to Appendix B of the REF).

Since investigations started in 2015, Roads and Maritime has compiled sufficient data to complete an appropriately robust traffic and transport assessment for the proposal, which is representative of the corridor from Roseville Bridge to Beacon Hill.

## 2.8.2 Traffic data

### Submission number(s)

9, 22, 23, 24, 29, 31

### Issue description

1. The traffic studies and data in the REF and Community Consultation Report are inadequate and misleading due to the following issues:
  - a) travel flow and travel time data has been manipulated to fit the *Sydney Clearways Strategy* considerations
  - b) consultation material indicated further investigations are warranted but this is not evident in the REF
  - c) data has been misrepresented to show that the eastern end is as congested as the western end which is not true
  - d) the traffic flow data is limited in terms of location and duration. The tube counter locations are considered to be unreliable. For example, no tube survey was done at Daines Parade
  - e) the traffic report uses travel times rather than vehicles per hour which is misleading
  - f) the traffic study notes that traffic signals cause more delay than parked vehicles. Traffic flows fall under 30 km/h on the road, in part due to traffic lights
  - g) the traffic study does not recognise that the kerbside lane needs to be clear because existing clearway/ 'No Stopping' restrictions are already in place
  - h) the graphs for the western end of the road corridor were only shown for one specific week (more than two years ago) while the graphs shown for the eastern end of the road corridor used an average of days from January 2017 to April 2017 (not including public holidays or school holidays)
  - i) traffic flows only fall below 30 km/h during current 'No Parking' times. Table 2-2 of the REF shows travel speeds at less than 30 km/h for peak periods for weekend eastbound and westbound traffic. The traffic study contradicts this
  - j) the REF should include the Peopletrans report and Roads and Maritime travel time analysis tool as appendices.

### Response

1. a) The REF assessed the proposal against the *Sydney Clearways Strategy* (TfNSW 2013a), which was developed to ensure the consistency of clearway operations across Sydney. The REF was supported by a Volume and Travel Time Analysis prepared by an independent traffic consultant to determine traffic volumes and travel times on Warringah Road. The Volume and Travel Time Analysis is included in Appendix D1 of the REF and summarised in Section 6.1 of the REF.

The Volume and Travel Time Analysis used data collected by tube and permanent counters (for traffic volumes) and GPS measurements (for travel time surveys). This data is provided in Appendix A and B of the Volume and Travel Time Analysis.

b) The Volume and Travel Time Analysis (refer to Appendix D1 of the REF) concluded that the investigation of new and extended clearway operations was warranted for the proposal corridor. Further investigations relevant to the establishment of new and extended clearways were included in the preparation of the REF. Consultation with key stakeholders including Council and the local community was also carried out to help form the proposal.

c) The analysis of traffic volumes carried out for the proposal (refer to Section 6.1 of the REF) show that traffic volumes are higher at Forestville when compared with those near Beacon Hill, however traffic conditions are still sufficient to justify implementation of a new clearway along



this full section of Warringah Road. Information contained within Section 6.1.2 of the REF is considered to be a true and accurate representation of data collected during the Volume and Travel Time Analysis (refer to Appendix D1 of the REF).

d) Roads and Maritime has used a range of sources, including permanent traffic counters and travel time surveys, to assess and then validate the need for new and extended clearways on this road. A summary of the Volume and Travel Time Analysis is presented in Section 6.1 of the REF and a copy of the full report is provided Appendix D1 of the REF. The Volume and Travel Time Analysis was prepared using data collected from tube surveys, GPS travel time video surveys and a number of site inspections carried out by independent traffic consultant, Peopletrans.

e) The Volume and Travel Time Analysis considered both travel time and vehicles per hour (refer to the summary of this assessment provided in Section 6.1 of the REF).

f) Section 3.1 of the Volume and Travel Time Analysis notes that traffic lights were observed to be the main source of delay for traffic in the proposal corridor. The Volume and Travel Time Analysis recommends that the throughput of intersections could be increased, and hence travel time issues addressed through the removal of kerbside parking adjacent to traffic signals on Warringah Road. Parking was observed near the Government Road/ Ellis Street and Cornish Avenue/ Willandra Road intersections as well as the pedestrian crossing near Daines Parade.

