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**BUNGENDORE HIGH SCHOOL
NORTH CAMPUS
(TEMPORARY)**

**ARCHITECTURAL DESIGN
REPORT**



Education
School Infrastructure

Prepared for
School Infrastructure NSW

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Project Number 240071

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P5	04.04.25	FOR FINAL REVIEW AND SUBMISSION	AC	PD

1 Introduction

1.1 Introduction

This Architectural Design Report has been prepared to support a Review of Environmental Factors (REF) for the NSW Department of Education (DoE) for the construction and operation of the new Bungendore North Campus High School (the activity).

The purpose of the REF is to assess the potential environmental impacts of the activity prescribed by State Environmental Planning Policy (Transport and Infrastructure) 2021 (T&I SEPP) as “development permitted without consent” on land carried out by or on behalf of a public authority under Part 5 of the Environmental Planning and Assessment Act 1979 (EP&A Act). The activity is to be undertaken pursuant to Chapter 3, Part 3.4, Section 3.37A of the T&I SEPP.

This document has been prepared in accordance with the Guidelines for Division 5.1 assessments (the Guidelines) by the Department of Planning, Housing and Infrastructure (DPHI). As well as the Addendum Division 5.1 guidelines for schools and Addendum October 2024 (Consideration of environmental factors for health services facilities and schools). The purpose of this report is to provide an overview of the environmental impacts of the activity.

1.2 Proponent

The NSW Department of Education (DoE) is the proponent and determining authority pursuant to Section 5.1 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

1.4 Site Description

The project site, and land to which the Review of Environmental Factors (REF) applies (the site) includes 4-6 and 10 Majara Street, as well as part Lot 1 DP 1276279 (previously Majara Street road reserve), as identified in Figure 1.

As shown at Figure 2 (p.2), the new Bungendore North Campus High School will utilise the existing administration building and car park located at 10 Majara Street.

Demountable buildings are proposed to be placed north of the existing building. Public domain upgrades will feature in part Lot 1 DP 1276279 and part Lot 1 DP 1276282.

The site is located between Mick Sherd Oval (to the west) and the rail corridor (to the east). The site is north of the Bungendore Train Station and Bungendore Primary School.

The Bungendore Primary School, located on the corner of Gibraltar Street and Majara Street currently accommodates Bungendore High School on a temporary basis.

1.5 Proposed Activity Description

The proposed activity is for the construction and operation of the new Bungendore North Campus High School. The high school will accommodate the operational needs of the high school on a temporary basis (together with the existing high school located within the grounds of Bungendore Public School) as students as enrolments continue to grow. These facilities will be utilised until such time the permanent high school at Birchfield Drive is established.

Specifically, the project involves the following:

- Use of the former Council administration building as part of the new Bungendore North Campus High School,
- New demountable classrooms,
- Landscaping, outdoor play areas, shade structure and basketball court,
- On site staff parking which utilises the existing car park and access from Majara Street, and
- Public domain upgrades to part Lot 1 DP 1276279 (previously Majara Street Road reserve) and part lot 1 DP 1276282 to enable kiss and drop from Majara Street and pedestrian connectivity to surrounding areas.

