



## APPLICATION ON NOTIFICATION – CROWN DEVELOPMENT

<b>Type of development:</b>	Section 131 – Crown Development
<b>Development Number:</b>	24012831
<b>Applicant:</b>	Department for Education
<b>Nature of Development:</b>	Two storey building comprising educational facilities and student accommodation
<b>Subject Land:</b>	172-174 Wireless Road West, Suttontown
<b>Planning &amp; Design Code Version:</b>	2024.9 (23 May 2024)
<b>Zone / Sub Zone:</b>	Community Facilities Zone
<b>Contact Officer:</b>	Eric Alessi
<b>Phone Number:</b>	(08) 7133 2362
<b>Consultation Start Date:</b>	19 June 2024
<b>Consultation Close Date:</b>	17 July 2024
<p><b>During the notification period, the application documentation can be viewed on the SA Planning Portal: <a href="https://plan.sa.gov.au/en/state_developments">https://plan.sa.gov.au/en/state_developments</a>.</b></p>	

Written representations must be received by the close date (indicated above) and can either be posted, hand-delivered, or emailed to the State Commission Assessment Panel (SCAP). A representation form is provided as part of this document.

**Any representations received after the close date will not be considered.**

Postal Address:

The Secretary  
 State Commission Assessment Panel  
 GPO Box 1815  
 ADELAIDE SA 5001

Street Address:

Planning and Land Use Services  
 Level 9, 83 Pirie Street  
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\*\*Please call 1800 752 664 (Plan SA Help desk) beforehand to confirm access and visitation arrangements.

Email Address: [spreps@sa.gov.au](mailto:spreps@sa.gov.au)

OFFICIAL

PLANNING, DEVELOPMENT AND INFRASTRUCTURE ACT 2016  
S131 – CROWN DEVELOPMENT  
REPRESENTATION ON APPLICATION

**Applicant:** Department for Education  
**Development Number:** 24012831  
**Nature of Development:** Construction of a two storey building comprising educational facilities and student accommodation  
**Zone / Policy Area:** Community Facilities Zone  
**Subject Land:** 172-174 Wireless Road West, Suttontown  
**Contact Officer:** Eric Alessi  
**Phone Number:** (08) 7133 2362  
**Close Date:** 17 July 2024

My Name: \_\_\_\_\_ My phone number: \_\_\_\_\_

Primary method(s) of contact: \_\_\_\_\_ Email: \_\_\_\_\_  
Postal Address: \_\_\_\_\_ Postcode: \_\_\_\_\_

**You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.**

- My interests are:  
(please tick one)
- owner of local property
  - occupier of local property
  - a representative of a company/other organisation affected by the proposal
  - a private citizen

**The address of the property affected is:** \_\_\_\_\_  
Postcode \_\_\_\_\_

- My interests are:  
(please tick one)
- I support the development
  - I support the development with some concerns
  - I oppose the development

**The specific aspects of the application to which I make comment on are:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- I:**
- wish to be heard in support of my submission
  - do not wish to be heard in support of my submission
- (please tick one) (Please tick one)

- By:**
- appearing personally
  - being represented by the following person
- (please tick one) (Please tick one)

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Return Address: State Commission Assessment Panel, GPO Box 1815, Adelaide, SA 5001 /or Email: [spreps@sa.gov.au](mailto:spreps@sa.gov.au)**

Russell and Yelland  
24ADL-0384  
3 May 2024

# Planning Report

Mount Gambier Technical College

172-174 Wireless Road West, Mount Gambier

# Planning Report

3 May 2024

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Prepared for	Russell and Yelland Architects
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URPS Ref	24ADL-0384

## Document history and status

Revision	Date	Author	Reviewed	Details
V1	02/04/2024	O.Brown	S.Twine	Initiation of report
V2	29/04/2024	S.Twine	-	Draft issued to Client
V3	03/05/2024	S.Twine	-	Final

We acknowledge the Kaurna People as the Traditional Custodians of the land on which we work and pay respect to their Elders past, present and emerging.

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# 1. Executive Summary

<b>Applicant and Owner:</b>	Minister for Education
<b>Property Location:</b>	172-174 Wireless Road West, Mt. Gambier
<b>Site Area:</b>	Approx. 16.35 hectares
<b>Council</b>	City of Mount Gambier
<b>Relevant Authority:</b>	Minister for Planning (Crown Development)
<b>Statutory Referrals</b>	City of Mount Gambier
<b>Public Notification</b>	Yes, Development exceeds \$10m
<b>Planning and Design Code:</b>	Version 2024.7 – 18 April 2024
<b>Zone</b>	Community Facilities Zone
<b>Overlays</b>	Building Near Airfields Native Vegetation Prescribed Wells Area Water Protection Area
<b>Technical and Numerical Variations</b>	Maximum Building Height is 5 Levels
<b>Current Land Uses:</b>	Educational Facility
<b>Description of Development:</b>	A two-storey building containing an educational facility and student accommodation for 44 students

## 2. Introduction

### 2.1 Purpose of this Report

URPS has been engaged by Russell and Yelland Architects to prepare this planning report. The report provides an assessment of the proposed Mount Gambier Technical College against the relevant provisions of the Planning and Design Code.

The development will provide a new building for use as an educational facility and student accommodation. It will offer industry training programs to the Limestone Coast region. It will supplement the existing TAFE SA and Uni SA facilities co-located on-site within the existing Mt Gambier Education Precinct. This Precinct is located at 178-224 Wireless Road West, Mt. Gambier.

This report is accompanied by:

- Architectural Plans prepared by Russell and Yelland Architects (**Appendix A**)
- Landscaping Concept prepared by Waxx Design (**Appendix B**)
- Traffic Report prepared by MFY (**Appendix C**)
- Stormwater Management Plan prepared by Aurecon (**Appendix D**)

### 2.2 Background

In 2022, the South Australian Government committed to delivering five Technical Colleges across South Australia. This included three within metropolitan Adelaide and two in regional South Australia. Mount Gambier has been selected as one of the two regional locations. It represents the fifth and final college to be produced by Department for Infrastructure and Transport (DIT) and the Department for Education (DfE).

The Mount Gambier Technical College will provide specific training programs for Agri-tech (includes forestry), Building and Construction (multi-trades), Early Childhood and Education and Health and Social Support. The college will support vocational education for high school students in years 10 to 12.

The facilities are situated within the Mt Gambier Education Precinct at 172-174 Wireless Road West, Mount. Gambier. It will be co-located with Uni SA and TAFE SA (both existing).

Mount Gambier Technical College is planned to open in 2026.

Being a form of development undertaken by a state agency (being DfE), it represents a form of Crown Development. The Planning Minister is the authority for Crown Development.



### 3. Site and Locality

#### 3.1 Subject Site

The site is located at 172-174 Wireless Road West within the Mount Gambier Education Precinct. It is irregular in shape and has an approximate area of 16.35 hectares. Wireless Road West is the lands frontage, with a width of approximately 200m.

The site operates as a tertiary educational facility. It contains single and two storey buildings and at-grade car parking. Established trees are located throughout the site and notably, the sites western frontage to Wireless Road West.

Wireless Road West is approximately 21m wide. It features a single way carriageway of circa 13m. This includes two single direction lanes, a dedicated bicycle lane on each side and marked car parking along its southern edge. A bus stop is located adjacent the lands frontage on the southern side of Wireless West Road.

It has a slight slope rising from the east to the west. Approximately 9.3ha of land to the rear of the site remains vacant.



Figure 1 – Subject Site

### 3.2 Locality

The land is situated within Suttontown. This is located to the northwest of Mount Gambier. This location is shown in Figure 2 overleaf.

The locality is mixed in nature. It features vacant land, detached dwellings at a low density and small-scale industrial uses. Vacant land in the locality is expected to be developed for residential purposes, reflective of the predominate Suburban Neighbourhood Zoning.

Wireless Road West is adjacent to the site and runs between Penola Road to the east and O'Leary Road to the west. O'Leary Road provides access to Jubilee Highway East, which is the major roadway through Mt Gambier.



Figure 2 – Locality, with the site shown in yellow

## 4. Proposed Development

### 4.1 Summary

The development seeks to construct a two-storey building. It will be used as an educational facility and for student accommodation.

### 4.2 Land Use

The technical college will be co-located with the existing Educational Facility (TAFE SA). It will introduce an extent of student accommodation.

The technical college will provide vocational education of high school students between Year 10 and 12. It will have a total enrolment capacity of 300 students. Only one year level will be present on-site, rotating on a weekly basis. This means a maximum of 100 students on-site at any one time. There will be 15 FTE supporting staff.

It will also accommodate a range of specific training programs. Because of this, it will include various workshops, general learning areas, computer suites, a quiet learning space, offices, storerooms, common areas and a boardroom. This is spread across the two levels.

The development also features an element of student accommodation. The accommodation will have capacity for 44 students and 3 staff members. This will enable 24-hour supervision for students staying on site. The accommodation will only be used during the week. No use on weekends will occur.

### 4.3 Built Form

The technical college will be constructed adjacent the land's Southwestern frontage to Wireless Road West. It will be sited between the roads frontage and the existing TAFE SA building. The positioning has been influenced by the existing TAFE SA building, the land's topography and vegetation along Wireless Road West. The location of the proposed building will result in the removal of 98 on-site parking spaces associated with TAFE SA.

The building's design has been developed in reference to the DfE's 'Design Guiding Principles for the technical colleges'. This guideline was produced for the implementation of the wider Technical College Program. The proposed building maintains consistency with these principles while integrating with the lands established built form context.

The building will feature locally sourced materials and internal/external colour sections inspired by the Mount Gambier Region; being the Blue Lake as well as its many sinkholes. Externally, this is reflected in the buildings earthy red/brown cladding.



**Figure 3 – Proposed Building Perspective**

## 4.4 Site Operation

The Technical College will operate between 7:00am until 10:00pm on weekdays. It is anticipated that adults will have access to the facility after school hours and on weekends.

Entry to the proposed building is obtained from its eastern side. The ground floor predominantly comprises of teaching spaces, administration and the reception areas. The first floor features student accommodation. This placement is deliberate for student security and safety reasons. Meal areas are also located on the first floor.

The student accommodation will be secured during the day. In the evening, the common areas are accessible for student meals and relaxation.

## 4.5 Access and Parking

Access to the land is obtained from Wireless Road West via two two-way access points. These access points connect to the existing internal access road. This road circulates around the lands existing buildings to provide a connected learning campus.

Service vehicle movements are accommodated via the internal circulating road. These movements are unchanged by the proposal. The proposed service area facilitates access by a 10.2m refuse collection vehicle, being the largest anticipated vehicle associated with the proposed building.

Car parking is located throughout the site. A 118-space car park extension is currently under construction in the Northwest corner of the land. This replaces the existing car park (containing 98 spaces) removed by this proposal. 10 additional spaces are also proposed adjacent the buildings frontage. Collectively, this will result in a net increase of 30 spaces on-site.

## 4.6 Landscaping

The development will be supplemented by attractive landscape paintings. These plantings focus on the following areas:

- Wireless Road West presence and building frontage.
- Landscape to buildings entry.
- Service yard screening.
- Courtyards to the rear of the proposed building.
- New car park area (car park under construction).

The landscape concept will deliver a range of native garden beds, shade plantings, pedestrian and vehicular surfaces, seating types (formal and informal) and outdoor learning areas.



Figure 4 – Entry Landscape Concept

## 5. Procedural Matters

### 5.1 Land Use Definition

The proposed two land uses within the site are 'Educational Facility' and 'Student Accommodation'. The Code's definitions of these land uses are below:

Land Use	Definition
<b>Educational facility</b>	<b><i>Means a primary school, secondary school, reception to year 12 school, college, university or technical institute, and includes an associated child care facility or institution for the care and maintenance of children.</i></b>
<b>Student accommodation</b>	<b><i>Mean premises used to accommodate students in room or dormitory style accommodation that can be (but need not be) self-contained and that includes common facilities for shared use by student occupants such as:</i></b> <b><i>(a) shared cooking facilities and/or the provision of meals;</i></b> <b><i>(b) common rooms and recreation areas;</i></b> <b><i>(c) shared laundry facilities or a laundry service; or</i></b> <b><i>(d) shared bathroom facilities.</i></b>

### 5.2 Planning and Design Code

The site is within the Community Facilities Zone under the Planning & Design Code (the Code). It is bordered by the Suburban Neighbourhood Zone.

The site is covered by the following Overlay:

- Building Near Airfields
- Native Vegetation
- Prescribed Wells Area
- Water Protection Area

The land is also subject to a Technical Numeric Variation that guides a maximum building height of 5 levels.

### 5.3 Assessment Pathway

The proposal represents Crown Development for the purposes of Section 131 of the *Planning, Development & Infrastructure Act 2016* (the Act). The Minister for Planning is the assessing authority.

## 5.4 Public Notification

The proposed development cost will exceed \$10 million. Public notification is required pursuant to section 131(13) of the Act.

## 5.5 Referrals

In accordance with Section 131 (6) of the Act a referral to the Mount Gambier Council is required.

No stage agency referrals are necessary for this development, noting:

- No Native Vegetation is to be cleared (Native Vegetation Council)
- The land is not located within a Design Overlay (Government Architect)
- The land does not result in a more sensitive use (Environment Protection Agency). This aspect is discussed below.

Practice Direction 14 provides assessment steps for site contamination. It includes Table 1: Land Use Sensitivity Hierarchy which determines when a more sensitive use is proposed. An education facility is listed within this table. Student accommodation is not.

Clause 5 of the direction requires an authority to have regard to the following when a use is not contained within Table 1:

- the sensitivity of the human populations proposed to be using the land following the change in use;
- the potential for exposure of those populations to chemicals from site contamination following the change of use.

Upon consideration of the above, I contend a change to a more sensitive use does not occur. This is because:

- The land is already used as an educational facility for tertiary and university students. The inclusion of secondary school aged students remains an Item 4 activity.
- Students residing in the proposed accommodation will be limited to short-term periods. This is consistent with tourist accommodation, being short-term accommodation. Tourist accommodation is also an Item 4 activity.
- The student accommodation and educational facility will be occupied by the same populations. Their co-location will not result in an increased sensitivity or exposure level for these occupants when applying the criteria identified in Clause 5.

## 6. Planning Assessment

### 6.1 Summary

The key planning considerations associated with the proposal are:

- Land Use.
- Design and Siting.
- Building Height.
- Interface within adjoining Land Uses (Overshadowing and Overlooking).
- Landscaping.
- Traffic, Car Parking and Servicing.
- Stormwater Management.
- Native Vegetation.

### 6.2 Land Use

The site is situated in the Community Facilities Zone. It is currently used as an “Educational Facility”. This use will remain. It will be supplemented by “Student Accommodation”.

The Zone seeks for land uses to:

- DO 1** *Provision of a range of community, educational, recreational and health care facilities.*
- PO 1.1** *Development is associated with or ancillary to the provision of community, educational, recreational and / or health care services.*
- PO 1.4** *Integration and coordination of land uses to enhance the accessibility and efficiency of service delivery.*
- PO 1.5** *Development avoids inhibiting or prejudicing future delivery of community, educational, recreational or health care services.*

The proposed uses satisfy the above because:

- An education facility is expressly desired by the Zone.
- The student accommodation is integrated with and ancillary to the primary educational use.
- The coordination of these land uses will enhance the efficiency and accessibility of the educational facility to the wider Limestone coast region.
- The colocation of services will not prejudice the delivery of further uses envisaged by the zone.

Similarly, the nature and type of land use will not conflict with the relevant provisions of the Water Protection Area Overlay.



## 6.3 Design and Siting

### 6.3.1 Building Siting

The Zone seeks for buildings:

**PO 1.7** *Expansion of existing community services such as educational facilities, community facilities and child care facilities in a manner which complements the scale of development envisaged by the desired outcome for the neighbourhood.*

**PO 2.4** *Buildings are set back from all boundaries (other than street boundaries) to minimise impacts on neighbouring residential properties, including access to natural light and ventilation.*

**DPF 2.4** *Buildings are set back a minimum 3m from all boundaries where the subject land abuts an allotment used for residential purposes, except where the development abuts the wall of an existing or simultaneously constructed building on the adjoining land.*

**PO 2.5** *Buildings on an allotment fronting a road that is not a State Maintained Road, and where land on the opposite side of the road is within a neighbourhood-type zone, provides an orderly transition to the built form scale envisaged in the adjacent zone to complement the streetscape character.*

The building is in the southwestern portion of the land, adjacent to the road frontage. It will satisfy the above provisions because:

- It will be setback behind the neighbouring dwelling located on the land to the immediate West at 178 Wireless Road West.
- It will be setback 11.28 metres from the Wireless Road West. The southern side of Wireless Road West adjacent the site features dwellings with primary setbacks in the order of 6m.
- Side and rear boundary setbacks will exceed 3m, to maintain neighbouring residential properties access to natural light and ventilation. The closest side boundary (West) setback will exceed 40 metres.

### 6.3.2 Building Design and Appearance

Building appearance is not expressly guided by the Community Facility Zone. Instead, the Design in Urban Areas General Development Policies module applies. This seeks:

**PO 1.3** *Building elevations facing the primary street (other than ancillary buildings) are designed and detailed to convey purpose, identify main access points and complement the streetscape.*

**PO 1.4** *Plant, exhaust and intake vents and other technical equipment are integrated into the building design to minimise visibility from the public realm and negative impacts on residential amenity by:*

- a) positioning plant and equipment discretely, in unobtrusive locations as viewed from public roads and spaces*
- b) screening rooftop plant and equipment from view*
- c) when located on the roof of non-residential development, locating the plant and equipment as far as practicable from adjacent sensitive land uses.*

**PO 1.5** *The negative visual impact of outdoor storage, waste management, loading and service areas is minimised by integrating them into the building design and screening them from public view (such as fencing, landscaping and built form), taking into account the form of development contemplated in the relevant zone.*

**PO 2.1** *Development maximises opportunities for passive surveillance of the public realm by providing clear lines of sight, appropriate lighting and the use of visually permeable screening wherever practicable.*

**PO 2.3** *Buildings are designed with safe, perceptible and direct access from public street frontages and vehicle parking areas.*

**PO 2.4** *Development at street level is designed to maximise opportunities for passive surveillance of the adjacent public realm.*

**PO 2.5** *Common areas and entry points of buildings (such as the foyer areas of residential buildings) and non-residential land uses at street level, maximise passive surveillance from the public realm to the inside of the building at night.*

The proposed exhibits high-quality design consistent with these provisions because:

- The building entry is clearly defined and orientated towards the lands primary entrance point. It is co-located with the existing TAFE SA entry.
- Street facing elevations feature varied materials, a landscaped setting and extensive glazing to contribute to the streetscape character.
- Plant and waste storage areas are screened from external view. This screening is integrated into the design of the building at ground level.
- The building features glazing to the Northern, Southern and Eastern elevations. This coupled with the inclusion of student accommodation, will provide improve passive surveillance of the site and carparking areas.

