## VARGA TRAFFIC PLANNING Pty Ltd

Transport, Traffic and Parking Consultants

ACN 071 762 537 ABN 88 071 762 537

9 June 2020 Ref 19090

#### SSD10291 Proposed Expansion of St Luke's Grammar School Proposed Senior School Campus at 800 Pittwater Road & Proposed Sports Centre at 24 Headland Road, Dee Why Preliminary Construction Traffic & Pedestrian Management Plan



#### Introduction

This Preliminary Construction Traffic & Pedestrian Management Plan (CTPMP) has been prepared to accompany an Environmental Impact Statement (EIS) to the *NSW Department of Planning* on behalf of *St Luke's Grammar School* (SLGS), to review the traffic and parking arrangements to be implemented during the staged demolition and construction works for the Senior School Campus proposed at 800 Pittwater Road and the sports centre proposed at 224 Headland Road.

All correspondence on this matter must be addressed to The Applicant's representative:

Toby James Midson Group Pty Ltd Suite 7, 33 Alexandria Street HUNTERS HILL NSW 2110 P: 9868 6923 E: tjames@midsongroup.com.au

It should be noted that *Varga Traffic Planning* accepts full responsibility for the preparation of this Construction Traffic Management Plan, but does not accept any responsibility for its implementation which is to be undertaken by others.

# St Luke's Grammar School is located in Dee Why on Sydney's Northern Beaches. The staged construction arrangements will involve 2 new sites as follows:

- Stage 1 a new sports centre at 224 Headland Road, and
- Stages 2 & 3 a new Senior School Campus at 800 Pittwater Road.

The 2 sites are separated by a 20m high cliff. A pedestrian link is ultimately proposed as part of the construction works to facilitate the movement of students and staff between the 2 sites.

The pedestrian link between the 2 sites will take the form of stairs and a lift (elevator). A vehicular link between the 2 sites is *not* feasible.

A recent *Nearmap* aerial image of the site and its surroundings (Figure 1), along with the Project Overview Plan prepared by *Tonkin Zulaikha Greer* (Figure 2) are reproduced below.



**Figure 1 - Locations** 



Figure 2 – Project Overview Plan

#### Site

#### **Existing School Campus**

No construction work is proposed at the existing school campus. The existing SLGS campus has frontages to Headland Road, Quirk Street and Tango Road, and currently caters for students from Preschool to Year 12. The existing school campus comprises a number of school buildings including a multi-purpose hall, classrooms, administration, multi-storey car park, playing courts and a number of outdoor areas.

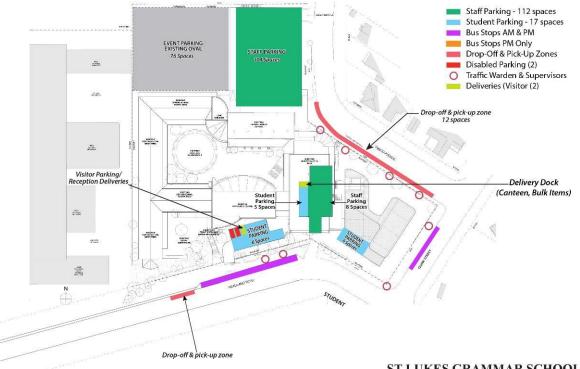
No change is proposed to the school's Traffic Management Plan which was updated as part of the school's most recently approved development consent number MOD2018/0412 dated 26 June 2019.

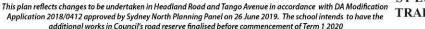
The drop-off and pick-up operations at the existing school campus are intensively managed by school staff in accordance with the school's Traffic Management Plan. There are 4 staff rostered each morning to supervise drop-offs, and 12 staff are rostered each afternoon to supervise pick-ups. The drop-off and pick-up operations are focused on the following kerbside zones located around the perimeter of the existing school campus as shown in Figure 3 below:

- a drop-off and pick-up zone in Headland Road (2 spaces)
- a drop-off and pick-up zone in an indented bay in tango Avenue (12 spaces)
- an indented bus bay in Headland Road (3 buses), and
- a bus zone in Quirk Street (1 bus).

Parents/carers using the Tango Avenue drop-off/pick-up bay are not permitted to exit their vehicle. Drivers must remain in the driver seat, and a member of St Luke's staff will open the passenger side doors and assist children to exit or enter the car. To assist this operation on the afternoon, parents/carers must place their family name *label* on the passenger side dashboard or sun visor so it can be seen by St Luke's staff. Students wait inside the school grounds until called to the kerb by staff *before* their parents' vehicle arrives at the designated pick-up point.

Five cars are loaded at any one time in the 12 spaces. The next 5 cars then move forward, by which time each student is waiting at their designated pick-up point.





ST LUKES GRAMMAR SCHOOL TRAFFIC MANAGEMENT PLAN FIGURE 3

#### **Existing Road Network**

Pittwater Road in the vicinity of the site carries three traffic lanes in each direction, with opposing lanes separated by a raised concrete median island. Additional turning lanes are provided at key locations including at the Warringah Road/Harbord Road intersection. Dedicated Bus Lanes are provided along both sides of Pittwater Road. Kerbside parking is generally prohibited on both sides of the road in the vicinity of the site.

Harbord Road directly outside the site frontage has a variable pavement width which carries two traffic lanes in each direction. Dual right turn holding lanes are provided at the Pittwater Road intersection. Opposing traffic flows are separated by a raised concrete median island which extends across the site frontage.

No Stopping/No Parking restrictions apply along the eastern side of Harbord Road in the vicinity of the intersection, including along the site frontage.

Headland Road has a typical pavement width of approximately 11m and carries with one traffic lane in each direction. Kerbside parking is generally permitted along both sides of the road, subject to sign-posted restrictions.

#### **Proposed Development**

St Luke's Grammar School proposes to expand its existing Dee Why campus to incorporate two new sites at No. 224 Headland Road as a sports centre, and No. 800 Pittwater Road as designated Senior School for up to 600 senior school students.

The proposed development comprises alterations and additions to the existing buildings located on the two sites.

A staged development is proposed to accommodate the individual lease agreements for the current tenancies, as set out below.

#### Stage 1 – 224 Headland Road

The first space to become available is the building located at No. 224 Headland Road. The northern-end of the existing building was upgraded in 2016 by the school to accommodate a half-basketball court with amenities and the school's uniform shop.

In Stage 1, the remainder of the building will become available to develop the entire building into a new school sports centre and the school's uniform shop. The construction activities are looking to commence on site in late-July 2022.

#### Stage 2 – 800 Pittwater Road

In Stage 2, the iMED and Fitness First tenancies will be vacated. Office Works will remain on the site, occupying the south-western portion of the building at No. 800 Pittwater Road. The proposed works are proposed to commence in July 2025.

The northern portion of the building will be developed into a self-sufficient senior school campus for up to 480 students. A direct pedestrian connection to No. 224 Headland Road is to be provided, comprising a pedestrian lift and stair access.

#### Stage 3

The remaining south-western portion of the building -i.e. Office Works tenancy, will become available and the Senior Campus will be extended to its full size to accommodate up to 600 students.

The proposed Stage 3 works will involve internal alterations to the existing portion of the building, with works not expected to commence until mid-2029.

