

Transport
for NSW

Henry Lawson Drive Upgrade

Stage 1A

Addendum review of environmental
factors
November 2022



transport.nsw.gov.au

Acknowledgement of Country

Transport for NSW acknowledges the traditional custodians of the land on which we work and live.

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

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

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



Prepared by Aurecon Australasia and Transport for NSW.

Publication number 23.011

ISBN 978-1-922875-64-8

Executive summary

The proposed modification

Transport for NSW ('Transport') proposes to modify the approved Henry Lawson Drive Upgrade Stage 1A project, which was determined in July 2022. Modifications are based on further detailed design work undertaken. The key features of this proposed modification is outlined below:

- additional drainage and earthworks on the Georges River Golf Course and replacement of the culvert under Henry Lawson Drive north of Tower Road
- a change to the delivery timing of the upgrade works on Milperra Road
- Jemena under bore trench and associated stockpile and access on parkland to the south of Newbridge Road
- demolition of the existing structures at 439 Henry Lawson Drive, Milperra and establishment of demountable site offices for use during project construction
- changes to the scope and timing of works at Auld Avenue intersection and to the south including:
 - delay to the implementation of left in/left out works at Auld Avenue intersection
- changes to the scope and timing of works at Milperra Drain bridge
 - delay to construction of the new Milperra Drain bridge
 - reconstruction of concrete kerbs, replacement of handrails, structure strengthening and repavement of the existing Milperra Drain bridge
- works on Bankstown Airport Limited land:
 - increased extent of tie-in works on Tower Road to tie into the recently constructed upgrade of the road by Bankstown Airport Limited
 - new compound site on Tower Road
 - inclusion of a dedicated left slip lane from Henry Lawson Drive to access the ALDI supermarket and retail area with improved safety It is anticipated that construction would commence in early 2023 and take up to two years to complete.

Background

In 2021, Transport prepared a Review of Environmental Factors (REF) and Environmental Impact Statement (EIS) for the upgrade of 1.3 kilometres of Henry Lawson Drive between Keys Parade, Milperra, to Tower Road, Bankstown Aerodrome. The overall proposal would create two lanes in each direction along Henry Lawson Drive, including the duplication of the Henry Lawson Drive Road bridge to the south of Auld Avenue.

A REF was prepared for the project that was subject to Part 5 of the Environmental Planning and Assessment Act 1979 (EP&A Act). However, parts of the project was located within areas mapped as coastal wetlands under the former Coastal Management SEPP. Work within these mapped coastal wetlands was classified as designated development and a separate EIS was prepared under Part 4 of the EP&A Act.

A Submissions report was prepared in May 2022 following the display of the REF and amended the project to include additional utilities work at the southern end of the project. The project REF and Submissions report changes were approved in July 2022. The proposed modification subject to this Addendum REF affects the REF proposal area only and there is no change to the EIS proposal approved by Canterbury – Bankstown City Council on 6 December 2021.

The proposed modification generally lies within the approved REF project boundary, except for minor changes on the Georges River Golf Course, south of Newbridge Road and access adjustment to the ALDI supermarket and retail area. These modifications extend beyond the currently approved boundary. This area has been assessed within a modified project boundary adopted in this addendum REF.

In addition, some works would be required on BAL land (as indicated in the preceding section), which would require planning approval from Bankstown Airport.

Need for the proposed modification

The proposed modification has come about from further design refinement to improve water quality, structures integrity and improve constructability. Overall, the proposed modification would contribute to the REF project achieving its aim to alleviate congestion along the corridor, support growth in the region and address concern about the high rate of casualty crashes.

The development of the proposed modification would support the future road and traffic conditions identified within the REF project area. The modified project would support the need for the overall proposal which is to:

- Alleviate congestion along the corridor that causes frustrating and costly delays for all road users across spreading peaks
- Address a road environment contributing to a high rate of casualty crashes
- Support growth in the area from large scale development in and around Milperra and the Bankstown Airport.

Without the development of the overall proposal, future road and traffic conditions within the overall proposal area would continue to decline into the future. Congestion would be expected to worsen, particularly during peak periods and road safety unimproved.

The proposed modification is consistent with the strategic need for the REF project and relevant government policies and strategies.

Proposed modification objectives

The objectives of the proposed modification are consistent with that outlined in the project REF. These include:

- Improved travel times, journey reliability and road safety outcomes for all road users.
- Improved freight efficiency and reduce vehicle operating costs on the road network.
- Support new development in the precinct by improving traffic flow and connectivity.

Options considered

Following the project determination, a number of design refinements across the project were identified.

Following this, two options were identified for further investigation:

- Option 1 – proceed with the approved project as described in the project REF
- Option 2 – proposed modification including the works on BAL land

These options were assessed against development criteria which included property acquisition, environmental impacts, Commonwealth issues such as works on airport land, constructability and whether they could meet the proposal objectives. 'Option 2' was selected as the preferred option as it would provide greater short and long-term benefits compared to 'Option 1', while resulting in minimal additional impacts.

Statutory and planning framework

The proposed modification that is not located on airport land can be assessed under Division 5.1 of the *Environmental Planning and Assessment Act 1979 (NSW)* as it is for a road and road infrastructure facilities and is to be carried out by Transport.. Development consent from council is not required.

This REF fulfils Transport's obligation under Section 5.5 of the EP&A Act including to examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of the activity. An assessment of the proposed modification concluded that it would not significantly impact on the matters of national environmental significance protected under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) or significantly affect threatened species or ecological communities and their habitats under the Biodiversity Conservation Act 2016 (BC Act). Therefore, the proposed modification is a valid development to be taken forward under Division 5.1 of the EP&A Act and no further planning approval requirements would be triggered under the EPBC Act or BC Act.

The proposed modification located on BAL land is subject to the requirements of Commonwealth *Airports Act 1996* (Airports Act) and its regulation.

As demonstrated by the assessment presented in Chapter 6 of the REF and discussed below in Section 4.3.2 of this addendum, it is considered that the proposed modification does not constitute a “major airport development” under Section 89 of the Airports Act. Rather the proposed modification requires a building permit and development application for building activity as defined by sections 2.02 and 2.03 of the Airports (Building Control) Regulations 1996.

Community and stakeholder consultation

The consultation strategy relevant to the proposed modification remains consistent with Section 5.1 of the project REF.

Transport will continue to consult with the community and relevant stakeholders during design and construction of the overall proposal. A SEPP (Transport and Infrastructure) consultation checklist has been prepared for the proposed modification. This identified that the proposed modifications would not need to undertake any further consultation under the T & I SEPP.

Extensive consultation with Bankstown Airport Limited (BAL), including Environment Officers, Planning Officers and the Airports Authority has been undertaken through the development of the project and these proposed modifications. Consultation will continue through any future stages of the project. Consultation has also been undertaken with Georges River Golf Course for the additional drainage and earthworks that will occur on the course as well as the Tower Road Tie-in works.

This addendum REF will be made available on the Transport website, so that the community and stakeholders are informed about what is being proposed.

Environmental impacts

The main environmental impacts of the proposed modification are:

Traffic and transport

During construction, the proposed modification impacts would be consistent with those described in the project REF. However, the construction area for the proposed modification requires the restriction of access to the pedestrian footpaths and shared paths through the parkland and under the bridge at Georges River to the south of Newbridge Road during construction. This interruption would be minor and temporary access arrangements would be implemented. However, the nearby pedestrian access along Henry Lawson Drive would be maintained and that can be used to cross Henry Lawson Drive and access the Georges River. The use of the new compound site at Tower Road is not expected to create a large volume of traffic that would strain existing road networks.

During operation, compared to the existing scenario and project REF, the proposed modification would provide safer access to the ALDI supermarket and retail area. During construction however, the changes to the Henry Lawson Drive access to the ALDI supermarket and retail area would result in temporary current access closure for the duration of the works. These impacts would be minor however, as alternative access to these businesses would still be available via Starkie Drive.

Under the project REF, Henry Lawson Drive and Auld Avenue intersection would change to a left in-left out arrangement. As identified in the submissions report and further described in this assessment, there would be a change to the scope and timing of works to the Auld Avenue intersection and to the south. This includes a delay to the implementation of the left in/left out works at Auld Avenue intersection and delay to construction of the new Milperra Drain bridge. Due to this, road users can still complete all traffic movements at this intersection and continue to have the same level of access as the existing situation in the interim until the Henry Lawson Drive Stage 1B project is constructed. In addition, to the south of the intersection, would also remain one lane either direction until the 1B project is constructed.

Biodiversity

The approved EIS and REF boundary considered that up to 2.15 hectares of native vegetation would require removal during project works. The proposed modification would result in an additional 0.27 hectares of vegetation (both native vegetation and weeds / exotic vegetation). Vegetation removal would comprise 0.13 hectares of PCT 835 - Forest Red Gum-Rough-barked Apple Grassy Woodland on Alluvial Flats of the Cumberland Plain, Sydney Basin which is a Threatened Ecological Community listed under the BC Act. An additional two habitat and hollow bearing trees would be removed within the modified boundary. Vegetation and habitat removal will be undertaken in accordance with Guide 4: Clearing of vegetation and removal of bushrock of the Biodiversity Guidelines: Protecting and managing biodiversity on RTA Projects (Roads and Traffic Authority, 2011a).

The proposed modification would replace the culvert under Henry Lawson Drive which was found to have roosting Southern Myotis (*Myotis macropus*) microbats as part of the project REF. Consistent with the project

REF recommendations, pre-clearing surveys prior to construction would be undertaken and should the Southern Myotis again be found, a Bat Management Plan would be prepared and implemented prior to any works occurring.

The additional vegetation impact would be offset by retiring biodiversity credits in accordance with Transport's Biodiversity Offset Guideline (RMS 2016).

Non-Aboriginal heritage

Construction of the proposed modification occurs on land that forms part of the locally listed Bankstown Aerodrome heritage item. However, the area impacted has previously been developed into commercial development and has limited to no heritage value. Due to the minor nature of the works, the impact, similar to the project REF, is considered to be neutral.

The operational phase of the proposed modification would have ongoing neutral impacts on the Bankstown Aerodrome.

Socioeconomic

The proposed modification is expected to have some adverse impacts during construction including property and land use impacts, changes in access and connectivity for road users and businesses and impacts to community values and amenity.

The Jemena under bore trench and associated stockpile works requires the temporary restriction of access to the pedestrian footpath through the parkland to the south of Newbridge Road for safety reasons. Pedestrians would be redirected to the existing pathway along Henry Lawson Drive to cross the road and access the Georges River riverfront via Camofleur Reserve. Traffic management measures would allow pedestrian and cyclist access to be maintained. There would be changes in access to the ALDI supermarket and retail area on Henry Lawson Drive during construction, with some temporary access restrictions. Construction impacts would be temporary and are not expected to impact operations of the ALDI supermarket and retail area. The estimated duration for the construction works is around 2 years.

During operation, the channelised access into the ALDI supermarket and the retail area would improve safe access into the site. Key mitigation measures include community consultation during design and construction to notify of temporary access changes, opportunities for temporary business signage and continued consultation with emergency services to make sure access is maintained.

Other impacts

Other notable impacts associated with the proposed modification would include:

- Construction activities have the potential to result in temporary impacts from disturbance to soils, topography and vegetation.
- Works may result in a slight increase in construction noise levels in close proximity to the works would not affect the operation of the Georges River Golf Course. The works for the Jemena under bore trench is located in close proximity to residents on Henry Lawson Drive, however construction noise impacts would be consistent with those of the project REF and no additional noise impacts are anticipated. There would not be any additional operational noise impacts from the proposed modification.

Justification and conclusion

The proposed modification may result in some additional, minor, adverse environmental impacts. These impacts would be managed in accordance with the mitigation and management measures provided in this Addendum REF and the project REF.

The proposed modification is considered justified as it would support the outcomes of the Henry Lawson Drive stage 1A project including to alleviate congestion along the corridor, support growth in the region and address concern about the high rate of casualty crashes.

Table of contents

1.	Introduction	14
1.1	Proposed modification overview	14
1.2	Purpose of the report.....	18
2.	Need and options considered	21
2.1	Strategic need for the proposed modification.....	21
2.2	Proposal objectives and development criteria	21
2.3	Alternatives and options considered.....	21
2.4	Preferred option	23
3.	Description of the proposed modification.....	24
3.1	The proposed modification	24
3.2	Design.....	24
3.3	Construction activities.....	37
3.4	Ancillary facilities.....	39
3.5	Public utility adjustment	40
3.6	Property acquisition	40
4.	Statutory and planning framework.....	43
4.1	Environmental Planning and Assessment Act 1979.....	43
4.2	Other relevant NSW legislation	45
4.3	Commonwealth legislation.....	49
4.4	Confirmation of statutory position	53
5.	Consultation	54
5.1	Consultation strategy	54
5.2	Consultation outcomes	54
5.3	Ongoing or future consultation.....	55
6.	Environmental assessment.....	56
6.1	Traffic and transport	56
6.2	Biodiversity	57
6.3	Non-Aboriginal heritage.....	60
6.4	Socioeconomic.....	62
6.5	Other impacts	64
6.6	Cumulative impacts	67
7.	Environmental management	68
7.1	Environmental management plans (or system)	68
7.2	Summary of environmental safeguards and management measures	69
7.3	Licensing and approvals.....	90
8.	Conclusion.....	91

8.1	Justification.....	91
8.2	Objects of the EP&A Act	92
8.3	Ecologically sustainable development.....	93
8.4	Conclusion.....	94
9.	Certification.....	95
10.	EP&A Regulation publication requirement.....	96
	Terms and acronyms used in this addendum REF.....	97
	References.....	99
	Appendix A	100
	Appendix B.....	105
	Appendix C	110
	Appendix D	115
	Appendix E.....	116

Figures

Figure 1-1: Location of the approved project.....	16
Figure 1-2: The proposed modification.....	17
Figure 1-3 Identified Heritage	20
Figure 3-1 Additional drainage and earthworks on the Georges River Golf Course north of Tower Road.....	26
Figure 3-2: Proposed modification to the Milperra Road construction area.....	28
Figure 3-3 Jemena under bore trench and associated stockpile access	30
Figure 3-4 Changes to the scope and timing of works to Auld Avenue intersection and the Milperra Drain bridge	32
Figure 3-5 Proposed modification to the Tower Road Tie-in works and new compound site	34
Figure 3-6: The proposed modification to the ALDI supermarket and retail area access	36
Figure 3-7: Proposed compound site on Tower Road.....	40
Figure 3-8 Proposed additional property acquisition and lease.....	42
Figure 4-1: Land zoning	46
Figure 6-1: Additional vegetation clearance from the proposed modification	59

Tables

Table 3-1 Proposed modification methodology for each construction activity.....	37
Table 3-2 Indicative list of plant and equipment.....	39
Table 3-3: Proposed property acquisition	41
Table 4-1: Consistency of REF proposal with LEP zones	45
Table 4-2 Requirements for building activity approval application	51
Table 4-3 Consistency of proposed modification with Gateway Precinct Objectives as noted in Section 8.4.8 of the Bankstown Airport Master Plan	53
Table 6-1 Additional safeguards on traffic and transport.....	57
Table 7-1: Summary of safeguards and management measures	69
Table 7-2: Summary of licensing and approval required	90

Appendices

- A Section 171(2) checklist and matters of National Environmental Significance and Commonwealth land
- B Statutory consultation checklists
- C Assessment of whether the proposal is a 'major airport development'
- D Non-Aboriginal Heritage memo
- E Consistency assessment for biodiversity

1. Introduction

1.1 Proposed modification overview

In 2021, Transport for NSW (Transport) proposed to upgrade Henry Lawson Drive between Keys Parade, Milperra, to Tower Road, Bankstown Aerodrome (referred to as Henry Lawson Drive Upgrade Stage 1A). The overall project consisted of upgrading a 1.3 kilometre length of Henry Lawson Drive including intersection upgrades and upgrade of 480 metres of Milperra Road.

Transport for NSW proposes to modify the Henry Lawson Drive Upgrade Stage 1A project through a number of design refinements as a result of community feedback to the REF and continued detailed design further detailed design and from community feedback to the REF.

Key features of the proposed modification would include:

- additional drainage and earthworks on the Georges River Golf Course and replacement of the culvert under Henry Lawson Drive north of Tower Road
- a change to the delivery timing of the upgrade works on Milperra Road
- Jemena under bore trench and associated stockpile and access on parkland to the south of Newbridge Road
- demolition of the existing structures at 439 Henry Lawson Drive, Milperra and establishment of demountable site offices for use during project construction
- changes to the scope and timing of works at Auld Avenue intersection and to the south including:
 - delay to the implementation of left in/left out works at Auld Avenue intersection
- changes to the scope and timing of works at Milperra Drain bridge
 - delay to construction of the new Milperra Drain bridge
 - reconstruction of concrete kerbs, replacement of handrails, structure strengthening and repavement of the existing Milperra Drain bridge
- works on Bankstown Airport Limited land:
 - increased extent of tie-in works on Tower Road to tie into the recently constructed upgrade of the road by Bankstown Airport Limited
 - new compound site on Tower Road
 - inclusion of a dedicated left slip lane from Henry Lawson Drive to access the ALDI supermarket and retail area with improved safety

The location of the approved project is shown in Figure 1-1 and the proposed modification is shown in Figure 1-2. Section 3 describes the proposed modification in more detail.

In 2021, Transport for NSW (Transport) proposed to upgrade Henry Lawson Drive between Keys Parade, Milperra, to Tower Road, Bankstown Aerodrome (referred to as Henry Lawson Drive Upgrade Stage 1A). The overall project consisted of upgrading a 1.3 kilometre length of Henry Lawson Drive including intersection upgrades and upgrade of 480 metres of Milperra Road.

A review of environmental factors (REF) was prepared for the Henry Lawson Drive Upgrade Stage 1A project in July 2021 (referred to as the project REF). The project REF was placed on public display between 4 August 2021 and 17 September 2021 for community and stakeholder comment. A Submissions report dated May 2022 was prepared to respond to issues raised in the 44 formal submissions received.

Part of the Henry Lawson Drive Upgrade Stage 1A project required the preparation of an Environmental Impact Statement (EIS) under Part 4 of the *Environmental Planning and Assessment Act 1979* as it intersected with coastal wetlands. Under the Coastal Management SEPP (now the SEPP (Resilience and Hazards) 2021), this development was also declared as designated development pursuant to Clause 10(2). This EIS was approved by Canterbury-Bankstown City Council on 6 December 2021. A Submissions report dated May 2022 was prepared to respond to issues raised in the 44 formal submissions received.

The proposed modification would only affect the REF portion of the project and would not impact on the EIS project.

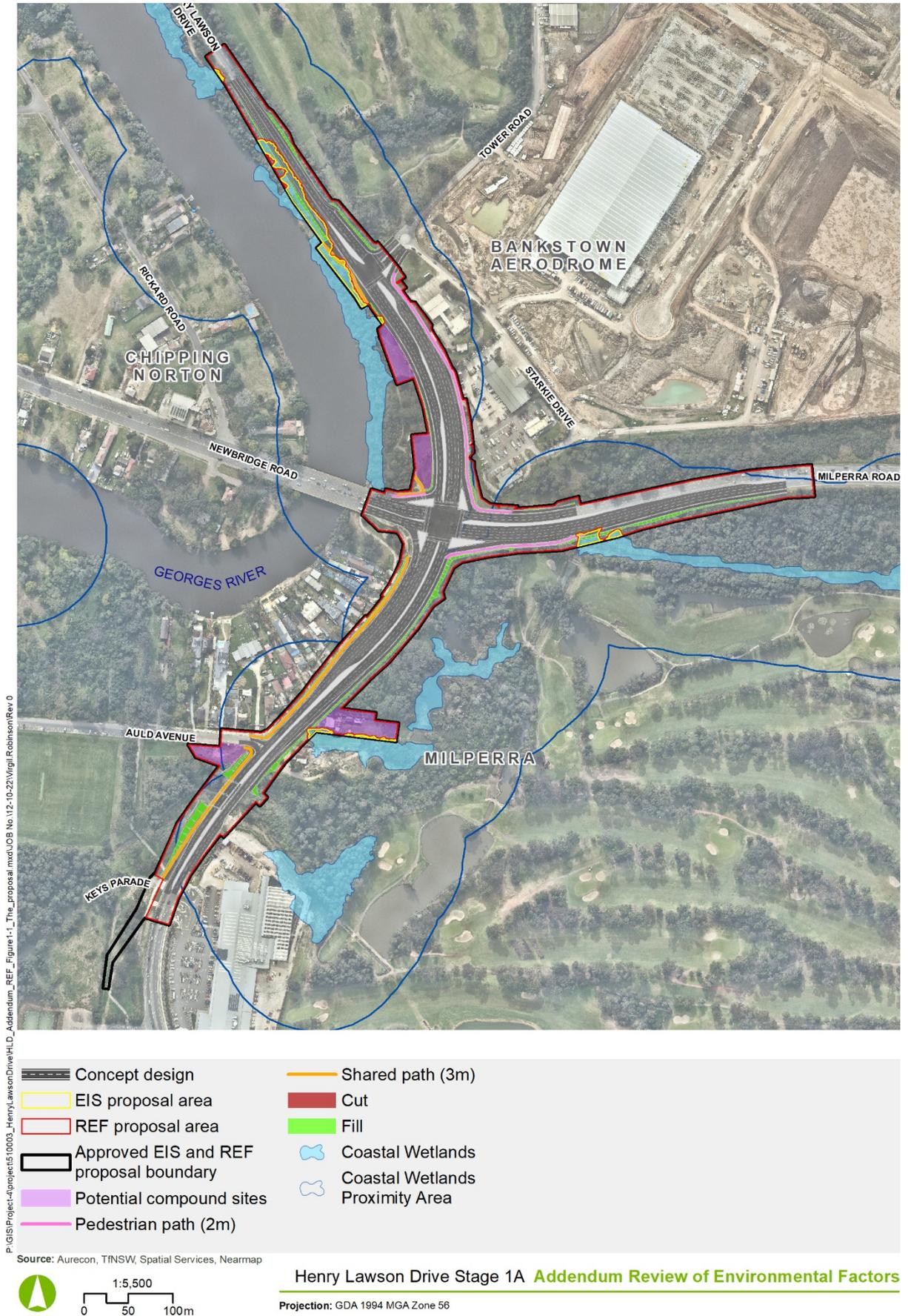


Figure 1-1: Location of the approved project

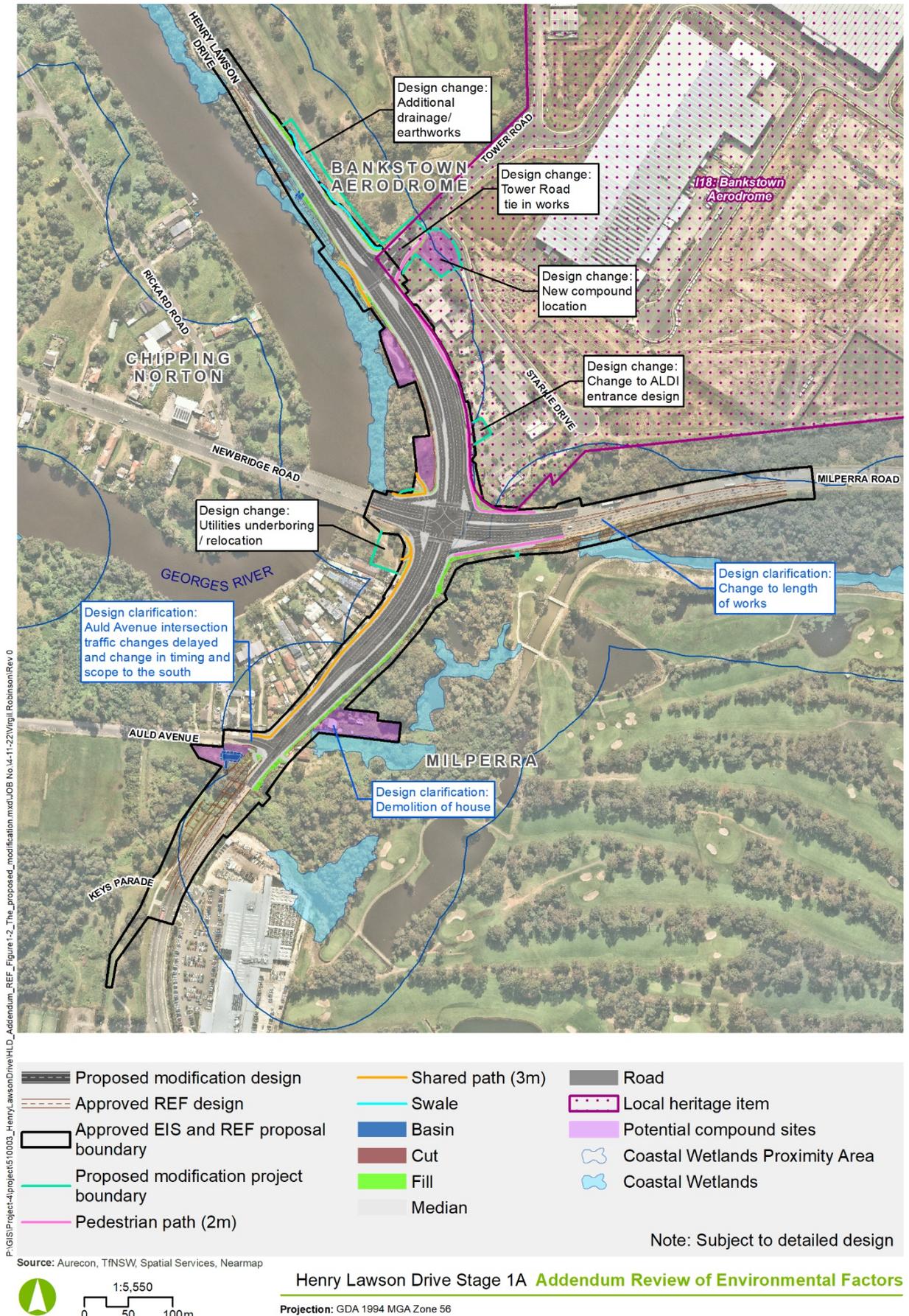


Figure 1-2: The proposed modification

1.2 Purpose of the report

This addendum review of environmental factors (REF) has been prepared by Aurecon Australasia Pty Ltd (Aurecon) on behalf of Transport for NSW.

This addendum REF is to be read in conjunction with the project REF and submissions report for the project. The purpose of this addendum REF is to describe the proposed modification, to document and assess the likely impacts of the proposed modification on the environment, and to detail mitigation and management measures to be implemented.

This REF has been prepared to address both the works on Bankstown Airport Limited (BAL) (Commonwealth) land and the works that fall under State planning pathways that are part of the proposal. For the portion of works to occur on BAL land, this REF would accompany the development application submitted to BAL for consent under the *Airports Act 1996*, and the building activity approval from the building controller.

