Construction Environmental Management Plan

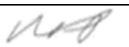
CLIENT NAME:	Amity College
PROJECT NAME:	Leppington Campus Stage 1
SITE ADDRESS:	85 Byron Road, Leppington NSW 2179
REVISION:	12
ISSUE DATE:	04/02/2022
DOCUMENT REF#:	LLOYD-1488CEMP-R12

ABBREVIATIONS

ABBREVIATION	DEFINITION
The Organisation	Lloyd Group
BDM	Business Development Manager
CA	Contract Administrator
Critical Incident	A critical incident is any incident in the workplace that results in death; major structural damage, or serious/permanent disability or injury
CM	Construction Manager
DIR	Director/s
EMP	All Company Employees
EST	Estimator
ESTM	Estimating Manager
FAI	First Aid Injury
HIRAC	Hazard Identification, Risk Assessment & Controls
HSE	Health Safety & Environment
HSR	Health & Safety Representative
IMS	Integrated Management System
HSEQ	Health Safety Environment and Quality
HSEQC	HSEQ Coordinator
HSEQM	HSEQ Manager
HSEQA	HSEQ Administrator
Lloyd Group	Lloyd Group/the Organisation
LTI	Lost Time Injury – At least one full shift lost due to injury
LTIFR	Lost Time Injury Frequency Rate = No. (LTI's/hours worked) x 1,000,000
MD	Managing Director
MTI	Medical Treatment Injury
MTIFR	Medical Treatment Injury Frequency Rate
NTL	National Team Leader – Safety & Compliance
OM	Office Manager
PPE	Personal Protection Equipment
PM	Project Manager

ABBREVIATION	DEFINITION
SDS	Safety Data Sheet (Formally referred to as MSDS)
Senior Management	Directors / General Managers / Construction Managers / HSEQ Managers / Procurement Managers
SM	Site Manager
SSC	Site Safety Committee

REGISTER OF REVIEW - MASTER				
REVISION	**DATE**	**SECTION**	**DESCRIPTION OF AMENDMENTS**	**AMENDED BY**
0	31/3/21	All	Initial issue	S Willoughby
7	1/12/21	All	Stage 1 Initial Issue	J Ling

APPROVALS			
NAME	**POSITION**	**SIGNATURE**	**DATE**
Matthew Licuria	Construction Manager		04/02/22
Scott Willoughby	HSEQ Manager		04/02/22
Joseph Elley	Project Manager		04/02/22
Kane Sabo	Site Manager		04/02/22

SITE PERSONNEL INDUCTION

Project team personnel are to be inducted into this plan before starting work on the project. Insert your name and role in the register below, then sign and date to acknowledge that you have read and understood the company requirements and agree to implement the procedures as applicable to your role. Note: Nominated approvers who have signed above are not required to sign below.

NAME	POSITION	SIGNATURE	DATE

REGISTER OF REVIEW - PROJECT				
REVISION	**DATE**	**SECTION**	**DESCRIPTION OF AMENDMENTS**	**AMENDED BY**
8	10/01/22	All	M.M Comments • Updated workzone management plans • Formatting	J Ling
9	18/01/22	All	M.M Comments • Added Senior Management Signatures	J Ling
10	31/01/22	All	Douglas Partners Comments • Amendments made as per 203645.00.R.003.Rev2 AIR 3.0 (CEMP Rev9).pdf issued by Paul Moritz	J Ling
11	02/02/22	All	Douglas Partners Comments Amendments made as per 203645.00.R.003.Rev2 AIR 3.2 (CEMP Rev10).pdf issued by Paul Moritz	J Ling
12	04/02/22	Appendix A	Removed Landscape Drawings and Transmittal as per P.R. request	J Ling

As required by condition C21(h) of the Consent Conditions, reviews and updates to this plan are to be documented above. Additionally, reviews are to be undertaken on a yearly basis, or if the building scope of works varies to a considerable extent as determined by either the Principal or Lloyd's HSEQ manager.

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1. Company Information

1.1. Company Background

Established in 1979 by Trevor Lloyd as a small contracting business, Lloyd Group (The Organisation) was built on strong family values and a relentless commitment to personalised service. Since then, Lloyd Group has experienced controlled and steady growth, having established longstanding relationships with many repeat clients and superior contractors.

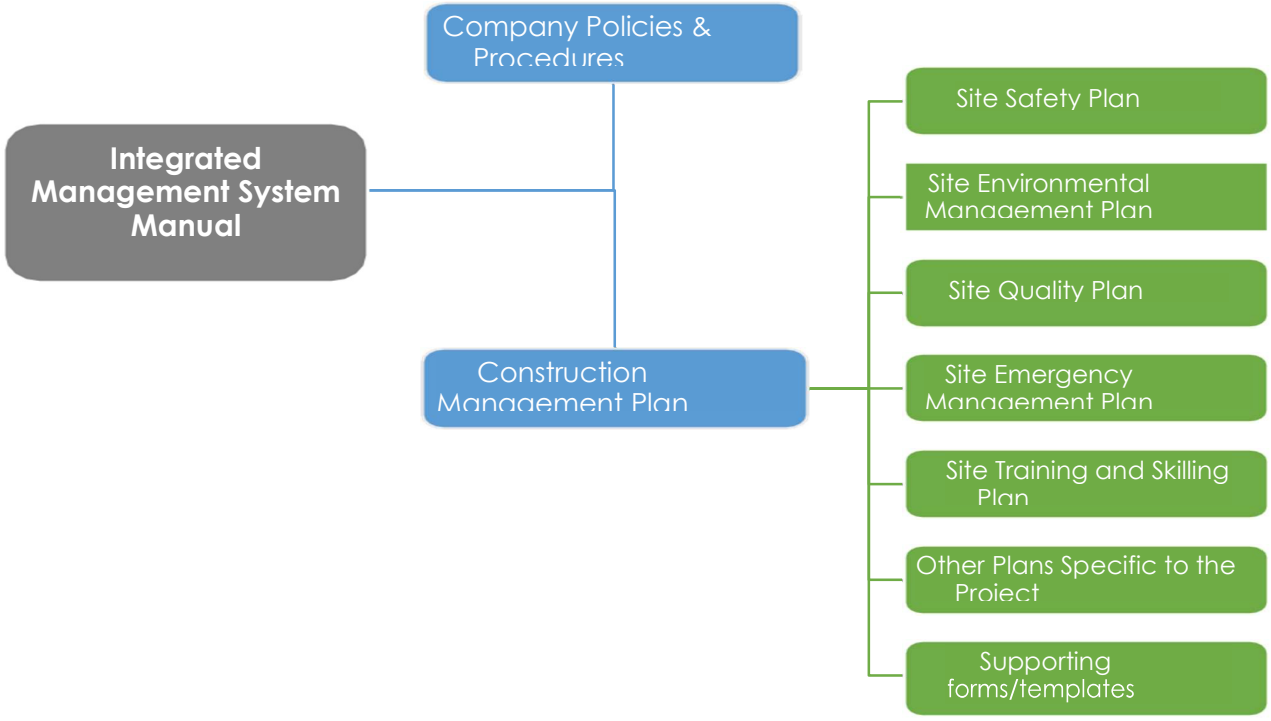
Today, Lloyd Group delivers high quality commercial construction projects across Victoria and New South Wales. Our team of over 60 exceptional people delivers projects up to $30M in value across a variety of sectors that includes education, childcare, health, aged care, community, ecotourism, industrial and retail.

Accredited in ISO4801 (safety), ISO9001 (quality) and ISO14001 (environment) and compliant to ISO45001, our systems support professional construction practices that allow our clients a positive experience with transparency and communication at the forefront of our practices.

We will always strive to grow and develop our business through our constructive thinking, never forgetting the quality of the personalised service we provide our clients.

1.2. Integrated Management System

The Organisation has documented, implemented, and continues to maintain an Integrated Management System (IMS). This Management System provides guidance to all aspects of safety, environmental and quality management applicable to all operations. The following diagram provides an overview of the IMS interaction.



The Organisation operates an Integrated Management System for Safety, Quality and Environmental Management. The IMS is has the following certifications:

- AS/NZS ISO 45001:2018 – Safety Management Systems
- AS/NZS ISO 14001:2015 – Environmental Management Systems
- AS/NZS ISO 9001:2015 – Quality Management System
- Federal Safety Commission

1.3. Project Overview and Scope

In July 2020 development consent was issued for the establishment of a new Amity College school campus on the subject site at Leppington. The project is a state significant development: SSD 9227. This Site Environmental Management Plan (Plan) has been developed specifically for SSD 9227 and will be maintained and updated for the duration of this project. This Plan has been prepared in accordance with development consent issued 14/07/2020, as well as the approved *Preliminary Construction Management – Plan Proposed Primary & Secondary School SSD 9227*, dated July 2019, prepared by Outline Planning Consultants Pty Ltd.

The scope of works covered by this Plan comprises the construction of buildings on the approved Amity College Leppington school site, for Stages 1-4 of the project. It includes but is not limited to the following:

The scope for the works in Stage 1 of the works is reliant on the following documentation:

- Site survey documentation, issued by Total Surveying Solutions.
- Civil documentation, prepared by Martens & Associates Pty Ltd.
- Architectural drawings, prepared by Gran Associates Australia Architects Pty Ltd.
- Architectural specification, prepared by Gran Associates Australia Architects Pty Ltd.
- Preliminary Construction Management Plan, prepared by Outline Planning Consultants Pty Ltd.
- Construction Programme, prepared by Lloyd Group Pty Ltd.

The purpose of this document is to broadly outline how the above works will be managed, including nature of measures likely to be used, control measures and environmental responsibilities. It will assist in ensuring:

- Best practice environmental management procedures are applied.
- Environmental risks associated with the project are properly identified and managed, and provide protection to workers, visitors and the general public from traffic and environmental hazards and risks that may arise as a result of the construction activity.
- To ensure that corrective actions, when required, are completed in a timely manner.
- Provide a safe environment for all surrounding residents, road users and workers on-site.
- Compliance with all current, relevant environmental legislation.
- Compliance with the requirements of the development consent.

Regarding the latter dot point above, SSD 9227 Development Consent condition C21 requires the preparation of management plans that must include the following:

- Detailed baseline data: condition C21(a). Refer to Section 2.
- Details of statutory requirements and the like: condition C21(b). Refer to Sections 2 and 3, and other relevant sections of this Plan.
- Measures to be implemented to comply with relevant statutory requirements: condition C21(c). Refer to Section 3 and other relevant sections of this Plan.
- Details of the monitoring program to be implemented: condition C21(d). Refer to other relevant sections of this Plan.
- Contingency plans: condition C21(e). Refer to other relevant sections of this Plan.
- A program to investigate and implement ways to improve environmental performance: condition C21(f). Refer to other relevant sections of this Plan.

- Protocols for managing and reporting incidents, non-compliance, complaints, and any failure to comply with statutory requirements: condition C21(g). Refer to other relevant sections of this Plan.
- Protocols for reviews and updates: condition C21(h). Refer to page 4 of this CEMP, containing the Revision and Review Register and also identifies the frequency of reviews; and what triggers a review.

C22 requires the preparation of a Construction Environmental Management Plan that includes the following, summarised in the following table.

The above requirements are addressed in the following.