The proposed construction staging is illustrated on **Figure 4** below. No works are proposed to the existing school campus at 210 Headland Road.

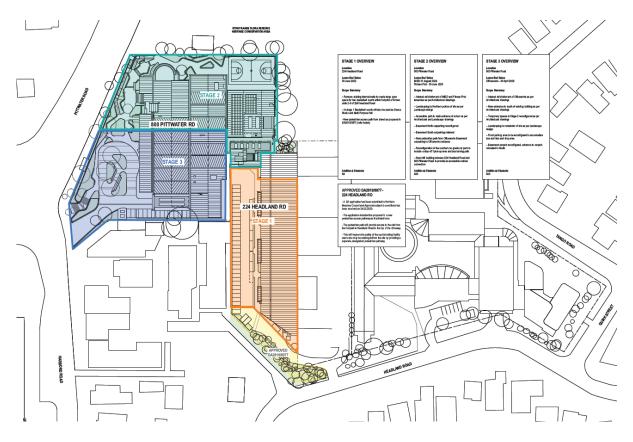


Figure 4 – Proposed Staging Plan for DA

#### **Construction Schedule**

The construction activities are expected to be undertaken over a duration of several years, as set out below. Working hours are proposed from 7:00am to 6:00pm Monday to Friday and 7:00am to 5:00pm on Saturday, as per Council's standard working hours. No work is to be carried out on Sundays or Public Holidays.

| <b>CONSTRUCTION PROGRAM – APPROXIMATE DURATIONS</b> |                                          |                            |  |  |
|-----------------------------------------------------|------------------------------------------|----------------------------|--|--|
| Stage                                               | Work                                     | Duration                   |  |  |
| 1                                                   | No.224 Headland Rd                       | July 2022 to October 2022  |  |  |
| 2                                                   | iMED/Fitness First – No.800 Pittwater Rd | July 2025 to January 2026  |  |  |
| 3                                                   | Office Works – No.800 Pittwater Rd       | May 2029 to September 2029 |  |  |

#### Loading & Unloading

All demolition and construction vehicles are to be contained *wholly* within the site using a variety of truck types and sizes up to and including 12.5m long HRV rigid trucks via designated secured compound areas for each stage of the construction.

Trucks will enter and exit the sites either from Headland Road or Harbord Road via the existing site access driveways in a forward direction <u>at all times</u>.

All materials are to be stored on site. <u>At no time</u> are materials to be stored on Pittwater Road, Harbord Road or any other road or Council property. The site manager will ensure that multiple trucks do not occur at the same time, unless they can all be accommodated within the proposed secured compound areas within the site.

It is pertinent to note that RMS-accredited traffic controllers will be present <u>at all times</u> during construction to assist with traffic flows within the car park and to ensure pedestrian safety.

#### **Proposed Construction Staging Arrangements**

**Stage 1** involves the removal of the existing internal partition walls of the building (No. 224 Headland Road). The existing school uses in the building will be temporary closed during the proposed works.

Loading/unloading of trucks will typically occur along the western and northern sides of the existing building, in part of the former at-grade car parking area, as illustrated on TCP No.1.

**Stage 2** involves alterations and additions to the northern portion of the existing building at No. 800 Pittwater Road.

Loading and unloading of construction vehicles will be undertaken within the site, around the northern perimeter of the building, within a safe work site compound which will be fenced-off as illustrated on TCP No. 2.

It is pertinent to note that the proposed arrangements allow the remaining commercial tenancy on the site – i.e. Office Works – to continue trading. Access to the tenancy and to the basement and at-grade car parking areas will be maintained and unobstructed at all times,

A new pedestrian pathway from the Office Works basement parking area is to be constructed, connecting the Office Works car parking in the basement to the Office Works store entrance.

The at-grade car park, fronting Pittwater Road will be reconfigured to accommodate car parking for Office Works as well as a school drop-off/pick-up area. The external at-grade car park reconfiguration has been designed to accommodate the swept turning path of large vehicles up to and including 12.5m HRV trucks (i.e. similar to a standard bus), and is to be completed prior to occupation of the Stage 2 school facilities.

**Stage 3** involves alterations and additions to the remaining southern portion of the existing building at No. 800 Pittwater Road to convert the former Office Works tenancy to school uses, including new additions to the south of the existing building.

It is noted that during Stage 3 of the proposed works, the northern portion of the building would be occupied by the senior school students (Years 10-12).

Construction of Stage 3 will be undertaken in two phases.

In *phase 1* the work will be undertaken from within a safe work site compound to be established along the southern side of the building, in the area previously occupied by the Office Works loading dock.

The drop-off/pick-up area established in Stage 2 will remain in operation, and vehicular access to the basement car parking area will continue to be provided via the existing ramp which is located at the front of the building.

In *phase 2* vehicular access to the basement car parking area will be relocated to the new driveway located on the southern side of the building to enable the final drop-off/pick-up facility in front of the school to be constructed. It is envisaged that this final phase of work will be undertaken during school holidays.

#### Works Zone

As noted above, all loading and unloading activities are to occur entirely *within* the sites, and Works Zone will therefore not be required. If the situation changes in the future for whatever reason, a Works Zone application will be made to Council.

#### Site Fencing, Hoarding & Amenities

Temporary site fencing and signage will be installed around all work areas within the sites. In addition, B-Class overhead hoarding and scaffolding may need to be installed above any pedestrian areas within the sites if adjacent to overhead demolition and construction work areas.

Site accommodation and amenities requirements will vary depending on the construction stage however will be accommodated within the school grounds or above the B-Class hoarding.

All external footpaths surrounding the existing/proposed campus will remain open to pedestrians at all times. If a footpath is required to be temporarily closed at any stage, a separate Pedestrian Management Plan will be submitted to Council for approval prior to any closure.

#### **Neighbouring Properties**

All neighbouring properties are to have their access maintained <u>at all times</u>. All nearby residents and businesses will be updated on a regular basis and at key construction stages with respect to the construction process, particularly in relation to construction vehicles movements, and be provided with a phone number to contact the site manager.

Furthermore, the site manager must liaise with the site managers of any nearby construction sites to ensure that appropriate measures are in place to prevent the combined impact of construction activities, such as (but not limited to) concrete pours, crane lifts and spoil truck routes.

#### **Construction Truck Routes**

All heavy vehicles involved in the demolition and construction of the proposed development would approach and depart the site, as indicated on Figures 3a & 3b.

The site manager will ensure that the route map is prominently displayed on the site and that all contractors and employees are given a copy of the route map and understand their obligations as part of their site induction procedure.

Light traffic roads and those subject to load or height limits will be avoided as well as minimising heavy vehicle movements during school peak periods. Whilst working on site can occur during the abovementioned construction hours, the site manager will endeavour to restrict truck loading/unloading *outside* peak drop-off/pick-up periods.

#### **Truck Movements**

A detailed estimation of the truck movements during Phase 1 & Phase 2 is provided within the Preliminary CMP and summarised below:

- 1. Stage 1: Sports Centre average peak of 6 truck movements per day
- 2. Stage 2: Senior Campus (northern) average peak of 10 truck movements per day
- 3. Stage 3: Senior Campus (southern) average peak of 10 truck movements per day

Demolition works would typically involve approximately 4 to 5 trucks carrying out approximately 2 to 3 loads per day. This would not occur every day as they would not be loading out every day of the demolition period.

