

REF addendum memo

То	, Director Program Management, Infrastructure and Place
From	, Senior Environment & Sustainability Manager, Assets and Operations
Cc	, Senior Project Manager, Infrastructure and Place
Priority	ROUTINE
Date	06/05/2025
Subject	Review of environmental factors addendum memo for Bridge Road Cycleway
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Proposed modification

Modification to the Bridge Road Cycleway review of environmental factors (REF).

Background

Transport for NSW (Transport) previously prepared a Review of Environmental Factors (REF) for the *Bridge Road Cycleway* project (referred to as the project REF), which was determined on 14 March 2022. The project comprises converting the existing temporary cycleway on Bridge Road/Pyrmont Bridge Road into a permanent cycleway. The cycleway was initially installed as a pop-up temporary cycleway for the community during COVID-19. The existing cycleway starts at Pyrmont Bridge Road near Lyons Road in Camperdown and continues onto Bridge Road until Taylor Street in Glebe. Since the determination of the project REF, it was subsequently identified during detailed design that several new design features were required to address safety issues, meet design standards, and respond to feedback received as part of community consultation. Transport therefore prepared an Addendum REF to assess these features which was determined on 9 May 2024.

Following awarding of the construction contract to the preferred tenderer, further proposed modifications have been identified related to the construction methodology which are subject of this REF addendum memo.



Purpose

The purpose of this memo is to:

- Describe the proposed modification.
- Document and assess the likely impacts of the proposed modification on the environment.
- Detail protective measures to be implemented.
- Document the recommendation of the Transport Senior Manager Environment and Sustainability (SMES) and the decision by the Transport delegated manager whether or not to determine the modification to the project.

This memo is an addendum to and is to be read in conjunction with the following documents:

- Bridge Road Cycleway review of environmental factors (determined on 14 March 2022)
- Bridge Road Cycleway addendum review of environmental factors (determined on 9 May 2024).

Description and need of proposed modification

The determined Project REF and Addendum REF nominated the following out of hours works subject to a Road Occupancy Licence (ROL):

- Night work hours: 8:00pm to 5:00am, Sunday to Thursday
- No work on public holidays.

Due to high traffic volumes in the area and the need to close lanes during construction, night works would be necessary to minimise traffic disruptions and maintain the safety of construction staff. It is therefore expected that most of the work would be undertaken outside of standard construction hours as per above nominated working hours.

However, following awarding of the construction contract, it has been proposed to also undertake some weekend works and some works during standard hours. The proposed modification is required for construction efficiency as it would allow to do trenching and asphalting works in longer lengths rather than short patches. Carrying out some of the work on weekends would allow to complete some activities faster and minimise the overall number of weekday night shifts (subject to weather conditions).

It is proposed to work up to six weekends through the construction period and weekend works are expected to be undertaken as follows (subject to ROL and weather conditions):

Weekend works: 7:00am Saturday to 5:00am Monday.

It is also proposed to undertake some works (mostly on side streets) during standard construction hours) as follows:

- Monday to Friday: 7am to 6pm
- Saturdays: 8am to 1pm.

Consultation

The community would be informed of the work schedules in the form of a project notification at least five working days prior the start of works. The Community would be provided with an email address and phone number to raise any concern regarding the work schedule.



Impact assessment

This section of the addendum REF provides a description of the potential environmental impacts associated with the proposed modification. All relevant aspects of the environment potentially affected by the proposed modification are considered. Site-specific safeguards are provided to ameliorate the identified potential impacts.

Attachment A addresses the environmental factors specified in section 171 of the *Environmental Planning and Assessment Regulation 2021* and matters of national environmental significance under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Traffic, transport and access

A qualitative assessment of potential traffic, transport and access impacts was undertaken as part of the determined Project REF and Addendum REF. In addition to the impacts previously identified, the proposed modification would require temporary detour routes for vehicular traffic including buses during proposed weekend construction works. Cyclist would need to dismount and walk on the footpath or use detour routes.

For weekend works occurring on Bridge Road between Lyons Road and Ross Street, it is expected that traffic traveling eastbound would need to detour via Lyons Road, Parramatta Road and Ross Street back into Bridge Road. Westbound traffic would be still allowed through this section of Bridge Street with traffic controls in place, refer to Figure 1 for further detail.