1.2.1 Works within the modified REF proposal area

For the purposes of these works, Transport for NSW is the proponent and the determining authority under Division 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The description of the proposed work and assessment of associated environmental impacts has been undertaken in context of section 171 of the Environmental Planning and Assessment Regulation 2021, *Is an EIS Required? Best Practice Guidelines for Part 5 of the Environmental Planning and Assessment Act 1979* (Is an EIS Required? guidelines) (DUAP, 1995/1996), *Roads and Road Related Facilities EIS Guideline* (DUAP, 1996), the *Biodiversity Conservation Act 2016* (BC Act), the *Fisheries Management Act 1994* (FM Act), and the Australian Government's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

In doing so, the addendum REF helps to fulfil the requirements of:

- Section 5.5 of the EP&A Act including that Transport examine and take into account to the fullest extent possible, all matters affecting or likely to affect the environment by reason of the activity
- The strategic assessment approval granted by the Federal Government under the EPBC Act in September 2015, with respect to the impacts of Transport for NSW's road activities on nationally listed threatened species, ecological communities and migratory species.

The findings of the addendum REF would be considered when assessing:

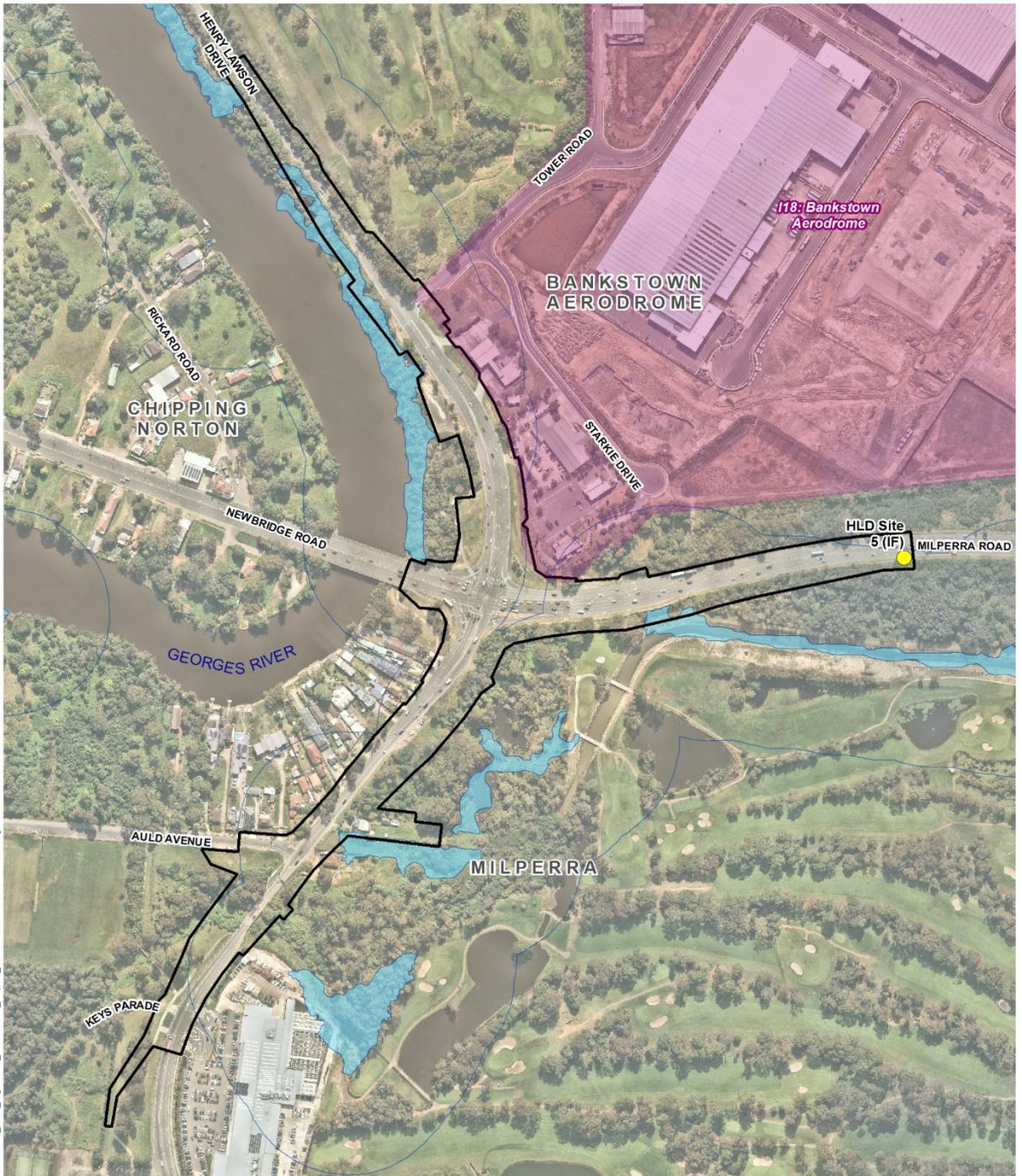
- Whether the proposed modification is likely to result in a significant impact on the environment and therefore the necessity for an environmental impact statement to be prepared and approval to be sought from the Minister for Planning under Division 5.2 of the EP&A Act
- The significance of any impact on threatened species as defined by the BC Act and/or FM Act, in section 1.7 of the EP&A Act and therefore the requirement for a Species Impact Statement or a Biodiversity Development Assessment Report
- The significance of any impact on nationally listed biodiversity matters under the EPBC Act, including whether there is a real possibility that the activity may threaten long-term survival of these matters, and whether offsets are required and able to be secured
- The potential for the proposed modification to significantly impact any other matters of national environmental significance or Commonwealth land and therefore the need to make a referral to the Australian Department of Climate Change, Energy, the Environment and Water for a decision by the Australian Government Minister for the Environment on whether assessment and approval is required under the EPBC Act.

1.2.2 Works on Bankstown Airport Limited land

Works to be undertaken on BAL land would require a Commonwealth building approval in accordance with Section 2.02 of the *Airports (Building Control) Regulations 1996* – the activity being defined as earthworks or engineering works.

Approval through a development application process would be sought from the airport-lessee company, who in this case is Bankstown Airport Limited.

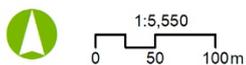
This REF would be provided as part of the development application process to Bankstown Airport Limited for their approval.



P:\GIS\Project-4\project\5\10003_HenryLawsonDrive\HLD_Addendum_REF_Figure1-3_Bankstown_Airport_Land.mxd\UCB No.14-11-22\Virgil Robinson\Rev.0

- Approved EIS and REF proposal boundary
- Local heritage item
- Coastal Wetlands Proximity Area
- Coastal Wetlands
- Isolated Artefact

Source: Aurecon, TfNSW, Spatial Services, Nearmap



Henry Lawson Drive Stage 1A **Addendum Review of Environmental Factors**
Projection: GDA 1994 MGA Zone 56

Figure 1-3 Identified Heritage

2. Need and options considered

2.1 Strategic need for the proposed modification

Section 2 of the project REF for the Henry Lawson Drive Stage 1A Upgrade addresses the strategic need for the project, the project objectives and the options that were considered. The proposed modification described and assessed in this addendum REF is consistent with the strategic need for the project.

Consistent with the project REF, the proposed modification would alleviate congestion along the corridor, support growth in the region and address concern about the high rate of casualty crashes.

The proposed modification is needed to improve traffic conditions and alleviate congestion along Henry Lawson Drive. Changes to the delivery timing of intersection works at Auld Avenue and Henry Lawson Drive have been developed in response to community feedback.

The proposed modification remains aligned with the NSW policy context documents discussed in Section 2.2 of the project REF.

The modified project would support the need for the overall proposal which is to:

- Alleviate congestion along the corridor that causes frustrating and costly delays for all road users across spreading peaks
- Address a road environment contributing to a high rate of casualty crashes
- Support growth in the area from large scale development in and around Milperra and the Bankstown Airport.

Without the development of the overall proposal, future road and traffic conditions within the overall proposal area would continue to decline into the future. Congestion would be expected to worsen, particularly during peak periods and road safety would be unimproved, in an unforgiving road environment.

2.2 Proposal objectives and development criteria

Section 2.4 of the project REF identifies the proposal objectives and development criteria that apply to the proposed modification.

These include the following:

- Improve travel times, journey time reliability and road safety outcomes for all road users.
- Improve freight efficiency and reduce vehicle operating costs on the road network.
- Support new development in the precinct by improving traffic flow and connectivity.

2.3 Alternatives and options considered

2.3.1 Methodology for selection of preferred modification option

As discussed in Section 2.5.1 of the project REF, the strategic options development for the existing challenges on Henry Lawson Drive Upgrade Stage 1A considered various options including the duplication of Henry Lawson Drive to increase capacity in the road network.

Following the project determination, a number of design refinements across the project REF were identified in which multiple refinement options were considered. The refinements enable the project objectives to meet and be consistent with the proposal objectives, aims and strategic transport, land use and road safety planning documents. The proposed modifications would mostly be constructed within the approved project footprint, with a small extension of works outside this boundary.

2.3.2 Identified options

Option 1 – proceed with approved project

This option would proceed with the approved project as described in the project REF, without any change to the scope of work.

Option 2 – proposed modification

This option would involve:

- additional drainage and earthworks on the Georges River Golf Course and replacement of the culvert under Henry Lawson Drive north of Tower Road
- a change to the delivery timing of the upgrade works on Milperra Road
- Jemena under bore trench and associated stockpile and access on parkland to the south of Newbridge Road
- demolition of the existing structures at 439 Henry Lawson Drive, Milperra and establishment of demountable site offices for use during project construction
- changes to the scope and timing of works at Auld Avenue intersection and to the south including:
 - delay to the implementation of left in/left out works at Auld Avenue intersection
- changes to the scope and timing of works at Milperra Drain bridge
 - delay to construction of the new Milperra Drain bridge
 - reconstruction of concrete kerbs, replacement of handrails, structure strengthening and repavement of the existing Milperra Drain bridge
- works on Bankstown Airport Limited land:
 - increased extent of tie-in works on Tower Road to tie into the recently constructed upgrade of the road by Bankstown Airport Limited
 - new compound site on Tower Road
 - inclusion of a dedicated left slip lane from Henry Lawson Drive to access the ALDI supermarket and retail area with improved safety

2.3.3 Analysis of options

Option 1 to proceed with the approved project, would meet the project objectives but would not provide the additional benefits afforded by Option 2. Option 1 would facilitate:

- Improved travel times, journey time reliability and road safety outcomes for all road users.
- Improved freight efficiency and reduced vehicle operating costs on the road network.
- Supporting new development in the precinct by improving traffic flow and connectivity to Bankstown Airport, Milperra Industrial Estate and proposed residential development in the area and the surrounding road network in the south west of Sydney
- Improved connectivity and safety for pedestrians and cyclists.

Option 2 would satisfy the project objectives as identified with Option 1, however it would provide additional benefits including:

- Maintaining all current traffic movements at the Henry Lawson Drive and Auld Avenue intersection until the alternative access is constructed as part of Henry Lawson Drive Stage 1B project. The new connection between Auld Avenue and Keys Parade is being developed to maintain access to Auld Avenue from Henry Lawson Drive.
- Improved road safety on Henry Lawson Drive by providing a channelised left turn into the ALDI supermarket and retail area, by removing turning vehicles out of the left turn lane into Milperra Road.

- Improving drainage and water quality north of Tower Road
- Improve constructability by utilising additional construction areas for utility works and creation of a new compound site.

However, it is also noted that the proposed modifications would result in additional environmental impacts through increased vegetation clearing, access changes and additional adjoining property impacts. This includes impacts to airport land (requiring approval under the *Commonwealth Airports Act 1996*) for proposed modification on Bankstown Airport Limited land. These impacts are addressed in Section 6.

2.4 Preferred option

'Option 2' was selected as the preferred option as it would provide greater short and long-term benefits compared to 'Option 1', whilst resulting in minimal additional impacts. The design features have been further detailed in Chapter 3 of this addendum REF.

3. Description of the proposed modification

3.1 The proposed modification

Transport for NSW proposes to modify the Henry Lawson Drive Stage 1A Upgrade through a number of design refinements that have arisen from further detailed design and community feedback to the REF. The proposed modification is shown in Figure 1-2 with more detailed figures in Figure 3-1 to Figure 3-6.

Key features of the proposed modification would include:

- additional drainage and earthworks on the Georges River Golf Course and replacement of the culvert under Henry Lawson Drive north of Tower Road
- a change to the delivery timing of the upgrade works on Milperra Road
- Jemena under bore trench and associated stockpile and access on parkland to the south of Newbridge Road
- demolition of the existing structures at 439 Henry Lawson Drive, Milperra and establishment of demountable site offices for use during project construction
- changes to the scope and timing of works at Auld Avenue intersection and to the south including:
 - delay to the implementation of left in/left out works at Auld Avenue intersection
- changes to the scope and timing of works at Milperra Drain bridge
 - delay to construction of the new Milperra Drain bridge
 - reconstruction of concrete kerbs, replacement of handrails, structure strengthening and repavement of the existing Milperra Drain bridge
- works on Bankstown Airport Limited land:
 - increased extent of tie-in works on Tower Road to tie into the recently constructed upgrade of the road by Bankstown Airport Limited
 - new compound site on Tower Road
 - inclusion of a dedicated left slip lane from Henry Lawson Drive to access the ALDI supermarket and retail area with improved safety

The key features of the proposed modification are shown in Figure 1-2 with further detail provided in Figure 3-1 to Figure 3-6. It should be noted that the proposed modification is not located on and would not require modification to the approved EIS area.

3.2 Design

3.2.1 Design criteria

The proposed modification has been designed to satisfy relevant standards and applications from Transport and Austroads. These standards describe the criteria that should be adopted for specific road classifications and conditions. There is no proposed change to the design criteria for the project as described in Section 3.2.1 of the project REF.

3.2.2 Engineering constraints

The engineering constraints for the proposed modification include:

- construction and traffic staging –Henry Lawson Drive, Milperra Road and Auld Avenue would need to remain operational in some form during construction. Design has had to consider minimising the need for lane closures and use of traffic control to minimise impacts on the travelling public.

- State Environmental Planning Policy (Resilience and Hazards) 2021 area – areas surrounding the project and proposed modification are in close proximity to Coastal Wetlands, so the proposed modifications have avoided impacts to these areas.
- Crown land and Aboriginal land claim – land along the Georges River and Milperra Road are identified as being Crown land with active land claims. Proposed modifications have avoided impacts to these areas.
- property impacts – trying to minimise adjoining property acquisition
- Bankstown Airport operations - Construction plant and operational structure to be within the 'OLS Inner Horizontal Surface' of 51m.

3.2.3 Main features of the modification within the REF area

Additional drainage and earthworks on the Georges River Golf Course north of Tower Road

The project REF identified that the drainage design along Henry Lawson Drive would be developed to provide road flood immunity above a 20-year Average recurrence interval (ARI) flood event. As such, the project boundary has shifted slightly along the Georges River Golf Course north of Tower Road due to required earthworks to meet the flood immunity.

Works in this area would involve culvert replacement, construction of a retaining wall, proposed swale works and additional vegetation clearing as noted in Figure 3-1 below.

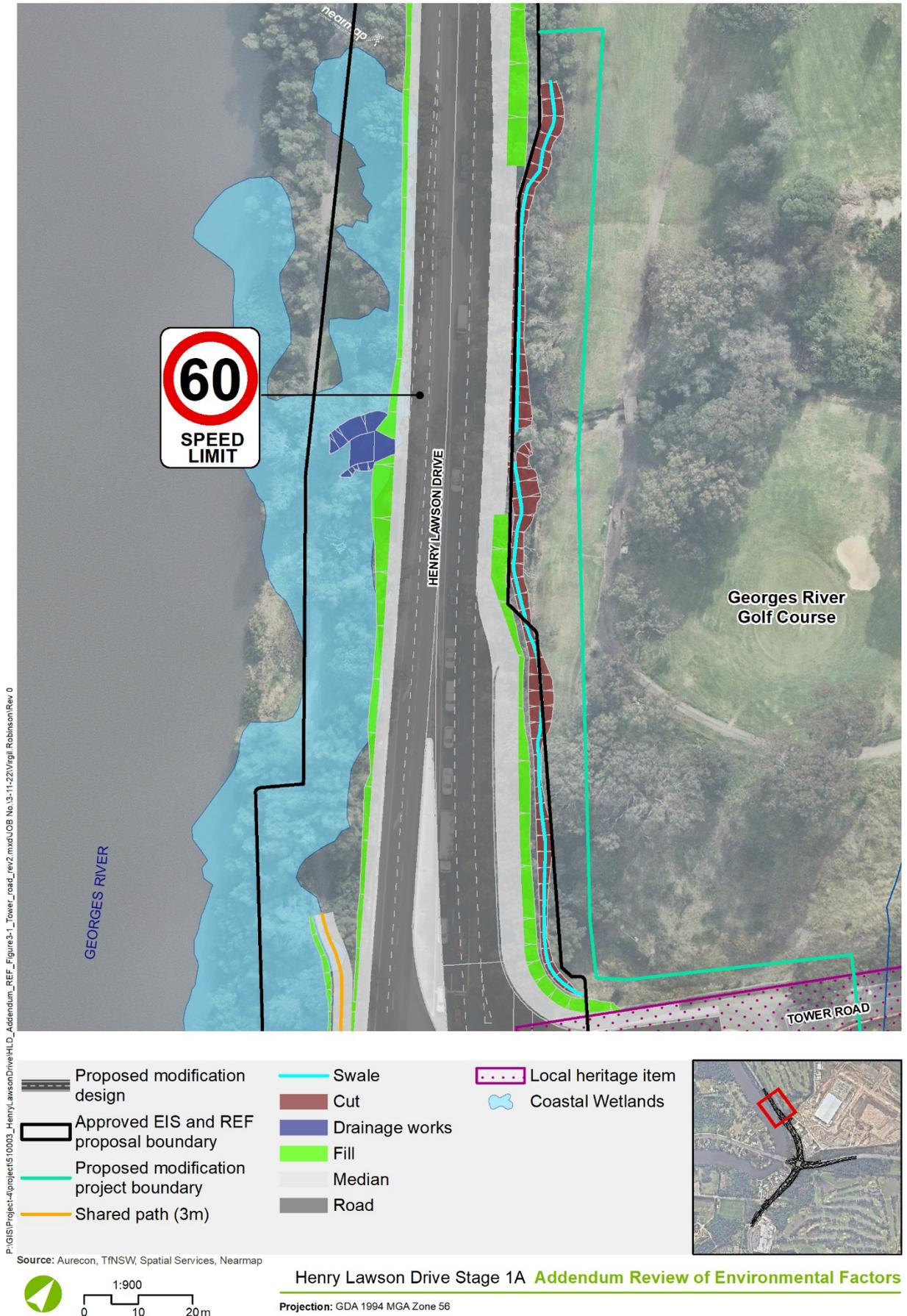


Figure 3-1 Additional drainage and earthworks on the Georges River Golf Course north of Tower Road

Changes to the delivery timing of works on Milperra Road

The project REF identified a 480 metre upgrade of Milperra Road. An undetermined Aboriginal land claim exists along Milperra Road. The delivery of the full approved design would be staged subject to the Aboriginal land claim determination as identified in Figure 1-3. Staging of the works would include preliminary works such as excavation, pavement works and finishing works such as line marking.

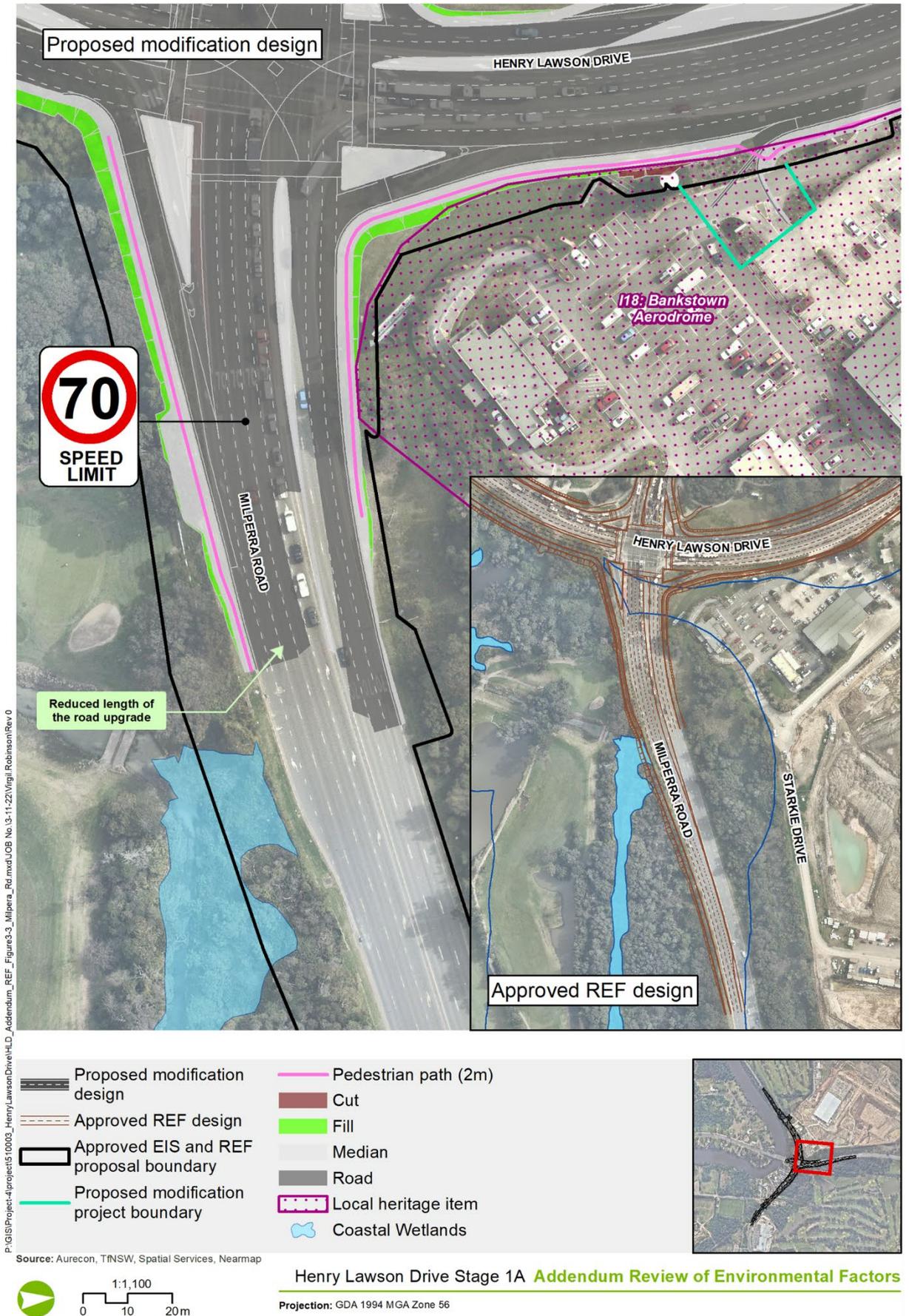


Figure 3-2: Proposed modification to the Milperra Road construction area.

Jemena under bore trench and associated stockpile access

The project REF described that the Jemena High Pressure gas main section on the eastern side of Henry Lawson Drive would need to be relocated or adjusted. To complete this work, the project boundary has shifted on the western side of the alignment south of the Newbridge Road site to facilitate the underboring construction methodology. The area for the underbore activities and associated stockpile access is predominately cleared land within the parkland. The anticipated areas of the works site is shown in Figure 3-3.

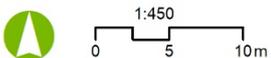
The proposed modification requires restriction of access to the pedestrian footpath through the parkland to the south of Newbridge Road for safety reasons. Pedestrians may be redirected around the site with appropriate fencing or an alternative detour through the front footpath depending on the staging of the works by the contractor. This interruption would be minor and temporary access arrangements would be required. Pedestrians would be redirected to the existing pathway along Henry Lawson Drive to cross the road and access the Georges River riverfront via Camofleur Reserve. Traffic management measures will allow maintained pedestrian and cyclist access.



P:\GIS\Project-4\project15\10003_HenryLawsonDrive\HLD_Addendum_REF_Figures\4_Jenema_assessment.mxd\JOB No.13-11-22\Virgil.Robinson\Rev.0

- | | |
|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
|  Proposed modification design |  Fill |
|  Approved EIS and REF proposal boundary |  Median |
|  Proposed modification project boundary |  Road |
|  Shared path (3m) |  3m wide Jenema easement |

Source: Aurecon, TfNSW, Spatial Services, Nearmap



Henry Lawson Drive Stage 1A **Addendum Review of Environmental Factors**
Projection: GDA 1994 MGA Zone 56



Figure 3-3 Jenema under bore trench and associated stockpile access

Demolition of structures at 439 Henry Lawson Drive, Milperra

The project REF proposed the ancillary facility to be located on residential land, Lot16 DP18399. The project REF described acquisition of the site by Transport for the purposes of road widening in the immediate vicinity of the residence. In addition, if possible the existing building would be utilised as a site office.

During detailed design, it was identified that the building was not suitable for use as a site office and would need to be demolished at the commencement of construction with demountable offices established. The property was previously mapped as coastal wetlands along the southern boundary under the Coastal Management SEPP. The mapping has since been updated and there are no mapped coastal wetlands in the property.

Changes to the scope and timing of works to Auld Avenue intersection and to the south

The project REF proposed to change the existing Henry Lawson Drive and Auld Avenue intersection into a left in / left out only intersection. A raised concrete median would separate the northbound and southbound lanes at this location. The REF identified that it would be based on balancing a range of issues including road safety and road network performance, as well as considering any future opportunities for broader connectivity.

In the Henry Lawson Drive Upgrade Stage 1A Submissions Report (May 2022), Transport noted that a new connection between Auld Avenue and Keys Parade was being considered to maintain access to Auld Avenue from Henry Lawson Drive. The new connection is to be assessed by the Henry Lawson Drive Stage 1B project. If approved, it would then be constructed as part of that project.

The proposed modification would undertake pavement, earthwork, utilities and new permanent water quality basin (as per the surface water assessment (Appendix F of the project REF) as part of the Stage 1A project but would retain all turning movement in and out of Auld Avenue.

Changes to the scope and timing of works at Milperra Drain bridge

The bridge duplication over Milperra Drain along Henry Lawson Drive and associated road works including implementation of the left in/let out arrangement at Auld Avenue as assessed under the project REF, would be delivered as part of the Stage 1B upgrade construction.

The proposed modification would result in further works to the existing Milperra Drain bridge to improve safety outcomes. This includes the reconstruction of the concrete kerb on the bridge to allow for installation of the new road barrier system to current standards, re-pavement of the bridge and structural strengthening of the bridge deck and girders under the structure. These works are consistent with kerb and pavement works identified across the broader project and no additional environmental impacts are expected.

