Internal Memo



TO: Executive Manager Project Management Office

CC: Planning Advisor

FROM: Grant Mansfield

DATE: 2 April 2024

SUBJECT: Review of Environmental Factors – Georgetown Local Centre

Georgetown Local Centre at Georgetown is subject to Part 5 of *Environmental Planning and Assessment Act 1979*, and therefore requires the preparation of a Review of Environmental Factors (REF). The attached project REF has been prepared by SLR dated 18 January 2024. I certify that to the best of my knowledge, the attached REF:

- accurately describes the proposed project works
- has been prepared by suitably qualified and competent people
- meets the requirements of section 5.5 and 5.7 and Part 5 of the *Environmental Planning and Assessment Act 1979*, and section 171 of the *Environmental Planning and Assessment Regulation 2021*.

Grant Mansfield 2/4/24 **Project Manager** Name Signature Date

Senior Project ManagerDavid Grejsen4/4/2024/ CoordinatorNameSignatureDate

Should you have further questions regarding the determination of the project please contact Grant Mansfield on the

Grant Mansfield PROJECT MANAGER

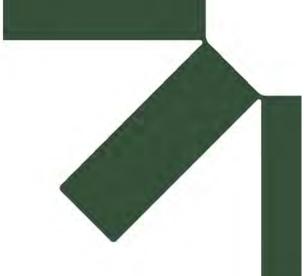
Delegated Officer Determination of REF

Under delegated authority, as City of Newcastle's representative as a determining authority under Part 5 of the *Environmental Planning and Assessment Act 1979*, I determine the proposed Georgetown Local Centre Renewal **will not** significantly impact the environment, and the proposal can proceed subject to the mitigation measures outlined in the attached REF and the conditions of any relevant approvals, licences or permits.

Patrick Burgess Name



8/4/2024 Date





Georgetown Local Centre Upgrade

Review of Environmental Factors

City of Newcastle

12 Stewart Avenue, Newcastle West 2302

Prepared by:

SLR Consulting Australia

10 Kings Road, New Lambton NSW 2305, Australia

SLR Project No.: 630.031306.00001

26 March 2024

Revision: 1.1

26 March 2024 SLR Project No.: 630.031306.00001

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
V0.1	18 December 2023	Jessica Keegan	Rob Dwyer	Rob Dwyer
V0.2	18 January 2024	Jessica Keegan	Rob Dwyer	Rob Dwyer
V1.0	18 March 2024	Jessica Keegan	Rob Dwyer	Rob Dwyer
V1.1	26 March 2024	Jessica Keegan	Rob Dwyer	Rob Dwyer



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Executive Summary

This Review of Environmental Factors (REF) has been prepared in support of upgrade work to Georgetown Local Centre as part of the Local Centres Program in the Newcastle local government area (LGA).

A new plaza, wider footpaths, street trees and safety improvements are among the improvements proposed under a recently exhibited draft Public Domain Plan for Georgetown, which has been developed by City of Newcastle following early community consultation.

The upgrade and the activity subject of this REF would reinforce the existing 40km/h zone to reduce driver speeds and make it easier for residents to safely navigate the area on foot. Works will include installation of new pedestrian refuges along Georgetown Road and a new public plaza is proposed at the intersection of Moate Street and Georgetown Road. The public plaza would create an attractive destination to support the shopping precinct while also facilitating safe cycle access between Asher Street and Parkview Street.

Various minor environmental impacts of the activity have been identified in this REF and these are generally temporary in nature. Based upon the information provided in this REF, there are no long-term adverse effects created by carrying out the activity. Construction impacts will be minor and minimised through appropriate mitigation and management.

The REF examined and considered all relevant Commonwealth, NSW and local legislation and policies, along all matters affecting or likely to affect the environment by reason of the proposed activity. The proposed activity as described in the REF best meets the project objectives.

This REF was prepared in accordance with Section 5.5 and 5.10(a) of the EP&A Act. It has concluded that the proposed activity is unlikely to significantly affect the environment and hence an EIS is not required to be prepared under section 5.7 of the EP&A Act. The proposed activity is also unlikely to affect Commonwealth land or have an impact on any MNES.

The proposed activity is unlikely to present a significant risk of harm to the environment and approval would be in the public interest.



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Appendices

Appendix A Concept Plans

Appendix B Area Photos

Appendix C Consideration of Section 171 and MNES Matters

Appendix D Background Searches



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ABS	Australian Bureau of Statistics
ACHA	Aboriginal cultural heritage assessment
ACHMP	Aboriginal cultural heritage assessment Aboriginal cultural heritage management plan
AHIMS	Aboriginal Heritage Information Management System
APZ	Asset Protection Zone
AUL	Auxiliary Left Lane Turn
BAL	Basic Left Turn
BAR	Basic Right Turn
BDAR	Biodiversity development assessment report
CPTED	Crime prevention through environment design
CN	City of Newcastle
DD	Due Diligence
DP	Deposited Plan
DPI	Department of Primary Industries
DPE	Department of Planning and Environment (formerly the Department of Planning, Industry and Environment, DPIE)
EEC	Endangered Ecological Community
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EPA	NSW Environment Protection Authority
EP&A Act	NSW Environmental Planning and Assessment Act 1979
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
ha	Hectares
LALC	Local Aboriginal Land Council
LEP	Local Environmental Plan
LGA	Local Government Area
MNES	Matters Of National Environmental Significance
NSW	New South Wales
NVIA	Noise And Vibration Impact Assessment
PAD	Potential Archaeological Deposit
PCT	Plant Community Type
PHA	Preliminary Hazard Analysis
PMST	Commonwealth Protected Matters Search Tool
RAPs	Registered Aboriginal Parties
RBLs	Rating Background Noise Levels
REF	Review of Environmental Factors
RFS	NSW Rural Fire Service
SIA	Social Impact Assessment
SLR	SLR Consulting Australia Pty Ltd



1.0 Introduction

1.1 Background

The activity area, Georgetown Local Centre, is located within the local government area (LGA) of Newcastle. Georgetown Local centre is located approximately 4 kilometres northwest of the Newcastle's central business district.

This review of environmental factors (REF) has been prepared to examine and take into account all matters affecting or likely to affect the environment as a result of the activities associated with the upgrade of Georgetown Local Centre.

1.2 Georgetown Local Centre Upgrade Overview

On 29 July 2021, Council endorsed the upgrade of the Georgetown Local Centre (activity area), as part of City of Newcastle's (CN) commitment to develop vibrant, safe, and active public places. The activity site upgrades are a part of the CN Local Centres Public Domain Program. In 2016 the Local Centres Program was developed to progress the full upgrade of infrastructure in Local Centres. Local Centres were ranked and prioritised according to their need for infrastructure renewal. As part of this program, CN have delivered several other upgrades to local centres within the Newcastle LGA.

The activity area is zoned E1 Local Centre and R3 Medium Density Residential under the *Newcastle Local Environmental Plan 2012* (NLEP 2012).

The objective of the Georgetown Local Centre Upgrade is to benefit both businesses and residents by:

- Improving the streetscape and accessibility, safety and convenience for pedestrians and cyclists.
- Improving traffic, visibility and safety.
- Improving infrastructure including drainage.
- Creating wider footpaths and a new plaza space.
- Providing more trees and landscaping.

Georgetown Local Centre Public Domain Planning Process Flow Chart outlines the steps associated with the planning of the upgrade. The Community has been invited to submit comment on the public exhibition of the draft plan, with submissions closing on the 8th of December 2023. The next steps are approval of the Final Georgetown Local Centre Public Domain and Travel Plan, investigations to inform civil and landscape detail design, planning for construction, community information about construction and construction.

The site context for the activity area is shown in **Figure 1**. Concept plans are contained in **Appendix A**.



Figure 1: Georgetown Local Centre Upgrade Context



Source: NSW Six Maps



1.3 Activity Area

In approval terms, the activity is classed as development without consent pursuant to Division 17, Subdivision 1, Section 2.109 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (Transport and Infrastructure SEPP), which permits development for the purpose of road or road infrastructure facilities to be undertaken by a determining authority without requiring development consent. Thus, the proposed activity will require the preparation of an REF pursuant to Part 5 of the *Environmental Planning and Assessment Act, 1979* (EP&A Act), which obliges the determining authority, being CN, to assess all matters affecting, or likely to affect, the environment by the construction of the works. This REF has been prepared for this purpose and identifies safeguards that avoid or minimise potential impacts as a result of works located in the following activity area.

The activity area extends along an approximately 330 metre section of Georgetown Road. It extends from the west of the intersection of Bowker Street through to the intersection of Cowper Street. It includes northern and southern sections of Moate Street along with a small section of Parkview Street, Asher Street and Turner Street.

The activity area is shown in Figure 2.

1.4 Location and Existing Environment

The site context and location of the activity area is shown in **Figure 1** and **Figure 2** and described in **Table 1**.

Georgetown Local Centre is located at the intersection of Georgetown Road and Moate Street, within 200m of Waratah Shopping Village which includes a K-mart and Coles Supermarket. Georgetown Road is a busy sub-arterial which intersects Turton Road (a major north-south arterial) at Waratah Shopping Village.

Table 1: Activity Area Detail

Item	Details	
LGA	City of Newcastle	
Real Property Description	Road reserve of Georgetown Road, Bowker Street, Parkview Street, Moate Street, and Turner Street.	
Activity Area	1.17 ha (approximately)	
Land Use Zoning	E1 Local Centre under NLEP 2012. R3 Medium Density Residential under NLEP 2012.	
Location	Georgetown	
Site Context and Existing Environment	The activity area is located within the local centre of Georgetown. The activity area extends approximately 330m along Georgetown Road. The aesthetic of the local centre has been identified as requiring improvement. The footpaths through the area are narrow, uneven and in poor condition. Georgetown Road connects several main roads, with vehicles traveling at increased speeds. At times there is poor visibility when entering Georgetown Road from side streets due parking near the kerb. Several of the business storefronts are aged. Due to limited vegetation and landscaping within the road reserve, there is considerable urban heat generated. Limited seating on footpaths. Bus stops within the area also require upgrading. Photographs of the activity area are provided in Appendix B .	



1.5 Author (s) Qualifications

Table 2: Authorship and Declaration

REF Authorship and Declaration			
Name	Rob Dwyer	Jessica Keegan	
Role	Co-Author / Reviewer	Co-Author	
Qualifications	 Bachelor of Science, Human and Physical Geography (University of Newcastle) Graduate Diploma of Urban and Regional Planning (University of New England) 	Management and Sustainability (university of Newcastle).	
Memberships	 Registered Planner and Fellow, Planning Institute of Australia (PIA). Accredited under the NSW Registered Environmental Assessment Practitioner (REAP) Scheme – REAP Number 7608. Member, Hunter Chapter Property Council of Australia (PCA). 		
Signature			
Name	Rob Dwyer	Jessica Keegan	
Date	26-03-2024	26-03-2024	

A declaration by the author(s) regarding the preparation of this REF and whether an environmental impact statement (EIS) is, or is not required, is contained in **Section 9**.





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ACTIVITY AREA

2.0 Requirement for Project and Options Considered

2.1 Strategic Need for the Proposed Activity

CN are committed, as part of the Local Centres Public Domain Program, to completing upgrades of local and neighbourhood centres across the Newcastle LGA.

In 2016 the Local Centres Program was developed to progress the full upgrade of infrastructure in Local Centres. The aim is to enhance the quality of life for residents and stimulate economic growth in these areas. The process of ranking and prioritising local centres involved evaluating various factors such as population growth, economic development, and the condition of existing infrastructure.

The high-level objectives of the Local Centres Program are as follows.

- Provide a strategic and equitable city-wide approach to infrastructure renewal.
- Ensure renewal works are co-ordinated within local areas for a holistic approach.
- Achieve sustainable outcomes and assist in the revitalisation of local centres.

CN's four-year Delivery Program (2018-22) contains objective 6.1.2.1 'Continue to deliver the Local Centres Public Domain Program to foster new growth in local centres'.

The Newcastle Local Planning Strategy 2015 includes the following statement regarding the importance of Local Centres:

'commercial centres play an important role serving a more holistic function than just employment. They provide for the retail, entertainment, recreational, community and social needs of the community...'

CN plans to introduce more street trees and landscaping throughout the activity area to improve the natural environment and the look and feel of the area. This was expected to reduce heat with increased shade.

Local Centre renewal projects align closely with the following objectives in the Newcastle LGA Community Strategic Plan 2040.

A major component of the Local Centres program is infrastructure improvements, including drainage, road, footpath, lighting, landscape and transport (bus stop) infrastructure. CN also plans to partner with businesses to beautify the local shop fronts through a future Façade Improvement Scheme.

The proposed activity will generally consist of:

- Site preparation.
- Site establishment.
- Vegetation clearing and re-vegetation (where required).
- Road works.
- Drainage infrastructure.
- Finishing works and commissioning.

These activities are further detailed in Section 3.0.



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2.2 Project Objectives

The primary objective of the project is to deliver the upgrade of infrastructure, stimulate economic growth and improve the liveability of Georgetown Local Centre.

The objectives of the proposed activity generally include the following.

- Maximise pedestrian and cycle accessibility and connectivity.
- Maximise safety for pedestrians, cyclists and vehicles.
 Maximise human comfort (eg through provision of shade, seating, buffer from traffic, water bubbler etc)
- Maximise new public open space(s) where people can gather for outdoor dining and small events.
- Accommodate buses including a relocated bus zone eastbound.
- Accommodate and retain driveways and access points to existing buildings.
- Accommodate the proposed footprint, driveways and access points of new developments and integrate them into the public domain layout.
- Maximise environmental benefits including new trees and landscaping.
- Retain existing trees where possible.
- Maximise stormwater infiltration and cleaning.
- Minimise loss of on-street parking note on-street parking provision is secondary to achieving pedestrian, cycle and open space objectives.
- Maximises safety and crime prevention through environment design (CPTED).

2.3 Alternatives

There were two other options considered.

Alternative option 1: The first alternative option is to upgrade small elements along Georgetown Road in a 'piece meal', isolated approach. It is likely that this option would bring an increased cumulative construction period, increased costs and increased disruption and impacts on the community.

Alternative option 2:

The second alternative option considered was a 'do-nothing' approach. This option is also considered to be sub-optimal as it does not address the current issues in the short or long term. If a cost-benefit analysis was applied to this approach, the economic and environmental losses to the local community would be significant, especially with impacts of aging infrastructure.



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3.0 Description of Proposed

3.1 Introduction

The proposed activity includes the following.

- Installation of flush entry treatment for vehicles with kerb island on the western side of the Georgetown Road / Bowker Street intersection.
- Upgrading of the existing bus stop opposite 74 Georgetown Road.
- Reconstruction of an existing vehicle threshold at the Bowker Street intersection and inclusion of rain gardens.
- Relocated bus stop near the intersection with Parkview Street.
- Continuous footpath across Parkview Street with no vehicle entry into Parkview Street from Georgetown Road.
- Installation of rain gardens at the Georgetown Road / Moate Street intersection.
- Creation of a landscaped public space at Moate Street (southern side of Georgetown Road) with free flow for cyclists.
- Moate Street (southern side), installation of cul-de-sac conditions with no vehicle access to Georgetown Road and no vehicle access from Moate Street into Asher Street.
- Installation of raised road hump and flush entry treatment in Moate Street (northern side).
- Continuous footpath along Georgetown Road with no vehicle entry from Georgetown Road into Turner Street.
- Installation of pedestrian refuge on Georgetown Road opposite 32 / 34 Georgetown Road.
- Installation of flush entry treatment for vehicles with kerb island at western end of the intersection of Georgetown Road with Cowper Street.
- Stormwater/ drainage renewal where required.
- Kerb extension with signposted 40km/h zone entry.
- Establishment of a special parking zone opposite existing shops.
- 40km/h zone gateway with textured/ coloured asphalt.
- Location of fully accessible electric vehicle charging station (subject to investigation)
- Widening of footpath in front of shops, including rectification of steep crossfall grades between 58 and 66 Georgetown Road.
- Comprehensive landscaping.

Concept Plans are contained in Appendix A.

3.2 Outline of Construction Works

Construction works will be completed by CN civil construction team with support from contractors. Works are scheduled to commence in May 2024 with a projected completion date of May 2026.



The activity area runs along an approximate 330 m length of Georgetown Road including intersection work giving an activity area of approximately 1.17 ha.

The proposed activity will generally include the following stages and elements.

3.2.1 Site Preparation

- Pre-construction identification and compound site verification.
- Utility location investigations.
- Removal of redundant utilities and relocation of existing ones.

3.2.2 Site Establishment

- Installation of erosion and sedimentation controls.
- Closure of the Moate Street / Georgetown Road intersection.
- Establishment of a compound, laydown / stockpile and safe park area in the vicinity of the Moate Street / Georgetown Road intersection (front of Lot 11, DP 1286353, refer to **Figure 2).**
- Utilities services works.
- Temporary security fencing and signage.
- Temporary pedestrian fencing and signage.
- Temporary traffic control measures, signage and lighting.
- Property adjustment work (if required).
- One tree has been identified for removal within the proposed plaza space.

The above preparatory stages will then be followed by construction and operation of the activity.

3.3 Construction Plant and Equipment

A range of plant and equipment would be used during construction. An indicative list is provided below.

- Road sweepers
 - Asphalt pavers
- Roller/compacters/compressors.
- Excavators
- Jackhammer.

- Concrete trucks.
- Dump trucks
- Water trucks
- Excavator
- Line marking vehicles.

- Smooth drum roller.
- General handheld power tools
- Scrapers

3.4 Construction Hours

Generally, construction and all deliveries will be undertaken during the following standard hours:

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



Work outside of these hours (including night work if required) will occur on an as necessary basis. In these occurrences, a Noise and Vibration Management Plan outlining management and mitigation measures should be undertaken. It is essential that the immediately affected residents and businesses be notified of works prior to commencement and the method should be in accordance with the Noise and Vibration Management Plan.

3.5 Material Import / Export

Materials for road construction would need to be imported from off-site facilities (e.g., batching plant for asphalt). Sources of materials for construction would be determined during further development of the design.

The following materials would be required for construction:

- Erosion and sediment controls (e.g., coir logs, silt fencing, geofabric, sandbags).
- Earthwork materials (e.g., topsoil, gravel, sand, clean fill material, road base) and other various materials for road formation.
- Bitumen and aggregates for pavement production.
- Stabilising binders to treat the road formation and culvert bases.
- Cement and aggregates for concrete (drainage construction, pavement construction, and kerbs and guttering).
- Precast concrete elements for drainage construction and miscellaneous work.

