



planning consultants

Review of Environmental Factors

Upgrades to Silverwater Park

Phase I of the Duck River Nature Trail

218 Silverwater Road, Silverwater

Prepared for: City of Parramatta
January 2025

Printed: 15 January 2025
File Name: 22120A Silverwater Park - REF/Reports/22120A.REF_V2
Project Manager: T. West
Client: City of Parramatta
Project Number: 22120A

Document Control

Version	Prepared By	Reviewed By	Issued To	Date
Draft	T. West	H. Burnett	Council	6 November 2024
Draft V2	T. West	H. Burnett	Council	26 November 2024
Final	T. West	H. Burnett	Council	10 January 2025

Suite 2.01 Level 2, 1A Eden Park Drive,
Macquarie Park NSW 2113
PO Box 230, North Ryde BC NSW 1670

t: 02 9980 6933
e: dfp@dfpplanning.com.au

DFP Planning Pty Limited
ACN 002 263 998

www.dfpplanning.com.au

Contents

1	Introduction	5
1.1	Commission	5
1.2	Certification	5
1.3	Material Relied Upon	6
1.4	Site Context and Surrounds	6
1.4.1	The Site	6
1.4.2	Physical Description	7
1.4.3	Vegetation	11
1.4.4	Surrounding Development	12
2	Description of Proposed Works	13
2.1	Summary of Works	13
2.2	Construction of a Shared Path	13
2.3	Construction of a Cycleway	13
2.4	Tree Removal	14
2.5	Lighting	14
2.6	Proposed Landscaping	15
3	Statutory Framework	16
3.1	Relevant Legislation	16
3.1.1	Environmental Planning and Assessment Act, 1979	16
3.1.2	Other Relevant Acts	16
3.1.3	Environmental Planning and Assessment Regulation 2021	19
3.1.4	Environment Protection and Biodiversity Act 1999 (Commonwealth)	21
3.1.5	State Environmental Planning Policy (Transport and Infrastructure) 2021 (SEPP TI)	21
3.1.6	State Environmental Planning Policy (Resilience and Hazards) 2021	24
3.1.7	State Environmental Planning Policy (Biodiversity and Conservation) 2021	24
3.1.8	State Environmental Planning Policy (Precincts – Central River City) 2021	25
3.1.9	Parramatta Local Environmental Plan 2023	25
4	Environmental Risk Assessment	28
4.1	Assessment Method	28
4.2	Site Constraints	28
5	Environmental Impact Assessment	32
5.1	Detailed Environmental Assessment	32
5.1.1	Flora & Fauna	32
5.1.2	Traffic and Parking	35
5.1.3	Lighting Impacts	36
5.1.4	Contamination	37
5.1.5	Soil & Water Quality	37
5.1.6	Heritage Impacts	37
5.1.7	Waste Management	38

Contents

5.1.8	Community Amenity	38
5.1.9	Cumulative Impacts	39
5.1.10	Construction Management	39

6	Conclusion	40
----------	-------------------	-----------

7	Mitigation Measures	41
----------	----------------------------	-----------

Figures

Figure 1	Site Location	7
Figure 2	Aerial photograph	7
Figure 3	Photograph of Silverwater Park	8
Figure 4	Photograph of an existing footpath towards the north eastern corner of Silverwater Park	8
Figure 5	Photograph of an existing footpath beneath Silverwater Bridge	9
Figure 6	Photograph of an existing boat ramp	9
Figure 7	Photograph of existing footpath within Silverwater Park	9
Figure 8	Photograph of existing footpath that connects to Clyde Street	10
Figure 9	Photograph of Silverwater Park, looking north	10
Figure 10	Photograph of Silverwater Park, looking south	10
Figure 11	Proposed Landscape Plan prepared by Capital Projects, dated 10 October 2024.	13
Figure 12	Landscape Plan showing the location of the proposed cycleway within the road reserve.	14
Figure 13	Land zoning map extract. Source: ePlanning Spatial Viewer	26
Figure 14	Photograph of mature fig trees towards the west of the park	33
Figure 15	Native vegetation mapping. Source: Applied Ecology	34
Figure 16	Records of threatened species within a 5km radius of Duck River. Source: Applied Ecology	35
Figure 17	Medium Rigid Vehicle Swept Path Diagram. Source: Woolacotts	36

Tables

Table 1	Tree Removal Schedule	14
Table 2	Assessment against other relevant Acts	16
Table 3	Environmental Factors to be considered under s171 of the EP&A Regulation	19
Table 4	EPBC Act 1999 Checklist	21
Table 5	Considerations under Section 2.10 of SEPP TI	22
Table 6	Assessment of proposal against relevant provisions of the LEP	27
Table 7	Site Constraints	29

Abbreviations

AS	Australian Standard
BC Act	<i>Biodiversity Conservation Act 2016</i>
BCA	Building Code of Australia
Council	City of Parramatta
DFP	DFP Planning Pty Limited

Contents

Abbreviations

DPHI	NSW Department of Planning, Housing and Infrastructure
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2021</i>
EPI	Environmental Planning Instrument
LEP	Local Environmental Plan
LGA	Local Government Area
REF	Review of Environmental Factors
SEPP	State Environmental Planning Policy
TfNSW	Transport for NSW
WM Act	<i>Water Management Act 2000</i>

1 Introduction

1.1 Commission

DFP has been commissioned by the City of Parramatta (Council) to prepare a Review of Environmental Factors (REF) for the proposed upgrade works to Silverwater Park, forming part of Phase 1 of the Duck River Nature Trail upgrades.

This REF report assesses the potential environmental impacts which could arise from the 'Proposal' which include:

- Partial demolition of a footpath;
- Construction of a 4.5m wide shared path;
- Construction of a 2.5m wide cycle path to connect with Wilson Park;
- Proposed park furniture and facilities, including new bins, drinking fountain, bicycle storage hoops and a bicycle repair station;
- Removal of eight (8) trees and associated replacement tree planting and landscaping; and
- Proposed lighting posts (5m in height) and luminaires, at 15m spacing.

This REF also details any relevant environmental management measures that should be implemented during the carrying out of the works.

This REF has been prepared in accordance with the relevant provisions of the *Environmental Planning and Assessment Act 1979* (EP&A Act), the *Environmental Planning and Assessment Regulation 2021* (the Regulation) and *State Environmental Planning Policy (Transport and Infrastructure) 2021* (SEPP TI) and concludes that, by adopting the mitigation measures identified in this assessment, it is unlikely that there would be significant environmental impacts associated with the Proposal.

1.2 Certification

This REF provides a true and fair review of the Proposal in relation to its potential effects on the environment. It addresses to the fullest extent possible, all matters affecting or likely to affect the environment as a result of the Proposal. The information contained in this REF is neither false nor misleading. This REF has been prepared in accordance with the relevant requirements of the EP&A Act, EP&A Regulation, and the NSW Code of Practice for Part 5 Activities.

Name of the person(s) who prepared the REF: **Thomas West**

Position and Qualifications of the person(s) who prepared the REF: **Senior Project Planner**
M.Planning Macquarie University

Signature:

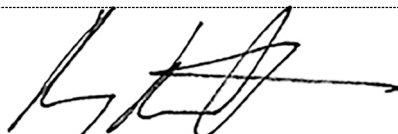


Date: 15 January 2025

Name of the person(s) who reviewed the REF: **Henry Burnett**

Position and Qualifications of the person(s) who prepared the REF: **Director**
B Planning Macquarie University

Signature



Date: 15 January 2025

I have examined this REF and the Certification and accept the REF on behalf of the City of Parramatta

Name of the Authorised Person: **Troy Holbrook**

Position of the Authorised Person: **Senior Open Space & Natural Area Planner**

1 Introduction

Signature:



Date: 28 January 2025

I accept this REF on behalf of the City of Parramatta, as the determining authority and determine that the Proposal can proceed subject to the mitigation measures being implemented

Name of Delegated Officer:

Terry Johnson

Designation:

Group Manager Parks and Open Space

Signature:



Date: 3 February 2025

1.3 Material Relied Upon

This REF has been prepared by DFP based on the information listed below.

Appendix 1: *Survey Plan, prepared by City of Parramatta, dated 1 June 2023;*

Appendix 2: *Landscape Plans prepared by Capital Projects, dated 10 October 2024;*

Appendix 3: *Civil & Stormwater Plans prepared by Woolacotts, dated 11 November 2024;*

Appendix 4: *Arborist Report prepared by Truth About Trees, dated 17 October 2024;*

Appendix 5: *Ecological Impact Assessment prepared by Applied Ecology, dated 21 September 2022;*

Appendix 6: *Flood Advice prepared by City of Parramatta, dated 23 October 2024;*

Appendix 7: *Light Spill Assessment Report prepared by Lighting, Art & Science, dated 12 August 2024;*

Appendix 8: *Traffic Statement prepared by City of Parramatta, dated 4 September 2024;*

Appendix 9: *Preliminary Construction Management Plan prepared by City of Parramatta;*

Appendix 10: *AHIMS Search, dated 14 June 2024;*

Appendix 11: *Aboriginal & Non-Aboriginal Archaeological Opportunities & Constraints Report prepared by Extent, dated 1 September 2023;*

Appendix 12: *Community Engagement Report, prepared by City of Parramatta, dated 11 November 2024; and*

Appendix 13: *Mitigation Measures*

1.4 Site Context and Surrounds

1.4.1 The Site

The Site is located approximately 6km east of the Parramatta Central Business District (CBD) and is located within the City of Parramatta Local Government Area (LGA).

The Site encompasses Silverwater Park which is Crown Land (Crown Reserve R56754) managed by Council as the Crown Land manager under the *Crown Land Management Act 2016* (CLM Act). The site has a property address of 218 Silverwater Road, Silverwater and comprises four (4) allotments as set out below.

- Lot 10 in DP 1177503;
- Lot 1 in DP 85506;
- Lot 92 in DP 1140110;

1 Introduction

- Lot 396 in DP 752058; and
- Lot 3 in DP 1140265

A minor portion of the proposed works, for the purpose of a cycleway link, is located within the road reserve to the east of Silverwater Park, beneath Silverwater Bridge.

A Survey of the site is included at **Appendix 1** of this REF.

The site is irregularly shaped with a frontage to Clyde Street to the south, Duck River to the west, Parramatta River to the north and Silverwater Road to the east.

Figure 1 below is a locality plan showing the site outlined in blue.

