



Transport for NSW

# **Beaches Link and Gore Hill Freeway Connection**

## **Cover note**

Information within this report regarding the proposed Port of Newcastle construction support site (BL15) has been superseded by an Addendum to the preferred infrastructure report lodged with the Department of Planning and Environment in June 2022. Please refer to Section 9 – Addendum – Treatment and loadout of dredged and excavated material not suitable for offshore disposal for further information



Transport for NSW

# **Beaches Link and Gore Hill Freeway Connection**

1 – Introduction and background

## Contents

1	Introduction and background .....	1-1
1.1	Introduction.....	1-1
1.2	The project as described in the environmental impact statement .....	1-2
	1.2.1 Project location .....	1-2
	1.2.2 Overview of the project .....	1-2
1.3	Statutory context .....	1-6
1.4	The environmental impact statement .....	1-6
1.5	Purpose of this document.....	1-7
1.6	Relationship with the submissions report .....	1-8
1.7	Next steps .....	1-9

# 1 Introduction and background

*The Western Harbour Tunnel and Beaches Link program is a major transport infrastructure program that would make it easier, faster and safer to get around Sydney. As Sydney continues to grow, faster and more reliable trips are essential to reducing congestion and providing new levels of access to jobs, recreation, and services such as schools and hospitals. By creating a western bypass of the Sydney CBD, the Western Harbour Tunnel would take pressure off the Sydney Harbour Bridge, Sydney Harbour Tunnel and ANZAC Bridge; while Beaches Link would create an alternative to the Military Road and Warringah Road corridors to relieve traffic pressure on the North Shore.*

*The program has been designed as part of an integrated transport network, with a focus on new public transport connections and improved journey times and reliability for buses. It would also provide improvements to walking and cycling routes, providing more shared transport options.*

## 1.1 Introduction

Transport for NSW is seeking approval under Part 5, Division 5.2 of the *Environmental Planning and Assessment Act 1979* to construct and operate the Beaches Link and Gore Hill Freeway Connection project (the project).

The project is part of the Western Harbour Tunnel and Beaches Link program of works. The program of works includes:

- The project, which comprises a new tolled motorway tunnel connection across Middle Harbour from the Western Harbour Tunnel, the Warringah Freeway and Gore Hill Freeway to Balgowlah and Killarney Heights including the surface upgrade of Wakehurst Parkway from Seaforth to Frenchs Forest and upgrade and integration works to connect to the Gore Hill Freeway at Artarmon
- The Western Harbour Tunnel and Warringah Freeway Upgrade project which comprises a new tolled motorway tunnel connection across Sydney Harbour, and an upgrade of the Warringah Freeway to integrate the new motorway infrastructure with the existing road network and to connect to the Beaches Link and Gore Hill Freeway Connection project.

A combined delivery of the Western Harbour Tunnel and Beaches Link program of works would unlock a range of benefits for freight, public transport and private vehicle users. It would support faster and more reliable travel times for journeys between the Northern Beaches and south, west and north-west of Sydney Harbour. For example, with the combined program of works, journeys from Dee Why to Sydney Kingsford Smith Airport are expected to be 56 minutes faster. Delivering the program of works would also improve the resilience of the motorway network, given that each project provides an alternative to heavily congested harbour crossings and their approaches.

The project and the Western Harbour Tunnel and Warringah Freeway Upgrade project are subject to separate but coordinated environmental assessment and approval processes.

This project included an extensive engagement program ahead of the environmental impact statement finalisation and exhibition including proactive consultation with the community and stakeholders. As a result, the project has benefitted from the input of local knowledge, insight, experience, goals and priorities, to identify issues, potential environmental management strategies

and opportunities to improve project outcomes, which were presented in the environmental impact statement.

## **1.2 The project as described in the environmental impact statement**

---

### **1.2.1 Project location**

The project would be located within the North Sydney, Willoughby, Mosman, Northern Beaches and Lane Cove local government areas, connecting Cammeray in the south with Killarney Heights, Frenchs Forest and Balgowlah in the north. The project would also connect to both the Gore Hill Freeway and Reserve Road in Artarmon in the west. Key features of the project are shown in Figure 1-1 and Figure 1-2.

