



**CAMPBELLTOWN  
CITY COUNCIL**

# **LOCAL PLANNING PANEL**

**25 MAY 2022**

## **MEETING NOTICE**

### **Campbelltown City Council Local Planning Panel**

The meeting of the Campbelltown City Council Local Planning Panel will be held via Microsoft Teams on **Wednesday, 25 May 2022 at 3.00pm.**

## **MEETING AGENDA**

### **1. ACKNOWLEDGEMENT OF COUNTRY**

I would like to acknowledge the Traditional Custodians, the Dharawal people, whose Lands we are now meeting on. I would like to pay my respects to the Dharawal Elders, past and present and all other Aboriginal people who are here today.

### **2. APOLOGIES**

### **3. DECLARATIONS OF INTEREST**

### **4. REPORTS**

**6**

- 4.1 Development Application for New Indoor Cricket Centre - Raby Sports Complex,  
Raby Road, Raby

**6**

## **General Information**

The role of the Local Planning Panel is to determine development applications and provide advice on planning proposals.

When the panel is considering a report relating to a development application, the panel will receive and consider verbal submissions from the applicant and from any person that made a written submission in regard to that development application (during the notification or exhibition period).

As required by the Minister's Local Planning Panels Direction, when considering a planning proposal, the role of the panel is to provide advice to Council. The panel is the first step in the evaluation process before Council and the State Government (through the Gateway process) to decide whether to support a formal public exhibition or consultation period on the proposal. It is possible that the proposal will be modified before or as part of the consideration by Council and/or through the Gateway process. The panel will consider verbal submissions made in relation to the matter from the applicant, if there is one, and from any other person. The panel will not consider written submissions tabled at the meeting, however they will be accepted and passed on to Council officers for consideration in their report to Council.

Any person who makes a verbal submission to the panel must identify themselves and must also accept that their presentation will include their images and sounds and will be webcast and stored on Council's website for future viewing. Any person who makes a verbal submission to the panel must also declare before their submission any political contributions or donations they have made over the last four years exceeding \$1,000 to any political party or candidate who contested the last Ordinary Election of Council.

If you would like to make a verbal submission to the panel, it is necessary to submit the "request to address – community access to meetings" form available on Council's website by midday the day prior to the meeting. The panel chair will invite the registered speakers to the table at the appropriate time in the agenda. Verbal submissions to the panel will be limited to five minutes each. The chairperson has the discretion to extend the period if considered appropriate. Panel members will have the opportunity to ask your questions at the end of your submission.

**Recommendations of the Panel**

The reports are presented to the Local Planning Panel for its consideration and recommendation.

After the panel has considered submissions made by interested parties, the panel will make recommendations to the Council. The Panel's recommendations become public the day following the Local Planning Panel meeting.

**Information**

Should you require information about the panel or any item listed on the agenda, please contact Council's City Development Division on 4645 4575 between 8.30 am and 4.30pm.

The following report is referred to the Local Planning Panel for its consideration and recommendation.

Lindy Deitz  
General Manager



## 4. REPORTS

### 4.1 Development Application for New Indoor Cricket Centre - Raby Sports Complex, Raby Road, Raby

#### Community Strategic Plan

Objective	Strategy
4 Outcome Four: A Successful City	4.4 - Maintain and create usable open and recreational spaces that set our city apart from others

#### Executive Summary

- A development application has been received for the construction of a new indoor cricket centre at the Raby Sports Complex, Raby.
- The subject site is within the RE1 Public Recreation zone pursuant to Campbelltown Local Environmental Plan 2015 (CLEP 2015).
- The application is generally consistent with the provisions of the Campbelltown (Sustainable City) Development Control Plan 2015 (SCDCP) and CLEP 2015.
- The application was publicly exhibited and notified to nearby neighbours between 25 March 2022 and 20 April 2022 and no written submissions were received.
- The land is owned and managed by Campbelltown City Council. Accordingly this assessment report has been completed by an independent consultant town planner (Romic Planning).
- An assessment under Section 4.15 of the *Environmental Planning and Assessment Act, 1979* (EP&A Act) has been undertaken and it is recommended that the application be approved subject to the conditions of consent listed in attachment 1.

#### Officer's Recommendation

That development application 323/2022/DA-C for a new indoor cricket centre at the Raby Sports Complex (legally described as Lot 1191 in DP 263508 and Lot 103 in DP 608294) be approved subject to the conditions of consent in attachment 1.

## Purpose

To assist the Panel in its determination of the subject application in accordance with the provisions of the EP&A Act.

<b>Property Description</b>	Lot 1191 in DP 263508 and Lot 103 in DP 608294
<b>Application No</b>	323/2022/DA-C
<b>Applicant</b>	Campbelltown City Council
<b>Owner</b>	Campbelltown City Council
<b>Provisions</b>	State Environmental Planning Policy (Resilience and Hazards) 2021 State Environmental Planning Policy (Biodiversity and Conservation) 2021 State Environmental Planning Policy (Industry and Employment) 2021 Campbelltown 2027 Community Strategic Plan Campbelltown Local Environmental Plan 2015
<b>Date Received</b>	8 February 2022

## History

### The Site and Locality

The Raby Sports Complex is part of a lineal series of public open spaces which roughly follows the alignment of Bunbury Curran Creek and includes (west to east) Colorado Reserve, Clark Reserve, Raby Sports Complex, and Sunderland Park.

The land comprising the Raby Sports Complex is legally described as Lot 1191 in DP 263508 and Lot 103 in DP 608294 and covers an area of approximately 15 hectares.

The open space has a primary frontage to Raby Road of around 290 m and Hurricane Drive of some 292 m.

An existing 6 m wide driveway provides vehicular access into the Raby Sports Complex.

An existing car park provides 160 spaces to service the demands of the Raby Sports Complex.

The Raby Sports Complex provides a range of elite standard cricketing facilities for cricket players in NSW over 3 existing indoor pitches contained within an existing building.

This existing building is of single storey appearance and constructed of face brickwork of 2-tone banding and a skillion roof line with metal sheeting. The building also features various openings in the way of roller shutters and door entrances.

The floor area of the existing building is around 366 m<sup>2</sup> and contains 3 indoor cricket pitches.

In addition to these cricketing facilities, the surrounding public open space offers other community recreation facilities that includes walking paths, children's playground and off-leash dog park.

### The Proposal

The proposed development application seeks consent for the following scope of works:

- Demolition and ground preparation works
- Removal of 12 trees
- Construction of an indoor cricket facility, that comprises:
  - 1,268.5 m<sup>2</sup> gross floor area (comprising 1,165.2 m<sup>2</sup> at ground floor and 103.3 m<sup>2</sup> mezzanine)
  - 6 Cricket Australia compliant indoor cricket nets
  - change rooms and amenities
  - kitchenette
  - equipment storage
- Landscaping embellishment works including planting of 23 new trees within the curtilage of the proposed building
- Signage to the entry
- Associated stormwater management works



Aerial photograph of the subject site and surrounding locality

## **Operational Details**

The use of the building will be as an indoor cricket centre.

The centre will be in operation from 4:00 pm and 10:00 pm Monday to Friday and between 8:00 am and 6:00 pm on Saturday and Sunday.

The facility includes 6 lanes of active pitches, a first-floor mezzanine and associated amenities.

No permanent staff will be based in the indoor cricket centre.

It is anticipated that the facility can accommodate up to 60 participants and a number of additional spectators.

These spectators will be located principally of the upper-level mezzanine.

## **Report**

### **1. Vision**

#### **Campbelltown 2017-2027 Community Strategic Plan**

Campbelltown 2027 is the Community Strategic Plan (CSP) for the city of Campbelltown. Campbelltown 2027 addresses four key strategic outcomes that Council and other stakeholders will work to achieve over the next 10 years:

- Outcome 1: A vibrant, liveable city
- Outcome 2: A respected and protected natural environment
- Outcome 3: A thriving, attractive city
- Outcome 4: A successful city

The proposal is consistent with Outcome 1 and allows the continued use and appropriate management of public land by the delivery of a sustainable, modern and attractive sporting infrastructure for the community.

### **2. Planning Provisions**

The proposed development is affected by the following consolidated State Environmental Planning Policies that came into effect on 1 March 2022. No savings provision is indicated within the new SEPPs, as no policy changes have been made.

The SEPP consolidation does not change the legal effect of the existing SEPPs, with section 30A of the *Interpretation Act 1987* applying to the transferred provisions.

In this regard, the following matters have been incorporated in the planning assessment of the proposed development under s4.15 of the EP&A Act and having regard to those matters the following issues have been identified for further consideration.

## 2.1 State Environmental Planning Policy (Resilience and Hazards) 2021

**Chapter 4 Remediation of land** of the SEPP requires a consent authority to be satisfied that the site is suitable or can be made suitable to accommodate the proposed development.

**Comment:**

A Preliminary Site Investigation Report was undertaken by Douglas Partners.

This Preliminary Site Investigation Report indicated that the potential for widespread contamination from fill at the site is considered to be low, and the site is suitable for the proposed indoor cricket centre development.

Despite the low likelihood of contamination, the Preliminary Site Investigation Report does include a number of recommendations, which are set out below, and would naturally be included as conditions of consent on any favourable decision:

- (i) further investigation of deeper fill and within the post-demolition building footprint; and
- (ii) an unexpected finds protocol being prepared and implemented to provide a formal contingency to be followed in the event of an unexpected find of contaminated material.

The Preliminary Site Investigation Report further notes that any excess soil that is required to be disposed of off-site will require waste classification in accordance with the EPA Waste Classification Guidelines.

Having regard to the above recommendations by Douglas Partners, it is considered that the site is suitable for the proposed use.

## 2.2 State Environmental Planning Policy (Biodiversity and Conservation) 2021

**Chapter 2 Vegetation in non-rural areas** of the SEPP relates to the protection of biodiversity values and vegetation in non-rural areas.

**Comment:**

The SEPP does not apply to development where tree removal is proposed ancillary to development.

**Chapter 3 Koala Habitat Protection 2020** of the SEPP aims to encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline.

**Comment:**

The site is not identified as either core koala habitat or potential koala habitat and the SEPP does not apply to development.

**Chapter 6 Bushland in Urban Areas** of the SEPP seeks to protect and preserve bushland within the urban areas.

**Comment:**

The proposal does not involve the disturbance of any bushland which holds any biodiversity or ecological values on the site.

The proposal does not trigger the provisions of Chapter 2.

**Chapter 11 Georges Rivers Catchment** of the SEPP applies as the proposal is within the Georges River Catchment.

**Comment:**

The general aims and objectives of this plan are as follows:

- (a) To maintain and improve the water quality and river flows of the Georges River and its tributaries and ensure that development is managed in a manner that is in keeping with the national, State, regional and local significance of the Catchment,
- (b) To protect and enhance the environmental quality of the Catchment for the benefit of all users through the management and use of the resources in the Catchment in an ecologically sustainable manner,
- (c) To ensure consistency with local environmental plans and also in the delivery of the principles of ecologically sustainable development in the assessment of development within the Catchment where there is potential to impact adversely on groundwater and on the water quality and river flows within the Georges River or its tributaries,
- (d) To establish a consistent and coordinated approach to environmental planning and assessment for land along the Georges River and its tributaries and to promote integrated catchment management policies and programs in the planning and management of the Catchment,
- (e) To provide a mechanism that assists in achieving the water quality objectives and river flow objectives agreed under the Water Reform Package.

The proposal does not conflict with any of the relevant provisions of Chapter 11 Georges River Catchment and is therefore considered acceptable in this regard.

## 2.3 State Environmental Planning Policy (Industry and Employment) 2021

**Chapter 3** of the SEPP applies given a new building identification sign is proposed.

### **Comment:**

A building identification sign is defined as:

A sign that identifies or names a building and that may include the name of a building, the street name and number of a building, and a logo or other symbol but does not include general advertising of products, goods or services.

The sign the subject of the development application has been considered under the provisions and determined as being acceptable for approval.

## 2.4 Campbelltown Local Environmental Plan 2015

The subject site is zoned RE1 Public Recreation pursuant to CLEP 2015.

The proposed development is defined as a recreation facility (indoor) as follows:

means a building or place used predominantly for indoor recreation, whether or not operated for the purposes of gain, including a squash court, indoor swimming pool, gymnasium, table tennis centre, health studio, bowling alley, ice rink or any other building or place of a like character used for indoor recreation, but does not include an entertainment facility, a recreation facility (major) or a registered club.

In this regard, the proposed indoor cricket facility is a permissible use in the RE1 Public Recreation zone.

The objectives of the RE1 zone are:

- To enable land to be used for public open space or recreational purposes.
- To provide a range of recreational settings and activities and compatible land uses.
- To protect and enhance the natural environment for recreational purposes.
- To provide for land uses compatible with the ecological, scientific, cultural or aesthetic values of land in the zone.
- To facilitate the multiple use of certain open space areas.
- To facilitate development that is ancillary or incidental to the special land uses provided for in this zone.
- To provide for the sufficient and equitable distribution of public open space to meet the needs of the local community.
- To preserve and rehabilitate bushland, wildlife corridors and natural habitat, including waterways and riparian lands, and facilitate public enjoyment of these areas.
- To provide for the retention and creation of view corridors.
- To protect and enhance areas of scenic value and the visual amenity of prominent ridgelines.
- To preserve land that is required for public open space or recreational purposes.
- To maximise public transport patronage and encourage walking and cycling.

Having regard to the above, it is considered that the proposed development is not inconsistent with the relevant objectives of the RE1 zone.

An assessment against the relevant provisions and development standards of the CLEP 2015 is provided below:

### **Height of buildings**

Clause 4.3 sets out the relevant provisions relating to the range of building heights.

**Comment:** There is no numerical height control applicable to the site.

### **Floor space ratio**

Clause 4.4 sets out the relevant provisions relating to the maximum floor space ratio of buildings.

**Comment:** There is no numerical floor space ratio control applicable to the site.

### **Flood planning**

Clause 5.21 requires the consent authority to be satisfied that the development:

- Is compatible with the flood function and behaviour of the land, and
- Will not adversely affect flood behaviour in a way that results in detrimental increases in the potential flood affectation of other development or properties, and
- Will not adversely affect the safe operation and efficient evacuation of people or exceed the capacity of existing evacuation routes for the surrounding area in the event of a flood, and
- Incorporates appropriate measures to manage risk to life from flood, and
- Will not adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of riverbanks or watercourses.

**Comment:** The proposed building occupies the existing indoor cricket facility building footprint with a larger floor plate.

The finished ground floor level of the proposed new building will be RL 61.84, which is well above the Probable Maximum Flood (PMF) of RL 60.25.

Having regard to the above, the proposed development is consistent with the provisions of clause 5.21 of the CLEP 2015.



## **Earthworks**

The objective of Clause 7.1 of CLEP 2015 is to ensure that earthworks for which development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land.

**Comment:** It is expected that earthworks are necessary to prepare the site and the new building foundations.

As stated earlier in Section 2 of this Report, the land is not identified as being contaminated based on the findings of a Preliminary Site Investigation Report undertaken by Douglas Partners.

Further to the conditions recommended by Douglas Partners and to mitigate impacts from arising in the locality of the development, a recommended condition has been included requiring erosion and sediment control fencing implemented during construction to mitigate impacts from arising in the locality of the development.

A further condition has been included in the recommended conditions requiring measures to be implemented to manage erosion and dust impacts in accordance with the requirements of the document titled Managing Urban Stormwater: Soils and Construction prepared by Landcom.

## **Salinity**

The objective Clause 7.4 of CLEP 2015 is to provide for the appropriate management of land that is subject to salinity and the minimisation and mitigation of adverse impacts from development that contributes to salinity.

**Comment:** The land has been determined to be as not being adversely affected by salinity processes by Douglas Partners in its Report on Geotechnical Investigation.

In this regard, the development is viewed to be designed, sited and managed to avoid any significant adverse environmental impact.

## **Preservation of the natural environment**

The objective of Clause 7.5 of CLEP 2015 is to preserve the natural environment by managing the removal of soil or bush rock on RE1 Public Recreation land.

**Comment:** All groundwork preparation for the new building is to occur on existing disturbed portions of the land.

In the event of an approval, conditions of consent can be applied to ensure compliance with this clause.

## **Development in Zone RE1**

The objective of Clause 7.17 of CLEP 2015 is to ensure that land required for public recreation is maintained for that purpose.

**Comment:** The assessment report has considered the necessity of the proposed development, its impacts to the existing and future land and the possible need for retention of land for future use.

The proposed development has satisfied the objectives and conditions of consent can be imposed to ensure the objectives of this clause is met.

### **Terrestrial biodiversity**

The objective of Clause 7.20 of CLEP 2015 is to maintain terrestrial biodiversity.

**Comment:** The subject land is partly identified as containing ‘Biodiversity’ on the Terrestrial Biodiversity Map; however, the proposed works are not located in vicinity of this mapped area and are generally dissociated. The area of the proposed works is located on the existing disturbed portions of the land which is of low significance.

The proposed development has satisfied the objectives and conditions of consent can be imposed to ensure the objectives of this clause are met.

### **1.1. Campbelltown (Sustainable City) Development Control Plan 2015**

The purpose of Campbelltown (Sustainable City) Development Control Plan 2015 (SCDCP) is to provide more detailed provisions to supplement the CLEP 2015.

Pursuant to Clause 4.15 (1)(a)(iii), Council is required to consider the relevant provisions of the applicable development control plan of the Campbelltown Local Government Area (LGA), being SCDCP.

### **Part 2 - Requirements Applying to All Types of Development**

The general provisions of Part 2 of the Plan apply to all types of development. Compliance with the relevant provisions of Part 2 of the Plan is discussed as follows where applicable:

<b>Provision</b>	<b>Comment</b>	<b>Compliance</b>
<b>2.2 Site Analysis</b>  Site Analysis Plan required to be submitted with the DA for all development involving the construction of a building.	The site analysis plan submitted to Council is considered to be compliant with the requirements for a Site Analysis plan in accordance with Section 2.2 of the SCDCP.	Yes
<b>2.3 Views and Vistas</b>  Development on areas of significant public open space is required to respond - in certain circumstances Council may require a visual analysis study.	The application will not impede on important scenic corridors from public places.	Yes
<b>2.4 Sustainable Building Design</b>  2.4.1 Rainwater Tanks  Rainwater tanks for all new	A 10,000 litre rainwater tank will be	

<p>buildings with roof area &gt; 100 m<sup>2</sup>; capacity calculated in accordance with Table 2.4.1 of DCP.</p> <p>2.4.2 Solar Hot water</p> <p>All new buildings encouraged to provide solar hot water.</p> <p>2.4.3 Natural Ventilation</p> <p>Maximise opportunities for X-flow ventilation and minimising need for A/C.</p> <p>2.4.4 Light Pollution</p> <p>Outdoor lighting to minimise light spill.</p>	<p>installed in accordance with the DCP requirement.</p> <p>Deemed to comply as a condition of consent that an energy efficient hot water unit is installed.</p> <p>No mechanical ventilation is proposed. The new building is designed to facilitate cross-flow ventilation.</p> <p>External lighting is limited to immediate illumination at the entry foyer.</p> <p>No additional flood lighting is proposed.</p> <p>Limited external wall lighting on a timer or sensor will be provided at strategic points on the building will be installed for security and is deemed to comply as a condition of consent.</p>	
<p><b>2.5 Landscaping</b></p>	<p>The proposal seeks to enhance the landscape character of the area by providing adequate landscaping and to offset tree removal.</p> <p>Refer to landscaping embellishment strategy.</p> <p>The proposed development includes additional landscaping to mitigate the visual impact of the proposed development.</p>	<p>Yes</p> <p>Yes</p>
<p><b>2.7 Erosion and Sediment Control</b></p> <p>Must submit a plan with the DA.</p>	<p>An erosion and sediment control plan accompanies the development application drawing package.</p> <p>Erosion and sediment control provisions can be conditioned where required.</p>	<p>Yes</p>
<p><b>2.8 Cut and Fill management plan</b></p> <p>Required to accompany DA where cut and fill is proposed</p>	<p>A Cut and Fill Management Plan accompanies the development application drawing package.</p> <p>All cut and fill proposed is within acceptable levels.</p>	<p>Yes</p>

<p><b>2.9 Demolition</b></p>	<p>A Demolition Plan accompanies the development application drawing package.</p> <p>Deemed to comply as conditions of consent.</p>	<p>Yes</p>
<p><b>2.10 Water Cycle management</b></p> <p>Stormwater Concept Plan to be submitted with DA</p>	<p>A Stormwater Concept Plan has been prepared by InLine Hydraulic Services.</p> <p>All drainage is to be to Council's existing drainage system.</p> <p>Deemed to comply as conditions of consent.</p>	<p>Yes</p>
<p><b>2.12 Retaining Walls</b></p> <p>Retaining walls greater than 900 mm to be designed by a structural engineer.</p> <p>Any excavation within the zone of influence of any other structure or building requires a structural engineering report.</p>	<p>The base of the northern and western walls of the proposed building will be constructed in concrete/core-filled reinforced blockwork and to Structural Engineer's details.</p> <p>These walls will also act to retain the adjacent backfill from the landscaped slope behind the building.</p> <p>Deemed to comply as conditions of consent.</p>	<p>Yes</p>
<p><b>2.13 Security</b></p> <p>Development needs to address CPTED principles</p>	<p>The DCP does not specify indoor sporting facilities requiring a CPTED report.</p> <p>The proposed development has been designed to meet the CPTED principles.</p>	<p>Yes</p>
<p><b>2.14 Risk Management</b></p> <p>Salinity Analysis and Remedial Action Plan required if the site has been identified as being subject to a salinity hazard.</p> <p>Bushfire</p> <p>Subsidence</p>	<p>The land has been determined to be as not being adversely affected by salinity processes by Douglas Partners in its Report on Geotechnical Investigation.</p> <p>The site is not recognised as being bushfire prone.</p> <p>The site is not classified as being affected by risk of subsidence.</p>	<p>Yes</p>
<p><b>2.15.1 Waste Management Plan</b></p> <p>A detailed Waste Management Plan (WMP) shall accompany development applications.</p>	<p>A waste management plan was submitted with the development application and is considered satisfactory.</p>	<p>Yes</p>

<p><b>2.16 Provision of Services</b></p>	<p>The site is currently serviced and essential services are available to the site.</p>	<p>Yes</p>
<p><b>2.17 Work on, Over or Near Public Land</b></p> <p>A hoarding or fence shall be erected between the work site and a public place.</p> <p>Where the site work is likely to be hazardous to persons on a public place, the work site shall be kept lit between the sunset and sunrise.</p>	<p>Conditions of consent can be imposed to ensure compliance is achieved with this control.</p>	<p>Yes</p>
<p><b>2.21 Acoustic Privacy</b></p>	<p>A detailed Acoustic Assessment Report prepared by Acoustic Logic assesses the potential impacts during both the construction and operational phases of the project.</p>	<p>Yes</p>
<p><b>Part 11 – Vegetation and Wildlife Management</b></p> <p><b>11.3 Permits and Development Applications for Vegetation Management</b></p>	<p>Council's controls outlined in Section 11.3.6 require the provision of replacement tree planting where those existing are intended for removal from the site.</p> <p>The applicant has submitted an arborist report in support of the proposed development which has reviewed the existing trees on the subject site.</p> <p>It is noted that a total of 12 trees will be removed as a result of the proposed development.</p> <p>Two trees that are located in close proximity of the development footprint will be the subject of protective measures to ensure the health and survival of the retained trees during the construction phase, as detailed in the Arboricultural report.</p> <p>The landscaping embellishment plan nominates that some Twenty-three new trees will be planted within the building grounds, which represents a net increase of 13 trees which suitably offsets the removal of the 12 trees.</p> <p>The proposed replacement tree planting included in the landscape plan is considered to satisfy the requirements</p>	

	<p>of the SCDCP.</p> <p>Councils Senior Environmental Officer reviewed the development application documentation and has provided recommended conditions on the consent which are included in attachment 1.</p>	
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## **1.2. Campbelltown Local Infrastructure Contributions Plan 2018**

The Campbelltown Local Infrastructure Contributions Plan 2018 applies to the subject site. In accordance with Clause 2.7 of the Plan, development contributions are not applicable to the proposed development as the development is public infrastructure to be carried out by or on behalf of a public authority i.e., Campbelltown City Council.

## **3. Planning Assessment**

### **1.3. Impacts on the natural and built environment**

Section 4.15(1)(b) of the EP&A Act requires Council to assess the development's potential impacts on the natural and built environment, as well as potential social and economic impacts.

The key matters for consideration when considering the development's potential impact on the natural and built environment is as follows:

- Demolition and construction
- Noise Impact
- Access and car parking
- Built form and scale

#### **Demolition and construction**

The demolition and construction phases of the development have the potential to generate short term environmental impacts through the generation of dust, noise and vibration.

Should the Panel seek to grant development consent, conditions would be required to manage construction works, including the installation of erosion and sediment control measures prior to works commencing on site

## **Noise Impact**

An acoustic report prepared by a qualified acoustic engineer (Acoustic Logic) has been submitted with the application.

Operational noise emissions were assessed, including amenity impacts for the nearest residential receivers approximately located at 3 receiver points being:

- 46.75 m to the north of the site at Thunderbolt Drive (battle-axe allotments/dwellings),
- 180 m to the south (group of dwellings) which address Halifax Street, and
- 290 m to the west being the western side of Raby Road (dwellings).

The assessment included the following noise sources:

- Noise emissions from patron activity and site operation, and
- Noise emissions from mechanical plant servicing the site (In principle).

The acoustic report makes several noise control recommendations and concludes that subject to the implementation of these recommendations, the proposed new indoor cricket centre would comply with all of the applicable noise criteria.

The specific noise control recommendations include:

- The facility is permitted to operate between the hours of 7:00 am and 10:00 pm Monday to Saturday, and between 8:00 am and 10:00 pm on Sundays and public holidays.
- Roller doors/ingress and egress doors are allowed to remain opened during use.
- Prominent signage is to be displayed near patron ingress/egress points to remind patrons to minimise noise when departing the premises.

The application was referred to Council's Environmental Health Officer who raised no objections subject to conditions of consent if approval was to be recommended, including compliance with the specific noise control including any mechanical plant emissions recommendations.

## **Access and car parking**

The Raby Sports Complex has frontage to Raby Road, which is a 2-way divided carriageway, with 2-lanes in either direction.

An existing 6 m wide driveway provides vehicular access into the Raby Sports Complex.

An existing car park provides 160 spaces to service the demands of the Raby Sports Complex.

The application was referred to Council's Engineers who raised no objections to the carrying capacity of the local road network or impact of increased traffic in Raby Road.

Council's Engineers also advised the existing car park is of sufficient capacity to meet the demands of the new indoor cricket centre.

### **Built form and scale**

The proposed built form and scale of the development is considered to be appropriate for the subject site and the surrounding locality.

The proposed choice of finishes and building materials is appropriate and adopts a distinct saw tooth pattern roofline to create visual interest.

The proposed landscaping embellishment to complement the built form as detailed in the supportive landscape plan demonstrates an appropriate level of landscaping and replacement species to offset the proposed tree removal.

### **1.4. Social, economic and environmental impacts**

Section 4.15(1)(b) of the EP&A Act requires the consent authority to assess the likely impacts of the development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality.

Having regard to social and economic impacts generated by the development, the proposed new indoor cricket centre will double the number of indoor cricket pitches from 3 to 6 and would meet the short and long term demands of local cricketers which is consistent with the strategic and statutory controls.

The proposal will provide positive social benefits by providing a modern and environmentally responsive recreational space for the community and will foster one of our nation's favourite sports to prosper for many years to come.

Economically, the proposal would be beneficial to the overall local economy with workers being employed during the demolition and construction phase of the development.

### **1.5. Site Suitability**

Section 4.15(1)(c) of the EP&A Act requires the consent authority to assess the suitability of the site for the proposed development.

The development is positioned over the existing footprint of the existing cricket centre and despite the larger footprint of the new building, the proposal will complement the existing vegetation on site and have a positive relationship with adjoining land.

Having regard the development proposal's location and setting within the Raby Sports Complex which covers an area of approximately 15 hectares, it considered that the development is suitable as it is befittingly setback from the nearest residential properties being 46.75 m to the north of the site at Thunderbolt Drive and will not cause adverse impacts given this generous separation.

It is noted that a total of 12 trees will be removed as a result of the proposed development.



Two trees that are located in close proximity of the development footprint will be the subject of protective measures to ensure the health and survival of the retained trees during the construction phase, as detailed in the Arboricultural report.

The landscaping embellishment plan nominates that 23 new trees will be planted within the building grounds, which represents a net increase of 13 trees which suitably offsets the removal of the 12 trees.

The overall landscaping embellishment plan will also complement the existing tree planting found within the grounds and will provide a landscaped screening backdrop between the proposed building and the residences.

#### **4. Public Participation**

Part 9 of Campbelltown (Sustainable City) Development Control Plan 2015 outlines Council's public participation policy in regard to Council Strategic Planning Documents (CSPDs) and Development Applications (DAs).

In this regard, a recreation facility (indoor) requires public notification.

The application was publicly exhibited and notified to the surrounding property owners.

The property owners were provided between 25 March 2022 and 20 April 2022 to provide comments regarding the proposal.

No written submissions were received.

#### **Conclusion**

Development application 323/2022/DA-C proposes the construction of a new indoor cricket centre at the Raby Sports Complex (legally described as Lot 1191 in DP 263508 and Lot 103 in DP 608294).

The proposal has been assessed under Section 4.15 of the *Environmental Planning and Assessment Act 1979*.

The application was notified to surrounding properties and publicly exhibited and Council received nil submissions.

The proposed development is defined as 'recreation facility (indoor)' under Campbelltown Local Environmental Plan 2015 and is permitted with consent within the RE1 Public Recreation zone.

The proposal meets the objectives of the RE1 Public Recreation zone and is considered compatible with the anticipated character of the locality.

The key planning considerations associated with the application relate to the potential amenity impacts of the built form and use of the new building upon the neighbouring properties and surrounding area.

The proposal responds to the desired future character of the surrounding locality in terms of built form and the continued use of the public recreational land for sporting and community purposes and is unlikely to result in any adverse amenity impacts.

Overall, having regard to the matters for consideration under Section 4.15 of the *Environmental Planning and Assessment Act 1979*, and the relevant matters discussed within this report, it is recommended that the development be approved, subject to the conditions listed in attachment 1.

### **Attachments**

1. Recommended Conditions of Consent (contained within this report)
2. SEE Raby Sports Complex (contained within this report)
3. Architectural Plans (contained within this report)
4. Landscape Plans (contained within this report)
5. Hydraulic Plans (contained within this report)
6. Stormwater Realignment Works (contained within this report)
7. Acoustic Assessment (contained within this report)
8. Arborist AIA (contained within this report)
9. Photomontage (contained within this report)

### **Reporting Officer**

Executive Manager Urban Centres

## ATTACHMENT 1 - 323/2022/DA-C

### Recommended Conditions of Consent

#### GENERAL CONDITIONS

The following conditions have been applied to ensure that the use of the land and/or building is carried out in such a manner that is consistent with the aims and objectives of the planning instrument affecting the land.

For the purpose of these conditions, the term 'applicant' means any person who has the authority to act on or benefit of the development consent.

#### 1. Approved Development

The development shall be carried out in accordance with the approved plans and documents listed in the table below, and all associated documentation supporting this consent, except as modified in red by Council and/or any conditions within.

Prepared By	Project Number	Drawing/Document Description	Drawing Number	Revision Number
Melocco & Moore Archts	2103	Cover page	000	G
		Site plan	001	H
		Site analysis plan	002	B
		Demolition plan	003	B
		Ground floor plan	101	J
		First floor plan	102	H
		Roof plan	103	F
		Site sections	151	F
		Section	152	F
		Elevations	153	F
		Elevations	154	E
Campbelltown Council	NA	Coversheet	L-000	A
		Landscape Plan	L-101	A
		Landscape detail sheets 1,2,3	L-801, 802, 803	A
		Specification sheets 1,2,3	L-901, 902, 903	A
Inline Hydraulic Services	21254	Site plan	H02	A
		Ground floor plan	H03	A
		First floor plan	H04	A
		Roof plan	H05	A
		Sediment and erosion control	H06	A
Enscape Studio	0097	Stormwater realignment works	C1-01	D
Acoustic Logic	20211457.1	Acoustic assessment		0
Douglas Partners	210572.01	Preliminary Site Investigation report		0

#### 2. Building Code of Australia

All building work must be carried out in accordance with the provisions of the *Building Code of Australia*. In this clause, a reference to the *Building Code of Australia* is a reference to that Code as in force on the date the application for the relevant construction certificate is made.

#### 3. Landscaping

The provision and maintenance of landscaping shall be in accordance with the approved landscape plan containing Council's approved development stamp including the engagement of a suitably

qualified landscape consultant/ contractor for landscaping works. The landscape design shall incorporate a significant portion of native, low water demand plants.

The landscaping plan specifications are to specify that no works are to occur on the site that is identified as 'biodiversity' on the Terrestrial Biodiversity Map of Campbelltown Local Environmental Plan 2015.

#### **4. External Finishes**

The external finishes shall be in accordance with the approved plans and the schedule of finishes submitted with this application. Any proposed alterations to these finishes are considered to be a modification to the development consent and require separate approval by Council.

#### **5. Advertising Signs – Separate DA Required**

This consent does not permit the erection or display of any advertising signs with the exception of the approved building identification signage to the entry.

Most advertising signs or structures require development consent. You should make separate enquiries with Council prior to erecting or displaying any advertising or signage.

#### **6. Lighting**

Illumination of the site is to be arranged to provide an appropriate level of lighting and in accordance with the requirements of *Australian Standard 4282 (as amended)* so as not to impact upon the amenity of the occupants of adjoining and nearby residential premises or traffic.

Any new lighting is to be timing or sensor activated.

#### **7. Storage of Goods**

All works, storage and display of goods, materials and any other item associated with the premises shall be contained wholly within the building.

#### **8. Graffiti Removal**

In accordance with the environmental maintenance objectives of 'Crime Prevention Through Environmental Design', the owner/lessee of the building shall be responsible for the removal of any graffiti which appears on the buildings, fences, signs and other surfaces of the property within 48 hours of its application.

#### **9. Unreasonable Noise, Dust and Vibration**

The implementation, construction and ongoing operation of this development must not adversely affect the amenity of the neighbourhood or interfere unreasonably with the comfort or repose of a person who is outside the premises by reason of the emission or discharge of noise, fumes, odour, dust, waste products or other products, particularly from machinery, vehicles, warning sirens, public address systems and the like.

In the event of a noise, fumes, odour, dust, or waste related issue arising during the implementation, construction and ongoing operation of this development, the person in charge of the premises shall when instructed by Council, cause to carry out an investigation by an appropriate consultant and submit the results to Council. If required by Council, the person in charge of the premises shall implement any or all of the recommendations of the consultant and any additional requirements of Council to its satisfaction.

Should the development not achieve compliance with the applicable guidelines and standards, amendments to the development are required to be made (with the consent of Council), which may

include, but are not limited to, changes to hours of operation, installation of further treatment, modification of operational procedures, etc.

#### **10. Engineering Design Works**

The design of all engineering works shall be carried out in accordance with the requirements set out in Council's 'Engineering Design Guide for Development' (as amended) and the applicable development control plan.

#### **11. Operating Hours**

The use of the premises/business shall be limited to:

Monday to Saturday	7:00 am – 10:00 pm
Sunday	8:00 am – 10:00 pm
Public Holidays	8:00 am – 10:00 pm

#### **12. Car Parking Spaces**

Car parking spaces shall be designed, sealed, line marked and made available to all users of the site in accordance with Australian Standards 2890.1 and 2 (as amended). The development shall not reduce car parking spaces available to users of the site.

#### **13. Rubbish/Recycling Bin Storage**

The rubbish and recycling bins shall not be stored within vehicle parking, vehicle manoeuvring areas or landscaped areas.

The bin(s) shall only be stored in accordance with the approved plans.

#### **14. Rain Water Tank(s)**

Rain water tank/s shall be installed on site for the collection and storage of stormwater for irrigation and reuse purposes (eg the flushing of toilets), in accordance with the approved plans.

#### **15. Construction Certificate**

Prior to the commencement of any works that require a construction certificate:

- a. the applicant shall appoint a Principal Certifier;
- b. the applicant shall obtain a construction certificate for the particular works; and
- c. when Council is not the Principal Certifier, the appointed Principal Certifier shall notify Council of their appointment no less than two days prior to the commencement of any works.

#### **PRIOR TO THE ISSUE OF A CONSTRUCTION CERTIFICATE**

The following conditions of consent must be complied with prior to the issue of a construction certificate by either Campbelltown City Council or the appointed Principal Certifier. All necessary information to comply with the following conditions of consent must be submitted with the application for a construction certificate.

#### **16. Utility Servicing Provisions**

Prior to Council or the appointed Principal Certifier issuing a construction certificate, the applicant shall obtain a letter from both the relevant electricity authority and the relevant telecommunications

authority stating that satisfactory arrangements have been made to service the proposed development.

*Note: The applicant should also contact the relevant water servicing authority to determine whether the development will affect the authority's water or sewer infrastructure.*

#### **17. Geotechnical Report**

Prior to Council or the appointed Principal Certifier issuing a construction certificate, a geotechnical report prepared by a NATA registered lab shall be submitted which indicates that the land will not be subject to subsidence, slip, slope failure or erosion where excavation and/or filling exceeds 900mm in depth or identified as filled land.

#### **18. Soil and Water Management Plan**

Prior to Council or the appointed Principal Certifier issuing a construction certificate, a detailed soil and water management plan shall be submitted for approval.

#### **19. Stormwater Management Plan**

Prior to Council or the appointed Principal Certifier issuing a construction certificate, a plan indicating all engineering details and calculations relevant to site regrading and the collection and disposal of stormwater from the site, building/s and adjacent catchment, shall be submitted for approval.

Floor levels of all buildings shall be a minimum of 150mm above the adjacent finished site levels and stormwater shall be conveyed from the site to the nearest system under Council's control. All proposals shall comply with Council's 'Engineering Design Guide for Development' (as amended) and the applicable development control plan.

#### **20. Design for Access and Mobility**

Prior to Council or the appointed Principal Certifier issuing a Construction Certificate, the applicant shall demonstrate by way of detailed design, compliance with the relevant access requirements of the BCA and AS 1428 – Design for Access and Mobility.