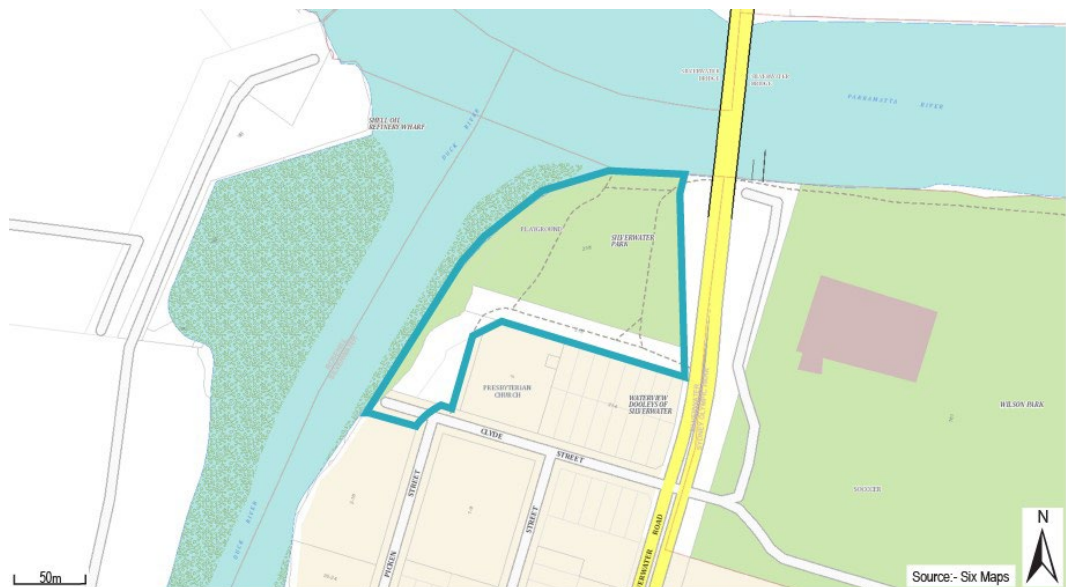


Figure 1 Site Location

Figure 2 is an aerial photograph of the site and its surrounds.



Figure 2 Aerial photograph

1.4.2 Physical Description

Existing facilities on the site include a number of footpaths and vegetation, ranging from trees to low-lying vegetation and grass cover. A playground is located within a central portion of the park, as well as scattered outdoor seating and associated structures. At-grade parking is provided towards the east of the site.

1 Introduction

Other facilities of the site include an amenities building, an open multi-use recreational space for outdoor activities, an at grade car park and picnic tables and seating with views towards Parramatta River.

Figures 3 to Figure 10 are photographs of the site.



Figure 3 Photograph of Silverwater Park



Figure 4 Photograph of an existing footpath towards the north eastern corner of Silverwater Park

1 Introduction



Figure 5 Photograph of an existing footpath beneath Silverwater Bridge



Figure 6 Photograph of an existing boat ramp



Figure 7 Photograph of existing footpath within Silverwater Park

1 Introduction



Figure 8 Photograph of existing footpath that connects to Clyde Street



Figure 9 Photograph of Silverwater Park, looking north



Figure 10 Photograph of Silverwater Park, looking south

1 Introduction

1.4.3 Vegetation

There are a variety of trees and shrubs across the full extent of the Silverwater Park site. Trees located within the vicinity of the proposed works have been assessed in the Arboricultural Impact Assessment (AIA) report prepared by Truth About Trees (see **Appendix 4**).

Land along the western boundary of the site, adjoining Duck River, is part of a wetland area and comprises biodiversity values and mangroves.

1 Introduction

1.4.4 Surrounding Development

To the north of the site is Parramatta River. On the northern side of Parramatta River is Eric Primrose Reserve.

To the east of the site is Silverwater Road. On the eastern side of Silverwater Road is Wilson Park and more broadly Blaxland Riverside Park. 'Cricket Central' is also located to the east of the site, which includes a full size cricket oval and a recreational facility that provides for indoor nets, a gymnasium, meeting rooms, an amphitheatre and other spaces that are utilised by Cricket NSW and can be hired out to the public.

To the south of the site are predominantly industrial developments, including the Gunlake Concrete Silverwater Plant, Autohaus Prestige Silverwater and the Silverwater Hotel.

To the west of the site is Duck River. On the western side of Duck River are a range of industrial development sites, including the Shell site at Camellia.

2 Description of Proposed Works

2.1 Summary of Works

In summary the proposed development comprises the following construction works:

- Partial demolition of a footpath;
- Construction of a 4.5m wide shared path;
- Construction of a 2.5m wide cycle path to connect with Wilson Park;
- Proposed park furniture and facilities, including new bins, drinking fountain, bicycle storage hoops and a bicycle repair station;
- Removal of eight (8) trees and associated replacement tree planting and landscaping; and
- Proposed lighting posts (5m in height) and luminaires, at 15m spacing.

The following subsections provide a more detailed description of the proposed works and should be read in conjunction with the accompanying consultant plans and reports.

2.2 Construction of a Shared Path

An existing footpath located along the southern side of Silverwater Park (adjoining 2 Clyde Street and 214 Silverwater Road) is proposed to be widened. This footpath is proposed to be replaced by a 4.5m wide shared path, which will be used for both pedestrians and cyclists.

The intention is that this path will link to the cycleway that is proposed towards the north easter corner of the site that connects to Blaxland Reserve and Newington Armory further to the east.

Figure 11 below is an extract of the Landscape Plan that shows the location of the proposed 4.5m wide shared path.



Figure 11 Proposed Landscape Plan prepared by Capital Projects, dated 10 October 2024.

2.3 Construction of a Cycleway

The location of the proposed cycleway within the boundaries of Silverwater Park is shown in blue in **Figure 11** above. The cycleway will provide a connection to an existing cycleway that is located to the east of the site, connecting more broadly to Blaxland Reserve and beyond.

2 Description of Proposed Works

As provided in **Figure 12** below, an extension of the cycleway through a road reserve beneath the Silverwater Bridge will need to be constructed to provide this link.



Figure 12 Landscape Plan showing the location of the proposed cycleway within the road reserve.

2.4 Tree Removal

The proposed development involves the removal of eight (8) trees to facilitate the proposed development. A breakdown of the trees that are subject to removal and details relating to their height, health and retention value are set out in **Table 1** below.

Table 1 Tree Removal Schedule				
Tree Number	Tree Type (Common Name)	Height	Health	Retention Value
265	Black She-oak	11m	Good	Low
267	Black She-oak	7m	Good	Low
268	Swamp She-oak	7m	Poor	Low
269	River She-oak	18m	Good	Medium
270	River She-oak	18m	Good	Medium
279	Grey Box	18m	Good	Very Low
286	River She-oak	15m	Poor	Medium
287	Swamp She-oak	13m	Good	Medium

2.5 Lighting

Lighting is proposed along the shared path, in the form of light poles (5m in height) that are spaced at approximately 15m intervals.

A lighting assessment has been undertaken by Lighting, Art & Science, which has considered the impacts of the proposed lighting, having regard to the relevant Australian Standards. That assessment is included at **Appendix 7**.

2 Description of Proposed Works

2.6 Proposed Landscaping

Replacement tree planting is proposed throughout the park and along the boundary of the proposed shared path.

Seven (7) trees are proposed towards the eastern side of the park, with an additional three (3) trees proposed along the south western side of the park.

Council has confirmed that the replacement planting will consist of species that are frequent to the area.

3 Statutory Framework

This section describes the statutory framework under which the Proposal has been assessed.

3.1 Relevant Legislation

3.1.1 Environmental Planning and Assessment Act, 1979

The provisions of SEPP TI allow the proposed works to be carried out as development without consent under Part 5 of the *Environmental Planning & Assessment Act 1979* (EP&A Act).

This REF also considers the requirements of Section 5.5 of the EP&A Act and Section 170, Section 171 and Section 171A of the EP&A Regulation.

3.1.2 Other Relevant Acts

Table 2 below provides an assessment against the relevant provisions of other applicable Acts under NSW legislation:

Table 2 Assessment against other relevant Acts		
Legislation	Assessment	Compliance
National Parks & Wildlife Act 1974	<p>The NP Act, amongst other things, aims to conserve nature, objects, places or features of cultural value within the landscape.</p> <p>An AHIMS Search was conducted on 14 June 2024 (refer to Appendix 10). No Aboriginal sites or places have been recorded or declared in or near Silverwater Park.</p> <p>Furthermore, the Plan of Management for Silverwater Park does not identify any Aboriginal objects or places within the park.</p> <p>The upgrades relate to an area of the park that has already been subject to disturbance. Therefore, it is unlikely that any impacts to Aboriginal objects or places will be generated by the proposed works.</p> <p>Notwithstanding, a Mitigation Measure has been included that relates to unexpected finds. If encountered during construction, all works should cease and consultation with a heritage professional or State government agency be conducted to determine the subsequent course of action.</p>	Yes
Disability Discrimination Act 1992	<p>The proposed shared path will be accessible. The intention is for the proposed works to provide accessibility and inclusion for all people.</p> <p>The proposed works have been designed to allow compliant access for all users.</p> <p>A Mitigation Measure has also been included for the proposal to be compliant with the relevant accessibility legislation.</p>	Yes
Crown Land Management Act 2016	<p>In accordance with Chapter 3 of the CLM Act, Council is appointed as the Crown Land Manager (CLM) that is responsible for the management of the park. Having regard to the Plan of Management that applies to the site, the land has been reserved for public recreation and classified as a 'Park'.</p> <p>The proposed minor works to Silverwater Park proposed as part of this REF are not inconsistent with this Plan of Management or public recreation purpose.</p>	Yes
Native Title Act 1993 (Commonwealth)	<p>A review of the National Native Title Register (NNTR) has not identified any Native Title Claims that have been administered by the National Native Title Tribunal (NNTT) on the site or in the immediate vicinity of the site.</p> <p>The proposed works are to be undertaken in good faith in accordance with the purpose of the site as a 'public recreation' use.</p>	Yes