Roads and Maritime reviews the timing of the phases for all traffic lights to ensure traffic is managed as effectively as possible. The traffic lights are linked to Sydney Coordinated Adaptive Traffic System (SCATS). SCATS is a traffic management system that synchronises nearby traffic signals to optimise traffic flow across the road network.

Congestion is generally a consequence of significant traffic volumes with insufficient road capacity resulting in major roads such as Warringah Road operating beyond their capacity. As a result, road users can experience significant delays during peak periods, which are beyond the control of traffic signals. The availability of the kerbside lane on Warringah Road would provide more capacity, reducing delays especially through the traffic lights at the intersections of Government Road/ Ellis Road, the pedestrian crossing near Daines Parade and Cornish Avenue/ Willandra Road.

g) The Volume and Travel Time Analysis provides a review of existing traffic, parking and travel conditions on Warringah Road, including the operation of any traffic controls and parking restrictions. The Volume and Travel Time Analysis has been used to assess existing conditions in accordance with the *Sydney Clearways Strategy* (TfNSW 2013a). The Volume and Travel Time Analysis does not make any predictions about future traffic operations under clearway operations, rather it assesses the effectiveness of existing traffic management methods.

h) Roads and Maritime operates a permanent traffic counter at Beacon Hill (ID: 55036) as part of its network of traffic monitors that are established across the State. Data from this counter was used to determine average weekday and weekend traffic flows over a period of several months.

Tube surveys were carried out on Warringah Road to provide a more detailed analysis of the traffic characteristics of the road. Tube surveys provide more data than the permanent count station and are capable of measuring vehicle numbers per lane, vehicle speed and vehicle classification. The tube survey location was chosen to assess traffic flows in the western end of the proposal corridor as there is no permanent traffic counter in this area

i) Initial assessment in the *Sydney Clearways Strategy* (TfNSW 2013a) based on analysis of daily travel speed profiles and historical records for peak directional travel indicates that average travel speeds of less than 30 km/h are regularly experienced on Warringah Road. It

was recommended in the Strategy that further investigation of clearways along the road corridor should be considered.

Roads and Maritime carried out further historical analysis of peak directional travel to verify travel times along the road corridor. This is presented in Figure 6-9 to Figure 6-12 of the REF.

Figures 3.2 to 3.13 of the Volume and Travel Time Analysis (refer to Appendix D1 of the REF) provide a more detailed analysis of travel times carried out during the detailed investigations. Based on traffic volume measurements described in Section 6.1 of the REF, and in accordance with the *Sydney Clearways Strategy* (TfNSW 2013a) and relevant Australian Standard; *Parking facilities Part 5: On-street parking* (Standards Australia 1993), Warringah Road was found to be a suitable road corridor for establishing a clearway during the hours nominated within the REF.

j) Appendix D of the REF provides both reports prepared by Peopletrans for the proposal (the Volume and Travel Time Analysis and Parking Study). The Roads and Maritime Travel Time analysis tool is a computerised system available to Roads and Maritime staff and contractors that provides outputs such as those shown in the Figures 6-9 to 6-12 of the REF. As such, it cannot be provided in a public report.

### 2.8.3 Bus dwell time data

#### Submission number(s)

23

#### Issue description

1. The bus dwell time data was presented for Forestville and does not represent the eastern end of the road corridor where we live.

#### Response

1. Warringah Road is identified as a suburban bus corridor within Transport for NSW's *Sydney's Bus Future* (TfNSW 2013b). An investigation of data for bus stop dwell time (ie the time that the bus stops at a particular transit stop to pick up or drop off passengers) for Warringah Road was carried out. Additional bus dwell time data has been sourced by Roads and Maritime for the eastern end of the proposal corridor (bus stops 2100143 and 210071, on Warringah Road near Government Road and Ellis Road, Beacon Hill, during the month of November 2017). This indicated an average bus dwell time of 19 seconds. This is a very short duration and not anticipated to substantially impact on the efficiency of clearway operations.

### 2.8.4 Impact of cyclists

#### Submission number(s)

23

#### Issue description

1. The REF has not considered how cyclists would affect operation of the proposed clearway.

#### Response

1. Section 6.1 of the REF considers cyclists movements and facilities along the proposal corridor. There are currently no designated cycle facilities along the proposal corridor. However, cycle facilities such as shared paths are being constructed as part of the NBH upgrade roadworks package along Warringah Road.