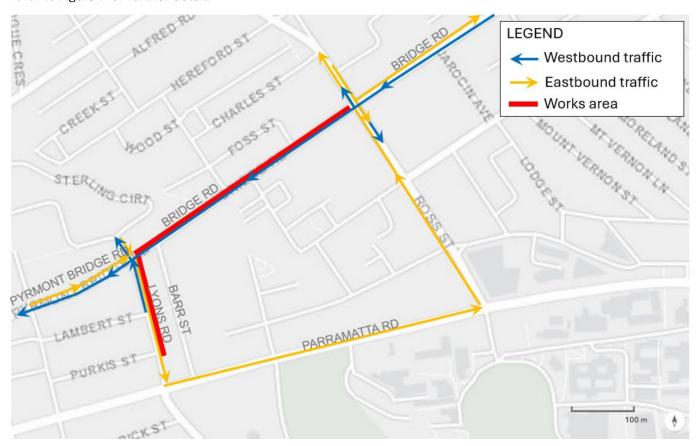


Figure 1 Expected detour route for weekend works on Bridge Road between Lyons Road and Ross Street

When proposed weekend works are being undertaken on Bridge Road between Ross Street and Glebe Point Road, it is expected that westbound traffic would need to detour via Glebe Point Road, St John Street and Ross Street back to Bridge Road. For this section of Bridge Road, eastbound traffic wouldn't need to detour during weekend works as shown in Figure 2.





Figure 2 Expected detour route for weekend works on Bridge Road between Ross Street and Glebe Point Road

Up to six weeks of weekend works are proposed throughout the construction duration that would require detours and lane closures. This would result in temporary minor impacts on travel times for all road users (including buses and cyclists) and inconvenience for residents and businesses.

Property access for residents and businesses would generally be maintained throughout construction. Should any temporary interruptions occur, this would be done with prior notification and in advance agreement with the property owner or resident, wherever practicable.

Noise and vibration

Assessment of construction noise was undertaken as part of the determined Project REF (March 2022) and the determined Addendum REF (May 2024). The assessment was undertaken for the noisiest construction scenario which was determined to be the 'Profiling'. The assessment identified nearby sensitive receivers, characterised background noise conditions and assessed quantitatively the potential construction noise impacts, recommending suitable management measures to minimise impact during construction.

Construction noise has been sufficiently assessed in the determined Project REF and Addendum REF and still applicable to the proposed modification as the assessment was undertaken for the worse case scenario. The proposed modification would not increase the noisiest scenario and therefore the construction noise impacts previously identified are still applicable. The proposed modification would result on some noise impacts during the day and on the weekend for residential and commercial receivers. Predicted construction noise levels are expected to be less intrusive during day time and noise impacts would be temporary as works move along the road corridor. The proposed modification is expected to minimise the overall number of weekday night shifts (subject

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to weather conditions). Safeguards for construction noise proposed in the determined Project REF and Addendum REF are applicable for the proposed modification and no additional safeguards are required.

No operational noise impacts are expected as a result of the proposed modification and no additional safeguards are required.

Vibration impacts are sufficiently assessed in the determined Project REF and determined Addendum REF and no additional safeguards are required.

Socio-economic

The proposed modification would undertake some weekend and standard hours construction works which may create some inconvenience to local residents and businesses that are opened at these times due to noise, vibration, visual and traffic and access impacts. Weekend works would be limited to six weekends and standard hours works would be generally undertaken on side streets. These construction impacts are temporary and minimal as discussed in the respective sections of this addendum REF memo.

Cumulative impacts

The New Sydney Fish Market project is currently under construction and would take place at the same time as the proposed modification. As part of the New Sydney Fish Market project, works will be undertaken along a section of Bridge Road, between Wattle Street and Wentworth Park Road to streamline traffic management in the local area and improve road safety. The construction of the New Fish Market project is generally undertaken during standard hours on weekdays and on some weekends.

The proposed modification would require some works during standard hours (mostly on side streets i.e. Lyons Road, Railway Street and Darling Street) as well as up to six weekends of works. Therefore, there is potential cumulative construction impacts as a result to the proposed modification. In addition, there is potential for construction fatigue for some nearby receivers from the ongoing works that have been progressing for the Sydney Fish Market redevelopment followed by construction of the proposed modification. The proposed modification may potentially increase the cumulative impacts related to traffic and noise during standard hours and weekends for some residents and businesses, especially for those closer to the New Fish Market project. However, the overall number of nigh shifts is expected to be minimised by the proposed modification and therefore would minimise the overall disruption to the community. Transport and the contractor would review the potential for cumulative impacts and mitigation measures in place in accordance with the cumulative impacts safeguard specified previously in the Project REF and the additional safeguard included below.

Other impacts

The proposed modification may have other environmental impacts which are expected to be nil or negligible, these are included in Table 1 below.

Table 1 Other environmental impacts of the proposed modification

Environmental issue	Potential impacts
Visual impacts	The proposed modification would require some works on weekends and during standard hours on side streets that may extend the minor visual impacts identified in the determined Project REF and Addendum REF further into these times. However, it is considered that the visual impacts are sufficiently assessed in the determined Project REF and Addendum REF and no additional safeguards are required.
Non-Aboriginal heritage	No further impacts are expected as a result of the proposed modification and no additional safeguards are required.
Biodiversity	No further impacts are expected as a result of the proposed modification and no additional safeguards are required.