### **1.2.2 Overview of the project**

The Beaches Link and Gore Hill Freeway Connection project would comprise two components:

- Twin tolled motorway tunnels connecting the Warringah Freeway and the Western Harbour Tunnel at Cammeray and the Gore Hill Freeway at Artarmon to the Burnt Bridge Creek Deviation at Balgowlah and Wakehurst Parkway at Killarney Heights, and an upgrade of Wakehurst Parkway (the Beaches Link)
- Connection and integration works along the existing Gore Hill Freeway and surrounding roads at Artarmon (the Gore Hill Freeway Connection).

The project is an integrated transport solution that would address urban congestion on Sydney's road network. It would take pressure off Spit Bridge and Military Road – improving amenity in Mosman, Cremorne and Neutral Bay and relieving traffic flows on Warringah Road, Roseville and through the suburbs of Willoughby and Northbridge. It would provide direct access from the Northern Beaches to the Warringah Freeway for fast and reliable access to North Sydney, the Sydney CBD and beyond. It would also provide a fast, reliable link between the Northern Beaches and other key centres including St Leonards and Macquarie Park via the direct Gore Hill Freeway connection. For public transport there would be opportunity for express buses within the Beaches Link tunnel, additional express bus services along Military Road and improved connections to the Sydney Trains and new Sydney Metro rail networks.

Key features of the Beaches Link component of the project are shown in Figure 1-1 and would include:

- Twin mainline tunnels about 5.6 kilometres long and each accommodating three lanes of traffic in each direction, together with entry and exit ramp tunnels to connections at the surface. The crossing of Middle Harbour between Northbridge and Seaforth would involve three lane, twin immersed tube tunnels
- Connection to the stub tunnels constructed at Cammeray as part of the Western Harbour Tunnel and Warringah Freeway Upgrade project
- Twin two lane ramp tunnels:
  - Eastbound and westbound connections between the mainline tunnel under Seaforth and the surface at the Burnt Bridge Creek Deviation, Balgowlah (about 1.2 kilometres in length)
  - Northbound and southbound connections between the mainline tunnel under Seaforth and the surface at the Wakehurst Parkway, Killarney Heights (about 2.8 kilometres in length)

- Eastbound and westbound connections between the mainline tunnel under Northbridge and the surface at the Gore Hill Freeway and Reserve Road, Artarmon (about 2.1 kilometres in length)
- An access road connection between the Burnt Bridge Creek Deviation and Sydney Road including the modification of the intersection at Maretimo Street and Sydney Road, Balgowlah
- Upgrade and integration works along the Wakehurst Parkway at Seaforth, Killarney Heights and Frenchs Forest, through to Frenchs Forest Road East
- New and improved public open space and recreation facilities at Balgowlah
- New and upgraded active transport infrastructure (pedestrian and cyclist facilities)
- Ventilation outlets and motorway facilities at the Warringah Freeway in Cammeray, the Gore Hill Freeway in Artarmon, the Burnt Bridge Creek Deviation in Balgowlah and the Wakehurst Parkway in Killarney Heights
- Operational facilities, including a motorway control centre at the Gore Hill Freeway in Artarmon, and tunnel support facilities at the Gore Hill Freeway in Artarmon and Wakehurst Parkway in Frenchs Forest
- Other operational infrastructure including groundwater and tunnel drainage management and treatment systems, surface drainage, signage, tolling infrastructure, fire and life safety systems, roadside furniture, lighting, emergency evacuation and emergency smoke extraction infrastructure, Closed-Circuit Television (CCTV) and other traffic management systems.

Key features of the Gore Hill Freeway Connection component of the project are shown in Figure 1-2 and would include:

- Upgrade and reconfiguration of the Gore Hill Freeway between the T1 North Shore & Western Line and T9 Northern Line and the Pacific Highway
- Modifications to the Reserve Road and Hampden Road bridges
- Widening of Reserve Road between the Gore Hill Freeway and Dickson Avenue
- Modification of the Dickson Avenue and Reserve Road intersection to allow for the Beaches Link off ramp
- Upgrades to existing roads around the Gore Hill Freeway to integrate the project with the surrounding road network
- Upgrade and inclusion of traffic lights of the Dickson Avenue and Pacific Highway intersection
- New and upgraded active transport infrastructure (pedestrian and cyclist facilities)
- Other operational infrastructure, including surface drainage and utility infrastructure, signage and lighting, CCTV and other traffic management systems.

