

**Traffic and Car Parking Assessment
Proposed Educational Establishment
6A Watsford Road, Campbelltown**

September 2019

Table of Contents

1	INTRODUCTION.....	3
2	THE SITE, SURROUNDING LAND USE AND ADJACENT STREETS	5
3	PUBLIC TRANSPORT.....	7
4	THE PROPOSAL.....	8
5	TRAFFIC GENERATION	12
6	PARKING	13
7	ACCESS AND INTERNAL CIRCULATION	14
7.1	SITE ACCESS	14
7.2	INTERNAL CIRCULATION.....	15
8	CONCLUSION.....	16

Copyright:

The concepts and information contained in this document are the property of gtk consulting pty ltd.
Use of information or copying of this document in whole or part without the written permission of
gtk consulting pty ltd constitutes an infringement of copyright.

1 INTRODUCTION

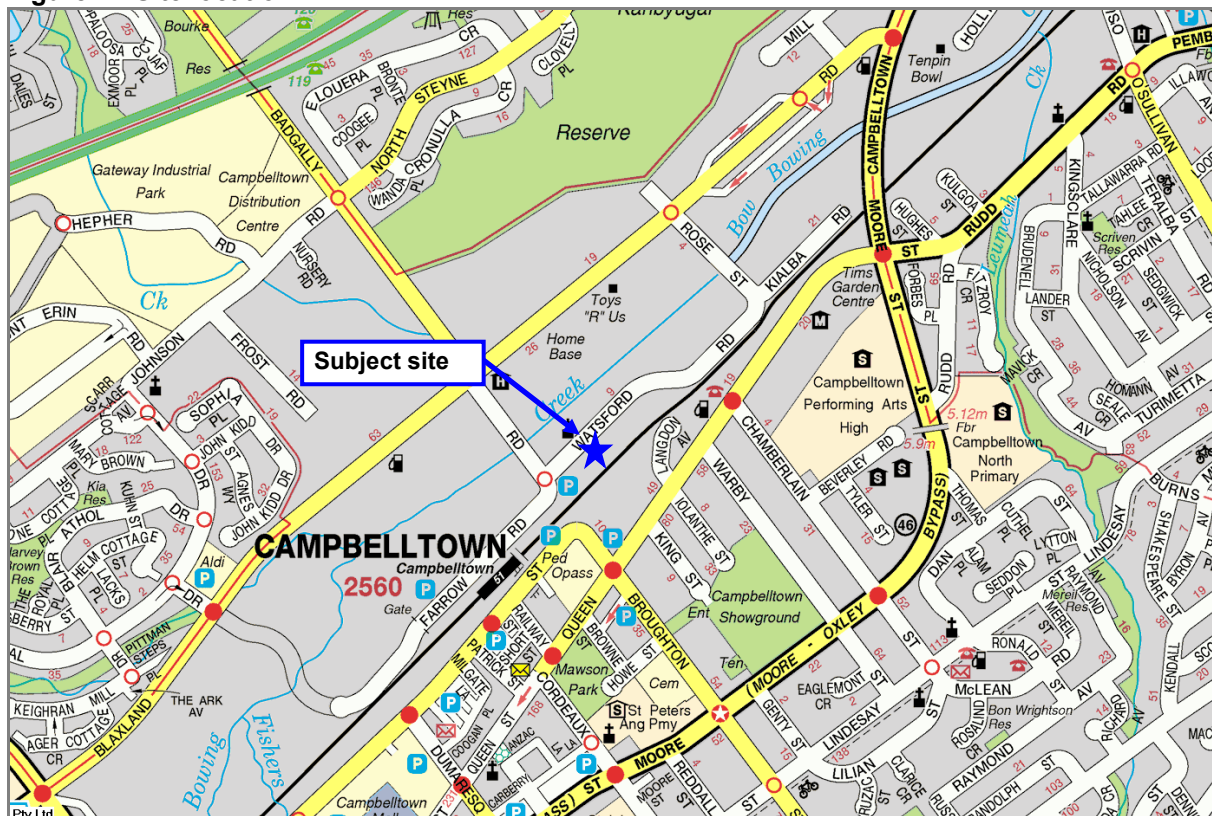
gtk consulting has been engaged by Warakirri College to undertake a traffic and car parking assessment for a proposal to construct an educational establishment at 6A Watsford Road, Campbelltown (**Figures 1 & 2**).