Major concrete pours would typically take approximately 4 to 6 hours to pour with 2 to 3 trucks per hour or 10 to 20 truck movements per day. Smaller pours would have a similar number of truck movements per hour but for a shorter duration; e.g. say 2 to 4 hours maximum.

General deliveries would occur intermittently throughout the project with the major deliveries being reinforcing steel, plasterboard and bricks. The remaining deliveries would generally comprise smaller truck deliveries.

#### **Traffic Control Plans**

Three indicative Traffic Control Plans have been prepared which illustrate the traffic arrangements to be implemented during the demolition and/or construction works when trucks are loading/unloading on-site. Key features of the Traffic Control Plans are:

- advance warning signs alerting approaching traffic and cyclists of the presence of possible road works and traffic controllers ahead
- warning signs alerting pedestrians to watch their step as they walk in the vicinity of the construction vehicular access driveway
- A-Class Hoarding and/or secure fencing with shade-cloth along the perimeter of the construction zone to prevent unauthorised access of the public
- traffic controllers situated outside the vehicular access driveway off Headland Road or Pittwater Road/Harbord Road, as well as a third traffic controller within the site (if required) who will have four primary responsibilities during the demolition and/or construction phases of the project:
  - 1. to ensure the safety of pedestrian movements along the Headland Road or Pittwater Road/Harbord Road site frontage so that no pedestrian enters the path of a heavy vehicle,
  - 2. to control heavy vehicle movements into and out of the site. The traffic controllers should wait for a safe gap in the passing traffic flows on Headland Road or Pittwater Road/Harbord Road before allowing the vehicle to exit the site,
  - 3. to momentarily control local traffic movements along Headland Road when trucks are entering or exiting the site, and
  - 4. to ensure traffic does not queue back onto Pittwater Road/Harbord Road <u>at any</u> <u>time</u>.

Traffic controllers must not control traffic along Pittwater Road and/or Harbord Road.

The Traffic Control Plan has been prepared generally in accordance with RMS's publication *Traffic Control at Works Sites (2018), version 5.0* and the Standards Australia publication AS1742.3: Traffic Control Devices for Work Sites on Road.

It should be noted that a separate Application may be required to the Transport Management Centre for a *Road Occupancy Licence* (due to the site's location on the classified Pittwater Road and Harbord Road) when the precise time and dates of the proposed works are known.

#### Permits

All necessary permits such as hoarding, crane, roadway/footpath/nature strip occupation etc. will require separate approval from Council and/or the Transport Management Centre. Any related task-specific Traffic Control Plans will be prepared by the respective contractor and provided under separate cover.

#### **Tradesmen and Contractor Parking**

The site manager will ensure that there is adequate on-site parking available for employee, tradesperson and construction vehicles, where practical. It is anticipated that construction workers will be able to use car parking vacated by commercial tenants during each stage of construction. However, construction staff will be encouraged to utilise public transport which will minimise traffic and parking impacts as a consequence of the construction process.

In this regard, there are a number of bus routes which operate within the immediate vicinity of the site, with the closest bi-directional bus stop located along Pittwater Road, within 250m walking distance west of the site.

