ENVIRONMENTAL ASSESSMENT REPORT

New Bridgewater Bridge Project

River Derwent Marine Conservation Area

RESERVE ACTIVITY ASSESSMENT 3928

June 2022

Acknowledgements

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Department of Natural Resources and Environment

Environmental Assessment Report

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Proposal	New Bridgewater Bridge
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Reserve	River Derwent Marine Conservation Area
RAA No.	3928
Document ID	Environmental Assessment Report – New Bridgewater Bridge – June 2022
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Glossary and Abbreviations

AHT	Aboriginal Heritage Tasmania
CA	Conservation Area
CAS	Conservation Assessments
CEMP	Construction Environmental Management Plan
CPR	Central Plan Register
DSG	Department of State Growth
EAR	Environmental Assessment Report
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
EPBC Act	*Environmental Protection and Biosecurity Act 1999*
LUPAA	*Land Use Planning and Approvals Act 1993*
MCA	Marine Conservation Area
MOU	Memorandum of Understanding
MPIS	Major Projects Impact Statement
NC Act	*Nature Conservation Act 2002*
NPRMA	*National Parks and Reserves Management Act 2002*
NPWAC	National Parks and Wildlife Advisory Council
NRET	Department of Natural Resources and Environment Tasmania
PWS	Parks and Wildlife Service
RAA	Reserve Activity Assessment
TPC	Tasmanian Planning Commission
TSPA	*Threatened Species Protection Act 1995*
UDP	Unanticipated Discovery Plan

Report Summary

This Environmental Assessment Report (EAR) completes the assessment of the New Bridgewater Bridge that is proposed by the Department of State Growth (DSG; the proponent). The proposals unique identifier is Reserve Activity Assessment (RAA) 3928.

The New Bridgewater Bridge was declared a Major Project on 23 December 2020, enabling the project to be assessed through the Major Projects process under the *Land Use Planning and Approvals Act 1993* (LUPAA). The Project Land, as defined under the declaration, includes land within the River Derwent Marine Conservation Area, managed under the *National Parks and Reserves Management Act 2002* (NPRMA). As this Act is not included as a project-related Act under LUPAA, a separate approval by the Parks and Wildlife Service (PWS) is triggered.

This EAR does not include consideration of the Crown land parcels within the Project Land. This land is proposed to be set aside in accordance with Section 12 of the *Crown Lands Act 1976*, with all the Crown Land identified in the Project Land to be set aside and used for the purposes of the Department of State Growth.

Within the Reserved land, the proposal is for a new four lane bridge including one shared pedestrian and cycle path. The proposed bridge is located directly east of the existing bridge. Works also include the demolition of the existing bridge and the reclamation of land within the River Derwent Marine Conservation Area.

RAA 3928 represents the first dual assessment of a project under the Major Project approvals pathway and the NPRMA. This EAR has been prepared largely based on the information submitted as part of the Major Project assessment process, the Supplementary Information requested by the PWS (Appendix 1) and including the Major Project Permit issued by the Tasmanian Planning Commission (TPC) on 18 May 2022 (Appendix 2). The PWS required access to the final TPC planning conditions to enable the completion of a gap analysis and to prepare recommended conditions that would not conflict with the permit requirements issued by the TPC.

This report completes the PWS environmental assessment of the proposal. The EAR evaluates the proposal in accordance with the PWS Environmental Management Policy and the NPRMA. Section 7 of this report provides a list of recommended conditions, which are summarised in Appendix 3.

While this EAR finalises the Environmental Impact Assessment (EIA) process, completion of the RAA does not constitute approval to undertake the proposal/activity until an authority, lease or licence is issued in accordance with the NPRMA.

Appendix 1 – PWS Supplementary Information

Appendix 2 – TPC Major Projects Permit, MPP2201

Appendix 3 – PWS Conditions

1. Assessment Process

Approval Process

1.1 Major Projects Process

The New Bridgewater Bridge represents the first project to be assessed under the Major Project approvals process. The New Bridgewater Bridge project was assessed under Division 2A – Major Projects of the *Land Use Planning and Approvals Act 1993* (LUPAA). The Major Projects process provides for the assessment of large scale, complex projects where impacts cross multiple municipal boundaries. The process combines multiple Acts under one approvals process; the *Aboriginal Heritage Act 1975*, the *Environmental Management and Pollution Control Act 1994*, the *Historic Cultural Heritage Act 1995*, the *Nature Conservation Act 2002*, the *Threatened Species Protection Act 1995* and any regulations under those Acts. The participating regulators under the project-related Acts are required to undertake an environmental impact assessment for the major project. A Development Assessment Panel was appointed by the Tasmanian Planning Commission (TPC) to manage the assessment of the Project. The proponent (DSG) was required to prepare a Major Project Impact Statement to address the assessment criteria and information requirements issued by the participating regulators and the TPC.

A final decision was made and the TPC Major Project Permit issued on the 18 May 2022. A detailed summary of the Major Projects Assessment Process, which includes public notifications and hearings, is available on the TPC website; www.planning.tas.gov.au

The Project Land is in part located within the River Derwent Marine Conservation Area, triggering the requirement for an assessment by the PWS under the *National Parks and Reserves Management Act 2002* (NPRMA).

The NPRMA is not project-related Act and the Parks and Wildlife Service (PWS) is not a participating regulator under LUPAA. Therefore, the PWS was required to carry out a separate assessment process. This assessment was based on the documentation prepared for the Major Projects approvals process and the Supplementary Information submitted by the proponent to address the further information requirements identified by the PWS under the NPRMA.

1.2 Reserve Activity Assessment

The proposal has been assessed at a Level 3 Reserve Activity Assessment (RAA) due to the significant scale and complexity of the development, its prominent location, and the potential impacts on the natural, cultural and recreational values of the River Derwent Marine Conservation Area. The endorsed Checklist (29/01/2021) recommends the Major Projects assessment pathway be adopted as an equivalent L4 EIA process (since amended and now referred to as a L3 RAA process), as provided for under Section 4.6 of the PWS EP-300 Environmental Risk Management Policy. In accordance with this Policy, the documentation submitted by the proponent, including the Major Project Impact Statement, was adopted as the environment impact statement (EIS).

An amended Major Project Impact Statement (MPIS V2) was prepared by the proponent in response to the further information requested from the Development Assessment Panel and the participating regulators. The amended MPIS V2 was used to inform the updated Supplementary Information prepared in response to the further information requested by the PWS. The Supplementary Information and associated documentation were reviewed by the PWS officers and specialists. The community had the opportunity to comment on the proposed development via the PWS 'Have your say' website. The timeframe for the PWS public notification period was concurrent with that of the TPC public exhibition period. A link to the website was provided to facilitate public access to all of the Major Project associated documents.

To avoid potentially conflicting conditions and to have a clear understanding of the final scope of the approved development and works, the PWS required access to the TPC permit prior to finalising the Level 3 RAA.

The PWS component of the assessment process milestones are summarised in Table 1. The New Bridgewater Bridge assessment documents, including the MPIS, are available on the Tasmanian Planning Commission website.

Table 1: Assessment Process Milestones

Date	Milestone
November 2020	Major Project Proposal prepared and submitted to the Minister
23 December 2020	New Bridgewater Bridge declared a Major Project by the Minister under the *Land Use Planning and Approvals Act 1993*
29 January 2021	Checklist prepared and Level 3 RAA recommendation endorsed
20 July 2021	Proponent notified of PWS further information requirements
27 August 2021	MPIS Version 1 completed and released
8 September 2021	Supplementary Information submitted to PWS
12 November 2021	MPIS Version 2 completed and released
2 December 2021	Amended Supplementary Information prepared by proponent and submitted to PWS
20 December 2021- 31 Jan 2022	Supplementary information and Major Projects documentation circulated for internal specialist advice
19 January 2022 – 17 February 2022	Public consultation period (PWS and TPC).
18 May 2022	TPC Major Project Permit issued
June 2022	PWS EAR prepared, including recommended conditions

2. Statutory assessment and policy requirements

2.1 Statutory Requirements

The PWS is responsible for ensuring use and development in reserved areas are in accordance with the objectives of the NPRMA and *National Parks and Reserves Management Regulations 2019* and any applicable statutory management plan. No statutory management plan applies to the River Derwent Marine Conservation Area.

The PWS Environmental Risk Management Policy provides for the RAA process to assist in determining conditions for proposals on reserved land. The RAA process requires RAA documentation, public consultation, and a statement of reasons for a decision.

The *Nature Conservation Act 2002* (NC Act) is the regulatory mechanism in Tasmania through which land is proclaimed as a reserve. Schedule 1 of the NC Act sets out the purpose of reservation for the various classes of reserved land. For a Conservation Area, the purpose of reservation is:

> *The protection and maintenance of the natural and cultural values of the area of land and the sustainable use of the natural resources of that area of land including special species timber harvesting.*

The key statutory framework for achieving the purpose of reservation is the NPRMA. This Act states the management objectives for each class of reserved land. The objectives listed in Schedule 1 of the NPRMA for a conservation area are:

> *(a) to conserve natural biological diversity;*
>
> *(b) to conserve geological diversity;*
>
> *(c) to preserve the quality of water and protect catchments;*
>
> *(d) to conserve sites or areas of cultural significance;*
>
> *(e) to provide for the controlled use of natural resources including special species timber harvesting, and including as an adjunct to utilisation of marine resources;*
>
> *(f) to provide for exploration activities and utilisation of mineral resources.;*
>
> *(j) to encourage research, particularly that which furthers the purposes of reservation*
>
> *(k) to protect the conservation area against, and rehabilitate the conservation area following, adverse impacts such as those of fire, introduced species, diseases and soil erosion on the conservation area's natural and cultural values and on assets within and adjacent to the conservation area;*
>
> *(l) to encourage appropriate tourism, recreational use and enjoyment (including private uses) consistent with the conservation of the conservation area's natural and cultural values;*
>
> *(m) to encourage cooperative management programs with Aboriginal people in areas of significance to them in a manner consistent with the purposes of reservation and the other management objectives.*

The proposals consistency with the management objectives are evaluated in Section 6 of this report.

2. 2 Other Approvals

2.2.1 *Land Use Planning and Approvals Act 1993*

A Major Projects Permit was issued by the TPC on 18 May 2022 (MPP2201). The Permit represents a consolidated approval under the project-related Acts; the *Aboriginal Heritage Act 1975*, the *Environmental Management and Pollution Control Act 1994*, the *Historic Cultural Heritage Act 1995*, the *Nature Conservation Act 2002*, *Threatened Species Protection Act 1995*.

The participating regulators (Environmental Protection Agency (EPA), TasGas, TasWater, Tasmanian Heritage Council, The Department of Natural Resources and Environment Tasmania, (Aboriginal Heritage Tasmania and Conservation Assessments) provided consent for the proposal through the LUPAA process, subject to the conditions outlined in the Major Projects Permit, MPP2201.

2.2.2 State Policies

The endorsed MPIS V2 submitted under the Major Projects assessment process includes consideration of and assessment against the relevant State Policy requirements. The project was deemed by the TPC assessment panel to be consistent with the State Policies.

2.2.3 *Environmental Protection and Biodiversity Conservation Act 1999*

The proposal was referred to the Commonwealth Government, Department of Agriculture, Water and the Environment for assessment under the *Environment Protection and Biosecurity Act 1999* (EPBC Act) (Referral 2021/9114). The proposal was not deemed a controlled action if undertaken in accordance with the measures identified to protect the Australian Grayling (*Prototroctes maraena*), an EPBC Act listed threatened species. A notification dated 21 April 2021 was issued to DSG identifying the manner in which the action must be undertaken.

3. Proposal

3.1 Proponent

The proponent is the Crown in Right of Tasmania represented by the Department of State Growth (DSG). This Department is responsible for the Midland Highway, which connects Bridgewater to the north with the Lyell Highway and Brooker Highway to the south of the River Derwent via the existing Bridgewater Bridge and causeway. Figure 1 below shows the extent of the Major Projects project land, including the terrestrial component. Figure 2 represents the chosen design, noting that this design is subject to refining pending the outcomes of further investigations, including the geotechnical drilling program approved by the PWS in May 2022.

