

Pedestrian Bridge – across Dobroyd Parade at Waratah Street Intersection

REF submissions report
April 2024



Acknowledgement of Country

Transport for NSW acknowledges the Gadigal and Wangal Peoples of the Eora Nation, the traditional custodians of the land on which the Pedestrian Bridge over Dobroyd Parade project is proposed.

We pay our respects to Elders past and present and celebrate the diversity of Aboriginal people and their ongoing cultures and connections to the lands and waters of NSW.

Many of the transport routes we use today – from rail lines, to roads, to water crossings – follow the traditional Songlines, trade routes and ceremonial paths in Country that our nation's First Peoples followed for tens of thousands of years.

Transport for NSW is committed to honouring Aboriginal peoples' cultural and spiritual connections to the land, waters and seas and their rich contribution to society.



Prepared by Stantec and Transport for NSW

Executive summary

The proposal

Transport for NSW (Transport) proposes to construct a pedestrian bridge across Dobroyd Parade and upgrade the road infrastructure at the intersection of Dobroyd Parade and Waratah Street (the proposal). The proposal is located within Haberfield, in the Inner West Local Government Area (LGA) adjacent to Iron Cove Creek, which is the border to the City of Canada Bay LGA. Once constructed the proposal would replace the existing at-grade (street level) pedestrian crossing and provide a safer crossing for pedestrians over Dobroyd Parade.

The bridge would include stairwells and lifts on either side for accessibility and an access ramp to the northern lift landing. The lift would be of suitable size to accommodate multiple people, a minimum of two bikes, and long enough for a cargo bike up to 2.6 metres long.

Key features of the proposal, as described in the Review of Environmental Factors (REF) (Transport, 2023c) would include:

- new pedestrian bridge including a covered walkway for weather protection, built over Dobroyd Parade at the Waratah Street intersection
- new lifts and stairs on either side of the pedestrian bridge, with a short access ramp to the lower lift landing on the northern side
- removal of existing at-grade (street-level) road crossing on Dobroyd Parade and extension of the existing fence in the median
- widening the footpaths on approach to the Waratah Street crossing and a new kerb ramp to provide a smoother transition between the footpath and the road for bike users
- installing a concrete barrier along Dobroyd Parade in front of the pedestrian bridge
- relocation of utilities, new landscaping, signage and linemarking
- bicycle wheeling ramps on stairs.

Display of the review of environmental factors (REF)

Transport prepared a REF for the pedestrian bridge across Dobroyd Parade at Waratah Street Intersection. The REF was publicly displayed between 27 November 2023 and 11 December 2023 and published on the Transport project website and made available for download. The REF public display period was advertised on Facebook through geo-targeted advertisements and community notifications were distributed to 1,500 properties in Haberfield and surrounds.

Summary of issues and responses

Public display of the REF and the supporting consultation resulted in a total of 68 submissions, of which 64 were from the general community and four from community groups.

Of these submissions, 28% were in support of the proposal, 6% were partially supportive of the proposal, 25% objected to the proposal, and 24% partially objected to the proposal due to lack of bike friendly infrastructure (ramps). The remaining submissions offered no position on whether they supported or objected to the proposal.

The main issues raised and responses to those issues are summarised below.

Assessment of options

Respondents raised concerns about the options and their assessment, in particular consideration of alternative locations and design options.

Alternative options and locations were investigated by Transport during an options assessment, which concluded that these alternatives did not meet the pedestrian safety and traffic objectives of the local area or would have too large an environmental footprint. These options included alternative bridge designs, a pedestrian tunnel, alternative bridge crossing

locations away from the current site, and removing the pedestrian crossing by closing off access from Waratah Street to Dobroyd Parade.

Transport is proposing to proceed with the current proposal as it best addresses safety concerns for the location while minimising environmental impact. When compared to ramps, the proposal provides better access for pedestrians, people with mobility issues and prams, while still catering for bike users.

Excluding rideable ramps from the project scope and network connectivity

Respondents raised concerns about the proposed installation of wheeling ramps instead of rideable bridge access ramps as the wheeling ramps may be more difficult for some bike users, including families or those with heavy bikes/cargo bikes. Further, that the lack of rideable ramps does not provide a continuous link for bike users, will be a deterrent to travelling through this area and severs a long-standing and popular bicycle cross-regional route and there is no alternative Dobroyd Parade crossing point for bike users.

The proposal offers two ways for bike users to access the bridge: via the lift and via the wheeling ramps on the stairs. It is acknowledged that heavy bikes or cargo bike users may have difficulty using the wheeling ramps on the stairs with access for these users provided via the lift which is large enough to fit cargo bikes up to 2.6 metres long. The lift would provide safe and equitable access from street level to the bridge for all users including bike users, pedestrians, mobility aid users and people with prams.

The existing cycling network is being maintained through the provision of the new bridge, which offers a safer way to cross Dobroyd Parade compared to the existing at-grade crossing and encourages those previously apprehensive about using the current crossing due to use the safer proposed new bridge.

Rideable ramps were not included in the proposal due to the large footprint the ramps would require, creating more environmental, visual and amenity impacts. Transport has also considered the proximity of other suitable crossings on Dobroyd Parade, including at Ramsay Street (320 metres to the west) and at Timbrell Drive and Mortley Avenue (at the Bay Walk, 520 metres to the east).

Appearance of the bridge and impacts on visual amenity

Respondents have raised concerns about the potential impacts to the visual amenity and character of the area from the bridge including impacts on the current urban amenity, the scale, visual dominance/intrusiveness of the bridge, shadowing and overlooking from the bridge, the selection of materials, and the possibility of advertising material being placed on the bridge.

Transport worked with urban design professionals when developing the proposal and believes that the design of the proposed pedestrian bridge as displayed in concept form in the REF is the most suitable for the location. The tied arch structure that has been selected aligns with Transport's Bridge Aesthetics guideline.

Elements of the bridge would continue to be developed during detailed design including colour, textures, privacy screening and surrounding landscape characteristics to minimise impact to the heritage and local amenity of the area. Transport is committed to working with the local residents through the detailed design process to improve privacy and landscaping treatments. Overshadowing from the bridge onto adjacent properties would be assessed during detailed design to inform local residents. No advertising material or signs are currently proposed to be placed on the bridge after completion.

Consideration of nearby residents and their concerns

If the proposal is approved, Transport will work with local residents through this design process, including and particularly those most directly affected by the construction and presence of the proposed bridge. Their views will be closely considered in the detailed design, including assessment of potential overshadowing, privacy screening, landscaping and visual amenity and mitigation of construction impacts, including noise.

During construction, the provision of suitable temporary fencing and barriers to screen views into and from the construction site are proposed (section 6.3.4 of the REF) and will be provided where possible.

Changes to the proposal

Some land on Reg Coady Reserve is required to accommodate the footprint of the bridge staircase. It has been identified that this is Crown Land and that it requires acquisition prior to construction unless there is a lease agreement with the landholder prior construction.

Next steps

Transport as the determining authority will consider the information in the REF and this submissions report and make a decision whether or not to proceed with the proposal.

Transport will inform the community and stakeholders of this decision and where a decision is made to proceed will continue to consult with the community and stakeholders prior to and during the construction phase.

Table of contents

Executive summary	iv
The proposal.....	iv
Display of the review of environmental factors (REF).....	iv
Summary of issues and responses.....	iv
Changes to the proposal.....	vi
Next steps.....	vi
1. Introduction and background	1
1.1 The proposal	1
1.2 REF display	4
1.3 Purpose of this report	4
2. Response to issues	5
2.1 Overview of issues raised.....	7
2.2 Issue 1: Project justification	8
2.3 Issue 2: Options assessment	11
2.4 Issue 3: Policy and legislation.....	12
2.5 Issue 4: Design	12
2.6 Issue 5: Consultation	14
2.7 Issue 7: Traffic and property access	14
2.8 Issue 8: Pedestrian, mobility, and bike access.....	15
2.9 Issue 9: Landscape and visual	17
2.10 Issue 10: Noise and vibration	20
2.11 Issue 11: Hazards, risk and utilities	20
2.12 Issue 12: Other.....	21
2.13 Outside the scope of the proposal.....	22
3. Changes to the proposal	23
3.1 Property acquisition.....	23
4. Environmental management	24
Environmental management plans (or system).....	24
Summary of safeguards and management measures	24
Licensing and approvals.....	39
References	40
Appendix A: Pedestrian Bridge – across Dobroyd Parade at Waratah Street intersection REF	41

Tables

Table 2-1: Respondents	5
Table 4-1: Summary of environmental safeguards and management measures.....	25
Table 4-2: Summary of licensing and approval required	39

1. Introduction and background

1.1 The proposal

Transport proposes to construct a pedestrian bridge over Dobroyd Parade and upgrade the road infrastructure at the intersection of Dobroyd Parade and Waratah Street (the proposal). The proposal is located within Haberfield, in the Inner West Local Government Area (LGA) adjacent to Iron Cove Creek, which is the border to the City of Canada Bay LGA. Once constructed, the proposal would replace the existing at-grade pedestrian crossing and provide a safer crossing for pedestrians over Dobroyd Parade.

The proposed bridge would span seven lanes of traffic, approximately 37 metres in length, with a width of 3.5 metres and a clearance of 6.1 metres above the road surface. The bridge would include stairwells and lifts on either side for accessibility and an access ramp to the northern lift landing. The lift would be of suitable size to accommodate multiple people, various accessibility needs, or a minimum of two bikes (including cargo bikes).

Key features of the proposal, as described in the Review of Environmental Factors (REF) (Transport, 2023c) would include:

- new pedestrian bridge including a covered walkway for weather protection, built over Dobroyd Parade at the Waratah Street intersection
- new lifts and stairs on either side of the pedestrian bridge, a ramp to the lower lift landing on the northern side
- removal of existing at-grade (street-level) road crossing on Dobroyd Parade and extension of the existing fence in the median
- widening the footpaths on approach to the Waratah Street crossing and a new kerb ramp to provide a smoother transition between the footpath and the road for bike users
- installing a concrete barrier along Dobroyd Parade in front of the pedestrian bridge
- relocation of utilities, new landscaping, signage and linemarking
- bicycle wheeling ramps on stairs and on the approach to the Waratah Street crossing a new kerb ramp to provide a smoother transition between the footpath and the road for bike users

The location of the proposal including proposed construction compounds are shown in **Figure 1-1** and an overview of the proposal is provided in **Figure 1-2**.

Should the proposal be approved, construction is expected to commence between late 2024 and mid-2025 and would take around six months to complete, subject to planning approvals.

A more detailed description of the pedestrian bridge across Dobroyd Parade at the Waratah Street intersection is found in the Review of Environmental Factors prepared by Transport in November 2023 (Appendix A).



