

Construction Management Plan

Murwillumbah Education Campus

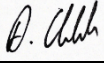

86 Riverview Street



REV: 8

Principal Contractor: Built. Pty Ltd | ABN 37 602 010 097
Project No. 201377
Client: School infrastructure NSW (SINSW)
Client Rep: MACE

Date of Issue: Wednesday, 2 March
2022

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|---------------------|----------------------|-------------------|--|
| Prepared By: | Alec Christofides | Signature: |  |
| Title: | Project Engineer | Date: | Wednesday, 2 March 2022 |
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| 1 | 30/04/21 | Initial Draft | A Christofides |
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| 6 | 2/12/21 | Updated Project Description, Updated Construction Hours | A Christofides |
| 7 | 11/12/22 | Updated Project Description | A Christofides |
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1.0 Introduction

The purpose of this Construction Management Plan is to provide SINSW with detailed construction information relating to the site establishment and construction works associated with the Murwillumbah Education campus, located at 86 Riverview Street, Murwillumbah. The information provided is for the reference of SINSW to highlight that all documented strategies Built has considered do not adversely affect the wider community where health, safety and amenity is concerned.

1.1 Contractor Details

| | |
|-------------------------|---|
| Principal Contractor | Built Pty Ltd |
| Address | Level 4/185 Clarence Street, Sydney, NSW 2000 |
| Telephone (Head Office) | (02) 8332 4111 |

1.2 Project Contacts

| Title | Name | Email |
|----------------------|-------------------|--|
| Construction Manager | Steve Kogias | stevekogias@built.com.au |
| Site Manager | Neil George | neilgeorge@built.com.au |
| Project Engineer | Alec Christofides | alecchristofides@built.com.au |

2.0 Project Overview

2.1 Project Description

The Murwillumbah Education Campus development, involves the co-location of Murwillumbah Primary School, Murwillumbah East Primary School, Murwillumbah High School, and Wollumbin High School, to establish a new primary school and a new high school as part of the same education campus.

The project will include the following scope of works within the SSD application:

- *Demolition of Building E*
- *All inground slabs, pathways, hardstands and footings including those to buildings B, C, D, G, H, M, P, S, AW and AZ*
- *Associated ground works required to facilitate the construction of new buildings and landscaped areas*
- *Construction of new Buildings 1, 2, 3 and 4:*
 - *Building 1 – New public school building comprising general learning spaces, administration, canteen, School Support Unit (SSU) and library;*
 - *Building 2 – Hall building including a public school hall, out of school hours care (OSHC) facilities, high school hall/gymnasium and other spaces for physical education and creative and performing arts (CAPA);*
 - *Building 3 – New high school building including the following facilities; general and specialist learning spaces, SSU, and library.*
 - *Building 4 - New high school building including the following facilities; science, support, administration and canteen;*
- *Refurbish Building A for DoE offices and school community health facilities along with associated access requirements. Building A is a locally listed heritage building and will be retained and refurbished;*
- *Refurbishment of Building F to provide learning space for agricultural education;*
- *Retention of existing AY.*
- *Creation of new public school and high school outdoor learning spaces to support future focused learning outcomes;*
- *New landscaping and embellishment of outdoor playgrounds;*

- *Civil and infrastructure works; and*
- *Kiss n drop and parking off Nullum Street*

2.2 Project Staging

Refer to Appendix A, Site logistics/layout plans, for the project staging for demolition, refurbishment and construction works. The onsite works will be completed over 1 stage with the construction works proceeding directly after the demolition works.

3.0 Element 1 – Public Safety, Amenity & Site Security

3.1 Overview

The objective of Element 1 is to detail all required measures taken by Built to adequately protect the public and school children/staff from all construction activities occurring within the construction site.

3.2 Stakeholders

Stakeholder Identification

In no particular order or limitation, the stakeholders for this project have been identified:

- Department of Planning, Industry and Environment (DPIE)
- Tweed Shire Council
- Department of Education (Delivery Agent - School Infrastructure NSW)
- Tweed Shire Council
- Essential Energy
- NBNco
- Telstra NSW, North
- Local Aboriginal Council
- Community Neighbours
- School Staff and principals

Stakeholder Management

Built will take all care to ensure that the stakeholders listed above, and any newly identified parties (after the completion of this document) are made aware of all construction activities which may affect their normal daily operations.

