REVIEW OF ENVIRONMENTAL FACTORS

TN17 – CHISHOLM SPORTSFIELD

70 BILLABONG PARADE CHISHOLM NSW 2322 (LOT 7 DP1269397)

CLIENT: MAITLAND CITY COUNCIL

DATE: 26 AUGUST 2025

PREPARED BY:

de Witt Consulting
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ENVIRONMENTAL ASSESSMENT DECLARATION

Review of Environmental Factors (REF)

Prepared under Part 5 of the *Environmental Planning and Assessment Act 1979*

REF Prepared by:

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Proponent address	263 High Street MAITLAND NSW 2320
Project address	70 Billabong Street CHISHOLM NSW 2322
Project name	TN17 – Chisholm Sportsfield
Certification	I certify that I have endorsed the contents of this REF document and, to the best of my knowledge, it is in accordance with the *Environmental Planning and Assessment Act 1979*, the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation) and the Guidelines approved under clause 170 of the EP&A Regulation, and the information it contains is neither false nor misleading.

Reviewed by	Released by
Name: Liberty Pannowitz **Position:** Lead Town Planner, PIA (Assoc.) ACCREDITED CPTED CONSULTANT	**Name:** Liberty Pannowitz **Position:** Lead Town Planner, PIA (Assoc.) **Signed:**  **Date:** 26 August 2025 **Version:** Final v1, Authority Issue

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ENVIRONMENTAL ASSESSMENT DETERMINATION

Certification by Maitland City Council	
Authorising Officer: In accordance with Sections 5.5 and 5.7 of the EP&A Act, I determine that the Proposed Activity may proceed on the condition that: • Any required consultation specified in Section 5 is completed, • The works are completed using the environmental safeguards outlined in Section 9, • Any required approvals, licenses and/or permits specified in Section 6 (if required) are obtained, and • Any additional assessments (if required) are completed.	
Technical review by Maitland City Council:	Name Position Date
Certified and accepted on behalf of Maitland City Council:	I certify that I have reviewed and endorsed the contents of this Review of Environmental Factors document, and, to the best of my knowledge, it is in accordance with the EP&A Act 1979, the EP&A Regulation 2021, and the information it contains is neither false nor misleading. Name Position Date

CONTENTS

APPENDICES

Appendix 1:	Landscaping and Architectural Plans prepared by Maitland City Council, 12/06/2025
Appendix 2:	Concept Civil Plan prepared by DRB Consulting Engineers, 04/07/2025
Appendix 3:	VENM, ENM and Waste Classification Assessments prepared by EP Risk, 2023
Appendix 4:	Biodiversity Assessment Report prepared by Peak Land Management, 17/07/2025
Appendix 5:	Flood Impact Risk Assessment by Maitland City Council, 22/05/2025
Appendix 6:	Aboriginal Due Diligence Assessment prepared by Biosis, 12/02/2024
Appendix 7:	AHIMS Search Result conducted by de Witt Consulting, 05/03/2024
Appendix 8:	Protected Matters Search, 03/11/2023
Appendix 9:	Desktop Preliminary Acid Sulfate Soils Assessment prepared by HEC, 03/11/2023
Appendix 10:	Preliminary Contamination Assessment Prepared by Douglas Partners, 21/12/2023
Appendix 11:	Geotechnical Investigation prepared by Douglas Partners, 11/04/2024
Appendix 12:	Environmental Site Assessment prepared by HEC, 14/02/2024
Appendix 13:	Geotechnical Design Report by Hunter Geotechnical Services 11/12/2024
Appendix 14:	Noise Assessment by MAC Muller Acoustic Consulting, 24/07/2025
Appendix 15:	Traffic, Parking and Access Assessment prepared by SECA Solution, 27/05/2025
Appendix 16:	Archaeological Report Final prepared by Biosis, 08/05/2025
Appendix 17:	Aboriginal Cultural Heritage Assessment (ACHA) prepared by Biosis, 8/05/2025
Appendix 18:	Vegetation Management Plan prepared by Fraser Ecological Consulting, 17/06/2025
Appendix 19:	Bushfire Protection Assessment prepared by ABPP 18/06/2025
Appendix 20:	Environmental Risk Assessment prepared by Water Technology/Bio2Lab, 28/10/2024
Appendix 21:	Lighting Plan prepared by Norwich Group 18/06/25
Appendix 22:	Stop Works Order dated 6/11/2023
Appendix 23:	Drainage and Irrigation Plans prepared by Water Wise Consulting on 07/07/2025
Appendix 24:	Development Letter Requirements from Hunter Water 16/05/2024
Appendix 25:	Fisheries Compliance Caution Notice dated 07/07/2024
Appendix 26:	Geotechnical Investigation prepared by Douglas Partners, 12/2023

ASSESSMENT INTERPRETATION

A colour coding legend has been used throughout this REF to denote the following, for ease:

Green: **Matter is satisfactorily addressed**.
No additional action or consideration required.

Yellow: Matter is adequately addressed.
Minor action, approval or permit is required after the REF stage.

Red: Matter is not satisfactorily resolved.
Additional information, clarification or assessment required at REF stage.

1. INTRODUCTION

1.1. PROPOSAL IDENTIFICATION

1.1.1 Site and Project Summary

Address	70 Billabong Parade Chisholm NSW 2322 (Tenambit)
Lot and DP	7 DP1269397
Zone	RU2 Rural Landscape (primary), C2 Environmental Conservation (partial - northeast), R1 General Residential (partial – south)
Land Area	4.57 hectares (ha)
Existing Structures	Fill material, sediment control fencing. No built structures.

Maitland City Council (Council) has requested de Witt Consulting (dWC) to undertake the required environmental assessment for the proposed neighbourhood sportsfield at 70 Billabong Parade, Chisholm NSW 2322 (Lot 7 DP1269397) (the site). The project is known as "**TN17**" and includes two playing fields, single storey amenities building with seating, open-air car park, pedestrian pathways, fencing, lighting and landscaping.

Note that the site is also known as 70 Billabong Road, Tenambit NSW 2323, but will be referred to as being within the suburb of Chisholm for the purposes of this assessment.

1.1.2 Statutory Context

The works are considered to be within the ambit of development permitted without consent under Section 2.73 of State Environmental Planning Policy (SEPP) (Transport and Infrastructure) 2021, where the works are undertaken by Council as the public authority.

As such, Council is obligated under Section 5.5 of the *Environment Planning and Assessment Act 1979* (EP&A Act) to examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of the proposed works.

This Review of Environmental Factors (REF) will document the likely impacts on the environment and address environmental management requirements in relation to the works.

1.1.3 Site and Project History

dWC have completed various environmental planning and advisory services in relation to this site since September 2023. This project history is outlined below, providing context for the basis of this assessment and an understanding of the site as it currently exists.

September 2023

dWC were engaged on 7/09/2023 to undertake a Site Inspection and Preliminary Review of the site as well as information supplied relating to the Chisholm sportsfield project, where works had appeared to have commenced on site (earthworks and introduction of fill).

dWC undertook a site inspection and desktop review and were unable to identify any development consent or determination which authorised the earthworks undertaken. On 14/09/2023, dWC provided email advice to Council, identifying potential unauthorised earthworks pursuant to the *Environmental Planning and Assessment (EP&A) Act 1979*. dWC recommended Council engage with their internal Planning, Environment and Regulatory team regarding existing consents and or potential stop work or compliance orders.

November 2023

Following this, Council's Planning and Environment team commenced their own preliminary compliance investigation, which generally concurred with dWC's findings. Subsequently, Council issued a Development Control Order (DCO) and Stop Work Order (SWO), dated 06/11/2023 (see **Appendix 22**).

Specifically, the issued DCO/SWO notes the following:

> ***1. To stop all works on the Premises carried out in contravention of this Act***
> *1.1 Stop all works on the Premises.*
> ***Timeframe:*** *Immediately upon service of the Stop Work Order*
> *1.2 Engage the services of an appropriately qualified person to undertake a detailed environmental impact assessment (review of environmental factors) of works currently completed on the premises and additional fill material to be stockpiled on works already completed;*
> ***Timeframe:*** *Fourteen (14) days from the date of the Development Control Order*
> *1.3 Submit the abovementioned (1.2) environmental impact assessment (review of environmental factors) of work currently undertaken for approval to the Group Management Planning & Environment.*
> ***Timeframe:*** *Twelve (12) weeks from the date of the Stop Work Order*
> *1.4 Engage the services of an appropriately qualified person to undertake a detailed environmental impact assessment (review of environmental factors) of works proposed to be completed on the premises;*
> ***Timeframe:*** *Twelve (12) weeks from the date of the Stop Work Order*
> *1.5 Submit the abovementioned (1.4) environmental impact assessment (review of environmental factors) of proposed works for approval to the Group Management Planning & Environment.*
> ***Timeframe:*** *Twelve (12) months from the date of the Stop Work Order, or as otherwise agreed upon by the Group Management Planning & Environment.*

Subsequently, Council requested that a detailed environmental impact assessment be prepared for the completed and proposed works per the DCO, with the original scope of each Review of Environmental Factors to be:

- REF #1 for completed works (earthworks – fill importation and stockpiling) and additional fill material (stockpiling atop works already completed); and
- REF #2 for the remaining proposed elements of the development including the playing fields, amenities, car parking, landscaping, services etc.

February 2024

dWC prepared and issued the first environmental assessment (REF #1) on 28/02/2024 (Final Version 1). This REF assessed the completed works (earthworks – fill importation and stockpiling) and additional fill material (stockpiling atop works already completed).

The project's potential impact on mapped Key Fish Habitat were first considered in the Biodiversity Assessment Report (BAR) prepared by Peak Land Management (November 2023) (**Appendix 4**), which supported REF #1. This BAR identified that the proposed development requires a Part 7 Permit from NSW Fisheries. REF #1 concluded further consultation with Department of Primary Industries (Fisheries NSW) was required.

An Aboriginal Due Diligence Assessment (ADDA) prepared by Biosis (February 2024) supported the REF #1. Notably, REF #1 only considered Aboriginal heritage to the extent of already filled areas on site, noting further investigation would be required to support future works beyond already disturbed areas.

March 2024 to April 2025

Council continued to work through matters relating to Aboriginal heritage, ecology and biodiversity (including with NSW Fisheries), as well as geotechnical and soils, architectural, landscape and civil design.

One Aboriginal site (AHIMS 38-4-2363/Maitland Sports Complex AS1) was identified within the site as part of an Archaeological Report (Biosis, 8/05/2025) (**Appendix 16**). This is a

subsurface artefact scatter with moderate archaeological significance. The proposed development is therefore also subject to considering the findings and recommendations/mitigation measures of the Aboriginal Cultural Heritage Assessment (ACHA) (Biosis, 8/05/2025) (**Appendix 17**), which determined an Aboriginal Heritage Impact Plan (AHIP) is required prior to the works proceeding.

May 2025 – Present

Following the above investigations, Council advised a change in strategy. The previous staged environmental assessment approach was to be replaced, with one comprehensive environmental assessment to be completed for both the completed works and the remaining proposed elements.

Therefore, this comprehensive REF (this document) relates to the works within the scope of the former REF #1 (28/02/2024) as well as all proposed works relating to this project. All works relating to this project are described as the "proposed development" herein, and as detailed in Section 3 of this document and its supporting appendices.

1.2. THE PROPONENT

The site comprises Lot 7 DP1269397, which is land owned and managed by Maitland City Council. Lot 7 forms part of an original parent lot which was contained in the Thornton North Section 94 Contribution Plan 2008 as line item *TN17 – Neighbourhood Sportsground* and was dedicated to Council as a public reserve as part of an approved 2 into 7 lot Torrens title subdivision, being DA15-2849. The land has been held by Council since.

Therefore, Maitland City Council is the landowner, proponent and determining authority for the proposed activity under Part 5 of the EP&A Act.

1.3. PURPOSE OF REPORT

The purpose of this REF is to fulfil duties under Section 5.5 of the EP&A Act 1979 to consider, to the *fullest extent possible*, all matters affecting or likely to affect the environment, for the purpose of protection and enhancement of the environment and to address the environmental management requirements in relation to the proposed works.

The description of the proposed works and assessment of associated environmental impacts have been documented in this REF having regard to Section 170 and 171 of the Environmental Planning and Assessment Regulation 2021, the *Biodiversity Conservation Act 2016 (BC Act), the Fisheries Management Act 1994* and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The findings of the REF will be considered when assessing:

- Whether the works are likely to have a significant impact on the environment and therefore the necessity for an environmental impact statement (EIS) to be prepared and approval to be sought from the Minister for Planning and Public Spaces;
- The significance of any impact on threatened species as defined by the BC Act in Section 1.7 of the EP&A Act and therefore the requirement for a Species Impact Statement (SIS) and/or a Biodiversity Development Assessment Report (BDAR); and
- The potential for the proposal to significantly impact a matter of national environmental significance or Commonwealth land and the need to make a referral to the Commonwealth Government Department of Climate Change, Energy, and the Environment and Water for a decision by the Australian Minister for the Environment and Water on whether assessment and approval is required under the EPBC Act.

It is the finding of this report that the proposed activity can proceed subject to any mitigation measures and/or conditions listed in Section 9 of this REF, Compilation of Mitigation Measures.

1.4. SITE AND SURROUNDING AREA

1.1.4 Site and Surrounding Area

The site is located on the northern side of Billabong Parade, within the Waterford County residential land release of Chisholm. The site itself has a frontage to Billabong Parade of approximately 178m, a depth of 255m and a total area of approximately 4.57ha. The site slopes down from the south to north.

The site itself does not contain any built structures, and was vacant, generally undisturbed land until recently. Based on recent survey, the site now also includes some imported fill material (approximately 12,800 cubic metres (m^3)) (**Appendix 2**). As partly addressed in Section 1.1.1, email advice was provided to Council on 14/09/2023, which identified unauthorised earthworks (fill deposit on the site). We understand this fill has been imported to the site from a nearby construction site, being the Government Road and Raymond Terrace Road intersection upgrade project, some 2.5km southeast of the site. This fill extends from Billabong Parade at the southern boundary towards the northern boundary and generally occupies the south/eastern part of the site up to depths of 4m. Vegetation is relatively disturbed and most of the subject site is considered non-native weeds/exotic flora (a moderate to high diversity of weeds) with less than 15% native cover (low native species count). See the Biodiversity Assessment Report prepared by Peak at **Appendix 4** and the Vegetation Management Plan (VMP) prepared by Fraser Ecological Consulting at **Appendix 18** for further details on the existing site's vegetation. Notably though, over the low lying less disturbed north-eastern part of the site, freshwater wetland species occur (**Appendix 4**).

There is an erosion and sediment control fence constructed around the fill mound / site boundaries. This area is shown in *Figure 5* below, based on a visual inspection of the site. There is also red flagging to the southern boundary, and temporary metal gates provided at the frontage where access was being provided via two ingress points, one on the eastern and the other on the western side. A CCTV camera has been installed on the fill mound.

The Four Mile Creek centreline exists just beyond the site's northern and western boundaries, with the associated waterway / wetland area and riparian vegetation also adjoining to the immediate east and existing within the northern part of the site. This forms part of the greater surrounding Tenambit Wetlands which extend to the north, west and south.

Low density residential housing exists to the immediate south, off Billabong Parade, as well as open space and parklands existing to the south-east. As above, the greater area is part the 'Waterford County' and 'Harvest' urban release housing estate of Chisholm. Other development within the estate is most notably the St Bede's Catholic College and the St Aloysius Catholic Primary School, several early childhood education centres, Waterford Kitchen café and a large shopping centre (Chisholm Plaza) currently under construction.

More generally, Chisholm exists to the north of the established suburb of Thornton, with Thornton North (newer housing releases) existing to the east and southeast. Metford (including the New Maitland Hospital) and East Maitland (including the major shopping centre Stockland Green Hills) are to the southwest, Tenambit is to the northwest and Berry Park to the northeast. The site is approximately 6.5km southeast of the Maitland central business district (CBD) and 24km northwest of the Newcastle CBD.

The estate is accessed via Raymond Terrace Road to the south, which via smaller local roads including Haussman Drive and Thornton Road, lead to Weakley's Drive and ultimately to the New England Highway (A43) and the Pacific Motorway M1) to the south.

Figure 1 below provides a general aerial view, *Figure 2* provides an indicative location for the existing sediment fencing, *Figure 3* provides an immediate location plan and *Figure 4* provides a larger 3-5km radius location plan.

Figure 1: *Aerial image of site (boundaries in red) (aerial © Aerometrex 22/07/2024)*

Figure 2*: Aerial image of site with sediment fencing outlined in blue (boundaries in red) (aerial © Aerometrex 22/07/2024)*

Figure 3: *Immediate location plan of site (site shown with arrow) (aerial © Aerometrex 22/07/2024)*

Figure 4: *3-5km radius location plan (site shown with arrow) (aerial © Aerometrex 22/07/2024)*

1.4.1. Site Photos

Site photos were obtained by de Witt Consulting during a visual site inspection on 13 October 2023. At the time of writing (May 2025), most of the site is understood to be in a comparable condition. Since 2023, the nearby waterbody has risen and fallen a number of times as a result of various rainfall and flood events, impacting some sections of fill on the north side.

Photo 1: *View at site frontage looking east along Billabong Parade.*

Photo 2: *View at site frontage looking north across site towards waterway.*

Photo 3: *View at site frontage east at the eastern temporary access point.*

Photo 4: *View at site frontage looking northwest across the site.*

Photo 5: *View at site frontage looking south at no. 69 Billabong Parade.*

Photo 6: *View at site frontage looking south at no. 75 Billabong Parade.*

Photo 7: *View at site frontage looking northeast at the east side temporary access point.*

Photo 8: *View from adjoining parkland looking north towards the site.*

Photo 9: *View from adjoining parkland looking northwest towards site and Billabong Parade.*

Photo 10: *View from east side boundary, looking southwest up towards Billabong Parade.*

Photo 11: *View at east side boundary, looking north towards adjoining waterway.*

Photo 12: *View at northeast side of fill mound looking south towards Billabong Parade..*

Photo 13: *View at northeast side of fill mound looking east towards waterway.*

Photo 14: *View at northeast side of fill mound looking east towards waterway.*

Photo 15: *View at northeast side of fill mound, looking at large tree stumps.*

Photo 16: *View at northeast side of fill mound looking south towards Billabong Parade.*

Photo 17: *View at northeast side of fill mound looking north towards waterway*

Photo 18: *View at north side of fill mound looking north towards waterway.*

Photo 19: *View at west side of fill mound looking south towards Billabong Parade.*

Photo 20: *View at west side of fill mound looking northeast across fill mound.*

Photo 21: *View at sites northwestern most boundary looking southeast towards fill mound.*

Photo 22: *View at west side of fill mound looking south towards Billabong Parade/access point.*

Photo 23: *View from Billabong Parade at the west side temporary access point looking north.*

Photo 24: *View from Billabong Parade looking northeast at the west side access point.*

2. NEEDS AND OPTIONS CONSIDERED

2.1. STRATEGIC NEED FOR THE PROPOSAL

Outdoor recreation encourages communities to gather, socialise and build relationships with one another, creating a sense of belonging in growing communities. Outdoor recreation facilities activate public open spaces and provide opportunities for enjoyment and interaction with the natural environment. They support the health and wellbeing of residents by providing places to be physically active and to engage in shared activity and foster stronger community connection. Without the appropriate infrastructure and facilities to support sport, many of the associated benefits would be left unrealised.

Council has undertaken significant strategic planning work in order to determine the future recreation and open space requirements to cater for the incoming population. The findings of these investigations have been detailed in the document "City Wide Section 94 Contributions Plan (2006/2016) Review of Open Space and Recreation" and translated into the open space and recreation works schedules.

As noted in Section 1.2, the site is part of the Thornton North Section 94 Contribution Plan 2008 (the Plan). New residential development in the Thornton North area will result in a clear demand for the provision of a range of Council-provided open space and recreation facilities to meet the needs of the new population. There is a direct relationship between the development of Thornton North and the provision of the proposed recreation and open space facilities. These facilities will service the Thornton North area and are not provided to benefit existing communities in Maitland. The Open Space and Recreation Services to be provided under the Plan are intended to be fully funded from Section 94 contributions (i.e., 100% apportionment to development).

The Plan has adopted standards (qualitative and quantitative) for the provision of open space facilities. As noted, the site is included as line item *TN17 – Neighbourhood Sportsground*, also shown as no. 17 in the Recreation and Open Space and Community Facilities map extract at *Figure 5* below.

The following standard is applicable to this site:

*"**Neighbourhood Sportsground** – A neighbourhood sportsground will primarily provide sport and recreation opportunities for residents within a planning precinct and cater for senior and junior competition. It should be a minimum 4.2 hectares and provided for approximately 3,000 – 5,000 people. It contains a double playing field and associated facilities such as lighting, car parking and landscaping."*

Council has provided a network of community facilities in areas throughout the city, which generally meet the needs of the current population. The Community Facilities and Services Strategy (2012) review indicated that existing community facilities are well utilised and are operating at capacity (i.e., no practical spare capacity). Council will therefore need to provide additional community facilities space, commensurate with the projected growth within the Thornton North release area. The Plan has calculated a total of 3 Neighbourhood Sportsgrounds as being required to serve the expected population increase.

The proposed development will construct a sportsground at the site, with the essential strategic need for the works are to facilitate recreation and open space and community facilities to support the needs of the growing Thornton North population.

The scope of works considered are provided in detail in Section 3 of this REF. Further strategic planning assessment is provided in Section 4.7 of this REF.

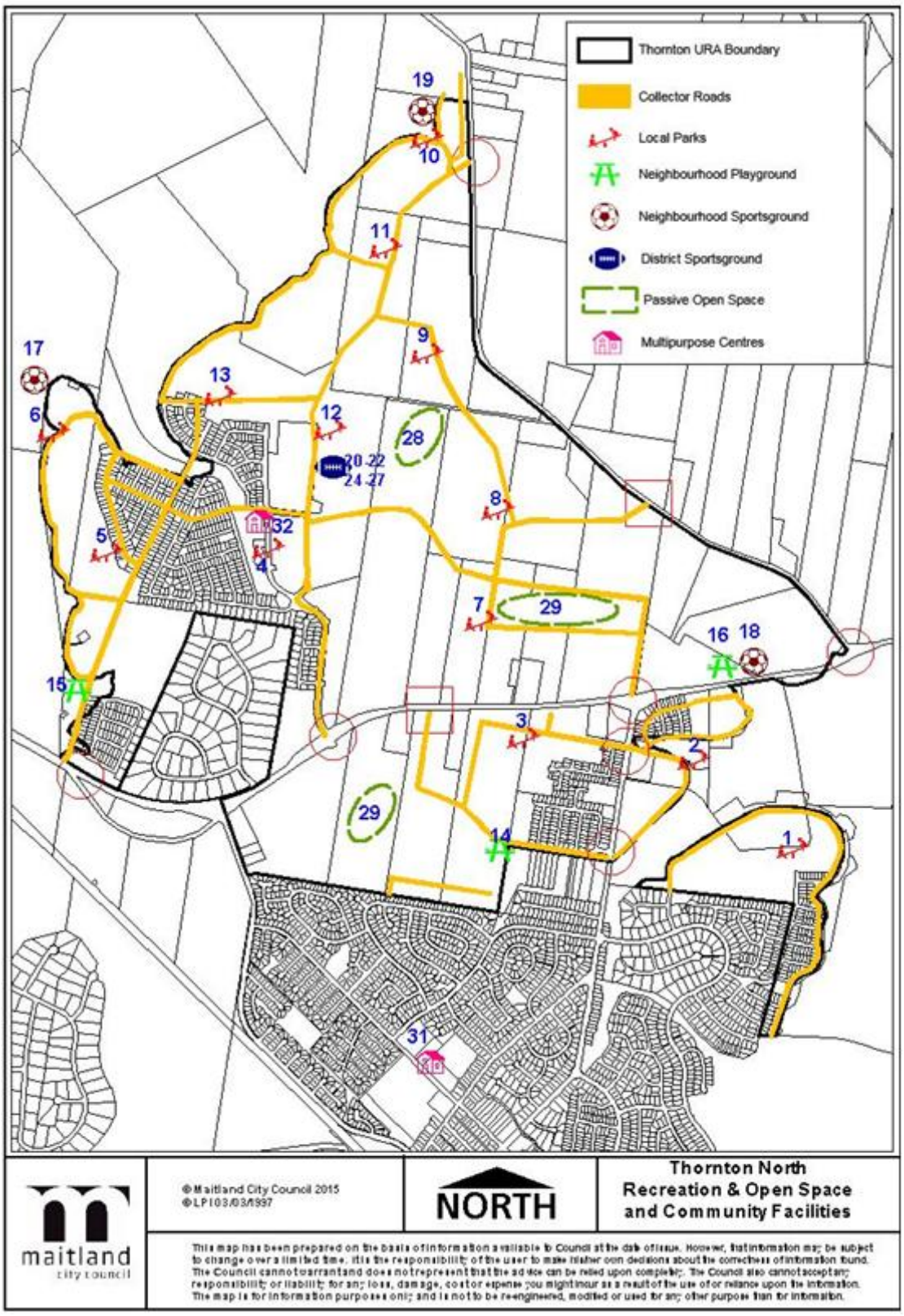


Figure 5: *Extract from Thornton North Section 94 Contributions Plan (site numbered 17 and shown as "Neighbouhood Sportsground") (Source: Maitland City Council, 2008)*

2.2. PROJECT OBJECTIVES

The purpose of the project is to facilitate a Neighbourhood Sportsground which will support the clear demand for Council provided open space and recreational facilities within the growing urban release areas of Thornton North.

The following objectives of the overall project have been assumed in this regard:

- Encourage community interaction and development and the enhancement of community wellbeing.
- Cater for the open space and recreational needs of the growing Thornton North population as development occurs and at a reasonable cost.
- Retaining the existing identity of Maitland with a relative abundance of recreation / natural areas.
- Primarily provide sport and recreation opportunities for residents within the Thornton North precincts to cater for senior and junior competition.
- Ensure that the existing communities of Maitland are not burdened by the provision of public services and amenities which are needed as a result of ongoing development and re-development in Thornton North.
- Promote environmental sustainability and environmental management, as well as incorporating strategies to ease environmental impact.
- Encourage and celebrate equitable and diverse participation of the community regardless of age, gender, ability, culture and any other human distinctions. Provide no exclusionary areas.
- Foster welcoming and equitable spaces to transcend socio economic disparities, promoting a sense of belonging and strengthening community resilience.
- Recognise and respect the local character, community identity and cultural connections to foster a sense of ownerships of the future facilities.
- Cohesively integrate the facilities into the surrounding urban context to create a vibrant, inclusive, safe and socially connected space. Design with CPTED principles.
- Planning with Country prioritized with local character, culture and identity to inform the facilities and spaces.

2.3. ALTERNATIVES AND OPTIONS CONSIDERED

The options are as follows:

1. Undertake environmental assessment of the proposed works to deliver a neighbourhood sportsground including playing fields, amenities and parking.
2. Do nothing.

2.3.1. Analysis of Options

Option 1: Undertake environmental assessments to deliver a neighbourhood sportsground.