Requirement for this Construction Environmental Management Plan (CEMP)	Where this requirement has been addressed in this CEMP
Details of hours of work: condition C22(a)(i)	Refer to section 4.2
24-hour contact details of site manager: condition C22(a)(ii)	Refer to section 3.4
Management of dust and odours to protect amenity of neighbourhood: condition C22(a)(iii)	Refer to section 8.7
Stormwater controls and discharge: condition C22(a)(iv)	Refer to section 10
Measures to avoid tracking of sediment etc. onto local roads: condition C22(a)(v)	Refer to section 10
External lightings: condition C22(a)(vi)	Refer to section 4.4
Community consultation and complaints handling: condition C22(a)(vii)	Refer to section 11
Construction Traffic and Pedestrian Management Sub-Plan: condition C22(b),C24	Refer to section 7
Construction Noise and Vibration Management Sub-Plan: condition C22(c),C25	Refer to section 8
Construction Waste Management Sub-Plan: condition C22(d),C26	Refer to section 9
Construction Soil and Water Management Sub-Plan: condition C22(e),C27	Refer to section 10
Unexpected finds protocol for contamination: condition C22(f)	Refer to section 5
Unexpected finds protocol for Aboriginal and non-Aboriginal finds: condition C22(g)	Refer to section 5
Waste classification for materials removed/remaining: condition C22(h)	Refer to section 6

This Plan sets out the framework for safety and environmental planning on this project consistent with Organisation Policies and Procedures. It outlines the projects safety and environmental management structure, delegation of responsibilities and site safety rules. Handover of responsibilities to operational managers will occur at the completion of the contractual maintenance periods for construction works.

The requirements of this plan apply to all construction and associated work activities undertaken by Organisation. This includes all activities of subcontractors, suppliers, and consultants. We note that the preliminary plans, SSDA and some of the project documents refer to all stages of the Amity College Leppington school. This Plan covers only our scope of works for Stage 1 (Separable Portion 1) as documented in the Amity College Preliminary Construction Management Plan-refer to accompanying **Figures 1.1 to 1.4** summarising the extent of the Stage 1 works.

All Organisation employees are inducted into this plan and are made aware of its location should they wish to refer to it at any time. Revisions of the plan are notified to relevant personnel.

1.4. Project Team

ROLE	NAME	CONTACT
General Manager	Matthew Licuria	0419 258 448
Construction Manager:	Matthew Licuria	0419 258 448
Project Manager	Joseph Elley	0408 848 050
Site Manager:	Kane Sabo	0451 120 060
HSEQ Manager	Scott Willoughby	0423 154 092
HSEQ Advisor	Scott Willoughby	0423 154 092
Contract Administrator:	Jordan Ling	0424 068 388
Workers Comp/Return to Work Coord:	Amy Parker	0413 455 261

1.5. Scope of Works

PROJECT NAME	Amity College
PROJECT LOCATION	85 Byron Road, Leppington NSW 2179
ORGANISATION ROLE	Head Contractor
START DATE	07/01/2022
PEAK NUMBER OF WORKERS	100
DESCRIPTION OF THE WORKS	Construction of a new Primary School building complex, fronting Pluto Avenue; including basement car park, accommodation, open space, and parking areas.

Figure 1.1 Stage 1: Site Overview

Figure 1.2 Stage 1: Site Overview – Southern Portion of site

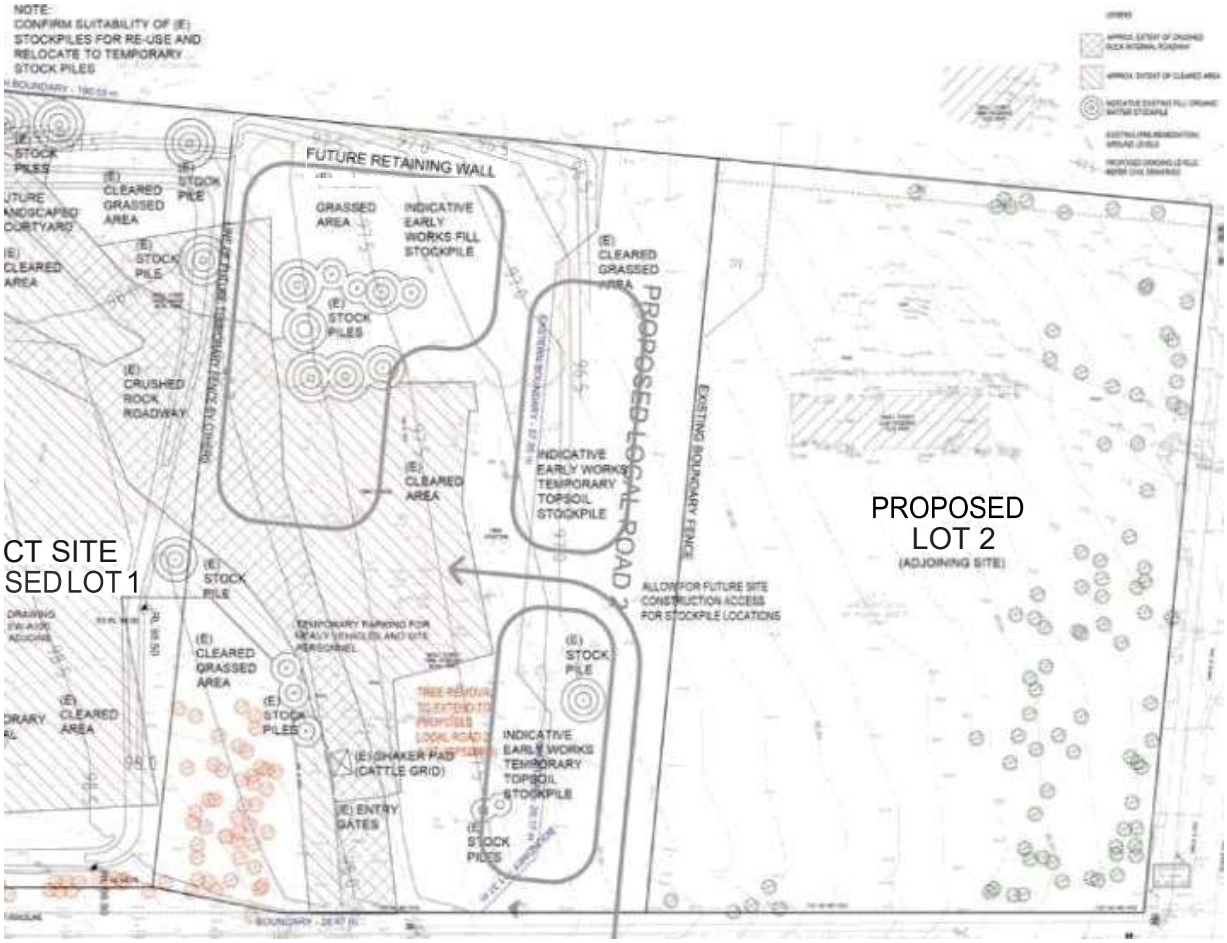


Figure 1.3 Stage 1: Site Overview – Northern Portion of site

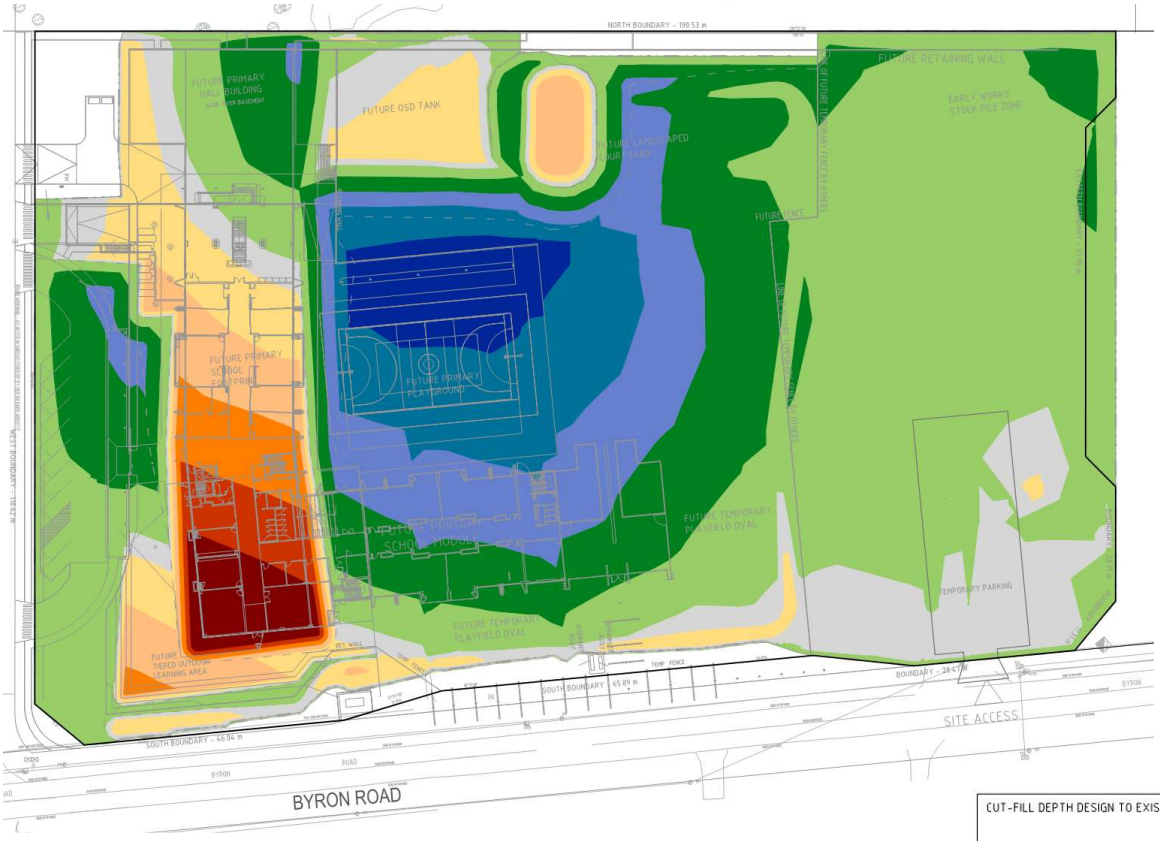


Figure 1.4 Bulk Earthworks: Cut and Fill Plan

NOTES:
- EARLY WORKS IS STAGE 1 BULK EARTHWORKS INCLUDING CUT FILL AND PLACEMENT OF PROTECTIVE TOPSOIL & SEEDING, AND EXCLUDES RETAINING WALLS, PLUTO ROAD ROADWORKS, PRIMARY DROP-OFF WORKS AND FINAL LANDSCAPE TOPSOIL.
- EXISTING SURFACE IS BASED ON SURVEY INFORMATION PROVIDED BY TOTAL SURVEYING SOLUTIONS DATED 18/01/2021.
- BULK EARTHWORK LEVELS ARE SHOWN ON PLANS (REFER TO DRG PS06-C300) ARE FINISHED SURFACE LEVELS MINUS 180mm SLAB FOR PAVED AREAS, MINUS 180mm SLAB FOR PAVED AREAS, AND MINUS 300mm TOPSOIL FOR LANDSCAPED AREAS.
- EARTHWORK CUT FILL DEPTHS ARE ANALYSED FROM PROPOSED BULK EARTHWORKS LEVELS TO EXISTING SURFACE MINUS 250mm TOPSOIL.
- EARTHWORK VOLUMES HAVE ACCOUNTED FOR APPROXIMATELY 2000m³ SOIL BEING REMOVED FROM REMEDIATION AREAS AND 250MM TOPSOIL BEING STRIPPED FROM THE SITE SURFACE.
- ADDITIONAL FILL TO BE IMPORTED IN EXCESS OF BULK EARTHWORKS REQUIRED FOR FINAL STAGE. TO BE STOCKPILED ON SITE WITH NOMINATED LOCATION INDICATED ON PS06-B301.
- SITE STRIPPED TOPSOIL TO BE STOCKPILED ON SITE WITH NOMINATED LOCATION ON PS03-B301.
- ALL EARTHWORK AREAS ARE TO BE REINSTATED BY THE CONTRACTOR TO THE DIRECTION AND SATISFACTION OF THE SUPERINTENDENT. AS A MINIMUM, ALL AREAS EXCLUDING PAVEMENT AND ROCK LINED AREAS OR OTHER AREAS NOMINATED FOR SPECIFIC LANDSCAPING ARE TO BE FINISHED WITH 150 mm THICK LAYER OF SITE SOURCED (OR APPROVED EXTERNAL SUPPLY TOPSOIL) AND SPRAY GRASSED OR TURFED ASAP FOLLOWING COMPLETION OF WORKS IN ANY ONE AREA.