The proposed educational establishment provides education for young people between the ages of 15 and 22 who have disconnected from mainstream education.

This report provides:

- A description of the site and the proposal.
- A description of the road network serving the site.
- A description of public transport availability.
- An assessment of the potential traffic implications of the development.
- An assessment of car parking requirements for the proposed education facility.
- An assessment of vehicle access to and from the site.

This assessment was undertaken by Garry Kennedy, Director gtk consulting pty ltd. Garry has extensive (46 years) experience in Traffic Engineering, Road Safety and Car Parking. Garry chaired a Local Traffic Committee for seventeen years at a major metropolitan Council. In 2006 Garry established gtk consulting and since that time has undertaken many traffic and car parking assessments and studies for Local and State Government Agencies and private developers. Garry provides expert evidence in the NSW Land and Environment Court, Local Magistrates Court and District Court. Garry's court experience covers a wide range of traffic activities, such as, the suitability of development proposals, traffic accident liabilities, heavy vehicle prosecutions, parking offences and many other offences under the Local Government Act and the Roads Act.

Figure 1: Site location

Source: UBD Vers7 licensed to gtk consulting

Figure 2: Aerial view of site

Source: Six Maps 2019

2 THE SITE, SURROUNDING LAND USE AND ADJACENT STREETS

The site of the proposed educational establishment is located on the south-eastern side of Watsford Road approximately 370 metres north-east of Campbelltown Railway Station. The property is currently vacant (**Photo 1**) and its legal description is Lot 113 in DP 1183297.

The surrounding land use is business and the site and adjacent lots are zoned *B5 Business Development*.

Photo 1: Subject site



Source: gtk consulting 2019

Watsford Road is 13.0 metres wide between kerbs. There is kerb and gutter on both sides of the road (**Photos 2 & 3**) and the speed zone is 50km/h.