3 Statutory Framework

Table 2 Assessment against other relevant Acts

<p>Aboriginal Land Rights Act 1983</p>	<p>The <i>Aboriginal Land Rights Act 1983</i> recognises the traditional owners of the land and seeks to compensate them for past dispossession, as well as supporting their social and economic development.</p> <p>Any activities on Crown land should not significantly impact the current physical condition of the land or prevent it being transferred should a claim be successful. Whilst it is unlikely that the Crown land within Silverwater Park would be claimable under the Act, as it is lawfully used and occupied by Council for public recreation purposes, advice should be sought from Crown lands as to due diligence requirements associated with any undetermined Aboriginal land claims.</p>	<p>Yes</p>
<p>Local Government Act 1993</p>	<p>The site is classified as 'Community Land' under the LG Act and is categorised as a 'Park'.</p> <p>Chapter 6 of the LG Act regulates community land, which is required to be managed in accordance with a Plan of Management applying to the land.</p> <p>In this regard, a Plan of Management (POM) adopted on 4 December 2023 applies to Silverwater Park, which was prepared in consultation with the community. The POM specifies that development of Community Land is to be consistent with the objectives of the plan and the provisions of any relevant environmental planning instrument (EPI's), including the EP&A Act.</p> <p>Having regard to Table 7 of the POM, the core objectives for a 'Park' are as follows:</p> <ul style="list-style-type: none"> - encourage, promote and facilitate recreational, cultural, social and educational pastimes and activities - provide for passive recreational activities or pastimes and for the casual playing of games - improve the land in such a way as to promote and facilitate its use to achieve the other core objectives for its management <p>This REF has considered the core objectives, the relevant EPI's and the EP&A Act, noting that the works are proposed to be undertaken in accordance with Part 5 of the EP&A Act.</p>	<p>Yes</p>
<p>Fisheries Management Act 1994</p>	<p>The objects of the FM Act are to develop and share the fishery resources of the State for the benefit of present and future generations.</p> <p>Silverwater Park adjoins Parramatta River to the north and Duck River to the west. However, the location of the proposed works is entirely contained within Silverwater Park and part of the road reserve to the east.</p> <p>Notwithstanding, erosion and sediment control measures during the construction works will be important to prevent sediment-laden water from entering into the nearby natural waterways.</p> <p>The Preliminary Construction Management Plan (PCMP) sets out requirements for management of erosion and sediment control, which includes the preparation of a plan that is to be established by the Principal Contractor and approved by Council prior to the commencement of works.</p> <p>Subject to the implementation of appropriate erosion and sediment control measures, it is considered that the proposed works are consistent with the objects of the FM Act.</p>	<p>Yes</p>
<p>Roads Act 1993</p>	<p>Section 138(1) of the Roads Act 1993 requires that the relevant roads authority provides consent to:</p> <p>(a) erect a structure or carry out a work in, on or over a public road, or</p>	<p>Capable of Compliance</p>

3 Statutory Framework

Table 2 Assessment against other relevant Acts

	<p>(b) dig up or disturb the surface of a public road, or (c) remove or interfere with a structure, work or tree on a public road, or (d) pump water into a public road from any land adjoining the road, or (e) connect a road (whether public or private) to a classified road,</p> <p>The proposed development includes works within the road reserve to the east of the site, beneath Silverwater Bridge, for the purpose of extending a cycleway from the River Walk to Silverwater Park.</p> <p>Prior to the works commencing a Section 138 Roads Authority Certificate is to be obtained from the relevant roads authority, for the works within the road reserve. This has been included as part of the Mitigation Measures (Appendix 13).</p>	
Water Management Act 2000	<p>The objectives of the WM Act are to provide for sustainable and integrated management of the water sources of the State for the benefit of both present and future generations.</p> <p>Section 91 of the WM Act relates to a controlled activity approval on waterfront land. Waterfront land is defined in the WM Act as being [bold text for emphasis]:</p> <p><i>waterfront land means—</i></p> <p>(a) the bed of any river, together with any land lying between the bed of the river and a line drawn parallel to, and the prescribed distance inland of, the highest bank of the river, or (a1) the bed of any lake, together with any land lying between the bed of the lake and a line drawn parallel to, and the prescribed distance inland of, the shore of the lake, or (a2) the bed of any estuary, together with any land lying between the bed of the estuary and a line drawn parallel to, and the prescribed distance inland of, the mean high water mark of the estuary, or (b) if the regulations so provide, the bed of the coastal waters of the State, and any land lying between the shoreline of the coastal waters and a line drawn parallel to, and the prescribed distance inland of, the mean high water mark of the coastal waters,</p> <p>where the prescribed distance is 40 metres or (if the regulations prescribe a lesser distance, either generally or in relation to a particular location or class of locations) that lesser distance. Land that falls into 2 or more of the categories referred to in paragraphs (a), (a1) and (a2) may be waterfront land by virtue of any of the paragraphs relevant to that land.</p> <p>Whilst a portion of the proposed works is within 40m of Parramatta River, Clause 38 of the Water Management (General) Regulation 2018 provides that public authorities are exempt from Section 91E(1) of the WM Act.</p> <p>Consequently, Council does not require a controlled activity approval in this instance.</p>	N/A
Biodiversity Conservation Act 2016	<p>The requirements for biodiversity assessment under the EP&A Act are provided in Part 7 of the BC Act.</p> <p>The test under Part 7 that needs to be established is whether an activity is “likely to significantly affect threatened species”.</p> <p>The BC Act establishes a framework for assessing the biodiversity impacts of development, as set out in Part 7. The framework aims to establish whether the development is likely to significantly affect threatened species, to determine whether the development exceeds the biodiversity offsets scheme and to determine whether the location of the development is carried out in a declared area of outstanding biodiversity value</p>	Yes

3 Statutory Framework

Table 2 Assessment against other relevant Acts

	<p>In relation to The Biodiversity Offsets Scheme it includes two elements in a threshold test, an area-based trigger and a Biodiversity Values Map trigger.</p> <p>As set out in Section 5 of this REF, a review of database records was undertaken as part of the Ecological Report. The review found that there were 59 threatened species and populations within a 5km radius of Silverwater Park. Notwithstanding, no threatened species and populations were recorded within the boundaries of Silverwater Park. Furthermore, the Ecology Report provides that the environment of Silverwater Park is highly modified with limited ecological values. In this regard, ecological impacts from the development are likely to be minimal.</p>	
--	---	--

3.1.3 Environmental Planning and Assessment Regulation 2021

This REF has been prepared in accordance with the Guidelines for Division 5.1 Assessments prepared by the Department of Planning and Environment dated June 2022, in accordance with Section 170 of the Regulation.

Table 3 includes an assessment against factors for consideration under Section 171 of the Regulation.

Table 3 Environmental Factors to be considered under s171 of the EP&A Regulation

Factor	Assessment
(1) When considering the likely impact of an activity on the environment, the determining authority must take into account the environmental factors specified in the environmental factors guidelines that apply to the activity.	This REF has been prepared in accordance with the Guidelines for Division 5.1 Assessments. There are no activity specific guidelines.
(2) If there are no environmental factors guidelines in force, the determining authority must take into account the following environmental factors— (a) the environmental impact on the community,	<p>The environmental impact on the community has been considered in the assessment at Section 6 of this REF.</p> <p>The predominant impacts that are likely from the proposed works relate to construction impacts, specifically in relation to traffic, noise, vibration and potential dust exposure.</p> <p>A positive impact to the community is predicted post construction. The upgrade works to the park will improve the functionality and useability of the space, for both pedestrians and cyclists.</p>
(b) the transformation of the locality,	<p>The proposal relates to the replacement of a footpath with a new shared path. Other works include the construction of a cycleway to link with an existing cycleway to the east of the site (along River Walk).</p> <p>Other minor upgrades to the park include the installation of lighting and landscaping. All of these works will improve the functionality of the park, however, will not significantly transform the locality.</p>
(c) the environmental impact on the ecosystems of the locality,	The works propose the removal of eight (8) trees, that are not considered to have significant ecological values based on the Ecological Report that has been prepared.

3 Statutory Framework

Table 3 Environmental Factors to be considered under s171 of the EP&A Regulation

Factor	Assessment
	<p>The impact of the proposed works on existing vegetation is assessed in this REF as being minimal. The proposal also involves the planting of additional trees.</p> <p>All trees proposed to be retained and proximate to the works area will be required to be protected during the demolition and construction phase.</p>
(d) reduction of the aesthetic, recreational, scientific or other environmental quality or value of the locality,	<p>The proposal will not result in a reduction of the aesthetic, recreational, scientific value of the locality. The proposed works will facilitate an overall redevelopment of the area which will provide a net improvement to these values of the locality.</p>
(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,	<p>An AHIMS Search (Appendix 10) was undertaken on 14 June 2024 which identified zero known Aboriginal Sites or Places within the site. In this regard, there are no known indigenous or cultural heritage items, objects or relics within the site and the proposed works are within the footprint of existing disturbed parts of the site.</p> <p>If during the construction works, Aboriginal objects are relics are uncovered, a Mitigation Measure has been included to cease works immediately and contact the relevant authority.</p>
(f) the impact on the habitat of protected animals, within the meaning of the <i>Biodiversity Conservation Act 2016</i> ,	<p>Pursuant to the Ecological Constraints Report prepared by Applied Ecology (Appendix 5), Silverwater Park is a highly modified environment that comprises limited ecological values. Most of the areas of ecological value within the site relate to the boundaries of the park, including the mangroves along the eastern banks of Duck River and to the west of the park. No works are proposed within these areas of ecological value.</p> <p>The report has determined that the ecological impacts associated with the works throughout Silverwater Park are likely to be minimal. Consequently, it is unlikely that the proposal will impact on the habitat of protected animals, within the meaning of the <i>Biodiversity Conservation Act 2016</i>.</p>
(g) the endangering of a species of animal, plant or other form of life, whether living on land, in water or in the air,	<p>As above, given the minimal ecological values of the site and highly modified environment with which the proposed works are to be located, it is unlikely that any adverse impacts on any species of animal plant or other wildlife will be generated.</p>
(h) long-term effects on the environment,	<p>This REF has assessed that the minimal short term construction impacts of the proposal can be mitigated and that there will be no significant adverse long-term effects on the environment.</p>
(i) degradation of the quality of the environment,	
(j) risk to the safety of the environment,	
(k) reduction in the range of beneficial uses of the environment,	<p>The proposed shared path replaces an existing footpath and the cycleway to the east will be marked over an existing road to the park. The proposal is not anticipated to result in a reduction to the range of beneficial uses of the environment.</p>
(l) pollution of the environment,	<p>As detailed within this REF, short term construction waste can be appropriately managed and there will be no long-term waste associated with the proposal.</p> <p>Minor construction-related air pollution is anticipated during the demolition phase of the works. The CMP will need to incorporate construction management strategies to mitigate the effects of air pollution and potential for water pollution due to the proximity to</p>
(m) environmental problems associated with the disposal of waste,	

3 Statutory Framework

Table 3 Environmental Factors to be considered under s171 of the EP&A Regulation

Factor	Assessment
	waterways, and also includes strategies for waste management and managing unanticipated contamination.
(n) increased demands on natural or other resources that are, or are likely to become, in short supply,	The proposed development is minor in nature and is not likely to result in a substantial increase in demands on natural or other resources that are likely to become in short supply.
(o) the cumulative environmental effect with other existing or likely future activities,	The proposed works involve replacement and upgrades to existing infrastructure in an existing park. Given the minor nature of the proposed works, there are not likely to be any significant adverse cumulative impacts arising from the development that will affect future activities.
(p) the impact on coastal processes and coastal hazards, including those under projected climate change conditions,	Given the minor nature of the proposed development, it is unlikely that the proposal will result in adverse impacts on coastal processes and coastal hazards.
(q) applicable local strategic planning statements, regional strategic plans or district strategic plans made under the Act, Division 3.1,	The proposal is considered to be consistent with relevant strategic documents as it will improve a high-quality recreational resource to service the existing and future population of the City of Parramatta.
(r) other relevant environmental factors.	All relevant factors have been considered within this REF.