3.6 Waste

Disposal, tracking and destination facilities of wastes will be recorded and undertaken in accordance with NSW EPA Waste Classification Guidelines.

3.7 Construction Environmental Management Plan (CEMP)

A Construction Environmental Management Plan (CEMP) will be prepared to ensure that all safeguards and management measures detailed in this REF are implemented, and that construction impacts on the locality are managed.

The CEMP will contain the following key components:

- Environmental management framework, including key contacts, roles and responsibilities, and regulatory requirements.
- Environmental incidents and non-compliance management strategy.
- Complaints management strategy.
- Environmental management commitments and responsibilities.
- Monitoring, inspections, and reporting requirements.
- Contingency Management Plan.

Environmental Management Commitments will cover (not limited to):

- Traffic and pedestrian management measures to reduce potential conflicts between pedestrian, local traffic and the arrival, unloading and departure of construction and delivery vehicles.
- Noise and Air Quality controls.
- Landscape Management



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- · Contamination and Unexpected finds protocol.
- Community Engagement strategy.
- Soil and Water Management.
- Waste Management.

The CEMP will be prepared in consideration of *Guideline for the Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources 2004).

3.8 Laydown Area, Site Access, Security - can we make sure this is depicted on the site map.

The compound and laydown area will be located at the intersection of Moate Street / Georgetown Road and Asher Street once a barricade is set up along Georgetown Road. The area will include the following.

- Road access points will be from Turton and Broadmeadow Road.
- Temporary office building and associated infrastructure such as power generator.
- Car parking area.

Materials will be transported directly from the CN works depot located at 222 Turton Road Waratah, 575m from site.

3.9 Traffic Management

Revised traffic management controls will be required. A traffic control plan will be prepared by a suitably qualified person as part of the CEMP, detailing construction movements and controls, prior to commencement of work on the site. Details within the CEMP are to ensure that compliance with AS 1742.3 Traffic Control at Worksites, WHS 2011 and *Roads Act* 1993 occurs.

3.10 Utility Adjustments

Utility works and adjustments typically include upgrades and re-configurations to communications and power. Due to the location of the activity area, it is anticipated that such adjustments to utilities will be required.



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4.0 Legislative Requirements

4.1 Environmental Planning and Assessment Act, 1979.

In NSW, the EP&A Act and the EP&A Regulation regulate development, planning and environmental impact assessment requirements. Part 5 of the EP&A Act regulates 'activities' identified as development without consent. Development that is unlikely to have a significant environmental impact requires an REF to be supplied for assessment and approval by the determining authority. In the case of this activity CN is the proponent and the determining authority.

Under Section 5.5 of the EP&A Act, CN is required to examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment.

Clause 171 of the EP&A Regulation identifies factors to be considered by CN in order to assess the likely impacts of the project on the natural and built environment. The Section 171 factors are considered in **Appendix C**.

4.2 Environmental Biodiversity Conservation Act 1999

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) is administered by the Commonwealth Department of Agriculture, Water and the Environment (DAWE), providing a legal framework to protect and manage nationally important flora, fauna, ecological communities and heritage places defined as matters of national environmental significance. An action that "has, will have or is likely to have a significant impact on a matter of national environmental significance" may not be undertaken without prior approval of the Commonwealth Minister, as provided under Part 9 of the EPBC Act.

A Protected Matters Search was undertaken on the DAWE website dated 14 December 2023 to ascertain if any matters of national environmental significance protected by the EPBC Act had been identified as occurring in or relating to within 10 km of the development site. The search returned 8 threatened ecological communities, 95 threatened species, and 77 migratory species within 10 km of the site. 1 Wetland of International Importance and 1 Commonwealth Marine Area is located within 10 km of the site.

The REF has assessed the above matters with respect to the proposed activity will not result in a significant impact on any MNES, refer to **Appendix C**, and, as such, does not require a referral to the Minister for the Environment.

4.3 State Environmental Planning Policies (SEPPs)

4.3.1 State Environmental Planning Policy (Transport and Infrastructure) 2021

The proposed activity will require the preparation of an REF pursuant to Part 5 of the EP&A Act, which obliges the determining authority, being CN, to assess all matters affecting, or likely to affect, the environment by the construction of the works. This REF has been prepared for this purpose and identifies safeguards that avoid or minimise potential impacts. In approval terms, the proposed activity is classed as development without consent pursuant to Division 17, Subdivision 1, Section 2.109 of the Transport and Infrastructure SEPP, which permits development for the purpose of road or road infrastructure facilities to be undertaken by a determining authority without requiring development consent.

Section 2.109 of the Transport and Infrastructure SEPP can be found on the NSW legislation website: View - NSW legislation.



4.3.2 State Environmental Planning Policy (Resilience and Hazards) 2021

Chapter 3 of the *State Environmental Planning Policy (Resilience and Hazards) 2021 (Resilience* and Hazards SEPP 2021) stipulates that no development can be undertaken without proper investigation and appropriate action into the remediation of land, in order to improve the health of the natural and human environment. This means, consent authorities should not grant approval unless the land has been assessed for contamination, and, if it is contaminated, that the land is suitable for its proposed use (or will be suitable after remediation).

A search of the Environmental Protection Agency (EPA) Contaminated Land Record database was completed on 11th of December 2023. A site was identified in close proximity to the activity site. Refer to **Section 4.5.3** for further detail. Search results are contained in **Appendix D.**

4.3.3 State Environmental Planning Policy (Biodiversity and Conservation) 2021

Chapter 1 of *State Environmental Planning Policy (Biodiversity and Conservation) 2021* applies to the subject land. Part 2.2 sets out requirements in relation to clearing vegetation in non-rural areas. The activity will involve the removal of one Melaleuca tree species located on the corner of Moate Street and Georgetown Road. The tree will be impacted by works associated with the new pedestrian plaza. Removal of the tree will be offset by the proposed landscaping and additional tree planting throughout the Activity area.

4.4 Local Planning Policies

4.4.1 The Local Centres Public Domain Program

The activity area is a part of the Local Centres Public Domain Program which guides upgrades of local and neighbourhood centres throughout the Newcastle Local Government Area. The aims of the upgrade under the Public Domain Plan are to improve the quality of the centre, improve streetscape and access and also improve traffic and safety.

4.4.2 Local Environment Plan (Newcastle Local Environment Plan 2012)

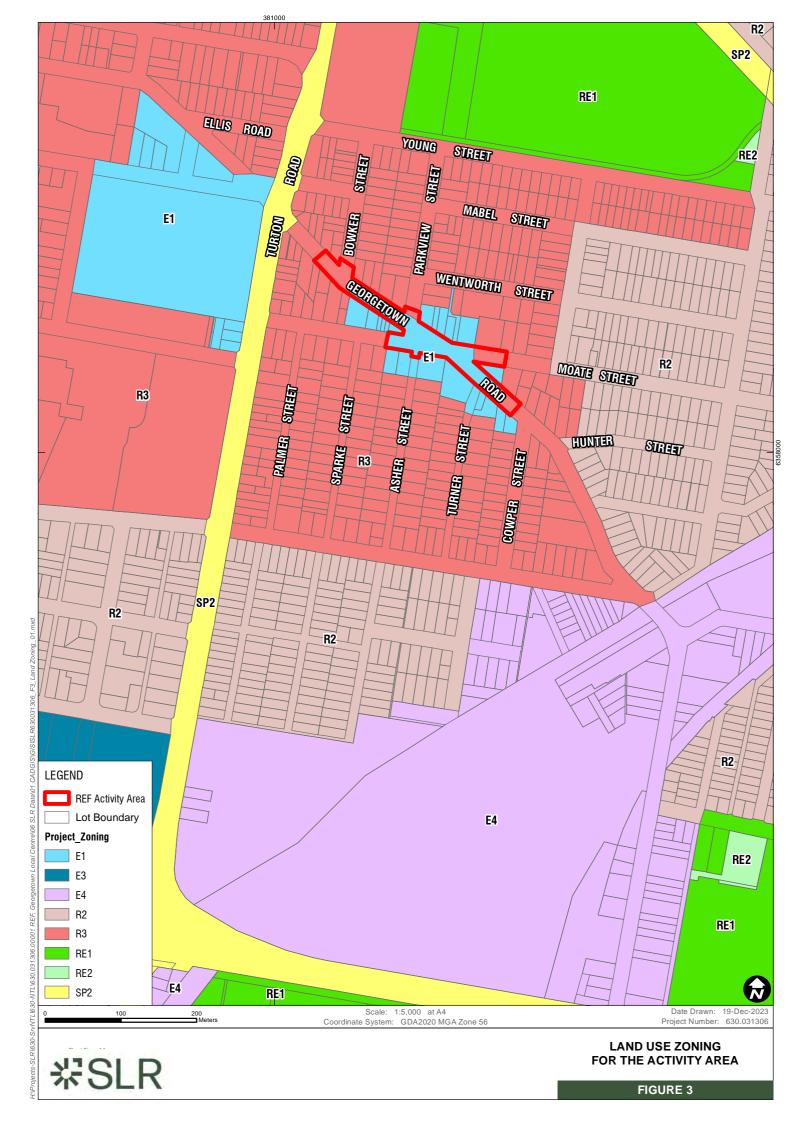
NLEP 2012 applies to the activity area and the activity area is primarily zoned E1 Local Centre as illustrated in **Figure 3**. A small section of the activity area is zoned R3 Medium Density Residential. This REF has been prepared under the provisions of Part 5 of the EP&A Act and consequently the provisions of NLEP 2012 do not apply. Nevertheless, the objectives of the of both zones have been considered as per below.

Objectives of E1 Local Centre:

- To provide a range of retail, business, entertainment and community uses that serve the needs of people who live in, work in and visit the local area.
- To encourage employment opportunities in accessible locations.
- To maximise public transport patronage and encourage walking and cycling.
- To allow for residential accommodation and other uses while maintaining active retail, business or other non-residential uses at the street level.

The activity is consistent with the above objectives for the E1 zone as it will facilitate the upgrade of road infrastructure, streetscapes, landscaping and access for the benefit of the community and businesses.





Objectives of R3 Medium Density Residential

- To provide for the housing needs of the community within a medium density residential environment.
- To provide a variety of housing types within a medium density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To allow some diversity of activities and densities if—
 - (i) the scale and height of proposed buildings is compatible with the character of the locality, and
 - (ii) there will be no significant adverse impact on the amenity of any existing nearby development.
- To encourage increased population levels in locations that will support the commercial viability of centres provided that the associated new development—
 - (i) has regard to the desired future character of residential streets, and
 - (ii) does not significantly detract from the amenity of any existing nearby development.

The activity is consistent with the above objectives for the R3 zone as it will facilitate the upgrade of road infrastructure, streetscapes, landscaping and access for the benefit of adjacent residents will in part due to the attractiveness of the upgrades attract increased population levels.

4.5 Other Legislative Requirements

4.5.1 Biodiversity Conservation Act 2016

The proposed development does not require vegetation clearing that meets the thresholds identified within *Biodiversity Conservation Act 2016 (BC Act)*. No areas within or adjoining the activity area are mapped as an area of significant Biodiversity Value from the NSW online mapping tool. The activity will not require the removal of vegetation.

4.5.2 Water Management Act 2000

The Water Management Act 2000 (WM Act) aims to provide for the sustainable management and use of State water sources. The WM Act regulates controlled activities that occur within 40 m of 'waterfront land', where 'waterfront land' means the bed of any river, lake or estuary, and the land within 40 m of the riverbanks, lake shore or estuary mean high water mark. The activity is not located within waterfront land.

4.5.3 Contaminated Land Management Act 1997

The Contaminated Land Management Act 1997 (CLM Act) establishes a process for investigating and remediating land where contamination presents a "significant risk of harm" to human health or the environment. It applies to contamination which occurred before or after its commencement.

Consideration must be given to contamination caused by past activities and potential contamination from spills and leaks in developing and managing land.

A search of the Environmental Protection Agency (EPA) Contaminated Land Record database was completed on 11th of December 2023.



Contaminated land has been located at 42 and 37-41 Georgetown Road which both previously operated as service stations. 42 Georgetown Road is currently being redeveloped. 68 Georgetown Road is contaminated, the source of contamination is not known but it currently operates as a flooring shop.

A nearby contamination site is Waratah former Gasworks, located at Turton and Georgetown Roads in Waratah. This is within approximately 150m of the boundary of the activity site area. Additional registered current contaminated sites within the City of Newcastle LGA are located in the suburbs of Hamilton North (Former Black and Decker Site, Former ELMA Site, Hamilton Gasworks), Mayfield (BHP Steel River, OneSteel (BHP)) Mayfield North (BHPB Closure site and bed sediments of the Hunter River, Former BHPB supply site) and Mayfield West (Koppers Coal Tar). Results of this search are contained in **Appendix D**.

An unexpected finds protocol will be incorporated into the construction environmental management plan (CEMP) to guide contractors, should potentially contaminated material be encountered during works.

Property and Development NSW (PDNSW) is undertaking the remediation of contaminated properties on the former Waratah Gasworks site in line with an approved Remediation Action Plan and in close consultation with residents and landowners, the EPA, the City of Newcastle and NSW Health.

4.5.4 Heritage Act 1977

The *Heritage Act 1977* (Heritage Act) provides for the protection and conservation of non-Aboriginal cultural heritage items such as buildings, works, relics and other places of historic, cultural, social, archaeological, architectural, natural and aesthetic significance. Approval must be sought under Section 60 of the Heritage Act if the proposed works are likely to impact an item of heritage significance listed on the State Heritage Register.

A search of the State Heritage register was completed on the 11th of December 2023 with no items of heritage significance identified. Results of this search are contained in **Appendix D**. No further heritage assessments are required to be completed for the activity area. This is in accordance with the Heritage Council of NSW Guidelines for Assessing Cultural Heritage Significance (DPIE, 2001).

4.5.5 National Parks and Wildlife Act 1974

Under the *National Parks and Wildlife Act 1974* (NPW Act), all Aboriginal objects and places are protected, irrespective of their level of significance or matters of land tenure. The NPW Act sets up 'strict liability' offences for harming or desecrating Aboriginal objects and Aboriginal places (this type of offence may apply even if a person is unaware that they are harming an Aboriginal object). All persons are therefore responsible for taking reasonable precautions and exercising their due diligence to ensure that their actions will not harm Aboriginal objects. A person who exercises their due diligence has a defence against prosecution if they later unknowingly harm an object.

The Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (DECCW 2010) provides guidance on how to identify activities that may harm an Aboriginal object or place, and to determine whether they should apply for consent to harm an Aboriginal object or place in the form of an Aboriginal Heritage Impact Permit (AHIP) under Section 90A of the Act. *The National Parks and Wildlife Regulation 2019* removes the need to follow the due diligence process if carrying out an activity, which is specifically defined as a 'low impact activity'.

A search of the State Heritage register was completed on the 11th of December 2023 with no items of Aboriginal Heritage significance identified.



4.5.6 Protection of the Environment Operations Act 1997

One of the aims of the *Protection of Environment Operations Act 1997* (PoEO Act) is to reduce risks to human health and prevent the degradation of the environment.

The proposed activities are not a scheduled activity pursuant to Schedule 1 of PoEO Act.

4.5.7 Roads Act 1993

The *Roads Act 1993* (Roads Act) regulates the carrying out of various activities on public roads. Section 138 of the Roads Act requires consent from the relevant road authority Transport for NSW (TfNSW), previously the Roads and Maritime Services (RMS), for the carrying out of work in, on or over a public road.

4.6 Summary

In line with the EP&A Act and relevant Commonwealth legislation, **Appendix C** (Section 171 Factors – EP&A Regulation 2021) and **Section 6**. (Environmental Assessment) of this REF provides an assessment of the environmental issues associated with the proposed activity.



5.0 Consultation

This Section discusses the consultation undertaken to date for the proposed activity and the consultation proposed for the future. The description contains the consultation strategy or approach used and the results of consulting with the community, relevant government agencies and stakeholders.

5.1 Consultation under the State Environmental Planning Policy (Transport and Infrastructure) 2021

Requirements for consultation with public authorities for such activities are set out in Part 2.2. Division 1 of the Transport and Infrastructure SEPP. Clause 2.15 of the SEPP identifies 'specified development' that should be referred to the applicable 'specified authorities'. This REF is not specified under the following conditions:

- The subject site is not land nor adjacent to land reserved under the NPW Act and therefore does not require referral to the NSW Office of Environment and Heritage (OEH) for this purpose.
- The development is not on land zoned C1 National Parks and Nature Reserves or in a land use zone equivalent to that zone, and therefore does not require referral to the NSW Office of Environment and Heritage (OEH) for this purpose.
- The proposed works do not comprise a fixed or floating structure in or over navigable waters, and consequently does not require referral to Transport for NSW under this requirement.
- The proposed works are not located within the dark sky region of NSW, and consequently do not require referral to the Director of the Observatory.
- The subject site is not on defence communications buffer land and consequently does not require referral to the Secretary of the Commonwealth Department of Defence.

5.2 Government Agency and Stakeholder Involvement

CN, as the public authority, will be executing the works in conjunction with civil/engineering contractors. All government agency engagement activities will occur as part of normal process for infrastructure projects. The activity area is not located within a mine subsidence district.

5.3 Aboriginal Community Consultation

A search was undertaken of the Aboriginal Heritage Information Management System (AHIMS) < https://www.environment.nsw.gov.au/awssapp/login.aspx on 14th December 2023 to determine if there were any registered Aboriginal sites within the activity areas (and an approximate buffer of 200m from the centre of the activity area), the search found 0 Aboriginal sites and 0 Aboriginal places in or near the activity area. Results of this search can be found at **Appendix D**. Notwithstanding this, it is recommended that the CEMP for the works include an unexpected finds protocol to be developed and implemented in the event of any potential heritage items are uncovered during excavation.

There are no potential impacts identified on Aboriginal cultural heritage that require management. It is recommended that the Aboriginal community be actively engaged with and consulted with. According to the 2021 Census data, Georgetown has an above national (3.2%) and state (3.4%) population percentage of Aboriginal and Torress Strait Islander people (3.8%).



5.4 Ongoing and Future Consultation

Concept plans to enhance the village atmosphere of Georgetown's neighbourhood shopping precinct were placed on public exhibition in November 2023 and closed on 8th December 2023. A drop-in session at the corner of Georgetown Road and Asher Street was held on Saturday 25 November between 8.30am and 10.30am.

A report on the outcomes of the public exhibition of the plans will be presented to the elected Councillors in early 2024.

CN will continue to liaise with adjacent landowners during the construction period.



