

HAZARDS PRESENT

Consequences	Possible Hazards	Possible Causes
<ul style="list-style-type: none"> Injury to worker Injury to vehicle occupants or motorcyclists Injury to pedestrians or cyclists Damage to vehicles or equipment Damage to infrastructure 	<ul style="list-style-type: none"> Penetration of worksite by a vehicle Worker straying onto roadway or clear zone Collision with obstacles on worksite Failure to navigate through the worksite End-of-queue collision Works vehicle impacting with motorists or motorcyclists Obstacles on worksite Vehicle approach speed too high Driver loss of control of the vehicle Collision between machinery / plant on worksite Abuse / harassment of workers by the public Pedestrians entering workspace or attempting to cross road through "hot" works and active mobile plant items. 	<ul style="list-style-type: none"> Failure to observe work signs Failure to navigate through the worksite Inadequate controls Failure to comply with controls Inadequate delineation Inadequate clearance Inadequate procedures Untidy worksite Worksite left unattended Improper attention given to motorists or motorcyclists Poor signing Inappropriate signing Heavy traffic or delays Inadequate sight distance Long traffic queues Inadequate signing Inadequate instructions for workers Improper attention given to the needs of pedestrians / cyclists Inappropriate route through or past worksite Inadequate separation from other traffic Insufficient number of PTCO/traffic controllers Poor visibility

No-Go-Zones

The No GO Zones will be for All unauthorised personal to be within 3 metres of machinery. Anyone who is not working inside the work zone will not be allowed to the sites access gates to the construction site in the boundaries set out by the temporary fencing of the work area. The no-go-zones provided on-site shall be listed during the pre-start, along with any additional no-go-zones in compliance with Patterson Building Group and Traffic Logistics Pty Ltd policies.

Environmental Impacts

All noisy works (e.g., jackhammering, saw cutting) to be completed during permitted hours to comply with NSW Environment Protection Authority requirements.

Aspect:	Risks, Hazards:	Risk Rating: L= Low M= Medium, H= High	Control Measures: (underline controls required for this site.)
STORMWATER	Biomatter falling into stormwater drainage systems	M	Sandbagging drainage, collection of biomatter prior to the departure of work area.
	Water used in cleaning of power tools running off into drainage		
DUST CONTROL	Dust arising from profiling and asphaltting activities	M	Moistening of surfaces to restrict the creation of airborne particles. Ensure

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Aspect:	Risks, Hazards:	Risk Rating: L= Low M= Medium, H= High	Control Measures: (underline controls required for this site.)
			road profilers and street sweepers use water to moisten road services prior to operation of machinery.
NOISE / VIBRATION	Night works disturbing residents	M	Activation of power tools only when necessary. Loud generators not to be used on-site; biomatter to be collected in additional truck and shredded off-site during appropriate hours of work.
WASTE MANAGEMENT	General waste left on work site	L	Access to rubbish bins whilst on-site. Removal of all general waste prior to departure according to SWMS, policies and procedures.
AIR QUALITY	Dust clouds	M	Use of PPE (dust masks, safety glasses). Moistening of surfaces.

Management of the Traffic Management Plan

Site Inspection/Community Landmarks

The site is located on in a residential area with wide roads. Paramore Street leads out to Gledswood Hills golf course with the Hermitage way being the main throughfare into Gledswood hills. Directly opposite the school on the western side the Gledswood Hills country club can be found and north east of the school is the gold course.

Trafficable Lane Restrictions

There are no trafficable lane restrictions along Paramoor St and The Hermitage Way.

Bus Routes and Stops

There are no Bus routes or stops on Paramoor Street but there are several bus stops on The Hermitage Way. These Bus stops will not be affected by the works happening withing the school as the access points to the work areas is on Paramoor Street.

Existing Parking

There are limited parking bays along Paramoor street which will need to be maintained for the public as with the parking bays on The Hermitage Way. The carpark within the school on the north east side will be partially occupied in stage 2 works with a gate access for the site to be within the carpark. All plant, equipment, construction and heavy vehicles must only be parked within the confines of site in compliance with SSD Condition B20.

Pedestrians

Pedestrians and students will need to managed on the footpath of Parramoor street with a nominated gate attendant/traffic controller. All work vehicles will need to give way to pedestrians when entering and exiting the gate access locations on Paramoor Street. The pedestrians on The Hermitage Way will not be affected by these works. Deliveries will be restricted during school drop off and pick up times unless disruption notice issued to SINSW for approval.

Controls for Site Inspection Items and Community Landmarks

As work is being undertaken during the day it should have little to no impact on the community as the work will be conducted during the standard working hours set out by council.

Emergency Event Procedure and Emergency Vehicle Movement Plan

All emergency service vehicles shall be given priority in an event where their vehicles are required to travel through the site. At least one open trafficable lane shall at all times be kept open to ensure that the emergency service vehicles are not impeded on approach to an emergency event.

Drivers Code of Conduct

CHAIN OF RESPONSIBILITY (COR) REQUIREMENTS FOR HEAVY VEHICLES – Driver Code of Conduct Chain of Responsibility (CoR) is a national program that aims to reduce accidents on the road by making everyone in the chain legally responsible for any action or inaction that may contribute to a transport risk or incident involving a heavy vehicle. This means if you are, for example, driving a truck, loading a truck, unloading a truck, receiving a delivery or operating plant; you are part of the chain and within the regulator's net. We cannot overload a truck, we must inform the transport company of the weights to be transported when known. We cannot direct a driver/transport company to speed and break their driver fatigue guideline. Consider your actions; Patterson Building Group operates ethically at all times and expects contractors to do the same, with the following code of conduct to be implemented and monitored throughout the project in accordance with procedure C9 – Chain of Responsibility:

Scheduling Site Managers & Contractors must take all reasonable steps to ensure the scheduling requirements will not cause the vehicle to breach mass limits or cause the driver or operator to exceed the legal speed limit. Reasonable steps may include:

- Consulting the driver or operator prior to finalising the schedule.
- Allowing for traffic conditions or other delays in schedules – I.e., school drop off & pick up times.
- Contingency planning concerning schedules.

Planning Earthworks When planning earthworks, excavation and the removal of soil, the Site Manager must check that all parties are across their obligations in respect of assessing transport risks. The following must be addressed:

- Mapping out the appropriate transport routes – In accordance with the approved traffic management plan (Appendix B6)
- Ensuring sufficient resources to secure loads
- Ensure that trucks are leaving site with tailgates secured and site soil is not being carried on the tyres and body.
- Ensuring sufficient resources are available to assess the weight of the load and assess their dimensions
- Contingency plans if an incident or unforeseen transport risk arises.

Drugs and Alcohol In accordance with Patterson Building Group's Drug and Alcohol Policy, random drug and alcohol testing of any worker, including heavy vehicle operators, may be conducted at any time and without prior notice. PBG's Drug and Alcohol Policy and Fitness for Work Procedure (F1) are available upon request.

Breaching Safety Standards & Community Expectations PBG's Chain of Responsibility procedure sets out the standards of behaviour expected from everyone who performs transport activities for PBG. Breaches of these standards may result in disciplinary action up to and including termination of employment. For

contractors, it may lead to the immediate termination of a contract. It is expected that suppliers will enforce a similar set of standards with their employees.

Communication and Incident Reporting The contents of this procedure are communicated to workers at PBG Site Induction. Further, if at any time a worker observes behaviour that is of concern or that may represent a violation of this procedure, the worker should raise the issue with their supervisor immediately. Should a worker require further information on any issue, they should contact site management to discuss. Any incident that occurs during the course of transport activities must be identified, notified and communicated to the parties down the supply chain and up to the Managing Director immediately so that any breach can be investigated and steps can be taken to avoid a recurrence. Incidents are recorded on PBG's Register of Injuries and Treatment/Accident/Incident Report (A1.1).

Documentation All transport documentation must be accurate and must not be false or misleading. All documentation must be kept in accordance with PBG's Documented Management System – Distribution and Control Procedure (D3).

Traffic Guidance Scheme

The Traffic Guidance Scheme has been developed in accordance with the Traffic Control at Work Sites Manual (TCAWS, version 6.1, 2022). This Traffic Guidance Scheme must also comply with the national requirements within the Australian Standard 1742.3, and shall only be implemented by accredited Traffic Controllers. If there is a requirement for Traffic Guidance Scheme/s to be modified, the implementer shall consult the Traffic Guidance Scheme developer and discuss the adjustments required with the proposed changes reflected in a risk assessment (in compliance with TCaWS requirements). Any adjustments are to be completed by the developer. Refer Appendix A for Traffic Guidance Schemes.

Heavy Vehicle Movement Plan

All heavy vehicles that will be entering and exiting the site will follow the same route. The below map will show the entry path in red and blue will be the exit path leaving the site back to the main roads. S map below will show the routes.

For Entering the site all heavy vehicles will exit off the M7 westbound onto Camden valley way. From there they will turn left Southbound onto The Hermitage Way then left onto Parramoor Street from here they will enter the site through the access gates.

Exiting Vehicles will turn right onto Parramoor Street heading South then turn Left on the Hermitage Way then Left onto Gledswood Hills Dr, left onto Raby Rd then Right onto Camden valley before going back onto the M7.



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Approvals Required before Implementation

Before any delineation devices are implemented on Corrimal Street a driveway crossover Permit approval will be required. If there is any construction works on the driveway affecting the pedestrians on the footpath and road a Road occupancy Licence issued by the Transport management Centre will need to be obtained before these works are to commence. Any works taking place on the road will need to comply with the location's conditions on the Road Occupancy licence.

Hold Point: Certificates of Approval

Process Held: Works involving the implementation of traffic control devices on an RMS road that requires a Road Occupancy Licence and/or additional licences/permits.

Submission Details: Evidence of documentation approving the works to be completed, ie Road Occupancy Licence, council permits (if required), accompanied licencing requirements for works.

Release of Hold Point: Activating approved Road Occupancy Licence, along with the compliance of any terms or conditions that accompany the licence.

Implementation of Traffic Management Plan, Traffic Guidance Scheme and Vehicle Movement Plan

The implementation of the Traffic Management Plan, Traffic Guidance Scheme and Vehicle Movement Plan shall, in accordance with local requirements (TCAWS v6, 2022), be undertaken by those fully qualified and accredited in the implementation of traffic management devices. No works shall begin prior to the review of all Traffic Controllers on-site displaying copies of accreditation.

Hold Point: Certification of Workers

Process Held: Works involving the implementation of traffic control devices.

Submission Details: Evidence of qualifications held by all traffic controlling parties on the work site.

Release of Hold Point: Documenting the qualification numbers of all workers intending to implement traffic control devices.

Responsibilities

Team Leader

In accordance with TCaWS Manual, the works supervisor or equivalent qualified person shall:

- Ensure that all signs and devices required by the Traffic Guidance Scheme are available, are the correct size and are in good condition.
- Ensure that the locations and types of devices are recorded in the diary.
- Ensure that authorisations have been given for the use of any roadwork speed zones or portable traffic signals.
- Ensure that, where flashing arrow signs are specified, only type-approved equipment complying with Specification TSI-SP-060 is used in accordance with Section 11, illuminated flashing arrow signs.
- Ensure that the Traffic Guidance Scheme is implemented as approved and a copy is available on site.

Traffic Controller

In accordance with TCaWS Manual, the person/s qualified in "Implement Traffic Control Plans" shall implement the approved Traffic Guidance Scheme before physical work commences and ensure that a copy of the Traffic Guidance Scheme is kept on site. The implementer shall also drive through the site before work begins to ensure that the Traffic Guidance Scheme has been implemented correctly and that it will warn, instruct and guide road users as designed. This drive through should also be completed at night if the

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traffic management will be in place after hours. Any variations made to the plan must be marked on the Traffic Guidance Scheme and initialled by the team leader.

The implementer shall ensure that, in conforming to the approved Traffic Guidance Scheme, by way of initial and regular inspections:

- There are no contradictory signs.
- There are no surplus, obstructing or distracting signs.
- The Traffic Guidance Scheme fits with other traffic control in the area which may or may not be under the control of the one organisation.
- Signs are suitably placed, by considering:
 - Line of sight and sight distances
 - Road user approach speeds
 - Expected queue lengths
 - Visibility, shady or high glare areas
 - The effects of sunrise and sunset
 - Lateral offset to travel lanes
 - Height of signs
- Only trained, certified and authorised Traffic Controllers are used and are suitably positioned.
- Signs and devices are in place at appropriate times, and removed or covered when not needed.
- Covered signs are inspected during windy periods to ensure that the covering has not been disturbed.
- Damaged or defective signs are replaced or repaired as soon as practicable.
- A trafficable travel path for vehicles is maintained and clearly defined.

The team leader shall also report any anomalies or inconsistencies found in the Traffic Guidance Scheme/s being used.

Plant and Equipment

All vehicles used in traffic control operations will be equipped with the appropriate vehicle mounted warning devices in accordance with the RMS TCaWS Manual and G10. During poor light conditions or at night, an additional Traffic Controller with an illuminated red wand will direct traffic around such plant and equipment.

During night time, where traffic is permitted to use the whole or portion of the existing road, all plant items and similar obstructions will be removed from the normal path of vehicles to provide a lateral clearance of at least 6m where practical, with a minimum clearance of 1.5m. Plant and equipment, within 6m of the normal path of vehicles, will be lit by not less than two yellow steady lamps suspended vertically from the point of the obstruction nearest to the traffic lane, and one yellow steady lamp at each end of the obstruction on the side furthest away from the traffic lane.

Time Management

Traffic Logistics Pty Ltd and/or Patterson Building Group must meet all time management requirements including:

- Notifying emergency services and relevant transport industry of significant traffic disruption.
- Notifying residents and businesses affected by any disruption (ie VMS board, letterbox drop).
- An additional letterbox drop/s to residents at least five business days before the proposed commencement date.
- Ensuring works are only carried out during the times and days permitted.
- Lodgement, no less than ten business days before the work, of a Road Occupancy Licence.

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- Advise TMC of delays to traffic which are, or are anticipated to be, longer than 15 minutes.

Communication and Consultation

Public Notification

Identified stakeholders (not being limited to residents, public transport services and emergency services) will be consulted and advised by the Patterson Building Group Customer and Community Relations Team of impending works. A notification has been developed by Patterson Building Group Communication Team outlining the traffic impacts. This will be issued to nearby residents and be accompanied by a traffic alert and VMS in place to direct motorists.

All communication by PBG & Traffic Logistics will be conducted in accordance with the SINSW Community Consultation Strategy (CEMP Appendix E6).

Stakeholder	Basis of Engagement
Police	Email
Fire	Email
Ambulance	Email
Residents	Door knock, letter drop, Live Traffic, social media
Business	Door knock, letter drop, Live Traffic, social media
Public Transport	Email

Disclaimer, Monitoring and Review

To the knowledge of the developer of this Traffic Management Plan, the details within are accurate reflections of the proposed work area. Any changes made to this work area prior to the commencement of work shall be reported to the developer, to which appropriate adjustments shall be made.

Traffic Logistics Pty Ltd does not hold any responsibility in the on-site implementation of the Traffic Management Plan, Traffic Control Plans or Vehicle Movement Plans if these plans are implemented by any organisation other than Traffic Logistics Pty Ltd. These plans are provided for Traffic Management Service Providers, that take ownership of all traffic management events during the initial implementation of the work site, through to the conclusion of the project.

Periodic Review



The Construction Traffic & Pedestrian Management Sub-Plan will be reviewed on a 6 monthly basis to find any ways to improve the current performance This review will be documented within the site diary & PMP Review & Amendments section. Areas to be reviewed include;

- Weekly & Monthly environmental inspections and audits,
- Site functioning and cleanliness,
- Prior impacts
- Prior incidents

Furthermore. PBG will review performance of implemented traffic and pedestrian management measures via gathering and analysing:

- Environmental inspections, environmental checklists and audits,
- Performance during inclement weather patterns.
- Affects post inclement weather patterns,
- Impacts to surrounding stakeholders and community.

Roles, Responsibilities and Approvals

Functional Role	Name/Company	Accreditation	Signed
TMP Designed By	Mark Hayward Traffic Logistics	TCT0046634	
TMP Reviewed and Approved By	Jorge Fonseca Traffic Logistics	IMP PWZ TCR TCT0036977	
TMP Reviewed By			
TMP Accepted By			
Road Authority Approval (TfNSW CJM or similar as applicable)			

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Traffic Management Plan Recommendations and Changes

This Traffic Management Plan has been reviewed by: Jorge Fonseca on 24/03/2023

Changes to be made are listed below:

- Road Occupancy License/s to be attached to this document once approved by Transport for NSW.
- All other relevant approvals will need to be sent with this document.
- Added Heavy Vehicle route plan and Driver's Code of Conduct

Authorised approver of changes: Jorge Fonseca, current PWZTMP licence holder.