Consultation

Built understands the high-profile nature of this project and the increased awareness of potential impacts that any construction activity may have on the immediate community surrounding the construction site. Built will ensure that all notification and consultation with surrounding neighbours and the immediate school is managed in conjunction with the SINSW communication team. Built will prepare a table of anticipated activities that require community notification. If unplanned events arise, we will advise SINSW as soon as practicable

3.3 Authorities

Authority Identification

In no particular order or limitation, the key project authorities have been identified as:

- Department of Planning, Industry and Environment (DPIE)
- Tweed Shire Council
- Department of Education (Delivery Agent - School Infrastructure NSW)
- Tweed Shire Council
- Essential Energy
- NBNco
- Telstra NSW, North

Permits

All necessary permits will be acquired to complete the construction of the Murwillumbah education precinct. Including but not limited to:

- Road occupancy permits (if required)
- Footpath occupancy permits (if required)
- Authority connection permits
- Construction Zone permit (if required)
- Vehicle Crossover permit (if required)

3.4 Pre-Construction Planning

Dilapidation Survey

A dilapidation survey will be undertaken to establish the existing conditions of neighbouring properties and council assets. In particular:

- Adjacent/Surrounding Buildings
- Footpaths
- Services
- Roads & Lanes
- Flora and Fauna
- Public property

Upon completion of the project, a final inspection will be conducted and compared to the dilapidation report to ensure that the condition of surrounding areas (as identified above) are acceptable.

3.5 Council Assets

Footpaths & Roads

Built is committed to ensuring that the existing quality of all footpaths, roads, kerbs and channel and stormwater drains is maintained throughout the project lifecycle. Any damage to council property (as listed above) as a result of the construction works will be rectified immediately to prevent any possible threats to public safety.

Public Furniture

All public furniture (seats, bins etc.) which Built see as having potential to be damaged during the construction process will be removed, securely stored, and reinstated in its original position upon completion of the project.

Flora

The site does not contain any listed ecological community or habitat for naturally occurring threatened flora species. Any trees designated for removal in council verge will be identified within the Planning approval for Council's comment / approval.

Tree protection zones will be established as identified by the arborist report ensuring compliance with any required specifications.

3.6 Public and Child Safety

Hoarding/fencing

Temporary Site fencing will be erected in line with the site layout plan for each stage of works. Shade cloth with SINSW approved artwork will be installed to all school and public facing site boundaries.

Please refer to Appendix A – Site layout and Logistic plans for further details

Signage

All required site signage will be installed in accordance with the *Safe Work Australia - Construction Work - Code of Practice*. Signage will be located at all site entrances.

The general signage installed on the hoardings will include:

- Site safety regulations
- Pedestrian warnings
- Emergency Built staff contact names and numbers
- Site related advertisements

Pedestrian Access

Pedestrian access routes will be identified on the site layout plan and will be maintained throughout all stages of construction. These access routes will be delineated from all vehicle routes to ensure the safety of pedestrians entering site.

3.7 Site

Layout – Access & Egress

Access to site will be through the entrances as illustrated in the Site Layout Plans. All site access will be managed under strict site access controls.

Please refer to Appendix A – Site layout and Logistic plans for further details

Site Security

Security is paramount in and around all Built construction sites. To ensure and maintain security both during and out of working hours, all gates and access points will be padlocked. Any covered walkways that are required along pedestrian routes will be adequately lit after hours.

Cameras will be used after hours with provision for back to base monitoring to ensure the site has adequate coverage. Signage will be provided on the external boundary to inform the public.

3.8 Plant & Equipment

Mobile Cranes

Mobile cranes will be used to service the installation of all conventional and DfMA construction components. Given the restrictive site constraints, selective routes and mobile cranes zones will be established to ensure all buildings are able to be serviced in line with the construction programme.

Mobile cranes will be regularly used during the construction phase of the project. They will be set down when not in use with the boom brought back to its minimum length and resting on the truck. The tallest crane will be required for Building 3, which is the highest building in the campus, will be located on level ground with a height of 15.2 m. With a maximum boom length of 66 m AHD, based atop a truck at 3 m AGL, it will extend to a maximum height of 84.2 m AHD.

It is likely that CASA will recommend that the cranes be lit with a medium intensity white obstacle light at the highest point of the crane available for the light.