3.1.4 Environment Protection and Biodiversity Act 1999 (Commonwealth)

Under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), a referral is required to the Australian Government for proposed actions that have the potential to significantly impact on matters of National Environmental Significance (NES) or the environment of Commonwealth land.

An assessment of the proposals impact on matters of National Environmental Significance is included in **Table 4** below.

Table 4 EPBC Act 1999 Checklist

Factor	Impact
Any significant impact on a declared World Heritage Property?	No
Any significant impact on a National Heritage place?	No
Any significant impact on a declared RAMSAR wetland?	No
Any significant impact on Commonwealth listed threatened species or endangered community?	No
Any significant impact on Commonwealth listed migratory species?	No
Does any part of the proposal involve nuclear actions?	No
Any significant impact on Commonwealth marine areas?	No
Any significant impact on the Great Barrier Reef Marine Park?	No
Any significant impact on Commonwealth land?	No
Any significant impact on a declared World Heritage Property?	No

3.1.5 State Environmental Planning Policy (Transport and Infrastructure) 2021 (SEPP TI)

Chapter 2 of SEPP TI provides planning provisions for the establishment of infrastructure. Relevant to the proposed works are Section 2.17, Section 2.73 and Section 2.109.

3 Statutory Framework

Section 2.10 – Consultation

Section 2.10 sets out the consultation requirements in relation to development carried out by or on behalf of a public authority that Chapter 2 provides may be carried out without development consent. Consultation with the relevant council is required in certain circumstances. These are considered in **Table 5** below.

Table 5 Considerations under Section 2.10 of SEPP TI	
Consideration	Consultation Required / Assessment
Consultation with the relevant council is required if it is considered that the development:	
(a) will have a substantial impact on stormwater management services provided by a council, or	No - The proposal is not considered to have a substantial impact on stormwater management services.
(b) is likely to generate traffic to an extent that will strain the capacity of the road system in a local government area, or	No - The proposal will replace and widen existing footpath surfacing and will provide a new cycleway. Any traffic impacts will be short term and related to the construction phase of the development. These have been assessed as capable of being accommodated in the surrounding road system.
(c) involves connection to, and a substantial impact on the capacity of, any part of a sewerage system owned by a council, or	No - There are no sewer connections proposed.
(d) involves connection to, and use of a substantial volume of water from, any part of a water supply system owned by a council, or	No - There are no water connections proposed.
(e) involves the installation of a temporary structure on, or the enclosing of, a public place that is under a council's management or control that is likely to cause a disruption to pedestrian or vehicular traffic that is not minor or inconsequential, or	No - There are no temporary structures proposed other than short term construction fencing during works and these are not considered likely to cause disruption that is not minor or inconsequential.
(f) involves excavation that is not minor or inconsequential of the surface of, or a footpath adjacent to, a road for which a council is the roads authority under the Roads Act 1993 (if the public authority that is carrying out the development, or on whose behalf it is being carried out, is not responsible for the maintenance of the road or footpath).	No - The excavation is minor and inconsequential.

Accordingly, formal consultation with Council under Section 2.10 of SEPP TI is not required.

Furthermore, Section 2.17 provides that Sections 2.10-2.15 of SEPP TI do not apply with respect to development that would require written notice to be given to a council or public authority who is carrying out the development. In this instance the City of Parramatta Council is carrying out the works and consequently, consultation under Section 2.10-2.15 is not required in this instance.

Section 2.16 of SEPP TI relates to consideration of planning for bush fire protection. Notwithstanding, this section only applies to development for the purpose of health services facilities, correctional centres, and residential accommodation. Furthermore, the site is not mapped as bushfire prone land.

Section 2.73 – Parks and other Public Reserves

Section 2.73(3) of SEPP TI sets out the following development that may be carried out by or on behalf of a public authority (including Council) as development without consent on a public reserve as follows (**bold emphasis added**):

- (3) *Any of the following development may be carried out by or on behalf of a public authority without consent on land owned or controlled by the public authority—*
 - (a) *development for any of the following purposes—*

3 Statutory Framework

- (i) **roads, pedestrian pathways, cycleways, single storey car parks, ticketing facilities, viewing platforms and pedestrian bridges,**
- (ii) *recreation areas and recreation facilities (outdoor), but not including grandstands,*
- (iii) *visitor information centres, information boards and other information facilities,*
- (iv) **lighting, if light spill and artificial sky glow is minimised in accordance with the Lighting for Roads and Public Spaces Standard,**
- (v) **landscaping, including landscape structures or features (such as art work) and irrigation systems,**
- (vi) *amenities for people using the reserve, including toilets and change rooms,*
- (vii) *food preparation and related facilities for people using the reserve,*
- (viii) *maintenance depots,*
- (ix) *portable lifeguard towers,*
- (b) *environmental management works,*
- (c) *demolition of buildings (other than any building that is, or is part of, a State or local heritage item or is within a heritage conservation area).*

The proposed construction works involve the widening of a footpath to create a shared path, the installation of lighting and associated landscaping / tree removal and hence the proposal can be undertaken as development without consent pursuant to Section 2.73(3) of SEPP TI. It is noted that the clearing of vegetation is a work / activity that is taken to be construction works, pursuant to Section 2.3(3) of SEPP TI.

Section 2.109 – Roads and Road Infrastructure Facilities

Section 2.109 of SEPP TI sets out that development that for the purpose of a road or road infrastructure facilities may be carried out by or on behalf of a public authority without consent on any land. Road infrastructure facilities are defined in Section 2.108 of SEPP TI as (**bold emphasis added**).

road infrastructure facilities includes—

- (a) *tunnels, ventilation shafts, emergency accessways, vehicle or pedestrian bridges, causeways, road-ferries, retaining walls, toll plazas, toll booths, security systems, bus lanes, transit lanes, transitways, transitway stations, rest areas and **road related areas** (within the meaning of the Road Transport Act 2013), and*
- (b) *associated public transport facilities for roads used to convey passengers by means of regular bus services, and*
- (c) *bus layovers that are integrated or associated with roads (whether or not the roads are used to convey passengers by means of regular bus services), and*
- (d) *bus depots, and*
- (e) *bus stops and bus shelters, and*
- (f) *traffic control facilities (within the meaning of Part 6 of the Transport Administration Act 1988), TfNSW road safety training facilities and safety works, and*
- (g) *premises used for the purposes of testing and inspecting heavy vehicles (within the meaning of the Road Transport Act 2013) under the TfNSW Heavy Vehicle Authorised Inspection Scheme.*

Road related areas are defined in the *Road Transport Act 2013* as being:

road related area means—

- (a) *an area that divides a road, or*
- (b) *a footpath or nature strip adjacent to a road, or*
- (c) *an area that is open to the public and is designated for use by cyclists or animals, or*
- (d) ***an area that is not a road and that is open to or used by the public for driving, riding or parking vehicles, or***
- (e) *a shoulder of a road, or*

3 Statutory Framework

(f) any other area that is open to or used by the public and that has been declared under section 18 to be an area to which specified provisions of this Act or the statutory rules apply.

Part of the proposed bike path extends beyond Silverwater Park to the east and within a road reserve beneath Silverwater Road. The bike path will provide a connection between Silverwater Park and an existing shared path known as the 'River Walk', which links to Blaxland Riverside Park and Newington Armory further to the east.

As set out in Section 2.7 of SEPP TI, if there is an inconsistency between this Chapter (Chapter 2) and any other Environmental Planning Instrument (EPI), this Chapter prevails to the extent of the inconsistency.

3.1.6 State Environmental Planning Policy (Resilience and Hazards) 2021

Chapter 4 of *State Environmental Planning Policy (Resilience and Hazards) 2021* (SEPP RH) relates to remediation of land. The object of this chapter is to *promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment.*

Section 4.6 requires a consent authority to consider whether the land is contaminated and if it is contaminated, that it would be suitable in its contaminated state or whether remediation is required.

In this regard, the site has a history of being used for the purpose of a park and associated public recreational purposes. As the proposal seeks to widen an existing path and other minor associated works that relate to the existing use, it is considered unlikely that contamination will be identified during the construction works.

Notwithstanding, landfilling near the Duck River confluence with Parramatta River has previously occurred. As a result, a mitigation measure has been included for soil testing to occur along parts of the proposed activity where soil depths are more than minimal (i.e.: for the installation of the light poles).

Furthermore, if contamination material is encountered during the construction works, then works must cease immediately and appropriate action be undertaken in accordance with the best-practice guidelines and the requirements of SEPP TI.

In this regard, Mitigation Measures have been included that relate to contamination and unexpected finds.

3.1.7 State Environmental Planning Policy (Biodiversity and Conservation) 2021

Section 171A of the EP&A Regulation requires the determining authority to 'take into account' certain sections of *State Environmental Planning Policy (Biodiversity and Conservation) 2021* (SEPP BC) as the site is within the Sydney Harbour Catchment, a regulated catchment under SEPP BC.

Water Quality and Quantity

Section 6.6 of SEPP BC sets out water quality and quantity provisions. Engineering plans accompany the REF. The proposed activity will not alter the existing stormwater system within the car park and will result in negligible impacts to the water quality and quantity as a result of the other works within Silverwater Park including minor additional hardstand resultant from new or widened concrete paths. The stormwater run-off from these paths will drain via overland flow and infiltrate into the turfed areas adjacent to the footpath as per the existing scenario and accordingly there is negligible change to water quality and quantity as a result of the proposed activity.

Aquatic Ecology

Section 6.7 of SEPP BC sets out aquatic ecology provisions. The ecological report prepared to accompany the REF does not identify aquatic ecology within the activity area which is within the highly modified terrestrial environment of Silverwater Park including a car parking area and

3 Statutory Framework

turfed park. Notwithstanding, the activity will be undertaken so as to minimise impacts on the natural water body including sediment and erosion control during construction.

Flooding

Section 6.8 of SEPP BC sets out provisions to consider the impacts on periodic flooding that benefits wetlands and other riverine ecosystems. The activity area is located between the flood planning area and the probable maximum flood. The activity is considered to have negligible impact on flood behaviour and therefore negligible impact on the recession of waters into natural waterbodies. Erosion and sediment control during construction and hardstand surfaces will minimise the likelihood of pollutants entering the natural waterbody.

Recreation and public access

Section 6.9 of SEPP BC sets out recreation and public access provisions. The proposed activity is for the purpose of promoting recreation and public access and is accordingly consistent with these provisions.

Development in Foreshores and Waterways Area

Section 6.28(1) of SEPP BC sets out general provisions for development in the Foreshores and Waterways Area. The proposed activity promotes recreation within the foreshore while not resulting in any adverse impacts on its natural setting.