Photo 2: Watsford Rd looking south-west



Source: gtk consulting 2019

Photo 3: Watsford Rd looking north-east

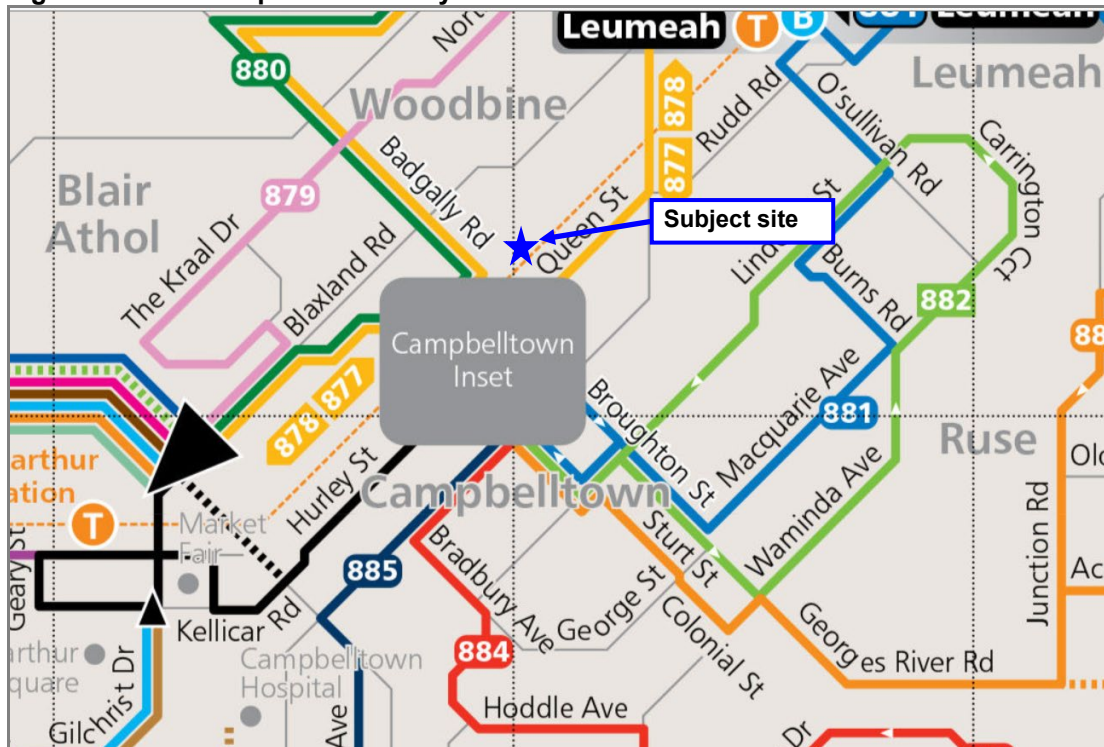


Source: gtk consulting 2019

3 PUBLIC TRANSPORT

The site is located immediately adjacent to regular bus services on Badgally Road and within easy walking distance (370 metres) to Campbelltown Railway Station (**Figure 3**).

Figure 3: Bus transport availability



Source: Transport Infoline 2019

4 THE PROPOSAL

The proposal is to establish an educational facility (Warakirri College) at 6A Watsford Road, Campbelltown. The college will cater for 120 young adults and 15 staff. Warakirri College has provided the following description of the college operation:

“Warakirri College operates two existing campuses in Fairfield and Blacktown. The proposed College will be funded by State and Federal Governments Special Assistance Schools (SAS) program, serving young people between the ages of 15 and 22 who have disconnected from mainstream education. Warakirri College provides a supportive adult educational environment for students to obtain their Year 10 Record of School Achievement and the Higher School Certificate (HSC). Warakirri Colleges are wholly operated by MTC Australia which is a public benevolent institution.

Students attending Warakirri are typically from disadvantaged backgrounds. They do not pay fees to attend the College and are issued with School Opal cards to assist with travel costs. Students at Warakirri Colleges rarely access the campuses by private vehicle making proximity to public transport important for students.”