It is unlikely that cranes will operate at night, however if they do it is likely that CASA will recommend that the cranes be lit with a low intensity red obstacle light.

Any crane used on the site during construction and extended above 47 m AHD, will be appropriately marked and lit.

Concrete Pump / Concrete Trucks

Concrete trucks and pumps will access and egress site in accordance with the site specific CTMP. Concrete deliveries and pumping will be facilitated from the established concrete pumping zones noted on the site layout plans. Concrete boom pumps will predominantly be used to pour all concrete elements.

Please refer to Appendix A – Site layout and Logistic plans for further details

Please refer to Appendix B – Traffic Management plan for further details

Site Compound & Amenities Location

The site amenities for all stages of construction work will be located as per the site layout plan. The site compound will include all amenities required in accordance with the *Safe Work Australia - Construction Work - Code of Practice*. This will include site offices, toilets, hand washing facilities, drinking water, eating facilities, showers, change rooms, personal storage and first aid facilities.

Please refer to Appendix A – Site layout and Logistic plans for further details

Materials

Deliveries

All deliveries will be managed in accordance with the site-specific traffic management plan and will be maintained throughout the construction works. Laydown zones will be established on site and will be used to drop off all materials and machinery.

Please refer to Appendix A – Site layout and Logistic plans for further details

Storage

Nominated areas on site will be allocated for storage of materials and machinery. These areas will be safe and secure. Storage areas may change throughout the course of the project as different stages of construction are completed. All dangerous chemicals will be stored in secure areas located away from emergency exits and stormwater pits. All signage for dangerous goods will be in accordance with *AS1219 – 1995 Class Labels for Dangerous Goods*.

Please refer to Appendix A – Site layout and Logistic plans for further details

4.0 Element 2 – Operating Hours, Noise and Vibration Controls

Site Operating Hours

| | |
|------------------|---------------------------------------|
| Monday to Friday | Normal Working Hours 7:00am to 6.00pm |
| Saturday | 7:00am to 1pm |
| Sunday | N/A |
| Public Holidays | N/A |

The above hours have been coordinated with the Tweed Shire Council Development Construction Specification, C101.

Built aims to complete work within the aforementioned operating hours, however due to unforeseen circumstances works may need to occur outside this period. If this is the case, approval will be sought from the appropriate authorities, Stakeholders and other parties immediately affected and if necessary, application for an out of Hours Permit will be submitted. SINSW will be informed of the potential out of hours works.

Noise & Vibration Controls

Cutting zones will be designated for materials which will be set away from pedestrians to reduce the impact of noise from this activity.

Where required appropriate ear protection is to be worn by all site personnel. Where necessary, signage and restricted areas are to be utilized.

Where required, Built will ensure subcontractor SWMS are developed to address the control of noise during their activities.

Built will ensure work practices to reduce noise complaints are implemented where required such as operating within the out of hours times, limiting material movement to goods lifts and designated Builders lifts, managing truck noise, encouraging the appropriate conduct of workers and using equipment sensibly.

5.0 Element 3 – Air and Dust Management

Dust Management

Dust control shall be managed such that minimal impact is caused to the public and adjoining owners by confinement to the site boundaries. The following strategies will be adopted where required:

- a) Ensuring all construction plant and equipment with access to the site is properly maintained. Smokey plant is to be stopped until repair works are completed. Vehicle engines are to be turned off whilst not in use (no long periods of idling).
- b) Minimising truck idle times under covered areas ensuring all trucks use the nominated holding bay when not unloading / loading.
- c) Ensuring all areas expelling dust is confined to within the site.
- d) Workers to ensure they do not drag concrete dust etc. around various parts of the building that are outside the work zone.
- e) Instruct all personnel that there will be no incineration or burning of waste materials on site.
- f) Subcontractors will be required to control the dust created during their tasks in SWMS.
- g) Installing and maintaining shade cloth on perimeter scaffolding.
- h) Reducing work activities /stop work during moderate to high wind velocity periods.
- i) Minimise areas of site disturbed and stage works where possible.
- j) On site drilling or coring operations will be undertaken by equipment fitted with air filtration equipment.
- k) Continuous dust management strategies in place during all demolition and bulk excavation works.

Dust suppression strategies to be used include (but are not limited to) water sprays, controlled speed of vehicles onsite and inspection of vehicle wheels upon leaving the site, and washing down as required.