3.1.8 State Environmental Planning Policy (Precincts – Central River City) 2021

The activity is situated outside the Land Application Map for Sydney Olympic Park under *SEPP (Precincts – Central River City) 2021*.

3.1.9 Parramatta Local Environmental Plan 2023

Permissibility

The site is zoned RE1 Public Recreation (the RE1 Zone) and W1 Natural Waterways (the W1 zone) under the LEP, however the location of the proposed works that are within Silverwater Park is entirely located on land in the RE1 zone. Some minor works within the SP2 Infrastructure zone (the SP2 zone) to the east is proposed for the purpose of providing road infrastructure facilities (being a cycleway).

The proposal merely seeks to upgrade a footpath to a shared path, create a cycle way link to land to the east and other minor associated works within an existing public recreation area, which is a permissible land use in the RE1 Zone.

The works within the SP2 zone are related to an existing road, which is a permissible land use in the SP2 zone.

An extract of the zoning map for the site is provided at **Figure 13** below.

3 Statutory Framework

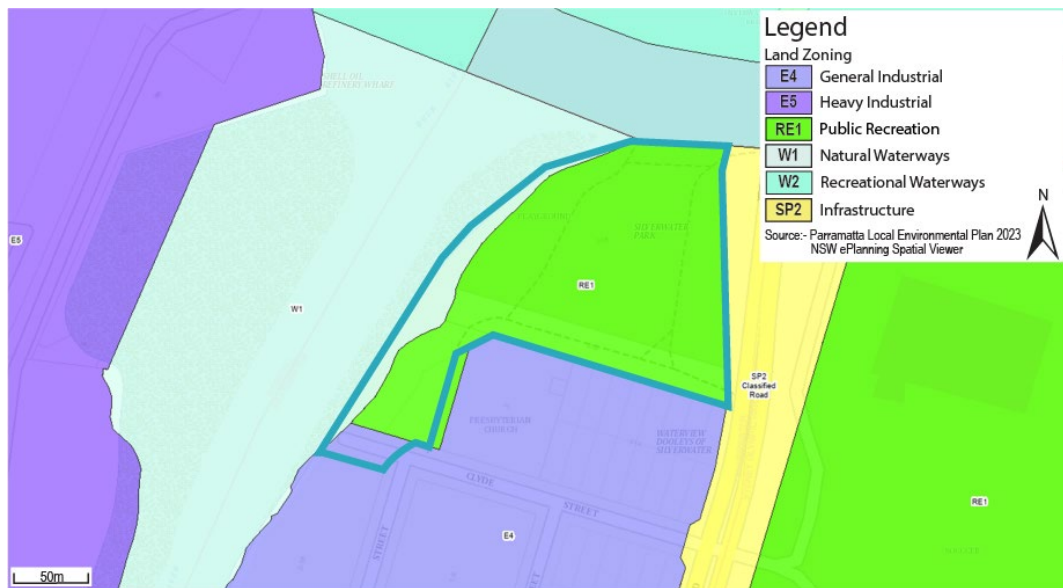


Figure 13 Land zoning map extract. Source: ePlanning Spatial Viewer

Zone Objectives

The objectives of the RE1 zone are provided below:

- To enable land to be used for public open space or recreational purposes.
- To provide a range of recreational settings and activities and compatible land uses.
- To protect and enhance the natural environment for recreational purposes.
- To conserve, enhance and promote the natural and cultural heritage value of parks and open space in the zone.
- To create opportunities to use riverfront land for public recreation.

Having regard to the objectives of the RE1 zone, the proposed works relate to the use of an existing public open space for recreational purposes. The proposal will facilitate a range of recreational activities, including the creation of a shared path for cyclist and pedestrian use, which will support and enhance the existing facilities / uses within Silverwater Park.

The proposed works have been located away from the areas of ecological values (refer to **Section 5** of this report) and has sought to minimise tree removal where possible. The site is also not identified as a heritage item.

The proposed works will enhance the useability and facilities within Silverwater Park. In doing so, this will assist in activating the riverfront land for public recreation purposes.

The objectives of the SP2 zone are provided below:

- To provide for infrastructure and related uses.
- To prevent development that is not compatible with or that may detract from the provision of infrastructure.

Having regard to the objectives of the SP2 zone, the proposed works will provide for new road infrastructure facilities, in the form of a cycleway (road related area) beneath Silverwater Bridge. This will provide for a cycle link between Silverwater Park and 'River Walk' to the east, which connects to Blaxland Reserve.

Table 6 below provides an assessment of the proposed works against the relevant provisions of the LEP.

3 Statutory Framework

Table 6 Assessment of proposal against relevant provisions of the LEP

Provision	Assessment	Consistent
Clause 5.10: Heritage Conservation	<p>The site is not mapped as a heritage item and is not located within a heritage conservation area. Part of the northern side of Silverwater Bridge is mapped as a heritage item, as well as wetland areas located on the western side of Duck River.</p> <p>Given the minor nature of the proposed works and the setback of these works from the aforementioned heritage items (50m and 100m respectively), it is considered that the proposal is unlikely to result in any adverse heritage impacts.</p>	Yes
Clause 5.21: Flood Planning	<p>In accordance with the Section 10.7 (2) & (5) Planning Certificate for the site (dated 5 June 2024), the site is located between the flood planning area and the probable maximum flood.</p> <p>Advice was provided by Council (Appendix 6), in relation to the potential flood impacts as a result of the proposed development. That advice has confirmed the following:</p> <p><i>"Due to the proposed footpath construction, there will not be any flooding impact or will not create any adverse flooding impact (such as raised the flood levels, depths, and velocity depth factors etc.) within Silverwater Park".</i></p> <p>In this regard, it is considered that the proposed works are consistent with the objectives of Clause 5.21.</p>	Yes
Clause 6.1: Acid Sulfate Soils	<p>The site is mapped as Class 5 Acid Sulfate Soils. However, having regard to Clause 6.1, the works are not likely to lower the watertable.</p>	Yes
Clause 6.6: Foreshore Area	<p>The site is partly located within a foreshore area. The objective of Clause 6.6 is to protect the Parramatta River by ensuring development in the area will not impact nature foreshore processes, the significance and amenity of the area and that the development will be compatible with the riverine environment.</p> <p>Based on the minor nature of the proposed works and subject to compliance with the Mitigation Measures (Appendix 12), it is considered that the proposed works will be consistent with the objectives of this clause.</p>	Yes

4 Environmental Risk Assessment

This section examines the environmental risks in relation to the proposed works.

4.1 Assessment Method

The methodology applied to the environmental risk assessment for the proposed works is as follows:

- Initial risk assessment for environmental constraints based upon:
 - Review of relevant planning controls and legislation;
 - Review of consultant reports; and
 - Examination of aerial photographs and site photos.
- Identifying potential environmental risks/impacts associated with the proposed works;
- Evaluating identified risks/impacts to determine the potential for occurrence and degree of severity; and
- Identifying and determining suitable environmental management/mitigation procedures and control measures appropriate for planned works.

4.2 Site Constraints

Table 7 identifies site constraints applicable to the site. Where an environmental issue is identified, impact assessment is provided in **Section 5** and mitigation measures and conditions are included in **Appendix 13**.

4 Environmental Risk Assessment

Table 7 Site Constraints

Constraint	Factor	Yes	No	Action
Contamination	Is the site affected by contamination as identified in Section 10.7 Certificate or 'List of NSW contaminated sites notified to the EPA' and/or potentially affected by contamination?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The site is not identified as being contaminated in the Section 10.7 Planning Certificates for the site nor is it listed on the NSW contaminated lands site notified by the EPA.
	Does the project involve demolition of buildings or part of a building that may contain Asbestos?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The proposal does not involve the demolition of any buildings. Notwithstanding, an Unexpected Asbestos Finds procedure will be included as a Mitigation Measure, which provides guidance with respect to the unexpected discovery of asbestos containing materials.
	Does the project require the disturbance of any other hazardous material (e.g. lead paint, lead dust, PCBs, ozone depleting substances)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	As set out above, the site is not identified as being contaminated based on the Section 10.7 (2) & (5) Planning Certificates for the site. Notwithstanding, a mitigation measure is included to provide guidance for how to manage unexpected contaminated material if encountered during construction works. Furthermore, landfilling near the Duck River confluence with Parramatta River has previously occurred. As a result, a mitigation measure has been included for soil testing to occur along parts of the proposed activity where soil depths are more than minimal (i.e.: for the installation of the light poles).
Flooding	Is the site affected by flooding? (i.e. is the land below the 1 in 100-year flood planning level)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The Section 10.7 Planning Certificate states that the land or part of the land is within the flood planning area. Consequently, advice has been obtained from Council's Flood Engineer to confirm if the proposed works are likely to result in flood impacts. The following comment was received: <i>As confirmed that the proposed footpath levels will not be altered the existing natural levels and will not be altered the surrounding area of the park. Which concludes that due to the proposed footpath construction, there will not be any flooding impact or will not create any adverse flooding impact (such as raised the flood levels, depths, and velocity depth factors etc.) within Silverwater Park.</i>
Coastal Hazards	Is the site identified within the coastal zone in the <i>Coastal Management Act 2016</i> OR has the site been identified by Council as affected, or potentially affected, by existing and future coastal hazards? This includes coastal storm erosion and recession of land due to sea level rise.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The site is mapped within a Coastal Environmental Area and a Coastal Use Area. Part of the site is also mapped Coastal Wetland. As part of the construction phase of the development, the implementation of suitable erosion and sediment control measures will be required, so as to mitigate impacts towards the coastal zones with which the site is located within.
Bushfire Hazard	Is the land nominated as Bushfire Prone Land on the Section 10.7 Certificate or is the site within 100m of unmanaged bushland?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The site is not mapped as bushfire prone land. No Action required.