BULK EARTHWORKS CALCULATIONS	CUT (m^3)	FILL (m^3)
EARTHWORKS VOLUME	-4131	16739
EARTHWORKS BALANCE	-	12608

FILL CALCULATIONS	VOLUME (m^3)
TOTAL STAGE 1 FILL REQUIRED	19000
TOTAL TOPSOIL REQUIRED FOR LANDSCAPE	4200
BULK EARTHWORK BALANCE	12608
FILL BALANCE TO STOCKPILE (FOR FINAL STAGE 1)	2200

TOPSOIL CALCULATIONS (EXCLUDES CONTAMINATED REMOVED)	CUT (m^3)	FILL (m^3)
LANDSCAPE TOPSOIL REQUIRED	-	4200
TOPSOIL STRIPPED (TO BE STOCKPILED ON SITE)	-3500	-
ADDITIONAL TOPSOIL REQUIRED TO IMPORT	-	700

2. Project Site, Baseline Data

The project site is at No. 85 Byron Road and No. 63 Ingleburn Road at Leppington, comprising Pt Lots 1 & 2 DP 525996. It lies within a part of the NSW Government's South West Priority Growth Area, at Leppington, within the Camden Local Government Area. The project site lies approximately 1.2km away from the planned Leppington Major Centre railway station- refer Figure 1. The land proposed to be developed for a school campus is roughly rectangular in shape and has an area of approximately 2.37ha- refer Photographs 2.1-2.3.

***PHOTOGRAPH 2.1: Project Site & surrounds showing approx. extent of early works area- shown with broken line** (Drone photography 14 January 2021, view from east)*

***PHOTOGRAPH 2.2: Southern portion of Project Site & neighbouring residential development. Remediated area to left of photo. Approx. extent of early works area shown with broken line** (Drone photography 14 January 2021, view from west)*

Area shown with broken line (Drone photography 14 January 2021, view from west)

PHOTOGRAPH 2.3: Northern Portion of Project Site. Remediated area to right hand side of photo. Approx. extent of early works area shown with broken line (Drone photography 14 January 2021, view from west)

Baseline data about the project site has been described in detail in the EIS accompanying the original development application for the SSD 9227 including but not limited to the following:

- The site is situated in a region typically characterised as gently undulating with relatively uniform ground surface generally falling to the north and north west towards Bonds Creek and Kemps Creek at angles typically ranging from 2 to 6 degrees. Within the site, the northern portion of the site is approximately level with a slight dip to the north at angles of less than 2 degrees. Ground surface on the southern portion generally slopes towards a depression along western boundary at angles of between 3 and 4 degrees. (source: GeoEnviro Consultancy Geotechnical and Salinity Investigation dated May 2019)
- The soils consists of highly plastic and moderately reactive subsoils with low permeability. Borehole investigation revealed the site to be generally underlain by topsoil overlying very stiff to hard natural Silty Clay with shale/siltstone bedrock at depths ranging from 0.9m to 3.0m, therefore construction of basement will require rock excavation. Depending on the staging for the proposed development, rock excavation may require vibration monitoring. (source: GeoEnviro Consultancy Geotechnical and Salinity Investigation dated May 2019)
- The natural soil below about 1 metre comprised Slightly Saline to Moderately Saline- considered to be Class 2 sub-surface soils per AS 3600- 2018 “Concrete”. (source: GeoEnviro Consultancy Geotechnical and Salinity Investigation dated May 2019) Consulting engineers martens & Associates have prepared a salinity plan for earthworks to be carried out as a part of this Plan.
- The site has biodiversity certification. The development consent permit clearing of all trees on the school site.
- The land to be developed for school purposes is specifically zoned for the purposes of a school ie. zoned SP2 (Educational Establishments). The SP2 zone has no stipulated building height or Floor Space Ratio (FSR) limits.
- The area to be developed is flood-free.

- A contamination report has found that the site was contaminated in part. Between November 2020 and April 2021 those parts of the site identified as being contaminated in the GeoEnviro Consultancy contamination report (source: GeoEnviro Consultancy Remediation Action Plan dated May 2019) have been remediated by Mackellar Excavations, accompanied by details of the contaminated materials removed from the site as well as details of the fill imported into the site.
- The site is not bushfire prone land.
- Sydney Water will be constructing a sewer line across the site fronting Pluto Avenue near the corner of Byron Road. Once constructed, the approved Primary School will be served by this sewer line.
- Reflecting the accelerated staging of the project, the substation approved near Road 2 will be relocated to an alternate location, close to the new Primary School.
- Dilapidation reports have been prepared for surrounding public infrastructure (Martens & Associates) and for private infrastructure (Lloyds). These reports have already been provided to the Department's Planning Portal.
- The engineering certification of the flood planning level and operational stormwater management system, prepared by consulting engineers Martens & Associates forms a part of the cc for Stage 1 of the works, approved by the PCA Accredited Building Certifiers. Further details of the stormwater system, including sediment and erosion control works, is included in the engineering drawings and technical notes accompanying the Stage 1 works program.

2.1 Current State of Site After Early Works

The below photos show the current state of the site following the Early Works Package undertaken by Lloyd Group.

Scope of works comprised work preparatory to the construction of buildings on the Amity College Leppington school site; and included the following:

- Clearing of vegetation on the site
- Re-Shaping the site, bulk Earthworks
- Construction of Sediment and erosion control devices and stormwater drainage measures.
- Excavation work including Primary School basement car park area
- Creation of stockpiles and importation of approved fill to the site.

2.2 Initial Contamination History and Remediation Works

Throughout Lloyd group's Early Works package, Asbestos Contaminated Material (ACM) was discovered on site. Throughout this process, ENRS were engaged as a hygienist to review the materials stockpiled on site and provide the relevant documentation to manage and dispose of the material properly. **Section 5.4** goes into detail outlining the how this material was assessed and removed from site; including markups, reports and sign-offs.

2.3 Independent Auditor

As a requirement of the Conditions of the SSDC, proposed independent auditors must be agreed in writing by the Planning Secretary prior to the preparation of an Independent Audit Program or commencement of an Independent Audit (Condition 32).

This site is subject to any Independent Environmental Audit an any Statutory Site Audit as required by any relevant Conditions in the SSDC.
These Conditions include but are not limited to:

- Condition D33: Independent Audits of the development must be conducted and carried out in accordance with the Independent Audit Post Approval Requirements.
- Condition D34: The Planning Secretary may require the initial and subsequent Independent Audits to be undertaken at different times to those specified above, upon giving at least 4 week's notice to the applicant of the date or timing upon which the audit must be commenced.
- Condition D35: In accordance with the specific requirements in the Independent Audit Post Approval requirements, the Applicant must:
    - (a) review and respond to each Independent Audit Report prepared under condition D33 of this consent;
    - (b) submit the response to the Planning Secretary and the Certifier; and
    - (c) make each Independent Audit Report and response to it publicly available within 60 days after submission to the Planning Secretary.
- Condition D36: Independent Audit Reports and the Applicant's response to audit findings must be submitted to the Planning Secretary within 2 months of undertaking the independent audit site inspection as outlined in the Independent Audit Post Approval Requirements, unless otherwise agreed by the Planning Secretary.
- Condition C37: Notwithstanding the requirements of the Independent Audit Post Approval Requirements, the Planning Secretary may approve a request for ongoing independent operational audits to be ceased, where it has been demonstrated to the Planning Secretary's satisfaction that an audit has demonstrated operational compliance.

3. Regulatory Approvals & Contact Details

3.1. Overview

Lloyd will conform with the construction requirements set down in the Development Consent for SSD 9227 and Stage 1 tender package, and in particular relating to:

- Site notices.
- Operation of plant and equipment.
- Construction hours.
- Implementation of management plans.
- No obstruction of public roads.
- Any relevant audit.
- Survey information provided.
- Unexpected finds protocols.

3.2. Pre-construction Investigations

It is a requirement that prior to construction works being undertaken on site, the following investigations will be undertaken to identify risks, and to mitigate and control impacts arising from the works:

- Existing condition and dilapidation survey of roads, light poles, and other government infrastructure. These dilapidation reports have been prepared, by Martens & Associates (public infrastructure) and by Lloyd (for private infrastructure).
- Infrastructure investigations to locate existing services. Prior to commencing any works, Lloyd will carry out a “dial before you dig” for a services search. Arrangements will then be made for all services to be physically located, identified, and clearly marked within the works area prior to the commencement of any work. Lloyd shall be responsible for the repair of any damage caused to such services during the works.
- Obtain approvals and permits, discussed below.

3.3. Permits and Approvals

Regarding the latter dot point above, various approvals and permits must be obtained including but not limited to the following:

- Construction Certificate: A separate valid Construction Certificate has been issued for work associated with the Stage 1 works.
- Notice to be given to Camden Council at least two (2) days prior to works commencing in accordance with Clause 104 of the EP&A Regulation 2000, the notice to include details relating to: the nature of the works to be undertaken; contact details; address of the land; details of the cc issued and relevant statement by the PCA; and the date on which the works will commence.

3.4. Signage

A sign is to be erected and maintained in a prominent position on the site in accordance with Clause 98A(2) of the *Environmental Planning and Assessment Regulation 2000* , as outlined in Development Consent condition D1 which states as follows:

"*D1.A site notice(s):*
(a) must be prominently displayed at the boundaries of the site during construction for the purposes of informing the public of project details including, but not limited to the details of the Builder, Certifier and Structural Engineer is to satisfy the following requirements;

(b) minimum dimensions of the notice must measure 841mm x 594mm (A1) with any text on the notice to be a minimum of 30-point type size;

(c) the notice is to be durable and weatherproof and is to be displayed throughout the works period;

(d) the approved hours of work, the name of the site/ project manager, the responsible managing company (if any), its address and 24-hour contact phone number for any inquiries, including construction/ noise complaint must be displayed on the site notice; and

(e) the notice(s) is to be mounted at eye level on the perimeter hoardings/fencing and is to state that unauthorised entry to the site is not permitted."