Proposal Location

Dobroyd Parade
Haberfield, New South Wales

Legend

- ▭ Proposal Boundary
- ▭ Proposed Site Compound
- Watercourse
- Cadastre
- Local Government Area

Project Codes: 304101012-GS-001 (a)
 Drawn By: AC, Checked By: AS
 Figure: 1-1 | Rev: 02
 Date: 2023-10-16



Notes:
1. Map displayed in GDA2020 MGA Zone 56

References:
1. Aerial Imagery (MetroMap, July 2023)
2. Cadastre and Local Government Area (NSW SS, 2023)
3. Watercourse (NSW SS)



Figure 1-1 Proposal location



Pedestrian Bridge Proposal

Dobroyd Parade
Haberfield, New South Wales

Project Code: 304101 (1) 2-G5-001 (a)
Drawn By: AC, Checked By: AS
Figure: 1-2 | Rev: 02
Date: 2023-10-18



- Legend**
- Proposal Boundary
 - Proposed Design
 - Watercourse
 - Cadastre
 - Local Government Area
 - Proposed Kerb Ramp
 - Proposed Path Adjustment
 - Existing Footpath to be removed
 - Proposed Mill and Resheet

Notes:
1. Map displayed in GDA2020 MGA Zone 56

References:
1. Aerial Imagery (MetroMap, July 2023)
2. Cadastre and Local Government Area (NSW SS, 2023)
3. Watercourse (NSW SS)



Figure 1-2 Proposal location

1.2 REF display

Transport prepared a REF (Transport 2023c) to assess the potential environmental impacts of the proposed works. The REF was available for feedback for 15 days between 27 November 2023 and 11 December 2023.

The REF was placed on the Transport project website and made available for download via the website link www.transport.nsw.gov.au/pedestrian-bridge-haberfield. The REF public display period was advertised on Facebook through geo-targeted advertisements and community notifications were distributed to 1,500 properties in Haberfield and surrounds.

1.3 Purpose of this report

This submissions report relates to the REF prepared for the pedestrian bridge over Dobroyd Parade at the Waratah Street intersection, 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 Transport. This submissions report summarises the issues raised and provides responses to each issue (Section 2). It also details the environmental management measures (Section 3).

2. Response to issues

Transport received 63 submissions, accepted up until 11 December 2023. Table 2-1 lists the respondents and each respondent's allocated submission number. The table also indicates where the issues from each submission have been addressed in Section 2 this report.

Table 2-1: Respondents

Respondent	Submission No.	Section number where issues are addressed
Organisation – Canada Bay Bicycle User Group	1	Sections 2.3.1, 2.4.1, 2.8.1, 2.8.2
Organisation – Inner West Bicycle Coalition	2	Sections 2.2.1, 2.3.1, 2.4.1, 2.8.1, 2.8.2, 2.8.3, 2.9.1
Individual	3	Sections 2.2.2, 2.4.1, 2.5.1, 2.5.2, 2.8.1, 2.8.2, 2.9.1, 2.9.2, 2.9.3
Individual	4	Sections 2.3.1, 2.7.2, 2.9.1, 2.9.4, 2.10.1, 2.12
Organisation – Bicycle NSW	5	Sections 2.2.1, 2.3.1, 2.4.1, 2.5.1, 2.8.2, 2.9.1
Organisation – Haberfield Association	6	Sections 2.2.1, 2.2.2, 2.3.1, 2.5.1, 2.6.1, 2.9.1, 2.9.2, 2.9.3, 2.9.4, 2.12
Individual	7	Sections 2.2.2, 2.5.1, 2.9.1, 2.9.4, 2.11.1, 2.11.2
Individual	8	Sections 2.2.3, 2.10.1
Individual	9	Support for proposal Sections 2.9.4, 2.11.2
Individual	10	Sections 2.2.3, 2.7.1, 2.9.1, 2.9.2
Individual	11	Section 2.7.1
Individuals	12 – 19	Support for proposal
Individual	20	Sections 2.8.1, 2.8.2
Individual	21	Section 2.8.1
Individual	22	Sections 2.2.3, 2.2.4, 2.7.1
Individual	23	Sections 2.3.1, 2.5.1, 2.8.1, 2.8.2, 2.9.1
Individual	24 – 25	Support for proposal
Individual	26	Support for proposal Section 2.2.2
Individual	27	Section 2.2.3
Individual	28	Support for the proposal Sections 2.8.1, 2.8.2
Individuals	29	Support for proposal

Respondent	Submission No.	Section number where issues are addressed
		Section 2.8.3
Individual	30	Section 2.8.2
Individual	31	Sections 2.3.1, 2.6.1, 2.9.1, 2.12
Individual	32	Section 2.7.1
Individual	33	Support for proposal Sections 2.9.1, 2.9.2, 2.9.3, 2.9.4
Individual	34	Sections 2.2.1, 2.2.2, 2.8.1, 2.8.2, 2.9.1
Individual	35	Support for proposal
Individual	36	Section 2.7.1
Individual	37	Sections 2.3.1, 2.7.2, 2.9.1, 2.9.4, 2.10.1, 2.12
Individual	38	Sections 2.9.1, 2.9.2
Individuals	39 – 40	Support for proposal
Individual	41	Sections 2.9.1, 2.9.2, 2.10.1
Individual	42	Support for proposal
Individual	43	Section 2.8.1
Individual	44	Sections 2.2.1, 2.3.1, 2.8.1
Individual	45	Support for proposal Section 2.8.1
Individual	46	Sections 2.2.1, 2.3.1
Individual	47	Section 2.8.1
Individual	48	Section 2.8.1
Individual	49	Sections 2.2.3, 2.3.1, 2.8.2, 2.8.3, 2.9.1
Individual	50	Section 2.2.1, 2.3.1
Individual	51	Sections 2.2.1, 2.2.3, 2.2.4, 2.3.1, 2.4.1, 2.8.2, 2.11.2
Individual	52	Sections 2.3.1, 2.4.1
Individual	53	Support for proposal Section 2.3.1
Individual	54	Sections 2.5.1, 2.8.1
Individual	55	Sections 2.3.1, 2.6.1, 2.9.1, 2.9.2, 2.9.3, 2.10.1

Respondent	Submission No.	Section number where issues are addressed
Individual	56	Sections 2.3.1, 2.4.1, 2.8.3
Individual	57	Sections 2.3.1, 2.8.1, 2.8.2
Individual	58	Sections 2.2.1, 2.3.1, 2.8.2
Individual	59	Non-support
Individual	60	Section 2.3.1
Individual	61	Sections 2.3.1, 2.5.1, 2.7.1, 2.8.1, 2.8.2, 2.8.3
Individual	62	Sections 2.9.1, 2.9.2, 2.9.3, 2.9.4, 2.10.1, 2.12
Individual	63	Sections 2.3.1, 2.11.2
Individual	64	Section 2.8.1
Individual	65	Support for the proposal
Individual	66	Support for the proposal Section 2.9.4
Individual	67	Sections 2.2.3, 2.9.1
Individual	68	Sections 2.4.1, 2.8.2, 2.8.3

2.1 Overview of issues raised

A total of 68 submissions were received in response to the display of the REF. This included three from cyclists groups, one from the Haberfield Association, and 64 from the community. Each submission has been examined individually to understand the issues being raised. The issues raised in each submission have been extracted 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 Transport’s response to these issues forms the basis of this chapter.

Of these submissions, 19 (28%) were in support of the proposal, 17 (25%) objected to the proposal, an additional 16 (24%) objected to the proposal due to lack of bike friendly infrastructure (ramps), and 4 (6%) partially supported the proposal. The remaining submissions did not offer a position at all on the proposal.

The issues raised in the submissions from the community and agencies can be categorised into 11 main areas as follows

- project justification
- options assessment
- policy and legislation
- design
- consultation
- traffic and property access
- pedestrian, mobility and bike access

- landscape and visual
- noise and vibration
- hazards, risk and utilities
- other.

2.2 Issue 1: Project justification

2.2.1 Prioritisation of cars over other road users

Submission number(s)

2, 5, 6, 34, 44, 46, 50, 51, 58

Issue description

A number of respondents raised concerns regarding the prioritisation of cars along Dobroyd Parade over pedestrians and bike users.

Response

The four key objectives of the proposal are to:

- improve safety for pedestrians, people with mobility issues, prams and bikes
- ease congestion and improve flow of traffic along Dobroyd Parade
- minimise environmental and community impacts during construction and operation
- optimise the urban design and landscape outcome to compliment the surrounding natural, built and community environment.

The main objective and key purpose of the proposal is to improve safety for pedestrians, people with limited mobility, prams and bikes. The other objectives were considered as part of the development of the design and the selection of the preferred option but were not the main drivers for the project.

The removal of the at-grade crossing and separating pedestrians and bike users through the provision of a bridge removes the conflict between vehicles and the most vulnerable road users, pedestrians.

An assessment of the safety of the current intersection undertaken by Transport identified that any at-grade crossing option would not be safe enough and that a grade separated option would be required.

The modification of traffic conditions on Dobroyd Parade, to improve the safety of pedestrians, was not considered appropriate as Dobroyd Parade is classified as a main road with an estimated traffic volume of 60,000 vehicles per day. This volume justifies the need to maintain traffic movement along Dobroyd Parade.

The selection of stairs and lifts over a long ramp design improves the amenity of the area by allowing for better use the existing road reserve area for placemaking on either side of the bridge to benefit all road users.

2.2.2 Road safety

Submission number(s)

3, 6, 7, 26, 34

Issue description

A number of respondents raised concerns about ongoing road safety near the proposal particularly with regard to:

- illegal traffic manoeuvres at the intersection, particularly u-turn movements
- running red lights
- speeding through the intersection.

Respondents suggested making changes to the intersection to address these safety concerns including providing enforcement to penalise motorists for illegal movements, sufficient pedestrian refuge at the crossing, reducing the speed limit, recognise that more roads, lanes, bridges and tunnels achieve the opposite of their intended goals, redesign the intersection to equalise all modes of transport rather than favouring car and toll road operators.

Response

Road network changes are not proposed as part of this proposal, however Transport are reviewing traffic issues raised in the submissions separately to this proposal.

Transport is addressing the issue of illegal traffic manoeuvres at the intersection through the following:

- extending the eastbound existing concrete median strip by 10 metres between the surface and tunnel traffic lanes to prevent illegal right turns from the outer lanes of Dobroyd Parade into Waratah Street
- providing additional “no-trucks over 3 tonne” signs on approach to and the entrance of Waratah Street to prevent oversize truck access down Waratah Street
- installing “no U-turn” signs on Dobroyd Parade to prevent illegal U-turn movements at the intersection of Dobroyd Parade / Waratah Street
- providing feedback to Inner West Council to address reported issues of illegal U-turn movements and speeding on Waratah Street.