Environmental issue	Potential impacts
Waste	No further impacts are expected as a result of the proposed modification and no additional safeguards are required.
Air quality	The proposed modification would require some works on weekends and during standard hours on side streets that may extend the minor air quality impacts identified in the determined Project REF and Addendum REF further into these times. However, it is considered that air quality impacts are sufficiently assessed in the determined Project REF and Addendum REF and no additional safeguards are required.
Water quality and flooding	No further impacts are expected as a result of the proposed modification and no additional safeguards are required.
Soil and contamination	No further impacts are expected as a result of the proposed modification and no additional safeguards are required.
Aboriginal heritage	No further impacts are expected as a result of the proposed modification and no additional safeguards are required.

Summary of additional or revised safeguards

A summary of additional or revised safeguards are included in the table below. A complete list of safeguards as amended is provided in Attachment B.

Safeguards	
Cumulative impacts	CMT2 Construction works are to be coordinated with the New Fish Market works in order to minimise cumulative traffic and noise impacts.

Licences, permits or approvals

All relevant licenses, permits, notifications and approvals needed for the Bridge Road Cycleway project and when they need to be obtained are listed in the Bridge Road Cycleway REF (determined on 14 March 2022) and Bridge Road Addendum REF (determined on 9 May 2024). The proposed modification would require a ROL (under the Roads Act 1993) in order to temporarily close the road and cycleway. The ROL would need to be acquired prior to the start of construction.

Conclusion

All relevant safeguards identified in the Bridge Road Cycleway REF (determined on 14 March 2022) and Bridge Road Addendum REF (determined on 9 May 2024) would be applied to this work. Additional safeguards have been identified as set out in this memo.

Division 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) applies to the proposed modification. The proposed modification has been reviewed in the context of the Bridge Road Cycleway REF (March 2022) and Bridge Road Addendum REF (determined on 9 May 2024) and considered against the requirements of sections 5.5 and 5.7 of the EP&A Act.

In considering the proposed modification this assessment has examined and taken into account to the fullest extent possible, all matters affecting or likely to affect the environment by reason of that activity as addressed in

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this memo, and associated information. This assessment is considered to be in accordance with the factors specified in section 171 of the Environmental Planning and Assessment Regulation 2021.

The Bridge Road Cycleway project including the proposed modification described in this memo will have some environmental impacts which can be ameliorated satisfactorily. Having regard to the safeguards and management measures proposed, it is considered that the expected environmental impacts are unlikely to be significant and an environmental impact statement is not required under Division 5.2 of the EP&A Act.

The assessment has considered the potential impacts of the activity on the biodiversity values listed under the *Biodiversity Conservation Act 2016* and the *Fisheries Management Act 1994*.

The Bridge Road Cycleway project including the proposed modification described in this memo will not significantly affect biodiversity values listed under the *Biodiversity Conservation Act 2016*. Therefore, the concurrence of the Coordinator General of the Environment and Heritage Group of Department of Planning and Environment and a species impact statement or a Biodiversity Development Assessment Report (BDAR) is not required.

In addition to the above, the assessment considered the effect of the activity on:

- Conservation agreements under the National Parks and Wildlife Act 1974.
- Plans of management under the National Parks and Wildlife Act 1974.
- Biodiversity stewardship sites under the Biodiversity Conservation Act 2016.
- Wilderness areas under the Wilderness Act 1987.

The assessment has also addressed the potential impacts of the activity on matters of national environmental significance and any impacts on the environment of Commonwealth land and concluded that there will be no significant impacts. Therefore, there is no need for a referral to be made to the Australian Government Department of Climate Change, Energy, the Environment and Water for a decision by the Australian Minister for the Environment on whether assessment and approval is required under the EPBC Act or for application of the EPBC Act strategic assessment for Transport activities assessed under Part 5 of the EPBC Act.

This memo is considered to be of adequate quality and meets all relevant requirements.

The proposed modification has been characterised in the context of the Bridge Road Cycleway project and is considered to be consistent with that project's objectives and key features. While the proposed modification would increase the overall environmental impacts of the determined project, it is substantially the same as the activity described and assessed in the determined REF and does not constitute an entirely new activity.

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Certification

This memo provides a true and fair description of the scope and potential impacts of the proposal to modify the Bridge Road Cycleway project to undertake works on weekends and during weekday standard construction hours.

Prepared by:



Senior Environment and Sustainability Officer, Assets and Operations

Transport for NSW

06/05/2025

Reviewed by:

07/05/2025

Senior Project Manager, Infrastructure and Place

Transport for NSW



Recommendation

It is recommended that the proposal to modify the Bridge Road Cycleway project to undertake works on weekends and during weekday standard construction hours as described in this memo proceed subject to the implementation of all safeguards and management measures identified in this memo and in the Bridge Road Cycleway REF (determined on 14 March 2022) and Bridge Road Addendum REF (determined on 9 May 2024) and compliance with all other relevant statutory approvals, licences, permits and authorisations. Consideration of this proposed modification has examined and taken into account, to the fullest extent possible, all matters likely to affect the environment by reason of the activity in accordance with the EP&A Act, EP&A Regulation and the Guidelines approved under clause 170 of the EP&A Regulation. It is established that the activity is not likely to significantly affect the environment. The memo has concluded that there will be no significant impacts on matters of national environmental significance or the environment of Commonwealth land.