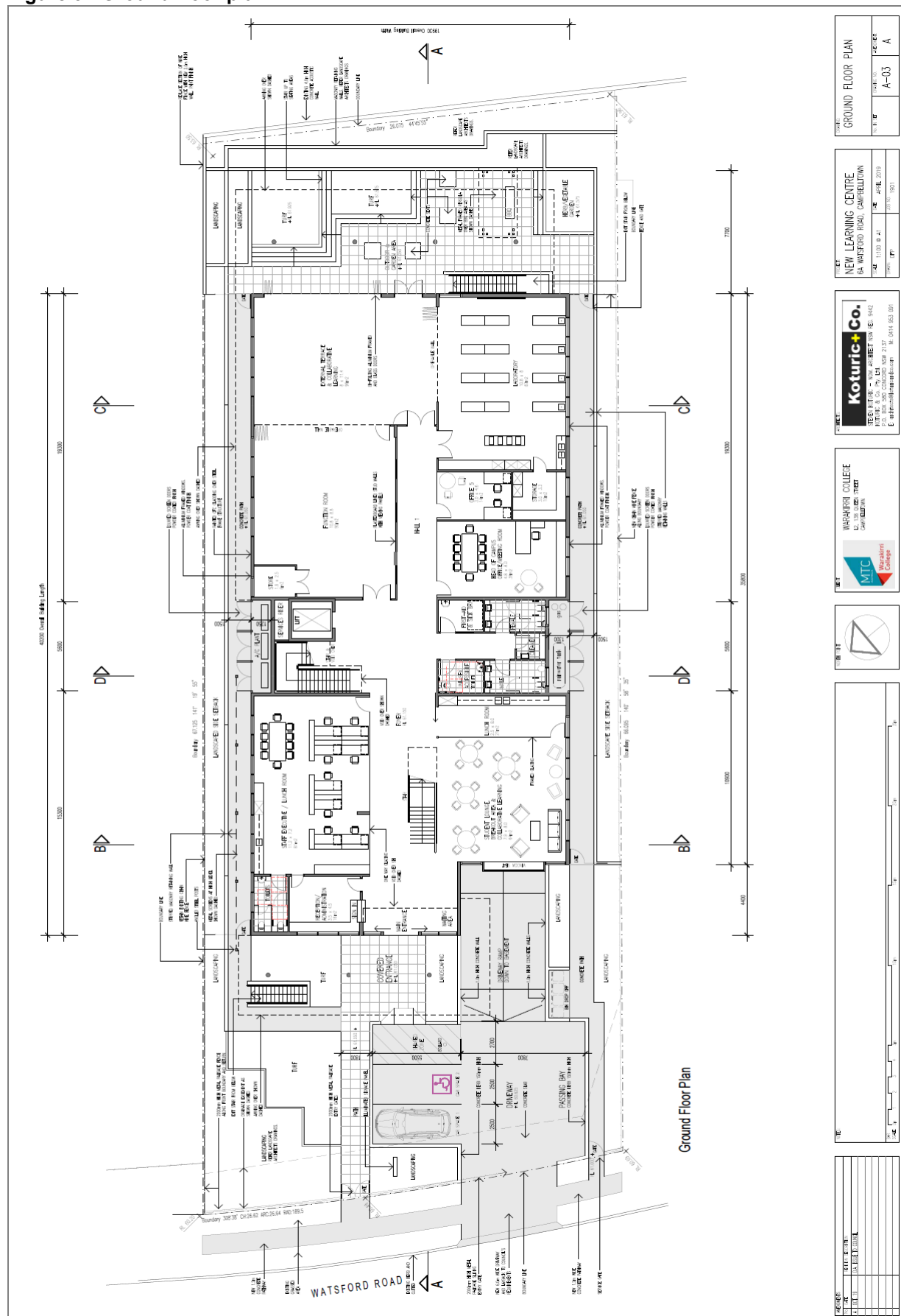
Eleven (11) car parking spaces are proposed within a lower ground floor car parking area and two (2) spaces at the entrance to the site. The car parking spaces comprise:

- 11 staff spaces, including 1 space for persons with a disability; and,
- 2 parent/carer/visitor spaces, including 1 space for persons with a disability.

Access to the lower ground floor car park will be via a one-lane ramp 5.3 metres wide. Vehicles entering at the top of the ramp will be able to stop and wait for an exiting vehicle to pass before entering the lower ground floor. A new 6.0 metre wide driveway will be provided on Watsford Road.