Transport is addressing red light running and speeding through nominating the intersection for a red light / speed camera to deter these activities. Transport has also requested police enforcement of the intersection to monitor all illegal movements.

While the measures above would improve the traffic safety at the intersection, it is unlikely to eliminate all risks to pedestrians, and the pedestrian bridge is still deemed necessary. Dobroyd Parade is classified as a main road that caters for an estimated 60,000 vehicles per day. Reducing the number of lanes or speed limit would have implications for the road network including re-routing of traffic through local streets. This may result in an increase in delays and queuing, which could increase illegal movements that would impact all road users, not just vehicles. The proposal balances the access requirements for the road and impact to road users.

Transport acknowledges that the opening of the M4 East tunnel has contributed to additional traffic at the Dobroyd Parade / Waratah Street intersection as noted in the M4 East 12-month post opening Road Network Performance Review Plan. The response is to improve the safety for pedestrians through the provision of a pedestrian bridge to remove the risks and potential conflicts posed by an at-grade crossing.

Provision of a wider pedestrian refuge with a barrier would not completely protect pedestrians from traffic and a pedestrian bridge is a safer option. The decision to provide a bridge is warranted based on the history of crashes involving vehicles hitting the existing median fence.

Previous suggestions by the community to install “local traffic only” or “resident only traffic” signage to manage traffic turning from Dobroyd Parade to Waratah Street are not considered appropriate as it would be difficult to enforce.

Community feedback on the presence of WestConnex patrol vehicles using Waratah Street to undertake u-turns has been raised with the WestConnex team to mitigate the issue.

2.2.3 Need

Submission number(s)

8, 10, 22, 27, 49, 51, 67

Issue description

A number of respondents raised concerns about the overall need for the provision of a pedestrian bridge. These respondents question whether the proposal is necessary and that the existing crossing is adequate.

Response

The strategic need for the proposal is addressed in Section 2.1 of the REF with the bridge proposed to address pedestrian safety in an area where there have been records of vehicle collisions with the current median fence, vehicle queuing over the current pedestrian crossing, and from heavy vehicle use on the road. The risk to pedestrians is irrespective of the number of pedestrians using the current crossing.

Pedestrian safety is a significant concern for NSW road safety. According to the NSW Centre for Road Safety, more than 1,100 pedestrians are hit on NSW roads each year, and pedestrians hit by cars travelling at 50km/hr are twice as likely to die than those hit by a car at 40km/hr¹. According to the data from the Office of Road Safety (Australian Government) there have been an average of 158 annual pedestrian deaths in Australia from 2014 to 2023.

The prevalence of responses raising concerns with ongoing road safety around the Dobroyd Parade / Waratah Street intersection (see section 2.2.2 of this report) supports the need for a grade separated crossing, the proposed bridge. This would improve the safety of all users crossing at this location.

The traffic volumes on Dobroyd Parade are estimated to be 60,000 vehicles per day. Despite the opening of WestConnex Rozelle Interchange, which would allow WestConnex M4 East tunnel users to continue towards Rozelle before exiting the tunnel instead of at Dobroyd Parade, Dobroyd Parade still functions as a main movement corridor.

The options assessment undertaken for the proposal, including both selection of location and design options is addressed in section 2.3.1 of this report.

2.2.4 Project cost

Submission number(s)

22, 51

Issue description

Two respondents raised concerns regarding the necessity of the proposal, and whether it represents value for money.

Response

Safety concerns and use of the current two stage crossing of Dobroyd Parade were raised during community engagement activities and through the option selection process undertaken for the proposal. Reluctance of some pedestrians to use the current crossing due to safety concerns and 'near misses' with cars have been raised with Transport during community engagement and is also reflected in submissions received.

Transport places the improvement of the safety for pedestrians, people with limited mobility, prams and bikes crossing the road at this location as a high priority. Value for money assessments are considered in the development of a project but are not assessed as part of the Review of Environmental Factors assessments or Submissions Reports.

¹ <https://roadsafety.transport.nsw.gov.au/downloads/pedestrian-safety.pdf>

2.3 Issue 2: Options assessment

2.3.1 Alternative options

Submission number(s)

1, 2, 4, 5, 6, 23, 31, 37, 44, 46, 49, 50, 51, 52, 53, 55, 56, 57, 58, 60, 61, 63

Issue description

Respondents raised concerns regarding the options assessment undertaken for the proposal, including both the consideration of alternative locations for the proposal and the alternative designs considered, including further accommodating to bike users and the mobility aid users.

Alternative locations for the pedestrian bridge have been identified by some respondents to minimise impact to the adjacent properties, including crossing Dobroyd Parade at Timbrell Drive into Mortley Avenue, and crossing of Dobroyd Parade into Robson Park.

Alternative options preferred by the respondents included:

- retention of an at-grade crossing and the provision of a bridge that incorporates rideable ramps
- closing off access from Waratah Street to Dobroyd Parade and directing pedestrian access to the Ramsay Street crossing
- extending the bridge to finish closer to Henley Marine Drive to avoid impact to Livvi's Place
- providing a pedestrian tunnel underneath Dobroyd Parade.

Response

Alternative bridge locations suggested at Dobroyd Parade/ Timbrell Drive / Mortley Avenue intersection and crossing Dobroyd Parade into Robson Park would not address specific safety issues at Dobroyd Parade / Waratah Street intersection. Therefore these bridge locations are not the preferred options.

Closing off access to and from Waratah Street to Dobroyd Parade to redirect pedestrian traffic to Ramsay Street would remove an existing connection for pedestrians, people with mobility issues, prams and bikes and is therefore not a preferred option.

In addition to the bridge location options considered in the REF, Transport reviewed alternative crossings on the western side of the Dobroyd Parade and Waratah Street intersection. This location was considered less feasible as it is constrained due to the proximity of an adjacent private properties and the location of additional utility services. An at-grade crossing of Dobroyd Parade near Crane Avenue was also considered by Transport. This location was considered unsafe as it would be situated within traffic queues from Dobroyd Parade / Timbrell Drive / Mortley Avenue. With the selection of the Dobroyd Parade / Waratah Street intersection as the preferred location to meet safety requirements, Transport undertook a detailed options analysis prior to proceeding with the preparation of the concept design presented in the REF. Options considered as part of this process included some where ramps were proposed on both or one side of the bridge (Options 2 and 3). A summary of the options assessment is provided in section 2.4 of the REF.

Options which included ramps were assessed however as detailed in Table 2-1 of the REF were not proceeded with due to factors including:

- the structure would have a substantially larger footprint due to ramps needing to achieve the required gradient. This would result in ramps up to 100 metres in length
- there would be a greater impact to public spaces (Timbrell Park and/or Reg Coady Reserve) due to the larger footprint required to accommodate the ramps
- The larger structure would be more visually intrusive to nearby residents, particularly those in Dobroyd Parade. This would also lead to increased overshadowing, greater impacts to privacy of residents, and greater change to the landscape character of the location.
- the larger footprint would require the removal of additional trees and landscaping such as the planted native vegetation along Dobroyd Parade and potentially in Timbrell Park or Reg Coady Reserve

Extending Option 2, which includes constructing a bridge from Waratah Street to Timbrell Park with ramps on the Timbrell Park side and lift and stairs on the Waratah Street side, to end closer to Henley Marine drive would potentially minimise impacts to Livvi's place but have a greater footprint impact in other areas as described above. Therefore this is not a preferred option.

The options described in Section 2.4 of the REF included Option 5— a single stage at-grade crossing. Option 5 does not completely remove the risk to pedestrians compared to the pedestrian bridge and would reduce the traffic efficiency of the intersection through longer wait times for pedestrians to cross. The pedestrian bridge was determined to be the safest option as it separates pedestrians and bike users from the risks posed by traffic.

An underground pedestrian tunnel below Dobroyd Parade is not feasible due to existing flooding issues in the area.

With consideration of these key factors and other matters during the options analysis, Transport is proposing to proceed with the proposed bridge as described in Section 1 as it provides better access for pedestrians, mobility aid users and prams while still catering for bike users to cross the bridge through the lifts and wheeling ramps on stairs provided.

2.4 Issue 3: Policy and legislation

2.4.1 Active transport policy compliance

Submission number(s)

1, 2, 3, 5, 51, 52, 56, 68

Issue description

A number of respondents have raised concerns regarding whether the proposal complies with various Transport policies, strategies and frameworks. The submissions refer to:

- *Future Transport Strategy (Transport 2022a)*
- *Providing for Walking and Cycling in Transport Projects Policy (Transport 2021a)*
- *Active Transport Strategy (Transport, 2022e)*
- *Road User Space Allocation Policy (Transport 2021b)*

Response

As per section 2.1 of the REF, the pedestrian bridge design as proposed in the REF was developed with consideration to the policies and strategies detailed in the submission. This design has been developed by Transport over time, balancing safety, amenity, and the intent of applicable policy documents. The principles that inform Transport's active transport mode decisions as detailed in the *Providing for Walking and Cycling in Transport Projects Policy CP21001 (Transport 2021)* or the *Active Transport Strategy*, these reflect the vision of the *Future Transport Strategy* and ultimately the proposed design. The primary goals in the *Active Transport Strategy* are to increase and encourage walking and biking for every day and shorter trips, enhance 15-minute local neighbourhood and improve place-making. It also aims to improve safety and comfort by providing "fit-for-purpose" active transport infrastructure. The *Future Transport Strategy* focusses on improving connections to encourage active transport and public transport and providing safe travel for every customer across a high performing efficient network and improving accessibility to amenities for all ages and abilities.

The project aligns with these strategies as they encourage more people to walk and bike by making it safe and accessible. This is reflected in the number of respondents who indicated that they felt unsafe using the existing at-grade crossing.

2.5 Issue 4: Design

2.5.1 Life reliability, maintenance, and costs

Submission number(s)

3, 5, 6, 7, 23, 54, 61

Issue description

A number of respondents have raised concerns regarding potential issues with lift maintenance and breakdowns, possible vandalism, and the need for signage.

Response

Transport acknowledges there are maintenance costs associated with the operation of the lift and that maintenance is the responsibility of Transport. This would include minor works like cleaning or graffiti removal and larger works including lift maintenance. Maintenance crews would attend for programmed maintenance and upon being notified of a complaint. During this time the lifts would be sign-posted to alert users of alternative crossing arrangements. Contact details would be displayed inside and outside of the lift for users to report any issues with the lift function and emergency 'help' communication facilities would be included during detailed design in line with applicable Australian Standards. Any down time as a result of breakdowns would be minimised as much as feasible.

Transport targets for lift reliability, availability and maintainability are detailed in *TS 04955.3:1.0 Services, Systems and Equipment— Part 3 Lifts* (Transport 2022). The targets are:

- reliability \geq 2 000 hours
- availability \geq 99.8%
- maintainability \leq 1.5 hours.