Transport Senior Manager Environment and Sustainability, Assets and Operations

Transport for NSW

Decision statement

In accordance with the above recommendation, I certify that I have reviewed and endorsed the contents of this addendum memo, and to the best of my knowledge, it is in accordance with the EP&A Act, the EP&A Regulation and the Guidelines approved under Section 170 of the EP&A Regulation, and the information is neither false nor misleading.

Determined by:



Director Program Management, Infrastructure and Place

Transport for NSW

Date: 8/5/25

Attachments

Attachment A – Section 171 EP&A Regulation checklists and Matters of National Environmental Significance

Attachment B - Complete list of safeguards

Attachment C - Bridge Road Cycleway REF (determined on 14 March 2022)

Attachment D - Bridge Road Addendum REF (determined on 9 May 2024)

Please return this paperwork to:

Attachment A: Consideration of State and Commonwealth environmental factors

Environmental Planning and Assessment Regulation 2021 section 171(2) checklist

The following factors, listed in section 171(2) of the Environmental Planning and Assessment Regulation 2021, have been considered to assess the likely impacts of the proposal on the natural and built environment. This consideration is required to comply with sections 5.5 and 5.7 of the EP&A Act.

Factor	Description of impact	Duration and extent
(a) Environmental impact on a community.	There would be some impacts on the community during construction, including traffic and transport, noise and vibration, and cumulative impacts. These are described in the respective sections of this REF addendum memo. Safeguards have been proposed to manage and mitigate these impacts, and the community would be notified of construction activities planned prior to and during construction.	Refer to impact assessment section
(b) The transformation of a locality.	There would be no transformation of the locality under the proposed modification.	Nil
(c) Environmental impact on the ecosystems of a locality.	There would be no further environmental impact on the ecosystems of a locality under the proposed modification.	Negligible
(d) Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality.	There would be no reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality under the proposed modification.	Negligible
(e) Any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations.	There would be no effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations as a result of the proposed modification.	Nil
(f) Any impact on habitat of any protected animals (within the meaning of the <i>Biodiversity</i>	There would be no impact on habitat of any protected animals under the proposed modification	Nil

Conservation Act 2016).		
(g) Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air.	The proposed modification would not endanger any species	Nil
(h) Any long-term effects on the environment.	There would be no further long-term effects on the environment as a result of the proposed modification.	Negligible
(i) Any degradation of the quality of the environment	During construction there would be temporary noise pollution as a result of the proposed modification that will be minimized with the implementation of safeguards. The proposed modification is expected to minimize the total number of night shifts (subject to weather conditions).	Negligible
(j) Any risk to the safety of the environment.	The proposed modification does not pose a risk to the safety of the environment.	Nil
(k) Any reduction in the range of beneficial uses of the environment.	The proposed modification is not expected to reduce further the range of beneficial uses of the environment in which it is located.	Negligible
(l) Any pollution of the environment.	During construction there would be temporary noise pollution as a result of the proposed modification that will be minimized with the implementation of safeguards. The proposed modification is expected to minimize the total number of night shifts (subject to weather conditions).	Negligible
(m) Any environmental problems associated with the disposal of waste.	There are no environmental problems associated with the disposal of waste under the proposed modification.	Nil
(n) Any increased demands on resources, natural or otherwise which are, or are likely to become, in short supply.	The proposed modification would not result in an increase in demand of resources that are, or likely to become, in short supply.	Nil
(o) The cumulative environmental effect with other existing or likely future activities.	The proposed modification may potentially increase the cumulative impacts related to traffic and noise during standard hours and weekends for some residents and businesses, especially for those closer to the New Fish Market project. However, the overall number of nigh shifts is expected to be minimised by the proposed modification and therefore would minimise the overall disruption to the community.	Minor, short term

(p) Any impact on coastal processes and coastal hazards, including those under projected climate change conditions.	There would be no impact on coastal processes or coastal hazards as a result of the proposed modification.	Nil
(q) Applicable local strategic planning statements, regional strategic plans or district strategic plans made under the Act, Division 3.1.	• N/A	N/A

Matters of National Environmental Significance

Environmental factor	Impact
Any impact on a World Heritage property? N/A	Nil
Any impact on a National Heritage place? N/A	Nil
Any impact on a wetland of international importance (often called 'Ramsar' wetlands)? N/A	Nil
Any impact on nationally threatened species, ecological communities or migratory species? N/A	Nil
Any impact on a Commonwealth marine area? N/A	Nil
Does the proposal involve a nuclear action (including uranium mining)? N/A	Nil
Additionally, any impact (direct or indirect) on the environment of Commonwealth land? N/A	Nil

Attachment B: Complete list of safeguards

Environmental safeguards for the Bridge Road Cycleway project are listed below. Additional safeguards identified in this addendum minor works REF memo are included in bold and italicised font. The safeguards will be incorporated into the CEMP and implemented during construction and operation of the proposed modification, should it proceed. These safeguards will minimise potential adverse impacts arising from the proposed works on the surrounding environment.