Where required, skips will be covered to prevent any rubbish and/or removed concrete rubble (dust) from becoming airborne.

Air Pollution

Built is committed to ensuring that the air quality in and around the construction site is maintained at acceptable levels throughout the construction period. This will be achieved by adopting the following where required:

- a) If odorous materials uncovered, re-cover immediately
- b) By seeking advice from an Environmental Consultant regarding materials management
- c) Ensuring purchased electrical products/whitegoods products comply with specification for CFCS & energy ratings
- d) Ensuring low solvent paints are used as a priority – low VOC
- e) Deliveries / transport from site are effectively planned to limit inefficient transport, assist back loading etc.

6.0 Element 4 – Stormwater and Sediment Control

Built is committed to preventing the contamination of, or damage to, stormwater drains and waterways as a result of activities occurring within our construction sites. The works will be undertaken in line with our approved sediment and erosion plan included within Planning approvals.

All stormwater pits and pipes within the site perimeter shall be sealed and plugged to minimise on-site water exiting the site, and where required an approved trade waste strategy will be put into place.

Built do not anticipate the works to cause sediment to flow into the drainage system external to the site. However, if it is apparent that any overground water is to flow from the site, then stormwater drains external of the site will have silt and affluent barriers in place to limit silt entering stormwater drains.

7.0 Element 5 – Waste & Material Re-use Management

Waste Minimisation

Waste shall be minimised by avoiding over ordering materials, minimising the use of packing materials and buying environmentally approved and recycled products where possible.

Waste Management

Training

Waste management training will form part of the site induction program. This will ensure that contractors and site visitors are aware of the materials on site (in particular any hazardous waste) and waste disposal requirements. Waste management requirements will be stipulated in contracts with sub-contractors. This includes the use of recycled materials where possible and the need to recycle any trade waste. As part of Built's policy, recycling of materials is strongly encouraged. Where possible, construction waste such as concrete, steel, formwork, plasterboard, metals etc. will be reused or recycled.

Nominated on-site personnel will be in charge of the daily collection and disposal of workers rubbish and proposed waste collection areas. All waste collection will occur during the Site Operating Hours.

All collected waste will be handled by accredited waste removal contractors only who shall transport the waste to their off-site sorting facilities. At the facilities, waste materials are separated from recyclables and disposed of accordingly. Recyclables will be sorted and distributed to various facilities depending on material.

Hazardous Waste

All waste deemed hazardous as specified in the Hygienist's report will be handled in accordance with State and Federal Legislation as well as the requirements under the Department of Education. Disposal of hazardous materials will be completed as per WorkSafe requirements.

Waste Tracking

All waste materials that are exported off site will be tracked through the following methods:

- a. Records of total volumes and mass of waste sent offsite including truck weighing bridges and random visual truck inspections
- b. The waste removal contractor shall provide monthly reports providing a breakup of waste recycled and waste going to landfill. These shall be reconciled against waste receipts by the Site Foreman.

Waste Bin Location

Waste Bin locations have been identified within Appendix A – Site layout and Logistic plans.

Prohibitions

Waste burning is prohibited on all of Built's sites.

8.0 Element 6 – Traffic Management

The construction traffic management plan has been developed by Bitzios Traffic Consulting.

Please refer to Appendix B – Construction Traffic Management Plan


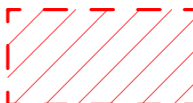




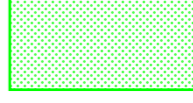
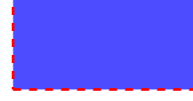