All lifts shall be suitable and arranged for continuous operation based on 24 hours, seven days a week operation. The lifts shall be capable of achieving 240 starts per hour.

Vandalism can be reported to Inner West Council, the NSW Police, or Transport for attention via the contact details provided inside and outside the lift. The design and lighting of the bridge and lift structure would be aimed to discourage vandalism of the area.

When lifts are temporarily out of order, there is a potential that pedestrians with prams, mobility aid users, and bike users would not be able to access the bridge to cross Dobroyd Parade at Waratah Street. Two alternative on-grade crossing points are available in close proximity to the bridge, 320 metres west at Dobroyd Parade / Wattle Street intersection, and 500 metres east at Dobroyd Parade / Timbrell Drive / Mortley Avenue intersection which can be accessed by existing paths along Dobroyd Parade, or through shared paths in Timbrell Drive and local roads within Five Dock and Haberfield.

It is noted that there would be occasions to wait for the lift, however there are currently wait times associated with use of the two stage at-grade crossing or additional travel time to access other crossings of Dobroyd Parade. There is unlikely to be a significant increase in wait times as a result of the pedestrian bridge.

2.5.2 Bridge design detail

Submission number

3

Issue description

One respondent raised the concern that no detail design information, including materials intended to be used, was provided for the proposal.

Response

The REF was based on concept design which focuses primarily on the form and structure of the bridge with further design development to be undertaken as part of the detailed design stage of the proposal. Section 2.9.1 addresses ongoing design development and the consideration of the selection of colours, textures, and landscape design. These elements while critical to the ultimate design of the bridge have limited implications on the environmental assessment and therefore will be further developed in the next design stage.

2.6 Issue 5: Consultation

2.6.1 Lack of on-going and satisfactory consultation

Submission number(s)

6, 31, 55

Issue description

Respondents raised concerns regarding community consultation undertaken for the proposal, incorporating the lack of ongoing community consultation since 2020, information on the proposal being distributed during the busy end of year period and only for a 2 week period. There is also concern of future lack of consultation and opportunity to consult with Transport regarding the proposal.

Response

Consultation undertaken for the proposal is addressed in section 5 of the REF. Consultation on the proposal commenced in 2020 with the issues raised by the community reviewed and considered during the development of the concept design. Additional consultation regarding the proposal after the 2020 consultations was not deemed appropriate until the completion of the REF when the impacts of the proposal have been assessed adequately.

Subsequent to the REF display, a meeting with local residents living adjacent to the project was held on 23 January 2024. The feedback from the meeting has been incorporated in the responses to the issues in this report. As per section 5.1 of the REF, Transport will continue to engage with the community and local residents regarding the proposal as it develops. This will include regular community updates, correspondence and meetings with directly impacted residents adjacent to the project.

In addition to community consultation, Inner West Council, City of Canada Bay Council and Sydney Water have been consulted about the proposal with this detailed in section 5.4 and 5.5 of the REF.

The REF display period of two weeks is consistent with the Transport's standard display process and did not fall over a school holiday period to warrant additional display times.

2.7 Issue 7: Traffic and property access

2.7.1 Road network changes

Submission number(s)

10, 11, 22, 32, 36, 61

Issue description

A number of respondents raised concern regarding whether there would be any changes to vehicle movements at Dobroyd Parade / Waratah Street intersection, including reduced access to and from Dobroyd Parade to Waratah Street, as a result of the proposal.

Response

The proposal does not include any changes to existing permitted traffic movements. Traffic will still be able to turn left and right from Waratah Street onto Dobroyd Parade and enter Waratah Street from Dobroyd Parade westbound, and from the M4 East tunnel exit eastbound on Dobroyd Parade.

The only key change to the existing road surface would be the removal of the at-grade pedestrian crossing on Dobroyd Parade at Waratah Street and relocation of the westbound stop line closer to the intersection.

2.7.2 Property access

Submission number(s)

4, 37

Issue description

A respondent raised a concern about possible impacts to property access at Dobroyd Pde cul-de-sac during the construction and operation of the proposal.

Response

No changes to property access is proposed during the construction of the pedestrian bridge or when it is completed. The footprint of the bridge is situated clear of any existing property accesses.

2.8 Issue 8: Pedestrian, mobility, and bike access

2.8.1 Wheeling ramps and the difficulty of bike use of lifts

Submission number(s)

1, 2, 3, 20, 21, 23, 28, 34, 43, 44, 45, 47, 48, 54, 57, 61, 64

Issue description

The respondents raised concerns about the use of wheeling ramps instead of bridge access ramps noting this is an "outdated" design and difficult for some bike users, including families or those with heavy bikes/cargo bikes. These concern include the difficulty for bike users when using lifts in large groups, families, and the use of cargo bikes.

Response

The proposal offers two ways for bike users to access the bridge, via the lift and via the wheeling ramps on the stairs. It is acknowledged that heavy e-bikes or cargo bike users may have difficulty using the wheeling ramps on the stairs with access for these users provided via the lift large enough to fit cargo bikes up to 2.6 metres long. The lift would provide safe and equitable access from street level to the bridge for all customers including bike users, those with mobility needs, and people with prams.

The stairs and wheeling ramps would be designed in accordance with Australian Standards and step heights selected in the lower range to provide easier access for pedestrians and those pushing their bikes. Similarly, the stairs would be wide enough so that pedestrians and bike users would be able to use the stairs at the same time.

Bike users would be able to access the lifts from connections to existing footpaths. A ramp would be provided to the lower lift landing on the northern side of the bridge from the existing footpath along Dobroyd Parade. On the southern side of the bridge, bike users will be able to access the lift from footpaths on Waratah Street. Bike users heading north on Waratah Street would be directed onto the western footpath to cross at proposed bicycle lanterns provided across Waratah Street at the Dobroyd Parade/Waratah Street intersection. Where there is sufficient width a shared path would be provided to allow bike users to ride towards the lifts. However, where there is insufficient width, bike users would be required to dismount as per standard footpath requirements. The proposed new kerb ramp on the eastern side of Waratah Street is to facilitate bike movements from the bridge to Waratah Street southbound.

Transport undertook a detailed options analysis prior to proceeding with the preparation of the concept design presented in the REF. Options considered as part of this process included some where ramps were proposed on both or one side of the bridge. A summary of the options assessment is provided in section 2.4 of the REF and is addressed further in section 2.3.1 of this report. Following consideration of the options Transport is proposing to proceed with a design that provides better access for mobility aid users and prams over ramps while still catering for bike users.

2.8.2 Bike and pedestrian network connectivity

Submission number(s)

1, 2, 3, 5, 20, 23, 28, 30, 34, 49, 51, 57, 58, 61, 68

Issue description

The respondents have expressed concerns that the provision of a bridge and associated works:

- does not provide a continuous link between cycleways on either side of Dobroyd Parade for bike users and will be a deterrent to travelling through this area
- severance of an active transport route and a long-standing and popular bike cross-regional route
- does not provide adequate connectivity or consider the wider bike network
- does not consider linkages proposed in the Iron Cove Creek Masterplan
- is a less accessible solution than the current at-grade crossing and will discourage pedestrian and bike activity
- creates a barrier between neighbourhoods, segregating spaces and flow.

Response

Movement of bike users and pedestrians were considered in the assessment of needs for the proposal and the development of the design as detailed in section 2 of the REF. Transport acknowledges the challenges that bike users may have with the proposed design compared to the existing at-grade crossing but have considered bike users through the sizing of lifts to accommodate access and the provision of wheeling ramps on stairs.

The decision not to proceed with ramps was based on the large footprint required to achieve a Disability Inclusion Act 2014 grade compliant ramp which would be over 100m long. This would have a significantly larger footprint, greater impact to existing vegetation, and be more visually intrusive to privacy of residents. Details on the decision to not proceed with ramps covered in Section 2.3.1.

The existing pedestrian and bike route connection is being maintained as bike users are able to use the pedestrian bridge to cross the road in a safer way and encourage those apprehensive about using this crossing to do so. The community between Haberfield and Fivedock is already separated by Iron Cove Creek therefore the pedestrian bridge would not be creating further separation between these two suburbs.

A barrier proposed on the northern side of Dobroyd Parade is required to discourage unsafe crossing of Dobroyd Parade. Bike users would be required to use the pedestrian bridge which is designed for their use.

Should bike users prefer not to dismount their bikes, alternative crossings of Dobroyd Parade would remain for bike users at the Ramsay Street / Wattle Street and the Dobroyd Parade / Timbrell Drive / Mortley Avenue intersections. However, the proposal would provide the safest crossing route for pedestrians, people with limited mobility, prams and bikes. Feedback on safety issues due to crowding on narrow footpaths at Dobroyd Parade / Timbrell Drive / Mortley Avenue intersection is being reviewed and will be investigated by Transport separately to this proposal.

The engagement for the Iron Cove Creek Masterplan proposed by Inner West Council closed in early November 2023. At this stage there are no details regarding proposed connections along Iron Cove Creek at the proposed bridge location. The detailed design stage of this proposal would consider linkages should additional information become available. Transport will continue to consult with Inner West Council on the proposal.

In addition, Sydney Water are investigating the potential to rehabilitate approximately 400 metres of the concrete lined Iron Cove Creek as detailed in Table 6-38 of the REF. Consultation with Sydney Water was undertaken as part of the concept design and it was identified that there would be no major conflicts between the naturalisation works and the proposal.

Transport does not propose to upgrade of the existing Iron Cove Creek bridge as it is owned and maintained by Inner West Council and City of Canada Bay Council. Transport would work together with Councils so that the proposal would not preclude any future upgrade of the existing bridge over Iron Cove Creek.

The Timbrell Park Masterplan shows the proposed bridge over Dobroyd Parade extending from Waratah Street to Timbrell Park. This layout is based on a previous iteration of the design and does not reflect the current design. City of Canada Bay Council have advised Transport that the masterplan would need to be updated to match the current proposal.

2.8.3 Pedestrian and bike user safety

Submission number(s)

2, 29, 49, 56, 61, 68

Issue description

The respondents raised concerns that the provision of a bridge does not provide a safe way for bike users to cross Dobroyd Parade as it may encourage unsafe crossings, and create safety issues for less abled pedestrians and people with prams sharing the bridge with bike users. The respondents also raised that it is not legal to ride a bike to the base of the proposed bridge, and that signage or measures to manage bike usage while accessing the bridge should be provided.

Response

The decision by Transport to proceed with a proposal for a pedestrian bridge in this location was made in response to safety concerns with pedestrians, people with limited mobility, prams and bike users using the current crossing. The proposal provides a safe and equitable access for all users. The proposal does not preclude bike users as it offers a lift and wheeling ramps for to access the bridge.