Cyclists are permitted to ride on the road under the Australian Road Rules. They must obey the road rules and may not ride more than two abreast in a traffic lane. When in operation, clearways provide an additional lane for all traffic, including cyclists. When a clearway is not in operation and vehicles are parked in the kerbside lane, cyclists are permitted to use the middle lane.

The NSW Government Cycleway Finder [http://www.rms.nsw.gov.au/maps/cycleway\\_finder](http://www.rms.nsw.gov.au/maps/cycleway_finder) recommends cyclists use quieter side streets and off-road environments along the Warringah Road corridor.

### 2.8.5 Metropolitan Road Freight Hierarchy

#### Submission number(s)

23

#### Issue description

1. The REF incorrectly states that Warringah Road is a tertiary freight route. The 'Metropolitan Road Freight Hierarchy' states that such roads should have a speed limit of 60 km/h and Warringah Road has a 70 km/h speed limit.

#### Response

1. Warringah Road is an identified tertiary freight route (refer to *Metropolitan Road Freight Hierarchy on the State Road Network Practice Note* (TfNSW 2011) and *NSW Freight and Ports Strategy* (TfNSW 2013c)).

Section 4 of the *NSW Freight and Ports Strategy* (TfNSW 2013c), states (in reference to freight road hierarchy definitions) that 'where numbers are stated within the criteria, they offer a broad guide and are not individually meant to be taken literally.'

Speed limits in NSW, as in other parts of Australia, are determined by a number of factors including the road geometry, surrounding conditions, road usage, adjacent development, vehicle types and volumes, crash history and the number of access points along the route.

### 2.8.6 Road safety

#### Submission number(s)

16, 34, 36

#### Issue description

1. Existing parking on side streets causes dangerous blind spots to road users. The proposal would worsen this issue due to increased parking if clearways are implemented. This may result in an increase in car crashes on these streets (including Earl Street) and at intersections with Warringah Road.
2. The proposal would result in a decrease in road safety as a result of vehicles travelling at high speeds in the kerbside lane.

#### Response

1. Roads and Maritime acknowledges that some side streets in the area where parking can occur are narrow and care needs to be taken when travelling and parking on these local streets.

On Warringah Road, removal of parked vehicles on the kerbside lane during the proposed clearway operating hours would improve line-of-sight for vehicles exiting driveways and vehicles travelling along the kerbside lane and assist in reducing the risk of crashes.

The proposal would also not alter any access arrangements to private property or businesses located along the proposal corridor during construction or operation.

2. As per the Community Consultation Report (Roads and Maritime 2017b), in NSW, Roads and Maritime is responsible for the setting and signposting of safe and appropriate speed limits in accordance with *NSW Speed Zoning Guidelines* (RTA 2011a).



Speed limits in NSW, as in other parts of Australia, are determined by a number of factors including the road geometry, surrounding conditions, road usage, adjacent development, vehicle types and volumes, crash history and the number of access points along the route.

Roads and Maritime reviewed the speed limits on Warringah Road between Eastern Valley Way, Roseville Chase and Pittwater Road, Dee Why in February 2017 in accordance with the *NSW Speed Zoning Guidelines* (RTA 2011a) and the current posted speed limits are considered appropriate at this time.

NSW Police is responsible for monitoring the road network to ensure users comply with all road rules and regulations. Both Roads and Maritime (through the Mobile Speed Camera Program) and NSW Police regularly enforce speed limits along Warringah Road, with regular enforcement observed near Forestville.

An initiative of the *NSW Speed Camera Strategy* (TfNSW 2012b) is to allow NSW residents to nominate locations for speed camera enforcement. Roads and Maritime recommends visiting the website: [saferroadsnsw.com.au/haveyoursayspeedcameras.aspx](http://saferroadsnsw.com.au/haveyoursayspeedcameras.aspx) to formally nominate a location as a potential site for a NSW Speed Camera. The information you provide, together with crash data and other road safety information would help to prioritise future locations for speed cameras in NSW.