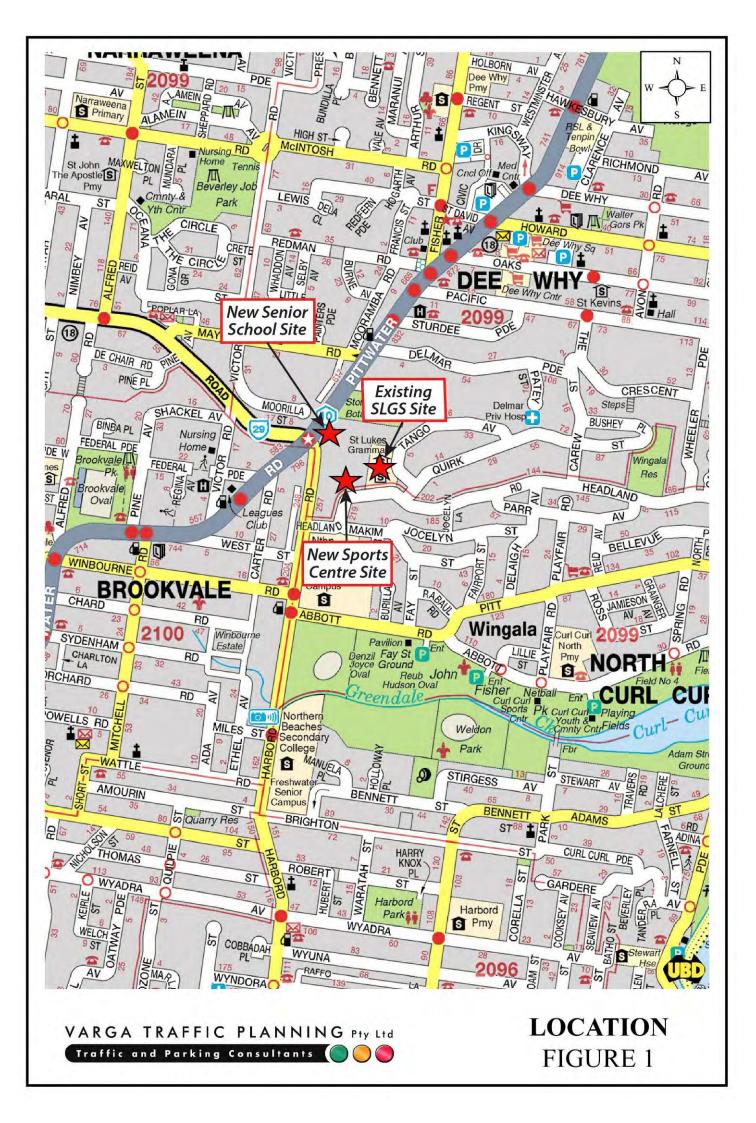
#### Site Inductions

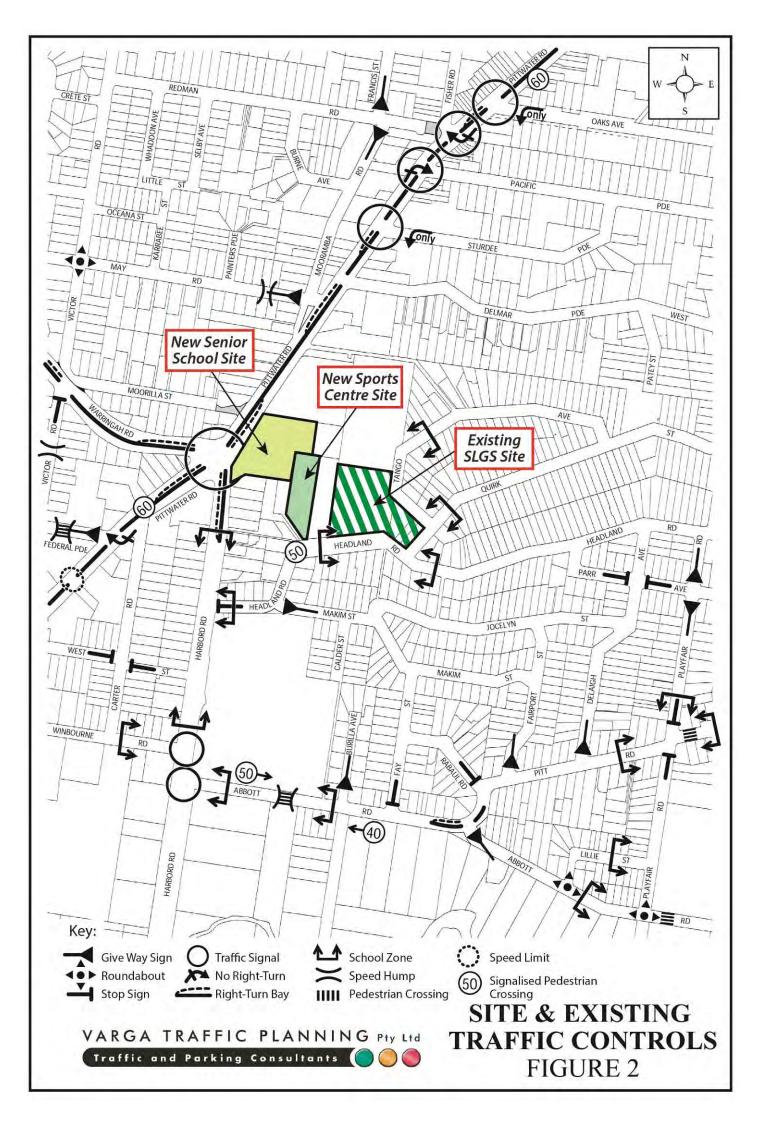
The requirements of this Construction Traffic & Pedestrian Management Plan must be followed by the demolition and construction contractors, builders, owner and any subcontractors. The site manager will ensure that site inductions occur on a regular basis or as deemed necessary. I trust this advice satisfies your requirements. Please do not hesitate to contact me on telephone 9904 3224 should you wish to discuss any aspect of the above.