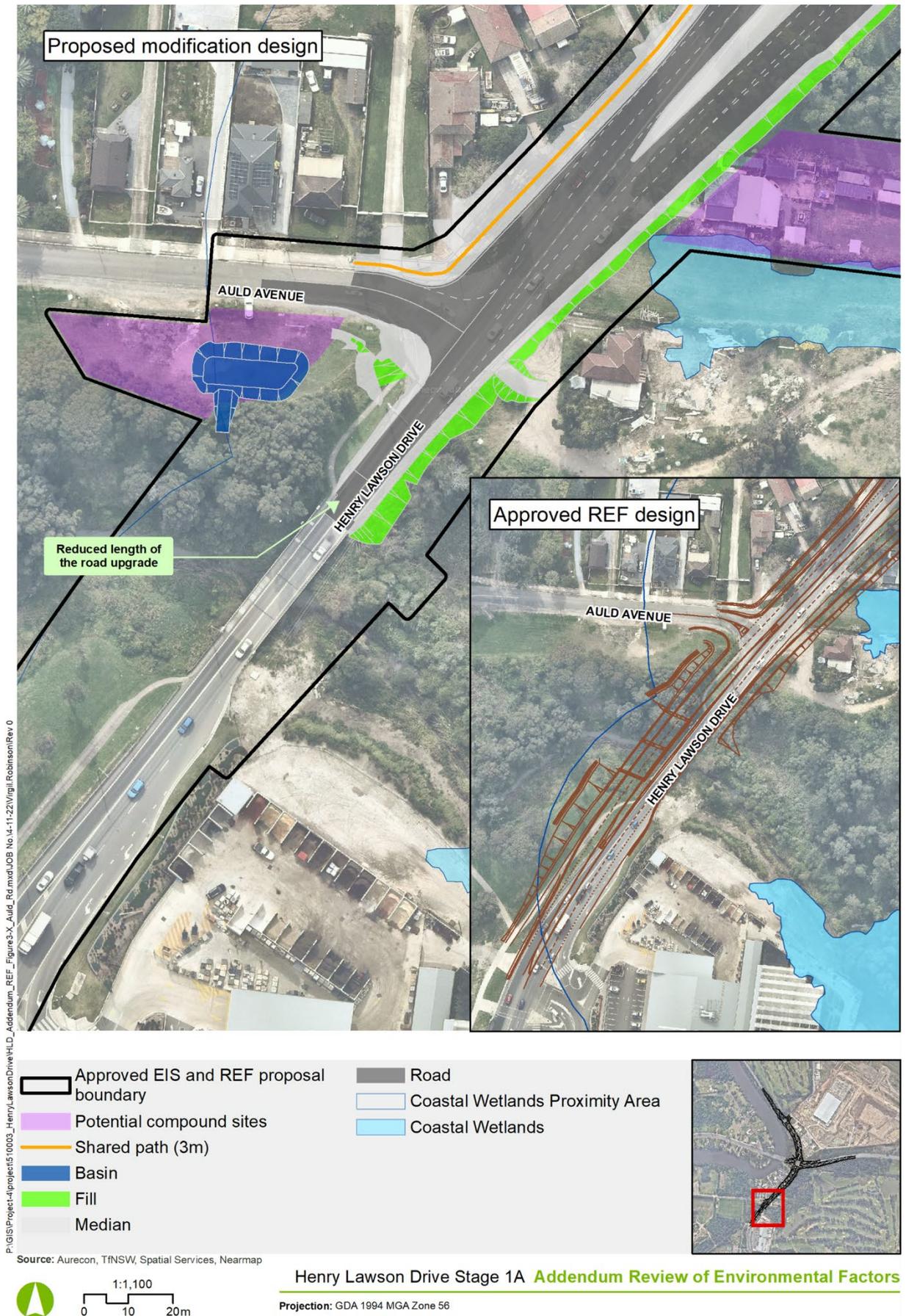


Figure 3-4 Changes to the scope and timing of works to Auld Avenue intersection and the Milperra Drain bridge

3.2.4 Main features of the modification on Bankstown Airport Limited (Commonwealth) land

Tower Road tie-in works

The project REF identified that the Henry Lawson Drive and Tower Road intersection would tie into the existing Tower Road. Tower Road forms part of the Bankstown Aerodrome. Since the preparation of the project REF, Tower Road has been upgraded by Bankstown Airport Limited. As such, the tie in location has shifted slightly to connect with the recent upgrade.

Works would involve minor realignment of kerbs and line marking, with works remaining within the project footprint. Refer to Figure 3-5 which shows the extension area from the project REF works.

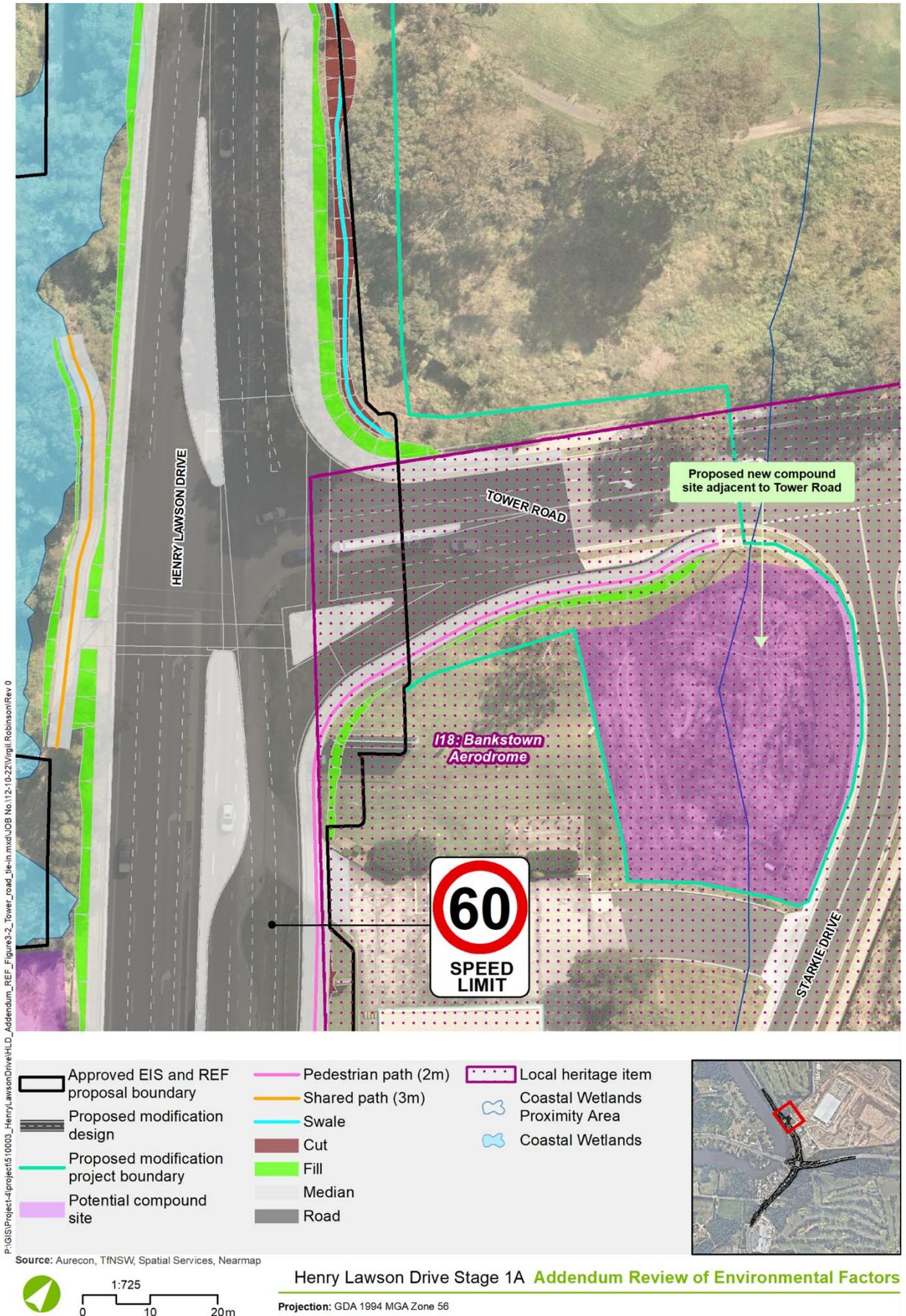


Figure 3-5 Proposed modification to the Tower Road Tie-in works and new compound site

New compound site on Tower Road

The Tower Road compound site would be located on the corner of Tower Road and Henry Lawson Drive as identified in Figure 3-5. Comprising an area of 2209.11 square metres, the site is located on Lot231 DP1132273. It is located on cleared land, was previously used as a compound site for the Tower Road upgrade and is currently owned by Bankstown Airport Limited (BAL) under a head lease from the Commonwealth Government. Access/ egress from the Tower Road site would be via Starkie Drive to avoid queuing along Tower Road. The compound site would be returned to its existing condition following with the removal of demountable site offices, sheds, carparking, workshops and storage at the conclusion of works.

Potential uses for this ancillary site include:

- hardstand and laydown area
- minor fuel storage and bunding
- crane setup
- bridge and under bore material storage
- plant and equipment storage
- alternative location for site offices.

Changes to the Henry Lawson Drive access to the ALDI supermarket and retail area

The project REF identified in Section 3.2.4.9 the removal of the existing dedicated left turn entry slip lane into the ALDI supermarket and fast-food retail area located south of the Tower Road and Henry Lawson Drive intersection. The construction boundary at present is constrained in some locations however this has been discussed with the staging consultant and noted the works can be undertaken and will remain within the property boundary. Access to the retail area was planned to be retained with one standard entry-only property driveway from Henry Lawson Drive.

Road safety concerns were identified with this arrangement, with vehicles utilising the left turn lane to access Milperra Road potentially causing conflicts. The proposed modification would create a dedicated channelised lane connecting to the retail area driveway, enabling access to the Aldi supermarket site and retail area. This would involve some changes to the ALDI supermarket property to restructure some areas of parking. The proposed modification is shown in Figure 3-6.

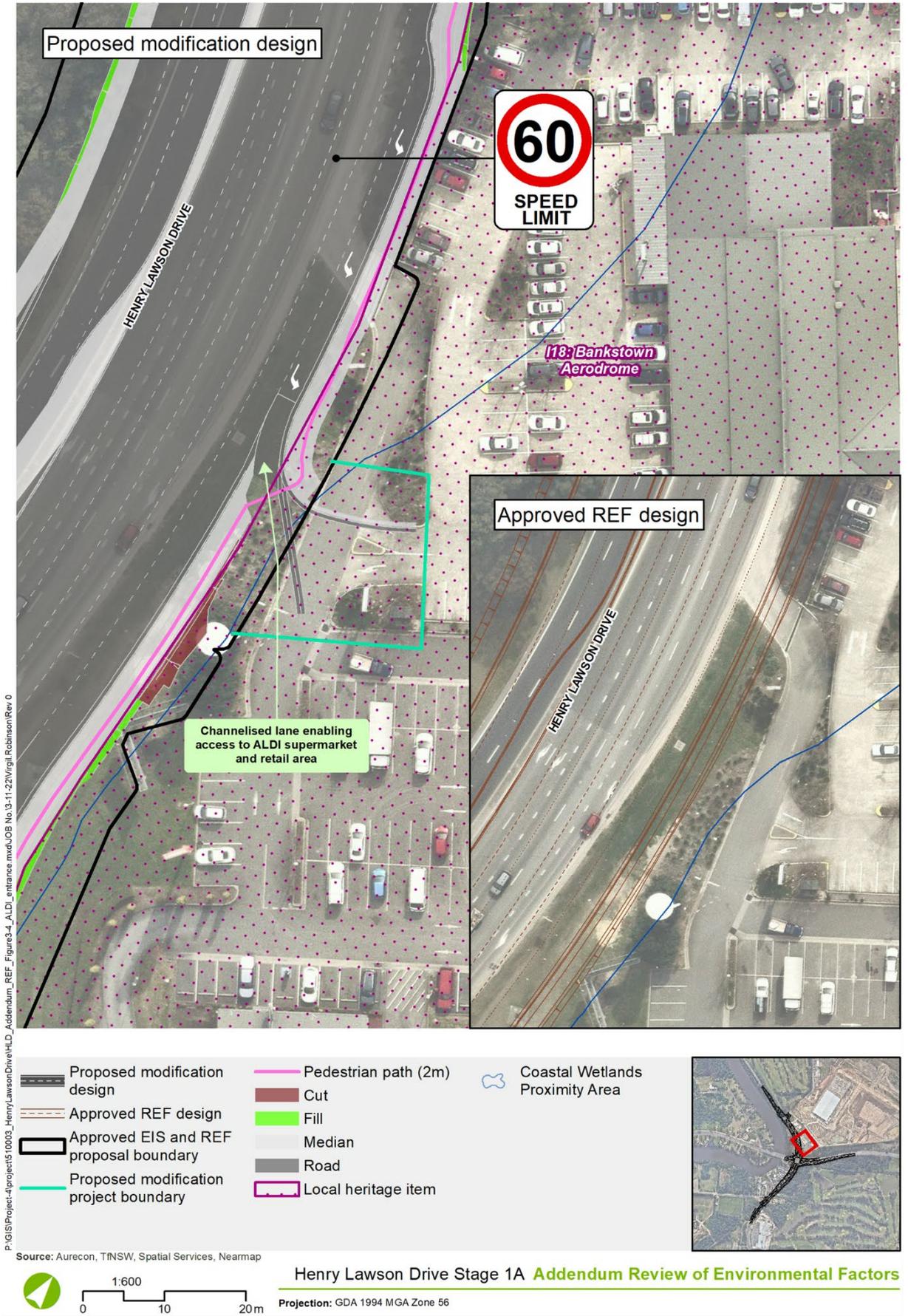


Figure 3-6: The proposed modification to the ALDI supermarket and retail area access

3.3 Construction activities

This section summarises the likely method, work hours, plant and equipment and associated activities for construction of the proposed modification. The work method as described in this section is indicative. The construction activities and their sequencing would be finalised during the pre construction phase and described in full in the project Construction Environmental Management Plan (CEMP). Any work outside the scope of activities described in the project REF or addendum REF would require additional assessments.

3.3.1 Work methodology

Construction of the proposed modification would involve the following activities:

- Preliminary works including establishment of ancillary facilities, construction access areas and the implementation of environmental, traffic and pedestrian controls, existing building and fencing removal, clearing and grubbing
- Utility adjustment works
- Earthworks
- Drainage works
- Intersection configuration and traffic signals

These construction activities are described in further detail in Table 3-1. Refer to Figure 3-1 which shows the location for the additional drainage north of Tower Road.

Table 3-1 Proposed modification methodology for each construction activity

Activity	Proposed methodology
Preliminary works	<p>Ancillary facilities are required to support construction. The proposed modification includes the demolition of existing structures situated at 439 Henry Lawson Drive, Milperra to facilitate construction compound activities.</p> <p>Key tasks include:</p> <ul style="list-style-type: none"> • Installation of construction boundary hoarding/ fencing • Installation of sediment and erosion controls • Vegetation removal and grubbing works • Demolition of structure on 439 Henry Lawson Drive, Milperra • Establishing ancillary facilities (including installation of demountables), designated laydown areas and services required for these facilities • Adjusting existing fencing structures • Installation of temporary traffic and pedestrian controls
Utility works	<p>The proposed modification requires utility works to be completed south of Newbridge Road and at Auld Avenue.</p> <p>Key tasks include:</p> <ul style="list-style-type: none"> • Preconstruction utility location identification • Protection of services where required • Adjusting, relocation and installation of services • Testing and commissioning of services • Reinstatement of surfaces, including backfill and compaction
Earthworks	<p>Additional earthworks into the golf course land north of Tower Road would be required.</p> <p>Key tasks include:</p> <ul style="list-style-type: none"> • Site inspection and survey • Removal of topsoil, stockpiling and/or disposal if weed affected • Cut to subgrade • Foundation treatments, where required

Activity	Proposed methodology
	<ul style="list-style-type: none"> Grading and compaction of materials to required levels
Drainage works	<p>Additional stormwater drainage into the golf course land north of Tower Road would be required.</p> <p>Key tasks include:</p> <ul style="list-style-type: none"> Excavation of trenches and pits for drainage Delivery of and placement of precast pipe and pits Filling of trenches Landscaping following compaction
Tower Road tie-in works, Milperra Drain bridge pavement works, intersection configuration and traffic signals	<p>Pavement work would be required at Tower Road tie in works and Milperra Drain bridge.</p> <p>Key tasks include:</p> <ul style="list-style-type: none"> Traffic switches as required Redirection of pedestrians and cyclists to temporary paths Survey and set-out of intersection layout Removal/relocation of concrete medians and islands as required Temporary pavement constructed where required Removal/ relocation of traffic control signal poles as required under the construction staging plan Construction of permanent pavement and line marking Reinstatement of pavement, pedestrian paths and signal functionality
Pavement works	<p>Pavement work would be required at Auld Avenue and the Milperra Drain bridge</p> <p>Key tasks include:</p> <ul style="list-style-type: none"> Construction of permanent pavement Reinstatement of pavement and pedestrian paths

3.3.2 Construction hours and duration

Consistent with the project REF, construction is expected to commence in early 2023 and would take about two years to complete.

Construction works would be undertaken in both standard hours and out-of-hours works (OOHW) for the project. Standard construction hours as defined in the Interim Construction Noise Guideline (DECC 2009) (ICNG) are:

- Monday to Friday: 7am – 6pm
- Saturday: 8am – 1pm
- Sunday and Public Holidays: No work.

Out of hours works would be required to minimise disruptions to the road network. The main works that would be required to occur out of hours would include works at the Henry Lawson Drive / Milperra Road intersection and Henry Lawson Drive / Tower Road intersections.

Any OOHW would be undertaken in accordance with the Construction Noise and Vibration Guidelines (Roads and Maritime 2016).

3.3.3 Plant and equipment

Plant and equipment would be generally consistent with the description provided in Section 3.3.6 of the project REF.

In addition, the equipment outlined in Table 3-2 is specific to the listed construction activities.

Table 3-2 Indicative list of plant and equipment

Activity	Plant and equipment
Utility works	Vacuum truck, light vehicles, backhoe/ excavator, concrete saw, daymaker, generator, crane, whacker plate, compactor, bogie tipper truck and jumping jack.
Pavement/tie - in works	Trencher, trucks, hand held tools, angle grinder, backhoe/ excavator, vacuum truck, paver and asphalt finisher, compactor, vibratory roller, concrete saw, concrete pump, concrete agitators, water cart, daymaker, generator, jumping jack, grader and crane.
Drainage works	Hand held tools, angle grinder, underbore, directional drill, vacuum truck, bored piling rig, rigid truck, truck and dog, light vehicle, concrete saw, concrete pump, concrete agitators, road sweeper, water cart, hiab crane, daymaker, vibratory roller, water truck, asphalt paver, grader, crane and large capacity crane.
Demolition works	Light vehicle, vacuum truck, excavator, rigid truck, handheld tools, hammer drill, crane, bogie tipper truck

3.3.4 Earthworks

A minor additional amount of earthworks would be required by the proposed modification, however, overall the quantities remain similar to those outlined in the REF. These are associated with the drainage changes north of Tower Road. The works will include removal of material to enable access and construction of the new culvert headwall as well as the construction of a retaining wall, swale works and additional vegetation clearing.

Excavated materials would be managed and stored (stockpiled) in accordance with the mitigation measures outlined in the project REF, the submissions report and this addendum REF, and subject to testing and classification in accordance with the Waste Classification Guidelines (EPA, 2014) prior to any offsite disposal.

3.3.5 Traffic management and access

Construction traffic access routes to the modified project would be consistent with the description provided in Section 3.3.9 of the project REF. Construction traffic would typically access the proposed modification work areas from the Hume Highway to the north, M5 Motorway to the south and Milperra Road to the east. The number of vehicle movements would generally be consistent with the project REF, being about 60 heavy vehicle, 40 light vehicle and 30 construction personnel vehicle movements to and from the site each day, during peak construction.

Some construction work would require temporary road closure at Tower Road, resulting in restricted access impacts for residents and businesses in these areas. A Road Occupancy Licence (ROL) would be obtained and consultation with the community undertaken prior to road or lane closures.

3.4 Ancillary facilities

One additional ancillary facility has been identified as part of these works. This is located south of Tower Road. In addition, there is clarification to the use of the Henry Lawson Drive site, opposite Auld Avenue.

3.4.1 Demolition of structures at 439 Henry Lawson Drive, Milperra

In Section 3.4.3 of the REF, the existing building on the Henry Lawson Drive site was considered for use as part of the main office space. If suitable, it would then be demolished after construction, but if unsuitable would be demolished as part of construction activities.

Further inspection of the structure found it to be unsafe for use, and the structure would need to be demolished. Instead, demountable buildings would be brought to the site for use as office and amenity space (as identified in the project REF).

3.4.2 Tower Road site

A new compound site has been identified to the south of Tower Road. This is cleared land adjacent to the road, having been previously used as a compound site for the Tower Road upgrade. The site compound would have a purpose for site offices, car parking, sheds, workshops and storage. The compound will occupy an area of 1565 sq m of the total 2799 sq metres to be leased. Refer to Figure 3-7 for the compound site on Tower Road.



Figure 3-7: Proposed compound site on Tower Road

3.5 Public utility adjustment

The proposed modification does not require any additional utility works other than those identified in the project REF. However, the new underbore trench location for the Jemena High Pressure gas main and associated stockpile site is a change in construction methodology for the Jemena High Pressure gas main that runs under Henry Lawson Drive as identified in Section 3.5 of the project REF.

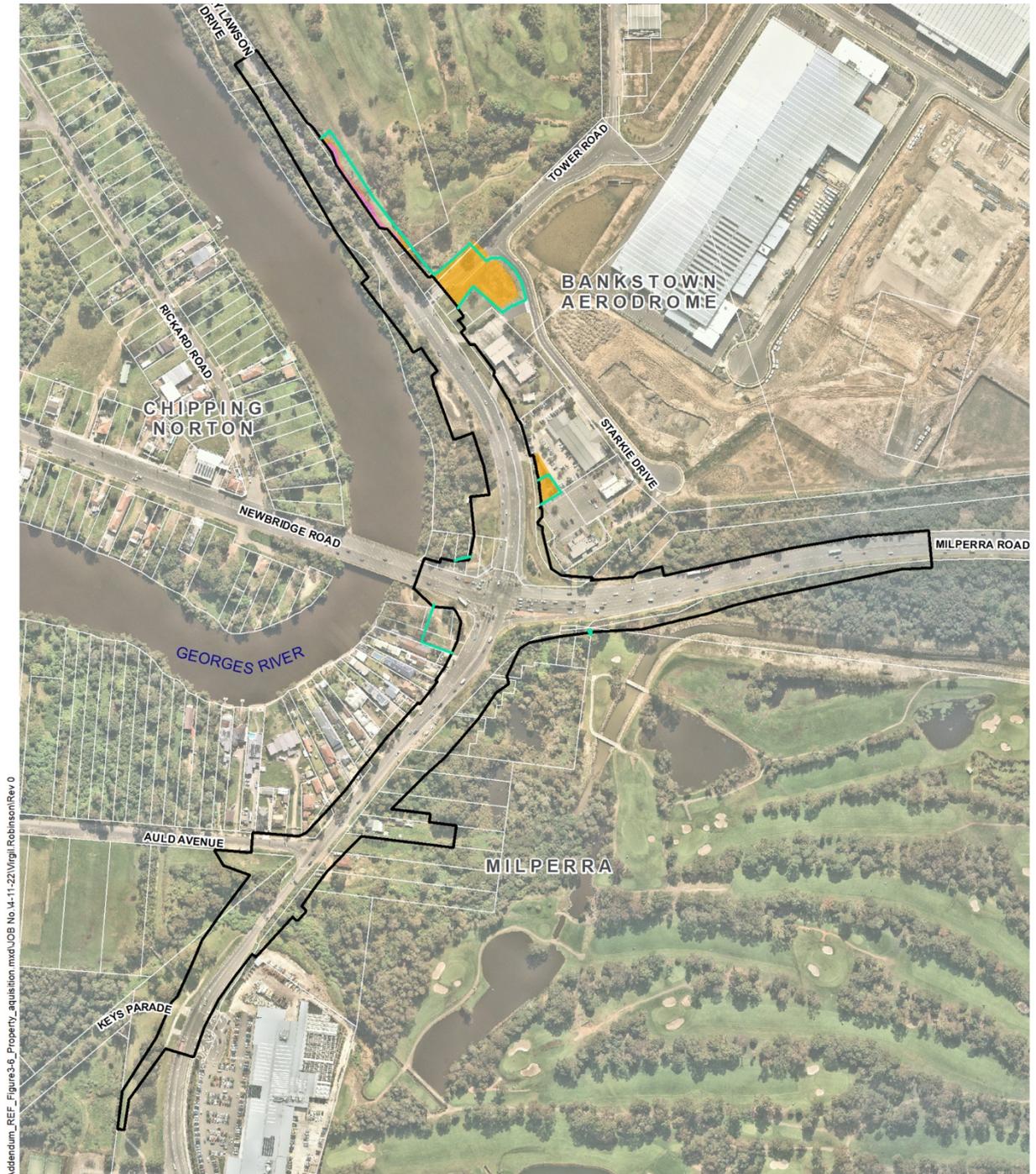
3.6 Property acquisition

The proposed modification would require some small additional property acquisition and temporary lease of property as identified in Table 3-3 below. Property acquisition would involve about 14 square metres for the ALDI supermarket and retail area access on Commonwealth land (Lot 122/DP1037071). This land would be partially acquired due to construction of a new access road off Henry Lawson Drive and the remainder would require property adjustments. Additional property acquisition is required for Lot 2/DP1103168, Lot 1/DP433616 and Lot 2/DP213387 with further detail provided in Table 3-3.

The new compound site on Tower Road occurs on Bankstown Airport Limited land that would be leased from the Commonwealth and no acquisition would be required. No acquisition would be required for the Jemena under bore trench on TfNSW owned land. Additional land would be leased from the Georges River Golf Course for the drainage works to the north of Tower Road.

Table 3-3: Proposed property acquisition

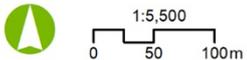
Description	Total area	Acquisition type	Current owner	Lot and DP	Land use zone (LEP)
Additional land required for the ALDI supermarket and retail access	14 square metres	Acquisition	Federal government land	Lot 122/DP1037071	SP2 Infrastructure
Land to be leased for the new compound site on Tower Road	2799 square metres	Lease	Federal government land	Lot 231/DP1132273	SP2 Infrastructure
Additional land required for the drainage works to the north of Tower Road	211 square metres	Lease	Privately owned	Lot 1/DP433616	RE1 Public Recreation
	259 square metres			Lot 2/DP213387	
Additional land required for the drainage works to the north of Tower Road	539 square metres	Acquisition	Privately owned	Lot 1/DP433616	RE1 Public Recreation
	44 square metres			Lot 2/DP213387	
Land to be leased for the Jemena under bore trench and associated stockpile and access on parkland to the south of Newbridge Road	12 square metres	Lease	Federal government land	Lot 3/ DP17144	RE1 Public Recreation
	4 square metres			Lot 4/DP17144	
Additional land required for the changes to the delivery timing of the upgrade works on Milperra Road	6 square metres	Acquisition	Crown land	Lot 2/DP1103168	RE1 Public Recreation



P:\GIS\Project-4\projects\10003_HenryLawsonDrive\HLD_Addendum_REF_Figures\6_Property_acquisition.mxd\JOB No. 14-11-22\Virgil Robinson\Rev 0

-  Approved EIS and REF proposal boundary
-  Proposed modification project boundary
-  Land to be leased for construction
-  Land to be acquired
-  Cadastre

Source: Aurecon, TfNSW, Spatial Services, Nearmap



Henry Lawson Drive Stage 1A **Addendum Review of Environmental Factors**
Projection: GDA 1994 MGA Zone 56

Figure 3-8 Proposed additional property acquisition and lease

4. Statutory and planning framework

This chapter provides the statutory and planning framework and considers provision of relevant state environmental planning policies, local environmental plans and other legislation.