### **6.3.1 Internal Design (Student Accommodation)**

Design in Urban Areas PO 41.1 and 41.2 guide the design of Student Accommodation. They seek:

**PO 41.1** *Student accommodation is designed to provide safe, secure, attractive, convenient, and comfortable living conditions for residents, including an internal layout and facilities that are designed to provide sufficient space and amenity for the requirements of student life and promote social interaction.*

**PO 41.2** *Student accommodation is designed to provide easy adaptation of the building to accommodate an alternative use of the building in the event it is no longer required for student housing.*

The proposal satisfies these provisions. It features:

- Secure accommodation on the first floor, isolated from education/general access areas.
- Dedicated student and staff living quarters. Each student suite is approximately 37m<sup>2</sup> and accommodates up to 4 students. They feature beds, storage and bathroom facilities.
- Provision of both student and staff accessible living units, as well as a shared laundry facility.

- Learning spaces and common areas located on the first floor provide a combined 307m<sup>2</sup> for use by students for studying, relaxing and socialising.
- The student accommodation is located within the educational facility building, enabling this area to be easily redeveloped for a future use if necessary.

## 6.4 Building Height

The Zone guides building height, seeking:

**PO 2.1** *Building height is consistent with the maximum height expressed in any relevant Maximum Building Height (Levels) Technical and Numeric Variation layer and the Maximum Building Height (Metres) Technical and Numeric Variation layer or is generally consistent with the prevailing character of the locality and height of nearby buildings.*

**DPF 2.1** *Other than on a Catalyst site in the St Andrews Hospital Precinct Subzone, development does not exceed the following building height(s):*  
**Maximum building height is 5 levels.**

The proposed two-level building satisfies PO/DPF 2.1. It will also complement the existing two-level TAFE SA buildings located on-site.

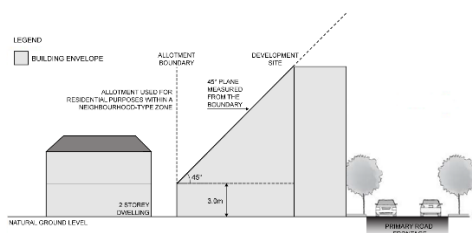
## 6.5 Interface with Adjoining Land Uses

### 6.5.1 Visual Mass

PO 2.2 of the Zone seeks:

**PO 2.2** *Buildings mitigate the visual impacts of massing on residential development within a neighbourhood-type zone.*

**DPF 2.2** *Except in the St Andrews Hospital Precinct Subzone and the part of the WHC and Memorial Hospital Precinct Subzone north of Kermode Street, buildings constructed within a building envelope provided by a 45 degree plane measured from a height of 3m above natural ground level at the boundary of an allotment used for residential purposes within a neighbourhood-type zone as shown in the following diagram (except where this boundary is a southern boundary or where this boundary is the street boundary):*



The building will be setback greater than 3m from external boundaries. PO/DPF 2.2 is satisfied.

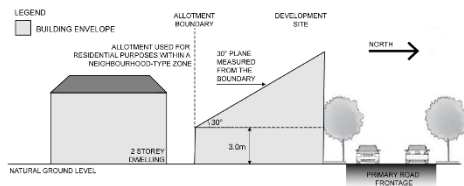
## 6.5.2 Overshadowing

The Code seeks to limit unreasonable shadow impacts. It states:

### Community Facilities Zone

**PO 2.3** Buildings are set back from all boundaries (other than street boundaries) to minimise impacts on neighbouring residential properties, including access to natural light and ventilation.

**DPF 2.3** Buildings on sites with a southern boundary adjoining the an allotment boundary used for residential purposes within a neighbourhood-type zone are constructed within a building envelope provided by a 30 degree plane grading north measured from a height of 3m above natural ground level at the southern boundary, as shown in the following diagram (except where this boundary is a street boundary):



### Interface Between Land Uses

**PO 3.1** Overshadowing of habitable room windows of adjacent residential land uses in:

- a) a neighbourhood-type zone is minimised to maintain access to direct winter sunlight
- b) other zones is managed to enable access to direct winter sunlight.

**PO 3.2** Overshadowing of the primary area of private open space or communal open space of adjacent residential land uses in:

- a) a neighbourhood type zone is minimised to maintain access to direct winter sunlight
- b) other zones is managed to enable access to direct winter sunlight.

**PO 3.3** Development does not unduly reduce the generating capacity of adjacent rooftop solar energy facilities taking into account:

- a) the form of development contemplated in the zone
- b) the orientation of the solar energy facilities
- c) the extent to which the solar energy facilities are already overshadowed.

The development is not anticipated to cast shadow on to neighbouring residential uses. This is due to the lands southern interface being shared with Wireless Road West and building's side setbacks exceeding 40m. The provisions of the Code outlined above are satisfied.

## 6.5.3 Overlooking

Design in Urban Areas General Development Policy 10.1 applies to overlooking. It seeks:

**PO10.1** Development mitigates direct overlooking from upper level windows to habitable rooms and private open spaces of adjoining residential uses in neighbourhood-type zones.

'Direct Overlooking' is defined by Part 8 of the Code to mean:

***In relation to direct overlooking from a window, is limited to an area that falls within a horizontal distance of 15 metres measured from the centre line of the overlooking window and not less than 45 degree angle from the plane of that wall containing the overlooking window.***

No second storey windows are located within 15m of adjoining residential uses. P10.1 does therefore not apply.

Notwithstanding this, overlooking has been minimised through:

- The retention of the established trees and landscaping around the external site boundaries.
- Absence of any upper-level windows to the west elevation that shares an interface with a neighbouring residential dwelling.
- The use of angled windows to student accommodation areas to increase privacy and reduce overlooking.

## 6.6 Landscaping

Design in Urban Areas guides landscaping. It seeks:

**PO 3.1 Soft landscaping and tree planting to be incorporated to:**

- a) Minimise heat absorption and reflection**
- b) Maximise shade and shelter**
- c) Maximise stormwater infiltration**
- d) Enhance the appearance of land and streetscapes**

**PO 3.2 Soft landscaping and tree planting maximises the use of locally indigenous plant species, incorporates plant species best suited to current and future climate conditions and avoids pest plant and weed species.**

Wax Design have prepared a landscape concept. It focuses on five primary areas surrounding the proposed building and the car park expansion (under construction). This focus areas surrounding the building include the street presence, building entry, courtyard space and a service yard.

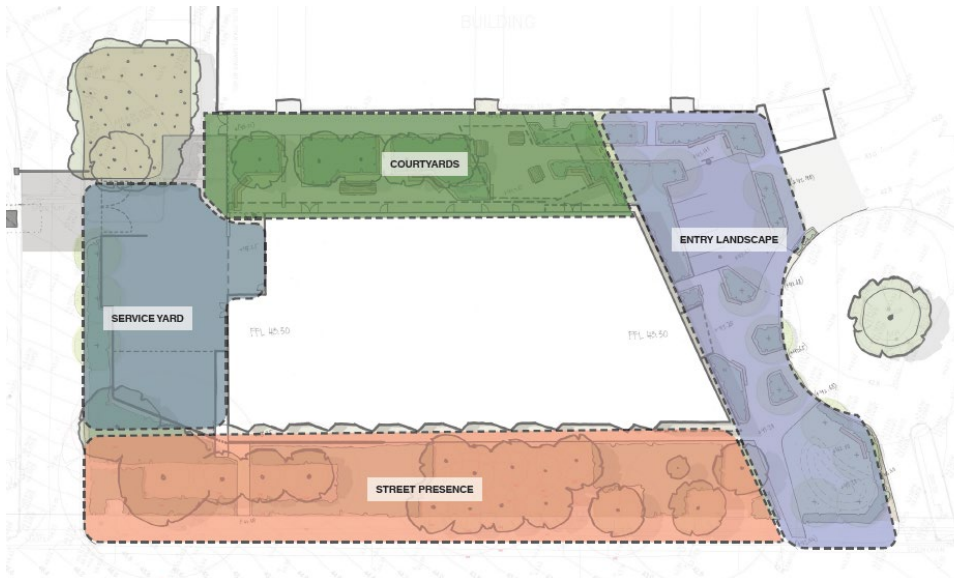


Figure 5: Building landscape zones

The concept satisfies PO 3.1 and 3.2, providing:

- An entrance plaza with new native garden beds and shade trees throughout.
- Lawn open space with lawn mound informal seating.
- Secure perforated fencing to a student courtyard (rear of proposed building) featuring seating for group outdoor learning and socialisation.
- A sheltered outdoor dining area.
- A paved carpark forward of the proposed building doubling as a shared use student space after hours. A basketball hoop and line marking to the car park surface provide a recreational opportunity.
- Buffer screening to the service yard comprising evergreen species.
- Retention of established trees where permissible, including western boundary plantings adjacent to car park extension (under construction).

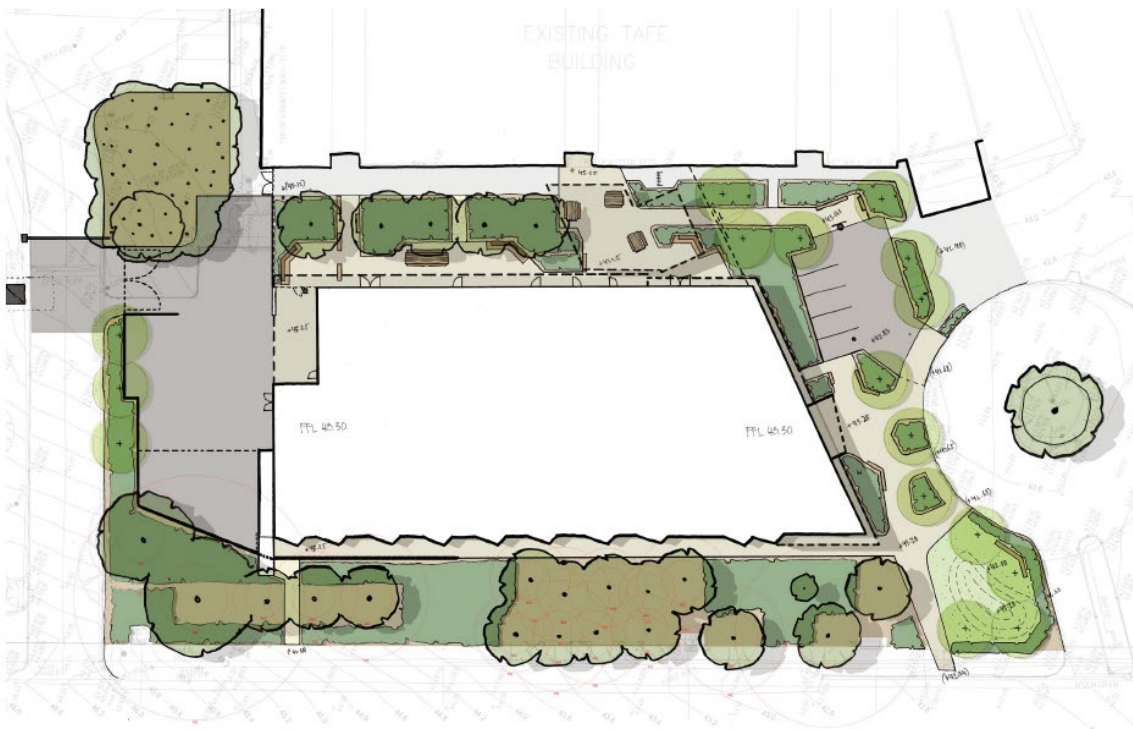


Figure 6 – Overall landscape concept

## 6.7 Traffic, Car parking and Servicing.

### 6.7.1 Traffic

A review of traffic generation rates has been undertaken by MFY Traffic Consultants. Anticipated traffic volumes during the school peak periods based on 100 students at the site are:

- 35 trips during the morning peak period.
- 24 trips during the afternoon peak period.

The forecast volumes are low and will be readily accommodated by the existing access arrangements, internal road and external road network.

### 6.7.2 Car Parking

The Transport, Access and Parking General Development Policies seek:

**PO 5.1 Sufficient on-site vehicle parking and specifically marked accessible car parking places are provided to meet the needs of the development or land use having regard to factors that may support a reduced on-site rate such as:**

**a) availability of on-street car parking**

**b) shared use of other parking areas**

**c) in relation to a mixed-use development, where the hours of operation of commercial activities complement the residential use of the site, the provision of vehicle parking may be shared**

**d) the adaptive reuse of a State or Local Heritage Place.**

DPF 5.1 via Table 1 - General Off-Street Car Parking Requirements provides guidance on how PO 5.1 can be satisfied. It provides for the following parking rates:

Land Use	Planning and Design Code Rate
<b>Educational facility</b>	<b>For a secondary school - 1.1 per full time equivalent employee plus 0.1 spaces per student for a pickup/set down area either on-site or on the public realm within 300m of the site.</b>
<b>Student accommodation</b>	<b>0.3 spaces per bed</b>

There are 15 FTE equivalent staff and 100 students proposed for this facility. Up to 44 of these students will reside within the building.

Traffic Consultants, MFY have provided a comprehensive assessment of car parking. This identified:

- The proposal will require:
  - 17 parking spaces for staff on-site.
  - 13 spaces for the student accommodation on-site.
  - 10 pick-up/set-down spaces for students either on-site or on the public realm within 300m of the site.

- 118 additional spaces are currently under construction on-site. This will be supplemented by 10 additional spaces contained within this proposal. This equates to a combined 128 spaces on-site.
- 98 on-site parking spaces associated with TAFE SA are to be removed to accommodate the proposed building.
- There will be a net increase of 30 on-site parking spaces.
- These 30 spaces will cater for all staff and student accommodation parking on-site.
- The 10 pick-up/set-down spaces are readily accommodated on Wireless West Road near the site.
- Pedestrian access to/from the development will continue to be provided via existing footpaths connecting to Wireless Road West. The visitor car park will include a footpath to connect between the parking and the adjacent facilities.

Sufficient car parking is provided and retained to service the lands proposed and existing uses. Access, Transport and Traffic PO 5.1 is met.

### **6.7.1 Servicing**

Relevant to service vehicles, the Transport, Access and Parking General Development Policies seek:

**PO 1.3 Industrial, commercial and service vehicle movements, loading areas and designated parking spaces are separated from passenger vehicle car parking areas to ensure efficient and safe movement and minimise potential conflict.**

**PO 1.4 Development is sited and designed so that loading, unloading and turning of all traffic avoids interrupting the operation of and queuing on public roads and pedestrian paths.**

**PO 6.6 Loading areas and designated parking spaces for service vehicles are provided within the boundary of the site.**

Service vehicles (deliveries/refuse collection) will occur within the proposed service yard. They will access the land via the existing western access.

Refuse collections will occur infrequently (one-two times per week) and when the facility is not in operation. This will ensure the largest vehicle (10.2m refuse collection vehicle) has full use of the service yard parking area for manoeuvring.

A sweep path analysis of the refuse vehicle has been undertaken. It confirms on-site manoeuvring is achieved to enable such vehicles to enter and exit the site in a forward direction.





**Figure 7 – Sweep Path Analysis**

The relevant Transport, Access and Parking provisions referenced above are satisfied.

## 6.8 Stormwater Management

The Code states the following for stormwater management:

### *Design in Urban Areas*

**PO 42.1** *Development likely to result in risk of export of sediment, suspended solids, organic matter, nutrients, oil and grease include stormwater management systems designed to minimise pollutants entering stormwater.*

**PO 42.2** *Water discharged from a development site is of a physical, chemical and biological condition equivalent to or better than its pre-developed state.*

**PO 42.3** *Development includes stormwater management systems to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that development does not increase peak flows in downstream systems.*

Aurecon has prepared a Stormwater Management Plan which accompanies the proposal. It satisfies the above provisions because:

- The rate and duration of stormwater discharged from the site will not increase peak flows in the downstream system. This is achieved via a 10KL detention tank (building roofed area) and an underground pit and pipe system (car park).
- A series of stormwater treatment measures are adopted to ensure water quality control. These include litter traps, permeable paving and a filtration unit.

## 6.9 Native Vegetation

The Native Vegetation Overlay applies to the land. It seeks:

**PO 1.1** *Development avoids, or where it cannot be practically avoided, minimises the clearance of native vegetation taking into account the siting of buildings, access points, bushfire protection measures and building maintenance.*

**PO 1.2** *Native vegetation clearance in association with development avoids the following:*

- a) *significant wildlife habitat and movement corridors*
- b) *rare, vulnerable or endangered plants species*
- c) *native vegetation that is significant because it is located in an area which has been extensively cleared*
- d) *native vegetation that is growing in, or in association with, a wetland environment.*

**PO 1.4** *Development restores and enhances biodiversity and habitat values through revegetation using locally indigenous plant species.*

No native vegetation has been identified for removal in connection with the development. PO 1.1 and 1.2 is therefore satisfied.

As outlined within the prior assessment of the proposed landscape concept, proposed garden beds will comprise a range of native species. This approach aligns with Overlay PO 1.4.

## 6.10 Site Contamination

PO 1.1 of Site Contamination General Development Policies provides:

**PO 1.1** *Ensure land is suitable for use when land use changes to a more sensitive use.*

As previously noted, the proposal is not considered to result in a more sensitive use. This is because:

- The land is already used as an educational facility for tertiary and university students. The inclusion of secondary school aged students remains an Item 4 activity within Table 1 (Land Use Sensitivity Hierarchy) of Practice Direction 14 (Site Contamination Assessment).
- Students residing in the proposed accommodation will be limited to short-term periods. This is consistent with tourist accommodation, being short-term accommodation. Tourist accommodation is also an Item 4 activity within Table 1 of Practice Direction 14.
- The student accommodation and educational facility will be occupied by the same populations. Their co-location will not result in an increased sensitivity or exposure level for these occupants when applying the relevant exclusion criteria identified in Clause 5 of Practice Direction 14.

## 7. Conclusion

The proposed educational facility and student accommodation comprises and supports educational services. They are appropriate land uses within the Community Facilities Zone.

The uses are within an attractive building of high-quality design. The building results in a negligible impact on the neighbouring residential uses. It will be supplemented by a targeted landscaping strategy.