### 2.8.7 Road and pedestrian safety

#### Submission number(s)

27, 32, 33, 34

#### Issue description

1. The proposal would create road and pedestrian safety issues for properties fronting Warringah Road and on nearby side streets. It would increase traffic and parking on narrow side streets resulting in safety risks to pedestrians and drivers through increased vehicle movements and reduced visibility.

#### Response

1. The proposed clearway on Warringah Road between Roseville Chase and Beacon Hill would remove parking in the kerbside lane during the proposed clearway operating hours. It is considered that the relocated parking from the State Road onto side streets may provide a safer parking environment than currently provided on Warringah Road as pedestrians are not getting in/ out of vehicles adjacent to a busy high volume, 70 km/h traffic lane. Additionally, the need for through traffic to weave and change lanes to manoeuvre around parked vehicles would be alleviated during clearway operation (refer to Section 6.1 of the REF). Roads and Maritime acknowledge that some side streets in the area where parking can occur are narrow and care needs to be taken when travelling and parking on these local streets.

### 2.8.8 Public transport – buses

#### Submission number(s)

23

#### Issue description

1. The REF states that 21 bus services use the proposed clearway route. This is incorrect as only one bus service has been observed outside my residence.

#### Response

1. This statement in the REF remains representative for the greater road corridor, and is not representative of a single section of Warringah Road. Bus services that use the proposal corridor are listed in Section 6.1.2 of the REF.

## 2.9 Environmental legislation

### 2.9.1 Environmental assessment process

#### Submission number(s)

22, 31

#### Issue description

1. The REF has not been prepared in accordance with the requirements of Part 5 of the EP&A Act.
2. The REF contains errors and does not investigate all environmental aspects of the proposal to the fullest extent, including the following aspects:
  - assessment of alternative options
  - traffic impacts
  - parking requirements and loss
  - mitigation measures
  - socio-economic considerations.

#### Response

1. Roads and Maritime is authorised to assess activities that are subject to Part 5 of the EP&A Act. Roads and Maritime has assessed the REF and determined that it has adequately examined and taken into account to the fullest extent possible all matters affecting or likely to affect the environment associated with the proposed clearway.

This has included consideration of conservation agreements and plans of management under the NPW Act, joint management and biobanking agreements under the TSC Act, wilderness areas, critical habitat, impacts on threatened species, populations and ecological communities and their habitats and other protected fauna and native plants. It has also considered potential impacts to matters of national environmental significance listed under the Federal EPBC Act. Refer to Chapter 4 (Statutory and planning framework) and Chapter 8 (Conclusion) of the REF for more details on the legislative framework of the EP&A Act applicable to this REF.

Roads and Maritime has an environmental impact assessment (EIA) procedure which has been developed to ensure consistency and quality in EIA. This is regularly reviewed and kept up to date to reflect best practice.

Section 5.6 (formerly section 111A) of the EP&A Act require determining authorities such as Roads and Maritime to consult on environmental impact assessments.

Roads and Maritime has carried out an extensive stakeholder and community consultation program for the proposal that has included delivery of newsletters to more than 10,000 residences, community information sessions, direct meetings, advertisements in local newspapers and public exhibition of the REF. Issues raised through this process were considered in the Community Consultation Report that was appended to the REF (Appendix B) and summarised in Chapter 5 (Community and stakeholder consultation) of the REF.

Through the consultation and REF process, a series of measures were developed to mitigate impacts associated with the proposal. These are summarised in Chapter 7 (Environmental management) of the REF.

2. All aspects of the environment potentially impacted upon by the proposal are considered in Chapter 6 (Environmental assessment) of the REF, including traffic and transport, parking and access, socio-economic, landscape character and visual impacts, noise and vibration, Aboriginal and Non-Aboriginal heritage, biodiversity, air quality, soils and contamination, water quality and flooding, waste and resource use and cumulative impacts.