A barrier would be provided along Doboyd Parade and the the existing centre median to deter unsafe crossing of the intersection. Signage and linemarking would be reviewed to direct bike users towards the pedestrian bridge.

The bridge is proposed to have a deck width of 2.3 metres between the handrails providing passing room for users while not enough room to travel at high speeds. As such, bike riders would not be required to dismount their bikes to cross the bridge. No linemarking is proposed to separate pedestrians and bikes on the bridge, however, signs to alert bike users of other pedestrians would be included to encourage safe movement. The provision of wayfinding, and other safety signage will be considered during the development of the detailed design. The description of the proposal in section 3.1 of the REF, details upgrade of access including a new kerb ramp on Waratah Street adjacent to the proposal to provide a smoother transition between the footpath and the road for bike users. Bicycle lanterns would be provided on the southern side of Dobroyd Parade / Waratah Street intersection, at the existing Waratah Street crossing to allow bike users to ride across the intersection. Transport are reviewing the provision of some shared paths to connect to the bridge where there is sufficient width.

However, where this is not possible, bike users with the exception of those under 12 years old or riding with children under 12 years old will be required to dismount their bikes to access the lifts as dismounting on footpaths is currently required by law. Dismounting is currently required when accessing the footpaths in the vicinity of the current at-grade crossing.

2.9 Issue 9: Landscape and visual

2.9.1 Visual amenity and impact

Submission number(s)

2, 3, 4, 5, 6, 7, 10, 23, 31, 33, 34, 37, 38, 41, 49, 55, 62, 67

Issue description

Respondents have raised concerns about the potential impacts to the visual amenity and character of the area from the bridge, in particular:

- impacts to the current urban amenity
- scale, visual dominance/intrusiveness of the bridge
- shadowing of adjacent properties from the bridge
- material selection and colour
- opposition to future advertising material being placed on the bridge.

Respondents were also concerned that the design does not meet the values detailed in the *Bridge aesthetics – design guideline to improve the appearance of bridges in NSW* (Transport, 2023).

Response

The pedestrian bridge proposed balances satisfying the needs and key objectives of the project (pedestrian and bike user safety and reduction of traffic congestion) and reducing the impact the structure would have on the landscape character, and visual and heritage amenity of the area. Any large changes to the current design such as removal of the covered walkway or a change from the arched design would not satisfy the safety objectives and potentially make the bridge larger. The current tied arch style of the bridge was selected as it would reduce the height of the lift towers compared to other styles and many other bridges around Sydney follow the same style.

The bridge was assessed as having a moderate to high level of visual impact as there is currently no elevated structure at the intersection. The type of bridge structure is unlikely to lower this rating due to the necessary height to provide adequate overhead clearance to traffic on Dobroyd Parade.

The proposed pedestrian bridge design is intended to appear visually light weight through the use of slender structural elements that reduces the bulk and allows for transparency through the structure. The structural elements will be designed efficiently to minimise costs and not be oversized unnecessarily.

The *Bridge Aesthetics* guideline was used during the design process for the project and the final product aligns with its values. The proposal is a balanced design centred on ensuring the height of the bridge is kept low to reduce overshadowing while ensuring the safety of users. The tied arch structure was developed out of much consultation. The lifts on either side of the bridge removed the need for piers. The canopies over the bridge deck provide protection for users. The basic form was sensitive to feedback and lessons learnt from previous projects. This bridge design has been used across the network and this project would allow for the customisation of surrounding landscaping, colour and textures of the bridge to tie into the surrounding area and minimise as much as possible, impact to the heritage and local amenity of the area. The tied arch bridge structure type will not be modified however refinement of these details will be undertaken during the detailed design.

No advertising is currently proposed for the pedestrian bridge. Future proposals for advertising and signage on the guidelines would need to be in accordance with the State Environmental Planning Policy No. 64 Advertising and Signage. Under this policy the display of advertising is prohibited in heritage conservation areas. .

Transport are committed to:

- working with the local residents through this design process to minimise the visual impact of the bridge at its base through landscaping treatments
- undertaking, as part of the detailed design, an assessment of extent of of any potential overshadowing from the bridge onto adjacent properties to assist nearby residents in understanding the impact of the bridge to their properties.

2.9.2 Heritage values

Submission number(s)

3, 6, 10, 33, 38, 41, 55, 62

Issue description

A number of respondents have raised concerns that the proposed bridge design does not reflect the heritage character or heritage values of the area.

Response

As per section 6.4 of the REF, the Statement of Heritage Impact concluded that the proposal would have neutral direct physical impact, negligible potential direct impact and an overall negligible visual impact to the Haberfield Conservation Area and the Dobroyd Canal Stormwater Channel. The design of the proposed bridge would continue to be developed during the detailed design stage of the project and would specifically include consideration, amongst others, of how the structure fits into the surrounding area and minimises, as much as possible, impacts to the heritage and local amenity of the area.

2.9.3 Landscaping

Submission number(s)

3, 6, 33, 55, 62

Issue description

Respondents raised concerns regarding limited detail provided about proposed landscaping, the lack of screening of the bridge provided by the landscaping, and the removal of existing green space for construction of the bridge.

Response

The REF (including sections 6.6.3 and 6.8.3) provides an overview of the landscaping proposed noting that it would include the planting of native tall trees, native shade trees, shrubs, grasses, and turf areas around the lift bases on both the northern and southern sides.

Removal of some existing landscaping and use of Reg Coady Park is required to facilitate construction of the northern bridge base and stairs. Removal of some existing vegetation will also take place on the south-eastern corner of Waratah Street and Dobroyd Parade to enable construction of the southern bridge base and stairs.

Following the completion of construction, tree planting and landscaping would be added to the impacted areas. This would include the areas around the lift landings and stairs on both side of the bridge, and incorporate the planting of native trees, shrubs, and groundcover to visually anchor the bridge to the locality, provide shade for pedestrians, and minimise the extent of hard paving. The REF was based on the concept design with further development of the landscaping design to be undertaken as part of detailed design. The proposed view of the landscaping treatment shown in Table 6-21 the REF reflects the latest design. The image from the REF Q&A session was a previous version of the design and has since been updated. The landscaping treatment would be further refined and consider the submission feedback received from the community to date, including landscaping to improve the character of the site and providing screening of the base of the bridge.

Transport are committed to working with adjacent local residents through the landscape design process.

2.9.4 Privacy

Submission number(s)

4, 6, 7, 9, 33, 37, 62, 66

Issue description

A number of respondents raised concern regarding potential impacts on the privacy of residents near the proposal. This includes concerns that there would be overlooking with people being able to see into nearby residential properties from the southern stairs and bridge. This would reduce privacy for these residents.

Response

During construction the provision of suitable temporary fencing and barriers to screen views into and from the construction site are proposed (section 6.3.4 of the REF). It is noted that during construction works at elevated locations some overlooking may occur. These will be screened where possible.

During operation of the bridge, due to the height and close proximity of the bridge adjacent to residential properties, there may be opportunities for overlooking into these properties. The height of the bridge is proposed to be 6.1 metres above the road level to accommodate high vehicles and maintenance requirements. No change to the height of the bridge is proposed. The detailed design of the proposed bridge would specifically investigate privacy screens on the bridge structure to address privacy concerns. Transport are committed to working with adjacent local residents on the privacy screening.

Transport is also investigating moving the lower lift entry point to face Waratah Street instead of the Dobroyd Parade cul-de-sac to improve privacy for local adjacent residents.

2.10 Issue 10: Noise and vibration

2.10.1 Construction noise

Submission number(s)

4, 8, 37, 41, 55, 62

Issue description

Respondents have raised concerns about the impacts of construction noise and sleep disturbance and have requested compensation for any impacts including loss of sleep.

Response

Transport acknowledges there would be noise impacts during construction with these discussed in section 6.2 of the REF. The noise levels predicted in the REF are for the worst-case scenario with all noise sources operating simultaneously within the construction footprint. In practice, noise experienced by nearby receivers is likely to be lower than the noise model predictions.

Construction work would be carried out primarily during daytime hours, however, for safety reasons, some construction activities such as piling for the bridge may require work to occur at night or early in the morning when conditions are calmest. Work would be planned in consultation with directly impacted residents and construction methodologies, frequency and respite periods managed to minimise disruption.

Limited night works are proposed during the construction of the proposal, limited to three stages of work as detailed in section 3.3.3 of the REF with the associated mitigation measures detailed in Tables 6-9, Table 6-10, Table 6-11, 6-12 and 6-13. The additional mitigation codes are described in Table 6-14. The length of the construction of the proposal and the equipment details and movements are outlined in section 3.3.3, section 3.3.4, and section 3.3.7 of the REF.

Details regarding mitigation measures to ameliorate any potential impacts as a result of the proposal are included in section 7 of the REF. To assist in the management of noise and vibration impacts to the local community a Construction Noise and Vibration Management Plan would be prepared prior to construction and implemented throughout the construction period.

2.11 Issue 11: Hazards, risk and utilities

2.11.1 Flooding

Submission number

7

Issue description

A respondent has raised concerns regarding the proposal being constructed on land subject to flooding.

Response

Section 6.5 of the REF details the findings of the flood impact assessment completed for the proposal with the operation stage findings provided in section 6.5.3.

The bridge is located within an area which is subject to flooding during a major flooding event (1% AEP) in which Iron Cove Creek floods to levels between 0.2 metres and 1.0 metres above ground level on the northern side of Dobroyd Parade in the proposal area and to less than 0.2 metres on the southern side of the Dobroyd Parade in the proposal area. The flood assessment undertaken for the proposal concludes that the construction and operation of the proposal would create a minor increase of impervious surface in the proposal area.

In relation to the safety of users of the bridge it is not anticipated that during a major flooding event there would be people accessing the bridge due to extensive flooding occurring within the surrounding area.

To protect the operations of the bridge, the lower lift landings of the bridge have been designed above the 1% AEP flood event. The structure will also be designed to withstand any flows from this major flood event.

2.11.2 Personal safety and property

Submission number(s)

7, 9, 51, 63

Issue description

A number of respondents have raised concerns regarding personal and property safety associated with the proposal, in particular:

- the safety of bridge users at night
- the potential for criminal activity to increase due to improved access
- the need for safety mechanisms for the lifts
- request for floor lighting to improve safety of users and to minimise disturbance to nearby residents
- request for the design to include additional features such as automated lift door safety mechanism and guttering on the bridge.

Response

The proposal would be designed to meet NSW and Australian engineering and safety standards, which provides guidance on safety and security measures consistent with the provisions of Crime Prevention through Environmental Design (CPTED). Considerations for safety features to discourage crime and improve safety of users, such as bridge lighting and CCTV, will be investigated during the detailed design stage of the project.