PWZTMP Licence Number: TCT0036977

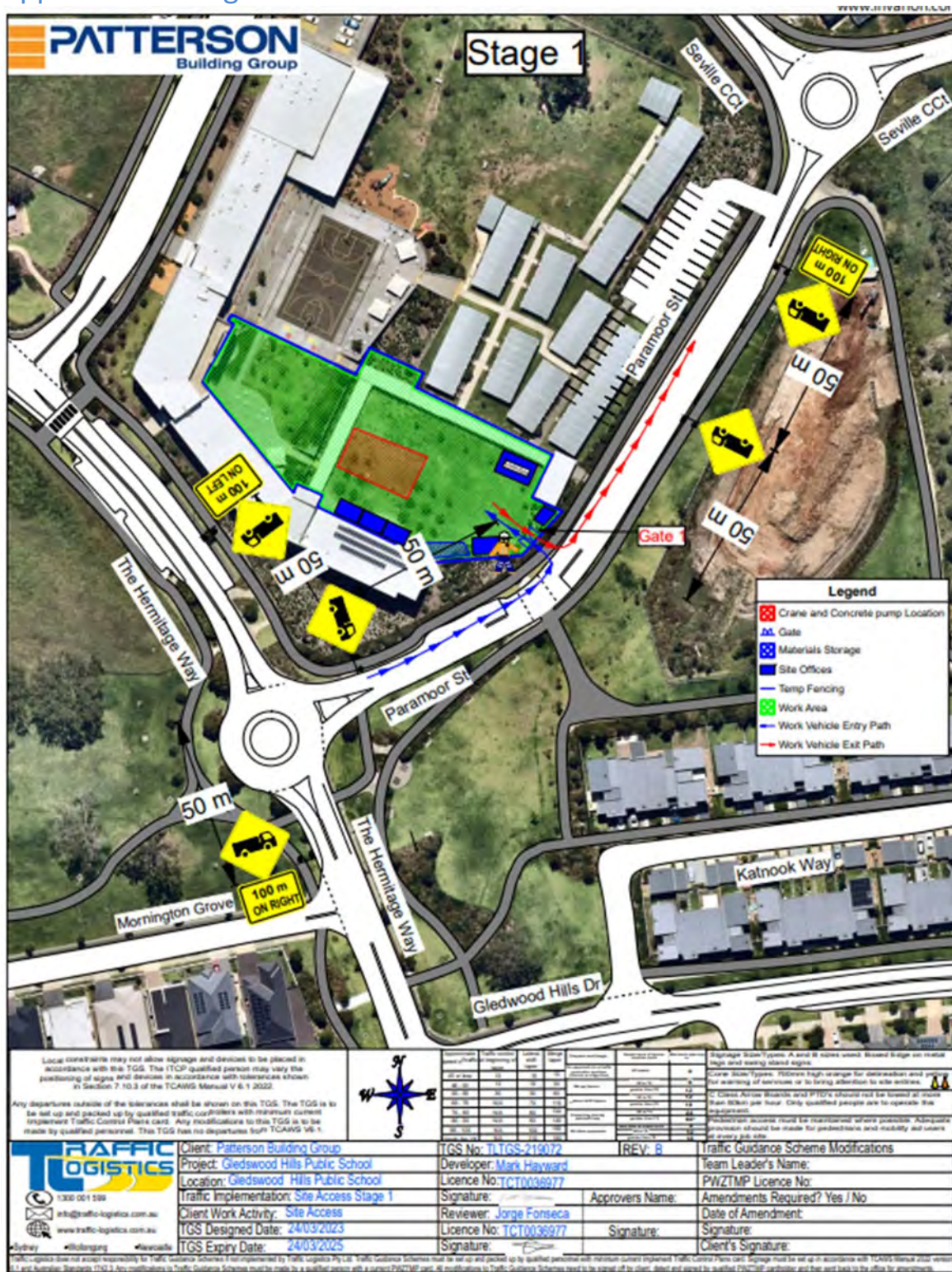
Signature:



Date: 17/04/23

Appendices

Appendix A – Stage 2A TCP

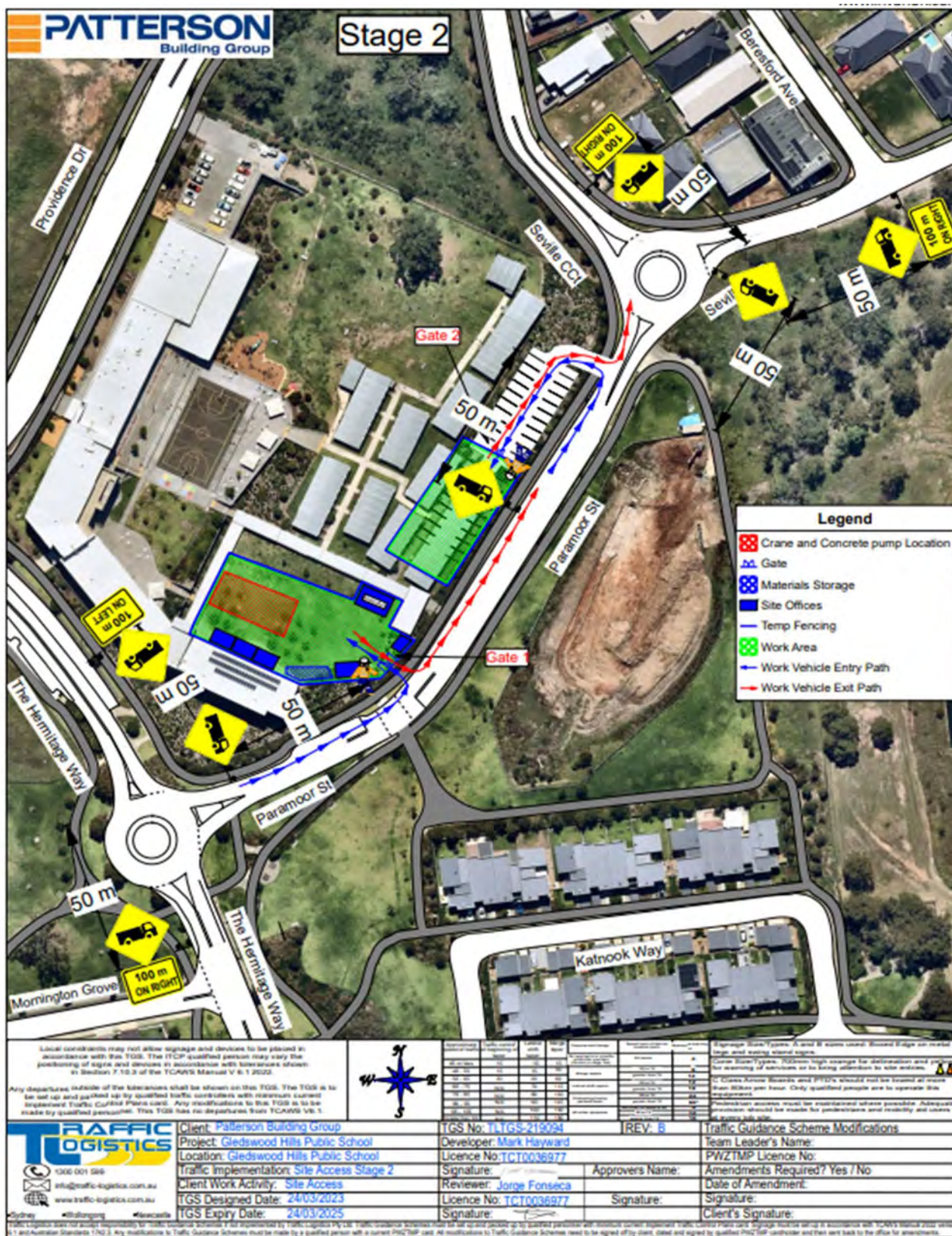


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Appendix B – Stage 2B TCP



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Appendix C – Council Consultation

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Post Approval Consultation Record

Identified Party to Consult:	Camden Council
Consultation type:	Email Correspondence
When is consultation required?	Prior to Construction Commencement
Why	<p>B16. The Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) must address, but not be limited to, the following:</p> <ul style="list-style-type: none"> (a) be prepared by a suitably qualified and experienced person(s); (b) be prepared in consultation with Council; (c) detail the measures that are to be implemented to ensure road safety and network efficiency during construction in consideration of potential impacts on general traffic, cyclists and pedestrians and bus services; (d) detail heavy vehicle routes, access and parking arrangements; (e) include a Driver Code of Conduct to: (i) minimise the impacts of earthworks and construction on the local and regional road network; (ii) minimise conflicts with other road users; (iii) minimise road traffic noise; and (iv) ensure truck drivers use specified routes; (f) include a program to monitor the effectiveness of these measures; and (g) if necessary, detail procedures for notifying residents and the community (including local schools), of any potential disruptions to routes.
When was consultation scheduled/held	Initial plan submission to council mailbox on 30/03/2023, with follow up email for feedback/acknowledgement of plans submission by relevant council officer on 17/04/2023, Updated CTPMSP Rev C issued on 18/04/23.
When was consultation held	30/03/2023, 17/04/2023, 18/04/23
Identify persons and positions who were involved	Relevant Officer from the Environmental or Development Planning Team
Provide the details of the consultation	<p>Initial revision of the Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) developed by PBG issued to Camden Council with CEMP on 30/03/23 for review and feedback by the relevant council officer.</p> <p>Follow up email sent on 17/04/23 with Revision B of the CTPSMP to Camden Council to see if any feedback will be provided.</p> <p>CTPMSP Revision C issued on 18/04/23 for information and comment.</p>



What specific matters were discussed?	Nil – Awaiting feedback.
What matters were resolved?	Nil
What matters are unresolved?	Nil
Any remaining points of disagreement?	N/A
How will SINSW address matters not resolved?	N/A

From: [Council Mailbox](#)
To: [Chris Sposito](#)
Subject: Camden Council Automatic Response
Date: Tuesday, 18 April 2023 9:19:33 AM

Thank you for contacting Camden Council.

Council has received your email and the appropriate officer will be in contact.



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From: [Chris Sposito](#)
To: mail@camden.nsw.gov.au
Cc: [Kurt Lanner](#); [Tim Baldwin](#); [Alex Warner](#)
Subject: RE: Gledswood Public School Stage 2 - CEMP, CSWMSP & CTPMSP Consultation
Date: Tuesday, 18 April 2023 9:17:00 AM
Attachments: [TLTMP-219117 REV C Gledswood Hills Public School.pdf](#)
[image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)

Good Morning,

Further to the below, please see attached updated Construction Traffic & Pedestrian Management Sub-Plan for your information and comment as necessary.

Thank you for your assistance.

Regards,

Chris Sposito
HSEQ Manager
Mobile: 0408 625 030



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From: Chris Sposito
Sent: Monday, April 17, 2023 3:08 PM
To: mail@camden.nsw.gov.au
Cc: kurtl@pattersonbuild.com.au; [Tim Baldwin <timb@pattersonbuild.com.au>](mailto:timb@pattersonbuild.com.au); [Alex Warner <alexw@pattersonbuild.com.au>](mailto:alexw@pattersonbuild.com.au)
Subject: RE: Gledswood Public School Stage 2 - CEMP, CSWMSP & CTPMSP Consultation

From: [Council Mailbox](#)
To: [Chris Sposito](#)
Subject: Camden Council Automatic Response
Date: Monday, 17 April 2023 3:10:31 PM

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From: [Chris Sposito](#)
To: mail@camden.nsw.gov.au
Cc: [Kurt Lanner](#); [Tim Baldwin](#); [Alex Warner](#)
Subject: RE: Gledswood Public School Stage 2 - CEMP, CSWMSP & CTPMSP Consultation
Date: Monday, 17 April 2023 3:07:00 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[TLTMP-219117 REV B Gledswood Hills Public School.pdf](#)
[TLTGS-219072 REV B Gledswood Hills Public School Site Access Stage 1.pdf](#)
[TLTGS-219094 REV B Gledswood Hills Public School Site Access Stage 2.pdf](#)
[PBG001 - Site Management Plan.pdf](#)

Good Afternoon,

Just following up on the below submission of documents and if there is any feedback from council for incorporation into our environmental management plans?

I have also attached the recently completed Construction Traffic and Pedestrian Management Plan (CTPMSP) for review and comment as necessary in accordance with *SSD-8378 - New Gledswood Hills Public School* conditions.

Thank you for your assistance.

Regards,

Chris Sposito

HSEQ Manager

Mobile: 0408 625 030



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From: [Council Mailbox](#)
To: [Chris Sposito](#)
Subject: Camden Council Automatic Response
Date: Thursday, 30 March 2023 7:17:17 PM

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From: Chris Sposito
Sent: Thursday, March 30, 2023 7:14 PM
To: 'mail@camden.nsw.gov.au' <mail@camden.nsw.gov.au>
Cc: Kurt Lanner <kurtl@pattersonbuild.com.au>; Tim Baldwin <timb@pattersonbuild.com.au>; Alex Warner <alexw@pattersonbuild.com.au>
Subject: Gledswood Public School Stage 2 - CEMP & Consultation

Good Evening,

Patterson Building Group have been recently appointed as the head contractor for construction of Gledswood Public School Stage 2.

We have commenced preparing the respective management plans required under the and in accordance with the SSD compliance conditions require consultation for the Construction Environmental Management Plan (CEMP) & Construction Soil and Water Management Plan (CSWMSP)

Could you please forward on the attached to the relevant representative within council for review and comments as necessary?

Thank you for your assistance.

Regards,

Chris Sposito
HSEQ Manager
Mobile: 0408 625 030



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	Construction Environmental Management Plan – 626 - Gledswood Hills Public School – Stage 2	E1
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25.3 Appendix E3 – Construction Noise & Vibration Management Sub-Plan

**SSD 8378 – Construction of Gledswood Hills Public School –
Submission of Construction Noise and Vibration Management Sub-Plan in
accordance with Condition B17**

Please refer to the below **SSD 8378 GHPS Condition Satisfaction Table** in relation to the above condition requirements and location within the CEMP attached herewith this letter.

SSDA Ref.	Requirement Summary	Documentation Reference
B17	<i>The Construction Noise and Vibration Management Sub-Plan (CNVMSP) must address, but not be limited to, the following:</i>	Appendix E3 – Construction Noise and Vibration Management Sub-Plan - Rev A 19/04/23
	(a) be prepared by a suitably qualified and experienced noise expert;	Prepared by William Wang – Senior Acoustical Engineer – Day Design
	(b) describe procedures for achieving the noise management levels in EPA’s Interim Construction Noise Guideline (DECC, 2009);	Construction Noise & Vibration Criteria (Section 4.0-4.4 Pg. 11-15)
	(d) include strategies that have been developed with the community for managing high noise generating works;	Construction Noise & Vibration Mitigation Measures (Section 6.0 Pg. 19-26)
	(e) describe the community consultation undertaken to develop the strategies in condition B17(d); and	Community Relations & Consultation (Section 6.11 Pg. 24)
	(f) include a complaints management system that would be implemented for the duration of the construction.	Managing a Noise Complaint (Section 6.12 Pg. 25)

If you require clarification of any aspect of our submission, please do not hesitate to contact me.

Yours faithfully,



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Construction Noise and Vibration Management Sub Plan – Stage 2 Works

Gledswood Hills Public School
The Hermitage Way, Gledswood Hills

REPORT No
6130-5.1R Rev A

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Prepared For:
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1.0 CONSULTING BRIEF

Day Design Pty Ltd was engaged by Patterson Building Group to prepare a Construction Noise and Vibration Management Sub Plan for the Stage 2 works to be carried out at Gledswood Hills Public School at The Hermitage Way, Gledswood Hills, NSW. The scope of work is as follows:

Inspect the site and environs

- Inspect the site and environs
- Measure the background noise levels at critical locations and times
- Establish acceptable noise level criterion
- Quantify noise emissions from the demolition, excavation and construction works
- Calculate the level of noise emission, taking into account distance attenuation
- Prepare a site plan identifying the development and nearby noise sensitive locations
- Provide recommendations for noise control
- Prepare a Construction Noise and Vibration Management Plan.



2.0 PROJECT DESCRIPTION

2.1 Site Description

Gledswood Hills Public School is located on land to the east of the proposed Town Centre. The school will have capacity for 1,000 students.

Existing residences and undeveloped land zoned for residential purposes are located to the west and south across The Hermitage Way and Gledswood Hills Drive respectively. A reserve is proposed to the south of the School after a new local road and before Gledswood Hills Drive. To the west will be the Gledswood Hills Town Centre.