A more detailed description of the project is provided in Chapter 5 (Project description) of the environmental impact statement.

Several design refinements to the project which have been made to further minimise impacts on the community and sensitive receivers are also provided in Section A4 of the submissions report.



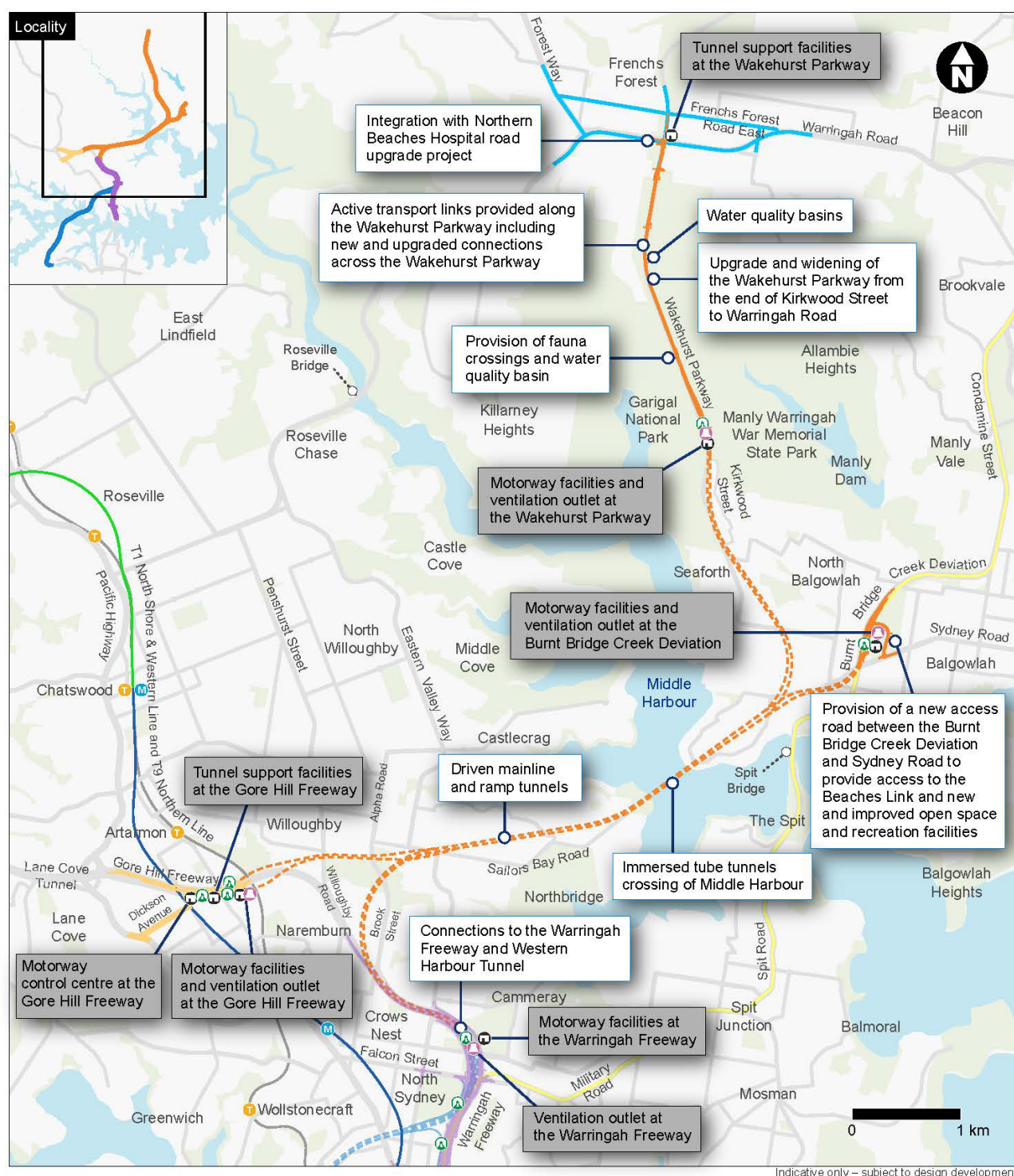
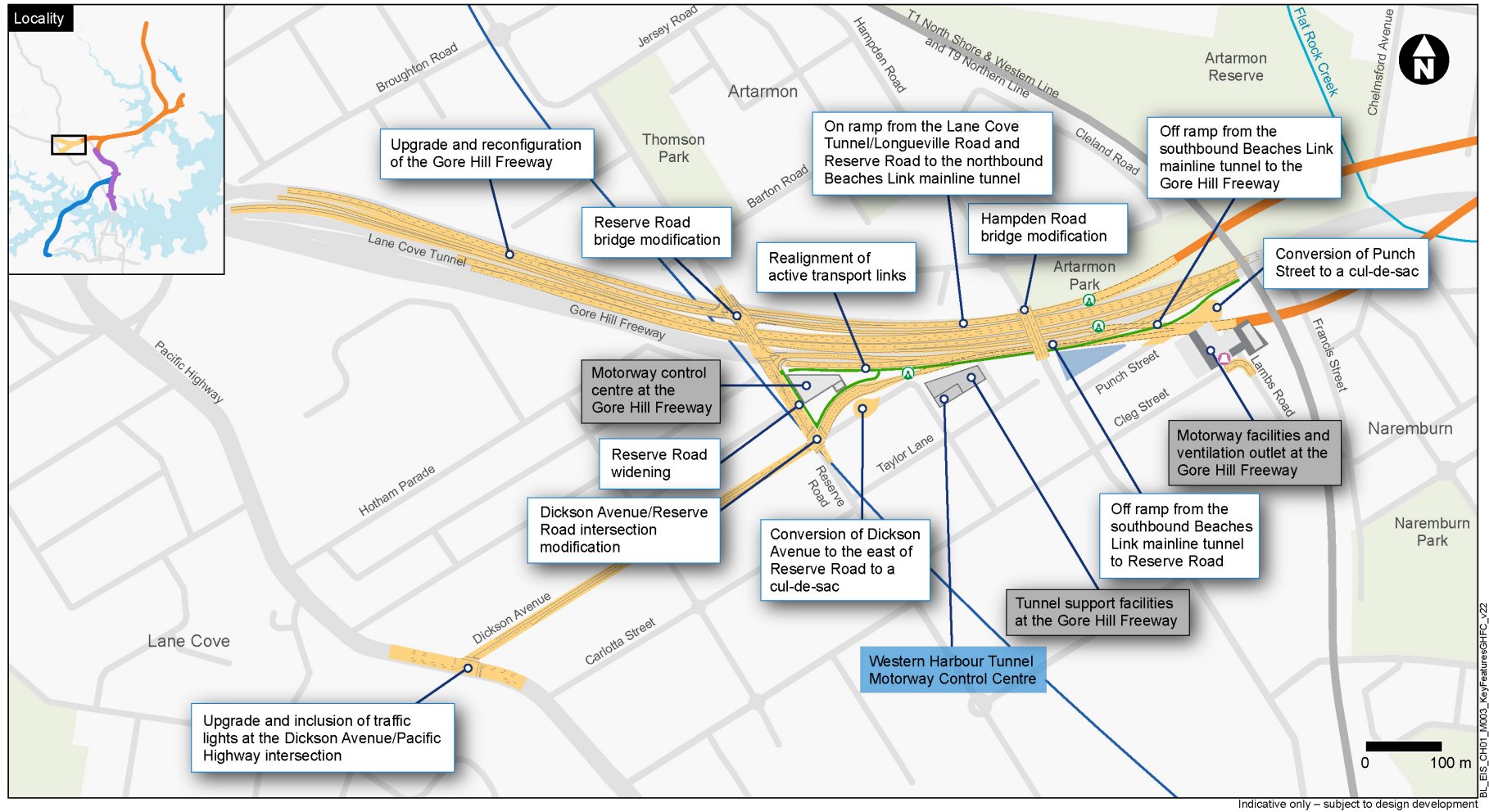