6.0 Environmental Assessment

6.1 Existing Environment of the Activity Area(s)

The activity area is within the road reserve. The existing Georgetown Local Centre aesthetic is outdated and worn, with poor quality footpaths. There are safety issues due to existing road reserve design. The design of the existing road reserve allows vehicles to park close to intersections causing poor visibility. Georgetown Road connects several main roads including Turton Road, Broadmeadow Road and Clyde Street. Vehicles travel at an increased speed despite existing road calming thresholds.

The impact of urban heat is felt due to the limited number of trees and landscaping.

An apartment block is currently under construction on 42 Georgetown Road, Georgetown. Development plans are underway for two additional vacant lots.

6.2 Potential Impacts

6.2.1 Construction

Impacts generated during the construction phase of the activity may include:

- Water quality.
- Hydrology and flooding.
- Geology and contamination.
- Air quality.
- Noise.
- · Visual amenity.
- · Bushfire.
- Waste.
- Traffic and access.
- Socio-economic.
- Climate change and hazards.
- Cumulative impacts.
- Ecologically Sustainable Development (ESD).

6.2.2 Operation

The operational activities of the activity area include the public use of the road footpaths and landscape. The operational impacts are considered to be low impact and low risk. Therefore, there are no foreseen ongoing, negative impacts from the proposed activity, post construction. The activity is expected to benefit the area in providing traffic and congestion improvements into the future.

6.3 Biodiversity

This section describes the potential biodiversity impacts and mitigation measures associated with the activity. The activity will occur along the road reserve and will require the removal of one Melaleuca species tree located on the corner of Moate Street and Georgetown Road. The tree will be impacted by works associated with the new pedestrian plaza. Removal of



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the tree will be offset by the proposed landscaping and additional tree planting throughout the Activity area.

6.3.1 Existing Environment

There are no areas of significant Biodiversity Value within the activity area or adjacent to the activity site, as shown on the NSW Biodiversity Values Map and Threshold tool.

6.3.2 Construction Impacts

The activity will involve the removal of one Melaleuca tree species located on the corner of Moate Street and Georgetown Road. The tree will be impacted by works associated with the new pedestrian plaza. Removal of the tree will be offset by the proposed landscaping and additional tree planting throughout the activity area. The activity would not result in a loss of vegetation cover that would have an impact on a threatened species, ecological community or its habitat listed under the BC Act (i.e., No loss of habitat for a threatened species or ecological community). As such, it has been determined that no further investigation is required in this instance.

6.3.3 Operational Impacts

There is unlikely to be any negative impacts to biodiversity during the operational phase. The proposed plans outline an increase to the number of trees and plants within the activity site.

6.3.4 Safeguards and Management Measures

The following mitigation measures are recommended to minimise impacts associated with biodiversity during construction:

- All machinery used on site is to be clean i.e., tracks, tyres buckets and attachments
 are to be visibly free of soil or plant material to minimise the risk of introduction and
 spread of weed propagules.
- Remove any waste containing weeds and seed material from the site such that the spread of weeds is minimised.
- Dispose of all rubbish and surplus material within 24 hours of completion.
- All landscape works will be consistent with the species composition of endemic vegetation communities analogous to that which occurs in similar locations and environmental conditions. Planting will be in general accord with species listed in: NCC - Street Tree Selection Manual (nsw.gov.au).

6.4 Water Quality and Flooding

This section describes the potential water quality and flooding impacts and mitigation measures associated with the activity.

6.4.1 Existing Environment

The soil type for this area is Killingworth (ki-5). This landscape is typified by undulating to rolling hills over a parent material of sandstone and siltstone strata, which give rise to a variety of soil types ranging from shallow to moderately deep and from well to imperfectly drained.

The activity area is not located near any natural water course, with stormwater and runoff from the site draining into the local stormwater system The activity area is not located within a Flood Planning Area (FPA) according to the Council LEP Mapping Portal.



The activity does not require works by which the water table is likely to be lowered below 1m AHD.

6.4.2 Construction Impacts

Potential construction impacts would include soil erosion and groundwater contamination. Deep excavation for construction is unlikely and therefore there will be little or no impact to groundwater resources. The activity is likely to marginally increase the impervious surface area within the activity area. The upgrades aim to make improvements to the drainage infrastructure. Surface water across the activity area will be managed in accordance with Landcom's *Managing Urban Stormwater – Soils and Construction* (the Blue Book) to ensure any impacts to surface water are minimised.

6.4.3 Operational Impacts

There is unlikely to be any negative impacts to water quality, hydrology, flooding during the operational phase due to the road being sealed and serviced by Council (owned and serviced). Drainage infrastructure will be improved as part of the upgrade with the installation of rain gardens.

6.4.4 Safeguards and Management Measures

The following mitigation measures are recommended to minimise impacts associated with hydrology and flooding during construction:

- Erosion potential would be limited by managing runoff fetches and velocities, with measures such as coir logs, booms and silt fences and curtains.
- Sediment and nutrient controls, prepared in accordance with the Landcom Managing
 Urban Stormwater Soils and Construction (the Blue Book), will be implemented to
 reduce the impacts of stormwater, erosion, and sedimentation on water quality.
 Specific erosion and sediment controls are to be contained within the site CEMP. All
 erosion and sediment control measures will be established before physical activity
 begins. Control measures are to remain in place until all surfaces have been fully
 restored and stabilised.
- Sediment and erosion control devices will be inspected regularly, maintained to ensure effectiveness over the entire duration of the project, and cleaned out before 30% capacity is reached.
- Temporary stockpiles will have appropriate erosion control devices installed to control runoff and prevent sedimentation.

6.5 Geology and Contamination

This section describes the potential geology and contamination impacts and mitigation measures associated with the activity.

6.5.1 Existing Environment

The activity area is located in the vicinity of three known contaminant sites (37-41, 42 and 68 Georgetwon Road), refer to **Section 4.5.3**, however the proposed activity itself is unlikely to disturb the contamination sites due to the type of upgrades proposed, the location of the upgrades and it is unlikely that deep excavation is required.

6.5.2 Construction Impacts

Construction activities will likely have limited disturbance to the existing road base. Some disturbance could increase the risk of erosion and sediment laden runoff. These impacts will



be minimised through the implementation of the safeguards and management measures detailed in this section and **Section 6.3.3**.

The proposed upgrades are unlikely to impact upon the contamination sites identified in **Section 4.5.3**. An Unexpected Finds Protocol is to be followed in the unlikely event contamination is uncovered.

6.5.3 Operational Impacts

There is not expected to be any operational geology and contamination impacts associated with the activity area.

6.5.4 Safeguards and Management Measures

The following measures are recommended in the event that potentially contaminated soils or materials are uncovered during construction:

- An unexpected finds protocol shall be developed and implemented in the event that any potentially contaminated sand / soils or materials are uncovered during excavations.
- Treatment, handling, and disposal methods for contamination, when encountered, will be done in accordance with EPA Guidelines.
- All potentially contaminated sand/soil excavated must be stockpiled in a secure area and be assessed and classified in accordance with the Waste Classification Guidelines (EPA, 2014) before being transported from the site for disposal at an appropriately licensed waste facility.
- Site disturbance will be minimised by containing machinery access to site areas required for approved repair works.
- No chemicals, fuels, and/or waste will be stored or collected for disposal within or adjacent to drainage lines or unsealed surfaces. Nevertheless a 'spill kit' will be always kept on site for potential chemical or fuel spills.

6.6 Air Quality

This section describes the potential air quality impacts and mitigation measures associated with the activity.

6.6.1 Existing Environment

The activity area is not located within an area that typically experiences regular poor air quality.

6.6.2 Construction Impacts

Construction of the proposed activity (upgrade work) will involve some ground disturbance which will have the potential to generate dust. Dust from the activities can be adequately minimised and managed by implementing environmental air quality controls. Air quality controls are implemented to mitigate dust and any potential odour from the construction site. Due to the nature of works, air quality impacts associated with the emissions from vehicles and plant associated with the proposed activity would likely be minor.

6.6.3 Operational Impacts

There is not expected to be any operational air quality impacts associated with the activity area.



6.6.4 Safeguards and Management Measures

The following mitigation measures are recommended to minimise impacts associated with air quality during construction:

- Machinery and vehicles will not be left running or idling when not in use.
- All vehicles and machinery will be fitted with approved exhaust systems to maintain exhaust emissions within accepted standards.
- Odour or air pollutant emission complaints will be dealt with promptly and the source will be eliminated wherever practicable.
- Any loads of excavated material and loads transported to the site will be kept covered at all times during transportation and will remain covered until they are unloaded either for use at the work site, reused or disposal at an EPA licensed waste disposal facility.
- All work sites, general work areas and stockpiles will be closely monitored for dust and watered down (with clean water) or covered in the event of dry and/or windy conditions.

6.7 Noise

6.7.1 Existing Environment

The activity area is surrounded by business and residential areas. An apartment complex at 42 Georgetown Road, Georgetown is located within the activity area and is currently under construction.

6.7.2 Construction Impacts

The primary source of construction noise will be from plant and equipment associated with the works. These impacts will be short-term and would include construction equipment and medium to heavy traffic movements.

The noise generated by these vehicles, plant, and equipment would be consistent with and generally indistinguishable from other construction noise sources expected on private construction sites.

Construction noise is assessed with reference to the NSW EPA *Draft Construction Noise Guideline* (EPA, 2020). Construction noise is unlikely to have an adverse impact on residential receivers for the following reasons.

- Construction would be temporary and would be undertaken during standard hours (refer to Section 3.4).
- The nature of the plant and equipment (relatively small scale) that would be used during construction (refer to **Section 3.3**).
- There would be minimal use of high noise level equipment and "very annoying activities" such as rock hammering.

Residences immediately adjacent to the activity area may experience a greater level of noise at times due to construction activities. This will be temporary and limited to the construction period.

6.7.3 Operational Impacts

Noise during operation would be similar to noise experienced currently at the site.



6.7.4 Safeguards and Management Measures

The following mitigation measures are recommended to minimise the impact of potential construction noise from the proposed activity on residential and commercial receivers:

- All equipment used will comply with AS2436-1981 Guide to Noise Control on Construction, Maintenance and Demolition Sites.
- Work and deliveries will only occur during the following times: Monday to Friday 7am to 6pm. No construction work or deliveries will occur on weekends or public holidays.
- Regular and effective maintenance of all equipment, including vehicles moving on and off the site will be conducted.
- Plant and equipment which is used intermittently will either be shut down in the intervening periods between works or throttled down to a minimum.
- Any portable equipment with the potential to create high levels of noise (e.g., compressors, generators) will only be selected for use if it incorporates effective noise control. This equipment should be located, where practical, so that natural ground barriers are between it and the nearest potentially affected receivers.

6.8 Aboriginal Heritage

6.8.1 Existing Environment

A search was undertaken of the Aboriginal Heritage Information Management System (AHIMS) https://www.environment.nsw.gov.au/awssapp/login.aspx on 14th December 2023 to determine if there were any registered Aboriginal sites within the activity areas (and an approximate buffer of 200m from the centre of the activity area). The search found 0 Aboriginal sites and 0 Aboriginal places in or near the activity area. Results of this search can be found at **Appendix D**.

6.8.2 Construction Impacts

Based upon the desktop assessment and visual inspection carried out, the activity does not present any potential impacts on Aboriginal cultural heritage and no further Aboriginal cultural heritage consultation or investigation should be required. Notwithstanding this, it is recommended that the CEMP for the works include an unexpected finds protocol in the event of any potential Aboriginal heritage items are uncovered during excavation.

6.8.3 Operational Impacts

There is not expected to be any operational Aboriginal Heritage impacts associated with the activity.

6.8.4 Safeguards and Management Measures

The following mitigation measures should be applied throughout the duration of works.

- If suspected Aboriginal objects are identified during construction the following procedures must be followed:
 - o Immediately cease all activity at the location.
 - o Ensure no further harm occurs, secure the area.
 - Notify Environment Protection Authority's Enviro Line on 131 555, and an archaeologist.



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- Notify relevant Aboriginal parties.
- o No further action to be undertaken until Heritage NSW provides written consent.
- It is recommended that the CEMP for the works include the above unexpected finds
 protocol and it be followed in the event that any potential heritage items are
 uncovered during excavation.

6.9 Non-Aboriginal Heritage

6.9.1 Existing Environment

A search of the following registers was undertaken to identify heritage sites within the vicinity of the proposed activity area.

- NLEP 2012.
- New South Wales State Heritage Register (SHR).
- Australian Heritage Database.

There are no non-Aboriginal heritage sites within or adjacent to the activity area.

6.9.2 Construction Impacts

There will be no construction impacts as there are no non-Aboriginal heritage sites within the activity area.

6.9.3 Operational Impacts

There are not expected to be any operational heritage impacts associated with the project.

6.9.4 Safeguards and Management Measures

The following mitigation measures are recommended during construction:

• If, during the course of proposed works, cultural heritage material is uncovered, work should cease in that area immediately. The NSW Heritage Branch should be notified, and works should only recommence when an appropriate and approved management strategy has been prepared and implemented.

6.10 Visual Amenity

6.10.1 Existing Environment

The visual amenity of the activity area is characterised by commercial and residential development and road infrastructure as illustrated in **Appendix B.**

6.10.2 Construction Impacts

Temporary visual impacts will occur and include.

- Temporary fencing and signage.
- Changes in cycle and foot traffic conditions.
- Machinery presence and movements (including deliveries).

The works will be short term and once completed will result in an improved street amenity.



6.10.3 Operational Impacts

The proposed works are designed to improve the visual amenity of the activity site and have a positive operational impact.

6.10.4 Safeguards and Management Measures

The following mitigation measures are recommended during construction:

 During construction works the site shall be kept in a clean and orderly manner to reduce the visual impact to site users.

6.11 Bushfire

6.11.1 Existing Environment

The proposed activity area is not located within a zone of Bushfire Prone Land (Non-EPI) mapping as identified on the NSW Planning Portal Spatial Viewer.

6.11.2 Construction Impacts

The construction activities will not involve 'hot works', meaning that there will be no grinding, welding or other spark or flame generating activities associated with construction.

There is not expected to be any construction bushfire impacts associated with the activity.

6.11.3 Operational Impacts

There is not expected to be any operational bushfire impacts associated with the activity.

6.11.4 Safeguards and Management Measures

Due to the nature of the proposed works no specific management measures with respect to bushfire are considered necessary.

6.12 Waste

6.12.1 Construction Impacts

All wastes will be generated during the construction phase including site commission and decommission. Expected waste streams include:

- Construction waste (spoil, concrete and road materials).
- Waste oils and liquids from machinery.
- Domestic wastes generated by workers.
- Existing signage and guard railing.

Waste minimisation will be practiced throughout the proposed activity by promotion of waste segregation and correct disposal. Waste generated from the proposed activity will be managed in accordance with the CEMP and resource management hierarchy principles of the *Waste Avoidance and Resource Recovery Act 2001*.

6.12.2 Operational Impacts

There is not expected to be any operational waste impacts associated with the activity area.



6.12.3 Safeguards and Management Measures

Management of waste during the construction phase should be in accordance with the principles of the waste hierarchy as detailed in the Waste Avoidance and Resource Recovery Act 2001. Any waste generated during construction will be classified in accordance the NSW EPA Waste Classification Guidelines (2014). Waste that cannot be avoided, reused, or recycled will be classified in accordance with the Waste Classification Guidelines and disposed of at appropriately licensed facilities.

The following mitigation measures should be applied throughout the duration of the works:

- Wherever possible waste generated during site preparation and construction will be reused. Waste that cannot be avoided, re-used, or recycled will be managed in accordance with the principles of the Waste Avoidance and Resource Recovery Act 2001 and classified in accordance with the Waste Classification Guidelines and disposed of at appropriately licenced facilities.
- All waste generated during the works will be reused or removed from the work areas as soon as practicable and disposed of in accordance with the waste disposal safeguards.
- All vessels used for contaminated or hazardous waste should be sealed, labelled according to their contents, and stored within bunded areas until their removal from the work site.
- Any fuel, lubricant or hydraulic fluid spillages will be collected using absorbent material and the contaminated material disposed of at an EPA licensed waste depot.
- In the unlikely event of a pollution incident, the relevant authorities will be notified in accordance with Clause 148 of the POEO Act and remedial actions undertaken. Environmental incident response and notification procedures will be detailed in the CEMP prior to the commencement of construction.
- The work site will be left clean and free of debris and other rubbish at the end of works.
- All hazardous wastes on site will be removed and disposed in accordance with the state and national regulations and guidelines and best practice for the removal of these materials.
- Treatment, handling, and disposal methods for contaminated soils, if encountered, will be done in accordance with NSW EPA Guidelines. Contaminated soils will be disposed of at an EPA licensed waste depot.

6.13 Traffic and Transport

6.13.1 Existing Environment

The roads within the activity area are maintained by CN. All side roads connecting to Georgetown Road are two way and accessible by vehicle. There are existing bus stops.

The R4 on road cycleway runs north-south through the activity area from Asher Street to Parkway Street via an awkward dogleg along Georgetown Road. The current route of the cycleway is problematic, with traffic incidents recorded at the intersection of Parkview Street and Georgetown Road.

6.13.2 Construction Impacts

The proposed activity would result in temporary traffic and transport related impacts including:



- Changed traffic conditions as per CEMP and Traffic Management/Control Plan.
- Potential short traffic delays during construction.

The construction vehicle access routes will be from the existing street network. Access to the site by construction vehicles is proposed to be via Cowper Street.

Temporary access restrictions or diversions will be required during construction. Restriction or diversions may have temporary impacts on pedestrian and vehicle flows within the area.

Proposed access routes and construction parking will be detailed within the CEMP.

6.13.3 Operational Impacts

There is unlikely to be any negative impacts to traffic and transport during the operational phase. The activity will change existing traffic conditions however the changes will facilitate local centre improvements with respect to pedestrian and cyclist safety, movements and general improved aesthetics. The activity will provide greater cycle connectivity from Asher Street to Parkway Street.

6.13.4 Safeguards and Management Measures

The following mitigation measures should be applied throughout the duration of the works:

- A traffic control plan shall be prepared by a suitably qualified person as part of the CEMP, detailing construction movements and controls, prior to commencement of work on the site. A traffic control plan shall be prepared by a suitably qualified person as part of the CEMP, detailing construction movements and controls, prior to commencement of work on the site. Details within the CEMP are to ensure that compliance with AS 1742.3 Traffic Control at Worksites, WHS 2011 & Roads Act 1993 occurs.
- Work areas shall be bounded by fencing or barriers and appropriate signage to
 prevent pedestrian access during construction. Safe, alternative access should be
 provided for pedestrians where required.
- Where works would result in delays to traffic, where possible, they would be scheduled to occur outside of morning and afternoon peak traffic periods and the public would be notified in advanced.
- Parking for construction workers would be accommodated within the construction footprint and existing cleared areas within the nearby road reserve.
- Traffic would be managed by traffic controllers throughout construction.
- Where possible, all loading and unloading operations will be conducted within the internal construction zone to alleviate the need for lifting materials from off the street.