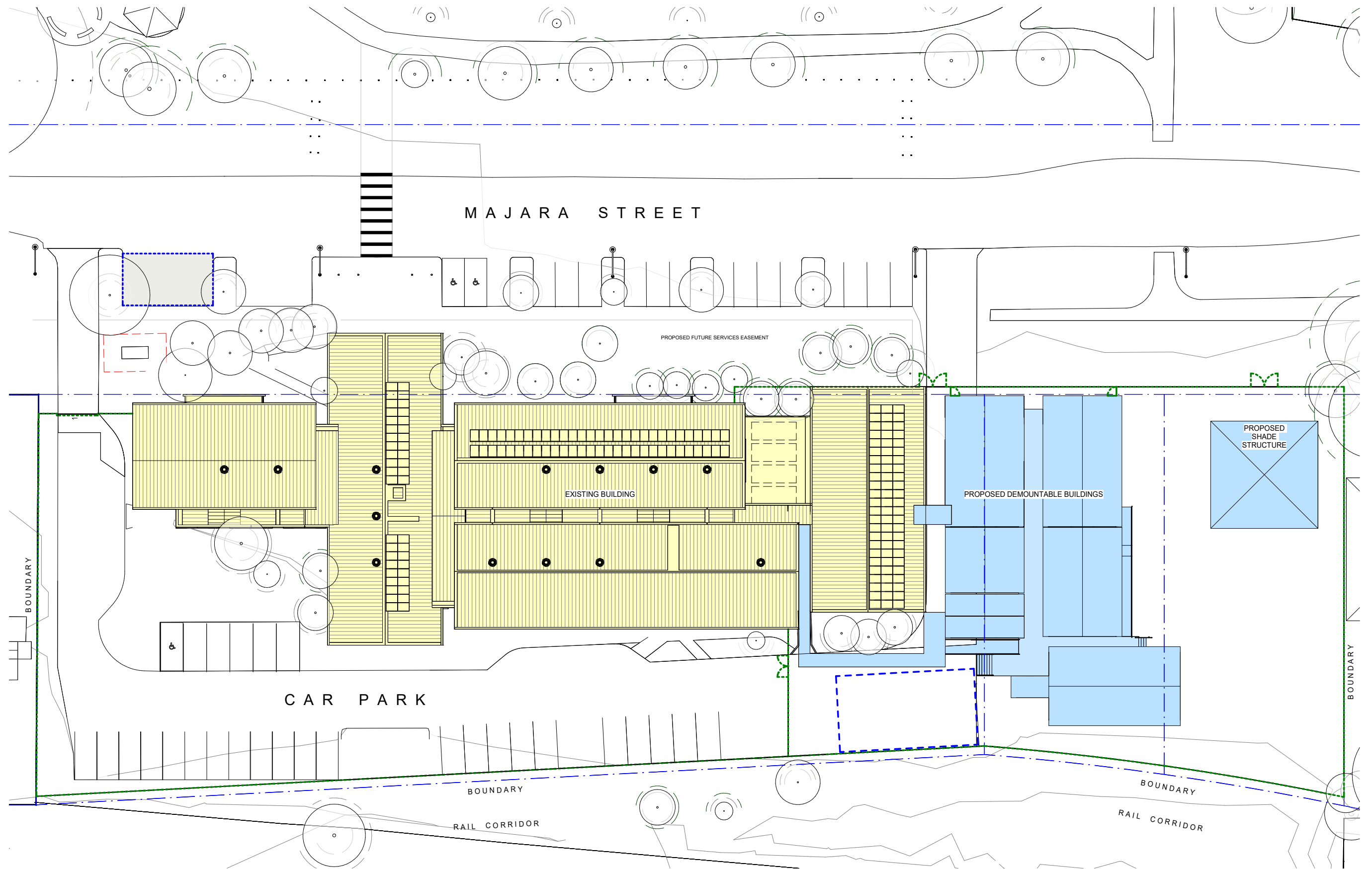
The design is intended to accommodate students until such time the permanent high school facilities are established at Birchfield Drive, Bungendore. The activity will supplement the existing high school facilities located within the Bungendore Primary School site.

Refer to the Review of Environmental Factors (REF) for the detailed scope of works and operational details.

Figure 2 provides an extract of the proposed Overall Campus Plan.



FIGURE 1 - SITE CONTEXT PLAN
Source: NEAR MAPS



- EXISTING DEVELOPMENT
- PROPOSED DEMOUNTABLES
- BLACK CORRUMESH FENCING 2100 HIGH

FIGURE 2 - SITE PLAN
Source: TKD - AR REF 2001

2.5 Site Area

This activity occurs over 5 lots; 3 DP 830878, 13 DP 1139067, 14 DP 1139067, 1 DP 1276279, and 1 DP 1276282.

3 DP 830878 = 4565 m²
13 DP 1139067 = 831 m²
14 DP 1139067 = 890 m²
1 DP 1276279 and 1 DP 1276282 = APPROX. 3623 m²

TOTAL = APPROX. 9910 m²

2.6 Built Form

The surrounding buildings and structures are of low level scale and consist of a mix of single and double storey buildings. The activity works consist of:

- change of use of the existing admin building to school.
- the addition of single storey demountables.
- Landscaping, outdoor play areas, basketball court, an outdoor shaded structure.
- Public domain upgrades to part Lot 1 DP 1276279 (previously Majara Street Road reserve) and part lot 1 DP 1276282 to enable kiss and drop from Majara Street and pedestrian connectivity to surrounding areas.
- This activity does not exceed the existing admin buildings ridge level.

2.7 Visual Impact

The site is visible from the neighbouring streets of Turallo Terrace, Gibraltar Street and Majara Street. The site will also be visible from within Bungendore Park (Mick Sherd Oval). There are no important vista's or views in the area which the activity will obscure. (Also noting the proposed activity is temporary).

2.8 Overshadowing

The activity works only consist of single storey demountables and an outdoor shaded structure. They do not create any problematic shadows. The shaded structure will allow filtered light but has been considered in the shadow analysis nonetheless. Shadows are primarily contained within the subject site. There is negligible impact to adjoining neighbours.