	Impact General - minimise	Environmental safeguards and management measures A CEMP will be prepared and submitted for review and endorsement of the Transport for NSW	Responsibility	Timing Pre-construction /
ס פֿ ס	during construction	As a minimum, the CEMP will address the following: • 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. The endorsed CEMP will be implemented during the undertaking of the activity.	for NSW project manager	detailed design
0	General - notification	All businesses, residential properties and other key stakeholders (e.g. schools, local councils) affected by the activity will be notified at least seven <i>calendar</i> days prior to commencement of the activity.	Contractor /Transport for NSW project manager	Pre-construction
0 10	General – environmental awareness	All personnel working on site will receive training to ensure awareness of environment protection requirements to be implemented during the project. This will include up-front site induction and regular "toolbox" style briefings. Site-specific training will be provided to personnel engaged in activities or areas of higher risk. These include identification of sensitive receivers.	Contractor / Transport for NSW project manager	Pre-construction / detailed design
'	Traffic and transport	According to Section 4.8 of QA G36 Environment Protection, a Traffic Management Plan (TMP) will be prepared and implemented as part of the CEMP for construction works. The TMP will be prepared in accordance with the Transport for NSW <i>Traffic Control at Work Sites Manual</i> (RTA, 2010) and QA Specification G10 Control of Traffic (Transport for NSW, 2008). The TMP will include: • Measures to maintain access to local roads and properties	Contractor	Detailed design/Pre- construction

		 Site specific traffic control measures (including signage) to manage and regulate traffic movement Measures to maintain pedestrian and bike rider access Requirements and methods to consult and inform the local community of impacts on the local road network 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. 		
TSP2	Traffic and transport	Consultation with emergency service authorities, including NSW Rural Fire Service and Fire Rescue would be undertaken during development of the detailed design.	Transport for NSW	Detailed Design
TSP3	Traffic and transport	Vehicular property access would be maintained, including access to residential properties, schools, places of worship and all commercial premises during construction works. Where property access would have to be temporarily closed during construction: • Property owners would be notified at least seven calendar days prior to the access closure • Alternative access would be provided if available Access closure would be minimised, and access would be returned to the property owners as soon as possible.	Contractor	Construction
TSP4	Traffic and transport	Pedestrian and bike rider access is to be maintained throughout construction. Provision of signposted outlining the pedestrians and bike rider diversion routes would be displayed during construction. There would be advance notification of any construction works that affect pedestrians and bike riders.	Contractor	Construction
TSP5	Traffic and transport	Access to appropriate bus stop locations would be maintained during construction in consultation with bus operators. Ongoing updates on locations and access to bus stops would be provided to the community during construction period to ensure that disruption is minimised.	Contractor	Construction
TSP6	Traffic and transport	Monitoring of roadway and cycleway traffic would be undertaken to track possible congestion impacts and cycleway usage.	Transport for NSW	Operation

VIS1	Visual impacts	Visual coherence with heritage conservation areas aesthetics are to be incorporated into the final design of the safety barriers.	Transport for NSW	Detailed design/Pre- construction
VIS2	Visual impacts	A high level of housekeeping will be maintained by ensuring that the work site is kept in a clean and tidy condition. Waste materials, from construction, will be removed from site.	Contractor	Construction
VIS3	Visual impacts	Klemmfix barriers to be adequately secured to the roadway, until Klemmfix barriers replaced with a more permanent structure, to maintain cycleway visual cleanliness.	Transport for NSW	Operation
VIS4	Visual impacts	Works to be carried out in accordance with Transport for NSW EIA-N04 Guideline for Landscape Character and visual impact assessment.	Transport for NSW and contractor	Pre-construction and construction
VIS5	Visual impacts	Artificial lighting will be directed down and light spill into neighbouring properties minimised where possible.	Contractor	Construction
NSV1	Noise and vibration	As per Section 4.6 of QA G36 Environment Protection, noise impacts are to be minimised in accordance with Transport for NSW's Construction Noise and Vibration Guideline (CNVG).	Contractor	Construction
NSV2	Noise and vibration	All sensitive receivers (local residents) likely to be affected will be notified at least seven (7) calendar days prior to commencement of any works associated with the activity that may have an adverse noise impact. The following mitigation measures will be in place: Notification (N) - Letterbox drops for receivers within a 165 metre radius. Notifications should detail work activities, dates, and hours, impacts and mitigation measures, indication of work schedule over the night-time period (if any), any operational noise benefits from the works (where applicable) and contact telephone number. Notification will be sent a minimum of seven calendar days prior to the start of works. Alternative Accommodation (AA) Alternative accommodation may be considered and offered to residents in close proximity in relation to highly intrusive noise levels during construction works.	Contractor	Pre-construction
NSV3	Noise and vibration	A Construction Noise and a Vibration Management Plan will be prepared and implemented as part of the CEMP. The Noise and Vibration Management Plan will generally follow the approach in the Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009) and identify: All potential noise and vibration generating activities associated with the activity Feasible and reasonable mitigation measures to be implemented. 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.	Construction contractor	Pre-construction, construction