As established, unauthorised works have commenced on site to deliver the overall project outcomes, however they are limited to fill importation and stockpiling at this stage. Importantly, works have ceased on site since the issue of the DCO and SWO on 06/11/2023. An extract of the SWO is below:

"The purpose of this Order is to restrain and/or remedy a breach and/or breaches of the Environmental Planning and Assessment Act 1979 (Act). Council, as the appropriate authority under the Act, is in possession of evidence that unauthorised development (earthworks) relating to land use have been undertaken without the requisite environmental impact assessment (review of environmental factors) on [70 Billabong Parade Chisholm]."

As per the DCO and SWO, Council are required to undertake environmental assessments for the works already completed and the works proposed. This REF is a detailed environmental

impact assessment of the existing and remaining works to be completed (as described in Section 1.1.3 Site and Project History)

Option 2: Do nothing.

Do not proceed with the environmental assessment of the works on site.

This option would not achieve the project objectives or ensure the project realises it's strategic need. Importantly, this option would not fulfil Council's requirements under the EP&A Act 1979 or the DCO / SWO to assess the environmental impact of the remaining works to be completed.

Doing nothing is not the preferred option.

2.3.2. Preferred Option

Council is obligated to comply with the requirements of the DCO under Clause 28 in Part 11 of Schedule 5 of the EP&A Act 1979. As such, there is no rational alternative to Option 1.

Option 1 is the preferred option based on the following reasons:

- It will fulfil Council's requirements under the EP&A Act 1979 and the DCO / SWO issued for the premises.
- It delivers the works to meet the strategic need and objectives outlined above.
- It ensures that appropriate environmental assessment will be undertaken for the works proposed on site, including provision of any mitigation measures or conditions. This will ensure that Council considers to the fullest extent possible, all matters affecting or likely to affect the environment, for the purpose of protection and enhancement of the environment and to address the environmental management requirements in relation to the works.

The REF considers potential environmental impacts of Option 1.

3. DESCRIPTION OF THE WORKS

This REF considers the completed earthworks and the proposed sportsfield (including amenities, car parking, drainage, landscaping, fencing and lighting) at 70 Billabong Parade, Chisholm NSW 2322. The total capital investment value for the project is $9.8 million.

The Architectural Plan and Landscaping Plan prepared by Maitland City Council on 12/06/2025 is at **Appendix 1** and should be referred to in the first instance. The same applies to the Concept Civil Plan prepared by DRB Consulting Engineers on the 04/07/2025 at **Appendix 2** as well as the Lighting Plan prepared by Norwich Group on the 18/06/25 at **Appendix 21**.

3.1. EXTENT OF WORKS – COMPLETED WORKS

The project thus far has involved the following key elements:

- Importation and stockpiling of approximately 12,800m^3 of Excavated Natural Material (ENM) and Virgin Excavated Natural Material (VENM) soils on the site. This soil has been procured from a nearby construction site, at the intersection of Government Road and Raymond Terrace Road, some 2.5km southeast. This soil was the subject of an In-site ENM and VENM resource recovery Assessment prepared by EP Risk (**Appendix 3**) on the 12th of April 2023 and was certified to be ENM and VENM. Full details of this Assessment and findings, are included within Section 6.1 and 6.4.
- Establishment of erosion and sediment control fencing along all boundaries to the fill mound. The location of the erosion and sediment control fencing was previously shown earlier in *Figure 2* of this REF.
- Establishment of temporary site access and egress points from Billabong Parade, one located at the west side (access) and the other at the east side (egress).
- Establishment of temporary site flagging, string-line fencing and metal gates along the Billabong Parade frontage.
- Installation of a pole-mounted CCTV security camera in the middle of the fill mound.

3.2. EXTENT OF WORKS – PROPOSED DEVELOPMENT

The proposal development includes two neighbourhood level football fields, an amenities building (see *Figures* overleaf) and a carpark, detailed as follows:

- Site and ground preparation works, including additional earthworks and ground levelling works, and battering, to accommodate the works, sub-soil drainage, irrigation, topsoil and dressing.
    - The additional fill material to be brought on site is expected to total between approximately 25,000m^3 – 30,000m^3 of ENM and VENM soils.
- Two uncovered turfed sporting fields will facilitate local and neighbourhood level games. The proposed fields will provide local sports facilities for the surrounding residential area as well as seeing teams travel from other surrounding areas.
- A single storey amenities building with associated clubhouse facilities is proposed in the southwestern corner, including tiered covered bench seating for spectators, amenities, canteen, change rooms, referee rooms and storage.
    - Spectator seating is located on the field facing building side (north).
    - Four change rooms, public toilets (including three standard female toilets, two standard male toilets, one ambulant female, one ambulant male and one accessible bathroom with a shower).
    - A canteen is located on the east side with full kitchen and preparation areas, with a servery on the north side.
    - Storage is located on the west and north side including 2 club store rooms.
    - Metal gates are provided to all doors, and a roller shutter is proposed to the servery.

- The roof is a metal skillion style, and has made allowance for photovoltaic panels (general indicative arrangement shown).

- There is a proposed 80 space open-air carpark in the southwestern corner (including 2 accessible spaces with shared zone and bollard) closest to the facilities entrance. The proposed car park will adequately support the proposed development's land use (sporting events, games and general recreation) once operational. Landscaped blisters and shade and amenity trees are interspersed throughout the car park.
- Bike racks are provided just west of the car park.
- There shall be two full-size fields. The fields will have adequate lighting (artificial lighting) as detailed in the Lighting Plan prepared by Norwich Group (**Appendix 21**).
- Concrete pedestrian pathways (including stairs and accessible ramps) through the site from the car park and from the entrance at Billabong Parade are proposed. This linking infrastructure provides accessible access through the site to the car park, amenities building, and to the playing fields.
- Landscaping treatments are proposed on the southern side of the site, while the northern, eastern and western sides will be the subject of an ecological revegetation area, to be managed under the VMP (**Appendix 18**).
- Turfed lawn is provided on the south side of the playing fields, around the amenities and car park.
- There are shade and amenity trees proposed along the western, southern and eastern boundaries, located at the entry point and throughout the car park, as well as shade and amenity trees throughout,
- Mulched planter beds with mass planting and feature trees are located adjacent the pedestrian links (at the main entrance and car park), and interspersed throughout the car park.
- Site entry signage at the principal entry point off Billabong Parade.
- Plans indicate bollards along the existing footpath to Billabong Parade, and on the north and west side of the car park, which will stop unauthorised vehicle access to the site, fields and car park.
- Metal perimeter fences and gates are provided around the playing fields, at various heights. The fence will be black chain metal, with maximum 3m height on the northern side, with a return of approximately 20m on east and west sides, down to 1m high fencing for the remainder and at the south side.
- A service/emergency access road is proposed from Billabong Parade at the west side down to the playing fields, including a vehicular access gate.
- Bins are located at the entry near the car park (3 x 240L enclosures) and a bin storage area (which includes area for at least 10 bins) is located on the west side of the amenities (screened and secured with aluminium battens). Waste receptacles will also be provided as part of the amenities building within key areas.
- New kerb crossings and public domain rectification works are proposed along Billabong Parade, to make good existing infrastructure / tie into proposed works.
- A pit and pipe network and grass lined swales will direct water around the amenities building, and from the playing fields, pathways, service accessway and car park to one of three (3) bio-basins (north of car park and 2 on the north side of playing fields), with headwall outlets discharging to the north. There is a 10kL rainwater tank on the west side of the amenities for reuse in toilets, which will collect water via the amenities roof and downpipes. There are 2 x ~45kL irrigation tanks located within a tank shed to the west of the amenities, secured behind 2.4m high metal fencing. The irrigation tanks are fed directly from the reticulated water supply system, and will act as a safeguard, ensuring sufficient water is available for irrigation to run smoothly.

Various plan extracts are provided overleaf for reference.

3.2.1. Proposed Development Plan Extracts

In the event construction parameters or ancillary works are proposed to be changed and these changes are considered significant, this REF will need to be reviewed and updated to ensure the environmental measures are adequate.

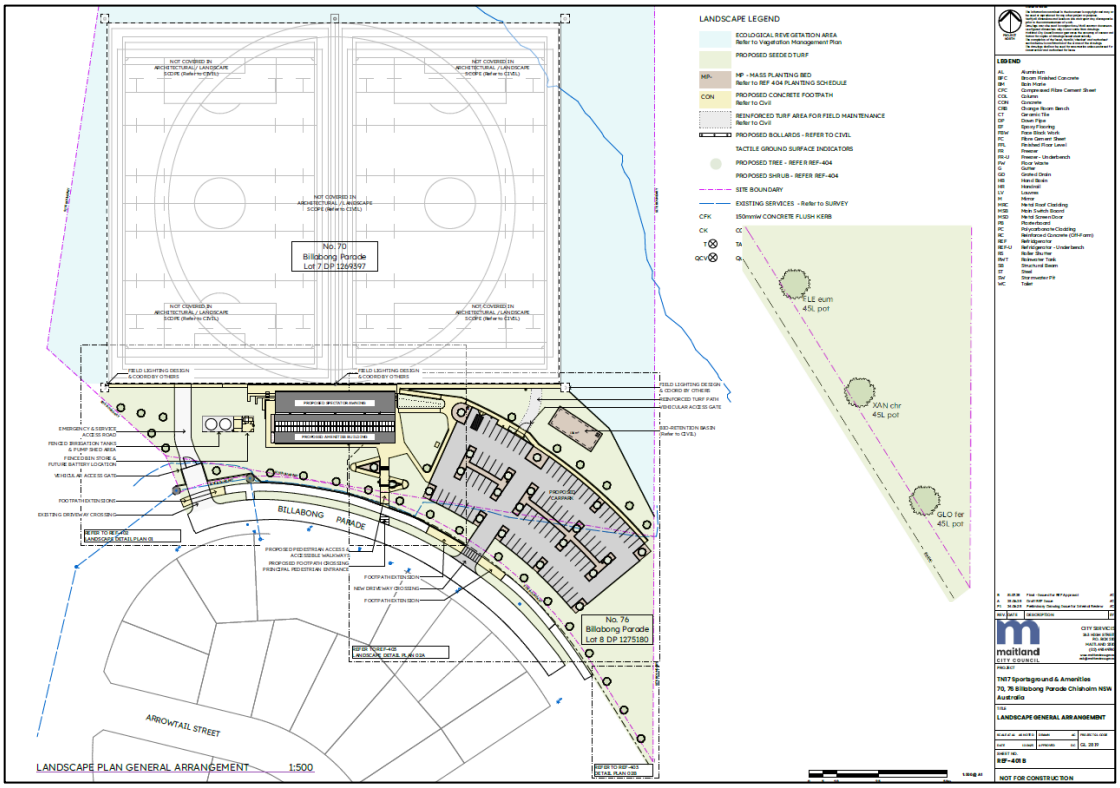


Figure 6: *Proposed Site Plan Extracted from Attachment 1 (Source: Council, 31/07/2025)*

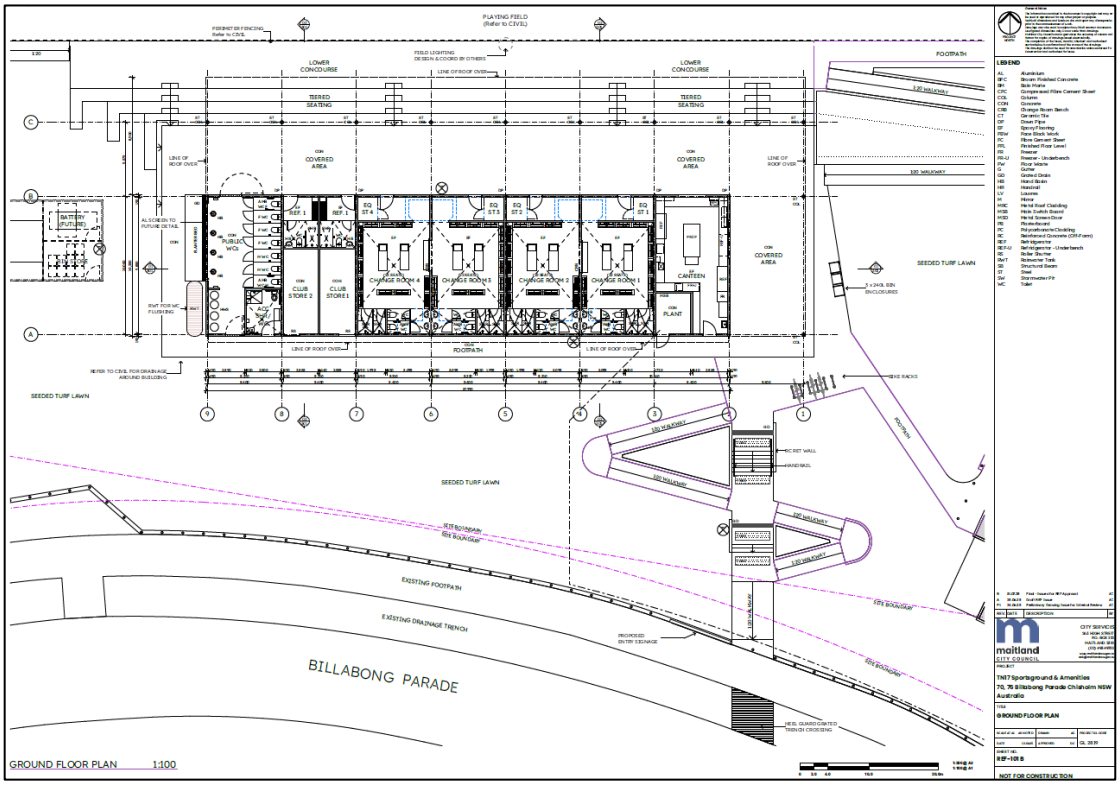


Figure 7: *Proposed Building Floorplan Extracted from Attachment 1 (Source: Council, 31/07/2025)*

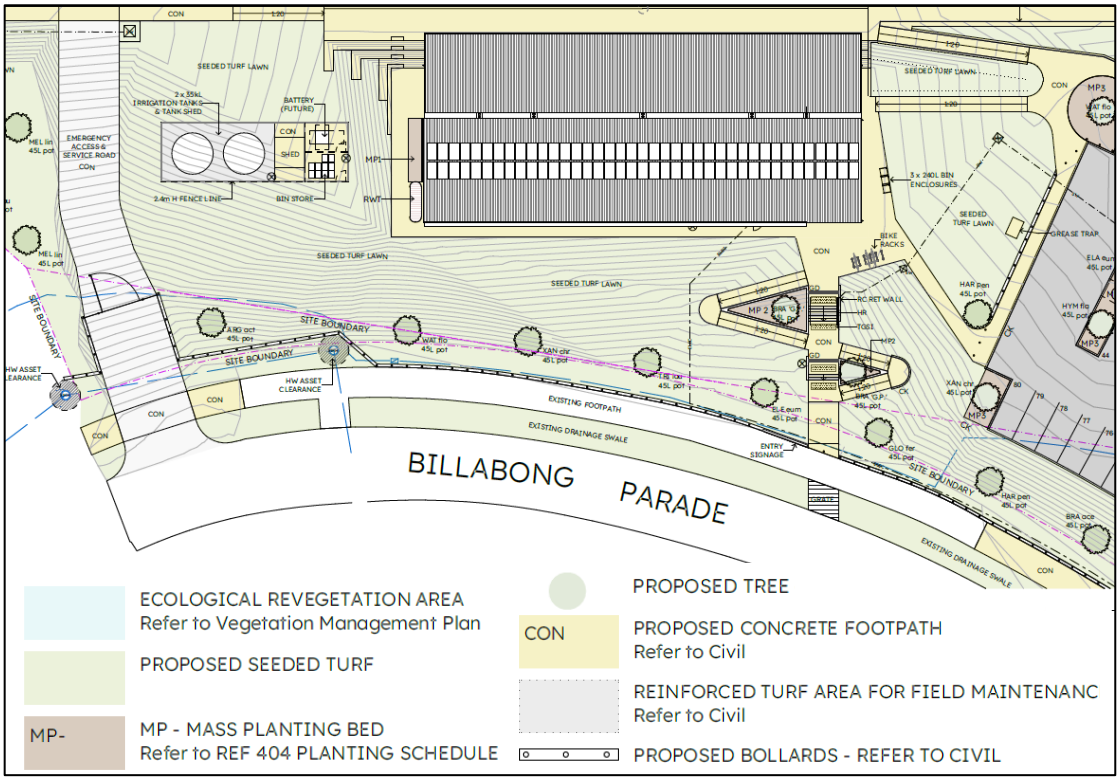


Figure 8: *Site Plan west side Extracted from Attachment 1 (Source: Council, 31/07/2025)*

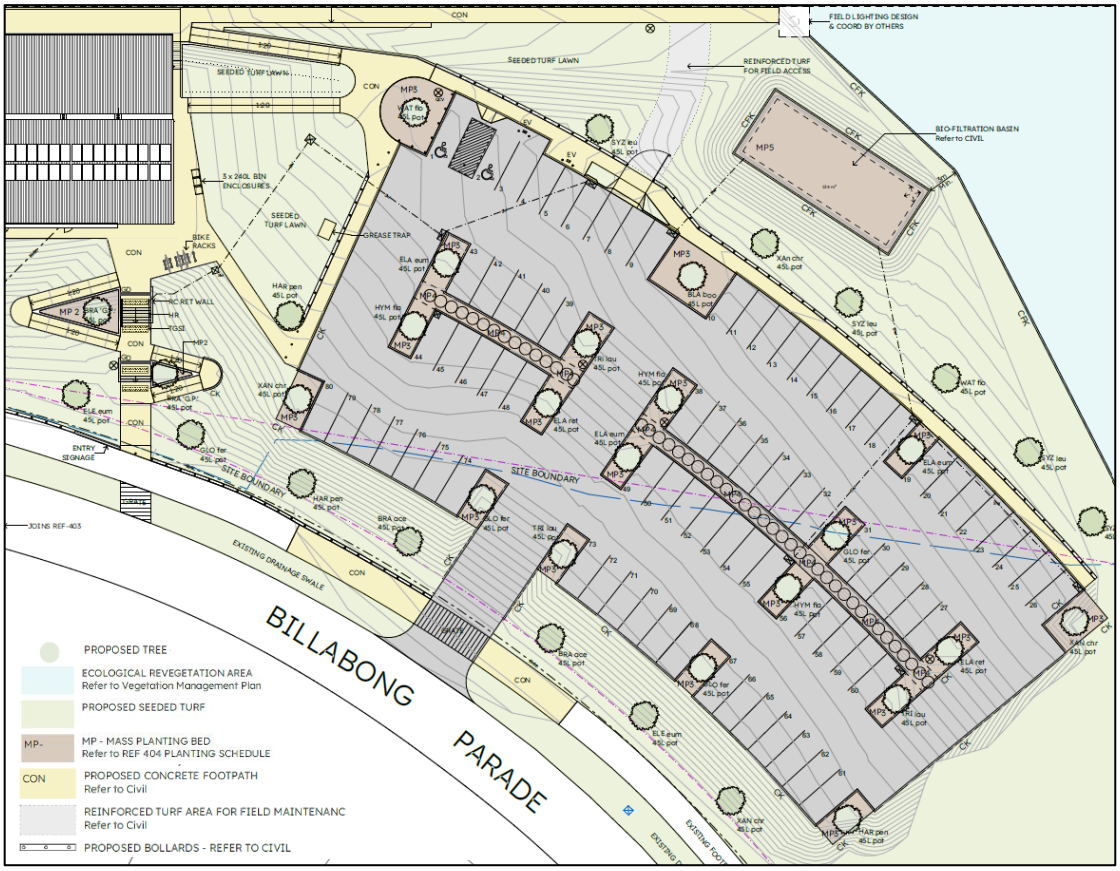


Figure 9: *Site Plan east side Floorplan Extracted from Attachment 1 (Source: Council, 31/07/2025)*

3.2.2. Material and Colour Palette

Figure 10: *View from southeast – materials noted – from Attachment 1 (Source: Council, 31/07/2025)*

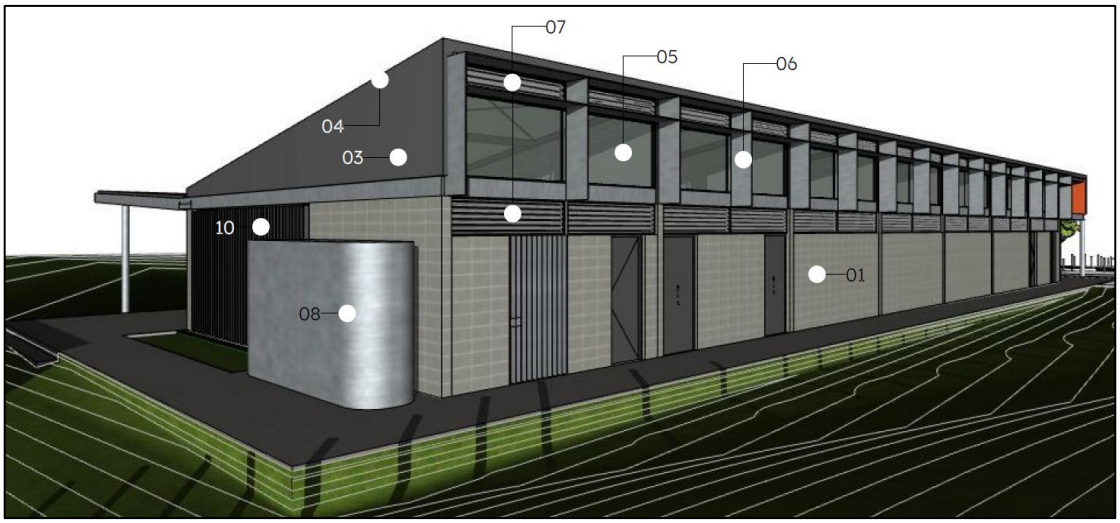


Figure 11: *View from southeast – materials noted – from Attachment 1 (Source: Council, 31/07/2025)*

01 - FACE BLOCKWORK
Product: 'Nu-Rock' Low Carbon Blockwork
Details: Stack Bond
Colour: TBC
Finish: Face

02 - STRUCTURAL STEEL
Product: Structural Steel Columns / Beams
Details: -
Colour: -
Finish: Hot Dipped Galvanised

05 - Translucent Cladding
Product: DANPAL 'Framed Facade' System
Details: TBC
Colour: TBC
Finish: TBC

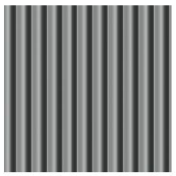
06 - Proprietary Aluminium Sun Shading
Product: HEKA Sun Hoods
Details: -
Colour: -
Finish: Powder Coated

08 - RAINWATER TANK
Product: 10,000L TANK
Details: -
Colour: -
Finish: Zincalume

09 - Future Collaborative Artwork
Image indicative only

Figure 12: *Material and colour palette – from Attachment 1 (Source: Council, 31/07/2025)*

03 - UPPER WALL & SOFFIT CLADDING
Product: VIROC Compressed FC Sheet (TBC)
Details: -
Colour: Natural
Finish: -



04 - ROOF CLADDING & FLASHING
Product: TBC
Details: TBC
Colour: WINDSPRAY
Finish: COLORBOND

07 - Aluminium Louvres
Product: (TBC)
Details: -
Colour: TBC
Finish: Powder Coat

08 - Off-Form Concrete Retaining Walls
Product: -
Details: -
Colour: TBC
Finish: TBC

10 - Aluminium Battens
Product: (TBC)
Details: -
Colour: TBC
Finish: Powder Coat

Figure 13: *Material and colour palette – from Attachment 1 (Source: Council, 31/07/2025)*

3.2.3. Planting Palette

Figure 14: *Planting palette – from Attachment 1 (Source: Council, 31/07/2025)*

3.2.4. Revegetation Management

As noted, the site is subject to a Vegetation Management Plan, with parts of the site to be managed under the following zones:

A. **Management Zone A:** Maintain existing open grassland planted. NO REVEGETATION WORKS REQUIRED. Control any outbreaks of High Threat Exotic weeds (6000sqm)
B. **Management Zone B**: Mass planting of *Lomandra, Juncus* and *Gahnia spp. grass* tube stock @ 2m centres (1500sqm)
C. **Management Zone C**: Rehabilitated Key Fisheries Habitat impacted by fill works planted with islands of native shrubs and hedges + additional infill plantings of *Juncus and Gahnia spp.* grass tube stock @ 1m centres (6100 sqm)
D. **Management Zone D:** Mass planting of *Lomandra* tube stock @ 1m centres on steep batter embankments (approx. 600 lineal metres for entire outer perimeter 600sqm)
E. **Management Zone E**: Runoff drainage swales and OSD basins. Mass planting of *Lomandra, Juncus, Carex and Gahnia spp. grass* tube stock @ 0.5m centres on rip rap.

Corresponding management zones A through E are shown in *Figure 15* below.

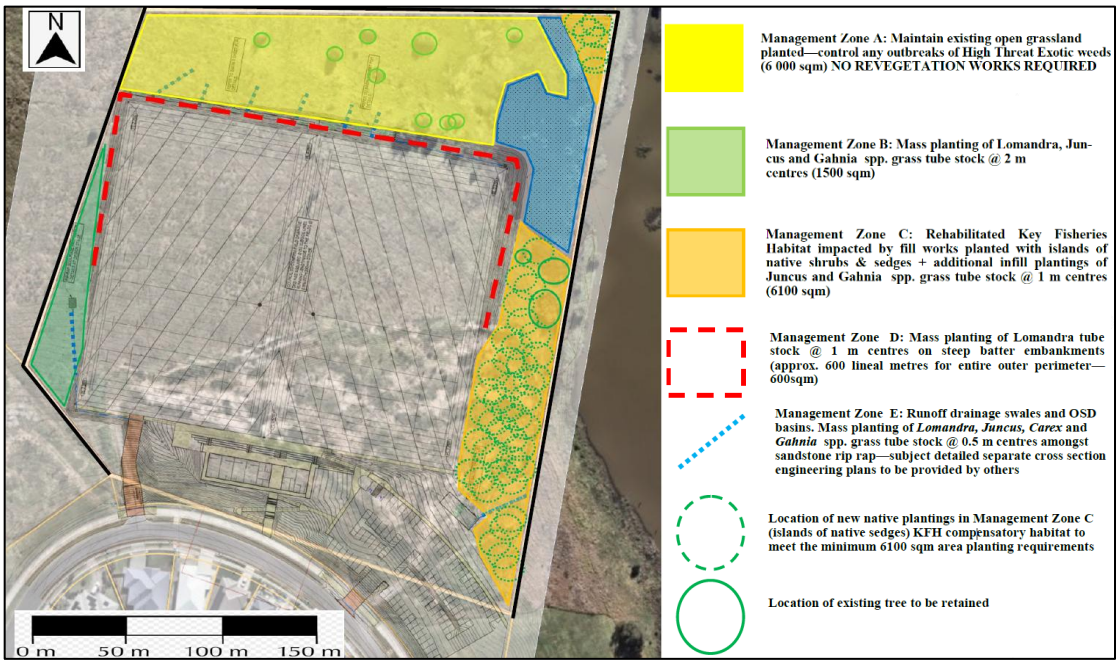


Figure 15: *VMP Management Zones – from Appendix 18 (Source: Fraser Ecological 17/06/2025)*

3.2.5. Flood Management

It is proposed to lower the fields below the 1% AEP flood level but above the 20% AEP flood levels. The aim of the latter is to reduce the overall field heights which would, in turn, decrease the overall site footprint and reduce its impact on the downstream Key Fish Habitats and the associated buffers. The implications of which are included in the Qualitative Environmental Risk Assessment prepared by Water Technology and Bio2Lab on 28/10/2024 at **Appendix 20**.