Appendices

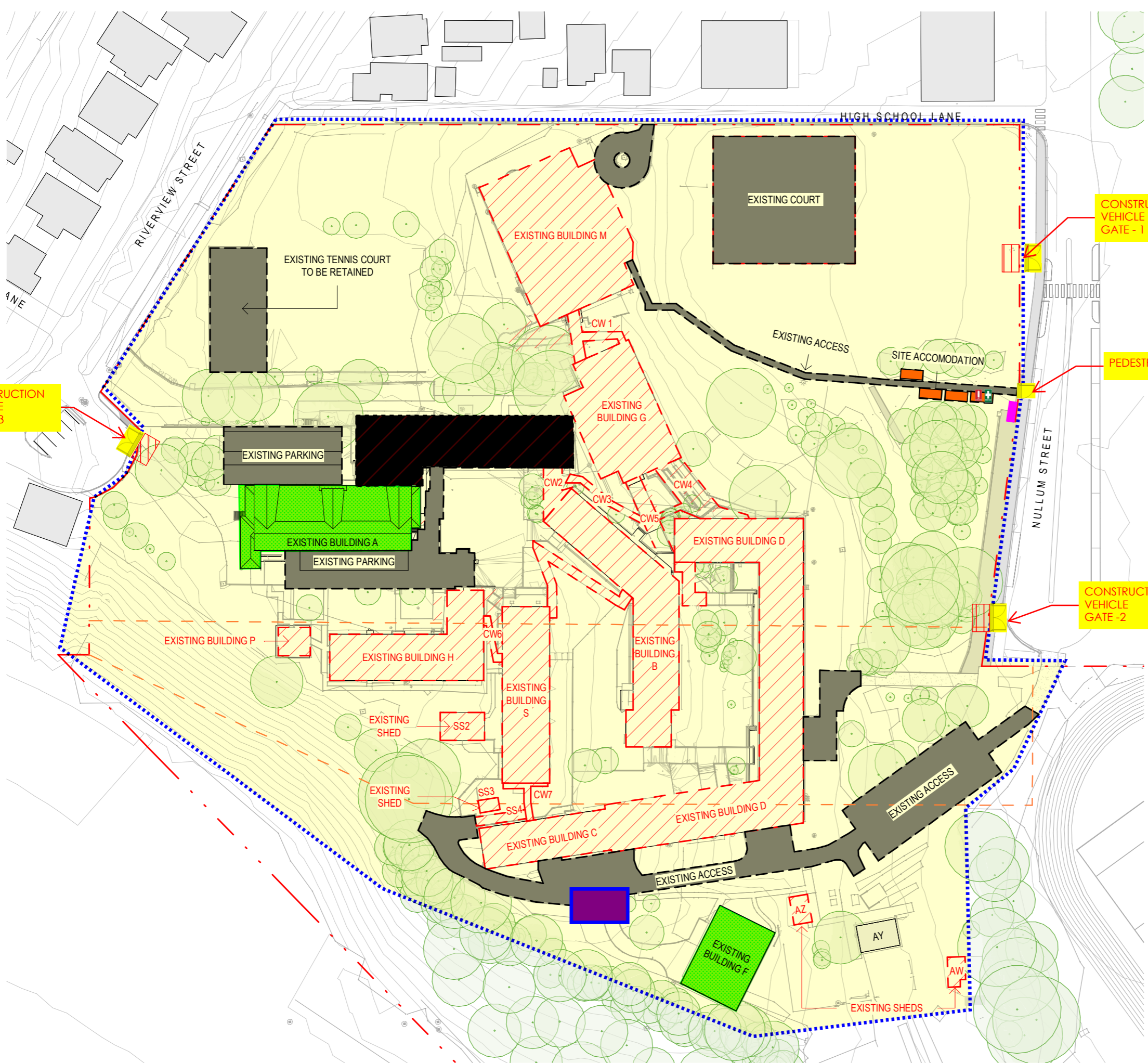
A – Site Layout and Logistics Plans

B – Construction Traffic Management Plans

Appendix A - Site Logistics / Layout Plans

LEGEND

-  CONSTRUCTION ZONE/SITE FENCING
-  EXISTING BUILDINGS SLABS TO BE REMOVED
-  SHAKER GRID / WASHDOWN FACILITIES
-  SITE SIGNAGE
-  SITE COMPOUND
-  BUILDING UNDER CONSTRUCTION/REFURBISHMENT
-  BUILDING TO BE RETAINED
-  COMPLETED BUILDINGS
-  PEDESTRIAN GATE
-  CONSTRUCTION VEHICLE GATE
-  EXISTING BUILDINGS TO BE DEMOLISHED
-  CONSTRUCTION WASTE BIN LOCATION



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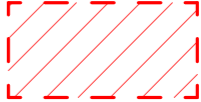