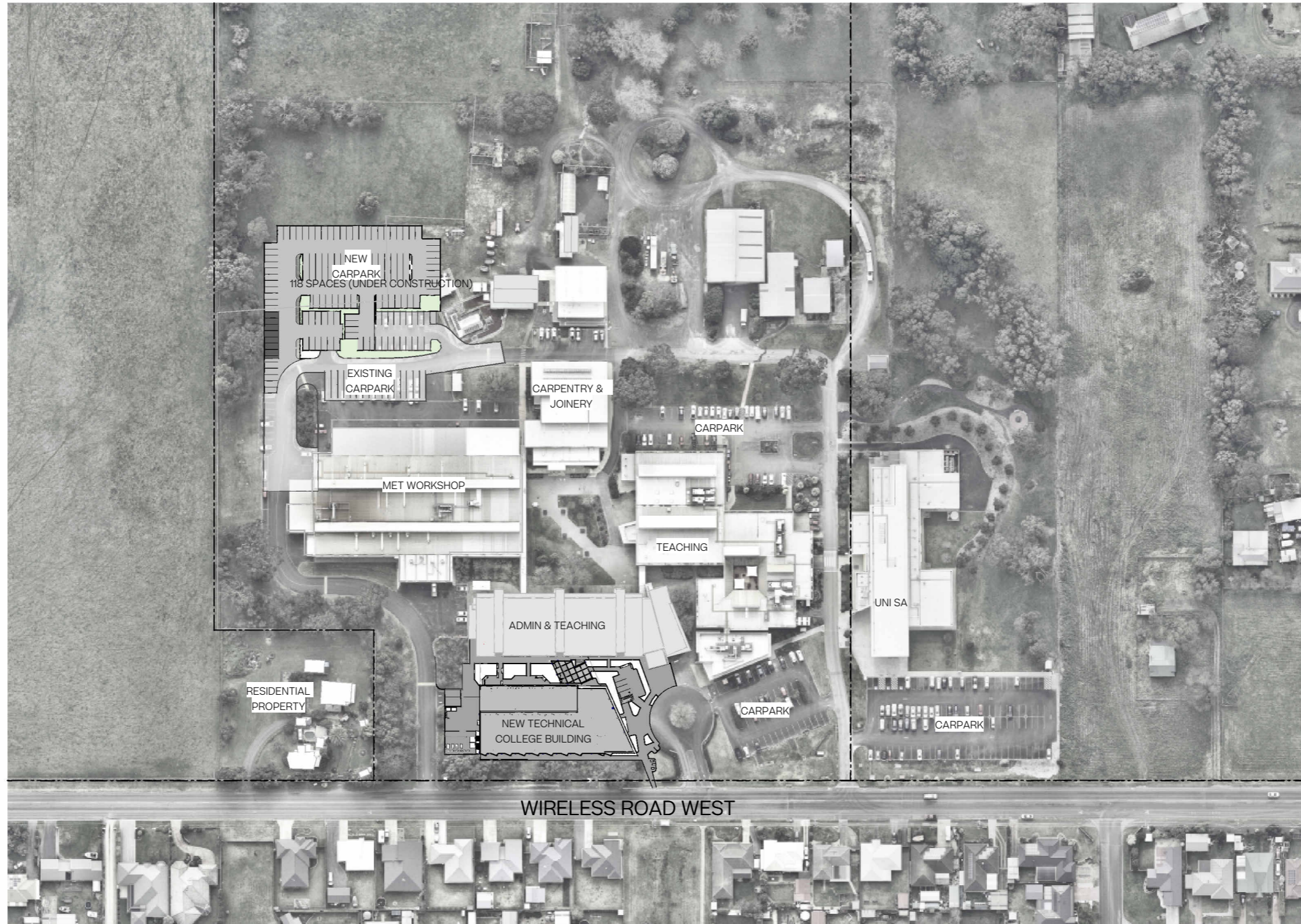
The development is serviced by sufficient car parking and set down/pick up areas and provides appropriate access for all service vehicles.

Stormwater will be appropriately managed within the capacity of the receiving system.

The proposed development warrants Planning Consent.

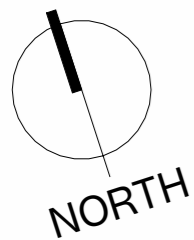
# Appendix A

Architectural Plans – Russell and Yelland



**SITE PLAN**

1:2000



**RUSSELL  
and  
YELLAND**

**Project:**  
**MOUNT GAMBIER TECHNICAL COLLEGE**

**Drawing Title:**  
**LOCATION PLAN**

**Address:**  
158- 174 WIRELESS RD WEST, MOUNT GAMBIER, SA 5290

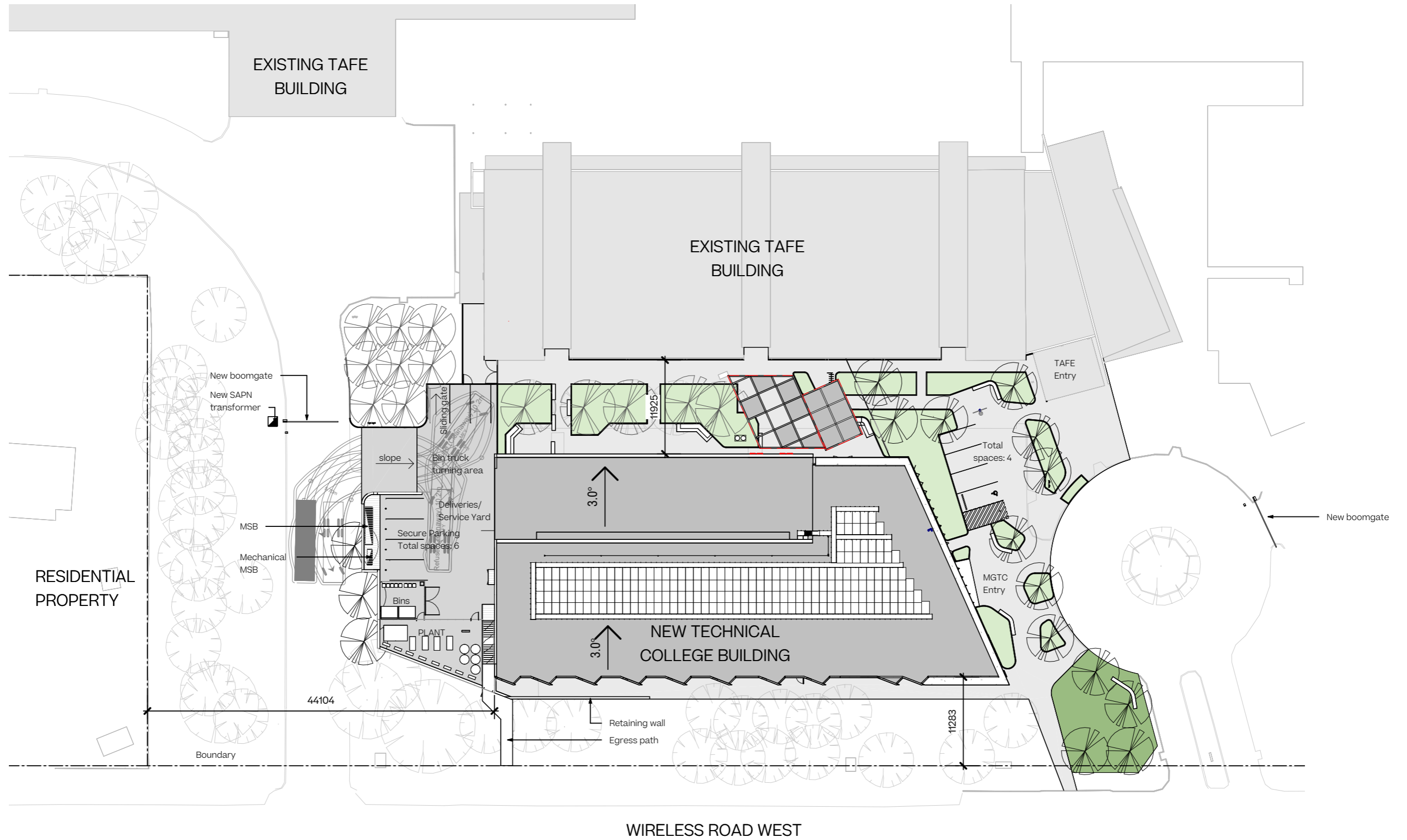
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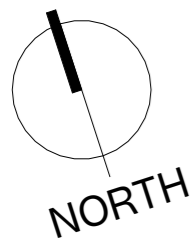
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**Original Sheet Size:** A3  
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**SITE PLAN**

1:500



**RUSSELL  
and  
YELLAND**

**Project:  
MOUNT GAMBIER TECHNICAL COLLEGE**

Drawing Title:  
**SITE PLAN**

Address:  
158- 174 WIRELESS RD WEST, MOUNT GAMBIER, SA 5290

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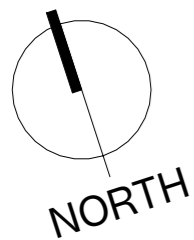
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**GROUND FLOOR PLAN**

1: 200



**RUSSELL  
and  
YELLAND**

**Project:  
MOUNT GAMBIER TECHNICAL COLLEGE**

Drawing Title:  
**GROUND FLOOR PLAN**

Address:  
158- 174 WIRELESS RD WEST, MOUNT GAMBIER, SA 5290

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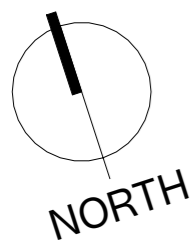


- AMENITIES
- CIRCULATION
- COMMONS
- DDA ACCOMMODATION
- DLA
- OFFICE
- RECEPTION
- SPECIALISED
- STAFF
- STAFF ACCOMMODATION
- STORE
- STUDENT ACCOMMODATION
- THINK TANK
- WORKSHOP STORE



**FIRST FLOOR PLAN**

1: 200



**RUSSELL  
and  
YELLAND**

**Project:  
MOUNT GAMBIER TECHNICAL COLLEGE**

Drawing Title:  
**FIRST FLOOR PLAN**

Address:  
158- 174 WIRELESS RD WEST, MOUNT GAMBIER, SA 5290

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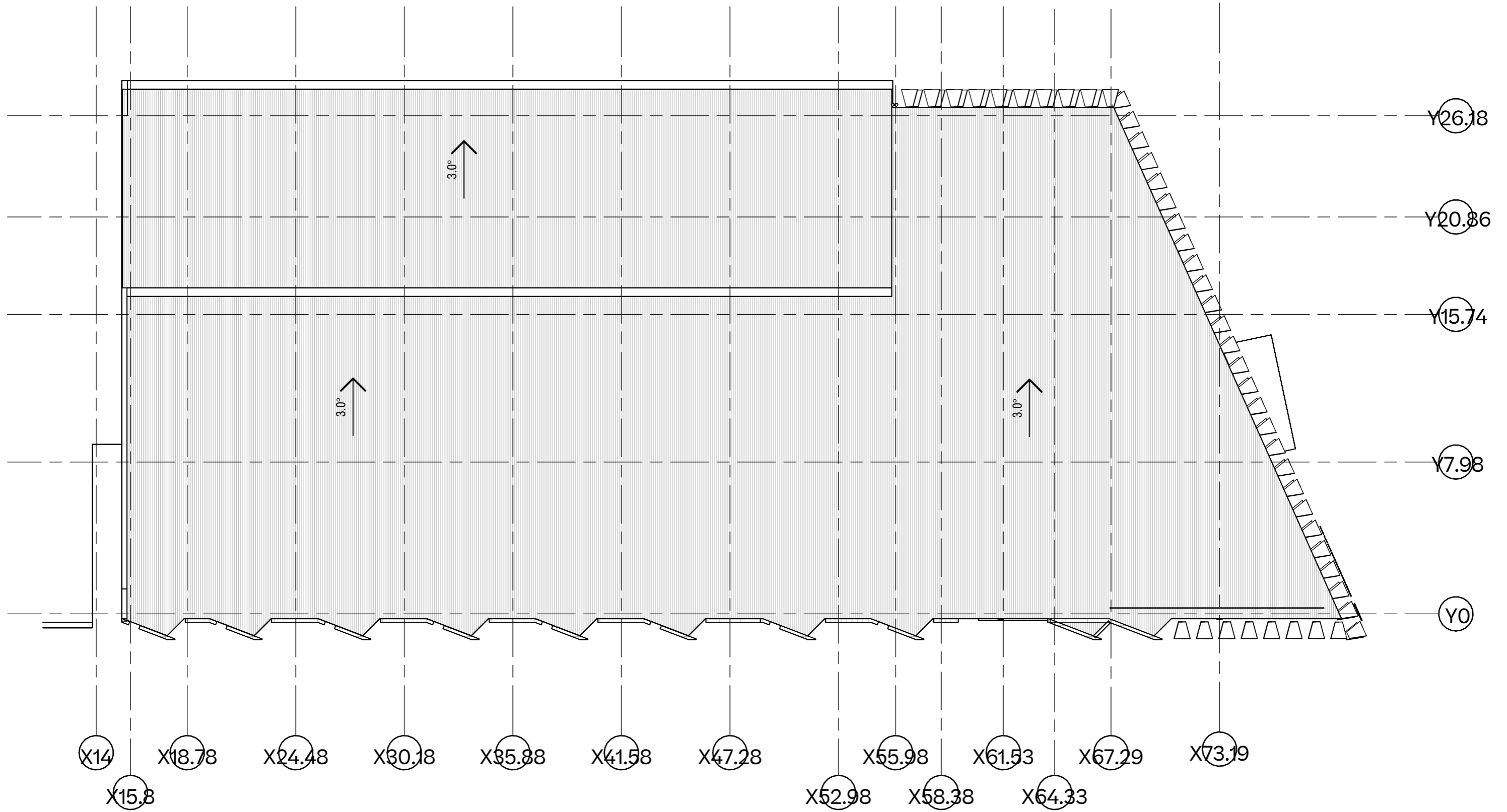
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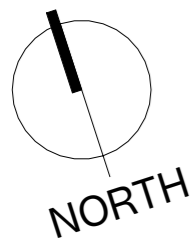






ROOF PLAN

1:200



**RUSSELL  
and  
YELLAND**

Project:  
**MOUNT GAMBIER TECHNICAL COLLEGE**

Drawing Title:  
**ROOF PLAN**

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158- 174 WIRELESS RD WEST, MOUNT GAMBIER, SA 5290

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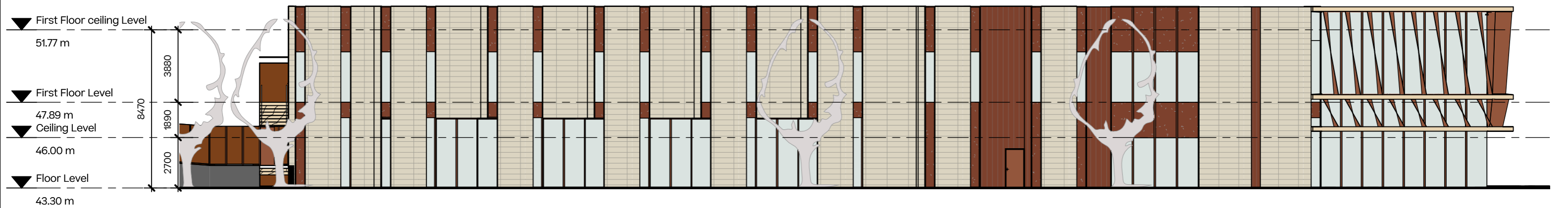
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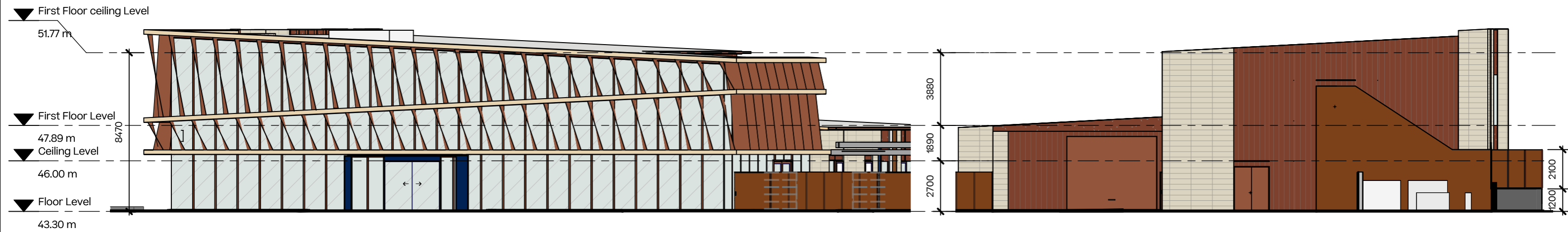
SK NORTH ELEVATION

1: 200



SK SOUTH ELEVATION

1: 200



SK EAST ELEVATION

1: 200

SK WEST ELEVATION

1: 200

**RUSSELL**  
and  
**YELLAND**

Project:  
**MOUNT GAMBIER TECHNICAL COLLEGE**

Drawing Title:  
**ELEVATIONS**

Address:  
158- 174 WIRELESS RD WEST, MOUNT GAMBIER, SA 5290

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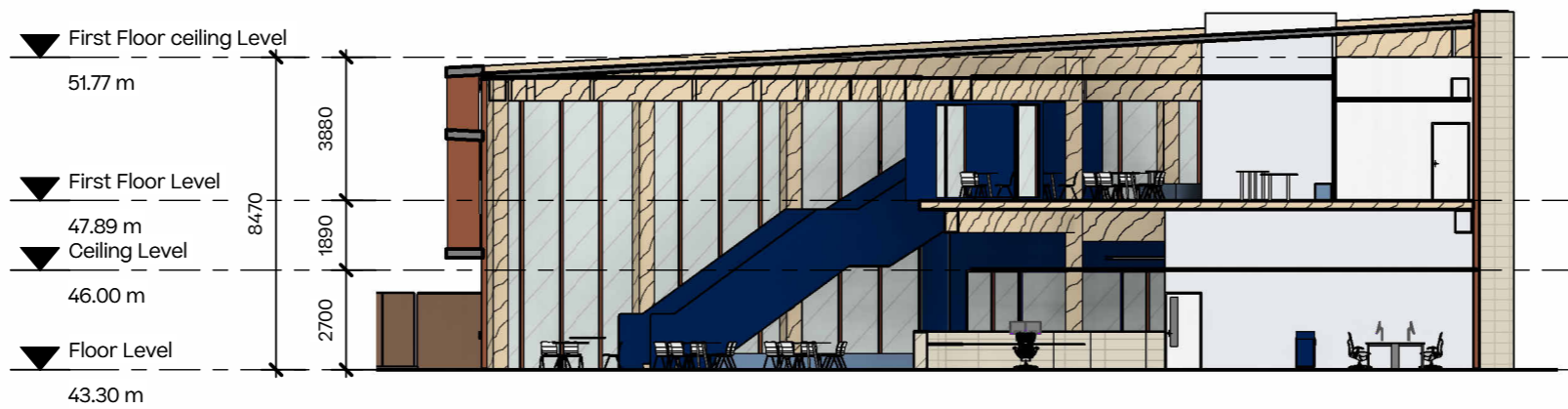
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**SK SECTION 1**