3.2 Proposal Infrastructure Overview

The proposal includes:

- a new bridge with two motor vehicle lanes in each of the two directions of traffic (north bound and south bound), with a minimum air draft clearance consistent with the defined navigation span clearance under the Bowen Bridge, equivalent to a clearance height of 16.2 metres AHD across a width of 45 metres
- grade separation of the Lyell Highway and Black Snake Road junctions at Granton and connecting ramps with Gunn Street and Old Main Road at Bridgewater
- increase of the posted speed limit to the bridge and highway approaches to the south (Brooker Highway) and north (Midland Highway), to a minimum speed limit of 80 km/hour
- ancillary facilities to the proposed bridge and interchanges, such as new and/or relocated shared paths, minor road connections, and updated road signage and stormwater drainage
- a shared path for pedestrians and cyclists as part of the crossing as well as safety screens and barriers
- demolition of the existing bridge structure, leaving the existing causeway
- demolition of existing buildings, including residential properties owned or to be owned by the State, as well as demolition of the existing maintenance compound at Nielsen Esplanade
- demolition and reconstruction of underground and above ground services, including temporary works to facilitate ongoing operation of these during construction.

Works in the marine conservation area include:

- piling works, including pitching, and driving of steel piles, drilling and removal of waste material from inside the piles (including the extraction of river water for use in a closed loop system), placement of steel reinforcement and filling with concrete

- placement of the reinforced concrete pile cap, either as a precast unit or cast in place, tying the piles to the pile cap and filling with concrete
- forming and pouring the piers on top of the pile cap up to bridge structure
- temporary and permanent land reclamation
- demolition of the existing bridge structure
- temporary works, including access structure/s, floating plant, and a temporary structure at the existing boat ramp site.

There is no intention to undertake any dredging in the marine environment to facilitate construction works or the future operations of the bridge.

The reclamation of up to 8000m² of land is proposed for the purpose of temporary access and the construction of piers. Approximately 5500m² of the marine reserve will be permanently converted to reclaimed land with the remainder to be removed and rehabilitated. Temporary infrastructure is proposed within the marine environment to support the construction of the new bridge, including temporary piles and bridge structures. The full extent of works will be confirmed once the final design plans are prepared and the construction methodology finalised.

The components of the project located within Reserve land are the subject of this assessment.

The RAA documentation submitted by the proponent consists of a Major Projects Impact Statement (November 2021) with the following appendices and supplementary documents:

- Assessment criteria New Bridgewater Bridge Major Project 04/01/2022
- Initial assessment report for the New Bridgewater Bridge major project 18 January 2022
- Initial assessment report Appendix 2 – 18 January 2022
- Initial assessment report Appendix 3 – 18 January 2022
- MPIS Appendix A - Section 3 - Site Analysis 15 November 2021
- MPIS Appendix A - Section 4 - Land Use Planning 12 November 2021
- MPIS Appendix A - Section 5 - Participating Regulator Figures
- MPIS Appendix AA - Design Drawings 12 November 2021
- MPIS Appendix B - Land Folios 12 November 2021
- MPIS Appendix BB - Memorandum - Comparison of Chosen Design to Completed Assessment of Coastal Inundation 10 November 2021
- MPIS Appendix BB - Memorandum - Comparison of Chosen Design to Completed Assessment of Dredging and Reclamation 11 November 2021
- MPIS Appendix BB - Memorandum - Comparison of Chosen Design to Completed Assessment of Dredging and Reclamation, and Flood-Prone Areas 12 November 2021
- MPIS Appendix BB - Memorandum - Comparison of Chosen Design to Completed Assessment of Public Open Space and Siting and Scale 12 November 2021
- MPIS Appendix C - Coastal Inundation Assessment 11 November 2021
- MPIS Appendix D - Marine Safety Assessment Report 5 November 2021
- MPIS Appendix E - Coastal Erosion Assessment 18 August 2021
- MPIS Appendix F - Solar Modelling Analysis 16 August 2021
- MPIS Appendix G - Aquatic Risk Assessment 4 November 2021
- MPIS Appendix H - Natural Values Assessment 5 November 2021
- MPIS Appendix I - Air Emissions Assessment 12 November 2021

- MPIS Appendix J - Noise Impact Assessment 8 November 2021
- MPIS Appendix K - Traffic Impact Assessment 11 November 2021
- MPIS Appendix L - Heritage Impact Statement 11 November 2021 MB
- MPIS Appendix M - Archival Report 18 August 2021
- MPIS Appendix N - Contamination, Acid Sulfate Soil, Waste and Groundwater Investigation 2 November 2021
- MPIS Appendix O - Desktop Hydrogeological Assessment 29 July 2021
- MPIS Appendix P - Landslip Hazard Report 20 July 2021
- MPIS Appendix Q - Artificial Light Impact Assessment and Management Plan 22 August 2021
- MPIS Appendix R - Hydrodynamic Modelling 10 November 2021 MB
- MPIS Appendix S - Flood Hazard Report 8 November 2021
- MPIS Appendix T - Retention Options Analysis 11 November 2021
- MPIS Appendix U - Recreation Impact Assessment 19 August 2021
- MPIS Appendix V - Landscape and Visual Impact Analysis 12 November 2021
- MPIS Appendix W - Geoheritage Impact Assessment August 2021
- MPIS Appendix X - Comparative Analysis 11 November 2021
- MPIS Appendix Y - Summary Aboriginal Heritage Report and Aboriginal Heritage Management Plan 2 August 2021
- MPIS Appendix Z - Stormwater Assessment 4 November 2021

A copy of the all the documentation is available at New Bridgewater Bridge – major project permit – Tasmanian Planning Commission Website.

3.3 Project Rational

The proponent states in the MPIS the key benefits of the Project include:

- removal of oversize overmass restrictions on the bridge, which will generally increase capacity and efficiency of the heavy vehicle network
- introduction of grade separation intersections either side of the River Derwent, which will prioritise traffic on the National Land Transport Network and improve north–south traffic movement
- increased posted speed limit and more consistent speed through the area, which will reduce congestion and queuing, reduce travel time and improved travel time reliability
- removal of the aged lift span, which will reduce future maintenance costs
- removal of the need for the National Land Transport Network to be closed intermittently to use the lift span and allow vessels to navigate beneath the Bridgewater Bridge
- reduced risk to the operational use of the Bridgewater Bridge and causeway due to mechanical failure of the bridge or seismic events impacting the causeway
- improved navigation for marine vessels
- improved pedestrian and cyclist access.

Upgrading of the existing bridge is not considered economically or practically feasible. The existing bridge has passed its design service life and does not meet contemporary design or loading standards. A key outcome of the new structure is the clearance available for vessels to travel unimpeded beneath the bridge and the provision of a combined pedestrian and cycle path.

3.4 Location

The Project Land for the development is intersected by the River Derwent, with the foundational piles for the New Bridgwater Bridge seated in the river bed of the River Derwent Marine Conservation Area (MCA). Development and works are also proposed on the Crown land located to the north and south of the River Derwent and encompassed in the Project Land shown in Figure 1 below. Council land and private land tenures also make up the Project Land as defined in the MPIS. Land under the authority of other agencies, including local government, and state government and directly impacted by the proposal is beyond the scope of this assessment. The PWS is the managing authority for the MCA. The remaining Crown land is managed by Department of Natural Resources and Environment Tasmania (NRET), State Roads and the State Rail Network.

The existing Bridgewater Bridge is located within the River Derwent MCA while the causeway is outside the MCA. The proponent, DSG, is responsible for the management of the highway across the existing bridge.

The Central Plan Register map (CPR 8628) identifies the boundary of the River Derwent MCA as following the high-water mark. The River Derwent MCA, where located within the Project Land shown in Figure 1 (sourced from the MPIS V2), is the subject of this RAA. Where the term ‘Project Area’ is used in this report it refers only to the marine conservation area to the high water mark and bounded to the east and west as per the dimensions defined in the MPIS.

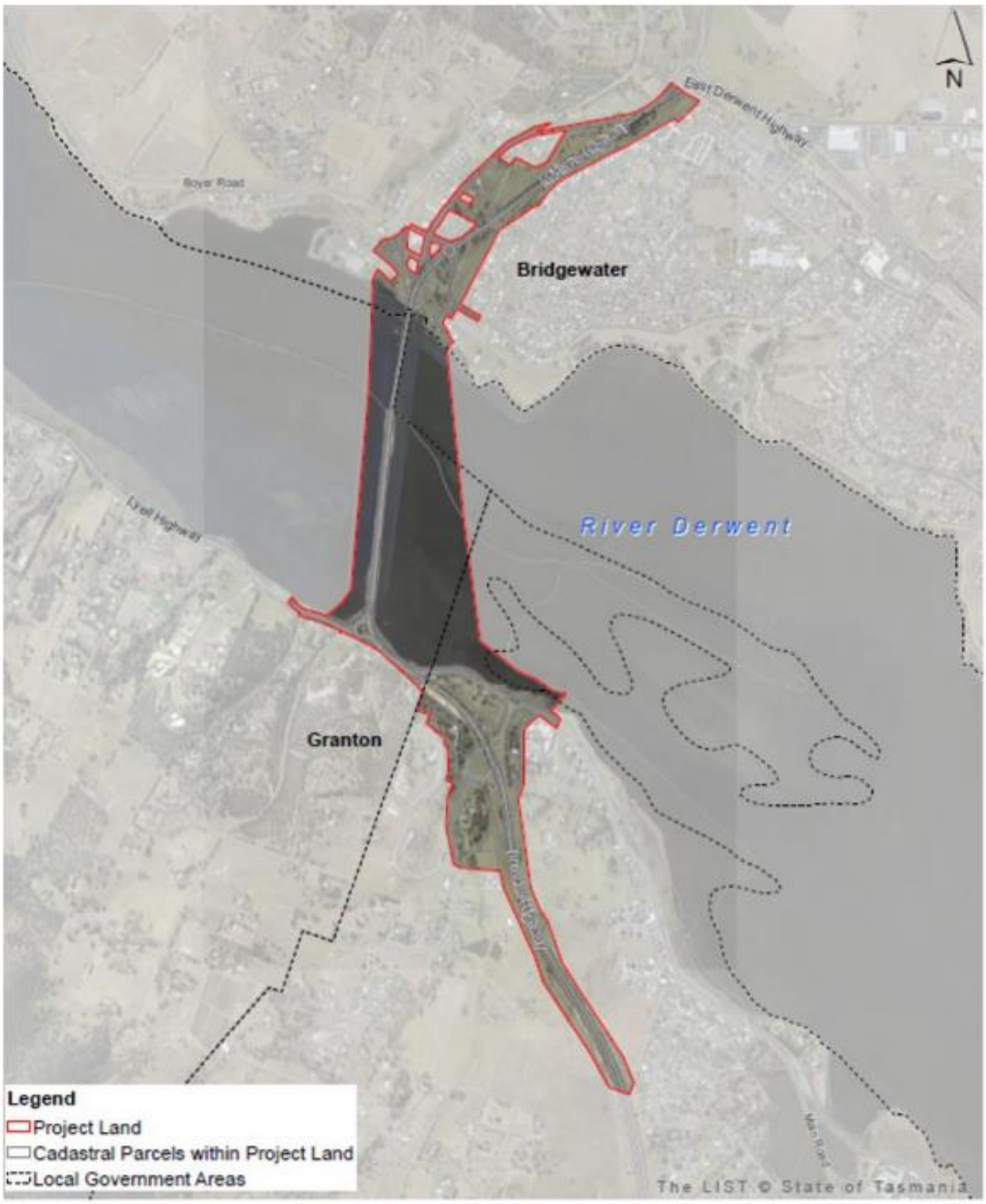

Figure 1 – Extent of the New Bridgewater Bridge Project Land (source MPIS V2). The River Derwent Marine Conservation Area (the Project Area) is the subject of RAA 3928 where located within the MPIS defined Project Land.