#### **21. Telecommunications Infrastructure**

- a. If the development is likely to disturb or impact upon telecommunications infrastructure, written confirmation from the service provider that they have agreed to proposed works must be submitted to the appointed Principal Certifier prior to the issue of a Construction Certificate or any works commencing, whichever occurs first; and
- b. The arrangements and costs associated with any adjustment to telecommunications infrastructure shall be borne in full by the applicant/developer.

#### **22. Sydney Water**

Prior to Council or the appointed Principal Certifier issuing a construction certificate, the approved plans must be submitted to Sydney Water via the Sydney Water Tap In service, to determine whether the development will affect any Sydney Water wastewater and water mains, stormwater drains and/or easements, and if any requirements need to be met.

An approval receipt will be issued if the building plans have been approved. The approval receipt shall be submitted to the appointed Principal Certifier prior to issue of a construction certificate.

The Sydney Water Tap In service can be accessed at [www.sydneywater.com.au](http://www.sydneywater.com.au).

**23. Existing Right of Carriageway**

The existing right of carriageway that traverses the land shall either be extinguished or relocated clear of the proposed building prior to commencement of construction.

For the purpose of this condition, construction does not include demolition of existing building.

**PRIOR TO THE COMMENCEMENT OF ANY WORKS**

The following conditions of consent have been imposed to ensure that the administration and amenities relating to the proposed development comply with all relevant requirements. These conditions are to be complied with prior to the commencement of any works on site.

**24. Erosion and Sediment Control**

Prior to the commencement of any works on the land, adequate/approved erosion and sediment control measures shall be fully installed/implemented.

**25. Erection of Construction Sign**

Prior to the commencement of any works on the land, signs must be erected in prominent positions on the site:

- a. Showing the name of the principal contractor (if any) for any building work and a telephone number on which that person may be contacted outside working hours
- b. Stating that unauthorised entry to the work site is prohibited
- c. Pollution warning sign promoting the protection of waterways (a digital copy is provided with this consent that can be printed, laminated and affixed to the site or a corflute sign is available for free pick up at Council's administration office)
- d. Stating the approved construction hours in which all works can occur
- e. Showing the name, address and telephone number of the principal certifying authority for the work.

Any such signs are to be maintained while the building work, subdivision work or demolition work is being carried out, but must be removed when the work has been completed.

**26. Toilet on Construction Site**

Prior to the commencement of any works on the land, toilet facilities are to be provided, at or in the vicinity of the work site on which work involved in the erection or demolition of a building is being carried out, at the rate of one toilet for every 20 persons or part thereof. Each toilet provided must be a standard flushing toilet and be connected to:

- a. A public sewer, or
- b. If connection to a public sewer is not practicable, to an accredited sewage management facility approved by Council, or
- c. If connection to a public sewer or an accredited sewage management facility is not practicable, to some other management facility approved by Council.

**27. Trade Waste**

Prior to the commencement of any works on the land, a trade waste facility shall be provided on-site to store all waste pending disposal. The facility shall be screened, regularly cleaned and accessible to collection vehicles.

**28. Public Property**

Prior to the commencement of any works on site, the applicant shall provide Council with a report establishing the condition of the property which is controlled by Council which adjoins the site including (but not limited to) kerbs, gutters, footpaths, and the like.

Failure to identify existing damage may result in all damage detected after completion of the development being repaired at the applicant's expense.

**29. Demolition Works**

Demolition works shall be carried out in accordance with the following:

- a. Prior to the commencement of any works on the land, a detailed demolition work plan designed in accordance with Clause 1.7.3 of Australian Standard AS 2601-2001 – The Demolition of Structures, prepared by a suitably qualified person with suitable expertise or experience, shall be submitted to and approved by Council and shall include the identification of any hazardous materials, method of demolition, precautions to be employed to minimise any dust nuisance and the disposal methods for hazardous materials.
- b. Prior to commencement of any works on the land, the demolition Contractor(s) licence details must be provided to Council.
- c. The handling or removal of any asbestos product from the building/site must be carried out by a NSW Work Cover licensed contractor irrespective of the size or nature of the works. Under no circumstances shall any asbestos on site be handled or removed by a non-licensed person. The licensed contractor shall carry out all works in accordance with NSW Work Cover requirements.
- d. An appropriate fence preventing public access to the site shall be erected for the duration of demolition works
- e. Immediately prior to the commencement of the demolition or handling of any building or structure that contains asbestos, the applicant shall request that the principal certifying authority attend the site to ensure that all appropriate safety measures are in place. The applicant shall also notify the occupants of the adjoining premises and Workcover NSW prior to the commencement of any works.

**30. Hoarding / Fence**

Prior to the commencement of any works, a hoarding or fence must be erected between the work site and a public place if the work involved in the development is likely to cause pedestrian or vehicular traffic in a public place to be obstructed or rendered inconvenient, or if the building involves the enclosure of a public place in accordance with Work Cover requirements.

The work site must be kept lit between sunset and sunrise if it is likely to be hazardous to persons in the public place.

A separate land use application under *Section 68 of the Local Government Act 1993* shall be submitted to and approved by Council prior to the erection of any hoarding on public land.



## **DEVELOPMENT REQUIREMENTS DURING CONSTRUCTION**

The following conditions of consent have been imposed to ensure that the administration and amenities relating to the proposed development comply with all relevant requirements. These conditions are to be complied with during the construction of the development on site.

### **31. Construction Work Hours**

All work on site shall only occur between the following hours:

Monday to Friday	7.00 am to 6.00 pm
Saturday	8.00 am to 5.00 pm
Sunday and public holidays	No Work.

### **32. Erosion and Sediment Control**

Erosion and sediment control measures shall be provided and maintained throughout the construction period, in accordance with the requirements of the manual – Soils and Construction (2004) (Bluebook), the approved plans, Council specifications and to the satisfaction of the principal certifying authority. The erosion and sedimentation control devices shall remain in place until the site has been stabilised and revegetated.

**Note: On the spot penalties up to \$8,000 will be issued for any non-compliance with this requirement without any further notification or warning.**

### **33. Work Zones**

All loading, unloading and other activities undertaken during construction shall be accommodated on the development site.

Where it is not practical to load, unload or undertake specific activities on the site during construction, the provision of a 'Work Zone' external to the site may be approved by Council following an application being submitted to Council's Traffic Unit outlining the proposal for the work zone. The application is required to be made prior to the commencement of any works and is to include a suitable 'Traffic / Pedestrian Management and Control Plan' for the area of the work zone that will be affected. All costs of approved traffic/pedestrian control measures, including relevant fees, shall be borne by the applicant.

### **34. Excavation and Backfilling**

All excavations and backfilling associated with the approved works must be executed safely and in accordance with appropriate professional standards. All excavations must be properly guarded and protected to prevent them from being dangerous to life or property.

All groundwork preparation and excavation of the site is to extend only to the area required for building works depicted on the approved plans. All excess excavated material shall be removed from the site.

If an excavation associated with the approved works extends below the level of the base of the footings of a building on an adjoining allotment of land, the person causing the excavation to be made:

- Must preserve and protect the building from damage; and
- If necessary, must underpin and support the building in an approved manner, and
- Must at least 7 days before excavating below the level of the base of the footings of a building on an adjoining allotment of land, give notice of intention to do so to the owner of the adjoining allotment of land and furnish particulars of the excavation to the owner of the building being erected or demolished.

The owner of the adjoining allotment of land is not liable for any part of the cost of work carried out, whether carried out on the allotment of land being excavated or on the adjoining allotment of land.

**35. Dust Nuisance**

Measures shall be implemented to minimise wind erosion and dust nuisance in accordance with the requirements of the manual - 'Soils and Construction (2004) (Bluebook). Construction areas shall be treated/regularly watered to the satisfaction of the appointed Principal Certifier.

**36. Certification of Levels of Building during Construction**

Prior to the placement of any concrete of the basement/ground floor slab, the applicant shall submit to the appointed Principal certifier a qualified practicing surveyor's certificate showing that the formwork levels are in accordance with the approved plan.

**37. Excess Material**

All excess material is to be removed from the site. The spreading of excess material or stockpiling on site will not be permitted without prior written approval from Council.

**38. Unidentified Contamination/Unexpected Finds Protocol**

Any new information which comes to light during demolition or construction works which has the potential to alter previous conclusions about site contamination and remediation must be immediately notified to Council and the Principal Certifier in writing. A Section 4.55 application under the *EP&A Act* shall be made for any proposed works outside the scope of the approved development consent.

**39. Waste Classification and Disposal of any Contaminated Soil and Material**

All soils and material(s), liquid and solid, to be removed from the site must be analysed and classified by an appropriately qualified and certified consultant, in accordance with the Protection of the Environment Operations (Waste) Regulation 2014 and related guidelines, in particular the NSW EPA Waste Classification Guidelines, prior to off-site disposal.

All waste material(s) must be disposed of at an appropriately licensed waste facility for the specific waste. Receipts for the disposal of the waste must be submitted to the Principal Certifier within 30 days of the waste being disposed of. All waste must be transported by a contractor licenced to transport the specific waste, and in vehicles capable of carting the waste without spillage and meeting relevant industry guidelines.

**40. Public Safety**

Any works undertaken in a public place are to be maintained in a safe condition at all times in accordance with AS 1742.3. Council may at any time and without prior notification make safe any such works Council considers to be unsafe, and recover all reasonable costs incurred from the applicant.

**41. Associated Works**

The applicant shall undertake any works external to the development, that are made necessary by the development, including additional road and drainage works or any civil works directed by Council, to make a smooth junction with existing work.

## **PRIOR TO THE ISSUE OF AN OCCUPATION CERTIFICATE**

The following conditions of consent must be complied with prior to the issue of an occupation certificate by the appointed Principal Certifier. All necessary information to comply with the following conditions of consent must be submitted with the application for an occupation certificate.

### **42. Section 73 Certificate**

Prior to the appointed Principal Certifier issuing an occupation certificate, a Section 73 Compliance Certificate under the *Sydney Water Act 1994* must be obtained from Sydney Water Corporation. Early application for the certificate is suggested as this can also impact on other services and building, driveway or landscape design.

Application must be made through an authorised Water Servicing Coordinator.

For help either visit [www.sydneywater.com.au](http://www.sydneywater.com.au) > Building and developing > Developing your Land > Water Servicing Coordinator or telephone 13 20 92.

The Section 73 Certificate must be submitted to the appointed Principal Certifier prior to the issue of an occupation certificate.

### **43. Completion of External Works Onsite**

Prior to the principal certifying authority issuing an occupation certificate, all external works, repairs and renovations detailed in the schedule of treatment/finishes, landscaping, driveways, fencing and retaining walls to be completed to the satisfaction of the principal certifying authority.

### **44. Final Inspection – Works as Executed Plans**

Prior to the appointed principal certifying authority issuing an occupation certificate, the applicant shall submit to Council two complete sets of fully marked up and certified work as executed plans in accordance with Council's Specification for Construction of Subdivisional Road and Drainage Works (as amended) and with the design requirements detailed in the Campbelltown (Sustainable City) DCP Volume 3 (as amended).

The applicant shall **also** submit a copy of the Works as Executed information to Council in an electronic format in accordance with the following requirements:

#### **Survey Information**

- Finished ground and building floor levels together with building outlines.
- Spot levels every 5m within the site area.
- Where there is a change in finished ground levels that are greater than 0.3.m between adjacent points within the above mentioned 5m grid, intermediate levels will be required.
- A minimum of 15 site levels.
- If the floor level is uniform throughout, a single level is sufficient.
- Details of all stormwater infrastructure including pipe sizes and types as well as surface and invert levels of all existing and/or new pits/pipes associated with the development.
- All existing and/or new footpaths, kerb and guttering and road pavements to the centre line/s of the adjoining street/s.
- The surface levels of all other infrastructure.

#### **Format**

- MGA 94 (Map Grid of Australia 1994) Zone 56 – Coordinate System
- All level information to Australian Height Datum (AHD)

*AutoCAD Option*

- The "etransmit" (or similar) option in AutoCAD with the transmittal set-up to include as a minimum:

Package Type - zip  
 File Format - AutoCAD 2004 Drawing Format or later  
 Transmittal Options - Include fonts

Include textures from materials

Include files from data links

Include photometric web files

Bind external references

The drawing is **not** to be password protected.

*MapInfo Option*

- Council will also accept either MapInfo Native format (i.e. .tab file) or MapInfo mid/mif.

All surveyed points will **also** be required to be submitted in a point format (x,y,z) in either an Excel table or a comma separated text file format.

**45. Public Utilities**

Prior to the appointed Principal Certifier issuing an occupation certificate, any adjustments to public utilities, required as a result of the development, shall be completed to the satisfaction of the relevant authority and at the applicant's expense.

**46. Council Fees and Charges**

Prior to the appointed Principal Certifier issuing an occupation certificate, the applicant shall obtain written confirmation from Council that all applicable Council fees and charges associated with the development have been paid in full. Written confirmation will be provided to the applicant following Council's final inspection and satisfactory clearance of the public area adjacent the site.

**FOOD CONSTRUCTION CONDITIONS**

The following conditions have been applied to ensure that all construction and fit-out of the food premises complies with the *Food Act 2003*, *Food Regulation 2015* Food Standards Code Australia and New Zealand and Australian Standard 4674-2004: Design, construction and fit-out of food premises.

**47. Construction**

The construction, fit-out and finishes of the food premises must be constructed in accordance with the *Food Act 2003*, *Food Regulation 2015*, Food Standards Code Australia and New Zealand and Australian Standard 4674-2004 Design, construction and fit-out of food premises.

**48. Food Premises Fit-Out Pre-Construction Meeting and Inspection**

Prior to any construction work commencing on the fit-out of the food premises, the applicant/builder/private certifier must contact Council's Environmental Health Officers on (02) 4645 4604 to arrange an onsite meeting to discuss the requirements of the fit out under this Consent.

Prior to the release of the occupation certificate, Council's Environmental Health Officer is to be contacted on (02) 4645 4604 to undertake an inspection of the premises to confirm compliance with this Consent, the *Food Act 2003*, *Food Regulation 2015*, Food Standards Code Australia and New Zealand and AS 4674-2004.

**49. Registration**

The premise is required to be registered with Council. Regular inspections will be carried out to ensure health standards are maintained. A business registration form is available on Council's website and must be completed and submitted to Council prior to the operation of the food business commencing (Food Safety Standard 3.2.2).

**50. Food Safety Supervisor**

Food businesses selling ready-to-eat potentially hazardous foods are required by law to appoint a Food Safety Supervisor that has undertaken food safety training at a registered training organisation approved by the NSW Food Authority.

**51. Floor Construction**

The floor construction within the food preparation area/s must be finished to a smooth, even non-slip surface, graded and drained to a floor waste (AS 4674-2004, Section 3.1).

**52. Floor Waste**

Floor wastes in food preparation and food service areas must be fitted with sump removable stainless steel baskets and grates (AS 4674-2004, Section 4.1.8).

**53. Coving**

Feather edge skirting and non-rebated coving is not permitted. Recessed coving must be provided at all intersections of the floor with the walls/plinths within all food preparation, service and storage areas. All coving must:

- a. Have a minimum concave radius of 25 mm; or
- b. Be tiled 50mm minimum in width and splayed at 45°.

The coving must be installed so as to be integral to the surface finish of both floor and wall in such a manner as to form a continuous, uninterrupted surface in accordance with Figure 3.1 and 3.2 of the Australian Standard (AS 4674-2004, Section 3.1.5).

**54. Penetrations/Service Lines**

INTEGRAL PENETRATIONS/SERVICE LINES - All service pipes, conduits and electrical wiring must be concealed in the floor, walls, plinths or ceiling (AS 4674-2004, Section 3.2.9).

EXTERNAL PENETRATIONS/SERVICE LINES - External service pipes and electrical conduit must be fixed on brackets so to provide at least 25 mm clearance between the pipe and adjacent vertical surface and 100 mm between the pipe or conduit and adjacent horizontal surfaces. Service pipes and electrical wiring must not be placed in the recessed toe space of plinths or of any equipment (AS 4674-2004, Section 3.2.9).

**55. Wall Requirements**

Cavity walls are not permitted. All walls in the food premises, including all new and existing partition walls, must be of solid construction and finished to a smooth, impervious surface that can be easily cleaned, as specified in Table 3.2 of AS 4674-2004. The finishing materials of the wall surfaces must provide an even surface, free of fixing screws, open joint spaces, cracks or crevices (AS 4674-2004, Section 3.2).

**56. Window Sills**

Window sills located within a food preparation area or food service area must be located 450 mm above the top of any bench or sink and tiled at a splayed angle of 45°.

**57. Ceiling Construction**

Drop-in panel style ceilings are not permitted in food preparation areas or over areas where open food is displayed, handled or served. The ceiling in the food premises must be constructed with a rigid, non-absorbent, smooth faced material free from open joints, cracks and crevices and be painted with a light coloured washable paint. The intersection of the walls and ceiling must be tight-jointed, sealed and dust proofed (AS 4674-2004, Section 3.2).

**58. Light Fittings**

All fluorescent light fittings must be fitted with a smooth faced diffuser. The light fittings must be either:

- a. Recessed so that the diffuser is flush with ceiling
- b. Designed to ensure that no horizontal surface exists which would allow dust and grease to accumulate (AS 4674-2004, Section 2.6.2).

**59. Hand Wash Basins**

Hand wash basins must be provided in all parts of the premises where open food is handled and in utensil/equipment washing areas. The hand wash basin is to be located and installed in such a way that they are not obstructed, are at bench height either permanently fixed to a wall, to a supporting frame or set in a bench top and is accessible from no further than 5 m away from any place where food handlers are handling open food (AS 4674-2004, Section 4.4).

The hand wash basin is to have a permanent supply of warm running potable water mixed to a temperature of at least 40°C and delivered through a single outlet. Disposable paper hand towels and soap must be provided and serviced from a dispenser adjacent to the hand wash basin. A waste receptacle for used towels must be provided (AS 4674-2004, Section 4.4).

**60. Dishwashing Machines**

The dishwashing/glass washing machine must be designed and able to operate in accordance with AS 4674-2004 and the Food Standards Code. All utensils and equipment must undergo a washing, sanitising and rinsing cycle. The sanitising rinse cycle must achieve a water temperature of 80°C for 2 minutes or 75°C for 10 minutes (AS 4674-2004, Section 4.1.6).

Appropriate ventilation must be provided over the dishwashing system and be designed and installed in accordance with Australian Standard 1668.2-2012: The use of ventilation and air conditioning in buildings - Part 2: Mechanical ventilation in buildings.

**61. Food Preparation Sink**

A food preparation sink is required where foods are prepared by immersion in water including for cleaning fruit or vegetables. All food preparation sinks must be used only for the preparation and cleaning of food. The sink is in addition to the hand basin and equipment wash sinks (AS 4674-2004, Section 4.1).

**62. Equipment Wash Sinks**

A double bowl wash sink must be installed and serviced with hot and cold water through a single outlet (AS4674-2004 - Section 4.1). The double bowl sink is in addition to the hand wash basin.

or

A triple bowl sink must be installed and serviced with hot and cold water through a single outlet where rinsing is required before or after sanitising e.g. wash, rinse, sanitise procedure or wash, rinse/sanitise, rinse procedure (AS 4674-2004, Section 4.1).

#### **63. Cleaner's Sink**

A cleaner's sink is to be installed in a location outside of the food preparation area and must be serviced with hot and cold water through taps fitted with hose connectors. (AS 4674-2004, Section 4.1.8).

#### **64. Tap Fittings**

Hot and cold wall mounted taps must be installed fitted with hose connectors and positioned at least 600 mm above the floor in a convenient and accessible location within the food preparation area and adjacent to the floor waste (AS 4674-2004, Section 4.1.8).

#### **65. Fittings and Fixtures**

All fixtures, fittings and equipment must be provided with smooth and impervious surfaces, free from cracks and crevices to enable easy cleaning (AS 4674-2004, Section 4).

All fittings and fixtures must be built into the wall and floor so to be free from joints, gaps and cavities to enable easy cleaning or alternatively, supported on one of the following in accordance with Table 4.5 of AS 4674-2004:

- Plinths must be an integral part of the floor, constructed of solid materials similar to the floor at least 75 mm in height and coved at the intersection with the floor. All plinths must have a smooth and impervious finish. All fittings and fixtures must be properly sealed to the plinth so to be free from gaps, cracks and cavities.
- Fittings and fixtures can be supported on wheels or castors. The wheels and castors must be capable of supporting and easily moving a full loaded fitting. All wheels and castors must be provided with a restraining device.
- Fittings and fixtures can be supported on legs but must be constructed of non-corrosive, smooth metal or moulded plastic. All legs must be free from cracks and crevices. All legs must have a clearance space between the floor and the underside of the fitting of at least 150 mm.

False bottoms under fittings are not permitted (AS 4674-2004, Sections 4.2 and 4.3).

#### **66. Food Preparation Benches**

All food preparation benches must be constructed of stainless steel. All food contact surfaces are to be smooth, continuous and flush so as to avoid any exposed screw fixtures.

#### **67. Benches**

The top and exposed edges of all benches and counters must be finished in a smooth and non-absorbent material, free of joints, cracks and crevices (AS 4674-2004, Section 4.2).

#### **68. Storage Cabinets/Cupboards**

All storage cabinets/cupboards (internal and external surfaces) must be finished in a smooth and non-absorbent material that is free of joints (AS 4674-2004, Section 4.2).

**69. Shelving**

All shelving must be located at least 25 mm off the wall or alternatively, the intersection of the shelf and the wall is to be completely sealed. All shelving must be constructed at least 150 mm from the floor level (AS 4674-2004, Section 4.2).

**70. Food Storage**

Any appliance used for the storage of hot and/or cold food must be provided with a numerically scaled indicating thermometer or recording thermometer accurate to the nearest degree Celsius or an alarm system for continuous monitoring of the temperature of the appliance.

**71. Condensation Collection**

Condensation from refrigeration units, freezer units and coffee machines must be directed to a tundish, installed in accordance with Sydney Water requirements (Food Standards Code 3.2.3).

**72. Mechanical Exhaust Ventilation**

A food premises must be provided with a kitchen exhaust hood complying with Australian Standard 1668.2-2012: The use of ventilation and air conditioning in buildings - Part 2: Mechanical ventilation in buildings and where applicable, Australian Standard 1668.1-1998: The use of ventilation and air conditioning in buildings - Fire and smoke control in multi-compartment buildings, where:

- a. Any cooking apparatus has:
  - i. A total maximum electrical power input exceeding 8 kW
  - ii. A total gas power input exceeding 29 MJ/h
- b. The total maximum power input to more than one apparatus exceeds:
  - i. 0.5 kW electrical power
  - ii. 1.8 MJ gas per m<sup>2</sup> of floor area of the room or enclosure; or
- c. Any deep fryer.

Documentation from a mechanical engineer certifying that the mechanical ventilation system, as installed, complies with the AS/NZS 1668.1:1998 and 1668.2-2012, must be provided to the certifying authority prior to the issue of an Occupational Certificate.

**73. Pest Protection**

Flyscreens and/or other approved means of excluding the entry of pests must be provided to all window and door openings in accordance with Section 2.1.5 of AS 4674-2004.

Where pipe work, drains, cables and ducts penetrate walls, ceilings and roofs, holes must be sealed, filled and finished to prevent the entry of pests.

Spaces between adjoining structures, such as between cool room walls and premises walls, must be accessible for inspection and cleaning or sealed with a suitable compound so that they are inaccessible to pests. Spaces between the top surface of equipment or structures, such as cool rooms, must be accessible for inspection and cleaning or sealed/boxed in so that they are inaccessible to pests.



**74. Toilet Facilities and Hand Basins**

A toilet for staff must be provided for the premises. The toilet cubicle must be separated from areas where open food is handled, displayed or stored by one of the following:

- a. An intervening ventilated space fitted with self-closing doors
- b. Self-closing doors and mechanical exhaust systems that operate when the sanitary compartment is in use for at least 30 seconds after the cubicle is vacated (AS 4674-2004, Section 5.2).

Toilets intended for customer use must not be accessed through areas where open food is handled, displayed or stored.

A hand basin must be located within the toilet cubicle. The basin must be freestanding, serviced with hot and cold water through a single outlet, able to be mixed to a temperature of at least 40°C and fitted with a hands-off type tap set (AS 4674-2004, Section 4.4). The basin must be provided with soap and disposable paper towels from a dispenser.

**75. Locker Storage for Staff Belongings and Equipment**

Sufficient lockers must be provided in the food preparation area or store room specifically for the storage of cleaning materials, employees' clothing and personal belongings (AS 4674-2004, Section 5.1).

**76. Meter Box**

An approved non-absorbent, smooth faced cover must be provided over the meter box. The cover is to be splayed at an angle of 45 degrees to the wall at the top and made tight fitting to the wall surfaces.

**77. Roller Door**

The drum of a roller door situated in the food preparation area must be enclosed in a frame, sheeted with compressed cement with a smooth and sealed finish. The enclosure must be accessible for pest control inspection and maintenance (AS 4674-2004, Section 2.1.5).

**78. Hot Water Service**

The hot water service must be positioned at least 75 mm clear of the adjacent wall surfaces, and mounted at a minimum 150 mm above the floor level on a non-corrosive metal stand. The hot water system must be of adequate size to enable a sufficient amount of hot water to all washing facilities throughout the working day (AS 4674-2004, Section 4.3).

Any hot water service to be installed shall be an energy efficient hot water unit.

**79. Smoke Free Areas**

Any enclosed eating area must be smoke free. Smoking is not permitted in all outdoor eating areas. "No Smoking" signs must be displayed within the eating areas to ensure all patrons comply with this requirement (*Smoke Free Environment Act 2000*). Please refer to NSW Health website for further information <http://www.health.nsw.gov.au>

**80. Construction of the Waste Storage Areas and Rooms**

The waste storage area/room must be provided with smooth and impervious surfaces (walls and floors) and coved at the intersection of the floor and walls. Floor areas must be graded and drained to a floor waste gully connected to the sewer. Waste storage rooms must be well ventilated and proofed against pests. The area or room must be provided with water service hose connectors to enable easy cleaning.

Open waste storage areas must be appropriately covered and bunded to avoid stormwater entering the sewer. The ground areas must be paved with impervious material and must be graded and drained to a waste water disposal system according to Sydney Water's requirements. A hose tap connected to a water supply must be provided (AS 4674-2004, Section 2.4).

#### **81. Waste and Recycling Storage, Collection and Disposal**

All waste and recycling generated from the business are to be kept within an appropriate storage receptacle on the premises. Waste is not to be stored or placed outside of a waste storage receptacle or in such a manner that it will become a litter, odour or health nuisance.

Waste bins that are placed out on a public place for collection must only be placed out for collection on the day of the collection after 6.00 pm and must be removed by 8.00 am the following day. Any residual waste left on the public place as a result of bin placement must be removed within undue delay by the business operator.

#### **82. Store Room**

The storeroom must be constructed in accordance with AS 4674-2004 by providing the following:

- a. A smooth, even and non-slip floor surface
- b. Walls must be provided with a smooth, even surface and painted with a light coloured washable paint to enable easy cleaning in accordance with Table 3.2 of AS 4674-2004
- c. The ceiling must be constructed with a rigid, non-absorbent, smooth faced material free from open joints, cracks and crevices and be painted with a light coloured washable paint. The intersections of the walls and ceiling must be tight-jointed, sealed and dustproof (AS 4674-2004, Section 3.2)
- d. Shelving or storage racks must be designed and constructed to enable easy cleaning
- e. Appropriate ventilation must be provided (ducted to the external air) within the store room to allow for the escape of heat and odour that can be produced from refrigeration and freezer motor units.

#### **83. Odour and Noise Control**

No odour nuisance, to the public or any adjoining premises, shall be created by the operation of any plant or equipment or any procedures carried out at the premises.

No noise nuisances shall be caused through the operation of any plant or equipment at the premises. Noise generated from the premises must not exceed the limits as specified in the NSW Industrial Noise Policy.

#### **84. Changes to the Food Act 2003 and AS4674:2004 Design, construction and fit-out of food premises.**

The provisions of the Food Act 2003 and Australian Standards 4674:2004 *Design, construction and fit-out of food premises* may change over time and irrespective of this condition compliance with this Act, Regulations, Australian Standards and other standards adopted under the Food Act (as amended) are mandatory.

**ADVISORY NOTES**

The following information is provided for your assistance to ensure compliance with the Environmental Planning and Assessment Act 1979, Environmental Planning and Assessment Regulation 2000, other relevant Council Policy/s and other relevant requirements. This information does not form part of the conditions of development consent pursuant to Section 4.17 of the Act.

**Advice 1. Environmental Planning and Assessment Act 1979 Requirements**

The Environmental Planning and Assessment Act 1979 requires you to:

- a. Obtain a construction certificate prior to the commencement of any works. Enquiries regarding the issue of a construction certificate can be made to Council's Customer Service Centre on 4645 4608.
- b. Nominate a Principal Certifier and notify Council of that appointment prior to the commencement of any works.
- c. Give Council at least two days notice prior to the commencement of any works.
- d. Have mandatory inspections of nominated stages of the construction inspected.
- e. Obtain an occupation certificate before occupying any building or commencing the use of the land.

**Advice 2. Tree Preservation Order**

To ensure the maintenance and protection of the existing natural environment, you are not permitted to ringbark, cut down, top, lop, remove, wilfully injure or destroy a tree outside three metres of the building envelope unless you have obtained prior written consent from Council. Fines may be imposed if you choose to contravene Council's Tree Preservation Order.

A tree is defined as a perennial plant with self supporting stems that are more than three metres or has a trunk diameter more than 150mm measured one metre above ground level, and excludes any tree declared under the *NSW Biosecurity Act 2015* or included within the NSW Governments Greater Sydney Strategic Management Plan 2017-2022.

**Advice 3. Provision of Equitable Access**

Nothing in this consent is to be taken to imply that the development meets the requirements of the *Disability Discrimination Act 1992* (DDA1992) or *Disability (Access to Premises – Buildings) Standards 2010* (Premises Standards).

Where a Construction Certificate is required for the approved works, due regard is to be given to the requirements of the *Building Code of Australia* (BCA) & the Premises Standards. In this regard it is the sole responsibility of the certifier, building developer and building manager to ensure compliance with the Premises Standards.

Where no building works are proposed and a Construction Certificate is not required, it is the sole responsibility of the applicant and building owner to ensure compliance with the DDA1992.

**Advice 4. Covenants**

The land upon which the subject building is to be constructed may be affected by restrictive covenants. Council issues this approval without enquiry as to whether any restrictive covenant affecting the land would be breached by the construction of the building, the subject of this permit. Persons to whom this permit is issued rely on their own enquiries as to whether or not the building breaches any such covenant.

**Advice 5. Adjustment to Public Utilities**

Adjustment to any public utilities necessitated by the development is required to be completed prior to the occupation of the premises and in accordance with the requirements of the relevant Authority. Any costs associated with these adjustments are to be borne by the applicant.

**Advice 6. Salinity**

Please note that Campbelltown is an area of known salinity potential. As such any salinity issues should be addressed as part of the construction certificate application. Further information regarding salinity management is available within *Campbelltown (Sustainable City) DCP - Volumes 1 and 3 (as amended)*.

**Advice 7. Asbestos Warning**

Should asbestos or asbestos products be encountered during construction or demolition works you are advised to seek advice and information prior to disturbing the material. It is recommended that a contractor holding an asbestos-handling permit (issued by Work Cover NSW), be engaged to manage the proper disposal and handling of the material. Further information regarding the safe handling and removal of asbestos can be found at:

[www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)  
[www.nsw.gov.au/fibro](http://www.nsw.gov.au/fibro)  
[www.adfa.org.au](http://www.adfa.org.au)  
[www.workcover.nsw.gov.au](http://www.workcover.nsw.gov.au)

Alternatively, call Work Cover Asbestos and Demolition Team on 8260 5885.

**Advice 8. Rain Water Tank**

It is recommended that water collected within any rainwater tank as part of the development be limited to non-potable uses. NSW Health recommends that the use of rainwater tanks for drinking purposes not occur where a reticulated potable water supply is available.

**Advice 9. Smoke Free Environment Act**

Nothing in this consent is to be taken to imply that the development meets the requirements of the *Smoke Free Environment Act 2000* (SFEA2000) or the *Smoke Free Environment Regulations 2007* (SFER2007). In the event that the occupier wishes to facilitate smoking within any enclosed public place of the premises (in accordance with clause 6 of the SFER2007), the occupier must first contact NSW Department of Health to ensure that the design and construction of the area proposed to facilitate smoking fully complies with the requirements of the SFEA2000 and the SFER2007.

**Advice 10. Dial before you Dig**

Underground assets may exist in the area that is subject to your application. In the interests of health and safety and in order to protect damage to third party assets please contact Dial before you dig at [www.1100.com.au](http://www.1100.com.au) or telephone on 1100 before excavating or erecting structures (This is the law in NSW). If alterations are required to the configuration, size, form or design of the development upon contacting the Dial before you dig service, an amendment to the development consent (or a new development application) may be necessary. Individuals owe asset owners a duty of care that must be observed when working in the vicinity of plant or assets. It is the individual's responsibility to anticipate and request the nominal location of plant or assets on the relevant property via contacting the Dial before you dig service in advance of any construction or planning activities.

**Advice 11. Telecommunications Act 1997 (Commonwealth)**

Telstra (and its authorised contractors) are the only companies that are permitted to conduct works on Telstra's network and assets. Any persons interfering with a facility or installation owned by Telstra is committing an offence under the Criminal Code Act 1995 (Cth) and is liable for prosecution.

Furthermore, damage to Telstra's infrastructure may result in interruption to the provision of essential services and significant costs. If you are aware of any works or proposed works which may affect or impact on Telstra's assets in any way, you are required to contact: Telstra's Network Integrity Team on phone number 1800 810 443.

**Advice 12. Historic Archaeology**

As required by the *Heritage Act 1977* in the event that historical relics are encountered/discovered where they are not expected, works must cease immediately and Council and the NSW Heritage Division must be notified of the discovery.

In the event that archaeological resources are encountered, further archaeological work may be required before works can re-commence, including the statutory requirement under the *Heritage Act 1977* to obtain the necessary approvals/permits from the NSW Heritage Division.

Note: The *Heritage Act 1977* impose substantial penalty infringements and/or imprisonment for the unauthorised destruction of archaeological resources, regardless of whether or not such archaeological resources are known to exist on the site.

Aboriginal Cultural Heritage – Staff and Contractors

All relevant on-site staff and contractors should be made aware of their statutory obligations for heritage under *National Parks and Wildlife Act 1974* and the *Heritage Act 1977*.

Aboriginal Cultural Heritage – Unexpected Finds

As required by the *National Parks and Wildlife Service Act 1974* in the event that Aboriginal cultural heritage objects or deposits are encountered/discovered where they are not expected, works must cease immediately and Council and the Office of Environment and Heritage (OEH) must be notified of the discovery.

In the event that archaeological resources are encountered, further archaeological work may be required before works can re-commence, including the statutory requirement under the *National Parks and Wildlife Service Act 1974* to obtain the necessary approvals/permits from the OEH.

Note: The *National Parks and Wildlife Service Act 1974* impose substantial penalty infringements and/or imprisonment for the unauthorised destruction of archaeological resources, regardless of whether or not such archaeological resources are known to exist on the site.

Skeletal Remains

In the event that skeletal remains are uncovered, work must cease immediately in that area and the area secured. NSW Police must be contacted and no further action taken until written advice has been provided by the NSW Police. If the remains are determined to be of Aboriginal origin, the Office of Environment and Heritage must be notified by ringing the Enviroline 131 555 and a management plan prior to works re-commencing must be developed in consultation with relevant Aboriginal stakeholders.

**END OF CONDITIONS**



# Statement of Environmental Effects

## Proposed Indoor Cricket Centre Raby Sports Complex



Prepared for



January 2022



## TABLE OF CONTENTS

<b>1</b>	<b>INTRODUCTION</b>	<b>1</b>
1.1	Type of Development and Consent Authority	1
1.2	Specialist Information	1
<b>2</b>	<b>THE SITE &amp; ENVIRONS</b>	<b>3</b>
2.1	Location & Context	3
2.2	Legal Description and Zoning	3
2.3	Physical Characteristics	4
	2.3.1 Topography and Physical Conditions	4
	2.3.2 Existing Structures	4
	2.3.3 Flooding	6
	2.3.4 Drainage	6
	2.3.5 Site Geology	6
	2.3.6 Existing Vegetation	8
2.4	Access and Parking	8
	2.4.1 Pedestrian and Cycle Access	8
	2.4.2 Vehicular Access & Parking	8
2.5	Contamination	9
	2.5.1 Acid Sulfate Soil	9
<b>3</b>	<b>DESCRIPTION OF PROPOSED DEVELOPMENT</b>	<b>10</b>
3.1	Demolition and Bulk Earthworks	10
3.2	Built Form and Design	11
	3.2.1 ESD Design Initiatives	11
3.3	Landscape Treatment	11
3.4	Use and Operational Management	12
	3.4.1 Signage	12
3.5	Access, Loading and Parking	13
3.6	BCA Compliance	13
3.7	Accessibility	13
3.8	Utility Services	13
3.9	Demolition / Construction Phase	13
	3.9.1 Erosion and Sediment Control	14
	3.9.2 Waste Management	14
<b>4</b>	<b>SECTION 4.15 ASSESSMENT</b>	<b>16</b>
4.1	Environmental Planning and Assessment Act 1979	16
4.2	SEPP 55 – Remediation of Land	16
4.3	SREP 20 – Hawkesbury-Nepean River (No. 2 – 1997)	16
4.4	SEPP 64 – Advertising and Signage	17
4.5	Campbelltown LEP 2015	18
4.6	Campbelltown Development Control Plan 2015	19
4.7	Likely Impacts of the Development	22
	4.7.1 Construction Impacts	22
	4.7.2 Construction Traffic, Access and Parking	22
	4.7.3 Noise Impact	23
	4.7.4 Impact on Existing Vegetation	27
	4.7.5 Relationship to adjoining properties	27
	4.7.6 Safety and Security	29
4.8	Suitability of the Site	31
4.9	Submissions	31
4.10	The Public Interest	31
<b>5</b>	<b>CONCLUSION</b>	<b>32</b>





# 1 Introduction

This report has been prepared by Helen Mulcahy Urban Planning Pty Limited on behalf of Campbelltown City Council (the Applicant) to accompany a development application (DA) for a new indoor cricket centre at the Raby Sports Complex located on Raby Road. The DA is submitted to Campbelltown Council (Council) pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The application seeks approval for:

- Demolition of existing buildings and structures;
- Bulk earthworks;
- Removal of 12 existing trees;
- Construction of a purpose-built building for use as a an indoor cricket facility, including:
  - 1,268.5m<sup>2</sup> gross floor area;
  - six (6) Cricket Australia compliant indoor cricket nets;
  - change rooms and amenities;
  - kitchenette; and
  - equipment storage
- Landscape treatment (soft and hard landscape works) including planting of 23 new trees within the curtilage of the proposed building; and
- Associated stormwater works.