1:200



**SK SECTION 2**

1:200

**RUSSELL  
and  
YELLAND**

**Project:**  
**MOUNT GAMBIER TECHNICAL COLLEGE**

**Drawing Title:**  
**SECTIONS**

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**Original Sheet Size:** A3  
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# Appendix B

Landscape Concept – Wax Design

# Mount Gambier Technical College

## Landscape Concept

April 2024

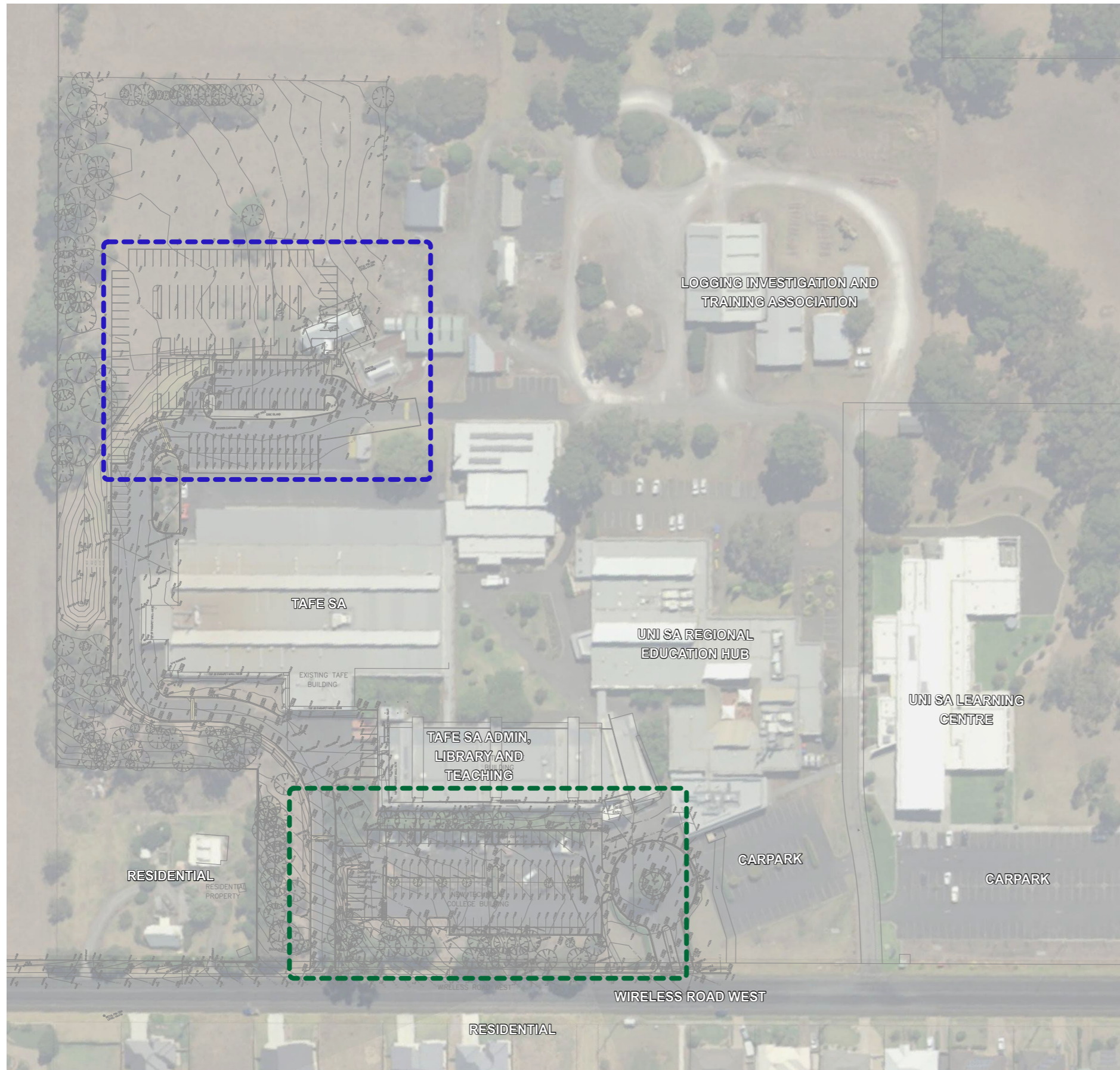
# Mount Gambier Technical College

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## Scope of Works



- Technical College Scope of Works
- Carpark Relocation Scope of Works



# Mount Gambier Technical College

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## Technical College - Photographic Survey



1. Campus entrance and signage (facing South)
2. Entrance into the southern carpark and spoon drain (facing South-West)
3. Carpark (facing North-West)
4. Paved pedestrian access and pram ramps from carpark towards the main entrances of both buildings
5. *Liquidambar styraciflua* to centre of circular road
6. Pedestrian access from Wireless Road West towards and around the carpark (facing South)
7. Scattered mature tree planting to boundary and no understorey planting
8. Centre of the carpark (facing West)
9. Garden beds aligned with centred carparks
10. Landscape embankment to carpark west
11. Shallow grassed swale to verge (no kerb and gutter to Wireless Road West)
12. Informal seating areas (loose furniture) within garden beds

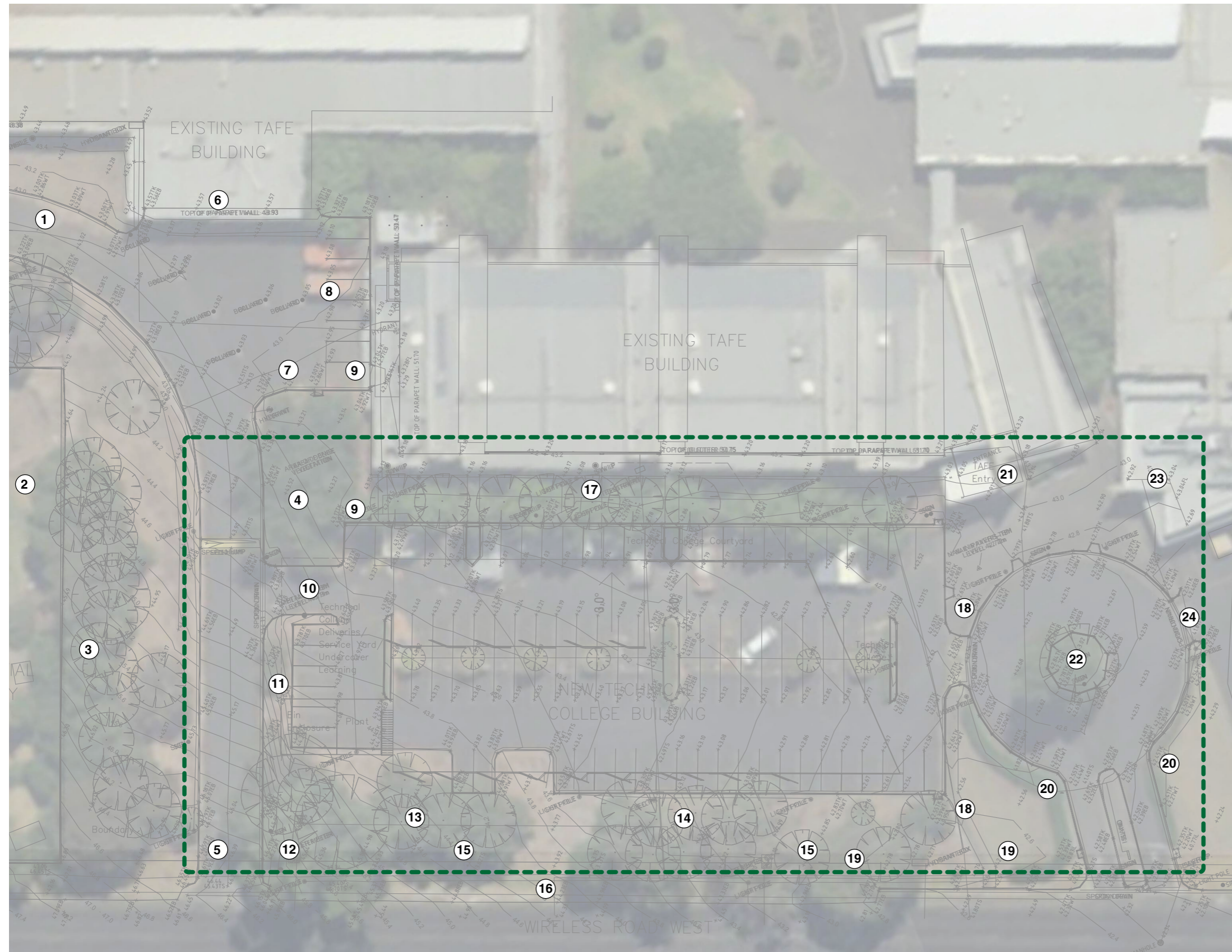
# Mount Gambier Technical College

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## Technical College - Existing Conditions



--- Technical College Scope of Works

1. Campus ring road with wayfinding signage and lightpoles
2. Residential property
3. Dense mature trees planting in mulched boundary landscape, limited understorey planting
4. Grove of birch trees
5. Secondary campus vehicle access via wireless road west, with lockable access gate
6. Large vehicle access (roller doors) to TafeSA building
7. TafeSA bin storage
8. Overflow and maintenance carpark
9. DDA parking and access to TafeSA building
10. Existing ramped carpark access
11. Landscape embankment to carpark edge
12. Water meter
13. Dense large native tree planting to boundary, no understorey planting.
14. Scattered medium native tree planting with views through, no understorey planting.
15. Low post and chain boundary fence
16. Shallow grassed swale to verge (no kerb and gutter to Wireless Road West)
17. Partial avenue of deciduous trees to western end of TafeSA facade. Large hedge planting to full facade between trees.
18. Paved pedestrian access footpath and pram ramps from carpark towards the main entrances of tafe and uni
19. Informal seating areas (loose furniture) within garden beds
20. Formal entry statement hedging
21. Main entrance into the TafeSA building
22. *Liquidambar styraciflua* to centre of circular road
23. Main entrance into the UniSA building
24. Access into the UniSA carpark





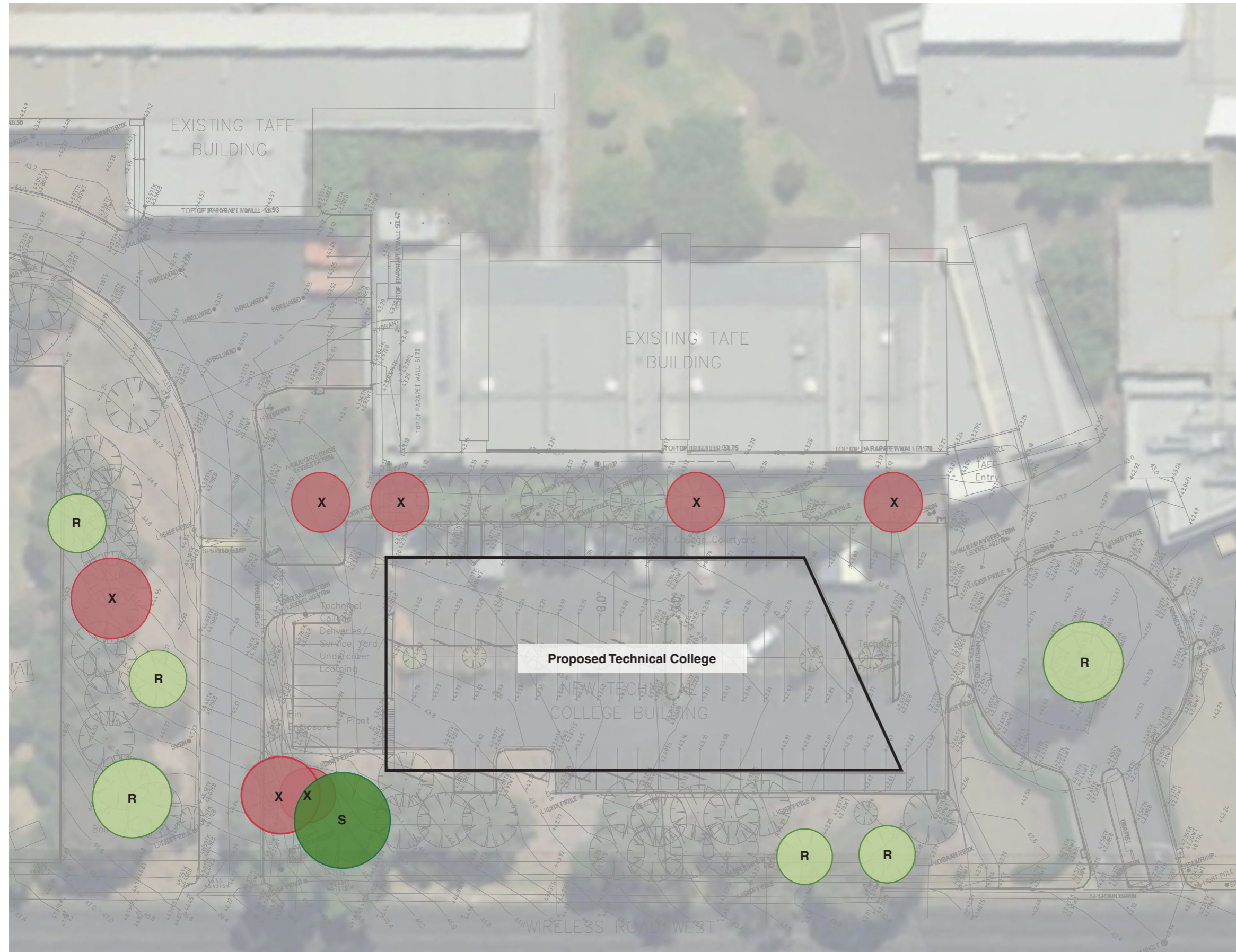
# Mount Gambier Technical College

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## Technical College - Tree Legislation and Removal



- Technical College Building
- R** Regulated Tree
- S** Significant Tree
- X** Remove Tree



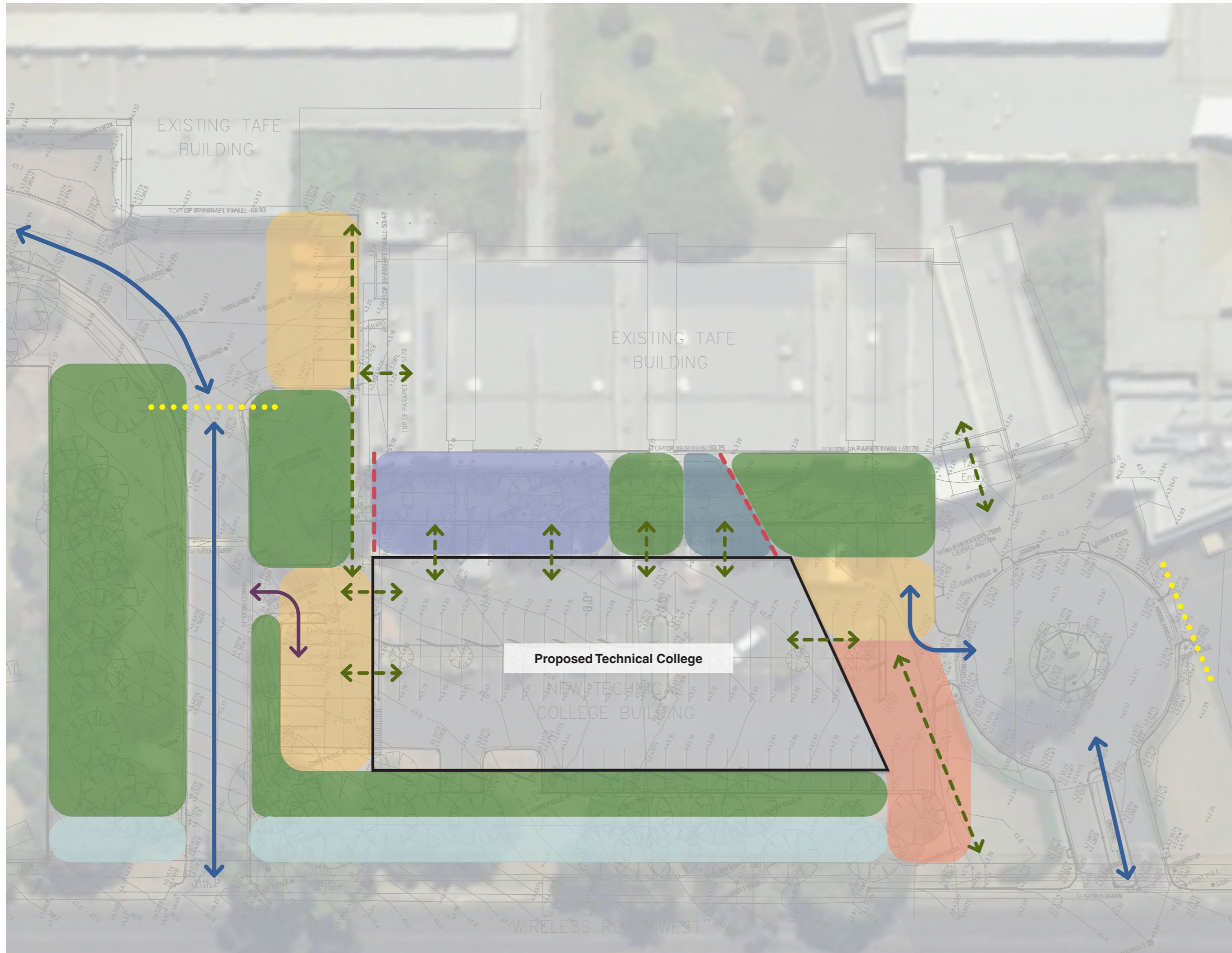
# Mount Gambier Technical College

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## Technical College - Spatial Mapping



- Technical College Building
- Landscape Amenity
- Outdoor Learning/Gathering Space
- Arrival Landscape
- Outdoor Dining
- Street Amenity
- Carparking and Services
- Pedestrian Access
- Vehicle Access
- Maintenance Vehicle Access
- Fencing
- Gated Entry