On the same signage a complaint contact number will be displayed at the construction site entrances, enabling complainants to contact the Head Contractor in a prompt manner. Lloyd will appoint a contact officer who register, address and respond to any complaints received during each stage of construction of the school.

The Site Manager will notify the Project Manager immediately of any safety notices/instructions served by a statutory authority. Any notice served by a statutory authority is included in the next Project Report.

4. Operation and Responsibilities

4.1. Earthworks

All works undertaken must be in accordance with the issued development consent for SSD 9227, including all reports and plans accompanying the consent, as well as plans and technical prepared by Martens & Associates, consulting engineers and Gran Associates and all other plans and guidelines forming a part of the Stage 1 works tender package/specifications.

A pre-construction meeting is to be held between representatives of Amity College, the project engineer, Lloyd, and all other relevant parties to discuss earthworks and excavation and related requirements.

Site clearance and earthworks will include but not be limited to the following:

- Excavation and earthworks. Includes excavation for basement car park. Any excavation and/or backfilling associated with the development shall be executed safely and in accordance with appropriate professional standards, with any excavation properly guarded and protected to prevent such work being dangerous to life or property. Includes earthworks associated with provision for drainage facilities, as well as for sediment and erosion control measures.
- Remediation of any unexpected finds contamination.
- Importation of fill.

Lloyd will ensure that:

- All earthworks are to be undertaken in accordance with *THE GUIDELINES FOR EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS AS 3798*.
- All excavation works comply with the NSW Work Cover *Code of Practice: Excavation 2000*. Earthworks shall include the excavation, placing and compaction of cut materials to the levels and profiles as detailed on the bulk earthworks plans prepared by consulting engineers Martens & Associates forming a part of the Stage 1 works tender package. project plans and specifications are to be read in conjunction with all geotechnical engineering advice regarding the site. Insite density testing is required in accordance with Martens & Associates engineering requirements. All earthworks are to be reinstated in accordance with Martens & Associates engineering requirements.
- Works areas shall be stripped of pavements, vegetation (including root affected soils) and other deleterious material. Topsoil is to be stockpiled on site for re-use. Stockpiles are to be in accordance with the soil erosion and sediment control plan prepared by Martens & Associates, consulting engineers accompanying the Stage 1 works tender package.
- Temporary sedimentation and erosion controls are to be constructed prior to commencement of any work to eliminate the discharge of sediment from the site. All works must be performed in accordance with the Erosion and Sediment Control Plan prepared by Martens & Associates, consulting engineers, accompanying the Stage 1 works tender package.
- Excavation work to account for salinity potential.
- All hollow-bearing and active nest trees removed from the site must to be inspected prior to removal. A qualified ecologist or wildlife carer must be present throughout vegetation clearing activities to relocate fauna or take fauna into care where appropriate (i.e. juvenile or nocturnal fauna). Street trees must not be trimmed or removed unless it forms a part of this development consent or prior written approval from Council is obtained or is required in an emergency to avoid the loss of life or damage to property.
- Soils permitted to be imported into the site must comply with the requirements of consent condition D24, namely: that only VENM, ENM, or other material approved in writing by EPA is brought onto the site; to keep accurate records of the volume and type of fill to be used; and to make these records available to the Certifier upon request. A log book consisting of volumes, origin and classification of the fill material imported onto the site shall be maintained to record the daily truck loads of fill brought to the site. This log book shall be made available for perusal

to the PCA or relevant government agency upon request.

- Prior to the commencement of construction Lloyd will implement the unexpected finds protocol for contamination as set down in Section 10 of the REMEDIATION ACTION PLAN entitled *REMEDIATION ACTION PLAN – PROPOSED NEW AMITY COLLEGE CAMPUS, LOT 1 DP 525996 NO 85 BYRON ROAD AND LOT 2 DP 525996 NO 63 INGLEBURN ROAD LEPPINGTON NSW* prepared by GeoEnviro Consultancy dated 30 May 2019. 30/5/2019.

4.2. Hours of Operation

The hours of operation on site will be as per the prescribed hours outlined by the Amity College Development Consent (SSD 9227), Section D, Clause 5, dated 14/07/2020, as set out in the following.

Except with the written consent of the responsible authority, demolition or construction works will only be carried out between 7.00am & 6.00pm from Monday to Friday (excluding public holidays) and 8.00am to 1.00pm on Saturdays. No works will be carried out on Sundays or public holidays without a specific permit.

In accordance with the Amity College Development Consent (SSD 9227), condition D6 construction activities may be undertaken outside of the above hours if required:

a) by the Police or a public authority for the delivery of vehicles, plant or materials; or

b) in an emergency to avoid the loss of life, damage to property or to prevent environmental harm; or

c) where a variation is approved in advance in writing by the Planning Secretary or nominee if appropriate justification is provided for the works.

Where out of hours works are required, permits shall be sought in accordance with the requirements of Camden City Council. It is anticipated that permits shall only be required sporadically for items such as service shutdowns and connections, transport, using canes, of large plant items, delivery & removal of piling rigs, or for other reasons that we may not be able to anticipate at this stage.

In accordance with the Amity College Development Consent (SSD 9227), condition D7, notification of such construction activities as referenced above must be given to affected residents before undertaking the activities or as soon as is practical afterwards.

In accordance with the Amity College Development Consent (SSD 9227), condition D8, rock breaking, rock hammering, sheet piling, pile driving and similar activities will only be carried out between the following hours:

a) 9:00am to 12:00pm (noon), Monday to Friday;

b) 2:00pm to 5:00pm Monday to Friday; and

c) 9:00am to 12:00pm (noon), Saturday.

4.3. Responsibilities

Personnel are provided with a Position Description upon commencement with the Organisation. The following responsibilities apply at an Organisation level. Project specific responsibilities are outlined in each Safety Plan developed for the project. The delegation of authority is related to the Organisational Chart.

GREEN = Primary Responsible Person

YELLOW = Secondary Responsible Person

ORANGE = Supporting Responsible Person

RESPONSIBILITIES	Director	General Manager	Construction Manager	PM	SM	HSEQ Manager	HSEQ Coordinator
Responsibility to ensure compliance to environmental processes in this plan							
Preparing, reviewing & maintaining the Environmental Management Plan including - establishment and upkeep of objectives and targets / aspect and impact register / document control / records							
Managing the Implementation of site environmental Control measures							
Coordinate Communications with Interested parties, including complaints							
Train employees & Communicate importance of environmental management i.e. Induction							
Communicate with subcontractors on Environmental expectations							
Comply with applicable regulatory requirements							
Maintain equipment/tools/spill kit to control environmental impact							
Coordinate emergency response efforts							
Manage Environmental Incidents & Reporting Requirements							
Internal Inspections							

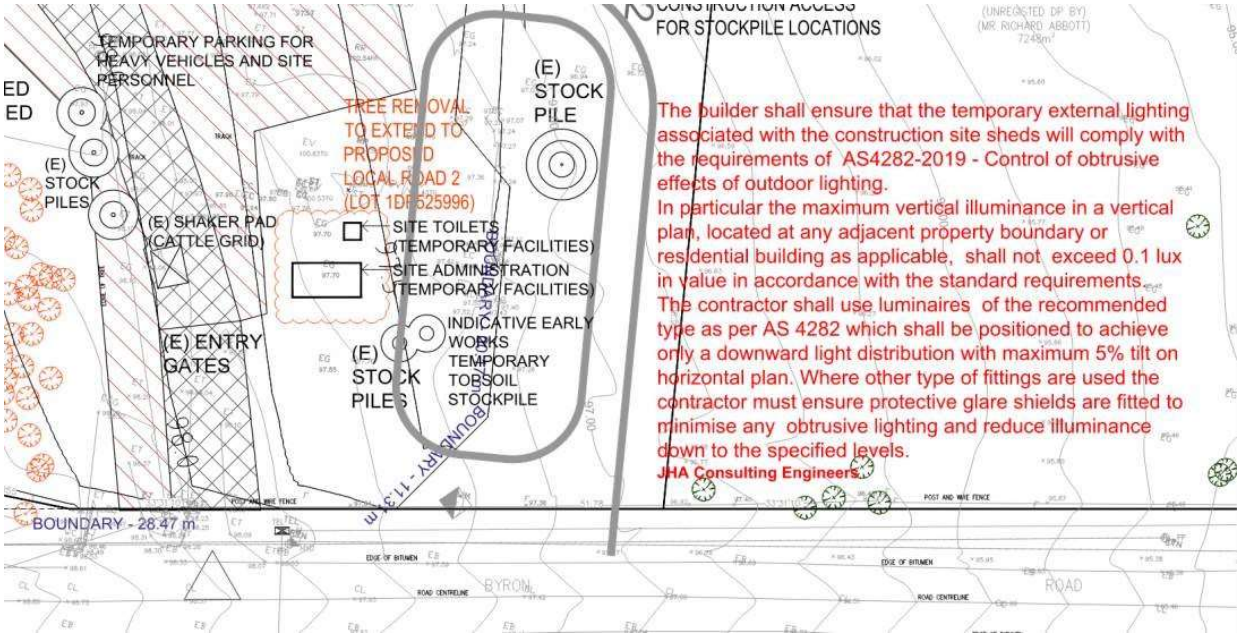
RESPONSIBILITIES	HSEQ Administrator	CA	EMP	S/C
Responsibility to ensure compliance to environmental processes in this plan				
Preparing, reviewing & maintaining the Environmental Management Plan including - establishment and upkeep of objectives and targets / aspect and impact register / document control / records				
Managing the Implementation of site environmental Control measures				
Coordinate Communications with Interested parties, including complaints				
Train employees & Communicate importance of environmental management i.e. Induction				
Communicate with subcontractors on Environmental expectations				
Comply with applicable regulatory requirements				
Maintain equipment/tools/spill kit to control environmental impact				
Coordinate emergency response efforts				
Manage Environmental Incidents & Reporting Requirements				
Internal Inspections				

4.4. Site Offices and Amenities

All site facilities including lunchrooms, change, first aid & toilets will be located within the site boundary. Initial site setup up will consist of portable sheds, accommodating a site office, amenities for the workers, First Aid room etc. Refer to the Traffic Control Plan, prepared by Lloyd Group, for details including locations of these facilities.

All site offices and amenities will be positioned according to the relevant stage of the school development. They shall be neat, clean, well-constructed and well maintained at all times, as well as being in compliance with applicable statutory requirements and industrial agreements. It is proposed to provide the following site offices and amenities on the project site over the life of the school project:

- Male and Female Toilet facilities for the workers on-site
- Administration office, with a separate meeting room for carrying out site meetings.
- Separate area set aside for changing facilities, first aid and OH&S facilities.
- External lighting in compliance with AS 4282-2019 *Control of the obtrusive effects of outdoor lighting* for site entry and site accommodation only. Refer to the diagram below for more information.
- As required by condition C31, sufficient site parking facilities will be provided on-site, including heavy vehicles and for site personnel, to ensure that heavy construction vehicles or site personnel associated with the development does not park on public and residential streets or utilise nearby public parking facilities. An existing site parking area was established for the Early Works package and will be expanded as required to accommodate for number of workers on site.