This report constitutes a Statement of Environmental Effects (SEE). It describes the site and environs, the proposed development and examines the proposal in terms of its compliance with the heads of consideration under Section 4.15 of the EP&A Act.

The Statement should be read in conjunction with the architectural drawing package prepared by Melocco and Moore, together with supporting technical information detailed in Section 1.2 of this Statement, all of which forms part of the DA documentation.

## 1.1 Type of Development & Consent Authority

The proposal is defined as *Local Development* and Council is the consent authority, based on an estimated capital investment value is in the order of \$3.46 million (i.e. less than \$5 million threshold for council DAs specified in Schedule 7 of State Environmental Planning Policy (State and Regional Development) 2011).

A QS Statement prepared by the Altus Group is included in the DA documentation.

## 1.2 Specialist Information

The following specialist information has been prepared to inform and support the development application:

Quantity Surveyors Report	Altus Group
Survey	ARP Registered Surveyors
Architectural Drawings (including Demolition Plan)	Melocco and Moore
Photomontage	Architectural Images
Arboricultural Impact Assessment	Green Spaces Consultancy
Preliminary Site Investigation	Douglas Partners
Geotechnical Investigation	Douglas Partners
BCA Assessment	Design Confidence





Accessibility Report  
Landscape Drawings  
Acoustic Assessment  
Cut and Fill Drawing  
Hydraulic Engineering  
Waste Management Plan

Design Confidence  
Campbelltown City Council  
Acoustic Logic  
Bligh Tanner  
Inline Hydraulic  
Melocco and Moore

Copies of these reports / plans are included as part of the DA documentation and have been used to inform this Statement.

## 2 The Site and Environs

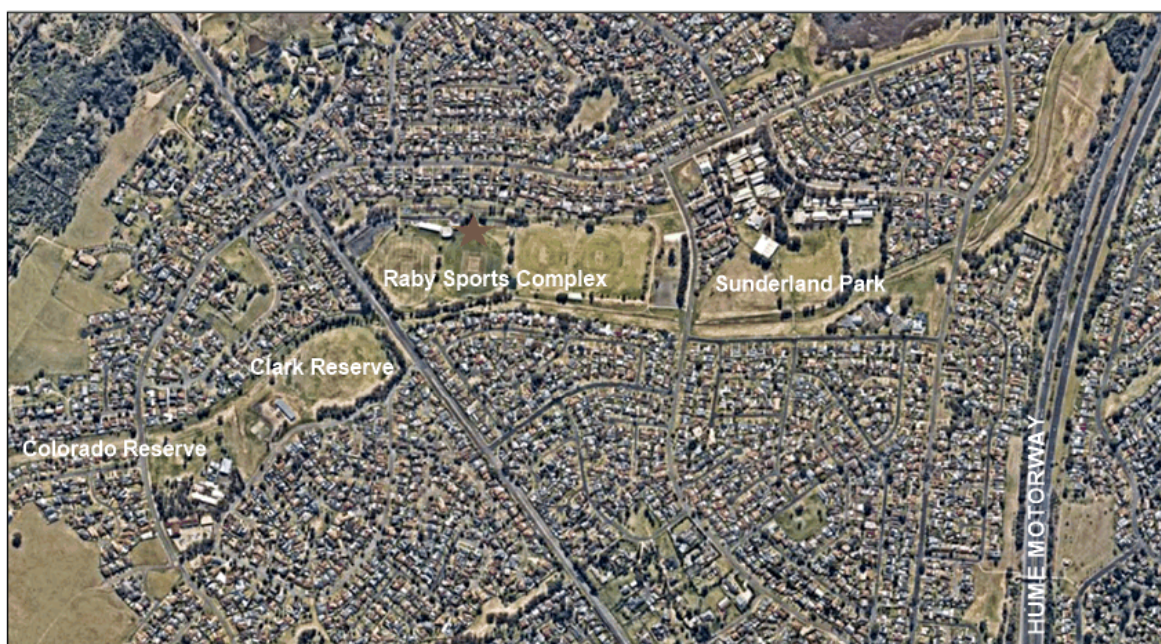
### 2.1 Location & Context

Raby Sports Complex is the largest sporting complex within the Campbelltown local government area (LGA) and provides a range of elite standard cricketing facilities. The land also provides an important local recreation facility including walking paths, children's playground and off-leash dog park.

The site is situated approximately 55km southwest of the Sydney CBD and approximately 12km north of Campbelltown CBD.

The Raby Sports Complex is part of a lineal series of public open spaces which roughly follows the alignment of Bunbury Curran Creek and includes (west to east) Colorado Reserve, Clark Reserve, Raby Sports Complex, and Sunderland Park.

**Figure 1** illustrates the location of the site.



**Figure 1** Aerial view illustrating site location and context (Source: NearMap)

Development in the vicinity comprises predominantly low density housing. The Hume Motorway is located approximately 1.2km to the east and the Raby neighbourhood shopping area is located some 1.5km to the south east, at the corner of Spitfire Drive and Hurricane Drive.

### 2.2 Legal Description and Zoning

The land comprising the Raby Sports Complex is legally described as Lot 1191 DP 263508 and Lot 103 DP 608294 and covers an area of approximately 15ha. The open space has a primary frontage to Raby Road of approximately 290 metres and Hurricane Drive of some 292 metres.

The registered owner of the land is Campbelltown City Council. The owner's consent to lodgement of the application is included in the supporting documentation.

Statement of Environmental Effects

**Proposed Indoor Cricket Centre – Raby Sports Complex**

3





**Figure 2** Location and approximate extent of proposed development (Source: NearMap (base image))

## 2.3 Physical Characteristics

### 2.3.1 Topography & Physical Conditions

The land comprising the car park, cricket pitches and the dog park is comparatively flat. The general topography of the surrounding area slopes gently towards the south east. The overall topographic relief is approx. 3 metres from the highest part of the site RL 66 (adjacent to the northern boundary) to the lowest part adjacent to the cricket oval at approximately RL 63.

A 3 metre wide shared pedestrian / cycle pathway runs east-west through along the higher ground connecting Raby Road to Hurricane Drive in the east and looping around the perimeter of the Raby Sports Complex.

### 2.3.2 Existing Structures

As can be seen from the photographs at **Figures 3** and **4**, the existing building is a simple single storey structure, sited immediately behind the sight screen on the second cricket oval. It has a series of roller shutter doors at the eastern end, where it interfaces with the outdoor cricket nets. A single roller shutter in the western elevation provides access to an equipment store and separate access doors to a change room and a toilet. Single doors in the north and south elevations provide fire egress and roller shutter doors in the southern elevation provide ventilation. The large roller shutter door in the eastern elevation provides additional run up space for bowlers.

The existing building occupies a footprint of approximately 365.6m<sup>2</sup>.





**Figure 3** Existing indoor cricket centre – northern elevation

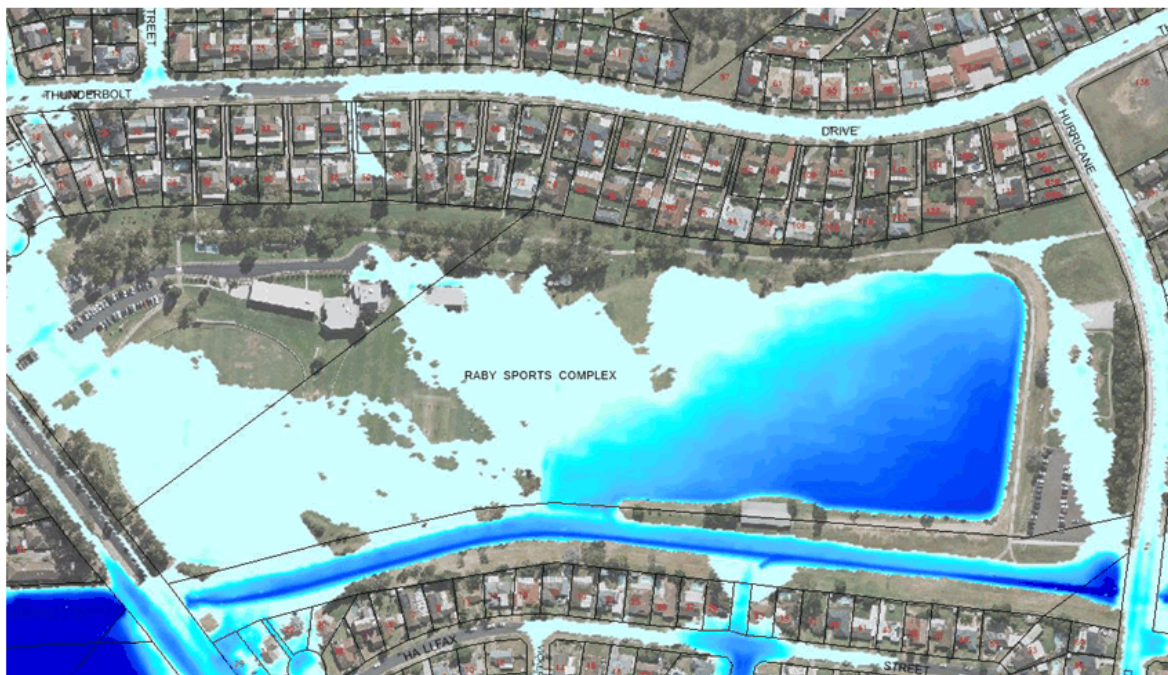


**Figure 4** Existing indoor cricket centre – western elevation



### 2.3.3 Flooding

Council has provided an extract from its flood mapping showing the extent of flooding in the 1% AEP (100 year ARI) event, see **Figure 5** below.



**Figure 5** Extract from flood mapping (Source: Campbelltown City Council)

Depth in the lower corner of the basin is about 1.4m in this event.

Event	Flood RL in basin (AHD)	Depth (m)
20% AEP	59.1	1.0
1% AEP	59.6	1.4
PMF	60.5	2.4

### 2.3.4 Drainage

InLine Hydraulic Services has undertaken an assessment of the existing stormwater drainage.

The stormwater system for the existing building consists of the roof draining to an eaves gutter on the northern side of the building. This gutter drains via downpipes to a stormwater system to the northern side of the building.

### 2.3.5 Site Geology

Douglas Partners has provided an update of its previous geotechnical investigations<sup>1</sup> dated April 2009. The previous investigations involved the drilling of 4 boreholes (BH01 to BH04), laboratory testing of samples, analysis and reporting. The report found:

<sup>1</sup> Douglas Partners Report on Geotechnical Investigation, Proposed Community Facilities Building, Raby Sports Complex, Raby dated 1 April 2009

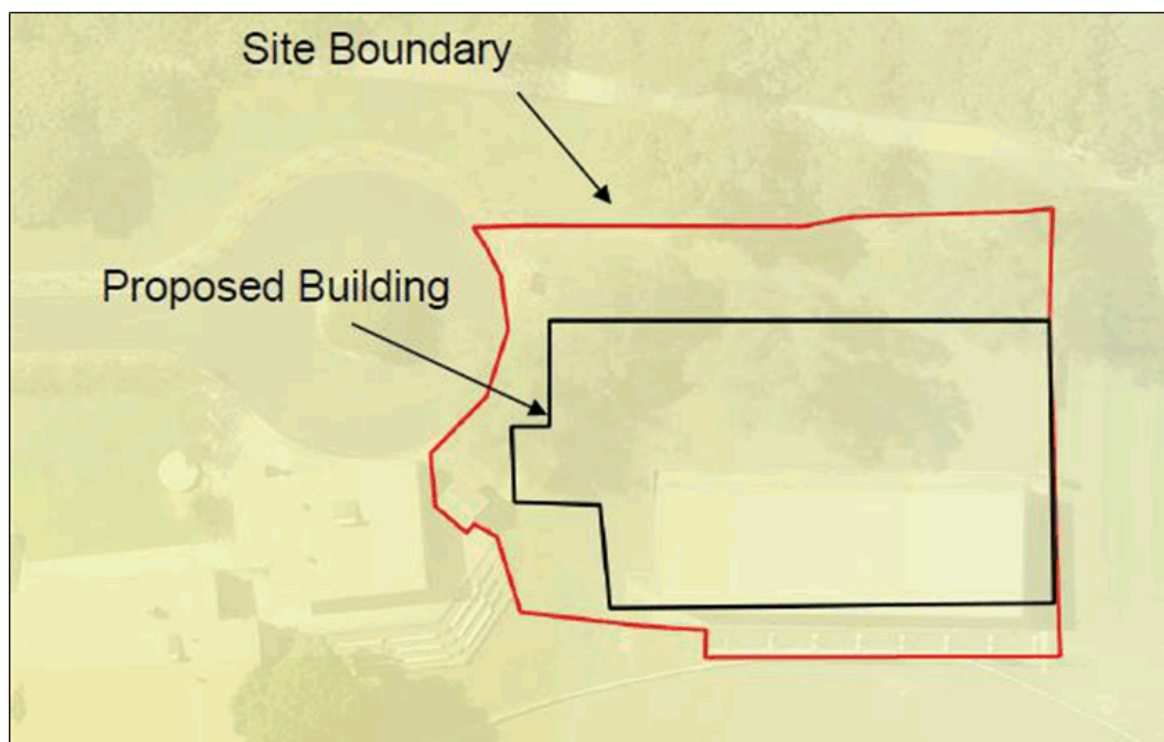
- Fill – of variable compaction and consistency to depths of 0.9 – 2.6 m. The fill typically comprised clay with some gravel;
- Clay – stiff to very stiff clay to depths of 2.4 – 7.9 m; and
- Rock – initially extremely low to very low strength shale and siltstone becoming at least low strength at refusal of the "tungsten carbide" bit at depths of 3.4 – 8.1 m. The recovered core from Bores 1 and 2 comprised high to very high strength siltstone and sandstone below depths of 6.7 m and continuing to the termination depth of 7.8 m and 8.7 m respectively.

Free groundwater was observed at depths of 4.2 m (RL 57.5) in BH 02 and 5.1 m (RL 57.2) in BH 04 whilst auger drilling. The water level in BH 04 rose to 4.3 m depth (RL 58.0) some 2 hours after completion of the bore. No free groundwater was observed whilst auger drilling in BH 01 and BH 03. It is noted that the bores were backfilled following completion of the drilling which precluded longer term groundwater monitoring. The use of water as a drilling fluid prevented groundwater observations whilst core drilling in BH 01 and BH 02.

Reference to the NSW Seamless Geological Series indicates that the site is underlain by Triassic Aged Bringelly Shale of the Wianamatta Group which typically comprises shale, carbonaceous claystone, claystone, laminate, fine to medium-grained lithic sandstone with occasional coal and tuff. Bringelly shale typically weathers to form clays of medium to high plasticity.

### Salinity

Reference to the Map of Salinity Potential in Western Sydney infers moderate salinity potential for the site. An extract from the mapping illustrating the approximate site boundary is shown in **Figure 6**. The mapping is based on soil type, surface level and general groundwater considerations and, as such are approximate only.



**Figure 6** Map of salinity potential – note: yellow designates Moderate Salinity Potential (Source: Douglas Partners)

Selected samples collected from the test locations were also tested in the laboratory for determination of aggressivity to concrete and steel, textural classification and salinity.



The results indicate that of the 5 samples tested for salinity:

- 4 samples were non-saline; and
- 1 sample was slightly saline.

Test results showing the aggressivity assessed by pH, resistivity, sulphate concentrations, and chloride concentration criteria (of AS 2159) at the test locations, together with the aggressivity class ranges indicated in Australian Standard AS 2159 are included in the Douglas Partners report. The results of the 5 samples tested indicate:

- 1 was mildly aggressive to concrete and 4 were non-aggressive to concrete; and
- 5 were non-aggressive to steel.

### 2.3.6 Existing Vegetation

Existing vegetation across the wider area of open space is largely confined to perimeter planting, with some mature trees located between Ovals 1 and 2.

There are fourteen (14) existing trees located within or adjacent to the footprint of the proposed development, as follows:

- 1 x Pepper Tree
- 3 x Evergreen Ash
- 7 x River She Oak
- 2 x Narrow-leafed Ironbark
- 1 x Port Jackson Fig

An Arboricultural Impact Assessment and Tree Management Plan has been prepared by Green Spaces Consultancy, a copy of which is included as part of the DA documentation.

## 2.4 Access and Parking

### 2.4.1 Pedestrian and Cycle Access

A footpath is provided on the western side of Raby Road (opposite the Raby Sports Complex). The footpath on the eastern side of Raby Road is fragmented and does not extend across the entire frontage of the Sports Complex, however the network of pedestrian / cycle paths provide connections through and between the various areas of lineal open space provide a high level of connectivity.

A pedestrian refuge is provided in the central median of Raby Road, approximately 50 metres north of the car park entry to the Sports Complex. This provides a connection between the residential area to the west and the pedestrian / cycle network through the Raby Sports Complex.

Pedestrian pathways from Cobra Place and Thunderbolt Drive also afford access to the open space and Sports Complex from the residential areas to the north of the site.

A pedestrian / cycle pathway circumnavigates the entire Sports Complex.

### 2.4.2 Vehicular Access & Parking

The Raby Sports Complex has frontage to Raby Road which is a two-way divided carriageway, with two-lanes in either direction. A 6 metre wide driveway provides vehicular access to / from the at grade car park which services the facility. The car park provides some 160 spaces.

An internal access driveway extends beyond the car park in an easterly direction providing service and maintenance vehicle access to the existing buildings within the Sports Complex.





## 2.5 Contamination

Douglas Partners has prepared a Preliminary Site Investigation for the proposed development. The objective of the investigation is to assess the potential for contamination at the site based on past and present land uses and to make a determination as to whether further investigation and / or management is required.

The report indicates that the site has historically be used for rural uses, most likely grazing since at least 1956 and was developed as public open space / sporting fields in the period between 1983 and 1990.

Significant soil disturbance, indicative of bulk earthworks and / or the placement of fill associated with the development of the parklands, was evident in the aerial image dated 1983. The existing sporting complex buildings appear to have been constructed some time between 2005 and 2011.

Four (4) test pits were installed across the site and soil samples were collected from encountered fill in three of these test pits. Contaminants of potential concern were not detected in any soil samples collected from the site at concentrations that represent an unacceptable human health or ecological risk.

Whilst the report indicates that the potential for encountering widespread contamination within the site is considered to be low, the potential for an unexpected find during future soil disturbance / excavation cannot be ruled out. Accordingly, the report recommends:

- (i) further investigation of deeper fill and within the post-demolition building footprint; and
- (ii) an unexpected finds protocol being prepared and implemented to provide a formal contingency to be followed in the event of an unexpected find of contaminated material.

The report further notes that any excess soil that is required to be disposed of off-site will require waste classification in accordance with the EPA Waste Classification Guidelines.

It is anticipated that the conclusions and recommendations of the Preliminary Site Investigation can be addressed as conditions of any consent which may be granted in respect of the DA.

### 2.5.1 Acid Sulfate Soil

The Douglas Partners report confirms that a review of Office of Environment and Heritage Acid Sulfate Soils Risk mapping indicates that the site is classified as having "*no known occurrence of acid sulfate soil*".

On this basis, no further investigation in relation to ASS has been undertaken





### 3 Description of Proposed Development

This section of the Statement should be read in conjunction with the Architectural drawing package prepared by Melocco and Moore which is included in the documentation that accompanies this DA.

The scope of works for which consent is sought includes:

- Demolition of existing buildings and structures;
- Bulk earthworks;
- Removal of 12 existing trees;
- Construction of a purpose-built building for use as a an indoor cricket facility, including:
  - 1,268.5m<sup>2</sup> gross floor area (comprising 1,165.2m<sup>2</sup> at ground floor and 103.3m<sup>2</sup> mezzanine);
  - six (6) Cricket Australia compliant indoor cricket nets;
  - change rooms and amenities;
  - kitchenette; and
  - equipment storage
- Landscape treatment (soft and hard landscape works) including planting of 23 new trees within the curtilage of the proposed building; and
- Associated stormwater works.

#### 3.1 Demolition and Bulk Earthworks

The DA seeks consent for the demolition of the existing building and structures on the site, including concrete pathways and other hardstand. The extent of proposed demolition is detailed in the Demolition Plan (Dwg No. 2103 D 003A) included in the Architectural drawing package prepared by Melocco and Moore.

The proposed development also seeks approval for earthworks which includes cuts in the order of 2-3 metres and localised fill, based on a design subgrade level of RL 61.84 m AHD.

#### Site Preparation

Earthworks will be required to construct a level building platform at the nominated design level for the proposed development and support of ground slabs. As a minimum, Douglas Partners has advised that site preparation works should allow for the following:

- Stripping of deleterious materials such as vegetation, organic topsoil and uncontrolled fill, and remove to stockpile for reuse or removal off site. Topsoil may be reused for landscaping only.
- Rolling the exposed surface with six passes of a minimum 12 tonne deadweight roller, followed by a further (test roll) pass at slow speed in the presence of a geotechnical consultant to detect soft or compressible zones. Where encountered, these compressible zones should be over-excavated and replaced with suitable material;
- Placing fill approved by the geotechnical consultant (where required to achieve design subgrade level) in maximum 250 mm thick compacted layers to at least 98% of standard maximum dry density (SMDD) with moisture contents maintained within 2% of standard optimum moisture content as measured in the standard compaction test;

All earthworks should be carried out in accordance with AS 3798 - 2007 Guidelines on Earthworks for Commercial and Residential Developments with inspection and testing carried out to a Level 1 standard as described in AS 3798.

#### Excavation

Based on a design subgrade level of 61.84 m AHD, Douglas Partners has anticipated limited excavation of say 2 – 3 metres within soils and bedrock of extremely low to very low strength. All uncontrolled fill, natural soils



and bedrock up to very low to low strength should be readily removed using a conventional medium sized excavator with a toothed bucket with some light ripping, or a D6 or equivalent dozer. Excavations in soil and weathered rock should include provision for temporary support using batters, benching or shoring.

Bligh Tanner has prepared a Cut and Fill Management Plan which is included as part of the DA documentation which indicates the project will require approximately 2,200m<sup>3</sup> of cut (no fill). It is noted that any off-site disposal of spoil will generally require assessment for re-use or classification in accordance with current *Waste Classification Guidelines* (NSW EPA, 2014).

The lower level northern and western walls of the proposed building will be constructed in core-filled reinforced blockwork, to Structural engineer's details. These walls will also act to retain the adjacent backfill from the landscaped slope behind the building.

### 3.2 Built Form and Design

The site of the proposed facility is located in a large expanse of public recreation space (Raby Sports Complex). Development in the vicinity comprises predominantly low density housing which dates from the 1980s and 1990s.

The existing zoning pattern is not expected to change in the foreseeable future and the proposed development has been designed in cognisance of the existing and the likely future site context.

The Cricket Centre has been designed to complement the existing adjoining buildings but brings a fresh, contemporary approach to the complex.

A dynamic saw-tooth roof structure breaks down the scale of the large building, whilst providing natural diffused light to interior of the facility. The staggered nature of the roof forms create an inviting entry sequence that is connected to the existing vehicular drop off. This upper level entry foyer and mezzanine overlooks the double height indoor training space.

An off-form concrete base ties the building into the existing concrete bleachers immediately to the west and base sections of adjacent buildings.

#### 3.2.1 ESD Design Initiatives

A range of design initiatives and elements have been employed to ensure the proposed development optimises its sustainability. These include:

- roof-mounted photovoltaic array
- wall and roof insulation
- installation of water efficient fittings and fixtures
- water efficient design
- energy efficient lighting and appliances
- a 10,000 litre capacity rainwater storage tank
- low maintenance, drought tolerant planting

In addition, the saw tooth roof allows for high level south-facing glazing, which diffuses natural light permeating the entire building. This in turn decreases the need for artificial light within the training centre.

A portion of this high-level glazing will be operable, allowing for natural ventilation in a venturi effect.

### 3.3 Landscape Treatment

The proposed development includes areas of landscaping, as illustrated in the Landscape drawing package prepared by Campbelltown City Council which is included in the DA documentation. The landscape design includes areas of hardscape and softscape surrounding the proposed built form.

The proposed design aims to provide a high quality landscape that enhances the amenity of the site and locality.

The landscape treatment responds to the need to replace those trees proposed to be removed as a result of the proposed development whilst creating an attractive landscape setting that maintains visual access and clear sight lines in and around the building.

Key design features of the landscape treatment include:

- installation of a feature planter with seating in the entry plaza to the facility;
- use of predominantly indigenous and native plant species with low water requirements;
- creation of shade through the use of native tall and open canopy trees;
- utilisation of water collected on-site for irrigation; and
- wood bark mulching to all planting areas.

### 3.4 Use and Operational Management

The proposed development is for the construction and operation of an indoor cricket centre. The facility will be in operation between 4.00pm and 10.00pm Monday to Friday and between 8.00am and 6.00pm on Saturday and Sunday.

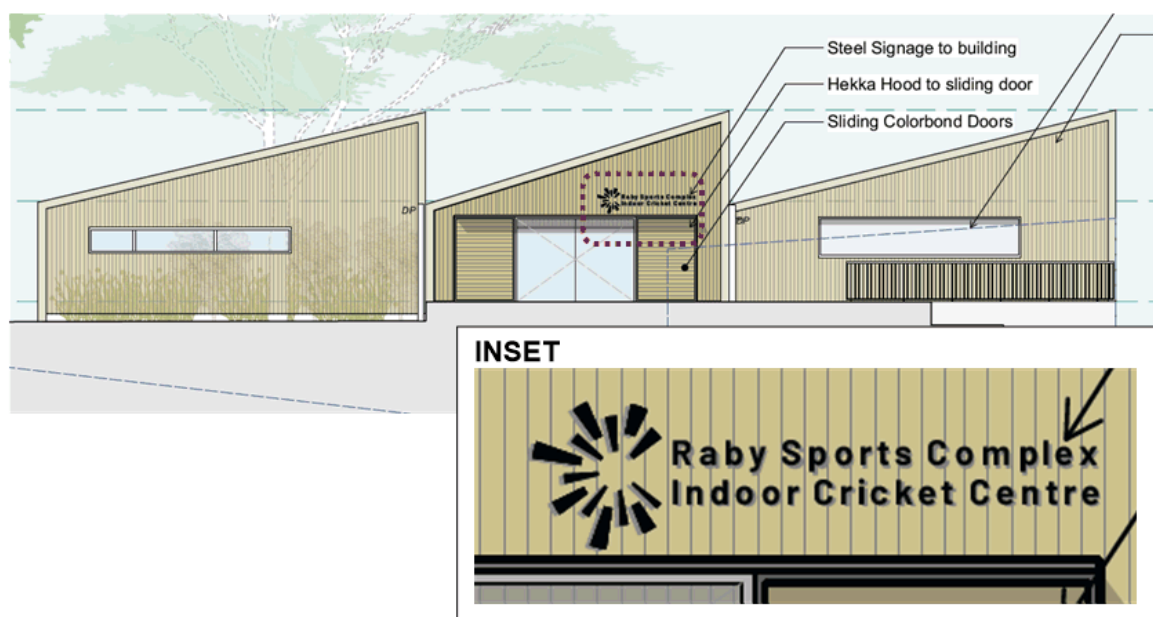
The facility includes 6 lanes of active pitches, a first floor mezzanine and associated amenities.

No permanent staff will be based in the indoor cricket centre.

It is anticipated that the facility can accommodate up to 60 participants and a number of additional spectators. These spectators will be located principally of the upper level mezzanine.

#### 3.4.1 Signage

Building identification signage will be installed above the main entry, in the western elevation of the building, as illustrated in **Figure 7** below.



**Figure 7** Western elevation illustrating building identification signage (Source: Melocco & Moore)



The signage comprises steel lettering in the corporate font (Barlow) which will be affixed directly to the wall of the proposed building. The proposed signage is consistent with the *Campbelltown Brand Guidelines 2020*.

An assessment against the relevant provisions of SEPP 64 is included at Section 4.3 of this Statement.

### **3.5 Access, Loading and Parking**

The proposed development will not result in any changes to the existing vehicle access, loading arrangements or on-site parking provision at the Raby Sports Complex.

### **3.6 BCA Compliance**

Design Confidence has undertaken an assessment of the architectural drawings against the relevant provisions of the BCA Volume 1, edition 2019 (Amendment 1). The assessment confirms that the proposed development is capable of complying with the performance provisions of the BCA.

The report notes that compliance would be achieved via the relevant deemed-to-satisfy requirements as outlined within the BCA without significant changes required to the proposed design. The following areas require further review as the project moves into detailed design documentation:

- Discharge from the building exits (D1.10)
- Fire fighting equipment (E1.3, E1.4 and E1.6)
- Weatherproofing (F1.1)

The report also identifies opportunities for performance-based design solutions developed in consultation with a fire safety engineer, which could be pursued as part of detailed design development.

A copy of the assessment is included in the documentation accompanying the DA.

### **3.7 Accessibility**

Design Confidence has prepared an Access Design Assessment which examines the proposed development in the context of the accessibility provisions of the Building Code of Australia (BCA).

The report concludes that the design is capable of meeting the relevant access and adaptability requirements of the National Construction Code – Building Code of Australia Volume 1, Edition 2019 and acknowledges that further assessment will be required during design development.

The report further notes that compliance can be achieved either by meeting the deemed-to-satisfy requirements of the BCA, as are principally contained within Parts D3, E3.6, F2.4 and F2.9, or via a performance-based approach.

A copy of the Accessibility report is included in the DA documentation.

### **3.8 Utility Services**

The proposed development will be connected to the available services including electricity, water, sewer and telecommunications to the site in accordance with the requirements of the relevant service providers.

### **3.9 Demolition / Construction Phase**

A Construction Management Plan (CMP) will be prepared by the contractor engaged to undertake the works. The CMP will outline the methods and procedures to be implemented to manage construction activities so as to ensure that the works do not result in the generation of unacceptable levels of environmental or community disturbance over the life of the works.





The procedures that will be implemented to manage the possible impact of construction activities on the surrounding area, including:

- location and construction of protective fencing / hoardings to the perimeter of the site;
- location of site storage areas / sheds / equipment;
- location of building materials for construction;
- provisions for public safety;
- dust control measures;
- details of methods of disposal of demolition materials;
- protective measures for tree preservation;
- provisions for temporary sanitary facilities;
- location and size of waste containers/bulk bins;
- details of proposed sediment and erosion control measures;
- construction noise and vibration management; and
- construction traffic management plan which will detail:
  - ingress and egress of vehicles to the site;
  - number and frequency of vehicles accessing the site;
  - the times vehicles are likely to be accessing the site;
  - management of loading and unloading of materials;
  - management of construction traffic and parking demand;
  - management of existing vehicular and pedestrian movements / routes around the site.

### 3.9.1 Erosion and Sediment Control

Erosion and sediment controls will be installed and will remain in place for the duration of the works to manage the quality of stormwater discharge from the site and ensure that no sediment can enter any waterways in the vicinity or disrupt the drainage system.

The range of measures may include, but not necessarily limited to:

- Sediment control fences around stockpiles and construction zones where soils are exposed;
- Sediment traps;
- Diversion bunds to collect construction site runoff and convey flows around the work site;
- Shaker grid and wash down areas at vehicle entry points; and
- Sediment basins as required during site filling works to prevent sediment runoff into the existing drainage swale.

Full details of erosion and sediment control measures, including dust control measures will be included in the Construction Management Plan which will be prepared by the contractor engaged to undertake the works. Notwithstanding a draft Erosion and Sediment Control Plan has been included in the Hydraulic drawing package prepared by InLine Hydraulic Services.

### 3.9.2 Waste Management

#### 3.9.2.1 Construction Waste

Melocco and Moore has prepared a Waste Management Plan for the construction / demolition phase of the proposed development. The report has been prepared having regard to Council's requirements for waste management.

Waste generated during the demolition / construction phase will comprise:

- building materials from the demolition of the existing shed structures;
- vegetation waste and soil from excavation;
- materials such as concrete, steel, and packaging.



Receptacles for waste / recyclables will be leased to the site contractor by the waste service provider as required.

As a construction contractor has not yet been appointed (that would normally determine estimates of construction and demolition waste), estimates of waste generation have been calculated based on the project cost estimates plan, using standard waste density calculations to derive volumes and a standard wastage percentage.

A copy of the Waste Management Plan prepared by Melocco and Moore is included in the documentation submitted as part of the DA. However it should be noted that a detailed plan will be prepared for inclusion in the CMP prepared by the Contractor.

### **3.9.2.1 Operational Waste**

The proposed development will be serviced by the existing Council waste collection for the Raby Sports Complex.

A waste room is not proposed as part of this development. In this regard the existing Sports Complex waste storage management system will be utilised.



## 4 Section 4.15 Assessment

### 4.1 Environmental Planning and Assessment Act 1979

Matters to be considered when determining development applications are set out in Section 4.15 of the *Environmental Planning and Assessment Act 1979*. The proposal has been assessed in accordance with these matters, as set out in the following sections of this Statement.

Section 4.15(1)(a) of the EP&A Act requires the consent authority to take into consideration:

- (a) *the provisions of:*
- (i) *any environmental planning instrument, and*
  - (ii) *any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and*
  - (iii) *any development control plan, and*
  - (iiia) *any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and*
  - (iv) *the regulations (to the extent that they prescribe matters for the purposes of this paragraph),*
  - (v) *(Repealed)*

*that apply to the land to which the development application relates,*

The primary statutory documents that relate to the subject site and the proposed development are discussed in the following sections of the Statement.

### 4.2 SEPP 55 – Remediation of Land

SEPP 55 seeks to promote the remediation of contaminated land in order to reduce risks to human health and the environment. Where land is contaminated, SEPP 55 requires that it be suitably remediated prior to any development occurring on that land. The SEPP contains provisions relating to the level of remediation required, and the consent mechanisms in relation to the remediation works.

As described in Section 2.5 of this Statement a Preliminary Site Investigation undertaken by Douglas Partners indicated that the potential for widespread contamination from fill at the site is considered to be low and the site is suitable for the proposed indoor cricket centre development.

Notwithstanding the low likelihood of contamination, the report does include a number of recommendations, as set out below, which it is anticipated can be included as conditions of any consent granted in respect of the DA:

- (i) further investigation of deeper fill and within the post-demolition building footprint; and
- (ii) an unexpected finds protocol being prepared and implemented to provide a formal contingency to be followed in the event of an unexpected find of contaminated material.

The report further notes that any excess soil that is required to be disposed of off-site will require waste classification in accordance with the EPA Waste Classification Guidelines.

Having regard to the above, it is considered that the site is suitable for the proposed use.

### 4.3 SREP 20 – Hawkesbury-Nepean River (No.2 – 1997)

The subject land falls within the boundary of SREP No. 20. This Policy aims "to protect the environment of the Hawkesbury-Nepean River system by ensuring that the impacts of future land uses are considered in a regional



*context*". SREP No. 20 requires the consent authority to assess development applications with regard to the general and specific considerations, policies and strategies set out in the Policy. These include total catchment management, environmentally sensitive areas, flora and fauna, wetland management and water quality and quantity.

No detrimental impacts upon the Hawkesbury-Nepean River system are anticipated as a result of the proposed development, as it will be subject to the implementation of suitable sediment and erosion controls and water management measures which will mitigate any potential adverse impacts during the construction and operational phases on natural watercourses and ultimately the Hawkesbury – Nepean River system.

### 4.3 SEPP 64 – Advertising and signage

As described in Section 3.4.1 of this Statement, the proposed building identification signage comprises steel lettering in 'Barlow' font affixed directly to the external wall of the building, above the main entry in the western elevation.

The proposal has also been assessed against the relevant provisions of SEPP 64, as set out in the table below.