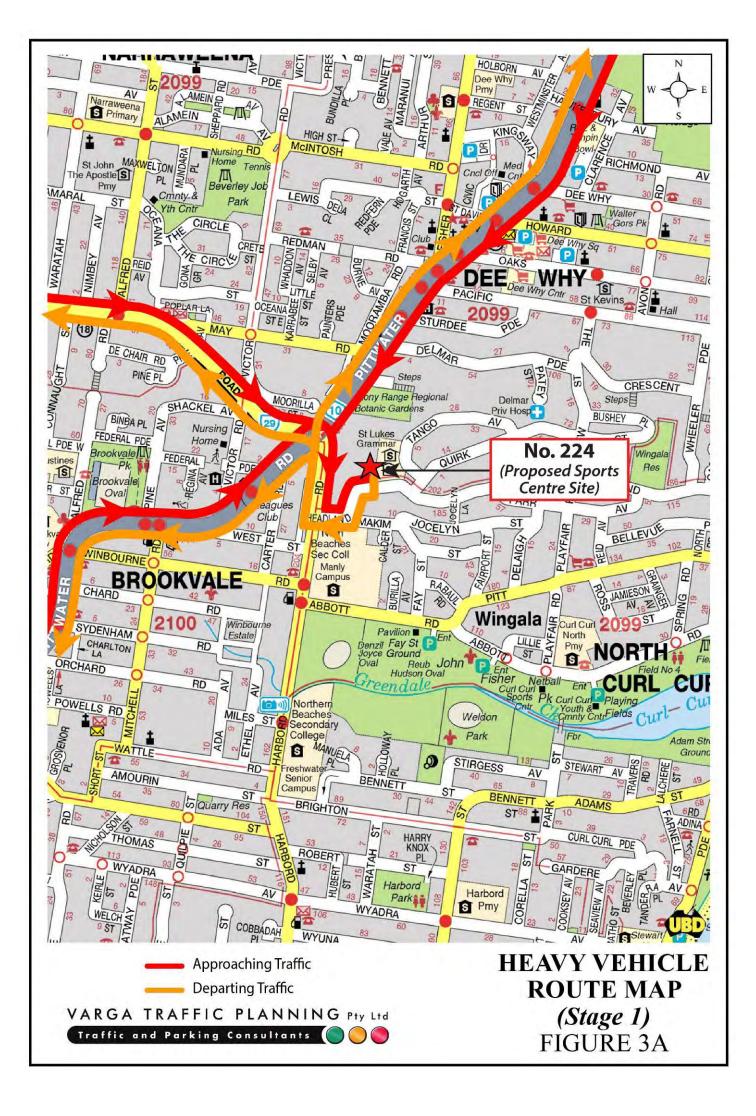
Yours sincerely

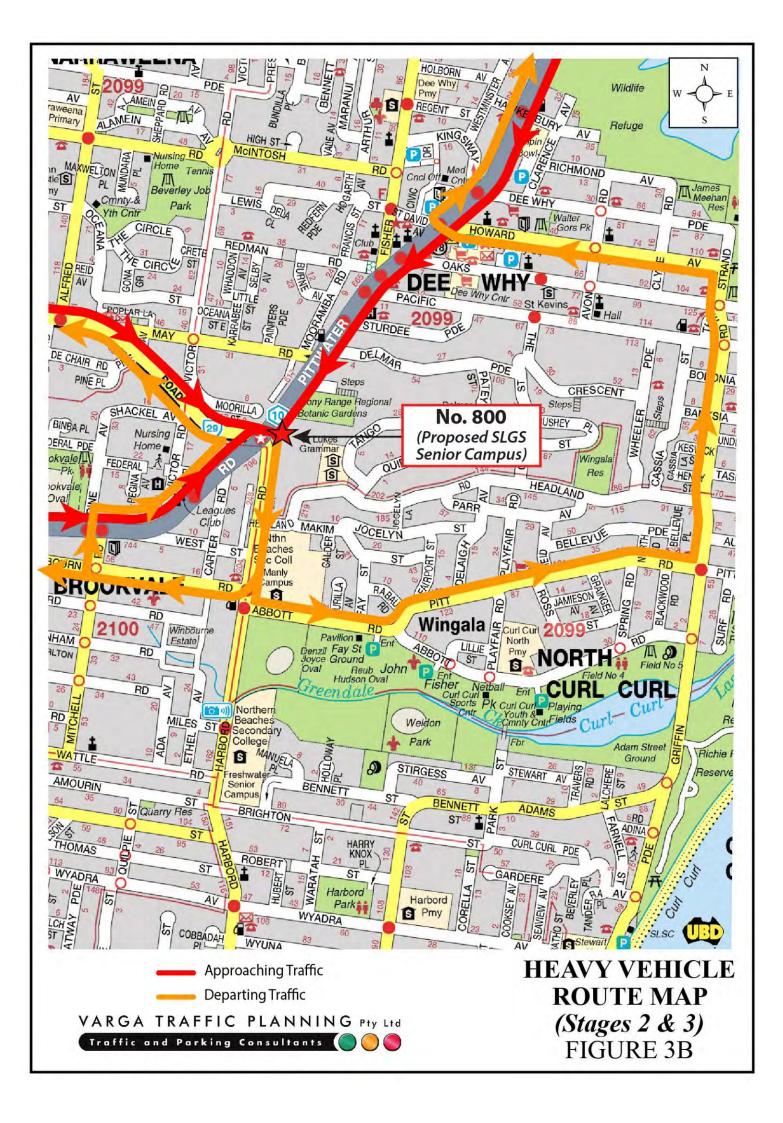
fal

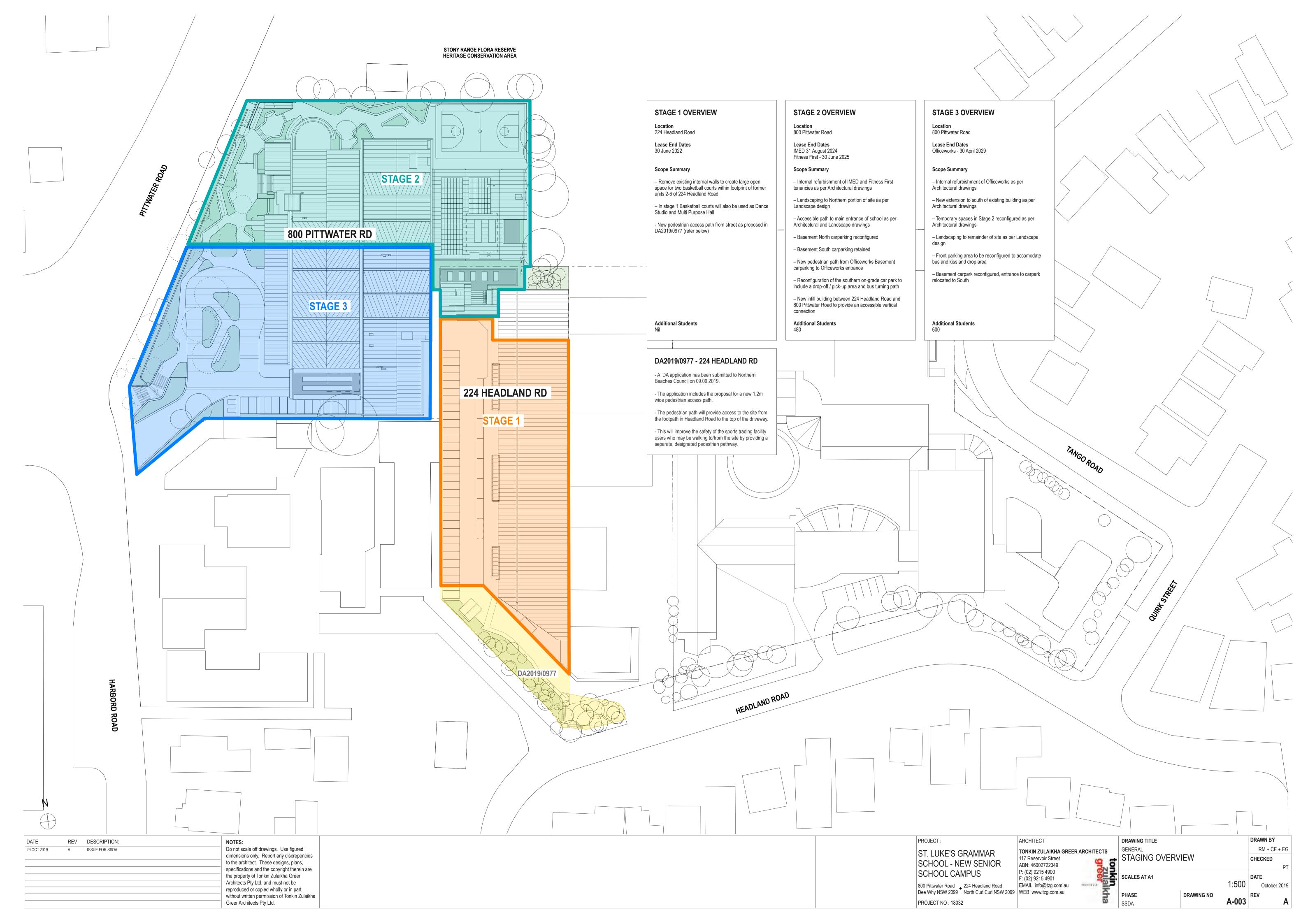
Chris Palmer Traffic Engineer B.Eng (Civil) Varga Traffic Planning Pty Ltd