4 Environmental Risk Assessment

Table 7 Site Constraints

Constraint	Factor	Yes	No	Action
Threatened Species	Does the Project involve the clearing of vegetation that would affect any threatened species? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If YES, answer the following two questions:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The proposed works involve the removal of eight (8) trees. In this regard, Ecological Advice has been prepared to describe the ecological assets and constraints of the site. The advice found that Silverwater Park is a highly modified environment with limited ecological values. Those limited values are located along the eastern banks of Duck River, which is to the west of the site. It is noted that the proposed works are located within the central and eastern portions of the park and away from those ecological assets. In this regard, it is unlikely that the proposed tree removal would affect any threatened species.
	Has the Section 10.7 Certificate and/or consultation with Council and/or review of the OEH critical habitat register identified a known critical habitat or threatened species, populations or endangered ecological communities and their habitat on or in close proximity to the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No action required.
	Is the Project Site adjacent to an area of bushland (including a National Park, State Forest, Council Reserve or area of unmanaged bushland) OR a natural watercourse (including a creek, river, estuary, lake or wetland)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The project site is located adjacent to Parramatta River to the north and Duck River to the west. Notwithstanding, the proposed works are confined within an existing park, including minor works within an adjoining road reserve. In this regard, and as set out in Section 5 of this report, the proposed works are unlikely to generate any adverse impacts on any threatened species.
Native Vegetation	Does the project involve the clearing of native vegetation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The project involves the removal of eight (8) native trees that are located within Silverwater Park. The Ecological Advice accompanying this report has determined that the Silverwater Park is a highly modified environment with limited ecological values, with the exception of the mangroves to the west and a row of mature fig trees. The proposal does not seek to remove or impact on these features.
Aboriginal Cultural Significance	Has the Section 10.7 certificate and/or consultation undertaken with Council identified that the site has, or is likely to have, significance to Aboriginal people, AND / OR will the proposed project impact on an Aboriginal place or known Aboriginal Objects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	An Aboriginal Heritage Information Management System (AHIMS) was obtained on 14 June 2024. The AHIMS did not identify any Aboriginal items within a 200m radius of the site.
	Is the site in an area very highly disturbed /modified (i.e. does it contain large areas of sealed surface, fill or previously excavated areas?)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No action required.
	If NO, does the project involve more than 1ha of ground disturbance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No action required.
	Is the project site within 200m of a high-water mark of coastal waters of NSW?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No action required.

4 Environmental Risk Assessment

Table 7 Site Constraints

Constraint	Factor	Yes	No	Action
	Is the project site within 200m of a wetland, coastal lake or waterway?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The site is located within 200m of land that is mapped as Coastal Wetlands. Notwithstanding, the proposed works are minor in nature and subject to the implementation of appropriate erosion and sediment control measures, is unlikely to result in any impacts to the nearby Coastal Wetlands.
	Is the project site located on a sand sheet or within a dune area located on a ridge top?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No action required.
	Is the project site within 20m of a cave, rock shelter, or a cave mouth?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No action required.
Acid Sulphate Soils	Is the site less than 6m AHD?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The site is located approximately 4-5m AHD. Notwithstanding, given the minor nature of the proposed works and that the watertable is unlikely to be lowered below 1m AHD on any nearby Class 1, 2, 3 or 4 land, no further action is required.
	Does the site contain acid sulphate soils of Class 1-4?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No action required.
	If YES, does the Project involve the excavation of more than 1 tonne of soil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No action required.
Mine Subsidence	Is the land located in a Mine Subsidence District?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No action required.
Land Slip	Does the Section 10.7 Certificate and/or consultation with the relevant council identify the site as being affected by land slip?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No action required.
Heritage	Does the site contain an item of local or state heritage significance or is the site located in the vicinity of a local or state heritage item?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No action required.

5 Environmental Impact Assessment

This section provides an environmental impact assessment for the proposed works at Silverwater Park. The assessment includes an overview of the proposal and provides additional information for any specific environmental issues relating to the site which require more detailed consideration.

5.1 Detailed Environmental Assessment

The following environmental aspects are considered to be applicable to the site and the proposed works:

- Flora and Fauna;
- Traffic and Parking;
- Lighting Impacts;
- Noise & Vibration;
- Soil & Water Quality / Contamination;
- Heritage;
- Waste Management;
- Community Amenity;
- Cumulative Impacts; and
- Construction Management.

5.1.1 Flora & Fauna

Tree Removal

The proposal includes removal of eight (8) trees (Trees 265, 267, 268, 269, 270, 279, 286 and 287) to allow for the trenches of the proposed lighting and the widening of the existing footpath.

These trees are identified in the Arborist Report prepared by Truth About Trees, dated 25 October 2024, with details relating to height, health and retention value of each tree set out in **Table 1** of this report.

Three (3) of the trees have been assessed as having low retention values, four (4) have medium retention value and one (1) has very low retention value.

The Arborist Report has identified an additional 11 trees as possibly being impacted to provide for construction vehicle access to the site. Notwithstanding, the documentation provided to date does not identify these trees for removal and consequently, this REF only relates to the removal of the eight (8) trees specified within this report.

A further 17 trees are subject to major encroachments to their Tree Protection Zone's (TPZ's), as a result of the proposed demolition and construction works. These vary between 10-20% (62, 261, 266, 297, 304, 326, 327, 328, 333, 334), 20-30% (299, 300, 302, 325, 329) and 30-40% (298, 301).

Tree 62 is a large mature Hills Fig that has lifted the footpath on the corner of Picken Street and Clyde Street. Given its significant interface between Silverwater Park and the streets to the east of the site, the retention of this tree is a priority.

The Arborist Report sets out tree protection measures that are to be implemented to minimise any potential impacts to existing trees proposed for retention. These tree protection measures have been included as part of the Mitigation Measures (**Appendix 13**) and are set out below:

- *Arborist supervision of ALL works within the TPZs of retained trees. Tree roots greater than 25mm in diameter are to be retained and protected.*

5 Environmental Impact Assessment

- Existing footings within TPZs to be either removed using non-destructive excavation or be retained in situ with the structure cut off below ground level.
- Demolition of existing structures is to be carried out with 2-2.5t rubber-tracked excavator under Arborist supervision.
- Shared pathway within TPZs is to be installed at or above existing ground level with no excavation in TPZs of retained trees.
- Tree protection fencing and signage.
- Regular site inspections by the project Arborist.

New tree planting using a healthy, advanced-sized specimens is recommended in the AIA to replace the loss of amenity and this is shown on the proposed Landscape Drawing prepared by Capital Projects.

Ecology

Part of the boundaries of the site that adjoin Duck River to the west and Parramatta River to the north are mapped as comprising biodiversity values (non-EPI), as well as mangroves that are mapped as coastal wetlands under SEPP RH.

As a result, an Ecological Constraints Report (ECR) was prepared by Applied Ecology which has assessed the entirety of the Duck River Nature Trail upgrades. Of significance to this REF is Section's 1 & 2 which relate to Silverwater Park.

The ECR has described Silverwater Park as a highly modified environment with limited ecological values, including past filling of the site and the establishment of a seawall. The ecological values that are present relate to the expanses of mangroves that are located along the eastern banks of Duck River and a strand of mature fig trees (refer to **Figure 14** below).



Figure 14 Photograph of mature fig trees towards the west of the park

The proposed upgrade works within Silverwater Park are clear of the mangroves and do not propose to impact on the mature fig trees. In this regard, it is considered that the proposed development is unlikely to result in any adverse impacts on the ecological values of the site.

Figure 15 below is an extract of the native vegetation mapping along the foreshore of Duck River. Silverwater Park is shown in the north eastern corner of the map below, with the location of the proposed works indicatively shown by the blue dotted line that spans along the eastern side of the park.

5 Environmental Impact Assessment

As can be seen, the location of the proposed works is clear of any native vegetation mapping within the area.



Figure 15 Native vegetation mapping. Source: Applied Ecology

Threatened Species

As part of the ECR, Applied Ecology undertook a desktop review of database records of threatened species recorded within a 5km radius of Duck River. A total of 59 threatened species and threatened populations have been recorded since 1998, which include 30 bird species, 14 flora species, nine (9) mammal species and six (6) microbat species.

The location of the recorded threatened species has been relayed onto an aerial image below (Figure 16). As can be seen, no threatened species have been identified within the location of Silverwater Park, which is in large part due to there being limited suitable habitat.

5 Environmental Impact Assessment

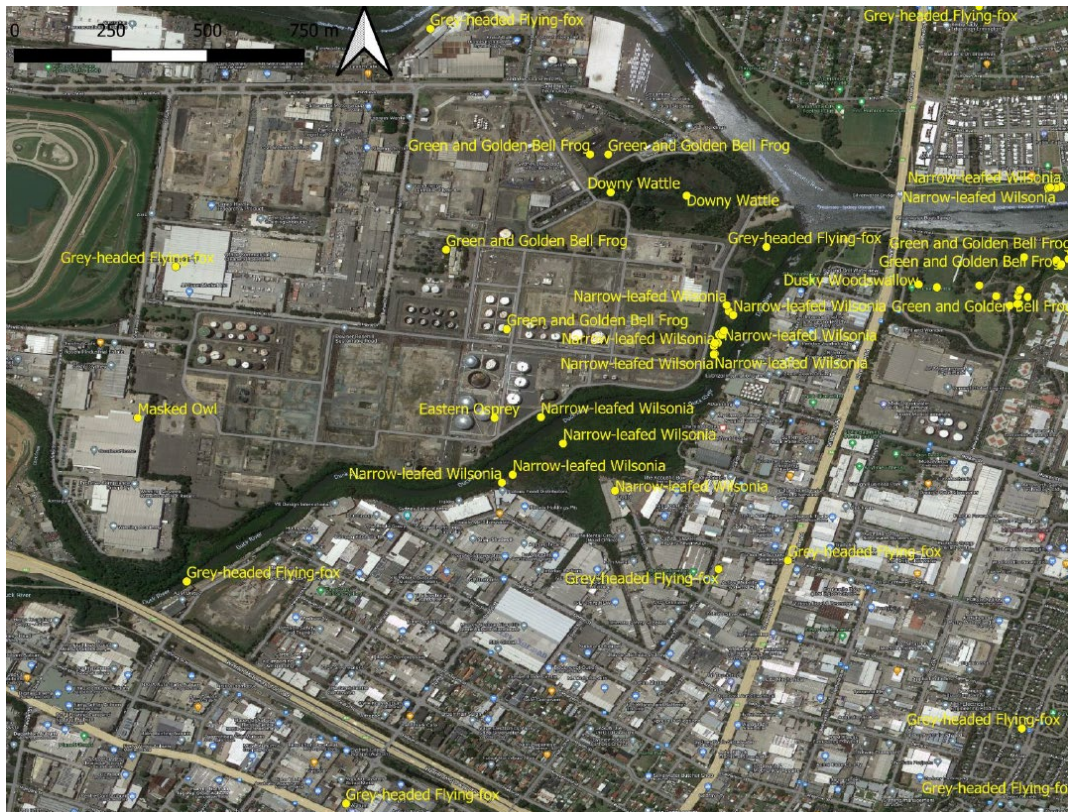


Figure 16 Records of threatened species within a 5km radius of Duck River. Source: Applied Ecology

5.1.2 Traffic and Parking

Proposed Cycleway

A Traffic Statement considering the works proposed within the road reserve to the east of the park has been undertaken by Council (see **Appendix 8**). The Traffic Statement has identified the existing road and footpath space beneath Silverwater Bridge as being constrained due to the bridge footings.