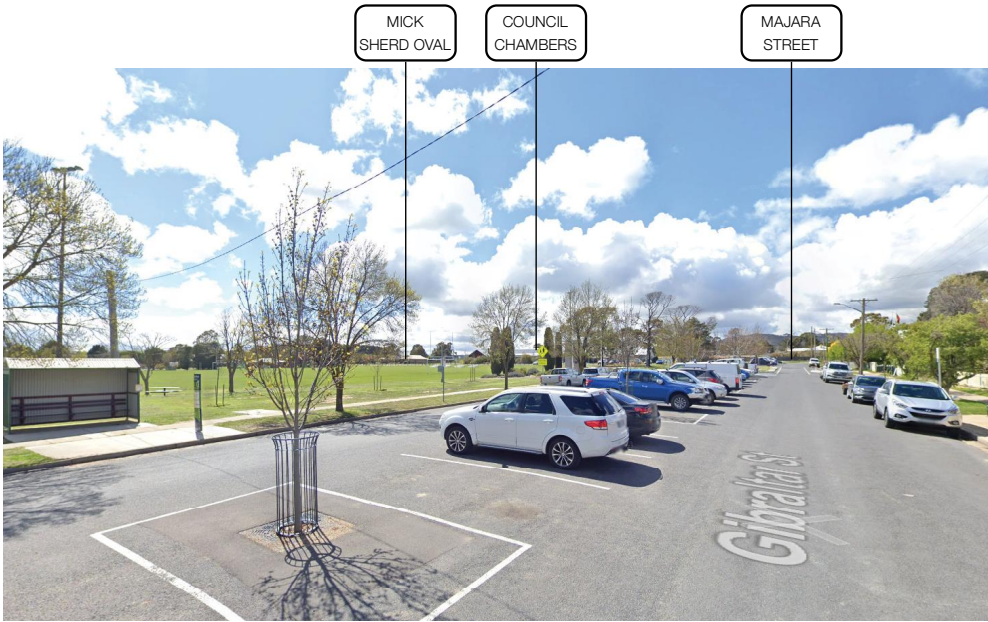
In addition, the site is largely open and not subject to adverse overshadowing from adjacent buildings and structures. There is no additional volume added to the existing Council Chambers building. As such, no increase in shadows.