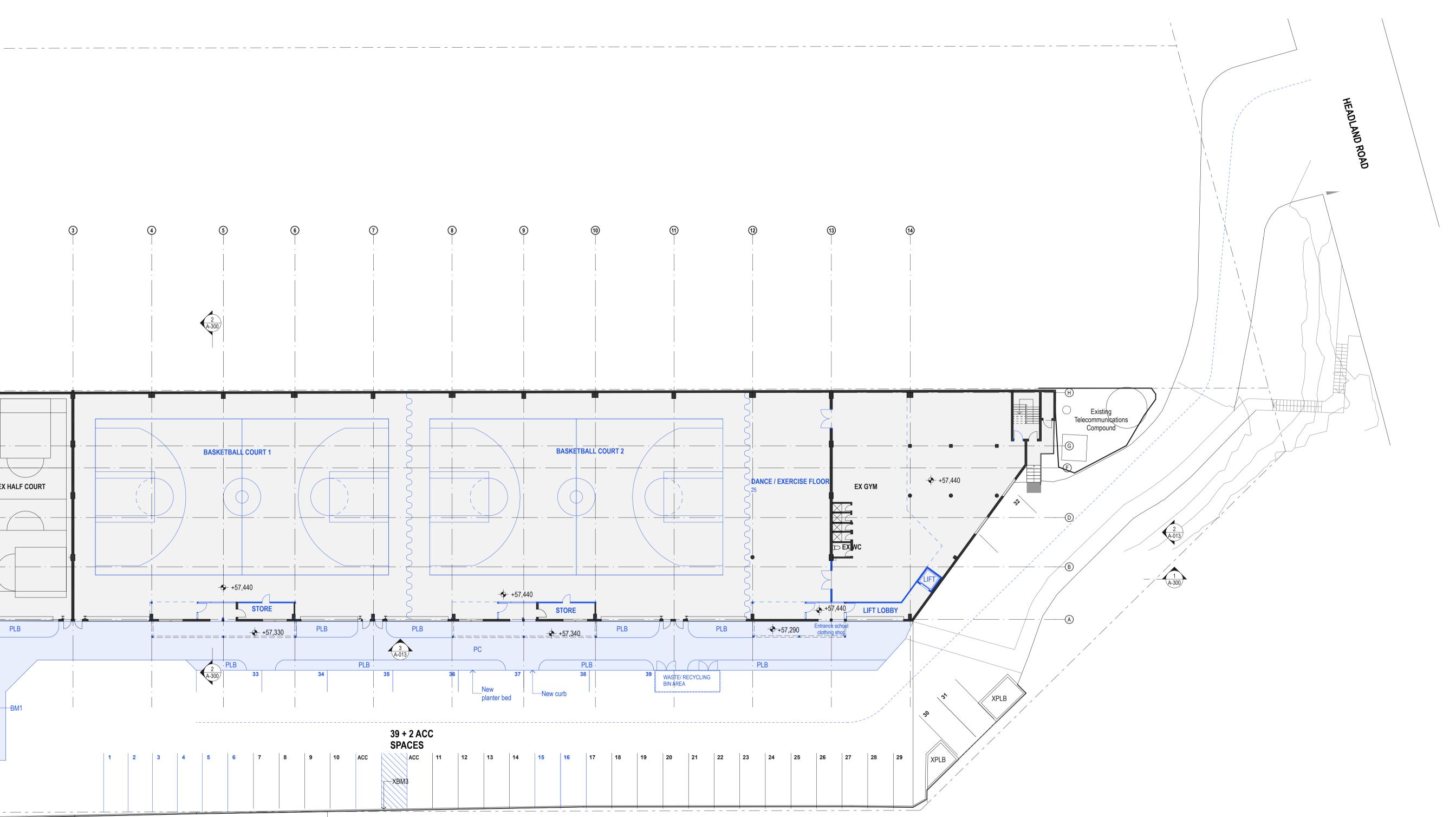


1 3 5  $\bigcirc$ 2 4 6 TEX OFFICE STRG  $\Theta \Theta \Theta$ EX MALE WC BASKETBALL COURT 1 (F)EX HALF COURT EX FEMALE WO (1) (A-013) X ACC S 1 A-300 B-EX FOYER +57,440 +57,440 STORE -(A)+ PLB PLB PLB \_\_\_\_\_\_ +57,250 BM1 • 2 PLB A-300 PLB 34 33 STAIR 9 CS \_\_\_\_ • ACC 7 9 10 1 2 3 4 5 6 8 MR1 LIFT 2 \_ \_\_ \_ \_ \_ \_ \_ Outline of 800 Pittwater Road below

z

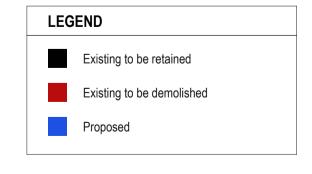
### NOTES:

| DATE        | REV | DESCRIPTION:   | NOTES:                                                                           |
|-------------|-----|----------------|----------------------------------------------------------------------------------|
| 29.OCT.2019 | А   | ISSUE FOR SSDA | Do not scale off drawings. Use figured dimensions only. Report any discrepencies |
|             |     |                | to the architect. These designs, plans,                                          |
|             |     |                | specifications and the copyright therein are                                     |
|             |     |                | the property of Tonkin Zulaikha Greer<br>Architects Pty Ltd, and must not be     |
|             |     |                | reproduced or copied wholly or in part                                           |
|             |     |                | without written permission of Tonkin Zulaikha                                    |
|             |     |                | Greer Architects Pty Ltd.                                                        |