In considering the design of the proposed development, the Traffic Statement has acknowledged that this is a constrained location (in part due to the boat ramp that is situated beneath Silverwater Bridge), however, has supported the separation of the road cycleway and maintained 3m wide travel lanes in each direction for motor vehicles. To delineate between the travel lanes, it has been recommended that centre line marking be provided. The centre line marking should not prevent legal traffic movements to the boat ramp.

Swept path diagrams have been undertaken by Council which has considered the largest anticipated day-to-day vehicles within this location (medium-rigid vehicles). Those swept path diagrams have determined that these vehicles are able to travel in both directions without impacting on the cycleway.

A copy of the swept paths for medium rigid vehicles has been provided at **Figure 17** below.

5 Environmental Impact Assessment

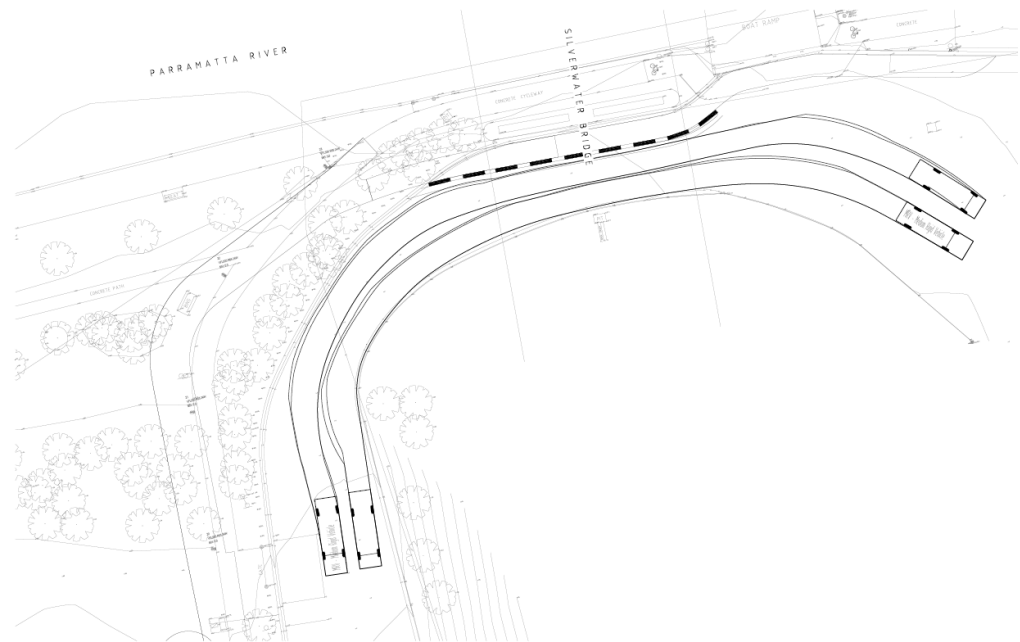


Figure 17 Medium Rigid Vehicle Swept Path Diagram. Source: Woolacotts

Construction Impacts

It is anticipated that there will be short-term traffic and parking impacts associated with construction worker vehicles and trucks removing waste from the construction works and delivering new materials.

To address the potential minor short-term impacts associated with construction works, a Preliminary Construction Traffic Management Plan (CTMP) should be prepared by the contractor, prior to construction works commencing. The CTMP should include details relating to the following:

- The number of construction workers on-site at any one time and the number of vehicles to be parked on-site;
- The location of construction vehicle parking;
- The location of where the construction vehicles will enter and exit the site from;
- Pedestrian management during construction works;
- Details and management of how construction vehicle parking will be separated from recreational uses associated with the park; and
- Estimated timeframes for completion of the construction works, to determine the extent of time that the construction impacts will last.

Upon completion of the CTMP, Council should be provided with a copy to review prior to construction works commencing.

5.1.3 Lighting Impacts

The proposed development involves the installation of free-standing light poles adjacent to the proposed shared path. In considering the lighting impacts associated with the installation of these light poles, a Lighting Plan was undertaken by Lighting, Art & Science (**Appendix 7**), dated 12 August 2024, which considered the proposed works against the relevant Australian Standards relating to obtrusive effects of outdoor lighting.

Based on the maximum allowable illuminance, luminous intensity at vertical planes, threshold increment and upward waste light ratio, the proposed lighting was found to comply with the

5 Environmental Impact Assessment

maximum requirements. Therefore, it is considered that the proposed lighting is unlikely to generate adverse impacts towards adjoining properties.

5.1.4 Contamination

The site is located on the southern side of Parramatta River and has been used as a park for a significant period of time, with the proposed works involving upgrades to the park to improve its useability and connectivity to other areas along the Parramatta and Duck River foreshores.

In this regard, the site has a history of being used for the purpose of a park and associated public recreational purposes. As the proposal seeks to widen an existing path and other minor associated works that relate to the existing use, it is considered unlikely that contamination will be identified during the construction works.

Notwithstanding, Council have advised that filling has occurred previously on the site. As a result, a Mitigation Measure has been included as part of this REF that all excavated material is required to be tested, classified and disposed of off-site.

Furthermore, if unexpected contaminated material is encountered during the works, all work shall cease and the site be secured. A safe work method statement would need to be implemented to ensure the site becomes suitable for use.

5.1.5 Soil & Water Quality

Due to the site's proximity to Parramatta River (to the north) and Duck River (to the west), there is the potential for soil to spill into the nearby waterways.

As a result, suitable erosion and sediment control measures are required to be implemented as part of the demolition and construction phase of the activity and remain in place for the duration of the works.

All sediment and control measures are to be checked regularly and be repaired or reinstated in the event of heavy rainfall. So as to ensure that erosion and sediment control measures are suitable, they must be implemented in accordance with the current best practice environmental management practices, to prevent sediment-laden water from entering into the adjacent waterways and local drainage systems.

5.1.6 Heritage Impacts

The site is not mapped as a heritage item and is not located with a heritage conservation area. Silverwater Park (and much of the Parramatta foreshore) is mapped in Council's DCP as being high Aboriginal sensitivity.

In this regard, an Aboriginal & Non-Aboriginal Archaeological Opportunities and Constraints Report (heritage report) has been prepared by Extent, dated 1 September 2023 (**Appendix 11**).

As part of this report, a site inspection was undertaken which did not identify any Aboriginal objects or sites within Silverwater Park. Furthermore, an AHIMS Search was undertaken on 14 June 2024, which similarly did not show any Aboriginal objects or places within a 200m radius of the site (**Appendix 12**).

The heritage report has acknowledged that the study area of Silverwater Park has been de-vegetated and landscaped in more recent years that would have created moderate ground disturbance. In addition, the current facilities present within the park would also have impacted the surface and shallow subsurface archaeological remains.

Having regard to the nature of the proposed works, being predominantly for an extension of a footpath, landscaping and installation of lighting, it is unlikely that adverse impacts on Aboriginal or non-Aboriginal archaeological heritage is likely to be generated.

However, in the event of unexpected finds relating to Aboriginal objects, sites or places, a mitigation measure has been included which requires construction works to cease and

5 Environmental Impact Assessment

consultation with a suitably qualified heritage professional and / or the relevant State government agency to determine the subsequent course of action.

5.1.7 Waste Management

The CMP prepared by Council (**Appendix 9**), provides for requirements in relation to the management of waste. In relation to general construction waste such as litter and material waste, these are to be contained on site.

Where skip bins are to be brought on site, they must have hinged lids and be closed at night and during wind affected days. The skip bins must be located within a secure construction compound to prevent unauthorised access. Where possible, waste generated from timber and metalworks should be recycled.

A mitigation measure has been included for a Construction Waste Management Plan (CWMP) to be prepared by the contractor, prior to construction works commencing. The CWMP should specify how waste will be generated, managed and disposed of in accordance with the Waste Classification Guidelines. The CWMP, should specify the following details:

- The nature of waste to be generated;
- The presence of waste on site prior to work commencing;
- The quantity of waste anticipated;
- The potential for waste receptors; and
- The proximity to potential waste receptors.

Prior to construction works commencing, the CWMP will need to be reviewed and approved by Council.

5.1.8 Community Amenity

As set out in **Section 2** of this REF, Silverwater Park comprises a range of recreational facilities, including picnic benches, barbecues, footpaths, play equipment and areas of open space for recreational activities.

The proposed works to widen an existing footpath and create a shared path for pedestrian and cyclist use will enhance the useability of the park. The proposed works will utilise existing footpath corridors, which will minimise impacts on other recreational uses of the park.

Furthermore, the proposed lighting along the shared path will enable safer use for cyclists and pedestrians during the evening hours.

Subject to compliance with the mitigation measures, it is considered that the community and amenity impacts of the proposed works are acceptable, having regard to the upgrades that are being provided to the site.

Public consultation occurred between 5 August and 2 September 2024, including engagement with local residents, a media release, Council website, social media and throughout Council's e-newsletters and on-site posters.

In total, 72 written submissions were received during the exhibition period, of which 58 were supportive of the proposed works, seven (7) supported to an extent, five (5) did not support and two (2) did not specify / were unsure of their view.

The majority of the submissions can be summarised by the following themes:

1. "Careful management of open space and ecological areas is needed to minimise impacts";
2. "Opportunities for interpretation and education about the area would be welcomed";
3. "Safety of the path, particularly for pedestrians and conflict with cyclists"; and

5 Environmental Impact Assessment

4. “Provision of lighting, seating, shade, and bubblers (in Stage 1 and subsequent Stages)”.

In regard to the first theme, the proposed works are located away from the mangroves to the west of the site and do not disturb the row of fig trees that have been identified in the Ecology Report as comprising ecological values.

In regard to the second theme, consideration for how to educate people about the area will be managed in an ongoing way. Notwithstanding, by upgrading the facilities of the park and providing a clearer link to the existing cycleway to the east, will improve connectivity and therefore greater opportunities for use.

In regard to the third point, the widening of the path will enable a separate bike land to be created, which will assist in mitigating the conflict between cyclists and pedestrians. In turn, the aim is that this will increase safety for all users of the path.

In regard to the fourth point, lighting is proposed around the proposed shared path to increase the potential for the path outside of daylight hours. Additional park facilities are also proposed, as detailed in the Landscape Plan.

The Community Engagement Report that summarises the public exhibition period for this development is provided at **Appendix 12**.

5.1.9 Cumulative Impacts

Given the minor nature of the proposed works, it is unlikely that any significant adverse cumulative impacts would be generated towards users of Silverwater Park and adjoining site's and worker's.

Any cumulative impacts associated with the works are considered to be minor, temporary and acceptable, subject to the implementation of mitigation measures, as provided in **Appendix 13** of this REF.

Some short-term impacts are likely to be generated by construction works, which will mostly relate to noise and vibration impacts. Notwithstanding, the longer-term benefits of the proposed development is likely to significantly outweigh any short-term impacts.