	Pre-construction, construction	Pre-construction, construction	Detailed design/Pre- construction	Construction	Detailed design/Pre- construction
	Transport for NSW, contractor	Transport for NSW, contractor	Contractor	Contractor	Transport for NSW
Contingency measures to be implemented in the event of noncompliance with noise and vibration criteria.	 The following management measures will be implemented: The noisiest activities (jackhammering and sawcutting) cannot be carried out past midnight Noise curtains are to be used for noisiest activities (jackhammering and sawcutting) during OOHW. An out of hours work assessment (OOHWA) is to be prepared prior the start of any out of hours works. No more than five night shifts per week will be permitted during construction. Additional measures will be investigated during construction stages to further minimize out of hours noise impacts. 	The minimum working distances in Table 6-4 (of the addendum REF determined in May 2024) must be complied with for vibration intensive plant and machinery (e.g. vibratory roller). Plant/machinery must be used in static mode (so that it doesn't generate vibration) when applicable minimum distances are unable to be complied with. Where this is not possible, pre-construction vibration monitoring tests will be undertaken to confirm vibration will be below a certain threshold to prevent cosmetic or structural damage. If after applying the above safeguards, the activity doesn't comply with the applicable vibration threshold then the construction methodology will be changed to reach compliance.	In accordance with Section 4.10 of <i>QA G36 Environment Protection</i> , a Non-Aboriginal Heritage Management Plan (NAHMP) will be prepared and implemented as part of the CEMP. It will provide specific guidance on measures and controls to be implemented to avoid and mitigate impacts to Non-Aboriginal heritage.	 In accordance with Section 4.10 of QA G36 Environment Protection The Standard Management Procedure - Unexpected Heritage Items (Transport for NSW, 2015) will be followed in the event that any unexpected heritage items, archaeological remains or potential relics of non-Aboriginal origin are encountered. Work will only re-commence once the requirements of that Procedure have been satisfied. 	Safeguards and management measures for visual impacts will take into account the surrounding heritage landscapes.
	Noise and vibration	Noise and vibration	Non-Aboriginal heritage	Non-Aboriginal heritage	Non-Aboriginal heritage
	NSV4	NCV5	HRG1	HRG2	HRG3

		Further safeguards and management measures related to this effect can be found in Section 6.4.3 of the project REF.		
HRG4	Non-Aboriginal heritage	Continued monitoring of community feedback would be undertaken regarding visual impacts on non-Indigenous heritage items	Transport for NSW	Operation
HRG5	Non-Aboriginal heritage	Consultation with City of Sydney will be undertaken to discuss options for impacting sections of sandstone/trachyte kerb and guttering (e.g. reinstatement of kerbing where practicable or reuse of the material).	Transport for NSW	Pre-construction
HRG6	Non-Aboriginal heritage	To safeguard indirect impact through vibration, mitigation measures will include having rollers on static mode (i.e. emitting no vibration) near heritage items, selection of machinery with lower vibration levels, avoiding the edges of the road by a minimum of 150 millimetres, and compliance with minimum working distances described in Table 6-4 (of the addendum REF determined in May 2024) for vibration intensive plant and machinery. In the event that the minimum working distances are unable to be complied with, further mitigation measures should then include pre-construction vibration monitoring. If readings are below vibration thresholds, then work can continue with caution. If readings exceed vibration thresholds, then a change of construction method/process will be implemented to reduce vibration to the necessary levels. In the event that the minimum working distances and safe vibration thresholds cannot be met, specialist advice should be sought from a structural engineer to advise on appropriate mitigation and management measures	Contractor	Pre-construction and construction
HRG7	Non-Aboriginal heritage	Impacts to the State significant Pyrmont and Glebe Railway Tunnel (including brick piers and overbridge across Bridge Road) must be avoided by appropriate mitigation and management measures such as: The use of hand-held tools only within one metre of the pier Expert supervision and the application of protective installation/s (e.g. protective foam).	Transport for NSW and contractor	Pre-construction and construction
HRG8	Non-Aboriginal heritage	All workers will be made aware of their responsibilities in avoiding impacts on heritage through a toolbox presentation that includes the findings of the heritage assessment (refer Appendix D <i>of the addendum REF determined in May 2024</i>).	Contractor	Pre-construction, construction
HRG9	Non-Aboriginal heritage	Tree trimming will not occur within the heritage curtilage of any heritage-listed item.	Transport for NSW and contractor tor	Pre-construction, construction
HRG10	Non-Aboriginal heritage	If the level of impact or methodology for these works changes and there is a risk that the proposed works will impact upon the brick pier that forms part of the significant fabric of the	Transport for NSW and construction contractor	All stages

