

Batemans Bay Bridge Replacement

Review of environmental factors consistency
review 8 - Changes to existing bridge pier cut off
depths

Transport for NSW

August | 2021

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Prepared by John Holland and Transport for NSW

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Document controls

Approval and authorisation

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Accepted on behalf of Transport for NSW by:	Vivien Murnane Project Manager/Engineer
Signed:	
Dated:	18/08/2021

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1 Introduction

1.1 The determined project

Transport for NSW completed a review of environmental factors (REF) of the Batemans Bay Bridge replacement project in November 2017. The REF described the project, assessed the potential environmental and social impacts associated with the construction and operation of the project and identified safeguards and management measures to avoid, mitigate or manage those potential impacts.

The project REF was placed on public display between 8 November and 8 December 2017 for community and stakeholder comment. Following public display submissions received were considered and responded to by Transport for NSW in the Batemans Bay Bridge replacement REF submissions report, dated May 2018.

An environmental impact statement (EIS) was also published for the project in November 2017, as a small part of the project is located in an area to which the State Environmental Planning Policy No 14 – Coastal Wetlands (SEPP 14) (now repealed) applied. Development consent for this part of the project was issued by Eurobodalla Shire Council in May 2018.

Subsequent to determination of the project, Transport for NSW proposed to modify the project to include the following:

- Batemans Bay Bridge replacement - Former bowling club demolition Addendum REF 1 (September 2018)
- Batemans Bay Bridge replacement REF Consistency Review 1 – Kings Highway slip lanes and utility adjustment works (January 2019)
- Batemans Bay Bridge replacement - precast ancillary facility Addendum REF 2 (March 2019)
- Batemans Bay Bridge replacement REF Consistency Review 2 – Temporary boat ramp (April 2019)
- Batemans Bay Bridge replacement REF Consistency Review 5 – Stockpile on Kings Highway (April 2019)
- Batemans Bay Bridge replacement REF Consistency Review 4 – Pier 1 temporary working platform and temporary Bailey bridge (May 2019)
- Batemans Bay Bridge replacement REF Consistency Review 3 – Detailed design changes 1 (October 2019)
- Batemans Bay Bridge Replacement REF Consistency review 6 - Precast ancillary facility boundary adjustment (May 2020)
- Batemans Bay Bridge replacement - New Floating Pontoon Addendum REF 3 (May 2020)
- Batemans Bay Bridge Replacement REF Consistency review 7 – Princes Highway north electrical trenching works for street lighting (May 2021)

1.2 Purpose

This consistency review is prepared when there is a proposed modification to a determined REF. It helps to ensure that any proposed modifications are undertaken in accordance with

the statutory requirements of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The purpose of this consistency review is to:

- Describe the determined project and the proposed modification
- Review the potential environmental impacts of the proposed modification against the environmental impacts of the determined project
- Decide whether or not the proposed modification is consistent with the determined project in accordance with the EP&A Act and the EPBC Act requirements
- Based on the decision of whether or not the proposed modification is consistent with the determined project, identify any further environmental impact assessment or environmental management requirements applicable to the proposed modification.

2 The proposed modification

2.1 The proposed modification

As part of the approved Project, the existing Batemans Bay Bridge, including superstructure, piers and, abutments would be removed. The project REF and Submissions Report included specific pile cut off depths for each bridge pier. The proposed modification seeks to change the proposed cut off depths for each pile. The approved and proposed approximate pile cut off depths can be seen in Table 1 below.

Table 1: Proposed approximate pile cut off depths

Pier	Approved project pile cut off depth	Proposed modification pile cut off depth
1	Minimum 1m below existing river bed	Minimum -2.9m RL
2	Complete removal	Approximately 0.5m above river bed
3	Complete removal	Approximately 0.5m above river bed
4	Complete removal	Approximately 0.5m above river bed*
5	Complete removal	Approximately 0.5m above river bed*
6	Complete removal	Approximately 0.5m above river bed
7	Minimum 2.5m below existing river bed	Approximately 0.5m above river bed
8	Minimum 2.5m below existing river bed	Approximately 0.5m above river bed
9	Minimum 1m below existing river bed	Minimum -2.9m RL

*following ~4 hours of hand-held venturi dredging

The proposed change in pile cut off depths is a result of further investigations and risk assessments undertaken in consultation with agencies and stakeholders.