Lighting around the base of the bridge and footpaths will be reviewed and progressed as part of detailed design. As detailed in the landscape character and visual safeguards and management measures (Table 6-22 of the REF) lighting associated with the proposal will consider potential light spill impacts on adjacent properties.

Features of the lift and the drainage of the bridge deck to prevent runoff from the bridge onto traffic below would be considered during the detailed design stage of the proposal. Safety mechanisms would be in place for lift outages and regular maintenance.

2.12 Issue 12: Other

Submission number(s)

4, 6, 31, 37, 62

Issue description

Respondents raised concerns regarding the following:

- potential impacts to property values
- communication made by transport indicating the project proceeding
- relocation of the pedestrian crossing on Waratah Street five to 10 metres south to improve stopping space for vehicles coming from Dobroyd Parade

Response

The proposal would be undertaken under the *Roads Act 1993* which does not make any provisions for compensation for any actual or perceived loss of property value as a result of the proposal. Therefore, Transport is unable to offer any compensation.

The decision on whether the proposal is to proceed has not been made. Transport is currently in the process of reviewing the REF submissions and responding to issues raised. Following this stage the proposal will proceed to the determination stage of the REF process, at which point it will be decided if the proposal is to proceed. The determination is undertaken by Transport internally. If approved to proceed, the project is then able to be constructed.

Relocation of pedestrian crossing on Waratah Street from the current crossing location is not considered appropriate as it would worsen sight lines for traffic waiting on Waratah Street making it more difficult to see traffic heading eastbound along Dobroyd Parade. To improve visibility to pedestrians crossing Waratah Street, the stop line for westbound traffic on Dobroyd Parade is proposed to be relocated closer to the intersection.

2.13 Outside the scope of the proposal

Submission number(s)

4, 13

Issue description

Respondents raised the following matters:

- REF noted that the bridge would be supported by tapered concrete piers, and steel lattice frame
- suggestion to provide a similar bridge at Dobroyd Parade / Timbrell Drive / Mortley Avenue and Parramatta Road / Dalhousie Street intersections
- suggestion to upgrade Dobroyd Parade / Timbrell Drive / Mortley Avenue intersection.

Response

The REF noted that the bridge would be supported by tapered concrete piers, and steel lattice frame attached to the truss structure. This statement is incorrect. The bridge will be supported by the lift shafts and will not have a steel lattice frame attached to the truss structure.

The proposal does not include new bridges at Dobroyd Parade / Timbrell Drive / Mortley Avenue and Parramatta Road / Dalhousie Street intersections.

Improvements at the intersection of Dobroyd Parade / Timbrell Drive / Mortley Avenue intersection are not part of this proposal. However, Transport would review the safety issue of crowding on the narrow footpaths separate to this proposal.

3. Changes to the proposal

3.1 Property acquisition

The land on Reg Coady Reserve is required to accommodate the footprint of the bridge staircase and has been identified as Crown Land that requires acquisition prior to construction unless there can be a lease agreement with the landholder.

4. Environmental management

The REF for the pedestrian bridge across Dobroyd Parade at the Waratah Street intersection 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).

After consideration of the issues raised in the public submissions the management measures detailed in the REF have been retained as proposed.

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

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 during the construction and operation of the proposal.

A Construction Environmental Management Plan (CEMP) will be prepared to describe safeguards and management measures identified. The CEMP will provide a framework for establishing how these measures will be implemented and who would be responsible for their implementation.

The CEMP will be prepared prior to construction of the proposal and must be reviewed and certified by environment staff, the Transport for NSW Senior Environmental & Sustainable Officer, Eastern Harbour & Central River office, prior to the commencement of any on-site works. The CEMP will be a working document, subject to ongoing change and updated as necessary to respond to specific requirements. The CEMP would be developed in accordance with the specifications set out in the QA Specification G36 – Environmental Protection (Management System), QA Specification G38 – Soil and Water Management (Soil and Water Plan), QA Specification G40 – Clearing and Grubbing and QA Specification G10 – Traffic Management.

Summary of safeguards and management measures

The REF for the proposal identified a range of environmental outcomes and management measures that would be required to avoid or reduce the environmental impacts.

After consideration of the issues raised in the public submissions, the environmental management measures for the proposal (refer to Section 7.2 of the REF) have been retained as proposed. Should the proposal proceed, the environmental management measures in Table 3-1 will guide the subsequent phases of the proposal.

Table 4-1: Summary of environmental safeguards and management measures

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
GEN1	General - minimise environmental impacts during construction	<p>A CEMP will be prepared and submitted for review and endorsement of the Transport for NSW Senior Manager Environment and Sustainability prior to commencement of the activity. As a minimum, the CEMP will address the following:</p> <ul style="list-style-type: none"> any requirements associated with statutory approvals details of how the project will implement the identified safeguards outlined in the REF issue-specific environmental management plans roles and responsibilities communication requirements induction and training requirements procedures for monitoring and evaluating environmental performance, and for corrective action reporting requirements and record-keeping procedures for emergency and incident management procedures for audit and review. <p>The endorsed CEMP will be implemented during the undertaking of the activity.</p>	Contractor / Transport for NSW project manager	Pre-construction / detailed design	<p>QA Specification G36 – Environmental Protection (Management System)</p> <p>QA Specification G38 – Soil and Water Management (Soil and Water Plan)</p> <p>QA Specification G40 – Clearing and Grubbing</p> <p>QA Specification G10 – Traffic Management</p>
T1	Traffic and transport	<p>A Traffic Management Plan (TMP) will be prepared and implemented as part of the CEMP. The TMP will be prepared in accordance with the Transport <i>Traffic Control at Work Sites Manual</i> (Transport 2022b) and <i>QA Specification G10 Traffic Management</i> (Transport, 2020b). The TMP will include:</p> <ul style="list-style-type: none"> confirmation of haulage routes and any Transport Management Centre requirements measures to maintain access to local roads and properties and minimise the potential for ‘rat-runs’ to form on local roads during road closures site-specific traffic control measures (including signage) to manage and regulate traffic movement measures to maintain pedestrian and bike user access requirements and methods to consult and inform the local community of impacts on the local road network 	Contractor	Detailed design/Pre-construction	<p>Traffic Control at Work Sites Manual</p> <p>QA Specification G10 Traffic Management</p>

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
		<ul style="list-style-type: none"> access to construction sites including entry and exit locations and measures to prevent construction vehicles queuing on public roads a response plan for any construction traffic incident consideration of other developments that may be under construction to minimise traffic conflict and congestion that may occur due to the cumulative increase in construction vehicle traffic monitoring, review, and amendment mechanisms. 			
T2	Pedestrian and bike user access	<p>Management of pedestrian and bike users movements during construction would be detailed in the CEMP. Specific item to minimise pedestrian and bike users disruptions may include:</p> <ul style="list-style-type: none"> signage outlining pedestrian diversion routes advanced notification of any construction work that affects pedestrians and bike users. 	Contractor	Construction	-
T3	Changed traffic conditions	The community will be notified in advance of any road closures and the likely disruptions to access in accordance with the Community and Stakeholder Engagement Plan. Adequate advisory and warning signage will be provided to inform motorists of the road conditions ahead including any road closure and/or detour route.	Contractor	Construction	
T4	Emergency vehicle and key stakeholder access	Access would be maintained for emergency response vehicles, and utility providers at all times, where possible. During the bridge lift, alternative arrangements will be developed in consultation with the relevant stakeholders in advance.	Contractor	Construction	
T5	Road closures and detours	Temporary traffic diversions and road closures would be implemented in consultation with and in accordance with the Transport Management Centre requirements.	Contractor	Construction	
NV1	Noise and vibration	<p>A Noise and Vibration Management Plan (NVMP) will be prepared and implemented as part of the CEMP. The NVMP will generally follow the approach in <i>the Interim Construction Noise Guideline</i> (Transport 2023a) and identify:</p> <ul style="list-style-type: none"> all potential significant noise and vibration generating activities associated with the activity mitigation measures for implementation. These are to consider the urban design principles in <i>Beyond the Pavement: urban design policy, process and principles</i> (Transport 2020a). 	Contractor	Detailed design / Pre-construction	Construction Noise Guideline

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
		<ul style="list-style-type: none"> a monitoring program to assess performance against relevant noise and vibration criteria arrangements for consultation with affected neighbours and sensitive receivers, including notification and complaint handling procedures contingency measures to be implemented in the event of non-compliance with noise and vibration criteria. 			
NV2	Noise and vibration	<p>All sensitive receivers (local residents) likely to be affected will be notified at least seven days prior to commencement of any works associated with the activity that may have an adverse noise or vibration impact. The notification will provide details of:</p> <ul style="list-style-type: none"> the project the construction period and construction hours contact information for project management staff complaint and incident reporting how to obtain further information. 	Contractor	Detailed design / Pre-construction	
NV3	Construction hours and scheduling	Where feasible and reasonable, construction will be carried out during the standard daytime working hours and work generating high noise levels will be scheduled during less sensitive time periods.	Contractor	Pre-construction	
NV4	Construction respite period during normal hours and out of hours	<p>The duration and respite of high noise generating activities will be carried out in accordance with the Construction Noise and Vibration Guideline, and in consultation with the community.</p> <p>As a guide, high noise generating activities near receivers will be carried out in blocks that do not exceed three hours each, with a minimum respite period of one hour between each block. The duration of each block of work and respite will be flexible to accommodate the usage and amenity at nearby receivers.</p>	Contractor	Pre-construction	Construction Noise Guideline
NV5	Plant noise levels	<p>The noise levels of plant and equipment will have operating Sound Power or Sound Pressure Levels compliant with the criteria in Appendix F of the Construction Noise and Vibration Guideline.</p> <p>A noise monitoring audit program will be implemented to ensure equipment remains within the more stringent of the manufacturer's specifications or Appendix F of the Construction Noise and Vibration Guideline.</p> <p>Only the necessary size and power of equipment will be used.</p>	Contractor	Pre-construction	Construction Noise Guideline