In response to the specific matters raised in this submission, consideration has been given to the following, as described in the REF:

- potential impacts on matters of national environmental significance under the EPBC Act (addressed in Appendix A and Chapter 6 of the REF)
- the factors specified in the guidelines *Is an EIS required?* (DUAP 1995) as required under clause 228(1) of the Environmental Planning and Assessment Regulation 2000 and the *Roads and Related Facilities EIS Guideline* (DUAP 1996) (addressed in Appendix A and Chapter 6 of the REF)
- alternatives and options (addressed in Section 2.4 of the REF)
- traffic and transport impacts (addressed in Section 6.1 of the REF),
- parking and access requirements (addressed in Section 6.2 of the REF)
- socio-economic considerations (addressed in Section 6.3 of the REF)
- safeguard and mitigation measures to manage potential impacts of the proposal have also (addressed in Chapter 7 (Environmental management) of the REF).
- community feedback and issues raised during community consultation in February 2017 and March 2017 (addressed in Chapter 5 (Stakeholder and community consultation) and Appendix B of the REF).

## 2.10 Out of scope

### Submission number(s)

6, 7, 13, 14, 16, 17, 18, 21, 28, 35

### Issue description

1. The proposal should consider other clearway options including implementing a clearway on Forest Way that operates 24 hours per day, seven days per week, 365 days of the year, and on other streets, specifically Beacon Hill Road from Old Pittwater Road to Warringah Road.
2. Existing turning arrangements for westbound traffic turning into Altona Avenue from Warringah Road are difficult and request road markings to stop traffic queuing on Warringah Road at the access into Altona Avenue.
3. Public transport options are sporadic and unreliable. Concerns were also raised about the need for additional designated bus bays along Warringah Road. Request also for indented bus bays on available Council land which could also assist in improving traffic flow.
4. Suggestion to increase speed limits on the approaches to Roseville Bridge from 80 km/h to 90 km/h to help traffic flow. Similarly, a request to reduce the speed limit on Warringah Road in recognition of surrounding residential land uses.
5. Respondent suggested 'Keep Clear' road markings be established on the T-intersection of Earl Street and Government Road and right hand turn road markings for vehicles entering into Warringah Road from Government Road.
6. New pattern of operation for traffic lights at Warringah Road/ Beacon Hill Road intersection is causing traffic congestion. Requested changes including reverting proposal to previous conditions.
7. Road and pedestrian safety issues on Warringah Road should be addressed through construction of a roundabout and refuge islands.
8. Alternative traffic solutions suggested including re-directing traffic via Allambie Road off Warringah Road to the Warringah Mall Shopping Centre which could reduce/ split the amount of traffic using Beacon Hill Road. Another alternative suggested is to change Beacon Hill Road

to one-way traffic only or to consider building a new road to Warringah Mall Shopping Centre to reduce/ split the amount of traffic using Allambie Road and Beacon Hill Road.

9. There are bigger road issues in Sydney and a limit should be put on the number of residents allowed to live on the Northern Beaches.

## Response

1. Clearways on Forest Way are currently being assessed under a separate Review of Environmental Factors. Roads and Maritime will pass this feedback on to the relevant project team.

Beacon Hill Road is a local road under the care of Northern Beaches Council. Roads and Maritime only consider clearways for State Roads. We have forwarded your request to Council for their consideration.

The *Sydney Clearways Strategy* (TfNSW 2013a) has identified more than 1000 kilometres of new and extended clearways across Sydney and these are being investigated by Roads and Maritime. For more information about recently installed clearways, ones that are currently under consideration and the *Sydney Clearways Strategy*, please visit: [rms.nsw.gov.au/clearways](https://rms.nsw.gov.au/clearways).

2. Queueing across and blocking an intersection is illegal under the Australian Road Rules. NSW Police is responsible for monitoring the road network to ensure users comply with all road rules. We encourage members of the public to report illegal behaviour on the road network to the police.

Queueing and blocking of intersections on Warringah Road is not included in the scope of this proposal. However, road safety and traffic are key priorities of Roads and Maritime. All right turns on Warringah Road between Roseville Bridge and Beacon Hill Road currently have right turn bays.

3. The provision of public transport and suggested indented bus bays is outside of the scope of this proposal. However, new and extended clearways would assist in providing efficiencies along the road corridor not only to general traffic but to public transport as well.

The proposal would allow existing road infrastructure to be better used in facilitating reliable public transport for bus travel.

The NSW Government is taking action to deliver transport improvements for the Northern Beaches, including an integrated program of service and infrastructure improvements to deliver the new B-Line bus service. The B-Line service started operating in November 2017.