Long term ambient noise measurements have been taken in the rear yard of a nearby existing residential property as shown in Figure 1. Ambient noise levels are presented in Section 3 of this report.

2.2 Development Description

Two new buildings are proposed to be constructed at Gledswood Hills Public School, being Building F and Building G to provide an additional 20 homebases over 3 to 4 stories. Additional car parking for 28 parking spaces is also proposed.

The development process is typically separated into three phases:

- Phase 1 – Demolition:
 - Activities include use of an excavator and dump trucks.
- Phase 2 – Excavation and earth moving:
 - Activities include use of excavator and dump trucks, and a rock hammer/saw as required.
- Phase 3 – Construction:
 - Expected timeframe of 52 weeks;
 - Activities include use of cement trucks, cranes, gensets, and hand tools.

In this case, Phase 1 and Phase 2 works were completed during the Stage 1 construction of the School site. The area is currently paved and planted, and will require light demolition to be removed such that concrete pads for the buildings can be poured and construction of the new homebase buildings can begin.



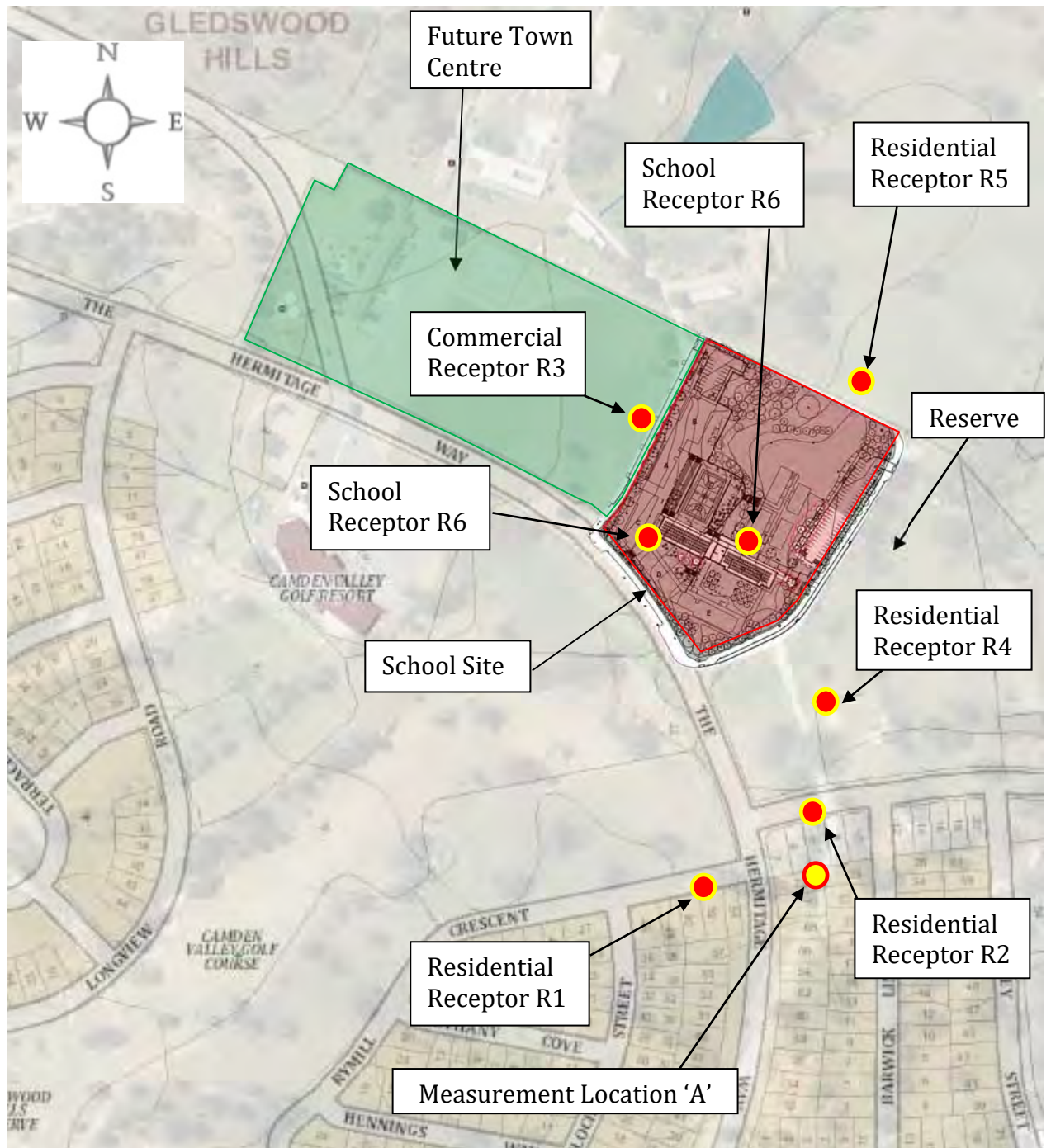


Figure 1 : Location Plan – Gledswood Hills Public School



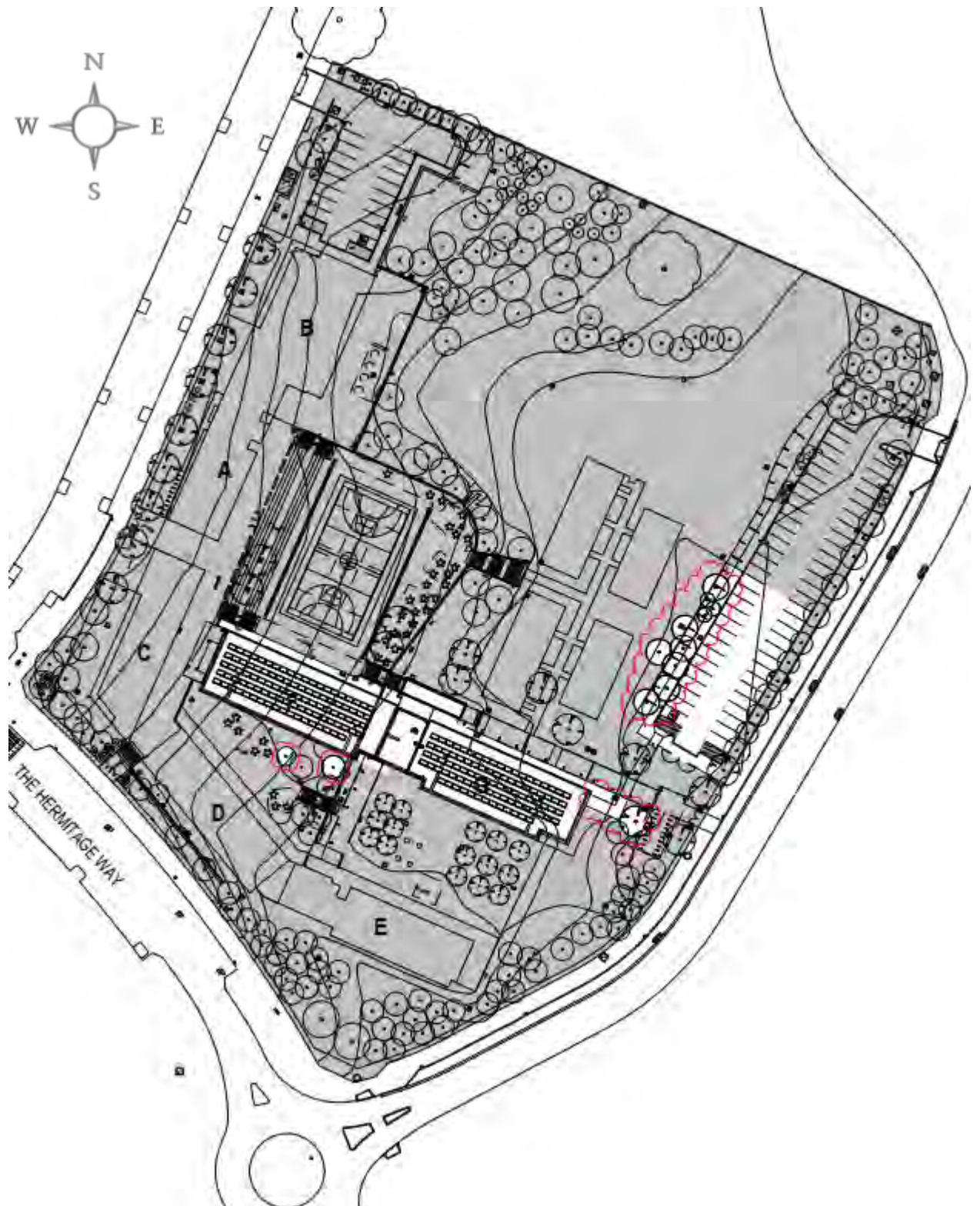


Figure 2 : School Site Plan



3.0 BACKGROUND NOISE LEVELS

3.1 Noise Survey Instrumentation

Noise level measurements and analysis were made with instrumentation as follows in Table 1:

Table 1 Noise Instrumentation

Description	Model No.	Serial No.
Infobyte Noise Logger	iM4	107
Condenser Microphone 0.5" diameter	MK 250	107
B & K Microphone Calibrator	4231	

An environmental noise logger is used to continuously monitor ambient noise levels and provide information on the statistical distribution of noise during an extended period of time. The Infobyte Noise Monitor iM4 is a Type 2 precision environmental noise monitor meeting all the applicable requirements of AS1259 for an integrating-averaging sound level meter.

All instrument systems had been laboratory calibrated using instrumentation traceable to Australian National Standards and certified within the last two years thus conforming to Australian Standards. The measurement system was also field calibrated prior to and after noise surveys. Calibration drift was found to be less than 1 dB during unattended measurements. No adjustments for instrument drift during the measurement period were warranted.

3.2 Background Noise Level

In order to assess the severity of a possible environmental noise problem in a residential area it is necessary to measure the ambient background noise level at the times and locations of worst possible annoyance. The lower the background noise level, the more perceptible the intrusive noise becomes and the more potentially annoying.

The ambient L_{90} background noise level is a statistical measure of the sound pressure level that is exceeded for 90% of the measuring period (typically 15 minutes).

The Rating Background Level (RBL) is defined by the NSW EPA as the median value of the (lower) tenth percentile of L_{90} ambient background noise levels for the day, evening or night time periods, measured over a number of days during the proposed days and times of operation.

The places of worst possible annoyance are the residences located to the south-west across The Hermitage Way and to the south across Gledswood Hills Drive. These potentially affected locations can be seen in Figure 1. The times of greatest annoyance will be during the day time when children are outdoors.



An environmental noise logger was placed in the rear yard of 72 The Hermitage Way, Gledswood Hills to determine the Rating Background Level. This location is shown on Figure 1 as Location 'A'.

In quiet areas where the background noise level is 30 dBA or less, it is not necessary to carry out long-term noise monitoring to establish the Rating Background Level. The NSW Noise Policy for Industry assumes minimum Rating Background Noise Levels in Table 2.1 being 35 dBA during the day, 30 dBA in the evening and 30 dBA at night.

The measured noise levels are presented in the attached Appendix A and also in Table 2.

Table 2 Ambient Noise Levels – Gledswood Hills

Location	Time Period	L₉₀ Rating Background Level (dBA)	Existing Leq Noise Level (dBA)
Location 'A' – 72 The Hermitage Way, Gledswood Hills	Day (7 am to 6 pm)	37	48
	Evening (6 pm to 10 pm)	34	42
	Night (10 pm to 7 am)	30 *	41

* The actual measured noise level at night was 28 dBA

Atmospheric conditions were ideal for noise monitoring. Noise measurements were therefore considered reliable and typical for the receptor area.



4.0 CONSTRUCTION NOISE AND VIBRATION CRITERIA

4.1 Development Consent

As part of the Development Consent for SSD 8378 on 21 September, 2018, Condition B17 requires a Construction Noise and Vibration Management Sub Plan be prepared as follows:

- B17. The Construction Noise and Vibration Management Sub-Plan (CNVMSP) must address, but not be limited to, the following:*
- (a) be prepared by a suitably qualified and experienced noise expert;*
 - (b) describe procedures for achieving the noise management levels in EPA's Interim Construction Noise Guideline (DECC, 2009);*
 - (c) describe the measures to be implemented to manage high noise generating works such as piling, in close proximity to sensitive receivers (wherever applicable);*
 - (d) include strategies that have been developed with the community for managing high noise generating works;*
 - (e) describe the community consultation undertaken to develop the strategies in condition B17(d); and*
 - (f) include a complaints management system that would be implemented for the duration of the construction.*

4.2 Camden Council Environmental Noise Policy – Construction Noise

Part B – Section 4 provides guidance on construction noise, however appears to be based on Chapter 171 of the Environmental Noise Control Manual published in 1985. In this situation, we recommend following the more recent *Interim Construction Noise Guideline* in July 2009 as detailed in Section 5.2.

We note that the time restrictions on construction noise in Part B – Section 4 are as follows:

Monday to Friday, 7 am to 6 pm;

Saturday, 8 am to 4 pm.

Note: Work outside of these hours may be considered on its merits by way of submission at development assessment stage.

No construction work is to take place on Sundays or Public Holidays unless specifically stated in the conditions of development approval.



4.3 EPA Construction Noise Guideline

The NSW Environment Protection Authority published the *Interim Construction Noise Guideline* in July 2009. While some noise from construction sites is inevitable, the aim of the Guideline is to protect the majority of residences and other sensitive land uses from noise pollution most of the time.

The Guideline presents two ways of assessing construction noise impacts; the quantitative method and the qualitative method.

The quantitative method is generally suited to longer term construction projects and involves predicting noise levels from the construction phase and comparing them with noise management levels given in the guideline.

The qualitative method for assessing construction noise is a simplified way to identify the cause of potential noise impacts and may be used for short-term works, such as repair and maintenance projects of short duration.

In this instance, the quantitative method is the most appropriate and has been used in this assessment. Details of the quantitative method are given in Section 4 of the Guideline.

Normal construction hours are defined by the EPA as follows:

- 7.00 am to 6.00 pm Monday to Friday;
- 8.00 am to 1.00 pm Saturday; and
- No work on Sunday or Public Holiday.

Table 2 in Section 4 of the Guideline sets out noise management levels at affected residences and how they are to be applied during normal construction hours. The noise management level is derived from the rating background level (RBL) plus 10 dB in accordance with the Guideline. This level is considered to be the 'noise affected level' which represents the point above which there may be some community reaction to noise.

The 'highly noise affected' level of 75 dBA represents the point above which there may be strong community reaction to noise. This level is provided in the Guideline and is not based on the RBL. Restrictions to the hours of construction may apply to activities that generate noise at residences above the 'highly noise affected' noise management level.

Based on the RBL of 37 dBA in the daytime, the recommended noise management level during all aspects of the construction program are summarised in Table 3.



Table 3 L_{eq} Noise Management Levels from Construction Activities

Receptor Location	Noise Management Level	How to Apply
All Residential Receptors Monday to Friday 7 am to 6 pm Saturdays 8 am to 1 pm No work on Sun or public holidays	47 dBA (37 + 10)	The noise affected level represents the point above which there may be some community reaction to noise. <ul style="list-style-type: none"> ▪ Where the predicted or measured $L_{Aeq (15 min)}$ noise level is greater than the noise affected level, the proponent should apply all feasible and reasonable* work practices to meet the noise affected level. ▪ The proponent should also inform all potentially impacted residents of the nature of works to be carried out, the expected noise levels and duration, as well as contact details.
	Highly noise affected 75 dBA	The highly noise affected level represents the point above which there may be strong community reaction to noise. <ul style="list-style-type: none"> ▪ Where noise is above this level, the relevant authority (consent, determining or regulatory) may require respite periods by restricting the hours that the very noisy activities can occur, taking into account: <ol style="list-style-type: none"> 1. times identified by the community when they are less sensitive to noise (such as before and after school for works near schools, or mid-morning or mid-afternoon for works near residences); 2. if the community is prepared to accept a longer period of construction in exchange for restrictions on construction times.
Outside Recommended standard hours	39 dBA (34 + 5)	<ul style="list-style-type: none"> • A strong justification would typically be required for works outside the recommended standard hours. • The proponent should apply all feasible and reasonable work practices to meet the noise affected level. • Where all feasible and reasonable practices have been applied and noise is more than 5 dB(A) above the noise affected level, the proponent should negotiate with the community. • For guidance on negotiating agreements see section 7.2.2.

* Section 6, 'work practices' of The *Interim Construction Noise Guideline*, states: "there are no prescribed noise controls for construction works. Instead, all feasible and reasonable work practices should be implemented to minimise noise impacts.

This approach gives construction site managers and construction workers the greatest flexibility to manage noise".