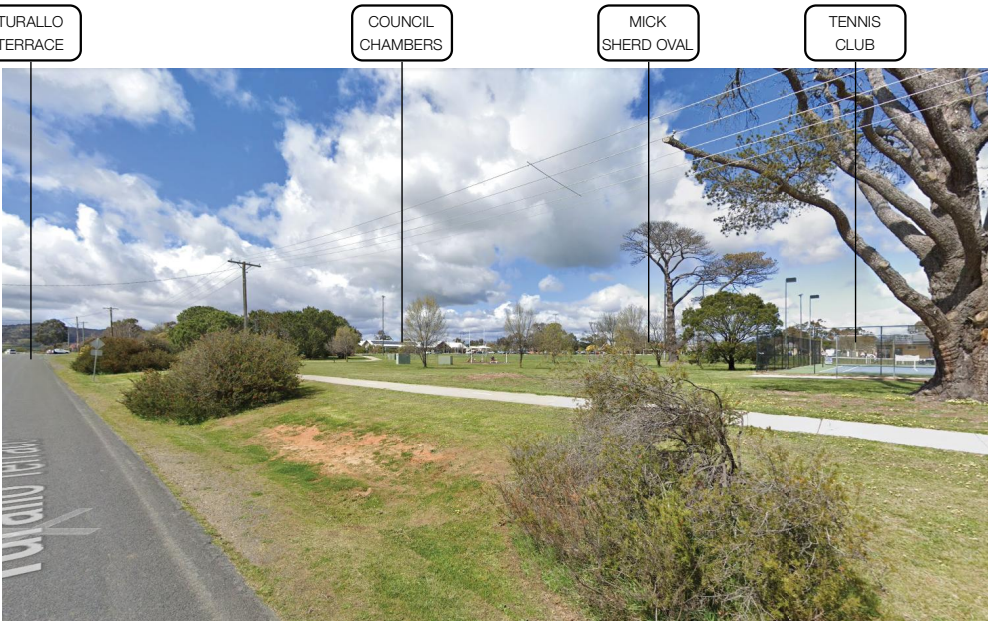
Looking North from Majara Street



Looking West from Turallo Terrace

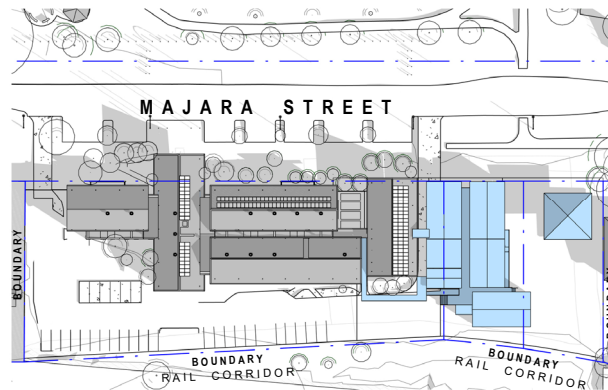


Looking North along Majara Street

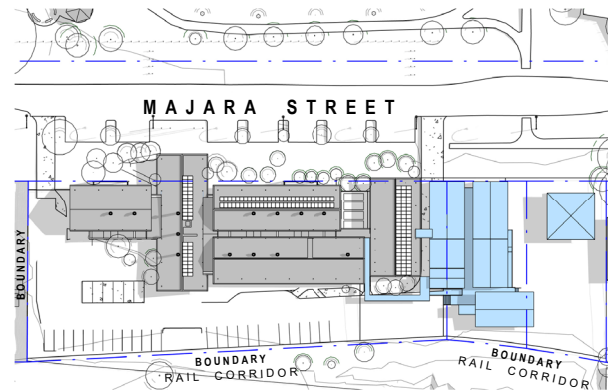


Looking East along Turallo Terrace

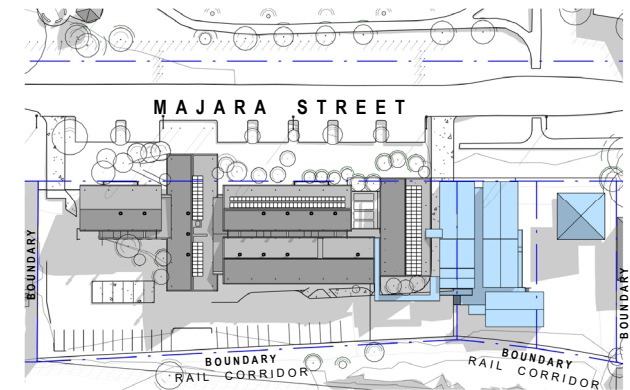
Source: GOOGLE IMAGES



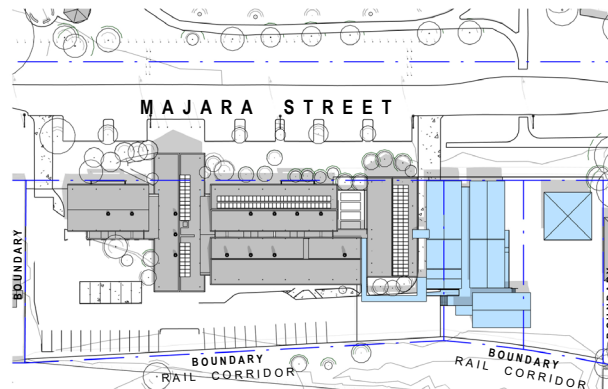
SHADOW ANALYSIS - JUN 21 - 0900 - PROPOSED



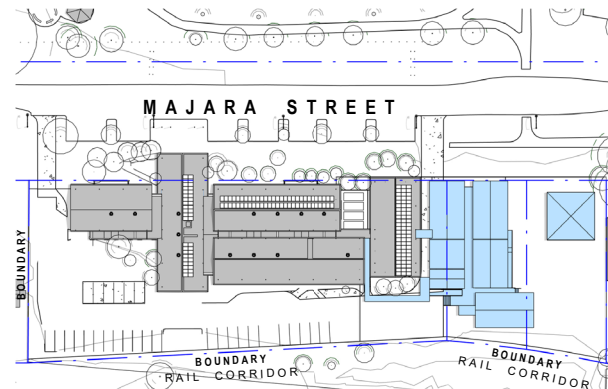
SHADOW ANALYSIS - JUN 21 - 1200 - PROPOSED



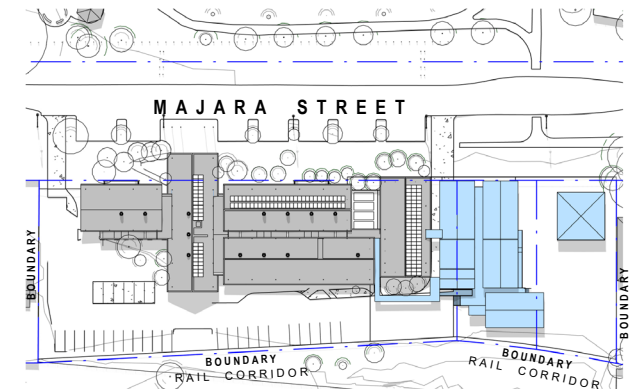
SHADOW ANALYSIS - JUN 21 - 1500 - PROPOSED



SHADOW ANALYSIS - DEC 22 - 0900 - PROPOSED



SHADOW ANALYSIS - DEC 22 - 1200 - PROPOSED



SHADOW ANALYSIS - DEC 22 - 1500 - PROPOSED

SHADOW ANALYSIS - PROPOSED

Source: TKD - AR REF 8001

- PROPOSED BUILDINGS
- EXISTING BUILDINGS

3 Safety

3.1 Crime Prevention Through Environmental Design (CPTED)

The school is naturally surveilled from within the school campus by staff who will be using the facility at all times when the school is open.

Within the school, all spaces will be supervised by the school staff at all times when being used.

Clear sightlines of the building have been maximised as to not obstruct surveillance

The school will be well maintained.

The school will be provided with an integrated system of security cameras and alarms in accordance with SINSW requirements.

The temporary school will be fully enclosed by an existing perimeter fence.