Two separate planning approval processes are required for the proposed modification:

- REF approval under the State Environmental Planning Policy (Transport and Infrastructure) 2021 for works within the REF area (see Section 4.1.1)
- Approvals under the Commonwealth Airports Act 1996 for works within Bankstown Airport Lands (see Section 4.3.2).

4.1 Environmental Planning and Assessment Act 1979

4.1.1 State Environmental Planning Policies

State Environmental Planning Policy (Transport and Infrastructure) 2021

In March 2022, the State Environmental Planning Policies (SEPPs) were updated. The Former State Environmental Planning Policy (Infrastructure) 2007 was incorporated into the State Environmental Planning Policy (Transport and Infrastructure) 2021 (Transport and Infrastructure SEPP). Chapter 2 (Infrastructure) of SEPP (Transport and Infrastructure) aims to facilitate the effective delivery of infrastructure across the State.

Clause 2.109 of SEPP (Transport and Infrastructure) permits development on any land for the purpose of a road or road infrastructure facilities to be carried out by or on behalf of a public authority without consent.

As the proposed modification, that lies within the REF boundary, is for a road and road infrastructure facilities and is to be carried out by Transport for NSW, it can be assessed under Division 5.1 of the EP&A Act.

Development consent from council is not required. However, it is noted that part of the proposed modification is located on Commonwealth land (being Bankstown Airport). As such, works on these sites are not subject to state legislation or the SEPP (Transport and Infrastructure). Works on Bankstown Airport Limited land would be subject to approval under the Commonwealth *Airports Act 1996* (refer to Section 4.3.2).

The proposed modification is not located on land reserved under the *National Parks and Wildlife Act 1974* and does not require development consent or approval under:

- State Environmental Planning Policy (Resilience and Hazards) 2021
- State Environmental Planning Policy (Planning Systems) 2021
- State Environmental Planning Policy (Precincts – Central River City)
- State Environmental Planning Policy (Precincts – Eastern Harbour City)
- State Environmental Planning Policy (Precincts – Regional) 2021
- State Environmental Planning Policy (Precincts – Western Parkland City) 2021

Section 2.10 to 2.15 of SEPP (Transport and Infrastructure) contains provisions for public authorities to consult with local councils and other public authorities prior to the commencement of certain types of development.

Consultation, including consultation as required by SEPP (Transport and Infrastructure) (where applicable), is discussed in Section 5 of this addendum REF.

State Environmental Planning Policy (Resilience and Hazards) 2021

The State Environmental Planning Policy (Resilience and Hazards) 2021 (SEPP (Resilience and Hazards)) aims to promote an integrated and co-ordinated approach to land use planning in the coastal zone in a manner consistent with the objectives of the Coastal Management Act 2016 (Coastal Management Act).

The proposed modification is not on any land identified as coastal wetlands, however the proposed modification is located within the 'proximity area for coastal wetlands' mapped under the SEPP (Resilience and Hazards). Section 2.8 of the SEPP (Resilience and Hazards) states that development consent must not be granted to development on land wholly or partly identified as "proximity area for coastal wetlands" unless the consent authority is satisfied that the proposed development would not significantly impact on the biophysical, hydrological or ecological integrity of the adjacent coastal wetland or; the quantity and quality of surface and ground water flows to the adjacent coastal wetland. For the works not proposed on BAL land, the proposed modification is being assessed under Part 5 of the EP&A Act and development consent is not required. As due diligence, the project REF assessed these potential impacts in Chapter 6 and identified that these impacts would not be significant. While most potential environmental impacts of the proposed modification are consistent with the project REF, assessment of additional impacts are discussed in Chapter 6 of this report.

Chapter 4 of the SEPP (Resilience and Hazards) aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health of any other aspect of the environment. An investigation was undertaken as part of the project REF with recommendations for a Detailed Site Investigation to be undertaken. The proposed modification is consistent with the project REF, and it is unlikely there would be any additional potential impacts to soils and contaminated land beyond those described in Section 6.5.3 of the project REF.

State Environmental Planning Policy (Biodiversity and Conservation) 2021

With the March 2022 updates to the SEPPs, the former Greater Metropolitan Regional Environmental Plan No 2 – Georges River Catchment was incorporated into the State Environmental Planning Policy (Biodiversity and Conservation) 2021.

Chapter 11 of the State Environmental Planning Policy (Biodiversity and Conservation) 2021 (SEPP (Biodiversity and Conservation)) applies to land within the Georges River Catchment and provides a series of general and specific planning principles and requirements to establish a consistent and coordinated approach to environmental planning and assessment and protect the environmental quality within the Georges River catchment.

The proposed modification is consistent with the objectives and planning principles of the Biodiversity and Conservation SEPP and changes to biodiversity impacts have been addressed in Chapter 6.

4.1.2 Local Environmental Plans

Bankstown Local Environmental Plan 2015

The proposed modification is located within the City of Canterbury-Bankstown Local Government Area (LGA). The City of Canterbury-Bankstown was formed in May 2016, replacing the former Bankstown City and Canterbury City Councils. The amalgamation process did not consolidate the LEPs of the local councils, and as a result, the Bankstown Local Environmental Plan 2015 (Bankstown LEP) and Canterbury Local Environmental Plan 2012 (Canterbury LEP) remain in force.

The proposed modification is located within land zoned as SP2 Infrastructure (Air Transport Facility) and RE1 Public Recreation under the Bankstown LEP, refer to Figure 4-1 below. Proposed works on the Bankstown Aerodrome and ALDI supermarket are zoned SP2 Infrastructure (Air Transport Facility) while the Georges River Golf Club is zoned RE1 Public Recreation. The proposed modification is consistent with the objectives of the zones identified, (SP2 Infrastructure and RE1 Public Recreation) with further detail provided in Table 4-1. The provisions of the Bankstown LEP apply to the proposed modification as the *Draft Canterbury Bankstown Consolidated Local Environmental Plan* (Draft Consolidated LEP) is under review by DPIE and has not yet commenced. The Draft Consolidated LEP zoning map however illustrates the zones within the proposal will remain as SP2 Infrastructure (Air Transport Facility) and RE1 Public Recreation and this is consistent with the zones identified in Table 4-1.

Table 4-1: Consistency of REF proposal with LEP zones

Zone	Objective of zone	Consistency of proposed modification with objective
SP2 Infrastructure	<ul style="list-style-type: none"> To provide for infrastructure and related uses To prevent development that is not compatible with or that may detract from the provision of infrastructure 	The proposed modification would be consistent with the objectives of this zone as it is road infrastructure
RE1 Public Recreation	<ul style="list-style-type: none"> To enable land to be used for public open space or recreational purposes To provide a range of recreational settings and land uses To protect and enhance the natural environment for recreational purposes 	The proposed modification would support the project in improving recreational settings through improvements to active transport linkages. The proposed modification has been designed to minimise impacts on the natural environment and scenic resources

4.2 Other relevant NSW legislation

4.2.1 Coastal Management Act 2016

The Coastal Management Act replaces the repealed Coastal Protection Act 1979, establishing a strategic framework and objectives for managing coastal issues in NSW. The Coastal Management Act promotes strategic and integrated management, use and development of the coast for the social, cultural and economic wellbeing of the people of NSW.

The Coastal Management Act defines the coastal zone as comprising of the four coastal management areas. The Coastal Management Act establishes management objectives specific to each of the management areas, reflecting their different values to coastal communities and the priorities for those areas.

The proposed modification is subject to the provisions of the Coastal Management Act as it partially located within proximity to coastal wetlands, coastal environment and coastal use areas, however the proposed modifications do not encroach on mapped coastal wetlands. The proposed modification and in particular, the replacement of the existing culvert on Tower Road satisfies the following objectives for coastal environment and coastal use:

- To protect and enhance the coastal environmental values and natural processes of coastal waters, estuaries, coastal lakes and coastal lagoons, including in response to climate change
- To maintain and improve water quality and estuary health
- Adverse impacts of development on cultural and built environment heritage are avoided or mitigated

4.2.2 Crown Lands Management Act 2016

The *Crown Land Management Act 2016* provides the legislative framework for the administration of land that is vested in the Crown in NSW. Ministerial approval is required to grant a 'lease, licence, permit, easement or right of way over a Crown Reserve'. The *Crown Lands Management Act 2016* also describes the process for the acquisition of Crown Land.

Consistent with the approved project, the proposed modification would affect Crown Land. The need and extent of acquisition and any relevant permit or lease of Crown land for the proposed modification would be discussed with the Department of Planning and Environment and in accordance with the requirements of the *Crown Land Management Act 2016*.

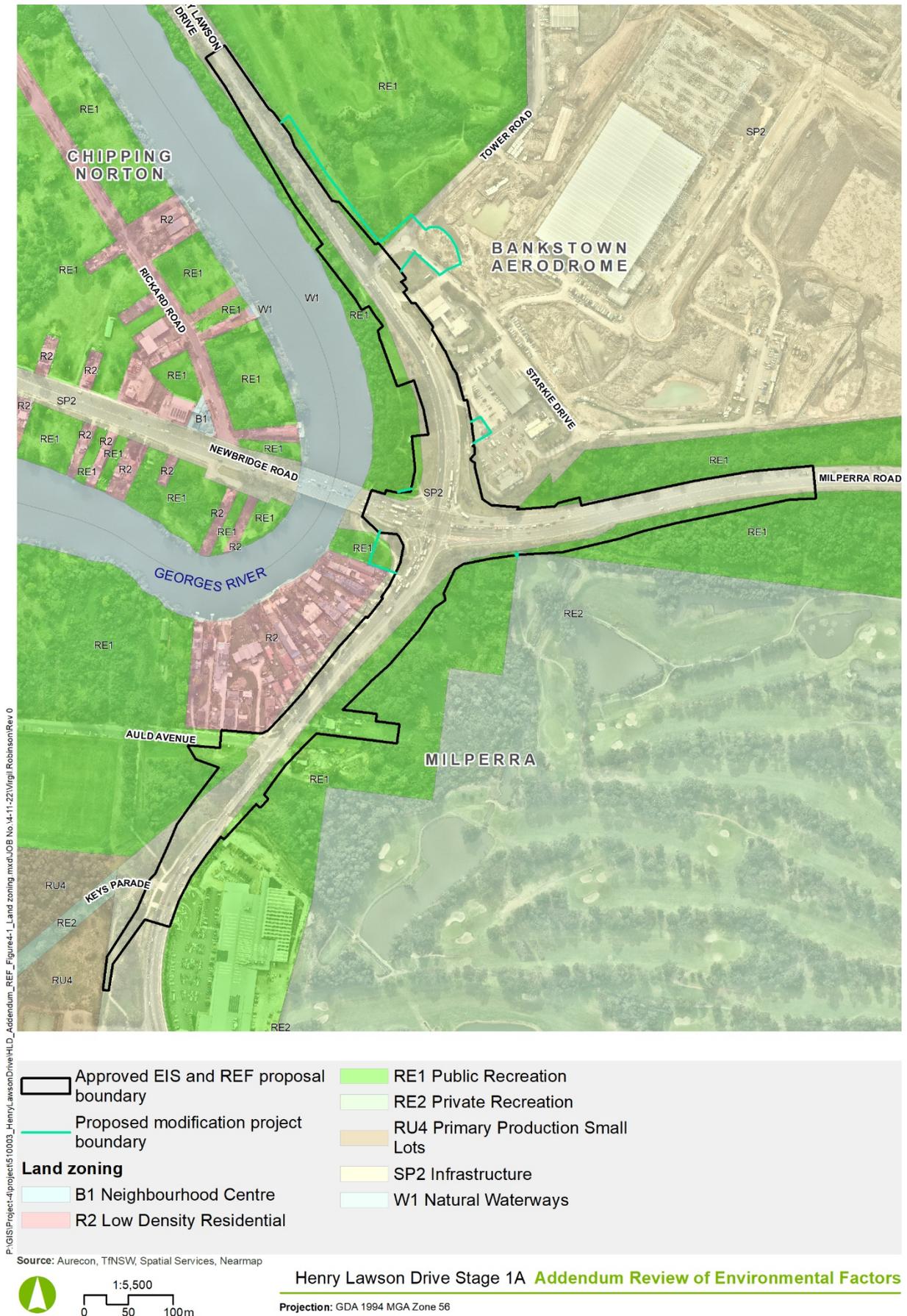


Figure 4-1: Land zoning

4.2.3 Roads Act 1993

The *Roads Act 1993* establishes that consent is required from the relevant road authority for the carrying out of work in, on or over a public road. A road occupancy licence would be obtained from the Customer Journey Centre under Section 138 of the *Roads Act 1993* to build the proposed modification as it would impact the operation of Henry Lawson Drive, Tower Road and Milperra Road, which are classified roads managed by Transport.

4.2.4 Protection of the Environment Operations Act 1997

The *Protection of the Environment Operations Act 1997* (POEO Act) regulates land, air, noise and water pollution in NSW. It also aims to provide opportunity for increased public involvement and access to information regarding environmental protection.

An environment protection licence (EPL) is required for scheduled activities or scheduled development work outlined in Schedule 1 of the POEO Act. The following scheduled activities potentially apply to the project:

- Road construction if it results in four or more traffic lanes (not including bicycle lanes or lanes used for entry or exit), where the road is classified or proposed to be classified as a main road for at least three kilometres of its length in the metropolitan area, and for at least five kilometres in any other area.

The proposed modification does not meet these trigger levels, therefore an EPL would not be required for the proposed modification.

4.2.5 Heritage Act 1977

The *Heritage Act 1977* (Heritage Act) is concerned with all aspects of conservation ranging from the most basic protection against indiscriminate damage and demolition of buildings and sites, through to restoration and enhancement.

Approval under Section 57(1) is required for works to a place, building, work, relic, moveable object, precinct, or land listed on the State Heritage Register. No State Heritage Register items are identified within the proposed modification. The Heritage Act states that an excavation permit is required under Section 139 to disturb or excavate any land containing or likely to contain a relic.

Section 170 of the Heritage Act requires that culturally significant items or places managed or owned by Government agencies are listed on the departmental Heritage and Conservation Register (Section 170 Register). Information on these registers has been prepared in accordance with Heritage Division guidelines. No items listed on the Transport Section 170 register have been identified within or close to the overall proposed modification.

No heritage approvals are required for the proposed modification.

4.2.6 National Parks and Wildlife Act 1979

The *National Parks and Wildlife Act 1974* (NPW Act) provides for the control and management of all national parks, historic sites, nature reserves, wetlands and other state reserves.

The NPW Act also provides for the protection of 'Aboriginal objects' and 'Aboriginal places' and makes it an offence to harm Aboriginal objects, places or sites without permission.

As consistent with the project REF, an unexpected finds procedure and other appropriate safeguards would be implemented to address circumstances if an unexpected find occurs to prevent any damage to any Aboriginal objects, places or sites due to the proposed modification.

4.2.7 Aboriginal Land Rights Act 1983

Through the *Aboriginal Land Rights Act 1983*, vacant Crown land not lawfully used or occupied or required for an essential purpose or for residential land, is returned to Aboriginal people (and vested in Aboriginal Land Councils). In accordance with Section 42B of the *Aboriginal Land Rights Act 1983*, land vested in an Aboriginal Land Council can only be acquired by Transport through an Act of Parliament.

Under section 39, the Minister may acquire land (including an interest in land) by agreement or by compulsory process in accordance with the *Land Acquisition (Just Terms Compensation) Act 1991*. The Minister may only do so if the Minister is of the opinion that there are exceptional circumstances which warrant the acquisition of land for the purpose of satisfying the objectives of this Act.

The delivery of the full approved design would be staged subject to the Aboriginal land claim determination. Transport would continue to consult with Local Land Councils during the detailed design phase to minimise impacts to any Aboriginal land claim land.

4.2.8 Water Management Act 2000

The *Water Management Act 2000* (WM Act) provides for the sustainable and integrated management of water resources. The area of the proposed modification is covered by the *Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources 2011*. Therefore, the WM Act applies to the project REF area.

Transport is exempt from controlled activity approvals under Subdivision 4, Clause 41 of the *Water Management (General) Regulation 2018* as they are a public authority. The proposed modification does not involve any water take, use or supply from natural sources or flood diversion work.

Elements of the WM Act (including in relation to drainage management, aquifer interference activities) and general principles for design specific to the overall project have been considered in this assessment to inform potential construction and operational phase risks of the proposed modification. There is potential to encounter groundwater, particularly for the drainage works to the north of Tower Road, however, the proposed modification would not extract groundwater for the purposes of water supply.

4.2.9 Fisheries Management Act 1994

The *Fisheries Management Act 1994* (FM Act) provides for the identification, conservation and recovery of threatened fish, aquatic invertebrates and marine vegetation. One of the key objectives of the FM Act is to conserve fish stocks and key fish habitats.

While the proposed modification would involve work near the Georges River and Milperra Drain along Milperra Road, work would not obstruct fish passage as the majority of the river and creek would be passable to fish at any given time. A permit would not be required for this part of the proposed modification under Section 219 of the FM Act.

4.2.10 Biodiversity Conservation Act 2016

The *Biodiversity Conservation Act 2016* (BC Act) is directed at conserving threatened species, populations and ecological communities of animals and plants. The BC Act outlines the framework for addressing impacts on biodiversity from development and clearing. It establishes a framework to avoid, minimise and offset impacts on biodiversity from development through the Biodiversity Offsets Scheme.

A Biodiversity Assessment Report (BAR) was undertaken for the project REF and a Biodiversity Development Assessment Report (BDAR) developed for the EIS (undertaken by WSP on behalf of Transport in 2021). As part of the BAR, significant impact assessments, in accordance with the BC Act, were carried out for threatened species and endangered ecological communities with a moderate likelihood of occurrence within the project footprint and considered unlikely to be impacted upon. The proposed modification would require up to 0.27 hectares of vegetation to be cleared, refer to Figure 6-1. This would include direct impacts to 0.13 hectares of native vegetation of the BC Act listed Threatened Ecological Community, PCT 835 - Forest Red Gum-Rough-barked Apple Grassy Woodland on Alluvial Flats of the Cumberland Plain, Sydney Basin. The remaining 0.14 hectares is weeds and exotics.

Further assessment of changes in the biodiversity impacts as a result of the proposed modifications are detailed in Section 6.1.

4.2.11 Biosecurity Act 2015

The *Biosecurity Act 2015* requires Transport to control, remove and eradicate weeds on land that they own to avoid further growth and spreading.

In NSW, all plants are regulated with a general biosecurity duty to prevent, eliminate or minimise any biosecurity risk they may pose. Any person who deals with any plant, who knows (or ought to know) of any biosecurity risk, has a duty to ensure the risk is prevented, eliminated or minimised, so far as is reasonably practicable. Any weeds identified within the area of the proposed modification and would be managed in accordance with the requirements of the *Biosecurity Act 2015*.

4.3 Commonwealth legislation

4.3.1 Environment Protection and Biodiversity Conservation Act 1999

Under the EPBC Act a referral is required to the Australian Government for *proposed 'actions that have the potential to significantly impact on matters of national environmental significance or the environment of Commonwealth land'*. These are considered in Appendix A and section 6 of the addendum REF.

A referral is not required for proposed road actions that may affect nationally listed threatened species, endangered ecological communities and migratory species. This is because requirements for considering impacts to these biodiversity matters are the subject of a strategic assessment approval granted under the EPBC Act by the Australian Government in September 2015.

Potential impacts to these biodiversity matters are also considered as part of section 6 of the addendum REF and Appendix A

Findings – matters of national environmental significance (other than biodiversity matters)

The assessment of the proposed modification's impact on matters of national environmental significance and the environment of Commonwealth land found that there would be no change to the findings of the determined activity and would be unlikely to cause a significant impact on matters of national environmental significance or the environment of Commonwealth land. A referral to the Australian Government Department of Climate Change, Energy the Environment and Water is not required.

4.3.2 Airports Act 1996

The proposed modification on Bankstown Airport Limited land is subject to the requirements of Commonwealth legislation and approval processes under the *Airports Act 1996* (Airports Act) and the Airports Regulations 1996. This applies to the following works:

- increased extent of tie-in works on Tower Road to tie into the recently constructed upgrade of the road by Bankstown Airport Limited
- new compound site on Tower Road
- inclusion of a dedicated left slip land from Henry Lawson Drive to access the ALDI supermarket and retail area with improved safety

Modifications that lie within the REF area require planning approval under the EP&A Act.

As demonstrated by the assessment presented in Chapter 6 of the REF and discussed below, it is considered that the proposed modifications on BAL land does not constitute a "major airport development" under Section 89 of the Airports Act. As a result, the preparation and approval of a major development plan (MDP) is not required pursuant to Section 90 of the Airports Act.

The proposed modification on BAL land is subject to:

- Bankstown Airport's Development Application and Consent Application processes to satisfy the requirements of the Airports Act
- Application for a Building Activities Permit to the Airport Building Controller (ABC) in accordance with the Airports (Building Control) Regulations 1996. The Bankstown Airport Consent Application must comply with the conditions of the Development Approval
- Airspace approval in accordance with the Airports (Protection of Airspace) Regulations 1996C
- Compliance with the Airport (Environmental Protection) Regulations 1997.

The requirements of the Commonwealth legislation are detailed below.

Proposals under the Airports Act require one of the following approvals:

- Major development plan: This applies to any major airport development (as defined by section 89(1) of the Airports Act)
- Building permit and development application: This applies to any proposals for building activity, as defined by sections 2.02 and 2.03 of the Airports (Building Control) Regulations 1996.

Major development plan

Sections of the proposal would be located on Commonwealth owned land prescribed in the Airports Act. Bankstown Airport is leased to the Bankstown Airport Limited (BAL) and development is managed in accordance with the Bankstown Airport Master Plan 2019 (refer to Section 4.3.3).

Section 89(1) of the Airports Act specifies development on Bankstown Airport land that constitutes a 'major airport development.' Bankstown Airport major airport development includes construction or modification of runways and taxiways, airport terminal buildings and other airport support facilities. An assessment on whether the proposal is a 'major airport development' under Section 89(1) of the Act was carried out, and is provided in full in Appendix C.

The assessment confirmed that the proposed modification on BAL land would not meet the criteria under section 89(1)(h) and(j). Under these clauses, the proposed modification on BAL land would not exceed \$25 million nor would increase capacity at the airport and as such would not be considered major airport development. However, the proposal aims to address existing and future traffic congestion and access issues to the airport and surrounding commercial premises, rather than to significantly increase the capacity of the airport to handle movements of passengers, freight or aircraft.

Section 89(1) also includes environmental, community and sensitive development triggers for 'major airport developments' as follows:

- (m) a development of a kind that is likely to have significant environmental or ecological impact; or
- (n) a development which affects an area identified as environmentally significant in the environment strategy; or
- (na) a development of a kind that is likely to have a significant impact on the local or regional community; or
- (nb) a development in relation to which the Minister has given an approval under section 89A.

The assessment confirmed that the proposed modification on BAL land would not meet the criteria associated with section 89(1)(m), (n), (na), (nb) and (o) (refer to Appendix C).

Based on the assessment it is considered that the activity would not constitute a major airport development and a major development plan is not required.

Building activities approval

Section 2.02 of the Airports (Building Control) Regulations 1996 states that building approval applications are required for the following proposed building activities:

- Construction or alteration of a building (clause 2(a))
- Construction or alteration of works (clause 2(b))
- Demolition, destruction, dismantling or removal of a building, or works (clause 2(c)).

The proposed modification on BAL land is for the purposes of the upgrade of roads. In the meaning of the Airports Act, the proposal is characterised as the following building activities:

- The Tower Road tie in works and new access point to the Aldi Supermarket is characterised as 'earthworks or engineering works' (Section 98, clause 3(e))
- The compound site to the south of Tower Road is characterised as 'structures' (Section 98, clause (2)(d)).

Building development application

A development application for work on Commonwealth land would be submitted to BAL by Transport (section 2.03, clause (1) of the regulations). Should the application be successful, BAL consent would be provided to Transport with any relevant environmental conditions for the proposal.

Transport would then seek building activity approval from Bankstown Airport’s airport building controller, who is independently employed by the Commonwealth Department of Infrastructure, Transport, Regional Development, Communications and the Arts.

This REF has been prepared to address both the works on Commonwealth land and the works that fall under State planning pathways that are part of the proposal. The REF would accompany the development application submitted to BAL for consent, and the building activity approval from the building controller. In addition to this a CEMP will need to be prepared for the works occurring on BAL land.

Section 2.05 of the Airports (Building Control) Regulations 1996 lists the information that is required within an application. These requirements are listed in Table 4-5 together with where they are addressed in the REF.

Table 4-2 Requirements for building activity approval application

Requirement	Where this is addressed in the addendum REF
(1) An application for a building approval must be in a form acceptable to the airport building controller for the airport site concerned, and must include:	
(a) a description of the proposed building activity, and its location on the airport site; and	This is addressed in Section 3.2.3.
(b) if there is a final master plan for the airport - a statement describing how the proposed building activity is consistent with the plan; and	This is addressed in Section 4.3.3.
(c) if the proposed building activity is, or comprises part of, a major airport development (within the meaning of section 89 of the Act), - a statement describing how the proposed building activity is consistent with: (i) the approved major development plan for the airport; or (ii) any exemption declared under paragraph 90(1)(d) of the Act; and	This is addressed in Section 4.3.2 and identifies that the proposed activity is not deemed a major airport development.
(d) if there is a final environment strategy for the airport - a statement describing how the proposed building activity is consistent with the strategy; and	This is addressed in Section 4.3.3 and further detailed in Table 4-6.
(e) 2 copies of the site plan for the proposed building activity, including a depiction of the proposed development resulting from the building activity	This is addressed in Section 1.2 and Section 3.2.3.
(f) a copy of any other information about the proposed building activity required by a regulatory authority, or other body having a regulatory function, in relation to the resulting building, works or demolition.	This is addressed in Section 4.3.2.
(2) if there is a final master plan, an approved major development plan, or a final environment strategy for the airport, the application must be supported by a declaration by the airport-lessee company for the airport	Bankstown Airport Limited is the airport-lessee company for the Airport and this is addressed in Section 4.3.2 under building development application.
(3) A declaration under subregulation (2) must state whether the proposed building activity is consistent with the final master plan, the	Bankstown Airport Limited is the airport-lessee company for the Airport and this is addressed in

Requirement	Where this is addressed in the addendum REF
approved major development plan, or the final environment strategy, as the case may be.	Section 4.3.2 under building development application.