Clause	Comments	Compliance
<b>3. Aims and Objectives</b> <ul style="list-style-type: none"> <li>Compatible with desired amenity and visual character of an area;</li> <li>Provides effective communication in suitable locations; and</li> <li>Is of high quality design and finish</li> </ul>	<p>The proposed building identification signage is consistent with the <i>Campbelltown Brand Guidelines 2020</i></p> <p>The signage will not protrude above the roofline of the proposed building and will not adversely impact the scenic quality of the visual catchment of the public or private domain.</p>	✓
<b>8. Granting of consent to signage</b> Consent authority must be satisfied that the signage: <ul style="list-style-type: none"> <li>is consistent with the objectives of this Policy;</li> <li>satisfies the assessment criteria in Schedule 1 of the Policy</li> </ul>	<p>The proposed building identification sign is considered to be consistent with the aims and objectives of the policy.</p> <p>An assessment of the proposal against Schedule 1 of the Policy is set out below.</p>	✓
<b>13. Matters for consideration</b> <ul style="list-style-type: none"> <li>aims and objectives of this Policy;</li> <li>Schedule 1;</li> <li>Design;</li> <li>Road safety;</li> <li>Public benefit</li> </ul>	<p>The proposed building identification sign is considered to be consistent with the aims and objectives of the SEPP.</p> <p>An assessment of the proposal against Schedule 1 of the Policy is set out below.</p> <p>The location of the building (and therefore the proposed signage) is not visible to / from a public road and will not have any impact on road safety.</p> <p>Building identification signage is considered to be in the public benefit as it assists with wayfinding.</p>	✓





Schedule 1 Assessment Criteria		
Clause	Comments	Compliance
<b>1. Character of the Area</b>	The proposal is modest in scale and form and is considered to be compatible with the existing character of the Raby Sports Complex.	✓
<b>2. Special Areas</b>	The proposed building identification sign will not detract from existing amenity or visual quality of this locality. The site for the proposal is not a heritage item; it is not located in any heritage conservation area, natural area, open space, waterway or rural landscape. It is not visible from residential areas.  The site is not visible from waterways or rural lands or located or visible from any environmentally sensitive area.	✓
<b>3. Views and Vistas</b>	<ul style="list-style-type: none"> <li>The proposal does not obscure or compromise any important views.</li> <li>No existing important views will be blocked as a result of this development.</li> <li>The proposal does not form part of a significant skyline or have any negative effect on views to / from residential properties in the vicinity.</li> <li>The panel is located just above the main entry on the western elevation of the building. It will not project above the roofline and will not therefore, be viewed as part of the local skyline.</li> <li>The building identification sign is not located adjacent to any other signage, will not obscure views to such items and will not visually compete with other signage within the visual context of the site.</li> </ul>	✓
<b>4. Streetscape, setting or landscape</b>	The scale, proportion and form of the proposed building identification sign are appropriate in the context of the Raby Sports Complex.  The proposed sign will be integrated into the new indoor cricket centre and will have a neutral effect on perceived existing visual clutter within its setting.	✓
<b>5. Site and building</b>	The proposed scale and proportion of the sign is compatible with the scale and form of the proposed indoor cricket centre.	✓
<b>6. Associated devices and logos with advertisements and advertising structures</b>	The Campbelltown "starburst" logo is proposed to be incorporated into the sign.	✓
<b>7. Illumination</b>	No illumination of the building identification signage is proposed.	✓
<b>8. Safety</b>	The proposed building identification sign will not be visible to / from any public road. As such, it will not impair local traffic safety, nor will it adversely impact or reduce the safety of pedestrians or cyclists and it will not obscure sightlines of public areas.	✓

## 4.5 Campbelltown Local Environmental Plan 2015

### Zoning and Permissibility

The site zoned RE1 Public Recreation under Campbelltown Local Environmental Plan 2015. The RE1 Zone permits a range of recreational facilities.

The Land Use table identifies the following as being permissible with consent (emphasis added):

Statement of Environmental Effects

**Proposed Indoor Cricket Centre – Raby Sports Complex**

18



*Aquaculture; Boat launching ramps; Camping grounds; Car parks; Community facilities; Emergency services facilities; Environmental facilities; Environmental protection works; Flood mitigation works; Heliports; Information and education facilities; Jetties; Kiosks; Markets; Recreation areas; **Recreation facilities (indoor)**; Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Restaurants or cafes; Roads; Signage; Small bars; Water recreation structures; Water supply systems*

The proposed indoor cricket facility falls within the definition of **recreation facility (indoor)** as follows:

*means a building or place used predominantly for indoor recreation, whether or not operated for the purposes of gain, including a squash court, indoor swimming pool, gymnasium, table tennis centre, health studio, bowling alley, ice rink or any other building or place of a like character used for indoor recreation, but does not include an entertainment facility, a recreation facility (major) or a registered club.*

On this basis, it is considered that the proposed indoor cricket facility constitutes a permissible use in the RE1 Zone.

#### **Other relevant provisions of CLEP 2015**

##### **Demolition**

Clause 2.7 provides that demolition of a building or work is permitted throughout the LGA, but only with consent. The DA seeks approval for demolition of the existing building on the site as detailed in the Demolition Plan included in the architectural drawing package prepared by Melocco and Moore which accompanies the application.

##### **Building Height**

Clause 4.3 sets out the relevant provisions relating to the maximum Height of Buildings. It is noted there is no numerical height control applicable to the site.

##### **Floor Space Ratio**

No FSR standard applies to the site (Clause 4.4).

##### **Flood Planning**

Clause 5.21 requires the consent authority to be satisfied that the development:

- is compatible with the flood function and behaviour of the land, and
- will not adversely affect flood behaviour in a way that results in detrimental increases in the potential flood affectation of other development or properties, and
- will not adversely affect the safe operation and efficient evacuation of people or exceed the capacity of existing evacuation routes for the surrounding area in the event of a flood, and
- incorporates appropriate measures to manage risk to life from flood, and
- will not adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.

The proposed building occupies the footprint (albeit expanded) of the existing indoor cricket facility. The finished ground floor level of the proposed building will be RL61.84, which is well above the Probable Maximum Flood (PMF) of RL60.25. Having regard to the above, it is anticipated that the proposed development can satisfy the provisions of clause 5.21 of the LEP.

## **4.5 Campbelltown Development Control Plan 2015**

Part 2 of the DCP is applicable to the proposed development and sets out the general requirements for all development. An assessment of the proposed development against the relevant provisions of Part 2 is included in the following table.



Table 4.1 DCP Compliance Table

Objectives / Controls	Response / Commentary
<b>SECTION 2 – Requirements applying to all development</b>	
<b>2.2 Site analysis</b> <ul style="list-style-type: none"> <li>Site Analysis Plan required to be submitted with the DA for all development involving the construction of a building</li> </ul>	Included in the Architectural package prepared by Melocco & Moore.
<b>2.3 Views and Vistas</b> <ul style="list-style-type: none"> <li>Development on areas of significant public open space is required to respond – in certain circumstances Council may require a visual analysis study</li> </ul>	Section 4.7.5 of this Statement addresses the likely impacts on adjoining properties, including visual impact.
<b>2.4 Sustainable Building Design</b> <b>2.4.1 Rainwater Tanks</b> <ul style="list-style-type: none"> <li>Rainwater tanks for all new buildings with roof area &gt; 100m<sup>2</sup>; capacity calculated in accordance with Table 2.4.1 of DCP</li> </ul> <b>2.4.2 Solar Hot water</b> <ul style="list-style-type: none"> <li>All new buildings encouraged to provide solar hot water</li> </ul> <b>2.4.3 Natural Ventilation</b> <ul style="list-style-type: none"> <li>Maximise opportunities for X-flow ventilation and minimising need for A/C</li> </ul> <b>2.4.4 Light Pollution</b> <ul style="list-style-type: none"> <li>Outdoor lighting to minimise light spill</li> </ul>	<p>A 10,000 litre rainwater tank will be installed in accordance with the DCP requirement.</p> <p>To comply</p> <p>The building will not be air conditioned and has been designed to facilitate cross-flow ventilation.</p> <p>External lighting is limited to localised illumination at the entry foyer. No additional flood lighting is proposed. Limited external wall lighting on a timer or sensor will be provided at strategic points on the building will be installed for security.</p>
<b>2.5 Landscaping</b>	<b>Complies.</b> Council has prepared a detailed landscape package to accompany the DA.
<b>2.7 Erosion and sediment control</b> <ul style="list-style-type: none"> <li>Must submit a plan with the DA</li> </ul>	<b>Complies.</b> Inline Hydraulic Services has prepared a preliminary erosion and sediment control plan which is included in the Hydraulic drawing package which accompanies the DA.
<b>2.8 Cut and Fill management plan</b> <ul style="list-style-type: none"> <li>Required to accompany DA where cut and fill is proposed</li> </ul>	<b>Complies.</b> Bligh Tanner has prepared a Cut and Fill Management Plan which is included as part of the Structural package which accompanies this DA
<b>2.9 Demolition</b> <ul style="list-style-type: none"> <li>Demolition plan</li> <li>Details of demolition contractor</li> <li>HAZMAT report</li> <li>Details of any asbestos that requires removal</li> <li>Dilapidation report (if in proximity to another structure)</li> <li>Details of any recycling of demolition waste</li> </ul>	<p>Melocco &amp; Moore has prepared a Demolition Plan which is included in the Architectural drawing package which accompanies the DA.</p> <p>A demolition contractor has not yet been appointed and will be subject to Council's standard tender process.</p> <p>The existing building (to be demolished) dates from 2010 and based on advice from Council, does not contain asbestos or other hazardous materials.</p> <p>It is envisaged that the necessary excavation batter slope, will necessitate the demolition and reconstruction of a portion of the adjacent concrete bleachers. This has been indicated on the Demolition Plan included in the Architectural drawing package.</p>



Objectives / Controls	Response / Commentary
	Melocco and Moore has prepared a Construction Waste Management Plan which is included in the DA documentation.
<b>2.10 Water Cycle management</b> <ul style="list-style-type: none"> <li>Water cycle management plan to be submitted in accordance with Council's Engineering Design Guide</li> <li>Stormwater Concept Plan to be submitted with DA</li> </ul>	<p>The proposed development does not satisfy the criteria for the preparation of a Water Cycle Management Plan</p> <p>A stormwater Concept Plan has been prepared by InLine Hydraulic Services and is included in the</p>
<b>2.12 Retaining Walls</b> <ul style="list-style-type: none"> <li>Retaining walls greater than 900mm to be designed by a structural engineer</li> <li>Any excavation within the zone of influence of any other structure or building requires a structural engineering report</li> </ul>	<p>The lower level northern and western walls of the proposed building will be constructed in core-filled reinforced blockwork, to Structural engineer's details. These walls will also act to retain the adjacent backfill from the landscaped slope behind the building.</p>
<b>2.13 Security</b> <ul style="list-style-type: none"> <li>Development needs to address CPTED principles</li> </ul>	<p>The DCP does not nominate indoor sporting facilities as requiring a CPTED report. Notwithstanding, the proposed development has been designed in cognisance of the four CPTED principles. Further discussion in this regard is included at Section 4.6.9 of this Statement.</p>
<b>2.14 Risk Management</b> <b>Salinity</b> Analysis and Remedial Action Plan required if the site has been identified as being subject to a salinity hazard  <b>Bushfire</b>  <b>Subsidence</b>	<p>Douglas Partners has provided an update of its previous geotechnical investigations for the site, which addresses the issue of salinity. The sample analysis revealed a classification of non-saline (4 samples) to slightly saline (1 sample).</p> <p><b>Not applicable.</b> The site is not identified as bush fire prone land by the RFS mapping.</p> <p><b>Not applicable.</b> The Geotechnical Report does not identify subsidence as a risk associated with the subject site.</p>
<b>2.15 Waste management</b> Operational Waste management – design requirements for bin storage, waste collection, vehicle manoeuvring etc Construction Waste Management Plan	<p><b>Complies.</b> The new indoor cricket centre will be serviced in the same manner as the existing facility. Furthermore, the new facility does not involve any changes to existing service vehicle access and manoeuvring at the site.</p>
<b>2.16 Services</b>	<p>The site is serviced by water, sewer and electricity.</p>
<b>2.17 Work on public land</b> Requires council approval for any works, activities or occupancy on public land.	<p><b>Complies.</b> The Raby Sports Complex is located on public land and consent is sought for the proposed demolition of the existing building and associated structures as well as the construction of a new indoor cricket facility.</p>
<b>2.21 Acoustic Privacy</b>	<p><b>Complies.</b> Acoustic Logic has prepared an Acoustic Assessment which assesses the potential impacts during both the construction and operational phases of the project. Further discussion in this regard is included at Section 4.6.2 of this Statement.</p>





Having regard to the above, it is considered that the proposed development is not inconsistent with the relevant objectives of Campbelltown DCP 2015.

## 4.7 Likely Impacts of the Development (S4.15(1)(b))

The potential impacts associated with construction and operation of the proposed development are discussed in the following sections of this Statement.

### 4.7.1 Construction Impacts

As described in Section 3.9 of this Statement, a Construction Management Plan (CMP) will be prepared by the contractor engaged to undertake the works, which will outline the methods and procedures to be implemented to manage construction activities so as to ensure that the works do not result in the generation of unacceptable levels of environmental or community disturbance over the life of the works.

It is anticipated that a condition will be imposed on any Consent issued in respect of this application which requires the preparation of a Construction Management Plan prior to commencement of works. The CMP would be prepared and form part of the Construction Certificate documentation for the project.

The primary environmental impacts associated with the proposed development are likely to occur during the demolition / construction phase and are expected to include:

- Noise and vibration
- Traffic, access and parking

### 4.7.2 Construction Traffic, Access and Parking

#### *Construction Traffic Control*

Detailed information for work site operations is contained in the Traffic Control at Work Sites manual (TfNSW, 2018). The control of traffic at work sites must be undertaken with reference to WorkCover requirements and any other Workplace Health and Safety manuals.

A traffic control plan will be included in the Construction Traffic Management Plan, and is expected to include the following:

- Construction vehicle activity, including the loading/ unloading of trucks to be conducted within the work site.
- Pedestrians and all passing vehicles will maintain priority.
- Clear definition of the work site boundary to be provided by erection of Class A hoarding / fencing around the work site boundaries.
- All signage will be clean, clearly visible and not obscured.
- All construction vehicle activity will be minimised during peak periods, where possible.

#### *Construction Site Access*

The construction vehicle access to the site will be via Raby Road.

Queuing or marshalling of construction vehicles will not be permitted on the road network, with call-up procedures to be implemented to manage arrivals / departures, if required.

#### *Parking*

On-site parking for construction workers can be provided in a section of the existing car park as construction hours do not coincide with peak usage of the Sports Complex and other park facilities (primarily late afternoon / evenings and weekends).



#### **Access during the Construction Phase**

- **Pedestrians and cyclists** - advanced warning signage will be in place to warn pedestrians / cyclists that they are approaching a construction work site and detour signs will be in place when required.

Only authorised personnel will be permitted within the work site, whilst within the confines of the work site, all personnel will attire in correct PPE and strictly adhere to all rules and regulations within the construction site.

- **Public Transport & Emergency Vehicles** – no specific disruption to public transport services is envisaged during the demolition / construction phase.

Should the need arise for emergency vehicle access in or around the site, such vehicles will be given absolute priority.

- **Access to Neighbouring Properties** – access will be maintained at all times. In the event that access to these properties is obstructed at any stage of the construction, temporary access arrangements to the satisfaction of the occupants and Council shall be provided.

Consultation with all nearby residents will be ongoing and be updated on a regular basis at key construction stages.

All residents in the work site vicinity will also be provided with the site manager's contact details.

Having regard to the preceding assessment it is considered that the traffic and access impacts during the construction phase of the proposed development can be managed to minimise impacts on the locality.

#### **4.7.3 Noise Impact**

The site of the proposed indoor cricket centre is within the Raby Sports Complex. The nearest residential receivers are:

- a series of battleaxe allotments addressed to Thunderbolt Drive located approximately 46 metres to the north of the site (R1 on **Figure 8**);
- dwellings on the western side of Raby Road, approximately 290 metres to the west (R2); and
- a group of dwellings located approximately 180 metres to the south of the proposed cricket centre which address Halifax Street (R3).

**Figure 8** illustrates the relationship of the site relative to the nearest residential receivers and other monitoring locations installed as part of the investigations.

Acoustic Logic has prepared an Acoustic Assessment which examines the likely noise impact generated during both the demolition / construction and operational phases of the project.

Unattended noise monitoring was undertaken between 29 November and 6 December 2021, with the monitor secured to the roof of the building immediately to the west of the existing indoor cricket centre (as illustrated at **Figure 8**).

Attended background noise measurements were also conducted to supplement the unattended noise monitoring data. These measurements were undertaken on 15 November 2021 between 11.30am and 12.00pm and 29 November 2021 between 6.00pm and 6.30pm. The equipment was installed adjacent to the property known as No. 64 Thunderbolt Drive (as illustrated on **Figure 8**).

The measured background noise data of the logger was processed in accordance with the recommendations contained in the NSW Environment Protection Authority's (EPA) *Noise Policy for Industry* (NPI). The results of the measurement survey provide ambient noise levels that are considered to be representative of the levels to be expected at the nearest and most affected residences to the proposed development.



Figure 8 Site of proposed works relative to nearest receivers and monitoring locations (Source: Acoustic Logic)

The following table presents a summary of the background noise levels for the nearest residential receivers (extract from Acoustic Assessment prepared by Acoustic Logic):

Receiver	Time of day	Rating Background Noise Level dB(A) <sub>L90(Period)</sub>
All Sensitive Receivers	Day (8:00am – 6:00pm)	44
	Evening (6:00pm to 10:00pm)	44

**4.7.3.1 Construction Noise**

Based on the measured noise levels detailed in the table above, the EPA’s *Noise Policy for Industry* (NPfi) which sets out acceptable noise levels for various localities, suggests the adoption of the “suburban” categorisation.

The NPfi has two criteria which need to be satisfied; namely the Intrusiveness noise level criteria and the Project amenity noise level criteria. The project noise trigger level is then established based on the lower of the intrusiveness and project amenity levels.

The Acoustic Assessment indicates that the external noise emission criteria for the project is as follows:

Location	Time Period	Project Criteria dB(A) $L_{eq}(15min)$
All Sensitive Receivers	Day (8am - 6pm)	49
	Evening (6pm – 10pm)	43





It is anticipated that the CMP for the project (prepared by the Contractor) will include a Construction Noise Management Plan which will detail noise monitoring reporting and response procedures, description of specific mitigation treatments management measures and procedures to be implemented, and address any other relevant provisions of the EPA's Interim Construction Noise Guidelines and Australian Standard 2436-2010 *Guide to Noise and Vibration Control on Construction, Demolition and Maintenance Sites*.

#### 4.7.3.2 Operational Noise

The noise emissions from the proposed development are required to comply with the requirements of:

- Campbelltown City Council – '*Campbelltown Sustainable Cities Development Control Plan 2015*'.
- NSW Department of Environment and Heritage, Environmental Protection Authority document – '*Noise Policy for Industry*' (NPfI) 2017.

Operational noise sources are identified as patron activity during opening hours and mechanical plant servicing the site. Acoustic Logic undertook attended noise measurements at an existing indoor cricket facility located at Cricket NSW Headquarters in order to determine typical operational activity noise levels.

The Cricket NSW facility includes the same number of active nets as the proposed development, but incorporates extra facilities such as active gym space which could reasonably be expected to generate more noise than the proposed Raby facility. This renders the acoustic assessment conservative.

#### Assumptions

The following assumptions were adopted for the noise modelling:

- Hours of operation 8.00am – 10.00pm
- The facility is at operational capacity for all use (i.e. all 6 pitches in use simultaneously)
- No background music is played at the facility
- Roller doors maintained on the southern and eastern facades of the building, as well as sliding glass doors maintained in the western façade are assumed to be open. All other windows / doors are assumed to be closed for exclusive patron ingress / egress.

**Figure 9** and **Figure 10** present the results of the predictive noise modelling.

It should be noted that detailed plant selection and location has not been finalised. The acoustic assessment indicates that satisfactory levels will be achievable through appropriate selection, siting and if necessary, standard acoustic treatments such as duct lining, acoustic silencers and / or enclosures. In this regard the report recommends that a detailed acoustic review should be undertaken at CC stage to determine appropriate treatments to control noise emissions to satisfactory levels.

The report makes the following recommendations in relation to operation of the premises:

- The facility is permitted to operate (i.e. maximum hours of operation) between 7.00am and 10.00pm Monday to Saturday, and between 8.00am and 10.00pm on Sundays and public holidays.
- Roller doors / ingress and egress doors are allowed to remain opened during use.
- Prominent signage is to be displayed near patron ingress/egress points to remind patrons to minimise noise when departing the premises



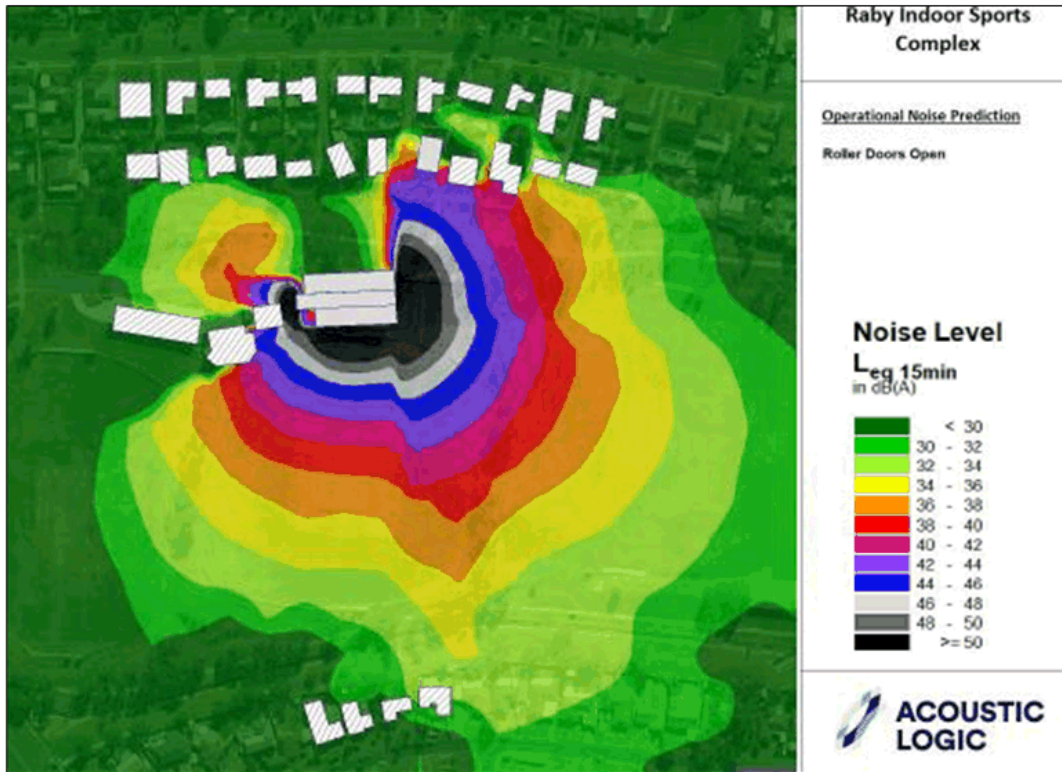


Figure 9 Operational Noise Predictions (Source: Acoustic Logic)

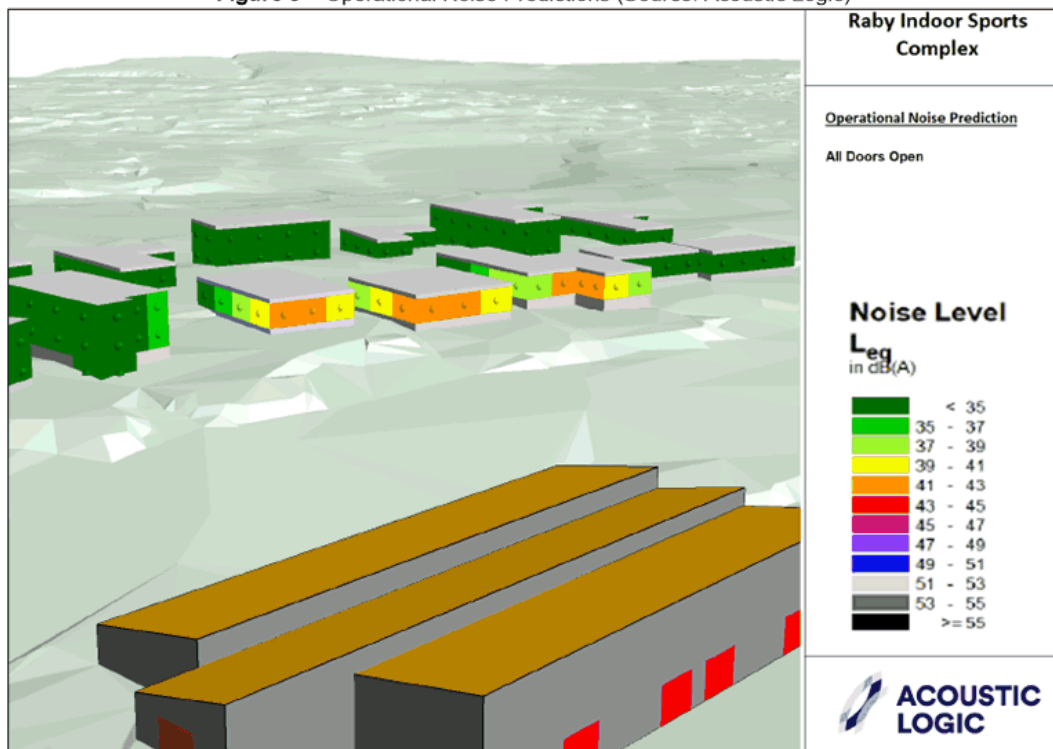


Figure 10 Predicted noise levels at R1 (Source: Acoustic Logic)

#### 4.7.4 Impact on Existing Vegetation

As indicated in Section 2.3.6 of this Statement, Naturally Trees has prepared an Arboricultural Impact Assessment Report and Tree Management Plan in relation to the proposed development. The report includes:

- a visual tree assessment;
- an assessment of the impact of the proposed works on the trees; and
- recommendations in relation to the use of sensitive construction methods and tree protection methods to minimise adverse impacts on trees to be retained.

A total of fourteen (14) trees were assessed as part of the Arboricultural investigations. Twelve (12) trees will be removed as a result of the proposed development. The remaining two trees in proximity to the development footprint will be the subject of protective measures to ensure the health and survival of the retained trees during the construction phase, as detailed in the Arboricultural report.

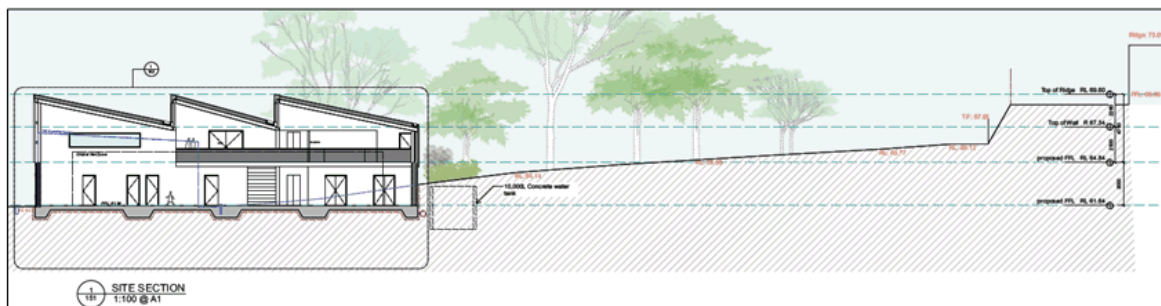
It should also be noted that twenty-three (23) new trees will be planted within the building curtilage, which represents a net increase of 13 trees (92%).

#### 4.7.5 Relationship to adjoining properties

##### *Overshadowing*

The proposed development will not result in any shadow impact to adjoining residential properties for the following reasons:

- physical separation (in excess of 40m);
- the proposed building is south of the nearest residential properties; and
- there is roughly 6 metres difference in ground level between the residential properties to the north (approx. RL 68 AHD) and the site of the new building (approx. RL 62 AHD)



**Figure 11** Cross section illustrating relationship of proposed development to residential properties to the north

##### *Visual Impact / View Loss*

The nearest residential properties are located approximately 50 metres to the north of the proposed facility. These dwellings are upslope from the proposed building, with the floor and garden levels of the properties being approximately on level with the roof ridge of the new cricket centre (**Figure 11**). The area of open space between these residential properties and the proposed facility includes numerous mature trees.

The new building has been designed with saw tooth roof profile, in order to break down the mass of the design. In addition the proposed building will be built into the existing landscaped slope, thereby presenting to the residences to the north as a single storey structure. Significant additional landscaping and tree planting will augment the substantial landscape buffer between the proposed building and the residences.



As is apparent from the “before” and “after” images at **Figure 12**, the additional height of the new facility is largely obscured by the existing tree canopy, which will be further augmented by new planting.



**Figure 12** View from the rear of No. 58 Thunderbolt Drive illustrating existing and future views



### **Privacy**

The building has been designed to ensure that privacy to the adjoining residential properties to the north of the facility is maintained. This has been achieved through:

- the siting of the building, taking advantage of both the physical separation and the change in ground level between the proposed development and the residential properties;
- the proposed landscape design which includes planting of 23 new trees in the northern curtilage of the proposed building; and
- the design and orientation of the building to preserve privacy to the private open space of the neighbours, specifically, there are no window openings in the northern elevation.

Having regard to the above it is considered that the proposed development will not have any detrimental impact on the privacy of dwellings in the vicinity of the site.

### **Lightspill**

All external lighting associated with the proposed development will be provided in accordance with the relevant Australian Standards.

Lighting will be limited to wall mounted lighting on the external building walls. Any light spill associated with the proposed development will be towards the cricket ovals to the south.

### **4.7.6 Safety and Security**

Crime Prevention through Environmental Design (CPTED) is a crime prevention strategy that focuses on the planning, design and structure of cities and neighbourhoods. Such a strategy seeks to reduce opportunities for crime by using design and place management principles that reduce the likelihood of essential crime ingredients (*law, offender, victim or target, opportunity*) from intersecting in time and space.

The proposed development has been designed having regard to the principles of CPTED, which has resulted in a design outcome that limits opportunities for concealment, controls access to the building and also provides opportunities for casual surveillance over areas of the public domain surrounding the building.

There are four principles that are used in the assessment of development applications to minimise the opportunity for crime, as discussed below.

#### **Surveillance**

Providing effective surveillance of areas within and surrounding a site can assist in reducing the attractiveness of crime targets. Surveillance of an area can be achieved through both natural and technical means.

Passive surveillance, where people can see what others are doing, creates a sense of safety within an environment and provides opportunities for interaction between individuals. This and high levels of passive surveillance, deters offenders from committing crime.

This highlights the importance of building layout, orientation and location; the strategic use of design; landscaping and lighting – it is a by-product of well-planned, well-designed and well-used space.

The siting and orientation of the building and landscape treatment have been designed in cognisance of the need to maintain passive surveillance and allow safe movement of pedestrians into and around the site balanced with the form and function of the building.

The landscape concept for the site incorporates low growing native grasses and groundcovers on the battered slope that will not create concealment opportunities or hinder passive surveillance to the communal areas or public domain beyond. Replacement tree planting is cognisant of the need to maintain clear lines of sight between the building and the surrounding public domain.





Appropriate site lighting will be provided within and surrounding the building, in accordance with the requirements of the relevant Australian Standards.

Surveillance management strategies include:

- maintenance of landscaping surrounding the building so that clear sight lines to and from the building are retained.
- opportunities for the installation of a CCTV system should be investigated as this will act as a further deterrent to opportunistic crime and will be particularly beneficial at night when the area is not being patronised.

### ***Access Control***

Physical and symbolic barriers can be used to attract, channel or restrict the movement of people. They minimise opportunities for crime and increase the effort required to commit crime. By making it clear where people are permitted to go or not go, it becomes difficult for potential offenders to reach and victimise people and their property. Illegible boundary markers and confusing spatial definition make it easy for criminals to make excuses for being in restricted areas. However, care needs to be taken to ensure that the barriers are not tall or hostile, creating the effect of a compound.

Access control strategies restrict, channel and encourage the movement of people and vehicles into and around designated areas. Physical barriers increase the effort required to commit crimes and will prevent unauthorised entry. Consideration will need to be given to the proposed mechanisms to control unauthorised access into the different parts of the development.

Access to the building will be controlled via swipe card.

### ***Territorial Reinforcement***

Community ownership of public space sends positive signals. People often feel comfortable in, and are more likely to visit, places which feel owned and cared for. Well used places also reduce opportunities for crime and increase risk to criminals. If people feel that they have some ownership of public space, they are more likely to gather and to enjoy that space. Community ownership also increases the likelihood that people who witness crime will respond by quickly reporting it or by attempting to prevent it.

As a public area, there is no demarcation between the public domain and private property. However, the proposed forecourt, located at the western end of the building and accessed directly from the service road clearly defines the path of travel to the entry to the facility.

Recommended territorial reinforcement strategies include the installation of clear and legible identification and directional signage to identify the various components of, and points of access to the building.

### ***Space Management***

Popular public space is often attractive, well maintained and well used space. Linked to the principle of territorial reinforcement, space management ensures that space is appropriately utilised and well cared for.

Ongoing maintenance and management of the building and surrounding areas will promote the message that both the community and pedestrians respect this environment. Through the appropriate coordination of the site, maintaining the building and surrounds, repairing vandalism as it occurs and retaining and improving when needed, the pedestrian facilities including lighting, will ensure that the space is appropriately utilised and well cared for.

Campbelltown City Council will be responsible for the management and maintenance of the building and the surrounding open space within the Raby Sports Complex.



Space management strategies include:

- Regular maintenance of the building and surrounding grounds, including litter removal;
- Regular maintenance of the landscaping surrounding the building;
- Regular inspections and timely repairs as deemed necessary; and
- Rapid removal of any graffiti.

It should also be noted that Cat 6 cabling will be installed to facilitate any future CCTV installation; and

#### **4.8 Suitability of the Site (S4.15(1)(c))**

Having regard to the characteristics of the site and its location, the proposed development is considered to be appropriate in that:

- the site is in an established public recreation zone;
- the land is zoned to permit the proposed development;
- the nature, scale and form of the proposed development is consistent with relevant legislative and statutory controls;
- the built form, land use and associated landscape treatment will make a positive contribution to the range of facilities at the Raby Sports Complex and will ensure it remains a building in a park;
- it will not result in any substantive adverse environmental impact; and
- the size and dimensions of the land are suitable for the scale of the works.

Furthermore, it is evident from this Statement and the supporting specialist information which accompanies the DA that the environmental impacts associated with the proposal can be satisfactorily mitigated.

On this basis, it is therefore considered that the site is suitable to accommodate the proposed development.

#### **4.9 Submissions (S4.15(1)(d))**

It is anticipated that the development application will be publicly exhibited / notified in accordance with Council's policy and submissions invited from any interested parties.

#### **4.10 Public Interest (S4.15(1)(e))**

The proposed development is considered to be in the wider public interest for the following reasons:

- it is consistent with the objects of the *Environmental Planning and Assessment Act 1979*, specifically because it represents the economic and orderly development of land;
- it is consistent with the statutory controls embodied in the relevant legislation including the *Environmental Planning and Assessment Act 1979*, as well as the provisions of Campbelltown Local Environmental Plan 2015 and Campbelltown Development Control Plan 2015;
- it does not result in any substantive adverse environmental impacts; and
- it replaces an existing undersized facility at the site, effectively doubling the capacity, which will contribute to the range of elite standard sporting facilities in the Campbelltown LGA.

Having regard to the above, the proposed indoor cricket centre at Raby Sports Complex is considered to be in the wider public interest.



## 5 Conclusion

This application seeks approval for demolition of an existing building and associated structures and the construction of a new indoor cricket centre at the Raby Sports Complex located on Raby Road..

The application seeks approval for:

- Demolition of existing buildings and structures;
- Bulk earthworks;
- Removal of 12 existing trees;
- Construction of a purpose-built building for use as a an indoor cricket facility, including:
  - 1,268.5m<sup>2</sup> gross floor area;
  - six (6) Cricket Australia compliant indoor cricket nets;
  - change rooms and amenities;
  - kitchenette; and
  - equipment storage
- Landscape treatment (soft and hard landscape works) including planting of 23 new trees within the curtilage of the proposed building; and
- Associated stormwater works.

The aim of this report has been to:

- describe the proposal;
- detail the background investigations that have been carried out prior to the preparation of the development application;
- illustrate compliance of the proposal with the relevant statutory considerations; and
- provide an assessment of the likely environmental effects of the proposal.

This Statement of Environmental Effects examines the proposal against the heads of consideration set out under Section 4.15 of the *Environmental Planning and Assessment Act 1979*. This includes the various State, regional and local planning instruments which apply to the site.

This assessment has demonstrated that the proposal is consistent with the relevant planning controls and that short term impacts associated with the demolition and construction phase can be appropriately managed to minimise any loss of amenity in the locality.

The works proposed as part of the application are also considered to be both appropriate and are in the wider public interest and are not expected to have any long term substantive adverse environmental impacts.

Having regard to the above, it is requested that Council's Local Planning Panel give favourable consideration to the application.