5.1.10 Construction Management

A Preliminary Construction Management Plan (PCMP) has been prepared by City of Parramatta (**Appendix 9**) which sets out the overarching approach to the construction works, management measures to mitigate or minimise environmental impacts and protocols for communicating with relevant authorities and other stakeholders.

6 Conclusion

This Review of Environmental Factors has been prepared by DFP for the City of Parramatta Council, the proponent and determining authority for the proposed upgrade works to Silverwater Park.

This REF describes the existing site context and provides details of the proposed works which should be read in conjunction with the relevant design documentation which accompanies the REF.

An assessment of the potential for the proposed works to impact the environment has been undertaken, drawing upon other specialist reports and investigations and together with those reports and investigations, this REF identifies relevant environmental management measures that should be implemented during the carrying out of the works to mitigate or minimise potential impacts to an acceptable level.

This REF concludes that the proposed works can be undertaken as development without consent pursuant to Part 5 of the EP&A Act and pursuant to the provisions of SEPP TI and does not require the preparation of a Species Impact Statement (SIS) or a Biodiversity Development Assessment Report (BDAR), as the activity is not likely to significantly affect threatened species, populations, ecological communities or their habitats.

Furthermore, it is assessed that, by adopting the mitigation measures identified in this assessment, it is unlikely that there would be significant environmental impacts associated with the proposed development and that an Environmental Impact Statement (EIS) is not required.

7 Mitigation Measures

Part 5 of the *Environmental Planning & Assessment Act 1979* (EP&A Act) provides for certain works to be undertaken as development without consent.

To ensure that the development activity, being the upgrade works to Silverwater Park, forming part of Phase 1 of the Duck River Nature Trail is carried out in accordance the provisions of Part 5 of the EP&A Act, **Section 2.1** of this document identifies the plans / documents (and any amendments approved under Part 5) which have been relied upon for the purposes of this assessment.

The remainder of this document sets out the mitigation measures that are to be implemented during the carrying out of the works to ensure impacts are avoided, mitigated or minimised to an acceptable level.

7.1 Authorised Documents

The development activity must be implemented generally in accordance with the REF prepared by DFP Planning Pty Ltd dated 26 November 2024 and the documents listed in **Table 1**, which are authorised for the carrying out of works as development without consent.

Table 1 Authorised Documents			
Survey Plan prepared by City of Parramatta			
Drawing Reference	Revision	Name of Plan	Date
03323	A	Survey COP – Duck River Nature Trail Silverwater, NSW 2128, Australia	01/06/2023
Other Supporting Documents			
Document	Prepared By		Date
Silverwater Park Concept Plan	Capital Projects		10/10/2024
Civil & Stormwater Plans	Woolacotts		11 November 2024
Arboricultural Impact Assessment	Truth About Trees		25/10/2024
Ecological Constraints Report	Applied Ecology		21/09/2022
Lighting Calculation Results	Lighting, Art & Science		12/08/2024
Traffic Statement	City of Parramatta		04/09/2024
Aboriginal & Non-Aboriginal Archaeological Opportunities & Constraints Report	Extent		1 September 2023
Community Engagement Report	City of Parramatta		11 November 2024

In the event of any inconsistency between the authorised documents and a mitigation measure hereunder, the mitigation measure shall prevail.

7.2 Amendment Tracking

Where there are any amendments to the authorised documents, an amendment register must be prepared which identifies the proposed amendment and demonstrates how the amendments will result in development that is substantially the same as the development to which the original REF applied.

7 Mitigation Measures

7.3 Measures to be Implemented Prior to Works Commencing

7.3.1 Council Notification

The City of Parramatta (Council) shall be advised in writing of the date it is intended to commence work, including demolition. A minimum period of seven (7) days notification shall be given.

7.3.2 Notification to occupiers of adjoining land

Adjoining land owners shall be advised in writing of the date it is intended to commence work, including demolition. A minimum period of seven (7) days notification shall be given.

7.3.3 Final Construction Traffic Management Plan (CTMP)

A Final Construction Traffic Management Plan shall be prepared prior to the commencement of any works and approved by Council.

7.3.4 Final Construction Management Plan (CMP)

A Final Construction Management Plan (CMP) shall be prepared prior to commencement of any works and approved by Council.

7.3.5 Utilities and Services

Prior to commencement of any demolition activities, any services near the works site which may be impacted by the works are to be accurately located.

Dial Before You Dig should be contacted prior to the commencement of any works.

Prior to commencement of works, and if required, an application for a compliance certificate is to be made to Sydney Water or other evidence of Sydney Water's non-objection to the commencement of work on the basis of service availability is to be provided.

7.3.6 Works in the Road Reserve

If required, any works within the road reserve should obtain approval under Section 138 of the *Roads Act 1993*. This includes a road opening permit for any temporary construction access.

Part of the proposed cycleway located to the east of Silverwater Park requires approval under Section 138 of the *Roads Act 1993*.

7.3.7 Tree Protection Measures

Tree protection measures are to be installed in accordance with the Tree Protection Specification provided as part of the authorised Arboricultural Impact Assessment prepared by Truth About Trees, dated 25 October 2024.

A Tree Protection Plan must be prepared which illustrates TPZ sensitive construction zones and exclusion zones prior to the commencement of works.

Tree protection fencing and signage must also be implemented to minimise any potential impacts upon retained trees prior to the commencement of works

7.3.8 Compliance with the Building Code of Australia and Australian Standards

Any works that are required to be undertaken in accordance with the National Construction Code (NCC) must be designed and constructed in accordance with the relevant provisions of the BCA and any relevant Australian Standards.

7.3.9 Soil Testing

Soil testing in locations of significant excavation (including the location of proposed light poles) is required to be undertaken prior to works commencing. Soil testing is required to determine the presence (if any) of contamination associated with the past filling activities on the site.

7 Mitigation Measures

7.4 Measures to be implemented During Demolition and Construction

7.4.1 Site Notice

A site notice must be prominently displayed in a prominent position at the site during construction to inform the public of project details, and must satisfy the following requirements:

1. The site notice(s) must be durable and weatherproof and must be displayed throughout the works period;
2. Include details of the approved hours of work, the name of the builder, Certifier, structural engineer, site/project manager, the responsible managing company (if any), its address and 24-hour contact phone number for any inquiries must be displayed on the site notice(s); and
3. The site notice(s) must be mounted at eye level on the perimeter hoardings/fencing and must state that unauthorised entry to the site is not permitted.

7.4.2 Complaints Management

A Complaints Register is to be established during construction works. Action taken or proposed to be taken must be documented on the register in response to complaints raised.

7.4.3 No Obstruction of Public Way

Building materials, machinery, vehicles, refuse, skip bins or the like must not be stored or placed in the public way (outside of any approved construction works zone). A secure site compound must be provided on site.

7.4.4 Implementation of Final CMP

All demolition and construction works are to be undertaken in accordance with the Final CMP.

The CMP must include measures for erosion and sediment control, which are to remain in place for the duration of the demolition and construction works.

Temporary site traffic management measures must also be implemented to provide for pedestrian, cyclist and vehicular safety.

7.4.5 Demolition

Demolition work must comply with the demolition work plans required by Australian Standard AS 2601-2001 The demolition of structures (Standards Australia, 2001) and endorsed by a suitably qualified person.

7.4.6 Work Hours

Unless otherwise agreed by the relevant statutory body, work hours shall be limited to:

- (a) Monday to Friday: 7.00am to 6:00pm;
- (b) Saturday: 8.00am to 1.00pm
- (c) Sunday and Public holidays: No work unless prior approval from Council is granted.

7.4.7 Unexpected Finds Protocol – Aboriginal Heritage

In the event that unexpected Aboriginal objects, sites or places (or potential Aboriginal objects, site or places) are discovered during construction, all works in the vicinity should cease and the proponent should determine the subsequent course of action in consultation with a heritage professional and/or the relevant State government agency as appropriate.

If surviving A Horizon soils are identified during the construction earthworks, it is recommended that an observer with knowledge of Aboriginal cultural objects (e.g. registered Aboriginal stakeholder) is present.

If human skeletal material less than 100 years old is discovered, the *Coroners Act 2009* requires that all works should cease, and the NSW Police and the NSW Coroner's Office should be contacted. Should the skeletal material prove to be archaeological Aboriginal

7 Mitigation Measures

remains, notification shall be given to Heritage NSW, the Local Aboriginal Land Council and the Commonwealth Minister for the Environment.

7.4.8 Unexpected Finds Protocol – Historic Heritage

If any unexpected archaeological relics are uncovered during the work, then all works must cease immediately in that area and the NSW Heritage Division contacted. Depending on the possible significance of the relics, an archaeological assessment and management strategy may be required before further works can continue in that area. Works may only recommence with the written approval of the NSW Heritage Division.

7.4.9 Contamination

All areas of significant excavation are to be tested, classified and disposed of offsite if necessary. A copy of relevant waste classification reporting and evidence of disposal at a licenced waste facility is to be provided to Council.

If unexpected-contaminated material is encountered during the works, all work shall cease, the site will be secured and a safe work method statement(s) and appropriate documented practices would be implemented to ensure the site is suitable for its use.

7.4.10 Tree Removal and Protection

All works must be undertaken consistent with the Arboricultural Impact Assessment Report prepared by Truth About Trees.

The following measures are to be retained to minimise any potential impacts upon retained trees:

- Arborist supervision of ALL works within the TPZs of retained trees. Tree roots greater than 25mm in diameter are to be retained and protected;
- Existing footings within TPZs to be either removed using non-destructive excavation or be retained in situ with the structure cut off below ground level;
- Demolition of existing structures is to be carried out with 2-2.5t rubber-tracked excavator under Arborist supervision;
- Shared pathway within TPZs is to be installed at or above existing ground level with no excavation in TPZs of retained trees;
- Tree protection fencing and signage; and
- Regular site inspections by the project Arborist.

7.5 Measures to be implemented – Prior to Occupation

7.5.1 Lighting

Lighting must be controlled in accordance with *AS 4282-2019, Control of obtrusive effects of outdoor lighting*.

Light spill and artificial sky glow is to be in accordance with the Lighting for Roads and Public Spaces Standard.

At the completion of the activity, a suitably qualified lighting engineer is required to certify that the lighting is compliant with the relevant standards.

7.5.2 Traffic Certification

At the completion of the activity, a suitably qualified traffic engineer must confirm that the works, including works within the road reserve, comply with the relevant Australian Standards and any requirements from the Section 138 *Roads Act* approval.

7 Mitigation Measures

7.5.3 Landscaping Certification

At the completion of the activity, a Landscape Completion Certificate for the proposed landscaping must be issued.

7.5.4 Arborist Certification

At the completion of the activity, the supervising arborist (a Level 5 qualified Arborist) is to provide a report (including photographs) to certify that the tree protection measures were implemented in accordance with the Tree Protection Plan and the Tree Protection Specifications.