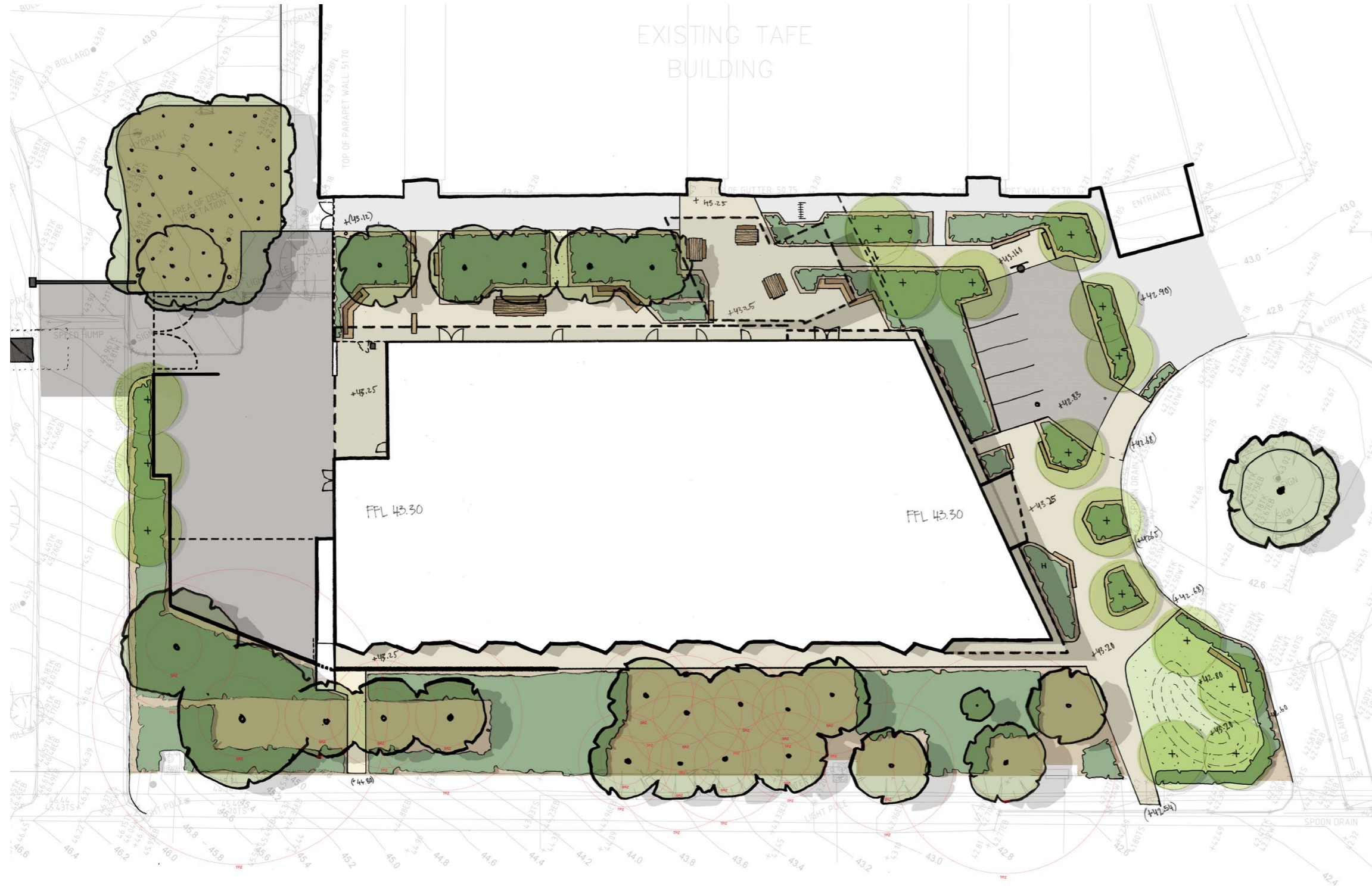
# Mount Gambier Technical College

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## Technical College - Overall Landscape Concept



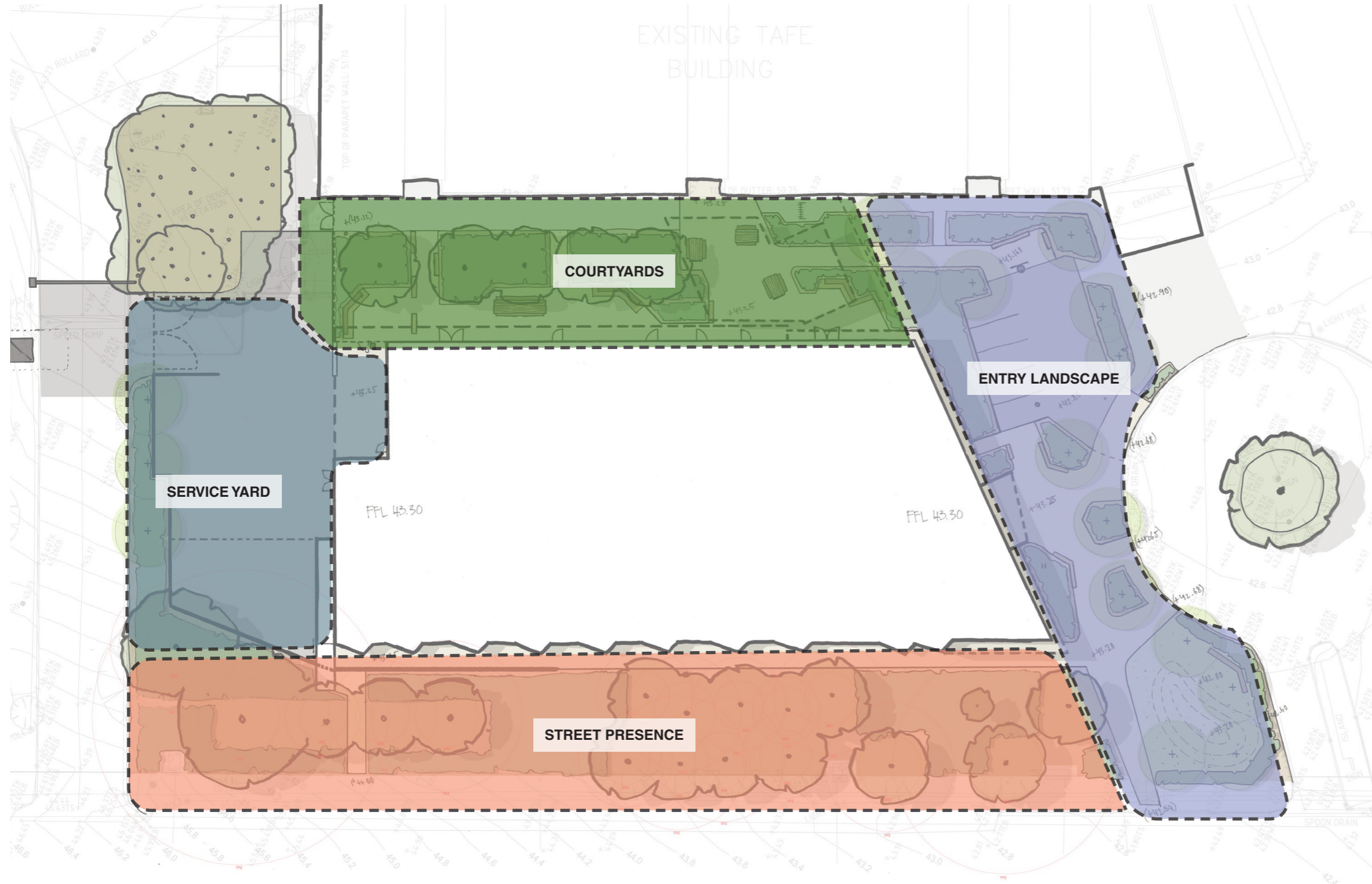
# Mount Gambier Technical College

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## Technical College - Overall Landscape Concept



# Mount Gambier Technical College

Project No. 23MGT / Date of Issue 15.04.2024

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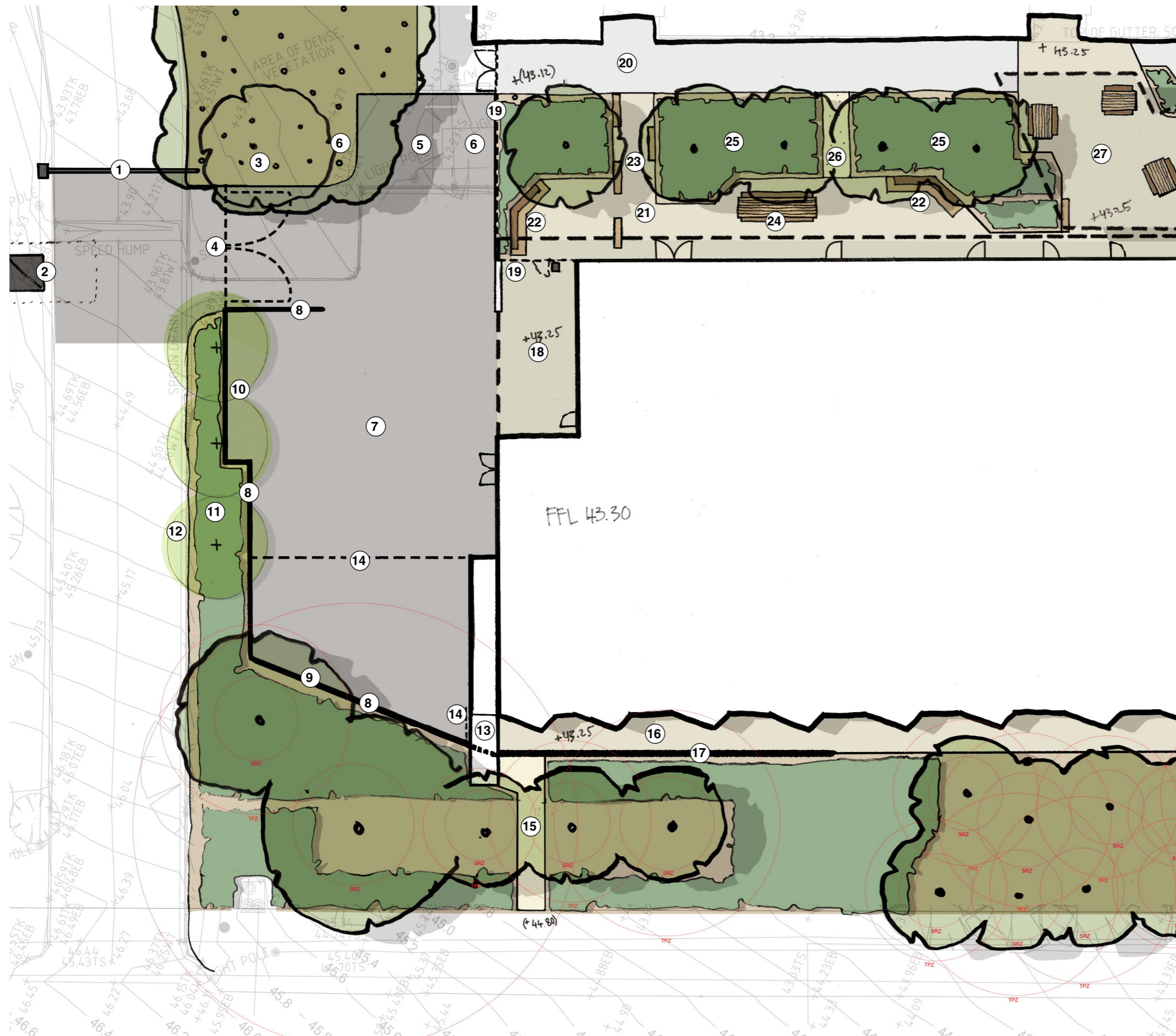
## Technical College - Entry Landscape Concept



1. Sheltered outdoor dining area with timber picnic benches, shelter above (dashed) by architects
2. Exposed aggregate concrete courtyard and access paths
3. Limestone block amphitheatre seating with timber tops
4. Mass planted native garden bed
5. Bike parking (7-10 bikes) galvanised steel rack
6. 1.8m high fencing between Technical College and Existing TAFE, perforated to match building
7. Sliding gate access between courtyard and carpark landscape, gate slides into garden bed
8. Deciduous tree planting to support winter solar gain to Technical College
9. Access path around buildings. 900mm wide to Tech College, 1200mm wide to TAFE
10. Basketball hoop, backboard and line marking to edge of carpark for after-hours student use
11. Linear limestone block seating walls with timber tops, basketball protection to garden beds
12. Interlocking paved carpark with line marking
13. DDA carpark space with shared zone adjacent
14. Paved driveway access, pedestrian priority thoroughfare between College and TAFE
15. Existing TAFE paving retained and relaid as required
16. Evergreen native tree planting
17. Kiss & drop and bus drop off space to edge of existing roadway
18. Flush mass planted native garden beds in exposed agg concrete entrance courtyard, opportunities for passive storm water collection
19. Entry shroud (by architects)
20. Lawn open space with 400mm high lawn mound informal seating
21. Existing hedging retained adjacent lawn space
22. Exposed agg concrete pedestrian connection to Wireless Road West
23. Understorey planting to existing verge, existing trees retained and protected
24. Existing informal unsealed pedestrian footpath along Wireless Road West retained
25. Relocated entry gate
26. Circle road and central tree planting retained
27. 1.5m wide perimeter access path to southern facade (maintenance access)



## Technical College - Courtyards and Service Yard Concept



1. Relocated entry gate
2. New SAPN transformer
3. Existing birch tree grove reduced, retained trees re-mulched and protected
4. New access driveway with double gates, existing access driveway removed
5. Large vehicle turning head, refer to engineer's drawings
6. 2x Liquidambar removed for vehicle turning head
7. Services yard and staff parking area, asphalt surface
8. Concrete retaining walls with perforated architectural fencing/screening above
9. Angled retaining wall to limit significant tree encroachment
10. Main distribution board setback to retaining wall
11. Mass planted native garden bed
12. Native evergreen tree planting to shelter services yard
13. Mesh walkway and steps connection between upper level emergency exit and verge. Emergency exit for ground level below.
14. Secure fencing to building plant and services, to match perforated architectural screening
15. Quarry fines footpath through garden bed to street (upper floor emergency exit route)
16. 1.5m wide perimeter access path to southern facade (maintenance access)
17. Concrete retaining wall
18. Concrete outdoor learning extension to messy workshop
19. Secure perforated fencing to student courtyard
20. Existing paving retained to TAFE interface, relaid as required
21. Exposed aggregate concrete to College courtyards
22. Limestone block amphitheatre seating with timber tops
23. Linear limestone block seating walls with timber tops
24. Long timber picnic bench for group outdoor learning and socialisation
25. Avenue of Liquidambar trees retained, garden beds and shrub planting modified
26. Quarry fines path through garden bed
27. Sheltered outdoor dining area with timber picnic benches, shelter above (dashed) by architects

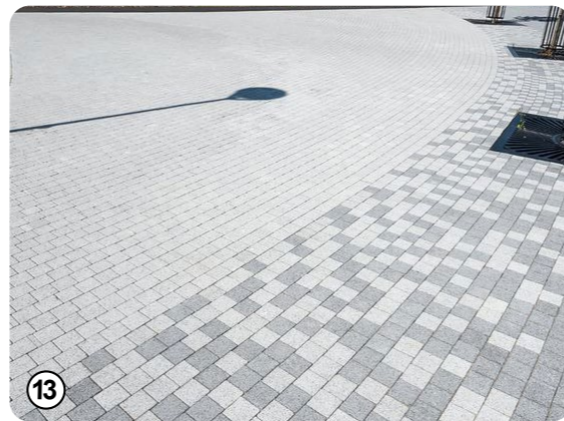
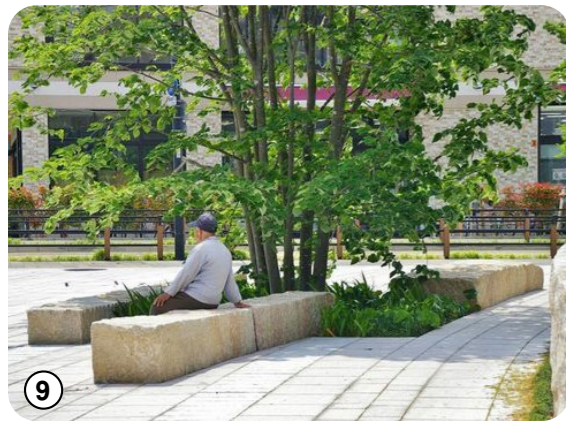
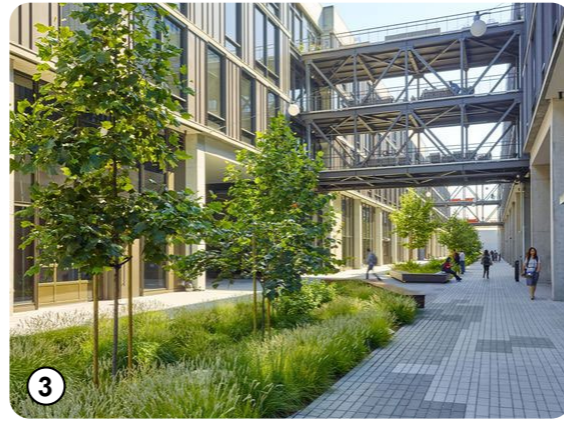
# Mount Gambier Technical College

Project No. 23MGT / Date of Issue 15.04.2024

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## Technical College - Precedent Moodboard



1. Sheltered outdoor dining area with timber picnic benches and pockets of planting
2. Sheltered courtyard between buildings
3. Mass planted central garden and tree planting to linear courtyard
4. Limestone block amphitheatre seating
5. Mass planted native garden bed
6. Compacted quarry fines seating nook in garden bed with limestone block seating
7. Deciduous tree planting to support winter solar gain to Technical College
8. Informal basketball half-court
9. Linear limestone block seating walls with timber tops. Deciduous tree planting
10. Flush paved carparking and pedestrian shared space
11. Flush native garden beds and tree planting in paved entrance courtyard
12. Arrival landscape with informal seating and wayfinding
13. Paving pattern wayfinding