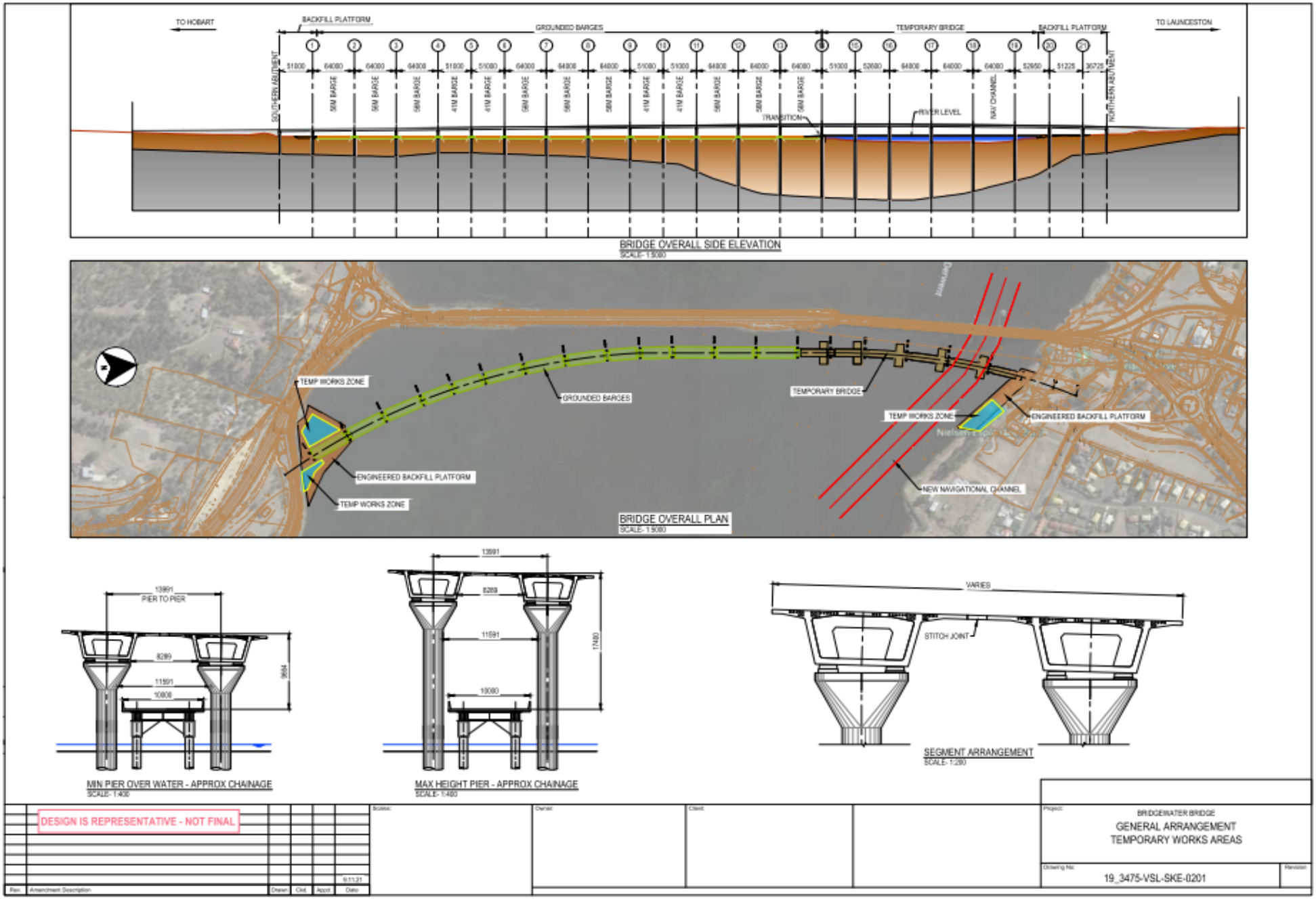

Figure 2: New Bridgewater Bridge Chosen Design. Source: [MPIS Appendix AA - Design Drawings 12 November 2021 (planning.tas.gov.au)]

3.5 River Derwent Marine Conservation Area

The River Derwent MCA is approximately 1636 hectares and lies between New Norfolk in the west and Dogshear Point in the east, with the boundary following the high tide mark (Central Plan Register map # 8628). The reserve area contains habitat for a number of threatened species, including the Derwent River seastar, and the Australian grayling. The reserve provides habitat for migratory wading birds, black swans, native ducks, crabs, pippis, platypus, frogs, snakes, fish, and a diversity of invertebrates. The area also contains important habitat including feeding, breeding and rest areas for whitebait and sharks.

The reserve area in the River Derwent was first proclaimed a "sanctuary with respect to black swans" on 4 March 1920 under the *Animals and Birds Protection Act 1919*. In 1941 the original proclamation was revoked and replaced with a new proclamation under the *Animals and Birds Protection Act 1928* declaring the area a "sanctuary for birds generally". The motivation for changing the proclamation was to protect all birds in the reserve particularly native ducks which were being hunted in the reserve.

The area was proclaimed a conservation area under the NC Act on 9 December 2009. This reserve class provides for the protection and maintenance of the natural and cultural values of the area and the sustainable use of natural resources.
Source: Marine Conservation Areas | Parks & Wildlife Service Tasmania

3.6 Reserved land to be impacted

The main reserved land consideration is the construction of the new bridge across the River Derwent. The new bridge is located to the east of the existing structure and will require the placement of the bridge piles into the riverbed, the reclamation of land on the northern and southern banks of the river, and the installation of temporary structures to facilitate the construction of the bridge. In addition, the works refer to the demolition and selective retention of components of the existing bridge and the removal and reinstatement of the existing public boat ramp and jetty, or an alternative structure e.g. a ferry terminal, as agreed to with Brighton Council and the PWS. The development will result in the permanent loss of an area of aquatic habitat associated with the footprint of the piles and the reclamation area. Additional losses may result from the shading of the riverbed from the bridge superstructure and changes in sediment distribution from the altered hydrology. The total area of reserve land potentially impacted by the works is represented by the marine component up to the high tide mark of the designated ‘Project Land’ in the MPIS.

4. Public and Agency Consultation

4.1 Public consultation summary

The public consultation for this project included:

- stakeholder and community consultation undertaken by the proponent;
- public consultation undertaken by the TPC; and
- public consultation undertaken by the PWS as part of the RAA process.

4.2 Department of Natural Resources and Environment Tasmania and Agencies

The following branches within NRET have been consulted and reviewed information relevant to their specialties during the assessment:

- Conservation Assessment and Wildlife Management Section
- PWS Assets and Engineering
- PWS Environmental Impact Assessment Unit
- PWS Landscapes Programs; and
- PWS Property Services

The National Parks and Wildlife Advisory Council (NPWAC) and Aboriginal Heritage Tasmanian also reviewed information and provided comment.

In general, specialist comment supported the information provided in the MPIS and the recommended mitigation measures. The importance of minimising sediment disturbance was reiterated to prevent the release of contaminants, including heavy metals and nutrients. Mitigation measures will need to be adhered to avoid and minimise impacts of the works within the waterway on the aquatic flora and fauna species. Conditions are included in the TPC permit to ensure impacts are avoided and minimised as far as practically possible. Mitigation measures are proposed to minimise sediment disturbance and an extensive water quality monitoring program will be established to enable an adaptive management approach to sediment control, and include an Estuarine Water Quality Monitoring Plan and an Estuarine Water Quality Management Plan (WQ1 – WQ8).

Detailed construction environmental management plans will be prepared prior to construction to set out the specific controls required to ensure the water quality objectives of the River Derwent are not compromised. Specialists advised that, while the development would result in the loss of aquatic flora species, including threatened species, the extent of the loss was not considered significant at a whole of population scale and specialists did not recommend further restrictions to the removal of the threatened *Ruppia megacarpa* (largefruit seatassel). The removal of bird nests, eggs and fledgling where located within the footprint of the development was also considered acceptable unless otherwise protected under the EPBC Act, whereby further advice requirements are triggered.

Another key issue raised by specialists was the importance of clarifying the future roles and responsibilities for the inspection, maintenance and repair of any infrastructure remaining within the River Derwent MCA following the completion of the construction phase and prior and post the demolition phase for the existing Bridgewater Bridge. It was highlighted that the PWS does not currently have the expertise or resources to manage the existing bridge infrastructure before or following its decommissioning and removal.

The on-going management of any negative impacts to the riparian system as a result of changes in hydrology also requires consideration as well as any changes to the boundary of the River Derwent MCA as a result of the works, including the reclamation. These matters have been addressed by way of conditions recommended to be included in any agreement issued by PWS Property Services.

Aboriginal heritage was addressed as part of the Major Projects assessment process and there are no known sites with Aboriginal heritage values location with the Project Area managed by the PWS. Aboriginal Heritage Tasmania (AHT) advised that all works on PWS-managed land remain subject to the requirements of the Unanticipated Discovery Plan (UDP) should Aboriginal heritage be suspected during works. Other than the use of the UDP, there are no further requirements under the *Aboriginal Heritage Act 1975* for PWS Project Area.

Specialists also commended the improved options for cyclists and pedestrians, also noting that the loss of the rail corridor was a potentially negative outcome.

4.3 Consultation by Proponent

Community consultation was undertaken in 2011/2012 as part of the Bridgewater Bridge Planning Study by the then Department of Infrastructure, Energy and Resources. Community engagement, and included local residents and property owners directly impacted by the development recommenced in 2020. The detail of key stakeholders engaged and an outline of the consultation activities undertaken is outlined in the Major Projects Proposal – New Bridgewater Bridge report dated 03 November 2020.

Additional public consultation was undertaken by the TPC on the preferred design and associated Major Projects documentation, which were available for public and stakeholder comment from 19 January 2022 – 17 February 2022. A total of 16 representations were received and published on the TPC website. Hearings were held in March 2022 to provide an opportunity for representors to clarify matters raised in relation to the MPIS documentation.

In the lead up to the construction phase, information sessions, including a community information centre is proposed within the local area to provide residents with up-to-date information about the project.

4.4 Public Consultation

The Supplementary Information submitted by DSG in response to the further information requested by the PWS was available for public comment via the PWS ‘Have your say’ website from 19 January 2022 – 17 February 2022. A link was provided to the TPC website to facilitate access to the full suite of documentation prepared for the project. No submissions were received via the ‘Have your say’ website. A total of 16 representations

were submitted via the TPC website. The representations included nine submissions by private individuals, three local government representations from the municipal areas impacted and three from state government agencies.

The majority of the issues raised are outside the jurisdiction of the PWS, with a focus on engineering and design considerations. Several submissions raised the issue of the impact of the development on recreational activities, in particular the removal of the boat ramp and jetty. It is noted that this issue has been addressed by way of condition in the Major Projects permit, which requires, within one year of the New Bridgewater Bridge being open to traffic, the Bridgewater boat ramp and jetty be reinstated, along with the adjoining parking area, to an equivalent or better standard than existing, unless agreed in writing with Brighton Council. While this matter is the responsibility of DSG, PWS have advised that the replacement infrastructure be subject to endorsement by PWS givens its location within the River Derwent MCA.

The remaining matters raised within the representations were addressed during the hearings and by the TPC Panel as part of the Major Projects assessment process. A copy of the representations and hearings are available on the TPC website.

5. Need for the proposal and alternatives

5.1 Summary of need

The Bridgewater Bridge is the most direct transport option between Bridgewater, on the northern shore of the River Derwent to Granton and is a key link in the Burnie to Hobart freight corridor, which is Tasmanian highest volume freight network. The Major Projects proposal (03/11/2020) includes a discussion of limitations of the existing bridge due to its load rating and geometry, the estimated operation costs of the existing bridge compared to a new structure and the vulnerability of the causeway to extreme events. Further detailed information on the rational for replacing the existing bridge can be found in the MPIS.

5.2 Alternatives

A comprehensive report – the *Bridgewater Bridge Retention Options Analysis* was prepared by Burbury Consulting (11/11/2021). The report concludes there is no alternative location for the bridge given the existing transport connections and the importance of location to the Tasmania's transport network.

Demolition of existing Bridge

The *Bridgewater Bridge Retention Options Analysis* examines seven different options for the existing bridge. They range from full retention with alternative uses considered, through partial retention with varying degrees of the structure left in place to full demolition.

The TPC Planning permit includes a condition for the retention of historically significant portion of the existing bridge, however most of the existing structure is to be removed once the New Bridgewater Bridge becomes fully operational. The existing heritage value causeway and the 1874 and 1893 bridge abutments must be retained as a condition of TPC approval.

The management responsibility for structures to be retained within the River Derwent MCA requires consideration.