3.2 Impacts of Outdoor Lighting

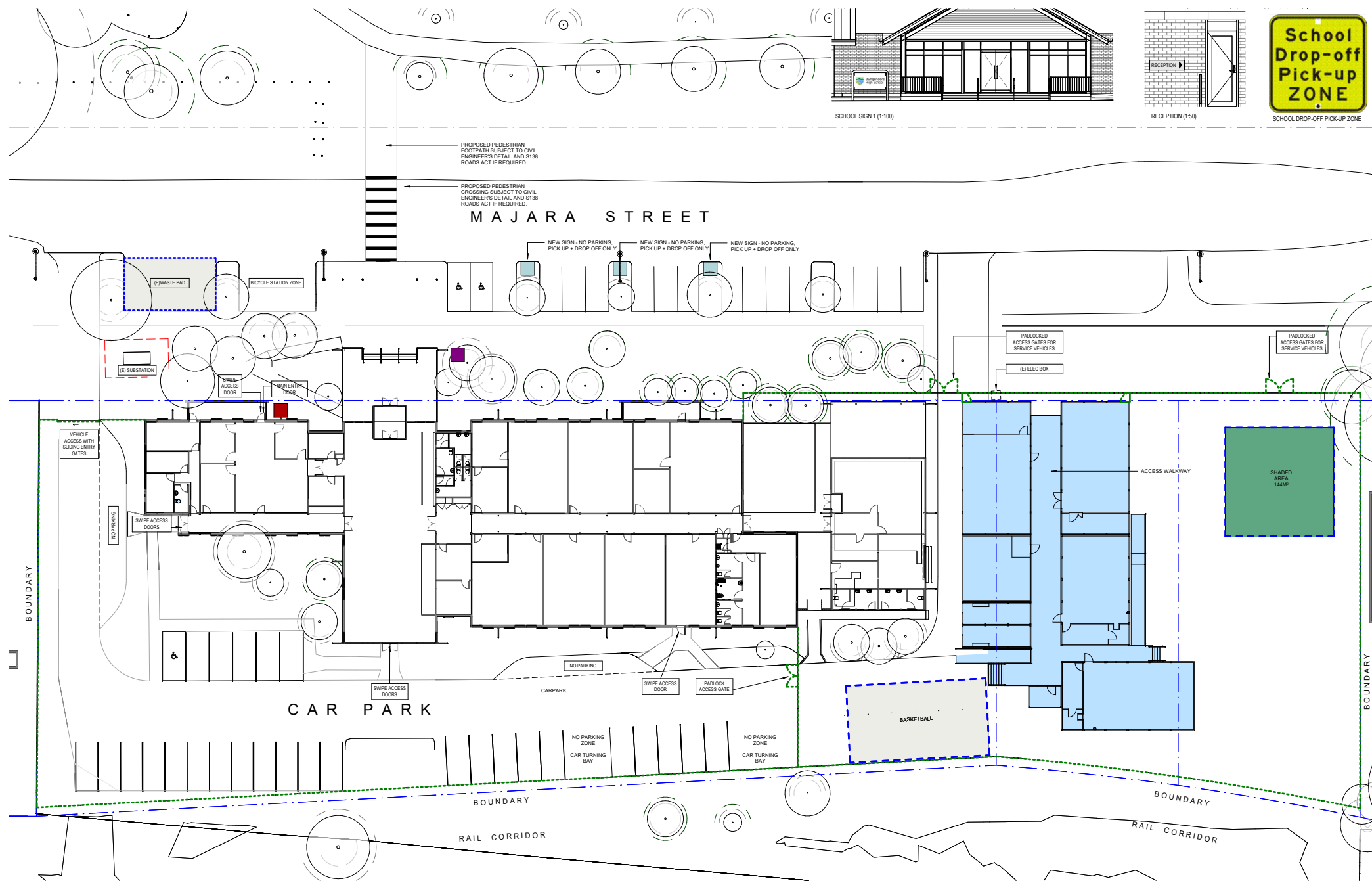
External lighting will be provided to illuminate external spaces and avoid dark shadows. Lighting shall generally be low height, low intensity and discreetly positioned to avoid spill lighting and compliance with AS1158.1 and AS4282.

3.3 Signage Strategy

The proposed signage for these works is to the western boundary. This is minimal based on the temporary nature of the activity.

This includes, School Identification signage and ‘Kiss and Drop’ parking signage.