Transport
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No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
NV6	Equipment selection	Use quieter and less noise emitting construction methods where feasible and reasonable.	Contractor	Pre-construction	
NV7	Noise and Vibration	All project personnel attending site are to receive an environmental induction. The induction must at least include: <ul style="list-style-type: none"> • all project specific and relevant standard noise and vibration mitigation measures • relevant licence and approval conditions • permissible hours of work • any limitations on high noise generating activities • location of nearest sensitive receivers • construction employee parking areas • designated loading/unloading areas and procedures • site opening/closing times (including deliveries) • environmental incident procedures. 	Contractor	Construction	
NV8	Noise and Vibration	Implementation of additional project specific mitigation measures is required. These measures include additional measures acquired from the Transport Construction Noise and Vibration Guideline	Contractor	Construction	Construction Noise Guideline
NV9	Non-tonal and ambient sensitive reversing alarms	Non-tonal reversing beepers (or an equivalent mechanism) will be fitted and used on all construction vehicles and mobile plant regularly used on site and for out of hours work. The use of ambient sensitive alarms that adjust output relative to the ambient noise level will be considered.	Contractor	Construction	
NV10	Noise and Vibration	Noisier activities, such as the use of jackhammers and concrete saws, would only be used prior to midnight.	Contractor	Construction	
NV11	Noise and Vibration	Vibration monitoring to be carried out during piling and where complaints about vibration received	Contractor	Construction	
NV12	Noise and Vibration	Where human comfort vibration guidelines are exceeded, the management measures are to be reviewed and are to consider alternate equipment and construction methodologies.	Contractor	Construction	
NV13	Noise and Vibration	Where vibration criteria specific to structural damage are exceeded during monitoring, work would cease immediately and less vibration intensive construction methods would be used	Contractor	Construction	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
NV14	Noise and vibration	<p>To minimise the risk of vibration impacts Dobroyd Stormwater Channel No.53 (Iron Cove Creek) the following mitigation measures should be implemented:</p> <ul style="list-style-type: none"> determine safe working limits based on proposed plant, and where possible, the smallest plant able to carry out required work should be used to minimise potential impacts. Where works are proposed within the safe working limits for the heritage structures, specialist advice must be sought from an appropriately qualified structural engineer who is familiar with heritage structures to assess if vibrations associated with the proposed works will potentially result in impacts to heritage structures. a vibration monitoring plan is to be prepared as part of the Construction Noise and Vibration Management Plan where works are proposed within safe working limits and implemented to confirm vibration levels prior to construction commencement. Where exceedances are recorded, works should be modified in consultation with the identified specialist to reduce vibration levels. if vibration monitors are attached to the heritage items, they must not be attached with permanent fixings. They should be removable without causing damage. Bees wax may be a suitable attachment method. attended vibration measurements should be undertaken at the commencement of vibration generating activities to confirm that vibration levels are within the acceptable range to prevent cosmetic building damage. assessment and monitoring of vibration impacts to heritage items within the safe working limits should adhere to: <ul style="list-style-type: none"> British Standard BS 7385: Part 2: Evaluation and Measurement for Vibrations in Buildings – Part 2 Guide to Damage Levels from Ground-Borne Vibration German Standard DIN 4150, Part 3: Structural Vibration in Buildings: Effects on Structures. 	Contractor	Pre-construction/ construction	Construction Noise Guideline
LV1	Visual Impacts	Where reasonable and feasible trees will be retained in design.	Transport	Detailed Design	
LV2	Landscape character and visual impact	Limit vegetation removal to the minimum amount required for the construction of the proposal.	Contractor	Construction	
LV3	Visual Impacts	Construction facilities will be contained within the construction works zone boundary and occupy the minimum area practicable for their intended use.	Contractor	Construction	

Transport
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No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
LV4	Visual Impacts	Provide suitable barriers to screen views from adjacent areas during construction	Contractor	Construction	
LV5	Visual impact	The work site should be cleaned and tidied at the end of each day to reduce visual impact.	Contractor	Construction	
LV6	Visual Impacts	Following the completion of construction works, plant/equipment will be removed, and disturbed areas will be revegetated, turfed or otherwise restored as appropriate.	Contractor	Construction	
LV7	Lighting	The design of new street lighting will consider potential light spill impacts on adjacent properties.	Transport	Detailed design	
LV8	Artwork	Incorporating artwork to be included in the bridge design, that would be sympathetic to the area, will be investigated.	Transport	Detailed Design	
LV9	Lighting	Temporary site lighting will be installed and operated in accordance with AS4282:1997 Control of the Obtrusive Effect of Outdoor Lighting, and an approved Traffic Management Plan. Construction lighting would be orientated to reduce any potential light spillage to surrounding areas.	Contractor	Construction	AS4282:1997 Control of the Obtrusive Effect of Outdoor Lighting
LV10	Privacy	Include privacy screening, where appropriate	Transport	Detailed design	
LV11	Privacy	Investigate moving the lower lift entry point to face Waratah Street instead of Dobroyd Parade cul-de-sac	Transport	Detailed design	
LV12	Visual Impact	Seek feedback from the adjacent residents regarding the bridge colour and landscaping design	Transport	Detailed design	
LV13	Overshadowing	Undertake an assessment to determine the extent of overshadowing of bridge and lift structures	Transport	Detailed design	
NH1	Non-Aboriginal heritage	A Non-Aboriginal Heritage Management Plan (NAHMP) will be prepared and implemented as part of the CEMP. It will provide specific drafting guidance on measures and controls to be implemented to avoid and mitigate impacts to non-Aboriginal heritage.	Contractor	Detailed design / Pre-construction	
NH2	Non-Aboriginal heritage	The <i>Standard Management Procedure - Unexpected Heritage Items</i> (Transport, 2015) will be followed in the event that an unknown or potential Aboriginal object/s, including skeletal remains, is found during construction. This applies where Transport does not have approval to disturb the object/s or where a specific safeguard for managing the disturbance (apart from the Procedure) is not in place.	Contractor	Detailed design / Pre-construction	Standard Management Procedure - Unexpected Heritage Items

Transport
for NSW

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
		Work will only re-commence once the requirements of that Procedure have been satisfied.			
NH3	Non-Aboriginal heritage	All relevant construction staff, contractors and subcontractors must be made aware of their statutory obligations for heritage under the Heritage Act 1977 and best practice as outlined in The Burra Charter (Australia ICOMOS 2013) to ensure no archaeological remains or heritage fabric are impacted during the proposed works without appropriate mitigation measures in place. This will be implemented through a heritage induction carried out prior to works commencing and throughout the works program.	Contractor	Pre-construction / construction	The Burra Charter (Australia ICOMOS 2013)
HF1	Flooding provisions	A lifted lift landing on the northern side of the pedestrian bridge has been included in the design along with an access ramp to accommodate potential flooding impacts. This measure would be maintained and carried through to detailed design.	Contractor	Detailed design	
HF2	Flooding	A flood management plan will be included in the CEMP and include safeguards and measures to reduce the impact of flooding during construction of the proposal and to manage potential impacts such as erosion and sedimentation.	Contractor	Detailed design / pre-construction	
HF3	Flooding	Inclusion of stop work protocols and site management requirements in the CEMP and site health and safety documentation in the event of a major flood event occurring. This will include protocols for protection of material, equipment, and exposed excavation.	Contractor	Construction	
B1	Biodiversity	Biodiversity Management Plan is to be prepared and included within the CEMP. The plan would include: <ul style="list-style-type: none"> • a site walk over with an ecologist as part of the pre-clearing surveys • a map showing vegetation clearing boundaries and sensitive area/no go area or trees to be protected • incorporation of management measures identified as a result of pre-clearing survey reports, completed by an ecologist • a detailed cleaning process in accordance with Biodiversity Guidelines (2011) • identify controls/mitigation measures to prevent impacts on sensitive location or no go zones or tree protection zones 	Contractor	Pre-construction	Biodiversity Guidelines

Transport
for NSW

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
		<ul style="list-style-type: none"> a stop work procedure in the event of identification of unidentified species, habitat or populations. 			
B2	Biodiversity Impacts	<p>Pre-clearing survey will be conducted in accordance with Biodiversity Guidelines, Guide 1 (Roads and Maritime, 2016) and will:</p> <ul style="list-style-type: none"> Confirm (with the assistance of a surveyor) clearing boundaries, exclusion zones, protected habitat features and revegetation areas prior to starting work Identify, in toolbox talks, where biodiversity controls are located on the site. 	Contractor	Pre- construction	Biodiversity Guidelines, Guide 1
B3	Encountering fauna	A suitably qualified ecologist or experienced wildlife handler would be engaged to survey and handle any fauna.	Contractor	Construction	Biodiversity Guidelines, Guide 6
B4	Weed management	<p>Weed management will occur in accordance with Biodiversity Guidelines, Guide 6 (Roads and Maritime, 2016) and include:</p> <ul style="list-style-type: none"> the Identification of weeds on site (confirmed during pre-clearing survey) weed management priorities and objectives Exclusion zones, protected habitat features and revegetation areas prior to starting work within or directly next to the site the location of weed infested areas weed control methods measures to prevent the spread of weeds, including machinery hygiene procedures and disposal requirements a monitoring program to measure the success of weed management communication with local Council noxious weed representative. 	Contractor	Construction	
B5	Spreading of diseases affecting plants	Management measures will be implemented to control and/or prevent the introduction and/or spread of disease-causing agents such as bacteria and fungi in accordance with the Biodiversity Guidelines, Guide 7 (Roads and Maritime, 2016).	Contractor	Construction	Biodiversity Guidelines, Guide 7
B6	Unexpected threatened species finds	If unexpected flora or fauna are discovered on site stop work immediately and implement the Roads and Maritime Unexpected Threatened Species Find Procedure in the Biodiversity Guidelines, Guide 1 (Roads and Maritime 2016).	Contractor	Construction	Biodiversity Guidelines, Guide 1

Transport
for NSW

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
B7	Spread of weeds	Reuse of topsoil free from weeds or pathogens would be used as part of habitation/landscaping works, where reasonable and feasible.	Contractor	Construction	
B8	Loss of trees	The loss of trees due to the proposal will be offset in accordance with the Tree and Hollow Replacement Guideline (Transport 2022)	Contractor	Construction	Tree and Hollow Replacement Guideline
B9	Minimise risks to native flora and fauna during construction	Protect trees nominated for retention in line with Australian Standard AS 4970-2009 Protection of Trees on Development Sites (Standards Australia, 2010). Exclusion zones will be established in area of construction and ancillary sites and identified in CEMP. Vehicle parking, machinery, construction compounds and material stockpiles will be located in cleared or disturbed areas.	Contractor	Construction	AS 4970-2009 Protection of Trees on Development Sites
B10	Protect native flora and fauna, minimise edge effects and avoid inadvertent impacts	Site-specific training will be given to personnel when working in the vicinity of areas of identified biodiversity value that are to be protected.	Contractor	Construction	
GSC1	Erosion and sediment control	A site specific Erosion and Sediment Control Plan/s will be prepared and implemented in accordance with the Managing Urban Stormwater: Soils and Construction, Volume 1 and 2 (Landcom 2004) as part of the Soil and Water Management Plan	Contractor	Detailed design / Pre-construction	Managing Urban Stormwater: Soils and Construction, Volume 1 and 2
GSC2	Accidental spill	A site-specific emergency spill plan will be developed and include spill-management measures in accordance with the Transport <i>Code of Practice for Water Management</i> (RTA, 1999) and relevant EPA guidelines. The plan will address measures to be implemented in the event of a spill, including initial response and containment, notification of emergency services and relevant authorities (including Transport EPA officers).	Contractor	Detailed design / Pre-construction	Code of Practice for Water Management
GSC3	Acid sulphate soils	Acid Sulphate soil management plan would be included as part of the CEMP. This management plan would include the safe management, treatment and transportation of any material deemed to be of acid sulphate soil risk and would include training and induction for all workers.	Contractor	Detailed design / Pre-construction	
GSC4	Removal of excavated material	Classify all waste material excavated and removed from the proposal area in accordance with the NSW Waste Classification Guidelines (EPA, 2004)	Contractor	Pre-construction	NSW Waste Classification Guidelines
GSC5	Existing condition of ancillary sites	Undertake a pre-construction land assessment prior to land being used for ancillary construction purposes (compounds, storage, parking, etc) to identify the presence of any pre-existing wastes or stored materials. The assessment should be prepared in accordance with the Transport for NSW Management of road construction and maintenance wastes (Roads and Maritime Services, 2016).	Contractor	Pre-construction	NSW Management of road construction and maintenance wastes