The causeway was constructed by convicts in 1829 and is a narrow finger of land approximately 30m wide and 700m in length which extends two thirds the way across the River Derwent from the southern bank. The causeway where above the high tide mark is outside of the MCA. The MPIS notes the causeway could potentially be re-used for enhanced recreational activities as part of an expanded public open space network. The PWS notes the causeway could contribute habitat for the nesting shorebirds displaced by the new bridge footprint and reclamation works.

The project is supported by funding from the Australian and Tasmanian Governments as part of the Hobart City Deal, having been identified a priority (medium) on Infrastructure Australia's *Infrastructure Priority List.*

It is accepted that the New Bridgewater Bridge is required to replace the current bridge, which no longer meets safety and design standards or current and future requirements for carrying and loading capacity. The proposed location directly to the east of the existing bridge is supported. Given the extent of the River Derwent MCA, there is no practical alternative option for locating the infrastructure outside of the MCA, other than via a revocation process.

6. Evaluation of statutory requirements and policies

6.1 Management Objectives

There is no statutory management plan applicable to the River Derwent MCA. The proposal therefore must be consistent with the purpose of reservation listed in Column 3 of Schedule 1 of the *Nature Conservation Act 2002* and with Schedule 1 – Objectives for management of reserved land under the *National Parks and Reserves Management Act 2002*. The revised Supplementary Information to the Revision 2 Major Project Impact Statement, Appendix 1, includes the proponent's assessment of the proposal against the objectives.

Evaluation of the proposal against the NPRMA management objectives is as follows:

(a) to conserve natural biological diversity

A Natural Values Assessment (NorthBarker, 5th Nov 2021) was undertaken to identify the flora and fauna values within the Project Land. The New Bridgewater Bridge – Aquatic Risk Assessment (Marine Solutions, Nov 2021) identifies the potential aquatic risks of the development and works, including on aquatic flora and fauna and recommends measures and monitoring programs to mitigate these impacts.

The project will result in the loss of aquatic flora and fauna during and following the construction phase. Direct losses are associated with the bridge piles, the footprint of the reclamation area and the impacts resulting from the installation of temporary infrastructure required for the construction phase of the bridge. Post construction, areas subject to changes in hydrodynamics and shading may impact the growth of native aquatic flora.

Potential impacts on aquatic and terrestrial species listed under the *Threatened Species Protection Act 1995* been assessed and addressed by NRET under the Major Projects assessment process. The area and number of threatened terrestrial and aquatic flora and fauna species impacted by the proposal was not considered significant. The TPC permit includes conditions to minimize the impact to threatened species as far as possible. Impacts on non-threatened water bird species are likely, including the black swan, Tasmanian native hen, purple swamp hen and Pacific black duck including the displacement of nesting habitat and the disturbance to the wildlife from construction and demolition activities. The impacts are considered to be short-term and are considered not to be detrimental to these species.

Key risks from the removal of the existing bridge to natural biological diversity includes the mobilisation of the sediments that have accumulated downstream of the existing bridge, the contamination of the aquatic environment from metal-based paints released during the removal of the structure and high frequency noise as a result of the cutting of piles. The risk assessment (Marine Solutions, Nov 2021) determined that, given the seafloor habitat has previously been subject to extreme levels of metal pollution, the quantities are unlikely to have a significant impact on the estuarine flora and fauna in this location. Mitigation

measures are proposed to minimize the likelihood of contaminated paint and other materials entering the water and to minimize the movement of sediments. The noise impacts on aquatic fauna have been addressed by the EPA in their assessment, with the recommended conditions included in the TPC permit.

Overall, the impact of the project footprint within the MCA, including the piles and area of land proposed for reclamation is proportionally minor relative to the extent of the River Derwent MCA. The proponent notes that, *as the opportunities for minimising footprint impact are limited, the key focus will be minimising potential for indirect impacts, particularly in the aquatic environment through rigorous controls on sediment disruption and deposition.* An Environmental Assessment was prepared by the EPA, which included a comprehensive list of conditions to address impacts on water quality, stormwater, noise and vibration emissions, groundwater and light pollution. Implementation of the required mitigation measures will assist to ensure that the impacts on the natural values of the site are minimized and managed in accordance with best practice standards.

- The proposal is not inconsistent with the management objective to conserve biological diversity:
- The works are unlikely to have a significant impact on threatened flora and fauna species; and
- Any impacts on non-threatened species will be largely limited to the construction and demolition phases of the project;
- Biological diversity will be protected outside the area of direct impact through the implementation of measures to mitigate the risks associated with the project including the mobilization of sediments and the movement of barges on the River Derwent;
- Disturbed areas are to be rehabilitated following the construction of the bridge.

(b) To conserve geological diversity

The Lower Derwent River Estuarine Delta and Flood Plains geoconservation site is located within the River Derwent MCA, mostly upstream of the existing bridge and extending to a short distance downstream of the bridge. It is not expected that the Lower Derwent River Estuarine Delta and Flood Plains geoconservation site will be significantly impacted by the construction of the new bridge. Internal NRET specialists agree with the statement in the revised Supplementary Submission to PWS that the geoheritage impact assessment commissioned to assess the potential for impact to the geoconservation site “found the potential for impact to this site to be low, given the relatively small footprint of the bridge works in comparison to the large size of the geosite, and the results of hydrodynamic modelling, which showed only localised changes in sediment distribution as a result of the project.” No mitigation measures are recommended. Geoconservation across the Project Land has been addressed in the MPIS and TPC permit conditions and the proposal is considered to be consistent with this objective.

(c) To preserve the quality of water and protect catchments.

Water quality, including stormwater and ground water were identified as key environmental issues and evaluated by the EPA. The potential impacts of the development on water quality have been examined in detail. The EPA are satisfied with the commitments made in the MPIS to protect water quality. A comprehensive list of conditions are included in the TPC permit to mitigate the potential impacts to water quality and catchment health during and post the construction and demolition phases. The EPA is the relevant regulator responsible for the enforcement of conditions and restrictions they issued for the TPC permit. The proposal is not inconsistent with the management objective.

(d) To conserve sites of cultural significance.

The proposal has been assessed by AHT. The *New Bridgewater Bridge Project Land Summary Aboriginal Heritage Report and Aboriginal Heritage Management Plan* (v.4.0) dated 2.8.2021 prepared by Stuart Huys concluded there are no sites of Aboriginal Cultural heritage located within the MCA. Conditions are included in the TPC permit for the protection of values on the terrestrial portion of the site. Any works within the River Derwent will be subject to an Unanticipated Discovery Plan.

The impact on European historic heritage was comprehensively reviewed in the *Heritage Impact Statement* prepared by Burbury Consulting on behalf of DSG (11/11/2021). The existing Bridgewater Bridge located within the MCA is a site of historic heritage and is proposed for demolition. Conditions are included in the TPC permit requiring the retention of representative samples e.g. the caissons, be retained for interpretative purposes. The Heritage Council is the relevant regulator for enforcement of conditions and restrictions relating to historic heritage. While the existing bridge is proposed for removal, it is considered that the suit of conditions put forward by the Council will facilitate the conservation of the sites cultural significance through the retention, conservation, display and interpretation of samples of the bridge structure. Given these measures, the proposal is considered consistent with this objective.

(e) To provide for the controlled use of natural resources including special species timber harvesting, and including as an adjunct to utilization of marine resources.

The proposal does not relate to or impede the controlled use of natural resources, timber harvesting or utilization of marine resources.

(f) To provide for exploration activities and utilisation of mineral resources.

The proposal is not for exploration activities and utilisation of mineral resources, nor does it jeopardise this provision.

(g) To provide for the taking, on an ecologically sustainable basis, of designated game species for commercial or private purposes, or both.

The proposal does not relate to the taking of designated game species for commercial or private purposes.

(h) To provide for other commercial or industrial uses of coastal areas.

The proposal is for public infrastructure and does not represent a commercial or industrial use of a coastal area.

(i) To encourage education based on the purpose of reservation and the natural or cultural values of the conservation area, or both.

The proposal will encourage education based on the cultural values of the site through the repurposing of sections of the existing bridge for public display and interpretation. There is opportunity to encourage education based on the purpose of reservation through the provision of interpretive signage with a focus on the flora and fauna values of the site as part of the development of the foreshore trail. The project is consistent with this objective.

(j) To encourage research, particularly that which furthers the purpose of reservation.

The proposed bridge does not encourage research however it is noted that extensive investigations have been undertaken to inform the MPIS and the bridge design and that this data maybe beneficial to inform the future management of this section of reserve. The project is not inconsistent with this objective.

(k) To protect the conservation area against, and rehabilitate the conservation area following, adverse impacts such as those of fire, introduced species, diseases and soil erosion on the conservations area's natural and cultural values and on assets within and adjacent to the conservation area.

Mitigation measures, including site rehabilitation, are proposed to protect the values of the conservation area during and following the construction and demolition phase. A comprehensive number of Environmental Management Plans will be developed to identify the appropriate measures. The terrestrial areas adjacent to the MCA will benefit from weed management and rehabilitation works. There is opportunity to repurpose the causeway as shorebird habitat. The project is not inconsistent with this objective.

(l) To encourage appropriate tourism, recreational use and enjoyment (including private uses) consistent with the conservation of the conservation area's natural and cultural values.

A *Recreation Impact Assessment* was prepared by Inspiring Place in August 2021 and the findings indicate the local foreshore and Derwent River is regularly used for recreation and enjoyment. The Assessment identified that the recreational use of the site will be temporarily disrupted during the construction and demolition phases through limited boat and watercraft access, impacts on the Derwent River Big Swim and loss of the local boat ramp and jetty. The benefits include improved access to the upper reaches of the Derwent River as a result of the removal of the lifting span, provision of an upgraded jetty and boat ramp (subject to PWS and Council approval), improved foreshore access via a shared cycle and pedestrian trail, and, opportunities for passive recreation associated with bird watching and interpretive signage. It is considered the improved amenity will encourage appropriate use of the area and that the proposal is consistent with this objective.

(m) To encourage cooperative management programs with Aboriginal people in areas of significance to them in a manner consistent with the purpose of reservation and other management objectives.

The proponent has consulted with AHT as part of the preparation of the MPIS. No sites of Aboriginal significance were identified within the River Derwent MCA. The proposal is not inconsistent with this objective.

Summary of objectives assessment

While state highway infrastructure may not be generally associated with a marine conservation area class of reserve, the location of the existing bridge predates the conservation area classification. It is accepted that the proposal is the replacement of existing infrastructure that is reaching end of life, does not meet contemporary standards for safety and design and is considered an essential component of Tasmania's transport network. The location is within a highly modified area and characterized by contaminated sediments and the existing bridge. Provided the recommended mitigation measures are implemented to minimize the impacts of the development on the natural, cultural and recreational values of the site, the development is not considered inconsistent with the management objectives or purpose for reservation for a conservation area.

7. Evaluation of impacts and recommended conditions

7.1 Background

Assessment Criteria were issued by the TPC on behalf of the Development Assessment Panel to specify the matters to be addressed by DSG in the MPIS. The criteria included the information requirements for each of the participating regulators. The participating regulators have each undertaken a detailed assessment of the proposal, in accordance with the requirements of their Act/s. For example, the EPA were required to consider the proposal in the context of the objectives of the Resource Management and Planning System of Tasmanian and the Environmental Management and Pollution Control System.

The proposal was subject to a rigorous assessment process and the MPIS V2 contains the bulk of the information required by the PWS to assess the proposal under the NPRM Act and associated regulations. The permit issued by the TPC includes a comprehensive number of conditions developed to minimise the impact of the development on the values of the site, including the reserve land.

Supplementary Information was requested by the PWS requiring the proponent to address the management objectives of the NPRM Act and the following key areas;

- impacts on natural values other than listed threatened species
- impacts to the recreational and other users of the conservation area
- protection of cultural values
- minimisation of impacts on reserved land
- management and maintenance responsibilities

Information was also requested in relation to the revocation and/or amendment of the conservation area boundary.

Impacts on natural values can be as a result of a range of construction and demolition activities located both within the MCA and on the adjacent land. Noise, light pollution, disturbance of wildlife, and the disturbance and mobilisation of sediments all have the potential to impact on the natural values of the site. While direct losses associated with the footprint of the bridge and the reclaimed areas cannot be avoided, the implementation of the recommended mitigation measures will be imperative to limiting the indirect impacts. A chosen design has been prepared and was used to inform the MPIS, however it is noted that the final construction methodology and impacts are subject to the final bridge design. Any significant changes in design and/or construction methods warrant further consideration by the PWS.