Protection of airspace approval

The Airports Act protects airspace at and around airports, as described in Section 4.3.2 earlier. Section 182 of the Airports Act defines any activity that intrudes into prescribed airspace as being a controlled activity. The Airports (Protection of Airspace) Regulations 1996, Clause 14(5) requires that if a controlled activity would, if carried out, result in a building structure or thing intruding into PANS-OPS airspace, the Secretary may approve a proposal for the activity only if the activity is a short-term controlled activity and the airport operator supports the approval. The Regulation requires any decision by the airport operator to be made in the interests of safety, efficiency or regularity of existing or future air transport operation into or out of the airport.

A review of the proposal against the Obstacle Limitation Surfaces (OLS) indicates that the proposed modification on BAL land does not interact with the OLS and the project is within the ‘OLS Inner Horizontal Surface’ at an estimated elevation of 51.0 m AHD. The PAN-OPS surface area is higher than this level, however, if any works are in the PAN-OPS surface area and are above an estimated elevation of 51.0 m AHD approval will be required from BAL.

4.3.3 Bankstown Airport Master Plan

The Bankstown Airport Masterplan outlines the vision, objectives, and aspirations for Bankstown Airport’s future over the next 20 years to enable the Airport to become a modern and sophisticated aviation and business centre. The Bankstown Airport Master Plan reflects the local Canterbury-Bankstown Council and NSW planning frameworks.

The Bankstown Master Plan outlines the following purpose:

- Provides stakeholders with a clear statement of BAL’s vision and objectives for the Airport
- Presents a land use plan which balances long-term aviation requirements with new non-aviation developments
- Provides a sufficient flexibility for BAL to adjust its plans to accommodate a changing commercial and operating environment
- Reflects local Canterbury-Bankstown Council and NSW planning frameworks.

The Land Use Zones of the Master Plan identifies that the proposed modification works fall within the Commercial Zone. The works required for the proposed modification are consistent with the commercial zone land uses and permitted in providing roads infrastructure and specialised retail premises (in Gateway Precincts only). The Commercial Zone is further divided, with all proposed modification works falling within the Gateway precinct of the Commercial Zone.

The desired future character of the Gateway Precincts will create a compatible and complimentary interface with the adjacent Milperra industrial area and a transitional buffer to aviation uses within the Airport and to Milperra Road. The Gateway Precincts will support a range of retail, industrial and other commercial uses that align with their location adjoining major arterial roads, including the significant exposure to Milperra Road. These precincts are intended to form ‘entry statements’ to the Airport from the south. The objectives of the Gateway Precinct within the Bankstown Airport Master Plan are consistent with the proposed modification as detailed in Table 4-3.

Table 4-3 Consistency of proposed modification with Gateway Precinct Objectives as noted in Section 8.4.8 of the Bankstown Airport Master Plan

Objective	Consistency of proposed modification with objective
Encourage retail development forming key 'entry statements' to the Commercial Zone	The proposed modification would be consistent with the objective by improving traffic flow and connectivity to the Airport through the increased extent of tie-in works on Tower Road to tie into the recently constructed upgrade of the road by Bankstown Airport Limited.
Provide a variety of different sized retail and accommodation spaces	The proposed modification supports the existing retail precinct in particular through improving and maintaining access from Henry Lawson Drive.
Ensure that the location, scale and bulk of development afford high levels of visual amenity and enhance the character and setting of the area.	The proposed modification has been designed to minimise impacts on the natural environment. The works would be in scale with the surrounding development. The new compound site on Tower Road would result in a reduction in visual amenity of the site, however this is temporary and will be returned to its natural state post construction.

4.3.4 Native Title Act 1993

The *Native Title Act 1993* recognises and protects native title. The Act covers actions affecting native title and the processes for determining whether native title exists and compensation for actions affecting native title. It establishes the Native Title Registrar, the National Native Title Tribunal, the Register of Native Title Claims and the Register of Indigenous Land Use Agreements, and the National Native Title Register. Under the Act, a future act includes proposed public infrastructure on land or waters that affects native title rights or interest.

A search of the Native Title Tribunal Native Title Vision website was undertaken for the project, with no Native Title holders/claimants identified.

4.4 Confirmation of statutory position

4.4.1 Works within the modified REF area

The proposed modification is categorised as development for the purpose of a road and is being carried out by or on behalf of a public authority. Under Clause 2.109 of SEPP (Transport and Infrastructure) the proposed modification is permissible without consent. The proposed modification is not State significant infrastructure or State significant development. The proposed modification can be assessed under Division 5.1 of the EP&A Act. Consent from Council is not required.

Transport is the determining authority for the proposed modification of works that will not occur on BAL/Commonwealth land. This addendum REF fulfils Transport's obligation under section 5.5 of the EP&A Act including to examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of the activity.

4.4.2 Modification on Bankstown Airport Limited (Commonwealth) land

A single REF would be prepared to address both the works on Commonwealth land and the works that fall under State planning pathways that are part of the proposal. The REF would accompany the development application submitted to Bankstown Airport Limited for consent, and the building activity approval from the building controller. In addition to this a CEMP will need to be prepared for the works occurring on Bankstown Airport Limited land under Section 2.05 of the Airports (Building Control) Regulations 1996

5. Consultation

5.1 Consultation strategy

The consultation strategy relevant to the proposed modification remains consistent with Section 5.1 of the project REF.

Project information, project updates, including details on the proposed modification, and media releases are regularly published on the Transport Henry Lawson Drive Upgrade Stage 1A website ([Henry Lawson Drive Upgrade Stage 1A - Henry Lawson Drive Upgrade - Projects - Roads and Waterways - Transport for NSW](#)).

Transport also notes that there was feedback received during public display of the REF about the need to change the access to the Henry Lawson Drive / Auld Avenue Intersection. This was detailed in the Henry Lawson Drive Upgrade Stage 1A Submissions Report and has resulted in the proposed modification at the Henry Lawson Drive / Auld Avenue Intersection.

Appendix B contains a SEPP (Transport and Infrastructure) consultation checklist that documents how Transport and Infrastructure SEPP consultation requirements have been identified. As identified in the consultation checklist the proposed modifications would not result in a need to undertake any further consultation with stakeholders. The Milperra Drain Bridge (Henry Lawson Drive) has been identified as having potential local heritage significance with a proposed more than minor or inconsequential impact (refer Appendix D). As the item is owned and managed by TfNSW and is not an asset of Council, SEPP (Transport and Infrastructure) consultation with Council under Section 2.11 is deemed not appropriate.

Extensive consultation with Bankstown Airport Limited, including Environment Officers, Planning Officers and the Airports Authority has been and will continue to be undertaken as part of the proposed modification on Bankstown Airport Limited land. The works related to Tower Road Intersection were initially planned to be delivered by Bankstown Airport Limited however a decision was made to for these to be delivered by Transport for NSW under the Henry Lawson Drive Stage 1A. Bankstown Airport Limited has, in turn discussed the proposed modification with its tenants and stakeholders, including ALDI. Consultation has also been undertaken with Georges River Golf Course in relation to the additional drainage and earthworks that will occur on the property as well as the Tower Road Tie-in works.

5.2 Consultation outcomes

Targeted consultation regarding the modification to the ALDI supermarket and retail entrance was undertaken with Bankstown Airport Limited. Following this Bankstown Airport Limited consulted with ALDI and both accepted the proposal. All other tenant businesses had no objection as an access will be maintained during the construction period

Bankstown Airport Limited have been consulted about the proposed modification as per the requirements of section 8.4 of the Bankstown Airport Masterplan (Sydney Metro Airports,2019)

Targeted consultation regarding the additional drainage and earthworks on the Georges River Golf Course included on site meetings with the Georges River Golf Course Operator. There was no objection to the project proceeding with the current design intent and proposed boundary changes. Sediment erosion controls were suggested for implementation in the creek inside the boundary leading to the culvert and although this is out the current construction limits approved mitigation measures are in place for sediment and erosion.

Targeted consultation

Various government agencies and stakeholders have been consulted about the proposed modification regarding the project description and planning approval pathway. The following government agencies and stakeholders include:

- Bankstown Airport Limited
- ALDI supermarket.
- Georges River Golf Course

5.3 Ongoing or future consultation

Transport will continue to consult with the community and relevant stakeholders during design and construction of the overall proposal, in particular with any property or business owners that are directly impacted by the proposed modifications. This addendum REF will be made available on the Transport website, so that the community and stakeholders are informed about what is being proposed.

6. Environmental assessment

This section of the addendum REF provides a detailed description of the potential environmental impacts associated with the construction and operation of the proposed modification of the Henry Lawson Drive Upgrade Stage 1A project. All aspects of the environment potentially impacted upon by the proposed modification are considered. This includes consideration of the guidelines Roads and Related Facilities EIS Guideline (DUAP, 1996) and Is an EIS required? (DUAP, 1999) the factors specified in section 171 of the Environmental Planning and Assessment Regulation 2021. The factors specified in section 171(2) of the Environmental Planning and Assessment Regulation 2021 are also considered in Appendix A.

Site-specific safeguards and management measures are provided to ameliorate the identified potential impacts.

6.1 Traffic and transport

This section describes the traffic and transport impacts that may occur when constructing and operating the proposed modification. It reviews the information presented in Section 6.6 of the project REF.

6.1.1 Methodology

A traffic and transport assessment was prepared for the project REF and outlined in Section 6.6.1 of the project REF. No additional database searches or site inspections were required to assess the proposed modification beyond those carried out for the project REF.

6.1.2 Existing environment

The existing traffic and transport environment relevant to the proposed modification is consistent with that described in Section 6.6.2 of the project REF.

6.1.3 Potential impacts

Construction

Generally, the potential traffic impacts of the modified project would be consistent with those described in Section 6.6.3.1 of the project REF.

Access to properties would be maintained during construction, where possible. However, changes to the Henry Lawson Drive access to the ALDI supermarket and retail area would result in the current access potentially being closed for the duration of the works. Alternative access to these businesses would continue to be available via Starkie Drive, and as such, the closure of the Henry Lawson Drive access would not affect operations

The proposed modification requires the restriction of access to the pedestrian footpaths and shared paths while the Jemena under bore works are undertaken at Georges River to the south of the Newbridge Road. The compound would be fenced for safety during utility work. Existing pathways would not be used and detours for pedestrian/cyclist access would be implemented within the area of the proposed modification with alternative arrangements managed through signage and wayfinding. The extent of the construction area would remove access through the parkland to the pathway under the bridge during underbore works. This interruption would be minor and temporary access arrangements would be required. However, the nearby pedestrian access along Henry Lawson Drive would be maintained that can be used to cross Henry Lawson Drive and access the Georges River.

Use of the new compound site at Tower Road is not expected to create a large volume of traffic. Access/ egress from the site would be via Starkie Drive to avoid queuing along Tower Road.

The culvert replacement under Henry Lawson Drive near the Georges River Golf Course would require opening of the road for the works in which a Road Occupancy Licence (ROL) is required. As Henry Lawson Drive would need to be maintained open to traffic, works would be undertaken at night time with traffic control in place to guide a contraflow traffic arrangement to allow one lane of traffic to pass through.

Operation

Access from Henry Lawson Drive to the ALDI supermarket and retail area would be maintained during operation via the arrangements described in Section 6.6 of the REF. The access arrangement would change but this would not have adverse impacts on patrons.

6.1.4 Safeguards and management measures

Safeguards T1 to T8 of the REF remain applicable and considered adequate to address the traffic and access impacts of the proposed modification. Safeguard T9 has been proposed to address the additional access impacts to commercial properties due to the proposed modification, refer to Table 6-1.

Table 6-1 Additional safeguards on traffic and transport

Impact	Environmental safeguards	Responsibility	Timing	Reference
<u>Access</u>	<u>Transport would discuss access to commercial properties with business owners prior to construction.</u>	<u>Transport</u>	<u>Pre-construction, construction</u>	

6.2 Biodiversity

This section describes the biodiversity impacts that may occur when constructing and operating the proposed modification. It reviews the information presented in Section 6.1 of the project REF.

6.2.1 Methodology

A Biodiversity Assessment Report was prepared by WSP for the Henry Lawson Drive Stage 1A REF to assess biodiversity impacts during construction and operation of the project REF (refer to Section 6.1.1 of the project REF). The study area identified in the BAR covers the proposed modifications where an additional biodiversity impact would result.

No additional database searches or site inspections were required to assess the proposed modification beyond those carried out for the project REF, however a consistency assessment is provided in Appendix E to address the proposed modifications.

6.2.2 Existing environment

The landscape context of the study area and biodiversity constraints are described in Section 6.1.2.1 of the project REF.

Vegetation within the additional areas associated with the proposed modification is mostly a miscellaneous ecosystem comprising weeds and non-native vegetation. However, plant community type (PCT) 835 Forest Red Gum-Rough-Barked Apple Grassy Woodland on Alluvial Flats of the Cumberland Plain, Sydney Basin is also present within the area of the proposed modification particularly where the additional drainage and earthworks on the Georges River Golf Course and replacement of the culvert under Henry Lawson Drive north of Tower Road will occur. The PCT corresponds to the EPBC Act listed Threatened Ecological Community, the River-flat eucalypt forest on coastal floodplains.

Drainage works are required on Georges River Golf Course and under Henry Lawson Drive (culvert replacement) that would discharge into the Georges River, an identified Key Fish Habitat. No ground water dependent ecosystems have been identified outside the approved project footprint. In addition, the culvert under Henry Lawson Drive was found to have roosting Southern Myotis (*Myotis macropus*) microbats.

6.2.3 Potential impacts

The anticipated biodiversity impacts in Section 6.1.3 of the project REF remain relevant for the proposed modification. Additional clearing of vegetation within the modified project boundary would result in the following impacts to biodiversity.

Construction

The approved EIS and REF boundary considered that up to 2.15 hectares of native vegetation, 0.3 hectares of exotic/ landscape plantings and 8.93 hectares of weeds/ non-native vegetation would require removal. The modified project boundary has been prepared (refer to Figure 6-1).

The proposed modification would require up to 0.27 hectares of vegetation to be cleared, refer to Figure 6-1. This would include additional direct impacts to 0.13 hectares of native vegetation of the BC Act listed Threatened Ecological Community, PCT 835-Forest Red Gum-Rough-barked Apple Grassy Woodland on Alluvial Flats of the Cumberland Plain, Sydney Basin. The remaining 0.14 hectares is weeds and exotics.

The drainage works would result in an additional area of clearing required to the east of Henry Lawson Drive as indicated in Figure 3-1. As the trees within the extended REF boundary are a Threatened Ecological Community, they would be offset in line with Transport’s Biodiversity Offset Guideline (Roads and Traffic Authority, 2011a). In addition, PCT 835 forms part of the habitat for the Southern Myotis (*Myotis macropus*) which is listed as vulnerable under the BC Act.

Table 6-2 Impacts on native vegetation

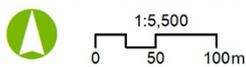
Plant community type (PCT)	BC Act	EPBC Act	Approved EIS and REF boundary area (ha) to be cleared	Additional clearing for the proposed modification
PCT 725: Broad-leaved Ironbark – Melaleuca decora shrubby open forest on clay soils of the Cumberland Plain, Sydney Basin Bioregion	E	CE	0.23	
PCT 781: Coastal Freshwater Lagoons of the Sydney Basin and South East Corner	E	-	0.1	
PCT 835: Forest Red Gum-Rough-barked Apple Grassy Woodland on Alluvial Flats of the Cumberland Plain, Sydney Basin	E	CE	1.11	0.13
PCT 1234: Swamp Oak Swamp Forest Fringing Estuaries, Sydney Basin and South East Corner	E	E	0.32	
PCT 1236: Swamp Paperbark – Swamp Oak tall shrubland on estuarine flats, Sydney Basin Bioregion and South East Corner Bioregion	E	-	0.16	
PCT 1800: – Swamp Oak open forest on riverflats of the Cumberland Plain and Hunter valley	E	E	0.23	
TOTAL			2.15	0.13



P:\GIS\Project-4\projects\10003_HenryLawsonDrive\HLD_Addendum_REF_FigureX-X_Additional_PCT_Impact.mxd\JOB No. 05-12-22\Virgil.Robinson\Rev.0

-  Approved EIS and REF proposal boundary
-  Proposed modification project boundary
-  Additional PCT 835 impact

Source: Aurecon, TfNSW, Spatial Services, Nearmap



Henry Lawson Drive Stage 1A **Addendum Review of Environmental Factors**

Projection: GDA 1994 MGA Zone 56

Figure 6-1: Additional vegetation clearance from the proposed modification

Whilst additional vegetation removal would be required in the Georges River Golf Course for the proposed modification that was not required for the approved project, the area is relatively small compared to the extent of habitat in the locality. It is therefore unlikely to impact the abundance or diversity of flora and fauna in the region in the long-term.

Of the two habitat and hollow bearing trees identified within the modified project boundary during the project REF surveys, both would likely require removal for the proposed modification.

Impacts to aquatic habitats (specifically Georges River) may arise from construction activities around the drainage works north of Tower Road. However, these impacts are not expected to differ from those assessed in the project REF. A number of mitigation measures would be implemented to minimise these impacts as far as practicable such as exclusion zones. In addition to this erosion and sediment control safeguards identified in the project REF would be sufficient to manage the potential risk. The culvert under Henry Lawson Drive holds a known colony of Southern Myotis (*Myotis macropus*) in which works have the potential to disrupt the colony's habitat. Potential impacts on the colony were assessed within the project REF. The safeguard identified in the project REF to prepare a Microbat Management Plan prior to construction would identify measures to be implemented during construction.

Overall, the impacts from the modifications are deemed consistent with the approved environmental safeguards and management measures outlined for the project.

Operation

There are no further biodiversity impacts from those identified in the REF associated with the proposed modifications.

Conclusion on significance of impacts

The modification is not likely to significantly impact threatened species, populations or ecological communities or their habitats, within the meaning of the BC Act or FM Act and therefore a Species Impact Statement is not required.

The modification is not likely to significantly impact threatened species, populations, ecological communities or migratory species, within the meaning of the EPBC Act.

6.2.4 Safeguards and management measures

Safeguards from the project REF remains applicable and are considered adequate to address the biodiversity impacts of the proposed modification. No additional measures are proposed.

6.2.5 Biodiversity offsets

Although efforts have been made to avoid, minimise and mitigate potential ecological impacts associated with the proposed modification, some residual impacts would occur.

Transport would provide biodiversity offsets or where offsets are not reasonable or feasible, supplementary measures for impacts that exceed the thresholds in the Transport 'Guideline for Biodiversity Offsets' (Roads and Maritime Services, 2016). Offsets for the proposed modification would be obtained as part of the broader Henry Lawson Drive Stage 1A project as part of the Biodiversity Offset Strategy to be developed for the project.

6.3 Non-Aboriginal heritage

This section describes the non-Aboriginal heritage impacts that may occur when constructing and operating the proposed modification. It reviews the information presented in Section 6.9 of the project REF and the information presented in Milperra Drain Bridge Heritage Memo (Artefact,2022). Refer to Appendix D.

6.3.1 Methodology

A Non-Aboriginal Heritage Statement of Heritage Impact –Henry Lawson Drive Stage 1A was prepared by Aurecon for the project REF to assess the potential non-Aboriginal (historical) impacts during construction and operation of the project. The study area assessed in the project REF addressed the areas of the project modification also.

No additional database searches or site inspections were required to assess the proposed modification beyond those carried out for the project REF.

6.3.2 Existing environment

The existing non-Aboriginal heritage environment relevant to the proposed modification is mostly consistent with that described in section 6.9.2 of the project REF however did not identify the Milperra Drain Bridge as a potential heritage item.

Further investigations has identified that as the Milperra Drain Bridge was built in the 1940s, could have some local heritage significance. However, it is noted that this structure is not listed on any heritage register. The materiality and form of the bridge are indicative of the post-WWII era, with concrete being a popular built aggregate during the early-to-mid 20th century.

6.3.3 Potential impacts

Construction

There is one heritage item within the modified project boundary that would be subject to physical impacts from construction of the project being: Bankstown Airport (I18).

The proposed modifications on the Bankstown Airport site include the compound site on Tower Road, the Tower Road tie in works and the new access into the ALDI supermarket and retail area. The works are minor in nature, and the compound site would be only temporary during construction and would be removed on completion. As described in Section 6.9.3 of the project REF, the areas around Tower Road and the commercial development is not considered to be an important component of the heritage listing due to the extensive historical development that has taken place on the site. Due to the minor nature of the works, the impact, similar to the REF, is considered to be neutral.

The REF of the proposal identified that works to the existing Milperra Drain Bridge would involve the removal of the existing footpath and kerb on the western side of the bridge and utility relocations. The modifications would require the replacement of the eastern kerb and the existing handrails to appropriate road barriers to meet current safety guidelines as well as strengthening works to the bridge structure.

The REF works and the proposed modifications are anticipated to result in moderate adverse impacts to the heritage fabric of the bridge structure. This is due to the demolition of heritage fabric, a change to its suburban setting and minor levels of utility relocation works to the bridge structure itself. However, the proposed maintenance works such as resurfacing and anti-graffiti works would see a positive impact to bridge's longevity and aesthetic.

Operation

As described in the project REF, the operational phase of the proposed modification would have ongoing neutral impacts on the Bankstown Airport.

6.3.4 Safeguards and management measures

Safeguard NA1 of the REF remains applicable and is considered adequate to address the non-Aboriginal heritage impacts of the proposed modification. No additional measures are proposed.

6.4 Socioeconomic

This section outlines the potential socio-economic impacts from the construction and operation of the proposed modification.

6.4.1 Methodology

The methodology adopted for this socio-economic impact assessment was consistent with that outlined in Section 6.11.1 of the project REF. The socio-economic study area is the same as that adopted for the project REF.

6.4.2 Existing environment

The proposed modification is comprised of land zoned SP2–Road Infrastructure Facility, RE1–Public Recreation as identified in Figure 4-1. The golf course is zoned RE1–Public Recreation while the works occurring on BAL land inclusive of the new compound site on Tower Road, the increased extent of Tie-in works on Tower Road and the changes to the Henry Lawson Drive access to the ALDI supermarket and retail area is zoned SP2–Infrastructure (Air Transport Facility). Section 6.11.2 of the project REF describes the existing environment in further detail.

6.4.3 Potential impacts

Construction

The proposed modification is expected to have some adverse impacts during the construction phase including property and land use impacts, changes in access and connectivity for road users and businesses and impacts to community values and amenity.

There would be a change in land use to the south of Tower Road, where the new compound site is proposed. This would be leased from BAL, however the site is currently not in use. Additional land of 583 square metres would be acquired and 470 square metres would be leased from the Georges River Golf Course for the drainage works to the north of Tower Road. Similar to the project REF, land use changes would have a low impact and it is not anticipated that operation of the Georges River Golf Course will be impacted.

There would be changes in access to the ALDI supermarket and retail area on Henry Lawson Drive. During construction, the existing access from Henry Lawson Drive may need to be closed to construct the new access. The businesses have an alternative access via Starkie Drive, which would be used to maintain access to the businesses through the construction phase. Any closure is not considered to affect operations.

Changes to the scope and timing of works to Auld Avenue intersection and to the south would result in retaining the existing traffic movements and a similar level of access as currently experienced. This would mean that the reduced access connectivity at this intersection would be delayed until Henry Lawson Drive Stage 1B is constructed.

The proposed Jemena construction works in the parklands to the south of Newbridge Road could also result in a slight increase in amenity impacts that people may experience when using the park and the Georges River including changes to noise, air quality and visual environment. These works are anticipated for a period within the construction timeframe but not across the whole construction timeframe.

Vegetation removal north of Tower Road and the new compound site would also result in visual amenity impacts that would be viewed by traffic on Henry Lawson Drive and Tower Road. These impacts would be consistent with those identified in the project REF.

Operation

During operation, the channelised access into the ALDI supermarket and the retail area would improve safe access into the site.

There are no further socio-economic impacts from those identified in the REF associated with the proposed modifications.

6.4.4 Safeguards and management measures

Safeguards SE1 to SE8 of the REF remain applicable and are considered adequate to address the socio-economic impacts of the proposed modification. No additional measures are proposed.

6.5 Other impacts

Environmental factors with negligible to minor impacts can be assessed in the table below. The intent of this table format is to keep the assessment succinct and appropriate to the scale of the impacts.