6.14 Amenity, Pedestrian Access and Recreational Usage

6.14.1 Existing Environment

The current amenities and pedestrian access infrastructure are outdated and in need of improvement. Recreational use is limited to cafes and a restaurant.

6.14.2 Construction impacts

Along with the required fencing and traffic control measures, there would be various items of construction plant on site as outlined in **Section 3.3**, as well as temporary stockpiles materials in designated areas.



Appropriate safety precautions would be taken during the construction of the works, such as incorporation of security fencing and construction barrier fencing and temporary traffic changes such as detours and short delays (As per Traffic Control Plan), to ensure public and worker safety. It would be a requirement of the CEMP for the construction contractor to employ or contract persons to control vehicular and pedestrian movements on adjacent roads, as required to ensure safety.

In summary, while there may be some temporary inconvenience to road users during the construction period, such inconvenience will be short term.

6.14.3 Operational Impacts

There is not expected to be any operational impacts associated with the activity. The activity will produce safer vehicular traffic flow and a more user-friendly pedestrian footpath for improved pedestrian access and safety. Shared spaces have the potential to improve recreational use.

6.14.4 Safeguards and Management Measures

The following measures are recommended to manage amenity and pedestrian access.

- Work areas shall be bounded by fencing or barriers to prevent pedestrian access during construction.
- Safe, alternative access should be provided for pedestrians where required.

6.15 Socio-Economic

6.15.1 Existing Environment

The suburb of Georgetown's socio-economic index has improved in recent years. Georgetown sets within the 5th quintile of the Socio-Economic Indexes for Areas (SEIFA), Australia, 2021.

6.15.2 Construction Impacts

There will be minor temporary impacts to the businesses within the activity area due to the presence of machinery and parking for the duration of the works, and potentially less foot traffic. The impacts will be limited in duration and will not create any long-term socio-economic issues. Any short-term impacts are likely to be significantly outweighed by long-term benefits.

6.15.3 Operational Impacts

It is anticipated that there will be an increase in foot traffic, with the design allowing for wider and safer footpaths, greenery and a shared social space. This would likely have a positive impact on social capital and social outcomes within Georgetown. These design improvements would likely benefit local businesses and local economy.

6.15.4 Safeguards and Management Measures

The following measures are recommended to limit any Socio-Economic impacts:

- Construction works will take place in accordance with hours specified in Section 3.4 which exclude 'night time' hours, thus reducing disturbance and impact.
- Traffic, pedestrian and cyclist arrangements will be established and maintained throughout the construction phase through the implementation of the Traffic Management Plan.



6.16 Climate Change and Hazards

An increase in the global concentration of greenhouse gas has led to an increase in the earth's average surface temperature and has contributed to the phenomenon of 'climate change'. The State of the Climate 2020 (CSIRO and Bureau of Meteorology 2020) report confirms that Australia's climate has warmed on average by 1.44 ± 0.24 °C since national records began in 1910, leading to an increase in the frequency of extreme heat events.

Other findings from the report indicate that in the southeast of Australia there has been a decline of around 12 per cent in April to October rainfall since the late 1990s. There has been a decrease in streamflow at the majority of streamflow gauges across southern Australia since 1975. Rainfall and streamflow have increased across parts of northern Australia since the 1970s. There has been an increase in extreme fire weather, and in the length of the fire season, across large parts of the country since the 1950s, especially in southern Australia.

Oceans around Australia are acidifying and have warmed by around 1°C since 1910, contributing to longer and more frequent marine heatwaves. Sea levels are rising around Australia, including more frequent extremes, that are increasing the risk of inundation and damage to coastal infrastructure and communities.

The NSW and ACT Regional Climate Modelling (NARCliM) is a partnership between the NSW, ACT and South Australian governments and the Climate Change Research Centre at the University of NSW. NARCliM provides high resolution climate projections at a scale that supports local decision makers.

Based on long-term (1910–2011) observations, temperatures in the Hunter Region have been increasing since about 1960, with higher temperatures experienced in recent decades.

The region is projected to continue to warm during the near future (2020–2039) and far future (2060–2079), compared to recent years (1990–2009). The warming is projected to be on average about 0.7°C in the near future, increasing to about 2°C in the far future. The number of high temperature days is projected to increase in parts of the region, with fewer potential frost risk nights anticipated.

The warming trend projected for the region is large compared to natural variability in temperature and is of a similar order to the rate of warming projected for other regions of NSW. The Hunter Valley currently experiences considerable rainfall variability across the region, seasons and from year-to-year and this variability is also reflected in the projections. However, most models agree that autumn rainfall will increase.

With the implementation of management measures identified below there are not expected to be any significant impacts associated with climate change during construction

- The use of alternative fuels and power sources for construction plant and equipment will be investigated and implemented, where appropriate.
- Recycled materials will be incorporated where possible.
- The energy efficiency and related carbon emissions will be considered in the selection of vehicle and plant equipment.

During operation, routine inspections and maintenance would be carried out to ensure any issues are identified and appropriately managed. As such, there are not expected to be any significant impacts associated with climate change during operation. The increase in greenery will have a positive impact on climate change.



6.16.1 Safeguards and Management Measures

- The use of alternative fuels and power sources for construction plant and equipment will be investigated and implemented, where appropriate.
- Recycled materials will be incorporated where possible.
- The energy efficiency and related carbon emissions will be considered in the selection of vehicle and plant equipment.
- Appropriate spill kits, advocated for use in association with fuels and chemicals are to be maintained on-site. These are to include spill booms and other methods aimed at the containment of fuels and chemicals spilled within the aquatic environment.
- Fuels and chemicals are to be stored off-site, however, if required to be stored onsite, they are to be located in a bunded area away from drainage lines.
- No refuelling is recommended within the subject site. If however, refuelling is required at the subject site, areas designated for the storage, refuelling and maintenance of plant are to be established where native vegetation has previously been cleared and at least 30 m from a waterway.
- Forecast checks of the Bureau of Meteorology site shall be undertaken daily. In the
 event that heavy rain is predicted, arrangements are to be made immediately to
 remove any plant and equipment from within the banks of the waterway prior to the
 rain event. All plant and equipment would be removed to higher ground above the 1
 in 100 year flood level.
- Any debris and spoil accumulated within the works site as a result of flooding would be removed to the designated stockpile area.
- All environmental controls would be reinstated as soon as possible following flooding.

6.17 Cumulative Impacts

This section describes the potential cumulative impacts and mitigation measures associated with the activity.

The impacts on the environment due to the construction of the proposed activity are considered to be minor. There will be a change in the type of vehicles entering the activity during construction namely construction and delivery vehicles and employee vehicles.

Cumulative impacts could occur if the construction of the proposed activity coincided with the construction of other projects particularly any that may be contemplated within adjacent land.

Three redevelopments have been proposed and / or are underconstruction for the Georgetown Local Centre as follows:

- 32-36 Georgetown Road DA2015/0546 a three storey block accommodating seniors living facilities and a ground floor café at the corner of Georgetown Road and Turner Street. Car park access will be from Turner Street.
- 42 Georgetown Road DA2022/0052 a three storey mixed used development with ground floor commercial fronting Georgetown Road and residential units above. This replaces the original proposal for a service station which was strongly opposed by the community. Car park access will be from Turner Street. Construction is currently underway.
- 29-31 Moate Street: DA2022/01233 a three storey mixed used development with ground floor commercial fronting Georgetown Road and residential units above. Discussions have already been held with the developer regarding the opportunity to



convert the section of Moate Street at the property frontage into public space that could be used for outdoor dining. Car park access will be from Asher Street.

It is anticipated that potential adverse cumulative impacts would relate to the temporary increase in construction traffic and cumulative noise and air impacts. These impacts would be largely avoidable through the implementation of mitigation measures detailed in this REF and through consulting with respective divisions within Council, if necessary, to ensure that the proposed construction works do not coincide with other development on private properties and/or routine maintenance activities.

Where conflicting construction schedules are unavoidable, cumulative construction impacts would be manageable through the implementation of the safeguards and mitigation measures identified in this REF.

The assessment within this REF indicates that the activity is not likely to have a significant effect on the environment. A range of environmental factors as listed in Clause 171 of the *Environmental Planning and Assessment Regulation 2021* (as amended) and Commonwealth Matters of National Environmental Significance have been considered as contained.

Implementation of the mitigation measures and safeguards identified above will minimise the risk of any impact and therefore further reduce the significance of any effect of cumulative impacts.

6.18 Ecologically Sustainable Development (ESD)

Ecologically Sustainable Development (ESD) is a primary objective of environmental protection in NSW, ESD is an objective of the EP&A Act under section 1.3, is defined under Section 1.4 of the EP&A Act and is a required assessment consideration under section 171 of the Environmental Planning and Assessment Regulation 2021. ESD has the same meaning it has in section 6(2) of the Protection of the Environment Administration Act 1991 and requires environmental assessments to include the reasons justifying the carrying out of the proposed activity in the manner proposed, having regard to biophysical, economic, and social considerations.

ESD is defined as:

"ecologically sustainable development requires the effective integration of social, economic, and environmental considerations in decision-making processes. Ecologically sustainable development can be achieved through the implementation of the following principles and programs—

- a. the precautionary principle—namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by:
 - (i) careful evaluation to avoid, wherever practicable, serious, or irreversible damage to the environment, and
 - (ii) an assessment of the risk-weighted consequences of various options,
- b. inter-generational equity namely, that the present generation should ensure that the health, diversity, and productivity of the environment are maintained or enhanced for the benefit of future generations,
- c. conservation of biological diversity and ecological integrity namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration.



d. improved valuation, pricing, and incentive mechanisms – namely, that environmental factors should be included in the valuation of assets and services, such as:

- (i) polluter pays, that is, those who generate pollution and waste should bear the cost of containment, avoidance, or abatement,
- (ii) the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste.
- (iii) environmental goals, having been established, should be pursued in the most cost-effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems. "

The overall objectives of ESD are to use, conserve, and enhance natural resources. This ensures that ecological processes are maintained, facilitating improved quality of life, now and into the future. The proposed activity will be effectively managed to avoid significant and/or costly environmental impact or degradation.

This REF has been developed to appropriately identify, avoid, mitigate, and manage environmental risk in line with the principles and objectives of ESD including:

- The Precautionary Principle.
- Social Equity, Inter-Generational Equity.
- Conservation of Biological Diversity and Ecological Integrity; and
- Improved Valuation and Pricing of Environmental Resources.

Each of these principles is explained below:

The Precautionary Principle

The precautionary principle, in summary, holds that where there are threats of serious or irreversible environmental damage, the lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. Specialist assessment for the design of the activity for impacts on the vegetation that will be removed has occurred. To this end, there has been careful evaluation undertaken in order to avoid where possible, serious, or irreversible damage to the environment. In the circumstances where avoidance was not possible, appropriate mitigated measures have been developed.

Social Equity, Inter-Generated Equity

Intergenerational equity is centred on the concept that the present generation should ensure that the health, diversity, and productivity of the environment are maintained or enhanced for the benefit of future generations. There is a moral obligation to ensure that today's economic progress, which will benefit both current and future generations, is not offset by environmental deterioration.

The various consultation activities have ensured that the planning, design, and environmental assessment phases of the activity have been transparent. The content of this REF (including appendices) has enabled an understanding of the potential implications of the activity and therefore identify the required management strategies and mitigation measures to ensure potential for impact is appropriately minimised.

Conservation of Biological Diversity and Ecological Integrity



The principle of conservation of biological diversity and ecological integrity holds that the conservation of biological diversity and ecological integrity should be a fundamental consideration for the proposed activity.

Improved Valuation and Pricing of Environmental Resources

The principle of improved valuation, pricing and incentive mechanisms deems that environmental factors should be included in the valuation of assets and services. The cost associated with using or impacting upon an environmental resource is seen as a cost incurred to protect that resource. Bases for evaluating costs relating to issues of biodiversity, noise, air quality, soil and water, traffic and transport, heritage, and visual impacts have been considered in the preparation of the REF.

The approach taken in the REF acknowledges and accepts the financial costs associated with all the measures required for the activity to avoid, minimize, mitigate, and manage potential environmental and social impacts for the proposed activity.



7.0 Summary of Mitigation Measures

Table 3 below contains a summary of mitigation measures to be implemented for the activity for each environmental aspect assessed in **Section 6**.

Table 3: Summary of Mitigation Measures

Environmental Assessment Section	Section No.	Mitigation Measures
Biodiversity	6.2	All machinery used on site is to be clean - i.e., tracks, tyres buckets and attachments are to be visibly free of soil or plant material to minimise the risk of introduction and spread of weed propagules.
		Remove any waste containing weeds and seed material from the site such that the spread of weeds is minimised.
		Dispose of all rubbish and surplus material within 24 hours of completion.
		All landscaping works will be consistent with the species composition of endemic vegetation communities analogous to that which occurs in similar locations and environmental conditions. Planting will be in general accord with species listed in: NCC - Street Tree Selection Manual (nsw.gov.au)
Water Quality, and Flooding	6.3	Erosion potential would be limited by managing runoff fetches and velocities, with measures such as coir logs, booms and silt fences and curtains.
		Sediment and nutrient controls, prepared in accordance with the Landcom <i>Managing Urban Stormwater - Soils and Construction</i> (the Blue Book), will be implemented to reduce the impacts of stormwater, erosion, and sedimentation on water quality. Specific erosion and sediment controls are to be contained within the site CEMP. All erosion and sediment control measures will be established before physical activity begins. Control measures are to remain in place until all surfaces have been fully restored and stabilised.
		Sediment and erosion control devices will be inspected regularly, maintained to ensure effectiveness over the entire duration of the project, and cleaned out before 30% capacity is reached.
		Temporary stockpiles will have appropriate erosion control devices installed to control runoff and prevent sedimentation.
Geology and Contamination	6.4	An unexpected finds protocol shall be developed and implemented in the event that any potentially contaminated sand / soils or materials are uncovered during excavations.
		Treatment, handling, and disposal methods for contamination, when encountered, will be done in accordance with EPA Guidelines.
		All potentially contaminated sand/soil excavated must be stockpiled in a secure area and be assessed and classified in accordance with the Waste Classification Guidelines (EPA, 2014) before being transported from the site for disposal at an appropriately licensed waste facility.
		Site disturbance will be minimised by containing machinery access to site areas required for approved repair works.
		No chemicals, fuels, and/or waste will be stored or collected for disposal within or adjacent to drainage lines or unsealed surfaces. Nevertheless a 'spill kit' will be always kept on site for potential chemical or fuel spills.
Air quality	6.5	Machinery and vehicles will not be left running or idling when not in use.
		All vehicles and machinery will be fitted with approved exhaust systems to maintain exhaust emissions within accepted standards.
		Odour or air pollutant emission complaints will be dealt with promptly and the source will be eliminated wherever practicable.
		Any loads of excavated material and loads transported to the site will be kept covered at all times during transportation and will remain covered



Environmental Assessment Section	Section No.	Mitigation Measures
		until they are unloaded either for use at the work site, reused or disposal at an EPA licensed waste disposal facility.
		All work sites, general work areas and stockpiles will be closely monitored for dust and watered down (with clean water) or covered in the event of dry and/or windy conditions.
		Water carts for dust suppression will be used regularly and adaptively to the conditions.
Noise	6.6	All equipment used will comply with AS2436-1981 Guide to Noise Control on Construction, Maintenance and Demolition Sites.
		Work and deliveries will only occur during the following times: Monday to Friday 7am to 6pm and Saturdays 8 am to 1 pm.
		Regular and effective maintenance of all equipment, including vehicles moving on and off the site will be conducted.
		Plant and equipment which is used intermittently will either be shut down in the intervening periods between works or throttled down to a minimum; and
		 Any portable equipment with the potential to create high levels of noise (e.g., compressors, generators) will only be selected for use if it incorporates effective noise control. This equipment should be located, where practical, so that natural ground barriers are between it and the nearest potentially affected receivers.
Aboriginal Heritage	6.7	If suspected Aboriginal objects are identified during construction the following procedures must be followed:
		 Immediately cease all activity at the location.
		 Ensure no further harm occurs, secure the area.
		 Notify Environment Protection Authority's Enviro Line on 131 555, and an archaeologist.
		 Notify relevant Aboriginal parties.
		 No further action to be undertaken until Heritage NSW provides written consent.
		It is recommended that the CEMP for the works include an unexpected finds protocol to be developed and implemented in the event that any potential heritage items are uncovered during excavation.
Non-Aboriginal Heritage	6.8	If, during the course of proposed works, cultural heritage material is uncovered, work should cease in that area immediately. The NSW Heritage Branch should be notified, and works should only recommence when an appropriate and approved management strategy has been prepared and implemented.
Visual Amenity	6.9	During construction works the site shall be kept in a clean and orderly manner to reduce the visual impact to site users.
Waste	6.11	Wherever possible, waste generated during site preparation and construction will be reused. Waste that cannot be avoided, re-used, or recycled will be managed in accordance with the principles of the Waste Avoidance and Resource Recovery Act 2001 and classified in accordance with the Waste Classification Guidelines and disposed of at appropriately licenced facilities.
		All waste generated during the works will be reused or removed from the work areas as soon as practicable and disposed of in accordance with the waste disposal safeguards.
		All vessels used for contaminated or hazardous waste should be sealed, labelled according to their contents, and stored within bunded areas until their removal from the work site.