Further underwater investigations at the time of pile removal may reveal additional constraints to pile cut off depths.

2.2 Need for the proposed modification

The proposed modification is a result of further investigations, consultation, and risk assessment undertaken to minimise potential environmental impacts of the approved project.

Under the approved Project complete removal of a number of piles was required. During detailed design it was determined that the proposed methods to access the required depths were not feasible due to engineering constraints. The changed cut off depths allow for the safe and effective completion of substructure pile removal given the emergence of technical risks identified during detailed design for bridge demolition.

The proposed modification:

- Provides a safe and technically sound alternative to full underwater pile removal
- Minimises dredging and removal of riverbed materials, including contaminated sediments, by cutting off the piers above the bed level where possible

2.3 Consultation

The consultation strategy used for the proposed modification is consistent with the strategy outlined in Section 5.1 of the project REF. The proposed modification has been developed following consultation with Department of Primary Industry and Environment (DPIE) (Regions,

Industry, Agriculture & Resources), DPI (Department of Primary Industry) (Batemans Marine Park), DPI (Fisheries) Environmental Protection Agency (EPA) and other stakeholders, as outlined in the following section.

Consultation for the proposed modification was undertaken during the development of the bridge substructure demolition methodology and preparation of this Consistency Review. Consultation was undertaken with stakeholders via an Environmental Review Group (ERG) forum on 10 November 2020, where a high-level discussion of the bridge demolition scope was discussed. The following stakeholders were present at the ERG:

- Eurobodalla Shire Council (ESC)
- DPIE (Regions, Industry, Agriculture & Resources)
- DPI (Fisheries)
- DPI (Batemans Marine Park)
- Environment Protection Authority (EPA)

A bridge demolition workshop including agencies and stakeholders was held on 10 November 2020, where the proposed modification to the bridge substructure demolition methodology was discussed in detail. The following key stakeholders were present at this workshop:

- DPI (Fisheries)
- DPI (Batemans Marine Park)
- Environment Protection Authority (EPA)

The following issues were raised and/or discussed by the relevant key environmental stakeholders at the bridge demolition workshop. There has been ongoing consultation with the respective agencies as the details of the substructure demolition were refined.

Table 2-1 Summary of issues relevant to pile cut off depths raised by environmental stakeholders during consultation

Stakeholder/s & Meeting	#	Issue/s Raised	Response/s
DPI (Batemans Marine Park) Bridge Demolition Work Methods Queries Meeting - 07/12/2020	1	Concern was raised regarding the pile cut-off depths and associated sediment dredging methodology and equipment. DPI (Batemans Marine Park) suggested that maintaining piles above bed level to 500mm where possible would have better biological outcomes due to less benthic habitat disturbance.	Pier removal methodology has been updated and presented to the agencies on the 18/02/2021. Details of each pier removal methodology and risks associated with pile cut off depths were assessed to reach an optimal outcome. In general dredging would be limited to the use of a hand-held venturi dredge at piers 4 and 5, a small scale suction pump at pier 9, and a shore based long reach excavator at Pier 1. Remaining piles would be cut off approximately 500mm above the bed level where practicable.
	2	Are cutting points on substructure predetermined?	Yes, the design considers the weight limitations for handling and the demolition design drawings detail the cut locations.
	3	How will identified hazards all be managed/ contained?	Environmental Work Method Statement (EWMS) will identify environmental hazards associated with the relevant activities and provide management controls.
DPI (Batemans Marine Park and Fisheries) NSW Environment	4	DPI (Batemans Marine Park) reiterated that they do not support cutting piles below river bed and requested further justification.	<p>Responses to original submissions (including queries regarding retention of existing bridge piles) were provided in the REF Submissions Report.</p> <p>Further assessments of the river bed and pile cut off depths have been undertaken and risk assessed in most instances resulting in reduced cut off depths.</p>