CPTED Principle	Response
<p>1. Natural Surveillance NSW police (Safer By Design, 2021) defines natural surveillance as follows: Natural surveillance is achieved when normal space users can see and be seen by others. 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.</p> <p>Natural surveillance is achieved by:</p> <ul style="list-style-type: none">• Orienting buildings, windows, entrances and exits, car parks, rubbish bins, walkways, landscape trees and shrubs, in a manner that will not obstruct opportunities for surveillance of public spaces;• Placing persons or activities to maximise surveillance possibilities; and• Providing lighting for night-time	<p>The siting of the existing admin building is at present optimal for natural surveillance due to its setbacks, lonitudinal volume and large openings.</p> <p>The additional demountables follow a similar deign strategy and allow for ease of surveillance.</p>
<p>2. Territorial Re-Enforcement NSW Police (Safer By Design, 2021) defines territorial re-enforcement as follows: Territorial re-enforcement uses actual and symbolic boundary markers, spatial legibility and environmental cues to ‘connect’ people with space, to encourage communal responsibility for public areas and facilities, and to communicate to people where they should/not be and what activities are appropriate.</p> <p>Territorial Reinforcement is achieved by:</p> <ul style="list-style-type: none">• Enhancing the feeling of legitimate ownership by reinforcing existing natural surveillance and natural access control strategies with additional symbolic or social ones;• Designing space to allow for its continued use and intended purpose; and• Using landscaping, pavement finishes, art, screening and fences to define and outline ownership of space.	<p>Firstly, the new boundary fence is the most prominent indicator of ownership of space.</p> <p>What assists to reinforce this indicator is that the current site has a strong western facade. The new demountables continue this language and assist to define the purpose of the site, a school.</p> <p>Secondly, the incorporation of new signage will act as symbols that define the use of the area.</p> <p>The partnership of perimeter and signage defining the space for the local community.</p>
<p>3. Access Control NSW Police (Safer By Design, 2021) defines access control as follows: Access control treatments restrict, channel and encourage people and vehicles into, out of and around the development. Way-finding, desire-lines and formal/informal routes are important crime prevention considerations. Effective access control can be achieved by using physical and symbolic barriers that channel and group pedestrians into areas, therefore increasing the time and effort required for criminals to commit crime.</p> <p>Access control is achieved by:</p> <ul style="list-style-type: none">• Using footpaths, pavement, lighting and landscaping to clearly guide the public to and from entrances and exits; and• Using of gates, fences, walls, landscaping and lighting to prevent or discourage public access to or from dark or unmonitored areas.	<p>The site has paths which allow for ease in channeling and grouping pedestrians. They are also clearly defined making visibility easy and crime difficult.</p> <p>Effective access control is achieved through the perimeter fencing and the use of high security silding access gates which can only be opened by those in relation with the schools operation.</p>
<p>4. Space/Activity Management NSW Police (Safer By Design, 2021) defines space/activity management as follows: Space/Activity Management strategies are an important way to develop and maintain natural community control. Space management involves the formal supervision, control and care of the development. All space, even well planned and well-designed areas need to be effectively used and maintained to maximise community safety. Places that are infrequently used are commonly abused. There is a high correlation between urban decay, fear of crime and avoidance behaviour.</p> <p>Space/activity management is achieved by:</p> <ul style="list-style-type: none">• Ensuring premises are well maintained and cared for; and• Ensuring rapid repair of vandalism and replacement of lighting.	<p>The school is naturally surveilled from within the school campus by staff who will be using the facility at all times when the school is open.</p>



- KISS AND DROP / NO STOPPING
- SCHOOL IDENTIFICATION SIGNAGE
- RECEPTION SIGNAGE

Source: TKD - AR REF 1100

4 Evaluation of Environmental Impacts

4.1 Evaluation of Environmental Impacts

- Built Form - Negligible adjustment to existing building.
 - Demountable buildings proposed are single storey and temporary.
- Heritage - Nil impact on existing heritage.
- Views and Overshadowing - Negligible impact.
- Noise - Some noise will be generated while temporary school is operational this is or the most part, attributed to the temporary play ground activity. Noting that this is some distance from the nearest neighbours.
- Traffic - There will be some additional traffic but this is also some distance from the nearest neighbours.

The extent and nature of potential impacts are low and will not have significant impact on the locality, community and/or the environment.

The conclusion of this assessment is that the proposed activity is not likely to significantly affect the environment in relation to design matters.

5 Landscaping

5.1 Landscaping

No additional landscaping is proposed. The only landscaping that is to occur is to reinstate and maintain what is existing.

5.1.1 Existing Turf Recommendations

Generally fill depressions and divots to provide a safe surface for playground activities and external circulation.