Environmental Assessment Section	Section No.	Mitigation Measures		
		 Any fuel, lubricant or hydraulic fluid spillages will be treated using absorbent material and the contaminated material will be disposed of at an EPA licensed waste depot. 		
		 In the unlikely event of a pollution incident, the relevant authorities will be notified in accordance with Clause 148 of the POEO Act and remedial actions undertaken. Environmental incident response and notification procedures will be detailed in the CEMP prior to the commencement of construction. 		
		• The work site will be left clean and free of debris and other rubbish at the end of works.		
		 All hazardous wastes on site will be removed and disposed in accordance with the state and national regulations and guidelines and best practice for the removal of these materials; and 		
		 Treatment, handling, and disposal methods for contaminated soils, if encountered, will be done in accordance with NSW EPA Guidelines. Contaminated soils will be disposed of at an EPA licensed waste depot. 		
Traffic and Transport	6.12	 A traffic control plan shall be prepared by a suitably qualified person as part of the CEMP, detailing construction movements and controls, prior to commencement of work on the site. Details within the CEMP are to ensure that compliance with AS 1742.3 Traffic Control at Worksites, WHS 2011 & Roads Act 1993 occurs. 		
		 Work areas shall be bounded by fencing or barriers and appropriate signage to prevent pedestrian access during construction. Safe, alternative access should be provided for pedestrians where required. 		
		 Where works would result in delays to traffic, where possible, they would be scheduled to occur outside of morning and afternoon peak traffic periods and the public would be notified in advanced. 		
		 Parking for construction workers would be accommodated within the construction footprint and existing cleared areas within the nearby road reserve. 		
		Traffic would be managed by traffic controllers throughout construction.		
		 Where possible, all loading and unloading operations will be conducted within the internal construction zone to alleviate the need for lifting materials from off the street. 		
Amenity, pedestrian access	6.13	• Work areas shall be bounded by fencing or barriers to prevent pedestrian access during construction.		
and recreational usage		 Safe, alternative access should be provided for pedestrians where required. 		
Socio-Economic	6.14	Construction works will take place in accordance with hours specified in Section 3.4 which exclude 'night time' hours, thus reducing disturbance and impact.		
		 Traffic, pedestrian and cyclist arrangements will be established and maintained throughout the construction phase through the implementation of the Traffic Management Plan. 		
Climate Change	6.15	The use of alternative fuels and power sources for construction plant and equipment will be investigated and implemented, where appropriate.		
		Recycled materials will be incorporated where possible.		
		The energy efficiency and related carbon emissions will be considered in the selection of vehicle and plant equipment.		
		 Appropriate spill kits, advocated for use in association with fuels and chemicals are to be maintained on-site. These are to include spill booms and other methods aimed at the containment of fuels and chemicals spilled within the aquatic environment. 		



Environmental Assessment Section	Section No.	Mitigation Measures
		Fuels and chemicals are to be stored off-site, however, if required to be stored on-site, they are to be located in a bunded area away from drainage lines.
		No refuelling is recommended within the subject site. If however, refuelling is required at the subject site, areas designated for the storage, refuelling and maintenance of plant are to be established where native vegetation has previously been cleared and at least 30 m from a waterway.
		Forecast checks of the Bureau of Meteorology site shall be undertaken daily. In the event that heavy rain is predicted, arrangements are to be made immediately to remove any plant and equipment from within the banks of the waterway prior to the rain event. All plant and equipment would be removed to higher ground above the 1 in 100 year flood level.
		Any debris and spoil accumulated within the works site as a result of flooding would be removed to the designated stockpile area.
		All environmental controls would be reinstated as soon as possible following flooding.



8.0 Conclusion

8.1 Summary of Beneficial Effects

The proposed activity will facilitate the upgrade of infrastructure, stimulate economic growth and improve the liveability of Georgetown Local Centre.

Environmental, economic and community benefits include:

- Improved streetscape and accessibility, safety and convenience for pedestrians and cyclists.
- Improved traffic, visibility and safety.
- Improved infrastructure including drainage.
- Improved shared space by creating wider footpaths and a new plaza space.
- Improved landscape with additional gardens, plants and trees.
- Improved social capital with shared social and recreational spaces.

8.2 Conclusion

This REF has been prepared in support of the proposed public domain upgrade for Georgetown Local Centre. The works aim to deliver the upgrade of drainage, road, footpath, lighting and landscape infrastructure in Georgetown Local Centre.

The REF has examined and considered all relevant Commonwealth, NSW and local legislation and policies, along all matters affecting or likely to affect the environment by reason of the proposed activity. The proposed activity as described in the REF best meets the project objectives.

This REF has been prepared in accordance with section 5.5 and section 5.10(a) of the EP&A Act. It has concluded that the proposed activity is unlikely to significantly affect the environment and hence an EIS is not required to be prepared under section 5.7 of the EP&A Act. The proposed activity is also unlikely to affect Commonwealth land or have an impact on any MNES.



9.0 Declaration

We certify that we have prepared the contents of this REF and to the best of our knowledge:

- It is in accordance with section 5.5 and 5.10(a) of the EP&A Act and Section 171(2) of the Environmental Planning and Assessment Regulation 2021.
- It examines and takes into account all matters affecting or likely to affect the environment as a result of the activities associated with this project.
- It is true in all material particulars and does not, by its presentation or omission of information, materially mislead.
- The proposed activity is not likely to significantly affect the environment. No EIS is required.
- The proposed activity will not be carried out in a declared area of outstanding biodiversity value and is not likely to significantly affect threatened species, populations or ecological communities, or their habitats or impact biodiversity values.
- The proposed activity may be approved subject to mitigation measures detailed in this
 document.
- The proposed activity is unlikely to present a significant risk of harm to the environment and approval would be in the public interest.

	SLR						
Name	Position within SLR	Date	Signature				
Rob Dwyer	Technical Director-Environmental Assessment and Management	26-03-24					
Jessica Keegan	Project Consultant	26-03-24					

Newcastle City Council					
Name Position within CN Date Signature					



10.0 References

- Environmental Planning and Assessment Act, 1979.
- Matters of National Environmental Significance
- Bureau of Meteorology/CSRIO State of the Climate 2014 Report.
- Australian Standard (AS) 2436: 2010 Guide to noise and vibration control on construction, demolition and maintenance sites.
- Landcom Managing Urban Stormwater: Soils and construction Volume 1 (Blue Book), 2004.
- NSW EPA Local government air quality toolkit Module 3 Module 3: Guidelines for managing air pollution.
- NSW EPA (2014). Waste Classification Guidelines Part 1: Classification of waste.
- NSW EPA (2009). Interim Construction Noise Guideline.
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- NSW ePlanning Portal.
- NSW Rural Fire Service 2019 Planning for Bush Fire Protection A guide for councils, planners, fire authorities and developers November 2019.
- Heritage NSW (2023). Aboriginal Heritage Information Management System (AHIMS)
 Web Services. Retrieved11, 2022, from https://www.environment.nsw.gov.au/awssapp
- NSW Rural Fire Service Guide for Bushfire Mapping, Version 5B (2015)





Appendix A Concept Plans

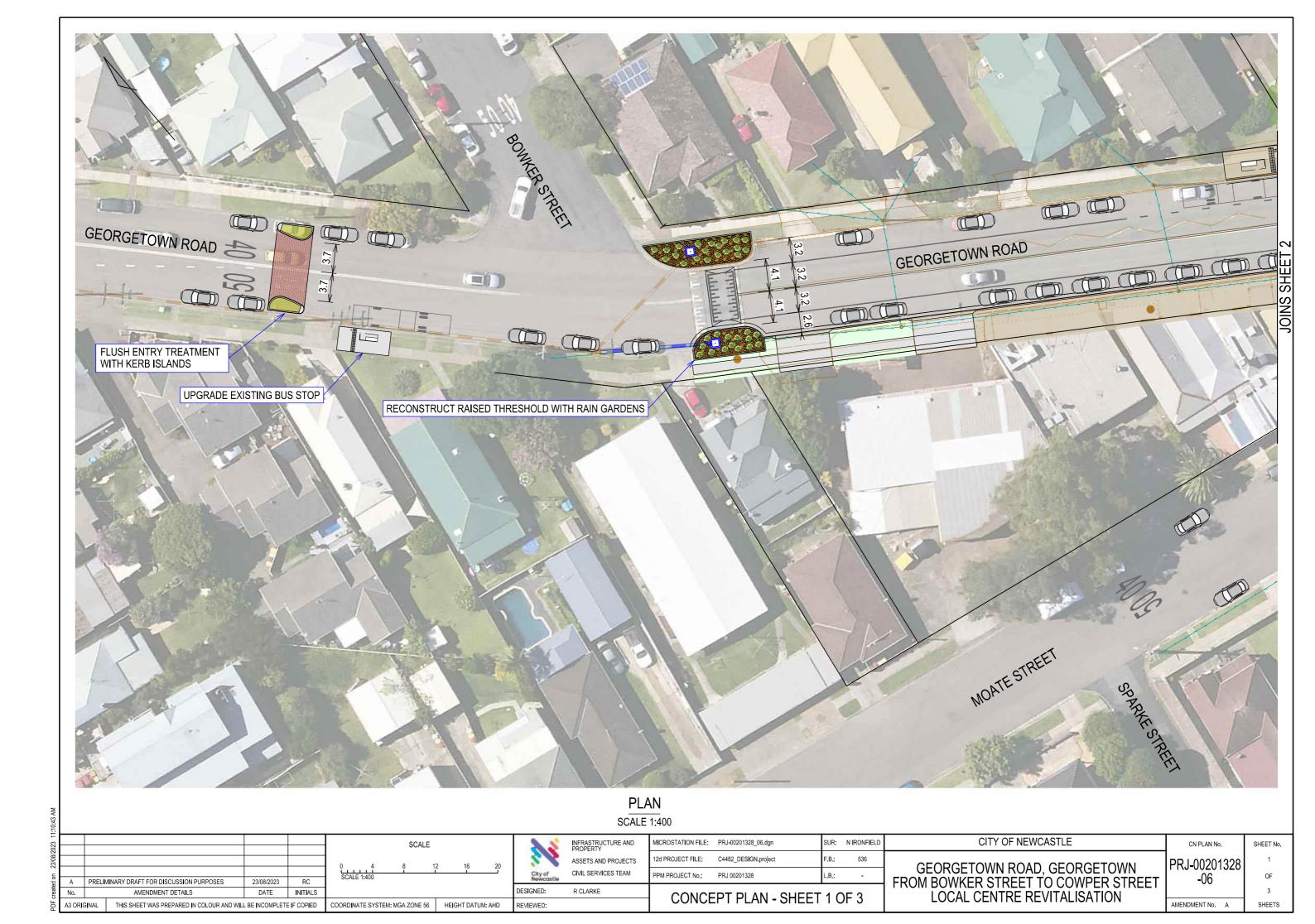
Georgetown Local Centre Upgrade

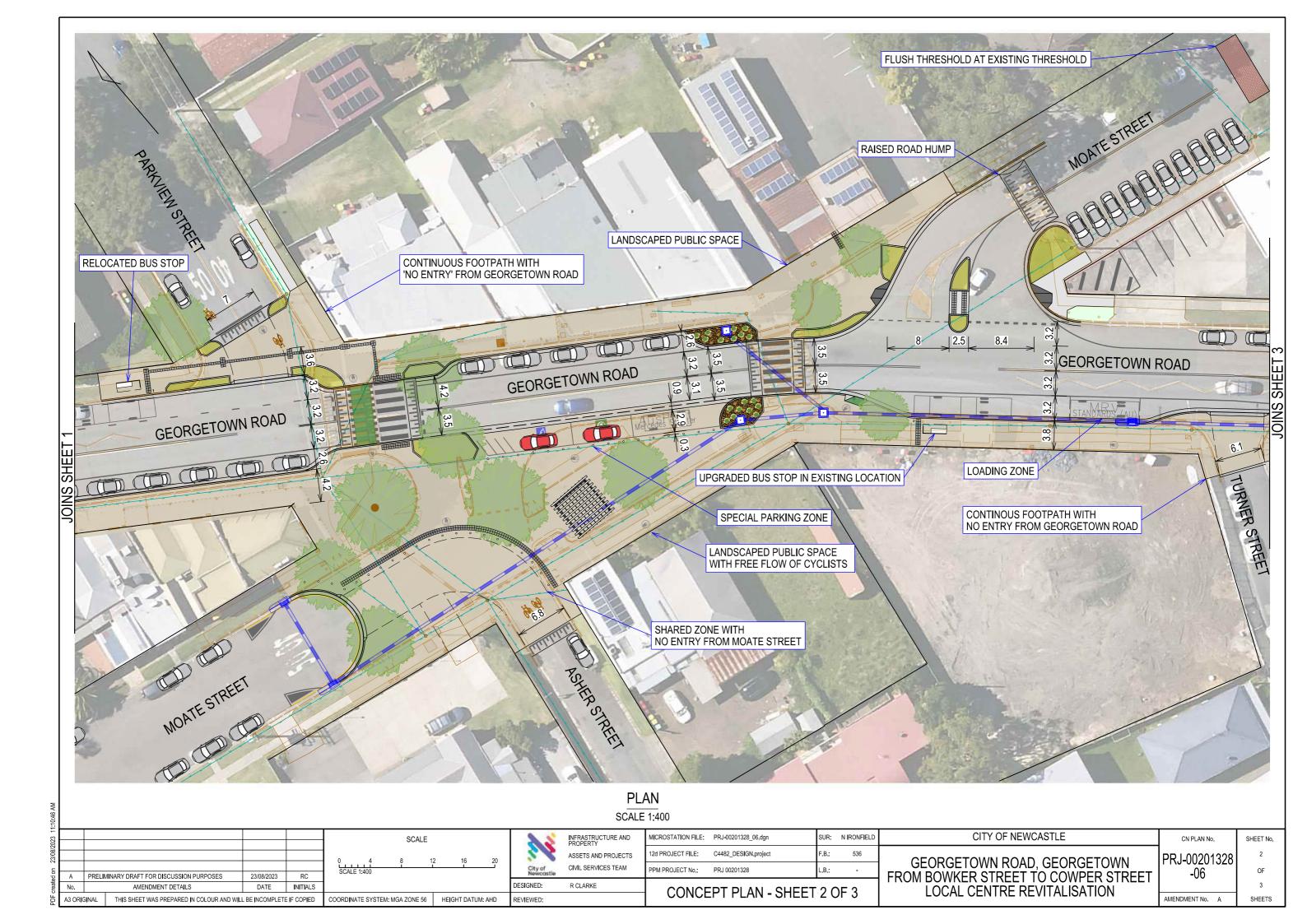
Review of Environmental Factors

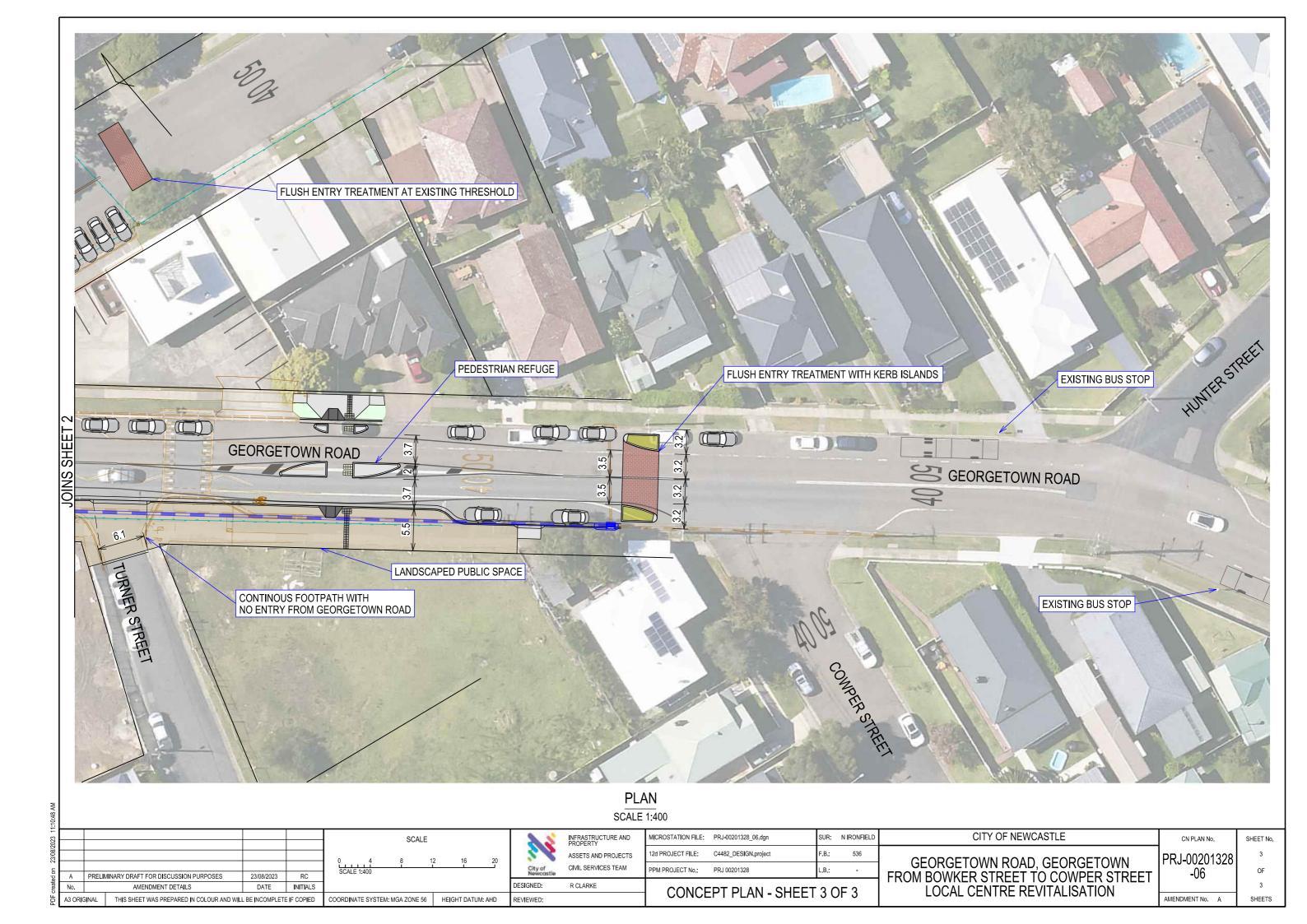
City of Newcastle

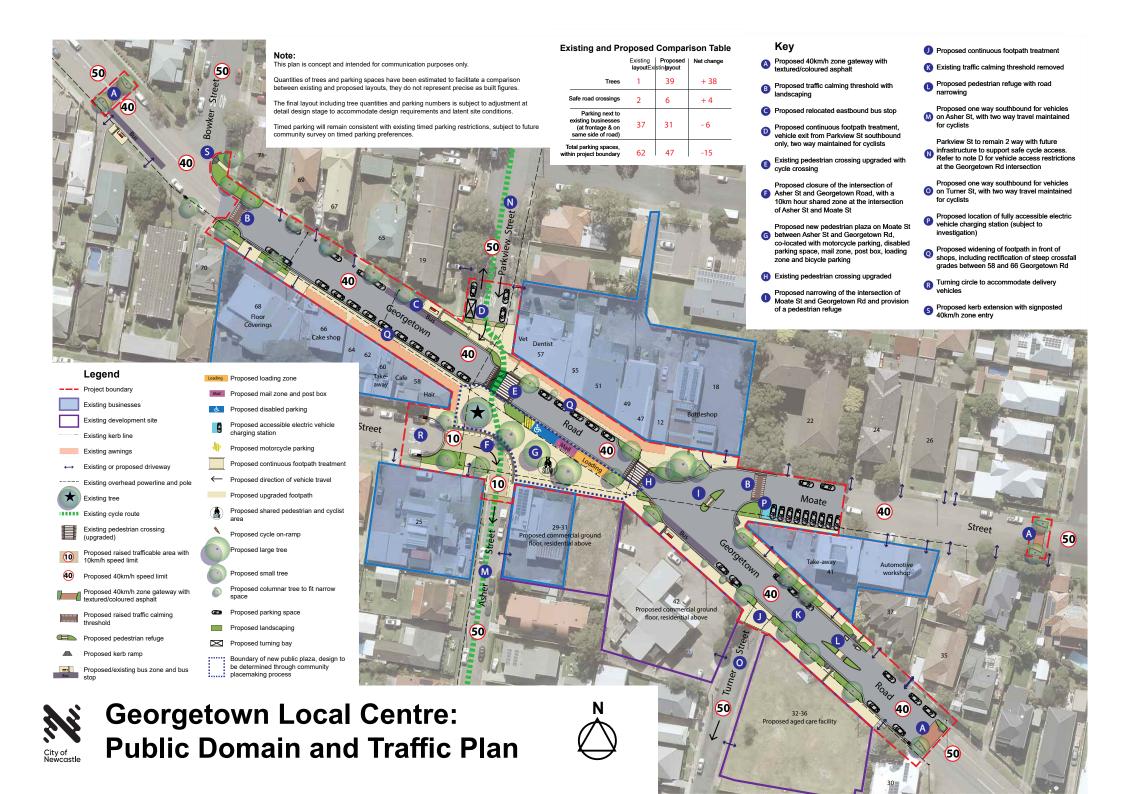
SLR Project No.: 630.031306.00001













Appendix B Area Photos

Georgetown Local Centre Upgrade

Review of environmental Factors

City of Newcastle

SLR Project No.: 630.031306.00001





Looking east at the western end of the activity area, Georgetown Road.