# Raby Sports Complex - Indoor Cricket Centre

Campbelltown City Council

## Drawing List / Transmittal

Stage:	Design Development	Day	19	20	28	29	8	16	10	20
Month:	Year	11	11	11	11	11	12	12	1	1
Year:	2021	21	21	21	21	21	21	21	22	22
By:	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD

Sheet No	Sheet Title	Size	Revision
000	Cover Page A1	ISO A1	A
001	Site Plan 1:200 @ A1	ISO A1	F G H
002	Site Analyse Plan 1:200 @ A1	ISO A1	A B
003	Demolition Plan 1:200 @ A1	ISO A1	A B
101	Ground Floor Plan 1:100 @ A1	ISO A1	A B E F G H I J
102	First Floor Plan 1:100 @ A1	ISO A1	E F G H
151	Site Sections-1 1:100 @ A1	ISO A1	D E F
152	Section 1:50 @ A1	ISO A1	D E F
153	Elevations 1:100 @ A1	ISO A1	D E F
154	Elevations 1:100 @ A1	ISO A1	C D E



1 Night Perspective  
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Distribution	Company/Organization	Name	File Name	Format	No. of copies and media type
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	Christians engineer	Design Engineer		electronic .dwg	x x x x x
	Bright Turner	Project Manager		electronic .dwg	x x x x x
	Hydraulic Engineer	Hydraulic Engineer		electronic .dwg	x x x x x
	Electrical engineer	Electrical Engineer		electronic .dwg	x x x x x
	Lighting Art & Culture	Lighting Designer		electronic .dwg	x x x x x
	Arts Group	Arts Group		electronic .dwg	x x x x x
	BCA & Access	BCA & Access		electronic .dwg	x x x x x
	Design-Construct	Design-Construct		electronic .dwg	x x x x x
	Team Planner	Team Planner		electronic .dwg	x x x x x
	Health Safety & Environment	Health Safety & Environment		electronic .dwg	x x x x x
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	Abord	Abord		electronic .dwg	x x x x x
	Green Science Consultancy	Green Science Consultancy		electronic .dwg	x x x x x
	Acoustic Consultant	Acoustic Consultant		electronic .dwg	x x x x x
	Acoustic Logic	Acoustic Logic		electronic .dwg	x x x x x
	Landscape Design	Landscape Design		electronic .dwg	x x x x x
	Campbelltown City Council	Campbelltown City Council		electronic .dwg	x x x x x
	Photogrammetry Consultant	Photogrammetry Consultant		electronic .dwg	x x x x x
	Architectural Imaging	Architectural Imaging		electronic .dwg	x x x x x

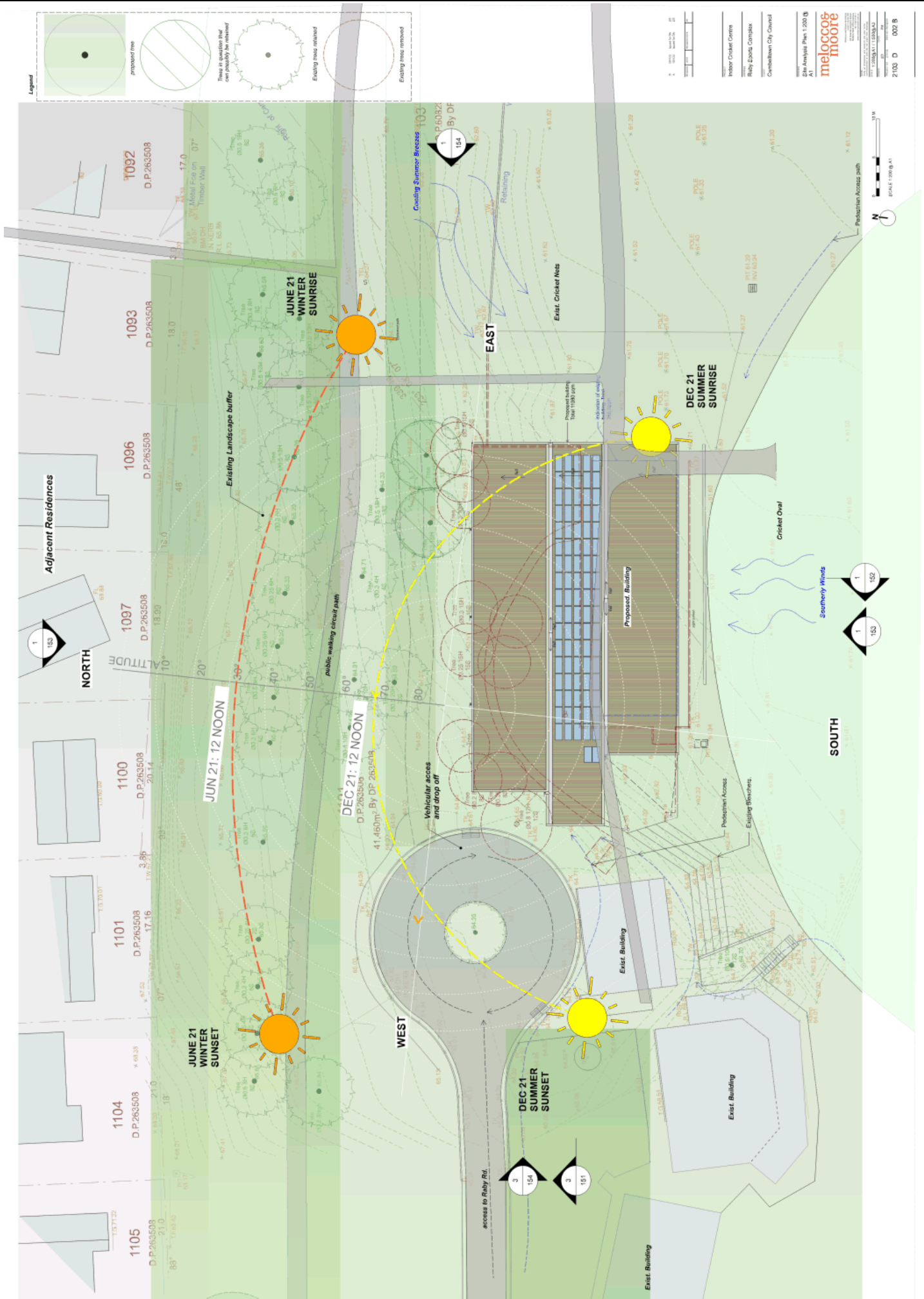
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Indoor Cricket Centre  
 Raby Sports Complex  
 Campbelltown City Council

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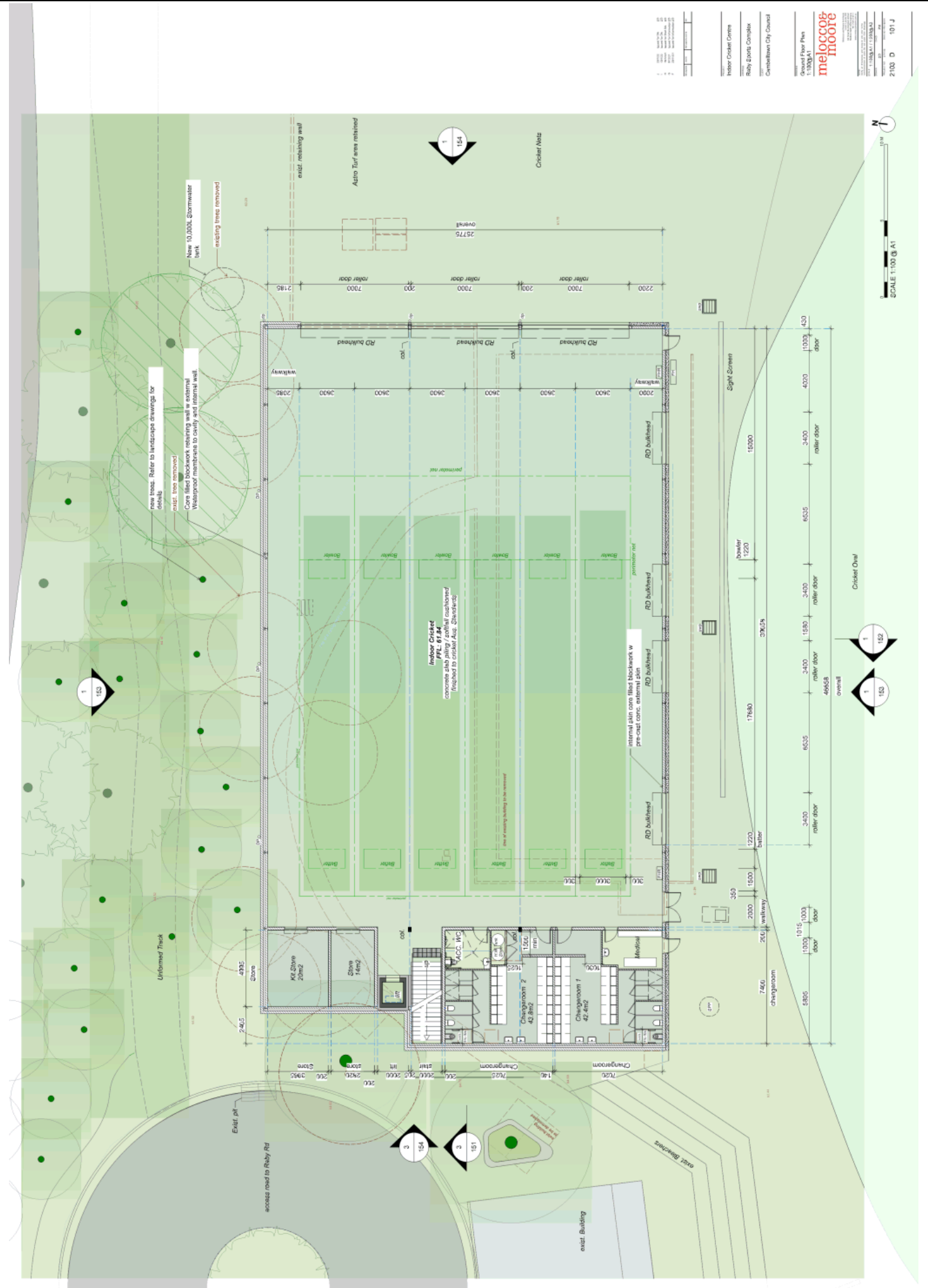




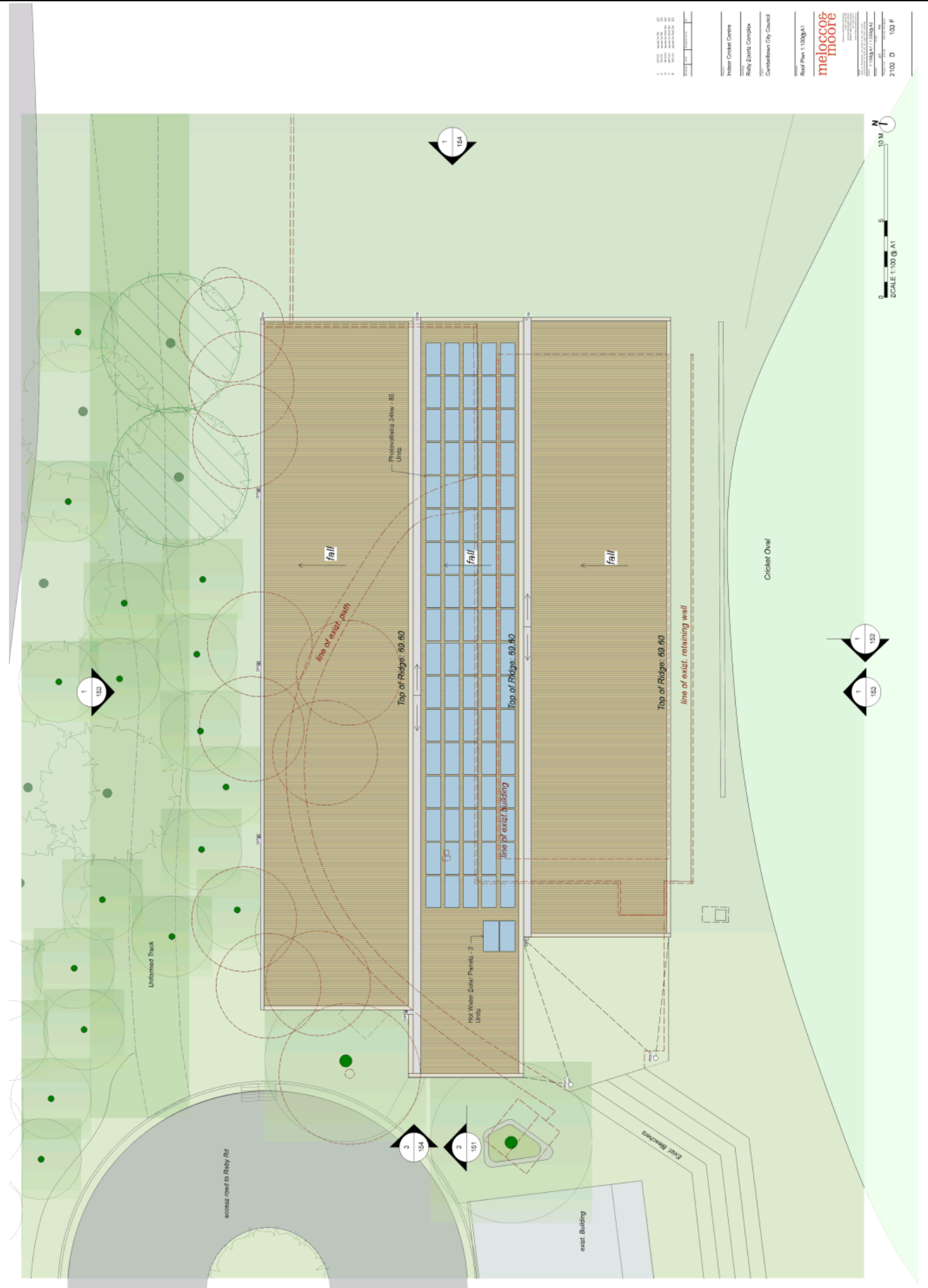












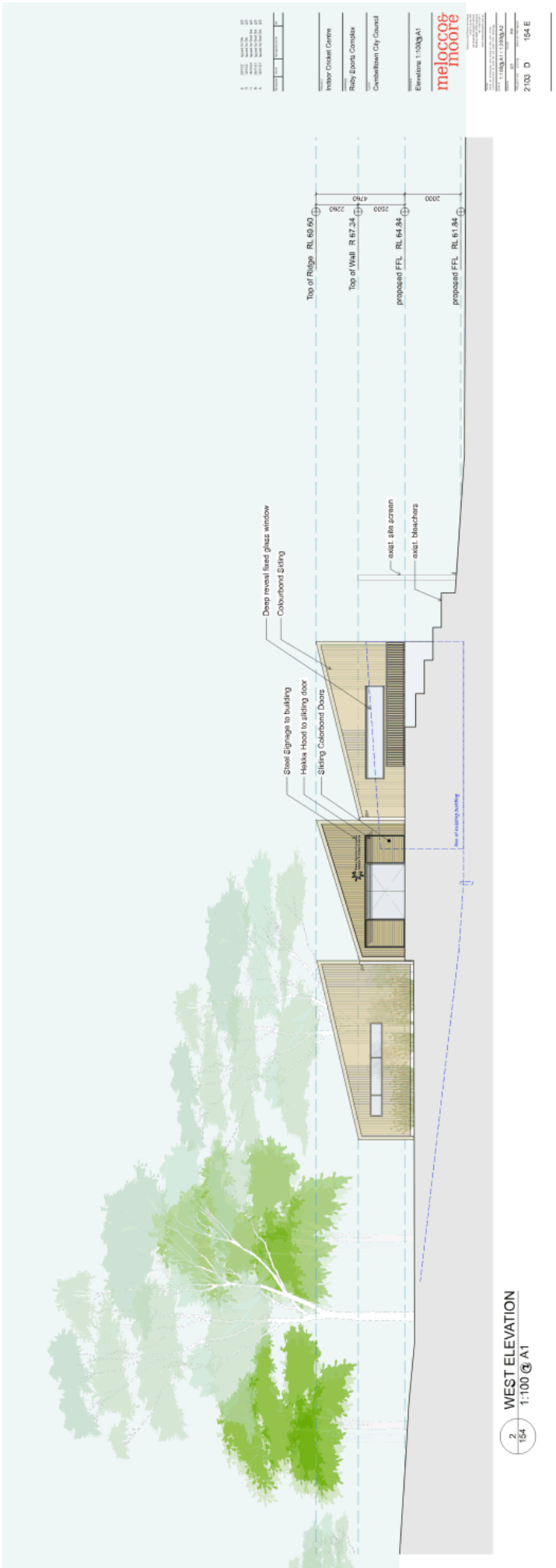
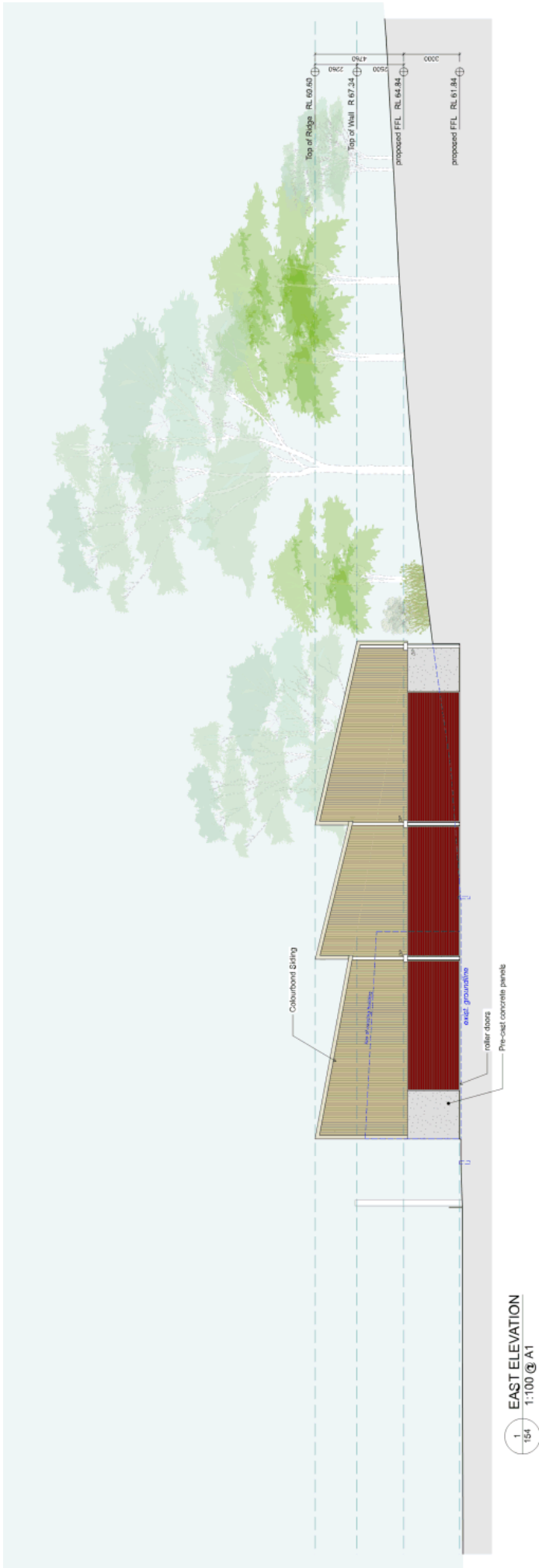












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 melcoo@inboore.com  
 2100 D 154 E

# RABY SPORTS COMPLEX - INDOOR CRICKET CENTRE DECEMBER 2021

## DRAWING INDEX

DRAWINGS: LANDSCAPE WORKS			
DRAWING #	DRAWING NAME	REV	DATE
L-000	COVER SHEET	A	03/12/21
L-101	LANDSCAPE PLAN	A	03/12/21
L-801	LANDSCAPE DETAILS - SHEET 1	A	03/12/21
L-802	LANDSCAPE DETAILS - SHEET 2	A	03/12/21
L-803	LANDSCAPE DETAILS - SHEET 3	A	03/12/21
L-901	SPECIFICATION - SHEET 1	A	03/12/21
L-902	SPECIFICATION - SHEET 2	A	03/12/21
L-903	SPECIFICATION - SHEET 3	A	03/12/21



Night Perspective  
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### NOTES

- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH DOP OF CAMPBELLTOWN CITY COUNCIL, AUSTRALIAN STANDARDS & TO THE SATISFACTION OF THE SUPERINTENDENT. LANDSCAPE ARCHITECT ALL MATERIALS & WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE RELEVANT AS CODES & TO THE SPECIFICATION.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER WORKING DRAWINGS, SPECIFICATIONS & OTHER WRITTEN INSTRUCTIONS THAT MAY BE ISSUED DURING THE COURSE OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REFERRED TO THE SUPERINTENDENT FOR DECISION BEFORE PROCEEDING WITH THE WORK.
- CONTRACTOR TO CONTACT DIAL BEFORE YOU DIG (130) FOR PLAIN INFORMATION ON UNDERGROUND PIPES & CABLES. AT LEAST TWO DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CONTRACTOR TO BE HELD RESPONSIBLE SHOULD THEY DAMAGE UTILITY PROPERTY.
- DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS. REDUCED LEVELS ARE IN METRES. ALL OTHER DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN. SET OUT DIMENSIONS ON THE DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR ON-SITE.
- THE CONTRACTOR SHALL OBTAIN ALL LEVELS FROM ESTABLISHED BENCHMARKS ONLY.
- THE CONTRACTOR SHALL VERIFY PROVISIONS & REQUIREMENTS AS NECESSARY TO THE SATISFACTION OF THE SUPERINTENDENT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION & THROUGHOUT CONSTRUCTION. SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN ACCORDANCE WITH THE GUIDELINES OF THE NSW DEPARTMENT OF CONSERVATION & LAND MANAGEMENT & NEW EPA AS NECESSARY TO PREVENT SEDIMENT RUN-OFF FROM THE SITE RESULTING FROM WORKS.
- ALL AREAS NOT SUBJECT TO CONSTRUCTION WORKS SHALL BE RETAINED FREE FROM DISTURBANCE OR DAMAGE FOR THE DURATION OF WORKS. TOPSOIL STOCKPILES SHALL BE COVERED TO PREVENT EROSION AND SUCH DAMAGE EXPRESSIONS ON THESE PROTECTION ZONES.
- NO WORK WITHIN ANY PRIVATE PROPERTIES IS TO BE UNDERTAKEN WITHOUT WRITTEN PERMISSION FROM THE PROPERTY OWNER.
- TREE PROTECTION MEASURES ARE TO BE IN PLACE PRIOR TO COMMENCEMENT OF WORKS. NO TREES ARE TO BE DELIBERATELY REMOVED WITHOUT APPROVAL AND SHOULD BE SUPERVISED BY COUNCIL'S ARBORIST.

 N	Project No: XXXX	Project Title: <b>RABY SPORT COMPLEX CRICKET CENTRE</b> RABY 2566		Scale: AS SHOWN @ A1 Original: C1:0/06   Datum: DO NOT SCALE	Drawing Title: <b>COVER SHEET</b>
	Drawing No: L-000			Drawing Title: A1 MGA AHD	Revision: DA A
EXISTING SERVICES HAVE BEEN PLOTTED FROM CAMPBELLTOWN CITY COUNCIL RECORDS. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL SERVICES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO SERVICES.					
CIVIC CENTRE: 24 West Street, Campbelltown NSW 2566 PO Box 67, Campbelltown NSW 2560 T: 02 4644 4200 F: 02 4644 4111 E: www.campbelltown.nsw.gov.au AIN: 31 453 314 397					
Recommended Date:			Approved by Date:		
Description Rev:   Date:					

















**LANDSCAPE WORKS SPECIFICATION NOTES (cont.)**

**5.0 DRAINAGE WORKS**

One sufficient (not less than 24 hours) to the Superintendent as to the inspection may be made of the following:

- Trenching, excavation and all other work.
- Completion of all drainage and drainage.

**5.2 Trenching and Drains During Construction**

Head of drainage shall be at least 100mm above the finished ground level. The aggregate shall be laid on a 100mm (1%) fall with pipe laid to the required level and grade. In cases where drainage is to be installed in a trench, the trench shall be backfilled with drainage aggregate and finished to a level of 100mm above the finished ground level.

**5.3 Hauling of Work**

The CCC Representative may set out the position of drainage structure to the location and level shown on the Drawings, and may present the method for installation by the CCC Representative.

**5.4 Subsoil Drainage**

Subsoil drainage shall be installed in accordance with the following:

- The drainage aggregate shall be 20mm diameter HDPE sewer pipe.
- The drainage aggregate shall be 20mm diameter HDPE sewer pipe.
- The drainage aggregate shall be 20mm diameter HDPE sewer pipe.

**6.0 HARDWORKS**

**6.1 Inspection of Works**

One sufficient (not less than 24 hours) to the Superintendent as to the inspection may be made of the following:

- Trenching, excavation and all other work.
- Completion of all drainage and drainage.

**6.2 Standards**

Concrete shall be in accordance with the current edition of relevant Australian Standards including:

- Concrete Structure to AS 3600
- Reinforced Concrete to AS 1012
- Reinforced Concrete to AS 1515
- Reinforced Concrete to AS 1519
- Control of Concrete Surface Finish to AS 1310
- 8th Edition of Precast/Prestressed Concrete Part 1 1993 Requirements, Part 2 1994 to AS/NZS 3601
- Reinforcement to AS 1332 grade 250R, AS 1330, AS 1534 and AS 3600 CL19.2
- In place test methods by any agency to AS 1541.14
- In place test methods by any agency to AS 1541.14
- In place test methods by any agency to AS 1541.14
- In place test methods by any agency to AS 1541.14

**6.3 NOMINATED FINISHES**

Any variations or ambiguity between contract documents & Australian Standards shall be referred to Superintendent for decision before proceeding with the work.

ITEM	CONCRETE WORKS	AGGREGATE	FINISH
REINFORCING	Nature Grey	10MM COMMON AGGREGATE	BROWN FINISH WITH 10MM FENCE ROUND EDGE
CONCRETE JOINTS			
ITEM	PRODUCT METHOD		SUPPLIER
SEALANT JOINTS	CONCRETE JOINT WITH PERMANENT PVC CAPPING		CONCRETE JOINT WITH PERMANENT PVC CAPPING
CONTROL JOINTS	CONCRETE JOINT WITH PERMANENT PVC CAPPING		CONCRETE JOINT WITH PERMANENT PVC CAPPING
FLYMOULDED JOINTS	CONCRETE JOINT WITH PERMANENT PVC CAPPING		CONCRETE JOINT WITH PERMANENT PVC CAPPING
CONTROL JOINTS	3-8MM WIDE AND MINIMUM 10MM DEEP SAWCUTS		3-8MM WIDE AND MINIMUM 10MM DEEP SAWCUTS

**6.3.2 Brick Paving**

Color: AUSTRALIAN LONDON CLAY PAVERS  
Color: TEA  
Size: 230x110x40mm

The final use of the paving ground shall be defined under the direction of the Superintendent. CCC Representative.

**6.7 Base and Subgrade**

Prepare the subgrade by grading to accommodate the thickness of the base course and paving. If necessary, loosen the ground to a depth of 200mm and add the moisture content to the subgrade.

- The concrete paving shall be compacted to a minimum of 95% relative compaction.
- The concrete paving shall be compacted to a minimum of 95% relative compaction.
- The concrete paving shall be compacted to a minimum of 95% relative compaction.

**6.8 Formwork**

Formwork shall be provided in accordance with AS 1289.3.1 to determine the maximum dry density for the material.

- The formwork shall be provided in accordance with AS 1289.3.1 to determine the maximum dry density for the material.
- The formwork shall be provided in accordance with AS 1289.3.1 to determine the maximum dry density for the material.
- The formwork shall be provided in accordance with AS 1289.3.1 to determine the maximum dry density for the material.

**6.9 Reinforcement**

Reinforcement shall be provided in accordance with AS 1332 grade 250R, AS 1330, AS 1534 and AS 3600 CL19.2.

- Reinforcement shall be provided in accordance with AS 1332 grade 250R, AS 1330, AS 1534 and AS 3600 CL19.2.
- Reinforcement shall be provided in accordance with AS 1332 grade 250R, AS 1330, AS 1534 and AS 3600 CL19.2.
- Reinforcement shall be provided in accordance with AS 1332 grade 250R, AS 1330, AS 1534 and AS 3600 CL19.2.

**6.10 Concrete Finishes**

Concrete shall be finished in accordance with AS 1310.

- Concrete shall be finished in accordance with AS 1310.
- Concrete shall be finished in accordance with AS 1310.
- Concrete shall be finished in accordance with AS 1310.

**6.1.2 Transporting and Placing**

Concrete shall be transported in a manner which will prevent segregation, contamination, or loss of materials. Concrete may be transported by pumping, subject to the Superintendent's approval.

- Concrete shall be transported in a manner which will prevent segregation, contamination, or loss of materials.
- Concrete shall be transported in a manner which will prevent segregation, contamination, or loss of materials.
- Concrete shall be transported in a manner which will prevent segregation, contamination, or loss of materials.

**6.1.3 Concrete Curing and Protection**

Concrete shall be protected from weathering, frost, and other damage from other causes.

- Concrete shall be protected from weathering, frost, and other damage from other causes.
- Concrete shall be protected from weathering, frost, and other damage from other causes.
- Concrete shall be protected from weathering, frost, and other damage from other causes.

**6.1.4 Surface Finishes**

Concrete shall be finished in accordance with AS 1310.

- Concrete shall be finished in accordance with AS 1310.
- Concrete shall be finished in accordance with AS 1310.
- Concrete shall be finished in accordance with AS 1310.

**6.1.5 Jointing**

Concrete shall be jointed in accordance with AS 1310.

- Concrete shall be jointed in accordance with AS 1310.
- Concrete shall be jointed in accordance with AS 1310.
- Concrete shall be jointed in accordance with AS 1310.

**6.1.6 Furniture and Fixture**

Furniture and fixtures shall be provided in accordance with AS 1310.

- Furniture and fixtures shall be provided in accordance with AS 1310.
- Furniture and fixtures shall be provided in accordance with AS 1310.
- Furniture and fixtures shall be provided in accordance with AS 1310.

**6.1.7 Scaffolding**

Scaffolding shall be provided in accordance with AS 1310.

- Scaffolding shall be provided in accordance with AS 1310.
- Scaffolding shall be provided in accordance with AS 1310.
- Scaffolding shall be provided in accordance with AS 1310.

**6.1.8 Formwork**

Formwork shall be provided in accordance with AS 1289.3.1 to determine the maximum dry density for the material.

- Formwork shall be provided in accordance with AS 1289.3.1 to determine the maximum dry density for the material.
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**6.1.9 Reinforcement**

Reinforcement shall be provided in accordance with AS 1332 grade 250R, AS 1330, AS 1534 and AS 3600 CL19.2.

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- Reinforcement shall be provided in accordance with AS 1332 grade 250R, AS 1330, AS 1534 and AS 3600 CL19.2.

**6.1.10 Concrete Finishes**

Concrete shall be finished in accordance with AS 1310.

- Concrete shall be finished in accordance with AS 1310.
- Concrete shall be finished in accordance with AS 1310.
- Concrete shall be finished in accordance with AS 1310.

**6.1.11 Jointing**

Concrete shall be jointed in accordance with AS 1310.

- Concrete shall be jointed in accordance with AS 1310.
- Concrete shall be jointed in accordance with AS 1310.
- Concrete shall be jointed in accordance with AS 1310.

**6.1.12 Formwork**

Formwork shall be provided in accordance with AS 1289.3.1 to determine the maximum dry density for the material.

- Formwork shall be provided in accordance with AS 1289.3.1 to determine the maximum dry density for the material.
- Formwork shall be provided in accordance with AS 1289.3.1 to determine the maximum dry density for the material.
- Formwork shall be provided in accordance with AS 1289.3.1 to determine the maximum dry density for the material.

**6.1.13 Reinforcement**

Reinforcement shall be provided in accordance with AS 1332 grade 250R, AS 1330, AS 1534 and AS 3600 CL19.2.

- Reinforcement shall be provided in accordance with AS 1332 grade 250R, AS 1330, AS 1534 and AS 3600 CL19.2.
- Reinforcement shall be provided in accordance with AS 1332 grade 250R, AS 1330, AS 1534 and AS 3600 CL19.2.
- Reinforcement shall be provided in accordance with AS 1332 grade 250R, AS 1330, AS 1534 and AS 3600 CL19.2.

**6.1.14 Concrete Finishes**

Concrete shall be finished in accordance with AS 1310.

- Concrete shall be finished in accordance with AS 1310.
- Concrete shall be finished in accordance with AS 1310.
- Concrete shall be finished in accordance with AS 1310.

**6.1.15 Jointing**

Concrete shall be jointed in accordance with AS 1310.

- Concrete shall be jointed in accordance with AS 1310.
- Concrete shall be jointed in accordance with AS 1310.
- Concrete shall be jointed in accordance with AS 1310.

**6.1.16 Formwork**

Formwork shall be provided in accordance with AS 1289.3.1 to determine the maximum dry density for the material.

- Formwork shall be provided in accordance with AS 1289.3.1 to determine the maximum dry density for the material.
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Rev.	Date	Issue For	DA	Revision
A	03.12.21	ISSUE FOR DA		A

Project No.	Project Title	Drawn By	Checked By	Scale
XXXX	RABY SPORT COMPLEX CRICKET CENTRE	AI	AI	AS SHOWN @ A1
L-902	RABY 2566	AI	AI	DO NOT SCALE
DA	SPECIFICATION - SHEET 02	AI	AI	Original

Item	Quantity	Provide photos of
1 of each section	2	1 of each section
2 of each section	2	2 of each section
3 of each section	2	3 of each section
4 of each section	2	4 of each section
5 of each section	2	5 of each section
6 of each section	2	6 of each section
7 of each section	2	7 of each section
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L-902	RABY 2566	AI	AI	DO NOT SCALE
DA	SPECIFICATION - SHEET 02	AI	AI	Original

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# INDOOR CRICKET CENTRE RABY SPORTS COMPLEX

## Hydraulic Services

**IN LINE**  
HYDRAULIC SERVICES  
PO BOX 204  
OTMARA NSW 2227  
PH (02) 4323 1100  
FAX (02) 4323 1101  
EMAIL: info@inlineservices.com.au  
www.inlineservices.com.au

**LEGEND**

STORMWATER	100
SUBSOIL	100
SEWER DRAINAGE	100
VENT PIPE	100
COLD WATER	100
HOT WATER	100
GAS	100
HIGH LEVEL SERVICE	100
EMERGENCY SERVICE	100
TEMPORARY SEGMENT FENCE	100
FIRE HYDRANT COVERAGE	100
FLOW TO ABOVE	100
FLOW TO BELOW	100
SEWERAGE	100
STORMWATER GRATED PIT	100
GRATED TRENCH DRAIN	100
STOP VALVE	100
THERMOSTATIC DRINKING VALVE	100
WATER METER	100
TUNDRY FLOW METERING VALVE	100
FLOOR METER	100
BOUNDARY TAMP	100
OVERFLOW GALLY	100
CLEAR OUT	100

**DRAWING SCHEDULE**

H01	COVER SHEET & LEGEND
H02	SITE PLAN
H03	GROUND FLOOR PLAN
H04	FIRST FLOOR PLAN
H05	ROOF PLAN
H06	SEWAGE & RAINWATER CONTROL PLAN

**STORMWATER NOTES**

- COLLECTOR WITHE ROD DIMENSIONS x x 0.075m FOR 100mm GALVANISE PIPE
- COLLECTOR WITHE ROD DIMENSIONS x x 0.075m FOR 100mm GALVANISE PIPE
- CONCRETE PIPES FOR REINFORCED CONCRETE PIPE (RCP)
- RAINFALL LEVEL BASED ON ARCHITECTURAL & SURVEY DRAWINGS
- SHOULDER TO CONSTRUCTION OF PIPE INSTALLATION AND/OR ANY DISCREPANCY
- STORMWATER DRAINAGE - 1000mm TO BE BENTWALL GRADE UPON WITH EXISTENT
- STORMWATER DRAINAGE - 1000mm TO BE CLARE 7 FIBRE REINFORCED CONCRETE
- WITH RUBBER RING JOINT LACK ON CHANNELS BEHIND TO ASBOND 2
- LAD IN PRE-CASTING SHALLOW MATERIAL
- CONCRETE SHALL BE REINFORCED WITH 10mm STEEL REINFORCEMENT & 10mm STEEL REINFORCEMENT SHALL BE PROVIDED WITH FLEXIBLE JOINTS
- ALL DRAINAGE TO BE MIN 1000mm LESS THAN 1000mm TO SPECIALITY
- PULLING SUPPORTS TO BE SET TO 1000mm TO SPECIALITY
- ALL DOWNPIPES DRAINING TO THE COLLECTION SYSTEM SHALL BE MADE TO ACCORDANCE LONG SERVICE ELEMENT AS PER MANUSCRIPT DRAWING 7.3.3
- AS REQUIRED FOR CERTIFICATION PURPOSES ALL RELEVANT DRAWINGS SHALL BE SUBMITTED TO CONSULTANT FOR APPROVAL PRIOR TO FINAL ACTION
- FINAL DRAINAGE LAYOUT SHALL BE MARKED ON ASBOND DRAWINGS AS APPROVED
- ANY ELEMENTS, POSITIVE COMMENTS OR OTHER LEGAL INSTRUMENTS TO BE APPROVED AS REQUESTED BY SURVEYOR OR OTHER APPROVAL AGENCY

**NOTE:**  
THESE PLANS SHALL BE VALID FOR ALL WORKS COVERED BY THE SERVICES PROVIDED BY IN LINE HYDRAULIC SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS PRIOR TO COMMENCEMENT OF WORKS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS PRIOR TO COMMENCEMENT OF WORKS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS PRIOR TO COMMENCEMENT OF WORKS.

**STORMWATER NOTES**

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**REVISIONS**

No.	Date	Description
A	07/12/21	DEVELOPMENT APPLICATION

ALL SIGN OFF CERTIFICATIONS ARE TO BE UNDERWRITTEN BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW SOUTH WALES. THE ENGINEER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS PRIOR TO COMMENCEMENT OF WORKS. THE ENGINEER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS PRIOR TO COMMENCEMENT OF WORKS.