6.5.1 Existing environment and potential impacts

Table 6-4 Potential impacts for other environmental factors

Environmental factor	Existing environment	Potential impacts
Hydrology, flooding and coastal processes	The existing environment is generally consistent with that described in Section 6.2.2 of the project REF. Works for the drainage works north of Tower Road are being undertaken in proximity to Georges River and in the drainage channel in the Georges River golf course	<p>The potential impacts of the proposed modification on hydrology, flooding and coastal processes would be consistent with those described in Section 6.2.3 of the project REF.</p> <p>The Tower Road works and associated utilities would provide a better alignment and falling grade towards the culvert, for discharge into Georges River. Overall this would improve the drainage in the area, but would not have any additional impacts to either flooding or coastal processes. Similar to the project REF boundary, the area within the proposed modification would be exposed to flood inundation. As such, the mitigation measures described in Section 6.2.4 of the project REF would be implemented during construction.</p>
Surface water	The existing environment for the proposed modification is consistent with Section 6.3.2 of the project REF, works are located within the Georges River catchment and adjacent to mapped coastal wetlands. Poor water quality health is evident throughout most of the catchment because of urbanisation and development. Similarly surface water quality of waterways has been heavily impacted over the last two centuries due to changing land uses within the catchment.	The proposed modification includes the excavation of a new swale drain that would provide a better alignment and falling grade towards the culvert, for discharge into Georges River. Potential construction impacts to surface water were assessed in Section 6.3.4 of the project REF. No additional impacts are expected to surface water. Appropriate mitigation measures as described in Section 6.3.5 of the project REF would be implemented to manage potential impacts on the Georges River.
Groundwater	The existing environment is generally consistent with what has been described in Section 6.4.2 of the project REF.	<p>As described in the project REF, the installation of drainage infrastructure and underground utility trenches and channels are expected to be around 1.5 to two metres deep, however the groundwater table in the area falls between 2.5 and five metres below the surface and may intersect with groundwater during the construction phase. Potential impacts would be the result of interactions during excavation that may increase groundwater and soil salinity as a result of potential interactions to be explored in further during detailed design.</p> <p>The potential operational impacts of the proposed modification on groundwater would be generally consistent with those described in Section 6.4.3 of the project REF. Due to the relatively minor extent of works and implementation of environmental groundwater safeguards it is possible that groundwater may be interacted with during excavation however it is unlikely that groundwater flows or quality would be impacted during construction and operation.</p>

Environmental factor	Existing environment	Potential impacts
Soils	As described in Section 6.5.2 of the project REF, at current the overall proposal area is used as a transport corridor within major intersections of Milperra Road/Newbridge Road and at Tower Road. As per the project REF, the modified proposal sits within a natural low point in the region, funnelling down into the Georges River. The area lies in a flat floodplain area for the nearby Georges River and is underlain with poorly drained and low permeability soils.	<p>The proposed modification include road works and associated utilities. As a result, construction activities have the potential to result in soil impacts from disturbance to soils, topography and vegetation.</p> <p>The loss of topsoil from earthworks activities has the potential to result in impacts to both terrestrial and aquatic ecology through loss of/changes to habitat. The highest potential for soil erosion would be associated with the disturbance of soils from earthworks on the Georges River Golf Course north of Tower Road and at the Jemena underbore south of Newbridge Road. It is unlikely there would be any additional potential impacts to soils and contaminated land beyond those described in Section 6.5.3 of the project REF.</p>
Noise and vibration	<p>As detailed in section 6.6.2 of the project REF the area surrounding the proposed modification has been divided into several Noise Catchment Areas (NCAs) based on similar land use and similar location. The following NCAs have been identified where the proposed modifications will take place;</p> <ul style="list-style-type: none"> • NCA 5 – additional drainage/ earthworks and culvert replacement • NCA 4 – Change to ALDI and retail entrance design • NCA 4 and NCA 5 – tower road tie in works and new compound location • NCA 2 – utilities underboring / relocation. 	<p>The project REF identified exceedances of the highly noise affected management level predicted for six receivers within NCA 1 for bridge and drainage works. The exceedance of up to 30dB is predicted for the nearest affected receivers, those of which are within 100 metres of the construction footprint. The utilities and drainage (culvert replacement) works north of Tower Road are similar to the bridge and drainage works scenario in the project REF and of which the noise impacts expected are considered similar to those identified in the project REF.</p> <p>The use of the compound site south of Tower Road would result in a new noise source, however the closest receivers are commercial properties and the Georges River Golf Course. Cumulatively with the road construction that would be occurring at this time, noise levels are not expected to exceed the construction works.</p> <p>Works for the underboring of utilities south of Newbridge Road was captured in the REF noise assessment and would not result in additional noise impacts.</p> <p>During operation, the proposed modification works would not result in any ongoing noise and vibration impacts.</p>
Aboriginal cultural heritage	As detailed in Section 6.8.2 of the REF the proposal area and surrounding region are known to have been important and extensively used in the past by Aboriginal people. Databases searches confirmed no additional Aboriginal sites or declared Aboriginal places within or adjacent to the study area.	The proposed modification boundary falls within an area assessed under CHAR (as detailed in the REF) and would not impact on any additional known Aboriginal heritage sites. However, an Unexpected Finds procedure would be in place for the overall project that will be implemented should any items be uncovered during construction.
Landscape character and visual impact	As identified in Section 6.10.2 of the REF, a review of the physical and social context of the overall proposal was undertaken to understand the present context and attributes of place to be able to determine the potential impact.	The proposed modification would result in minor potential additional visual impacts, relating to additional vegetation removal at the Georges River Golf Course and the new compound site. However, the new compound site impacts would be temporary. Vegetation removal (and its visual impact) would be mitigated through revegetation as part of the project.

Environmental factor	Existing environment	Potential impacts
Air quality	The modified proposal is near existing high-volume roads and airport, the air quality data from the surrounding air quality stations shows that the performance standards are generally being met. Motor vehicles on Henry Lawson Drive and the surrounding road network are a significant local source of air pollutant emissions. Higher emissions would be experienced during periods of traffic congestion. Further detail is provided in Section 6.12.1 of the REF.	The potential impacts of the proposed modification on air quality would be generally consistent with those described in Section 6.12.2 of the project REF. Mitigation measures in Section 6.12.3 of the project REF would be employed to minimise any impacts to air quality during construction.
Hazard and risk	The hazards and risks of the existing environment identify land within the REF proposal on Milperra Road, and the southern side of Henry Lawson Drive to be located within the council mapped 'Bushfire Prone Land'. Land to the north of the Henry Lawson Drive and Milperra Road/Newbridge Road intersection is not included on the bush fire prone area land mapping. For BAL land any development within areas affected by acid sulphate soils will be subject to the required development assessment process.	The potential impacts of the proposed modification on hazards and risk management would be generally consistent with those described in Section 6.13.3 of the project REF.
Waste management	As per the REF, Transport is committed to ensuring the responsible management of unavoidable waste and promotes the reuse of such waste in accordance with the resource management hierarchy principles outlined in the Waste Avoidance and Resource Recovery Act 2001.	The potential impacts of the proposed modification on waste and resources would be consistent with those described in Section 6.14.1 of the project REF. Additional waste quantities due to the proposed modification would be negligible in the context of the project and no additional types of waste have been identified.

6.5.2 Safeguards and management measures

Impact	Environmental safeguards	Responsibility	Timing	Reference
<u>Aboriginal heritage impact</u>	<u>The requirement for an AHIP for HLD Site 5 (IF) would be sought prior to construction impacting the site at the required time of delivery.</u>	Transport/Contractor	Detailed design/construction	

6.6 Cumulative impacts

6.6.1 Potential impacts

The proposed modification is not expected to materially change the assessment of cumulative impacts provided in Section 6.15.3 of the project REF.

6.6.2 Safeguards and management measures

Safeguard CU1 is considered adequate to address the other impacts of the proposed modification and no additional measures are proposed.

7. Environmental management

7.1 Environmental management plans (or system)

A number of safeguards and management measures have been identified to minimise adverse environmental impacts, including social impacts, which could potentially arise as a result of the proposed modification. Should the proposed modification proceed, these management measures would be addressed if required during detailed design and incorporated into the Contractors Environmental Management Plan (CEMP) and applied during the construction and operation of the proposed modification.

7.2 Summary of environmental safeguards and management measures

Environmental safeguards and management measures for the Henry Lawson Drive Stage 1A Upgrade are summarised in Table 7-1. Additional safeguards and management measures identified in this addendum REF are included in bold and italicised font. The safeguards and management measures will be incorporated into the detailed design phase of the proposed modification, the CEMP and implemented during construction and operation of the proposed modification, should it proceed. These safeguards and management measures will minimise any potential adverse impacts arising from the proposed works on the surrounding environment.

Table 7-1: Summary of safeguards and management measures

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
GEN1	Minimise environmental impacts during construction	<p>A CEMP will be prepared and submitted for review and endorsement of the Transport Environment Manager prior to commencement of the activity. It is also the responsibility of the Contractor to provide a copy of the CEMP to Canterbury Bankstown Council for review.</p> <p>As a minimum, the CEMP will address the following:</p> <ul style="list-style-type: none"> • Any requirements associated with statutory approvals • Details of how the project will implement the identified safeguards outlined in the REF • Issue-specific environmental management plans • Roles and responsibilities • Communication requirements • Induction and training requirements • Procedures for monitoring and evaluating environmental performance, and for corrective action • Reporting requirements and record-keeping • Procedures for emergency and incident management • Procedures for audit and review. <p>The endorsed CEMP will be implemented during the undertaking of the activity.</p>	Contractor	Pre-construction / during construction	Core standard safeguard
GEN2	Notification	All businesses, residential properties and other key stakeholders (eg schools, local councils) affected by the activity will be notified at least five working days prior to commencement of the activity	Contractor / Transport	Pre-construction	Core standard safeguard
GEN3	Environmental awareness	All personnel working on site will receive training to ensure awareness of environment protection requirements to be	Contractor	Pre-construction	Core standard safeguard

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
		<p>implemented during the project. This will include up-front site induction and regular "toolbox" style briefings.</p> <p>Site-specific training will be provided to personnel engaged in activities or areas of higher risk.</p> <p>These include:</p> <ul style="list-style-type: none"> • Threatened species habitat • Unexpected finds procedure • Adjoining residential areas requiring noise awareness, behavioural practices and mitigation measures. 			
T1	Traffic Management Plan	<p>A Traffic Management Plan (TMP) will be prepared and implemented as part of the CEMP. The TMP will be prepared in accordance with the Transport Traffic Control at Work Sites Manual (RMS, 2020) and QA Specification G10 Control of Traffic (Transport, 2020). The TMP will include:</p> <ul style="list-style-type: none"> • Confirmation of haulage routes • Measures to maintain access to local roads and properties • Construction traffic control plans outlining site-specific traffic control measures (including signage) to manage and regulate traffic movement • Measures to maintain pedestrian and cyclist access (with the implementation of a Vehicle Movement Plan) • Requirements and methods to consult and inform the local community of impacts on the local road network • Access to construction sites including entry and exit locations and measures to prevent construction vehicles queuing on public roads • A response plan for any construction traffic incident • Consideration of other developments that may be under construction to minimise traffic conflict and congestion that may occur due to the cumulative increase in construction vehicle traffic • Monitoring, review and amendment mechanisms. <p>The TMP will ensure the following:</p>	Contractor	Pre-construction / during construction	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
		<ul style="list-style-type: none"> Alternative routes for active transport users will be clearly identified by signage and the use of traffic controllers where required. Property access will be maintained where feasible and reasonable and property owners will be consulted well in advance of work starting that may temporarily restrict or control access. Public transport providers and users will be notified in advance of any changes to bus stop locations through signage at the existing bus stops on Milperra Road. Canterbury Bankstown Council will be consulted of any detours in accordance with the Traffic Management Plan and the Community Liaison Plan. 			
T2	Traffic impacts	<p>Further traffic modelling will be carried out during detailed design based on detailed construction methods and traffic staging. Traffic modelling will assess the potential traffic impacts from detailed design and identify whether any additional mitigation measures or traffic control measures will be required.</p> <p>Further investigations on the layout of the Auld Avenue intersection will be undertaken during detailed design, including traffic monitoring and design options to identify the most optimal layout for this intersection. Any change in the layout will be based on balancing a range of issues including road safety and road network performance, as well as considering any future opportunities for broader connectivity.</p>	Transport	Detailed design	
T3	Impact on bus stops or routes	Temporary and permanent bus stop relocation will be discussed with the relevant bus operator.	Transport/ Contractor	Pre-construction	
T4	Construction traffic	Heavy vehicle movements to be minimised during peak traffic periods (i.e. not between 7.15 and 8.15 am or 4.45 and 5.45 pm), where practical.	Contractor	During construction	
T5	Traffic management measures	Any temporary traffic diversions, clearways and lane closures for work carried out will be implemented in accordance with Transport Management Centre (TMC) and Canterbury Bankstown Council requirements.	Contractor	During construction	
T6	Parking	Off-road parking for construction vehicles will be provided within the ancillary facility and construction areas.	Contractor	During construction	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
T7	Damage to local roads	Any damage to the local road network identified to be caused by construction vehicles for the project will be remediated by the contractor to be similar to the existing road condition.	Contractor	During construction	
T8	Access	Driveway access to residential properties will be designed in greater detail in detailed design. Sight distances, setbacks and gradients will be designed in accordance with the Australian Standards, Austroads Road Design Guides, RMS (Transport) Supplements and Canterbury Bankstown Council Standard Drawings.	Transport/ Contractor	Detailed design / pre-construction	
<u>T9</u>	<u>Access</u>	<u>Transport would discuss access to commercial properties with business owners prior to construction.</u>	<u>Transport</u>	<u>Pre-construction</u>	
B1	Removal of native vegetation and habitat features/ Removal of threatened species habitat	Native vegetation and habitat removal will be minimised through detailed design processes in particular, to minimise impacts on Hollow-bearing trees, <i>Callistemon linearifolius</i> and Threatened Ecological Communities, where possible, with consideration to: <ul style="list-style-type: none"> • Placement of embankments and adopting alternative options such as retaining walls to minimise the construction footprint. • Ground survey locations of hollow bearing trees, <i>Callistemon linearifolius</i> and <i>Acacia pubescens</i> for inclusion onto design plans and integration into constructability assessments. 	Transport	Detailed design	
B2	Removal of native vegetation and habitat / Removal of threatened plants	Pre-clearing surveys will be undertaken in accordance with Guide 1: Pre-clearing process of the Biodiversity Guidelines: Protecting and managing biodiversity on RTA Projects (Roads and Traffic Authority, 2011a).	Contractor	Prior to construction	
B3	Removal of native and non-native vegetation and habitat/ Injury and mortality of fauna	Vegetation and habitat removal will be undertaken in accordance with Guide 4: Clearing of vegetation and removal of bushrock of the Biodiversity Guidelines: Protecting and managing biodiversity on RTA Projects (Roads and Traffic Authority, 2011a).	Contractor	During design	
B4	Removal of native vegetation and habitat	Native vegetation will be re-established in accordance with Guide 3: Re-establishment of native vegetation of the Biodiversity Guidelines: Protecting and managing biodiversity on RTA Projects (Roads and Traffic Authority, 2011a) and the landscaping plans for the project.	Contractor	During design	
B5	Removal of native vegetation and habitat/	The unexpected species find procedure under Biodiversity Guidelines: Protecting and managing biodiversity on RTA Projects (Roads and Traffic Authority, 2011a) will be implemented if TECs or	Contractor	During design	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
	Wildlife corridors and connectivity	threatened fauna, not assessed in the biodiversity assessment, are identified in the REF project area.			
B6	Removal of native vegetation and habitat / Impacts to habitat in human made structures	Fauna will be managed in accordance with Guide 9: Fauna handling of the Biodiversity Guidelines: Protecting and managing biodiversity on RTA Projects (Roads and Traffic Authority, 2011a).	Contractor	During design	
B7	Impacts to habitat in human made structures	Develop options for providing microbat roosting habitat during detailed design processes for culvert structures particularly for the Southern Myotis (<i>Myotis macropus</i>).	Transport	Detailed design	
B8	Microbat survey and habitat	<p>A targeted microbat survey of structures within the footprint and proposed for removal or modification would be undertaken in accordance with 'Species credit' threatened bats and their habitats NSW survey guide for the Biodiversity Assessment Method (OEH, 2018b), prior to construction or as soon as feasible prior to disturbance.</p> <p>If threatened microbats are detected, a Microbat Management Plan will be developed as part of the Construction Environment Management Plan and implemented by a suitably qualified bat specialist. A copy of the Microbat Management Plan would be submitted to Canterbury Bankstown Council for review</p>	Contractor	Pre-construction and during construction	
B9	Removal of native vegetation/Aquatic impacts/Edge effects on adjacent native vegetation and habitat	Exclusion zones will be set up at the limit of clearing in accordance with Guide 2: Exclusion zones of the Biodiversity Guidelines: Protecting and managing biodiversity on RTA Projects (Roads and Traffic Authority, 2011a). This will include demarcating riparian exclusions zones to protect aquatic habitats and riparian zones where works are not required.	Contractor	During design	
B10	Invasion and spread of weeds	Weed species will be managed in accordance with Guide 6: Weed management of the Biodiversity Guidelines: Protecting and managing biodiversity on RTA Projects (Roads and Traffic Authority, 2011).	Contractor	During design	
B12	Invasion and spread of pathogens and disease	The Landscaping Plan and the Construction Flora and Fauna Management Plan, the latter comprising a Weed Management Sub-Plan will be prepared in accordance with the DPI Office of Water Guidelines for Vegetation Management Plans on Waterfront Land (2012).	Contractor	Pre-construction	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
B13	Indirect impacts on native vegetation and habitat	Pathogens will be managed in accordance with Guide 2: Exclusion zones of the Biodiversity Guidelines: Protecting and managing biodiversity on RTA Projects (Roads and Traffic Authority, 2011).	Contractor	During design	
B14	Impacts to habitat in non-native vegetation	Shading and artificial light impacts will be minimised where practicable taking into account minimum luminescence requirements for: <ul style="list-style-type: none"> • Safety when constructing during the night-time period • An urban road as outlined in the Australian Standards through detailed design. 	Transport / contractor	Detailed design / during construction	
B15	Impacts to habitat in non-native vegetation	Habitat will be replaced or re-instated in accordance with: <ul style="list-style-type: none"> • Urban design landscaping plans which will include revegetation with local native vegetation species, suitable for the riparian zone considering vegetation species that adopts existing communities and landscape character, and uses local provenance. • Guide 5: Re-use of woody debris and bushrock • Guide 8: Nest boxes of the Biodiversity Guidelines: Protecting and managing biodiversity on RTA Projects (Roads and Traffic Authority, 2011). • Canterbury Bankstown Council will be consulted with at the detailed design stage in regard to the selection of vegetation species in the landscaping plans. 	Transport / contractor	Detailed design / during construction	
B16	Injury and mortality to fauna - vehicle strike	Opportunities to minimise road-kill will be identified in the design process with consideration to: <ul style="list-style-type: none"> • Available space. • Avoid creating features too close to the roadside that would attract fauna to the roadside. • Using landscaping techniques to create suitable buffers and to separate any potential attracting features from the roadside. • A roadside planting palette that does not intentionally attract fauna to the roadside. 	Transport	Detailed design	
B17	Aquatic impacts	Aquatic habitat will be protected in accordance with:	Contractor	During design	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
		<ul style="list-style-type: none"> • Guide 10: Aquatic habitats and riparian zones of the Biodiversity Guidelines: Protecting and managing biodiversity on RTA Projects (Roads and Traffic Authority, 2011) • Section 3.3.2 Standard precautions and mitigation measures of the Policy and guidelines for fish habitat conservation and management Update 2013 (Department of Primary Industries, 2013) • Acid Sulfate Soil Management Plan • Construction Soil and Water Management Plan. 			
B18	Aquatic impacts	<p>Consider detailed design refinements and constructability options that ensure that fish passage is not blocked during construction of the new Auld Avenue bridge.</p> <p>During construction, in stream works to construct the Auld Avenue bridge will ensure that fish passage is not blocked.</p>	Transport / contractor	Detailed design / during construction	
B19	Aquatic impacts	Consultation with NSW DPI Fisheries Regional Conservation Manager will be undertaken to discuss the best approach to construction works within aquatic habitats and riparian zones. This will also help identify whether any trees to be removed for the project can be used to re-sag waterways	Contractor	Pre-construction	
B20	Removal of riparian vegetation, and impacts to GDEs	Consider detailed design refinements and constructability options that minimise removal of riparian vegetation. This includes ensuring any access to the waterway, if required, minimises the removal of riparian vegetation and is restricted to the minimum amount of bank length required for the construction activity.	Transport	Detailed design	
NA1	General	A Non-Aboriginal Heritage Management Plan will be prepared and implemented as part of the CEMP. It will provide specific guidance on measures and controls to be implemented to avoid and mitigate impacts to Non-Aboriginal heritage.	Contractor	Detailed design/ pre-construction	
SE1	Property acquisition requirements including private and crown land acquisition	Land acquisition will occur in accordance with the Land Acquisition (Just Terms Compensation) Act 1991.	Transport	Pre-construction	
SE2	Community impacts during construction including	A Community Liaison Plan (CLP) will be prepared and implemented as part of the CEMP to help provide timely and	Contractor	Pre-construction / during construction	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
	noise, visual and access impacts	<p>accurate information to the community during construction. The CLP will include (as a minimum):</p> <ul style="list-style-type: none"> • Mechanisms to provide details and timing of proposed activities to affected residents, broader community, recreational groups, businesses and other stakeholders including changed traffic and access conditions • Contact name and number for complaints. <p>The CLP will be prepared in accordance with:</p> <ul style="list-style-type: none"> • Transport's stakeholder engagement tool kit • Transport's Stakeholder and Community Engagement Policy 2019 			
SE3	Community consultation during detailed design and construction, property impacts as a result of temporary access changes and property acquisition	<p>Transport will continue to consult with the community, recreational groups, businesses and other stakeholders until the completion of the overall project. Discussions will include:</p> <ul style="list-style-type: none"> • Changes to the overall project as a result of detailed design, the nature and timing of construction works • Mitigation measures for residents, stakeholders and people using the overall project • Mitigation measures for noise, traffic, access and visual impacts. 	Transport / contractor	Detailed design / pre-construction / during construction	
SE4	Potential impacts on Aboriginal Heritage and areas of significance	Transport will continue to consult with Local Aboriginal Land Councils during detailed design phase to minimise impacts to both the acquired land and adjacent Aboriginal claim land.	Transport	Detailed design / pre-construction	
SE5	Social infrastructure impacts including	Operators of the Georges River Golf Course and Bankstown Golf Course, public transport providers as well as Council in reference to Gordon Parker Reserve, Vale of Ah Reserve and the vegetated corridor between the Georges River and Henry Lawson Drive will be consulted and informed regarding construction activities to mitigate any impacts during busy periods and events at these facilities.	Contractor	Pre-construction / during construction	
SE6	Temporary relocation of the roadside memorial	The roadside memorial on the southern side of Milperra Road will be temporarily relocated during construction in consultation with the stakeholders who have made the memorial. Access to the	Transport	Pre-construction / construction	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
		relocated roadside memorial would be maintained for pedestrians during construction.			
SE7	Business signage during construction to mitigate access and potential loss of passing trade impacts	<p>Opportunities for the temporary installation of signage on approach to Tower Road for access to businesses will be investigated.</p> <p>Wayfinding and the location of signage during construction will be based on the construction staging and where room is available.</p>	Transport / contractor	Pre-construction / construction	
SE8	Consultation with emergency services to maintain access	Continued consultation with emergency services to understand access requirements so that access can be maintained during construction, particularly during works at the Tower Road/Henry Lawson Drive intersection.	Transport / contractor	Detailed design/ construction	
H1	Construction and management of ingress, changes to surface water flows and scour A	<p>Construction Soil and Water Management Plan will be prepared to guide construction methods in implementing the following measures in accordance with Blue Book (Managing Urban Stormwater, Soils and Construction Volume 2D Main Road construction):</p> <ul style="list-style-type: none"> • Intercepting clean water flows from areas upslope of the REF project areas and diverting it in a controlled manner whether through or around the construction work areas to avoid or minimise mixing of 'clean' water flows with 'dirty' sediment-laden runoff from work areas. • Minimise the potential for scour by implementing surface stabilisation, scour protection measures and energy dissipation measures • Implement a 'wet weather' Erosion and Sediment Control Plan that includes stabilisation of exposed earthworks prior to the onset of heavy rainfall or predicted flooding. <p>In addition, changes to surface water flows (volume and velocity) will be minimised by:</p> <ul style="list-style-type: none"> • Detailed design of drainage infrastructure that provides sufficient capacity and energy dissipation controls. 	Transport/ Contractor	Detailed design/ Pre-construction	
H2	Site facilities and flood emergency management within ancillary sites, management of adverse	The CEMP will include a Construction Flood Management Plan Sub-Plan. This Sub-Plan will include details and procedures to minimise the potential for construction activities to adversely	Contractor	Pre-construction	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
	flood impacts on neighbouring properties	<p>impact on flood behaviour in neighbouring properties. Measures to manage residual flood impacts will include:</p> <ul style="list-style-type: none"> • Staging construction to limit the extent and duration of temporary works on the floodplain • Ensuring construction equipment and materials are removed from floodplain areas at the completion of each work activity or should a weather warning be issued of impending flood producing rain • Providing temporary flood protection to properties identified as being at risk of adverse flood impacts during any stage of construction of the project • Developing flood emergency response procedures to remove temporary works during periods of heavy rainfall. <p>For the ancillary facilities located within the floodplain, a Construction Flood Management SubPlan will include the following additional components:</p> <ul style="list-style-type: none"> • Limit the extent of works located in floodway areas • A procedure to monitor weather conditions (existing and forecast conditions), including minor rain events, local weather warnings and river water level data • A communication protocol to disseminate warnings to construction personnel of impending flood producing rain or predicted flooding in the Georges River and actions required to make construction areas stable and safe. • An evacuation plan for construction personnel should a severe weather warning or flood alert for the Georges River be issued. 			
H3	Material storage and stockpiling within ancillary sites	<p>The storage of hazardous material in ancillary facilities located within the floodplain will be confined to areas that are not subject to flooding during a 1% AEP extent or either:</p> <ul style="list-style-type: none"> • Stored in a manner that prevents their mobilisation during times of flood • Be removed from the floodplain when minor rain events are predicted to inundate storage areas and at the onset of a flood. <p>The Construction Flood Management Sub-Plan will define the flood immunity criteria (including consideration of inundation from minor rain events) for material storage and stockpile areas</p>	Contractor	Pre-construction/ Construction	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
		<p>proposed to be located on land that is inundated during a 1% AEP event.</p> <p>Erosion and sediment (ERSED) controls are to be installed around ancillary facilities located within the floodplain to reduce the risk of sediment runoff. These ERSED controls are to be integrated into any exclusion zone or property boundary demarcation.</p>			
H4	Management of adverse flood impacts on neighbouring properties	<p>A detailed hydrologic and hydraulic (flood) assessment will be undertaken during detailed design to assess the impacts of the REF project on flood behaviour and the associated measures which are required to mitigate those impacts.</p> <p>Subject to the flood assessment during detailed design a detailed ground survey (including floor levels of buildings) may need to be undertaken in affected areas to determine whether the project would increase flood damages in adjacent development (i.e. in properties where there is a potential for increases in peak flood levels for events up to 1% AEP in magnitude).</p>	Transport	Detailed design	
H5	Management of adverse flood impacts on the existing environment	<p>During detailed design, the following measures will be implemented to manage adverse flood impacts:</p> <ul style="list-style-type: none"> • The road alignment will be further refined to minimise the increase in road levels and peak flood levels compared to pre-project conditions. • Works within the floodplain will be designed to minimise adverse impacts on surrounding development for flooding up to the 1% AEP event in magnitude. • Incorporate measures that are aimed at mitigating its impact on flood behaviour in properties where existing buildings would experience above-floor inundation during floods up to the 1% AEP event. • The provision of scour protection and energy dissipation measures will be included in order to mitigate the localised increases in flow velocities at the outlets that are to be upgraded, relocated or new stormwater drainage systems. 	Contractor	Pre-construction	
H6	Bridge construction	In order to construct the central pier for the new Auld Avenue bridge, a temporary working platform may be located across part of the main channel of Milperra Drain that is frequently inundated by flow. The temporary working platform will be designed and constructed to manage the potential for scour and transport of	Transport/ Contractor	Detailed design/ Construction	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
		<p>material into Milperra Drain, while maintaining passage for floodwater through the construction site.</p> <p>Consider detailed design refinements to temporary working platforms that may be required on the overbank of Milperra Drain to construct the new bridge that minimise the impact on the in-bank area of the watercourse.</p> <p>The contractor will use clean rock fill for the construction of the temporary working platforms.</p>			
SW1	Construction surface water quality	<p>The Concept Design Erosion and Sedimentation Strategy will be reviewed and updated during detailed design. The Strategy will be based on detailed design construction staging plans and construction methodologies. The Strategy will be revised in accordance with Managing Urban Stormwater – Soils and Construction Volume 1 (Landcom 2004) and 2D (main road construction) (DECC 2008) and Transport’s Environmental Management of Construction Dewatering (RTA 2011).</p> <p>A site specific Erosion and Sediment Control Plan/s (ESCP) will be prepared and implemented as part of the Construction Soil and Water Management Plan. These Plans will further develop the Construction Erosion and Sediment Control Strategy developed in detailed design and be consistent with the above guidelines of the ‘Blue Book’ (Landcom, 2004, DECC 2008 and RTA 2011).</p> <p>The ESCP will include arrangements for managing wet weather events, including monitoring of potential high risk events (such as storms) and specific controls and follow-up measures to be applied in the event of wet weather.</p>	TransportContractor	<p>Detailed design</p> <p>Pre-construction/ Construction</p>	
SW2	Contamination of surface water	The refuelling and maintenance of plant and equipment will be undertaken in a designated sealed bunded area at ancillary facilities, where possible.	Contractor	During construction	
SW3	Contamination of surface water	Vehicle wash downs and concrete washouts will be carried out within designated sealed bunded areas at construction ancillary facilities or carried out off-site.	Contractor	During construction	
SW4	Contamination of surface water	Regular visual water quality checks (include for turbid plumes and hydrocarbon spills or slicks) will be carried out when working in or near waterways. Construction water quality monitoring will be undertaken upstream and downstream of the REF project to	Contractor	During construction	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
		ensure that controls and site practices are effective at maintaining current water quality conditions. Monitoring will be undertaken in accordance with the Guideline for Construction Water Quality Monitoring (RTA, undated).			
SW5	Accidental spill	A site specific emergency spill plan will be developed, and include spill management measures in accordance with the Roads and Maritime Code of Practice for Water Management (RTA, 1999) and relevant EPA guidelines. The plan will include measures to be implemented in the event of a spill, including initial response and containment, notification of emergency services and relevant authorities (including Transport and EPA).	Contractor	Pre-construction/ During construction	
SW6	Accidental spill	Emergency spill kit will be kept on site at all times. Spill kits will be located at all ancillary facilities and main construction work areas. All staff would be made aware of the location of the spill kit and trained in its use.	Contractor	Construction	
SW7	Stormwater runoff and water quality of the Georges River and Milperra Drain	The Concept Design Operational Water Quality Strategy will be reviewed and updated during detailed design to achieve the operational water quality objective and identify additional opportunities in the wider sub-catchments to reduce total nitrogen loads to Georges River and Milperra Drain, in consultation with Canterbury Bankstown Council. The Operational Water Quality Strategy will consider Transport's Water Sensitive Urban Design Guidelines (RMS 2017) and potential impacts of proposed water quality controls to the surrounding area.	Transport	Detailed design	
G1	Disturbance to GDEs	Where disturbance cannot be avoided, appropriate mitigation measures will be adopted to prevent impacts outside of the required areas of disturbance. This may include use of physical barriers, boundary demarcation and signage to prevent intrusion of contractors and equipment into sensitive areas, and ongoing monitoring to ensure disturbance footprints do not extend outside of set boundaries	Contractor	Construction	
G2	Groundwater dewatering during excavation	In the event that groundwater/ aquifer dewatering must occur to lower the groundwater table and reduce or prevent groundwater ingress into excavations, then potential impacts on GDEs must be quantitatively assessed prior to dewatering along with appropriate management measures and documented in a site	Contractor	Construction	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
		dewatering management plan. Quantitative assessment must include assessment of the magnitude and duration of drawdown and whether impacts are likely to adversely affect the habitat conditions and ecological communities within the GDEs. Relevant approvals and permits must be obtained prior to groundwater/ aquifer dewatering.			
G3	Shallow excavations within the topsoil and fill materials for embankments	A Construction Soil and Water Management Plan, Construction Flora and Fauna Management Plan and a Clearing and Grubbing Plan will include mitigation measures and procedures to identify further opportunities to minimise direct impacts to GDEs.	Contractor	Pre-construction/ Construction	
G4	Mobilisation of acid sulfate soils	An Acid Sulfate Soil Management Plan (ASSMP) will be prepared and implemented to manage PASS or ASS exposed from excavations of soils between 2 and 4 metres, changes to groundwater levels and stockpiling. The ASSMP will be informed by the results of the Detailed Site Investigation that will include the identification of presence and extent of ASS/PASS, particularly around the proposed bridge duplication works over Milperra Drain near Auld Avenue.	Contractor	Pre-construction/ Construction	
G5	Groundwater contamination, piling and excavations	A site contamination management plan (CMP) will be prepared and implemented in the event that contaminated groundwater is encountered during construction activities, this should be completed before construction occurs. During construction any intercepted groundwater, including piling works, should be managed under the project CEMP to mitigate risks associated with the potential mobilisation or release of contamination to the groundwater, improper storage and disposal of intercepted groundwater. A baseline groundwater monitoring program of the overall project area will be undertaken during detailed design.	Contractor	Pre-construction/ During construction	
G6	Groundwater levels and contamination – piling and excavations	Regular inspection of pile borings will be carried out to identify any occurrence of light nonaqueous phase liquids, oils, staining, or odours and to prevent any accumulation of potential contamination within pile borings.	Contractor	Pre-construction/ During construction	
S1	Risk of contamination from APECs	A Detailed Site Investigation should be undertaken near the APECs showing a moderate risk of COPCs at concentrations above the Tier I screening values. The scope of the DSI should be detailed in a Sampling Analysis and Quality Plan which should	Transport	Detailed design	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
		include collection of soil, groundwater and landfill gas samples near moderate risk APECS. The scope of the DSI should be in accordance with the NEPM 2013 and analytical results compared to the applicable Tier I screening values in Schedule B2 of the NEPM 2013.			
S2	Contamination from onsite filling	<p>Analytical results from any spoil requiring off-site disposal will be sorted in accordance with:</p> <ul style="list-style-type: none"> NSW EPA Waste Classification Guidelines Parts 1 to 4 and Addendum 1. <p>If natural soil is disturbed, it may meet the definition of Excavated Natural Material and the analytical data will be compared to the concentrations and requirements with:</p> <ul style="list-style-type: none"> ENM Resource Recovery Order and Exemption under the Protection of Environmental Operations (Waste) Act 2000. 	Contractor	During construction	
S3	Risk of potentially impacted soil migrating	<p>A Contaminated Land Management Sub-Plan will be prepared and implemented as part of the CEMP. This will address the risk of potentially impacted soil migrating from site during construction and include standard practices for dust suppression, and erosion and sedimentation control. Other controls in the Contaminated Land Management Sub-Plan will include:</p> <ul style="list-style-type: none"> An Unexpected Finds Protocol and the Construction Work Health and Safety Plan will include a UXO risk assessment and any management measures. Mitigation of the risk that contaminated groundwater is encountered during construction activities. During construction any intercepted groundwater will be managed under the CEMP to mitigate risks associated with the potential mobilisation or release of contamination to the groundwater, improper storage and disposal of intercepted groundwater. Monitoring of excavations for volatile gases that may be present as a result of hydrocarbon contamination, which may pose a risk to human health and built environment. Proper use of work health and safety (WHS) equipment and monitoring of works where asbestos or other contamination is identified. 	Contractor	Pre-construction	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
		<ul style="list-style-type: none"> Response plan if accidental major spills and leaks occur detailing remediation steps necessary to reduce impact to nearby coastal wetlands and GDEs. 			
S4	Unexploded Ordnance	Prior to any ground disturbance directly west of the Bankstown Aerodrome property boundary, a risk assessment will be undertaken to determine the likelihood of UXO being present and the required management measures to mitigate the risk.	Transport/ Contractor	Detailed design/ Pre-construction	
N1	Construction noise and vibration	<p>A Noise and Vibration Management Plan will be prepared and implemented as part of the CEMP. The NVMP will be prepared in accordance with the Construction Noise and Vibration Guideline (Roads and Maritime 2016) NSW EPA Interim Construction Noise Guideline and identify:</p> <ul style="list-style-type: none"> All potential significant noise and vibration generating activities associated with the activity A monitoring program to assess performance against the noise and vibration criteria Arrangements for consultation with affected neighbours and sensitive receivers, including notification and complaint handling procedures Contingency measures to be implemented in the event of non-compliance with noise and vibration criteria. 	Contractor	Pre-construction / during Construction	
N2	Out of hours work	<p>Out of hours works will be undertaken in accordance with the Construction Noise and Vibration Guideline (Roads and Maritime 2016). This includes:</p> <ul style="list-style-type: none"> Offer respite and/or restricted construction hours where noise intensive works are planned over extended periods, especially where they occur outside of standard hours. This may include moving the construction work front to different areas so that sensitive receivers are not impacted for longer than two consecutive days No more than two consecutive nights of noise with special audible characteristics and/or vibration generating work may be undertaken in the same NCA over any 7-day period, unless otherwise negotiated with affected receivers. 	Contractor	During Construction	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
N3	Out of hours work	Noisiest activities should be limited to standard construction hours, where practicable.	Contractor	During Construction	
N4	Noise and vibration	All sensitive receivers (eg local residents) likely to be affected will be notified at least 5 working days prior to commencement of any works associated with the activity that may have an adverse noise or vibration impact. The notification will provide details of: <ul style="list-style-type: none"> • The project • The construction period and construction hours • Contact information for project management staff • Complaint and incident reporting • How to obtain further information. 	Contractor	During Construction	
N5	Noise and vibration	A register of most affected noise and vibration sensitive receivers (NVSRs) will be kept on site and maintained. The register will include the following details for each NVSR: <ul style="list-style-type: none"> • Address of receiver • Category of receiver (e.g. Residential, Commercial etc.) • Contact name and phone number. The register is to be included as part of the project's Community Liaison Plan or similar document and maintained in accordance with the requirements of this plan.	Contractor	During Construction	
N6	Noise and vibration	Source controls will be employed to minimise noise impacts, such as using noise screens and mufflers, maximising offset distance, and orienting plant away from sensitive receivers.	Contractor	During Construction	
N7	Noise and vibration	The selection of plant and machinery will consider noise emissions, operated to reduce maximum noise levels, maintained regularly and turned off when not in use.	Contractor	During Construction	
N8	Operational Road Traffic Noise	An operational noise and vibration management plan will be prepared and implemented. The plan would further develop reasonable and feasible mitigation strategies reducing identified noise impacts.	Transport	Post Construction	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
A1	Aboriginal heritage impact permit (AHIP)	<u>The requirement for an AHIP for HLD Site 5 (IF) would be sought prior to construction at the required time of delivery</u>	Transport/ Contractor	Detailed design/ During construction	
A2	Aboriginal and NonAboriginal heritage – unexpected finds	The Standard Management Procedure - Unexpected Heritage Items (Transport for NSW, 2015) will be followed in the event that an unknown or potential Aboriginal and/or Non-Aboriginal object/s, including skeletal remains, is found during construction. The construction workforce will be inducted and trained in the procedure. The procedure applies where Transport does not have approval to disturb the object/s or where a specific safeguard for managing the disturbance (apart from the Procedure) is not in place. Work will only re-commence once the requirements of that Procedure have been satisfied.	Contractor	During construction	
A3	Additional Aboriginal heritage impacts	Any further impacts proposed beyond the project area must be subject to further assessment and consultation with Aboriginal stakeholders, consistent with the process in this report	Transport/ Contractor	Detailed design/ during construction	
V1	Visual amenity and urban design	Urban design development of the project will continue through to detailed design for the overall project, of which a portion includes the REF project. Urban design will be integrated into project development processes. The following policy/guidelines will guide future design development of the project: <ul style="list-style-type: none"> • Transport Urban Design Policy (Beyond the Pavement) • Transport Urban Design Guidelines. The urban design objectives, principles and concept design strategy presented in the urban design report for the REF and EIS projects will form the basis for future design development and consultation with stakeholders.	Transport	Detailed design	
V2	Earthworks and landscape character	Integrate earthworks with adjoining landform to avoid sharp transition in profile through the adoption of appropriate grades, where possible.	Transport	Detailed design	
V3	Earthworks and landscape character	Stabilise and progressively revegetate exposed ground as works progress to limit erosion and visual impacts through early integration with surrounding vegetation.	Contractor	During construction	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
V4	Revegetation	Plants used in revegetation will be consistent with existing communities, including riparian vegetation, and support the existing landscape character. Revegetation will use local provenance material and proposed tree species which provide canopy cover and minimise urban heat effects.	Transport	Detailed design	
V5	Tree management and removal	Any tree removal or pruning will be undertaken by a qualified specialist and in accordance with AS4970: 2009: Protection of Trees on Development Sites (Standards Australia, 2009) and AS4373:2007: Pruning of Amenity Trees and WorkCover Amenity Tree Industry Code of Practice 1998.	Contractor	Pre-construction / Construction	
V6	Minimise road furniture and signage	Provide minimum signage requirements and limit structural elements to provide an open and permeable setting.	Transport	Detailed design	
V7	Lighting	Minimise lighting and potential for light spill.	Transport	Detailed design	
V8	Lighting	Minimise night works and provide lighting which minimises light spill.	Contractor	During construction	
V9	View management	Provide visual screening to minimise the visual impact in areas identified as moderate or high impact.	Transport	Detailed design/ During Construction	
V10	Visual amenity and ancillary facilities	The layout of the ancillary facility sites will be designed to minimise visual amenity impacts. The design will consider: <ul style="list-style-type: none"> • Screening of boundaries facing sensitive receivers or views • Careful placement of structures and buildings to maintain viewpoints or provide additional screening of site activities 	Contractor	Pre-construction/ Construction	
V11	Visual amenity and ancillary facilities	The ancillary facilities will be maintained, kept tidy and well-presented including sorting regular removal of excess materials to reduce visual impact.	Contractor	Pre-construction/ Construction	
V12	Visual amenity and ancillary facilities	Ancillary facility sites and temporary construction areas will be progressively restored to at least their pre-construction conditions or in accordance with Landscaping Plans, when no longer required.	Contractor	During construction	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
AQ1	General air quality impacts	An Air Quality Management Plan (AQMP) will be prepared and implemented as part of the CEMP. The AQMP will include: <ul style="list-style-type: none"> • Identification of potential risks and impacts from dust generating activities • Management measures to minimise risk of dust generation • A process for monitoring dust on-site • A process for altering management measures as required and reprogramming construction activities if the safeguards and management measures do not adequately reduce dust generation. 	Contractor	Pre-construction/ During Construction	
AQ2	Dust emissions	Dust generating work will cease when levels of visible airborne dust become excessive.	Contractor	During construction	
AQ3	Dust emissions	Works that disturb vegetation, soil or stockpiles will not be carried out during strong winds (over 40 km/h) when this may affect receivers (visibility on roads; dust and debris near recreational areas residences and commercial premises).	Contractor	During construction	
AQ4	Dust emissions	Stockpiled materials will be covered stabilised or stored in areas not subject to high wind.	Contractor	During construction	
AQ5	Dust emissions	All trucks will be covered when transporting material to and from the site.	Contractor	During construction	
R1	Risk/hazard –Bushfire risk	The CEMP will include a bushfire management plan prepared in accordance with the Planning for Bush Fire Protection 2019 (Rural Fire Service 2006). Measures to be implemented to manage bushfire risk include: <ul style="list-style-type: none"> • Monitoring of weather and local bush fire ratings • Consultation requirements for community notifications in the event of a bushfire • Maintaining equipment in good working order • Ensuring plant and equipment are fitted with appropriate spark arrestors, where practicable • Ensuring site workers are informed of the site rules including designated smoking areas and putting rubbish in designated bins. 	Contractor	Pre-construction/ During Construction	