<p>Protection Authority</p> <p>Meeting to Discuss Agency Concerns with Proposed Bridge Sub-structure Demolition Work Methods - 08/12/2020</p>	<p>5</p>	<p>DPI (Batemans Marine Park) advised that issue of the Marine Parks Permit would consider benthic survey findings and contamination risks to ensure that the methodology and outcome is 'ecologically sustainable'.</p>	<p>Noted.</p> <p>This has been considered in the revised demolition methodology and design.</p>
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3 Consistency review

3.1 Potential environmental impacts

Table 3-1: Comparison of environmental impacts

Environmental issue	Consideration of the relative environmental impacts of the proposed modification compared to the determined project
Soil and Water Quality	<p>Potential soil and water quality impacts are included in section 6.4.3 of the project REF and section 4.12 & 4.8.4 of the submissions report.</p> <p>Construction</p> <p>Positive Impact – There would be short term positive impacts associated with the proposed cut off pile heights as outlined in Table 1, overall this would include a reduction in dredging. This would have the following short term positive impacts in regards to soil and water quality:</p> <ul style="list-style-type: none"> • Reduction in impacts to water quality, particularly turbidity owing to dredging activities • Reduction in visual plumes of sediment while dredging and deposition of materials on the riverbed • Reduction in mobilisation of potentially contaminated materials from the riverbed • Reduction in the requirement for potential riverbed backfilling and capping after ground disturbance activities. <p>Operation</p> <p>Neutral impact – no impacts would occur during operation</p> <p>Safeguards and management measures</p> <p>Safeguards and mitigation measures within the submissions report and the DEMP, are considered adequate for the proposed modification to ensure all environmental issues are addressed.</p>
Hydrology/Hydrological issues	<p>Potential impacts on hydrology and coastal processes associated with the determined project are included in section 6.3.3 of the project REF and section 4.12 & 4.8.3 of the submissions report.</p> <p>Construction</p> <p>Neutral Impact – No impact to Hydrology/ Hydrological issues additional to those assessed in the project REF and submissions report would be expected during construction of the proposed modification.</p>

Environmental issue	Consideration of the relative environmental impacts of the proposed modification compared to the determined project
	<p>Operation</p> <p>Negative impact – The proposed modification is expected to have minor negative impacts on riverbed morphology or coastal processes.</p> <p>In general, the less the piers extrude above the riverbed the smaller the impact zone to the hydrodynamic and riverbed morphology of Clyde River at the bridge location. Operational hydrodynamic and riverbed morphology modelling was completed for the proposed modification. Based on the proposed retention heights of the existing piles the operational impacts would be limited to minor localised scour and accretion around the existing cut off piles above bed level. The scour hole created around each pile is typically backfilled following flood events as the river flow resumes to ambient conditions.</p> <p>Operational phase flood modelling previously completed for the detailed design assumed full removal of the existing bridge and the modelling results showed reductions in flood levels upstream of the new bridge. It was noted that the protruding bridge piles would not affect previously reported operational flood results as the obstruction area of the piles is insignificant relative to the overall waterway area of the river.</p> <p>Safeguards and management measures</p> <p>Safeguards and mitigation measures within the submissions report and the DEMP, are considered adequate for the proposed modification to ensure all environmental issues are addressed.</p>
Biodiversity	<p>Potential impacts on biodiversity are included in section 6.2.3 of the project REF and section 4.12 & 4.8.2 of the submissions report.</p> <p>Construction</p> <p>Positive Impact – The reduction in dredging required for the pile extraction, would result in decreased soil and water quality impacts and subsequently minimise potential impacts to marine flora and fauna species including seagrasses and fauna species such as the Australian Grayling.</p> <p>Operation</p> <p>Neutral impact – no impacts would occur during operation</p> <p>Safeguards and management measures</p> <p>Safeguards and mitigation measures within the submissions report and the DEMP, are considered adequate for the proposed modification to ensure all environmental issues are addressed.</p>