3.2.6. Access and Car Park

Access to the car park will be from a new driveway on the eastern side of the site, whilst the existing driveway to the west will provide emergency access. Access to the proposed field/s will be facilitated by the new driveway, which will tie into the existing road reserve at the site's boundary. Part of the existing pedestrian footpath near the site will be demolished, and a new path will be tied into the existing, retained path.

As detailed in the Traffic, Parking and Access Assessment prepared by SECA Solution 27/05/2025 (appended at **Appendix 15**), the proposed car park will connect with Billabong

Parade at a driveway allowing for two-way movements. The location of the access driveway to the car park has been reviewed on site. It is to be located on the outside of a gentle bend in the road, allowing good visibility in each direction for drivers entering and exiting the site. Visibility to the east (left along Billabong Parade) extends for a distance exceeding 150m whilst to the west (right along Billabong Parade) it is available across the bend for a distance of 97m.

3.2.7. Plant and Equipment

Equipment expected to be used during the works include, but are not limited to, the following:

- Excavator
- Concrete truck
- Roller/compacter
- Mulcher
- Generators
- Light, medium, and heavy rigid vehicles (tipper trucks, delivery trucks of materials)

3.2.8. Post-Construction Rehabilitation

With regards to green infrastructure, any damage to existing grassed areas and similar green elements caused by construction plant / traffic will be repaired by re-turfing / seeding or resurfacing upon completion. Turfed and seeded areas will be watered until established as part of the turfed landscaping proposed under the project scope.

With regards to other infrastructure, a Dilapidation Report should be prepared by the relevant contractor prior to the works occurring on site. The report should capture the condition of local government assets around the site prior to any works in order to serve as a record for future reference should any damage be flagged during or post works. These assets can include road and footpath pavements, stormwater infrastructure, and the like. The Civil Plans (**Appendix 2**) note several aspects of the existing public domain to be demolished and tied in with the new works (footpaths on both ends and the new access way on the east end).

3.2.9. Construction Traffic

The number of vehicle movements would fluctuate throughout the construction program with the maximum daily vehicle movements occurring during construction of the sportsfield and associated ancillary elements. Construction traffic will access via the existing crossover on the west side, and a temporary stabilised site access point will be maintained there (**Appendix 2**). General mitigation measures are included at Section 6.3 to ensure traffic and pedestrian issues can be safely and efficiently managed during the works.

3.2.10. Timing and Hours of Work

Construction will occur during standard construction hours as recommended by the NSW Environment Protection Authority (EPA) in the Interim Construction Noise Guideline published by the Department of Environment and Climate Change NSW in July 2009:

- Mondays to Fridays: 7:00am to 5:00pm
- Saturdays: 8:00am to 1:00pm
- Sundays and public holidays: No work

The final confirmed construction duration and construction hours are currently unknown and would be confirmed by Council prior to works commencing. Notwithstanding, construction is expected to commence in late-2025. The works once commenced are expected to last no longer than 2 years, with completion and occupation expected late-2027. A construction program should be determined upon appointment of the contractor(s) and may be refined as part of the detailed construction programming.

4. STATUTORY PLANNING CONTROLS

4.1. CONFIRMATION OF PART 5 ASSESSMENT

Part 5 of the EP&A Act permits activities to be assessed by a determining authority – and pursuant to Section 5.1 of the EP&A Act, the proposal is an "activity". Per Section 5.5(1) of the EP&A Act, the determining authority must "*examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity*".

The proposal is identified as development permitted without consent under Section 2.73 of the SEPP (Transport and Infrastructure) 2021. Maitland City Council is the landowner, proponent and determining authority in this instance. This REF, and the proceeding sections in particular, fulfills their obligations.

4.2. LOCAL ENVIRONMENTAL PLAN

The Maitland Local Environmental Plan (LEP) 2011 applies to the study area. The site is primarily zoned RU2 Rural Landscape pursuant to LEP 2011, along with small portions zoned C2 Environmental Conservation and R1 General Residential. Refer to *Figure 16* below.

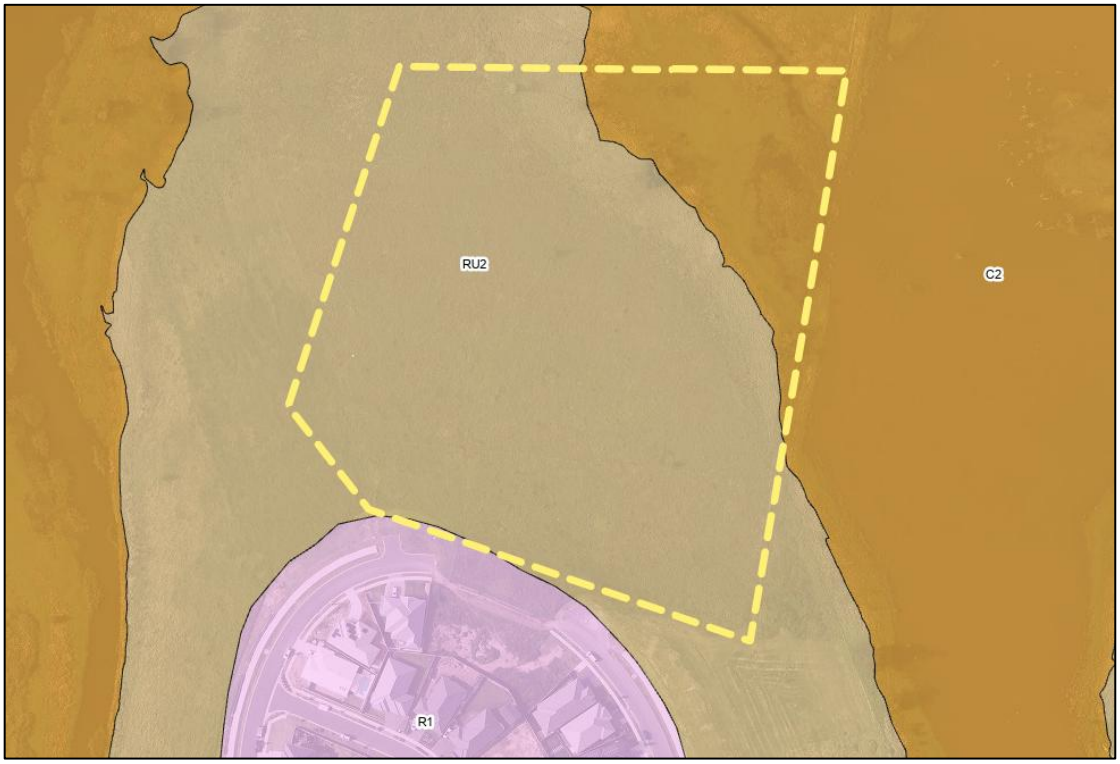


Figure 16: *Zoning plan (site outlined in yellow) (Source: NSW Planning Portal Spatial Viewer)*

Subclause (1) of *Clause 5.12 Infrastructure development and use of existing buildings of the Crown* of LEP states:

> *(1) This Plan does not restrict or prohibit, or enable the restriction or prohibition of, the carrying out of any development, by or on behalf of a public authority, that is permitted to be carried out with or without development consent, or that is exempt development, under State Environmental Planning Policy (Transport and Infrastructure) 2021.*

As such, the proposed activity can proceed without development consent under SEPP (Transport and Infrastructure) 2021 which supersedes the provisions of the LEP (refer to Section 4.2.1 of this report for further detail).

4.3. STATE ENVIRONMENTAL PLANNING POLICIES

4.3.1. State Environmental Planning Policy (Transport and Infrastructure) 2021

SEPP Transport and Infrastructure seeks to facilitate the effective delivery of infrastructure across NSW which improves regulatory processes, certainty and efficiency.

SEPP Transport and Infrastructure facilitates infrastructure in NSW by identifying environmental assessment categories for different types of infrastructure. Chapter 2 relates to various infrastructure categories. Division 12 of this chapter relates to parks and other public reserves. Section 2.73 of the Transport and Infrastructure SEPP identifies development permitted without consent:

(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—

*(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).

Note—

The term building is defined in the Environmental Planning and Assessment Act 1979 as including any structure.

The proposed works, as defined under the Standard Instrument, are considered to include a recreation area (outdoor), internal roads, pedestrian pathways, a single storey car park, lighting, landscaping, amenities, and food preparation facilities.

The T&I SEPP contains additional provisions for development without consent which could also be applied to various ancillary infrastructure components, if required. Specifically:

- Division 5 Electricity transmission or distribution, Section 2.36 – in relation to any new electricity cables, poles, pits and the like.
- Division 17 Roads and traffic, Section 2.109(1) – in relation to any road works or road rehabilitation works within the Billabong Parade reserve, if needed.
- Division 20 Stormwater management systems, Section 2.137 – in relation to the various stormwater management and drainage works proposed.
- Division 21 Telecommunications and other communication facilities, Section 2.142 – in relation to any works required to the telecommunications network.

Therefore, several clear mechanisms exist which allow all components of the works to proceed as development permitted without consent. Notwithstanding, the proposed works are all

considered pursuant to Section 2.73(3), with any stormwater, road, electricity or utility infrastructure works being ancillary components to the recreation facility (outdoor).

Accordingly, the T&I SEPP identifies the proposal as development without consent, thereby permitting assessment under Part 5.5 of the EP&A Act.

1.1.5 Other applicable SEPPs

Table 4.2.2 addresses other SEPPs relevant to the proposal.

***Table 4.2.2**: Relevant SEPPs*

SEPP	COMPLIANCE
State Environmental Planning Policy (Resilience and Hazards) 2021 (SEPP Resilience and Hazards) *Chapter 4 Remediation of land*	Section 4.6 of this SEPP sets out that a consent authority must not consent to the carrying out of any development on land unless it has considered whether the land is contaminated, and it is satisfied that the land is suitable in its contaminated state (or will be suitable after remediation) for the purpose for which development is proposed to be carried out. Chapter 4 of SEPP Resilience and Hazards does not apply to development permitted without consent. Nevertheless, for abundant caution and to demonstrate that the environmental impacts of the proposal are acceptable, this matter is discussed further within Section 6.5 of this REF. The development can proceed with regards to this SEPP.
State Environmental Planning Policy (Resilience and Hazards) 2021 (SEPP Resilience and Hazards) *Chapter 2 Coastal management*	Chapter 2 of the SEPP aims to promote an integrated and co-ordinated approach to land-use planning in the coastal zone in a manner that is consistent with the objects of the Coastal Management Act 2016, including the management objectives for each coastal management area. The SEPP protects vulnerable coastal land including various coastal areas, wetlands and rainforests. The site is not mapped as being within any applicable coastal management zones (coastal use area or coastal environmental area), nor is it within or nearby a Coastal Wetland or Littoral Rainforest Area, as mapped by the SEPP. No further consideration of this Chapter is required. The development can proceed with regards to this SEPP.
State Environmental Planning Policy (Biodiversity and Conservation) 2021 (SEPP Biodiversity and Conservation) *Chapter 4 Koala habitat protection 2021*	The works are being assessed under Part 5 of the EP&A Act and as such is not part of a development application assessed under Part 4 of the EP&A Act. Therefore, there is not a statutory requirement to assess the proposal in accordance with Chapter 4 of this SEPP. Koala are nevertheless addressed within the 5 Part Test within the Biodiversity Assessment at **Appendix 4**, as habitat is still present and impact proposed. This is further discussed in Section 6.8 of this REF. The development can proceed with regards to this SEPP.
State Environmental Planning Policy (Biodiversity and Conservation) 2021	Chapter 2 of the SEPP aims to protect biodiversity values of trees and other vegetation and associated amenity in non-rural areas of the State.

(SEPP Biodiversity and Conservation) *Chapter 2 Vegetation in non-rural areas*	The site is largely zoned RU2 and generally this Chapter would not be applicable. However, there is a small portion of the site zoned residential, so the SEPP is considered as a conservative measure. The Biodiversity Assessment Report at **Appendix 4** provides an understanding of the proposed activity's potential impacts, and a VMP is at **Appendix 18**. Section 6.8 of this REF provides further analysis on flora and fauna impacts, while providing mitigation measures. The development can proceed with regards to this SEPP.

4.4. ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

The EP&A Act is the principal legislation guiding land use development in NSW. Part 5 of the EP&A Act permits activities to be assessed by a determining authority which, in this case, is Maitland City Council. As the proposal is within the definition of an 'activity' under Section 5.1 of the Act, the works can proceed as development without consent. Accordingly, the proposal is required to consider Part 5 of the EP&A Act to determine its potential impact on the environment. Key sections of the Act include:

- Section 1.7 provides effect of the Act subject to the provisions of Part 7 of the BC Act 2016 and Part 7A of the *Fisheries Management Act 1994* that relate to the operation of this Act in connection with the terrestrial and aquatic environment.
- Section 5.5 outlines duty of a determining authority to fully consider possible all matters affecting or likely to affect the environment by reason of an activity.
- Section 5.7 outlines an EIS is required when an activity is prescribed or may have a significant impact on the environment.

4.5. ENVIRONMENTAL PLANNING AND ASSESSMENT REGULATION 2021

4.5.1. Environmental Factors under the Regulations

Section 170 and 171 of the Environmental Planning and Assessment Regulation 2021 identifies factors to be taken into account when considering the impact of an activity on the environment. These factors are also listed in the Department of Planning and Environment's Guidelines for Division 5.1 assessments made under Section 170 of the EP&A Regulation (the *Division 5.1 Guidelines*). An assessment of each factor is provided in Section 7.1 of this REF.

4.5.2. Publication Requirements under the Regulations

in accordance with Section 171(4) of the EP&A Regulation, an REF must be published on the determining authority's website or the NSW Planning Portal if:

a) The activity has a capital investment value of more than $5 million, or
b) The activity requires an approval or permit as referred to in any of the following provisions before it may be carried out –
    i. *Fisheries Management Act 1994*, Sections 144, 200, 205 or 219,
    ii. Heritage Act 1977, Section 57,
    iii. National Parks and Wildlife Act 1974, Section 90
    iv. Protection of the Environment Operation Act 1997, Section 47-49 or 122, or
c) The determining authority considers that it is in the public interest to publish the review.

Council has advised that the proposed activity has a total capital investment value (CIV) of $9.8 million ($5.5 million of which is grant funded). On this basis, the REF will need to be published on the determining authority's website or the NSW Planning Portal.

Further, the proposed activity will require a permit in relation to provision b(i) listed above (specifically, a permit for dredging and/or reclamation (Section 200, Part 7) *Fisheries Management Act 1994*). Further detail on the permit is included in Section 4.5.1 of this REF. Therefore, this REF is to be published on Council's website or the NSW Planning Portal.

Section 171A of the EP&A Regulation requires the consideration of the impact of an activity on the environment in a regulated catchment. The site is not located within a regulated catchment as defined under Schedule 6 of SEPP Biodiversity and Conservation.

This REF requires publication under the Regulations due to CIV and a Part 7 Fisheries Permit.

4.6. NSW STATE LEGISLATION

4.6.1. Relevant NSW State Legislation

Table 4.6.1 details relevant legislation, it's purpose and its relevance and requirements.

Table 4.6.1: *Relevant NSW State Legislative Requirements and Approvals*

LEGISLATION	PURPOSE OF LEGISLATION	RELEVANCE AND REQUIREMENTS
Biodiversity Conservation Act 2016	Under Section 7.6(2) of the *Biodiversity Conservation Act 2016 (BC Act)*, an activity under Part 5 of the EP&A Act is to be regarded as an "*activity likely to significantly affect the environment if it is likely to significantly affect threatened species*". In that case, an EIS must be prepared and accompanied by a Species Impact Statement or (if elected) a Biodiversity Development Assessment Report (BDAR). If the likely significant effect on threatened species is the only significant effect on the environment, only an SIS or BDAR is required and not an EIS. The test for determining whether the proposed activity is likely to significantly affect threatened species or ecological communities, or their habitats is set out in Section 7.3 of the BC Act	A Biodiversity Assessment Report (BAR) has is appended at **Appendix 4**. Note that the BAR meets all requirements under the BC Act. Note that Council are not required to opt into the Biodiversity Offsets Scheme (BOS) for these works, as there is no significant impact on any threatened or endangered ecological community (EEC). No referral is required to the Department of Planning and Environment (DPE) in this regard. The site is not mapped as Regent Honeyeater, or Swift Parrot or Migratory Shorebird Important Area (*Figure 7* of **Appendix 4**). It is not mapped on the Biodiversity Values Map (*Figure 5* of **Appendix 4**), and Council elect not to opt in to the BOSET scheme. Refer to **Appendix 4** for the full detail. The VMP that has been appended at **Appendix 18** states that overall*:, "the site has low flora biodiversity, with one native vegetation community present being Southern Lower Floodplain Freshwater Wetlands, equivalent to a NSW listed Endangered Ecological Community being NSW Freshwater Wetland over Floodplains Endangered Ecological Community. This is not a Federal EPBC listed Endangered Ecological Community".* Section 6.8 of this REF provides further analysis on flora and fauna impacts, while providing mitigation measures The development can proceed with regards to this Act.

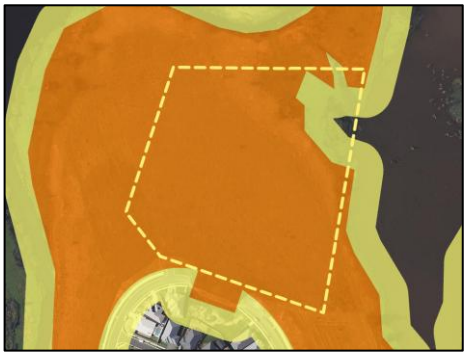
LEGISLATION	PURPOSE OF LEGISLATION	RELEVANCE AND REQUIREMENTS
Biosecurity Act 2015	The Act provides a framework for the prevention, elimination and minimisation of biosecurity risks posed by biosecurity matter. The Act covers pest animals and disease and pathogens potentially harmful to flora and/or fauna, and while not discounting the importance of these components, of relevance to this REF assessment includes those risks and impacts associated with weeds, and in particular, Priority Weeds.	Maitland City Council is required to control priority weeds on land to prevent spread of weeds to adjoining land. Total area of impacted native vegetation is 0.68ha (Peak Land Management 2023). Vegetation cover throughout the Subject Area is relatively disturbed and most of the subject site is considered weeds/exotic flora, and non native being <15% native cover. It is dominated by species such as Paspalum, Fireweed, Carpet Grass, etc with low % of *Juncus ustitatus* throughout. State Priority Weeds identified in the Hunter Regional Strategic Weed Management Plan 2023-2027 (Hunter LLS 2022), have therefore been recorded on the subject land (i.e., Fireweed). These are discussed further in the VMP at **Appendix 18**, with weed management control, weed reduction and bush regeneration included in the VMP. Mitigation measures are also identified in Section 9 of this REF The development can proceed with regards to this Act.
Coal Mine Subsidence Compensation Act 2017	The Act provides for a fair, efficient and sustainable compensation framework for dealing with the impacts of coal mine subsidence.	The proposed works are not mapped within a Mines Subsidence District. The proposal will not be subject to approval under Section 22 of the Act. The development can proceed with regards to this Act.
Contaminated Land Management Act 1997	The Act establishes a process for investigating and (where appropriate) remediating land that the EPA considers to be contaminated significantly enough to require regulation under Division 2 of Part 3. Furthermore, under Section 60 a person whose activities have contaminated land or a landowner whose land has been contaminated is required to notify the EPA when they become aware of the contamination.	The fill material (approximately 12,800m^3 has been certified as both VENM and ENM soils (in-situ). These assessments are provided in **Appendix 3**. Further, a Preliminary Site Investigation (PSI) has been prepared by Douglas Partners (DP), located at **Appendix 10**. This PSI found that the fill on site was generally consistent with the material imported to the site, however some materials were not consistent with ENM or VENM. Additional investigation was therefore recommended. To this affect, an Environmental Site Assessment (ESA) was conducted by Hunter Environmental Consulting (HEC), located at **Appendix 12** to inform environmental liabilities and remediation of the site. HEC confirmed based on observations and minor clean-up works, that no further intrusive investigation or analysis is required and there are no sensitive human

LEGISLATION	PURPOSE OF LEGISLATION	RELEVANCE AND REQUIREMENTS
		or ecological receptors identified which would impede ongoing works on site. A Report on Geotechnical Investigation prepared by DP (11/04/2024) (see details at **Appendix 11**) and a Geotechnical Design Report by Hunter Geotechnical Services (11/12/2024) (see details at **Appendix 13**) have been prepared. If the recommendations from the two latter documents are actioned, then the proposed works and the site contamination are suitably addressed and compliant with the *Contaminated Land Management Act 1997*. Therefore, site contamination is suitably addressed. Refer to Section 6.5 of this REF for further detailed information. The development can proceed with regards to this Act.
Dangerous Good (Road and Rail Transport Act) 2008	The purpose of this Act is to regulate the transport of dangerous goods by road and rail in order to promote public safety and protect property and the environment.	No known dangerous goods are required as part of the works. If dangerous goods are to be utilised then a license may be required. The need for a license can be confirmed as part of a Construction Environmental Management Plan (CEMP) when the relevant contractor is appointed. The development can proceed with regards to this Act.
Environmentally Hazardous Chemicals Act 1985	The Act regulates use and storage of environmentally hazardous chemicals or declared chemical waste. The Act is aimed at controlling the introduction, use and disposal of environmentally hazardous chemicals in NSW.	This act will only apply if environmentally hazardous chemicals are used during construction and there is potential for a significant impact on the environment. The need for approval under the Act can be confirmed as part of the CEMP. It is expected that only standard chemicals will be used, such as petrol/diesel for machinery. These will not be in the quantities that would trigger any significant impact on the environment as the persons responsible for construction on site will be appropriately trained in proper handling and storage of such chemicals in accordance with the relevant safety standards. The development can proceed with regards to this Act.
Fisheries Management Act 1994	The FM Act applies to all waters within the limits of NSW, except where Commonwealth legislation applies. Section 220ZZ provides that the determining authority must consider whether a proposal will result in a significant impact on	The adjoining waterway is noted as 'key fish habitat' under the Fisheries NSW mapping. As work has occurred over a Fisheries habitat area, referral to and approval from NSW Fisheries for unlawful reclamation

LEGISLATION	PURPOSE OF LEGISLATION	RELEVANCE AND REQUIREMENTS
	threatened species, population or ecological communities, or their habitats. Under Section 221ZX of the FM Act, an activity under Part 5 of the EP&A Act that is "*likely to significantly affect threatened species, populations or ecological communities, or their habitats*" or is "*carried out in critical habitat*" is considered to be an activity that is "*likely to significantly affect the environment*" in accordance with the test set out in Section 220ZZ of the FM Act. In those circumstances, an SIS is required.	work, and proposed work, must occur, before any more work occurs. It is noted that existing unlawful filling encroaches over the mapped Fisheries Habitat area of around 500m^2, subject to NSW Fisheries determination. The illegal placing of contaminated fill/soil has been close to the water, and when the water level has risen, the contaminated soil/fill has become part of the waterway. NSW Fisheries issued a Caution Notice to Council on 16/09/2023 (**Appendix 25**), finding Council to be acting in contravention of NSW Fisheries rules. Fisheries withheld a penalty in the circumstances, noting the expectation to comply with rules in the future and that a Permit would be obtained. No further work should be undertaken until NSW Fisheries provide the relevant permit. It is understood that consultation with NSW Fisheries is currently ongoing at the time of writing this REF (August 2025) and that the process of obtaining the relevant permit (Part 7 Fisheries Permit) will be supported by this REF. Specifically, the final REF will support Council's application for a Permit, including all works (landscaping and revegetation) in the supporting appendices. Therefore, the works authorised under this REF, including landscape design and revegetation or buffer zones, are still subject to any Fisheries permit approval and conditions. Once any permit is granted, Council should confirm that all conditions align with this REF. Any substantial inconsistencies would be subject of an updated REF or an addendum to REF, to address any changes beyond that which would be considered 'minor' changes.  The development can proceed with regards to this Act, pending a Part 7 Fisheries Permit

LEGISLATION	PURPOSE OF LEGISLATION	RELEVANCE AND REQUIREMENTS
		is obtained and all conditions are consistent with this REF.
Heritage Act 1977	The NSW Minister for Heritage is responsible for administration of the *Heritage Act 1997*. The *Heritage Act 1997* concerns the protection and restoration and enhancement of State heritage items, historic archaeological relics, maritime archaeology and items subject to Interim Heritage Orders.	The State Heritage Register lists items that are significant for NSW and protected under the Heritage Act 1977. No items or places of heritage are located within the site, based on a search on 27/11/2023. Accordingly, no permits under the Act are required. The development can proceed with regards to this Act.
Local Government Act 1993	The Act largely deals with land classified as community land. The Act provides that the use and management of community land is to be regulated by a plan of management. The Act deals with operational land to the extent that reclassification is concerned.	The site is owned and managed by Maitland City Council and will remain under the existing management practices that are currently used for the site. The development can proceed with regards to this Act.
National Parks and Wildlife Act 1974	The Act aims to conserve nature and objects, places or features of cultural value. It contains provisions for protecting Aboriginal objects and declared Aboriginal places in NSW. An Aboriginal Heritage Impact Permit is required under Section 90 to harm or desecrate Aboriginal objects or places. The Act is supported by the National Parks and Wildlife Regulation 2019 (NPW Regulation). Compliance with the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (DECCW 2010) adopted under the NPW Regulation constitutes a defence against prosecution if an Aboriginal object is unknowingly harmed without an AHIP. The NPW Regulation also outlines requirements for Aboriginal consultation.	An Aboriginal Heritage Information Management System (AHIMS) search was conducted on 5/03/2024 and returned 1 record of an Aboriginal site on the register within the works area with a 200m buffer (**Appendix 7**). An Aboriginal Due Diligence Assessment (**Appendix 6**) was initially conducted by Biosis (12/02/2024). It provided an assessment of the impacted areas of the site (being 11,173sqm) to assist Council in exercising due diligence in determining whether the project will involve activities that may harm Aboriginal objects and to determine whether consent in the form of an Aboriginal Heritage Impact Permit is required. As the portion of the study area subject to the ADDA had already been filled, it was deemed not possible to avoid harm to the landscape features. There was moderate potential for stone artefacts and potential archaeological deposits occurring within the study area, with other site types being low, very low or nil. Biosis were further requested by Council to complete an Aboriginal Cultural Heritage Impact Assessment (ACHA) (**Appendix 17)** (8/05/2025), which is supported by the Archaeological Repot (AR) (**Appendix 16**) (8/05/2025). The AR documents the findings of the archaeological investigations and supports the conclusions and management recommendations of the ACHA.