The B-Line provides more frequent bus services for customers travelling between Mona Vale and the Sydney CBD. For further information on this project, please visit: [b-line.transport.nsw.gov.au](https://b-line.transport.nsw.gov.au).

4. As per the Community Consultation Report (Roads and Maritime 2017b), in NSW, Roads and Maritime is responsible for the setting and signposting of safe and appropriate speed limits in accordance with *NSW Speed Zoning Guidelines* (RTA 2011a).

Speed limits in NSW, as in other parts of Australia, are determined by a number of factors including the road geometry, surrounding conditions, road usage, adjacent development, vehicle types and volumes, crash history and the number of access points along the route.

Roads and Maritime reviewed the speed limits on Warringah Road between Eastern Valley Way, Roseville Chase and Pittwater Road, Dee Why in February 2017 in accordance with the

*NSW Speed Zoning Guidelines* (RTA 2011a) and the current posted speed limits are considered appropriate at this time.

5. Earl Street and Government Road are both local roads under the care and control of Northern Beaches Council. We have forwarded your request to Council for their consideration. Access to Warringah Road from Government Road through changes to signalised intersection movements is under the control of Roads and Maritime. We have forwarded your request to the relevant Roads and Maritime department for their consideration.
6. Beacon Hill Road is a local road under the care and control of Northern Beaches Council. Access to and from Warringah Road on Beacon Hill Road through changes to signalised intersection movements is under the control of Roads and Maritime. We have forwarded your request to the relevant Roads and Maritime department for their consideration.
7. The provision of roundabouts and pedestrian refuge islands on Warringah Road is outside of the scope of this proposal.

Pedestrians are encouraged to use the existing pedestrian facilities provided along Warringah Road.

Existing signalised intersections which cater for pedestrians crossing along Warringah Road are located at Beacon Hill Road, Willandra Road, Daines Parade, Government Road, Allambie Road, Wakehurst Parkway, Hilmer Street, Currie Road, Starkey Street and Darley Street. There are also a number of pedestrian bridges along Warringah Road.

New pedestrian bridges are currently being planned by Roads and Maritime or are already under construction on Warringah Road at Starkey Street, Forest Way and Hilmer Street.

8. Allambie Road and Beacon Hill Road are local roads under the care and control of Northern Beaches Council. We have forwarded your request to Council for their consideration.
9. Noted.

## 3 Environmental management

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The REF for the *Proposed Clearways on Warringah Road, Roseville Bridge to Beacon Hill Road, Beacon Hill*, identified the framework for environmental management, including safeguards and management measures that would be adopted to avoid or reduce environmental impacts (Section 7.2 of the REF).

Should the proposal proceed, environmental management would be guided by the framework and mitigation measures outlined below.

### 3.1 Environmental management plans (or system)

A number of safeguards and management measures have been identified in order to minimise adverse environmental impacts, including social impacts, which could potentially arise as a result of the proposal. Should the proposal proceed, these management measures would be incorporated into the detailed design and applied for the proposal.

### 3.2 Summary of safeguards and management measures

The *Proposed Clearways on Warringah Road, Roseville Bridge to Beacon Hill Road, Beacon Hill Review of Environmental Factors* (Roads and Maritime 2017a) identified a range of environmental outcomes and management measures that would be required to avoid or reduce the environmental impacts.

Should the proposal proceed, the environmental management measures in Table 3-1 would be adopted in the subsequent implementation phase of the *Proposed Clearways on Warringah Road, Roseville Bridge to Beacon Hill Road, Beacon Hill*.