Figure 1-1 Key features of the Beaches Link component of the project



### Legend

#### Operational features

- Gore Hill Freeway Connection
- Beaches Link
- Permanent operational facility

- Surface connection
- Ventilation outlet

- Pedestrian / active transport links
- Permanent water quality basin

#### Existing rail network

- Suburban rail/Sydney Trains

#### Other projects

- Sydney Metro City & Southwest (under construction)

Figure 1-2 Key features of the Gore Hill Freeway component of the project



### 1.3 Statutory context

---

Clause 94 of the State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP) provides that development for the purpose of a road or road infrastructure facilities may be carried out by or on behalf of a public authority without development consent on any land.

Clause 14(1) of the State Environmental Planning Policy (State and Regional Development) 2011 (State and Regional Development SEPP) declares development to be State significant infrastructure if it is permissible without consent under Part 4 of the *Environmental Planning and Assessment Act 1979* and is specified in Schedule 3 of the State and Regional Development SEPP.

Transport for NSW has made a request to the Minister for Planning and Public Spaces for the project to be declared critical State significant infrastructure. Section 5.13 of the *Environmental Planning and Assessment Act 1979* provides for the declaration of critical State significant infrastructure by means of an environmental planning instrument. Clause 16 of the State and Regional Development SEPP declares development listed in Schedule 5 to be critical State significant infrastructure. Transport for NSW's request is that the project be listed in Schedule 5.

Other relevant NSW and Commonwealth legislation that would apply to the project is provided in Chapter 2 (Assessment process) of the environmental impact statement.

### 1.4 The environmental impact statement

---

An environmental impact statement was prepared for the project in accordance with the relevant provisions under the *Environmental Planning and Assessment Act 1979*. The environmental impact statement addressed the environmental assessment requirements issued by the Secretary of the Department of Planning, Industry and Environment on 15 December 2017 and reissued on 22 April 2020, and the relevant provisions of Schedule 2 of the Environmental Planning and Assessment Regulation 2000. A copy of the Secretary's environmental assessment requirements and where they are addressed in the environmental impact statement are provided in Appendix A (Secretary's environmental assessment requirements checklist).

In accordance with the *Environmental Planning and Assessment Act 1979*, the environmental impact statement presented an assessment of environmental issues identified during the planning and design of the project. The assessment considered the areas directly or indirectly affected by construction and operation of the project. Further detailed investigations, planning and surveys would be carried out during subsequent project development stages. All technical road design requirements and road functionality as described in the environmental impact statement, the submissions report and this preferred infrastructure report would need to be considered and revised environmental management measures and conditions of approval for the project would need to be satisfied.

The environmental impact statement was placed on public exhibition on 9 December 2020, with an exhibition closing date of 1 March 2021. This equated to a total exhibition period of 61 days, noting that the period between 20 December 2020 and 10 January 2021 (inclusive) was not included within the 61 day official exhibition period. Public exhibition of the environmental impact statement provided the community, interested parties and key stakeholders (including government agencies and councils) with an understanding of the project and the opportunity to comment on the environmental impact statement.

## 1.5 Purpose of this document

Following the close of exhibition on 1 March 2021, the Department of Planning, Industry and Environment reviewed the environmental impact statement and submissions received and sought independent expert air quality, traffic, surface water and groundwater advice.

Accordingly, the Department of Planning, Industry and Environment has requested further assessment and, in accordance with Section 5.17(6)(b) of the *Environmental Planning and Assessment Act 1979*, the preparation of a preferred infrastructure report, that further:

- a) Assesses alternative locations, social and environmental impacts of the proposed construction ancillary facility located at Flat Rock Drive (BL2) and assesses the construction impacts to recreational users of Spit West Reserve (BL9)
- b) Assesses the impacts to Middle Harbour from the introduction of a sill (due to the placement of immersed tube tunnels) including appropriate measurements/monitoring data and impact assessment
- c) Assesses the treatment and handling of contaminated material and any temporary onshore transfer/handling sites associated with the proposed dredging of Middle Harbour
- d) Identifies local road intersections impacted by traffic changes as a result of the operation of the project. Consideration and assessment of the impact of those changes and identification of measures to mitigate the impacts was also required.

This preferred infrastructure report has been prepared to address the above further assessment requirements and its structure is provided in Table 1-1 below.