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing	Reference
		<ul style="list-style-type: none"> Obtaining hot work permits and implementing total fire bans as required Implementing adequate storage and handling requirements for potentially flammable substances in accordance with the relevant guidelines. 			
R2	Risk/hazard - Consultation with emergency services	<p>Consultation with emergency services will be undertaken, including the Rural Fire Service and Fire and Rescue NSW to:</p> <ul style="list-style-type: none"> Ensure emergency access is maintained during and after construction Co-ordinate any bush fire emergency actions as outlined in the project's Bushfire Management Plan. 	Contractor	During Construction	
W1	Waste - Waste	<p>A Waste Management Plan (WMP) will be prepared and implemented as part of the CEMP. The WMP will include but not be limited to:</p> <ul style="list-style-type: none"> Measures to avoid and minimise waste associated with the project Classification of wastes and management options (re-use, recycle, stockpile, disposal) Statutory approvals required for managing both on and off-site waste, or application of any relevant resource recovery exemptions Procedures for storage, transport and disposal Monitoring, record keeping and reporting. <p>The WMP will be prepared taking into account the Environmental Procedure - Management of Wastes on Transport Land (Transport for NSW, 2014) and relevant Transport Waste Fact Sheets.</p>	Contractor	Detailed design / pre-construction	
CU1	Cumulative - Cumulative impacts	Ongoing coordination and consultation will be undertaken between the project contractors and other developments in the area to make sure cumulative traffic impacts are appropriately assessed and managed particularly during peak holiday periods.	Contractor	Pre-construction/ During Construction	

7.3 Licensing and approvals

All relevant licenses, permits, notifications and approvals needed for the Henry Lawson Drive Stage 1A Upgrade and when they need to be obtained are listed in Table 7-2. Additional or changed licenses and approval requirements identified in this addendum REF are indicated by underlined and/or struck out font.

Table 7-2: Summary of licensing and approval required

Instrument	Requirement	Timing
<i>National Parks and Wildlife Act 1974 (s90)</i>	Aboriginal heritage impact permit from the Chief Executive of OEH.	Prior to the start of the activity.
<u>Roads Act 1993 (Section 138)</u>	<u>All impacts to the road network would be undertaken in accordance with a Road Occupancy Licence (ROL) to be obtained from the Traffic Management Centre.</u>	<u>Pre-construction</u>
<u>Road Occupancy Licence</u>	<u>All impacts to the road reserve would be undertaken in accordance with a Road Occupancy Licence, to be obtained form the Traffic Management Centre</u>	<u>Pre-construction</u>

8. Conclusion

8.1 Justification

8.1.1 Social factors

As documented in Section 6.4, the proposed modification would have some minor short-term negative socio-economic impacts as a result of the Jemena gas works that would occur during construction. The effect of pedestrian access changes and general disturbance caused by the construction activity would result in a general loss of amenity that would be temporary and short-term in duration for a number of residents. These impacts are generally consistent with the project REF.

In addition, the changes in access to the ALDI supermarket and retail area on Henry Lawson Drive would also have some minor short-term negative socio-economic impacts. The effect of local access changes, parking loss and general disturbance would impact people who use the area on a regular basis. However, during operation, improved safe access to the ALDI supermarket and retail area would provide a beneficial social outcome.

Overall, the proposed modification would be considered to have positive social benefit in the long term through improvements to access and connectivity around Henry Lawson Drive.

8.1.2 Biophysical factors

The proposed modification involves the construction of a new swale north of Tower Road which requires vegetation clearing. Some clearing of native vegetation would be required. However, as indicated in Section 6.2 the vegetation clearing would not significantly impact threatened species, populations or ecological communities.

8.1.3 Economic factors

The proposed modification would require four additional property acquisitions to the project REF. This would have minor impacts to the landowner.

The benefits of the proposed modification for improving safety and freight efficiency are considered to outweigh the mostly temporary adverse impacts and risks associated with the project.

8.1.4 Public interest

The modified project represents a cost-efficient investment in public infrastructure that would maximise the long-term social and economic benefits, while minimising the long-term negative impacts on communities and the environment. The project REF aims to improve transport amenities and with the support of the proposed modification these objectives would better enable the movement of people, goods and services.

The proposed modification would result in some additional short-term impacts on amenity, access and noise during construction.

Changes to the scope and timing of works to the Auld Avenue intersection traffic movements has been driven by community feedback. These works would not be undertaken until similar access is provided through the development of a new connection to Keys Parade as part of the Henry Lawson Drive Stage 1B project.

Mitigation measures would be implemented to manage and reduce short term construction impacts

8.2 Objects of the EP&A Act

Object	Comment
1.3(a) To promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources.	The proposed modification would support the objectives listed in Section 9.2 of the project REF. The proposed modification would contribute to the improved function and route of Henry Lawson Drive in the future.
1.3(b) To facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment.	The principles of ecologically sustainable development are considered with respect to the proposed modification in Section 8.3.
1.3(c) To promote the orderly and economic use and development of land.	The proposed modification supports the project REF which is required to cater for the safe and efficient movement of people and goods along Henry Lawson Drive, and to support the nearby large-scale traffic generating development
1.3(d) To promote the delivery and maintenance of affordable housing.	Not relevant to the project or proposed modification.
1.3(e) To protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats.	The need to minimise impacts on the environment, including threatened and native species has been considered during development of the proposed modification. An additional 0.13 hectares of native vegetation clearing is required on the Georges River Golf Course and the underboring south of Newbridge Road, however have been minimised as far as practicable.
1.3(f) To promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage).	The need to minimise impacts on built and cultural heritage has been considered during development of the proposed modification. As described in Section 6.9.3 of the project REF, the areas around Tower Road and the commercial development is not considered to be an important component of the heritage listing due to the extensive development that has taken place on the site. The proposed modification works are minor in nature, and the impact, similar to the REF, is considered to be neutral. An unexpected finds procedure would be put in place during construction should any sites/items be identified.
1.3(g) To promote good design and amenity of the built environment.	The project has been designed in accordance with the urban design objectives and principles as outlined in Section 2.4.2 of the project REF.
1.3(h) To promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants.	Not relevant to the project or proposed modification.
1.3(i) To promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State.	Not relevant to the project or proposed modification
1.3(j) To provide increased opportunity for community participation in environmental planning and assessment.	The project development process has involved consultation with relevant stakeholders. Consultation carried out to date and proposed for the future is outlined in Section 5

8.3 Ecologically sustainable development

Ecologically sustainable development (ESD) is development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends. The principles of ESD have been an integral consideration throughout the development of the proposed modification.

ESD requires the effective integration of economic and environmental considerations in decision-making processes. The four main principles supporting the achievement of ESD are discussed below.

8.3.1 The precautionary principle

The precautionary principle deals with reconciling scientific uncertainty about environmental impacts with certainty in decision-making. It provides that where there is a threat of serious or irreversible environmental damage, the absence of full scientific certainty should not be used as a reason to postpone measures to prevent environmental degradation.

The proposed modification has sought to take a precautionary approach to minimise environmental impacts, including through assessing impacts based on the 'worst-case' or conservative scenarios. This has also been applied in the development of safeguards and management measures using best available technical information, environmental standards and guidelines.

This addendum REF has been prepared using the precautionary principle and appropriate mitigation measures are outlined to address all of the potential impact identified for the modified project.

Additional environmental assessment would be carried out where there is an identified inconsistency with this addendum REF as well as the project REF. This again would ensure that uncertainty is identified, addressed and resolved throughout the project's design lifecycle by implementing precaution at all stages.

8.3.2 Intergenerational equity

Social equity is concerned with the distribution of economic, social and environmental costs and benefits. Intergenerational equity introduces a temporal element with a focus on minimising the distribution of costs to future generations.

The modified project area would not impact on the health, diversity and productivity of the local environment or communities in a way that would disadvantage future generations.

8.3.3 Conservation of biological diversity and ecological integrity

Preserving biological diversity and ecological integrity requires that ecosystems, species, and biological diversity are maintained to ensure their survival.

As discussed in Section 6.2, the proposed modification has refined the initial clearing extent of 2.15 hectares of native vegetation (approved project) to a maximum of 2.28 hectares. The area of native vegetation removal required for the proposed modification is relatively small (0.13 ha) compared to the extent of habitat in the locality and therefore is unlikely to impact the abundance or diversity of flora and fauna in the region in the long-term.

8.3.4 Improved valuation, pricing and incentive mechanisms

The principle of internalising environmental costs into decision making requires consideration of all environmental resources which may be affected by the carrying out of a project, including air, water, land and living things.

Environmental issues were considered as key matters in the options selection process and in the economic and financial feasibility assessments for the proposed modification. The value of the proposed modification to the community in terms of improved safety was also recognised.

Environmental safeguards and management measures for the avoidance, reuse, recycling and management of waste during construction and operation are to be implemented.

8.4 Conclusion

This addendum REF has examined and taken into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of the proposed activity.

This has included consideration where relevant, of conservation agreements and plans of management under the NPW Act, biodiversity stewardship sites under the BC Act, wilderness areas, areas of outstanding value, impacts on threatened species, populations and ecological communities and their habitats and other protected fauna and native plants. It has also considered potential impacts to matters of national environmental significance listed under the Federal EPBC Act.

A number of potential environmental impacts from the proposed modification have been avoided or reduced during the design development and options assessment. The proposed modification as described in the addendum REF best meets the project objectives but would still result in some temporary impacts on biodiversity, traffic and transport, non-Aboriginal heritage and socioeconomic. Safeguards and management measures as detailed in this addendum REF would ameliorate or minimise these expected impacts. The proposed modification would also improve traffic conditions and alleviate congestion along Henry Lawson Drive. On balance the proposed modification is considered justified, and the following conclusions are made.

8.4.1 Significance of impact under NSW legislation

The proposed modification would not result in a change to the findings of the project REF or submissions report and would be unlikely to cause a significant impact on the environment. Therefore, it is not necessary for an environmental impact statement to be prepared and approval to be sought from the Minister for Planning under Division 5.2 of the EP&A Act. A Biodiversity Development Assessment Report or Species Impact Statement is not required. The proposed modification that is not located on BAL land is subject to assessment under Division 5.1 of the EP&A Act. Consent from Council is not required.

8.4.2 Significance of impact under Australian legislation

The proposed modification would not likely cause a significant impact on matters of national environmental significance or the environment of Commonwealth land within the meaning of the EPBC Act. A referral to the Australian Government Department of Climate Change, Energy, the Environment and Water is not required.

The works associated with the proposed modification on BAL lands would require approval under the Airports Act 1996. The proposed modification on BAL land is subject to:

- Bankstown Airport's Development Application and Consent Application processes to satisfy the requirements of the Airports Act 1996
- Application for a Building Activities Permit to the Airport Building Controller (ABC) in accordance with the Airports (Building Control) Regulations 1996. The Bankstown Airport Consent Application must comply with the conditions of the Development Approval

9. Certification

This addendum review of environmental factors provides a true and fair review of the proposed modification in relation to its potential effects on the environment. It addresses to the fullest extent possible all matters affecting or likely to affect the environment as a result of the proposed modification.



Adelaide Guinness
Environmental Consultant
Aurecon

Date: 19/12/2022

I have examined this addendum review of environmental factors and accept it on behalf of Transport for NSW.