Definitions of the terms feasible and reasonable are given in Section 1.4 of the Guideline.

The Interim Construction Noise Guideline recommends the following noise levels for land uses other than residential, as shown in Table 4. The external noise levels should be assessed at the most affected occupied point on the premises. A conservative estimate of 10 dB is generally applied as the difference between the external and internal level for noise sensitive uses that require internal noise measurement.

Table 4 Other Sensitive Land Uses

Land Use	Noise Management Level, $L_{Aeq,(15\text{ minute})}$ Applies when properties are being used.
Passive Recreation Areas, (areas that generate no or little noise during use)	60 dBA – External Noise Level
Offices and retail outlets	70 dBA – External Noise Level
Classrooms at schools and other educational institutions	45 dBA – Internal Noise Level*

*Equivalent to 65 dBA outside with windows closed

4.4 EPA Vibration Guideline

The NSW EPA published the *Assessing Vibration: a technical guideline* in February 2006. This guideline is based on the British Standard BS6472:1992 “*Evaluation of human exposure to vibration in buildings (1 Hz to 80 Hz).*”

The guideline presents preferred and maximum vibration values for use in assessing human responses to vibration and provides recommendations for measurement and evaluation techniques. The guideline considers vibration from construction activities as Intermittent Vibration. Table 2.4 of the guideline sets out limits for Vibration Dose Values to assess intermittent vibration and is replicated in Table 5 for residential receptor locations.

Table 5 Vibration Dose Values (VDV) from Construction Activities

Receptor Location	Daytime	
	Preferred value ($m/s^{1.75}$)	Maximum value ($m/s^{1.75}$)
All Residences	0.20	0.40



The British Standard BS7385-2:1993 “*Evaluation and measurement for vibration in buildings – Part 2: Guide to damage levels from groundborne vibration*” provides guide values for transient vibration relating to cosmetic damage, replicated in Table 6 for residential buildings.

Table 6 Transient Vibration Guide Values for Cosmetic Damage

Type of Building	Peak component particle velocity in frequency range of predominant pulse	
	4 Hz to 15 Hz	15 Hz and above
Residential	15 mm/s at 4 Hz increasing to 20 mm/s at 15 Hz	20 mm/s at 15 Hz increasing to 50 mm/s at 40 Hz and above

In our opinion, an overall peak particle velocity of **15 mm/s** at the boundaries is an acceptable criterion for intermittent vibration to prevent cosmetic damage to the adjacent residential buildings.



5.0 CONSTRUCTION NOISE AND VIBRATION ASSESSMENT

The main sources of noise on the site during the construction of the school buildings will be from heavy machinery such as concrete pump trucks and hand held pneumatic and electric power tools, etc. Activities that may cause particular annoyance, due to tonality, spectral content or impulsiveness include generator motors, hand tools such as grinders, jackhammering and other activities involving impacts. These activities will require particular attention with regard to mitigation.

The standard recommended construction hours are Monday to Friday 7 am to 6 pm, Saturdays 8 am to 1 pm, with no work on Sundays or public holidays. Camden Councils Environmental Noise Policy in Part B – Section 4 outlines construction hours of Monday to Friday 7 am to 6 pm, Saturdays 8 am to 4 pm, with no work on Sundays or public holidays.

The suburb of Gledswood Hills is currently in the middle of transformation from largely greenfield sites to residential estates. The suburb is currently experiencing a large amount of construction work in the nearby areas. Given the current state of the suburb, and Camden Council's recommended hours, Day Design is of the opinion that the standard hours of construction be in line with Camden Councils Environmental Noise Policy.

5.1 Proposed Staging of Works

The School was proposed to be built over two stages, as shown in the drawings attached as Appendix B. Stage 1 works, including the main building, the multi-purpose hall located along the western and southern sides of the school site, have already been constructed. Additional demountable classrooms are located along the eastern side of the site.

Stage 1 of the construction works included preparation of the entire site and earthworks to form the proposed ground levels of the school buildings as part of Stage 2.

Stage 2 will involve minimal earthworks and demolition of existing paved areas, and primarily be erection of the buildings.



5.2 Stage 2 Construction Works

The construction of the new homebase buildings as part of Stage 2 works is estimated to take 52 weeks and will involve the use of concrete pump trucks, power tools and portable mechanical plant such as generators and cement mixers. The equipment likely to be used and their corresponding sound power levels are presented in Table 7.

Table 7 Typical Construction Equipment - Sound Power Levels

Description	Qty	Sound Power Level, dBA [^]
Silenced Diesel Generator	Up to 2	Up to 89
Telehandler (3 ton)	1	Up to 99
Elevated Work Platforms	2	Up to 95
Pneumatic and Electric Hand Tools	Up to 5 simultaneous	Up to 110

[^]All sound power levels are based on AS2436:2010 and DEFRA database of various plant noise measurements.

Calculations consider distance attenuation only and the range of levels are based on the closest potential distance and furthest potential distance at which each item of plant may operate from each respective residential location.

The calculated noise levels at nearby residential receptors are presented in Table 8.

Table 8 Calculated Receptor Sound Pressure Levels from Construction

Receptor Location	Calculated Sound Pressure Levels (dBA)	Noise Management Level (dBA)	Compliance
R1 - Rymill Crescent Residences (South-West)	55 - 61	47	No
R2 - Gledswood Hills Drive Residences (South)	55 - 60	47	No
R3 - Gledswood Hills Town Centre (West)	61 - 77	70	No
R4 - Residences Across Reserve (South-East)	56 - 65	47	No
R5 - Future Residences (North-East)	56 - 59	47	No
R6 - Stage 1 Buildings – Building C/D (West/South-West)	63 - 83	65	No
R7 - Stage 1 Buildings – Demountable (North)	66 - 89	65	No



Note that once the façade of the Stage 2 homebase buildings begin to be completed, the façade will act as a noise barrier to the nearby Stage 1 school buildings, reducing the level of construction noise as construction progresses.

The demountables will be affected for a short duration while the new ramp is being constructed near Building G, causing the high exceedance.

5.3 Vibration Impacts

Past measurements of ground borne vibration show that vibration levels can vary significantly at different distances and receptor locations. Recommended safe working distances for various items of vibration generating plant are given in Section 6.3 of Transport for NSW Construction Noise Strategy 2012. This information is shown below in Table 9.

Table 9 Recommended safe working distances for vibration generating plant

Plant Item	Rating/Description	Safe Working Distance	
		Cosmetic Damage (BS 7385)	Human Response (OH&E Assessing Vibration – A Technical Guideline)
Small Hydraulic Hammer	300 kg – 5 to 12T Excavator	2 m	7 m
Medium Hydraulic Hammer	900 kg – 12 to 18T Excavator	7 m	23 m
Vibratory Pile Driver	Sheet piles	2 m to 20 m	20 m
Pile Boring	≤800 mm	2 m (nominal)	N/A
Jackhammer	Hand held	1 m (nominal)	Avoid contact with structure

We recommend that compliance monitoring of ground borne vibration is carried out at the nearest residence, when vibratory machinery such as pile drivers, jackhammers and the like are used on site. Refer to Section 6.14 for the mitigation measures to be engaged to reduce the impact of adverse vibration.



6.0 CONSTRUCTION NOISE AND VIBRATION MITIGATION RECOMMENDATIONS

The predicted level of noise (Section 5.2) and vibration (Section 5.3) emission from the construction of the School show that noise levels will likely exceed the Noise Management Levels established in Section 4.3 of this report at times during construction.

The following work practices are recommended to be implemented where necessary and practicable, to reduce noise emission as far as reasonably practicable.

- Works to be staged to minimise noise impact.
- Restriction of noisy activities to within standard construction hours.
- Impact noise will be limited.
- Substitution of equipment will be considered to minimise noise (Section 6.3).
- Impulsive and tonal noise is restricted to the hours of 8.00 am to 5.00 pm Mon-Fri, and continuous blocks will not exceed three hours each with a minimum respite from those activities and works of not less than one hour between each block.
- Management plan to ensure construction vehicles arrive and depart during construction hours only.
- Reversing alarms to be of “quacker” broadband alarm style.

6.1 Engineering and Practical Noise Controls

Australian Standard AS2436:2010, Appendix C, Table C3 provides the relative effectiveness of various forms of noise control that may be applicable and implemented on various construction sites and projects. Table C3 is replicated in Table 10.

Table 10 Relative Effectiveness of Various Forms of Noise Control

Control by	Nominal Noise Reduction Possible, dB
Distance	Approximately 6 dB for each doubling of distance
Screening	Normally 5 dB to 10 dB maximum 15 dB
Enclosure	Normally 5 dB to 25 dB maximum 50 dB
Silencing	Normally 5 dB to 10 dB maximum 20 dB

Distance

Where applicable, we recommend locating mechanical plant near the north/west of the site (adjacent to the future retail precinct) such that it is as far as practically possible from the nearby existing residences.



Enclosure

Constructing acoustical enclosures around items of mobile plant such as generators is recommended where extended use for long periods of time is expected.

Screening

We recommend erecting temporary sound barrier screens along the boundaries of the construction site of Building F and G to remain throughout all construction phases, as far as reasonably practicable. All sound barriers should be designed by a structural engineer to resist wind loads.

Silencing

Consideration should be given to any mobile plant already acoustically treated when assessing tenders. All plant and machinery should be selected with consideration to low noise options where practicable and available.

Care should be taken to ensure that not more than one item of plant is operating simultaneously within close proximity of any given residence as far as reasonably practicable, to minimise cumulative noise impacts.

6.2 Stage 2 Construction (Where Stage 1 is Complete)

Where Stage 1 of the development is complete and occupied while Stage 2 is under construction, we recommend the following:

- plant be located to the east, such that the plant will be located furthest from Stage 1 buildings and demountables and building works of Stage 2 will act as an additional noise barrier.
- all windows and doors in Stage 1 be kept closed during the construction of Stage 2 buildings to reduce noise intrusion into the completed Stage 1 rooms.
- a temporary solid sound barrier or hoarding be erected around the Stage 2 building works to reduce any direct noise emission to the nearby Stage 1 buildings.
- where possible, noisy works (including any impulsive or tonal noise emissions) be carried out outside of school hours (typically 7 am to 9 am, 3 pm to 6 pm) to reduce interruption with school programs. This may include works for the ramp near Building G and the existing demountables.



6.3 Reducing Noise from Plant and Equipment

- Use alternatives to diesel and petrol engines and pneumatic units, such as hydraulic or electric controlled units where feasible and reasonable. Where there is no electricity supply, use an electrical generator located away from residences.
- Examine different types of machines that perform the same function and compare the noise level data to select the least noisy machine. For example, rubber wheeled tractors can be less noisy than steel tracked tractors.
- Noise labels are required by NSW legislation for pavement breakers, mobile compressors, chainsaws and mobile garbage compactors. These noise labels can be used to assist in selecting less noisy plant.
- Pneumatic equipment is traditionally a problem – select supersilenced compressors, silenced jackhammers and damped bits where possible.
- Place as much distance as possible between the plant or equipment and residences and other sensitive land uses.

6.4 Maintain Equipment

- Regularly inspect and maintain equipment to ensure it is in good working order. Also check the condition of mufflers.
- Equipment must not be operated until it is maintained or repaired, where maintenance or repair would address the annoying character of noise identified.
- For machines with enclosures, check that doors and door seals are in good working order and that the doors close properly against the seals.
- Return any hired equipment that is causing noise that is not typical for the equipment – the increased noise may indicate the need for repair.
- Ensure air lines on pneumatic equipment do not leak.

6.5 Noise Measurement Equipment

All acoustic instrumentation employed throughout the monitoring programme will comply with the requirements of AS IEC 61672.1:2004 *Electroacoustics – Sound level Meters-Specifications*. All sound level meters must have a current calibration certificate from a NATA accredited laboratory in accordance with NATA guidelines. Instrument calibration shall be checked before and after each measurement survey, with the variation in calibrated levels not exceeding ± 0.5 dB.



6.6 Attended Residential Noise Monitoring Procedure

If required, attended noise measurements will be conducted in accordance with the procedures outlined in Australian Standard AS1055 *Acoustics – Description and measurement of environmental noise* and in accordance with methods outlined in the NSW The NSW Industrial Noise Policy has since been superseded by the NSW Noise Policy for Industry. The following points should be followed when conducting noise monitoring:

- A field calibration should be conducted before and after measurements;
- The sound level meters must be set to A-weighting and Fast response;
- The sound level meters sample period should be set to 15 minutes;
- The following descriptors should be measured as a minimum: L_{A1} , L_{Aeq} and L_{A90} ; and
- Measurements should be conducted a minimum of 3 metres from the nearest façade and/or solid fence/wall. If it is not possible to do this corrections for façade reflection should be applied to the measurement results.

6.7 Noise Monitoring of Equipment

In addition to the residential noise monitoring procedures described above, the following equipment measurements will be undertaken:

- Noise emission levels of all critical items of mobile plant and equipment will be checked by the site environmental officer for compliance with noise limits appropriate to those items prior to the equipment going into regular service;
- For equipment and mobile plant used for construction works, L_{Aeq} measurements will be taken at an appropriate distance, normally 7 metres and converted to a Sound Power Level;
- An *Equipment Noise Certificate*, presenting relevant sound levels of the equipment tested, will be issued by the Construction Contractor's site environmental officer within the first week of the equipment commencing at the construction site.

The equipment sound power levels will be compared to the levels contained in Table 7. If noise checks on any equipment result in a prediction of non-compliance, quieter equipment will be substituted.

6.8 Periods of Respite

All activities associated with the construction shall take place within the standard hours outlined in Camden Council's Environmental Noise Policy, as shown below:

- 7:00 am to 6:00 pm, Monday to Friday inclusive; and
- 8:00 am to 4:00 pm Saturdays;
- At no time on Sundays or public holidays.



6.9 Work Practices

Workers and contractors shall be trained in work practices to minimise noise emission such as the following:

- Avoid dropping materials from a height.
- Avoid shouting and talking loudly outdoors.
- Avoid the use of radios outdoors that can be heard at the boundary of residences.
- Turn off equipment when not being used.
- Carry out work only within the approved hours of operation.
- Construction vehicles to arrive and depart during construction hours only.

6.10 Heavy Vehicles and Staff Vehicles

- Truck drivers shall be informed of designated vehicle routes, parking locations, acceptable delivery hours or other relevant practices (for example, minimising the use of engine brakes, and no extended periods of engine idling).
- Site vehicle entrances shall be located away from residences where practicable.
- The number of vehicle trips shall be configured to reduce the number of trips to and from the site – movements shall be organised to amalgamate loads rather than using a number of vehicles with smaller loads.
- Parking and queuing of staff vehicles and other construction vehicles shall be avoided as far as is practicable on streets outside of the site.
- There shall be no access the site via, or park within residential areas prior to 7 am on any occasion, in order to avoid sleep disturbance.
- Vehicles shall be fitted with broadband reversing alarms or alternative, non-tonal proximity warning systems.
- For the duration of construction, use of compression braking shall not be permitted on the site or nearby the site, such as on access roads within close proximity to residential premises.



6.11 Community Relations

- A Community Liaison Officer shall to be appointed by the contractor prior to the commencement of any works.
- The officer will approach all potentially affected residents prior to the commencement of any works as an initial introduction and provide their contact details.
- The officer will explain the project, duration of works, potentially noisy periods as well as determine any particularly sensitive receivers or sensitive time periods and schedule works accordingly, as far as reasonably practical.
- A community information telephone number may be established to provide access and information about the project.
- Community notifications and newsletters shall be prepared and distributed, at least 7 days prior to commencement of any works, to the community in areas that are potentially affected by the project. The contents of the notifications shall include information on the nature of the works, location of works being carried out, possible impacts to amenity, traffic flow or services, and the contact details as listed above.
- Community drop-in sessions shall be organised to engage with the community and to provide a conduit for direct consultation between those affected, or with an interest in the project, and the project team. To encourage the widest attendance and accessibility to the community, drop-in sessions shall be arranged outside of business hours such as weeknights or on Saturday.
- Information cards with the above contact details shall be prepared and distributed to the project management team and other staff on site. These cards shall be given to members of the community or other interested parties should they approach staff on site for information.

Engagement with the community has been undertaken (as required by conditions B17(d) and (e) of the consent to include the mitigation of noise from the high noise works. This includes consultation conducted for development of the Acoustic Assessment Report by Day Design for SSD-8378 approval in 2018 (Including a 'Noise Impact Assessment Issues' Workshop with SINSW and other project stakeholders), as well as the issuing of this CNVMSP updated for Stage 2 to the council and School for information and comment, as necessary. The strategies detailed in the Community Communication Strategy which is included in Appendix E6 of the CEMP outlines measures for consulting with the community (including identified sensitive receivers) regarding noise generating activity measures, commencement and includes a project engagement timeline for the engagement of the community regarding construction noise generated from the site (including high noise works) during construction works.