Table 3-1: Summary of environmental safeguards and management measures

No.	Impact	Environmental safeguards	Responsibility	Timing
<b>Traffic and transport</b>				
1	Construction traffic management	<ul style="list-style-type: none"> <li>Works would operate under an approved construction traffic management plan</li> </ul>	Construction Contractor	Pre-construction
<b>Parking and access</b>				
2	Altered parking arrangements	<ul style="list-style-type: none"> <li>Notification of the proposed clearway changes would be made to all affected stakeholders at least one week prior to implementation of the Clearway work and commencement of new clearway operating times.</li> </ul>	Roads and Maritime/ Construction Contractor	Pre-construction
3	Construction Congestion and safety	<ul style="list-style-type: none"> <li>Traffic control would be provided in accordance with the approved construction traffic management plan to manage and regulate traffic movements during construction.</li> </ul>	Construction Contractor	Construction
4	Construction Access to properties	<ul style="list-style-type: none"> <li>Property access would be maintained at all times where practicable.</li> <li>In the unlikely event, changes to access arrangements are necessary, Roads and Maritime would advise owners and tenants and consult with them in advance regarding alternate access arrangements.</li> </ul>	Roads and Maritime/ Construction Contractor	Construction
<b>Socio-economic</b>				
5	Socio-economic	<ul style="list-style-type: none"> <li>A Communication Plan (CP) would be prepared and implemented to help provide timely and accurate information to the community prior construction. The CP would include (as a minimum): <ul style="list-style-type: none"> <li>Mechanisms to provide details and timing of proposed activities to affected residents, businesses and other key stakeholders including schools and local councils of changed traffic and parking conditions.</li> <li>The notification would include details of: the proposal; implementation date; contact information; complaint and incident reporting; and how to obtain further information.</li> </ul> </li> </ul>	Roads and Maritime	Pre-construction/ Construction

No.	Impact	Environmental safeguards	Responsibility	Timing
<b>Landscape character and visual impacts</b>				
6	Construction Light spill	<ul style="list-style-type: none"> <li>Ensure all lights are directed away from residential properties where ever practicable.</li> </ul>	Construction Contractor	Construction
<b>Noise and vibration</b>				
7	Construction Noise and vibration	<ul style="list-style-type: none"> <li>Considerations in equipment selection would include: <ul style="list-style-type: none"> <li>Quieter and less noise emitting construction methods where feasible and reasonable</li> <li>All plant and equipment to be appropriately maintained to ensure optimum running conditions</li> <li>Non-tonal reversing beepers (or an equivalent mechanism) must be fitted and used on all construction vehicles and mobile plant regularly used on site and for any out of hours work.</li> </ul> </li> </ul>	Construction Contractor	Pre-construction/ construction
<b>Non-Aboriginal heritage</b>				
8	Aboriginal heritage	<ul style="list-style-type: none"> <li>Inform all site personnel of the location and significance of the heritage item during site induction.</li> </ul>	Construction Contractor	Construction
9	Non-Aboriginal heritage	<ul style="list-style-type: none"> <li>Should any remains of historic heritage be encountered during the proposed work that have not been assessed in the REF, cease work in that location and follow the Roads and Maritime's <i>Unexpected Archaeological Finds</i> procedure (Roads and Maritime 2015).</li> </ul>	Construction Contractor	Construction

No.	Impact	Environmental safeguards	Responsibility	Timing
<b>Aboriginal heritage</b>				
10	Aboriginal heritage	<ul style="list-style-type: none"> <li>Stop all work if Aboriginal heritage items are uncovered.</li> <li>Immediately contact the regional environment officer and Roads and Maritime's Aboriginal cultural heritage advisor</li> <li>Follow the steps in the Roads and Maritime Standard Management Procedure: <i>Unexpected Archaeological Finds</i> (Roads and Maritime 2015)</li> <li>Work would only re-commence once the requirements of that Procedure have been satisfied.</li> </ul>	Construction Contractor	Construction
<b>Biodiversity</b>				
11	Biodiversity	<ul style="list-style-type: none"> <li>If unexpected threatened fauna or flora species are discovered, works would be stopped immediately and follow the Roads and Maritime's <i>Unexpected Threatened Species Find Procedure</i> in the Roads and Maritime's <i>Biodiversity Guidelines 2011 – Guide 1 (Pre-clearing process)</i> (RTA 2011b)</li> <li>Protocols for preventing or minimising the spread of noxious and environmental weeds would be developed and implemented as appropriate.</li> <li>All construction work would be undertaken in accordance with Roads and Maritime's <i>Biodiversity Guidelines, Protecting and Managing Biodiversity on RMS Projects</i> (RTA 2011b).</li> </ul>	Roads and Maritime/ Construction Contractor	Pre-construction
<b>Air quality</b>				
12	Construction Air quality	<ul style="list-style-type: none"> <li>Turn machinery off rather than left to idle when they are not in use</li> <li>Maintain vehicles to manufacturer's standards</li> </ul>	Construction Contractor	Pre-construction