**Table 1-1 Structure of this preferred infrastructure report**

Chapter	Description
Section 1	Provides the introduction and background to the project and preferred infrastructure report.
Section 2	Provides an assessment of alternatives to the proposed temporary construction support site at Flat Rock Drive (BL2). This comprises a comparative assessment of Option A (Flat Rock Baseball Diamond) and Option B, which is the proposed location of the temporary construction support site as described in Chapter 6 (Construction works) of the environmental impact statement. Additional information on consultation carried out with the community and Willoughby City Council to date and potential relocation options for the Flat Rock Baseball Diamond are also provided.
Section 3	Provides an assessment of a reconfiguration of the Spit West Reserve construction support site (BL9) at Spit West Reserve. This change has arisen in response to a request in Mosman Council's submission to further minimise the impact on the community and recreational uses of the reserve. The key activities, hours of construction and access arrangements of the Spit West Reserve construction support site would not change from those outlined in Table 6-23 of the environmental impact statement. However, the site area and layout would be modified from that described and represented in the environmental impact statement and as illustrated in Figure 6-37. The indicative construction program would remain consistent with Table 6-24 of the environmental impact statement.
Section 4	Provides the results of additional water quality modelling and further consideration of the potential impacts to marine biodiversity within Middle Harbour from the introduction of a sill due to the proposed immersed tube tunnels. The location of the immersed tube tunnel and the construction methodology have not changed

Chapter	Description
	from that outlined in Chapter 5 (Project description) and Chapter 6 (Construction works) of the environmental impact statement, respectively. The additional assessment carried out supports the conclusion made in Appendix T (Technical working paper: Marine ecology) that the effect of the proposed immersed tube tunnel sill would not be of concern from a marine biodiversity perspective.
Section 5	Provides an assessment of an onshore loadout facility for the treatment and handling of contaminated material associated with the proposed dredging of Middle Harbour described in Table 6-4 of the environmental impact statement. This facility would handle the transfer of all dredged material that is deemed unsuitable for offshore sea disposal. Once material is dredged from Middle Harbour, this material would be loaded directly into self-propelled split hopper barges, where it would be made spadable before being transported to a loadout facility and transferred onto trucks, for disposal at a suitably licensed land-based facility. Since the completion of the environmental impact statement, Transport for NSW has identified a preferred location for the loadout facility within the Newcastle local government area, at the Port of Newcastle.
Section 6	Provides additional review and assessment of the environmental impact statement operational traffic models, to provide clarity on the modelling outcomes at a number of road intersections of concern at the following locations: <ul style="list-style-type: none"> <li>• Warringah Freeway and surrounds</li> <li>• Gore Hill Freeway and Artarmon</li> <li>• Balgowlah and surrounds</li> <li>• Frenchs Forest and surrounds.</li> </ul>
Section 7	Provides a conclusion to the preferred infrastructure report.

A copy of the revised environmental management measures for the project is provided in Appendix C of this preferred infrastructure report.

## 1.6 Relationship with the submissions report

Following closure of the exhibition period for the environmental impact statement, the Department of Planning, Industry and Environment provided copies of the submissions to Transport for NSW. In accordance with Section 5.17 of the *Environmental Planning and Assessment Act 1979*, the Secretary requested on 11 March 2021 that Transport for NSW provide a response to submissions that addresses the issues identified in the submissions. Accordingly, a separate submissions report has been prepared by Transport for NSW to respond to the issues raised in submissions during exhibition of the environmental impact statement. The submissions report is available on the Department of Planning, Industry and Environment Major Projects website: [www.planningportal.nsw.gov.au/major-projects/project/10456](http://www.planningportal.nsw.gov.au/major-projects/project/10456).

As discussed in Section 1.5, this preferred infrastructure report specifically addresses the further assessment requirements as requested by the Department of Planning, Industry and Environment. However, it also provides further detail on the assessment of certain issues raised in submissions where they are relevant to the Department of Planning, Industry and Environment's further assessment requirements. Appropriate cross-references have been included between the submissions report and preferred infrastructure report to assist the community and key stakeholders navigate between each document.

## 1.7 Next steps

---

The environmental impact statement, the submissions report and this preferred infrastructure report will be considered by the Department of Planning, Industry and Environment during its assessment of the project, in accordance with the approval process under Part 5, Division 5.2 of the *Environmental Planning and Assessment Act 1979*. The Secretary of the Department of Planning, Industry and Environment will prepare an environmental assessment report in accordance with Section 5.18 of the *Environmental Planning and Assessment Act 1979*. The Minister for Planning and Public Spaces will then decide whether or not to approve the project and identify any conditions of approval which will apply.

If the project is approved by the NSW Government, Transport for NSW will continue to consult with community members, government agencies and other stakeholders during the further design development and construction phases of the project.