The Site Manager will be the appointed the Community Liaison Officer unless noted otherwise.



Once works commence, communication with the community shall be maintained by the Community Liaison Officer. Communication shall be maintained via the aforementioned methods.

Consultation and cooperation between the contractor and the neighbours and the removal of uncertainty and rumour can help to reduce adverse reaction to noise.

6.12 Managing a Noise Complaint

The Liaison Officer shall receive and manage noise complaints and implement a Construction Complaints Management System.

All complaints shall be treated promptly and with courtesy.

In the event that a noise complaint is received, noise monitoring will be carried out at the affected receptor location and appropriate measures be taken to reduce the noise emission as far as reasonably practicable.

Where it is not practicable to stop the noise, or reduce the noise, a full explanation of the event taking place, the reason for the noise and times when it will stop shall be given to the complainant.

The following guidelines are recommended in Section 6 of the *Interim Construction Noise Guideline* to manage a noise complaint:

- Provide a readily accessible contact point, for example, through a 24 hour information and complaints line.
- Give complaints a fair hearing.
- Have a documented complaints process, including an escalation procedure so that if a complainant is not satisfied there is a clear path to follow.
- Call back as soon as possible to keep people informed of action to be taken to address noise problems. Call back at night-time only if requested by the complainant to avoid further disturbance.
- Provide a quick response to complaints, with complaint handling staff having both a good knowledge of the project and ready access to information.
- Implement all feasible and reasonable measures to address the source of complaint, which may include standing equipment down.
- Keep a register of any complaints, including details of the complaint such as date, time, person receiving complaint, complainant's contact number, person referred to, description of the complaint, work area (for larger projects), time of verbal response and timeframe for written response where appropriate.



6.13 Noise Monitoring

In the event of a noise complaint, monitoring shall be carried out at the complainant's residence to determine which activities are generating excessive noise. If practicable, noise mitigation measures, such as those outlined above, shall be implemented and further monitoring shall then be employed to determine the efficacy of noise mitigation.

6.14 Vibration Monitoring

If high impact activities, such as rock hammering or piling are to be conducted at any time during construction, vibration measurements may be carried out at a residence within each of the nearest receptor locations at the commencement of high impact activities to determine the maximum levels of vibration during these peak vibration generating events.

In the event of an exceedance of the Peak Particle Velocity (PPV) vibration criteria as defined in Table 6, unattended vibration monitor or monitors shall be installed at each residential location where an exceedance was measured.

Unattended vibration monitors shall have the capability to trigger an alert to make the site manager and/or plant operator aware immediately when the vibration limit is exceeded. The vibration monitor should be set to trigger the alert when the overall PPV exceeds the criteria within each frequency range, as stipulated in Table 5, at the nearest residential building.

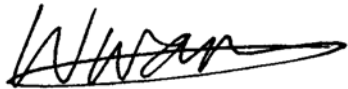
In the event that levels of ground-borne vibration exceed the recommended acceptable levels for cosmetic damage vibration causing works should cease immediately and alternative methods shall be considered.



7.0 ENVIRONMENTAL NOISE IMPACT STATEMENT

Day Design Pty Ltd was engaged by Patterson Building Group to provide a Construction and Vibration Management Sub-Plan for the Stage 2 works to be carried out at Gledswood Hills Public School, located at The Hermitage Way, Gledswood Hills, NSW.

Provided the recommendations in Section 6 of this report are implemented, the level of noise and vibration from the construction works for Stage 2 at Gledswood Hills Public School will be minimised as far as reasonably practical in accordance with the EPA's *Interim Construction Noise Guideline 2009* and *Assessing Vibration: a technical guideline 2006*, as detailed in Section 4 of this report to meet Condition B.17 of SSD 8378 dated 21 September, 2018.



William Wang, BE (Mechatronics), MIEAust, MAAS

Senior Acoustical Engineer

for and on behalf of Day Design Pty Ltd

AAAC MEMBERSHIP

Day Design Pty Ltd is a member company of the Association of Australasian Acoustical Consultants, and the work herein reported has been performed in accordance with the terms of membership.

Attachments:

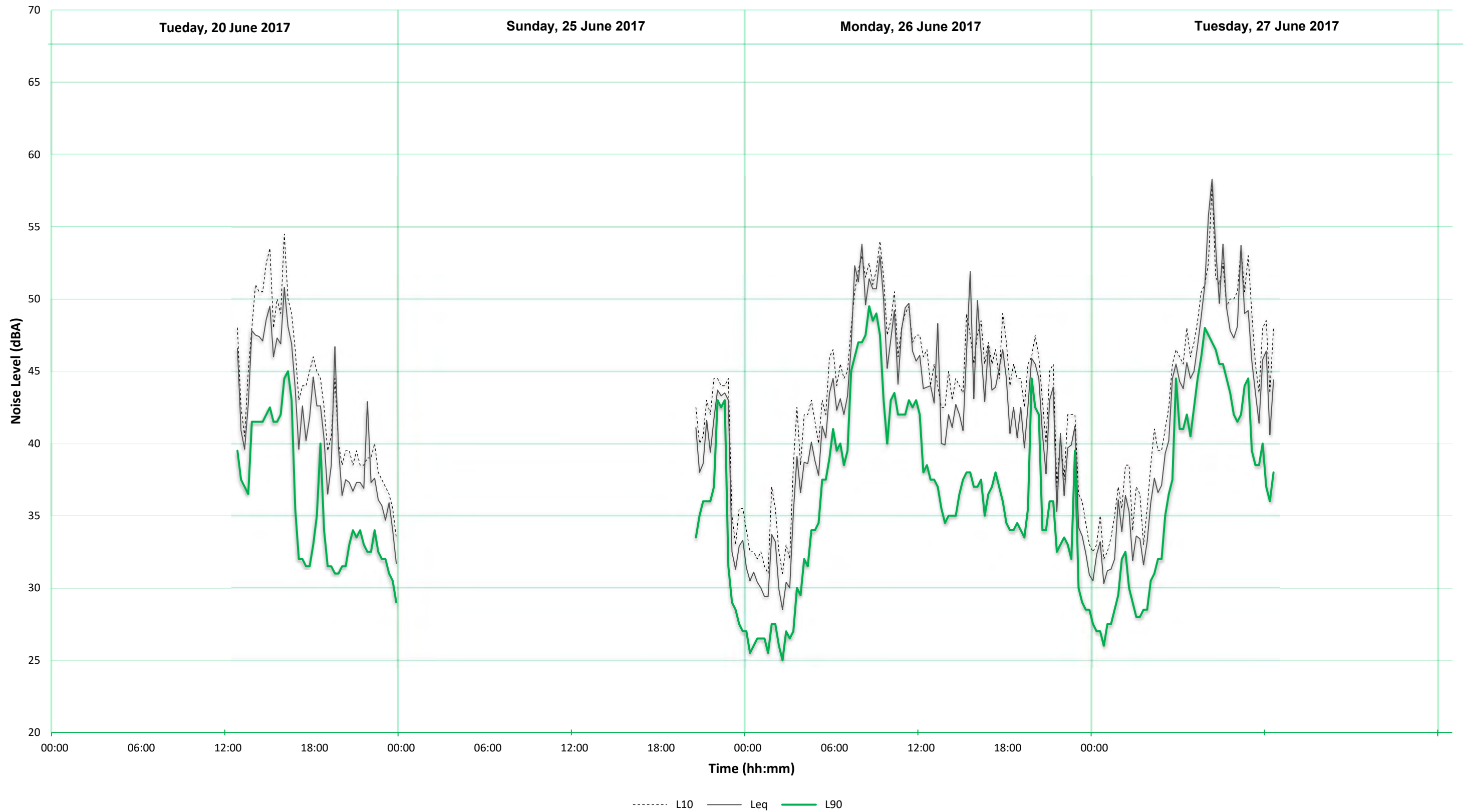
- Appendix A – Ambient Noise Survey
- Appendix B – Architectural Drawings
- Appendix C – Site Management Plan
- AC108-1 to 4 – Glossary of Acoustical Terms



AMBIENT NOISE SURVEY

6130-1
Appendix A

Located at 72 The Hermitage Way, Gledswood Hills, NSW



GLEDSWOOD HILLS PUBLIC SCHOOL

DRAWING LIST

ARCHITECTURAL

DRAWING NUMBER

DRAWING NAME

00_SITE	
3302 - ARC - CD - DWG - 00_000	COVER SHEET AND DRAWING LIST
3302 - ARC - CD - DWG - 00_001	LEGEND
3302 - ARC - CD - DWG - 00_002	OVERALL SITE ROOF PLAN
3302 - ARC - CD - DWG - 00_003	OVERALL SITE PLAN - AT GROUND
3302 - ARC - CD - DWG - 00_100	BLOCK F AND G SITE AREA DEMOLITION PLAN
3302 - ARC - CD - DWG - 00_101	BLOCK F AND G SITE AREA PROPOSED WORKS PLAN
3302 - ARC - CD - DWG - 00_200	EXTERNAL WORKS - SHEET 01
3302 - ARC - CD - DWG - 00_201	EXTERNAL WORKS - SHEET 02
01_BLOCK F	
3302 - ARC - CD - DWG - 01_011	BLOCK F - PLANS - GROUND & FIRST FLOOR
3302 - ARC - CD - DWG - 01_012	BLOCK F - PLANS - SECOND FLOOR & ROOF
3302 - ARC - CD - DWG - 01_031	BLOCK F - WALL SETOUT & TYPE PLAN - GROUND & FIRST FLOOR
3302 - ARC - CD - DWG - 01_032	BLOCK F - WALL SETOUT & TYPE PLAN - SECOND FLOOR
3302 - ARC - CD - DWG - 01_101	BLOCK F - ELEVATIONS
3302 - ARC - CD - DWG - 01_201	BLOCK F - SECTIONS - SHEET 01
3302 - ARC - CD - DWG - 01_301	BLOCK F - REFLECTED CEILING PLAN - GROUND & FIRST FLOOR
3302 - ARC - CD - DWG - 01_302	BLOCK F - REFLECTED CEILING PLAN - SECOND FLOOR
3302 - ARC - CD - DWG - 01_401	BLOCK F - FINISHES, PAINTING, ACOUSTIC & FRL PLAN - GROUND, FIRST & SECOND FLOOR
3302 - ARC - CD - DWG - 01_501	BLOCK F - FURNITURE PLAN - GROUND, FIRST & SECOND FLOOR
02_BLOCK G	
3302 - ARC - CD - DWG - 02_011	BLOCK G - PLANS - LOWER GROUND & GROUND FLOOR
3302 - ARC - CD - DWG - 02_012	BLOCK G - PLANS - FIRST FLOOR & ROOF
3302 - ARC - CD - DWG - 02_031	BLOCK G - WALL SETOUT & TYPE PLAN - LOWER GROUND & GROUND FLOOR
3302 - ARC - CD - DWG - 02_032	BLOCK G - WALL SETOUT & TYPE PLAN - FIRST FLOOR
3302 - ARC - CD - DWG - 02_101	BLOCK G - ELEVATIONS
3302 - ARC - CD - DWG - 02_201	BLOCK G - ELEVATION & SECTIONS - SHEET 01
3302 - ARC - CD - DWG - 02_301	BLOCK G - REFLECTED CEILING PLAN - LOWER GROUND & GROUND FLOOR
3302 - ARC - CD - DWG - 02_302	BLOCK G - REFLECTED CEILING PLAN - FIRST FLOOR
3302 - ARC - CD - DWG - 02_401	BLOCK G - FINISHES, PAINTING, ACOUSTIC & FRL PLAN - LOWER GROUND, GROUND & FIRST FLOOR
3302 - ARC - CD - DWG - 02_501	BLOCK G - FURNITURE PLAN - LOWER GROUND, GROUND & FIRST FLOOR
DETAILED ROOM LAYOUTS	
3302 - ARC - CD - DWG - 80_001	DETAILED ROOM LAYOUTS - BLOCK G - WET AREAS
TYPICAL	
3302 - ARC - CD - DWG - 90_201	JOINERY DETAILS - SHEET 01
3302 - ARC - CD - DWG - 80_211	JOINERY DETAILS - TYPICAL
3302 - ARC - CD - DWG - 80_401	STAIR DETAILS - HANDRAIL & BALUSTRADE DETAILS
3302 - ARC - CD - DWG - 90_721	WALL TYPE DETAILS - SHEET 1
3302 - ARC - CD - DWG - 90_722	WALL TYPE DETAILS - SHEET 2
3302 - ARC - CD - DWG - 91_013	CONSTRUCTION DETAILS - TYPICAL - SHEET 3



ARTISTS IMPRESSIONS



LOCATION PLAN (NTS)

1/09/2022 11:12:33 AM

REV	BY	DATE	DESCRIPTION
A	MW	06.09.21	ISSUED FOR APPROVAL
B	MW	25.11.21	ISSUED FOR TENDER
MW	11.08.22	AMEND NUMBER OF JOINERY SHEETS	
C	MW	01.09.22	RE-ISSUED FOR TENDER



STRUCTURAL, CIVIL & HYDRAULICS Woolacotts Consulting Engineers T: 02 9203 1500	BCA Group DLA T: 02 9355 3160	PEDAVOLI ARCHITECTS PTY LTD LEVEL 2, 458-468 WATTLE STREET ULTIMO NSW 2007 AUSTRALIA TEL: +61 2 9291 0000 WEB: WWW.PDAVOLI.COM.AU
ELECTRICAL, SECURITY & COMMS JHA Consulting Engineers T: 02 9437 1000	LANDSCAPE ARCHITECT Lorna Harrison Pty Ltd T: 02 9555 1147	ACCESSIBILITY JAC Building Consultants T: 03 9108 6198
MECHANICAL, VERT. TRANSPORT & ESS JHA Consulting Engineers T: 02 9437 1000	PLANNER DPP Planning T: 02 9980 6553	NOMINATED ARCHITECT: VINCE PEDAVOLI NSW REG. No. 5045
TRAFFIC Woolacotts Consulting Engineers T: 02 9203 1500		



GLEDSWOOD HILLS PUBLIC SCHOOL	
HERMITAGE WAY GLEDSWOOD HILLS NSW	
DRAWING NAME	
COVER SHEET AND DRAWING LIST	

SCALE NTS				
01 SEPTEMBER 2022				
DRAWING NUMBER	PROJECT	DISCIPLINE	PHASE	TYPE
3302 - ARC - CD - DWG - 00_000				
REVISION	C			

GLEDSDOOD HILLS PUBLIC SCHOOL

LEGEND			
AB	Above Bench	MC	Metal Capping
ADJ	Adjustable	MF	Metal Flashing
AFFL	Above Finished Floor Level	MIR	Mirror
AL	Aluminium	MJ	Movement Joint
AP	Access Panel	MR	Metal Roofing
BAL	Balustrade	MWC	Metal Wall Cladding
BIN	Waste Bin	NOS	Stair Nosing
BL	Bollard	OF	Gutter Overflow
BLK	Blockwork	P	Paint Colour
BR	Bike Rack	PB	Plasterboard
BSN	Hand Basin	PH	Pull Handles
BWK	Brickwork	PIN	Pinboard
CC	Concrete Column	PLY	Plywood
CD	Dust Sealed Concrete	PP	Perforated Plasterboard
CF	Ceiling Fan	PMS	Perforated Metal Screen
CFC	Compressed Fibre Cement	POC	Polished Concrete
CH	Coat Hook	PWC	Powdercoat Colour
CL	Ceiling Level	RC	Roof Cowl
CMT	Cementitious topping	RBL	Roller Blind
CO	Concrete	RL	Reduced Level
COS	Confirm On Site	RV	Roof Ventilator
CP	Carpet	RW	Retaining Wall
CS	Cleaners Sink	SB	Seat Bench
CT	Ceramic Tile	SC	Steel Column
DATA	Data Outlet	SCS	Steel Column Setdown
DF	Drinking Fountain	SD	Soap Dispenser
DG	Door Grille	SG	Sliding Glazing
DM	Door Mat	SHF	Shelf
DP	Downpipe	SK	Skirting
DPS	Downpipe W/ Spreader	SL	Soffit Lining
DPT	Dispenser Paper Towel	SM	Security Mesh
DT	Drinking Trough	SNK	Sink
DTP	Dispenser Toilet Paper	SPS	Sanitary Partition System
DUR	Durress Button	SPH	Soap Holder
EX	Existing	SPL	Splashback
FC	Fibre Cement	S/S	Stainless Steel
FE	Fire Extinguisher	S/S/S	Satin Stainless Steel
FENCE	Fence	SSB	Stainless Steel Bench
FG	Fixed Glazing	STA01	Acoustic Rated Studwork Wall Type Code
FH	Fire Hydrant	STD	Studwork Type
FHR	Fire Hose Reel	STW	Studwork Wall Type Code
FIP	Fire Indicator Panel	SUN	Sunshade
FL	Floor Level	SWG	Security Window Grille
FLY	Fly Screen	TAC	Tactile Indicator
FP	Fixed Panel	TOW	Top Of Wall
FRC	Fire Rated Ceiling	TR	Metal Trim
FS	Folding Shower Seat	TRIM	Trims
FW	Floor Waste	TWR	Towel Rail
G	Gutter	TYP	Typically
GJ	Gutter Joint	UB	Under Bench
GL	Glazing	UC	Undercut
GPO	General Power Outlet - Double	UPS	Uninterrupted Power Supply GPO - Double
GPOS	General Power Outlet - Single	UR	Urinal
GR	Grab Rail	UIS	Underside
GSF	Glass Safety Film	VOS	Verify On Site
HD	Hand Dryer	VP	Verit Pipe
HDG	Hot Dip Galvanised	WB	Whiteboard
HR	Hand Rail	WC	Water Closet
HT	Hose Tap	WG	Window Grille
HWU	Hot Water Unit	WPM	Waterproof Membrane
INST	Insulation - Thermal	WT	Wash Trough
INSA	Insulation - Acoustic		
INT	Intercom		
LAM	Laminated		
LCP	Lighting Control Panel		
LF	Light Fitting		
LS	Light Switch		
LV	Louvers		

WINDOW NUMBER

BLDG No.
LEVEL
WINDOW No.
TYPE

WF.0.001-a01

DOOR NUMBER

BLDG No.
LEVEL
DOOR No.