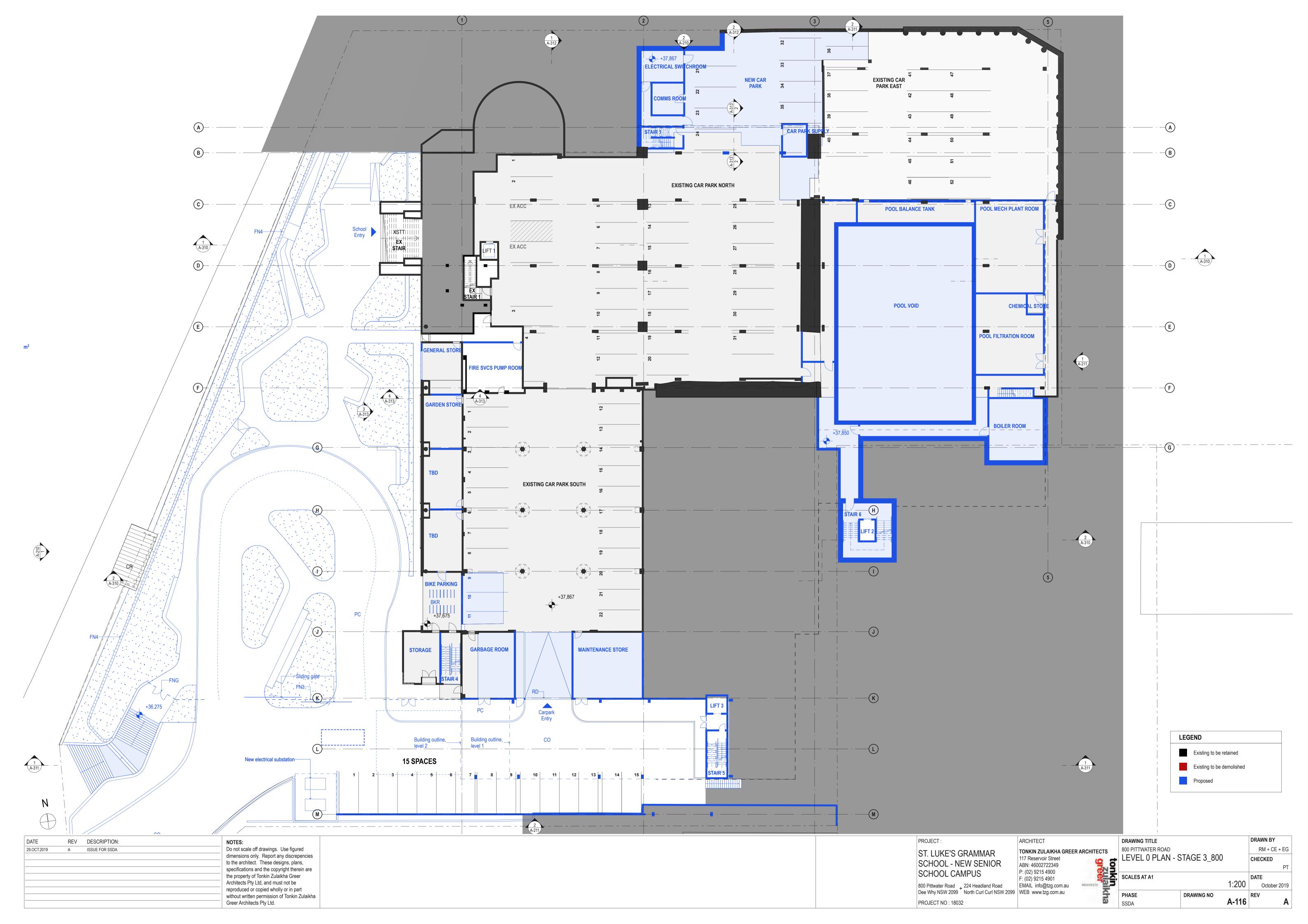


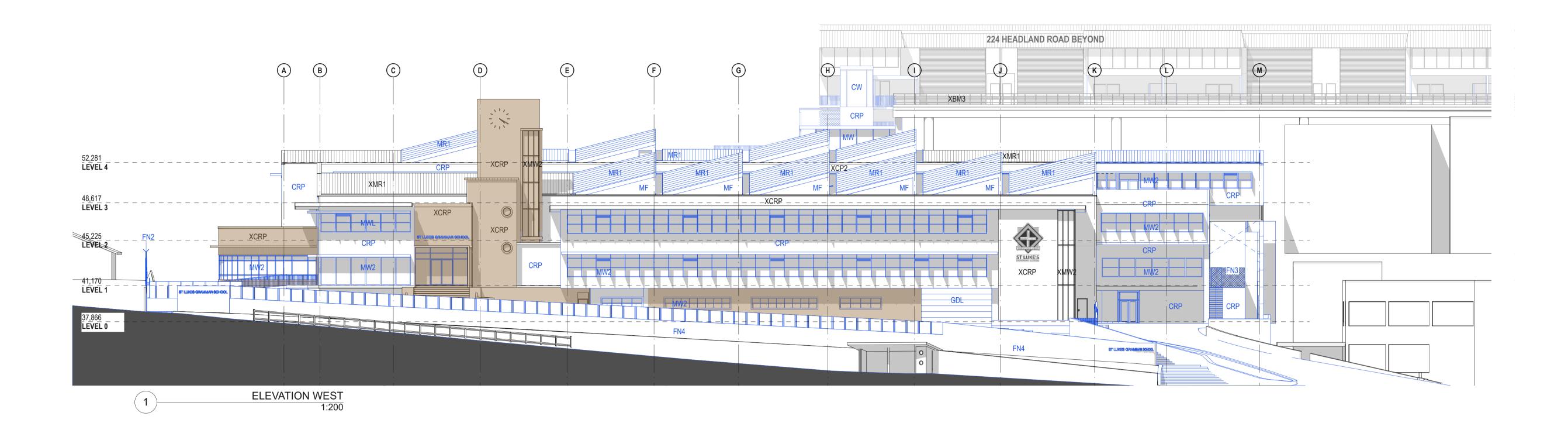
APPLICANT: ST LUKE'S GRAMMAR SCHOOL Mrs Jane Hughes (Business Manager) 210 Headland Road

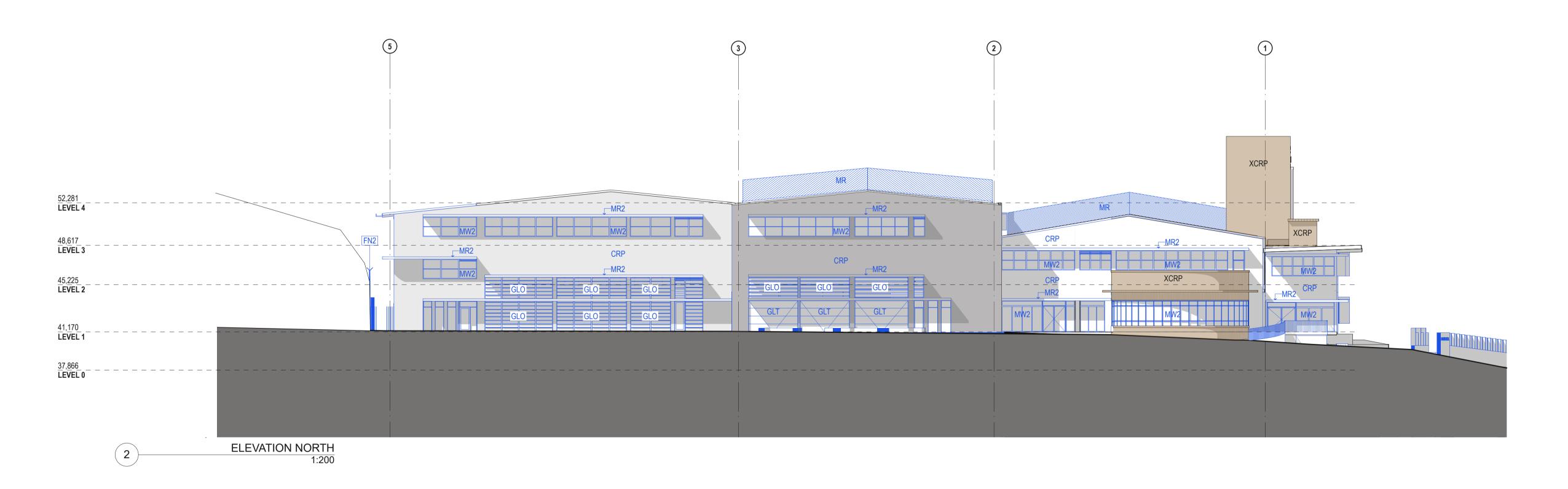
Dee Why NSW 2099



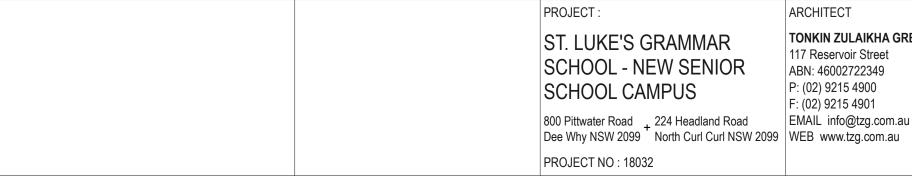
| PROJECT :                                 | ARCHITECT                             | DRAWING TITLE     |            | DRAWN BY     |
|-------------------------------------------|---------------------------------------|-------------------|------------|--------------|
| ST. LUKE'S GRAMMAR                        | TONKIN ZULAIKHA GREER ARCHITECTS      | 224 HEADLAND ROAD |            | RM + CE + EG |
| SCHOOL - NEW SENIOR                       | 117 Reservoir Street                  | LEVEL 0 PLAN_22   | 24         | CHECKED      |
|                                           | ABN: 46002722349<br>P: (02) 9215 4900 |                   |            | PT           |
| SCHOOL CAMPUS                             | F: (02) 9215 4901                     | SCALES AT A1      | 4.000      | DATE         |
|                                           | EMAIL info@tzg.com.au                 |                   | 1:200      | October 2019 |
| Dee Why NSW 2099 North Curl Curl NSW 2099 | WEB www.tzg.com.au                    | PHASE             | DRAWING NO | REV          |
| PROJECT NO : 18032                        | 0                                     | SSDA              | A-100      |              |







| DATE<br>29.OCT.2019 | REV<br>A | DESCRIPTION:<br>ISSUE FOR SSDA | NOTES:       Do not scale off drawings. Use figured       dimensions only. Report any discrepencies       to the architect. These designs, plans, |
|---------------------|----------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
|                     |          |                                | specifications and the copyright therein are                                                                                                      |
|                     |          |                                | the property of Tonkin Zulaikha Greer                                                                                                             |
|                     |          |                                | Architects Pty Ltd, and must not be                                                                                                               |
|                     |          |                                | reproduced or copied wholly or in part                                                                                                            |
|                     |          |                                | without written permission of Tonkin Zulaikha                                                                                                     |
|                     |          |                                | Greer Architects Pty Ltd.                                                                                                                         |