No.	Impact	Environmental safeguards	Responsibility	Timing
<b>Soils and contamination</b>				
13	Contamination of soils	<ul style="list-style-type: none"> <li>If indicators of contamination are encountered during construction (such as odours or visually contaminated materials), work in the area would cease until advice on the need for remediation or other action is obtained from an environmental consultant</li> <li>A fully equipped emergency spill kit would be kept in vehicles</li> <li>The refuelling of plant and maintenance of machinery would be carried out in designated bunded areas.</li> </ul>	Construction Contractor	Construction
<b>Water quality and flooding</b>				
14	Construction Accidental spill	<ul style="list-style-type: none"> <li>An emergency spill plan would be developed, and include spill management measures in accordance with the <i>Roads and Maritime Code of Practice for Water Management</i> (RTA 1999). The plan would address measures to be implemented in the event of a spill, including initial response and containment, notification of emergency services and relevant authorities (including Roads and Maritime and EPA officers).</li> </ul>	Construction Contractor	Pre-construction/ Construction
15	Construction Water quality	<ul style="list-style-type: none"> <li>There would be no release of dirty water into drainage lines and/ or waterways.</li> </ul>	Construction Contractor	Construction
<b>Waste and resource use</b>				
16	Construction Waste minimisation	<ul style="list-style-type: none"> <li>The following resource management hierarchy principles would be followed: <ul style="list-style-type: none"> <li>Avoid unnecessary resource consumption as a priority</li> <li>Avoidance would be followed by resource recovery (including reuse of materials, reprocessing, and recycling and energy recovery)</li> <li>Disposal would be a last resort (in accordance with the WARR Act).</li> </ul> </li> </ul>	Construction Contractor	Construction
17	Waste management	<ul style="list-style-type: none"> <li>All wastes would be managed in accordance with the POEO Act.</li> </ul>	Construction Contractor	Construction

### 3.3 Licensing and approvals

In addition to the REF prepared under the *Environmental Planning and Assessment Act 1979* (EP&A Act), Table 3-2 identifies relevant licences, permits, notifications and approvals needed to construct and operate the proposal.

Table 3-2: Summary of licensing and approval required

Instrument	Requirement	Timing
<i>Roads Act 1993</i> (Roads Act) (NSW)	<p>Section 138 of the <i>Roads Act 1993</i> (Roads Act) requires consent from the relevant road authority for the carrying out of work in, on or over a public road. However, under clause 5(1) in Schedule 2 of the Roads Act, public authorities do not require consent for work on unclassified roads. Therefore, the proposal only requires consent from the relevant roads authority for work impacting classified roads within the proposal corridor. The affected classified roads are identified below.</p> <p>The proposal would involve works on Warringah Road, which is a classified State Road maintained by Roads and Maritime. Consent under the Roads Act would not be required as the road is maintained by Roads and Maritime. However, Road Occupancy Licence/s would be obtained for roadworks and any temporary road closures from the relevant roads authority by the Contractor. The proposal would require temporary partial road closures for activities such as line marking (refer to Section 6.1 of the REF).</p>	Prior to start of the activity
<i>State Environmental Planning Policy (Infrastructure) 2007</i>	The proposal is permissible without development consent and can be assessed under Part 5 of the EP&A Act. Part 2 of the State Environmental Planning Policy (Infrastructure) 2007 contains provisions for public authorities to consult with local councils and other agencies prior to the commencement of certain types of development. Chapter 5 of the REF outlines the consultation carried out in accordance with the requirements of the State Environmental Planning Policy (Infrastructure) 2007.	Prior to construction
<i>Warringah Local Environmental Plan 2011</i>	The proposal is located within the former Warringah LGA (now Northern Beaches LGA). The proposal traverses land zoned SP2 Infrastructure under the Warringah LEP 2011. Under the Warringah LEP, development for the purposes of roads within this zone is permitted with consent. However, the provisions of the ISEPP remove the requirement for development consent from Northern Beaches Council.	Design stage and construction

## 4 References

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[contactus@rms.nsw.gov.au](mailto:contactus@rms.nsw.gov.au)



Customer feedback  
Roads and Maritime  
Locked Bag 928,  
North Sydney NSW 2059



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