	All stages	All stages	Detailed design / preconstruction and construction	Pre-construction and construction	Pre-construction and construction	Construction	Operation
	Transport for NSW and construction contractor	Transport for NSW and construction contractor	Contractor	Transport for NSW	Contractor	Contractor	Transport for NSW
State heritage listing (SHR item 01225), further assessment would be required and a section 60 permit under the <i>Heritage Act 1977</i> may need to be sought.	New signage proposed for new locations must be constrained within the road corridor, kept away from identified heritage items and not affixed to adjacent buildings or structures, with further investigation required if impacts beyond that are proposed.	The proposal must be carried out in accordance with the conditions attached to the Exemption from approval under s57(2) of the Heritage Act 1977 (refer to Appendix E of the addendum REF determined in May 2024).	 A Communication Plan (CP) will be prepared and implemented as part of the CEMP to help provide timely and accurate information to the community during construction. The CP will include (as a minimum): Mechanisms to provide details and timing of proposed activities to affected residents, including changed traffic and access conditions Contact name and number for complaints. The CP will be prepared in accordance with the Community Involvement and Communications Resource Manual (RTA, 2008). 	All businesses, and residences likely to be affected by the proposed works must be notified in writing at least seven working calendar days prior to the commencement of the proposed construction activities. The Notification letter would include (as a minimum): • Contact name and phone number • Working hours and proposed construction period • Complaints process.	Road users, pedestrians and bike riders would be informed of changed conditions, including likely disruptions to access during construction.	Fencing with material attached (e.g. shade cloth) would be provided around the construction compounds and other areas to screen views from adjoining properties.	Continued monitoring of community feedback would be undertaken relating to the ongoing operation of the cycleway.
	Non-Aboriginal heritage	Non-Aboriginal heritage impacts	Socio-economic	Socio-economic	Socio-economic	Socio-economic	Socio-economic
	HRG11	HRG12	SOE1	SOE2	SOE3	SOE4	SOE5

Detailed design / preconstruction and construction	Pre-construction and construction	Construction	Construction	Pre-construction, construction	Pre-construction, construction	Pre-construction, construction	Pre-construction, construction
Contractor	Transport for NSW	Contractor	Contractor	Contractor	Contractor	Contractor	Transport for NSW and contractor
Existing access for nearby and adjoining properties is to be maintained at all times during the works unless otherwise agreed to by the affected property owner.	The CEMP would be revised to consider potential cumulative impacts from surrounding development activities as they become known. This would include a process to review and update mitigation measures as new works begin or if complaints are received. If required, the project manager would prepare a Community Liaison Management Plan which would include consultation with proponents other nearby projects to: Increase awareness of construction timeframes and impacts Coordinate impact mitigation and management (e.g. respite periods).	Construction works are to be coordinated with the New Fish Market works in order to minimise cumulative traffic and noise impacts.	If Aboriginal heritage items are uncovered during the works, all works in the vicinity of the find must cease and the Transport for NSW Aboriginal cultural heritage officer and regional environment manager contacted immediately. Steps in the Transport for NSW <i>Standard Management Procedure: Unexpected Heritage Items</i> must be followed.	If unexpected threatened fauna or flora species are discovered, stop works immediately and follow the Transport for NSW Services <i>Unexpected Threatened Species Find Procedure</i> in the <i>Biodiversity Guidelines 2011 — Guide 1 (Pre-clearing process</i>).	Standard tree protection zones will be implemented as described in AS 4970-2009 (Australian Standard, 2010).	Tree trimming must be limited to no more than 10% of the overall tree canopy volume. All tree trimming work is to be carried out by an arborist with a minimum AQF Level 3 qualification in Arboriculture, in accordance with AS4373 Pruning of Amenity Trees, and the NSW WorkCover Code of Practice for the Amenity Tree Industry (1998). Pruning of mature trees is to be in accordance with Part 5 of the Australian Standard 4373-2007 Pruning of amenity trees.	If it is identified that construction is required to occur within a TPZ a qualified arborist will be consulted to advise how the design may be revised to avoid impact to the tree. Should this not be possible, and construction within a TPZ is still required, an arborist will be required to supervise and document the works.
Socio-economic	Cumulative impacts	Cumulative impacts	Aboriginal heritage	Biodiversity	Biodiversity	Biodiversity	Biodiversity
SOE6	CMT1	СМТ2	AHER1	BIO1	BI02	BIO3	BI04