LEGISLATION	PURPOSE OF LEGISLATION	RELEVANCE AND REQUIREMENTS
		Test excavations and consultation with community were undertaken. It was found that the development has potential to impact sub-surface deposit of 126 artefacts recorded as AHIMS 38-4-2363/ Maitland Sports Complex AS1. The ACHA provides recommendations, including an AHIP. No earthworks, fill or construction is to commence anywhere on site until the AHIP salvage and conditions are completed. Council must obtain an AHIP before any works can proceed. Once (if) granted, the AHIP allows works to proceed with strict conditions, including salvage, consultation, and care of cultural materials. A summary of the findings are provided in Section 6.9 of this REF. The development can proceed with regards to this Act, based on the ACHA and AR, and pending compliance with and completion of all pre-construction works as per an AHIP.
Protection of the Environment Operations Act 1997 (POEO Act)	The POEO Act primarily regulates pollution control and waste disposal in NSW and is administered by the OEH. It identifies development for which a licence is required.	The Soils Waste Classification (**Appendix 3**) identifies that the topsoil *"and imported natural clay fill material (refer to logs Attachment 3 and Table 1) (approximately 800 m³/ 1,600 t of material) meets the criteria outlined in the Excavated Natural Material Exemption 2014 under Part 9, Clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014"*. An environmental protection license is not required as the works are not listed in Schedule 1 of the POEO Act. The development can proceed with regards to this Act.
Protection of the Environment (Waste) Regulation 2014	This regulation regulates waste facility requirements, measuring and monitoring controls at waste facilities, waste transportation, transportation and management of asbestos waste, construction and demolition waste facilities and classification of waste.	The objective of the In-situ Assessment at **Appendix 3** was to determine whether in-situ material within the intersection upgrade excavation areas (off Government Road / Raymond Terrace Road) meets the Excavated Natural Material Order 2014 (ENM Order 2014) and Excavated Natural Material Exemption 2014 under Part 9, Clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014. EP Risk determined that the material did meet the criteria and the soils that were imported to the site are therefore ENM and VENM. The development can proceed with regards to this Act.

LEGISLATION	PURPOSE OF LEGISLATION	RELEVANCE AND REQUIREMENTS
Protection of the Environment (Noise Control) Regulation 2008	Regulates noise from vehicles, machines and articles.	A range of plant and equipment will be in use apart of this activity (some listed in Section 3.2.7). Due to the proximity of residential receivers, a Noise Assessment (NA) is required for the proposed works. A Noise Assessment by Muller Acoustic Consulting (MAC) was prepared 24/07/2025 and is at **Appendix 14**. The results of the NA demonstrate noise emissions from the construction and operation phases can satisfy the relevant criteria once noise management and mitigation measures are implemented, discussed further in Section 6.4 of this REF. The development can proceed with regards to this Act.
Rural Fires Act 1997	The Rural Fires Act aims to, *inter alia*, protect infrastructure, persons and property from damage arising from fires. A Bushfire Safety Authority (BFSA) is required for a subdivision of bush fire prone land that could lawfully be used for residential or rural residential purposes or development of bushfire prone land for a Special Fire Protection Purpose (SFPP).	The Bushfire Prone Land Map indicates that the site is bushfire prone (vegetation category 3 and vegetation buffer zone).  Planning For Bushfire Protection (PBP) 2019 states that with respect to development to which the former Infrastructure SEPP 2009 applies to, the consent authority is required to consult with NSW Rural Fire Service (RFS) who will provide advice on the proposal. However, SEPP Transport and Infrastructure 2021 replaced the Infrastructure SEPP 2009 and in accordance with Section 2.16 of the in-force SEPP, consultation with the NSW RFS is not required. As the latest SEPP prevails over the PBP 2019, no further consideration of consultation is legislatively required. It is also noted that the works are not considered to be a SFPP for the purpose of section 100B of the Act and a bushfire safety authority is not required. Notwithstanding, a Bushfire Protection Assessment has been prepared by ABPP (**Appendix 19**) (18/06/2025). The report confirms that the proposal complies with

LEGISLATION	PURPOSE OF LEGISLATION	RELEVANCE AND REQUIREMENTS
		the aim and objectives of PBP 2019 to the extent that the recommended BAL 12.5 construction standards, access provisions and fire protection measures provide for a development which affords the public adequate protection from exposure to a bushfire occurrence in the grassland vegetation on the land to the west and north of the site. The assessment includes bushfire protection strategies, including design and construction measures, land management responsibilities, and evacuation management measures. These are discussed further in Section 6.8 of this REF. The development can proceed with regards to this Act.
Water Management Act 2000	Works within 40m of a waterway generally require a Controlled Activity Approval (Section 91). Taking groundwater that is not managed by a water sharing plan requires a groundwater licence under Section 113 of the *Water Act 1912*.	The proposed works occur nearby naturally occurring waterways (Four Mile Creek and Two Mile Creek). Notwithstanding, Clause 41 of the Water Management (General) Regulation 2018 provides that public authorities are exempt from requirement to obtain a CAA. The development can proceed with regards to this Act.
Waste Avoidance and Resource Recovery Act 2001	Objects of the Act include encouraging efficient use of resources and reducing environmental harm in accordance with the principals of ecologically sustainable development. The Act establishes the waste hierarchy of avoidance, resource recovery and disposal.	Any spoil generated as part of the development in which is intended to be exported from the site must be suitably classified against the NSW EPA (2013) Waste Classification Guidelines Part 1: Classifying Waste. A waste management and minimisation strategy should form part of the contractors CEMP prior to new works occurring. The development can proceed with regards to this Act.

4.7. COMMONWEALTH LEGISLATION

The EPBC Act provides a national framework for environmental protection and management of nationally and internationally important flora, fauna, ecological communities and heritage places. Part 3 of the Act lists nine matters of National Environmental Significance (NES) that may require approval from the Minister for the Environment and Water. Further details of the impact of the development on places or matters of NES is provided in Section 7.2 of this REF.

Additionally, the EPBC Act provides that an action taken by any person on Commonwealth land that is likely to have a significant impact on the environment (Section 26(1) of the Act) or an action taken by any person outside of Commonwealth land that is likely to have a significant impact on Commonwealth land (Section 26(2) of the Act) may require approval from the Minister for the Environment and Water. Commonwealth land is not affected by the proposal.

The assessment of the proposal found that there is unlikely to be a significant impact on matters of NES or on the environment of Commonwealth land. Specifically, the BAR at **Appendix 4** has found that there is "*no significant threat or impact on any local species, population or ecological communities under the EPBC Act"* (or other legislation such as the BC Act or FM Act for that matter). Furthermore, the VMP at **Appendix 18** identifies the vegetation on the site's proposed development area to be in poor condition and of low ecological value. Revegetation management will improve the site's ecological value in the long-term.

Accordingly, the proposal does not need to be referred to the Commonwealth Minister for the Environment. Other relevant issues have been considered throughout this REF and summarised in Section 7.2.

4.8. STRATEGIC FRAMEWORK

Section 171(2) of the EP&A Regulation and the Division 5.1 Guidelines require applicable local strategic planning statements, regional strategic plans or district plans made under Division 3.1 of the EP&A Act to be considered in a determination under Part 5.

This section of the REF describes that the proposal demonstrates compliance with relevant strategic planning policies.

4.8.1. Hunter Regional Plan 2041

The Hunter Regional Plan 2041 (HRP 2041) is a 20-year land use plan prepared under the EP&A Act 1979. It applies to the local government areas (LGAs) of Cessnock, Dungog, Lake Macquarie, Maitland, MidCoast, Muswellbrook, Newcastle, Port Stephens, Singleton and Upper Hunter. It draws from each council's local strategic planning statements and acknowledges common interest without duplicating effort and divides the Hunter in six (6) district planning and growth areas with its own planning priorities to assist in shaping the region in a consolidated approach that spans different LGAs. The proposed development is located within the "Greater Newcastle" district, which is described as follows:

> *"The Greater Newcastle Metropolitan Plan 2036 built on the dynamic and entrepreneurial city centre, strong industrial employment base, diversified economy and desirable lifestyle. It capitalised on extensive investment from all levels of government and private partners by coordinating and linking places and ideas.*
>
> *Greater Newcastle will be Australia's newest and emerging economic and lifestyle city.*

Planning Priority 7 of the Greater Newcastle district ("local open space plans integrate the blue and green grid, extend urban tree canopy and include water management"), states that:

> *"As councils continue to develop local strategies for public spaces and/or recreation areas, efforts should be focused on forming a network that creates open spaces near homes, integrating them with and complementing the blue and green grid, and increasing tree canopy in public places., Further, an integrated water management approach should be applied, using recycled water and stormwater to irrigate public places."*

The proposed activity is a realisation of this strategy, in that it is opening up the green grid, and is providing a substantial addition to the open space network within the Greater Newcastle and Hunter area as a whole. It responds to the immediate and future needs of residents and visitors. Additionally, tree planting proposed will increase the tree canopy in the immediate surrounding area, which will aid in mitigating the urban heat island effect, as well as providing a visually cohesive and pleasant outcome, tying into the adjoining wetland area.

4.8.2. Greater Newcastle Plan 2036

Greater Newcastle is a key element in the future productivity of the Hunter Region and critical to it being the leading regional economy in Australia. It comprises of the closely connected

urban communities of Cessnock, Lake Macquarie, Maitland, Newcastle and Port Stephens LGAs. Presently, Greater Newcastle is home to around 475,000 people but it is expected to grow to around 600,000 over the next 20 years. The Greater Newcastle Metropolitan Plan 2036 (GNMP 2036) is a strategic long-term plan that sets out strategies and actions that will drive sustainable growth to ensure that homes, jobs and infrastructure are delivered in the right locations, and that the region's competitive advantages, environmental assets and natural resources are safeguarded and maximised. Further, GNMP 2036 sets five (5) elements to shape Greater Newcastle into a *"dynamic and entrepreneurial city with a globally competitive economy and a great lifestyle, framed by wineries to the waterfront."* Element 3 "Metro Frame" are applicable to the proposed activity. In particular, Element 3 states:

> *"Greater Newcastle is framed by an arc of cities and towns from southern Lake Macquarie to Cessnock, Branxton, Maitland and Raymond Terrace. These centres are located by the water or the bush and have a strong identity, high amenity and a sense of place. They will become more closely connected with each other, to the metro core and metro heart.*
>
> *It is also home to Central Maitland, - a growing administrative centre for the metro frame, and East Maitland – an emerging health and retail service centre. These strategic centres are some of the fastest growing in regional NSW that will continue to provide housing, jobs and services for communities across the metro frame.*
>
> *Cessnock, Kurri Kurri, Morisset and Raymond Terrace will also provide local housing and jobs opportunities and will be designed to maintain the coastal and green outlooks, improve access to open space and retain the identity of places that collectively form Greater Newcastle."*

The proposed activity is consistent with Strategy 11, in that active and passive recreation is being provided. More specifically, the proposed activity is consistent with action item 11.1 "*enhance community access to sporting, recreational, cultural and community services and facilities."* The proposed activity is lessening residents travel distance to access sport and recreational facilities. This will encourage social cohesion and improve the health and wellbeing outcomes of residents. It also shows a commitment from Council to appropriately address current and future demand for sport and recreation facilities within the LGA.

4.8.3. Maitland Local Strategic Planning Statement

The Maitland Local Strategic Planning Statement (LSPS) sets out a 20 year plan integrating land use, transport and infrastructure planning for city growth. It outlines how growth is managed sustainably over this period and has been informed by the community and other stakeholders.

The proposed activity is consistent with Local Planning Priority 17 ("*Provide good quality, accessible and appropriate infrastructure across the city"*). This priority identifies that as population grows in the LGA demand on existing infrastructure and demand for additional community infrastructure will only grow. Additionally, the priority notes that most open spaces within the LGA are at or near capacity with limited scope for growth. The proposed activity directly addresses this current and future need for sport and recreation facilities within the Thornton North urban release area.

5. CONSULTATION

5.1. INTRODUCTION

Consultation is a key component of the environmental assessment. Relevant stakeholders have been consulted as part of preparing this REF to determine their requirements in relation to the proposal. Sections 5 outlined consultation that has occurred and how it has been considered in this REF. Community consultation is required prior to works commencing.

5.2. INFRASTRUCTURE SEPP CONSULTATION

Part 2.2 and 3.2 (Divisions 1) of the SEPP Transport and Infrastructure provides provisions for public authorities to consult with local councils and other public authorities prior to undertaking some development activities. If any of the items listed in Table 5.2 of this REF are triggered, then the public authority, or person acting on behalf of the public authority, will not be able to carry out the development unless the authority or the person has:

> *(a) given written notice of the intention to carry out the development to the council for the area in which the land is located (or other relevant public authority as the case may be), and*
>
> *(b) taken into consideration any response to the notice that is received from the council (or other relevant public authority as the case may be) within 21 days after the notice is given.*

Table 5.2: *Assessment of Items of Sections 2.10-2.17 of SEPP (Transport and Infrastructure).*

CLAUSE	IS NOTIFICATION REQUIRED
2.10 Consultation with councils—development with impacts on council-related infrastructure or services	
(1) This clause applies to development carried out by or on behalf of a public authority that this Policy provides may be carried out without consent if, in the opinion of the public authority, the development: (a) will have a substantial impact on stormwater management services provided by a council, or (b) is likely to generate traffic to an extent that will strain the capacity of the road system in a local government area, or (c) involves connection to, and a substantial impact on the capacity of, any part of a sewerage system owned by a council, or (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 (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 (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). (2) A public authority, or a person acting on behalf of a public authority, must not carry out development to which this clause applies unless the authority or the person has:	No. Council is carrying out the proposed development, and as such, notice is not required to be given as per Section 2.17.

(a) given written notice of the intention to carry out the development (together with a scope of works) to the council for the area in which the land is located, and (b) taken into consideration any response to the notice that is received from the council within 21 days after the notice is given.	
2.11 Consultation with councils—development with impacts on local heritage	
(1) This clause applies to development carried out by or on behalf of a public authority if the development: (a) is likely to affect the heritage significance of a local heritage item, or of a heritage conservation area, that is not also a State heritage item, in a way that is more than minor or inconsequential, and (b) is development that this Policy provides may be carried out without consent. (2) A public authority, or a person acting on behalf of a public authority, must not carry out development to which this clause applies unless the authority or the person has: (a) had an assessment of the impact prepared, and (b) given written notice of the intention to carry out the development, with a copy of the assessment and a scope of works, to the council for the area in which the heritage item or heritage conservation area (or the relevant part of such an area) is located, and (c) taken into consideration any response to the notice that is received from the council within 21 days after the notice is given.	No. No items of local heritage significance or of a heritage conservation area will be affected by the development.
2.12 - Consultation with councils—development with impacts on flood liable land	
(1) (Repealed) (2) A public authority, or a person acting on behalf of a public authority, must not carry out, on flood liable land, development that this Policy provides may be carried out without consent and that will change flood patterns other than to a minor extent unless the authority or person has: (a) given written notice of the intention to carry out the development (together with a scope of works) to the council for the area in which the land is located, and (b) taken into consideration any response to the notice that is received from the council within 21 days after the notice is given.	No. The project area is located within flood prone land. Although the site is flood prone land, notice is not required to be given to Council as they are carrying out the work. No notice is required pursuant to Section 2.17.
2.13 - Consultation with State Emergency Service—development with impacts on flood liable land	
(1) A public authority, or a person acting on behalf of a public authority, must not carry out development on flood liable land that may be carried out without development consent under a relevant provision unless the authority or person has: (a) given written notice of the intention to carry out the development (together with a scope of works) to the State Emergency Service, and (b) taken into consideration any response to the notice that is received from the State Emergency Service within 21 days after the notice is given. (2) Any of the following provisions in Part 2.3 is a ***relevant provision***:	No. The site is not listed as a relevant provision under Section 2.13(2) of the SEPP. Therefore, consultation with the NSW State Emergency Service (SES) is not required.

(a) Division 1 (Air transport facilities), (b) Division 2 (Correctional centres and correctional complexes), (c) Division 6 (Emergency services facilities and bush fire hazard reduction), (d) Division 10 (Health services facilities), (e) Division 14 (Public administration buildings and buildings of the Crown), (f) Division 15 (Railways), (g) Division 16 (Research and monitoring stations), (h) Division 17 (Roads and traffic), (i) Division 20 (Stormwater management systems). (3) This clause does not apply in relation to the carrying out of minor alterations or additions to, or the demolition of, a building, emergency works or routine maintenance. (4) (Repealed)	
2.14 - Consultation with councils—development with impacts on certain land within the coastal zone	
(1) This clause applies to development on land that is within a coastal vulnerability area and is inconsistent with a certified coastal management program that applies to that land. (2) A public authority, or a person acting on behalf of a public authority, must not carry out development to which this clause applies, which this Policy provides may be carried out without development consent, unless the authority or person has: (a) given written notice of the intention to carry out the development to the council for the local government area in which the land is located, and (b) taken into consideration any response to the notice that is received from the council within 21 days after the notice is given. (3) In this clause: ***certified coastal management program*** has the same meaning as in *State Environmental Planning Policy (Coastal Management) 2018*. ***coastal vulnerability area*** has the same meaning as in the *Coastal Management Act 2016*.	No. The development site is not identified as being within a coastal vulnerability area pursuant to the former *SEPP (Coastal Management) 2018* – now SEPP Resilience and Hazards 2021. Refer to Section 4.3 of this REF for compliance with the SEPP.
2.15 - Consultation with public authorities other than councils	
(1) A public authority, or a person acting on behalf of a public authority, must not carry out specified development that this Policy provides may be carried out without consent unless the authority or person has: (a) given written notice of the intention to carry out the development (together with a scope of works) to the specified authority in relation to the development, and (b) taken into consideration any response to the notice that is received from that authority within 21 days after the notice is given. (2) For the purposes of subclause (1), the following development is ***specified development*** and the following authorities are ***specified authorities*** in relation to that development:	No. The development is not specified development under Section 2.15. No consultation with public authorities other than councils is required.

(a) development adjacent to land reserved under the *National Parks and Wildlife Act 1974* or to land acquired under Part 11 of that Act—the Office of Environment and Heritage, (b) development on land in Zone C1 National Parks and Nature Reserves or in a land use zone that is equivalent to that zone—the Office of Environment and Heritage, (c) development comprising a fixed or floating structure in or over navigable waters—Transport for NSW (d) development that may increase the amount of artificial light in the night sky and that is on land within the dark sky region as identified on the dark sky region map—the Director of the Observatory, (e) development on defence communications facility buffer land within the meaning of clause 5.15 of the Standard Instrument—the Secretary of the Commonwealth Department of Defence, (f) development on land in a mine subsidence district within the meaning of the *Mine Subsidence Compensation Act 1961*—the Mine Subsidence Board. (g) development on, or reasonably likely to have an impact on, a part of the Willandra Lakes Region World Heritage Property—the World Heritage Advisory Committee and Heritage NSW, (h) development within a Western City operational area specified in the *Western Parkland City Authority Act 2018*, Schedule 2 with a capital investment value of $30 million or more—the Western Parkland City Authority constituted under that Act.	
2.16 - Consideration of Planning for Bush Fire Protection	
(1) This section applies to development for the following purposes that this Chapter provides may be carried out without development consent— (a) health services facilities, (b) correctional centres, (c) residential accommodation. (2) A public authority, or a person acting on behalf of a public authority, must consider Planning for Bush Fire Protection before carrying out the development in an area that is bush fire prone land. (3) In this section— **bush fire prone land** means land recorded for the time being as bush fire prone land on a map certified under the Act, section 10.3(2). **Planning for Bush Fire Protection** means the document prescribed by the *Environmental Planning and Assessment Regulation 2021*, section 271.	No. The proposed development is not listed in Section 2.16(1). Notwithstanding, consideration of PBP 2019 has occurred (see **Appendix 19** in the first instance). The report at **Appendix 19** examines the extent of the bushfire prone vegetation within the site and on adjacent land to the west, north and east and confirms that the width of the Asset Protection Zone to the west of the building removes the potential for flame contact on the building. The report at **Appendix 19** also confirms that the proposal complies with the aim and objectives of PBP 2019 to the extent that the recommended BAL 12.5 construction standards, access provisions and fire protection measures provide for a development which affords the public adequate protection from exposure to a bushfire

	occurrence in the grassland vegetation on the land to the west and north of the site. Consultation with RFS NSW is not required prior to carrying out the activity. Bushfire is further considered in Section 6.8.
2.17 - Exceptions	
(1) Sections 2.10-2.15 do not apply with respect to development to the extent that: (a) they would require notice of the intention to carry out the development to be given to a council or public authority from whom an approval is required in order for the development to be carried out lawfully, or **(**b) they would require notice to be given to a council or public authority with whom the public authority that is carrying out the development, or on whose behalf it is being carried out, has an agreed consultation protocol that applies to the development, or (c) they would require notice to be given to a council or public authority that is carrying out the development or on whose behalf it is being carried out, or (d) the development is exempt development or complying development under any environmental planning instrument (including this Chapter), or (e) the development comprises emergency works, or (f) the development is carried out in accordance with a code of practice approved by the Minister for the purposes of this clause and published in the Gazette. (2) In this clause: ***approval*** means any licence, permission or any form of authorisation, other than development consent, under any other law. ***consultation protocol*** means an arrangement that: (a) is about when and how the parties to the arrangement will consult one another about proposed development, and (b) is recorded in writing, and (c) is approved in writing on behalf of any public authority that is a party to the arrangement by a person who is authorised to do so.	Noted. No consultation with Council is required as the development is to be carried out by Council. No other public authority consultation is required.

5.3. COMMUNITY CONSULTATION

Community engagement is a process of involving people that are affected by or interested in a decision. It enables good governance, problem solving and decisions that are balanced and informed, resulting in better outcomes. It supports transparency, builds trust in the decision-making process and an understanding of decisions. The purpose of community engagement is not to gain consent from the affected community but to provide an opportunity to identify potential and actual social impacts associated with the proposal.

The requirement for, or level of, engagement required for projects will depend on the proposal – i.e., the more significant the potential social impacts, the greater the engagement requirements. In undertaking consultation, the proponent must provide sufficient information

about the activity to allow the organisation or person being consulted to fully understand what is being proposed. This may include making available a copy of a draft REF, copy of plans, and/or any other supporting information. The form of consultation may include a stakeholder meetings or workshop (online or in person), consultation letters, pamphlets in letter boxes, online or in person pop up surveys, social media engagement, posters in public spaces or a publicly advertised and exhibited draft REF.

5.3.1. Section 94 Contributions Plan

As noted elsewhere, the site is included as line item *TN17 – Neighbourhood Sportsground* in the *City-Wide Section 94 Contributions Plan (2006/2016) Review of Open Space and Recreation*. The following has been undertaken as part of consultation for that Contributions Plan and TN17 more generally:

CONSULTATION	DATE
Regarding the development of the Thornton North Section 94 Contributions Plan, 213 residents were directly contacted via letter. In addition, advertisements were placed in the local newspaper in December 2005 / January 2006. There was also additional follow up advertising in 2007.	2005 - 2007
Community meetings held regarding the development of the Thornton North Section 94 Contributions Plan	Various dates 2007
Thornton North Section 94 Contributions Plan 2008 on public exhibition	20 August to 12 October 2007
Amendment to Thornton North Section 94 Contributions Plan 2008 on public exhibition (Cap contributions to $30,000)	2 March to 1 April 2011
Amendment to Thornton North Section 94 Contributions Plan 2008 on public exhibition (Inclusion of new city wide rates, consolidate multipurpose facilities and relocate neighbourhood sportsground - TN17 Stage 1 northern catchment north western floodplain)	3 December 2015 to 28 January 201
Pop up Maitland Your Say stall and online interactive mapping tool for Local Strategic Planning Statement engagement which produced a number of comments relating to traffic in Thornton	November 2019
Monthly reporting to Funding Authority, Accelerated Infrastructure Fund, regarding project progression	2023 – Ongoing
Media release regarding successful grant	February 2023

5.3.2. Land Release Information

Further, additional publicly available information reviewed by de Witt Consulting suggest that at the time of the Waterford Living and Harvest estates development and during sale of urban lots, purchasers were likely made aware that there were sporting fields proposed to be delivered as part of the estate. Specifically, the Waterford Masterplan by Avid shows a sportsfield located at the site's approximate location (see Figure 17 overleaf).

Realistically, we cannot confirm if all residents were advised of or have seen the masterplan. Moreover, not all nearby residents would have been the original land purchaser, and may have bought land and moved into the area after the original land release, so did not benefit from the same information being shared. This is not critical, but worth noting as we cannot assume that all residents would already be aware of the intention to deliver sportsfield here.

Figure 17: *Waterford Masterplan (Source: Avid, https://waterford.avid.com.au/masterplan/)*

5.3.3. Proposed Formal Community Consultation

Notwithstanding, based on the scale of the works, types of works proposed being commensurate with a residential land release, and history of the site and associated land release, and alignment with an established contribution plan, it is considered that community consultation and stakeholder engagement at the **inform** level is suitable. This type of engagement is designed to inform the community of the upcoming works so they can understand the proposal and provide a point of contact to answer any questions or concerns.

Council has advised the following formal consultation will be undertaken to support the REF:

- Issue of pamphlets via letter box drop to nearby residents. The correspondence will include the location of the works, a description of the works, project timeframe, concept plan and Council's contact. This letter should be issued at least 14 days prior to any works commencing on site.

The site's nearby residents along Billabong Parade are to be informed of the construction works that are to take place, including duration and timeframes, as well as a contact detail for the relevant persons. This should be undertaken at least 14 days prior to commencement.

While standard mitigation measures are included in Section 9 of this REF, the Noise Assessment at **Appendix 14** also recommend construction consultation with nearby residents, noting to *"undertake letter box drops to notify receivers of potential works"*. The residents/occupiers of the dwellings at the addresses tabulated in the figure overleaf (*Figure 18*) are the receivers who will require the latter notification.

See **Appendices 16-17** of this REF for the additional community consultation and activities undertaken as part of the ACHA and AR, particularly Registered Aboriginal Parties (RAPs). See Section 6.9 of this REF for the future activities that the ACHA and AR recommend.

Please note that the above relates to consultation during the REF stage. This community consultation does not replace Council's statutory requirement for consultation or notification under any required concurrence or approval. Note that under Section 171 of the EP&A Regulations, this REF must also be published on the determining authority's website or the NSW Planning Portal (see Section 4.5.2 of this REF).

Receiver Review

A review of residential receivers in proximity to the project has been completed and are summarised in **Table 1. Figure 1** provides a locality plan showing the position of these receivers in relation to the project.