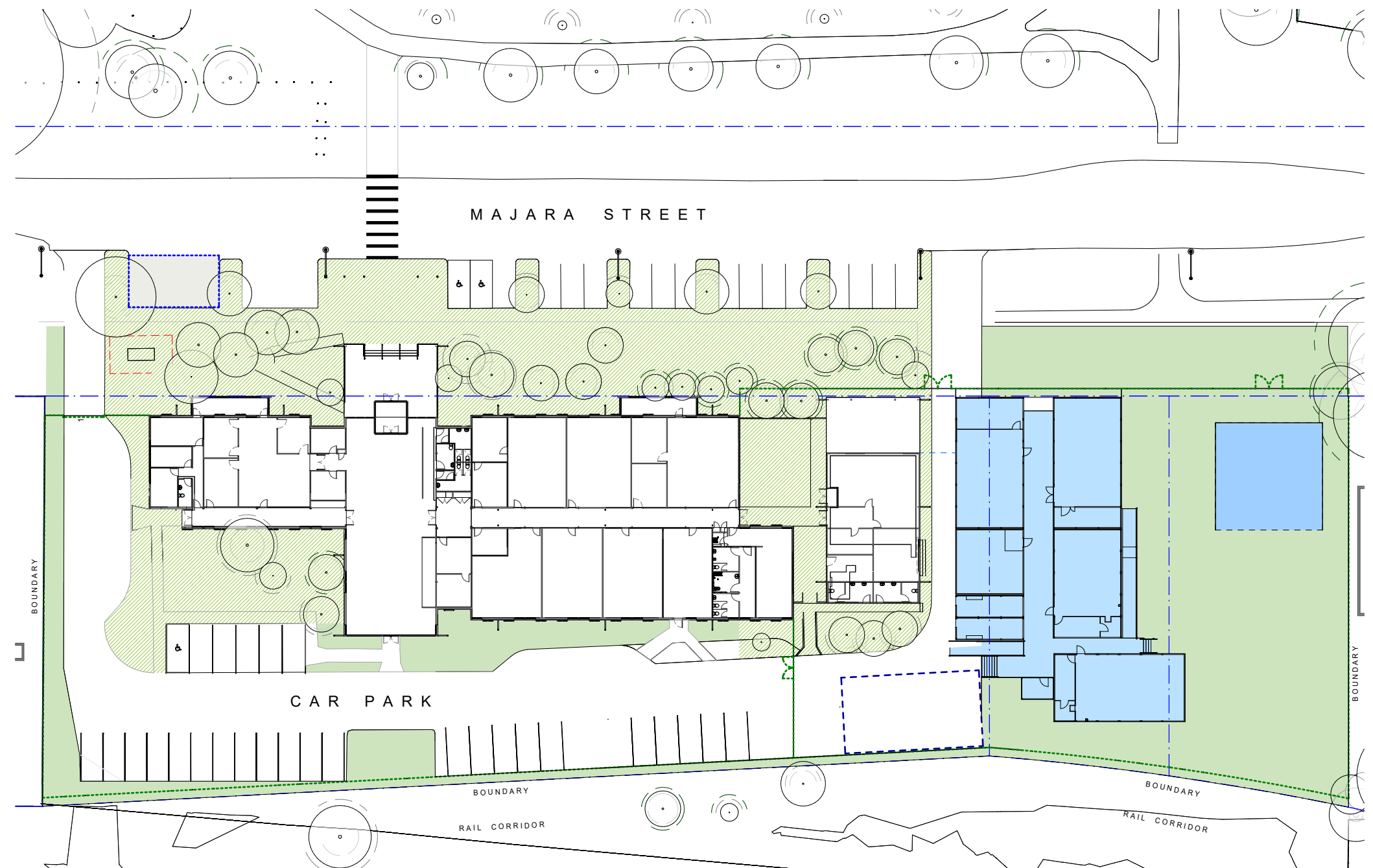
Replace/reinstate/provide new turf to areas where turf is missing or in poor condition.

Treat all turf (new + existing) with appropriate fertiliser and weed killer.

5.1.2 Existing Garden Bed/Planting Recommendations

Clear all debris and dead planting/foliage.

Provide matching infill planting which results in a consistent spread/placement of planting.



- PROPOSED BUILDINGS
- EXISTING TURF
- EXISTING GARDEN BED/PLANTING

Source: TKD - AR REF 1100

6 Connecting with Country

6.1 Connecting with Country

As highlighted in 2.1 'What is Country?' of the Government Architects New South Wales document 'Connecting with Country', "Country encompasses everything. It includes both living and non-living elements. It holds everything within the landscape, including Earth, Water and Sky Country, as well as people, animals, plants, and the stories that connect them."

The additional schooling facilities will allow these "interrelationships between country, community and individuals." (p.22). Removing the need to travel out of Bungendore for school will increase the students local identity and connection.

The size, limited scale temporary nature of the proposed works will create minimal land disturbance and aim to maintain what is existing to the full of its ability.

In reference to the 'Connecting with Country' document, these minimal works speak to the aspects of:

[3.5 Outcomes for Country](#)

- Healthy Country

Minimal land disturbance - Demountables generally hover over the ground - a light touch.

- Healthy Community

Providing more learning spaces for a growing population.

[4.2 Design Opportunities](#)

- Supporting living systems: Earth

Minimal land disturbance.

[4.3 Design considerations](#)

- Precinct-scale

Providing more learning spaces for a growing population.

- Building-scale

Minimal land disturbance - single storey and temporary.