Nanthini Easwaran
Senior Project Manager
Transport for NSW

Date: 25 Jan 2023

10. EP&A Regulation publication requirement

Respondent	Yes/No
Does this REF need to be published under section 171(4) of the EP&A Regulation?	Yes

Terms and acronyms used in this addendum

REF

Term /acronym	Description
AEP	Annual exceedance probability
AQMP	Air Quality Management Plan
ARI	Average recurrence interval
BAL	Bankstown Airport Limited
BC Act	<i>Biodiversity Conservation Act 2016 (NSW).</i>
CEMP	Construction / Contractor's environmental management plan
EES	Environment, Energy and Science
EP&A Act	<i>Environmental Planning and Assessment Act 1979 (NSW).</i> Provides the legislative framework for land use planning and development assessment in NSW
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth).</i> Provides for the protection of the environment, especially matters of national environmental significance, and provides a national assessment and approvals process.
ESD	Ecologically sustainable development. Development which uses, conserves and enhances the resources of the community so that ecological processes on which life depends, are maintained and the total quality of life, now and in the future, can be increased
EPL	Environment protection licence
ERSED	Erosion and sediment
FM Act	<i>Fisheries Management Act 1994 (NSW)</i>
Heritage Act	<i>Heritage Act 1977 (NSW)</i>
ICNG	Interim Construction Noise Guideline
LEP	Local Environmental Plan. A type of planning instrument made under Part 3 of the EP&A Act.
NPW Act	National Parks and Wildlife Act 1974 (NSW)
NVSR	Noise and vibration sensitive receivers
NSW	New South Wales
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
REF	Review of Environmental Factors
Roads and Maritime	NSW Roads and Maritime was dissolved by the Transport Administration Amendment Bill in August 2019, all function are now managed by Transport for NSW
SEPP	State Environmental Planning Policy. A type of planning instrument made under Part 3 of the EP&A Act.
SEPP (Biodiversity and Conservation)	State Environmental Planning Policy (Biodiversity and Conservation) 2021

Term /acronym	Description
SEPP (Planning Systems)	State Environmental Planning Policy (Planning Systems) 2021
SEPP (Precincts – Central River City)	State Environmental Planning Policy (Precincts – Central River City) 2021
SEPP (Precincts – Eastern Harbour City)	State Environmental Planning Policy (Precincts – Eastern Harbour City) 2021
SEPP (Precincts – Regional)	State Environmental Planning Policy (Precincts – Regional) 2021
SEPP (Precincts – Western Parkland City)	State Environmental Planning Policy (Precincts – Western Parkland City) 2021
SEPP (Resilience and Hazards)	State Environmental Planning Policy (Resilience and Hazards) 2021
SEPP (Transport and Infrastructure)	State Environmental Planning Policy (Transport and Infrastructure) 2021
TMC	Transport Management Centre
Transport	Transport for NSW
WM Act	<i>Water Management Act 2000</i>
QA Specifications	Specifications developed by Roads and Maritime Services for use with road work and bridge work contracts let by Transport for NSW.

References

- Department of Environment and Climate Change NSW. 2008. Managing Urban Stormwater - Soils and Construction. <https://www.environment.nsw.gov.au/-/media/OEH/CorporateSite/Documents/Water/Water-quality/managing-urban-stormwater-soils-construction-volume2a-installation-services-0801.pdf>
- Department of Environment and Climate Change. 2009. Interim Construction Noise Guideline (ICNG).
- Department of Primary Industries. 2013. Policy and guidelines for fish habitat conservation and management (update 2013).
- Environment Protection Authority. 2014. Waste Classification Guidelines. November 2014.
- Landcom. 2004. Soils and Construction – Managing Urban Stormwater Volume “the Blue Book”. <https://www.environment.nsw.gov.au/-/media/OEH/CorporateSite/Documents/Water/Water-quality/managing-urban-stormwater-soils-construction-volume-1-fourth-edition.pdf>
- Roads and Maritime. 2016. Construction Noise and Vibration Guideline.
- Road Transport Authority. 1999. Code of Practice for Water Management: Road Development and Management. <https://www.pacifichighway.nsw.gov.au/sites/default/files/media/documents/2018/RTA%20Code%20of%20Practice%20for%20Water%20Management%20April%201999.pdf>
- Roads & Traffic Authority. 2011. Environmental Management of Construction Site Dewatering.
- Roads & Traffic Authority. 2011b. Biodiversity Guidelines – Protecting and managing biodiversity on RTA projects
- Standards Australia. 2007. AS4373:2007: Pruning of Amenity Trees.
- Standards Australia. 2009. AS4970: 2009: Protection of Trees on Development Sites.
- Sydney Metro Airports. 2019. Bankstown Airport Master Plan. November 2019.
- Transport for NSW. 2015. The Standard Management Procedure - Unexpected Heritage Items
- Transport for NSW. 2019. Unexpected Heritage Finds Guideline. T. f. NSW. Sydney, Government of New South Wales
- Transport for NSW. 2020. Traffic control at work sites Technical Manual: Issue 6.0.

Appendix A

Consideration of section 171(2) factors and matters of National Environmental Significance and Commonwealth land

Section 171(2) checklist

In addition to the requirements of the Is an EIS required? (1995/1996) guideline and the *Roads and Related Facilities EIS Guideline* (DUAP, 1996) as detailed in the addendum REF, the following factors, listed in section 171(2) of the Environmental Planning and Assessment Regulation 2021, have also been considered to assess the likely impacts of the proposed modification on the natural and built environment.

Factor	Impact
<p>Any environmental impact on a community?</p> <p>The proposed modification would result in the following environmental impacts on the community:</p> <ul style="list-style-type: none"> removal of native and non-native vegetation during construction minor temporary traffic and pedestrian impacts temporary amenity impacts. 	<p>Long-term positive impacts</p> <p>Short term moderate negative impacts</p>
<p>Any transformation of a locality?</p> <p>The proposed modification is unlikely to result in any transformation of the locality as it would not change the current land use of properties adjoining the project footprint.</p>	<p>Nil</p>
<p>Any environmental impact on the ecosystems of the locality?</p> <p>The proposed modification would involve the removal of 0.13 hectares of additional vegetation north of Tower Road. Safeguards and mitigation measures have been proposed in Section 7.2, to manage and minimise these impacts where possible.</p>	<p>Long-term minor negative impact</p>
<p>Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?</p> <p>The proposed modification may result in a temporary reduction in the aesthetic and recreational quality of the area during the construction phase in the form of visual impacts. The proposed modification may also result in temporary reduction of environmental quality due to vegetation clearing during construction.</p> <p>Safeguards and mitigation measures have been proposed to manage and minimise these impacts where possible.</p>	<p>Short-term minor negative impact</p>
<p>Any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations?</p> <p>The proposed modification would be partially located on land that forms part of the locally listed Bankstown Aerodrome heritage item. However, the area impacted has previously been developed into commercial development and has limited to no heritage value.</p>	<p>Nil</p>
<p>Any impact on the habitat of protected fauna (within the meaning of the <i>National Parks and Wildlife Act 1974</i>)?</p> <p>The proposed modification would result in the removal of 0.13 hectares of native vegetation (TEC) due to the culvert replacement. This would result in a reduction of habitat in the area of the proposed modification.</p> <p>Safeguards and mitigation measures have been proposed in section 7.2, to manage and minimise these impacts where possible</p>	<p>Long-term minor negative impact</p>
<p>Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air?</p> <p>The proposed modification may result in a potential for wildlife injury or mortality throughout the construction phase due to vehicle and equipment movements within the area of the proposed modification. However, this is not anticipated to endanger any species.</p>	<p>Short-term minor negative impacts</p>

Factor	Impact
<p>Any long-term effects on the environment?</p> <p>The proposed modification would result in loss of vegetation due to the works, however this would not result in a significant impact to the environment.</p>	<p>Long-term minor negative impact</p>
<p>Any degradation of the quality of the environment?</p> <p>Providing the mitigation measures outlined in this proposed modification are implemented (refer to Section 7.2), the proposed modification is not expected to result in noticeable degradation of the quality of the environment.</p>	<p>Nil</p>
<p>Any risk to the safety of the environment?</p> <p>By improving the road environment, the proposed modification could result in increased safety for road users.</p>	<p>Long-term major positive impact</p>
<p>Any reduction in the range of beneficial uses of the environment?</p> <p>The proposed modification would not result in a reduction in the range of beneficial uses of the environment</p>	<p>Nil</p>
<p>Any pollution of the environment?</p> <p>Providing the mitigation measures outlined in this proposed modification are implemented (refer to Section 7.2), the proposed modification is not expected to result in pollution of the environment.</p>	<p>Nil</p>
<p>Any environmental problems associated with the disposal of waste?</p> <p>The proposed modification is not likely to cause environmental problems associated with the disposal of waste. Standard mitigation measures have been proposed in Section 7.2.</p>	<p>Nil</p>
<p>Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply?</p> <p>The proposed modification is not likely to result in increased demands on resources which are or are likely to become in short supply.</p>	<p>Nil</p>
<p>Any cumulative environmental effect with other existing or likely future activities?</p> <p>Cumulative impacts could occur due to a number of other developments occurring at a similar construction timeframe as the proposed modification. This could include cumulative impacts around amenity and traffic disruption.</p> <p>During operation, in conjunction with other infrastructure projects along Henry Lawson Drive, would result in cumulative positive traffic impacts.</p>	<p>Short-term minor negative impact</p> <p>Long-term minor positive impact</p>
<p>Any impact on coastal processes and coastal hazards, including those under projected climate change conditions?</p> <p>The proposed modification would not impact on coastal processes or hazards, including those under projected climate change conditions.</p>	<p>Nil</p>
<p>Applicable local strategic planning statements, regional strategic plans or district strategic plans made under the Act, Division 3.1.</p>	<p>The Bankstown Local Environmental Plan 2016 has been addressed in Section 4.1.2 of this addendum REF. The proposed modification positively supports the overall project and these works are consistent with the REF. Additional strategic planning statements that are considered to the extent of which the</p>

Factor	Impact
	<p>proposed modification interacts with the plans and polices and positively support includes the Bankstown Airport Master Plan addressed in Section 4.3.3 of this addendum REF. Additional strategic planning statements include those addressed in Section 2.2 of the project REF</p>
Other relevant environmental factors	<p>In considering the potential impacts of this proposed modification all relevant environmental factors have been considered, refer to Chapter 6 of this assessment.</p>

Matters of National Environmental Significance and Commonwealth land

Under the environmental assessment provisions of the EPBC Act, the following matters of national environmental significance and impacts on Commonwealth land are required to be considered to assist in determining whether the proposed modification should be referred to the Australian Government Department of Climate Change, Energy, the Environment and Water.

Under the EPBC Act strategic assessment approval a referral is not required for proposed road actions that may affect nationally listed threatened species, populations, endangered ecological communities and migratory species. Impacts on these matters are assessed in detail as part of this addendum REF in accordance with Australian Government significant impact criteria and taking into account relevant guidelines and policies.

Factor	Impact
Any impact on a World Heritage property?	Nil
Any impact on a National Heritage place?	Nil
Any impact on a wetland of international importance?	Nil
Any impact on a listed threatened species or communities? The proposed modifications would result in 0.13 hectares removal of the BC Act listed vegetation community: PCT 835: Forest Red Gum-Rough barked Apple grassy Woodland on Alluvial Flats of the Cumberland Plain, Sydney Basin Bioregion. An assessment of these impacts is identified in Section 6.2 of the addendum REF.	Minor direct impacts may occur for listed threatened species and threatened ecological communities.
Any impacts on listed migratory species?	Nil
Any impact on a Commonwealth marine area?	Nil
Does the proposed modification involve a nuclear action (including uranium mining)?	Nil
Additionally, any impact (direct or indirect) on Commonwealth land? The proposed modification would directly impact Bankstown Airport Limited (Commonwealth) land however these impacts are minor noting the current state of the land.	Minor direct impacts may occur on Commonwealth land

Appendix B

Statutory consultation checklists

Transport and Infrastructure SEPP 2021

Certain development types

Development type	Description	Yes / No	If 'yes' consult with	SEPP (Transport and Infrastructure) section
Car park	Does the project include a car park intended for the use by commuters using regular bus services?	No		Section 2.110
Bus depots	Does the project propose a bus depot?	No		Section 2.110
Permanent road maintenance depot and associated infrastructure	Does the project propose a permanent road maintenance depot or associated infrastructure such as garages, sheds, tool houses, storage yards, training facilities and workers' amenities?	No		Section 2.110

Development within the Coastal Zone

Issue	Description	Yes / No / N/A	If 'yes' consult with	SEPP (Transport and Infrastructure) section
Development with impacts on certain land within the coastal zone	Is the proposal within a coastal vulnerability area and is inconsistent with a certified coastal management program applying to that land?	No		Section 2.14

Note: See interactive map [Coastal management - \(nsw.gov.au\)](https://www.nsw.gov.au/coastal-management). Note the coastal vulnerability area has not yet been mapped.

Note: a certified coastal zone management plan is taken to be a certified coastal management program.

Council related infrastructure or services

Development type	Potential impact	Yes / No	If 'yes' consult with the relevant local council(s).	SEPP (Transport and Infrastructure) section
Stormwater	Are the works likely to have a substantial impact on the stormwater management services which are provided by council?	No		Section 2.10 (1)(a)
Traffic	Are the works likely to generate traffic to an extent that will strain the capacity of the existing road system in a local government area?	No		Section 2.10 (1)(b)
Sewerage system	Will the works involve connection to a council owned sewerage system? If so, will this connection have a substantial impact on the capacity of any part of the system?	No		Section 2.10 (1)(c)
Water usage	Will the works involve connection to a council owned water supply system? If so, will this require the use of a substantial volume of water?	No		Section 2.10 (1)(d)
Temporary structures	Will the works involve the installation of a temporary structure on, or the enclosing of, a public place which is under local council management or control? If so, will this cause more than a minor or inconsequential disruption to pedestrian or vehicular flow?	No		Section 2.10 (1)(e)
Road and footpath excavation	Will the works involve more than minor or inconsequential excavation of a road or adjacent footpath for which council is the roads authority and responsible for maintenance?	No		Section 2.10 (1)(f)

Local heritage items

Development type	Potential impact	Yes / No	If 'yes' consult with the relevant local council(s).	SEPP (Transport and Infrastructure) section
Local heritage	<p>Is there is a local heritage item (that is not also a State heritage item) or a heritage conservation area in the study area for the works?</p> <p>If yes, does a heritage assessment indicate that the potential impacts to the heritage significance of the item/area are more than minor or inconsequential?</p>	No	The Milperra Drain Bridge (Henry Lawson Drive) has been identified as having potential local heritage significance with a more than minor or inconsequential impact (refer Appendix D). As the item is owned and managed by TfNSW and is not an asset of Council, SEPP (Transport and Infrastructure) consultation is	Section 2.11

Development type	Potential impact	Yes / No	If 'yes' consult with the relevant local council(s).	SEPP (Transport and Infrastructure) section
			deemed not appropriate.	

Flood liable land

Development type	Potential impact	Yes / No	If 'yes' consult with	SEPP (Transport and Infrastructure) section
Flood liable land	Are the works located on flood liable land? If so, will the works change flood patterns to more than a minor extent?	No		Section 2.12
Flood liable land	Are the works located on flood liable land? (to any extent). If so, do the works comprise more than minor alterations or additions to, or the demolition of, a building, emergency works or routine maintenance	No, proposed modifications are minor compared to the project REF. Consultation was undertaken for the project REF		Section 2.13

Note: Flood liable land means land that is susceptible to flooding by the probable maximum flood event, identified in accordance with the principles set out in the manual entitled Floodplain Development Manual: the management of flood liable land published by the New South Wales Government.

Public authorities other than councils

Development type	Potential impact	Yes / No	If 'yes' consult with the relevant local council(s).	SEPP (Transport and Infrastructure) section
National parks and reserves	Are the works adjacent to a national park or nature reserve, or other area reserved under the <i>National Parks and Wildlife Act 1974</i> , or on land acquired under that Act?	No	DPE	Section 2.15 (2)(a)
National parks and reserves	Are the works on land in Zone E1 National Parks and Nature Reserves or in a land use zone equivalent to that zone?	No	DPE	Section 2.15 (2)(b)
Aquatic reserves and marine parks	Are the works adjacent to an aquatic reserve or a marine park declared under the <i>Marine Estate Management Act 2014</i> ?	No	Department of Industry	Section 2.15
Sydney Harbour foreshore	Are the works in the Sydney Harbour Foreshore Area as defined by the <i>Sydney Harbour Foreshore Authority Act 1998</i> ?	No	Sydney Harbour Foreshore Authority	Section 2.15
Bush fire prone land	Are the works for the purpose of residential development, an educational establishment, a health services facility, a correctional centre or group home in bush fire prone land?	No	Rural Fire Service	Section 2.15

Development type	Potential impact	Yes / No	If 'yes' consult with the relevant local council(s).	SEPP (Transport and Infrastructure) section
Artificial light	Would the works increase the amount of artificial light in the night sky and that is on land within the dark sky region as identified on the dark sky region map? (Note: the dark sky region is within 200 kilometres of the Siding Spring Observatory)	No	Director of the Siding Spring Observatory	Section 2.15 (2)(d)
Defence communications buffer land	Are the works on buffer land around the defence communications facility near Morundah? (Note: refer to Defence Communications Facility Buffer Map referred to in section 5.15 of Lockhart LEP 2012, Narrandera LEP 2013 and Urana LEP 2011).	No	Secretary of the Commonwealth Department of Defence	Section 2.15 (2)(e)
Mine subsidence land	Are the works on land in a mine subsidence district within the meaning of the <i>Mine Subsidence Compensation Act 1961</i> ?	No	Mine Subsidence Board	Section 2.15 (2)(f)

Appendix C

Assessment of whether the proposal is a 'major airport development'

	Development / impact type	Relevant	Comment
Airports Act s.89(1) Meaning of major airport development			
For the purposes of this Act, a major airport development is a development that is carried out at an airport site and that consists of:			
(a)	constructing a new runway; or	No	The proposal does not involve constructing a new runway.
(b)	extending the length of a runway; or	No	The proposal would not extend the length of a runway.
(ba)	altering a runway (other than in the course of maintenance works) in any way that significantly changes: (i) flight paths; or (ii) the patterns or levels of aircraft noise; or	No	The proposal would not result in the altering of a runway.
(c)	constructing a new building wholly or principally for use as a passenger terminal, where the building's gross floor space is greater than 500 square metres; or	No	The proposal does not involve construction of any buildings for use as a passenger terminal.
(d)	extending a building that is wholly or principally for use as a passenger terminal, where the extension increases the building's gross floor space by more than 10%; or	No	The proposal does not involve extension of any passenger terminals.
(e)	constructing a new building, where: (i) the building is not wholly or principally for use as a passenger terminal; and (ii) the cost of construction exceeds the threshold amount (a) \$25 million; or (b) if an amount is determined in an instrument under subsection (10) and is in effect in accordance with subsection (11) – that amount; or	No	No new buildings would be constructed as part of the proposal.
(f)	constructing a new taxiway, where: (i) the construction significantly increases the capacity of the airport to handle movements of passengers, freight or aircraft; and (ii) the cost of construction exceeds \$25 million; or (b) if an amount is determined in an instrument under subsection (10) and is in effect in accordance with subsection (11) – that amount; or	No	The proposal does not involve constructing a new taxiway.
(g)	extending a taxiway, where: (i) the extension significantly increases the capacity of the airport to handle movements of passengers, freight or aircraft; and (ii) the cost of construction exceeds \$25 million; or (b) if an amount is determined in an instrument under subsection (10) and is in effect in accordance with subsection (11) – that amount; or	No	The proposal does not involve extending a taxiway.
(h)	constructing a new road or new vehicular access facility, where: (i) the construction significantly increases the capacity of the airport to handle movements of passengers, freight or aircraft; and (ii) the cost of construction exceeds \$25 million; or (b) if an amount is determined in an instrument under subsection (10) and is in effect in accordance with subsection (11) – that amount; or	No	The proposal does not involve the construction of a new road or new vehicular access facility, except to replace the existing access to the Aldi commercial premises and to tie into the Tower Road upgrade. This would not significantly increase the capacity of the airport to handle movements of passengers, freight or aircraft.
(j)	extending a road or vehicular access facility, where: (i) the extension significantly increases the capacity of the airport to handle movements of passengers,	No	The proposal would not involve extending a road or vehicular access facility. Works at Tower Road would seek to widen the Tower Road / Henry Lawson Drive intersection to tie into

	Development / impact type	Relevant	Comment
	freight or aircraft; and (ii) the cost of construction exceeds \$25 million; or (b)if an amount is determined in an instrument under subsection (10) and is in effect in accordance with subsection (11) – that amount; or		widening works on Tower Road undertaken by BAL. However, this would not significantly increase the capacity of the airport to handle movements of passengers, freight or aircraft.
(k)	constructing a new railway or new rail handling facility, where: (i) the construction significantly increases the capacity of the airport to handle movements of passengers, freight or aircraft; and (ii) the cost of construction exceeds \$25 million; or (b)if an amount is determined in an instrument under subsection (10) and is in effect in accordance with subsection (11) – that amount; or	No	The proposal does not involve constructing a new railway or a rail handling facility.
(l)	extending a railway or rail handling facility, where: (i) the extension significantly increases the capacity of the airport to handle movements of passengers, freight or aircraft; and (ii) the cost of construction exceeds \$25 million; or (b)if an amount is determined in an instrument under subsection (10) and is in effect in accordance with subsection (11) – that amount; or	No	The proposal does not involve extending a railway or a rail handling facility.
(m)	a development of a kind that is likely to have significant environmental or ecological impact; or	No	The environmental assessment carried out in the REF has confirmed that the proposal would not have a significant environmental or ecological impact during construction or operation as additional vegetation clearance is minor (refer to Section 6.2.3).
(n)	a development which affects an area identified as environmentally significant in the environment strategy; or	No	The proposal would not affect any areas identified as environmentally significant on Bankstown Airport land as identified in the Bankstown Airport Environment Strategy. Investigations undertaken for the Henry Lawson Drive Stage 1A project also did not identify any features on airport land that may be considered environmentally sensitive.
(na)	a development of a kind that is likely to have a significant impact on the local or regional community; or	No	Socio-economic impacts associated with the proposal have been assessed in Section 6.4. The proposal would not have a significant impact on the local or regional community. Further discussion of impacts as per the ‘Significant Impact on the Local or Regional Community Guide’ is detailed in the table below.
(nb)	a development in relation to which the Minister has given an approval under section 89A	No	The Minister has not given approval to the proposal under section 89A of the Airports Act.
(o)	a development of a kind specified in the regulations	No	This proposal is not a development of a kind specified in the regulations for which a major development plan would need to be prepared.

Airports Act 1996 – Sect 89, item (4)

	Development / impact type	Relevant	Comment
(4)	The Minister may determine in writing that specified developments that are proposed to be carried out at an airport site together constitute a major airport development if: (a) Each individual development is : (i) covered by subparagraph (1)(e)(i), (f)(i), (g)(i), (h)(i), (j)(i), (k)(i) or (l)(i); but (ii) not covered by subparagraph (1)(e)(ii), (f)(ii), (g)(ii),(h)(ii), (j)(ii), (k)(ii) or (l)(ii); and (b) the developments are: (i) consecutive or concurrent projects; or (ii) extensions to existing buildings.	No	The proposal does not involve multiple specified developments. Furthermore, the proposal does not meet criteria specified in (1)(e)(i), (f)(i), (g)(i), (h)(i), (j)(i), (k)(i) or (l)(i), as the proposal does not include constructing a new building, and its purpose is not to increase the capacity of the airport. Rather its purpose is to upgrade existing access points to Henry Lawson Drive.
Significant Impact on Local/ Regional Community Guide - January 2012			
Consideration of possible community impacts:			
(a)	noise	No	The construction and operational noise assessment confirmed that the impact of the proposal is not significant (refer to Section 6.5).
(b)	odour	No	The proposal would not generate odour.
(c)	dust or other physical intrusions	No	The air quality impact assessment (refer to Section 6.5) and impact to airport operations assessment (Section 6.13.3.2 of the project REF) have found that the dust generated during construction of the proposal and the temporary physical intrusion into the protected airspace as a result of construction are not significant.
(d)	noticeable traffic impacts such as increased traffic congestion at certain times or an increase in heavy vehicle traffic	No	The proposal would not have a significant impact on traffic flows during construction with the implementation of appropriate traffic control measures and by maintaining through traffic or identifying detours during peak periods. Furthermore, the operation of the proposal would improve traffic flows, network performance and reduce travel times within the proposal area (refer to Section 6.1).
(e)	impacts on public transport linkages or services	No	The proposal would not affect public transport linkages or services.
(f)	commercial impacts affecting the viability of business centres in the surrounding areas	No	The proposal would not reduce the viability of businesses in the surrounding areas (refer to Section 6.4). While a new access from Henry Lawson Drive would be constructed to the Aldi supermarket and fast food restaurants, access to these premises would be maintained via Starkie Drive.
(g)	lighting impacts on residential areas or other businesses	No	The proposal would not affect lighting on any residential houses or businesses. Street lighting on Tower Road and the Aldi supermarket access would be as per existing. Lighting for the compound site would be temporary during construction and would not extend to premises nearby.
(h)	hazardous materials or dangerous goods	No	The proposal would not generate any hazardous materials or dangerous goods. Material storage and stockpiling within ancillary sites are detailed in

	Development / impact type	Relevant	Comment
			mitigation measures provided in Section 7.
(i)	impacts on implementation of local and regional planning schemes, including land use and transport planning	No	The proposal has been reviewed against the Bankstown Local Environmental Plan 2015 and Bankstown Airport Master Plan objectives (refer to Section 4.1.2 and Section 4.3.3). The review has found that the proposal is consistent with the objectives of the zones that it is located within.
(j)	impacts on the safety, security or amenity of local communities	No	The proposal would not impact on the safety, security or amenity of the local communities.
(k)	impediments to emergency planning and response access or services	No	The proposal would not have a significant impact to emergency planning and response access or services during construction with the implementation of appropriate traffic control measures. In addition, it is noted the important role that Bankstown Airport holds in terms of emergency justice and medical services. Emergency access would be maintained at the Tower Road / Henry Lawson Drive intersection during construction.
Significant Impact on Local/ Regional Community Guide - January 2012			
Airport lessee companies should ask the following questions:			
(l)	Is the type of development proposed of known concern to the community or government?	No	The proposal is not of known concern to the community or government.
(m)	Is the proposed development in conflict with planning schemes for the local and regional communities surrounding the airport?	No	The proposal is aligned with the Bankstown Airport Masterplan with a strategic vision to expand upon the role as a major economic and employment hub. In addition to this the proposal is consistent with the Bankstown Local Environment Plan 2015 (refer to section 4.1.2), the South District Plan (refer to section 2.2.8 of the project REF) and the Canterbury Bankstown Local Strategic Planning Statement 'Connective City 2036' (refer to section 2.2.9 of the project REF).
(n)	Have similar types of development raised substantial community concerns in the past?	No	The proposal which is similar to other types of development has not raised substantial community concerns in the past.
(o)	Are there any other potential community impacts?	No	Other potential community impacts are addressed elsewhere in this table.

Appendix D

Non-Aboriginal Heritage memo

Appendix E

Consistency assessment for biodiversity



© Transport for New South Wales

Copyright: The concepts and information contained in this document are the property of Transport for NSW. Use or copying of this document in whole or in part without the written permission of Transport for NSW constitutes an infringement of copyright.