ORGANISATION	CONTACT DETAILS	
Fire / Police / Ambulance	Emergency hotline	000
Camden Council	Authorisations, notices	(02) 4654 7777
NSW - Environmental Protection Authority	Info and pollution	131 555
Sydney Water	Authorisations, notices	132092 (from NSW) or 1300 143 734 (from interstate)

4.5. Flora and Fauna Management

In accordance with the Amity College Development Consent, condition C41, prior to commencement of works for the relevant construction stage, a survey plan to identify whether tree hollows or active nests are present, must be prepared.

Narla Environmental were engaged as part of the Early Works package to assess tree hollows or active nests prior to site clearance. As a result, three (2) nest boxes were installed to compensate the loss of three (3) hollows reported in the post clearing report (Narla 2021) in line with C32 of the Development Consent

Details of the installed Nest Boxes are provided in the below table:

Nest Box Id	Location		Height	Tree Species	Box type	Orientation
	Latitude	Longitude				
NB303	-33.966103	150.807201	5m	*Eucalyptus tereticornis*	Microbat Double Chamber	West
NB422	-33.966209	150.807606	10m	*Eucalyptus tereticornis*	Glider Box	North
NB374	-33.966216	150.807232	7m	*Eucalyptus tereticornis*	Small Parrot Box	Northeast

If any further tree hollows and/or active nests are present, a nest box installation and active nest relocation plan must be prepared by a suitably qualified person. In accordance with the Amity College Development Consent, condition D18, for the duration of the construction works:

a) Street trees must not be trimmed or removed unless it forms a part of this development consent or prior written approval from Council is obtained or is required in an emergency to avoid the loss of life or damage to property;

b) All street trees immediately adjacent to the approved disturbance area must be protected at all times during construction in accordance with Council's tree protection requirements. Any street tree, which is damaged or removed during construction due to an emergency, must be replaced, to the satisfaction of Council;

c) all trees on the site that are not approved for removal must be suitably protected during construction as per the recommendations of the Arboricultural Impact Assessment, version 4, dated 17/7/2019 prepared by Lauranco; and

d) if access to the area within any protective barrier is required during the works, it must be carried out under the supervision of a qualified arborist. Alternative tree protection measures must be installed, as required. The removal of tree protection measures, following completion of the works, must be carried out under the supervision of a qualified arborist and must avoid both direct mechanical injury to the structure of the tree and soil compaction within the canopy or the limit of the former protective fencing, whichever is the greater.

In accordance with the Amity College Development Consent, condition D,19, all hollow-bearing and active nest trees removed from the site must to be inspected prior to removal. Measures must be taken to ensure that fauna inhabiting tree hollows or active nests are treated humanely and relocated before development activities commence, consistent with the National Parks and Wildlife Act 1974. A qualified ecologist or wildlife carer must be present throughout vegetation clearing activities to relocate fauna or take fauna into care where appropriate (i.e. juvenile or nocturnal fauna).

The following protocols will also be applied on site:

- Plans and construction procedures shall clearly outline limit of works and flora/fauna exclusion areas.
- All work areas shall be located within the area of contract.
- Movement of vehicles and plant shall be restricted to designated access corridors and work areas.

4.6. Environmental and Safety Controls

Environmental and safety controls will need to be established on the school site prior to work being undertaken. These will include, but not be limited to the following:

- Security measures (fencing and gate access). Appropriate signage will be placed on areas at the entrance to each (progressive) work zone, indicating the works area and restricted access to the site. Security fencing is already in place, surrounding the entire work area.
- Occupational health and safety measures (personal protective equipment, first aid supplies, signage and barriers if needed). All works will be undertaken in accordance with the requirements of Work Cover NSW as well as the relevant standards and codes of practice to ensure the safety of personnel on and around the site. It will be the Lloyd Group's responsibility to ensure that work, health and safety (WHS) practices are implemented and revised where necessary to reduce the occurrence and impact of workplace accidents and incidents. WHS monitoring and review operations will be programmed on a daily basis, to minimise workplace incidents and accidents. WHS issues shall be continually monitored. Consultation with employees, subcontractors and visitors as required will also be required to ensure WHS accidents and incidents are kept to a minimum.
- Personal protective equipment to be provided to all workers on the site.
- Environmental management measures are to be put into place.
- Toilet facilities shall be provided on the site.
- Daily monitoring of work site by Lloyd Group personnel.
- Site induction. Anyone entering that part of the school site where construction activities are being undertaken will be required to undergo a site induction. The induction will include parking and access, deliveries, emergency procedures, WHS and standard environmental requirements. The induction will cover aspects relating to safety and amenity; including access, emergency evacuation procedures, location of first aid facilities, location of amenities, site hours, material handling, noise and dust policies and environmental management. Lloyd Group is required to provide adequate training of its employees, subcontractors and site visitors including mandatory site inductions. The site induction should make all parties aware of their site responsibilities.
- All workplace amenities, offices, workshops, vehicles, plant and storage facilities including those of contractors will have a suitable type and number of fire extinguishers available for use in the event of a fire. AS2444 provides details on the various extinguishers available, use and effectiveness for various types of fire. All bulk storage of fuels, oils or other products should be in accordance with the relevant Australian standard. Signage will be located at all extinguisher locations on site to indicate the extinguisher type and suitability for the fuels, oils or other products stored on site.

4.7. Environmental Authority Notification & Site Visits

Contact with the relevant government agency should be conducted via the Site Manager and/or HSEQ Manager. Depending on the significance of the issue, the Project Manager will determine whether the notification of Organisation Legal Counsel or other Organisation senior management is required.

Communication from the relevant government agency must be documented (as a minimum) in the site diary. It is recognised that depending on the nature of the communication, other supporting documentation may need to be compiled. In the event that a representative (Officer) of the relevant government agency representative arrives on site, the following procedure should be followed:

- The Officer should be taken to the Site Office to meet the Site Manager or his representative. Before any site inspection, the purpose of the government agency's visit should be determined.
- Particular care must be taken to ensure that visitors are signed in and inducted to an appropriate standard depending on the nature of their visit.

- Under legislation, officers of the EPA or Council have the right to enter any site for the purposes of evaluating the nature and extent of potential pollution.
- The Officer should be escorted around the site under the full-time supervision of the Site Manager or a suitable Organisation representative.
- Before the Officer leaves the site, the Site Manager should obtain a debriefing from the Officer to identify the findings of the inspection.

Where relevant to environmental issues on site, contact details for basic authorities/emergency services can be found in the below table:

ORGANISATION	CONTACT DETAILS	
Fire / Police / Ambulance	Emergency hotline	000
Camden Council	Authorisations, notices	(02) 4654 7777
NSW - Environmental Protection Authority	Info and pollution	131 555
Sydney Water	Authorisations, notices	132092 (from NSW) or 1300 143 734 (from interstate)

4.8. Quality Assurance and Occupational Health & Safety

Lloyd Group will implement a quality assurance and occupational health and safety protocols, as summarised below.

Lloyd Group will maintain a quality assurance system which complies with the requirements of AS 9001 (2000) and AUS-SPEC COC & COS. The protocols in this system include but are not limited to the following. Further details are to be found in the technical notes prepared by Martens & Associates forming a part of the tender documents and accompanying this Plan- refer **Section 12 Appendix A** for details.

- The quality system will include the keeping of all records relating to all aspects of the Stage 1 works.
- At the completion of each stage of the Stage 1 works, Lloyd Group will certify that the works have been undertaken in accordance with the plans and technical notes prepared by consulting engineers Martens & Associates, and any other instructions or drawings issued during the course of the contract works.
- Material safety data sheets to be kept on site at all times, and be readily accessible to personnel at all times. All material to be transported, stored, imported, used or disposed of shall be in accordance with the material safety data sheets.
- The work site and surrounds are to be kept in a clean and tidy condition at all times. Litter and rubbish shall be placed in containers and removed from the site. A waste storage container is to be provided at the commencement of the building work.
- The engineering drawings prepared by consulting engineers Martens & Associates shall be read in conjunction with all other drawings, specifications and written instructions that may be issued during the course of the contract. Lloyd Group shall ensure that they have the latest drawing revision prior to commencing any works. All set out dimensions shall be verified by the contractor on site before work commences. Drawings shall not be scaled for dimensions. All levels are in metres and all dimensions are in metres unless noted otherwise.

4.9. Risk Management

Risk Management is key to delivering the Amity College Stage 1 works successfully. By planning prior to works commence and identifying risks early we can ensure that the best possible outcome is secured. Our risk register for the project is located in **Section 13 Appendix B**

5. Unexpected Finds Protocols

5.1. Unexpected Finds Protocol – Contamination

Previous investigations on the project site have identified the potential presence of contaminated fill materials in the surface and sub-surface. Those parts of the site so affected have been remediated. A Remediation Action Plan (RAP), which sets sets out the remediation strategy for the site, has been prepared.
The unexpected finds and site conditions that may arise at the site include:

- Finding contamination in areas not previously surveyed or the uncovering of currently unknown types of contamination.
- The uncovering of greater amounts of ground contamination than currently identified.
- The uncovering of additional Asbestos containing materials.
- The uncovering of any suspect or unacceptable odour containing materials. This material is typically identified by unusual staining, odour, discolouration or inclusions such as building rubble, asbestos, ash material, etc

Should any of the above be encountered during any stage of works (including earthworks, site preparation or construction works, etc.), such works shall cease immediately until a qualified environmental specialist has be contacted and conducted a thorough assessment. Refer to step by step guide below for details. The following steps will apply.

Any unexpected finds that may be identified as a result of site activity will be actioned in accordance with the Unexpected Finds Protocol prepared by GeoEnviro Consultancy Pty Ltd, as well as in accordance with the original Construction Management Plan (CMP) prepared by Outline Planning Consultants Pty Ltd, Preliminary Construction Management - Plan Proposed Primary & Secondary School SSD 9227, dated July 2019, where modified by the consent.

Upon notification of the unexpected find/s, Lloyd Group will:

a) Stop work and notify the site manager/HSE coordinator as soon as practically possible.

b) Ensure the find is not further disturbed.

c) Ensure all personnel are removed from the area with the exception of personnel required to isolate or make safe the area.

d) Establish an “unexpected find” isolation zone as required to prevent or minimise the risks for site personnel, members of the public, fauna or flora. Persons are not to expose themselves to further risk whilst establishing isolation zone.

e) Assess the requirement to evacuate areas or the entire site.

f) Co-ordinate site or area evacuation as assessed. It is preferrable to evacuate the whole site if there is any doubt as to the safety of personnel or the environment.

g) As soon as the safety of personnel, environment & the site is secured, the Site Manager/Supervisor should notify their relevant HSE Manager, Project Manager & Construction Manager.

h) As soon as practically possible, record the events associated with the unexpected find.

In accordance with the Unexpected Finds Protocol, prepared by GeoEnviro Consultancy Pty Ltd, the Project Manager/HSE Manager, in consultation with the relevant General Manager, will notify regulatory authorities as required. The Project Manager/HSE Manager will also ensure that the find is reported to the Principal.

In the case of unexploded ordnance:

a) Do not touch or disturb;

b) Contact Police immediately.

In the case of unexpected services, which may include power, gas or fuel:

a) Do not touch or further disturb.

b) The area must be immediately designated a non-smoking and "no naked flames" area.

c) All nearby machinery should be turned off.

d) Contact relevant governing authority.

e) Contact appropriate trade supervisor.