DF.0.001

RCP TAGS

CEILING HEIGHT
CEILING FINISH
FIRE RATING
ACOUSTIC RATING

CL-3000
PB1
A45 / 120/120/120

A35 - Rw35
A40 - Rw40
A45 - Rw45
A50 - Rw50

WALL TYPE TAG

WALL TYPE
FIRE RATING
ACOUSTIC RATING - ACHIEVED VIA THE CONSTRUCTION OF NOMINATED WALL TYPE. NO ADDITIONAL TREATMENT TO NOMINATED WALL TYPE IS REQUIRED, REFER TO ACOUSTIC ENGINEER FOR STANDARD SERVICES PENETRATION DETAILS.

PCP01 | 60/60/60 | A45 | 3200

REMOVE INSULATION FROM WALL TYPE IN NOTED LOCATIONS

WALL HEIGHT. HEIGHT IS ABOVE FL
U/S - WALL SEALED TO UNDERSIDE OF ROOF SHEETING OR STRUCTURE ABOVE.
ABOVE - NOTES WALL TYPE ABOVE WINDOW, DOOR OR OTHER ITEMS.
BELOW - NOTES WALL TYPE BELOW WINDOW, DOOR OR OTHER ITEMS.

WALL ORIENTATION SYMBOL, REFER TO WALL TYPE DETAILS

FINISHES TAG

FLOOR FINISH
SKIRTING TYPE
SECONDARY FLOOR FINISH WITHIN A SPACE

CT1 / SK2
RF1 / SK1

APPLIED WALL FINISH. NOTED ON FINISHES PLANS. REFER TO DETAILED ROOM LAYOUT DRAWINGS FOR FULL EXTENT OF APPLIED WALL FINISHES

CT2

APPLIED WALL FINISH NOTED ON DETAILED ROOM LAYOUT DRAWINGS

JOINERY NUMBER

BLD No.
LEVEL
JOINERY No.

J01.0.001

GATE NUMBER

BLD No. OR SITE
LEVEL
GATE No.

G01.0.001

FENCE TYPE TAG

FENCE TYPE

A

DOOR LEAF PAINT COLOURS

P03, P06, P07 etc. INDICATES PAINT COLOUR TO BOTH SIDES OF LEAF
REFER TO SCHEDULE OF MATERIALS COLOURS AND FINISHES FOR PAINT COLOUR

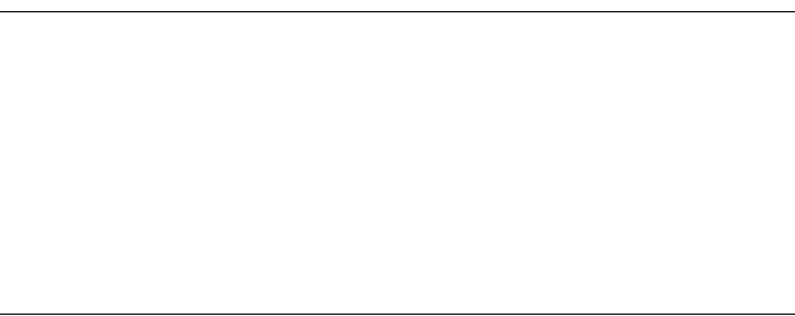
GENERAL NOTES:

- THIS SET OF DRAWINGS CONTAINS DRAWINGS UTILISING COLOUR AND IS REQUIRED TO BE PRINTED IN FULL COLOUR
- TYPICAL DOOR FIXING DETAILS FOUND ON DRAWINGS 91_011 - 91_013
- TYPICAL WINDOW FIXING DETAILS FOUND ON DRAWINGS 91_011 - 91_013
- GATE ELEVATIONS FOUND ON DRAWING 90_001
- FOR RCP SERVICES LEGEND, REFER TO SERVICES CONSULTANTS DRAWING

1/09/2022 11:12:43 AM

REV	BY	DATE	DESCRIPTION
A	MW	06.09.21	ISSUED FOR APPROVAL
B	MW	25.11.21	ISSUED FOR TENDER
MW		11.08.22	AMEND NOTES
C	MW	01.09.22	RE-ISSUED FOR TENDER

STRUCTURAL, CIVIL & HYDRAULICS Woolacotts Consulting Engineers T: 02 9203 1500	BCA Group DLA T: 02 8355 3160	PEDAVOLI ARCHITECTS PTY LTD LEVEL 2, 458-468 WATTLE STREET ULTIMO NSW 2007 AUSTRALIA TEL: +61 2 9291 0000 WEB: www.pv-arch.com.au
ELECTRICAL, SECURITY & COMMS JHA Consulting Engineers T: 02 9437 1000	LANDSCAPE ARCHITECT Lorna Harrison Pty Ltd T: 02 9555 1147	ACCESSIBILITY JAZ Building Consultants T: 03 9108 6198
MECHANICAL, VERT. TRANSPORT & ESC JHA Consulting Engineers T: 02 9437 1000	PLANNER DFP Planning T: 02 9203 1500	NOMINATED ARCHITECT: VINCE PEDAVOLI NSW REG. No. 5045



GLLEDSDOOD HILLS PUBLIC SCHOOL

HERMITAGE WAY GLEDSDOOD HILLS NSW

PEDAVOLI ARCHITECTS

SCALE NTS

01 SEPTEMBER 2022

DRAWING NUMBER	REVISION
PROJECT DISCIPLINE PHASE TYPE SERIES NUMBER	C
3302 - ARC - CD - DWG - 00_001	

LEGEND



OPEN PLAY SPACES	
OPEN PLAY SPACE - WITH DEMOUNTABLES	10,921 m ²
OPEN PLAY SPACE - WITHOUT DEMOUNTABLES	13,209 m ²

1/09/2022 11:13:00 AM

REV	BY	DATE	DESCRIPTION
A	MW	06.09.21	ISSUED FOR APPROVAL
B	MW	25.11.21	ISSUED FOR TENDER
MW	11.08.22	ADD PLAY SPACE AREAS	
C	MW	01.09.22	RE-ISSUED FOR TENDER

NOTES:
 -REFER TO LANDSCAPE DRAWINGS FOR SCOPE/EXTENT OF LANDSCAPE WORKS
 -REFER TO CIVIL DRAWINGS FOR SCOPE/EXTENT OF CIVIL WORKS

LEGEND:
 NEW LANDSCAPE
 EXISTING LANDSCAPE

STRUCTURAL, CIVIL & HYDRAULICS
 Woolacotts Consulting Engineers
 T: 02 8203 1500

ELECTRICAL, SECURITY & COMMS
 JHA Consulting Engineers
 T: 02 9437 1000

MECHANICAL, VERT. TRANSPORT & E&S
 JHA Consulting Engineers
 T: 02 9437 1000

TRAFFIC
 Woolacotts Consulting Engineers
 T: 02 8203 1500



BCA Group DLA
 T: 02 8355 3160

LANDSCAPE ARCHITECT
 Lorna Harrison Pty Ltd
 T: 02 9555 1147

ACCESSIBILITY
 JAC Building Consultants
 T: 03 9108 6198

PLANNER
 DFP Planning
 T: 02 9980 6533



GLEDSDWOOD HILLS PUBLIC SCHOOL
 HERMITAGE WAY GLEDSDWOOD HILLS NSW

OVERALL SITE ROOF PLAN



PROJECT NORTH	0 5000 10000 15000 20000 25000 50000	SCALE: As indicated @ A1
01 SEPTEMBER 2022		
DRAWING NUMBER	PROJECT DISCIPLINE PHASE TYPE SERIES NUMBER	REVISION
3302 - ARC - CD - DWG - 00_002		C



1/09/2022 11:13:21 AM

REV	BY	DATE	DESCRIPTION
A	MW	06.09.21	ISSUED FOR APPROVAL
B	MW	25.11.21	ISSUED FOR TENDER
C	MW	11.08.22	AMEND CLASSROOM LAYOUTS
	MW	01.09.22	RE-ISSUED FOR TENDER

NOTES:
 -REFER TO LANDSCAPE DRAWINGS FOR SCOPE/EXTENT OF LANDSCAPE WORKS
 -REFER TO CIVIL DRAWINGS FOR SCOPE/EXTENT OF CIVIL WORKS

LEGEND:
 NEW LANDSCAPE
 EXISTING LANDSCAPE

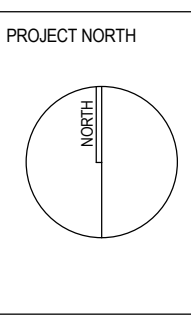
STRUCTURAL, CIVIL & HYDRAULICS Woolacotts Consulting Engineers T: 02 9203 1500	BCA Group DLA T: 02 9555 3160	PEDAVOLI ARCHITECTS PTY LTD LEVEL 2, 458-468 WATTLE STREET ULTIMO NSW 2007 AUSTRALIA TEL: +61 2 9291 0000 WEB: www.sp-1.com.au
ELECTRICAL, SECURITY & COMMS JHA Consulting Engineers T: 02 9437 1000	LANDSCAPE ARCHITECT Lorna Harrison Pty Ltd T: 02 9555 1147	ACCESSIBILITY JAC Building Consultants T: 03 9108 6198
MECHANICAL, VERT. TRANSPORT & E&S JHA Consulting Engineers T: 02 9437 1000	PLANNER DPP Planning Woolacotts Consulting Engineers T: 02 9203 1500	NOMINATED ARCHITECT: VINCE PEDAVOLI NSW REG. No. 5045
TRAFFIC Woolacotts Consulting Engineers T: 02 9203 1500		



STRUCTURAL, CIVIL & HYDRAULICS Woolacotts Consulting Engineers T: 02 9203 1500	BCA Group DLA T: 02 9555 3160	PEDAVOLI ARCHITECTS PTY LTD LEVEL 2, 458-468 WATTLE STREET ULTIMO NSW 2007 AUSTRALIA TEL: +61 2 9291 0000 WEB: www.sp-1.com.au
ELECTRICAL, SECURITY & COMMS JHA Consulting Engineers T: 02 9437 1000	LANDSCAPE ARCHITECT Lorna Harrison Pty Ltd T: 02 9555 1147	ACCESSIBILITY JAC Building Consultants T: 03 9108 6198
MECHANICAL, VERT. TRANSPORT & E&S JHA Consulting Engineers T: 02 9437 1000	PLANNER DPP Planning Woolacotts Consulting Engineers T: 02 9203 1500	NOMINATED ARCHITECT: VINCE PEDAVOLI NSW REG. No. 5045
TRAFFIC Woolacotts Consulting Engineers T: 02 9203 1500		

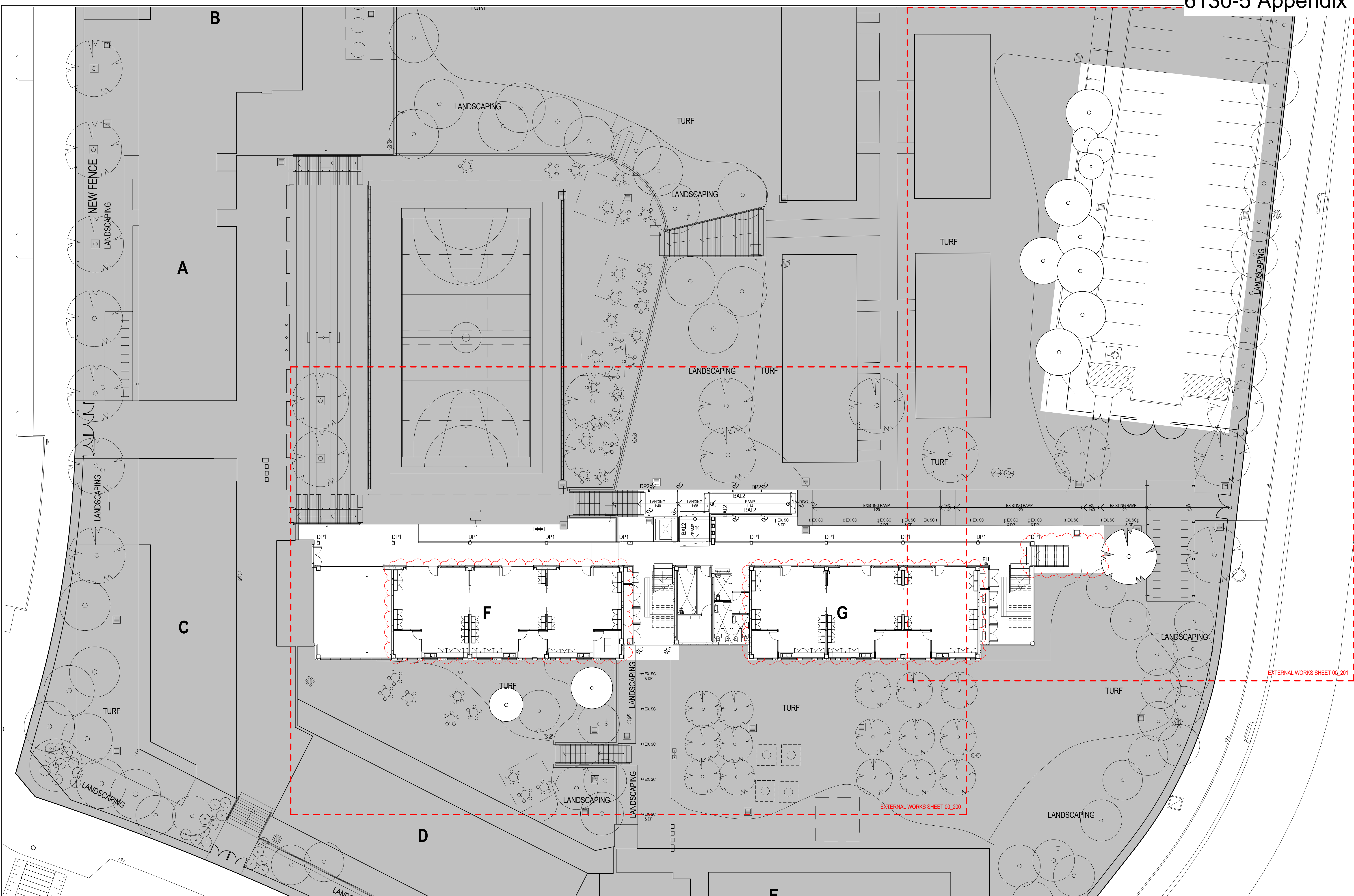


GLEDSDWOOD HILLS PUBLIC SCHOOL
 HERMITAGE WAY GLEDSDWOOD HILLS NSW
 OVERALL SITE PLAN - AT GROUND



SCALE 1:500 @ A1				
01 SEPTEMBER 2022				
DRAWING NUMBER	PROJECT	DISCIPLINE	PHASE	TYPE
3302 - ARC - CD - DWG - 00_003				
SERIES NUMBER	REVISION			
	C			