Environmental issue	Consideration of the relative environmental impacts of the proposed modification compared to the determined project
<p>Traffic, transportation and access</p>	<p>Potential traffic and transport impacts associated with the determined project are included in section 6.7.3 of the project REF and section 4.1.2 of the submissions report.</p> <p>Construction</p> <p>Positive impact – there would be a minor short term positive impact as the change to the pile cuts will result in less maritime vessel movements to manage the decreased scope of dredging and pile removal.</p> <p>Operation</p> <p>Neutral impact – no impacts would occur during operation</p> <p>Safeguards and management measures</p> <p>Safeguards and mitigation measures within the submissions report and the DEMP, are considered adequate for the proposed modification to ensure all environmental issues are addressed.</p>
<p>Land use and property</p>	<p>Potential impacts on property and land use associated with the determined project are included in section 6.8.2 of the project REF and section 4 of the submissions report.</p> <p>Construction</p> <p>Neutral impact – No land use and property impacts additional to those assessed in the project REF and submissions report would be expected due to the proposed modification during construction.</p> <p>Operation</p> <p>Neutral impact – no impacts would occur during operation</p> <p>Safeguards and management measures</p> <p>Safeguards and mitigation measures within the submissions report and the DEMP, are considered adequate for the proposed modification to ensure all environmental issues are addressed.</p>
<p>Noise and vibration</p>	<p>A summary of the existing noise and vibration environment is included in section 6.6.3 of the project REF. Potential noise and vibration impacts are included in 6.6.4 of the Project REF.</p> <p>Construction</p> <p>Neutral Impact - No noise and vibration impacts additional to those assessed in the project REF and submissions report would be expected due to the proposed modification during construction.</p> <p>Operation</p> <p>Neutral impact – no impacts would occur during operation</p>

Environmental issue	Consideration of the relative environmental impacts of the proposed modification compared to the determined project
	<p>Safeguards and management measures</p> <p>Safeguards and mitigation measures within the submissions report and the DEMP, are considered adequate for the proposed modification to ensure all environmental issues are addressed.</p>
<p>Aboriginal cultural heritage</p>	<p>A summary of the existing Aboriginal heritage is included in section 6.5.2 of the project REF. An Aboriginal cultural heritage assessment and consultation in accordance with the Procedure for Aboriginal cultural heritage consultation and investigation (the PACHCI) was carried out for the project.</p> <p>Construction</p> <p>Neutral impact - No Aboriginal heritage impacts additional to those assessed in the project REF and submissions report would be expected due to the proposed modification during construction.</p> <p>Operation</p> <p>Neutral impact - No impacts would occur during operation.</p> <p>Safeguards and management measures</p> <p>Safeguards and mitigation measures within the submissions report and the DEMP, are considered adequate for the proposed modification to ensure all environmental issues are addressed.</p>
<p>Non-Aboriginal heritage</p>	<p>Potential impacts on non-Aboriginal heritage associated with the determined project are included in section 6.10.3 of the project REF and section 4.8.7 of the submissions report.</p> <p>Construction</p> <p>Neutral impact - No non-Aboriginal heritage impacts additional to those assessed in the project REF and submissions report would be expected due to the proposed modification during construction.</p> <p>Operation</p> <p>Neutral impact - No impacts would occur during operation.</p> <p>Safeguards and management measures</p> <p>Safeguards and mitigation measures within the submissions report and the DEMP, are considered adequate for the proposed modification to ensure all environmental issues are addressed.</p>
<p>Landscape character and visual impacts</p>	<p>A summary of the existing landscape character and visual impact environment is included in section 6.1.2 of the project REF. Potential impacts on landscape character and visual are included in section 6.1.3 of the project REF and section 4.8.1 of the submissions report.</p> <p>Construction</p>