In the case of unexpected finds of material containing asbestos, including Products made from asbestos cement not only include fibro sheeting (flat and corrugated), but items such as water, drainage and flue pipes, roofing shingles and gutters etc.:

a) Do not touch or further disturb.

b) Isolate area (10 metre isolation zone required for asbestos).

c) Contact hygienist. Implement hygienist's recommendations.

d) If persons have been exposed arrange medical advice/consultation i.e. possible asbestos fibre exposure will require lung function test & chest x-ray. Note: This applies more specifically to friable type asbestos rather than non friable asbestos containing material however if any doubt exists treat as friable.

e) Obtain clearance from hygienist prior to re-entering area.

Before re-commencing works in or near the source of the unexpected find the following actions will be followed:

a) Approval will be required from the contamination consultant to allow for the re-commencement of works or part thereof.

b) The extent of the unexpected find must be delineated.

c) Review the need, if any, to amend or update the Remediation Action Plan as necessary to include the additional remediation and validation of the unexpected find, and to update if required.

All measures will be acted upon in accordance with the Remediation Action Plan entitled *Remediation Action Plan – Proposed New Amity College Campus, Lot 1 DP 525996 No 85 Byron Road and Lot 2 DP 525996 No 63 Ingleburn Road Leppington NSW*, prepared by GeoEnviro Consultancy and dated 30 May 2019.

5.2. Unexpected Finds Protocol – Aboriginal Heritage

In accordance with the Amity College Development Consent (SSD 9227), condition D26, in the event that surface disturbance identifies a new Aboriginal object, all works must halt in the immediate area to prevent any further impacts to the object(s).

A suitably qualified archaeologist and a registered Aboriginal representatives must be contacted to determine the significance of the objects.

The site is to be registered in the Aboriginal Heritage Information Management System (AHIMS) which is managed by EES Group and the management outcome for the site included in the information provided to AHIMS. The Applicant must consult with the Aboriginal community representatives, the archaeologists and EES Group to develop and implement management strategies for all objects/sites. Works shall only recommence with the written approval of EES Group.

5.3. Unexpected Finds Protocol – Historic Heritage

In accordance with the Amity College Development Consent (SSD 9227), condition D27, if any unexpected archaeological relics are uncovered during the work, then all works must cease immediately in that area and the Heritage NSW contacted. Depending on the possible significance of the relics, an archaeological assessment and management strategy may be required before further works can continue in that area. Works may only recommence with the written approval of the Heritage NSW.

5.4. Records of unexpected Finds

Throughout the early works several unexpected finds were discovered on site. The below timeline of events outlines the nature of each of these finds and the actions that were undertaken by Lloyd group, relevant consultants and contractors in collaboration with the Principal.

Appendix 5.4 A

Initial suspected areas provided by client showing stockpile, borehole and sampling locations.

Appendix 5.4 B

3/08/2021 – Notice of Delay 003 – Topsoil Asbestos Removal.
Various site finds notified to Principal

Appendix 5.4 C

3/08/2021 – Email accompanying Notice of Delay 003. ACM fragments encountered while conducting site strip
Outlines Lloyd group's actions in response to the find and also includes GeoEnviro Consultancy's Unexpected Finds protocol and Initial survey of stockpiled materials

Appendix 5.4 D

The encountered ACM tested (positive) and wrapped in plastic and clearing continues throughout the site

ENRS is engaged as a hygienist to review the materials stockpiled on site. ENRS work in conjunction with the civil contractor and site auditor to complete the testing of stockpiles Condition. Report and lab analysis attached

25/08/2021 - Regarding Lloyd email :RE: ENRS1990 stockpile results - Lloyd provides results of the negative ACM content of the stockpiles

27/08/2021 - Auditor responds with queries, ENRS closes majority of queries

Appendix 5.4 G

14/10/2021 - Lloyd email RE: ENRS1990 stockpile results - closes final auditor queries and wrapped ACM is approved to be disposed from site by auditor email RE: ENRS1990 stockpile results received 15/10/2021. Tip dockets for asbestos also provided.

Appendix 5.4 A

LEGEND:

- Clearance Areas
- Potential impact beyond assessment extent
- Site boundary
- Validation sampling locations for Asbestos
- Proposed borehole locations for sampling of imported material
- Soil stockpiles of unknown origin

0 10 20 30 m

Coordinate Reference System: GDA 94
Projection:Transverse Mercator (MGA zone 54)
Datum: GDA 94

ENVIRONMENTAL EARTH SCIENCES
CONTAMINATION RESOLVED

Client: **Mackellar Excavations Pty Ltd**		Job No: **120110**
Drawn By: **KA**	Scale: **as shown**	Source: **QGIS, Nearmap**
Project Manager: **NE**	Date: **June 2021**	**Figure 1**
Reviewed by: **JB**		

Title: **Proposed sampling locations**
Location: **85 Byron Ave. Leppington**

Appendix 5.4 B

UNEXPECTED FINDS
LLOYD INITIAL NOD

Tuesday 3rd August 2021

Attention: Mr Peter Reed
Gran Associates Australia
Level 1, 597 Darling Street
Rozelle NSW 2039

1442 – Amity College Early Works
Notice of Delay 003 – Topsoil Asbestos Removal

Dear Peter,

Lloyd Group Pty Ltd hereby provide a Notice of Delay re email sent to Peter Reed by Joseph Elley 12:09pm 03/08/21 *'Amity College Leppington - Asbestos Topsoil'.*

Particulars;

1. During the process of topsoil scrapping and stockpiling for removal on site at Amity College Leppington Early Works, fragments of asbestos have been found (see below mark up of area and supporting photos). This area will not be touched and closed off until the hygienist is present on site and can advise removal strategies, etc which will be relayed onto the client for review and approval. This does affect the area in which is required to meet our programme target completion deadlines and dates, until the area can be cleared, and continuation of works can be carried out.

2. We anticipate that this closure will consequently delay *Completion* due to critical path activities being both directly and indirectly affected by the closure.

Lloyd Group will advise the client if any other asbestos if found in other areas, immediately.

Regards,

Nicholas Messiou
Project Coordinator
Lloyd Group

Appendix 5.4 C

Nick Messiou

UNEXPECTED FINDS
LLOYD INITIAL NOD

From: Joseph Elley
Sent: Tuesday, 3 August 2021 12:09 PM
To: Peter Reed
Cc: Matthew Licuria; Marcus Smith; Kane Sabo; Vincent Phuong; Nick Messiou; Scott Willoughby
Subject: Amity College Leppington - Asbestos Topsoil
Attachments: 03082021103944-0001.pdf; IMG_3370.JPG; IMG_3371.JPG; IMG_3372.JPG

Importance: High

Hi Peter,

As discussed, we've encountered ACM fragments while conducting the site strip.

The area is shown in the attached marked up PDF and the fragments and sheets are shown in the images attached.

Per the RAP report for the project provided by GeoEnviro we will follow the unexpected finds protocol Appendix B.

We can through visual inspection confirm:

- The area as been isolated
- There is no requirement for evacuation as the materials found appear to be bonded (testing has been booked in ETA Thursday)
- We have notified by way of this email our Senior Management and Safety representative

We will provide a notification of delay COB once we have collated the information

We will once we receive advice from the hygienist provide a clearance method to yourself for review and approval

We will provide further notification if the situation on site changes

Appendix 5.4 C

GeoEnviro Consultancy Pty Ltd
Unit 5, 39-41 Fourth Avenue, Blacktown, NSW 2148, Australia
PO Box 1543, Macquarie Centre, North Ryde, NSW 2113

ABN 62 684 294 782
Tel : (02) 9679 8733
Fax : (02) 9679 8744

UNEXPECTED FINDS
LLOYD INITIAL NOD

UNEXPECTED FINDS PROTOCOL.

ITEM	REQUIREMENTS
DEFINITION	An unexpected find may be identified as a result of site activity, for example through earthworks and movement of plant on site including preparatory site works.
SITE SUPERVISOR	On being notified of an **Unexpected Find**, the Principal Contractor must: • Stop work & notify the site manager/HSE coordinator as soon as practically possible. • Ensure the find is not further disturbed. • Ensure all personnel are removed from the area with the exception of personnel required to isolate or make safe the area. • Establish an "unexpected find" isolation zone as required to prevent or minimise exposure risks for site personnel, members of the public, fauna or flora. Note: Persons are not to expose themselves to further risk whilst establishing isolation zone. • Assess the requirement to evacuate areas or the entire site. • Co-ordinate site or area evacuation as assessed. Note: It is preferable to evacuate the whole site if there is any doubt as to the safety of personnel or the environment. • As soon as the safety of personnel, environment & the site is secured the Site Manager/Supervisor should notify their relevant HSE Manager, Project Manager & Construction Manager. • As soon as practically possible record the events associated with the unexpected find.
PROJECT MANAGER	The Project Manager and/or HSE Manager in consultation with the relevant General Manager notify regulatory authorities as required. Establish a risk based process for managing clearance of the unexpected find & establishing incident investigation.
	The Project Manager or HSE Manager must also ensure that the find is reported to the Principal. This may be by verbal communication.
UNEXPLODED ORDNANCE	• Do not touch or disturb. • Contact Police immediately.
UNEXPECTED SERVICES **(LIVE OR DISUSED)**	• This may include power, gas or fuel. • Do not touch or further disturb. • The area must be immediately designated a non-smoking and "no naked flames" area. • All nearby machinery should be turned off. • Contact relevant governing authority. • Contact appropriate trade supervisor.

Appendix 5.4 C

UNEXPECTED FINDS
LLOYD INITIAL NOD

ITEM	REQUIREMENTS
HUMAN REMAINS	• Do not touch or disturb. • Contact Police immediately. Please note that aboriginal burial objects (such as bark coffins) are defined by legislation as human remains.
HERITAGE ITEMS	• Do not touch or disturb. • Contact Heritage Office or relevant State or Local Government Authority.
OBJECTS OF POSSIBLE CULTURAL SIGNIFICANCE	• Do not touch or disturb. Contact Department of Indigenous Affairs or relevant State or Local Government Authority.
UNEXPECTED FIND PROCESS	**Unexpected Find Discovered** ↓ **Person Uncovering Find** 1. Stop work 2. Consider personnel safety etc 3. Notify Site Supervisor/ Manager location ↓ **Site Supervisor/Manager** • Establish Unexpected Find isolation zone as required • Notify Project Manager/ Construction Manager and HSE Managers ↓ **Project Manager/Construction Manager** • In consultation with State General Manager/HSE Manager notify relevant authority (where required) • Complete Incident Register in site diary • Develop, document and implement process to clear find