Table 1 Receiver Locations

Receiver	Receiver Type	Receiver Height	Coordinates (MGA56)	
			Easting	Northing
R01	Residential	1.5m	371034	6375490
R02	Residential	1.5m	371050	6375504
R03	Residential	1.5m	371075	6375515
R04	Residential	1.5m	371098	6375515
R05	Residential	1.5m	371111	6375510
R06	Residential	1.5m	371142	6375491
R07	Residential	1.5m	371154	6375479
R08	Residential	1.5m	371165	6375465
R09	Residential	1.5m	371529	6375477
R10	Residential	1.5m	371535	6375496
R11	Residential	1.5m	371541	6375510
R12	Residential	1.5m	371549	6375528
R13	Residential	1.5m	371556	6375546
R14	Residential	1.5m	371568	6375563
R15	Residential	1.5/4m	371576	6375575
FR01	Future Residential	1.5m	371125	6375499

***Figure 17**: Extract from Appendix 14, Table 1 relating to Noise Assessment (Source: MAC 2025)*

5.3.4. Proposed Informal Community Consultation

The following informal notifications may also be undertaken prior to commencement of work:

- Maitland City Council social media releases (i.e., Facebook, website, LinkedIn) prior to commencement. Media releases should include a concept plan and brief description.
- Social media releases may also be shared by Maitland's Council representatives (i.e., Mayor, Councillors, etc) to several local community groups including:
- "Harvest Chisholm Community" (4.3k users)
- "Thornton/Chisholm/Woodberry Group" (11.7k users)
- "Waterford County Chisholm (3.2k users)
- Ongoing social media releases regarding progress of works.

6. ENVIRONMENTAL ASSESSMENT

6.1. LAND USE

6.1.1. Existing Environment

There are no built structures on the site. The site currently exists with large volumes of imported fill material (approximately 12,800m^3), and associated erosion and sediment control fencing around the fill mound and site boundaries. The fill material is generally stockpiled within the south-eastern corner of the site and along the southern boundary to Billabong Parade. The frontage currently contains temporary fencing, to control access to the site, and there is a pole-mounted CCTV within the central part of the fill mound. The site is largely cleared of vegetation, with trees generally existing at the boundary edges.

The site exists within an urban and semi-rural context. The site is zoned RU2 Rural Landscape, C2 Environmental Conservation and R1 General Residential. On the site's northern and western side is Four Mile Creek, with the associated riparian and wetland vegetation area adjoining the site to the east and within the northern part of the site. This area forms part of the Tenambit Wetlands, which extent to the north, west and south. To the immediate south of the site is low density residential development.

6.1.2. Potential Impacts

The works will facilitate the use of land as a neighbourhood sporting field, providing a positive improvement in the accessibility of public open space and recreational sporting facilities for residents in Chisholm and its surrounding area. Outdoor recreation facilities activate public open spaces and provide opportunities for enjoyment and interaction with the natural environment. They support the health and wellbeing of residents by providing places to be physically active, to engage in shared activities, to socialise and, subsequently, to strengthen community connection. Without the appropriate infrastructure and facilities to support sport, many of the associated benefits would be left unrealised. The proposed development enables this recreational infrastructure and is therefore a positive land use impact.

The proposed works have potential to create short-term construction impacts on the adjoining residential uses to the south, such as noise and vibration during construction works (discussed further in Section 6.4). Other short-term construction impacts resulting from this land use can include dust, traffic impacts, and access impacts to surrounding open space areas. Suitable mitigation measures for these are included in Section 9 to manage any impacts.

Pedestrians have the potential to be impacted if there is impact on the pedestrian footpaths and public domain at the site frontage because of the construction works. The location of the proposed development is within the lot boundaries and within a lower use area of the residential estate, so these impacts can be considered appropriate in the short-term.

Longer-term impacts could include lighting spill. The proposed should meet the relevant Australian Standards for lighting (AS/NZS 1158.1). The proposed lighting will be positioned at the four corners of the proposed fields, as well as between the proposed amenities building and near the carpark (near the exterior of the site and the site's boundary). Lighting should not be directed towards private dwellings or spill into private dwellings, and should be designed to minimise wildlife impact. Further discussion on lighting is provided in Section 6.2.

Longer-term impacts could include traffic and access impacts, and accessibility. As for the surrounding infrastructure, the proposed development will include the following:

- An accessible path of travel linking a proposed, accessible car park to the proposed amenities building and sports field. The design details (including measurements and materials) of the path are outlined in the Concept Civil plans at **Appendix 2**.

- The configuration of the proposed accessible car parking reflects AS2890. The plans ensure it will have a fall of 1:40 in all directions and 1:33 for bitumen surfaces.

Other long-term impacts of the contaminated fill on the site (particularly on Four Mile Creek) could also include negative environmental impacts. Suitable mitigation measures for these are included in Section 9 to manage any adverse impacts.

6.1.3. Environmental Management Measures

Environmental management measures to minimise impact on land use are:

- Nearby residents and other stakeholders are to be informed of proposed construction and timing on an ongoing basis. Construction is to take place during standard construction hours only. (Monday to Friday 7am-6pm, Saturday 8am-1pm, no works on Sundays or public holidays)
- Installation and maintenance of site fencing and appropriate signage to restrict access to the construction area, plant and equipment.
- Installation and maintenance of appropriate wayfinding signage and temporary access routes for pedestrians using the adjacent footpath.
- Contact details of the site supervisor or relevant contact person/s to be displayed on site at all times.
- A construction compound is to be located within a suitable location at site.
- A Dilapidation Report is to be prepared by relevant contractor prior to further works commencing to ensure that the public domain can be restored to an appropriate level should any damage occur.
- New and existing works to tie in as per Civil Plans (**Appendix 2**).
- Access to Billabong Parade and nearby properties is to be maintained at all times.
- All mitigation measures identified in this REF are to be implemented in a CEMP prepared in relation to the activity. The contractor is to adhere to all environmental management measures in the CEMP.

6.2. CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

Fear of crime is an emotional reaction, which is difficult to measure. Partly it is due to general factors (media reports on crime, violence in movies, anxiety due to economic conditions) that are not linked to the local environment but depend on broader conditions. Environmental planning and design cannot directly affect this type of fear, although an environment that does not generate anxiety can contribute positively to reduce fear.

Many studies have shown that there is a strong correlation between criminal acts and antisocial behaviour and the specific features of the built environment. Fear of crime and feeling insecure or uneasy are also strongly related to the character of the environment

6.2.1. Existing Environment

The site has good opportunity for passive and natural surveillance. The site is open, with generally wide and clear sightlines along the frontage and towards adjoining land uses. There are minimal obstructions present and the final reduced level of the sportsfield will be at a similar height to adjoining uses when complete. Residential dwellings opposite the site to the south provide for passive surveillance and increased activity within the area. The areas to the east, being generally public areas including parkland and the adjoining shared pathway that runs along the frontage provides for additional activity and passive surveillance, with the area seeing higher levels of recreational activity. The site's position bounded by a road will further ensure a good level of vehicle activity and passive vehicle surveillance of the area.

There are existing streetlights provide lighting during the nighttime, enhancing surveillance. Despite the illegal fill, the site and surrounds are generally appropriately maintained, though public domain rectification works will be needed (particularly to the path on Billabong Parade).

The development should focus on providing appropriate surveillance and space management in particular, as well as access control and territorial reinforcement to minimise the opportunity for offences to occur within the site and to flow out onto neighbouring areas.

6.2.2. Potential Impacts

The 'Crime Prevention and the Assessment of Development Applications: Guidelines under Section 79C (s4.15) of the *Environmental Planning and Assessment Act 1979*' state that:

> *"Crime prevention through environmental design (CPTED) seeks to influence the design of buildings and places by:*
>
> - increasing the perception of risk to criminals by increasing the possibility of detection, challenge and capture
> - increasing the effort required to commit crime by increasing the time, energy or resources which need to be expended
> - reducing the potential rewards of crime by minimising, removing or concealing 'crime benefits'
> - removing conditions that create confusion about required norms of behaviour."

Importantly, design alone cannot eliminate the risk of crime and the application of the principles and strategies of Safer by Design, including the particular outcomes identified in this report, will mitigate the risk of the offences occurring. In considering mitigation strategies and remedial actions there are four basic CPTED principles:

- Surveillance.
- Access control.
- Territorial reinforcement.
- Environmental (space and activity) management.

An assessment of the development against each of these principles is provided below.

<u>Surveillance</u>

As noted in above, the surrounding dwellings, shared pathways and recreational open spaces all offer good opportunity for passive surveillance of the site, and there is good visibility with generally limited obstructions.

Landscaping

See **Appendix 1** for the Architectural Plan and Landscaping Plan which indicate the landscaping design. Overall well designed, will well spaced shade/amenity trees along site boundaries and within the car park, which allow open views and sightlines / don't offer hiding spaces. Where trees are provided within garden beds, mass planting ground covers will provide visual interest and greening, without creating entrapment spaces or reducing visibility/sightlines. Standard management of trees and ground covers will be appropriate, included below.

CCTV

CCTV has not been confirmed as part of the plans, but is recommended for the development. CCTV should be provided externally on the corners of the amenity building facing outwards to capture the approaches from the car park, Billabong Parade, emergency access, and out towards the playing fields. Cameras should also be installed to the tank shed and overlooking the waste storage area on the west side.

The cameras should be kept high (out of reach). Camera's pointed outward should not be aimed directly at the adjoining residential dwelling houses windows and should be focused on public space areas such as the fields, car park, footpaths, street and site approaches.

Lighting

Lighting should be in accordance with relevant Australian Standards. Lighting should help maintain sightlines and illuminate potential concealment areas. Poorly illuminated spaces or even the colour of lighting can negatively affect spaces and discourage users, which increases risk of crime, as well as poorly lit spaces providing opportunities for concealment or vandalism.

As previously identified as provided at **Attachment 21**, artificial lighting plans have been developed for the two fields to ensure the fields are luminated at night. This will ensure both the safety of the field users at night as well as other visitors/passers-by. **Attachment 21** contains lumination calculations and glare ratings for grid observers in relation to the two fields. The lighting will be supplied by the lighting distributor Stramac Lighting. 16 luminaries will be included within the proposed development scope as per **Attachment 21**. As per **Attachments 1-2**, appropriate lighting will also be provided within and surrounding the proposed amenities building including under awning light) and carpark on the site. The lights are to be evenly distributed and placed throughout the site to ensure the area is lit and sightlines to and from the site are also available after dark. Generally, cool-white tones should be chosen for bulbs and they should be out of reach.

There will be aluminium louvres and shade hoods on the windows near the highest wall area of the proposed amenities building as per **Appendix 1**. The latter will ensure a good amount of internal lighting illuminates the internal spaces during the day while still ensuring the privacy of the future users inside the building.

Lighting should be designed to ensure no impact on wildlife occurs, with most wildlife being more sensitive to light. Light should provide sufficient light for safety and amenity, encourage active outdoor exercise and extend the functioning hours of public sporting assets, while minimising the impact on wildlife. A lighting consultant should be engaged for the detailed design of the development noting proximity to wetlands and natural features.

<u>Access control</u>

Confusion resulting from ambiguous entry design can legitimise exploration, trespassing and excuse making by opportunistic criminals.

There is no proposed 'boundary' fencing as part of this development, and is not considered a necessary element, considering the public to semi-public nature of the space. The boundary to Billabong Parade and on the north side of the car park are lined with bollards, which will stop unauthorised vehicle access to the site and fields, with a gate on the west side emergency access. The fields are fenced with 1m to 3m fences on all sides, which are more symbolic and to assist with keeping balls inside the fields.

As the amenities building will be for the public to use. No details of locks has been provided, but there are roller shutters and metal gates noted to all doors, so it is assumed that the building will be lockable and appropriately secured after hours (understood to be by Council). The canteen servery roller doors, canteen entry door and toilets, waste storage area and tank shed in particular must be locked after hours. We have not been advised about alarms, but would recommend that an alarm system be installed to the internal areas of the amenities, storage and plant rooms, which are triggered via unauthorised access.

It is expected that existing footpaths on Billabong Parade, and those proposed as part of the development, including walkways from the street, car park and around the front of the amenities / south side of the playing fields, will channel users around the site and concentrate pedestrian movements, ensuring there is no ambiguity of space and all areas are accessible.

Territorial reinforcement

Generally, people recognise areas that are well used and cared for, and those that are not. Research shows that public areas displaying strong ownership (territorial) cues are less likely to be improperly used than those that don't. Similarly, people are commonly attracted to vibrant public areas; well used areas are made safer by natural community supervision. Given the shared nature of the sportsfield and amenities, a sense of communal responsibility for maintaining this space will be present, which will ensure that the spaces feel cared for and are used well. The nature of the site will then be one where there are higher levels of activity, creating a space that is well used, increasing offender risk of detection.

The proposed bollards along Billabong Parade and on the north side of the car park, the continuous lining of trees (particularly those that will be adjacent to Billabong Parade) will be a form of symbolic territorial reinforcement. See **Appendix 1**'s Landscape Detail Plan 01 (REF-402 A) for the precise location of the proposed trees and the Planting Schedule (REF-404 A) at **Appendix 1** for their respective species. Other proposed trees will run adjacent to proposed footpaths on the site and within/around the car park, and will help reinforce boundaries, within the site and surrounding it. The proposed footpaths around the site will provide an additional symbolic cue, being distinctive space transition cues promoting clear and legible access points.

Proposed entry signage will be located on Billabong Parade to aid both pedestrian and motorists. The signage will be along the existing footpath, where it meets with the proposed concrete footpath (to the west of the proposed footpath) (see REF-101 A in **Appendix 1**). We consider this as appropriate site identification signage. Standard Council signs within the car park and adjacent the fields should be installed to indicate use of space and site details. Linemarking signage to the car park will be required, to designate spaces, as well as the emergency point to avoid ambiguity and guide users. Directional signage at key junctions should be used to guide users around and through the site, including off the car park, at the principal site entrance and at the amenities building. This will concentrate pedestrian movements, limited unwanted access and reduce any excuse making behaviours and any ambiguity of space. Details of any hours of operation (and similar), if any (such as those relating to the proposed amenities building) should be provided at the site, as well as emergency/maintenance contact details. Signage should be used to indicate any restricted areas (such as waste storage rooms).

Environmental (space and activity) management

Good consistent management of the premises will contribute to natural surveillance and guardianship to reduce the overall risk of crime. We also note that the site being in proximity to residential dwellings offers more activity and adds to a sense of 'around the clock usage' of the area. Further, the actual land use, being a neighbourhood sporting field and facilities, will contribute to feelings of ownership and therefore generally promote a well-cared for and appropriately used space/s.

The presence of rubbish signals a lack of care and guardianship. This may stimulate interest in potential offenders and avoidance behaviour in others. In this regard, the development should include appropriate measures for waste management and minimisation. Waste storage areas should also be kept clean and well managed. Full details of waste management have not been confirmed (or than waste bins and storage area noted on plans), but we would recommend that any waste is kept contained within a designated waste storage area and waste receptacles be secured. Regular maintenance of waste receptables should be undertaken to ensure waste does not build up / overflow.

The site will need to be operated under a suitable Plan of Management (PoM). The PoM is to ensure the facility functions in a safe and socially responsible manner, and the document is an

essential part of the ongoing management requirements of the site. The PoM covers ownership and management details including hours, peak times, Council's and users arrangements and responsibilities; user groups and programmes; accidents and emergency; security and CPTED considerations; noise management; complaints, registers and grievances; cleaning and waste management; and lists any Council established policies and procedures with regards to management of recreational space. This document suitably outlines the practices to ensure appropriate security and risk measures are implemented and continuously monitored for a safe operation.

6.2.3. Environmental Management Measures

Environmental management measures to minimise crime risk are:

- CCTV should be provided externally on each corner of the amenities building facing outwards. CCTV cameras are kept high (out of reach and vandal resistant). Further, any camera's pointed out should not be aimed directly at the adjoining residential dwelling houses windows or areas of private open space and should be focused on public space areas such as the playing fields, carpark, street and site approaches.
- Landscaping should be managed to ensure views to and from the site are maintained and entrapment opportunities are avoided. Any trees should be appropriately spaced and maintained / pruned up to a height of 2m to avoid concealment opportunities or comprised sightlines and ground covers maintained to no higher than 600mm.
- All windows and doors associated with the amenities are to be secured and lockable via either or a combination of lockable gates (shown), key-lockable devices and/or electronic alarmed keypads / swipe card systems (or similar).
- An alarm system for the amenities building and storage/plant rooms be implemented.
- Locks should be provided to the tank shed and external bin enclosures.
- The emergency service vehicle access gate should be fitted with a lock.
- Signposting is required to enhance wayfinding and prevent excuse making behaviour, as well as create a sense of ownership. All internal and external signage and directions should be installed in accordance with the relevant Australian Standards.
- Signage should be provided at the site entrances, off the pedestrian pathway on Billabong Parade at the emergency access point, the main pedestrian access and the entrance to the car park,.
- Line marking signage to the car park will be required, to designate spaces.
- Directional signage at key junctions should be used to guide users including off the car park, at the principal site entrance, fields, and at the amenities building.
- Details of any public hours of operation (and similar) for the amenities should be provided at the site, as well as emergency/maintenance contact details.
- Signage should be used to indicate any restricted areas (such as waste storage rooms).
- Lighting (in addition to any decorative lighting) should be provided in accordance with relevant Australian Standards and should be installed high to avoid vandalism. A lighting consultant should be engaged for the detailed design of the development.
- Under awning lights should also be provided to the amenity building for even and well-lit spaces at night. Pole mounted lights along the pedestrian footpaths and car park would also be provided at appropriate heights to light up walkways and user areas after dark. The lights should be evenly distributed and placed, ensuring that the area is lit and sightlines to and from the site are also available after dark. Generally, cool-white tones should be chosen for bulbs.
- Lighting should be designed to ensure no impact on wildlife occurs, with most wildlife being more sensitive to light. Light should provide sufficient light for safety and amenity, encourage active outdoor exercise and extend the functioning hours of public sporting assets, while minimising the impact on wildlife.

- The site should be clean and well-maintained to encourage regular use and reinforce strong community territorial cues.
- Prompt rubbish removal should occur to reinforce strong territorial cues, which can be achieved via regular surveillance / maintenance checks of the site throughout the day. Waste should be kept contained with designated waste storage areas.
- Provisions to promptly replace any vandalised, damaged, or defective equipment / property – to avoid what is known as the "broken windows theory". Graffiti and other forms of vandalism fall into this same category and should be managed effectively and quickly through 'rapid removal'.
- Consideration should be given to the use of graffiti resistant materials and surface treatments which are easy to clean / remove graffiti.
- Hardened glass should be employed to prevent breakage.
- Any items outside secured areas or any miscellaneous items (such as seats, pot plants or any bins) should be secured where possible. If they cannot be secured, they should be brought inside the various store rooms after hours.
- A Plan of Management is required. The PoM is to ensure the facility functions in a safe and socially responsible manner. The PoM covers ownership and management details including hours, peak times, Council's and users arrangements and responsibilities; user groups and programmes; accidents and emergency; security and CPTED considerations; noise management; complaints, registers and grievances; cleaning and waste management; and lists any Council established policies and procedures with regards to management of recreational space. This document suitably outlines the practices to ensure appropriate security and risk measures are implemented and continuously monitored for a safe operation.

6.3. TRAFFIC AND ACCESS

6.3.1. Existing Environment

The site has a frontage of 178m along Billabong Parade. This is a formalised local road with a speed limit of 50km/h, with kerb and gutter. There are pedestrian footpaths on both sides of Billabong Parade within proximity to the site. There is a temporary access point on the western part of the site, with a metal fence and gate, to limit access onto the site. A temporary egress point is then located on the eastern part of the site frontage.

As identified in the Traffic, Parking and Access Assessment prepared by SECA Solution on 27/05/2025 (provided at **Appendix 15**), the site is currently vacant with a driveway providing access to the western side of the site. **Appendix 15** has been informed by traffic surveys and parking observations undertaken during the busiest time for winter soccer on 03/05/2025 (a Saturday, 9.45am and 10.45am). See **Appendix 15** for further information on the existing environment.

6.3.2. Potential Impacts

Construction Traffic and Access

There will be a slight increase in traffic during the construction of the proposed sportsfield. Construction vehicles will generally include light vehicles up to heavy vehicles. We understand that during construction works all vehicles enter the site via the west side, manoeuvre on site and exit in a forward motion from the site, and limit potential impacts on the traffic network (referring to the Civil Plans at **Appendix 2**).

Construction vehicles and deliveries of materials are not likely to result in any adverse short-term access issues or disruptions to traffic along Billabong Parade, noting the dedicated ingress/egress point. Access from the sealed roadway will not impact on residents along Billabong Parade, with all driveways and the main roadway to be kept clear at all times. All construction vehicles should park within the site and not out within Billabong Parade.

Pedestrian access along the northern footpath of Billabong Parade may be impacted during the works stage, depending on the extent of the site fencing and timing of the works. Any impact is expected to a very minor extent; should they need to wait for vehicles to enter or exit the site, however, the preference should be for pedestrians to utilise the footpath, and then vehicles make their turn into and out of the site. The pedestrian footpath itself should be kept clear at all times and not hinder access. Notably though, if access is impacted for any reason (i.e., damage to the footpath or the site fencing extends out beyond the footpath during any construction), then alternative pedestrian access will remain on the opposite southern side of Billabong Parade. Directional signage for pedestrians should be provided to direct pedestrians.

Exclusionary barriers and construction fencing should be implemented to reasonably prohibit pedestrian and vehicle access to this area during construction works as required. Wayfinding signage should also be used to direct people.

There will also be additional construction traffic experienced within the greater suburb / traffic network, however it is not expected to be significant or to a degree that would impact other motorists, the capacity of the network or residents, and will be temporary in nature.

Operational Traffic and Access

The proposal includes the provision of 80 parking spaces to be incorporated into an at grade car park towards the eastern end of the site as per **Appendix 1**. This will help prevent long term negative impacts on traffic and transport.

As per **Appendix 15**, access to the proposed operational car park *"will be from a new driveway on the eastern side of the site whilst the existing driveway to the west will provide an emergency access for an ambulance…The additional trips associated with the development may generate around 60 additional trips (30 inbound, 30 outbound) per hour during the Saturday morning peak. Whilst there is adequate capacity to cater for these additional trips on the local roads, the extra demands may see some delay for right turns out of Billabong Parade given the bunching of vehicles leaving together at the end of a game. Any queue will however be expected to clear with minimal delays…The location of the access driveway to the car park can be located with suitable visibility and sight lines in accordance with AS2890".*

Evidently, the proposed will not exceed/inappropriately strain the existing transport network capacity that surrounds the site. However, the new proposed driveway will be necessary to ensure quality, effective and efficient access is provided to the site for vehicles. If it is not provided, then this could lead to unideal turns being made onto the site during peak times (such as Saturday mornings, when soccer is on at the site). Furthermore, if the emergency access point is not provided, then there is potential for increased delay in an ambulance's ability to reach the site and a patient. Both points are therefore appropriate.

In addition, additional traffic impacts during the ongoing operational phase of the project on the broader network were reviewed, extracted from **Appendix 15**:

"The impact on Billabong Parade, being a local residential street, is assessed by considering the environmental capacity of this road. A road of this type (local street) would have an environmental capacity of 300 vph maximum, 200 vph desirable. Current two-way flows are 49 vph which shall increase to 110 vph allowing for the proposed development. This is within the desirable level of 200 vph. It also makes no allowance for some vehicles to approach from the south along Billabong Parade. As traffic demands at the intersection of Dragonfly Drive and Billabong Parade are well below the capacity of this intersection there is no requirement for an analysis of the impact of the additional turn demands at this location. This intersection has been recently built having been designed to meet current standards. A review of crash data in this location indicates there have been no accidents at this intersection in the five years

2019-2023 reflecting the suitability of the layout of this intersection to provide a safe road environment".

Overall, it is concluded that the proposed development, does not adversely impact on the local and State road network and access is appropriate.

6.3.3. Environmental Management Measures

Environmental management measures to minimise impact on traffic and access are:

- During construction, the contact details of the site supervisor or primary contact are to be available on site at all times.
- Park all construction vehicles in a designated construction compound nominated in a CEMP, to be located off the public domain and within the site boundaries.
- No on-street parking of construction vehicles should occur. Vehicles should not encroach or be parked within the internal roads or impact on resident driveways and access.
- Provide signposting to direct traffic and to minimise traffic disruption and improve wayfinding during construction for both pedestrians and motorists.
- Ensure access to and along Billabong Parade is maintained for all residents and visitors.
- Utilise appropriate exclusionary fencing/signs to limit access to the site while under construction.
- Workers to only attend site during construction hours and were practical and relevant to limit unnecessary vehicle movements.
- A new driveway is proposed in the eastern section of the site. This will ensure a safe/efficient volume of turns onto the site will be made in a safe/appropriate location of the site, considering its surrounding road network. As per **Appendix 15**, the location of the access driveway to the car park will be located with suitable visibility and sight lines in accordance with AS2890.
- The proposal includes the provision of 80 parking spaces to be incorporated into an at grade car park towards the eastern end of the site. This, serviced by the proposed eastern driveway, will ensure the surrounding road infrastructure will not be inappropriately strained by the proposed during the operational stage.
- An emergency access point will be provided at the west of the site once the proposed development is operational.
- It is recommended by **Appendix 15** that cyclists be catered for with racks for at least eight bikes (1 per 10 car parking spaces).
- Car parking be constructed to AS2890.1-2004 Parking facilities – Part 1 – Off street car parking facilities.

6.4. NOISE AND VIBRATION

6.4.1. Existing Environment

Main sources of ambient noise within the immediate area include vehicles (distant traffic noise from nearby roadways, as per **Appendix 14**), typical residential and recreational noises (noting open spaces adjacent, walking paths and parks nearby). Broader existing noise impacts include traffic along surrounding roads, small residential power tools and gardening equipment, pets and wildlife (such as foliage noise, birds, insects, foxes, cats and dogs) (as per **Appendix 14**) . Sensitive land uses (residents in their homes) are located in proximity of the site, with occupied residences to the immediate south, opposite Billabong Parade.

6.4.2. Potential Impacts

The recent earthworks have, and the proposed activity will, involve the use of construction plant and equipment discussed in Section 3. Mobilisation of construction vehicles may also

generate additional road traffic noise on the external road network. Construction activity has a high potential to generate noise noticeable at the closest sensitive receivers due to their proximity to the site, being those along Billabong Parade, and further south on Arrowtail Street. However, the works would be undertaken during daytime and standard working hours and therefore impacts on any nearby receivers would be minimal. Construction noise is only temporary in nature and is therefore not expected to impact on sensitive receivers long-term. Advanced warning of works and potential disruptions can assist in reducing the impact on the community and provide for acceptable vibration levels for human comfort.

As a further precaution, neighbours and other stakeholders will be notified prior to construction activities taking place, and a complaints register will be established to manage any noise issues. Further assessment or mitigation measures may be required should noise or vibration issues arise.

In addition to the construction phase, there will be additional acoustic impacts during the ongoing operational phase of the project. The Noise Assessment (at **Appendix 14**) provides further information on acoustic impacts.

The traffic generation resulting from the operational and construction phase of the proposed will not be significant enough that it will have a significant negative acoustic impact on the surrounding properties. Peak traffic generation times will be before and after football games, with a small increase in local traffic sound pollution on surrounding sites. The plans and mitigation measures for traffic and transport generation outlined in **Appendix 15** will prevent a build-up of louder traffic (honking, crashes, etc) that could result if the proposed development was delivered without a carpark and adequate transport networks.