The site provides aquatic habitat to a range of birds, who utilise the area for feeding, roosting and resting. It is noted that the chosen design proposes the use of a semi-transparent safety barrier and throw screen manufactured from tensile web mesh. No information was provided assessing the bird strike risk presented by this barrier. A Bird Strike Risk Assessment is recommended to determine any risks associated with the final

design and choice of materials to enable the recommended mitigation measure be incorporated into the final plans submitted for approval.

The following table references the TPC conditions that are considered relevant to matters requiring consideration under this RAA. The TPC conditions are included to demonstrate how these matters have been addressed and to avoid duplication of requirements. However, as the PWS is not a relevant regulator, duplication is required in some instances for example, where PWS requires access to management plans, including Construction Environmental Management Plans (CEMPS), reports, surveys, and design plans, these must be requested separately.

7.2 Compliance and Enforcement

It is noted that the relevant regulators under the Major Project approvals process are responsible for the enforcement of their management plans, including Environmental Management Plans or other plans as identified in the TPC permit. The PWS will be responsible for the regulation of its relevant conditions.

7.3 Recommended Conditions

The construction of the New Bridgwater Bridge was approved by the Tasmanian Planning Commission Development Assessment Panel subject to the conditions of the Major Projects Permit, MPP2201 (also referred to in this document as the 'TPC permit'). This permit includes the bulk of the conditions required to ensure the development and works are undertaken in a manner which will minimise impacts to the natural and other values of the Project Land and provides a regulatory framework under which the works can occur. The conditions listed in MPP2201 were taken into consideration during the preparation of the PWS conditions, with the aim to avoid duplication of the conditions, roles and responsibilities.

The following table is a summary of the recommended PWS permit conditions. The relevant TPC permit conditions are included for context. These conditions take into consideration specialist advice and community comments.

7.3 Roles and Responsibilities

The proponent has identified the following roles and responsibilities;

1. In relation to Conditions that relate to the demolition of the existing Bridgewater Bridge and not the construction of the new bridge, they are the responsibility of the State to the extent that they relate to the demolition of the existing bridge.
2. In relation to Conditions that relate to the submission of design plans for any boat ramp or jetty, or other facility that is constructed as a replacement or reinstatement of the existing Bridgewater Bridge boat ramp or jetty, they are the responsibility of the State to the extent that they relate to the boat ramp, jetty or other replacement facility.
3. Conditions that relate to the determination of appropriate reserve boundaries and revocation of reserved land are the responsibility of the State.
4. Conditions that relate to the creation of Agreements with the Parks and Wildlife Service to formalise post-demolition responsibilities for the components of the existing Bridgewater Bridge to be retained within the River Derwent Marine Conservation Area are the responsibility of the State.

7.4 Implementation of Conditions

Two separate mechanisms are proposed to enable the conditions to be fulfilled. A license will be prepared which includes the conditions which are the responsibility of the Contractor, and a Memorandum of Understanding (MOU) will be established between the Parks and Wildlife Service and the Department of State Growth to cover off on the conditions that are the responsibility of DSG.

The following conditions apply to the River Derwent Marine Conservation Area where the River Derwent MCA is located within the Project Land defined in Figure 3.2 of the New Bridgewater Bridge Major Project Impact Statement (November 2021) and referred to as the 'Project Area' unless otherwise defined.

1A - The proponent is authorised to undertake the development and works in accordance with the conditions listed in the Major Projects Permit, MPP2201, subject to the conditions below, that would otherwise be prohibited under Regulation 5 – 2; (a), (b), (c), 4; (a), (c), (5), (6), 7; (a), (b) and Regulation 7 – 1; (a), (e), (f),(2) of the National Parks and Reserves Management Regulations 2019.
1B - The contractor is in control of the work site for the duration of the works and is responsible for ensuring the health and safety of people using the site as detailed in the Work Health and Safety Act 2021, the Work Health and Safety Regulations 2021 and in the required works plan.
1C - The proponent must report any breaches of the Terms of Consent as soon as practicable and no later than 24 hours of becoming aware of the matter to the Parks and Wildlife Services (PWS) Regional Manager South, or a delegate. The report may be initially verbal; however, written notification must be provided within 48 hours of becoming aware of the breach. The written notification must provide details including, but not limited, to:

- breach of condition;
- date, time;
- cause of breach;
- likely environmental harm caused; and
- action taken or to be taken, compliant with relevant legislation, to minimise environmental impact or breach of conditions.

1 D - A copy of the approved design plans, management plans and other plans, reports, surveys and audits and the like must be made available to the Regional Manager, PWS South or their delegate within 7 days of the request, unless otherwise specified.

Table 1 PWS Permit Conditions

Topic	TPC Major Project Permit Conditions: MPP2201	PWS comment	PWS Recommended Conditions	No.
Approved and endorsed plans	1. Design plans and management plans, approved or endorsed under a condition of this permit, form part of the permit.	Supported – PWS will be approving plans therefore duplicate condition required.	Design plans and management plans, approved or endorsed under a condition of this permit or under MPP2201, form part of the approval.	RC1
	2. Use and development must be undertaken generally in accordance with the required, approved design plans, management plans and other plans.	Supported – PWS requires the same condition	Use and development must be undertaken generally in accordance with the required, approved design plans, management plans and other plans.	RC2
	3. Approved design plans, management plans and other plans must not be altered or modified without the written consent of the Commission, or the relevant regulator responsible for enforcement of a management plan or other plan.	Supported – noting that 'Other plans' is defined in the TPC Permit and only includes plans required as part of the TPC permit.	The written consent of the PWS is required to alter or modify approved design plans, management plans and other plans where that alteration or modification will impact matters protected under the *National Parks and Reserves Management Act 2002*.	RC3
Final design plans	4. Prior to the commencement of relevant construction, design plans must be prepared by a suitably qualified person, must be provided to the satisfaction of the commission.	Supported – PWS to request a copy of the design plans. Relevant construction, as per MPP2201, *means construction activities, other than Low Impact Works, that are directly associated with, and may cause an impact against or relate to, a particular issue.*	Prior to the commencement of relevant construction, a copy of the design plans must be submitted to the Regional Manager, PWS South, or their delegate. The design plans must include the structures to be retained following the demolition of the existing bridge, be consistent with the requirements of the relevant PWS permit conditions and must be to the satisfaction of the Regional Manager, PWS South, or their delegate.	RC4
	Design plans must be fully dimensioned, drawn to a scale, and be generally in accordance the following plans: 5.1. New Bridgewater Bridge – Master Plan – Sheet No 0002(dated 11-Nov-21); 5.2. New Bridgewater Bridge – finishes schedule – Sheet No 0003 (dated 15-Nov-21); 5.3. New Bridgewater Bridge – General Arrangement – Sheet 1 to 5 of 5 - Sheet No 0005 to 0008 (dated 11 Nov-21) and Sheet No 0009 (dated 10-Nov-21); 5.4. New Bridgewater Bridge – Main Bridge details Sheet 06 – Sheet No. 0015 (dated 10-Nov-21);	Supported – noting that 5.11 includes the requirement for the location and dimensions for reclamation set out in the Existing and Future Public Open Space and Access Paths – Bridgewater and Granton (on or near Project Land), Burbury Consulting (2 sheets), dated 11/11/2021 to be included in the design plans.	See RC4	

	5.5. New Bridgewater Bridge – Black Snake Bridge Sheet 02 – Sheet No. 0020 (dated 10-Nov-21); 5.6. New Bridgewater Bridge – Perspective Sheet 01 to 03 and 05 – Sheet No. 0030, 0031, 0032, 0034 (dated 10-Nov-21); 5.7. New Bridgewater Bridge – Typical cross sections Sheet 1 and 5 – Sheet No. 1101 and 1105 (dated 9-Nov-21); 5.8. New Bridgewater Bridge – Shared use path general arrangements Sheet 1 to 4 – Sheet No. 1401, 1402, 1403, 1404(dated 9-Nov-21); 5.9. New Bridgewater Bridge – Chosen Design – 3 sheets (undated); 5.10. New Bridgewater bridge project – Potential locations of noise walls (sheets 1 to 3 of 3), (undated); and 5.11. the location and dimensions for reclamation set out in the Existing and Future Public Open Space and Access Paths – Bridgewater and Granton (on or near project land), Burbury Consulting (2 sheets), dated 11/11/2021.	The TPC permit condition does not appear to include the requirement for the plans to show the location of infrastructure to be retained following the demolition of the existing bridge. Design plans must be consistent with the requirements of 'any other permit condition' in relation to the major projects permit. PWS requires a separate condition to cover this requirement. Design plans must include any recommended mitigation measures to reduce bird collision risk.		
	The design plans must be modified from the plans listed in condition 5: 6.1. so that the height of roads on the south side of the River Derwent, at the intersection of Main Road and Black Snake Road, and Main Road passing under the New Bridgewater Bridge, are capable of accommodating a road height higher than a 1% annual exceedance probability from a flood event in 2090; 6.2. to respond to issues identified in previous road safety audit reports; 6.3. to include plans of access provisions for land impacted by the new works; 6.4. to provide reasonable provision for U-turns to accommodate local traffic requirements on roads with turning limitations to or from intersecting roads or properties; 6.5. to provide Disability Discrimination Act 1992 (Cth) compliant paths;	Supported – noting that effectively losing a portion of the Marine Conservation Area – converting marine habitat to terrestrial area. Confirm process required. 6.11. to include the final location and general arrangements of all structures; (all structures may not include the structures to be retained following the demolition of the existing bridge) – see RC4. 6.13. to identify the areas of land to be reclaimed from the River Derwent above the	Prior to the commencement of the reclamation works. the design plans for the permanent and temporary reclamation areas must be submitted to the satisfaction of the Regional Manager, PWS South, or their delegate. The extent of the reclaimed area must be the minimum required for the purpose of the reclaimed land and the shape must be designed to minimise disruptions to water flows as demonstrated by hydrodynamic modelling. The plans must include: 1) the final location and dimensions of the permanent and temporary reclamation areas; and, 2) the area in m2 of reclaimed land located above and below the high tide line.	RC5

	6.6. to provide bus stops in consultation with public transport providers; 6.7. to provide safe pedestrian and cyclist crossing points where paths meet roadways and other paths, and to provide access to bus stops; 6.8. to provide for the creation of a foreshore trail beneath the new bridge at Bridgewater, connecting the path from folios of the Register 176642/4 and 176642/5 to Gunn Street; 6.9. to include footpaths on both sides of Gunn Street; 6.10. with a materials and finishes schedule that has: 6.10.1. a colour palette of natural and muted hues; and 6.10.2. low reflectivity to avoid glint and glare; 6.11. to include the final location and general arrangements of all structures; 6.12. to include the works or structures associated with any operating stage noise mitigation measures required by this permit; 6.13. to identify the areas of land to be reclaimed from the River Derwent above the high water mark, that does not exceed: 6.13.1. 5500m² at the southern site; and 6.13.2. 2500m² at the northern site; 6.14. to show the existing rail corridor, including showing a useable clearance available under and beside the bridge; 6.15. to include a vehicle crossing for access to the Watch House property; and 6.16. to be consistent with the requirements of any other permit condition.	high water mark, that does not exceed: 6.13.1. 5500m² at the southern site; and 6.13.2. 2500m² at the northern site; These dimensions will not capture the full extent of the impact. On-going management implications for PWS must be determined and addressed. 6.16. to be consistent with the requirements of any other permit condition and 6.8 provides for the creation of a foreshore trail. Future consideration - PWS to engaged with the Brighton Council in the design phase of any foreshore trail where it impacts or adjoins PWS MCA.	The rectification of any issues that may affect the reserved land as a result of the reclaimed areas is the responsibility of the proponent, for a period of not less than three years from the date of cessation of works unless otherwise agreed in writing, and includes repairs to the erosion protection measures of the permanently reclaimed area, above and below the high tide mark, and indirect impacts caused by the expansion of land into the River Derwent Marine Conservation Area, e.g. erosion and scouring of the foreshore. Temporary and permanently reclaimed land must be rehabilitated to the satisfaction of the Regional Manager, PWS South or their delegate. The proponent is responsible for ensuring that appropriate reserve boundaries are determined in consultation with the Parks and Wildlife Service within six months of construction and demolition finishing at the development site. If revocation of reserved land is required by the PWS, the revocation process is the responsibility of the proponent and must commence within twelve months of construction and demolition finishing at the site.	RC6 RC7 RC8
Staging	7. Use and development may be completed in stages. The corresponding obligations arising under this permit may be completed in accordance with the approved staging report. 8. Where staging is proposed, a staging report must be provided to the satisfaction of the Commission. 9. A staging report must set out for the whole of the project:	Supported – include in agreement.	Where staged construction, demolition or operation is proposed, PWS must be provided with a copy of the approved staging report which is to specify how the relevant conditions of the PWS approval apply to each stage and how compliance with those conditions will be achieved across and between each of the stages of the major project. The Regional Manager, PWS South, or their delegate, must be	RC9