Georgetown Road / Bowker Street intersection.



Existing threshold looking east along Georgetown Road



Intersection of Parkview Street with Georgetown Road



Looking west towards Moate Street and proposed Public Space



Moate Street intersection



Looking towards Turner Street and construction occuring



Cowper Street / Georgetown Road intersection



Existing construction



Proposed public space and threshold treatment / entry on RHS.



Proposed public space are in Moate Street



Looking towards Parkview Street



Appendix C Consideration of Section 171 and MNES Matters

Georgetown Local Centre Upgrade

Review of Environmental Factors

City of Newcastle

SLR Project No.: 630.031306.00001



Consideration of Section 171 Factors

The following factors, listed in Section 171 of the *Environmental Planning and Assessment Regulation 2021*, are required to be considered to assess the likely impacts of the proposed activity on the natural and built environment.

	Clause 171 Factors	Impact
(a)	the environmental impact on a community,	Minor construction noise, visual and access impacts. (Short term). No long term impacts.
(b)	the transformation of a locality	Neutral impact
(c)	the environmental impact on the ecosystems of the locality,	Neutral impact.
(d)	the reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality,	Neutral impact. Introducing more street trees and landscaping throughout the precinct will improve the natural environment as well as the look and feel of the area whilst reducing heat with increased shade.
(e)	the effects on any locality, place or building that has— (i) aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance, or (ii) other special value for present or future generations,	Neutral impact. Over time the works will enhance the built environment and deliver a safer, more attractive place to visit.
(f)	the impact on the habitat of protected fauna, within the meaning of the Biodiversity Conservation Act 2016, The proposed activity is unlikely to have a significant impact on any threatened species, populations, ecological communities or migratory species in the locality.	No significant impact identified within the meaning of the <i>Biodiversity Conservation Act 2016</i> . No vegetation is to be removed.
(g)	the endangering of any species of animal, plant or other form of life whether living on land, in water or in the air,	Nil
(h)	long term effects on the environment?	Unlikely to be any long-term impacts. Short-term impacts will be reduced through appropriate mitigation and management.
(i)	Any degradation of the quality of the environment?	Degradation will be mitigated through appropriate management.
(j)	risk to the safety of the environment,	Risks will be managed through appropriate controls.
(k)	reduction in the range of beneficial uses of the environment,	No significant reduction identified
(1)	pollution of the environment,	Minor impacts from vehicle/equipment fuel pollution. These matters would be addressed through the CEMP.
(m)	environmental problems associated with the disposal of waste,	No waste disposal issues likely during construction or operation.
(n)	increased demands on resources (natural or otherwise) that are or are likely to become in short supply,	No impact identified
(o)	the cumulative environmental effect with other existing or likely future activities,	Long term positive impact

(p)	the impact on coastal processes and coastal hazards, including those under projected climate change conditions	Neutral impact
(q)	applicable local strategic planning statements, regional strategic plans or district strategic plans made under the Act, Division 3.1,	Relevant plans and statements have been considered in the preparation of this REF and it is concluded that the activity is not inconsistent with the vision and planning priorities set out within each plan. Neutral impact.
(r)	other relevant environmental factors.	No other environmental factors are considered relevant.

Consideration of Matters of National Environmental Significance

Under the environmental assessment provisions of the *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth), the following Matters of National Environmental Significance are required to be considered to assist in determining whether the proposed activity should be referred to the Australian Government Department of the Environment and Water Resources.

Factor	Impact
Any impact on a World Heritage property?	Nil
There are no world heritage properties within the vicinity of the proposed activity.	
Any impact on a National Heritage place?	Nil
There are no National Heritage places within the vicinity of the proposed activity.	
Any impact on a wetland of international importance?	Nil
There are no RAMSAR listed wetlands located within 5km of the proposed activity.	
Any impact on a listed threatened species or communities?	No significant impact
Assessment of impacts against the Significant Impact Guidelines Commonwealth Department of the Environment (DotE) found that a referral is not recommended for any of the listed Matters of National Environmental Significance (MNES) species.	
Any impacts on listed migratory species?	No significant impact
No threatened flora or fauna species were identified in the activity area.	
Any impact on a Commonwealth marine area? No Commonwealth marine areas are located within 10km of the Proposed activity.	Nil
Any impact on the Great Barrier Reef Marine Park?	Nil
The proposed activity will not have a significant adverse effect on the Great Barrier Reef Marine Park, as this area is not within the region.	
Does the proposal involve a nuclear action (including uranium	Nil
mining)?	
The proposed activity will not involve a nuclear action.	
Water resource, in relation to coal seam gas development and large coal mining development.	Nil
The proposed activity is not considered to significantly impact upon a water resource, and thus does not contribute to this MNES.	
Additionally, any impact (direct or indirect) on Commonwealth land?	Nil
Commonwealth Land is located to west of the activity area however due to the nature of the proposed activity its proximity and use will have no impact (direct or indirect) on the Commonwealth Land.	



Appendix D Background Searches

Georgetown Local Centre Upgrade

Review of Environmental Factors

City of Newcastle

SLR Project No.: 630.031306.00001



Your Ref/PO Number: 463

Date: 14 December 2023

Client Service ID: 849125

Jessica Keegan SLR Consulting

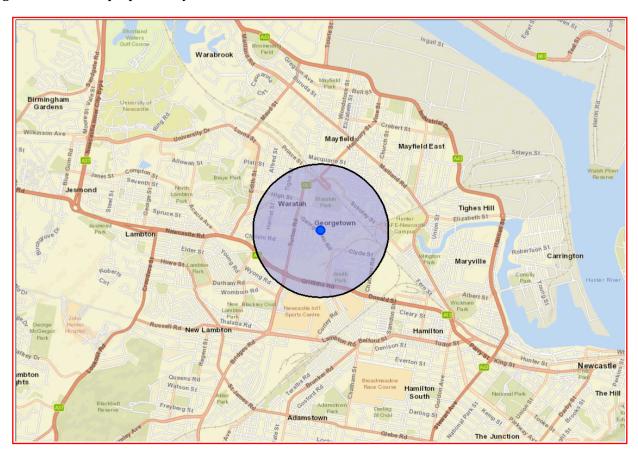
Attention: Jessica Keegan

Email: jkeegan@slrconsulting.com

Dear Sir or Madam:

AHIMS Web Service search for the following area at Address: 31 GEORGETOWN ROAD GEORGETOWN 2298 with a Buffer of 1000 meters, conducted by Jessica Keegan on 14 December 2023.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.

0 Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it.
 Aboriginal places gazetted after 2001 are available on the NSW Government Gazette
 (https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.

ABN 34 945 244 274

Email: ahims@environment.nsw.gov.au

Web: www.heritage.nsw.gov.au

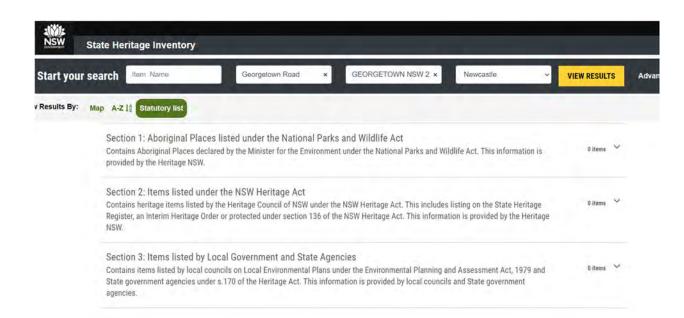
• This search can form part of your due diligence and remains valid for 12 months.

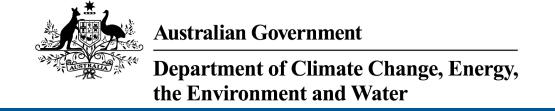
About u

Public registers	Home Public regi	sters Contaminated land record of notices		
+ POEO Public Register	Search res			
Contaminated land record of notices	Your search for:	LGA: NEWCASTLE CITY COUNCIL		ices relating to 24 sit
About the record of notices	Suburb	Address	Site Name	n Refine Search Notices related to
List of notified sites	Juparo	7001030	The Hart	this site
The to see which	HAMILTON	116 Tudor STREET	Taxi Services	5 former
Tips for searching Disclaimer	HAMILTON NORTH	56 Clyde STREET	Former Black and Decker Site	2 current
Dangerous goods licences	HAMILTON NORTH	54 Clyde STREET	Former ELMA Site	1 current and 1 former
Pesticide licences	HAMILTON NORTH	1 Chatham ROAD	Hamilton Gasworks	4 current and 8 former
Radiation licences	HAMILTON NORTH	5 Chatham ROAD	Shell Newcastle Terminal	2 current and 4 former
	HEXHAM	21 Sparke STREET	Former Forgacs Site	1 current
	HEXHAM	64 Old Maitland ROAD	Trojay Pty Ltd	1 current
	KOORAGANG	544 Cormorant Road, Kooragang ROAD	544 Cormorant Road, Kooragang	2 current
	KOORAGANG	Cormorant ROAD	BHP Kooragang	1 current and 1 former
	KOORAGANG	15 Greenleaf ROAD	Orica Kooragang Island	5 current and 11 former
	MARYVILLE	184-188 Hannell STREET	7-Eleven Service Station	6 former
	MAYFIELD	The Buffer Zone' extending directly adjacent to the Hunter River; near the Tourle Street Bridge STREET	BHP Steel River	3 current and 1 former
	MAYFIELD	Industrial DRIVE	OneSteel (BHP)	2 current and 5 former
	MAYFIELD NORTH	Bound by Hunter River, Selwyn Street & Industrial DRIVE	BHPB Closure site and bed sediments of the Hunter River	4 current and 23 former
	MAYFIELD NORTH	Industrial DRIVE	Former BHPB Supply site	2 current and 11 former
	MAYFIELD WEST	East of Woodstock Street and Tourle STREET	Koppers Coal Tar	2 current and 6 former
	NEWCASTLE	25-28 Honeysuckle DRIVE	Reclaimed Land	1 former
	SANDGATE	Maitland ROAD	North Limited Storage Handling facility	1 current and 7 former
	SHORTLAND	2 (part) & 28 (part) Astra STREET	Former Astra Street Landfill	4 current and 5

*ep00	Your environment	Reporting, incidents and recovery programs		Licensing and Regulation	Working togethe	
	Public registers	Home Public re-	gisters Contaminated land record of notices	i		
	+ POEO Public Register	0				
	- Contaminated land record of	Search re	sults			
	notices	Your search for:	LGA: NEWCASTLE CITY COUNCIL	Matched 167 no	tices relating to 24 sites.	
				Search Again Refine Search		
	About the record of notice	es Suburb	Address	Site Name	Notices related to	
	List of notified sites	Children and	CCC		this site	
	Tips for searching	TIGHES HILL	110 Elizabeth STREET	Former Mobil Terminal	6 former	
		WARATAH	Turton and Georgetown ROADS	Waratah former Gasworks	3 current and 12	
	Disclaimer				former	
	Dangerous goods licences	WICKHAM	156 Hannell Street and 33 Annie STREET	Caltex Terminal and "Building 33" on offsite adjacent and	4 current and 3 former	
	Pesticide licences	WICKHAM	2 Holland STREET	Fuchs Lubricants Wickham	4 current and 3	
	Radiation licences				former	
	National incences				12	

Page 2 of 2





EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 14-Dec-2023

Summary

Details

Matters of NES
Other Matters Protected by the EPBC Act
Extra Information

Caveat

Acknowledgements

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the <u>Administrative Guidelines on Significance</u>.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	1
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	1
Listed Threatened Ecological Communities:	8
Listed Threatened Species:	95
Listed Migratory Species:	77

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at https://www.dcceew.gov.au/parks-heritage/heritage

A <u>permit</u> may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	90
Commonwealth Heritage Places:	2
Listed Marine Species:	103
Whales and Other Cetaceans:	12
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	7
Regional Forest Agreements:	1
Nationally Important Wetlands:	5
EPBC Act Referrals:	70
Key Ecological Features (Marine):	None
Biologically Important Areas:	10
Bioregional Assessments:	1
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Wetlands of International Importance (Ramsar Wetlands)	[Resource Information	
Ramsar Site Name	Proximity	Buffer Status
Hunter estuary wetlands	Within Ramsar site	In feature area

Commonwealth Marine Area

[Resource Information]

Approval is required for a proposed activity that is located within the Commonwealth Marine Area which has, will have, or is likely to have a significant impact on the environment. Approval may be required for a proposed action taken outside a Commonwealth Marine Area but which has, may have or is likely to have a significant impact on the environment in the Commonwealth Marine Area.

Feature Name

Commonwealth Marine Areas (EPBC Act)

In buffer area only

Listed Threatened Ecological Communities

[Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name Central Hunter Valley eucalypt forest and woodland	Threatened Category Critically Endangered	Presence Text Community may occuwithin area	Buffer Status IrIn feature area
Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community	Endangered	Community likely to occur within area	In feature area
Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland	Endangered	Community may occu within area	ırln feature area
Kurri sand swamp woodland of the Sydney Basin bioregion	Endangered	Community may occurIn buffer area only within area	
Lowland Rainforest of Subtropical Australia	Critically Endangered	Community may occurIn buffer area only within area	
River-flat eucalypt forest on coastal floodplains of southern New South Wales and eastern Victoria	Critically Endangered	Community likely to occur within area	In feature area
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	Community likely to occur within area	In buffer area only
Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South	Endangered	Community likely to occur within area	In buffer area only

Community Name	Threatened Category	Presence Text	Buffer Status
East Queensland bioregions			

Listed Threatened Species Status of Conservation Dependent and E	xtinct are not MNFS unde	<u>-</u>	source Information]
Number is the current name ID.		3. 4.16 2 .1 30 7.64	
Scientific Name BIRD	Threatened Category	Presence Text	Buffer Status
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calidris tenuirostris Great Knot [862]	Critically Endangered	Roosting known to occur within area	In buffer area only
Callocephalon fimbriatum Gang-gang Cockatoo [768]	Endangered	Species or species habitat known to occur within area	In feature area
Calyptorhynchus lathami lathami South-eastern Glossy Black-Cockatoo [67036]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u>Charadrius mongolus</u> Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area	In buffer area only
Climacteris picumnus victoriae Brown Treecreeper (south-eastern) [67062]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Diomedea antipodensis</u> Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea antipodensis gibsoni Gibson's Albatross [82270]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
<u>Diomedea epomophora</u> Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
<u>Diomedea sanfordi</u> Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In buffer area only
Erythrotriorchis radiatus Red Goshawk [942]	Endangered	Species or species habitat may occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat may occur within area	In feature area
Fregetta grallaria grallaria White-bellied Storm-Petrel (Tasman Sea), White-bellied Storm-Petrel (Australasian) [64438]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Limosa lapponica baueri Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit [86380]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Melanodryas cucullata cucullata South-eastern Hooded Robin, Hooded Robin (south-eastern) [67093]	Endangered	Species or species habitat likely to occur within area	In feature area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat may occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pterodroma leucoptera leucoptera Gould's Petrel, Australian Gould's Petrel [26033]	Endangered	Species or species habitat may occur within area	In buffer area only
Pterodroma neglecta neglecta Kermadec Petrel (western) [64450]	Vulnerable	Foraging, feeding or related behaviour ma occur within area	In buffer area only y

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pycnoptilus floccosus Pilotbird [525]	Vulnerable	Species or species habitat may occur within area	In feature area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area	In feature area
Stagonopleura guttata Diamond Firetail [59398]	Vulnerable	Species or species habitat known to occur within area	In feature area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche bulleri platei Northern Buller's Albatross, Pacific Albatross [82273]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche eremita Chatham Albatross [64457]	Endangered	Foraging, feeding or related behaviour may occur within area	In buffer area only y
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
FISH			
Epinephelus daemelii Black Rockcod, Black Cod, Saddled Rockcod [68449]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Hippocampus whitei White's Seahorse, Crowned Seahorse, Sydney Seahorse [66240]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Seriolella brama Blue Warehou [69374]	Conservation Dependent	Species or species habitat known to occur within area	In buffer area only
Thunnus maccoyii Southern Bluefin Tuna [69402]	Conservation Dependent	Species or species habitat likely to occur within area	In buffer area only
FROG			
Litoria aurea Green and Golden Bell Frog [1870]	Vulnerable	Species or species habitat known to occur within area	In feature area
Mixophyes balbus Stuttering Frog, Southern Barred Frog (in Victoria) [1942]	Vulnerable	Species or species habitat may occur within area	In feature area
Uperoleia mahonyi Mahony's Toadlet [89189]	Endangered	Species or species habitat likely to occur within area	In buffer area only
MAMMAL			
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status	
Chalinolobus dwyeri Large-eared Pied Bat, Large Pied Bat [183]	Endangered	Species or species habitat known to occur within area	In feature area	
Dasyurus maculatus maculatus (SE main Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	nland population) Endangered	Species or species habitat known to occur within area	In feature area	
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area	In buffer area only	
Notamacropus parma Parma Wallaby [89289]	Vulnerable	Species or species habitat may occur within area	In feature area	
Petauroides volans Greater Glider (southern and central) [254]	Endangered	Species or species habitat known to occur within area	In feature area	
Petaurus australis australis Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat likely to occur within area	In feature area	
Phascolarctos cinereus (combined popul Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	ations of Qld, NSW and the Endangered	ne ACT) Species or species habitat known to occur within area	In feature area	
Potorous tridactylus tridactylus Long-nosed Potoroo (northern) [66645]	Vulnerable	Species or species habitat likely to occur within area	In feature area	
Pseudomys novaehollandiae New Holland Mouse, Pookila [96]	Vulnerable	Species or species habitat known to occur within area	In feature area	
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Roosting known to occur within area	In feature area	
PLANT				
Angophora inopina Charmhaven Apple [64832]	Vulnerable	Species or species habitat known to occur within area	In feature area	