Environmental issue	Consideration of the relative environmental impacts of the proposed modification compared to the determined project
	<p>Neutral impact - No visual impacts additional to those assessed in the project REF and submissions report would be expected due to the proposed modification during construction.</p> <p>Operation</p> <p>Neutral impact - No visual impacts are expected during operation.</p> <p>Safeguards and management measures</p> <p>Safeguards and mitigation measures within the submissions report and the DEMP, are considered adequate for the proposed modification to ensure all environmental issues are addressed.</p>
Air quality	<p>A summary of the existing air quality environment is included in section 6.12.2 of the project REF. Potential impacts of the project on air quality are included in section 6.12.3 of the project REF.</p> <p>Construction</p> <p>Neutral Impact – No air quality impacts additional to those assessed in the project REF and submissions report would be expected due to the proposed modification during construction.</p> <p>Operation</p> <p>Neutral impact - No air quality impacts are expected during operation.</p> <p>Safeguards and management measures</p> <p>Safeguards and mitigation measures within the submissions report and the DEMP, are considered adequate for the proposed modification to ensure all environmental issues are addressed.</p>
Socio-economic issues	<p>A summary of the existing socioeconomic environment is included in section 6.9.2 of the project REF. Potential socio-economic impacts of the project are included in section 6.9.3 of the project REF and section 4.1.2 of the submissions report.</p> <p>Construction</p> <p>Neutral Impact - No socio-economic impacts additional to those assessed in the project REF and submissions report would be expected due to the proposed modification during construction.</p> <p>Operation</p> <p>Neutral Impact – No socio-economic impacts are expected during operation.</p>

Environmental issue	Consideration of the relative environmental impacts of the proposed modification compared to the determined project
	<p>Safeguards and management measures</p> <p>Safeguards and mitigation measures within the submissions report and the DEMP, are considered adequate for the proposed modification to ensure all environmental issues are addressed.</p>
<p>Climate change</p>	<p>A summary of the existing environment in regards to climate change and sustainability is included in Section 6.13.1 of the project REF.</p> <p>Construction</p> <p>Neutral Impact - No climate change impacts additional to those assessed in the project REF and submissions report would be expected due to the proposed modification during construction.</p> <p>Operation</p> <p>Neutral Impact – No climate change impacts are expected during operation.</p> <p>Safeguards and management measures</p> <p>Safeguards and mitigation measures within the submissions report and the DEMP, are considered adequate for the proposed modification to ensure all environmental issues are addressed.</p>
<p>Waste and resource management</p>	<p>A description of potential waste management sources and impacts is included in section 6.11.1 of the project REF and section 6.2 of the submissions report.</p> <p>Construction</p> <p>Positive Impact - The proposed modification is expected to reduce the amount of riverbed material waste produced by dredging by the project, as only the minimum amount of riverbed materials would be removed.</p> <p>Operation</p> <p>Neutral Impact – No waste and resource impacts are expected during operation.</p> <p>Safeguards and management measures</p> <p>Safeguards and mitigation measures within the submissions report and the DEMP, are considered adequate for the proposed modification to ensure all environmental issues are addressed.</p>
<p>Cumulative impacts</p>	<p>Potential cumulative impacts associated with the determined project are included in section 6.14.1 of the project REF and section 6.2 of the submissions report.</p>

Environmental issue	Consideration of the relative environmental impacts of the proposed modification compared to the determined project
	<p>Construction</p> <p>Neutral impact – no impacts additional to those assessed in the project REF and submissions report would be expected due to the construction of the proposed modification.</p> <p>There has been no change in the number and scale of projects occurring at the same time as the proposed modification.</p> <p>Operation</p> <p>Neutral Impact - No impacts would occur during operation.</p> <p>Safeguards and management measures</p> <p>Safeguards and mitigation measures within the submissions report and the DEMP, are considered adequate for the proposed modification to ensure all environmental issues are addressed.</p>

3.2 EPBC Act factors

Under the environmental assessment provisions of the *Environment Protection and Biodiversity Conservation Act 1999*, the following matters of national environmental significance and impacts on Commonwealth land are required to be considered for the proposed modification.