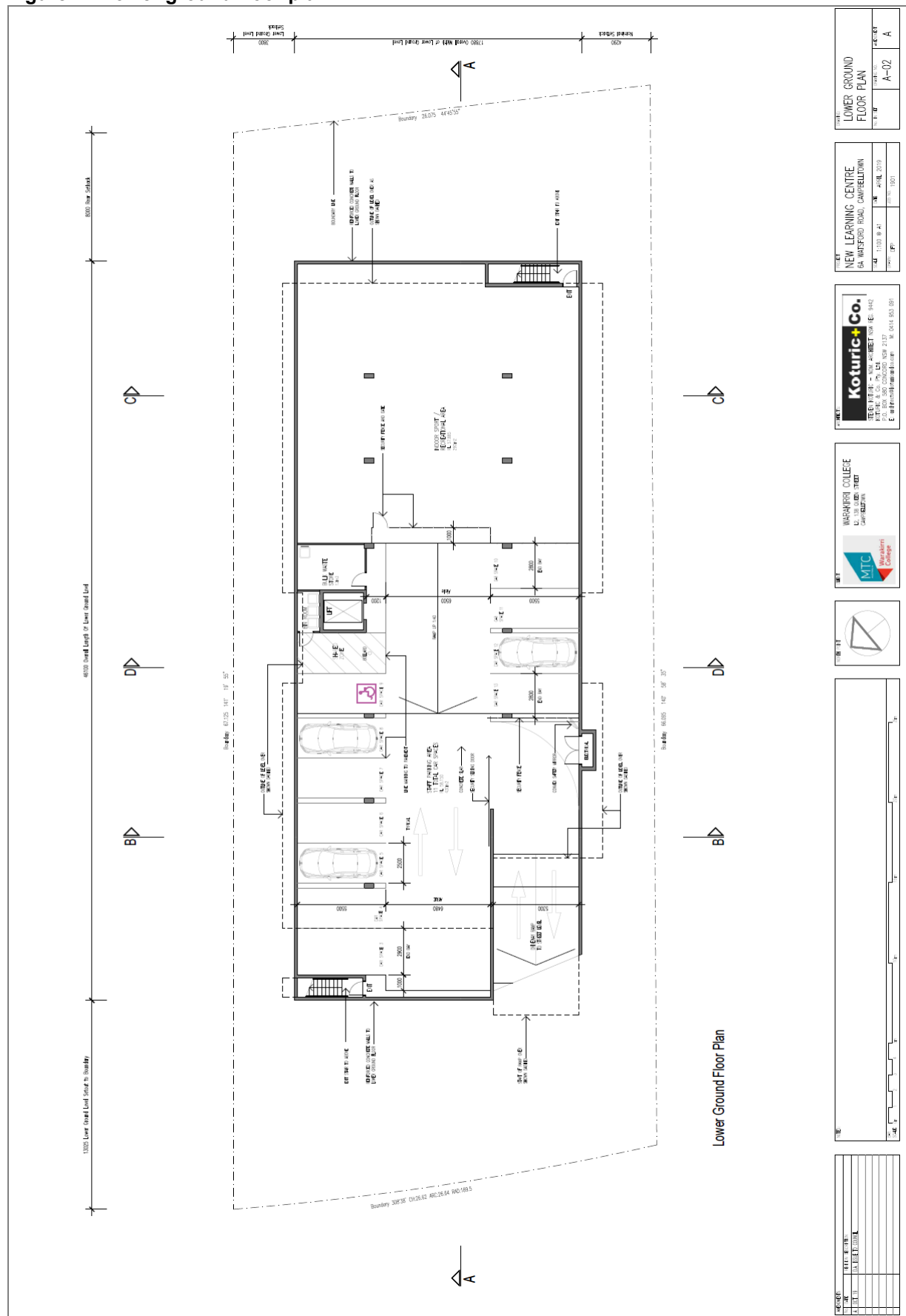
Architectural plans for the proposal are provided in **Figures 3, 4 and 5**.