Scientific Name	Threatened Category	Presence Text	Buffer Status
Caladenia tessellata	Threatened Gategory	T TOSCHOO TOXE	Duller Glatus
Thick-lipped Spider-orchid, Daddy Long-legs [2119]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Commersonia prostrata			
Dwarf Kerrawang [87152]	Endangered	Species or species habitat likely to occur within area	In feature area
Cryptostylis hunteriana Leafless Tongue-orchid [19533]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Cynanchum elegans			
White-flowered Wax Plant [12533]	Endangered	Species or species habitat known to occur within area	In buffer area only
<u>Diuris praecox</u>			
Newcastle Doubletail [55086]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Eucalyptus camfieldii			
Camfield's Stringybark [15460]	Vulnerable	Species or species habitat known to occur within area	In feature area
Eucalyptus parramattensis subsp. decad	ens		
Earp's Gum, Earp's Dirty Gum [56148]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Euphrasia arguta			
[4325]	Critically Endangered	Species or species habitat may occur within area	In feature area
Grevillea parviflora subsp. parviflora			
Small-flower Grevillea [64910]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Grevillea shiressii			
[19186]	Vulnerable	Species or species habitat known to occur within area	In feature area
Melaleuca biconvexa			
Biconvex Paperbark [5583]	Vulnerable	Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Persicaria elatior Knotweed, Tall Knotweed [5831]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Prasophyllum sp. Wybong (C.Phelps OR a leek-orchid [81964]	Critically Endangered	Species or species habitat may occur within area	In feature area
Pterostylis gibbosa Illawarra Greenhood, Rufa Greenhood, Pouched Greenhood [4562]	Endangered	Species or species habitat may occur within area	In buffer area only
Rhizanthella slateri Eastern Underground Orchid [11768]	Endangered	Species or species habitat may occur within area	In buffer area only
Rhodamnia rubescens Scrub Turpentine, Brown Malletwood [15763]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Rhodomyrtus psidioides Native Guava [19162]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Rutidosis heterogama Heath Wrinklewort [13132]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Syzygium paniculatum Magenta Lilly Pilly, Magenta Cherry, Daguba, Scrub Cherry, Creek Lilly Pilly, Brush Cherry [20307]	Vulnerable	Species or species habitat known to occur within area	In feature area
Tetratheca juncea Black-eyed Susan [21407]	Vulnerable	Species or species habitat known to occur within area	In feature area
Thelymitra adorata Wyong Sun Orchid [84724]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
Thesium australe Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area	In feature area
REPTILE			

Scientific Name	Threatened Category	Presence Text	Buffer Status	
Caretta caretta				
Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In buffer area only	
Chelonia mydas				
Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only	
Dermochelys coriacea				
Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In buffer area only	
Eretmochelys imbricata				
Hawksbill Turtle [1766]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only	
Natator depressus				
Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only	
SHARK				
Carcharias taurus (east coast population)				
Grey Nurse Shark (east coast population) [68751]	Critically Endangered	Foraging, feeding or related behaviour likely to occur within	In buffer area only	
		area		
Carcharodon carcharias		area		
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only	
	Vulnerable	Species or species habitat known to	In buffer area only	
White Shark, Great White Shark [64470]	Vulnerable Conservation Dependent	Species or species habitat known to	In buffer area only In buffer area only	
White Shark, Great White Shark [64470] Galeorhinus galeus School Shark, Eastern School Shark, Snapper Shark, Tope, Soupfin Shark	Conservation	Species or species habitat known to occur within area Species or species habitat may occur		
White Shark, Great White Shark [64470] Galeorhinus galeus School Shark, Eastern School Shark, Snapper Shark, Tope, Soupfin Shark [68453]	Conservation	Species or species habitat known to occur within area Species or species habitat may occur	·	
White Shark, Great White Shark [64470] Galeorhinus galeus School Shark, Eastern School Shark, Snapper Shark, Tope, Soupfin Shark [68453] Rhincodon typus	Conservation Dependent	Species or species habitat known to occur within area Species or species habitat may occur within area Species or species habitat may occur	In buffer area only	
White Shark, Great White Shark [64470] Galeorhinus galeus School Shark, Eastern School Shark, Snapper Shark, Tope, Soupfin Shark [68453] Rhincodon typus Whale Shark [66680]	Conservation Dependent	Species or species habitat known to occur within area Species or species habitat may occur within area Species or species habitat may occur	In buffer area only	
White Shark, Great White Shark [64470] Galeorhinus galeus School Shark, Eastern School Shark, Snapper Shark, Tope, Soupfin Shark [68453] Rhincodon typus Whale Shark [66680] Sphyrna lewini Scalloped Hammerhead [85267]	Conservation Dependent Vulnerable Conservation	Species or species habitat known to occur within area Species or species habitat may occur within area Species or species habitat may occur within area Species or species habitat may occur within area	In buffer area only In buffer area only In buffer area only	
White Shark, Great White Shark [64470] Galeorhinus galeus School Shark, Eastern School Shark, Snapper Shark, Tope, Soupfin Shark [68453] Rhincodon typus Whale Shark [66680]	Conservation Dependent Vulnerable Conservation	Species or species habitat known to occur within area Species or species habitat may occur within area Species or species habitat may occur within area Species or species habitat may occur within area	In buffer area only In buffer area only	

Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Anous stolidus Common Noddy [825]		Species or species habitat likely to occur within area	•
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Ardenna carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Ardenna grisea Sooty Shearwater [82651]		Species or species habitat likely to occur within area	
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat known to occur within area	In buffer area only
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
<u>Diomedea epomophora</u> Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
<u>Diomedea sanfordi</u> Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In buffer area only
Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat likely to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat known to occur within area	In buffer area only
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Sternula albifrons Little Tern [82849]		Breeding likely to occur within area	In buffer area only
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche eremita Chatham Albatross [64457]	Endangered	Foraging, feeding or related behaviour ma occur within area	In buffer area only y
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
	Threatened Category	TIESCHOO TEXT	Dullet Status
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Migratory Marine Species			
Balaenoptera edeni			
Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Balaenoptera musculus			
Blue Whale [36]	Endangered	Species or species habitat may occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour may occur within area	
O a male and the continuous for a second			
Carcharhinus longimanus Oceanic Whitetip Shark [84108]		Species or species habitat may occur within area	In buffer area only
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Caretta caretta			
Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In buffer area only
<u>Dugong dugon</u> Dugong [28]		Species or species habitat may occur within area	In buffer area only
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Eubalaena australis as Balaena glacialis a Southern Right Whale [40]	australis Endangered	Species or species habitat likely to occur within area	In buffer area only
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat likely to occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area	In buffer area only
Mobula alfredi as Manta alfredi Reef Manta Ray, Coastal Manta Ray [90033]		Species or species habitat may occur within area	In buffer area only
Mobula birostris as Manta birostris Giant Manta Ray [90034]		Species or species habitat may occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Migratory Terrestrial Species			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat known to occur within area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area	In feature area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area	In feature area
Symposiachrus trivirgatus as Monarcha Spectacled Monarch [83946]	<u>trivirgatus</u>	Species or species habitat known to occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Arenaria interpres Ruddy Turnstone [872]		Roosting known to occur within area	In buffer area only
Calidris acuminata Sharp-tailed Sandpiper [874]		Roosting known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat known to occur within area	In feature area
Calidris ruficollis Red-necked Stint [860]		Roosting known to occur within area	In buffer area only
Calidris tenuirostris Great Knot [862]	Critically Endangered	Roosting known to occur within area	In buffer area only
Charadrius bicinctus Double-banded Plover [895]		Roosting known to occur within area	In buffer area only
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u>Charadrius mongolus</u> Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area	In buffer area only
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat known to occur within area	In feature area
Gallinago megala Swinhoe's Snipe [864]		Roosting likely to occur within area	In buffer area only
Gallinago stenura Pin-tailed Snipe [841]		Roosting likely to occur within area	In buffer area only
<u>Limicola falcinellus</u> Broad-billed Sandpiper [842]		Roosting known to occur within area	In buffer area only
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In buffer area only
<u>Limosa limosa</u> Black-tailed Godwit [845]		Roosting known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Numenius minutus Little Curlew, Little Whimbrel [848]		Roosting likely to occur within area	In buffer area only
Numenius phaeopus Whimbrel [849]		Roosting known to occur within area	In buffer area only
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In buffer area only
Philomachus pugnax Ruff (Reeve) [850]		Roosting known to occur within area	In buffer area only
Pluvialis fulva Pacific Golden Plover [25545]		Roosting known to occur within area	In buffer area only
Pluvialis squatarola Grey Plover [865]		Roosting known to occur within area	In buffer area only
Tringa brevipes Grey-tailed Tattler [851]		Roosting known to occur within area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area	In feature area
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Roosting known to occur within area	In buffer area only
Xenus cinereus Terek Sandpiper [59300]		Roosting known to occur within area	In buffer area only

Other Matters Protected by the EPBC Act

Other Matters Protected by the EPBC Act		
Commonwealth Lands		[Resource Information]
The Commonwealth area listed below may indicate the presence of Commonwealth of the data source, all proposals should be checked as to we Commonwealth area, before making a definitive decision. Contact the State department for further information.	hether it	impacts on a
Commonwealth Land Name	State	Buffer Status
Commonwealth Bank of Australia		
Commonwealth Land - Commonwealth Bank of Australia [11596]	NSW	In buffer area only
Commonwealth Trading Bank of Australia		
Commonwealth Land - Commonwealth Trading Bank of Australia [11591]	NSW	In buffer area only
Commonwealth Land - Commonwealth Trading Bank of Australia [11682]	NSW	In buffer area only
Commonwealth Land - Commonwealth Trading Bank of Australia [11703]	NSW	In buffer area only
Commonwealth Land - Commonwealth Trading Bank of Australia [11685]	NSW	In buffer area only
Communications, Information Technology and the Arts - Australian Broadca	astina Co	rporation
Commonwealth Land - Australian Broadcasting Corporation [11595]	NSW	In buffer area only
Communications, Information Technology and the Arts - Australian Postal C	Corporation	on
Commonwealth Land - Australian Postal Commission [11592]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [11593]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [11594]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [11680]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [11710]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [11687]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [11653]	NSW	In buffer area only
Commonwealth Land - Australian Postal Corporation [11690]	NSW	In buffer area only
Communications, Information Technology and the Arts - Telstra Corporation	n Limited	
Commonwealth Land - Australian & Overseas Telecommunications Corporation [11686]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11668	3]NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11600)]NSW	In buffer area only

Commonwealth Land - Australian Telecommunications Commission [11674] NSW

In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - Australian Telecommunications Commission [11671]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11672]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11597]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11658]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11681]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11701]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11700]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11702]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11708]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11622]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [16433]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11655]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11656]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11657]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [11711]	NSW	In buffer area only
	NSW	In buffer area only
Defence Commonwealth Land - Defence Service Homes Corporation [11679]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [11675]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [11598]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [11670]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [11673]	NSW	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - Defence Service Homes Corporation [11705]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [11524]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [11693]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [11697]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [11691]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [11692]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [11699]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [11694]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [11695]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [11696]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [11640]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [11698]	NSW	In buffer area only
Defence - ADF CAREERS REFERENCE CENTRE [11228]	NSW	In buffer area only
Defence - ADF CAREERS REFERENCE CENTRE [11219]	NSW	In buffer area only
Defence - ADF CAREERS REFERENCE CENTRE [11229]	NSW	In buffer area only
Defence - ADF CAREERS REFERENCE CENTRE [11222]	NSW	In buffer area only
Defence - ADF CAREERS REFERENCE CENTRE [11224]	NSW	In buffer area only
Defence - ADF CAREERS REFERENCE CENTRE [11227]	NSW	In buffer area only
Defence - ADF CAREERS REFERENCE CENTRE [11225]	NSW	In buffer area only
Defence - ADF CAREERS REFERENCE CENTRE [11220]	NSW	In buffer area only
Defence - ADF CAREERS REFERENCE CENTRE [11223]	NSW	In buffer area only
Defence - ADF CAREERS REFERENCE CENTRE [11226]	NSW	In buffer area only
Defence - ADF CAREERS REFERENCE CENTRE [11221]	NSW	In buffer area only
Defence - OFFICES [11195]	NSW	In buffer area only
Defence - STOCKTON RIFLE RANGE [10057]	NSW	In buffer area only
Defence - TS TOBRUK [10053]	NSW	In buffer area only
Defence - Defence Housing Authority		

Commonwealth Land Name		State	Buffer Status
Commonwealth Land - Defence Housing Authority	/ [16171]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority	/ [16170]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority	/ [11678]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority	/ [16168]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority	/ [16167]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority	/ [16169]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority	/ [16166]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority	/ [16165]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority	/ [16173]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority	/ [16172]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority	/ [11688]	NSW	In buffer area only
Commonwealth Land - Director of War Service Ho	omes [11676]	NSW	In buffer area only
Commonwealth Land - Director of War Service Ho	omes [11677]	NSW	In buffer area only
Commonwealth Land - Director of War Service Ho	omes [11704]	NSW	In buffer area only
Commonwealth Land - Director of War Service Ho	omes [11683]	NSW	In feature area
Commonwealth Land - Director of War Service Ho	omes [11652]	NSW	In buffer area only
Commonwealth Land - Director of War Service Ho	omes [11654]	NSW	In buffer area only
Commonwealth Land - Director of War Service Ho	omes [11639]	NSW	In buffer area only
Unknown			
Commonwealth Land - [15660]		NSW	In buffer area only
Commonwealth Land - [11599]		NSW	In buffer area only
Commonwealth Land - [11707]		NSW	In buffer area only
Commonwealth Land - [11709]		NSW	In buffer area only
Commonwealth Land - [11706]		NSW	In buffer area only
Commonwealth Land - [11684]		NSW	In buffer area only
Commonwealth Land - [16434]		NSW	In buffer area only
Commonwealth Heritage Places			[Resource Information]
Name	State	Status	Buffer Status