Table 3-2: Comparison of EPBC Act factors

Factor	Consideration of the relative impact of the proposed modification compared to the determined project and if applicable any change to the EPBC strategic assessment or other EPBC approval
Any impact on a World Heritage property?	The proposed modification will not have any impact on World Heritage.
Any impact on a National Heritage place?	The proposed modification will not have any impact on Natural Heritage.
Any impact on a wetland of international importance?	The proposed modification will not have any impact on wetlands of international importance.
Any impact on a listed threatened species or communities?	The proposed modification will not have any impact on listed threatened species or communities.

Factor	Consideration of the relative impact of the proposed modification compared to the determined project and if applicable any change to the EPBC strategic assessment or other EPBC approval
Any impacts on listed migratory species?	The proposed modification will not have any impact on migratory species.
Any impact on a Commonwealth marine area?	The proposed modification will not have any impact on Commonwealth marine areas.
Does the proposal involve a nuclear action (including uranium mining)?	The proposed modification does not involve a nuclear action.
Additionally, any impact (direct or indirect) on Commonwealth land?	The proposed modification does not impact (directly or indirectly) on Commonwealth land.

3.3 Licences, permits and approvals

Table 3-3: Comparison of licence, permit and approval requirements

Existing requirement for the determined project	Identification of additional requirements or any change to the existing requirements as a result of the proposed modification
Environment protection licence (EPL) for scheduled activities being extractive activities from the EPA.	The existing project EPL would not be required to be revised.
Permit to harm marine vegetation from the Minister for Primary Industries.	The existing Part 7 Permit PN19_178 would not be required to be revised.
Marine Parks Permit for work in the Batemans Bay Marine Park.	The existing Marine Parks permit for bridge demolition would not be required to be revised.

3.4 Consistency review

Table 3-4 below presents a set of questions to assist in identifying whether the proposed modification is consistent with the determined project, or if further environmental impact assessment is required. These questions are addressed with consideration to the information above.

Table 3-4: Consistency review questions

Consistency questions	Discussion	Response
<p>Q1) Is the proposed modification to be carried out as part of a project which has a determined REF?</p> <p><i>If answered No, this consistency review does not apply to your proposed works. Seek advice from your Environmental Manager.</i></p>	<p>The proposed modification would be carried out as part of the existing Batemans Bay Bridge Replacement project which was subject to a REF that was determined in November 2017.</p>	<p>Yes</p>
<p>Q2) Is the proposed modification so different in scope and impacts to the determined REF as to be a radical transformation and so, in reality, an entirely new project?</p> <p><i>If answered Yes, a separate environmental impact assessment is required. This may take the form of a new REF, an environmental impact statement or a development application as advised by the Transport for NSW Environment Manager.</i></p> <p><i>If answered No, proceed to the next question.</i></p>	<p>The proposed modification does not result in a substantive change to the key design elements of the project or the potential impacts identified and assessed in the project REF, or the submissions report.</p>	<p>No</p>
<p>Q3) If the proposal is subject to the EPBC strategic assessment or other EPBC Act approval, would the proposed modification change the potential impacts on matters of national environmental significant or the environment of Commonwealth land?</p> <p><i>If answered Yes, advice is to be sought from the Transport for NSW Environment Manager and the Senior Specialist (Biodiversity) on how to proceed.</i></p>	<p>The proposal is not subject to the EPBC Strategic Assessment of other EPBC Act approval.</p> <p>The assessment of the impacts of the proposed modifications on matters of national environmental significance and the environment of Commonwealth land considers that there would be no change to the findings of the determined project and the proposed modifications are not likely to significantly impact threatened species, populations, ecological communities or migratory species, or the environment of Commonwealth land, within the meaning of the EPBC Act.</p>	<p>No</p>