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**CAMPBELLTOWN CITY COUNCIL**

**IN LINE**  
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UNIT 18, 96 WARRICK CROFT LANE, OTMARA NSW 2227  
PH (02) 4323 1100  
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EMAIL: info@inlineservices.com.au

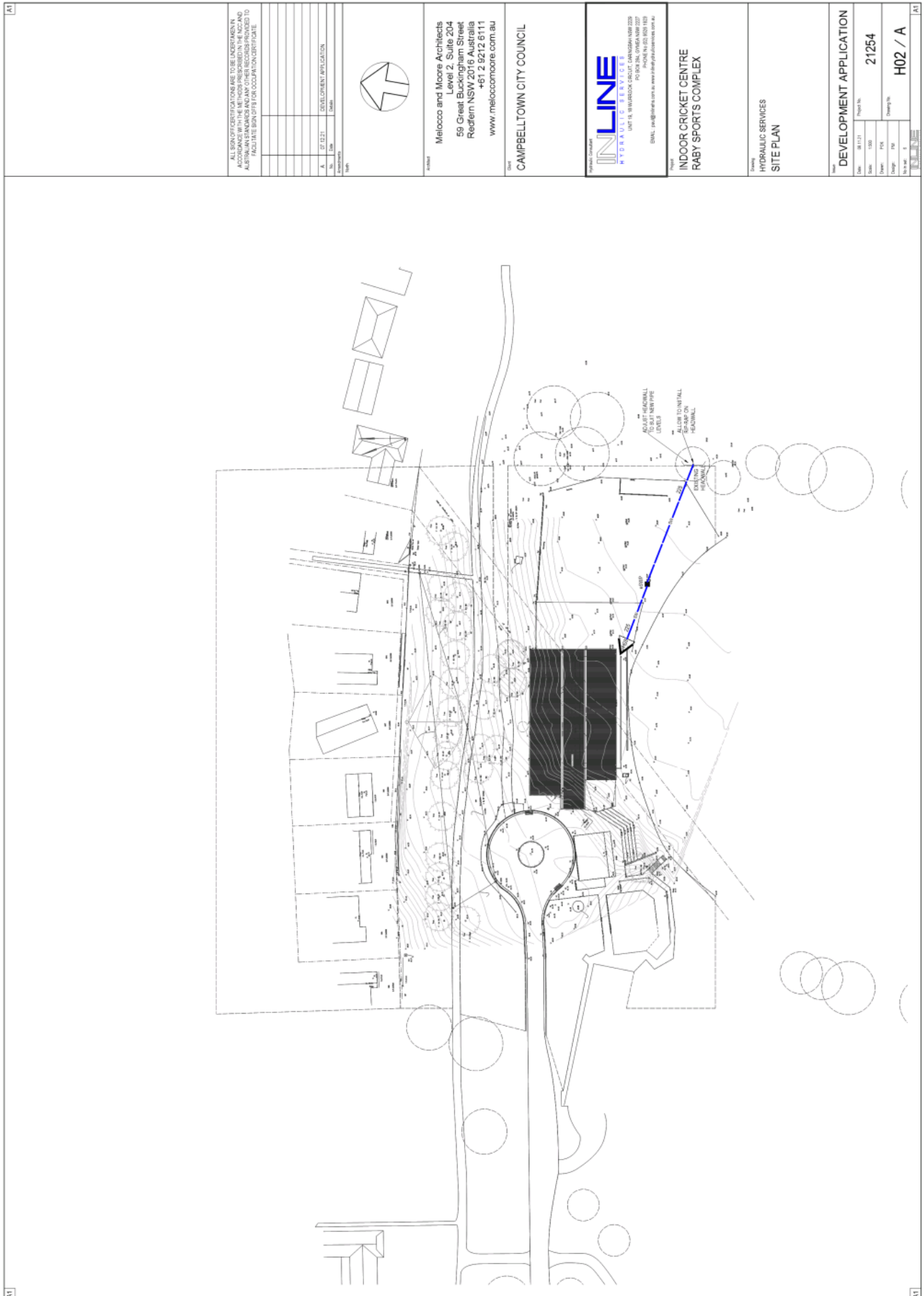
**INDOOR CRICKET CENTRE  
RABY SPORTS COMPLEX**

**HYDRAULIC SERVICES  
COVER SHEET & LEGEND**

**DEVELOPMENT APPLICATION**

Page No.	21254
Drawn	PKC
Checked	PKC
Design No.	H01 / A

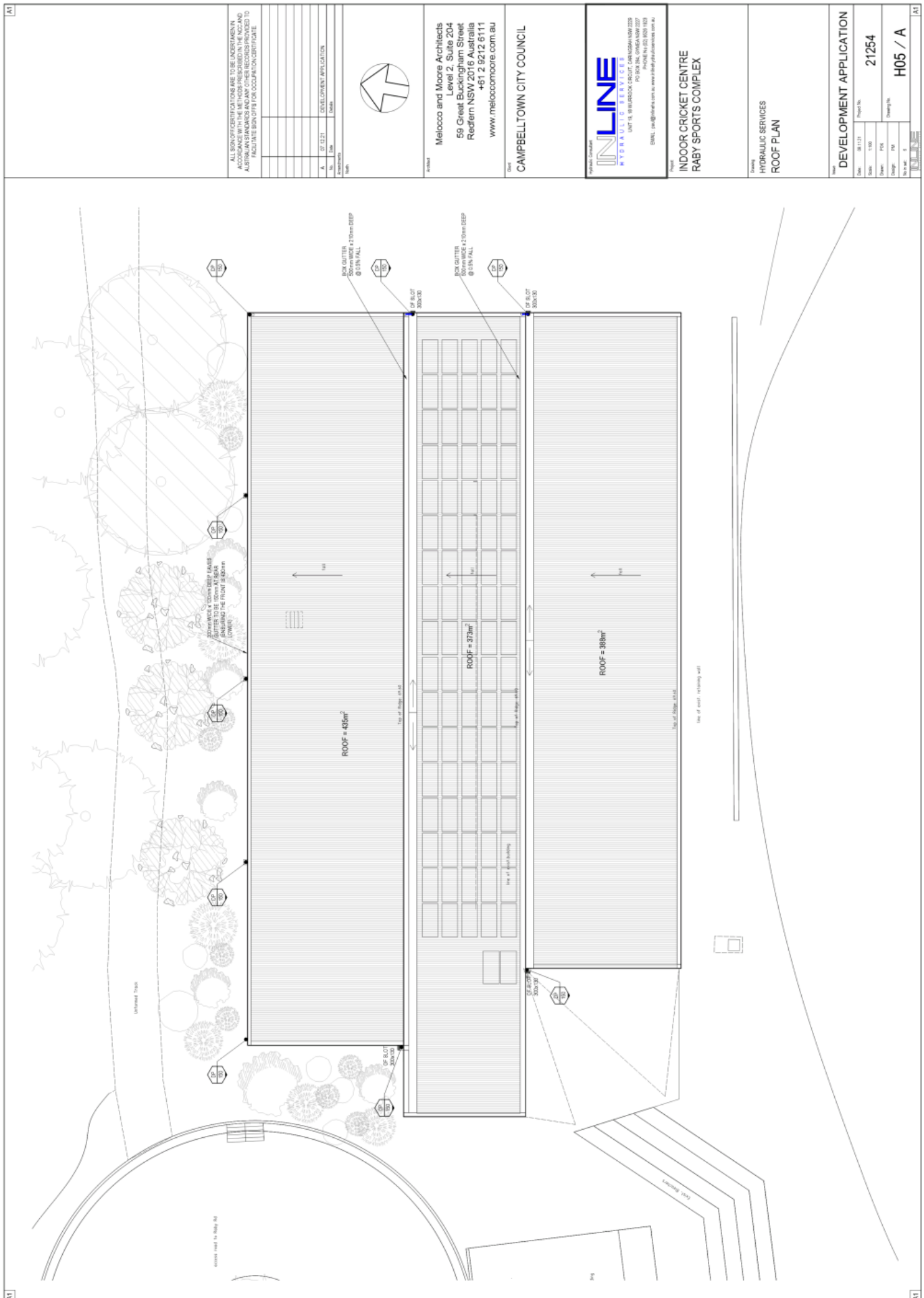












ALL SIGNIFICANT CERTIFICATIONS ARE TO BE UNDERTAKEN IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL GOVERNMENT ACT 1995 AND THE LOCAL GOVERNMENT (MISCELLANEOUS PROVISIONS) ACT 2016. THE APPLICANT IS RESPONSIBLE FOR OBTAINING ALL NECESSARY CERTIFICATIONS AND APPROVALS PRIOR TO THE COMMENCEMENT OF WORKS.

No.	Date	DESCRIPTION / APPLICATION
1.	07/12/21	DEVELOPMENT APPLICATION



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 Level 2, Suite 204  
 59 Great Buckingham Street  
 Redfern NSW 2016 Australia  
 +61 2 9212 6111  
 www.meloccomooore.com.au

CAMPBELLTOWN CITY COUNCIL

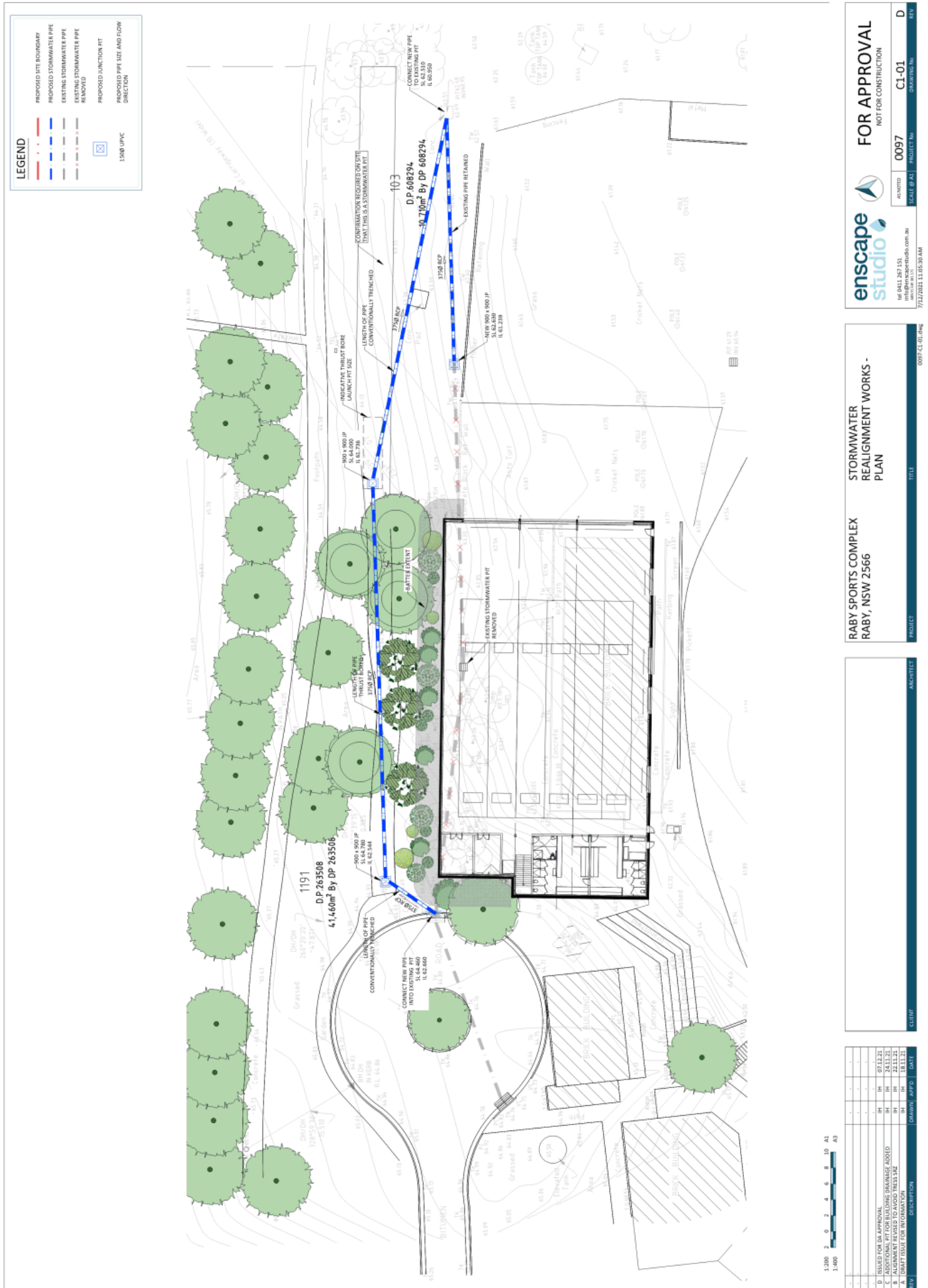


INDOOR CRICKET CENTRE  
 RABY SPORTS COMPLEX

HYDRAULIC SERVICES  
 ROOF PLAN

DEVELOPMENT APPLICATION	
Date:	08/12/21
Project No:	21254
Drawn:	1:100
Checked:	PKC
Design No:	H05 / A
Scale:	1:100









MATTHEW PALAVIDIS  
VICTOR FATTORETTO  
MATTHEW SHIELDS

## Raby Sports Centre - Indoor Cricket Facility, Raby

### DA Acoustic Assessment

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**SYDNEY**  
9 Sarah St  
MASCOT NSW 2020  
(02) 8339 8000

ABN 98 145 324 714  
[www.acousticlogic.com.au](http://www.acousticlogic.com.au)

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Project ID	20211457.1
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## TABLE OF CONTENTS

<b>1</b>	<b>INTRODUCTION .....</b>	<b>4</b>
<b>2</b>	<b>SITE DESCRIPTION .....</b>	<b>5</b>
<b>3</b>	<b>EXISTING ACOUSTIC ENVIRONMENT .....</b>	<b>7</b>
<b>3.1</b>	<b>NOISE DESCRIPTORS .....</b>	<b>7</b>
<b>3.2</b>	<b>AMBIENT NOISE SURVEY .....</b>	<b>8</b>
<b>3.3</b>	<b>UNATTENDED BACKGROUND NOISE MONITORING.....</b>	<b>8</b>
3.3.1	Measurement Position.....	8
3.3.2	Measurement Period.....	9
3.3.3	Measurement Equipment.....	9
3.3.4	Measured Background Noise Levels.....	9
<b>3.4</b>	<b>ATTENDED BACKGROUND NOISE MEASUREMENTS.....</b>	<b>10</b>
3.4.1	Measurement Position.....	10
3.4.2	Measurement Period.....	10
3.4.3	Measurement Equipment.....	10
3.4.4	Measured Background Noise Levels.....	10
<b>3.5</b>	<b>SUMMARISED BACKGROUND NOISE LEVELS.....</b>	<b>11</b>
<b>4</b>	<b>NOISE EMISSION ASSESSMENT.....</b>	<b>12</b>
<b>4.1</b>	<b>NOISE CRITERIA .....</b>	<b>12</b>
4.1.1	Campbelltown City Council – ‘Campbelltown Sustainable Cities Development Control Plan 2015’.....	12
4.1.2	NSW EPA Noise Policy for Industry (NPfI) 2017 .....	12
4.1.3	Project Amenity Criterion .....	13
<b>4.2</b>	<b>SUMMARY OF NOISE EMISSION CRITERIA.....</b>	<b>14</b>
<b>5</b>	<b>NOISE EMISSION ASSESSMENT.....</b>	<b>15</b>
<b>5.1</b>	<b>CRICKET NSW CENTRE OF EXCELLENCE NOISE MEASUREMENTS.....</b>	<b>15</b>
<b>5.2</b>	<b>INFORMATION/ASSUMPTIONS .....</b>	<b>15</b>
<b>5.3</b>	<b>SOUNDPLAN MODELLING .....</b>	<b>16</b>
<b>5.4</b>	<b>OPERATIONAL NOISE MODEL.....</b>	<b>16</b>
<b>5.5</b>	<b>MECHANICAL PLANT EMISSIONS.....</b>	<b>19</b>
<b>6</b>	<b>RECOMMENDATIONS.....</b>	<b>20</b>
<b>7</b>	<b>CONCLUSION.....</b>	<b>21</b>
	<b>APPENDIX ONE – UNATTENDED MONITORING DATA .....</b>	<b>22</b>

## 1 INTRODUCTION

Acoustic Logic have been engaged to conduct an acoustic assessment of potential noise impacts associated with the proposed alterations and additions to the Indoor Cricket Facility maintained at the Raby Sports Complex.

This document addresses noise impacts associated with the following:

- Noise emissions from operation of the tenancy.
- Noise emissions from mechanical plant to service the project site (in principle).

AL have utilised the following documents and regulations in the assessment of noise impacts for the development:

- Campbelltown City Council – ‘*Campbelltown Sustainable Cities Development Control Plan 2015*’.
- NSW Department of Environment and Heritage, Environmental Protection Authority document – ‘*Noise Policy for Industry*’ (NPI) 2017.

This assessment has been conducted based on the architectural drawings for Development Application provided to AL, prepared by Melocco and Moore, revision D and dated 26/11/2021. The drawing numbers are presented in the following table.

**Table 1 – Drawing Numbers**

<b>Architect</b>	<b>Drawing No.</b>	<b>Drawing Title</b>	<b>Date</b>
Melocco and Moore	001 D	Site Plan	26/11/2021
	101 D	Ground Floor Plan	
	102 D	First Floor Plan	
	103 C	Roof Plan	
	151 C	Site Section Page 1	
	152 C	Site Section Page 2	
	153 C	Elevations Page 1	
	154 B	Elevations Page 2	

## 2 SITE DESCRIPTION

The proposed alterations and additions to the current 3-pitch indoor training facility nominate extension of the facility to include 6 indoor pitches in total.

The facility is proposed to operate between the hours of 4pm and 10pm Monday to Friday, and between 8am and 6pm on Saturdays and Sundays, and will include 6 pitches on the ground floor, in conjunction with a first-floor mezzanine, as well as amenities.

A site survey has been carried out by this office to identify surrounding noise sensitive receivers and the existing acoustic environment. Nearest potentially affected receivers are as follows:

- **R1:** Residential dwellings maintained along Thunderbolt Drive, directly to the north of the proposed site.
- **R2:** Residential dwellings maintained along Raby Road, maintained to the west of the proposed site.
- **R3:** Residential receivers located along Halifax Street, directly south of the proposed site.

A site map, measurement locations and surrounding receivers are presented in Figure 1.





Figure 1: Site Map with Nearest Sensitive Receivers and Monitoring Locations (Sourced From Six Maps)

### 3 EXISTING ACOUSTIC ENVIRONMENT

The acoustic environment is categorised by moderate background noise levels associated with a suburban environment during the day and evening, and quieter during the night-time period.

Unattended noise monitoring conducted at site was conducted by this office in order to establish the existing background noise environment.

#### 3.1 NOISE DESCRIPTORS

Environmental noise constantly varies. Accordingly, it is not possible to accurately determine prevailing environmental noise conditions by measuring a single, instantaneous noise level.

To accurately determine the environmental noise a 15-minute measurement interval is utilised. Over this period, noise levels are monitored on a continuous basis and statistical and integrating techniques are used to determine noise description parameters.

In analysing environmental noise, three-principle measurement parameters are used, namely  $L_{10}$ ,  $L_{90}$  and  $L_{eq}$ . The  $L_{10}$  and  $L_{90}$  measurement parameters are statistical levels that represent the average maximum and average minimum noise levels respectively, over the measurement intervals.

The  $L_{10}$  parameter is commonly used to measure noise produced by a particular intrusive noise source since it represents the average of the loudest noise levels produced by the source.

Conversely, the  $L_{90}$  level (which is commonly referred to as the background noise level) represents the noise level heard in the quieter periods during a measurement interval. The  $L_{90}$  parameter is used to set the allowable noise level for new, potentially intrusive noise sources since the disturbance caused by the new source will depend on how audible it is above the pre-existing noise environment, particularly during quiet periods, as represented by the  $L_{90}$  level.

The  $L_{eq}$  parameter represents the average noise energy during a measurement period. This parameter is derived by integrating the noise levels measured over the 15-minute period.  $L_{eq}$  is important in the assessment of environmental noise impact as it closely corresponds with human perception of a changing noise environment; such is the character of environmental noise.

The  $L_{max}$  parameter represents the loudest instantaneous sound pressure level during a measurement period.



### 3.2 AMBIENT NOISE SURVEY

NSW EPA's Rating Background Noise Level (RBL) assessment procedure requires determination of background noise level for each day (the ABL) then the median of the individual days as set out for the entire monitoring period.

Appendix 1 presents the results of unattended noise monitoring previously conducted at the project site. Weather affected data was excluded from the assessment.

### 3.3 UNATTENDED BACKGROUND NOISE MONITORING

Unattended background noise monitoring has been conducted by this office from Monday the 29<sup>th</sup> of November 2021 to Monday the 06<sup>th</sup> of December 2021. Measured noise levels applicable to proposed operational hours of the indoor cricket facility are detailed below.

#### 3.3.1 Measurement Position

One unattended noise monitor was installed Raby Sports Complex, Raby. This location is visualised within Figure 1. A photo of the installed monitor is presented in Figure 2.



**Figure 2 – Unattended Noise Monitor**

### 3.3.2 Measurement Period

Unattended noise monitoring was conducted from Monday the 29<sup>th</sup> of November 2021 to Monday the 06<sup>th</sup> of December 2021.

### 3.3.3 Measurement Equipment

Equipment used consisted of an Acoustic Research Laboratories Pty Ltd noise logger. The logger was set to A-weighted fast response and was programmed to store 15-minute statistical noise levels throughout the monitoring period. The monitor was calibrated at the start and end of the monitoring period using a Rion NC-73 calibrator. No significant drift was noted.

### 3.3.4 Measured Background Noise Levels

The background noise levels established from the unattended noise monitoring are detailed in Table 2 below.

**Table 2 – Unattended Noise Monitor - Assessment Background Noise Levels**

Date	Assessment Background Noise Level dB(A) <sub>LA90</sub>	
	Day (8am-6pm)	Evening (6pm-10pm)
Monday 29 <sup>th</sup> November 2021	-	44
Tuesday 30 <sup>th</sup> November 2021	44	43
Wednesday 01 <sup>st</sup> December 2021	44	44
Thursday 02 <sup>nd</sup> December 2021	43	45
Friday 03 <sup>rd</sup> December 2021	45	0
Saturday 04 <sup>th</sup> December 2021	46	43
Sunday 05 <sup>th</sup> December 2021	44	41
Monday 06 <sup>th</sup> December 2021	43	-
<b>Median</b>	<b>44</b>	<b>44</b>

*Note: Periods marked '-' have had more than 20% of data within the nominated period be either not collected or be affected by adverse weather and in accordance with Fact Sheets A and B of the NPfl, have been removed from the assessment.*

### 3.4 ATTENDED BACKGROUND NOISE MEASUREMENTS

Attended background noise measurements were conducted by this office to supplement the unattended noise monitoring data. These attended background noise measurements were conducted on Monday the 15<sup>th</sup> of November 2021 between 11:30am and 12:00pm, and Monday the 29<sup>th</sup> of November 2021 between 6:00pm and 6:30pm. Measured noise levels are detailed below.

#### 3.4.1 Measurement Position

Two attended noise measurements were undertaken to validate the background noise levels at nearest residential receivers surrounding the proposed development and were conducted at the property boundary of 64 Thunderbolt Drive, Raby. The measurement location is visualised within Figure 1.

#### 3.4.2 Measurement Period

The attended noise measurement was conducted on Monday the 15<sup>th</sup> of November 2021 between 11:30am and 12:00pm, and Monday the 29<sup>th</sup> of November 2021 between 6:00pm and 6:30pm.

#### 3.4.3 Measurement Equipment

The measurement was conducted using a Norsonic 140 Sound Analyser. The analyser was set to fast response and calibrated before and after the measurements using a Norsonic Sound Calibrator type 1251. No significant drift was noted.

#### 3.4.4 Measured Background Noise Levels

The measured background noise levels for the attended measurements are presented in the table below.

**Table 3 – Measured Background Noise Levels at Attended Measurement Location**

<b>Measurement Location</b>	<b>Time of day</b>	<b>Measured Background Noise Level dB(A)L<sub>90</sub>(Period)</b>
64 Thunderbolt Drive, Raby	Monday the 15 <sup>th</sup> of November 2021 11:30am – 12:00pm	49
	Monday the 29 <sup>th</sup> of November 2021 6:00pm – 6:30pm	44



### 3.5 SUMMARISED BACKGROUND NOISE LEVELS

Table 4 presents a summary of the background noise levels for sensitive receivers surrounding the project site.

**Table 4 – Summarised Background Noise Levels at Sensitive Receivers**

<b>Receiver</b>	<b>Time of day</b>	<b>Rating Background Noise Level dB(A)<sub>L90(Period)</sub></b>
All Sensitive Receivers	Day (8:00am – 6:00pm)	44
	Evening (6:00pm to 10:00pm)	44

## 4 NOISE EMISSION ASSESSMENT

A noise emission assessment has been carried out to ensure noise emitted from the proposed indoor cricket facility is in accordance with the requirements listed in this section.

This assessment will review noise emissions associated with the following:

- Operational Noise.
- Mechanical plant (in principle).

The noise emissions from the project site shall comply with the requirements of the following:

- Campbelltown City Council – ‘Campbelltown Sustainable Cities Development Control Plan 2015’.
- NSW Department of Environment and Heritage, Environmental Protection Authority document – ‘Noise Policy for Industry’ (NPfI) 2017.

### 4.1 NOISE CRITERIA

#### 4.1.1 Campbelltown City Council – ‘Campbelltown Sustainable Cities Development Control Plan 2015’.

The Campbelltown Sustainable Cities Development Control Plan 2015 states the following with regard to acoustic privacy:

*“On-site noise generating sources including, but not limited to, plant rooms and equipment, air conditioning units, pool pumps and recreation areas shall be designed and located to ensure that the noise levels generated by such facilities do not exceed 5 dB(A) above background noise levels at the property boundary.”*

#### 4.1.2 NSW EPA Noise Policy for Industry (NPfI) 2017

The NSW EPA Noise Policy for Industry (NPfI) 2017, has two criteria which need to be satisfied; namely the Intrusiveness noise level criteria and the Project amenity noise level criteria. The project noise trigger level is then established based on the lower of the intrusiveness and project amenity levels.

Noise levels are to be assessed at the property boundary or nearby dwelling, or at the balcony or façade of an apartment.

##### 4.1.2.1 Intrusiveness Noise Level Criteria

The guideline is intended to limit the audibility of noise emissions at residential receivers and requires that noise emissions measured using the  $L_{eq}$  descriptor do not exceed the background noise level by more than 5dB(A). Where applicable, the intrusive noise level should be penalised (increased) to account for any annoying characteristics such as tonality.

Background noise levels adopted are presented in Section 3.5. Noise emissions from the site should comply with the noise levels presented below when measured at nearby property boundary.

**Table 5 – EPA Intrusive Noise Levels**

<b>Receiver</b>	<b>Time of day</b>	<b>Background Noise Level dB(A)<math>L_{90}(\text{Period})</math></b>	<b>Intrusiveness Criteria (Background + 5dB(A)<math>L_{eq}(15\text{-minute})</math>)</b>
All Sensitive Receivers	Day (8am – 6pm)	44	49
	Evening (6pm – 10pm)	44	49

**4.1.3 Project Amenity Criterion**

The guideline is intended to limit the absolute noise level from all noise sources to a level that is consistent with the general environment.

The EPA's NPfl sets out acceptable noise levels for various localities. The recommended noise amenity area is based upon the measured background noise levels at the sensitive receiver. Based on the measured background noise levels detailed in Table 6, the Noise Policy for Industry suggests the adoption of the 'suburban' categorisation.

The NPI requires project amenity noise levels to be calculated in the following manner;

$$L_{Aeq,15min} = \text{Recommended Amenity Noise Level} - 5 \text{ dB(A)} + 3 \text{ dB(A)}$$

The amenity levels appropriate for the receivers surrounding the site are presented in Table 6.

**Table 6 – EPA Amenity Noise Levels**

<b>Receiver Type</b>	<b>Time of day</b>	<b>Recommended Noise Level dB(A)<math>L_{eq}(\text{period})</math></b>	<b>Project Amenity Noise Level dB(A)<math>L_{eq}(15\text{ minute})</math></b>
Residential (Suburban)	Day (8am – 6pm)	55	53
	Evening (6pm – 10pm)	45	43

#### 4.2 SUMMARY OF NOISE EMISSION CRITERIA

Based on the noise emission criteria detailed above, a summary of the external noise emission criteria is presented in the table below.

**Table 7 – Summary of Indoor Cricket Facility Noise Emission Criteria**

<b>Location</b>	<b>Time Period</b>	<b>Project Criteria dB(A) <math>L_{eq}(15min)</math></b>
All Sensitive Receivers	Day (8am - 6pm)	49
	Evening (6pm – 10pm)	43

## 5 NOISE EMISSION ASSESSMENT

Operational noise emissions are assessed below. The assessment includes the following noise sources:

- Noise emissions from patron activity and site operation.
- Noise emissions from mechanical plant servicing the site (In principle).

### 5.1 CRICKET NSW CENTRE OF EXCELLENCE NOISE MEASUREMENTS

Attended noise measurements were conducted at an indoor cricket facility at Cricket NSW Headquarters on Wednesday 21<sup>st</sup> August 2019 at an intra-squad practice session run by Cricket NSW. The measured typical operational activity noise levels (Sound Pressure Level) around the pitches for this site have been presented below and used within the Operational Noise Emission Assessment for Raby Indoor Sports Complex.

This active site included 6 lanes of active pitches, coaching staff and around 30 players dispersed between training using the net facilities, as well as performing other excises on the other side of the complex (Gym/Workout Area). Noise measurements were taken by performing a full perimeter sweep of the pitches at 1m from the netting of the pitches. Noise measurements of the gym usage were taken by performing a full perimeter sweep of the training area at 2m from the internal boundary of the gym facility. Both measurements provide detail into the internal sound pressure level of the space from noise generated by the respective operational activities. This includes repeated intermittent impulsive noise from the bat striking the ball at approximately once every 15 seconds during practice sessions, player shouting and cheering.

Whilst this facility is not one to one true scale for the site in Raby, the number of active nets is consistent with the proposed site, and includes extra facilities (Active Gym Space), meaning that one would expect the Cricket NSW site to be louder than the Raby Indoor Complex, inherently making the assessment conservative.

**Table 8 – Measured Indoor Cricket Pitch Noise Level SPL dB(A) L<sub>10</sub> - Cricket NSW Centre of Excellence**

Space	31.5Hz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	A-Weight
NSW Cricket Indoor Pitches	69	62	66	68	69	69	64	60	53	72

### 5.2 INFORMATION/ASSUMPTIONS

The following information/assumptions have been utilised in the assessment of operational noise:

- The facility is to operate between 8am and 10pm.
- The facility is at operational capacity for all use (All 6 pitches in use).
- There is to be no background music played within the facility.
- Roller Doors maintained on the southern and eastern facades of the development, as well as the sliding glass doors maintained on the western façade of the development are considered to be open. All other windows/doors are considered to be closed exclusive for patron ingress/egress.

SoundPLAN noise modelling has been conducted based on the information/assumptions presented within Sections 5.1 and 5.2, to predict noise emissions to surrounding sensitive receivers due to site operation.



### 5.3 SOUNDPLAN MODELLING

Noise levels have been predicted at the receiver locations using SoundPlan™ 8.0 modelling software implementing the ISO 9613-2:1996 "Acoustics – Attenuation of Sound During Propagation Outdoors – Part 2: General Method of Calculation" noise propagation standard.

Noise enhancing meteorological effects have been adopted as recommended by the NPfI, noting that the ISO 9613 modelling approach assumes that all receivers are 'downwind' (i.e., that noise enhancing wind conditions are in effect at all times).

Ground absorption was calculated with a ground factor of 0.6 for all areas surrounding the site (Grasslands) exclusive of any hardscape areas (Driveways, footpaths etc.), which have conservatively been modelled with a ground factor of 0, as recommended in *Engineering Noise Control* (Bies & Hanson).

In line with Factsheet C of the NPfI, penalties for annoying noise characteristics should be applied at the receiver, where applicable. Based on the predicted noise levels, no penalty should be applied (either for tonality, intermittency, or otherwise).

### 5.4 OPERATIONAL NOISE MODEL

Figure's 3 and 4 present the results of the predictive operational noise modelling, and results are summarised in Table 9.

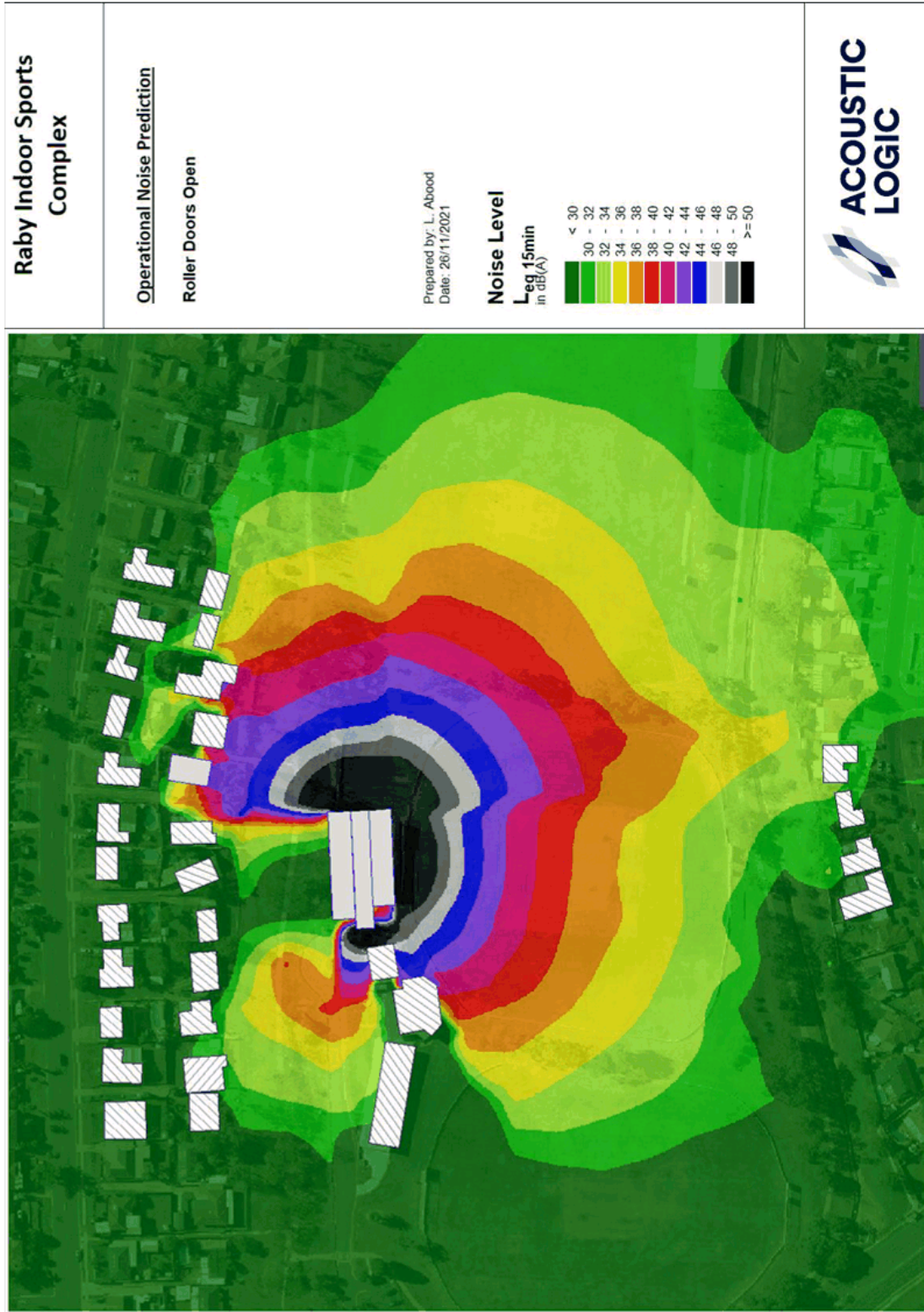


Figure 3: Raby Indoor Sports Complex Operational Noise Predictions

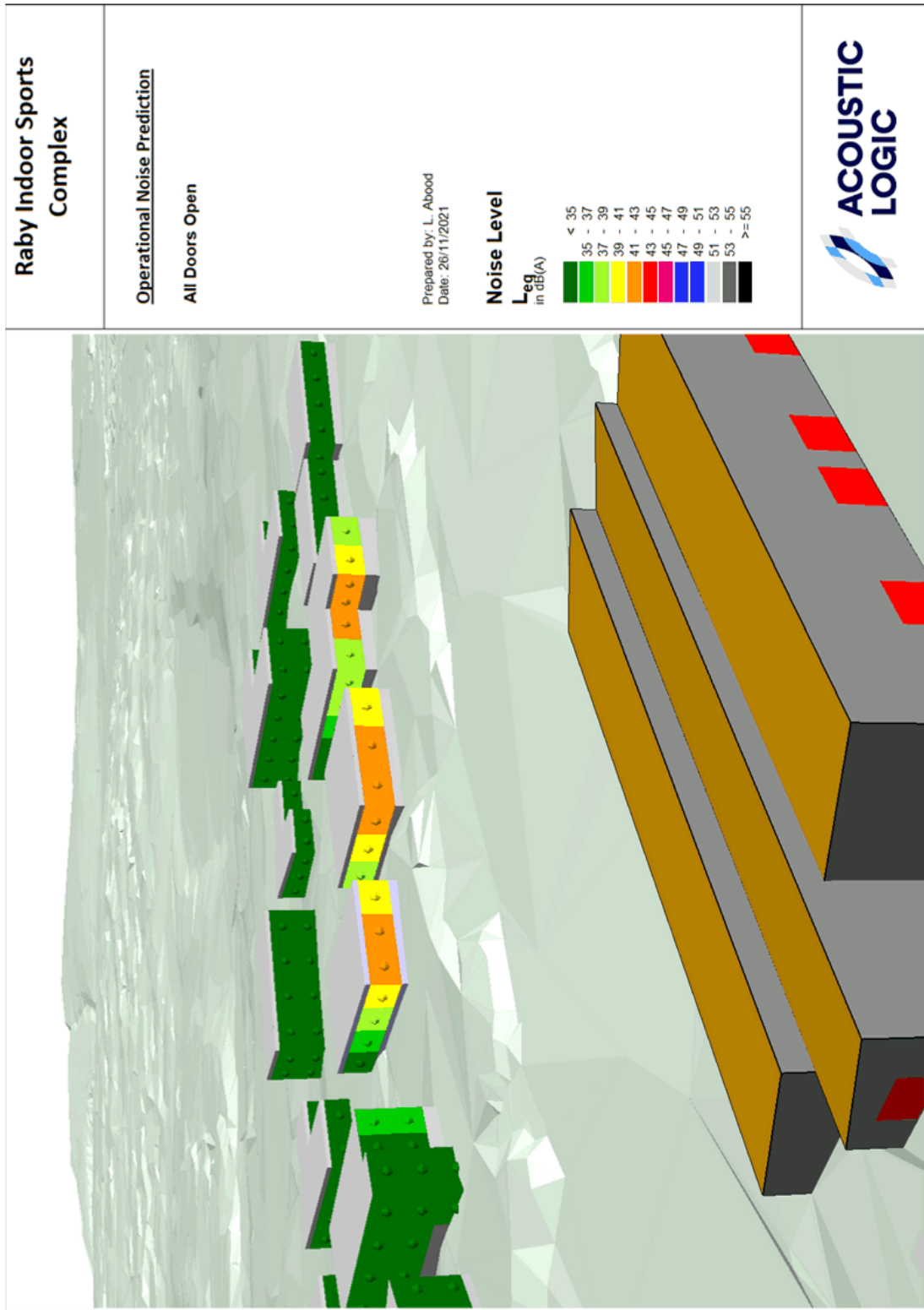


Figure 4: Predicted Noise Levels at R1

The table below presents the maximum predicted external noise levels experienced at sensitive receivers within the SoundPlan model.

**Table 9 – Maximum External Noise Levels for Sensitive Receivers due to Operational Noise**

Receiver	Predicted Noise Levels (dB(A) $L_{eq}(\text{period})$ )	Project Noise Emission Criteria (dB(A) $L_{eq}$ )	Compliance?
R1	41-43	≤ 43 (Evening)	<b>Yes</b>
R2	< 35		
R3			

### 5.5 MECHANICAL PLANT EMISSIONS

Detailed plant selection and location has not been undertaken at this stage. Satisfactory levels will be achievable through appropriate plant selection, location and if necessary, standard acoustic treatments such as duct lining, acoustic silencers, and enclosures.

Noise emissions from all mechanical services to the closest residential receivers should comply with the requirements of Section 4.