	9.1. how relevant aspects of construction and operation shall be staged and sequenced; and 9.2. the location and details of associated development and works within each stage.		notified in writing of the commencement of the construction, demolition and operation stages of the Project, at least 5 days before each stage commences.	
Low impact work	10. Low impact work may occur prior to construction. **Low Impact Works** means topographical or feature survey work including installation of controls and markers, dilapidation surveys, underground service location including potholing, geotechnical investigations including drilling, coring, test pitting and hand testing, collection of samples for analysis including of contaminated materials, installation of monitoring stations, installation of mitigation measures for sediment and erosion control, installation of temporary fencing, establishment of temporary facilities to support construction (e.g. site offices and laydown areas), establishment of exclusion zones for protected areas, archaeological investigations, geoheritage investigations, maintenance of existing facilities under the control of the Proponent, and in accordance with any other condition required by this permit. **Relevant construction** means construction activities, other than Low Impact Works, that are directly associated with, and may cause an impact against or relate to, a particular issue.	*and in accordance with any other condition required by this permit* - taken to mean that any other condition requiring mitigation measures also apply to Low Impact Works. The timing might not be adequate e.g. EMPs only required prior to the commencement of 'relevant construction' which may not include Low Impact Works. Condition is required to ensure protection of values within the MCA, noting that 'low impact' is not clearly defined in terms of potential environmental impacts.	The Regional Manager, PWS South, or their delegate must be notified 48 hours in advance prior to the commencement of any low impact works within the Project Land. Low impact works, where located in the River Derwent Marine Conservation Area, must be undertaken in a manner that avoids or minimises impacts to wildlife, plants, habitat, and sediments. Low impact works should ensure that best practice environmental protocols are implemented throughout the activity to minimise impacts on the natural values of the marine conservation area, including: (i) Best practice sediment dispersal and stormwater control measures; (ii) Best practice sediment storage, sampling, and disposal procedures consistent with EPA guidelines; (ii) Best practice fuel and hazardous material handling, storage and clean up procedures; and (iii) Best practice biosecurity procedures, including cleaning of all equipment prior to immersion in the river, consistent with the DPIPWE (2015) Weed and Disease Planning Guidelines.	RC10
Aboriginal heritage	Aboriginal heritage 15. Works must not to occur within 2m of site AH13880. 16. Prior to the commencement of works, highly visible and durable barricading must be placed around site AH13880 at a distance of not less than a 2m radial buffer.	Supported – AHT advice provided regarding UDP requirement.	All works within the River Derwent Marine Conservation Area must adhere to Aboriginal Heritage Tasmania's Unanticipated Discovery Plan. The Plan must be kept on site to aid in meeting the requirements under the Act. If at any time during works, Aboriginal heritage values are impacted, works must cease immediately, and Aboriginal Heritage Tasmanian contacted for advice.	RC11

Reclamation	18. Reclamation must use one or more of the following fill types: 18.1. clean fill type 1 as defined under the Environmental Management and Pollution Control Act 1994; and 18.2. an alternative fill approved by the Director, EPA. 19. Reclaimed land at the southern site must be armoured with rock or similar erosion protection measures to minimise the risk of predicted 1% AEP erosion events in 2090. 20. Reclaimed land at the northern site must have erosion protection measures installed, commensurate with the duration of usage.			
Marine safety and infrastructure	25. Within 1 year of the New Bridgewater Bridge being open to traffic, reinstate the Bridgewater boat ramp and jetty, and adjoining parking area, to an equivalent or better standard than existing, unless agreed in writing with Brighton Council. 26. Prior to and during construction works within the River Derwent: 26.1. install and maintain temporary navigation aids and markers during construction of the New Bridgewater Bridge, in accordance with advice from MAST; and 26.2. have a vessel available to be deployed within the project land in the River Derwent to assist with the safe navigation of vessels. 27. Prior to the completion of the development, install permanent navigation aids and markings for the ongoing safe navigation of vessels, in accordance with advice from MAST.	Supported – PWS to be engaged in the location of the replacement facility within the River Derwent Conservation Area. Supported – requires authorisation under NPRM Act regs. Further consideration is required where impacts are outside of the Project Area. The following conditions are considered covered by condition 1A: Temporary navigation aids and markers within the Project Area are approved for installation as required for the duration of the construction and demolition phases of the project. All buoys, structures, navigational devices, work platforms, reclaimed land, signage and other items	Prior to the reinstatement or relocation of the Bridgewater Bridge boat ramp and jetty, design plans must be submitted to the satisfaction of the Regional Manager, PWS South, or their delegate, unless otherwise agreed in writing with the Parks and Wildlife Service.	RC12

		located within the River Derwent Marine Conservation Area that are of a temporary nature and associated with the construction, demolition and rehabilitation stages of the New Bridgewater Bridge project must be removed as soon as it is safe and practical to do so or before expiry of this Agreement. Permanent navigation aids and markings for the ongoing safe navigation of vessels must be located within the Project Area and be in accordance with advice from MAST.		
Public Open Space	29. An open space network must be provided substantially in accordance with the future public openspace, shown in: 29.1. Existing and Future Public Open Space and Access Paths – Bridgewater (on or near project land), dated 1/11/2021; and 29.2. Existing and Future Public Open Space and Access Paths – Granton (on or near project land), dated 1/11/2021.	Potentially involves PWS if foreshore is included or goes below high-water mark. Open space network to be prepared in consultation with PWS.	The open space network must be designed in consultation with the Parks and Wildlife Service where works are proposed within or immediately adjacent to the River Derwent Marine Conservation Area.	RC13
Construction Environmental Management Plan	35. Prior to the commencement of relevant construction a Construction Environmental Management Plan must be prepared by a suitably qualified person and provided to the satisfaction of the Commission. 36. The Construction Environmental Management Plan must: 36.1. for land reclamation works: 36.1.1. set out the methodology for reclamation works, including the type of fill required by condition 18;	Supported – Include the requirement for PWS and or Property Services to endorse CEMP. There is no management strategy proposed for minimising impacts to the fauna that currently use the site. Bird strike risk also requires assessment.	Prior to the commencement of relevant construction, a copy of the Construction Environmental Management plan required under Condition 35 of the TPC permit must be submitted to the satisfaction of the Regional Manager, PWS South, or their delegate. The methodology for reclamation works must include the rehabilitation details.	RC14

	36.1.2. set out the erosion protection measures to be used at the southern site and northern site; and 36.1.3. set out the methodology of how reclamation at the northern site will be removed; 36.2. for works on the causeway, set out the management strategies, including monitoring, to be applied to minimise the risk to causeway embankment failure; 36.3. for wetlands work, include construction diagrams and maps that identify areas of the wetlands threatened native vegetation community to be excluded from clearance and conversion; and 36.4. include construction diagrams and maps that identify the location of the site AH13880 to be excluded from works.	Australian grayling migration considerations are included under the EPBC condition		
Weed Disease and Hygiene Management Plan	48. Prior to the commencement of relevant construction, a Weed, Disease and Hygiene Management Plan prepared by a suitably qualified person must be provided to the satisfaction of the Commission. 49. The Weed, Disease and Hygiene Management Plan must be consistent with the Weed and Disease Planning and Hygiene Guidelines - Preventing the spread of weeds and diseases in Tasmania.	Supported – the Weed, Disease and Hygiene Plan is not currently included in the CEMP. Needs to include section on marine pests and diseases.	Prior to the commencement of relevant construction, the Weed, Disease and Hygiene Management Plan must be provided to the satisfaction of the Regional Manager, PWS South, or their delegate.	RC15

Tasmanian Heritage Council	HERITAGE COUNCIL For the purpose of section 60ZZP(9) of the Land Use Planning and Approvals Act 1993, the Heritage Council is the relevant regulator responsible for enforcement of conditions and restrictions THC1 to THC3. **THC2 and THC3–** see TPC Permit for details. No implications for PWS. **THC1 Bridgewater Bridge** Conditions THC1, 1. to 8. apply to the Bridgewater Bridge, a registered place. 1. Documentation demonstrating how the following conditions are to be implemented, must be provided to Heritage Tasmania to the satisfaction of Works Manager, Heritage Tasmania prior to the commencement of works within the registered place. 2. An overarching construction heritage management plan (CHMP) must be developed for the registered place and must include the following components: 2.1. A site induction protocol must be prepared by a suitably qualified person and must be implemented for all contractors working within or adjacent to the registered place. The induction protocol must explain the heritage values of the place and the relevant heritage conditions of the permit that apply, including archaeological matters; 2.2. A staging plan must be prepared for the proposed works within the registered place. The staging plan for the registered place must explain how this staging plan relates to the overall staging plan for the project; 2.3. A construction noise and vibration management plan (CNVMP) must be prepared by a suitably qualified person and must include a vibration risk assessment for the registered place; 2.4. The CHMP must include protection zones and vibration management around structures and areas of heritage significance, including areas of archaeological significance, to avoid damage to these items during construction activity. The	Supported The causeway is currently outside of the River Derwent Marine Conservation Area – future use of this site is open for discussion. Engage Derwent Estuary Program and PWS. Opportunity to off-set the reclamation area by including the causeway in the MCA. Provides potential nesting habitat and passive recreation opportunities. Implications of retaining the bridge abutments and identification of on-going management responsibility for the structures, which are currently located within the Marine Conservation Area. Implications of retaining the bridge caissons and identification of on-going management responsibility for the structures located within the marine conservation area. PWS to be engaged in discussions regarding on-going management of the remaining components of the existing Bridgewater Bridge. Three-year timeframe noted for the maintenance of the rehabilitation works under the	The proponent is responsible for the on-going inspection, servicing and maintenance of the existing Bridgewater Bridge to a standard which minimises any impacts on the values of the River Derwent MCA until such time that the bridge is demolished and an Agreement entered into or otherwise as agreed to in writing by the Regional Manager, PWS South, or their delegate. The proponent is responsible for ensuring an Agreement with the PWS is established to formalise the post-demolition responsibilities for the components of the existing Bridgewater Bridge to be retained within the River Derwent Marine Conservation Area. Interpretation, maintenance, and monitoring must be addressed in the Agreement. The Agreement must be established within 6 months of the demolition of the existing bridge, or to an alternative timeframe as agreed to by the Regional Manager, PWS South, or their delegate.	RC16

	establishment of protection zones must include all associated uses for the registered place, such as the provision of laydown areas; and 2.5. All excavation and ground disturbance within the causeway must be managed and monitored by a historical archaeologist in accordance with the Archaeological Impact Assessment & Archaeological Method Statement - Bridgewater Bridge Replacement by Praxis Environment dated November 2021. The CHMP must include notification protocols whereby archaeological advice is sought if unanticipated archaeological features or deposits are uncovered during excavation or where doubt exists concerning the historical cultural heritage significance of any materials uncovered during excavation or ground disturbance; that provision must be made for controlled archaeological excavation to be undertaken when and to a standard consistent with the archaeological advice received. 3. The existing causeway and the 1874 and 1893 bridge abutments must be retained. 4. Other than where it is demonstrably necessary to provide a sufficient navigation channel, the caissons of the existing Bridgewater Bridge must be retained for interpretive purposes.	TPC permit conditions. Arrangements post 3 years to be determined.		