Figure 3: Ground floor plan



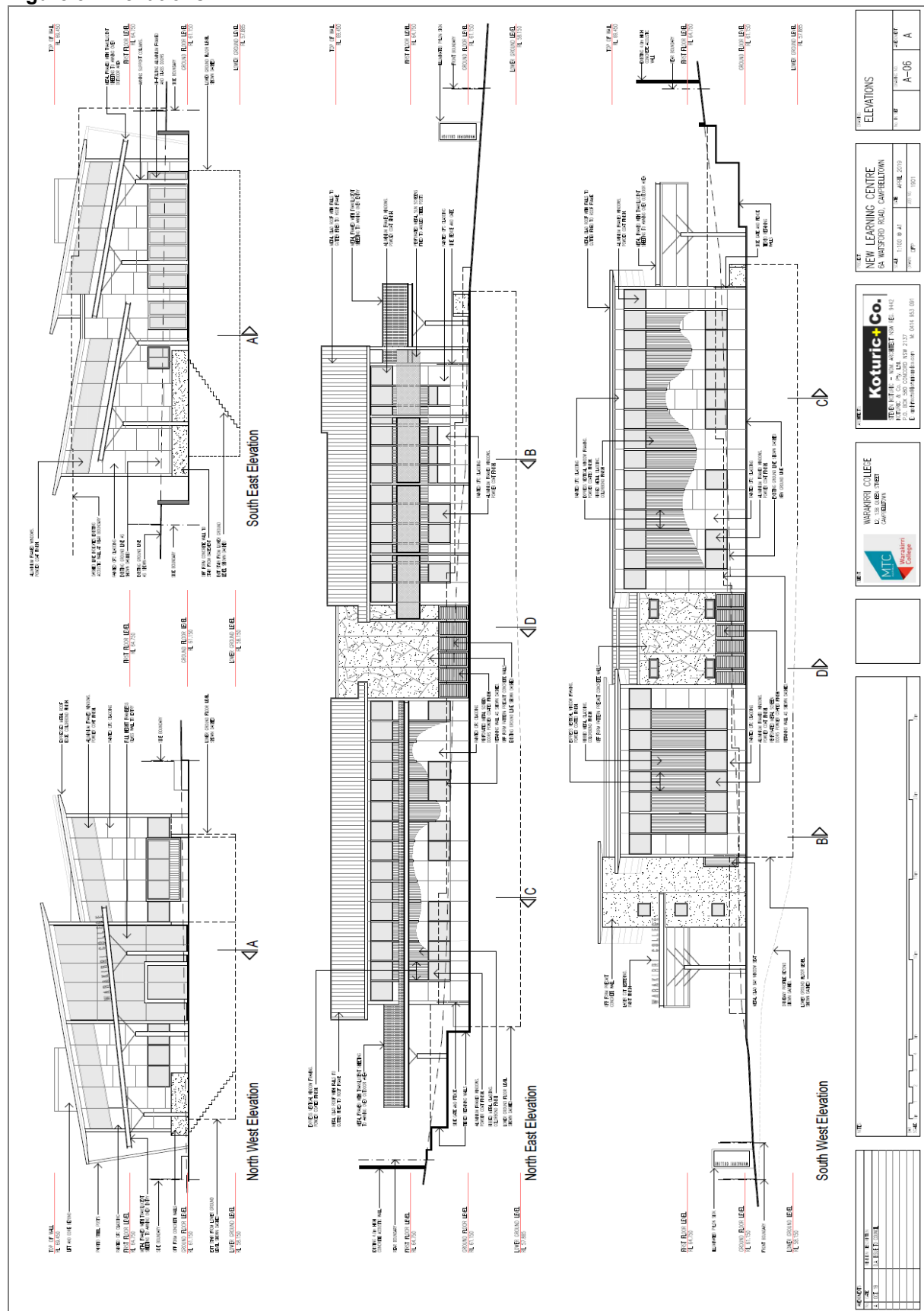
Source: Koturic & Co. Pty Ltd 2019

Figure 4: Lower ground floor plan



Source: Koturic & Co. Pty Ltd 2019

Figure 5: Elevations



Source: Koturic & Co. Pty Ltd 2019

5 TRAFFIC GENERATION

Traffic generation rates for development proposals, such as educational facilities and schools, are sourced from guidelines published by NSW Roads and Maritime Services. The proposed educational facility (Warakirri College), however, does not operate as a typical school. As discussed in **Section 4**, the College provides a supportive adult educational environment for young people between the ages of 15 and 22 who have disconnected from mainstream education. Students are typically from disadvantaged backgrounds and are issued with School Opal cards to assist with travel costs. Students at Warakirri Colleges rarely access campuses by private vehicle making proximity to public transport important for students.