Detailed acoustic review should be undertaken at CC stage to determine acoustic treatments to control noise emissions to satisfactory levels.

## 6 RECOMMENDATIONS

The following is recommended for the alterations and additions to the indoor cricket facility at Raby Sports Complex:

- The facility is permitted to operate between the hours of 7am and 10pm Monday to Saturday, and between 8am and 10pm on Sundays and public holidays.
- Roller doors/ingress and egress doors are allowed to remain opened during use.
- Prominent signage is to be displayed near patron ingress/egress points to remind patrons to minimise noise when departing the premises.



## 7 CONCLUSION

This report presents an acoustic assessment of noise impacts associated with the alterations and additions to the Indoor Cricket facility maintained at Raby Sports Complex, Raby.

Provided acoustic treatments in Section 6 of this report are implemented, noise emissions from the proposed facility will satisfy the requirements of:

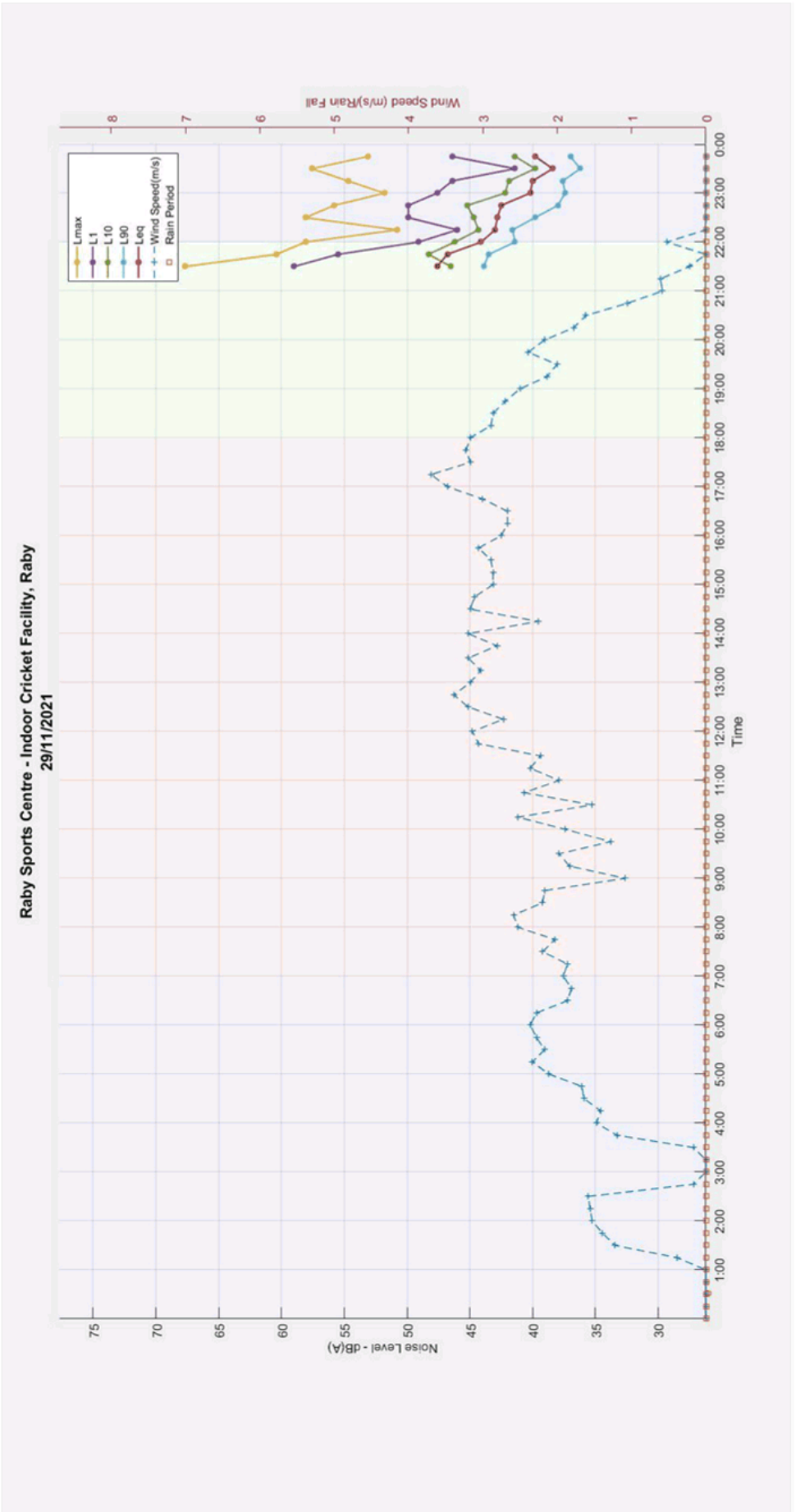
- Campbelltown City Council – '*Campbelltown Sustainable Cities Development Control Plan 2015*'.
- NSW Department of Environment and Heritage, Environmental Protection Authority document – '*Noise Policy for Industry*' (NPI) 2017

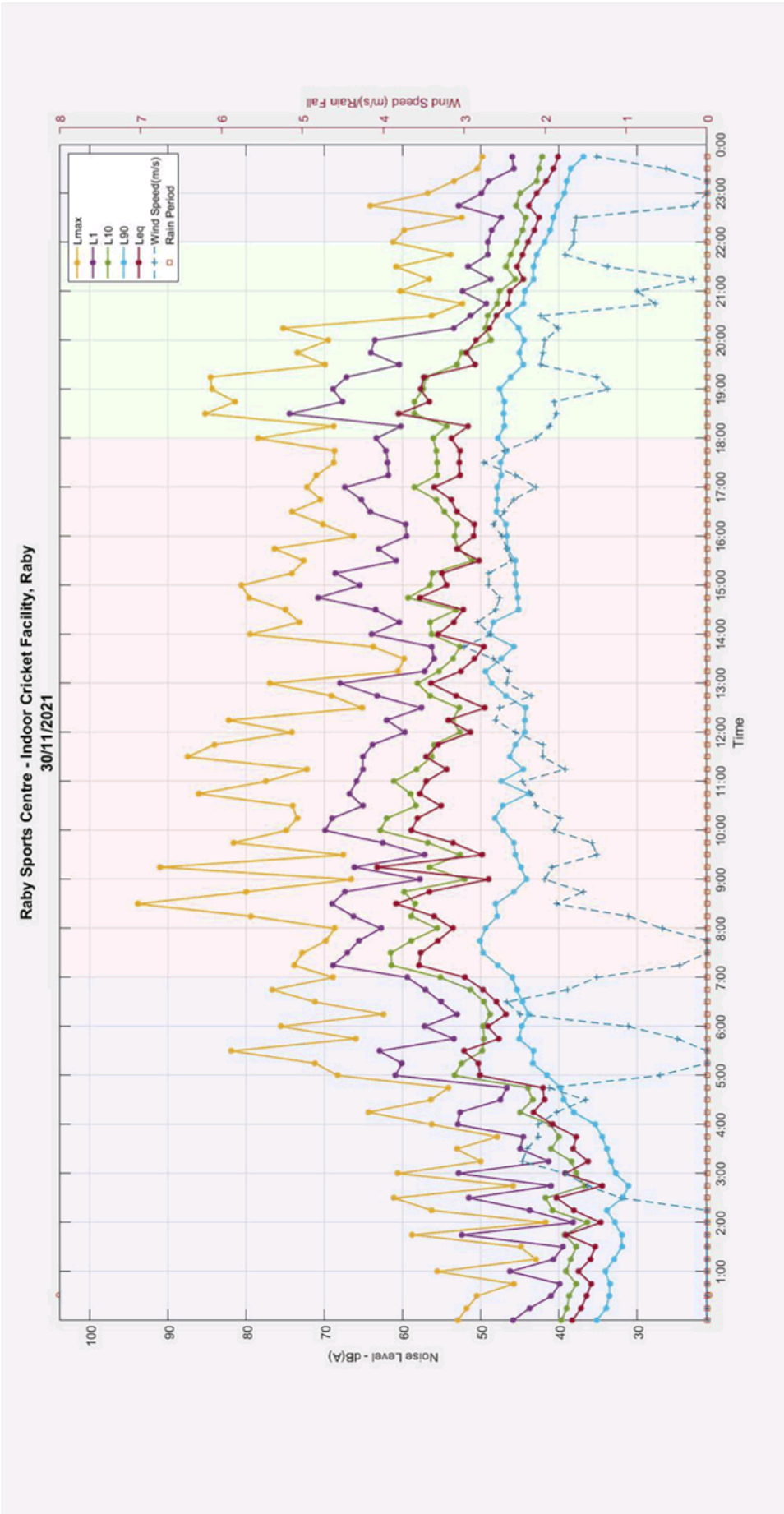
We trust this information is satisfactory. Please contact us should you have any further queries.

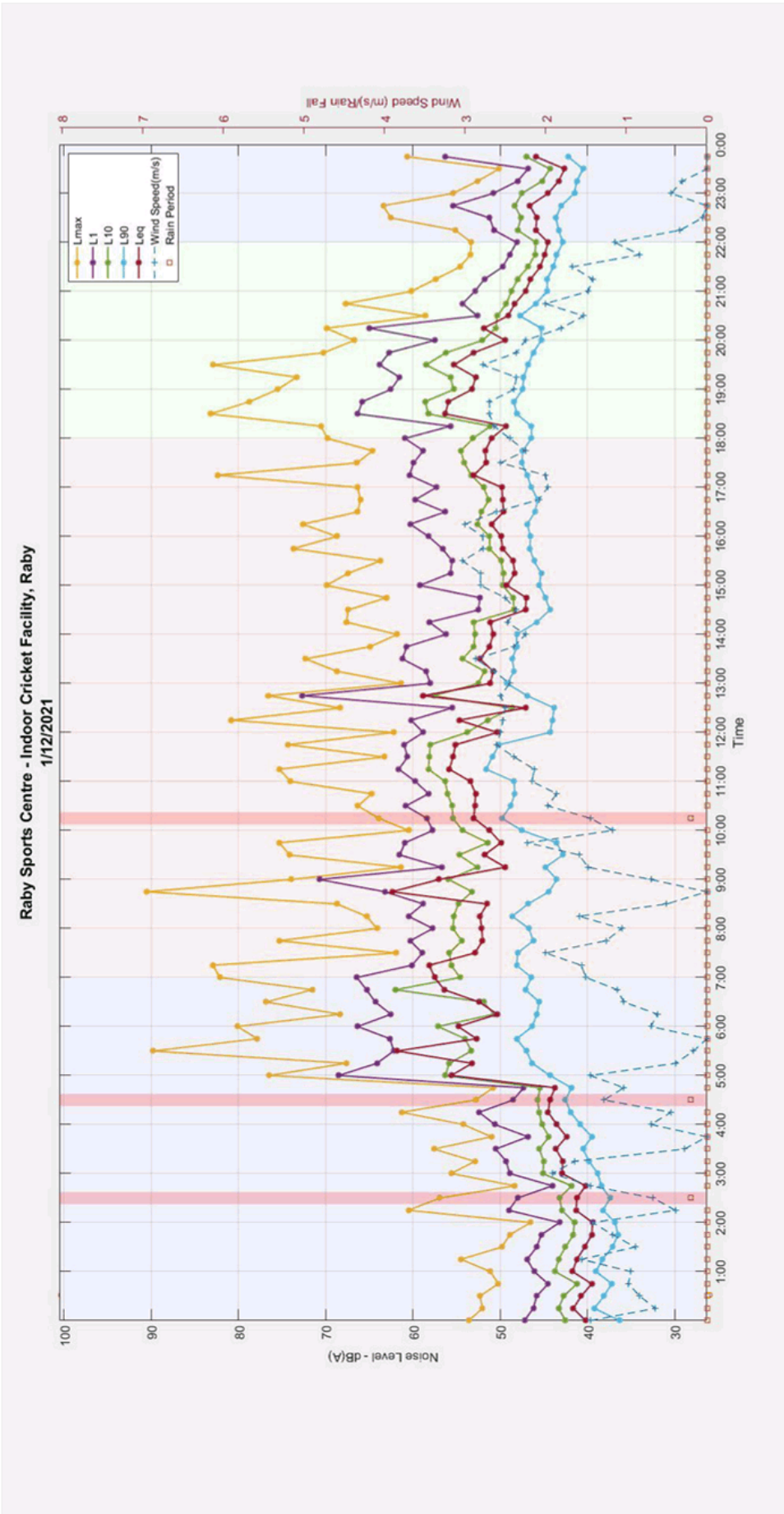
Yours faithfully,

Acoustic Logic Pty Ltd  
Lachlan Abood

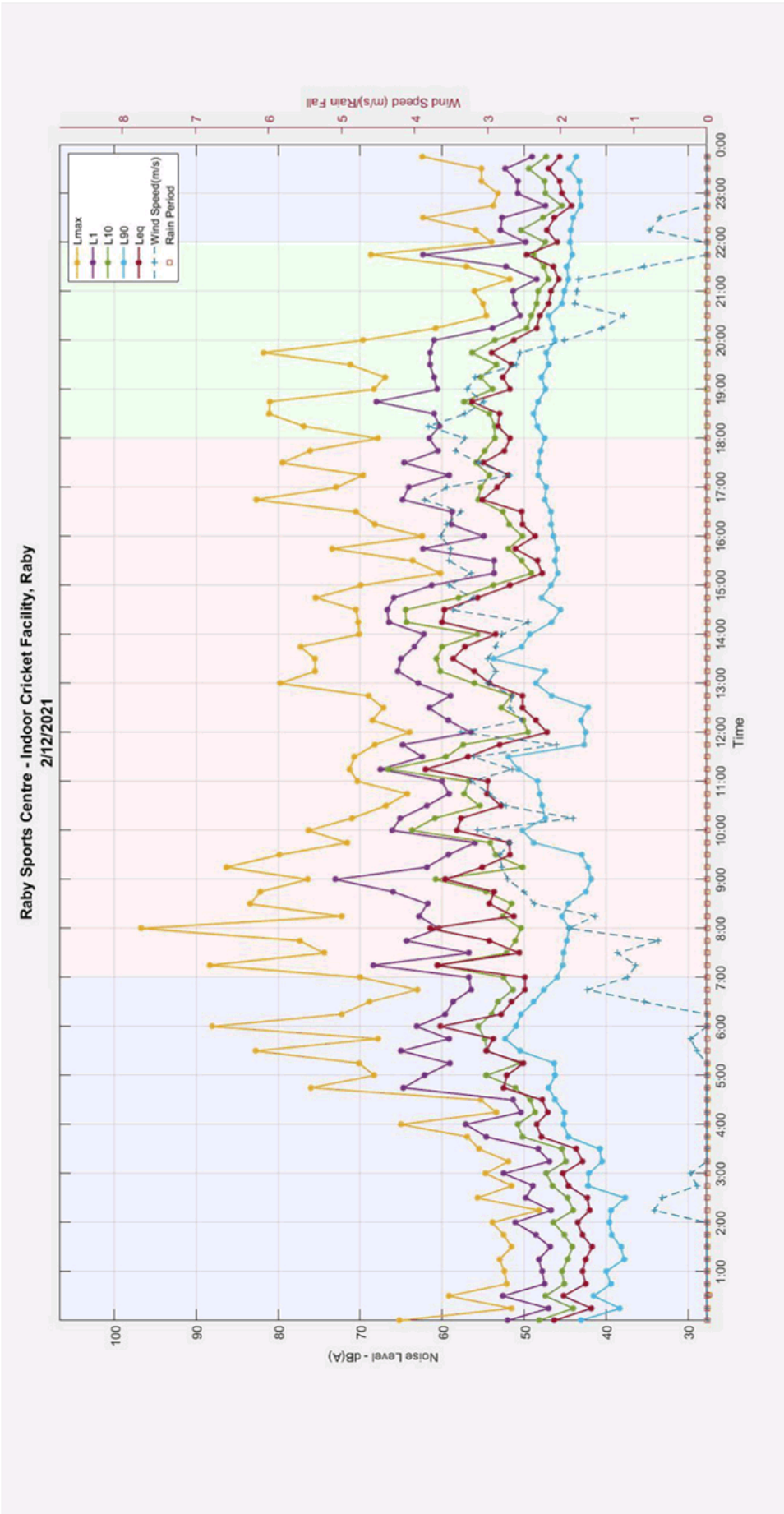
## **APPENDIX ONE – UNATTENDED MONITORING DATA**

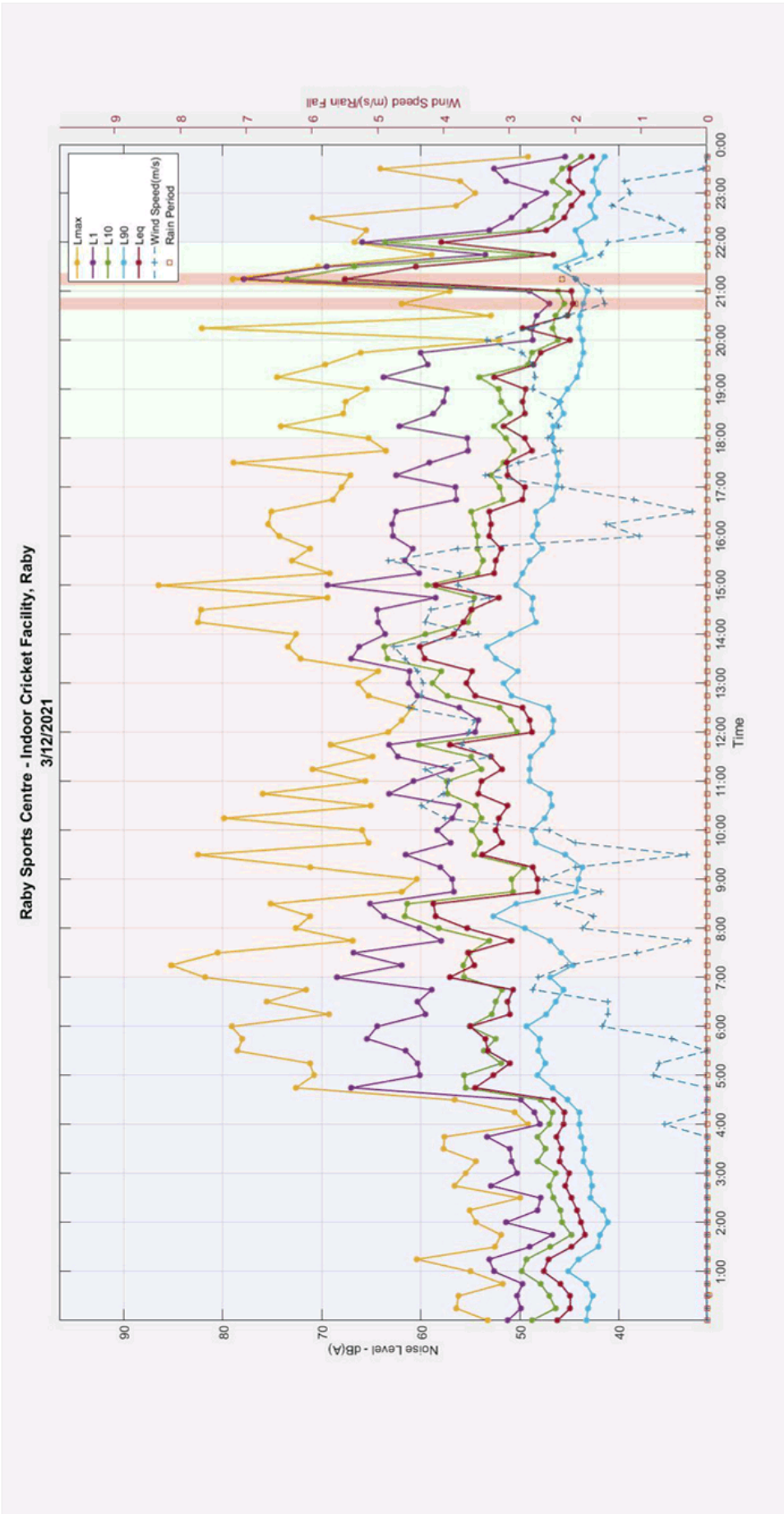


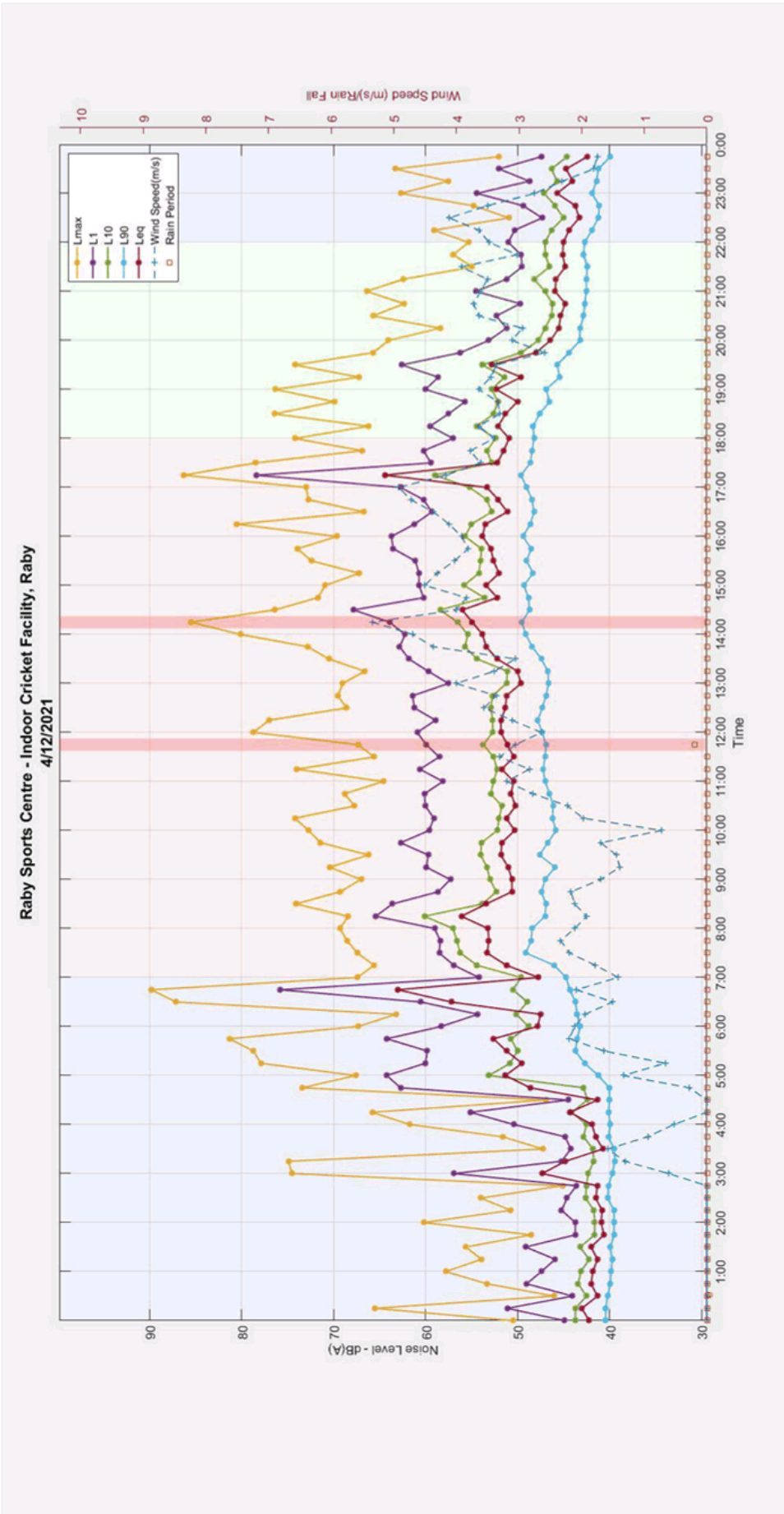


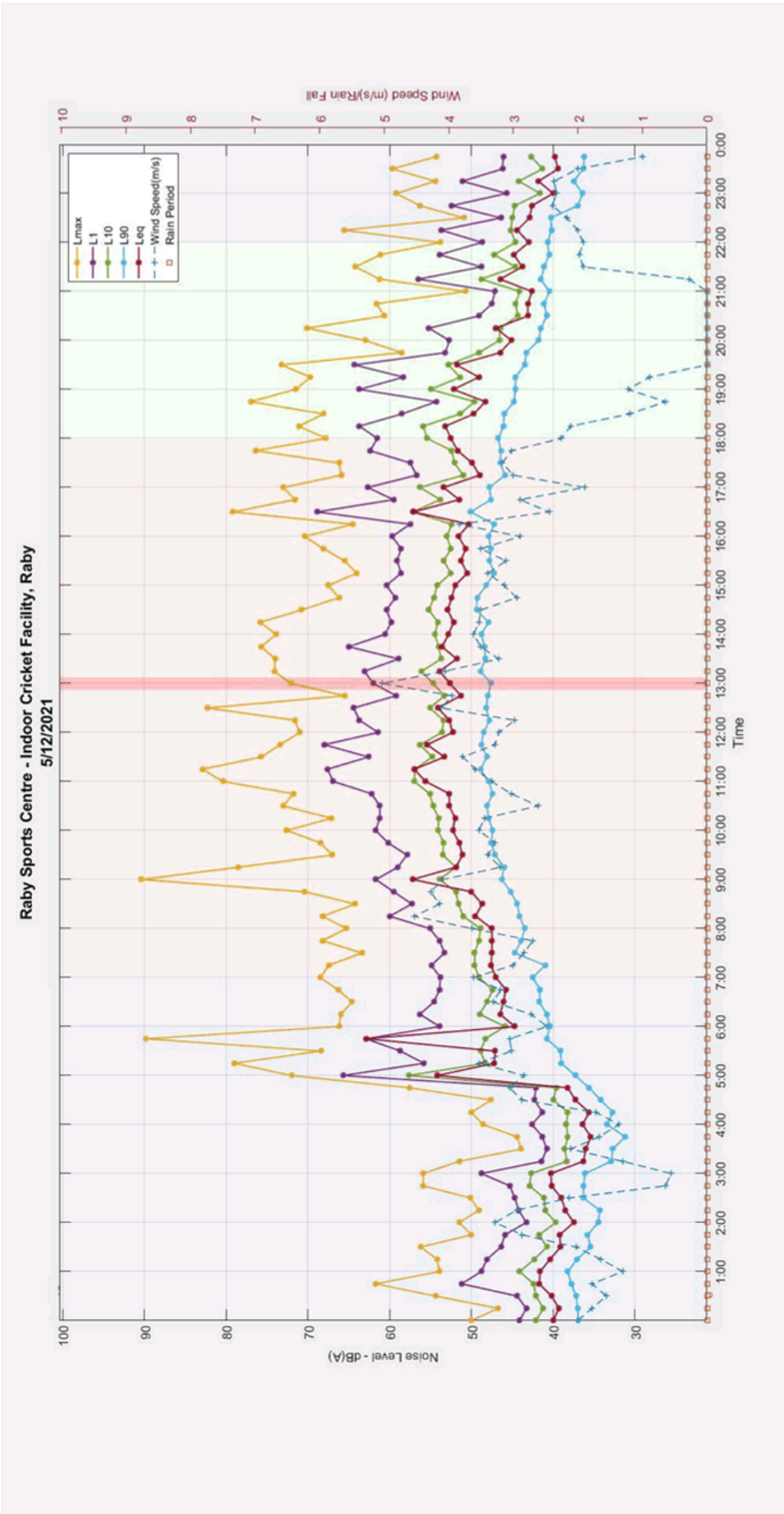




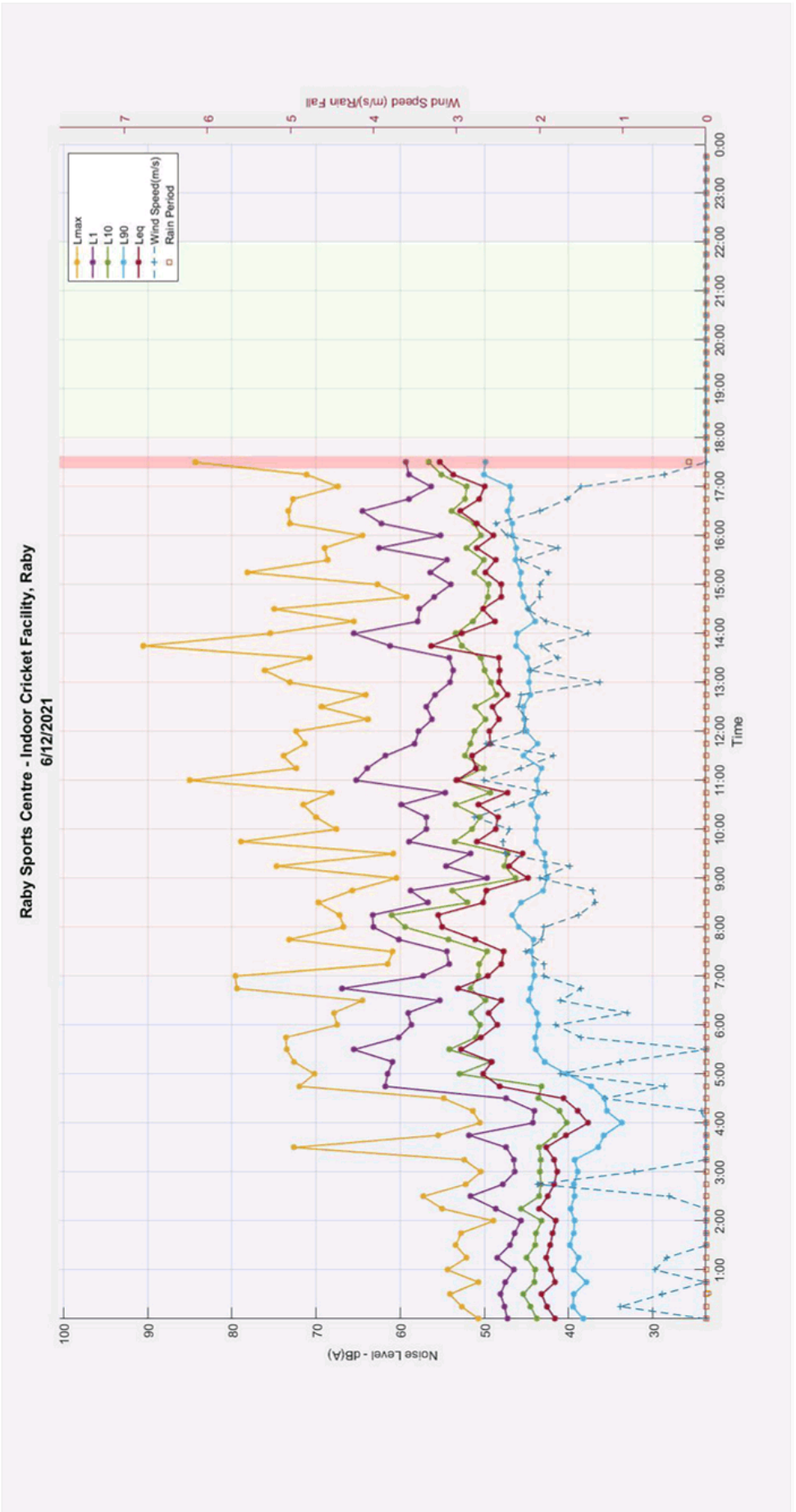














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# Arboricultural Impact Assessment and Tree Management Plan

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Site: Indoor Cricket Centre at Raby Sports Complex, Raby

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Date: 4 December, 2021

Reference: AIARaby10/21 Rev A

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## 1 Executive Summary

Green Spaces Consultancy has been engaged by Melocco & Moore Architects to undertake an Arboricultural Impact Assessment and Tree Management report in relation to a site within the Raby Sports Complex, Raby (*the site*).

The report has been prepared for submission in conjunction with a Development Application to Campbelltown Council.

The project proposes the demolition of the existing indoor cricket centre on the site and the construction of a new larger facility.

There are fourteen (14) trees located within or adjacent to the footprint of the proposed structure that have been included in this report.

Twelve (12) trees are proposed for removal as they are either located within the footprint or will be adversely impacted to the point where viable retention is not possible. Of the trees to be removed six (6) have been allocated a 'Low' retention value, four (4) have been allocated a 'Moderate' retention value and two (2) have been allocated a 'Moderate/High' retention value.

Recommendations have been made in relation to suitable replacement canopy trees that can be incorporated into the Landscape Plans for the site.

## 2 Contents

1	Executive Summary.....	2
3	Introduction.....	4
4	Documentation .....	5
5	Aims .....	5
6	The Site .....	6
7	Trees likely to be impacted.....	7
7.1	Tree Locations.....	7
7.2	Tree Schedule .....	7
7.3	Retention Values .....	8
8	Development Impact Discussion .....	9
9	Recommendations (Tree Management Specification).....	11
9.1	Tree Protection Fencing .....	11
9.2	Ground Protection .....	13
9.3	Trunk Protection .....	13
9.4	Excluded works within TPZ .....	14
9.5	Project Arborist / Holdpoints .....	14
9.6	The following work within the TPZ's must be undertaken as specified -.....	15
9.6.1	Excavation .....	15
9.6.2	Machinery access (ground protection) .....	15
9.6.3	Soft Landscaping .....	15
9.6.4	Underground Services .....	15
10	Replacement tree planting.....	16
11	Bibliography/References .....	17
12	Appendix 1 – Tree Assessment Data .....	18
13	Appendix 2 - Tree Protection Plan.....	20
14	Appendix 3 – Images.....	21
15	Appendix 4 - Tree Assessment Methodologies .....	24
16	Appendix 5 - Tree Retention Value Assessment Methodology.....	26
17	Appendix 6 - Development Impact Assessment Methodology.....	28
18	Appendix 7 - Useful Life Expectancy (ULE) Categories.....	30
19	Appendix 8 – Landscape Significance Table .....	31
20	Appendix 9 – Tree Retention Values Matrix .....	32

### 3 Introduction

Green Spaces Consultancy has been engaged by Melocco and Moore Architects to undertake an Arboricultural Impact Assessment and Tree Management report in relation to a site within the Raby Sports Complex, Raby (*the site*).

The report has been prepared for submission in conjunction with a Development Application to Campbelltown Council.

The project proposes the demolition of the existing indoor cricket centre on the site and the construction of a new larger facility.

There are fourteen (14) trees located within or adjacent to the footprint of the proposed structure that have been included in this report.

Twelve (12) trees are proposed for removal as they are either located within the footprint or will be adversely impacted to the point where viable retention is not possible. Of the trees to be removed six (6) have been allocated a 'Low' retention value, four (4) have been allocated a 'Moderate' retention value and two (2) have been allocated a 'Moderate/High' retention value.

The Retention Values do not take into account the proposed development works and are not a schedule for tree retention or removal. The retention values are usually one of several considerations when developing a design.

Recommendations have been made in relation to suitable replacement canopy trees that can be incorporated into the Landscape Plans for the site.

The site was attended by Lisa Durland (*the author*) on the 25<sup>th</sup> October, 2021.

## 4 Documentation

The following documents have been provided -

Plan/Document	Prepared by	Dwg No/Ref No	Dated
Survey Plan	ARP Surveyors	Ref No. 261	16/06/21
Architectural Plans	Melocco & Moore	Dwgs: 000,001,101,102 - Rev D. 103,151,152,153 - Rev C	26/11/21
Hydraulic Plans	Inline	H/01 - 06 / P3	30/11/21
Stormwater Realignment Plan	Enscape Studio	C1-01 Rev C	24/11/21

Figure 1 – Table of supplied plans and documents

The plans/documents as listed above have been relied upon for the information in this report.

The tree locations referenced in this document corresponds to the information as supplied on the survey plan provided and the tree numbering is consistent with the numbering used on the tree location plan that can be referenced in Section 7.1 - Figure 2.

## 5 Aims

- Provide advice relating to the suitability of the retention or removal of the trees on the site in the context of the proposed development.
- To identify existing trees to be retained and removed.
- Identify the Structural Root Zone and Tree Protection Zone (SRZ and TPZ in accordance with *AS4970 'Protection of trees on development sites'*) for prescribed trees and street trees.
- Identify the impact of the proposed development on the site trees to be retained.
- Identify any additional issues that may require assessment or ongoing monitoring.
- To provide tree protection and management specifications to mitigate the impact of the work on the trees to be retained.
- To provide recommendations in relation to replacement tree plantings.



## 6 The Site

The site is located within the Raby Sports Complex, Raby. The area to be developed falls away from the north (RL 64.69) to the south (RL61.96).

The location of the proposed Indoor Cricket Centre is shown by the red outline in Image 1 below.



Image 1 - Site Location (Source: <https://maps.six.nsw.gov.au> )

## 7 Trees likely to be impacted

### 7.1 Tree Locations

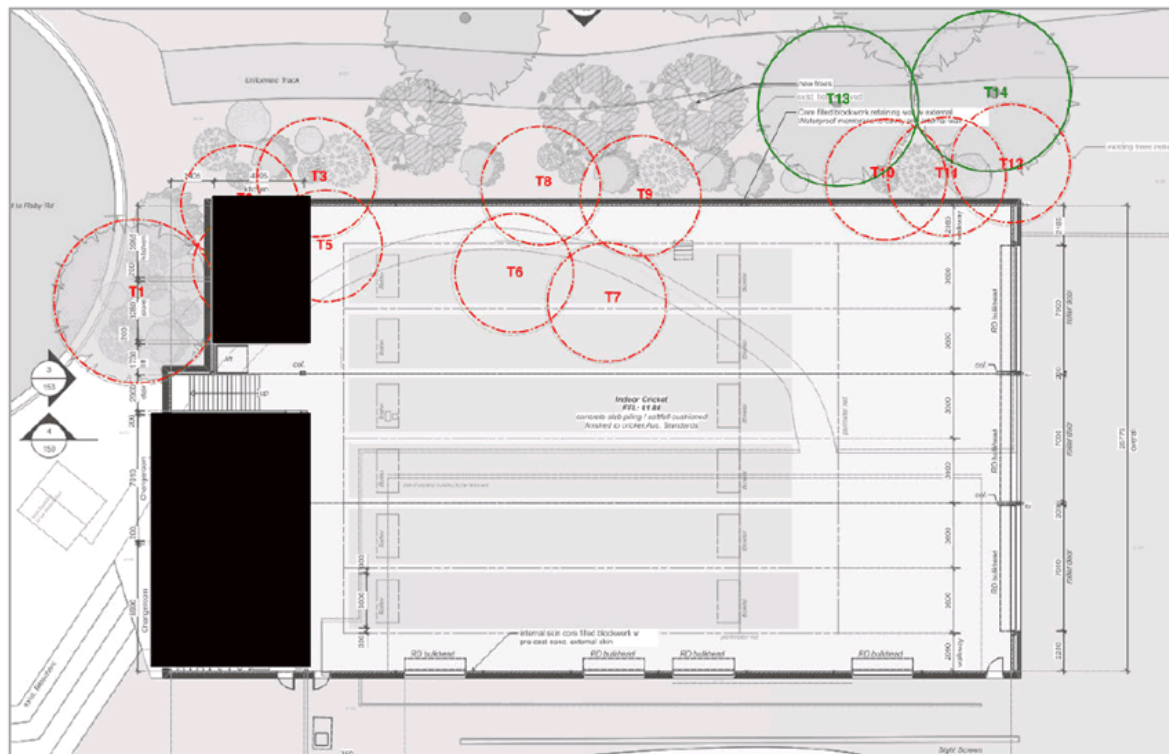


Figure 2 – Location of trees from Ground Floor Plan prepared by Melocco & Moore (Dwg 101 Rev B).