Source: Government Architects New South Wales 'Connecting with Country'

7 Response to Education SEPP Design Quality Principles

7.1 Response to Education SEPP Design Quality Principles

Design Quality Principle	Response
1. Context, Built Form, and Landscape	The design integrates with its urban and natural surroundings, addressing the transitioning context of the area from semi-rural to urban. The single storey buildings are appropriately scaled relative to the surrounding low density residential developments. Generous landscaped setbacks reduce the visual bulk and ensure a sympathetic relationship with adjacent properties. Retained and additional endemic vegetation enhances biodiversity and softens the built form.
2. Sustainable, Efficient, and Durable	The project incorporates environmentally sustainable design features. These include rainwater harvesting (tanks proposed for underneath demountables which are elevated), water-sensitive urban design measures, and tree retention to mitigate the heat island effect. Durable materials are selected for longevity, with shading devices minimising energy consumption and ensuring thermal comfort.
3. Accessible and Inclusive	The existing public administration building design prioritises inclusivity and accessibility, with covered walkways connecting buildings, and pathways designed for universal access. The main pedestrian entry is strategically located for connectivity with a new zebra crossing which connects the site to the adjoining Mick Sherd Oval and other community facilities. The demountable classrooms ensure universal access by incorporating hand-railed ramps for wheelchair and low mobility users.
4. Health and Safety	The layout incorporates clear sightlines, passive surveillance, and well-lit pathways to enhance safety. A secure perimeter fence and controlled entry points ensure a safe environment for students and staff. The existing building and design of the demountable classrooms minimises exposure to external hazards, and noise mitigation measures ensure a high level of internal acoustic comfort.
5. Amenity	The site provides a variety of indoor and outdoor learning spaces, including a basketball court and landscaped play areas. Given the siting of the existing building, which has classrooms on the eastern and western facades, it will ensure reasonable solar access and natural ventilation for these learning and recreational spaces. Shade is provided through existing trees and architectural features, enhancing outdoor comfort.
6. Whole of Life, Flexible, and Adaptive	Given the proposed activity is utilising an existing public administration building the site has already demonstrated adaptability and can easily accommodate future needs. The robust material palette of the existing building and the demountable classrooms ensures long-term durability, while sustainability measures, such as rainwater harvesting (tanks proposed for underneath demountables which are elevated) and energy generation, support ongoing efficiency and resilience.
7. Aesthetics	The design of the existing public administration building and demountable classrooms reflects its operational use, and the proposed activity does not seek to change its current aesthetics. Existing vegetation and landscaping complement the built form, integrating the new Bungendore North Campus High School into its urban and natural environment.

8 Design Guide for Schools dated May 2025 (Issue no. 04-2025)

8.1 Response to Design Guide for Schools dated May 2025 (Issue no. 04-2025)

Design Principles	Response
1. Responsive to context	<p>The project utilises and repurposes an existing building to accommodate the majority of the required functions. (Teaching spaces and specialist teaching spaces for 2 year groups) Additional needs are addressed by the inclusion of demountables. The project utilises what is existing and where buildings are added they are single storey, lightweight and temporary.</p> <p>For a portion of the overall site plan, the existing building will serve as the boundary, reducing the extent of fencing required.</p> <p>-Healthy Country Minimal land disturbance - Demountables generally hover over the ground - a light touch.</p> <p>- Healthy Community Providing more learning spaces for a growing population.</p>
2. Sustainable, efficient and resilient	<p>The project utilises and repurposes an existing building to accommodate the majority of the required functions. Additional needs are addressed by the inclusion of demountables. The project utilises what is existing and where buildings are added they are lightweight and temporary. The building by virtue of its original plan can be a Council Building, A School Building and then return to being a Council Building. This is a strong example of sustainability.</p> <p>Reusing the existing Council Building is a positive environmentally. At the end of the need for the temporary school, the demountable buildings will be removed from site and will continue to provide accommodation in the next location / project where they are needed.</p>
3. Accessible and inclusive	<p>The building was / is a public building (completed in 2007). Accessibility was a consideration at the time when the building was constructed, only minor adjustment to the existing fabric is necessary to comply with current standards. The demountables are fully accessible via purpose made ramps.</p>
4. Healthy and safe	<p>The project is to accommodate older high school students; playground space and outdoor breakout areas are included. A covered area is also provided in the playground to provide protection from the sun and promote outdoor gatherings.</p>
5. Functional and comfortable	<p>Functionality and comfort are enhanced by upgrading of the existing services. The building also has raked ceilings in many areas which are being retained to promote larger volumes and a sense of generosity.</p>
6. Flexible and adaptable	<p>The upgrade of the existing Council Building results in a building (that when returned to Council) will be ready to accommodate new functions will less adjustment or upgrade. This is reusing. The building by virtue of its original plan can be a Council Building, A School Building and then return to being a Council Building. This is a strong example of Flexibility and Adaptability.</p> <p>The demountable buildings will be removed from site and will continue to provide accommodation in the next location / project where they are needed. The same building utilised many times, in many locations. This is a strong example of Flexibility and Adaptability.</p>
7. Visually appealing	<p>The existing Council Building is already a well-planned building, with appropriate scale and proportions. It is however, looking a little tired and in need of some attention. This project will revitalise this community asset so that when it is returned from being "borrowed" to be a school, it will have a new lease of life.</p> <p>The demountables are demountables, however any opportunity to enhance appearance will be considered and included when practicable.</p>