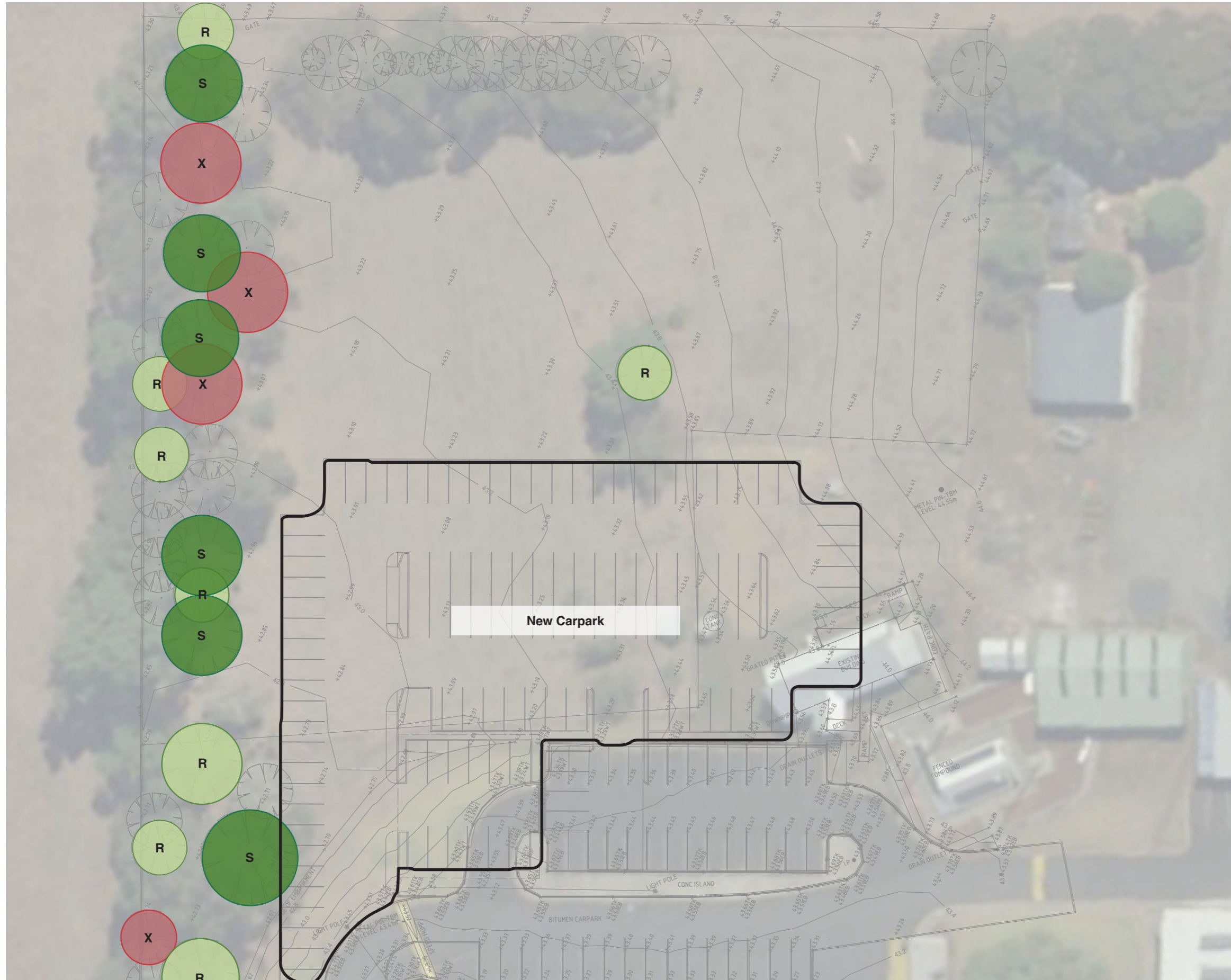
# Mount Gambier Technical College

Project No. 23MGT / Date of Issue 15.04.2024

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## Carpark - Tree Legislation and Removal



- New Carpark
- R Regulated Tree
- S Significant Tree
- X Remove Tree





# Mount Gambier Technical College

Project No. 23MGT / Date of Issue 15.04.2024

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## Carpark - Spatial Mapping



- Landscape Amenity
- Carparking and Services
- Existing Native Vegetation Amenity (Retained and Protected)
- Pedestrian Access
- Vehicle Access
- Maintenance Vehicle Access
- Fencing
- Gated Entry



# Mount Gambier Technical College

Project No. 23MGT / Date of Issue 15.04.2024

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## Carpark - Landscape Concept



1. Existing mature trees and native habitat to boundary retained and protected
2. 2.0m wide garden bed to carpark perimeter to screen earthwork mounding and prevent unauthorised access beyond carpark footprint
3. Maintenance/service access to rear paddock
4. Permeable carpark spaces (unsealed compacted rubble) within adjacent tree root zones
5. Asphalt carpark with linemarking
6. Main pedestrian access, kerb ramp access to islands
7. Native understory planting to carpark islands
8. Evergreen shade tree planting to mitigate heat island
9. Existing carparking retained and matched into
10. Future provision for secure (fenced) carparking)
11. Stormwater outlet to existing swale, revegetated with sedges and rushes



# Appendix C

Traffic Report – MFY

MLM/23-0257

3 May 2024

Mr Scott Twine  
URPS  
27 Halifax Street  
ADELAIDE SA 5000

Dear Scott,

## **MOUNT GAMBIER TECHNICAL COLLEGE**

We refer to the proposed development of a Senior Technical College at Mount Gambier. The proposed education facility, which would be located within a portion of the existing TAFE SA Campus, will provide vocational education for Year 10, 11 and 12 students.

As requested, we have assessed the proposal with respect to traffic and parking matters. The assessment has been based on Russell and Yelland's Site Plan 23.010 SK201C, dated 22 April 2024.

### **1 EXISTING SITUATION**

The subject site is located within an existing car park of the TAFE SA campus at Mount Gambier. The TAFE SA facility shares the site with a University of South Australia campus and is referred to as the Mount Gambier Education Precinct.

Access to the precinct is provided via three access points on Wireless Road West. The western and eastern access points provide access to the internal circulation roadway which connects to several parking areas on the site. The circulation roadway also caters for access by Restricted Access Vehicles, namely 26.0 m B-Doubles, associated with the existing campuses. The central access point services a turnaround facility which connects to the front car parking areas and serves as a pick-up/set-down facility for the TAFE SA building.

Wireless Road West is a collector road within the care and control of the City of Mount Gambier. It has a two-lane undivided carriageway with a posted speed limit of 50 km/h. The southern side of the road is kerbed with a bicycle lane and parking lane. The northern side of the road has kerbing and a bicycle lane adjacent the eastern portion of the Education Precinct site. The balance of the frontage has an unsealed shoulder adjacent the northern side of the carriageway.



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## 2 PROPOSAL

The proposal is for the development of a Senior Technical College adjacent the TAFE SA building, within the footprint of the existing 98 space car park.

The College will cater for vocational education of Year 10 to 12 students, with year levels rotating on a weekly basis resulting in only one year level being on campus each week. The College will therefore accommodate a maximum of 100 students at any given time. Student accommodation consisting of 44 beds plus three supervisors will be developed as part of the proposal for remote students to stay on campus during the week they are on-campus. There will be 15 FTE staff located on campus (inclusive of the three supervisors).

A small parking area with four spaces will be provided adjacent the main building entry. This car park, which will include a space for persons with a disability, will be accessed via the central driveway and will provide parking for visitors to the facility. The proposal will also include a service yard adjacent the building, which will be accessed via the western access point and will provide six secure staff parking spaces.

An extension of the existing rear parking on the north – west corner of the TAFE SA site is currently under construction. This is separate to the subject application. This expansion will provide adequate parking to replace the existing 98 spaces within the building development areas but also to cater for the demand associated with the Senior Technical College. The parking will result in an additional 118 spaces and will include a potential secure area with 12 spaces.

### 2.1 ACCESS

Access to the site will remain via the existing access points on Wireless Road West. An on-site assessment verified that sufficient sight distance is provided for exiting drivers at the access points, in accordance with the *Austrroads Guide to Road Design Part 4A: Unsignalised and Signalised Intersections*.

An existing gate controlled by TAFE SA at the western access point will be relocated to ensure access to the proposed facility is unimpeded for service vehicles. The relocated gate will be designed to provide digital access to ensure out-of-hours accessibility to the parking area can be maintained for students staying in the on-site accommodation.

### 2.2 SERVICE VEHICLES

Service vehicle access will be provided via the western access, with deliveries/refuse collection occurring within the proposed service yard.

Refuse vehicles will access the site infrequently (one-two times per week) when the facility will not be operational and therefore will be able to utilise the full parking area for manoeuvring. The service yard will be designed to ensure that the largest vehicle (a 10.2 m refuse collection vehicle) will be able to manoeuvre to enter and exit the site in a forward direction, as illustrated in Figure 1.



**Figure 1: Swept path of refuse vehicle accessing the site**

### 2.3 CAR PARKING

The proposed parking areas will be designed in accordance with the Australian/New Zealand Standard *Parking facilities Part 1: Off-street car parking (AS/NZS 2890.1:2004)*, in that:

- parking spaces will be 5.4 m long or 4.8 m long with a 600 mm overhang;
- parking spaces will be 2.6 m wide;
- parking aisle will be at least 5.8 m wide; and
- the dead-end aisles will be extended by 1.0 m

One space will be allocated for use by people with disabilities and will comply with the Australian Standard *Parking facilities Part 6: Off-street parking for people with disabilities (AS 2890.6:2022)*, in that the space will be 2.4 m wide and 5.4 m long with an equal sized adjacent shared area.

### 2.4 PEDESTRIAN CONNECTIVITY

Pedestrian access to/from the development will continue to be provided via existing footpaths connecting to Wireless Road West. The visitor car park will include a footpath to connect between the parking and the adjacent facilities.



### **3 PARKING ASSESSMENT**

The Planning and Design Code (PDC) identifies the following parking requirements for a secondary school:

- 1.1 spaces per full time equivalent employee; and
- 0.1 spaces per student for a pickup/set down area either on-site or on the public realm within 300 m of the site.

The PDC also identifies a requirement of 0.3 spaces per bed for student accommodation.

The proposal will therefore require 17 parking spaces for staff and 13 spaces for the accommodation. In addition there will be a requirement for ten pick-up/set-down spaces to comply with the requirements in the PDC.

The extension of the existing rear parking area will provide 118 spaces, replacing the 98 spaces located on the subject building development site plus an additional 20 spaces. In addition, the proposal will include ten spaces adjacent the building frontage, resulting in an increase in 30 spaces on the campus. Such a provision would cater for all staff and student accommodation parking.

The pick-up/set-down requirement would be readily accommodated on Wireless West Road in close proximity to the site.

There would potentially be a small student parking demand during the week when Year 12 students are on-campus. Notwithstanding that the PDC does not include a provision for student parking, such parking would typically be related to students staying in the accommodation and hence these vehicles will be accommodated on the site. In any event, parking would be available on Wireless West Road within close proximity to the site.

### **4 TRAFFIC ASSESSMENT**

A detailed review of traffic generation rates completed for the Roads and Maritime Service in NSW identified average traffic generation rates at regional secondary schools of 0.35 trips per student during the am peak period and 0.24 trips per student in the pm peak period (inclusive of all movements). The following traffic volumes could therefore be anticipated during the school peak periods based on 100 students at the site:

- 35 trips during the morning peak period; and
- 24 trips during the afternoon peak period.

The forecast volumes are low and will be readily accommodated at the access points with negligible impacts to the adjacent road network and in particular to Wireless Road West. Importantly there will be no perceivable impact to the nature or function of this road.



Further, the proposed traffic volumes will not have a significant impact on the operation of the internal road network with the existing campus. Existing traffic movements associated with the 98 spaces to be relocated as part of the proposal will utilise the east and west access points which will improve safety for pedestrians adjacent the pick-up/set-down loop and will not adversely impact the safety or convenience for drivers accessing parking.

## 5 SUMMARY

The proposed Senior Technical College will maximise use of existing access and circulation at the Mount Gambier Education Precinct. All traffic movements will enter and exit the site in a forward direction and the proposal will not impact existing B-Double manoeuvring requirements.

Parking provided adjacent the proposed building will be safe and convenient for users and will comply with relevant Australian Standards. Additional parking will be accommodated in the north-west car park which will be constructed prior to the commencement of this development. A direct pedestrian access will be provided to facilitate pedestrian movements between the car park, the existing TAFE SA Campus and the proposed development.

The proposed rotation of year levels at the facility over sequential weeks will minimise the parking requirement and traffic generation associated with the site, resulting in an innovative education model which minimises impact to the adjacent area.

Yours sincerely,

**MFY PTY LTD**

A handwritten signature in black ink, appearing to read 'Melissa Mellen', with a horizontal line extending to the right.

**MELISSA MELLEN**

Director



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2010 TELSTRA SOUTH AUSTRALIAN  
BUSINESS WOMAN OF THE YEAR



# Appendix D

Stormwater Management Plan – Aurecon

# Mount Gambier Technical College

Stormwater Management Plan

**Russell & Yelland Architects**

Reference: 526290

Revision: B

2024-05-20



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Figure 2. Topography of the terrain

Figure 3. 1% AEP Overland Flow Depths - 3hr

Figure 4. 1% AEP Overland Flow Velocities - 3hr

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Table 1; Stormwater design guidelines

# Stormwater Management Plan

## 1.1 General Description

### 1.1.1 Project Description

The project comprises the following scope:

- A new Technical College building to be built over an existing carpark at the Southern edge of the TAFE Mt Gambier Campus along Wireless Road.
- A new carpark to the northwest of the site, making up for parking spaces displaced as part of the Technical College construction.

### 1.1.2 Site Levels and context

Aurecon have assessed the detailed survey of the subject site and council asset plans. The site falls from the northern boundary at RL44.80 to RL42.32 at the main entrance on Wireless Road West. The site appears to be services in two areas, both of which are connected to borehole injection points. These 2 areas can be found west of the existing car park and on the southeastern point of the site near Wireless Road.

An assessment of the contours of the surrounding area does not show overland flow risks or flooding implications for the works areas in question from areas external to the site. Overland from a paddock to the north may impact areas on the eastern side of the technical college site. This does not have implications for proposed technical college building or carpark.

Wireless Road West on the southern boundary has limited drainage on the north side of the road and only at the Campus site is there any inground stormwater infrastructure.

The civil scope of works is split into two scope area the carpark extension and the main building works.



Figure 1. Aerial Image of Mount Gambier Technical College Campus / scope of carpark / building works

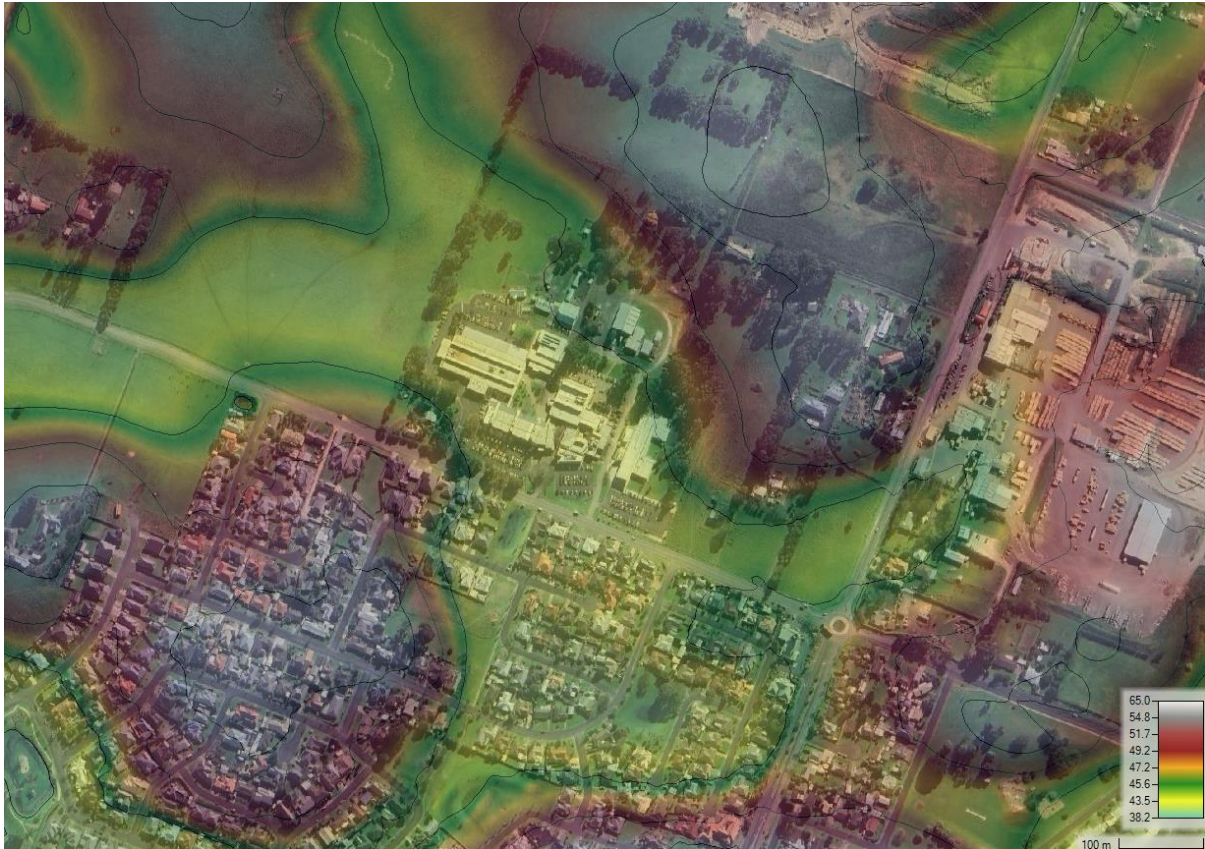


Figure 2. Topography of the terrain

## 1.2 Standards and References

The following codes and standards form the basis for components of the Preliminary Stormwater Design.