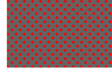
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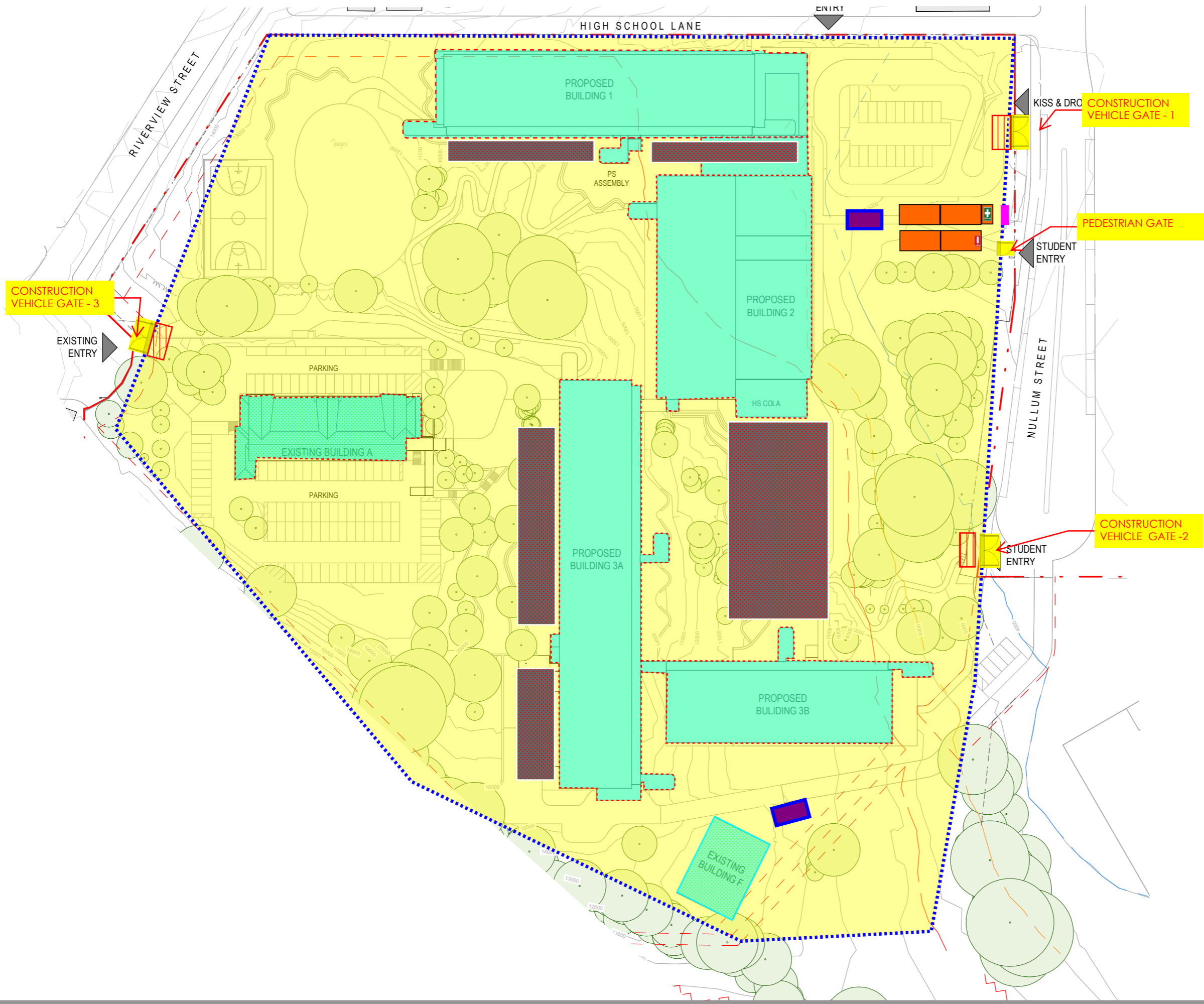
SITE LAYOUT - DEMOLITION

**Murwillumbah
Education Campus**



LEGEND

-  CONSTRUCTION ZONE/SITE FENCING
-  EXISTING BUILDING TO BE DEMOLISHED
-  SHAKER GRID
-  SITE SIGNAGE
-  SITE COMPOUND
-  BUILDING UNDER CONSTRUCTION/REFURBISHMENT
-  BUILDING TO BE RETAINED
-  COMPLETED BUILDINGS
-  PEDESTRIAN GATE
-  CONSTRUCTION VEHICLE GATE
-  CONSTRUCTION WASTE BIN LOCATION
-  PLANT AND MATERIALS HANDLING ZONES



Appendix B - Construction Traffic Management Plan

Refer to CTMP prepared by Bitzios Traffic Consulting