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
GSC6	Soil and water	<p>A Soil and Water Management Plan (SWMP) will be prepared and implemented as part of the CEMP. The SWMP will identify all reasonably foreseeable risks relating to soil erosion and water pollution and describe how these risks will be addressed during construction.</p> <p>The SWMP would include:</p> <ul style="list-style-type: none"> • stockpile management plan • dewatering plan which includes process for monitoring flocculants and dewatering water from site • a process to routinely monitor the Bureau of Meteorology weather forecast • preparation of a wet weather (rain event) plan which includes a process for monitoring potential wet weather and identification of controls to be implemented in the event of wet weather. • inspection and maintenance schedule for ongoing maintenance of temporary and permanent erosion and sediment controls. <p>The SWMP will address:</p> <ul style="list-style-type: none"> • transport for NSW Code of Practice for Water Management • the Blue Book- Managing Urban Stormwater: Soils and Construction, Volume 1 and 2 transport for NSW Technical Guideline – Temporary Stormwater Drainage for Road Construction. 	Contractor	Pre-construction	<p>NSW Code of Practice for Water Management</p> <p>Blue Book- Managing Urban Stormwater: Soils and Construction, Volume 1 and 2 transport for NSW Technical Guideline – Temporary Stormwater Drainage for Road Construction</p>
GSC7	Contaminated land	<p>If contaminated areas are encountered during construction, appropriate control measures, as detailed in the CEMP, will be implemented to manage the immediate risks of contamination. All other works that may impact on the contaminated area will cease until the nature and extent of the contamination has been confirmed and any necessary site-specific controls or further actions identified in consultation with the Transport for NSW Senior Manager Environment and Sustainability and/or EPA.</p>	Contractor	Construction	
GSC8	Soil and water	<p>All stockpiles would be designed, established, operated and decommissioned in accordance with the Transport for NSW Stockpile Management Procedures.</p>	Contractor	Construction	Transport for NSW Stockpile Management Procedures
GSC9	Soil and water	<p>Controls would be implemented at construction zones exit points to minimise the tracking of material onto the road.</p>	Contractor	Construction	
SE1	Community engagement	<p>A Community and Stakeholder Engagement Plan (CSEP) will be prepared and will include:</p>	Transport	Pre-construction	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
		<ul style="list-style-type: none"> procedures and mechanisms that would be implemented in response to the key social impacts identified for the proposal procedures and mechanisms that would be used to engage with affected landowners, business owners, and the wider community to identify potential access, parking, business visibility, and other impacts and develop appropriate management measures procedures to keep the community informed about construction and any associated changes to conditions (e.g., detours or lane closures) such as through advertisements in local media and advisory notices or variable message signs procedure for the management of complaints and enquiries, including a contact name and number for complaints. 			
SE2	Community notification of work	Notify local residents and potentially affected businesses before the work starts regarding the timing, duration and likely impact of construction activities., including interruptions to utility services.	Contractor	Pre- Construction/ Construction	
SE3	Proposal communication	<p>A Community Liaison Management Plan will be prepared and implemented as part of the CEMP to help provide timely and accurate information to the community during construction. The Community Liaison Management Plan will include (as a minimum):</p> <ul style="list-style-type: none"> mechanisms to provide details and timing of proposed activities to affected residents, including changed traffic and access conditions. contact name and number for complaints. 	Contractor	Detailed design / Pre-construction	
SE4	Access	Access to bus stops will be maintained during construction. Where changes to access arrangement are necessary, the contractor will advise those impacted.	Contractor	Pre-construction	
AH1	Aboriginal heritage	<p>The Transport <i>Unexpected Heritage Items Procedure</i> (Transport 2022) will be followed in the event that an unknown or potential Aboriginal object/s, including skeletal remains, is found during construction. This applies where Transport does not have approval to disturb the object/s or where a specific safeguard for managing the disturbance (apart from the Procedure) is not in place.</p> <p>Work will only re-commence once the requirements of that Procedure have been satisfied.</p>	Contractor	Detailed design / Pre-construction	Unexpected Heritage Items Procedure
AQ1	Air quality	Consideration would be made in the CEMP for air quality impacts to include the following:	Contractor	Detailed design / Pre-construction	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
		<ul style="list-style-type: none"> potential sources of air pollution (including site compound operation) air quality management objectives consistent with any relevant published EPA guidelines mitigation and suppression measures to be implemented methods to manage work during strong winds or other adverse weather conditions. the AQMP will include the following requirements: plant and equipment will be maintained in good condition and in accordance with manufactures specifications plant and machinery will be turned off when not in use work activities will be reprogrammed if the management measures are not adequately restricting dust generation. 			
AQ2	Air quality	Work would halt during dust emitting activities if strong winds or weather occur.	Contractor	Construction	
W1	Waste management	<p>Prepare and implement a design resource plan. As a minimum, the plan is to include the following information:</p> <ul style="list-style-type: none"> quantities and type of materials that will be produced by the project steps taken during detailed design to minimise the generation of material (such as excavated material) how the design maximises the on-site reuse of any excavated materials how detailed design maximises the opportunities for the use of recycled materials (ensuring that the material are fit for purpose and meet engineering performance standards) details of the quantities and type materials that cannot be reused onsite. 	Contractor	Detailed design / Pre-construction	
W2	Waste management	<p>A Waste Management Plan (WMP) will be prepared and implemented as part of the CEMP. The WMP will include but not be limited to:</p> <ul style="list-style-type: none"> measures to avoid and minimise waste associated with the project classification of wastes and management options (re-use, recycle, stockpile, disposal) statutory approvals required for managing both on and off-site waste, or application of any relevant resource recovery exemptions procedures for storage, transport and disposal 	Contractor	Detailed design / Pre-construction	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
		<ul style="list-style-type: none"> • monitoring, record keeping and reporting. 			
W3	Waste	<p>The following resource management hierarchy principles will be followed:</p> <ul style="list-style-type: none"> • avoid unnecessary resource consumption as a priority • avoidance will be followed by resource recovery (including reuse of materials reprocessing and recycling and energy recovery • disposal will be undertaken as a last resort (in accordance with the <i>Waste Avoidance and Resource Recovery Act 2001</i>). 	Contractor	Detailed design / Pre-construction	
W4	Waste	<p>Housekeeping at construction sites will be addressed regularly. This will include collection and sorting of recycling, general waste and green waste. Waste will be disposed regularly at a licensed waste facility or recycling facility where available.</p>	Contractor	Construction	
HR1	Hazards and risks	<p>A Hazard and Risk Management Plan (HRMP) will be prepared and implemented as part of the CEMP. The HRMP will include, but not be limited to:</p> <ul style="list-style-type: none"> • details of hazards and risks associated with the activity • measures to be implemented during construction to minimise these risks • record keeping arrangements, including information on the materials present on the site, material safety data sheets, and personnel trained and authorised to use such materials • a monitoring program to assess performance in managing the identified risks • contingency measures to be implemented in the event of unexpected hazards or risks arising, including emergency situations. • the HRMP will be prepared in accordance with relevant guidelines and standards, including relevant Safe Work Australia Codes of Practice and EPA publications. 	Contractor	Construction	Safe Work Australia Codes of Practice
C1	Cumulative construction impacts	<p>The contractor's CEMP would be revised as required to consider potential cumulative impacts from surrounding development activities as they become known.</p>	Contractor	Pre-construction/ Construction	
C2	Cumulative construction impacts	<p>Current and upcoming projects with the potential to interact with the proposal will be monitored. Where potential cumulative impacts are identified, the scheduling of works will be coordinated with interacting projects to minimise potential impacts. This will include:</p>	Transport Project Manager	Pre-construction / Construction	

Transport
for NSW

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
		<ul style="list-style-type: none">• scheduling works to allow suitable respite periods for construction noise• scheduling of works to minimise consecutive construction noise impacts, where feasible.• coordinating lane closures and pedestrian/cyclist diversions to minimise the overall number of occasions where disruption occurs.			

Licensing and approvals

A summary of the licences and approvals required for the proposal is provided in Table 4-2.

Table 4-2: Summary of licensing and approval required

Instrument	Requirement	Timing
Crown Land Management Act 2016 (Division 3.4, 5.5 and 5.6)	Lease or licence to occupy areas of Crown land.	Prior to start of the activity.
Road Occupancy Licence (ROL)	Applications for ROLs would be submitted to Transport's regional traffic management officer	At least 14 days before start of the activity

References

Australia ICOMOS (2013) The Burra Charter.

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Transport for New South Wales (2022d) Unexpected Heritage Items Procedure. Transport for NSW, 2022.

Transport for New South Wales (2022e) Active Transport Strategy. Transport for NSW, 2022.

Transport for New South Wales (2022f) QA Specification G36 – Environmental Protection. Transport for NSW, 2022.

Transport for New South Wales (2023a) Construction Noise and Vibration Guideline. Transport for NSW, 2023.

Transport for New South Wales (2023b) Bridge Aesthetics: Design guideline to improve the appearance of bridges in NSW. Centre for Urban Design, Transport for NSW, 2023.

Transport for New South Wales (2023c) Pedestrian Bridge – across Dobroyd Parade at Waratah Street intersection Review of Environmental Factors. Transport for NSW, 2023.

Transport for New South Wales (2023d) Waste management guideline (EMF-WM-GD-0050). Transport for New South Wales, 2023.

Transport for New South Wales (2023e) Construction Noise and Vibration Guideline (Roads). Transport for New South Wales, 2023.

Appendix A: Pedestrian Bridge – across Dobroyd Parade at Waratah Street intersection REF

Available online:

https://www.transport.nsw.gov.au/system/files/media/documents/2023/Dobroyd-Parade-pedestrian-bridge_Review-of-Environmental-Factors_v4_November-2023.pdf



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