ENVIRONMENT PROTECTION AUTHORITY TASMANIA For the purpose of section 60ZZP(9) of the Land Use Planning and Approvals Act 1993, the Environment Protection Authority is the relevant regulator responsible for enforcement of conditions and restrictions G1 to G7, A1 to A5, FF1, GW1, H1, L1 to L2, M1, N1 to N6, S1 to S2, WM1, and WQ1 to WQ8.				
General	**G1 Access to and awareness of conditions and associated documents** A copy of these conditions and any associated documents referred to in these conditions must be held in a location that is known to and accessible to the person responsible for the Project. The person responsible for the construction and demolition phases of the Project must ensure that all persons who are responsible for undertaking work in association with this Permit, including contractors and sub-contractors, are familiar with these conditions to the extent relevant to their work.	Supported	A copy of the PWS conditions and any associated documents referred to in these conditions must be held in a location that is known to and accessible to the person responsible for the Project. The person responsible for the construction and demolition phases of the Project must ensure that all persons who are responsible for undertaking work in association with this Permit, including contractors and sub-contractors, are familiar with these conditions to the extent relevant to their work.	RC17
	G2 Incident response If an incident, not otherwise permitted by this approval, causing or threatening environmental nuisance, serious environmental harm or material environmental harm from pollution occurs in the course of the Project, then the person responsible for the Project must immediately take all reasonable and practicable action to minimise any adverse environmental effects from the incident.	Supported – PWS to be notified of any changes approved of in writing by the EPA board.	The Regional Manager, PWS South, or their delegate is to be advised of environmental incidents not otherwise permitted under an existing permit, causing or threatening environmental nuisance, serious environmental harm or material environmental harm where the incident occurs within or impacts the River Derwent Marine Conservation Area. The proponent must advise the PWS of the actions taken to minimise the risk of adverse environmental effects.	RC18
	G3 No changes without approval 1. The following changes from that already approved under this permit or any of its conditions, if they may cause or increase the emission of a pollutant which may cause material or serious environmental harm or environmental nuisance, must only take place in relation to the construction and demolition phases of the Project if such changes have been approved in writing by the EPA Board, or by the Director: 1.1. a change to a process used in the course of carrying out the Project; or 1.2. the construction, installation, alteration or removal of any structure or equipment used in the course of carrying out the Project; or	Supported – duplicate so that PWS to be notified of changes.	The Regional Manager, PWS South, or their delegate is to be notified of any changes approved by the EPA board, or by the EPA Director where the change is located within or will result in an impact to the River Derwent Marine Conservation Area.	RC19

	1.3. a change in the quantity or characteristics of materials used in the course of carrying out the Project.			
	G4 Change of responsibility If the person responsible for the construction and demolition phases of the Project intends to cease to be responsible, that person must notify the Director in writing of the full particulars of any person succeeding him or her as the person responsible before such cessation.	Supported – PWS also requires notification. Include as a condition.	If the person responsible for the construction and demolition phases of the Project intends to cease to be responsible, that person must notify the Regional Manager, PWS South, or their delegate in writing of the full particulars of any person succeeding him or her as the person responsible before such cessation.	RC20
	G5 Notification prior to commencement The Director must be notified in writing of the commencement of construction, demolition stages and operation stages of the Project, at least 14 days before each stage commences.	Supported	See staging condition – RC9	
	G7 Environmental Management Plans 1. A minimum of one month prior to the planned commencement of construction, or by a date otherwise specified in writing by the Director, relevant Environmental Management Plans (EMPs) as listed in Condition G7.4 must be submitted to the Director for approval, addressing all proposed upcoming construction works for the Project. This requirement will be deemed to be satisfied only when the Director indicates in writing that the submitted documents adequately address the requirements of these conditions (as relevant) to their satisfaction. Construction cannot commence until the Director has approved all EMPs applicable to the commencing works. 2. A minimum of one month prior to the planned commencement of the existing bridge demolition phase of the Project, or by a date otherwise specified in writing by the Director, Environmental Management Plan (EMPs) as listed in Condition G7.4 must be submitted to the Director for approval, addressing all proposed demolition works. This requirement will be deemed to be satisfied only when the Director indicates in writing that the submitted	Supported – Request access to all plans. PWS to review relevant management plans – relevant plans are those which detail mitigation measures that protect values as defined under the NPRM Act. The demolition of the existing bridge involves works in the marine environment. (see Appendix N for risks and mitigations). The impact of the demolition works are to be addressed in the specified EMPs. EIA documentation includes assessment of demolition works.	A copy of the approved environmental management plans required under condition G7 of the TPC permit must be made available to the Regional Manager, PWS South, or their delegate, upon request. The PWS can request changes to an EMP where it is determined the document does not adequately address the requirements of the PWS conditions.	RC21

	documents adequately address the requirements of these conditions (as relevant) to their satisfaction. Demolition cannot commence until the Director has approved all EMPs applicable to the commencing works. 3. The EMPs must be prepared in accordance with these conditions and any reasonable guidelines provided by the Director, and otherwise consistent with the MPIS, with the purpose of preventing environmental nuisance and/or harm. EMPs must be updated as necessary to reflect staging of works or other changes as the project progresses, and updates provided to the Director for approval. 4. Unless otherwise approved in writing by the Director, without limitation, the following EMPs must be provided for the construction phase of the Project and, as relevant, for the demolition phase of the Project: 4.1. an Air Quality Management Plan, addressing both dust and emissions; 4.2. a Noise and Vibration Management Plan, including consideration of underwater noise management; 4.3. an Estuarine Water Quality Monitoring Plan; 4.4. an Estuarine Water Quality Management Plan; 4.5. a Contingency Management Plan for construction in the Derwent; 4.6. a Stormwater Management Plan; 4.7. an Environmentally Hazardous Materials Management Plan; 4.8. a Waste Materials Management Plan; 4.9. a Lighting Plan; and 4.10. a Decommissioning and Rehabilitation Plan. 5. The EMPs must include the following: 5.1. staging of proposed works, including consideration of management changes as works progress;			

	5.2. best practice environmental management measures; 5.3. processes for adaptive management and incident response; 5.4. an implementation timetable for key aspects of the plans; and 5.5. a reporting program to regularly advise the Director of the results of the plans. 6. The person responsible must implement and act in accordance with the approved EMPs. 7. In the event that the Director, by notice in writing to the person responsible, either approves a minor variation to the approved EMPs or approves new plans in substitution for the EMPs originally approved, the person responsible must implement and act in accordance with the varied EMPs or the EMPs, as the case may be.			
Hazardous Substances	**H1 Storage and handling of environmentally hazardous materials** 1. Without limitation, unless otherwise approved in writing by the Director, the Environmentally Hazardous Materials Management Plan(s) required under these conditions must include provision for storage, handling and mobile containment of environmentally hazardous materials by the person responsible on The Project Land including: 1.1. storage within impervious bunded areas, spill trays or other containment systems; and 1.2. management to prevent unauthorised discharge, emission or deposition of pollutants in a manner that is likely to cause serious or material environmental harm: 1.2.1. to soils; 1.2.2. to groundwater; 1.2.3. to waterways; and/or 1.2.4. beyond the boundary of The Project Land.		The Regional Manager, PWS South, or their delegate to be notified of unauthorised discharge, emission or deposition of pollutants that cause environmental harm to the River Derwent Marine Conservation Area.	RC22

	2. Management measures may include spill kits, spill trays/bunds or absorbent pads, and automatic cut-offs on any pumping equipment. Management equipment must be kept in appropriate locations near areas of work.			
Lighting	**L1 Artificial lighting design and use** 1. Unless otherwise approved in writing by the Director, lighting for construction, demolition, and operational phases of the Project, must be selected and used on the basis of achieving the minimal artificial lighting required to meet design and safety requirements and standards, while minimising adverse impact on sensitive receptors including fauna, with consideration of the light pollution analysis and relevant management measures recommended in the MPIS. 2. Without limitation, unless otherwise approved in writing by the Director, the Lighting Plan(s) required under these conditions must specify principles and parameters for selection and use of lighting during the construction and demolition phases of the Project, in accordance with the MPIS.	Supported – PWS to endorse the Lighting Plan as the consultant's report identified significant impacts on natural values if the recommendations are not implemented.	A copy of the Lighting Plan/s, post construction light survey and associated audits required as a condition of the TPC Permit L1 and L2 must be provided to the satisfaction of the Regional Manager, PWS South, or their delegate.	RC23
Waste and Contamination Management	**WM1 Waste Materials Management Plan** 1. Without limitation, unless otherwise approved in writing by the Director, the Waste Materials Management Plan(s) required under these conditions must include: 1.1. Consideration of the waste management hierarchy; 1.2. Any proposed or potential reuse of material; 1.3. Measures for detecting, testing, classification, management and treatment of the following with consideration of IB 105 and the ASS Guidelines, and in accordance with measures recommended in the MPIS: 1.3.1. PASS and sediment from the River Derwent contaminated with metals, PAH and nutrients;	Supported - The plan to include consideration of all potentially contaminated substances associated with the existing bridge, including the paint pigments, and the built-up sediments downstream of the existing bridge and describe how these contaminants will be managed and contained during the demolition works.	Prior to the commencement of demolition works associated with the removal of the existing bridge, the Waste Management Plan, or a sub-plan, must be submitted to the satisfaction of the Regional Manager, PWS South, or their delegate.	RC24

	1.3.2. PASS and sediments from PASS areas as identified in the MPIS; 1.3.3. AASS as identified in the MPIS; 1.3.4. Contaminated soils as identified in the MPIS; 1.3.5. Solid wastes mixed into the soils within the embankment on the northern end of the existing Bridgewater Bridge; 1.3.6. Excavated soils and sediments from potentially contaminated areas; 1.3.7. Unanticipated contamination, or controlled and general waste. 1.4. Measures for managing potential dust, odours and spills, for containment of leachate from contaminated material, PASS and ASS, and management of contaminated stormwater or groundwater 1.5. Transport, disposal and/or reuse of controlled waste and other waste materials, with consideration of any further approvals required under the Environmental Management and Pollution Control (Waste Management) Regulations 2020 or amended versions thereof.			
	WQ3 Estuarine Water Quality Management Plan 1. Without limitation, unless otherwise approved in writing by the Director, the Estuarine Water Quality Management Plan(s) required under these conditions must include details of the following: 1.1. Relevant Community Values within the area of potential estuarine water quality impact as a result of construction and demolition works; 1.2. Water quality guidelines values for the protection of identified Community Values; 1.3. Water quality trigger levels and adaptive management actions for key water quality indicators at near-field and intermediate monitoring sites; 1.4. Responsible persons for implementation of each management action; 1.5. A table containing all major commitments made in the plan; and	Supported – PWS to be advised of plan implementation and outcomes as per 1.6. Include overarching condition requiring the provision of plans, programs, reports etc that are relevant to the MCA.	See condition 1D.	