- AS3500.3-2021 plumbing and drainage.
- Australian Rainfall and Runoff, 2019.
- Storm Drainage Design in Small Urban Catchments: ARRB Special Report No. 34, Argue, 1986.
- Hydraulics of Pre-cast Concrete Conduits, Concrete Pipe Association of Australia (1983).
- Australian Runoff Quality: A Guide to Water Sensitive Urban Design: Engineers Australia (2006).
- City of Mount Gambier Infrastructure Asset Management Plan 2016/17 – 2026/27G
- Department for Education and Child Development Infrastructure Guidelines
- Building Code of Australia
- Bureau of Meteorology

The following have also been considered in development of the SWMP:

- Detailed topographic and utilities survey, undertaken in m AHD height datum and MGA 2020 coordinates system.
- Location SA Map Viewer
- Water Connect SA Flood Awareness Maps

## 2. Design Guidelines

Based on the standards and guidelines indicated above, the following design criteria have been adopted:

Table 1; Stormwater design guidelines

Item	Design Storm Event	Notes
Roof Catchments	1% AEP	Connection to the rainwater detention tank, to be designed and specified by the drainage engineer in accordance with AS3500. Rainwater to be reused for toilets within the building.
Internal Underground Site Drainage	20% AEP	Minimum freeboard within pits of 150mm.
Sag Locations	5% AEP	Where pits are positioned in sag locations, ensure they have inlet capacity for the 5% AEP storm event. Sag pits assumed to be a 0.5 blockage factor.
Overland Flow path and Flooding	1% AEP	Minimum freeboard of 300mm to all building and infrastructure finished floor levels.  Overland flow depth and velocity to be safe at all times.  No increase in flood afflux outside the development boundary.

## 2 Site Flood Risk Modelling

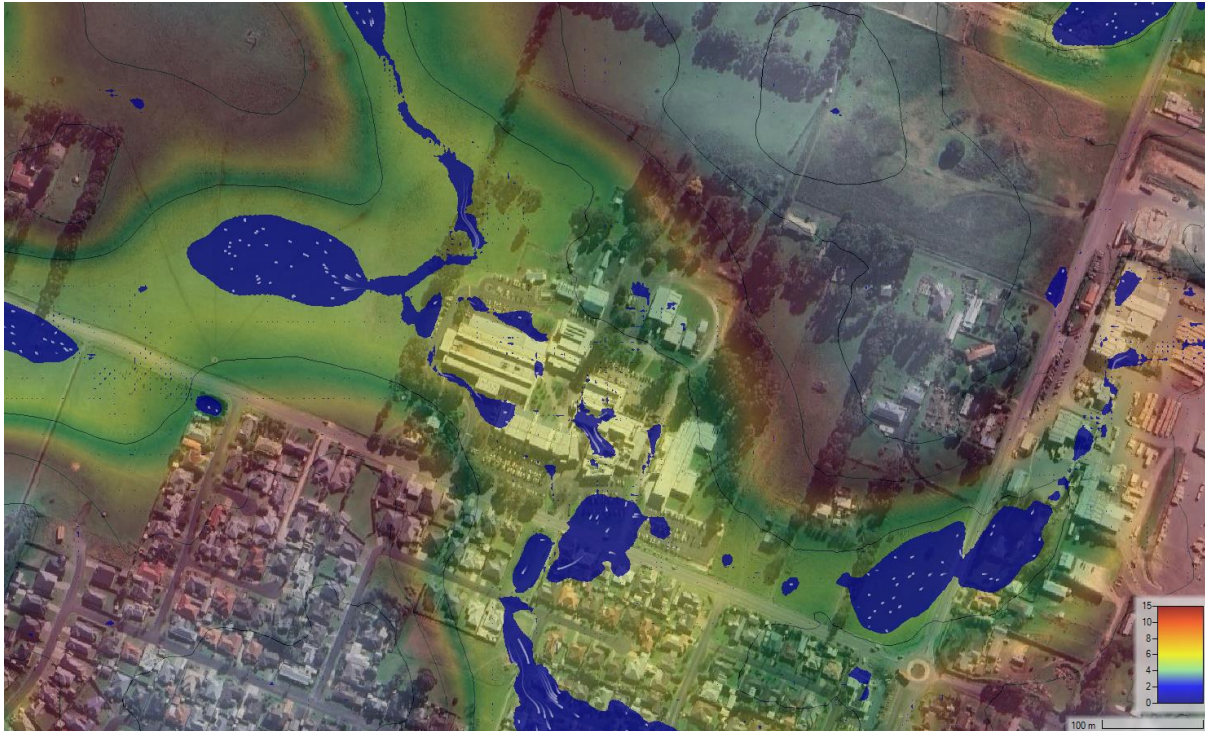
In the following analysis, the terrain of the site was examined against the overland flow amidst a 1% AEP (Annual Exceedance Probability) 3-hour storm event. The depth of the overland flow was found to be mainly under 1 meter across the site and across the adjacent basin along the west extent of the college. Additionally, the velocity of the flow was assessed and found to all be under 1 m/s across the site. There were no areas of concern found in this analysis which may cause disruption to design.

### Depth:



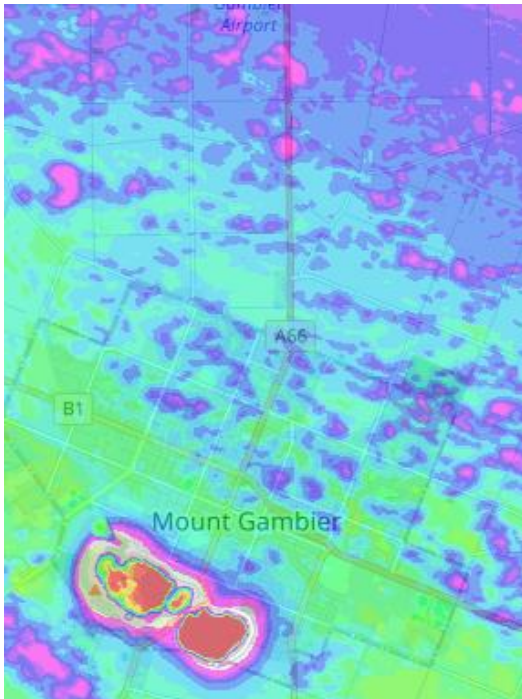
Figure 3. 1% AEP Overland Flow Depths - 3hr

**Velocity:**



**Figure 4. 1% AEP Overland Flow Velocities - 3hr**

The area is not flagged on as known flood risk area with historical flooding for Mt Gambier located to the south side of the Jubilee Highway. Flood map of Mount Gambier provided below.



**Figure 5. Flood Map of Mount Gambier, SA**



## 3 Proposed Drainage System (Post Development)

### 3.1 Carpark Works



Figure 6. Highlighted extent of the proposed car park extent on top of existing conditions

#### 3.1.1 Existing conditions

The existing portion of the carpark is an asphalt pavement with concrete kerbing with an inground stormwater network draining to the existing borehole injection pits and basin located on the west of the site. The basin's overflow discharges to the neighbouring paddock and under the Eucalyptus trees. The current asphalt is to be retained as part of the works.

#### 3.1.2 Stormwater

Currently there is borehole injection pits and a basin located to the west of the existing carpark. It is intended to utilise this system for the extension of the carpark as part of the proposed works. The basin is considered to be part of the treatment system for water sensitive urban design.

A DRAINS simulation model has been used to size the stormwater network. If requested, Aurecon can provide the necessary calculations from DRAINS.

The requirement for detention and discussion on the suitability of this outfall will be discussed with Council.

#### 3.1.3 Environmental and WSUD Considerations

A MUSIC (Modelling Urban Stormwater Improvement Conceptualisation) model has been prepared to understand the suitability of such system.

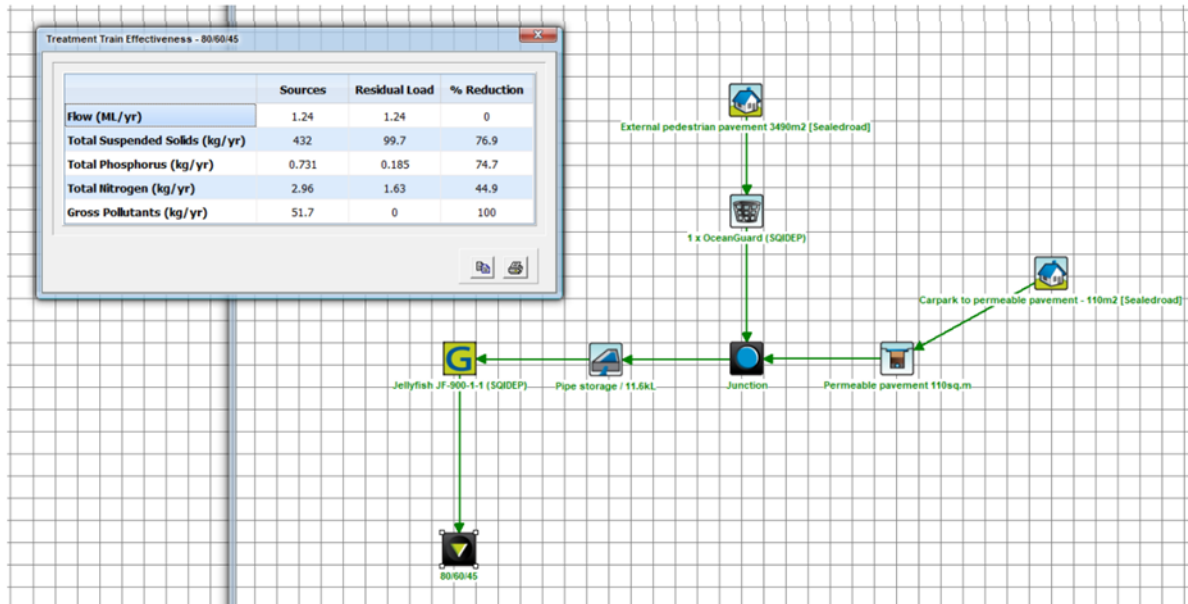


Figure 7. MUSIC model for the proposed carpark

A series of stormwater treatment measures are shown above from the MUSIC Model simulation. These are OceanGaurd Litter traps in all pits, permeable paving (subject to arborist discussion to be excluded), 11.6kL of pipe storage and a JellyFish tertiary filtration unit.

### 3.1.4 Levels/Earthworks

The intent of pavement levels is to grade the carpark from northeast to the southwest to ensure that in the event the stormwater system is inundated overland flow can still be maintained to the basin location.

## 3.2 Building Works



Figure 8. Highlighted extent of the proposed building on top of existing conditions

### 3.2.1 Existing condition

The proposed location for the structure is within the existing asphalt carpark. This carpark is bounded to the south by a nature strip with a number of large trees, and paved areas to the north, east and west.

### 3.2.2 Stormwater

The stormwater will be a pit and pipe solution with connection to the existing pit and pipe system draining towards the existing borehole injection pits and basin located on the southeastern tip of the site near Wireless Road.

The inground stormwater will be designed to convey the 1 in 10-year storm event with levels to convey the 1 in 100-year event. Detention storage is proposed to meet the requirements of Mount Gambier Council and to prevent impact on the existing borehole injection pits and basin.

Calculations for the pre and post-development conditions as well as required detention is presented in Section 4 of this report.

### 3.2.3 Environmental and WSUD Considerations

Council may require water sensitive urban design elements to provide treatment of the structure will need to be integrated into the landscape strategy. Aurecon will ensure these Council requirements are achieved by incorporating the following treatment measures into the design of the stormwater drainage system:

- Stormwater pit litter baskets within the carpark
- Directing 1500m<sup>2</sup> of roof catchment to a 10kL rainwater tank.
- Overland flow paths will utilise landscaped and vegetated areas where possible before entering the detention basin.
- The detention basin is to be located at the downstream extreme of the stormwater drainage system to attenuate flows prior to the proposed site stormwater discharge point.

- Hydrocarbon oil filters will be used at the carpark perimeter to remove hydrocarbons and free oils from the carpark stormwater runoff.

A MUSIC model for the system can be seen in Figure 9. below.

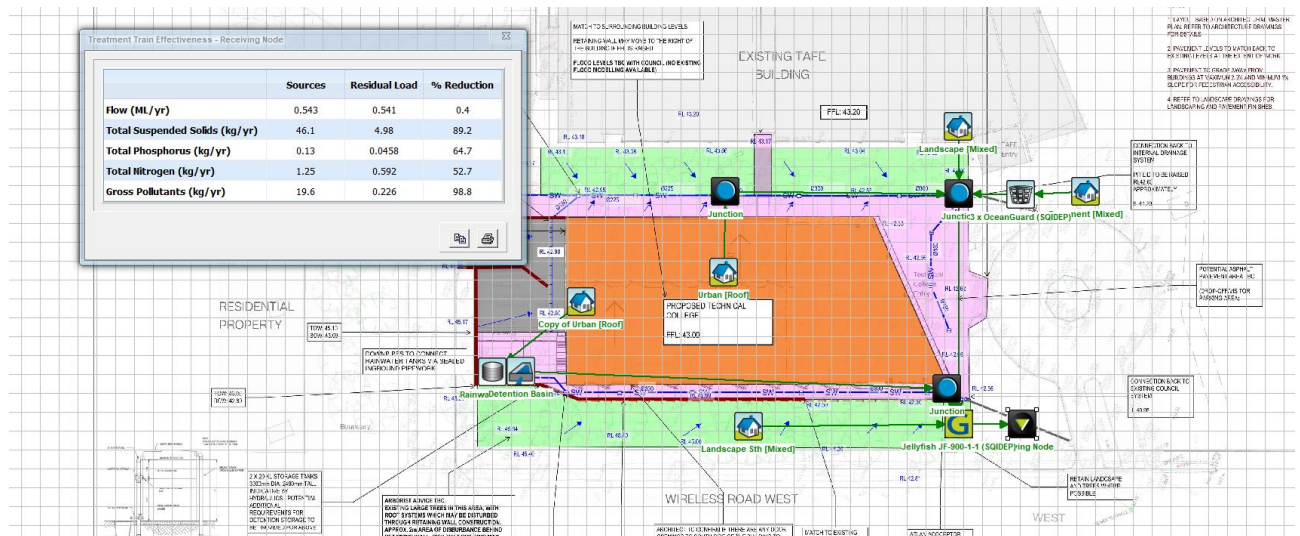


Figure 9. MUSIC model of the proposed building

### 3.2.4 Levels/Earthworks

To complete the site works a portion of earthworks (to prepare the building level pad) is required to be benched with a cut to fill balance across the site from the east to west end. As no overland flow of significance is present within the area there is no requirement for freeboard fundamentals to be added to the FFL of the building.

As part of the main civil works package a bulk earthworks model for stripping to structural levels will be completed.

### 3.2.5 Landscape Integration/Tree impacts

As noted, the current layouts for landscape are a work in progress with coordination required between civil and architectural/landscape architect. The three major areas to be validated are the frontage drop off connection and the connection to Wireless Road west, the northern edge of the structure to the main building and the southern edge to Wireless Road West.

The main drop off area levels work well to provide an open space to allow pedestrian movement through to the structure. Coordination between civil, traffic and landscape are required to maximise the potential of this space.

The northern edge will be a mixture of the landscape and walking paths through this area, there is several existing stormwater pits provided through this area that service the existing carpark that can be removed.

The southern edge will potentially require a retaining wall to adjust the building levels back to landscape levels to retain the existing trees. There is potential to modify this with batters though as this southwest corner of the structure is lower than the existing carpark. A review of the placement of the retaining wall will be required with the arborist. The civil intent will be where possible to maintain the existing trees along this edge of the road.

## 4 Council stormwater approval

### 4.1 Carpark Works

Aurecon has conducted a preliminary hydrological analysis for the proposed development based on the criteria above. A summary of the pre and post development can be shown below in Table 2. A critical storm duration of 5 minutes has been taken conservatively to account for the proposed carpark area.

Table 2. Stormwater Impact Analysis Summary – Proposed Carpark

Input Watercom Drains Model	Pre-Development	Post-Development
Impervious Area (Paved)	2034m <sup>2</sup>	5227m <sup>2</sup>
Pervious Area (Grassed)	3616m <sup>2</sup>	423m <sup>2</sup>
AEP 1% Flow (Major)	651.0 L/s	704.0 L/s
AEP 5% Flow (Minor)	417.0 L/s	467.0 L/s
Additional Volume Required	15kL	

Through DRAINS modelling conducted above, for the predeveloped scenario, the volume of the existing basin (215m<sup>3</sup>) is sufficient to combat the 1% AEP storm event safely, however post development, the volume of the basin is required to increase to 230m<sup>3</sup> to satisfy the demands of the 1% AEP major storm event.

Additionally, with correspondence to the MUSIC model in Figure 7, OceanGaurd Litter traps in all pits, permeable paving, and 11.6kL of pipe storage and a JellyFish tertiary filtration unit will be required.

### 4.2 Building Works

The civil team has begun engagement with the Mt Gambier Council to ensure all council requirements are met, the council also informed us that existing flow data for the borehole injection pits are not available. The following is potentially applicable but will be further validated in the next issue – detention storage requirements, water sensitive urban design principles, conditions on the existing outfall and an understanding of any future works to Wireless Road West and local issues.

Preliminary hydrological analysis has been undertaken based on the criteria above. A summary is shown below in Table 3. A critical storm duration of 5 minutes has been taken conservatively to account for the proposed building site area, and it is assumed that the existing system has no additional capacity.

Table 3. Stormwater Impact Analysis Summary – Proposed Building

Input Watercom Drains Model	Pre-Development	Post-Development
Roofed Area	0m <sup>2</sup>	1498.5m <sup>2</sup>
Impervious Area (Paved)	2632.67m <sup>2</sup>	1152.72m <sup>2</sup>
Pervious Area (Grassed)	1170.m <sup>2</sup>	1151.45m <sup>2</sup>
AEP 1% Flow (Major)	133.0 L/s	132.0 L/s
AEP 5% Flow (Minor)	90.0 L/s	89.0 L/s
Additional Volume Required	10kL	

Appendix A shows the proposed civil design, it is proposed that the 5% AEP flows generated from within the site and the external catchment are detained via detention tanks and outlets connecting back to the existing piped and pit system draining towards the borehole injection pits and basin. The stormwater will be directed to the low point at the northern east end of the system of underground pits and pipes. The roof water will be directed via downpipes and flows are to be captured by a 10kL rainwater detention tank, with an overflow connecting to the basin via the same underground network.

Design Development is still being undertaken for the on-site storage options. In particular, the following options are being considered:

- Installation of a detention tank system on the West of the newly proposed campus building within retaining wall.
- Installation of an underground storage system across the carpark via grated storage pits and a swale drain connecting to the basin on the West of the carpark.

These options will be explored further with regards to safety, costing and performance, with the final option to be detailed during the Detailed Design phase of the project.

## 5 Conclusion

The Mount Gambier City Council stormwater management principles require that the development should detain the 5% and 1% AEP flows generated on the site back to pre-development conditions. With the current and limited knowledge of the borehole injection pits on site and their capacity, it is proposed that the project maintains the existing conditions, ensuring conditions are no worse in the catchment and on the adjacent roads surrounding the college.