For the operational phase, see Table 2 from **Appendix 14** extracted and provided below. The results of the Noise Assessment demonstrate that noise emissions from the operation would satisfy the relevant PNTLs at all assessed receivers for all assessment periods once noise controls for the project are implemented (see Section 5.3 of **Appendix 14**).

Table 2 Noise Generating Activities

Activity/Source	Period[1]	Operational
Carparks	Day	✓
	Evening	✓
	Night	✓
Sports Fields	Day	✓
	Evening	✓
	Night	✓
Amenities Building	Day	✓
	Evening	✓
	Night	X

Note 1: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

Figure 18: *Noise Generating Activities extracted from Table 2 of Appendix 14 (Source: MAC 2025)*

6.4.3. Environmental Management Measures

Environmental management measures to minimise noise and vibration impacts are:

- **Appendix 14** recommends *"undertake letter box drops to notify receivers of potential works"*. The residents/occupiers of the dwellings at the addresses tabulated in ***Figure 17*** of this REF are the receivers who are recommended to receive the notification. This REF recommends that these local residents are to be informed of the general scope

of construction works that are to take place, including duration and timeframes, as well as a contact detail for the relevant persons responsible for the construction works at least 2 weeks prior to commencement of works.

- All site workers (including subcontractors and temporary workforce) should be familiar with the potential for noise impacts upon residents and encouraged to take all practical and reasonable measures to minimise noise during their activities.
- Toolbox and induction of personnel prior to shift to discuss noise control measures that may be implemented to reduce noise emissions to the community.
- Where possible use mobile screens or construction hording to act as barriers between construction works and receivers.
- All plant should be shut down when not in use. Plant to be parked/started at farthest point from relevant assessment locations.
- Operating plant in a conservative manner (no over-revving).
- Selection of the quietest suitable machinery available for each activity.
- Avoidance of noisy plant/machinery working simultaneously where practicable.
- Minimisation of metallic impact noise.
- All plant are to utilise a broadband reverse alarm in lieu of the traditional hi frequency type reverse alarm.
- The project is constructed as per the site design (as presented Appendix B in **Appendix 14)** which includes the barrier attenuation provided by the project buildings orientation.
- The mechanical ventilation plant is located on the rooftop of the amenities building.

6.5. SOILS AND GEOLOGY

6.5.1. Existing Environment

The site is not located within a mine subsidence district.

Acid Sulfate Soils (ASS)

LEP 2011 mapping identifies the site as Class 3 and 5. Desktop assessment by Hunter Environmental Consulting (HEC, 2023; **Appendix 9**) notes:

- ASS are naturally occurring sediments/soils containing iron sulfides that generate sulfuric acid when exposed to oxygen.
- "Actual" ASS refers to highly acidic sediments already oxidised; "Potential" ASS refers to soils that may become acidic if disturbed.
- ePlanning/eSPADE data indicate potential ASS presence between 0–2 m BGL (Class 2 / H1 high probability area).

Fill Material

Approximately 12,800m³ of VENM/ENM-certified fill has been imported. Preliminary Site Investigation (PSI, Douglas Partners 2023; **Appendix 10**) found:

- Fill is largely consistent with VENM/ENM standards. These assessments are provided in **Appendix 3.**
- Some areas contained non-VENM/ENM material, including minor asbestos-containing material at surface stockpiles. The potential contamination sources included fill at the site, former agricultural/grazing use and contamination from possible inundation of impacted surface waters.
- Potential for gross contamination at site is low.

Additional recommendations were made to further assess suitability of the imported fill to remain on site. To this effect, an Environmental Site Assessment (ESA) was conducted by HEC (**Appendix 12)** to inform environmental liabilities and remediation of the site. HEC confirmed

based on observations and minor clean-up works, that no further intrusive investigation or analysis is required and there are no sensitive human or ecological receptors identified which would impede ongoing works on site. Specifically, the following is noted:

> *"Minor B(a)P concentrations as reported within the PSI (DP, 2023) are considered to be sourced from trace asphalt inclusions within the Fill materials on the perimeter of the Site. Sieving of these asphalt inclusions and disposal under pre-classification is possible to remove the source of potential contamination, however, given the proposed final foundation level of the Site, these Fill materials would be placed at depth and no source receptor linkage is considered possible for sensitive human receptors on completion of the civil works.*
>
> *No further potential ACM was observed during HEC's site inspections, however HEC recommends that all future civil works should be conducted under the unexpected finds protocol provided* [in **Appendix 12**]*." (HEC, 2024)*.

As per **Appendix 12**, the existing contaminated fill on the site will remain on the site

Geotechnical Conditions

Uncontrolled fill exists. Site Investigation (DP 2023, 2024; **Appendices 11, 13, 26**) identifies:

- Uncontrolled fill may lead to settlement risk if left in place.
- Existing soils may require re-compaction or controlled placement to meet design life requirements.
- Recommendations follow AS 3798-2007 for bulk fill placement and testing.

Geotechnical Investigations at **Appendix 11 and 26** provide information on estimated magnitudes of settlement, geotechnical parameters for future design, recommended site preparation measures, suitability of existing soils to act as engineered fill, recommended material quality requirements and recommended designs.

6.5.2. Potential Impacts

Potential impacts are summarised as follows (and expanded in the paragraphs following):

- The works do not involve disturbance of actual or potential ASS.
- Existing contaminated fill is largely intended to remain on-site; potential disturbance is subject to adherence to mitigation measures.
- Uncontrolled fill presents a risk of total and differential settlement, particularly under future sportsfields and embankments, if not managed appropriately.

The works do not involve soil disturbance of potential or actual acid sulfate soils. However, it is noted that the contaminated fill that has been placed on the site is not currently anticipated/intended to be removed by Council. Whether disturbance of any contaminated soil on the site is required, mitigation measures are provided below and should be followed when applicable. The unexpected finds protocol in **Appendix 12** is included below to limit future impacts associated with contamination.

Geotechnical Investigation was conducted by DP at the site (**Appendix 26**). A key matter covered includes information on the estimated magnitude of settlement and suitability of existing soils to act as engineered fill. DP notes the following:

"The existing fill does not appear to have been placed to an engineering specification. The existing fill, if it were to remain in place, would therefore present an increased risk of both total and differential settlement over the design life of the sporting precinct compared to fill which is placed and compacted with reference to the procedure. The magnitude of likely settlement of the existing fill cannot be predicted with any certainty and Council would need to accept this risk, or alternatively the fill could be removed and recompacted.

Geotechnical inspections and testing is recommended during the surface stripping and placement and compaction of the bulk fill. With reference to AS3798:2007 it is suggested that Level 2 testing could be used in connection with bulk fill placement for the playing fields while Level 1 supervision / testing should be adopted for all fill placed beneath building structures." (DP, 2023, **Appendix 26**)

Additional investigation was undertaken by DP to assess options for settlement and stability (**Appendix 11**). DP note:

"*Based on the results of the analysis, the proposed concept design is considered to be suitable from a geotechnical perspective, for the majority of the site.*

However, where fill is proposed to be placed in the low lying far north-eastern corner of the options will need to be considered to manage both settlement and stability of the overlying fill embankment."

6.5.3. Environmental Management Measures

Environmental management measures to minimise impact on soils and geology are:

- Appropriate erosion and sediment control measures should be put in place and maintained for the duration of works to limit erosion or the travel of the soils.
- Implement Erosion and Sediment Control Plans in accordance with *Managing Urban Stormwater: Soils and Construction "The Blue Book" (4th edition, Landcom 2004*).
- Equipment will be serviced and maintained to minimise potential for loss of fluids.
- Keep the soils damp to ensure that potential dust impacts are limited, which will also ensure the minimisation of soil leaving the site.
- The CEMP will include details on waste management and provide a spill management procedure.
- Any excess soil or material will be tested and classified prior to leaving the site. For any excess spoil material classed as contaminated, disposal of this material will be at an appropriately licensed landfill in accordance with the EPA (2014) waste classification guidelines.
- If contaminated soils or unobserved waste deposition are uncovered during the works, all works within the vicinity must cease immediately and Maitland City Council's project manager be notified immediately.
- Minor clean-up of surface contaminants (e.g., asphalt inclusions) prior to placement at depth.
- As per **Appendix 9**, the proposed sporting field development should involve no soil disturbance of potential or actual ASS soils. However, if disturbance of ASS materials is required as part of the development, it is recommended that an ASS assessment is conducted to 1m below the proposed excavation depth in order to assess soils and provide a specific liming rate and management plan for disturbed materials at the Site. Once materials have been stabilized in accordance with an ASS management plan (if required), they may be retained onsite for reuse or exported for disposal.
- Prior to the removal of stabilised ASS, the client must determine a waste classification using a chemical assessment in accordance with Step 5 of Part 1 of the Waste Classification Guidelines. If the client does not chemically assess the treated ASS, the soil must be classified as hazardous waste (**Appendix 9**).
- Unexpected Finds Protocol: All works will follow the HEC 2024 protocol (**Appendix 12**) to manage contaminated soils or unexpected ACM.
- It is expected that the existing uncontrolled fill may remain on site. The recommendations provided in **Appendix 13** for the preparation, design and construction regarding controlled filling are to be adhered to. **Appendix 13** also

includes recommendations for uncontrolled fill monitoring, such as surface settlement monitoring, which should be adhered to.

- Slope stability analysis assessed the risk of localised embankment instability under the proposed fill embankment loads. Options to manage fill embankment settlement and stability, and control measures to addressed identified settlement and instability in the far north-eastern part of the site are provided in **Appendix 11**.
- Additional comments regarding other geotechnical aspects of the project, including earthworks and site preparation measures, are included in the previous (Douglas Partners, 2023) report which should read in conjunction with the information presented above (see **Appendix 26** for that report).

6.6. AIR QUALITY

6.5.1. Existing Environment

Table 6.5.1 below is a summary of the rainfall and temperatures collected by the Bureau of Meteorology for Maitland Airport AWS (temperature data) and Maitland Belmore Bridge AWS (rainfall), 13.4km (Maitland Airport AWS) and 6.95km (Maitland Belmore Bridge AWS) away. In summer the mean daily temperatures average 28.9 ˚C. In winter mean daily temperatures average 19.2 ˚C. Rainfall is generally higher in later summer early-mid Autumn.

Table 6.5.1: Summary of the climate at the abovementioned stations (Bureau of Meteorology)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Rainfall (mm)												
Mean	90.8	119.5	85.5	72.0	33.8	7.3	161.5	35.3	53.8	93.0	45.5	44.5
Temperature (˚C)												
Mean	29.6	29.6	28.0	24.3	20.9	18.3	18.5	20.7	23.6	24.0	25.8	27.6

Urban activities in the local area can affect air quality, generally through the use of vehicles and power tools all year and wood fires utilised during winter months. The site is proximate to local roads where public transport and traffic on these roads can affect air quality through vehicle emissions.

6.6.1. Potential Impacts

Construction of the proposed sportsfield and associated components has the potential to generate wind borne dust from exposed soil and cutting of building materials on site. Dry and windy conditions will generate additional dust from exposed soil and movement of vehicles and wind conditions should be monitored.

Exhaust from heavy machinery and other vehicles may also impact on local air quality. Furthermore, the contaminated fill that is currently on site has the potential to impact on air quality if the mitigation measures outlined in Section 6.5 are not met.

6.6.2. Environmental Management Measures

Environmental management measures to minimise impact on air quality are:

- Reduce vehicle traffic speed in and around the site where dust could be generated.
- Use water to dampen exposed soil and stockpiles if exposed to air for long periods.
- Maintain vehicle and machinery to minimise emissions.
- Where wind causes off-site emission of soil then work may cease for a short time or dust control measures put in place.
- Implement erosion and sediment control measures to prevent any contaminates entering the local waterways.

6.7. WATER QUALITY AND HYDROLOGY

6.7.1. Existing Environment

To the north of the site is Four Mile Creek, and associated wetland areas, being natural waterways. The site slopes down from the roadway into these natural waterbodies and water features. The site in its entirety is flood prone land, per LEP 2011 mapping.

Specifically, per the Flood Impact Assessment at **Appendix 5**, "*the topography of the study area extends from low lying flood prone farmland with reduced levels of approx. R.L. 1.0 and gradually grades up to support residential development above nominal flood planning levels (greater than approx. R.L. 6.4m AHD). The study area occurs within flood fringe and flood storage areas for both local catchment of Four Mile Creek and regional Hunter River catchment. As a result, flood velocities are often low within these defined areas even though observed inundation depths may be high*."

As discussed further in Section 6.8.1, Council's importation of contaminated fill on the site has been partly submerged within a body of water (within/next to the site) that is a Key Fish Habitat. It can be assumed that this has had a negative impact on the water quality.

6.7.2. Potential Impacts

The proposed activity has the potential to create adverse runoff impacts into Four Mile Creek and surrounding wetlands. Silt and sedimentation could flow from the site to the aforementioned waterways and cause contamination and/or a reduction in water quality. Additionally, through poor maintenance, there is the potential for plant and equipment to leak fuel, oils and/or other chemicals, which could create the potential for contamination into the waterway.

The following discussion is paraphrased from the Flood Impact Assessment at **Appendix 5.**

Flood Impact Assessment Discussion

Considering the already imported fill material, flood related impacts have the potential to impact on the site and the future recreational facilities, as well as surrounding areas and the community by changing flood behaviour. The volume of fill quantities is small with consideration to the broader catchment floodplain associated with both the regional Hunter River flood storage volume and the local Four Mile Creek catchment. The field has been nominated at R.L. 4.53 which is above the Four Mile Creek 1% high Hunter River tailwater level modelled as part of the Berry Park catchment analysis. This level was chosen by Maitland City Council as it coincides with a 5% AEP (1 in 20) Hunter River flooding event. Filling of the site is likely to result in the displacement of flood waters from this area however it is considered that this loss can be distributed across the remaining flood storage volume available within the catchments. A further assessment of significance for impact of the development on the community has been undertaken at **Appendix 5**, which notes the significance for impact for all key matters is '*not significant'* in all cases.

With regards to impacts to the site and development itself, the nominal R.L 4.43m AHD requirement has been developed by Maitland City Council to provide a balanced approach for recreation facilities which acknowledges that whilst a sportsground is a significant asset, there is a level of acceptance to inundation of sportsgrounds during significant adverse flooding events. This adopts the logic that during times of flood, sports are often cancelled due to fields being out of service and/or access is restricted at key road points due to flooding inundation. The latent impacts associated with inundation over sportsgrounds during major events is considered to be an acceptable risk as part of Councils sportsground management. A further assessment of significance for impact on the development itself and future users has been undertaken at **Appendix 5**, which notes the significance for impact for all key matters is '*not*

significant' with the exception of *'flood level changes'* and *'change in flood duration'* impacts which were assessed as '*minor'*.

It is proposed to lower the fields below the 1% AEP flood level but above the 20% AEP flood levels. The aim of the latter is to reduce the overall field heights which would, in turn, decrease the overall site footprint and reduce its impact on the downstream Key Fish Habitats and the associated buffers. The implications of which are included in the Qualitative Environmental Risk Assessment prepared by Water Technology and Bio2Lab on 28/10/2024 at **Appendix 20**

NSW Fisheries

Since the writing of **Appendix 5**, correspondence with and investigations into the policies of NSW Fisheries have occurred and it is understood that consultation with NSW Fisheries is currently ongoing at the time of writing this REF (August 2025). The process of obtaining the relevant permit (Part 7 Fisheries Permit) will be supported by this REF. Specifically, the final REF will support Council's application for a Permit, including all works (landscaping and revegetation) in the supporting appendices.

Therefore, the works authorised under this REF, including landscape design and revegetation or buffer zones, are still subject to any Fisheries permit approval and conditions.

Once any permit is granted, Council should confirm that all conditions align with this REF. Any substantial inconsistencies would be subject of an updated REF or an addendum to REF, to address any changes beyond that which would be considered 'minor' changes.

6.7.3. Environmental Management Measures

Environmental management measures to minimise impact on water quality/hydrology are:

- The development can proceed pending a Part 7 Fisheries Permit is obtained and all conditions are consistent with this REF.
- Appropriate erosion and sediment control measures should be put in place to limit the amount of sedimentation or erosion into the waterways.
- Regular servicing and maintenance of plant and equipment to minimise fluid loss.
- Ensure any storage of oil, fuels or chemicals are stored in a locked bund within the compound.
- Utilise site filling to raise the field and amenities building to levels that are considered appropriate for the associated level of flood risk.
- Maintain existing rising road access away from the site for evacuation and emergency management.
- Minimise increases in impervious areas within the catchment by reducing impervious footprint across the site. Apply on-site detention and water sensitive urban design measures to reduce potential impacts associated with the proposal.
- Scouring velocities have been assessed to be minimal. To improve resistance of site to scouring, provide maintainable batter slopes (1:4) and grass cover.
- Adopt appropriate flood related development requirements for flood planning levels associated with non-residential (but not special use) properties and use appropriate building materials within flood prone areas.

6.8. FLORA, FAUNA AND BUSHFIRE

6.8.1. Existing Environment

The BAR appended at **Appendix 4** explains the existing flora and fauna environment in detail.

The site is located on a floodplain adjoining a waterway. Vegetation is generally degraded, with less than 15% native cover across most of the area. An exception occurs in the north-eastern section, where wetland sedges and remnant Swamp Oak (Casuarina glauca) occur

with >15% native cover, consistent with Southern Lower Floodplain Freshwater Wetlands (PCT 3975).

High weed infestation is present, including Alligator Weed (*Alternanthera philoxeroides*), Peruvian Primrose (*Ludwigia peruviana*), and other environmental weeds. The wetland vegetation contributes to local floodplain and aquatic habitat values despite its degraded condition.

Historical filling activities have resulted in encroachment into mapped Fisheries Habitat and the waterway corridor. This fill is a pre-existing issue and requires ongoing management in consultation with NSW DPI Fisheries.

Bushfire vegetation mapping identifies the site as Vegetation Category 1 (wetland/floodplain vegetation), with corresponding Bushfire Attack Level implications for adjoining land uses.

Figure 19: *Extract from Page 1 of Appendix 18 Capturing the Body of Water near the Site (Source: Fraser Ecological Consulting, 2025)*

6.8.2. Potential Impacts

The proposal involves recreational development, earthworks, public domain upgrades, footpath and road construction, lighting, landscaping, and water-sensitive urban design elements.

Vegetation and Habitat

Minor clearing of degraded native and exotic vegetation may be required for path installation and lighting. No clearing of high-quality vegetation or hollow-bearing trees is proposed.

Aquatic Habitat

Works occur adjacent to Fisheries Habitat; however, no in-stream works are proposed. Ongoing management of historical fill and erosion control is required.

The proposed development will include the lowering of the fields below the 1% AEP flood level but above the 20% AEP flood levels. The aim is to reduce the overall field heights which would, in turn, decrease the overall site footprint and reduce its impact on the downstream Key Fish

Habitats and the associated buffers. The QERAS summarises the potential impact of lowering the fields below the 1% AEP flood mark (**Appendix 20).**

Threatened Species and Communities

As such, all species regarded as having the potential to be impacted upon in any more than a very low way have been subject to a 5 Part Test of Significance (s.7.3 BC Act). The test concludes the proposal is unlikely to significantly impact threatened species, populations, or ecological communities. No referral under the EPBC Act is required.

Bushfire Risk

Vegetation removal is minimal; no increase in bushfire hazard is anticipated. The width of the APZ to the west of the building removes the potential for flame contact on the building considering the bushfire prone vegetation within and on adjacent land (**Appendix 19**).

6.8.3. Environmental Management Measures

Vegetation and Weed Management

The VMP provides the following recommendations/management actions (see page 31 of **Appendix 18**). The VMP shall be implemented for a period of three (3) years during the construction and initial operational phases of the proposal.

Actions are listed in the Works Schedule in Section 9 and are detailed below:

- **Management Zone A:** Maintain existing open grassland planted—control any outbreaks of High Threat Exotic weeds (6000 sqm) NO REVEGETATION WORKS REQUIRED.
- **Management Zone B**: Mass planting of Lomandra spp. grass tube stock @ 2 m centres (1500 sqm).
- **Management Zone C**: Rehabilitated Key Fisheries Habitat impacted by fill works planted with islands of native shrubs & sedges + additional infill plantings of Juncus and Gahnia spp. grass tube stock @ 1 m centres (6100 sqm).
- **Management Zone D:** Mass planting of Lomandra longifolia spp. hystrix tube stock @ 1 m centres on steep batter embankments (approx. 600 lineal metres for entire outer perimeter—600sqm).
- **Management Zone E**: Runoff drainage swales and OSD basins. Mass planting of Lomandra, Juncus, Carex and Gahnia spp. grass tube stock @ 0.5 m centres amongst sandstone rip rap—subject to detailed separate cross section engineering plans to be provided by others (for each of the 8 outlets).

The location of these management zones are depicted within *Figure 20* below.

See **Appendix 18** for more details on the management measures/recommendations, such as weed control, weed management techniques and revegetation works.

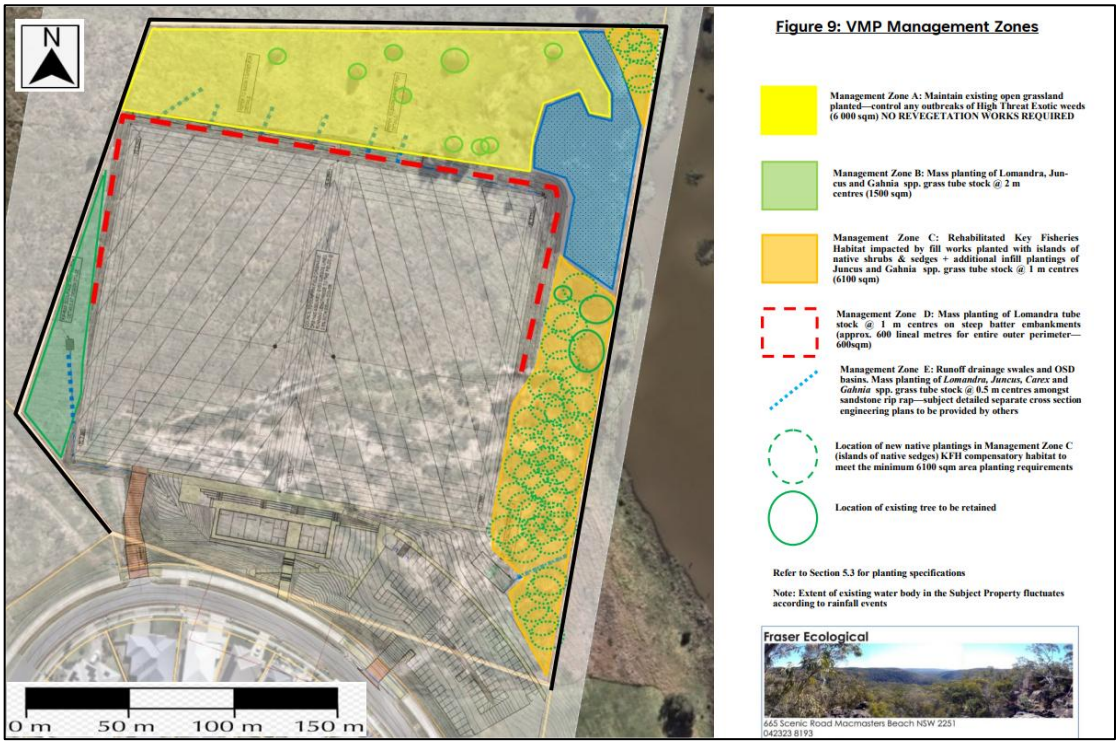


Figure 20: *The Vegetation Management Plan's Management Zones (extracted from Figure 9 of Appendix 18) (Source: Fraser Ecological Consulting, 2025)*

General Flora and Fauna Management

Environmental management measures to minimise impacts on flora and fauna (**Appendix 4**):

- The proposed works will require a Part 7 Permit from NSW Fisheries who will assess impact over wetland. NSW Fisheries approval is required prior to any construction work, and will determine project feasibility by Council. It will determine if the project is able to continue in its current form, with proposed sportsfield's causing impact over a Fisheries habitat wetland.
- Any revegetation or restoration works/activities required must be done in accordance with the NSW Fisheries Permit 7. Therefore, the works authorised under this REF, including landscape design and revegetation or buffer zones, are still subject to any Fisheries permit approval and conditions. Once any permit is granted, Council should confirm that all conditions align with this REF. Any substantial inconsistencies would be subject of an updated REF or an addendum to REF, to address any changes beyond that which would be considered 'minor' changes.
- Ongoing consultation and comments from NSW Fisheries have been adopted by Council which include:

  1. Field Level Reduction: Lower the field level by approximately 1.5 metres to reduce the volume of fill required and to minimise the impact on the Key Fish Habitat (KFH) buffer zone.

  2. Offset Scheme: Include a 2:1 offset arrangement for the material that has already been placed within the KFH area.

  3. Buffer Zones (as per the attached AHS):

  - Apply a 1:1 offset for every square metre of buffer lost.

  - Additionally, provide a 1:1 offset for any buffer areas damaged during construction.
- Avoid impact over wetland and restrict construction machinery/impact to a 5m wide strip or less around the Key Fish Habitat/Wetland area.
- A VMP has been produced by Fraser, 2025. All recommendations shall be followed.

- Enact all recommendations from Aquatic Habitat Survey (H2O, 2025).
- Direct all Sports field stormwater from carpark & oval area into Billabong Parade stormwater system, or detention basins. Install a trash rack on stormwater outlets.
- Ensure treated clean water only released from the development into wetland. This will reduce amount of potential pollutants entering Tenambit Wetlands directly.
- Design detention basins to capture pollutants/fertilizers/pesticides, silt, rubbish, etc for stormwater running off sports fields (located in a disturbed area, not in riparian zone/wetland).
- Revegetate riparian zone with local endemic wetland species only (such as listed in Appendix 1), and ensure no slashing of riparian zone in accordance with VMP.
- Minimise excess light spillage over wetland in accordance with AS 4282 and other.
- Lighting must be directed away from adjoining bushland to avoid disturbance to nocturnal fauna.
- Retain all existing native vegetation where feasible, outside of works zone (and within works area where feasible). Ensure retained trees and adjoining remnant vegetation are all clearly marked and have temporary No Go fencing or similar installed prior to any works being undertaken, and staff /contractors appropriately trained/tool boxed on all safeguards.
- No Priority weeds or exotic species with weed potential (such as Rhodes Grass) should be introduced to the site.
- No pollutant or other non natural substances allowed to enter natural environment.
- Ensure compound/stockpile site is located away from any natural vegetation, and made good after works completed.
- Priority weeds should be controlled/eradicated where feasible, and weeds controlled after works have been completed on an ongoing basis to prevent infestation of surrounding wetland in accordance with Biosecurity Act. In particular Alligator Weed.
- Erect silt fencing round all site works in accordance with council erosion and sediment control policy, with any wetland work carried out during dry forecast periods only.
- Consider artificial tall wooden posts with nest boxes/flat areas on top for birds such as raptors to roost/nest located away from the oval.
- Ensure wetland areas are not accessible to the general public, to reduce habitat disturbance to birds/other fauna.
- Connectivity should be reinstated around the edge of the wetlands with riparian vegetation, which the VMP addresses. It is noted limited terrestrial connectivity is present around the subject site, and long term Council should consider reforesting these 40m wide riparian areas to provide protection and habitat for water birds, including threatened species, and provide a filter for urban stormwater runoff.