1/09/2022 11:13:46 AM



AMENDMENTS		
REV	BY	DATE
A	MW	06.09.21
B	MW	25.11.21
C	MW	01.09.22

NOTES:
 -REFER TO LANDSCAPE DRAWINGS FOR SCOPE/EXTENT OF LANDSCAPE WORKS
 -REFER TO CIVIL DRAWINGS FOR SCOPE/EXTENT OF CIVIL WORKS

LEGEND:
 NEW LANDSCAPE
 EXISTING LANDSCAPE

STRUCTURAL, CIVIL & HYDRAULICS
 Woolacotts Consulting Engineers
 T: 02 8203 1500

ELECTRICAL, SECURITY & COMMS
 JHA Consulting Engineers
 T: 02 9437 1000

MECHANICAL, VERT. TRANSPORT & ESS
 JHA Consulting Engineers
 T: 02 9437 1000



BCA
 Group DLA
 T: 02 8355 3160

LANDSCAPE ARCHITECT
 Lorna Harrison Pty Ltd
 T: 02 9555 1147

ACCESSIBILITY
 JAC Building Consultants
 T: 03 9108 6198

PLANNER
 DFP Planning
 T: 02 9880 6933

PEDAVOLI ARCHITECTS PTY LTD
 LEVEL 2,
 458-468 WATTLIE STREET
 ULTIMO NSW 2007 AUSTRALIA
 TEL: +61 2 9291 0000
 WEB: WWW.PDA.COM.AU
 Nominated Architect:
 VINCE PEDAVOLI
 NSW REG. No. 5045



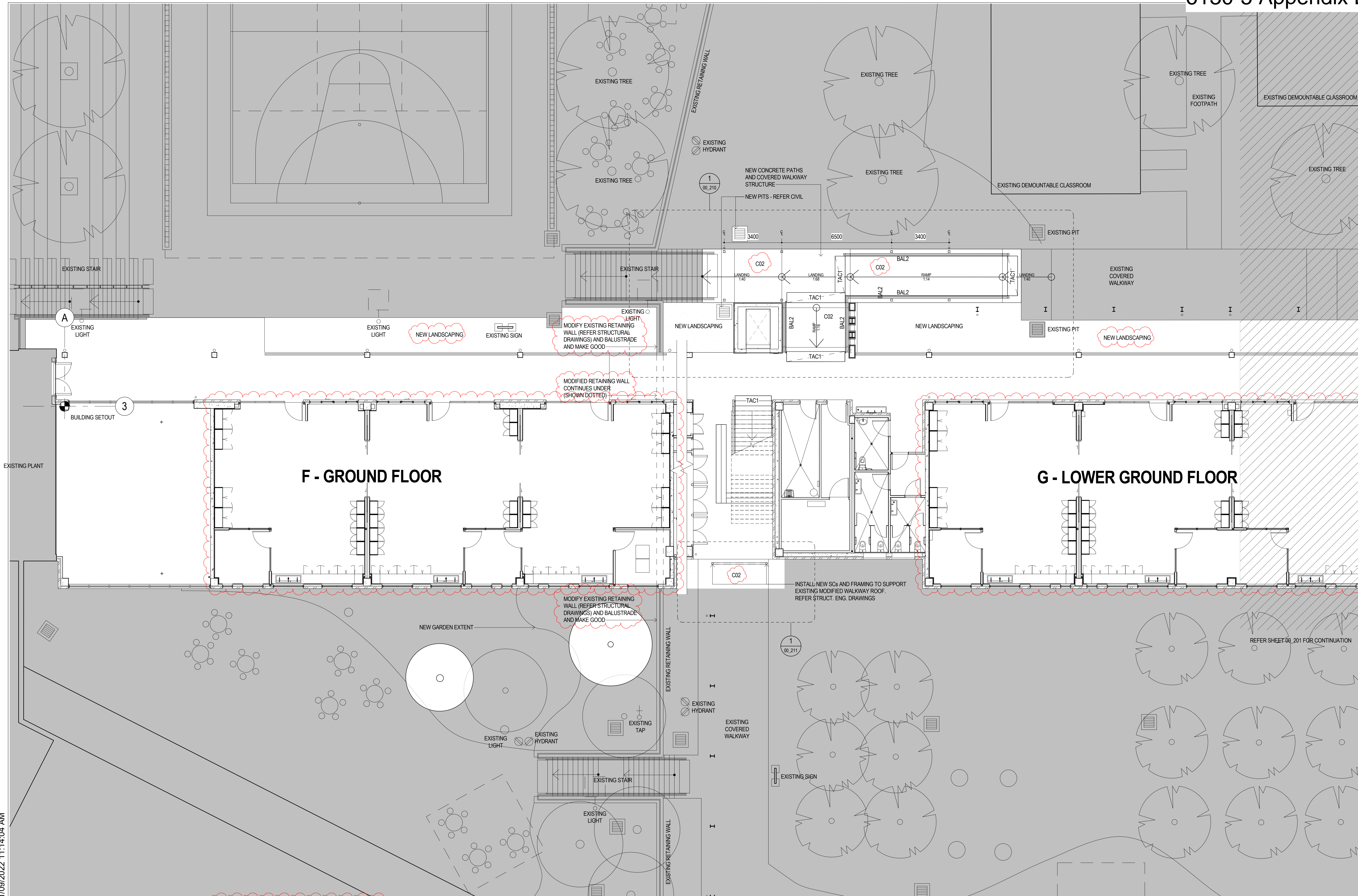
GLEDSDWOOD HILLS PUBLIC SCHOOL
 HERMITAGE WAY GLEDSDWOOD HILLS NSW
 DRAWING NAME
**BLOCK F AND G SITE AREA PROPOSED
 WORKS PLAN**

PROJECT NORTH

SCALE: As indicated @ A1

01 SEPTEMBER 2022

DRAWING NUMBER	PROJECT	DISCIPLINE	PHASE	TYPE	SERIES NUMBER	REVISION
3302 - ARC - CD - DWG - 00_101						C



1/09/2022 11:14:04 AM

REV	BY	DATE	DESCRIPTION
A	MW	06.09.21	ISSUED FOR APPROVAL
B	MW	25.11.21	ISSUED FOR TENDER
MW		11.08.22	AMEND CLASSROOM LAYOUTS
C	MW	01.09.22	RE-ISSUED FOR TENDER

NOTES:
 -REFER TO LANDSCAPE DRAWINGS FOR SCOPE/EXTENT OF LANDSCAPE WORKS
 -REFER TO CIVIL DRAWINGS FOR SCOPE/EXTENT OF CIVIL WORKS

LEGEND:
 NEW LANDSCAPE
 EXISTING LANDSCAPE

STRUCTURAL, CIVIL & HYDRAULICS
 Woolacotts Consulting Engineers
 T: 02 8203 1500

ELECTRICAL, SECURITY & COMMS
 JHA Consulting Engineers
 T: 02 9437 1000

MECHANICAL, VERT. TRANSPORT & E&S
 JHA Consulting Engineers
 T: 02 9437 1000

TRAFFIC
 Woolacotts Consulting Engineers
 T: 02 8203 1500

BCA Group DLA
 T: 02 8355 3160

LANDSCAPE ARCHITECT
 Lorna Harrison Pty Ltd
 T: 02 9555 1147

ACCESSIBILITY
 JAC Building Consultants
 T: 03 9108 6198

PLANNER
 DFP Planning
 T: 02 9880 6553



PEDAVOLI ARCHITECTS PTY LTD
 LEVEL 2,
 458-468 WATTLE STREET
 ULTIMO NSW 2007 AUSTRALIA
 TEL: +61 2 9291 0000
 WEB: WWW.PEPA.COM.AU

NOMINATED ARCHITECT:
 VINCE PEDAVOLI
 NSW REG. No. 5045



GLEDSDWOOD HILLS PUBLIC SCHOOL
 HERMITAGE WAY GLEDSDWOOD HILLS NSW

EXTERNAL WORKS - SHEET 01

PROJECT NORTH

0 1000 2000 3000 4000 5000 10000
 SCALE: As indicated @ A1

01 SEPTEMBER 2022

DRAWING NUMBER	PROJECT	DISCIPLINE	PHASE	TYPE	SERIES NUMBER	REVISION
3302 - ARC - CD - DWG - 00_200						C

REFER SHEET 00_201 FOR CONTINUATION

REFER SHEET 00_200 FOR CONTINUATION



1/09/2022 11:14:16 AM

REV	BY	DATE	DESCRIPTION
A	MW	06.09.21	ISSUED FOR APPROVAL
B	MW	25.11.21	ISSUED FOR TENDER
MW		11.08.22	AMEND CLASSROOM LAYOUTS
C	MW	01.09.22	RE-ISSUED FOR TENDER

NOTES:
 -REFER TO LANDSCAPE DRAWINGS FOR SCOPE/EXTENT OF LANDSCAPE WORKS
 -REFER TO CIVIL DRAWINGS FOR SCOPE/EXTENT OF CIVIL WORKS

LEGEND:
 NEW LANDSCAPE
 EXISTING LANDSCAPE

STRUCTURAL, CIVIL & HYDRAULICS
 Woolacotts Consulting Engineers
 T: 02 9203 1500

ELECTRICAL, SECURITY & COMMS
 JHA Consulting Engineers
 T: 02 9437 1000

MECHANICAL, VERT. TRANSPORT & ESD
 JHA Consulting Engineers
 T: 02 9437 1000

TRAFFIC
 Woolacotts Consulting Engineers
 T: 02 9203 1500

BCA Group DLA
 T: 02 8355 3160

LANDSCAPE ARCHITECT
 Lorna Harrison Pty Ltd
 T: 02 9555 1147

ACCESSIBILITY
 JAC Building Consultants
 T: 03 9108 6198

PLANNER
 DFP Planning
 T: 02 9980 6933



PEDAVOLI ARCHITECTS PTY LTD
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 458-468 WATTLE STREET
 ULTIMO NSW 2007 AUSTRALIA
 TEL: +61 2 9291 0000
 WEB: WWW.PDA.COM.AU

NOMINATED ARCHITECT:
 VINCE PEDAVOLI
 NSW REG. No. 5045



GLEDSDWOOD HILLS PUBLIC SCHOOL
 HERMITAGE WAY GLEDSDWOOD HILLS NSW

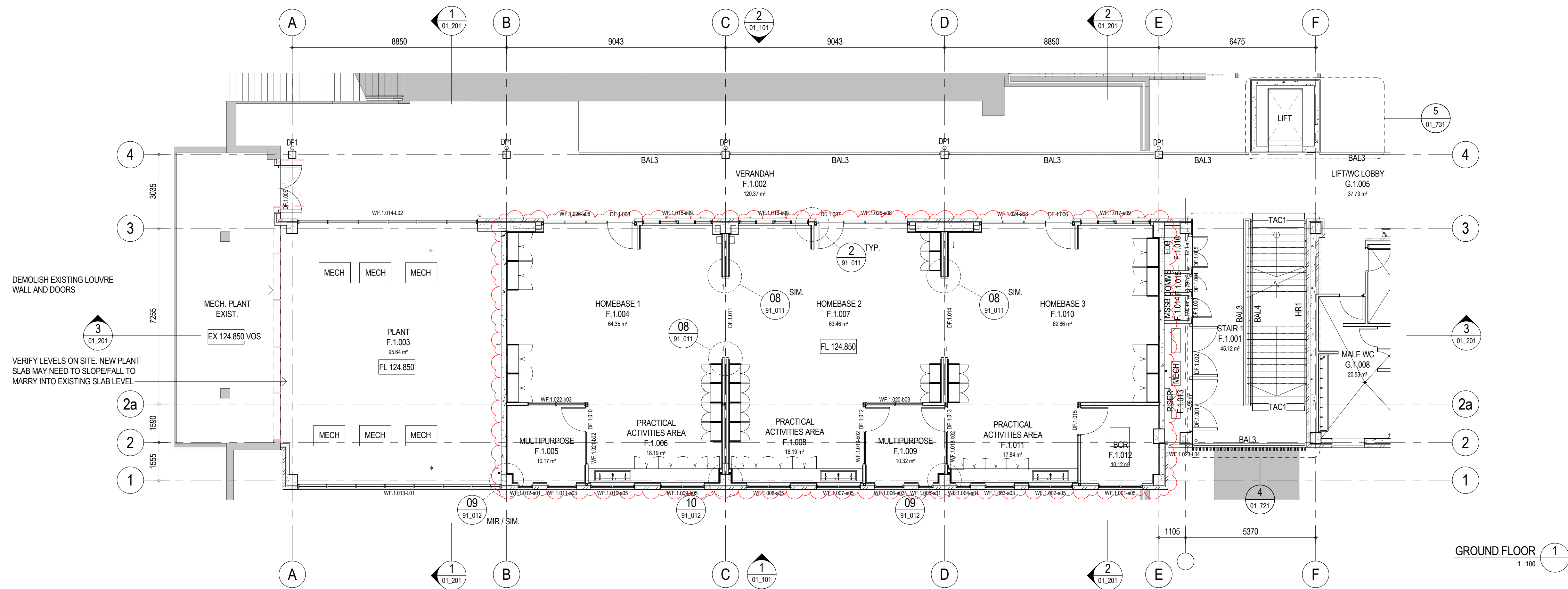
DRAWING NAME
EXTERNAL WORKS - SHEET 02

PROJECT NORTH

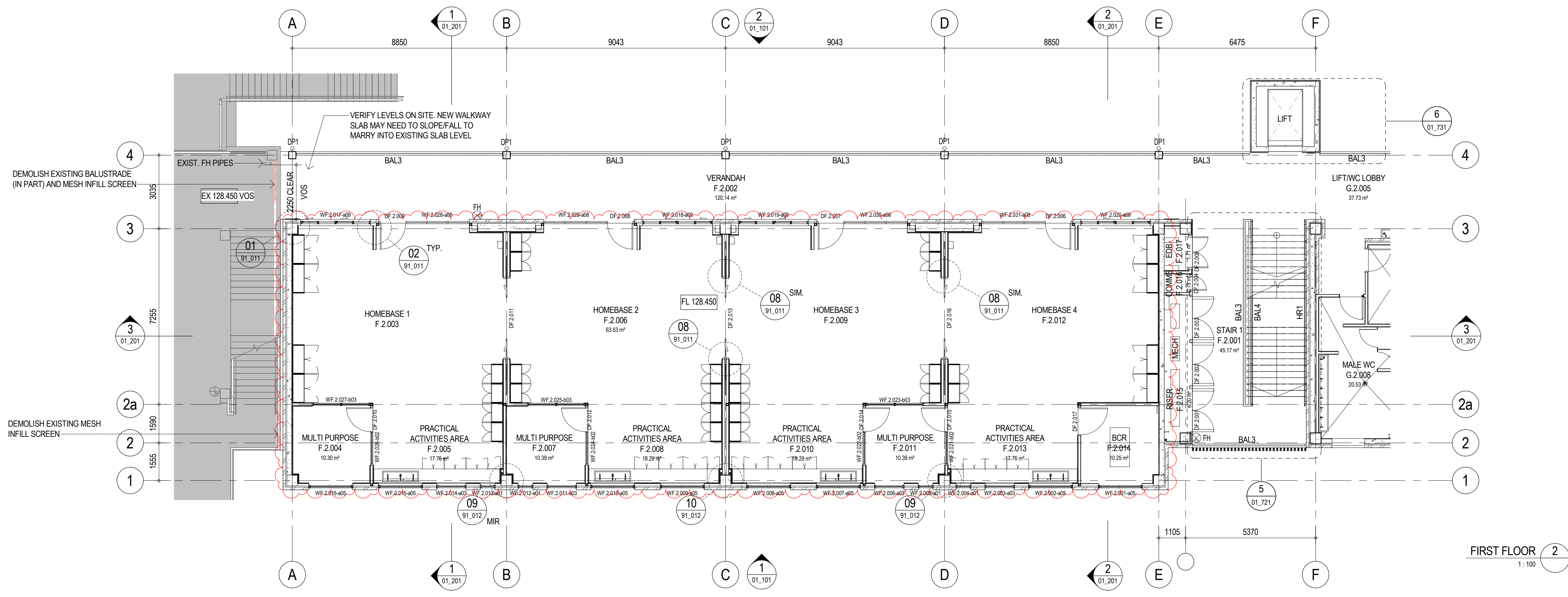
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 SCALE: As indicated @ A1

01 SEPTEMBER 2022

DRAWING NUMBER	PROJECT	DISCIPLINE	PHASE	TYPE	SERIES NUMBER	REVISION
3302 - ARC - CD - DWG - 00_201						C



GROUND FLOOR 1
1:100



FIRST FLOOR 2
1:100

1/09/2022 11:32:51 AM

REV	BY	DATE	DESCRIPTION
A	MW	06.09.21	ISSUED FOR APPROVAL
B	MW	25.11.21	ISSUED FOR TENDER
MW		11.08.22	AMEND CLASSROOM LAYOUTS
C	MW	01.09.22	RE-ISSUED FOR TENDER