For the flows generated on the site of the new Mount Gambier Technical College, the following are proposed:

- Roof drainage is directed to a 10kL stormwater storage tank detention system, with overflows directed to the proposed underground system that will drain to the local point of discharge.
- Paved and landscape areas are directed to an underground pit and pipe system, conveying all flows for minor storms underground and overland flow directed towards the local point of discharge in major storm events.

To achieve these measures, new connections are required between the site and the existing underground network in the south-East of the proposed TAFE campus building. This discharge will be restricted as low as possible whilst maintaining the conditions listed above, with approval from the asset owner (DIT).

Flooding within the site was found not to be of any major concern seen via the HEC-Ras modelling analysis in section 2, conservatively adopting a 1% AEP 3-hr storm event for the assessment.

# A

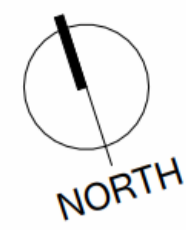
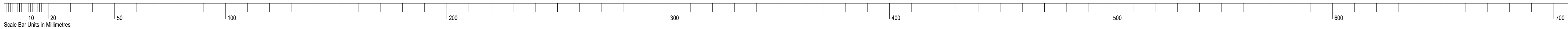
## Sketch Plans

Section description



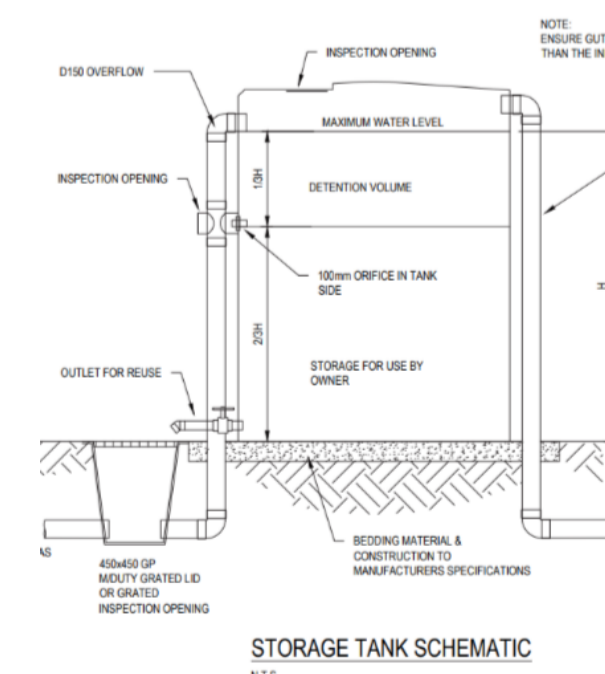
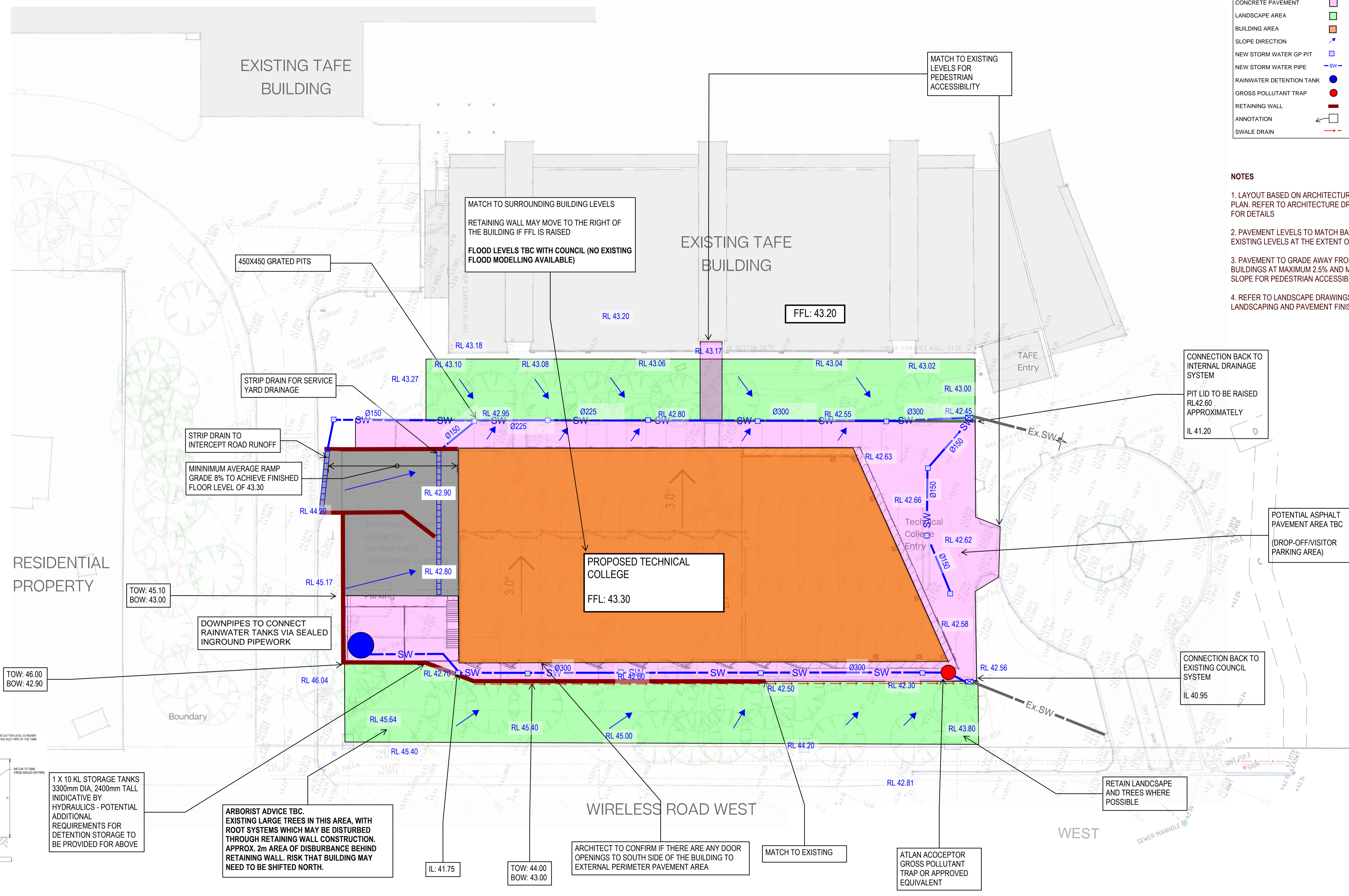
# Appendix A: Civil Concept Sketches





LEGEND:	
ASPHALT PAVEMENT	
CONCRETE PAVEMENT	
LANDSCAPE AREA	
BUILDING AREA	
SLOPE DIRECTION	
NEW STORM WATER GP PIT	
NEW STORM WATER PIPE	
RAINWATER DETENTION TANK	
GROSS POLLUTANT TRAP	
RETAINING WALL	
ANNOTATION	
SWALE DRAIN	

- NOTES**
- LAYOUT BASED ON ARCHITECTURAL MASTER PLAN. REFER TO ARCHITECTURE DRAWINGS FOR DETAILS
  - PAVEMENT LEVELS TO MATCH BACK TO EXISTING LEVELS AT THE EXTENT OF WORK.
  - PAVEMENT TO GRADE AWAY FROM BUILDINGS AT MAXIMUM 2.5% AND MINIMUM 1% SLOPE FOR PEDESTRIAN ACCESSIBILITY.
  - REFER TO LANDSCAPE DRAWINGS FOR LANDSCAPING AND PAVEMENT FINISHES.



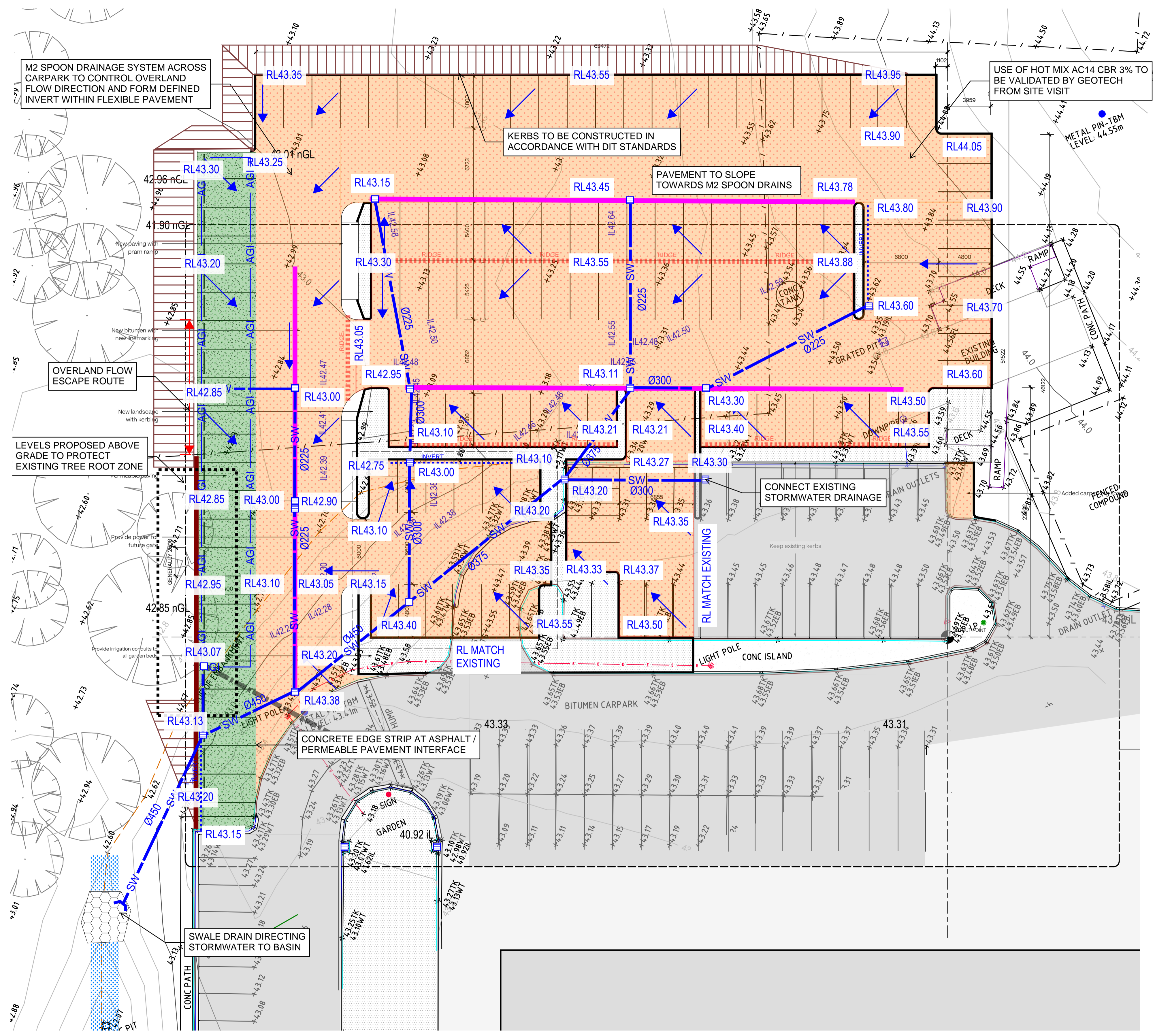
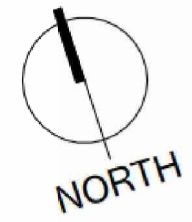
1 X 10 KL STORAGE TANKS  
3300mm DIA, 2400mm TALL  
INDICATIVE BY  
HYDRAULICS - POTENTIAL  
ADDITIONAL  
REQUIREMENTS FOR  
DETENTION STORAGE TO  
BE PROVIDED FOR ABOVE

ARBORIST ADVICE TBC.  
EXISTING LARGE TREES IN THIS AREA, WITH  
ROOT SYSTEMS WHICH MAY BE DISTURBED  
THROUGH RETAINING WALL CONSTRUCTION.  
APPROX. 2m AREA OF DISBURBANCE BEHIND  
RETAINING WALL. RISK THAT BUILDING MAY  
NEED TO BE SHIFTED NORTH.

ARCHITECT TO CONFIRM IF THERE ARE ANY DOOR  
OPENINGS TO SOUTH SIDE OF THE BUILDING TO  
EXTERNAL PERIMETER PAVEMENT AREA

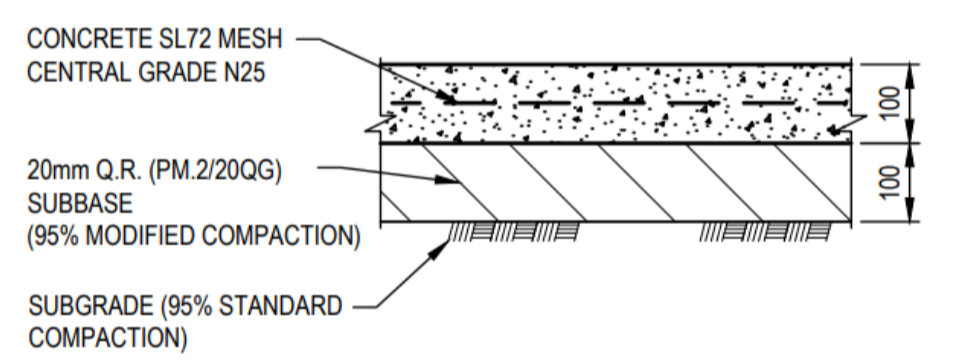
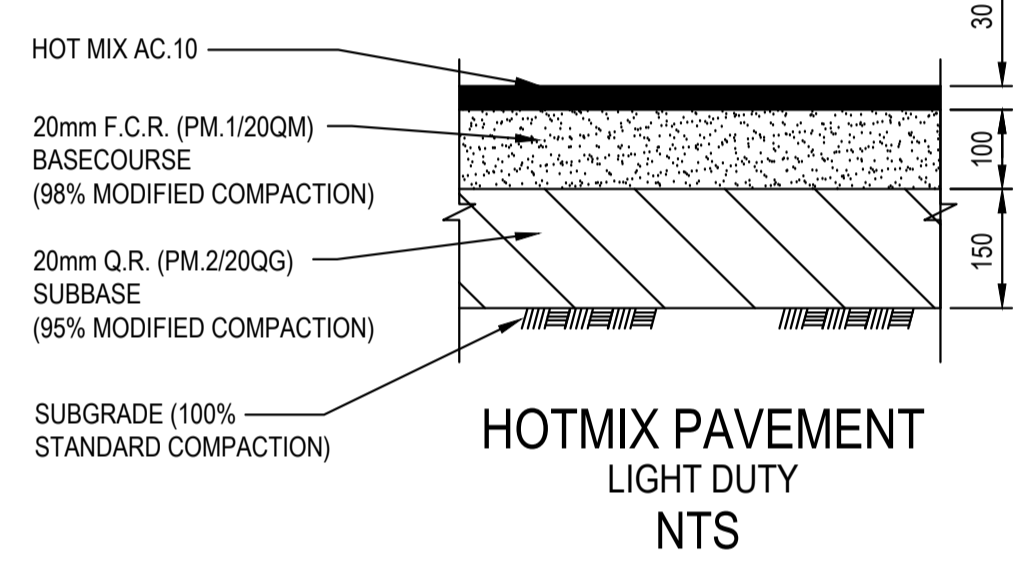
ATLAN ACCEPTOR  
GROSS POLLUTANT  
TRAP OR APPROVED  
EQUIVALENT

<p>Government of South Australia Department for Infrastructure and Transport</p>	<p>RUSSELL and YELLAND 101 Frederick St, Uthley SA 5061</p>	<p>aurecon Level 3, 25 Grenfell Street Adelaide SA 5000, Australia T 61 8 8231 9777 F 61 8231 9778 E adelaide@aurcongroup.com W www.aurcongroup.com</p>	CONTRACT EXECUTION/CONTRACTOR	DATE	SITE ADDRESS	CONTRACT NO.	DRAWN BY - CHECKED BY
			WITNESS	DATE	158-174 WIRELESS ROAD WEST, MOUNT GAMBIER SA 5290		E.M R.M.S
			CONTRACT NAME		DRAWING TITLE	PSC JOB NO.	SCALE - SHEET SIZE
			MOUNT GAMBIER TECHNICAL COLLEGE		CIVIL SERVICES SITE PLAN	526290	1:250 @A1
						DIT ASSET NO.	SHEET NO.
							00001
						DIT DRAWING NO.	REVISION
						MGTC-AUR-BC-SK-00002	A



**LEGEND**

- HOT MIX AC14 PAVEMENT CBR 3%
- PERMEABLE PAVEMENT
- CONCRETE ISLAND
- DIRECTION OF FLOW
- B1 KERB
- B2 KERB
- M2 SPOON DRAIN
- KERB INVERT
- GRADED HIGH POINT
- PROPOSED PAVEMENT LEVEL
- SWALE DRAIN
- STORMWATER PIPE
- STORMWATER PIT
- STORMWATER INVERT
- STORMWATER PIPE DIAMETER
- ROCK BEACHING
- EXISTING CARPARK SURFACE
- FILL BATTER



REV.	DATE	AMENDMENTS
B	08.04.24	CONCEPT DESIGN
A	28.03.24	CONCEPT DESIGN

REV.	DATE	AMENDMENTS
B	08.04.24	CONCEPT DESIGN
A	28.03.24	CONCEPT DESIGN

# Appendix B: Civil Calculations

Calculations for borehole injection pits and sand trap next to Carpark Works Basin remediation:

Q=Cd.A.sqrt(2.g.h)		Orifice flow	
Boreholes			
Cd	0.6	for sharp ended outlet	
A	0.028353		
g	9.81		
h	2		
Q	0.106565	m <sup>3</sup> /s	For one borehole
Q <sub>3</sub>	0.319694	m <sup>3</sup> /s	3 Boreholes together
Sand Trap Pit Outlet			
Cd	0.6	for sharp ended outlet	
A	0.070686		
g	9.81		
h	2		
Q	0.265673	m <sup>3</sup> /s	For one borehole

Calculations for borehole injection pits and sand trap next to DRAINS model for carpark works.

Q=Cd.A.sqrt(2.g.h)		Orifice flow	
Boreholes			
Cd	0.6	for sharp ended outlet	
A	0.028353		
g	9.81		
h	2		
Q	0.106565	m <sup>3</sup> /s	For one borehole
Q <sub>3</sub>	0.213129	m <sup>3</sup> /s	2 Boreholes together
Sand Trap Pit Outlet			
Cd	0.6	for sharp ended outlet	
A	0.070686		
g	9.81		
h	2		
Q	0.265673	m <sup>3</sup> /s	For one borehole

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