Consistency questions	Discussion	Response
<p><i>If answered No, proceed to the next question.</i></p>		
<p>Q4) If the proposal is subject to a Species Impact Statement (SIS) or Biodiversity Development Assessment Report (BDAR), would the proposed modification change the potential impacts on areas of outstanding biodiversity value, threatened species or ecological communities and their habitats as set out in the SIS or BDAR and its Conditions?</p> <p><i>If answered Yes, advice is to be sought from the Transport for NSW Environment Manager and the Senior Specialist (Biodiversity) on how to proceed.</i></p> <p><i>If answered No, proceed to the next question.</i></p>	<p>The determined project is not subject to an SIS or BDAR.</p> <p>The proposed modifications are not likely to significantly impact threatened species, populations or ecological communities or their habitats, within the meaning of the BC Act or FM Act and therefore an SIS is not required.</p>	No
<p>Q5) Would the proposed modification result in a reduction of the overall environmental impacts of the determined project including that it would not be likely to trigger the EPBC Act strategic assessment, other EPBC approval, SIS or BDAR?</p> <p><i>If answered Yes, the proposed modification is consistent with the determined project. This consistency review is to be completed and endorsed. Any actions identified by the Transport for NSW Environment Manager are to be implemented.</i></p> <p><i>If answered No, further environmental impact</i></p>	<p>The consistency review has assessed the environmental risks associated with undertaking the proposed modification and considers that it would result in an overall reduction in impacts associated with the determined project. The proposed modification would result in a reduction of environmental impacts by reducing duration and scope of underwater operations.</p> <p>The proposed modification would result in short term positive impacts associated with minimising the movement and removal of riverbed materials, particularly contaminated sediment, by increasing the cut off height of multiple piers above the bed level. This includes short term positive impacts to soil and water quality, biodiversity and marine traffic.</p> <p>Potential long term operational impacts would be limited to minor localised scour and accretion around the existing cut off piles above bed level. The scour holes</p>	Yes

Consistency questions	Discussion	Response
<p><i>assessment is required and will need to be documented. This may take the form of an Addendum REF (Resource 19 or 20) as advised by the Transport for NSW Environment Manager.</i></p>	<p>created around each pile would typically be backfilled following flood events as the river flow resumes to ambient conditions.</p> <p>The benefits of this modification through the construction phase outweigh the minimal potential impact on riverbed morphology during operation.</p>	
<p>Q6) Whatever the outcome of the consistency review, are modifications to any other authorisations, or new authorisations, required, eg environment protection licences, Heritage Act permits, permits under the Fisheries Management Act etc?</p> <p><i>If answered Yes, provide details as to which authorisations would require modification or would now be required and the associated implications.</i></p>	<p>The proposed modification would not require any additional or variations to any authorisations.</p>	<p>No</p>

4 Conclusion


The consistency review has considered the proposed modification in terms of consistency against the determined project Batemans Bay Bridge Replacement.

As set out in Table 3-4 above, the proposed modification is considered to be consistent with the determined project. In addition the project would not result in any additional impacts additional impacts that would likely trigger EPBC Act strategic assessment, EPBC Act approval, SIS, or BDAR.

5 Certification and endorsement

5.1 Certification – Consistency review preparer

This document provides a true and fair consistency review of the scope and potential impacts of the proposed modification compared with the scope and environmental impacts of the determined project.

Signed 

Name Tim Faiz

Position Environment Manager



Date 17/08/21

5.2 Transport for NSW certification and endorsement

I have reviewed the scope and potential environmental impacts of the proposed modification against the determined project. The proposed modification would reduce the overall environmental impacts of the determined project and as such, in accordance with section 5.4(a) of the EP&A Act, is exempt from further environmental impact assessment.


The proposed modification would not trigger the EPBC Act strategic assessment/other EPBC Act approval and/or a SIS or BDAR.

The CEMP and sub plans will be updated to incorporate the modification.

Signed 	Signed 
Name Michelle Toms	Name Vivien Murnane
Position Senior Environment officer	Position Project Manager/Engineer
Date 24/8/2021	Date 24/08/2021

5.2.1 Endorsement

I have examined consistency of the proposed modification with the determined Batemans Bay Bridge replacement. In accordance with section 5.4(a) of the EP&A Act I endorse the findings of this consistency review.

Signed 
Name Graham Roche
Position A/Senior Environment and Sustainability Manager RPDD South
Date 24/08/2021