Aquatic Habitat and Fisheries Compliance

According to QERAS at **Appendix 20**, the critical factor in minimising risk to key fish habitats is the design and implementation of an integrated turf and facility management program regardless of the flood risk at the site. It recommends the following:

- Development of a suitable turf and facility management plan that incorporates an adaptive approach to minimising chemical run-off from the site will manage the risks to KFH adjacent to the Subject Site.
- Choice of appropriate chemicals, application rates and timing of those applications is recommended.
- Provision of water quality treatment assets, including primary treatment, to treat runoff from the site before discharge to the receiving environment.

Bushfire Risk Mitigation

Three key bush fire risk mitigation recommendations from **Appendix 19** are below:

- Water Supply for Firefighting Operations: A fire-fighting water supply shall be provided to the development, in compliance with A.S. 2419.1 – 2005. Fire Hose Reels shall be installed to the Amenities Building in accordance with A.S. 2441.
- Construction Standards to proposed Amenities Building: The proposed Amenities Building shall be constructed to comply with Section 3 and Section 5 (BAL 12.5) of A.S. 3959 – 2018 – 'Construction of Buildings in Bushfire Prone Areas'.
- Management of Asset Protection Zone to the Amenities Building: The curtilage to the Amenities Building shall be maintained to the standards of an Inner Protection Area (IPA) as defined by Appendix 4 of Planning for Bushfire Protection 2019 and the NSW Rural Fire Services document 'Standards for Asset Protection Zones'.

6.9. HERITAGE - ABORIGINAL

6.9.1. Existing Environment

An Aboriginal Heritage Information Management System (AHIMS) basic search was conducted by de Witt Consulting on 5 March 2024 and returned 1 record of an Aboriginal site on the register within the works area with a 200m buffer (**Appendix 7**).

An Aboriginal Cultural Heritage Impact Assessment (ACHA) had been previously prepared by McCardle Cultural Heritage (2018) for the approved 2 into 7 lot Torrens title subdivision, being DA15-2849, which created the subject lot 7. The overall findings for the area are that it is of high significance and likelihood of sites/items is also high. The report also notes that the likelihood of finding higher density artefact scatters also increases markedly with proximity to water.

An Aboriginal Due Diligence Advice had originally been prepared by Biosis, at **Appendix 6** (2024) for the filled portion of the site. The ADDA confirmed that the filled portion of the site has lost archaeological integrity, with any potential objects buried too deeply for confirmation but preserved in-situ beneath fill.

Additional reporting was then required for the unfilled portions of the site. An Aboriginal Cultural Heritage Assessment and Archaeological Report (Biosis, May 2025) identified subsurface archaeological items of moderate significance within the development footprint. The site is therefore considered to have moderate archaeological potential, particularly in the unfilled portions of the study area adjacent to Four Mile Creek and associated wetlands.

One Aboriginal site (AHIMS 38-4-2363 / Maitland Sports Complex AS1) has been identified within the study area. The site comprises a subsurface artefact scatter of moderate archaeological significance. The artefacts are not in-situ and the site has been subject to previous disturbance from fill and agricultural activities. The ACHA does not elevate the site's significance to a level warranting redesign of the project or an EIS.

6.9.2. Potential Impacts

The proposed works will result in unavoidable harm to Aboriginal objects at AS1. While the impact is direct, the disturbed nature of the site and the moderate level of significance mean the impacts can be managed within the framework of an AHIP. The ACHA concludes that the scale of impact is not sufficient to trigger an EIS, noting:

- The site is already disturbed and artefacts lack integrity.
- Cultural values have been identified and considered through consultation with Registered Aboriginal Parties.
- Harm can be managed through salvage and ongoing consultation processes.

An AHIP is therefore required before construction works can start.

6.9.3. Environmental Management Measures

As previously identified, the ACHA and AR (provided at **Appendices 16**-**17**) were prepared by Biosis (May 2025) for the proposed development. The ACHA and AR provide 8 recommendations (mitigation measures) that have been summarised below:

- Apply for an Aboriginal Heritage Impact Permit for unavoidable impacts to AS1. An AHIP because harm is unavoidable but does not elevate the site's significance to a level warranting project redesign or an EIS.
- Conduct archaeological salvage in key test pits (Transects 6 & 7) after AHIP is obtained. The report explicitly recommends salvage, not avoidance.
- Continue consultation with RAPs throughout the project.
- Develop long-term care arrangements for artefacts in consultation with RAPs (e.g., reburying near origin).
- Follow protocols for unexpected finds, relics, or ancestral remains during the proposed works.
- Provide heritage induction training for all contractors and site workers.
- See **Appendix 16** and **Appendix 17** for the comprehensive 8 recommendations and supporting information.

6.10. HERITAGE – NON-ABORIGINAL

6.10.1. Existing Environment

The State Heritage Inventory was searched on the 5th of March 2024. No State heritage items, or locally listed items, were identified within the proximity of the site. The site is not located within a heritage conservation area (HCA).

6.10.2. Potential Impacts

The proposed activity is contained wholly within the site and does not impact any items of non-Aboriginal heritage. There are no impacts to non-Aboriginal heritage as a result of the proposed activity.

6.10.3. Environmental Management Measures

Environmental management measures to minimise impact on non-Aboriginal heritage are:

- All on-site personnel are to be made aware of their obligations under the *Heritage Act 1977*, including the reporting of any archaeological or historic materials, including those suspected to be archaeological or historic. This may be implemented through an on-site induction or other suitable format.
- In the unlikely event that during the course of the proposed works, previously unknown historical archaeological material or heritage items are discovered, all work in the area of the item(s) shall cease immediately and a qualified heritage consultant will be consulted, in accordance with Section 146 of the *Heritage Act 1977*, to determine an appropriate course of action prior to the recommencement of work in the area of the item, or mitigation and management measures are implemented.

6.11. VISUAL IMPACTS

6.11.1. Existing Environment

The site provides an open landscape out to the wetlands area from the road reserve and dwellings to the south of the subject site. As shown by the site photos in Section 1.4.1 of this report, the site contains an existing fill mound elevated above the original ground level, introduced to the southeastern part of the site. Revegetation (weeds, grasses and small trees) has started to occur over much of the fill; but still presents as visually uncharacteristic.

6.11.2. Potential Impacts

Visually, the existing fill stockpiling is highly visible from Billabong Parade, as well as the adjoining open spaces to the south and east. Further west, the stockpile is also highly visible from Emperor Parade, across the waterway. As these receptors are all residents, their sensitivity to changes in their landscape generally defaults to high – i.e., the most sensitive visual receptors are residents at home in high proximity and visibility to the proposal. The significance of a visual impact/effect is considered for this sensitivity, as well as the magnitude of a given effect. Magnitude relates to the size or scale of the effect from the works, the geographical extent of the area influenced and the duration and reversibility of the effect.

Thus, the existing material stockpile creates visual impacts on nearby residential receptors, as it introduces a high degree of contrast to the existing landscape with the loss of existing features and the addition of new features. For example, the material stockpiling is a stark contrast to the natural environment in this location, considering the original ground levels have been significantly raised in the order of several metres, the vegetation cover in this location has been removed and replaced with soil of a contrasting colour and texture, and the scale of the works take up a large footprint on the site.

Notably, many receptors in this area also have a wide view of the landscape, in that they see out over the wetland area, and so the works would occupy only a portion of their views, albeit for the closest receptors on Billabong Parade, directly south, where the works are expected to consume a large portion of the view.

Importantly, whilst the existing state of the site creates a harsher contrast, the proposed development (being the two sportsfields, amenities block, car parking, lighting and landscaping) is expected to be a less noticeable element in the view of these receptors, and a form of development that is compatible with the landscape. The form of development is expected to be viewed as compatible with the landscape in terms of:

- Colour and material palette (i.e., green fields and addition of new site landscaping such as trees, shrubs and ground covers, as well as a neutral and sympathetic colour and materials palette (as shown in Section 3)),
- scale (sympathetically sized amenities building and ancillary components, comparable to adjoining dwelling houses) and
- land use (compatible recreational development within an urban release area).

So overall, the completed works as considered under this REF would present a lower visual significance in this landscape and not likely to result in adverse changes to the views or landscape character currently exhibited at site. In this regard, the proposed visual impact can be considered appropriate.

There will be short term adverse visual impacts from the presence of construction vehicles and equipment on the site during the construction phase. In the long term the activity is not considered to have a directly adverse visual impact as it will lead to an aesthetically pleasing sportsground, which will have a positive contribution to the community.

6.11.3. Environmental Management Measures

Environmental management measures to minimise impact on the visual environments are:

- Maintain the construction site by removing waste materials, parking in designated areas and storing construction equipment appropriately.
- Remove all waste and material once construction is complete.
- Materials used in the construction of the new facilities should be durable ad require minimal ongoing maintenance.
- New landscaping should be of a low-maintenance / drought tolerant species which is also sympathetic with existing vegetation communities in the area.

- A maintenance schedule should be implemented for the site as part of the future operational management, particularly with regards to ongoing maintenance, repairs, waste management, and overall site cleanliness.
- A final landscape design for the proposed development will be contingent upon NSW Fisheries permit conditions. A provisional landscaping plan has been provided in the Appendices at **Appendix 1**. Five required revegetation management zones have been added to this REF (such as per **Appendix 18**) as environmental management measures (not optional design features) (addressed above in section 6.8.3 of this REF).

6.12. SOCIAL AND ECONOMIC

6.12.1. Existing Environment

The Australian Bureau of Statistics (ABS) website (accessed 5 March 2024) indicates that during the 2021 Census, Chisholm had a population of 4,577, being 49% male and 51% female. The median age of residents was 32 and the median weekly household income was $2,755. There are 1,319 families in the census area, and on average there are 2 children per family. Notably, the population is expected to be higher as of 2024, with residential land releases and construction of new housing within Chisholm an ongoing feature.

As of writing, there are no operational neighbourhood sportsgrounds within Chisholm, with existing recreation offerings being limited to local parks, neighbourhood playgrounds, walking and cycling ways and general open space. The area is also earmarked (within the Contributions Plan) for a district sportsground, a multipurpose centre and 2 other neighbourhood sportsground, none of which have been constructed. There are also a number of local parks yet to be constructed per the Contributions Plan.

However, there is a similarly scaled Neighbourhood Sportsfield (TN18) being constructed at Sophia Waters, in the adjoining estate.

6.12.2. Potential Impacts

The proposed activity will have short-term construction impacts in the form of increased noise and traffic generation. Consultation with the local community will assist in providing information to the community and supporting landowners on important site activities including timing of works and potential traffic impacts.

The proposed activity, forming part of a wider sports facility project, will have a positive long-term contribution to the amenity of the local area, whilst also providing health and recreation benefits to local residents, by providing them with a facility to exercise on, or play in community sports. This is critical social and recreational infrastructure for Chisholm, as the suburb does not yet benefit from any neighbourhood sportsgrounds yet continues to grow in population with additional land releases. The proposed development once operational can be a place for social capital, social connection, and potential future job opportunities/networking to foster/occur.

Construction and supply companies will benefit by construction work and this creates flow-on benefits to the community.

If the proposed development is not delivered as per the recommendations of this REF, there could be potential for the proposed development to have negative physical health/wellbeing impacts on future site users/local residents. For instance, contaminated soils or polluted waterways could have a negative impact on the physical health of future site users / nearby residents, and flora and fauna.

As noted, TN18 is currently under construction at Sophia Waters, and works as part of this sportsfield are likely to coincide. Some community members may view the concurrent construction as duplicative or question the distribution of resources. Conversely, others may

see it positively, as evidence of investment in local recreational infrastructure within the Thornton North catchment.

Similarly, once completed, there is the clear potential for duplication of facilities within a small catchment. This may create competition between clubs or codes for membership and use, potentially leading to challenges in securing sustainable participation levels and maintenance funding. However, in the longer term, the increased provision of sports facilities is more likely to support population growth, attract families, and improve community wellbeing. Strategic need and the need for additional recreational facilities in the catchment has been clearly demonstrated. Therefore, it could also reduce pressure on existing fields, allowing better asset management and scheduling.

6.12.3. Environmental Management Measures

Environmental management measures to minimise social and economic impact are:

- Preparation of a project consultation strategy prior to construction. This strategy would provide information to the community and surrounding land owners on important construction activities, including timing of works and traffic related impacts, as well as a contact detail for the relevant persons. As described in Section 5.3 of this REF, is considered that community consultation and engagement for the purposes of inform should be required for the works captured under this REF.
- Contact details of the site supervisor to be on site at all times.
- TN17 and TN18 project teams should liaise to coordinate works programs where possible, avoiding peak overlap of disruptive activities (e.g. bulk earthworks, haulage).
- Deliver the environmental, soils and geology, and other management measures provided in this REF.

6.13. WASTE

6.13.1. Existing Environment

The site currently contains imported fill, as outlined previously in this report.

6.13.2. Potential Impacts

Inadequate treatment of waste generated during construction has the potential to impact the environment through the contamination of soils (contamination from spills), water (sedimentation, spills) and air (emissions, dust). The disposal of this material must be in accordance with EPA NSW *Waste Classification Guidelines Part 1: Classifying Wastes (2014).* The construction crew / builders may generate personal waste in the form of food and food wrappings.

Waste generated through the ongoing use of the area must also be considered to ensure activities do not adversely affect the environment and the site remains safe and hygienic for all users. Bins have been provided throughout the site for users, as well as a dedicated store room. Note we have not considered waste generation volumes or assessed the suitability of waste storage capacity on site at this time. We understand waste will be managed and collected via Council waste management services as part of an established routine, and would be managed under the site's PoM and updated / made more frequent if necessary. Bins will need to be provided throughout the site for users and collected via Council waste management services.

6.13.3. Environmental Management Measures

Environmental management measures to minimise waste impacts are:

- Resource management hierarchy principles are to be followed:
- Avoid unnecessary resource consumption as a priority.

- Avoidance is followed by resource recovery (including reuse of materials, reprocessing and recycling and energy recovery).
- Disposal is undertaken as a last resource (in accordance with the *Waste Avoidance & Resource Recovery Act 2001*).
- All construction waste generated by the proposal will be classified in accordance with the Waste Classification Guidelines Part 1: Classifying Wastes (NSW EPA, 2014).
- Construction waste material is not to be left on site once works have been completed.
- Working areas will be maintained, kept free of rubbish and cleaned up at the end of each working day.
- Ensure compound/stockpile site is located away from any natural vegetation, and made good after works completed.
- Designated and secure waste storage areas are to be provided as part of the ongoing use of the site, and regularly serviced and collected to avoid waste being piled up on site, transported off site or lost into adjoining lands.

6.14. CUMULATIVE IMPACTS

The REF has considered the potential cumulative impacts of the proposed sportsfield (known as TN17) at 70 Billabong Parade, Chisholm.

Other known projects within the immediate area that will occur at the same time as construction of the works include low-density residential housing developments. We do not consider that the cumulative impacts of these small-scale projects and the proposal to be significant or adverse.

We are aware of another environmental assessment being conducted at the time of writing, for TN18 – Proposed Sportsfield at 15 Suncroft Street, Chisholm. We do not consider that the **cumulative impacts** of these two projects to be significant or adverse, being historically planned development within the Thornton North urban release areas. The cumulative impacts are primarily short-term social disruption during construction and long-term economic considerations around facility demand and sustainability. While the short-term impacts can be managed through scheduling, communication, and mitigation (dust, noise, traffic), the long-term impacts require coordinated planning between Council, sporting clubs, and local associations to ensure facilities complement rather than compete with one another.

Other cumulative impacts of **social and economic** issues will be appropriately managed by consulting with local residents, adopting recommendations/measures in this REF, and managing the site and construction hours. Maintaining a clean and tidy work site will also minimise the potential for significant adverse cumulative impact as a result of the proposal.

The impact the proposed works will have on the existing **road network** has been considered. There may be temporary disruptions to the flow of the vehicular and pedestrian traffic during the construction, however, this will be minimal given it will be temporary in nature and considering mitigation measures are adhered too. The operational traffic impacts will not be significantly adverse and will be appropriate for the capacity of the surrounding local roadways. The traffic generated by the proposed development (once operational) will peak on a weekend when background traffic flows are generally lower than the typical peak hour flows mid-week. Dragonfly Drive and Billabong Parade both operate with spare capacity and the only delay for turning vehicles is as motorists slow to make a turn. The additional trips associated with the development will be adequately catered on the local roads. Extra demands may see some delay for right turns out of Billabong Parade, but any queue will be expected to clear with minimal delays.

There will be some **noise** impacts due to construction. These impacts are considered to be minimal as they will be temporary during the construction and will be done during standard work hours and suitably separated from adjoining sensitive receivers.

There will be some **visual** impacts associated with the proposed works. There be short term adverse visual impacts from the presence of construction vehicles and equipment on the site during the construction phase. The works would present a lower long-term visual significance, being not likely to result in adverse changes to the views or landscape including its character or value. In this regard, the activity is not considered to have an adverse visual impact as it will lead to an aesthetically pleasing sportsground with ancillary recreational amenities, landscaping, car parking and services, which will have a positive contribution to the community and be a sympathetically scaled visual outcome.

The **Aboriginal archaeological record** has been considered as part of this assessment through the provision of the various specialist reports (such as the ACHA and AR). On the basis of the ACHA and AR findings, this REF and AHIP pathway is appropriate and defensible for the project. An EIS is not required given the site's moderate significance, disturbed context, and the availability of mitigation through salvage and AHIP conditions. All earthworks, filling or construction are to commence only after salvage has been completed and AHIP conditions have been satisfied. This sequencing ensures compliance with statutory requirements and protection of cultural values.

With the implementation of the mitigation measures, the proposal is not expected to result in significant impacts on **threatened species, ecological communities**, or **aquatic habitats** under the BC Act, FM Act, or EPBC Act. Mitigation measures to minimise risk include adherence to the Vegetation Management Plan, erosion and sediment control, water-sensitive urban design, fauna-sensitive lighting, and NSW Fisheries compliance.

With adherence to the identified measures, **soil contamination** and **geotechnica**l risks are manageable. The site is suitable for the proposed sportsfield development, provided earthworks are controlled, inspected, and compliant with AS 3798-2007 and the unexpected finds protocol.

It is expected that the proposal will result in positive social impacts and positive long term contributions for the suburb and greater Thornton North catchment. It will provide critical social and recreational infrastructure, new health and recreational opportunities and improved amenity for local residents.

7. CHECKLISTS

7.1. ENVIRONMENTAL PLANNING AND ASSESSMENT REGULATIONS 2021 (Section 171)

Factors required to be taken into account under Section 171 of the Environmental Planning and Assessment Regulation 2021 are presented in Table 7.1.1.

Table 7.1.1: *Environmental Planning and Assessment Regulation 2021 (Section 171)*

FACTOR		ASSESSMENT
a)	The environmental impact on the community	The proposal will provide recreation and community amenity. No social or health impacts are anticipated.
b)	The transformation of the locality	The proposal will result in a long-term positive impact on the locality by enabling the establishment of a neighbourhood sportsground, improving accessibility of recreational facilities for the community. The development converts a largely disturbed, low-value area into a managed sports precinct, enhancing recreational and visual amenity while maintaining surrounding wetland and riparian buffers.
c)	The environmental impact on the ecosystems of the locality	Impacts are largely confined to previously disturbed areas. Remnant wetland vegetation and Key Fish Habitat are avoided or mitigated via revegetation, stormwater management, and buffer zones. No threatened species or endangered ecological communities are expected to be significantly affected.
d)	Reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality	Recreational and aesthetic values are expected to improve. Scientific or ecological values of remnant wetlands are preserved through buffers, revegetation, and habitat protection measures.
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,	The site contains a subsurface Aboriginal artefact scatter (AS1, moderate significance). Impacts are unavoidable but mitigated through AHIP salvage, consultation with RAPs, and artefact management. No redesign or EIS is required. Heritage and cultural values are preserved and managed for future generations. Providing the mitigation measures are adopted, the proposal will not have a significant impact on any items.
f)	The impact on the habitat of protected animals, within the meaning of the Biodiversity Conservation Act 2016,	No threatened fauna species were recorded, and habitat impacts are localised to disturbed areas. Protective measures, including restricted access, revegetation, and riparian connectivity, minimise impacts on adjacent habitats.
g)	The endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air	No species are expected to be endangered. Management measures, including habitat buffers, weed control, and careful construction protocols, reduce risks to local biodiversity.
h)	Long-term effects on the environment	Long-term effects are expected to be low. Revegetation, stormwater management, and habitat restoration will maintain or improve ecological and social values. The proposal is not considered to result in any long term negative effects on the environment, provided that the environmental mitigation measures are adopted.
i)	Degradation of the quality of the environment	Environmental quality is unlikely to degrade. Mitigation measures address erosion, fill, chemical runoff, and habitat protection to maintain soil, water, and vegetation.

FACTOR		ASSESSMENT
j)	Risk to the safety of the environment	Risks are low. Unexpected finds protocols, AHIP compliance, and controlled earthworks minimise contamination and heritage risks.
k)	Reduction in the range of beneficial uses of the environment	Beneficial uses, including recreation and community access, are enhanced. Local ecosystems retain functionality due to mitigation measures.
l)	Pollution of the environment	There may be short-term risks during construction in terms or air and acoustics, however environmental management measures will ameliorate that risk. Stormwater treatment, runoff detention, and turf management plans minimise pollutant release. No uncontrolled discharges are expected.
m)	Environmental problems associated with the disposal of waste	Imported fill has been assessed and certified; minor contaminated materials are managed in accordance with NSW EPA guidance. Waste management protocols are in place for construction and earthworks. Waste generated will be removed from site for appropriate disposal as per the environmental mitigation measures and the CEMP. Maitland City Council must ensure appropriate management of waste associated with ongoing use of the site.
n)	Increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply.	Additional construction or labour resources required for the project may be affected by standard supply chain resourcing disruptions. Maitland Council will, as part of the construction phase, need to analyse the current supply chain, forecast the required materials and identify a suitable timeline for material purchasing and communicate with construction stakeholders (such as workers) regarding construction timeframes.
o)	The cumulative environmental effect with other existing or likely future activities	Cumulative impacts with TN18 and nearby developments are considered low, as impacts are localised, sites are spatially separated, and mitigation measures are implemented for each project.
p)	The impact on coastal processes and coastal hazards, including those under projected climate change conditions	The site is inland; coastal processes are not applicable. Flooding and stormwater risks are managed through field lowering, detention basins, and design above the AEP flood level.
q)	Applicable local strategic planning statements, regional strategic plans or district strategic plans made under the Act, Division 3.1,	Council has undertaken significant strategic planning work in order to determine the future recreation and open space requirements of the area to cater for future populations. The findings of these investigations have been detailed in the document "City Wide Section 94 Contributions Plan (2006/2016) Review of Open Space and Recreation". The site is part of the Thornton North Section 94 Contribution Plan 2008 – line item TN17. As such, as proposed development will facilitate a neighbourhood sportsground at the site, the essential strategic need for the works are to facilitate recreation and open space and community facilities to support the needs of the growing Thornton North population.
r)	Other relevant environmental factors.	Bushfire risk is managed via APZs, construction standards (BAL 12.5), and water supply for firefighting. Cultural heritage, wetlands, and flora/fauna values are managed through protocols, permits, and mitigation measures outlined in the REF and supporting appendices

7.2. ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

The EPBC Act provides a national framework for environmental protection and management of nationally and internationally important flora, fauna, ecological communities, and heritage places. Part 3 of the Act lists nine matters of National Environmental Significance that may require approval from the Australian Minister for the Environment and Water.

An EPBC Act Protected Matters Report (**Appendix 8**) identified matters of NES to be considered as part of this REF. These are presented in Table 7.2.1.

Table 7.2.1: Matters of National Environmental Significance (NES)

MATTERS OF NES	OCCURRENCE IN OR NEAR THE SITE
World Heritage Properties	None
National Heritage Places	None
Wetlands of International Significance	1
Great Barrier Reef Marine Park	None
Commonwealth Marine Areas	None
Threatened Ecological Communities	9
Threatened Species	87
Migratory Species	55

Other matters protected by the EPBC Act, including Commonwealth land, identified in the search is presented in Table 7.2.2.

Table 7.2.2: Other Matters

OTHER MATTERS PROTECTED BY THE EPBC ACT	OCCURRENCE IN OR NEAR THE SITE (10KM BUFFER)
Commonwealth Land	16
Commonwealth Heritage Places	1
Listed Marine Species	67
Whales and Other Cetaceans	None
Critical Habitats	None
Commonwealth Reserves Terrestrial	None
Australian Marine Parks	None

Commonwealth land would not be affected by the proposal. Other relevant issues have been considered throughout this REF.

Table 7.2.3 provides an assessment of the proposed development against each matter of NES.

Table 7.2.3: Matters of NES Assessment

MATTERS OF NES	COMMENT	LIKELY IMPACT
World Heritage	No world heritage properties will be significantly affected by the proposal.	Nil
National Heritage	No national heritage places will be significantly affected by the proposal.	Nil
Wetlands of International Importance	The site is not located on any creek, river or tributary that will affect a wetland of international significance.	Nil
Threatened Species and Ecological Communities	No threatened species, populations or ecological communities listed within Commonwealth (or State)	Nil

	legislation should be significantly affected by the proposal providing the environmental mitigation measures are adopted.	
Migratory Species	No migratory species should be affected by the proposal providing the environmental mitigation measures are adopted.	Nil
Nuclear Actions	No nuclear actions are proposed.	Nil
Marine Environment	No Commonwealth Marine Areas will be significantly impacted by the proposal.	Nil
Great Barrier Reef Marine Park	The Great Barrier Reef Marine Park will not be impacted by the proposal.	Nil
Protecting Water Sources from Coal Seam Gas and Large Coal Mining Developments	No coal seam gas or coal mines are proposed.	Nil

Referral under the EPBC Act is not required for the proposed activity.

8. CONCLUSION AND JUSTIFICATION FOR THE PROPOSAL

This REF has considered the completed earthworks and the proposed sportsfield (including amenities, car parking, landscaping and lighting) at 70 Billabong Parade, Chisholm NSW 2322. The proposal is located within the Maitland City Council local government area and is included as item "*TN17 – Neighbourhood Sportsground*" within the Thornton North Section 94 Contribution Plan 2008.

This REF is prepared on behalf of Maitland City Council as the proponent and a determining authority under Part 5 of the *Environmental Planning and Assessment Act 1979*. The works are in accordance with Chapter 2, Division 12 of SEPP (Transport and Infrastructure) 2021, which relates to parks and other public reserves.

This REF fulfills Maitland City Councils obligations as the proponent to examine and fully consider possible all matters affecting or likely to affect the environment.