## LEGEND

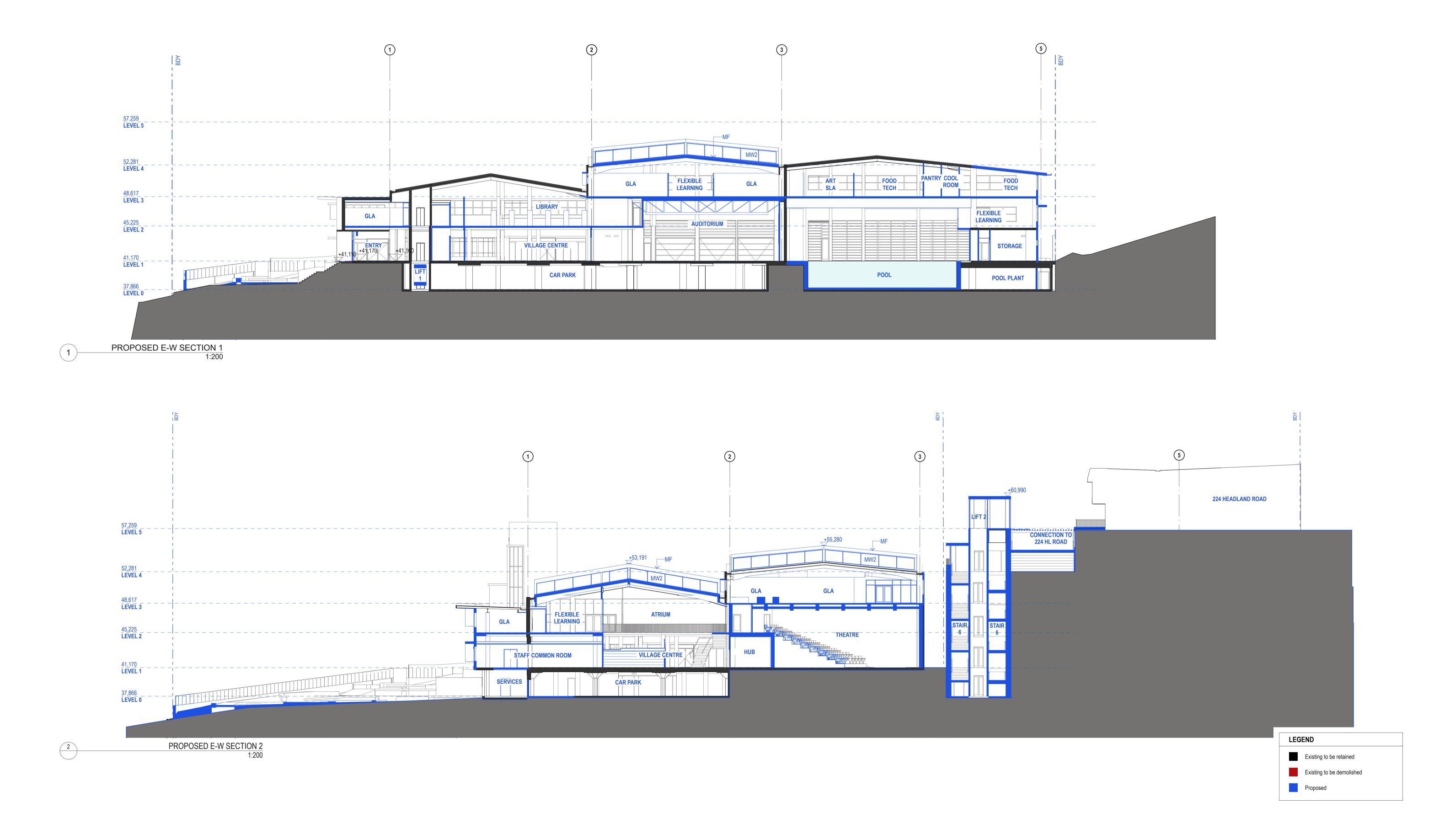
Existing to be retained

Existing to be demolished

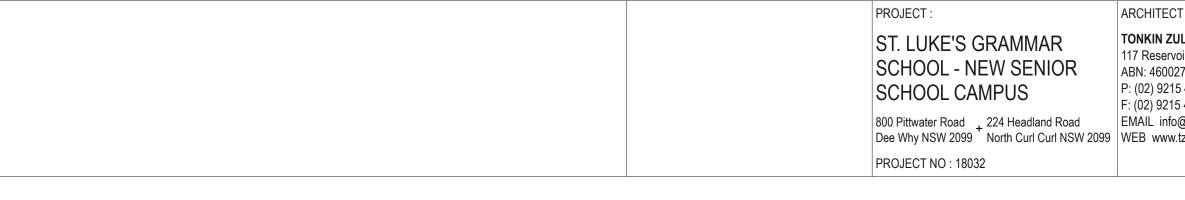
Proposed

Existing, significant heritage item

|                 | ARCHITECT                              |                | DRAWING TITLE      |                | DRAWN BY     |
|-----------------|----------------------------------------|----------------|--------------------|----------------|--------------|
| 1AR             | TONKIN ZULAIKHA GREEF                  | R ARCHITECTS   | 800 PITTWATER ROAD |                | RM + CE + EG |
|                 | 117 Reservoir Street                   | 0 =            | ELEVATIONS WE      | ST + NORTH_800 | CHECKED      |
|                 | ABN: 46002722349<br>P: (02) 9215 4900  |                |                    |                | PT           |
|                 | F: (02) 9215 4900<br>F: (02) 9215 4901 |                | SCALES AT A1       |                | DATE         |
| land Road       | EMAIL info@tzg.com.au                  | ARCHITECTS 2.3 |                    | 1:200          | October 2019 |
| I Curl NSW 2099 | WEB www.tzg.com.au                     | \$             | PHASE              | DRAWING NO     | REV          |
|                 |                                        | 0              | SSDA               | A-210          | A            |



| DATE REV 29.0CT.2019 A | DESCRIPTION:<br>ISSUE FOR SSDA | <b>NOTES:</b><br>Do not scale off drawings. Use figured<br>dimensions only. Report any discrepencies<br>to the architect. These designs, plans,<br>specifications and the copyright therein are<br>the property of Tonkin Zulaikha Greer<br>Architects Pty Ltd, and must not be<br>reproduced or copied wholly or in part<br>without written permission of Tonkin Zulaikha |  |
|------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                        |                                | Greer Architects Pty Ltd.                                                                                                                                                                                                                                                                                                                                                  |  |



|             | ARCHITECT                             |           | DRAWING TITLE      |            |              | DRAWN BY     |
|-------------|---------------------------------------|-----------|--------------------|------------|--------------|--------------|
| R           | TONKIN ZULAIKHA GREER ARCHITECTS      |           | 800 PITTWATER ROAD |            | RM + CE + EG |              |
| OR          | 117 Reservoir Street                  | 0 5       | SECTIONS 1_800     |            |              | CHECKED      |
| UK          | ABN: 46002722349<br>P: (02) 9215 4900 | E No      |                    |            |              | PT           |
|             | F: (02) 9215 4900                     |           | SCALES AT A1       |            |              | DATE         |
| Road        | EMAIL info@tzg.com.au                 | ARCHITETS |                    |            | 1:200        | October 2019 |
| rl NSW 2099 | WEB www.tzg.com.au                    | 5         | PHASE              | DRAWING NO |              | REV          |
|             |                                       | 5         | SSDA               |            | A-310        | A            |