STRUCTURAL CIVIL & HYDRAULICS Woolacotts Consulting Engineers T: 02 9203 1500	BCA Group DLA T: 02 9555 3160	PEDAVOLI ARCHITECTS PTY LTD LEVEL 2, 458-468 WATTLE STREET ULTIMO NSW 2007 AUSTRALIA TEL: +61 2 9291 0000 WEB: WWW.PDVAU.COM.AU NOMINATED ARCHITECT: VINCE PEDAVOLI NSW REG. No. 5045
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ELECTRICAL, SECURITY & COMMS JHA Consulting Engineers T: 02 9437 1000	LANDSCAPE ARCHITECT Lorna Harrison Pty Ltd T: 02 9555 1147	ACCESSIBILITY JAC Building Consultants T: 03 9108 6198
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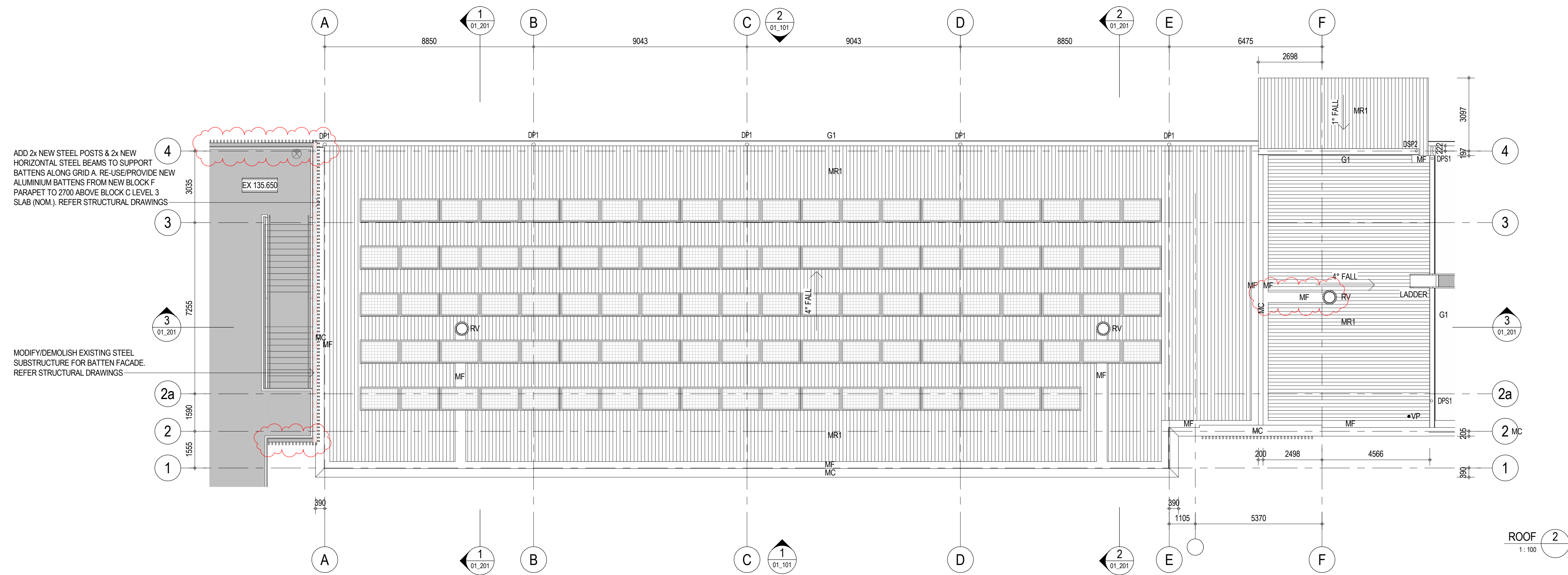
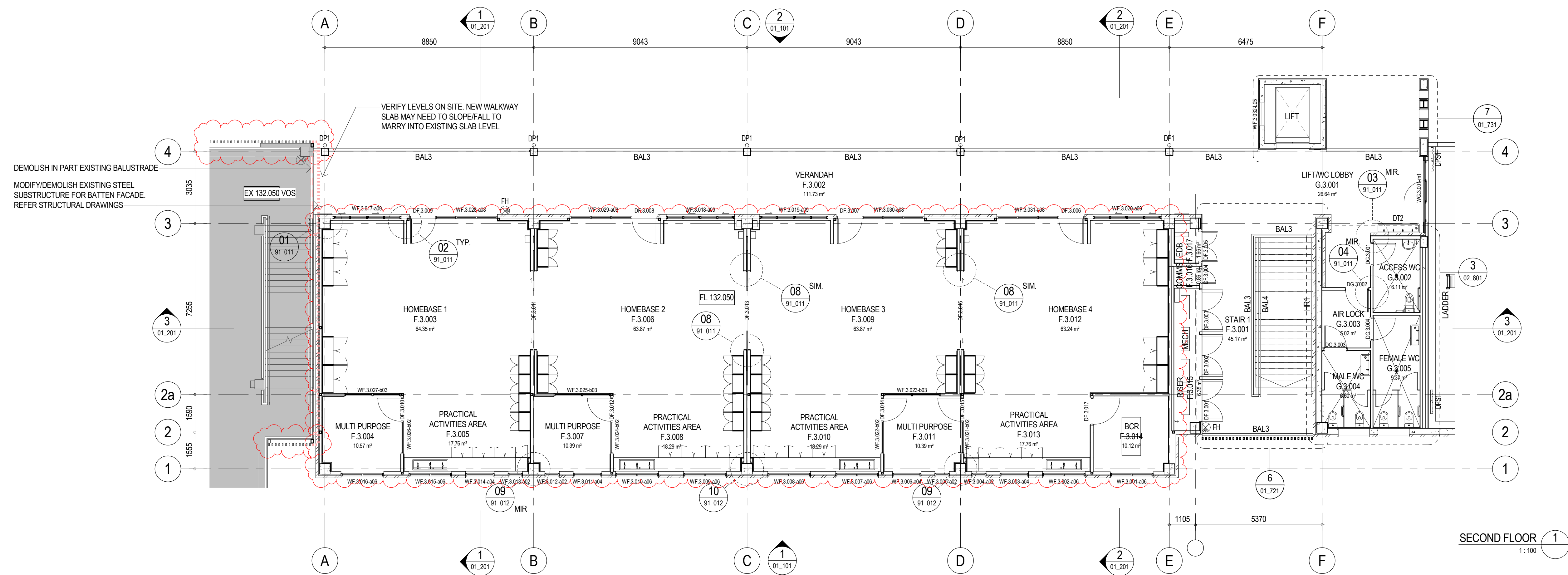


MECHANICAL, VERT. TRANSPORT & ELEV JHA Consulting Engineers T: 02 9437 1000	TRAFFIC Woolacotts Consulting Engineers T: 02 9203 1500
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GLEDSDWOOD HILLS PUBLIC SCHOOL
HERITAGE WAY GLEDSDWOOD HILLS NSW
DRAWING NAME
BLOCK F - PLANS - GROUND & FIRST FLOOR

PROJECT NORTH	0 1000 2000 3000 4000 5000 10000	SCALE 1:100 @ A1
01 SEPTEMBER 2022		
DRAWING NUMBER	PROJECT DISCIPLINE PHASE TYPE SERIES NUMBER	REVISION
3302 - ARC - CD - DWG - 01_011		C

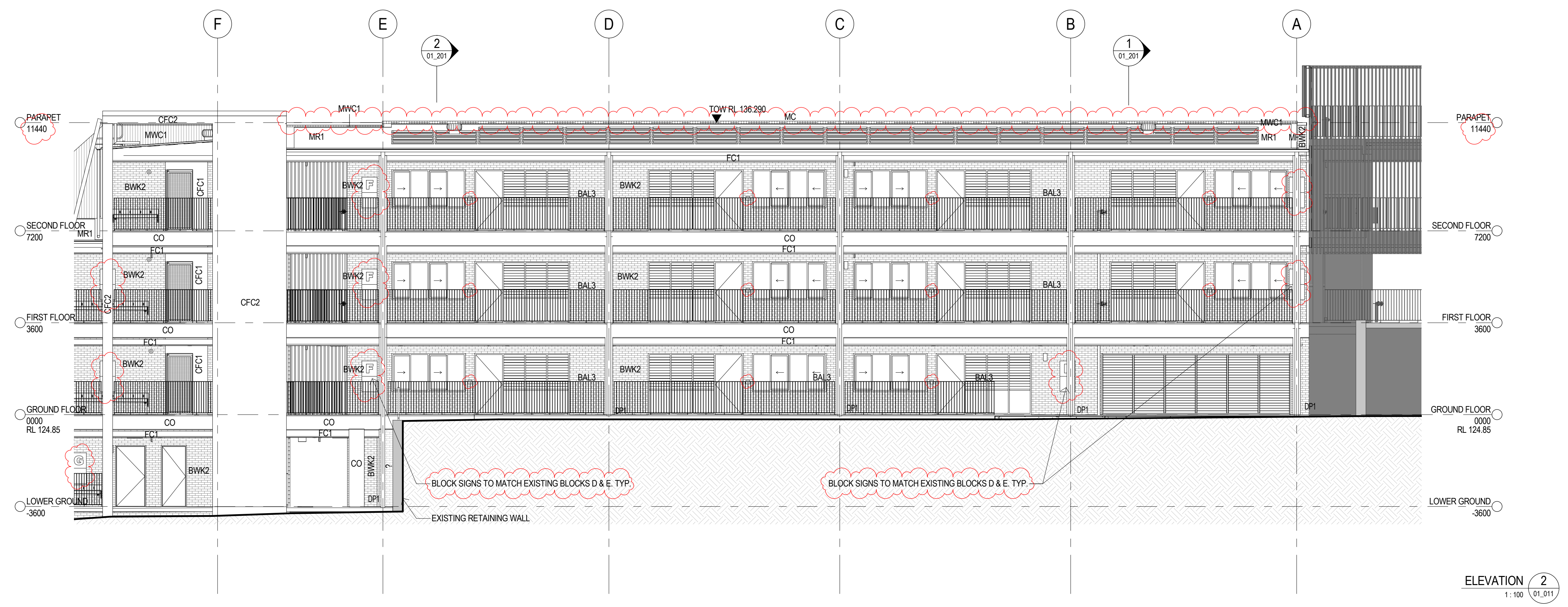
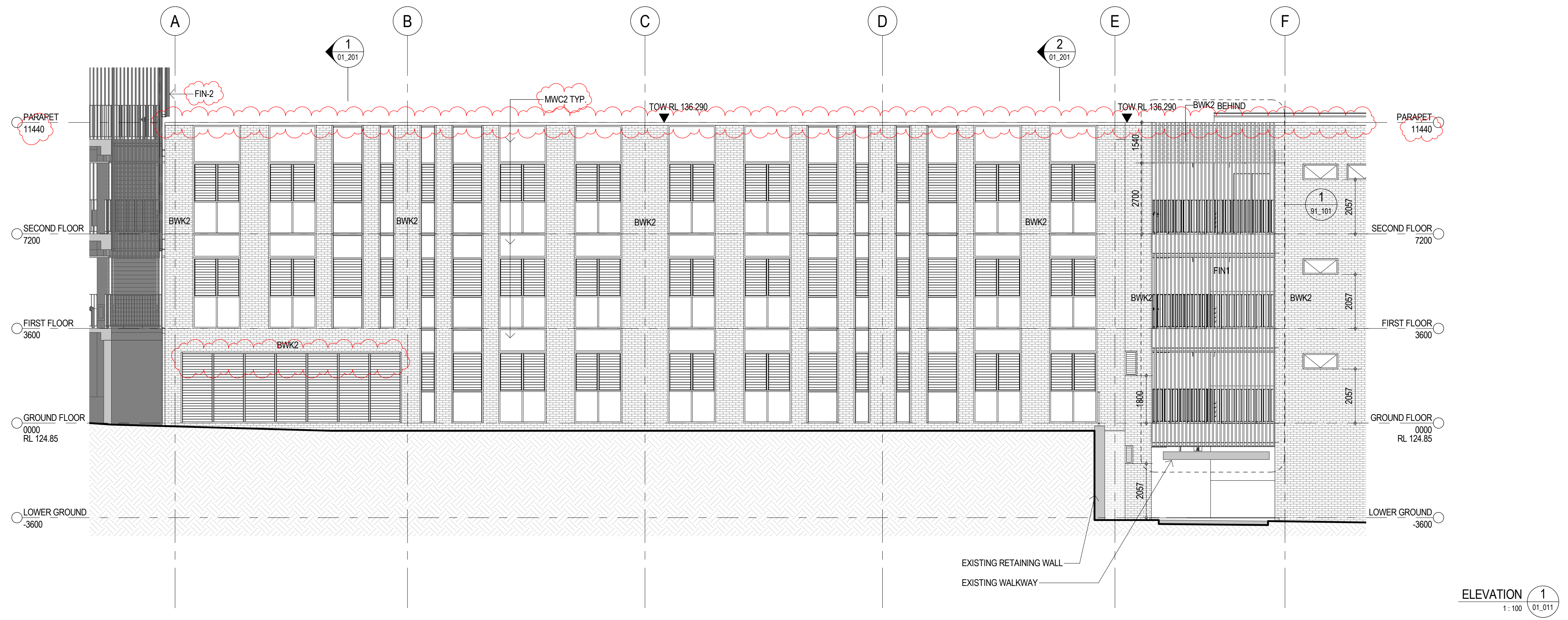


1/09/2022 11:33:17 AM

REV	BY	DATE	DESCRIPTION
A	MW	06.09.21	ISSUED FOR APPROVAL
B	MW	25.11.21	ISSUED FOR TENDER
MW	11.08.22	AMEND CLASSROOM LAYOUTS & EXISTING BATTEN EXTENT	
C	MW	01.09.22	RE-ISSUED FOR TENDER

	STRUCTURAL, CIVIL & HYDRAULICS Woolcoats Consulting Engineers T: 02 9203 1500	BCA Group DLA T: 02 8555 3160	PEDAVOLI ARCHITECTS PTY LTD LEVEL 2, 458-468 WATTLE STREET ULTIMO NSW 2007 AUSTRALIA TEL: +61 2 9291 0000 WEB: WWW.PDVA.COM.AU NOMINATED ARCHITECT: VINCE PEDAVOLI NSW REG. No. 5045	GLEDSDWOOD HILLS PUBLIC SCHOOL HERITAGE WAY GLEDSDWOOD HILLS NSW DRAWING NAME BLOCK F - PLANS - SECOND FLOOR & ROOF	PROJECT NORTH 	0 1000 2000 3000 4000 5000 10000 SCALE 1:100 @ A1
	ELECTRICAL, SECURITY & COMMS JHA Consulting Engineers T: 02 9437 1000	LANDSCAPE ARCHITECT Lorna Harrison Pty Ltd T: 02 9555 1147				

01 SEPTEMBER 2022				
DRAWING NUMBER	PROJECT	DISCIPLINE	PHASE	TYPE
3302 - ARC - CD - DWG - 01_012				
REVISION				C



1/09/2022 11:34:11 AM

REV	BY	DATE	DESCRIPTION
A	MW	06.09.21	ISSUED FOR APPROVAL
B	MW	25.11.21	ISSUED FOR TENDER
	MW	25.11.21	ISSUED FOR TENDER - NOT ISSUED
	MW	11.08.22	ADD SIGNAGE
C	MW	01.09.22	RE-ISSUED FOR TENDER

	STRUCTURAL, CIVIL & HYDRAULICS Woolcoats Consulting Engineers T: 02 9203 1500	BCA Group DLA T: 02 8355 3160	PEDAVOLI ARCHITECTS PTY LTD LEVEL 2, 458-468 WATTLE STREET ULTIMO NSW 2007 AUSTRALIA TEL: +61 2 9291 0000 WEB: WWW.PA.COM.AU NOMINATED ARCHITECT: VINCE PEDAVOLI NSW REG. No. 5045	GLEDSDWOOD HILLS PUBLIC SCHOOL HERITAGE WAY GLEDSDWOOD HILLS NSW DRAWING NAME BLOCK F - ELEVATIONS	0 1000 2000 3000 4000 5000 10000 SCALE 1:100 @ A1 01 SEPTEMBER 2022
	ELECTRICAL, SECURITY & COMMS JHA Consulting Engineers T: 02 9437 1000	LANDSCAPE ARCHITECT Lorna Harrison Pty Ltd T: 02 9555 1147			