Pre-construction, construction	Construction	Construction	Construction	Construction	Detailed design / Pre-construction	Pre-construction
Contractor	Contractor	Contractor	Contractor	Contractor	Contractor	Contractor
Prior to tree trimming, fauna spotting shall be undertaken by a qualified person to check that fauna species are not present. Fauna handling must be carried out in accordance with the requirements the Transport for NSW Biodiversity Guidelines - Guide 9 (Fauna Handling).	 The management measures would include but not limited to the following: Vehicles transporting waste or other materials that have a potential to produce odours or dust are to be covered during transportation. Dust would be suppressed on stockpiles and unsealed or exposed areas using methods such as water trucks, temporary stabilisation methods, soil binders or other appropriate practices. Plant, vehicles and equipment would be maintained in good condition and in accordance with manufacturer's specifications. Plant and machinery would be turned off when not in use Using mains electricity or battery powered equipment instead of diesel- or petrol-powered generators where practicable Using lower emissions plant and equipment where feasible and reasonable. 	Any material transported onto pavements would be swept and removed at the end of each working shift and prior to rainfall.	The Soil and Water Management Plan would include a contingency plan for any acid sulfate soils or salinity identified during the construction phase.	In the event that indications of contamination are encountered (known and unexpected, such as odorous or visually contaminated materials), work in the area would cease until an contamination assessment can be prepared to advise on the need for remediation or other action, as deemed appropriate.	If an incident (e.g. spill) occurs, the Transport for NSW Environmental Incident Classification and Reporting Procedure is to be followed and the Project Manager notified as soon as practicable.	A contingency plan would be prepared in preparation for a potential flood event during construction and would outline evacuation procedures. The plan would include: • Evaluation of what flood event would trigger the plan • Evacuation procedures
Biodiversity	Air quality	Soil and Contamination	Soil and Contamination	Soil and Contamination	Soil and contamination	Water and flooding
BI05	AIR1	SOL1	SOL2	SOL3	S0L4	WAT1

	Pre-construction	Detailed design / Pre-construction	Construction	Pre-construction / Construction	Construction	Construction	
	Contractor	Contractor	Contractor	Contractor	Contractor	Contractor	
A map indicating the area that is flood prone and the locations where to evacuate.	Temporary drainage or drainage diversions will be installed so that stormwater function is not impeded during construction. An Erosion and Sedimentation Control Plan (ESCP) will be prepared in accordance with the Landcom Managing Urban Stormwater, Soils and Construction Guidelines (the Blue Book) prior to construction. Water quality control measures are to be used to prevent any waste materials / litter entering drain inlets or waterways.	 A Waste Management Plan (WMP) will be prepared and implemented as part of the CEMP. The WMP will include but not be limited to: 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 Monitoring, record keeping and reporting. The WMP will be prepared taking into account the <i>Environmental Procedure - Management of Wastes on Roads and Maritime Services Land</i> (Roads and Maritime, 2014) and relevant Roads and Maritime Waste Fact Sheets. 	 With regard to the stockpiled general solid waste material: Where practicable, recyclable fractions of the construction and demolition waste (e.g. concrete and asphalt) would be separated for off-site disposal to an appropriately licensed recycling facility. 	A far as practicable, construction materials would be sourced within the Sydney region so as to reduce transport costs, including fuel usage.	Working areas are to be maintained, kept free of rubbish and cleaned up at the end of each working day.	If vegetation is to be mulched and transported off site for beneficial reuse, it is to be assessed for the presence of weeds, pest, and other disease and a Mulch Management Plan prepared in accordance with the Roads and Maritime Technical Procedure: Mulch Management.	
	Water and flooding	Waste	Waste	Waste	Waste	Waste	
	WAT2	WSTI	WST2	WST3	WST4	WST5	

	Waste	If coal tar asphalt is identified and is to be removed, it is to be disposed of to landfill in accordance with Roads and Maritime Environmental Direction No.21 – Coal Tar Asphalt Handling and Disposal.	Contractor	Construction
Water	er	The future design of the replacement barrier in flood prone areas would allow flood waters to pass underneath the installed structure.	Transport for NSW	Detailed design / pre- construction

Attachment C: Determined REF

 $\underline{\text{https://www.transport.nsw.gov.au/system/files/media/documents/2024/Bridge-Road-Review-of-Environmental-Factors-March-2022.pdf}$

Attachment D: Determined Addendum REF #1

 $\underline{\text{https://www.transport.nsw.gov.au/system/files/media/documents/2024/Bridge-Road-Cycleway-Addendum-Review-of-Environmental-Factors-April-2024.pdf}$