Name	State	Status	Buffer Status
Historic			
Fort Wallace	NSW	Listed place	In buffer area only
Nobbys Lighthouse	NSW	Listed place	In buffer area only
Listed Marine Species		[Res	source Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos			
Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Anous stolidus			
Common Noddy [825]		Species or species habitat likely to occur within area	In buffer area only
Apus pacificus			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Ardenna carneipes as Puffinus carneipes			
Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Ardenna grisea as Puffinus griseus Sooty Shearwater [82651]		Species or species habitat likely to occur within area	In buffer area only
Arenaria interpres			
Ruddy Turnstone [872]		Roosting known to occur within area	In buffer area only
Bubulcus ibis as Ardea ibis			
Cattle Egret [66521]		Breeding likely to occur within area overfly marine area	In feature area
Calidris acuminata			
Sharp-tailed Sandpiper [874]		Roosting known to occur within area	In feature area
Calidris canutus			
Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat known to occur within area overfly marine area	In feature area
Calidris ruficollis Red-necked Stint [860]		Roosting known to occur within area overfly marine area	In buffer area only
Calidris tenuirostris Great Knot [862]	Critically Endangered	Roosting known to occur within area overfly marine area	In buffer area only
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat known to occur within area	In buffer area only
Charadrius bicinctus Double-banded Plover [895]		Roosting known to occur within area overfly marine area	In buffer area only
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u>Charadrius mongolus</u> Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area	In buffer area only
Charadrius ruficapillus Red-capped Plover [881]		Roosting known to occur within area overfly marine area	In buffer area only
<u>Diomedea antipodensis</u> Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea antipodensis gibsoni as Diomedea Gibson's Albatross [82270]	edea gibsoni Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
<u>Diomedea sanfordi</u> Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In buffer area only
Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat known to occur within area	In buffer area only
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat likely to occur within area	•
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat known to occur within area overfly marine area	In feature area
Gallinago megala Swinhoe's Snipe [864]		Roosting likely to occur within area overfly marine area	In buffer area only
Gallinago stenura Pin-tailed Snipe [841]		Roosting likely to occur within area overfly marine area	In buffer area only
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Himantopus himantopus Pied Stilt, Black-winged Stilt [870]		Roosting known to occur within area overfly marine area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Hirundapus caudacutus	•		
White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Limicola falcinellus Broad-billed Sandpiper [842]		Roosting known to occur within area overfly marine area	In buffer area only
<u>Limosa Iapponica</u> Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In buffer area only
<u>Limosa limosa</u> Black-tailed Godwit [845]		Roosting known to occur within area overfly marine area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat known to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area overfly marine area	In feature area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat may occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Numenius minutus Little Curlew, Little Whimbrel [848]		Roosting likely to occur within area overfly marine area	In buffer area only
Numenius phaeopus Whimbrel [849]		Roosting known to occur within area	In buffer area only
Pachyptila turtur Fairy Prion [1066]		Species or species habitat known to occur within area	In buffer area only
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In buffer area only
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat known to occur within area	In buffer area only
Philomachus pugnax Ruff (Reeve) [850]		Roosting known to occur within area overfly marine area	In buffer area only
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pluvialis fulva Pacific Golden Plover [25545]		Roosting known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pluvialis squatarola Grey Plover [865]		Roosting known to occur within area overfly marine area	In buffer area only
Pterodroma cervicalis White-necked Petrel [59642]		Species or species habitat may occur within area	In feature area
Recurvirostra novaehollandiae Red-necked Avocet [871]		Roosting known to occur within area overfly marine area	In buffer area only
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area overfly marine area	In feature area
Rostratula australis as Rostratula bengh Australian Painted Snipe [77037]	alensis (sensu lato) Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Stercorarius antarcticus as Catharacta s Brown Skua [85039]	<u>kua</u>	Species or species habitat may occur within area	In buffer area only
Sterna striata White-fronted Tern [799]		Foraging, feeding or related behaviour likely to occur within area	In feature area
Sternula albifrons as Sterna albifrons Little Tern [82849]		Breeding likely to occur within area	In buffer area only
Symposiachrus trivirgatus as Monarcha Spectacled Monarch [83946]	<u>trivirgatus</u>	Species or species habitat known to occur within area overfly marine area	In feature area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche bulleri platei as Thalassarche Northern Buller's Albatross, Pacific Albatross [82273]	che sp. nov. Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche eremita Chatham Albatross [64457]	Endangered	Foraging, feeding or related behaviour may occur within area	
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	·
Tringa brevipes as Heteroscelus brevipe Grey-tailed Tattler [851]	<u>S</u>	Roosting known to occur within area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area overfly marine area	In feature area
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Roosting known to occur within area overfly marine area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Xenus cinereus Terek Sandpiper [59300]		Roosting known to occur within area overfly marine area	In buffer area only
Fish			
Acentronura tentaculata Shortpouch Pygmy Pipehorse [66187]		Species or species habitat may occur within area	In buffer area only
Festucalex cinctus Girdled Pipefish [66214]		Species or species habitat may occur within area	In buffer area only
Filicampus tigris Tiger Pipefish [66217]		Species or species habitat may occur within area	In buffer area only
Heraldia nocturna Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area	In buffer area only
Hippichthys penicillus Beady Pipefish, Steep-nosed Pipefish [66231]		Species or species habitat may occur within area	In buffer area only
Hippocampus abdominalis Big-belly Seahorse, Eastern Potbelly Seahorse, New Zealand Potbelly Seahorse [66233]		Species or species habitat may occur within area	In buffer area only
Hippocampus whitei White's Seahorse, Crowned Seahorse, Sydney Seahorse [66240]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Histiogamphelus briggsii Crested Pipefish, Briggs' Crested Pipefish, Briggs' Pipefish [66242]		Species or species habitat may occur within area	In buffer area only
<u>Lissocampus runa</u> Javelin Pipefish [66251]		Species or species habitat may occur within area	In buffer area only
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Notiocampus ruber Red Pipefish [66265]		Species or species habitat may occur within area	In buffer area only
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragor [66268]	1	Species or species habitat may occur within area	In buffer area only
Solegnathus spinosissimus Spiny Pipehorse, Australian Spiny Pipehorse [66275]		Species or species habitat may occur within area	In buffer area only
Solenostomus cyanopterus Robust Ghostpipefish, Blue-finned Ghos Pipefish, [66183]	t	Species or species habitat may occur within area	In buffer area only
Solenostomus paradoxus Ornate Ghostpipefish, Harlequin Ghost Pipefish, Ornate Ghost Pipefish [66184]		Species or species habitat may occur within area	In buffer area only
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area	In buffer area only
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area	In buffer area only
Syngnathoides biaculeatus Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area	In buffer area only
Trachyrhamphus bicoarctatus Bentstick Pipefish, Bend Stick Pipefish, Short-tailed Pipefish [66280]		Species or species habitat may occur within area	In buffer area only
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area	In buffer area only
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area	In buffer area only
Mammal			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area	In buffer area only
Arctocephalus pusillus Australian Fur-seal, Australo-African Fur-seal [21]		Species or species habitat may occur within area	In buffer area only
Dugong dugon Dugong [28]		Species or species habitat may occur within area	In buffer area only
Reptile			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In buffer area only
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Hydrophis platurus as Pelamis platurus Yellow-bellied Sea Snake [93517]		Species or species habitat may occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Wholes and Other Catagons		I Doo	ource Information
Whales and Other Cetaceans		<u>L Kes</u>	<u>source Information </u>

Whales and Other Cetaceans		[Re	<u>source Information]</u>
Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			
Balaenoptera acutorostrata			
Minke Whale [33]		Species or species habitat may occur within area	In buffer area only

Current Scientific Name	Status	Type of Presence	Buffer Status
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour may occur within area	
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In buffer area only
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area	In buffer area only
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only
Stenella attenuata Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area	In buffer area only
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area	In buffer area only
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area	In buffer area only

Extra Information

State and Territory Reserves			[Resource Information]
Protected Area Name	Reserve Type	State	Buffer Status
Awabakal	Nature Reserve	NSW	In buffer area only
Blue Gum Hills	Regional Park	NSW	In buffer area only
Glenrock	State Conservation Area	NSW	In buffer area only
Hexham Swamp	NRS Addition - Gazettal in Progress	NSW	In buffer area only
Hunter Wetlands	National Park	NSW	In buffer area only
Worimi	State Conservation Area	NSW	In buffer area only
Worimi	Regional Park	NSW	In buffer area only

Regional Forest Agreements

[Resource Information]

Note that all areas with completed RFAs have been included. Please see the associated resource information for specific caveats and use limitations associated with RFA boundary information.

RFA Name	State	Buffer Status
North East NSW RFA	New South Wales	In feature area

Nationally Important Wetlands		[Resource Information]
Wetland Name	State	Buffer Status
Hexham Swamp	NSW	In buffer area only
Jewells Wetland	NSW	In buffer area only
Kooragang Nature Reserve	NSW	In buffer area only
Lake Macquarie	NSW	In buffer area only
Shortland Wetlands Centre	NSW	In buffer area only

EPBC Act Referrals

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Eastern Rise Offshore Wind Project	2023/09544		Assessment	In buffer area
				only
Eastern Rise Offshore Wind Project Initial Marine Field Investigations	2023/09555		Completed	In buffer area only
M1 Motorway extension to Raymond Terrace, NSW	2018/8288		Post-Approval	In buffer area only
Residential development, Hillsborough, NSW	2014/7217		Assessment	In buffer area only
<u>Tomago Battery Energy Storage</u> <u>System (BESS)</u>	2023/09521		Completed	In buffer area only
Controlled action				
Construction and Sequential Filling of Waste Emplacement Facility	2008/4652	Controlled Action	Post-Approval	In buffer area only
Former Rifle Range Residential Development, Popplewell Road, Fern Bay, NSW	2017/7993	Controlled Action	Proposed Decision	In buffer area only
Gas Transmission Pipeline	2011/5917	Controlled Action	Completed	In buffer area only
Gloucester Coal Seam Methane Gas Project	2008/4432	Controlled Action	Post-Approval	In buffer area only
Hunter River Port and Transport Corridor	2001/419	Controlled Action	Completed	In buffer area only
Hunter River south arm dredging	2003/950	Controlled Action	Post-Approval	In buffer area only
Kooragang Island Waste Emplacement Facility - Area 2 Closure Works, NSW	2016/7670	Controlled Action	Post-Approval	In buffer area only
Kooragang Wetland Rehabilitation Project	2007/3220	Controlled Action	Post-Approval	In buffer area only
Newcastle gas storage facility project	2010/5752	Controlled Action	Post-Approval	In buffer area only
Newcastle inner city bypass Rankin Park to Jesmond NSW	2015/7550	Controlled Action	Post-Approval	In buffer area only
Newcastle LNG export facility	2011/5915	Controlled Action	Completed	In buffer area only
Newcastle Power Station Project, Tomago, NSW	2019/8425	Controlled Action	Post-Approval	In buffer area only
Nobby's Lighthouse redevelopment	2006/3179	Controlled Action	Completed	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Northbank Enterprise Hub	2021/9058	Controlled Action Guidelines Issued		In buffer area only
Northbank Enterprise Hub, Industrial and Business Park	2010/5660	Controlled Action Completed		In buffer area only
Port Site and Materials Handling Development	2001/242	Controlled Action Completed		In feature area
Protech Cold Mill Facility	2001/274	Controlled Action Post-Approval		In feature area
Queensland Hunter Gas Pipeline, approximately 825 km in length	2008/4483	Controlled Action	Completed	In buffer area only
Remediation Works, Kooragang island waste facility emplacement facility NSW	2011/5920	Controlled Action	Completed	In buffer area only
River Dredging Operations	2001/249	Controlled Action	Completed	In feature area
Rutile and Zircon Mining on Stockton Rifle Range	2000/8	Controlled Action	Post-Approval	In buffer area only
Steel Mill	2001/231	Controlled Action	Completed	In buffer area only
Terminal 4 Coal Export Terminal Project, Kooragang Island	2011/6029	Controlled Action	Post-Approval	In buffer area only
Tomago Road Industrial Subdivision	2007/3343	Controlled Action	Post-Approval	In buffer area only
Not controlled action				
Blue Gum Vista Estate Residential development off Minmi Road	2004/1507	Not Controlled Action	Completed	In buffer area only
construction of a hydrological control structure at the mouth of Wader Creek and	2002/780	Not Controlled Action	Completed	In buffer area only
Construction of a Jetty	2002/784	Not Controlled Action	Completed	In buffer area only
Controlling Water Levels in Shortland Wetlands	2010/5468	Not Controlled Action	Completed	In buffer area only
<u>Demolition of Ablutions Block,</u> <u>Snapper Island, NSW</u>	2018/8303	Not Controlled Action	Completed	In buffer area only
Expansion to Kooragang Coal Terminal	2007/3352	Not Controlled Action	Completed	In buffer area only
Fort Scratchley refurbishment works	2005/2283	Not Controlled Action	Completed	In feature area

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Fort Scratchley site remediation	2005/2075	Not Controlled Completed Action		In feature area
Geological exploration and historical research of convict coal mines beneath For	2004/1421	Not Controlled Action	Completed	In feature area
Green & Golden Bell Frog Habitat Enhancement Project	2004/1795	Not Controlled Action	Completed	In feature area
Hexam Train Support Facility	2012/6285	Not Controlled Action	Completed	In buffer area only
Hexham Relief Roads Project	2012/6309	Not Controlled Action	Completed	In buffer area only
Hunter Natural Gas Pipeline	2004/1902	Not Controlled Action	Completed	In buffer area only
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
Industrial and Residential Subdivision, Minmi and Black Hill, Lower Hunter	2008/4603	Not Controlled Action	Completed	In buffer area only
Kooragang Coal Terminal Arrival Roads Stage 2 Upgrade, Newcastle, NSW	2014/7229	Not Controlled Action	Completed	In buffer area only
Nelson Bay Rd and Seaside Blvd intersection development, Nelson Bay, NSW	2019/8433	Not Controlled Action	Completed	In buffer area only
Newcastle Inner City Bypass - Sandgate to Shortland	2007/3633	Not Controlled Action	Completed	In buffer area only
Nobbys Headland Redevelopment	2008/4672	Not Controlled Action	Completed	In buffer area only
Proposed maintenance and manufacturing facility to support industrial activities	2007/3592	Not Controlled Action	Completed	In buffer area only
Queensland Hunter Gas Pipeline, approximately 833 km in length	2008/4620	Not Controlled Action	Completed	In buffer area only
Retail development, Lots 10-14, South Street, Windale, NSW	2013/7031	Not Controlled Action	Completed	In buffer area only
Revised alignment Hunter Natural Gas Pipeline	2005/2470	Not Controlled Action	Completed	In buffer area only
Richmond Vale Rail Trail	2019/8568	Not Controlled Action	Completed	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status	
Not controlled action					
sale of property located at 96, Hunter Street	2003/1097	Not Controlled Action	Completed	In feature area	
Sandgate Rail Grade Separation	2005/1948	Not Controlled Action	Completed	In feature area	
Shorebird and wader habitat rehabilitation	2001/457	Not Controlled Action	Completed	In buffer area only	
Stockpiling of lump coal up to 40,000 tonnes	2003/1304	Not Controlled Action	Completed	In buffer area only	
Tomago Aluminium Rod & Conductor Manufacturing Facility	2011/6085	Not Controlled Action	Completed	In buffer area only	
Tomago to Tomaree Electricity Supply Upgrade	2003/1023	Not Controlled Action	Completed	In feature area	
Tomago Trunk Watermain Upgrade	2008/4049	Not Controlled Action	Completed	In buffer area only	
Tomago Wetland Rehabilitation Project	2011/5894	Not Controlled Action	Completed	In buffer area only	
Not controlled action (particular manne	ir)				
2D marine seismic survey in PEP-11 permit area, NSW	2002/879	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only	
Fort Wallace Residential Development Proposal, north of Newcastle, NSW	2017/7951	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only	
Kooragang Island coal export terminal	2006/2987	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only	
Kooragang Island Waste Emplacement Facility Closure Works	2012/6464	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only	
Rehabilitation of Hexham Swamp	2003/1244	Not Controlled Action (Particular Manner)	Post-Approval	In feature area	
Star of the South Offshore Surveys	2019/8525	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only	
TransGrid 132kV Power Transmission Line	2002/794	Not Controlled Action (Particular	Post-Approval	In buffer area only	

Title of referral	Reference	Referral Outcome	Assessment Statu	ıs Buffer Status
Not controlled action (particular mann	er)			
		Manner)		
Wastewater Transfer Scheme	2011/5985	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Referral decision				
Breeding program for Grey Nurse Sharks	2007/3245	Referral Decision	Completed	In buffer area only
Biologically Important Areas				
Scientific Name		Behaviour	Presence E	Buffer Status
Dolphins				
<u>Tursiops aduncus</u>				
Indo-Pacific/Spotted Bottlenose Dolph	nin [68418]	Breeding	Likely to occur I	n buffer area only
<u>Tursiops aduncus</u>				
Indo-Pacific/Spotted Bottlenose Dolph	nin [68418]	Foraging	Known to occur I	n buffer area only
Seabirds				
Ardenna carneipes				
Flesh-footed Shearwater [82404]		Foraging	Known to occur I	n buffer area only
Ardenna grisea				
Sooty Shearwater [82651]		Foraging	Likely to occur I	n buffer area only
Ardenna pacifica				
Wedge-tailed Shearwater [84292]		Foraging	Likely to occur I	n buffer area only
Ardenna tenuirostris				
Short-tailed Shearwater [82652]		Foraging	Likely to occur I	n buffer area only
Diomedea exulans antipodensis				
Antipodean Albatross [82269]		Foraging	Known to occur I	n buffer area only
Procellaria parkinsoni				
Black Petrel [1048]		Foraging	Likely to occur I	n buffer area only
Sharks				
Carcharias taurus				
Grey Nurse Shark [64469]		Foraging	Known to occur I	n buffer area only
Whales				
Megaptera novaeangliae				
Humpback Whale [38]		Foraging	Known to occur I	n buffer area only

Bioregional Assessments			
SubRegion	BioRegion	Website	Buffer Status
Hunter	Northern Sydney Basin	BA website	In feature area

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- -Office of Environment and Heritage, New South Wales
- -Department of Environment and Primary Industries, Victoria
- -Department of Primary Industries, Parks, Water and Environment, Tasmania
- -Department of Environment, Water and Natural Resources, South Australia
- -Department of Land and Resource Management, Northern Territory
- -Department of Environmental and Heritage Protection, Queensland
- -Department of Parks and Wildlife, Western Australia
- -Environment and Planning Directorate, ACT
- -Birdlife Australia
- -Australian Bird and Bat Banding Scheme
- -Australian National Wildlife Collection
- -Natural history museums of Australia
- -Museum Victoria
- -Australian Museum
- -South Australian Museum
- -Queensland Museum
- -Online Zoological Collections of Australian Museums
- -Queensland Herbarium
- -National Herbarium of NSW
- -Royal Botanic Gardens and National Herbarium of Victoria
- -Tasmanian Herbarium
- -State Herbarium of South Australia
- -Northern Territory Herbarium
- -Western Australian Herbarium
- -Australian National Herbarium, Canberra
- -University of New England
- -Ocean Biogeographic Information System
- -Australian Government, Department of Defence
- Forestry Corporation, NSW
- -Geoscience Australia
- -CSIRO
- -Australian Tropical Herbarium, Cairns
- -eBird Australia
- -Australian Government Australian Antarctic Data Centre
- -Museum and Art Gallery of the Northern Territory
- -Australian Government National Environmental Science Program
- -Australian Institute of Marine Science
- -Reef Life Survey Australia
- -American Museum of Natural History
- -Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
- -Tasmanian Museum and Art Gallery, Hobart, Tasmania
- -Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the **Contact us** page.

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Department of Climate Change, Energy, the Environment and Water

GPO Box 3090

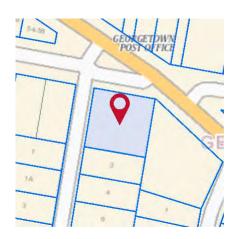
Canberra ACT 2601 Australia

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Property Report

29 MOATE STREET GEORGETOWN 2298



Property Details

Address: 29 MOATE STREET GEORGETOWN 2298

Lot/Section 11/-/DP1286353

/Plan No:

Council: NEWCASTLE CITY COUNCIL

Summary of planning controls

Planning controls held within the Planning Database are summarised below. The property may be affected by additional planning controls not outlined in this report. Please contact your council for more information.

Local Environmental Plans Newcastle Local Environmental Plan 2012 (pub. 30-5-2014)

Land Zoning E1 - Local Centre: (pub. 24-2-2023)

Height Of Building 11 m 1.5:1 Floor Space Ratio Minimum Lot Size NA NA Heritage Land Reservation Acquisition NA Foreshore Building Line NA Acid Sulfate Soils Class 5 Additional Permitted Uses Item 2

Detailed planning information

State Environmental Planning Policies which apply to this property

State Environmental Planning Policies can specify planning controls for certain areas and/or types of development. They can also identify the development assessment system that applies and the type of environmental assessment that is required.



Property Report

29 MOATE STREET GEORGETOWN 2298

- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Excluded (pub. 21 -10-2022)
- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Subject Land (pub. 2-12-2021)
- State Environmental Planning Policy (Exempt and Complying Development Codes) 2008: Land Application (pub. 12-12-2008)
- State Environmental Planning Policy (Housing) 2021: Land Application (pub. 26-11-2021)
- State Environmental Planning Policy (Industry and Employment) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Planning Systems) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Primary Production) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Resilience and Hazards) 2021: Land Application (pub. 2
 -12-2021)
- State Environmental Planning Policy (Resources and Energy) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Sustainable Buildings) 2022: Land Application (pub. 29-8-2022)
- State Environmental Planning Policy (Transport and Infrastructure) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy No 65—Design Quality of Residential Apartment Development: Land Application (pub. 26-7-2002)

Other matters affecting the property

Information held in the Planning Database about other matters affecting the property appears below. The property may also be affected by additional planning controls not outlined in this report. Please speak to your council for more information

Housing and Productivity Housing and Productivity Contribution Lower Hunter

Contribution Region_A&A

Local Aboriginal Land Council AWABAKAL

Regional Plan Boundary Hunter