The proposed College is located within easy walking distance (370 metres) to Campbelltown Railway Station and 130 metres from bus routes on Badgally Road. The site at 6A Watsford Road, Campbelltown is, therefore, ideally located for the College.

Eleven (11) staff car parking spaces are provided in the lower ground floor car park and two (2) spaces for visitors, at the front of the site. The maximum traffic generation in the peak periods, therefore, is:

- 13 vehicles in during the AM peak; and,
- 13 vehicles out during the PM peak.

The volume of traffic generated by the proposed College, therefore:

- Is minimal and will have negligible impact on existing traffic flows, and intersection capacities.
- Will not present any unsatisfactory traffic safety or capacity issues on the road network.

6 PARKING

Campbelltown City Council's Development Control Plan 2014 does not provide a schedule of car parking requirements for educational facilities or schools. As discussed in **Section 5**, Warakirri Colleges do not operate as typical schools and students attending rarely access the campuses by private vehicle.

The proposed College is a small school of 120 young adult students and 15 staff, including ancillary staff. The proposal will provide:

- 2 car parking spaces, including 1 space for persons with a disability, for parents/carers/visitors; and,
- 11 car parking spaces for staff, including 1 space for persons with a disability.

In accordance with AS 2890.1:2004 the lower ground floor car parking area is a Class 1 facility. The aisle width is a minimum 6.48 metres and staff car parking spaces are 2.5 metres wide and minimum 5.4 metres long. The spaces for persons with a disability are 2.4 metres wide adjacent to a 2.4 metres wide 'shared area', both of which are 5.4 metres long. Spaces located adjacent to a wall or fence are a minimum 2.7 metres wide and the traffic aisle has been extended 1.0 metre at either end of the car park. All of these dimensions comply with AS 2890.1:2004.

7 ACCESS AND INTERNAL CIRCULATION

7.1 SITE ACCESS

The minimum requirement in assessing the safety of the driveways on Watsford Road is the need to provide sufficient sight distance for drivers to observe a possible conflict with other vehicles and allow for sufficient time to take evasive action should it be required.

An accepted approach to calculating the provision of safe and efficient access to and from the site is to ensure that there is sufficient sight distance to enable non-priority traffic (i.e. traffic turning into and out of the site) to carry out their turning movements without unduly interfering with mainstream traffic flow.

AS 2890.1:2004 *Parking Facilities – Off-street car parking* sets out the sight distance requirements for access driveways.

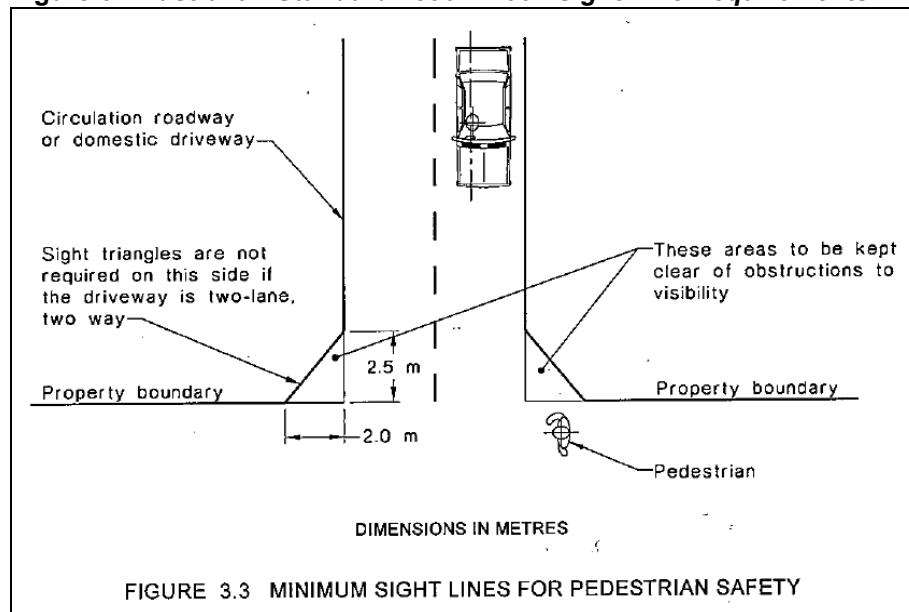
The speed zone on Watsford Road is 50 km/h and sight distance from the location of the access driveways is set out in **Table 1**:

Table 1: Sight distance requirements

Source	Sight Distance Required	Sight Distance Available
AS 2890.1:2004 (5 sec gap@ 50km/h)	69 metres (north-east)	150 metres
	69 metres (south-west)	110 metres

The sight distance from the proposed driveway on Watsford Road, therefore, exceeds the requirements of AS 2890.1:2004.

In addition to sight distance requirements for vehicles entering and exiting the site, AS 2890.1: 2004 requires the provision of adequate visibility between vehicles leaving a car park and pedestrians on the road frontage footpath. Landscaping on either side of the exit driveway will be low shrubs and ground covers and, as shown in **Figure 3 (Section 4)**, there are clear sightlines at the road boundary of the exit driveway. **Figure 6** below reproduces Figure 3.3 of the Standard and details the sight lines required for a vehicle exiting a driveway, i.e. a point 2.5 metres within the property to a distance of 2.0 metres either side of the exit driveway.

Figure 6: Australian Standard 2890.1:2004 Sight Line Requirements

The landscaping on either side of the exit driveway will be low shrubs and ground covers, therefore, complying with the sight line requirements of AS 2890.1:2004.

7.2 INTERNAL CIRCULATION

In accordance with Table 1.1 of AS 2890.1:2004 the car parking area for the proposed College is a Class 1 facility. The proposed driveway for the car parking area is 6.0 metres wide and the ramp to the lower ground floor is 5.3 metres wide. The lower ground floor car park is for staff only and, as such, all staff will arrive in the morning and leave in the afternoon. The ramp, therefore, has a one-way traffic flow 'in' during the morning and one-way 'out' in the afternoon.

Notwithstanding the one-way traffic flow, the entrance driveway at the top of the ramp has been widened 2.5 metres for a length of 9.0 metres in the unlikely event of two vehicles needing to pass on the driveway or ramp. In addition, a convex safety mirror will be placed at the bottom of the ramp to allow drivers on the lower ground floor to see any vehicles travelling down the ramp. All of the dimensions comply with Table 3.2 and Section 3.2.2 of AS 2890.1:2004 for a car parking facility less than 25 spaces.

8 CONCLUSION

The proposal to establish an education facility (Warakirri College) for 120 young adults at 6A Watsford Road, Campbelltown has been assessed to determine the suitability of the proposal in relation to Council's DCP, Australian Standards, RMS guidelines and the likely traffic impacts on the surrounding road network.

Assessment of the proposal indicates that:

- Warakirri College does not operate as a typical secondary school and students attending rarely access campuses by private vehicle.
- The provision of 13 car parking spaces (including 2 spaces for persons with a disability) is sufficient to meet College requirements.
- The car parking layout complies with AS 2890.1:2004 *Off-Street Car Parking* and AS 2890.6:2009 *Off-Street Parking for People with a Disability*.
- Driver sight distance from the proposed driveway onto Watsford Road exceeds the requirements of AS 2890.1:2004.
- Pedestrian sightlines from the proposed driveway comply with the sight line requirements of AS 2890.1:2004.
- The traffic generated by the proposed development is minimal and will not present any unsatisfactory traffic safety or capacity issues on the existing road network.

This assessment concludes that the traffic impact, road safety and car parking elements of the proposed education facility at 6A Watsford Road, Campbelltown comply with the relevant standards and guidelines for such developments and is worthy of approval.

Garry Kennedy



Director