The proposed sportsfield development is located on predominantly disturbed land with limited ecological, social and aesthetic values. While unavoidable impacts to a subsurface Aboriginal artefact scatter (AS1) and minor remnant vegetation within floodplain areas are anticipated, these impacts are mitigated through an AHIP, archaeological salvage, revegetation, stormwater management, and ongoing consultation with Registered Aboriginal Parties. No threatened species, endangered ecological communities, or significant environmental receptors are expected to be adversely affected.

Cumulative impacts with nearby developments, including the TN18 sportsfield at Sophia Waters, are minor due to spatial separation and staged construction. Overall, the proposal enhances recreational, social, and community amenity, and environmental quality is maintained or improved through the implementation of the recommended management measures. The development is consistent with applicable planning instruments, relevant environmental legislation, and heritage requirements, and no further assessment via an EIS is warranted.

In the event construction parameters or ancillary works are proposed to be changed and these changes are considered significant, this REF will need to be reviewed and updated to ensure the environmental measures are adequate.

9. COMPILATION OF MITIGATION MEASURES

9.1. CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

A CEMP or equivalent, such as a Site Environmental Plan (SEP) will be prepared for the proposed works. The CEMP or equivalent will include any licences and permits that may be required, environmental management measures outlined in Section 6 of this REF and additional site-specific measures that may be required as part of establishing the construction site or construction methodology. Where construction requires a change of scope to that considered in this REF, then an addendum to the REF will be prepared to consider additional environmental impacts and management measures.

An Environmental Site Induction must be conducted prior to any construction activities commencing on site for all construction personnel working on the site. Records of the induction including content and personnel inducted must be kept.

9.2. DECISION STATEMENT

To allow the proposed activity to proceed, Maitland City Council must make a determination of the REF in accordance with Part 5.1 of the EP&A Act. Specifically, Council are required to determine the proposed activity and issue a Decision Statement to that effect. The objectives of the Decision Statement are to:

- Assess the environmental impacts of the proposed activity and determine the significance of those impacts;
- Document consultation with agencies and the public;
- Explain why the key conclusions in the REF were or were not accepted;
- Document the authorised person's engagement with the REF;
- Make a determination of the proposed activity, or make a decision that there is sufficient information to discharge the duty under Section 111 of the EP&A Act

9.3. LAND USE

Environmental management measures to minimise impact on land use are:

- Nearby residents and other stakeholders are to be informed of proposed construction and timing on an ongoing basis. Construction is to take place during standard construction hours only. (Monday to Friday 7am-6pm, Saturday 8am-1pm, no works on Sundays or public holidays)
- Installation and maintenance of site fencing and appropriate signage to restrict access to the construction area, plant and equipment.
- Installation and maintenance of appropriate wayfinding signage and temporary access routes for pedestrians using the adjacent footpath.
- Contact details of the site supervisor or relevant contact person/s to be displayed on site at all times.
- A construction compound is to be located within a suitable location at site.
- A Dilapidation Report is to be prepared by relevant contractor prior to further works commencing to ensure that the public domain can be restored to an appropriate level should any damage occur.
- New and existing works to tie in as per Civil Plans (**Appendix 2**).
- Access to Billabong Parade and nearby properties is to be maintained at all times.
- All mitigation measures identified in this REF are to be implemented in a CEMP prepared in relation to the activity. The contractor is to adhere to all environmental management measures in the CEMP.

9.4. CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

Environmental management measures relating to CPTED are:

- CCTV should be provided externally on each corner of the amenities building facing outwards. CCTV cameras are kept high (out of reach and vandal resistant). Further, any camera's pointed out should not be aimed directly at the adjoining residential dwelling houses windows or areas of private open space and should be focused on public space areas such as the playing fields, carpark, street and site approaches.
- Landscaping should be managed to ensure views to and from the site are maintained and entrapment opportunities are avoided. Any trees should be appropriately spaced and maintained / pruned up to a height of 2m to avoid concealment opportunities or comprised sightlines and ground covers maintained to no higher than 600mm.
- All windows and doors associated with the amenities are to be secured and lockable via either or a combination of lockable gates (shown), key-lockable devices and/or electronic alarmed keypads / swipe card systems (or similar).
- An alarm system for the amenities building and storage/plant rooms be implemented.
- Locks should be provided to the tank shed and external bin enclosures.
- The emergency service vehicle access gate should be fitted with a lock.
- Signposting is required to enhance wayfinding and prevent excuse making behaviour, as well as create a sense of ownership. All internal and external signage and directions should be installed in accordance with the relevant Australian Standards.
- Signage should be provided at the site entrances, off the pedestrian pathway on Billabong Parade at the emergency access point, the main pedestrian access and the entrance to the car park,.
- Line marking signage to the car park will be required, to designate spaces.
- Directional signage at key junctions should be used to guide users including off the car park, at the principal site entrance, fields, and at the amenities building.
- Details of any public hours of operation (and similar) for the amenities should be provided at the site, as well as emergency/maintenance contact details.
- Signage should be used to indicate any restricted areas (such as waste storage rooms).
- Lighting (in addition to any decorative lighting) should be provided in accordance with relevant Australian Standards and should be installed high to avoid vandalism. A lighting consultant should be engaged for the detailed design of the development.
- Under awning lights should also be provided to the amenity building for even and well-lit spaces at night. Pole mounted lights along the pedestrian footpaths and car park would also be provided at appropriate heights to light up walkways and user areas after dark. The lights should be evenly distributed and placed, ensuring that the area is lit and sightlines to and from the site are also available after dark. Generally, cool-white tones should be chosen for bulbs.
- Lighting should be designed to ensure no impact on wildlife occurs, with most wildlife being more sensitive to light. Light should provide sufficient light for safety and amenity, encourage active outdoor exercise and extend the functioning hours of public sporting assets, while minimising the impact on wildlife.
- The site should be clean and well-maintained to encourage regular use and reinforce strong community territorial cues.
- Prompt rubbish removal should occur to reinforce strong territorial cues, which can be achieved via regular surveillance / maintenance checks of the site throughout the day. Waste should be kept contained with designated waste storage areas.
- Provisions to promptly replace any vandalised, damaged, or defective equipment / property – to avoid what is known as the "broken windows theory". Graffiti and other forms of vandalism fall into this same category and should be managed effectively and quickly through 'rapid removal'.

- Consideration should be given to the use of graffiti resistant materials and surface treatments which are easy to clean / remove graffiti.
- Hardened glass should be employed to prevent breakage.
- Any items outside secured areas or any miscellaneous items (such as seats, pot plants or any bins) should be secured where possible. If they cannot be secured, they should be brought inside the various store rooms after hours.
- A Plan of Management is required. The PoM is to ensure the facility functions in a safe and socially responsible manner. The PoM covers ownership and management details including hours, peak times, Council's and users arrangements and responsibilities; user groups and programmes; accidents and emergency; security and CPTED considerations; noise management; complaints, registers and grievances; cleaning and waste management; and lists any Council established policies and procedures with regards to management of recreational space. This document suitably outlines the practices to ensure appropriate security and risk measures are implemented and continuously monitored for a safe operation.

9.5. TRAFFIC AND ACCESS

Environmental management measures to minimise impact on traffic and access are:

- During construction, the contact details of the site supervisor or primary contact are to be available on site at all times.
- Park all construction vehicles in a designated construction compound nominated in a CEMP, to be located off the public domain and within the site boundaries.
- No on-street parking of construction vehicles should occur. Vehicles should not encroach or be parked within the internal roads or impact on resident driveways and access.
- Provide signposting to direct traffic and to minimise traffic disruption and improve wayfinding during construction for both pedestrians and motorists.
- Ensure access to and along Billabong Parade is maintained for all residents and visitors.
- Utilise appropriate exclusionary fencing/signs to limit access to the site while under construction.
- Workers to only attend site during construction hours and were practical and relevant to limit unnecessary vehicle movements.
- A new driveway is proposed in the eastern section of the site. This will ensure a safe/efficient volume of turns onto the site will be made in a safe/appropriate location of the site, considering its surrounding road network. As per **Appendix 15**, the location of the access driveway to the car park will be located with suitable visibility and sight lines in accordance with AS2890.
- The proposal includes the provision of 80 parking spaces to be incorporated into an at grade car park towards the eastern end of the site. This, serviced by the proposed eastern driveway, will ensure the surrounding road infrastructure will not be inappropriately strained by the proposed during the operational stage.
- An emergency access point will be provided at the west of the site once the proposed development is operational.
- It is recommended by **Appendix 15** that cyclists be catered for with racks for at least eight bikes (1 per 10 car parking spaces).
- Car parking be constructed to AS2890.1-2004 Parking facilities – Part 1 – Off street car parking facilities.

9.6. NOISE AND VIBRATION

Environmental management measures to minimise noise and vibration impacts are:

- **Appendix 14** recommends *"undertake letter box drops to notify receivers of potential works".* The residents/occupiers of the dwellings at the addresses tabulated in ***Figure 17*** of this REF are the receivers who are recommended to receive the notification. This REF recommends that these local residents are to be informed of the general scope of construction works that are to take place, including duration and timeframes, as well as a contact detail for the relevant persons responsible for the construction works at least 2 weeks prior to commencement of works.
- All site workers (including subcontractors and temporary workforce) should be familiar with the potential for noise impacts upon residents and encouraged to take all practical and reasonable measures to minimise noise during their activities.
- Toolbox and induction of personnel prior to shift to discuss noise control measures that may be implemented to reduce noise emissions to the community.
- Where possible use mobile screens or construction hording to act as barriers between construction works and receivers.
- All plant should be shut down when not in use. Plant to be parked/started at farthest point from relevant assessment locations.
- Operating plant in a conservative manner (no over-revving).
- Selection of the quietest suitable machinery available for each activity.
- Avoidance of noisy plant/machinery working simultaneously where practicable.
- Minimisation of metallic impact noise.
- All plant are to utilise a broadband reverse alarm in lieu of the traditional hi frequency type reverse alarm.
- The project is constructed as per the site design (as presented Appendix B in **Appendix 14)** which includes the barrier attenuation provided by the project buildings orientation.
- The mechanical ventilation plant is located on the rooftop of the amenities building.

9.7. SOILS AND GEOLOGY

Environmental management measures to minimise impact on soils and geology are:

- Appropriate erosion and sediment control measures should be put in place and maintained for the duration of works to limit erosion or the travel of the soils.
- Implement Erosion and Sediment Control Plans in accordance with *Managing Urban Stormwater: Soils and Construction "The Blue Book" (4th edition, Landcom 2004*).
- Equipment will be serviced and maintained to minimise potential for loss of fluids.
- Keep the soils damp to ensure that potential dust impacts are limited, which will also ensure the minimisation of soil leaving the site.
- The CEMP will include details on waste management and provide a spill management procedure.
- Any excess soil or material will be tested and classified prior to leaving the site. For any excess spoil material classed as contaminated, disposal of this material will be at an appropriately licensed landfill in accordance with the EPA (2014) waste classification guidelines.
- If contaminated soils or unobserved waste deposition are uncovered during the works, all works within the vicinity must cease immediately and Maitland City Council's project manager be notified immediately.
- Minor clean-up of surface contaminants (e.g., asphalt inclusions) prior to placement at depth.

- As per **Appendix 9**, the proposed sporting field development should involve no soil disturbance of potential or actual ASS soils. However, if disturbance of ASS materials is required as part of the development, it is recommended that an ASS assessment is conducted to 1m below the proposed excavation depth in order to assess soils and provide a specific liming rate and management plan for disturbed materials at the Site. Once materials have been stabilized in accordance with an ASS management plan (if required), they may be retained onsite for reuse or exported for disposal.
- Prior to the removal of stabilised ASS, the client must determine a waste classification using a chemical assessment in accordance with Step 5 of Part 1 of the Waste Classification Guidelines. If the client does not chemically assess the treated ASS, the soil must be classified as hazardous waste (**Appendix 9**).
- Unexpected Finds Protocol: All works will follow the HEC 2024 protocol (**Appendix 12**) to manage contaminated soils or unexpected ACM.
- It is expected that the existing uncontrolled fill may remain on site. The recommendations provided in **Appendix 13** for the preparation, design and construction regarding controlled filling are to be adhered to. **Appendix 13** also includes recommendations for uncontrolled fill monitoring, such as surface settlement monitoring, which should be adhered to.
- Slope stability analysis assessed the risk of localised embankment instability under the proposed fill embankment loads. Options to manage fill embankment settlement and stability, and control measures to addressed identified settlement and instability in the far north-eastern part of the site are provided in **Appendix 11**.
- Additional comments regarding other geotechnical aspects of the project, including earthworks and site preparation measures, are included in the previous (Douglas Partners, 2023) report which should read in conjunction with the information presented above (see **Appendix 26** for that report).

9.8. AIR QUALITY

Environmental management measures to minimise impact on air quality are:

- Reduce vehicle traffic speed in and around the site where dust could be generated.
- Use water to dampen exposed soil and stockpiles if exposed to air for long periods.
- Maintain vehicle and machinery to minimise emissions.
- Where wind causes off-site emission of soil then work may cease for a short time or dust control measures put in place.
- Implement erosion and sediment control measures to prevent any contaminates entering the local waterways.

9.9. WATER QUALITY AND HYDROLOGY

Environmental management measures to minimise impact on water quality/hydrology are:

- The development can proceed pending a Part 7 Fisheries Permit is obtained and all conditions are consistent with this REF.
- Appropriate erosion and sediment control measures should be put in place to limit the amount of sedimentation or erosion into the waterways.
- Regular servicing and maintenance of plant and equipment to minimise fluid loss.
- Ensure any storage of oil, fuels or chemicals are stored in a locked bund within the compound.
- Utilise site filling to raise the field and amenities building to levels that are considered appropriate for the associated level of flood risk.
- Maintain existing rising road access away from the site for evacuation and emergency management.

- Minimise increases in impervious areas within the catchment by reducing impervious footprint across the site. Apply on-site detention and water sensitive urban design measures to reduce potential impacts associated with the proposal.
- Scouring velocities have been assessed to be minimal. To improve resistance of site to scouring, provide maintainable batter slopes (1:4) and grass cover.
- Adopt appropriate flood related development requirements for flood planning levels associated with non-residential (but not special use) properties and use appropriate building materials within flood prone areas.

9.10. FLORA, FAUNA AND BUSHFIRE

9.10.1. Vegetation and Weed Management

The VMP shall be implemented for a period of three (3) years during the construction and initial operational phases of the proposal. The VMP provides the following recommendations/management actions:

- **Management Zone A:** Maintain existing open grassland planted—control any outbreaks of High Threat Exotic weeds (6000 sqm) NO REVEGETATION WORKS REQUIRED.
- **Management Zone B**: Mass planting of Lomandra spp. grass tube stock @ 2 m centres (1500 sqm).
- **Management Zone C**: Rehabilitated Key Fisheries Habitat impacted by fill works planted with islands of native shrubs & sedges + additional infill plantings of Juncus and Gahnia spp. grass tube stock @ 1 m centres (6100 sqm).
- **Management Zone D:** Mass planting of Lomandra longifolia spp. hystrix tube stock @ 1 m centres on steep batter embankments (approx. 600 lineal metres for entire outer perimeter—600sqm).
- **Management Zone E**: Runoff drainage swales and OSD basins. Mass planting of Lomandra, Juncus, Carex and Gahnia spp. grass tube stock @ 0.5 m centres amongst sandstone rip rap—subject to detailed separate cross section engineering plans to be provided by others (for each of the 8 outlets).

9.10.2. General Flora and Fauna Management

Environmental management measures to minimise impacts on flora and fauna (**Appendix 4**):

- The proposed works will require a Part 7 Permit from NSW Fisheries who will assess impact over wetland. NSW Fisheries approval is required prior to any construction work, and will determine project feasibility by Council. It will determine if the project is able to continue in its current form, with proposed sportsfield's causing impact over a Fisheries habitat wetland.
- Any revegetation or restoration works/activities required must be done in accordance with the NSW Fisheries Permit 7. Therefore, the works authorised under this REF, including landscape design and revegetation or buffer zones, are still subject to any Fisheries permit approval and conditions. Once any permit is granted, Council should confirm that all conditions align with this REF. Any substantial inconsistencies would be subject of an updated REF or an addendum to REF, to address any changes beyond that which would be considered 'minor' changes.
- Ongoing consultation and comments from NSW Fisheries have been adopted by Council which include:

  1. Field Level Reduction: Lower the field level by approximately 1.5 metres to reduce the volume of fill required and to minimise the impact on the Key Fish Habitat (KFH) buffer zone.

  2. Offset Scheme: Include a 2:1 offset arrangement for the material that has already been placed within the KFH area.

3. Buffer Zones (as per the attached AHS):
- Apply a 1:1 offset for every square metre of buffer lost.
- Additionally, provide a 1:1 offset for any buffer areas damaged during construction.

- Avoid impact over wetland and restrict construction machinery/impact to a 5m wide strip or less around the Key Fish Habitat/Wetland area.
- A VMP has been produced by Fraser, 2025. All recommendations shall be followed.
- Enact all recommendations from Aquatic Habitat Survey (H2O, 2025).
- Direct all Sports field stormwater from carpark & oval area into Billabong Parade stormwater system, or detention basins. Install a trash rack on stormwater outlets.
- Ensure treated clean water only released from the development into wetland. This will reduce amount of potential pollutants entering Tenambit Wetlands directly.
- Design detention basins to capture pollutants/fertilizers/pesticides, silt, rubbish, etc for stormwater running off sports fields (located in a disturbed area, not in riparian zone/wetland).
- Revegetate riparian zone with local endemic wetland species only (such as listed in Appendix 1), and ensure no slashing of riparian zone in accordance with VMP.
- Minimise excess light spillage over wetland in accordance with AS 4282 and other.
- Lighting must be directed away from adjoining bushland to avoid disturbance to nocturnal fauna.
- Retain all existing native vegetation where feasible, outside of works zone (and within works area where feasible). Ensure retained trees and adjoining remnant vegetation are all clearly marked and have temporary No Go fencing or similar installed prior to any works being undertaken, and staff /contractors appropriately trained/tool boxed on all safeguards.
- No Priority weeds or exotic species with weed potential (such as Rhodes Grass) should be introduced to the site.
- No pollutant or other non natural substances allowed to enter natural environment.
- Ensure compound/stockpile site is located away from any natural vegetation, and made good after works completed.
- Priority weeds should be controlled/eradicated where feasible, and weeds controlled after works have been completed on an ongoing basis to prevent infestation of surrounding wetland in accordance with Biosecurity Act. In particular Alligator Weed.
- Erect silt fencing round all site works in accordance with council erosion and sediment control policy, with any wetland work carried out during dry forecast periods only.
- Consider artificial tall wooden posts with nest boxes/flat areas on top for birds such as raptors to roost/nest located away from the oval.
- Ensure wetland areas are not accessible to the general public, to reduce habitat disturbance to birds/other fauna.
- Connectivity should be reinstated around the edge of the wetlands with riparian vegetation, which the VMP addresses. It is noted limited terrestrial connectivity is present around the subject site, and long term Council should consider reforesting these 40m wide riparian areas to provide protection and habitat for water birds, including threatened species, and provide a filter for urban stormwater runoff.

9.10.3. Aquatic Habitat and Fisheries Compliance

According to QERAS at **Appendix 20**, the critical factor in minimising risk to key fish habitats is the design and implementation of an integrated turf and facility management program regardless of the flood risk at the site. It recommends the following:

- Development of a suitable turf and facility management plan that incorporates an adaptive approach to minimising chemical run-off from the site will manage the risks to KFH adjacent to the Subject Site.

- Choice of appropriate chemicals, application rates and timing of those applications is recommended.
- Provision of water quality treatment assets, including primary treatment, to treat runoff from the site before discharge to the receiving environment.

9.10.4. Bushfire Risk Mitigation

Three key bush fire risk mitigation recommendations from **Appendix 19** are below:

- Water Supply for Firefighting Operations: A fire-fighting water supply shall be provided to the development, in compliance with A.S. 2419.1 – 2005. Fire Hose Reels shall be installed to the Amenities Building in accordance with A.S. 2441.
- Construction Standards to proposed Amenities Building: The proposed Amenities Building shall be constructed to comply with Section 3 and Section 5 (BAL 12.5) of A.S. 3959 – 2018 – 'Construction of Buildings in Bushfire Prone Areas'.
- Management of Asset Protection Zone to the Amenities Building: The curtilage to the Amenities Building shall be maintained to the standards of an Inner Protection Area (IPA) as defined by Appendix 4 of Planning for Bushfire Protection 2019 and the NSW Rural Fire Services document 'Standards for Asset Protection Zones'.

9.11. HERITAGE - ABORIGINAL

As previously identified, the ACHA and AR (provided at **Appendices 16**-**17**) were prepared by Biosis (May 2025) for the proposed development. The ACHA and AR provide 8 recommendations (mitigation measures) that have been summarised below:

- Apply for an Aboriginal Heritage Impact Permit for unavoidable impacts to AS1. An AHIP because harm is unavoidable but does not elevate the site's significance to a level warranting project redesign or an EIS.
- Conduct archaeological salvage in key test pits (Transects 6 & 7) after AHIP is obtained. The report explicitly recommends salvage, not avoidance.
- Continue consultation with RAPs throughout the project.
- Develop long-term care arrangements for artefacts in consultation with RAPs (e.g., reburying near origin).
- Follow protocols for unexpected finds, relics, or ancestral remains during the proposed works.
- Provide heritage induction training for all contractors and site workers.
- See **Appendix 16** and **Appendix 17** for the comprehensive 8 recommendations and supporting information.

9.12. HERITAGE – NON-ABORIGINAL

Environmental management measures to minimise impact on non-Aboriginal heritage are:

- All on-site personnel are to be made aware of their obligations under the *Heritage Act 1977*, including the reporting of any archaeological or historic materials, including those suspected to be archaeological or historic. This may be implemented through an on-site induction or other suitable format.
- In the unlikely event that during the course of the proposed works, previously unknown historical archaeological material or heritage items are discovered, all work in the area of the item(s) shall cease immediately and a qualified heritage consultant will be consulted, in accordance with Section 146 of the *Heritage Act 1977*, to determine an appropriate course of action prior to the recommencement of work in the area of the item, or mitigation and management measures are implemented.

9.13. VISUAL IMPACT

Environmental management measures to minimise impact on the visual environment are:

- Maintain the construction site by removing waste materials, parking in designated areas and storing construction equipment appropriately.
- Remove all waste and material once construction is complete.
- Materials used in the construction of the new facilities should be durable ad require minimal ongoing maintenance.
- New landscaping should be of a low-maintenance / drought tolerant species which is also sympathetic with existing vegetation communities in the area.
- A maintenance schedule should be implemented for the site as part of the future operational management, particularly with regards to ongoing maintenance, repairs, waste management, and overall site cleanliness.
- A final landscape design for the proposed development will be contingent upon NSW Fisheries permit conditions. A provisional landscaping plan has been provided in the Appendices at **Appendix 1**. Five required revegetation management zones have been added to this REF (such as per **Appendix 18**) as environmental management measures (not optional design features) (addressed above in section 6.8.3 of this REF).

9.14. SOCIAL AND ECONOMIC

Environmental management measures to minimise social and economic impacts are:

- Preparation of a project consultation strategy prior to construction. This strategy would provide information to the community and surrounding land owners on important construction activities, including timing of works and traffic related impacts, as well as a contact detail for the relevant persons. As described in Section 5.3 of this REF, is considered that community consultation and engagement for the purposes of inform should be required for the works captured under this REF.
- Contact details of the site supervisor to be on site at all times.
- TN17 and TN18 project teams should liaise to coordinate works programs where possible, avoiding peak overlap of disruptive activities (e.g. bulk earthworks, haulage).
- Deliver the environmental, soils and geology, and other management measures provided in this REF.

9.15. WASTE

Environmental management measures to minimise waste impacts are:

- Resource management hierarchy principles are to be followed:
- Avoid unnecessary resource consumption as a priority.
- Avoidance is followed by resource recovery (including reuse of materials, reprocessing and recycling and energy recovery).
- Disposal is undertaken as a last resource (in accordance with the *Waste Avoidance & Resource Recovery Act 2001*).
- All construction waste generated by the proposal will be classified in accordance with the Waste Classification Guidelines Part 1: Classifying Wastes (NSW EPA, 2014).
- Construction waste material is not to be left on site once works have been completed.
- Working areas will be maintained, kept free of rubbish and cleaned up at the end of each working day.
- Ensure compound/stockpile site is located away from any natural vegetation, and made good after works completed.
- Designated and secure waste storage areas are to be provided as part of the ongoing use of the site, and regularly serviced and collected to avoid waste being piled up on site, transported off site or lost into adjoining lands.

APPENDICES

APPENDIX 1

Architectural Plan and Landscaping Plan prepared by Maitland City Council on 12/06/2025

APPENDIX 2

Concept Civil prepared by DRB Consulting Engineers on 04/07/2025

APPENDIX 3

VENM, ENM and Waste Assessments prepared by EP Risk, 2023

APPENDIX 4

Biodiversity Assessment Report prepared by Peak Land Management on 17/17/2025

APPENDIX 5

Flood Impact Assessment, prepared by Maitland City Council, 22/05/2025

APPENDIX 6

Aboriginal Due Diligence Assessment prepared by Biosis 12/02/2024

APPENDIX 7

AHIMS Search Result conducted by de Witt Consulting 05/03/2024

APPENDIX 8

Protected Matters Search dated 03/11/2023

APPENDIX 9

Desktop Preliminary Acid Sulfate Soils Assessment prepared by HEC, 03/11/2023

APPENDIX 10

Preliminary Site Contamination Assessment prepared by Douglas Partners 21/12/2023

APPENDIX 11

Geotechnical Investigation prepared by Douglas Partners 12/12/2023

APPENDIX 12

Environmental Site Assessment prepared by HEC, 14/02/2024

APPENDIX 13

Geotechnical Design Report by Hunter Geotechnical Services 11/12/2024

APPENDIX 14

Noise Assessment by Muller Acoustic Consulting 24/07/2025

APPENDIX 15

Traffic Report prepared by SECA Solution 27/05/2025

APPENDIX 16

Archaeological Report prepared by Biosis APEM Group on 08/05/2025

APPENDIX 17

Aboriginal Cultural Heritage Assessment Maitland Sports Complex prepared by Biosis APEM Group on 8/05/2025

APPENDIX 18

Vegetation Management Plan Prepared by Fraser Ecological Consulting on 17/06/2025

APPENDIX 19

Bushfire Protection Assessment prepared by ABPP 18/06/2025

APPENDIX 20

Qualitative Environmental Risk Assessment Summary Letter prepared by Water Technology and Bio2Lab on 28/10/2024

APPENDIX 21

Lighting Plan prepared by Norwich Group 18/06/2025

APPENDIX 22

Stop Works Order dated 6/11/2023

APPENDIX 23

Drainage and Irrigation Plans prepared by Water Wise Consulting on 07/07/2025

APPENDIX 24

Development Letter Requirements from Hunter Water 16/05/2024

APPENDIX 25

Fisheries Compliance Caution Notice dated 07/07/2024

APPENDIX 26

Geotechnical Investigation prepared by Douglas Partners 12/2023