REGARDS,

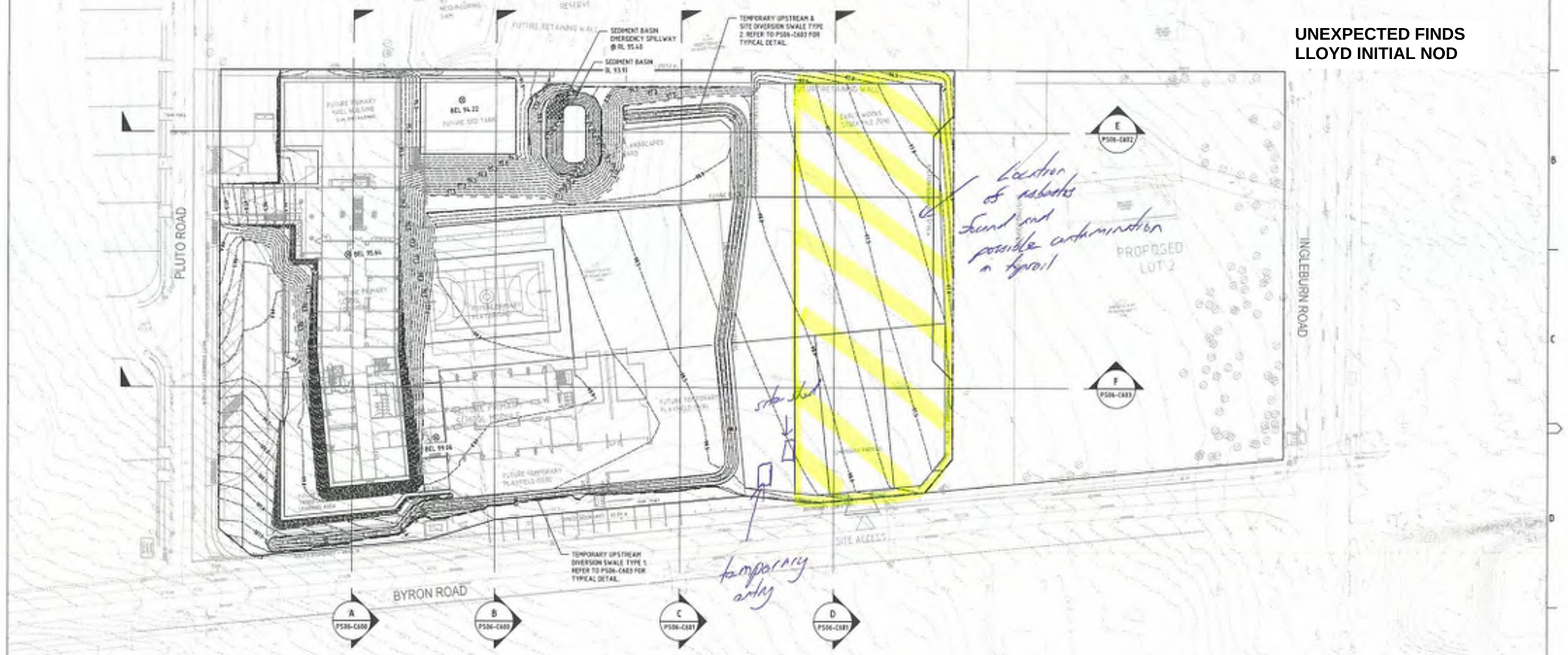
JOSEPH ELLEY
PROJECT MANAGER

Appendix 5.4 C

Map of Found Asbestos

NOTE: RESIDUAL CONTAMINATION MAY BE ENCOUNTERED DURING WORKS. SUPERINTENDENT & ENVIRONMENTAL CONSULTANT TO BE NOTIFIED IMMEDIATELY FOR ADVICE.

UNEXPECTED FINDS
LLOYD INITIAL NOD



KEY

- EXISTING CONTOURS
- PROPOSED CONTOURS
- EARTHWORKS HINGE
- SWALE TYPE 1
- SWALE TYPE 2
- INTERFACE
- SITE BOUNDARY

NOTES:
- EARLY WORKS IS STAGE 1 BULK EARTHWORKS INCLUDING CUT FILL AND PLACEMENT OF PROTECTIVE TOPSOIL & SEEDING, AND EXCLUDES RETAINING WALLS, PLUTO ROAD ROADWORKS, PRIMARY DROP-OFF WORKS AND FINAL LANDSCAPE TOPSOIL.
- EXISTING SURFACE IS BASED ON SURVEY INFORMATION PROVIDED BY TOTAL SURVEYING SOLUTIONS DATED 18/01/2021.
- BULK EARTHWORK LEVELS ARE SHOWN ON PLANS FINISHED SURFACE LEVELS MINUS 200mm SLAB FOR BASEMENT CARPARK, MINUS 180mm SLAB FOR PAVED AREAS, AND MINUS 300mm TOPSOIL FOR LANDSCAPED AREAS.
- ALL EARTHWORK AREAS ARE TO BE REINSTATED BY THE CONTRACTOR TO THE DIRECTION AND SATISFACTION OF THE SUPERINTENDENT. AS A MINIMUM, ALL AREAS EXCLUDING PAVEMENT AND ROCK LINED AREAS OR OTHER AREAS NOMINATED FOR SPECIFIC LANDSCAPING ARE TO BE FINISHED WITH 150 mm THICK LAYER OF SITE SOURCED (OR APPROVED EXTERNAL SUPPLY TOPSOIL) AND SPRAY GRASSED OR TURFED ASAP FOLLOWING COMPLETION OF WORKS IN ANY ONE AREA.

CONSTRUCTION CERTIFICATE

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
D	MINOR AMENDMENT	26/02/2021	GH	AW/PB	SA	TH
C	MINOR AMENDMENT	22/02/2021	GH	AW/PB	SA	TH
B	MINOR AMENDMENT	18/02/2021	GH	AW/PB	SA	TH
A	INITIAL RELEASE	12/02/2021	GH	AW/PB	SA	TH

SCALE: A1 (841) 1:500 (1:1,000) METRES

GRID	DATUM	PROJECT MANAGER
MGA94	mAHD	TH

DISCLAIMER & COPYRIGHT
This plan must not be used for construction unless signed for approval by the consulting authority.
All measurements are in metres unless otherwise specified.
This drawing must not be reproduced in whole or part without prior written consent of Martens & Associates Pty Ltd.

CLIENT: AMITY COLLEGE

PROJECT NAME/PLANSET TITLE: AMITY COLLEGE LEPPINGTON CAMPUS
BULK EARTHWORKS (EARLY WORKS)
53 INGLEBURN RD & 65 BYRON RD, LEPPINGTON, NSW 2171
LOT 1 & 2 DP 525996

martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia. Phone: (02) 9476 9999 Fax: (02) 9476 9767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE: BULK EARTHWORKS GRADING PLAN

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1806493	PS06	R04	PS06-C300	D

LLOYD

UNEXPECTED FINDS
LLOYD INITIAL NOD

Appendix 5.4 C

Appendix 5.4 C

LLOYD

UNEXPECTED FINDS
LLOYD INITIAL NOD

Appendix 5.4 C

Amity College Early Works
Asbestos Mark Up 04/08/21

NOTE: RESIDUAL CONTAMINATION MAY BE ENCOUNTERED DURING WORKS. SUPERINTENDENT & ENVIRONMENTAL CONSULTANT TO BE NOTIFIED IMMEDIATELY FOR ADVICE.

KEY

- EXISTING CONTOURS
- PROPOSED CONTOURS
- EARTHWORKS HINGE
- SWALE TYPE 1
- SWALE TYPE 2
- INTERFACE
- SITE BOUNDARY

NOTES:

- EARLY WORKS IS STAGE 1 BULK EARTHWORKS INCLUDING CUT FILL AND PLACEMENT OF PROTECTIVE TOPSOIL & SEEDING, AND EXCLUDES RETAINING WALLS, PLUTO ROAD ROADWORKS, PRIMARY DROP-OFF WORKS AND FINAL LANDSCAPE TOPSOIL.
- EXISTING SURFACE IS BASED ON SURVEY INFORMATION PROVIDED BY TOTAL SURVEYING SOLUTIONS DATED 18/01/2021.
- BULK EARTHWORK LEVELS ARE SHOWN ON PLANS FINISHED SURFACE LEVELS MINUS 200mm SLAB FOR BASEMENT CARPARK, MINUS 180mm SLAB FOR PAVED AREAS, AND MINUS 300mm TOPSOIL FOR LANDSCAPED AREAS.
- ALL EARTHWORK AREAS ARE TO BE REINSTATED BY THE CONTRACTOR TO THE DIRECTION AND SATISFACTION OF THE SUPERINTENDENT. AS A MINIMUM, ALL AREAS EXCLUDING PAVEMENT AND ROCK LINED AREAS OR OTHER AREAS NOMINATED FOR SPECIFIC LANDSCAPING ARE TO BE FINISHED WITH 150 mm THICK LAYER OF SITE SOURCED (OR APPROVED EXTERNAL SUPPLY TOPSOIL) AND SPRAY GRASSED OR TURFED ASAP FOLLOWING COMPLETION OF WORKS IN ANY ONE AREA.

CONSTRUCTION CERTIFICATE

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
D	**MINOR AMENDMENT**	**24/02/2021**	**GM**	**AW/PB**	**SA**	**TH**
C	MINOR AMENDMENT	22/02/2021	GM	AW/PB	SA	TH
B	MINOR AMENDMENT	18/02/2021	GM	AW/PB	SA	TH
A	INITIAL RELEASE	12/02/2021	GM	AW/PB	SA	TH

SCALE: 0 5 10 15 20 25 30 35 40 45 50 METRES
A1 (A3) 1:500 (1:1,000)

GRID	DATUM	PROJECT MANAGER
MGA94	mAHD	TH

CLIENT: AMITY COLLEGE

PROJECT NAME/PLANSET TITLE: AMITY COLLEGE LEPPINGTON CAMPUS
BULK EARTHWORKS (EARLY WORKS)
63 INGLEBURN RD & 85 BYRON RD, LEPPINGTON, NSW 2171
LOT 1 & 2 DP 525996

martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE: BULK EARTHWORKS GRADING PLAN

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1806493	PS06	R04	PS06-C300	D