Red nominates trees for removal. Green nominates trees for retention.

### 7.2 Tree Schedule

Tree #	Botanical Name (Common Name)	DARF (mm)	SRZ radius (m)	DBH (mm)	TPZ (m)	Retention Value
1	<i>Schinus molle var areira</i> (Pepper Tree)	820	3	750	9	Moderate/High
2	<i>Fraxinus griffithii</i> (Evergreen Ash)	265	1.9	250	3	Low
3	<i>Casuarina cunninghamiana</i> (River She Oak)	610	2.6	480	5.7	Moderate
4	<i>Fraxinus griffithii</i> (Evergreen Ash)	320	2	240	2.8	Low
5	<i>Fraxinus griffithii</i> (Evergreen Ash)	245	1.8	160	2	Low
6	<i>Casuarina cunninghamiana</i> (River She Oak)	680	2.8	410	4.9	Moderate/High
7	<i>Casuarina cunninghamiana</i> (River She Oak)	710	2.8	450	5.4	Moderate
8	<i>Casuarina cunninghamiana</i> (River She Oak)	410	2.2	280	3.3	Moderate

Tree #	Botanical Name (Common Name)	DARF (mm)	SRZ radius (m)	DBH (mm)	TPZ (m)	Retention Value
9	<i>Casuarina cunninghamiana</i> (River She Oak)	360	2.1	275	3.3	Moderate
10	<i>Casuarina cunninghamiana</i> (River She Oak)	380	2.2	275	3.3	Low
11	<i>Eucalyptus crebra</i> (Narrow-leafed Ironbark)	325	2	280	3.3	Low
12	<i>Casuarina cunninghamiana</i> (River She Oak)	440	2.3	390	4.6	Low
13	<i>Eucalyptus crebra</i> (Narrow-leafed Ironbark)	380	2.2	305	3.6	Moderate
14	<i>Ficus rubiginosa</i> (Port Jackson Fig)	480	2.4	370	4.4	Moderate

Figure 3 – Tree SRZ and TPZ Table

DBH – Diameter at breast height (AS4970 nominates DBH at 1.4m above ground).

DARF – Diameter of the trunk just above the root flare.

SRZ – Structural Root Zone in accordance with AS 4970 'Protection of trees on development sites'. Measured from centre of trunk.

TPZ – Tree Protection Zone in accordance with AS 4970 'Protection of trees on development sites'. Measured from centre of trunk.

### 7.3 Retention Values

As required by Clause 2.3.2 of Australian Standard 4970 (2009) Protection of Trees on Development Sites (AS-4970), each tree assessed has been allocated a Retention Value. The Retention Value is based on the tree's Useful Life Expectancy and Landscape Significance with consideration to its health, structural condition and site suitability.

The detailed methodology for assessing the Retention Values is outlined in Appendix 5.

The Retention Values do not take into account any proposed development works and are not (in isolation) a schedule for tree retention or removal. The retention values are usually one of several considerations when developing a design.



## 8 Development Impact Discussion

Trees 2, 3, 4, 5, 6, 7, 8, 9, 10,11 and 12 are either located within the building footprint or in very close proximity where the works will impact a significant portion of the Structural Root Zone (SRZ). These trees require removal for the proposed construction to be undertaken. Refer to Figure 2 in Clause 7.1 of this report.

Tree 1 (*Schinus molle* var. *areira* (Pepper Tree) is also proposed for removal due to the 'Major' (> 10%) encroachment into the Tree Protection Zone (TPZ) and the additional consideration that canopy pruning will be required.

The proposed encroachment into the TPZ area will be a minimum of 28 % if shoring can be used for construction (pink area in Figure 5 below) along the proposed building alignment. Battering (shown by red dashed line in Figure 5 below) would impact the SRZ and a significantly higher portion TPZ area. It is considered that Tree 1 will not be viable in either excavation scenarios.

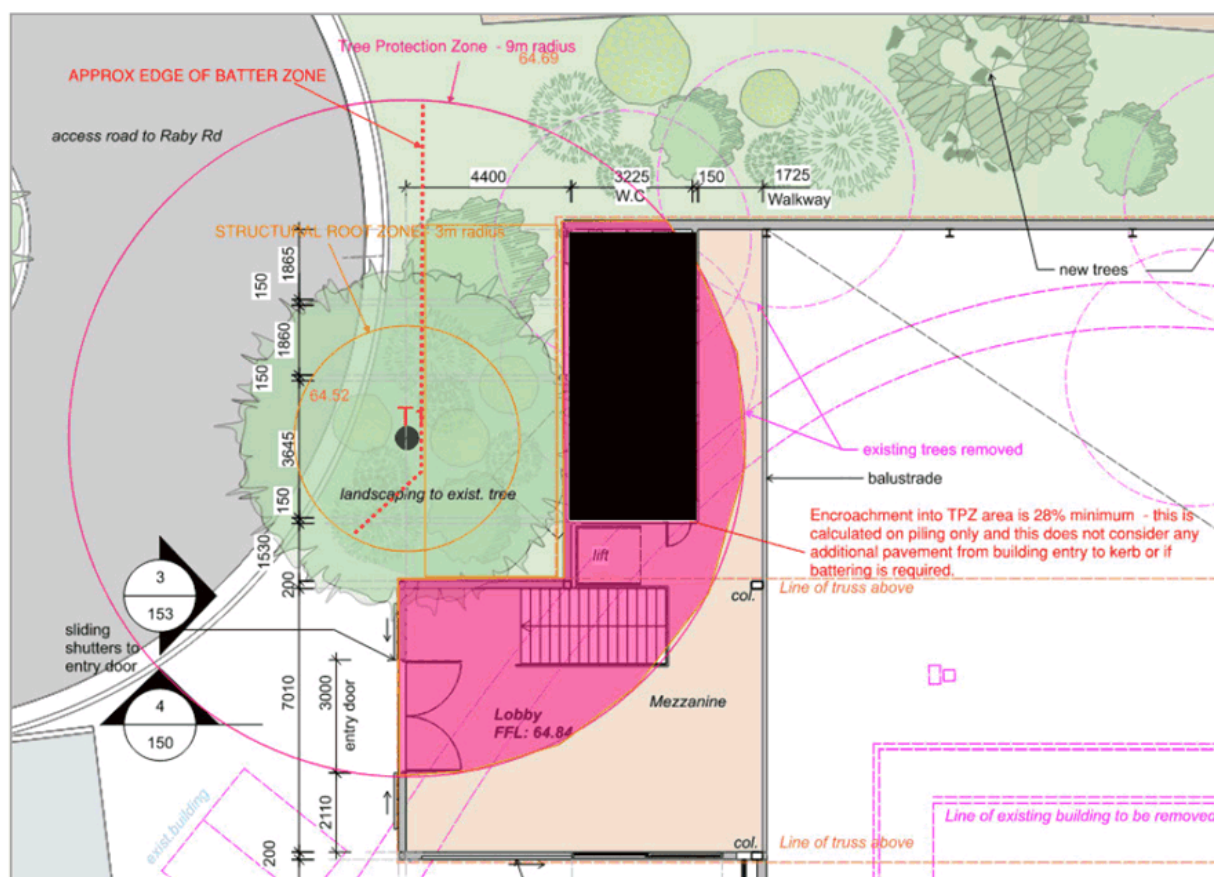


Figure 4 – Demonstrating incursion into TPZ/SRZ of Tree 1

Trees 13 and 14 are nominated for retention. If battering is undertaken the encroachment will be clear of the SRZ for each tree and slightly greater than 10% (11.7% and 11% - refer to Figure 6 below) of the TPZ area. Given the relatively young age of these trees it is considered that the encroachment will not impact their viability. The area lost to the proposed encroachment can be compensated for contiguous with the TPZ as is required in Clause 3.3.3 of AS4970 'Protection of trees on development sites'. These trees will not require canopy pruning.

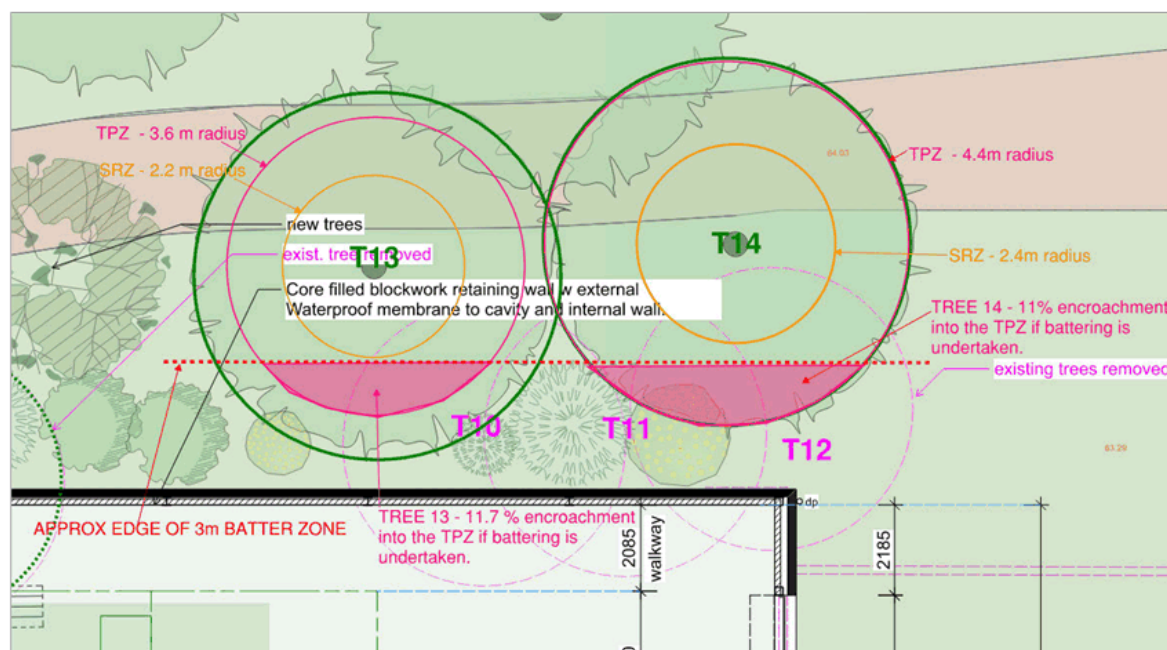


Figure 5 – Demonstrating the incursions into the TPZ's of Trees 13 and 14

### Stormwater –

The stormwater realignment plans prepared by Enscape Studio and dated 24/11/21 indicate that the stormwater realignment will be located within the TPZ of Trees 13 and 14 and two (2) additional trees to the north.

The proposal is to thrust bore the length of pipe within the TPZs at a depth of greater than 1.3 metres to the top of the pipe and therefore this work will have little (if any) impact on these trees as the majority of the root systems are likely to be within the top 800 - 1000mm of soil (refer to Figure 6 following). Additionally, the plans indicate that the launch pit site is outside the TPZ of any existing tree to be retained.

The Hydraulic plans prepared by Inline and dated 30/11/21 indicate a minor incursion (rainwater reuse tank and line) into the TPZ of Tree 14. These structures are located within the area of batter that has already been accounted for in the development impact discussion above and as shown in Figure 5.



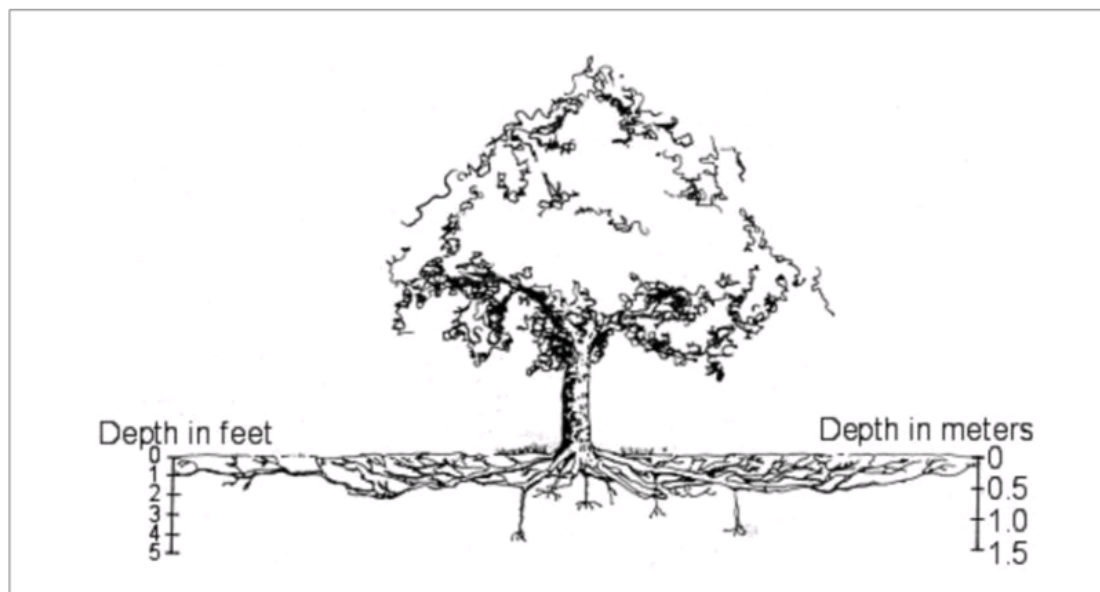


Figure 6 - Typical tree root configuration. Source - Arboriculture (Harris, Clarke and Matheny, page 27, Figure 2-19)

## 9 Recommendations (Tree Management Specification)

It is recommended that if approved by Campbelltown Council, Trees 1-12 be removed and replaced.

Trees 13 and 14 are to be retained and protected during construction in accordance with the following specifications.

If machinery movements cannot be avoided within the TPZ of any other trees not subject of this report they must be fenced at the canopy perimeter or trunk and ground protection is required within the TPZ where the vehicular movements will take place.

### 9.1 Tree Protection Fencing

The tree protection fencing shall be erected prior to any works (other than tree removal and pruning) commencing on the site. The fencing shall be installed in the approx. location as shown by the blue (or brown if relevant) lines on the Tree Protection Plan in Appendix 2 – exact placement to be determined by Project Arborist on site. The fencing shall be constructed from 1.8 metre high galvanised steel framed (50mm) panels with chain link infills. The panels shall be clamped together to prevent sideways movement and shall be stabilized at the ground with concrete block 'feet'. Fencing must not encroach onto roadway or footpath. Refer to Image 2 below as an example.

The fencing shall remain in situ until the completion of all construction.



Image 2 - Example of recommended fencing materials and configuration

All tree protection fencing shall be prominently sign posted indicating that the area is not to be accessed (refer to example from AS 4970 below in Fig 5). The sign shall include contact details for the builder/project manager and project arborist and can also include information about activities that are not allowed within the Tree Protection Area.

At a minimum the signs shall –

- Be visible from within the development site and shall be compliant with AS 1319-1994 'Safety signs for the occupational environment' – as specified in AS4970.
- Be annotated as conditioned by Council (if applicable).
- Be constructed from a durable material (i.e. metal, Coreflute) that will last for the duration of the works on site.
- Be securely attached to the fencing and replaced if removed or if the attachment fails.
- Be left in place until the Tree Protection Fencing (or other tree protection) is approved for removal by the Project Arborist.
- Include contact details for the Project Arborist



Figure 7 – Example of a Tree Protection Sign (Source - AS4970-2009 'Protection of trees on development sites' Appendix C).

## 9.2 Ground Protection

Where the area of the TPZ is not able to be fenced the Project Arborist may specify ground protection to prevent root damage and soil compaction. In accordance with AS4970 *‘Protection of trees on development sites’* measures may include 100mm of mulch laid over a geotextile membrane or if machinery is required within the TPZ aggregate or rumble boards laid over geotextile.

## 9.3 Trunk Protection

Where trunk protection is specified it must be undertaken as follows -

Trunk protection shall be installed by wrapping padding (either carpet underlay or 10mm thick jute geo-textile mat or similar) around the trunk (and first order branches where required if scaffolding is within 300mm) to a minimum height of 2m. Timber battens (90 x 45mm) spaced at 150mm centres shall be strapped together and placed over the padding. Timber battens must not be fixed to the trees. Refer to Clause 4.5.2 of AS 4970 *‘Protection of trees on development sites’* and Image 3 below for an example.



Image 3 - Example of trunk protection

Tree trunk (and where required branch) protection is to remain in place for the duration of work within the Tree Protection Zone (TPZ) and shall be removed at the completion of the works within the TPZ. Note - The general tree protection requirements as detailed in Clause 9.4 also apply within the TPZ radius of trees to be retained.

#### 9.4 Excluded works within TPZ

As listed in AS4970, the following activities must be excluded from the TPZ's:

- machine excavation – refer to 9.6.1 for allowable works
- excavation for silt fencing
- cultivation
- storage
- preparation of chemicals (including cement products)
- parking of vehicles and plant
- refueling
- dumping of waste
- wash down and cleaning of equipment
- placement of fill
- lighting of fires
- soil level changes
- temporary or permanent installation of utilities and signs, and
- physical damage to the tree

#### 9.5 Project Arborist / Holdpoints

The Project Arborist must have a minimum qualification of AQF (Australian Qualification Framework) Level 5 in Arboriculture.

The Project Arborist must certify the following HOLDPOINTS –

Stage of arboricultural inspection	Compliance documentation and photos shall be included
Installation of tree protection fencing/measures prior to any work (except for tree removal) commencing on site	Compliance with tree protection measures as approved and the Tree Protection Plan in Appendix 2.
Any changes in approved tree protection	Compliance with amended tree protection measures as approved
Excavation along northern edge of works within the TPZ of Trees 13 and 14.	Compliance with specification in 9.6.1 and the approved Tree Protection Plan in Appendix 2.
Pruning of roots – supervision	Compliance with specification in 9.6.1.
Prior to the issue of a Final Occupation Certificate	Compliance that all works have been undertaken as conditioned by Council and/or in accordance with this report.



9.6 The following work within the TPZ's must be undertaken as specified -

#### 9.6.1 Excavation

Prior to the use of machinery to excavate for the batter within the TPZ of Trees 13 and 14, excavation must be undertaken by hand held tools (or other tree sensitive methods as approved by the Project Arborist) along the northern edge of the works (top of batter), to a depth of 500mm within the TPZ of Tree 13 and 14. All roots encountered from these trees must be cleanly cut using a 'sharp and fit for purpose' pruning saw. Excavations beyond 500mm in depth may be undertaken by mechanical means if required and in accordance with any instructions from the Project Arborist.

Any spoil from the excavations must not be left within the TPZ unless approved in writing by the Project Arborist.

#### 9.6.2 Machinery access (ground protection)

Access to the site by machinery shall be clear of the TPZs of all trees to be retained unless the machinery is traversing over existing concrete slabs, paving or elevated structures.

Should machinery require access through a TPZ over exposed ground surfaces the route and ground protection must be approved prior by the Project Arborist.

#### 9.6.3 Soft Landscaping

Excavation for planting must be carefully undertaken by hand held tools ensuring that woody tree roots are not damaged - plants to be located accordingly.

The installation of fill should be avoided within the TPZ. If the installation of fill cannot be avoided a minor amount of fill (maximum 150mm in isolated areas) for planting may be approved (by the Project Arborist) in some areas providing that the fill is not placed directly around the base of the trunk and that the material is a well drained, friable soil that matches the texture of the existing site topsoil.

Any fill shall be in accordance with *AS4419 'Soils for Landscaping and Garden Use'*.

#### 9.6.4 Underground Services

All proposed stormwater lines and subterranean services shall be located outside the TPZ unless approved in writing by the Project Arborist prior to installation. Where installation outside the TPZ is not possible alternate tree sensitive measures for excavation may be utilized if specified, and supervised, by the Project Arborist.



## 10 Replacement tree planting

The following locally occurring tree species can be considered for incorporating into the Landscape Plan for the site:

Small trees -

*Acmena smithii* (Lillypilly)

*Backhousia myrtifolia* (Grey Myrtle)

*Callistemon salignus* (Willow Bottlebrush)

Larger trees -

*Angophora costata* (Smooth Bark Apple)

*Angophora floribunda* (Rough Bark Apple)

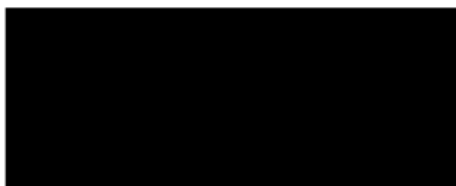
*Eucalyptus moluccana* (Grey Box)

*Eucalyptus sideroxylon* (Mugga Ironbark)

*Eucalyptus teteticornis* (Forest Red Gum)

*Syncarpia glomulifera* (Turpentine)

Canopy trees must be planted in deep soil with sufficient above and below ground space for the trees to grow to the typical mature dimensions.



### LISA DURLAND

Diploma of Arboriculture (AQF Level 5) – Distinction  
TRAQ – ISA Tree Risk Assessment Qualification  
QTRA – Risk Assessment Qualification  
Associate Diploma in Landscape Design  
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Assumptions: Care has been taken to obtain information from reliable sources as far as possible. Lisa Durland can neither guarantee nor be responsible for the accuracy of information provided by others.

Unless stated otherwise: The inspection was limited to visual examination of the subject tree/s without dissection, excavation, probing or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the subject tree/s may not arise in the future.

The structural condition and health of the tree/s should be assessed on a regular basis (recommended every 2 years) by a qualified Arborist.

## 11 Bibliography/References

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<https://www.campbelltown.nsw.gov.au/LocalEnvironment/Trees/TreeManagement> - accessed 27/10/1

## 12 Appendix 1 – Tree Assessment Data

Tree #	Botanical Name (Common Name)	Estimated Height (m)	Av Crown spread (m) Average	DBH (mm)	TPZ rad (m)	DARF (mm)	SRZ rad (m)	Health	Condition	ULE (years)	Landscape Significance	Retention Value	Comments
7	<i>Schinus molle</i> var <i>areira</i> (Pepper Tree)	8	9	750	9	820	3	Good	Medium	Medium/Long	High	Moderate/High	Some woody roots breaching ground surface and running adjacent kerb - lifting kerb and gutter at one point. Minor amount of small diameter deadwood. Minor amount of epicormic growth. Canopy suppressed by Tree 3. Canopy raised in past.
2	<i>Fraxinus griffithii</i> (Evergreen Ash)	5	3.5	250	3	265	1.9	Medium	Medium	Short	Low	Low	
3	<i>Casuarina cunninghamiana</i> (River She Oak)	12	8	480	5.7	610	2.6	Good	Medium	Medium	High	Moderate	
4	<i>Fraxinus griffithii</i> (Evergreen Ash)	6	4	240	2.8	320	2	Medium	Medium	Short	Low	Low	Suppressed by T1. Co-dominant from 500mm.
5	<i>Fraxinus griffithii</i> (Evergreen Ash)	4.5	2.5	160	2	245	1.8	Medium	Medium/Poor	Short	Low	Low	Suppressed by T4 and T3. Co-dominant from 1.15m.
6	<i>Casuarina cunninghamiana</i> (River She Oak)	12	7	410	4.9	680	2.8	Good	Good	Medium/Long	High	Moderate/High	Reduced canopy density. Canopy has been crown lifted. Low amount of small diameter deadwood.
7	<i>Casuarina cunninghamiana</i> (River She Oak)	13	6	450	5.4	710	2.8	Good	Good	Medium	High	Moderate	
8	<i>Casuarina cunninghamiana</i> (River She Oak)	11	4.5	280	3.3	410	2.2	Good	Medium	Medium	Moderate	Moderate	Suppressed by T6.
9	<i>Casuarina cunninghamiana</i> (River She Oak)	13	4.5	275	3.3	360	2.1	Good	Medium	Medium	Low	Moderate	Suppressed by T6. Low amount of medium diameter deadwood.
10	<i>Casuarina cunninghamiana</i> (River She Oak)	12	4	275	3.3	380	2.2	Good	Medium	Medium	Low	Low	Reduced canopy density. Canopy has been crown lifted. Low amount of small diameter deadwood.

## Tree Assessment / Arboricultural Impact Assessment Indoor Cricket Centre, Raby December 2021

Tree #	Botanical Name (Common Name)	Estimated Height (m)	Av Crown spread (m) Average	DBH (mm)	TPZ rad (m)	DARF (mm)	SRZ rad (m)	Health	Condition	ULE (years)	Landscape Significance	Retention Value	Comments
11	<i>Eucalyptus crebra</i> (Narrow-leaved Ironbark)	13	5	280	3.3	325	2	Good	Medium	Medium	Low	Low	Somewhat suppressed by adjacent trees resulting in no lower trunk branching.
12	<i>Casuarina cunninghamiana</i> (River She Oak)	13	5	390	4.6	440	2.3	Good	Medium	Medium	Low	Low	A third co-dominant trunk has been removed at 1.4m. Canopy of T14 starting to grow through.
13	<i>Eucalyptus crebra</i> (Narrow-leaved Ironbark)	10	6	305	3.6	380	2.2	Good	Medium	Medium	Moderate	Moderate	Old wound near base of trunk – occluding well with no decay apparent. Old wound in one of the main leaders. Some tight branch unions, may be some included union sin upper canopy.
14	<i>Ficus rubiginosa</i> (Port Jackson Fig)	8.5	8	370	4.4	480	2.4	Good	Good	Long	Moderate	Moderate	Co-dominant from 900mm. Past canopy raising. Some roots breaching ground surface have been scalped.





### 14 Appendix 3 – Images



Image 4



Image 5





Image 6



Image 7





Image 8



Image 9

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## 15 Appendix 4 - Tree Assessment Methodologies

The assessment of the trees is based on a visual inspection of the trees from ground level using relevant aspects of the Visual Tree Assessment (VTA) method as outlined by Mattheck & Breloer (1994). The inspection included notation of the dimensions of the trees, the density and health of the foliage in conjunction with an examination of the form and structure of the trunks, branches and crown and an assessment of the health and soundness of these elements of the trees.

The inspection was limited to visual inspection of each tree without dissection or coring. The inspection did not include aerial inspection and no testing of woody tissue or substantial subterranean root investigation was undertaken.

The tree heights were estimated using comparison with adjacent structures where heights and dimensions were known. The canopy spread was estimated and the trunk diameter at breast height (DBH) and trunk diameter above the root flare (DARF) was measured using a Yamayo® diameter tape at 1.4 above ground and is expressed in millimeters.

All measurements from the trees are taken as if measured from the centre of the tree trunk and are expressed in meters.

The criteria for assessing health included assessing density of the canopy, new extension growth, impact of pests and or diseases, amount and dimensions of deadwood/dieback, size and colour of foliage and presence or absence of epicormic growth. Each tree was rated as having Good (G), Medium (M), Poor (P) or Dead (D) health.

The criteria for assessing condition included assessing the soundness of the branch unions, presence of cavities and or decay, branching structure including co-dominant trunks and rubbing branches, leaning trunks, root girdling or root damage/removal, branch failures and general structural integrity. Each tree was rated as having Good (G), Medium (M), Poor (P) or Remove (R) condition.

No soil sampling or testing has been undertaken.

The Structural Root Zones (SRZ) and Tree Protection Zones (TPZ) have been calculated using the formula as nominated in AS 4970 'Protection of trees on development sites. The

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assessment of encroachment from previous development uses AS 4970 'Protection of trees on development sites' – Section 3.3.2 and 3.3.3 as a point of reference.

The results of the visual tree assessment for the trees have been summarized in a table in Appendix 1.



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## 16 Appendix 5 - Tree Retention Value Assessment Methodology

The process as detailed below was used to determine a retention value for each tree on the site. The retention value assists in determining the constraint value of each tree in the context of designing the proposed development.

A retention value for each tree has been determined and is included in Appendix 1.

The process for determining the retention values involved a considered methodology detailed as follows, in order of undertaking -

### 16.1 ULE

Each tree has been assigned a ULE (Useful Life Expectancy) value modified by a process developed by Barrell (1996). The objective of a ULE assessment is to assign a relative value to individual trees within a group for the purpose of informing future management options. In summary, ULE is the life expectancy of each tree modified by economic considerations, impacts on trees with a longer ULE and the retention of the amenity of the wider landscape. A ULE value for each tree is included in the table in Appendix 1 and details of the ULE categories (from which the ULE values were derived) are provided in Appendix 7.

### 16.2 Landscape Significance rating

Each tree has been assigned a Landscape Significance rating using the criteria developed by Morton (2011). The trees have been rated using criteria relating to heritage, ecological and amenity values. Landscape Significance ratings for each tree are included in Appendix 1 and the table detailing the criteria for assigning significance ratings is provided in Appendix 8.

### 16.3 Retention Value

As required by Clause 2.3.2 of AS4970 '*Protection of trees on development sites*' a Retention Value has been assigned to each tree on the site.

Using the ULE and the Landscape Significance rating the Tree Retention Value Matrix has been applied to determine a retention value for the trees. The matrix is included in Appendix 9.

A retention value for each site tree has been determined and is included in Appendix 1.

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The Retention Value does not include a consideration of the proposed development work and is not a schedule for tree retention or tree removal however is one, of several, considerations when designing works on a development site.

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## 17 Appendix 6 - Development Impact Assessment Methodology

The following methodology was used in relation to determine the impacts of the proposed development on trees to be retained.

As defined in AS 4970-2009 'Protection of trees on development sites' (AS 4970) the Tree Protection Zone (TPZ) is the principal means of protecting trees on development sites. The TPZ is a combination of root area and crown area requiring protection. It is ideally an area isolated from construction disturbance (i.e. excavation or fill, trenching, ripping, grading, compaction etc.) so that the tree remains viable.

The TPZ is a radial distance measured from the centre of the tree trunk.

The TPZ and Structural Root Zones (SRZ) dimensions for the trees are recorded in Appendix 1.

### 17.1 Determining Tree Protection Zones

As defined in AS 4970 Section 1.4.7 the TPZ is 'a specified area above and below ground and at a given distance from the trunk set aside for the protection of a tree's roots and crown (canopy) to provide for the viability and stability of a tree to be retained where it is potentially subject to damage by development'. The TPZ is the root zone/canopy area required for vigour and long-term viability. The TPZ area has been calculated as specified in Section 3.2 of AS 4970.

### 17.2 Determining Structural Root Zones

As defined in AS 4970 Section 1.4.5 the SRZ is 'the area around the base of a tree required for the tree's stability in the ground. The woody root growth and soil cohesion in this area are necessary to hold the tree upright.' The SRZ area has been calculated as specified in Section 3.3.5 of AS 4970.

### 17.3 Variation to the TPZ – Major

Should major encroachments (> 10%) of the TPZ be proposed it must be demonstrated by The Project Arborist that the tree will remain viable into the long term. Demonstration of viability may include non-destructive methods of root investigation and should be made in consideration of the following factors as listed in Section 3.3.4 of AS 4970:

Location and distribution of the roots

- Potential loss of root mass

- 
- Tree species and tolerance to root disturbance
  - Age, vigour and size of the tree
  - Lean and stability of the tree
  - Soil characteristics
  - Existence of past or existing structures affecting root growth
  - Design factors

#### 17.4 General Comment - Encroachments into the TPZ

Calculating the percentage of the encroachment is the initial step in the process of assessing any impact. The nature of any major encroachment (>10%) must also be considered in the context of Section 3.3.4 of AS 4970.

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## 18 Appendix 7 - Useful Life Expectancy (ULE) Categories

Each tree has been allocated a ULE rating that aligns with one of the categories below –

- I. 40 years or more
- II. 15 - 40 years
- III. 5 -15 years
- IV. Less than 5 years

The methodology has been modified from Barrell (1996) and is based on an estimate of the longevity of each tree in consideration of the growing environment. Further consideration is given to the tree health, structural condition and the site suitability and the ULE is modified if required.



### 19 Appendix 8 – Landscape Significance Table

Ref: Andrew Morton - Earthscape Horticultural, Berowra, NSW (December 2011) – modified by Green Spaces Consultancy 2019.

RATING	HERITAGE VALUE	ECOLOGICAL VALUE	AMENITY VALUE
1. SIGNIFICANT	<p>The subject tree is listed as a Heritage Item under the Local Environment Plan (LEP) with a local, state or national level of significance or is listed on Council's Significant Tree Register</p> <p>The subject tree forms part of the curtilage of a Heritage Item (building /structure /artefact as defined under the LEP) and has a known or documented association with that item</p> <p>The subject tree is a Commemorative Planting having been planted by an important historical person (s) or to commemorate an important historical event</p>	<p>The subject tree is scheduled as a Threatened Species as defined under the Threatened Species Conservation Act 1995 (NSW) or the Environmental Protection and Biodiversity Conservation Act 1999</p> <p>The tree is a locally indigenous species, representative of the original vegetation of the area and is known as an important food, shelter or nesting tree for endangered or threatened fauna species</p> <p>The subject tree is a Remnant Tree, being a tree in existence prior to development of the area</p>	<p>The subject tree has a very large live crown size exceeding 300m<sup>2</sup> with normal to dense foliage cover, is in a visually prominent position in the landscape, exhibits very good form and habit typical of the species</p> <p>The subject tree makes a significant contribution to the amenity and visual character of the area by creating a sense of place or creating a sense of identity</p> <p>The tree is visually prominent in view from surrounding areas, being a landmark or visible from a considerable distance.</p>
2. VERY HIGH	<p>The tree has a strong historical association with a heritage item (building/structure/artefact/garden etc.) within or adjacent the property and/or exemplifies a era or style of landscape design associated with the original development of the site.</p>	<p>The tree is a locally indigenous species, representative of the original vegetation of the area and is a dominant or associated canopy species of an Endangered Ecological Community (EEC) formerly occurring in the area occupied by the site.</p>	<p>The subject tree has a very large live crown size exceeding 200m<sup>2</sup>; a crown density exceeding 70% (normal-density), is a very good representative of the species in terms of its form and branching habit or is aesthetically distinctive and makes a positive contribution to the visual character and the amenity of the area</p>
3. HIGH	<p>The tree has a suspected historical association with a heritage item or landscape supported by anecdotal or visual evidence</p>	<p>The tree is a locally indigenous species and representative of the original vegetation of the area and the tree is located within a defined Vegetation Link / Wildlife Corridor or has known wildlife habitat value</p>	<p>The subject tree has a large live crown size exceeding 100m<sup>2</sup>; The tree is a good representative of the species in terms of its form and branching habit with minor deviations from normal (e.g. crown distortion/suppression) with a crown density of at least 70% (normal); The subject tree is visible from the street and surrounding properties and makes a positive contribution to the visual character and the amenity of the area</p>
4. MODERATE	<p>The tree has no known or suspected historical association but does not detract or diminish the value of the item and is sympathetic to the original era of planting.</p>	<p>The subject tree is a non-local native or exotic species that is protected under the provisions of this DCP.</p>	<p>The subject tree has a medium live crown size exceeding 40m<sup>2</sup>; The tree is a fair representative of the species, exhibiting moderate deviations from typical form (distortion/suppression etc.) with a crown density of more than 50% (thinning to normal); and</p> <p>The tree is visible from surrounding properties but is not visually prominent – view may be partially obscured by other vegetation or built forms. The tree makes a fair contribution to the visual character and amenity of the area.</p>
5. LOW	<p>The subject tree detracts from heritage values or diminishes the value of a heritage item</p>	<p>The subject tree is scheduled as exempt (not protected) under the provisions of this DCP due to its species, nuisance or position relative to buildings or other structures.</p>	<p>The subject tree has a small live crown size of less than 40m<sup>2</sup> and can be replaced within the short term (5-10 years) with new tree planting</p>
6. VERY LOW	<p>The subject tree is causing significant damage to a heritage item.</p>	<p>The subject tree is listed as an Exempt Species in the relevant Local Government Area, being invasive, or is a known nuisance species.</p>	<p>The subject tree is not visible from surrounding properties (visibility obscured) and makes a negligible contribution or has a negative impact on the amenity and visual character of the area. The tree is a poor representative of the species, showing significant deviations from the typical form and branching habit with a crown density of less than 50% (sparse).</p>
7. INSIGNIFICANT	<p>The tree is completely dead and has no visible habitat value</p>	<p>The tree is an invasive weed under the Biosecurity Act (2015) within the relevant Local Government Area.</p>	<p>The tree is completely dead and represents a potential hazard.</p>

## 20 Appendix 9 – Tree Retention Values Matrix

ULE	Landscape Significance Rating						
	1	2	3	4	5	6	7
<b>Long</b> - greater than 40 years	High Retention Value (Priority for Retention)						
<b>Medium</b> - 15 to 40 years			Moderate Retention Value (Consider for Retention)				
<b>Short</b> - 5 to 15 years					Low Retention Value (Consider for Removal)		
<b>Transient</b> - less than 5 years					Very Low Retention Value (Priority for Removal)		
<b>Dead or Hazardous</b>							

Ref: - Modified from  
Couston, Mark & Howden, Melanie (2001)  
**Tree Retention Values Table**  
Footprint Green Pty Ltd, Sydney Australia



**Photomontage - Raby Sports Complex**



**Existing Raby Sports Complex**



**Proposed Raby Sports Complex**

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