	1.6. A reporting program to advise the Director of plan implementation and outcomes. 2. The Plan(s) must be reviewed and amended as necessary in response to the water quality impact studies required under these conditions within one month of the completion of each water quality impact study. Where amended, the Plan(s) must be resubmitted to the Director for approval.			
	WQ 5 Water quality impact studies 1. Unless otherwise approved in writing by the Director, within 14 days of initial commencement of any construction or demolition activities for the Project which are likely to release sediment into the water column, estuarine Water Quality Impact Studies of those activities must be undertaken. 2. Types of construction activities to which this condition applies include: 2.1. the movement of vessels to and from landing facilities; 2.2. sediment disturbance as a result of land reclamation activities; 2.3. the installation of temporary piles for the construction of working platforms; 2.4. the installation of piles associated within construction of the first pier to be constructed for the Project within estuarine waters; 2.5. the use of floating plant where the potential exists for sediment disturbance through placement, anchorage, vibration or settling of plant on the sediment; and 2.6. other activities which have the potential to disturb sediment to the extent that water quality impacts may occur at intermediate monitoring sites; 3. The Director must be notified within 7 days of the commencement of each study. 4. Each impact study must include the following: 4.1. an estimate of the frequency of sediment disturbance caused by the construction activity	Supported – May be of interest in relation to the reclamation activities (2.2). Request a copy of each Water Quality Impact Study.	See condition 1D.	

	through the phases of the Project. This should include a discussion of factors that could cause the magnitude and spatial extent of sediment disturbance to vary from that measured in the Water Quality Impact Study; 4.2. an evaluation of water quality impacts within the vicinity of the construction activity and along a gradient with the current away from the source via measurements which may include field measurements, laboratory analyses, photography and video footage; 4.3. an evaluation of current direction to refine selection of assessment locations; 4.4. an evaluation of water quality impacts at intermediate monitoring sites relative to the location where disturbance has or is occurring during the construction phase for the Project; 4.5. where the potential exists for water quality impacts at intermediate monitoring sites, an assessment of pollutant variation and secondary impacts, such as dissolved oxygen depletion, in the vicinity of the construction activity relative to the variations of water quality indicators at the intermediate monitoring sites; 4.6. recommendations as appropriate for amendments to the Estuarine Water Quality Monitoring Plan and Estuarine Water Quality Management Plan required by these conditions. 5. For each Water Quality Impact Study, a report must be completed within one month of completion of the study and submitted to the Director within 14 days of completion. The report must be provided with the monitoring plan(s) and management plan(s) required by these conditions where amendments to these plans are required.			
	WQ6 Contingency management plan for construction in the Derwent estuary 1. The Contingency Management Plan for construction in the Derwent estuary required under these conditions must detail measures to prevent and	Supported - Item 2 provides for notification of the relevant government agencies.		

	mitigate environmental harm if an unplanned event occurs. Unplanned events that must be addressed by the plan include but are not limited to: 1.1. Incidents, accidents, equipment failure and malfunctions with the potential to cause environmental harm as a result of: 1.1.1. the release of pollutants to the aquatic environment; or 1.1.2. the disturbance and release of large quantities of sediment to the estuarine water column at greater rates, volume or over a larger area than otherwise planned for; 1.2. the release from capture and containment facilities of extracted estuarine sediments; and 1.3. weather or other environmental conditions which may result in greater levels of disturbance of sediment from areas of operations than otherwise expected. 2. The plan must include communication procedures that ensure that the general public and relevant Government agencies are informed of any unplanned event to the extent necessary to allow them to take precautions against adverse impacts upon the environment and the public.			
	WQ 7Final design hydrodynamic modelling 1. Unless otherwise approved in writing by the Director, within two (2) months of the issuing of these conditions: 1.1. hydrodynamic modelling based on the chosen design must be undertaken over a sufficient area, timeframe and scale to determine potential changes in sediment mobilisation, deposition and general bathymetry in the Derwent estuary resulting from the Project, following completion of construction; and 1.2. a report on the hydrodynamic modelling results must be submitted to the Director for approval. 2. Hydrodynamic modelling undertaken must be sufficient to determine whether there is the potential for negatives impacts to the aquatic ecosystem to occur, or the extent of any potential negative impacts	Supported – Agreement to be worded to enable the implementation of the mitigation measures and ongoing management of impacts. Agreement is for the activity period, and includes post construction activities.	On-going management of the negative impacts to the aquatic ecosystem resulting from the construction and demolition stages, is the responsibility of DSG for a period of at least 3 years from the completion of works, unless otherwise agreed with the Regional Manager, PWS South, or their delegate.	RC25

	to water quality as a result of the final bridge design, such as from scouring or other mechanisms. 3. Where potential negative impacts are identified, recommendations must be made in the report for mitigation measures and ongoing management of impacts, to be either incorporated as part of the constructed bridge or implemented post-construction. 4. This condition will be deemed to be satisfied only when the Director indicates in writing that the submitted report adequately addresses the requirements of this condition to their satisfaction.			
THREATENED SPECIES PROTECTION ACT 1995 Section 60ZZZD of the Land Use Planning and Approvals Act 1993, sets out the responsibility for enforcement of conditions and restrictions TSP1 and TSP2.				
Aquatic Flora	TSP2 The Proponent (and any employees or subcontractors of a person named in this permit acting on that person's behalf on their written authority) is authorised to take the following specified aquatic threatened flora: "(a) *Ruppia megacarpa* (largefruit seatassel) – up to 3.53 ha of Habitat from the Bridgewater Bridge direct Project footprint, contained within the Project Land identified in Figure 3.2 of the New Bridgewater Bridge Major Project Impact Statement (November 2021)." Subject to the following conditions: 1. Prior to commencement of relevant construction, in the River Derwent, an Aquatic Threatened Flora Management Plan that includes mitigation measures to prevent sediment disturbance to threatened flora outside of the direct project footprint must be submitted to the Department of Natural Resources and Environment Tasmania for approval. The Management Plan must include, at a minimum, mitigation measures to control impacts to threatened flora including: use of barriers to limit sediment disturbance during high impact activities (e.g. such as cofferdams, silt screens, and/or silt curtains) and control of vessel movements (e.g such as limiting	Supported	A copy of the approved Aquatic Threatened Flora Management Plan must be made available to the Regional Manager, PWS South, or their delegate, upon request.	RC26

	total movements, timing movements to correlate with high tides, use of shallow draft boats with short sharp motors). The locations of all threatened aquatic flora on the Project land, outside of the direct project footprint, must be clearly marked on the construction environmental management plan. 2. A report detailing the numbers of individual plants taken, or the area of the population taken, along with the date and location of the works undertaken that directly impacted the specified threatened species must be provided to the Department of Natural Resources and Environment Tasmania (NRE Tas) within 30 days of the completion of the activity authorised under this permit or 30 days prior expiration of the permit, whichever is the sooner.			
NATURE CONSERVATION ACT 2002 Section 60ZZZD of the Land Use Planning and Approvals Act 1993, sets out the responsibility for enforcement of condition and restriction NCA1.				
Terrestrial Fauna	NCA1. 1. The proponent (and any employees or subcontractors of a person named in this permit acting on that person's behalf on their written authority) is authorised to take nests, eggs and nestlings of Protected and Partly Protected bird species listed under Schedules 1 and 8 of the Nature Conservation (Wildlife) Regulations 2021 (the Regulations). 2. These may be taken from the Project Land in Figure 3.2 of the New Bridgewater Bridge Major Project Impact Statement (November 2021). 3. This action is subject to the following conditions: 3.1. This permit does not permit the taking of, or impacts to; nests, eggs and nestlings of birds listed as Specially Protected under Schedule 5 of the Regulations. If any nests identified as belonging to birds listed under Schedule 5 of the Regulations are identified as occurring within the construction footprint of the bridge and will be impacted directly by the construction, works must cease immediately and further advice sought from the regulator.	Supported The use of RPA's is subject to the following conditions: 1.The remote pilot must be certified and registered with CASA and fly safely / operate in accordance with CASA regulations including not flying near bushfires and other emergency situations. 2. The RPA must only be operated in visual line of sight of the remote pilot in day visual meteorological conditions. 3. An RPA observer must accompany the remote pilot and undertake the role of helicopter spotter, raptor (eagle & other birds of prey) spotter and to interpret bird behaviour. The remote pilot	The proponent is authorised to undertake bird nest surveys within the River Derwent Marine Conservation Areas where located within the Project Area inclusive of the use of remotely piloted aircrafts (RPA). RPA use must be in accordance with the Remotely Piloted Aircraft (Drones) Policy PWSP- 230 or as otherwise agreed with in writing by the PWS. No eggs, fledglings or wildlife products are to be deposited within reserved land. A Bird Strike Risk Assessment and Management Plan must be prepared by a suitably qualified person. The report must include an assessment of the bird strike risk associated with: a) with the construction and demolition phases of the project, and: b) the final bridge design including the proposed lighting, safety screens and barriers, and	RC27 RC28 RC29

	3.2. Nest surveys of Protected and Partly Protected bird species located within the Project Land are permitted to take place from May onwards and clearance of nests, eggs and nestlings must take place as close to the commencement of construction as possible. 3.3. Nests and associated nesting habitat from the bird species authorised to be taken under this permit, located within the direct Project footprint and that will be impacted by construction activities, must be removed and/or destroyed. Any eggs found within nests must be removed from the nests and destroyed. Any nestlings must be removed from the nests and humanely destroyed. 3.4. All known locations of bird nests outside of, but adjacent to, the works area must be taped or fenced off by a suitably qualified person to the extent necessary to prevent incursion by machinery or personnel. 3.5. A report must be provided to the Department of Natural Resources and Environment Tasmania within 30 days of the completion of the activity authorised under this permit or expiration of the permit, whichever is the sooner. The report must detail the number of individual bird nests, eggs and/or nestlings taken, along with the date and location of the works undertaken. 3.6. A suitably qualified and experienced person must be engaged to identify the nests as not belonging to bird species listed under Schedule 5 of the Regulations. 3.7. Any nestlings found within the construction footprint directly prior to construction works must be euthanised in accordance with the Methods of Euthanasia set out in the *Best Practice Guidelines for Wildlife Rehabilitation July 2021* published on the Department of Natural Resources and Environment Tasmania website.	must immediately land the RPA upon the sighting of any raptor and watch out for and avoid large birds, flocks of birds and other aircraft. 4.The remote pilot must aim to minimise wildlife disturbance flight practices in so far as the survey allows. Practices to reduce wildlife disturbance include conducting the survey from approx. 35m altitude (where possible), minimising flight time, avoiding threatening approach trajectories and sporadic flight movements.	c) detail the mitigation measures to minimise the risk of bird strike for the different stages of the project, and d) address reporting and monitoring, including the collection of bird collision and disorientation event data. The design plans and construction and demolition must be in accordance with the recommended mitigation measures identified in the Bird Strike Risk Assessment and Management Plan.	

8. Statement of Reasons

This assessment is based on the information provided in the MPIS and associated documents, and incorporates advice provided by NRET specialists and PWS regulatory staff. This assessment also addresses the issues raised in specialist advice and public submissions.

This statement of reasons is a summary of assessment criteria relevant to the proposal and how the criteria were considered by the delegated authority.

8.1 Assessment Criteria

Nature Conservation Act 2002
The proposal is consistent with the purpose of reservation for conservation areas, listed in Schedule 1 of the NC Act. The proposal would not significantly impact the natural and cultural values of the River Derwent MCA.

National Parks and Reserves Management Act 2002
The proposed development is not inconsistent with the management objectives for conservation areas listed in Schedule 1 of the NPRM Act.

Land Use Planning and Approvals Act 1993
The Final Assessment Report (18 May 2022) for the New Bridgewater Bridge Major Project notes that the Tasmanian Planning Commission Assessment Panel can only issue a permit if it is satisfied that the project is consistent with furthering the objectives specified in Schedule 1 of LUPAA; satisfies all of the assessment criteria and that the project is not in contravention of a State Policy, the Tasmanian Planning Policies or the Southern Tasmanian Regional Land Use Strategy that applies to the Project Land.

The development was granted the Major Project Permit, MPP2201 under section 60ZZM(1) of the LUPAA and is therefore considered to be consistent with the above requirements.

Environment Protection and Biodiversity Conservation Act 1999
It was determined the project did not have a significant impact on Matters of National Environmental Significance and was not a controlled action. A notification dated 21 April 2021 was issued to DSG identifying the way the works must be undertaken.

8.2 Limitations of Assessment

This decision has been informed by the information presented in the Major Projects documentation, including the MPIS, appendices, Major Project Permit MPP2201 and the Supplementary Information. Should the proposal be changed such that an amendment to the Major Project Permit is triggered, and the proposed changes impact the River Derwent MCA, further advice must be obtained from the PWS to determine whether a new or amended RAA is required.

9. Decision

1. The proposal is acceptable because:
    - the proposal aligns with the purposes for reservation under the *Nature Conservation Act 2002* and the reserve management objectives for conservation areas as stated in Schedule 1 of the *National Parks and Reserves Management Act 2002;*
    - the Major Project Impact Statement under the identified assessment criteria demonstrates that the proposal would not cause significant environmental impacts;
    - the matters raised in the public submissions and by specialists have been addressed in sections 4, 6 and 7 of this Environmental Assessment Report;
    - the proposal would deliver a high-standard road connection, which meets contemporary design standards and supports improved efficiency, reliability and safety outcomes for users. It would support recreational use and enjoyment in the Marine Conservation Area through the establishment of a foreshore trail and improved access.

2. The proposal can be implemented in accordance with the conditions stated in Appendix 3 of this report.

Jason Jacobi
A/DIRECTOR OF NATIONAL PARKS AND WILDLIFE

Date: 27/6/22

The EIA process is completed when the managing authority signs this environmental assessment report and provides it to the PWS Regional Manager South.

CONTACT DETAILS

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