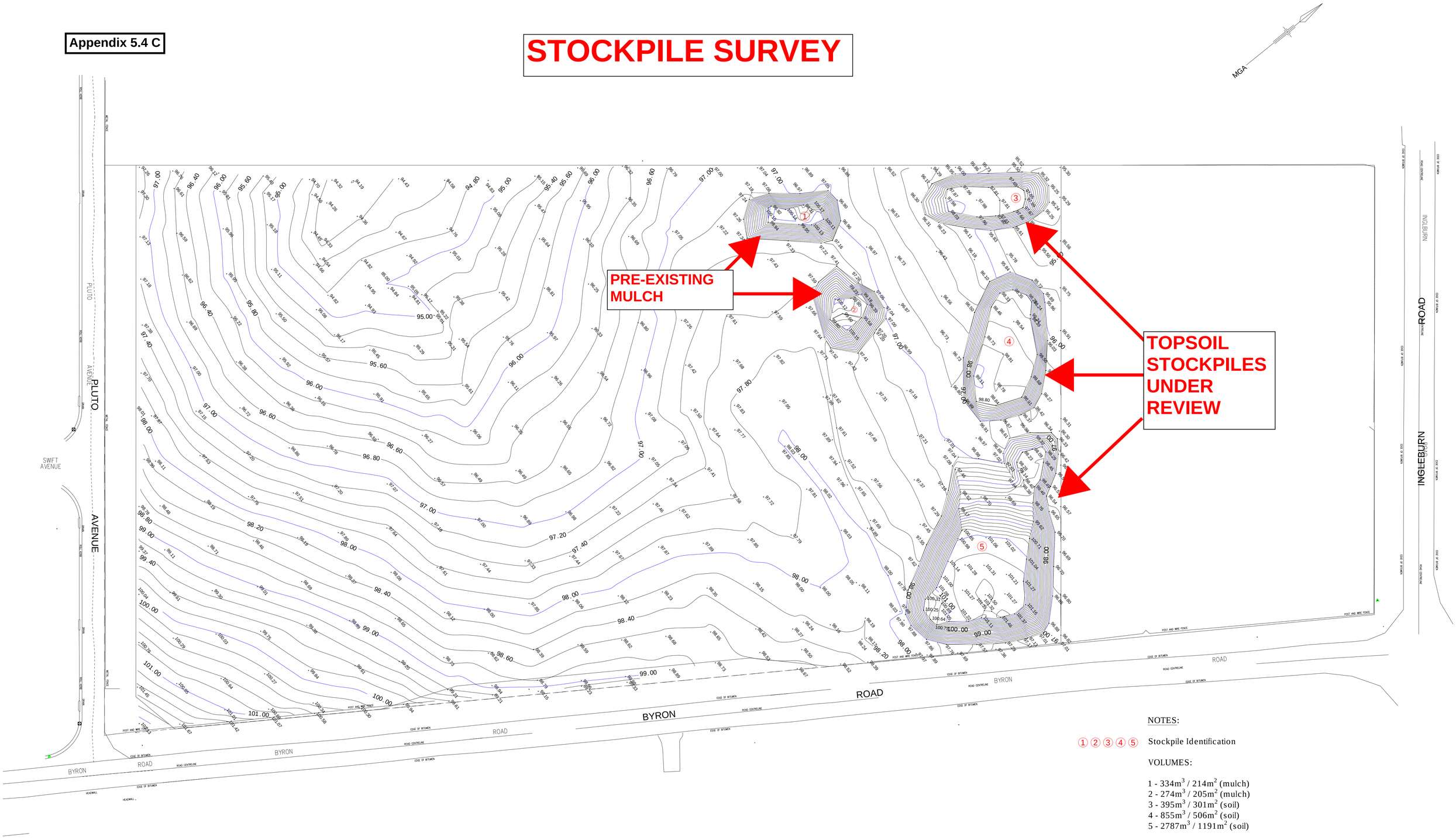
DRAWING ID: P1806493-PS06-R04-C300

PRINTED ---- USER: GMOSTOFA

A1 / A3 LANDSCAPE (A1LC_v02.0.01)

Appendix 5.4 C

STOCKPILE SURVEY



NOTES:

① ② ③ ④ ⑤ Stockpile Identification

VOLUMES:

1 - 334m^3 / 214m^2 (mulch)
2 - 274m^3 / 205m^2 (mulch)
3 - 395m^3 / 301m^2 (soil)
4 - 855m^3 / 506m^2 (soil)
5 - 2787m^3 / 1191m^2 (soil)

0	JF	INITIAL ISSUE	14/08/21
REVISION	BY	REVISION DESCRIPTION	DATE

INITIAL SURFACE LEVELS & STOCKPILES SURVEY
AMITY COLLEGE. 85 BYRON ROAD
LEPPINGTON NSW 2179

NORTHWEST SURVEYS | TRUE NORTH SURVEYS | GEOMAT ENGINEERING PTY LTD

TRUE NORTH GROUP

114 Windsor Road
Northmead NSW 2152
mobile: 0449 293 663
phone: (02) 9453 0100
email: javier@geomat.com.au

SCALE : 1:400 @ A1 : 1:800 @ A3			
CLIENT: T & I CIVIL			
LEVELS ORIGIN : PM 44296 RL 94.432			
SURV	DRAF	CHK	DATUM : AHD CLASS LC
CA	CA	JF	DATE : 14/08/2021
DRAWING: 2288 AMITY_SURV 210814			PROJECT: 2288
			REVISION: 0

Appendix 5.4 D

ENVIRONMENT & NATURAL RESOURCE SOLUTIONS

Lloyd Group

Date of Issue: 30th August 2021
Project No.: ENRS1990
Status Rev.2

SUBJECT: SOIL STOCKPILE ASBESTOS INVESTIGATION (AI)
85 BYRON ROAD, LEPPINGTON

1 INTRODUCTION

Environment & Natural Resource Solutions (ENRS Pty Ltd) were commissioned as independent environmental consultants to conduct an Asbestos Investigation (AI) on soil stockpiles located at 85 Byron Road Leppington, NSW (herein referred to as the Site).

This letter report provides an assessment of potential asbestos in soil in general accordance with the *Guidelines for Consultants Reporting on Contaminated Land* (EPA;2020) and *National Environment Protection (Assessment of Site Contamination) Amendment Measure 2013 (No.1).*

2 OBJECTIVES

This aim of this assessment was to assess if the soil stockpiles contain asbestos and consider if the material can be re-used on site.

3 SCOPE OF WORK

The scope of work for this assessment was to:

- Review Site survey plans and aerial imagery to quantify the volume of stockpiled material;
- Prepare sample plan for stockpile characterisation based on documented volumes;
- Mobilise Licensed Asbestos Assessor (LAA) with experience in NEPM asbestos in soil sampling and contaminated land management;
- Conduct stockpile walkover and visual inspection for asbestos;
- Oversee test pit investigations, NEPM asbestos in soil sampling, field screening and collection of supplementary jar samples;
- Submit sieved samples to NATA laboratory for asbestos in soil analysis;
- Place jar samples on hold pending requirements for chemical testing, if required;
- Preparation of a letter report, compile investigation results with comparison against the Site Assessment Criteria (SAC).

4 BACKGROUND

ENRS understand the soil stockpiles comprise materials excavated on Site during early works in preparation of re-development for a school college. The Site was previously subject of a combined Stage 1 and 2 contamination assessment by GeoEnviro Consultancy in 2019 and a Remediation Acton Plan (RAP). The Stage 1-2 report documents the Site has a low risk of

gross chemical contamination and documents areas of asbestos impacted Fill and asbestos in building structures. At the time of this stockpile AI the Site had been scraped, and it is understood the known asbestos areas have been remediated, cleared and validated.

The Site is subject of a Site Audit by Paul Moritz, Douglas Partners. Auditor correspondence notes if the stockpiles are found to contain asbestos, or other contamination, such that they need to be disposed, once they are removed the site surface on which they have been sitting will need to be re-validated before further works.

5 SITE DESCRIPTION

The soil stockpiles subject of this assessment were positioned across the northern central portion of the Site as depicted in **Figure 1**. The stockpiles were surveyed prior to this assessment and were noted to be covered with geotextile fabric:

- Soil Stockpile No.1 - 395 m^3 *(Noted on Survey plan SP ID3);*
- Soil Stockpile No.2 - 855 m^3 (Noted on Survey plan SP ID4); and
- Soil Stockpile No.3 - 2,787 m^3 *(Noted on Survey plan SP ID5).*

6 ASSESSMENT CRITERIA

The EPA has endorsed the use of the Health Investigation Levels (HILs) given in the *National Environment Protection (Assessment of Site Contamination) Amendment Measure 2013 (No. 1)* 'Schedule B (1) Guideline on the Investigation Levels for Soil and Groundwater'. The NEPM provide a framework for risk-based assessment of soil and groundwater contamination. Health Screening Levels (HILs) are provided for four (4) land use categories:

Table 1: Summary of NEPM Land Use Categories

NEPM	Description of Land Use Categories
HIL A	**Residential A with garden/accessible soil also includes children's day care centres, preschools and primary schools.**
HIL B	Residential B with minimal opportunities for soil access; includes buildings with fully and permanently paved yard space such as high-rise buildings and apartments.
HIL C	Recreational C includes public open space such as parks, playgrounds, playing fields (e.g. ovals), secondary schools and unpaved footpaths.
HIL D	Commercial/industrial D includes premises such as shops, offices, factories and industrial sites.

Given the Site proposal for the construction of School College this assessment has adopted **Level 'A'** as the Site Assessment Criteria (SAC) for the stockpiled materials

6.1 Asbestos in Soil Criteria

The ASC NEPM (2013) *Schedule B2 - Guideline on site characterisation* documents Health Screening Levels (HSLs) for asbestos levels in soil adopted from the Western Australian Guidelines for the Assessment Remediation and Management of Asbestos contaminated sites in Western Australia (WA Gov;2009). The Guidelines only apply to asbestos materials in soils,

they do not apply to asbestos or asbestos containing materials present in buildings, structures, functional pipelines etc. The NEPM guidelines define three (3) primary forms of asbestos in soil:

- ***Asbestos Containing Material*** (***ACM)*** – non-friable matrix material generally observed as stable fragments in soil unless subjected to aggressive disturbance, prolonged saturation or fire;
- ***Fibrous Asbestos*** (***FA)*** – friable and fibrous material. Friable asbestos materials are those that can be crumbled, pulverised or reduced to powder by hand pressure when dry; and
- ***Asbestos Fines*** (***AF)*** – sub-7mm material including free fibre. Respirable asbestos fibres are generally greater than five micrometres long and no wider than 3 micrometres.

Table 2: Health Screening Levels for Asbestos in Soil (NEPM 2013)

Form of Asbestos	Health Screening Level (HSL) (w/w%)	
	Residential A[1]	Commercial/ Industrial D[2]
Bonded ACM	0.01%	0.05%
FA and AF (friable asbestos)	0.001%	
All forms of asbestos	No visible asbestos for surface soil	

1. Residential A with garden/accessible soil also includes children's day care centres, preschools and primary schools.
2. Commercial/Industrial D includes premises such as shops, offices, factories and industrial sites.

7 SAMPLE METHODOLOGY

7.1 Sample Density

sample density adopted the NEPM Vol3. Schedule B2 Section 7.5.2 as the recognised guideline for stockpile characterisation in NSW, which further references the 95% UCL calculations outlined by the Vic. EPA IWRG702. The adopted sample density was considered suitable supported by field observations and laboratory results which reported minor occurrence of asbestos, and no other visual and olfactory indicators of contamination observed to trigger higher density testing.

7.2 Asbestos in Soil

Sampling for asbestos in soil (ASBINS) was undertaken in general accordance with Section 4 of the ASC NEPM (2013) and Table 8 of the Western Australia Department of Health: Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia (WA DOH, 2009), as summarised below:

- Per sample location, 10 litres of soil screened through a 7 mm sieve. For handling purposes sieving is completed in two passes of 5L to manage fatigue and stain. The coarse non-passing material spread out for inspection on an impermeable layer of contrasting colour material. Any identified ACM removed, double bagged and labelled for weighing and calculation of w/w% concentration;

- One (1) wetted 500 ml sub sample collected from the fines passing the 7 mm sieve and submitted for laboratory analysis for asbestos identification (AS4964-2004); and
- Where asbestos is detected in any sample, the concentration of asbestos as fragments (ACM) and as loose fibres (FA or AF) to be compared with the relevant Site Assessment Criteria.

Table 3: Asbestos in Soil Sample Plan

Location	Volume (m^3)	Number of Samples required for 95% UCL	Action	Analyte
SP01	395	10 (200-2500m^3)	Sieve 10 L to 7 mm with field screening and composite laboratory sample.	NEPM level screening for asbestos in soil
SP02	855	10 (200-2500m^3)		
SP03	2,787	12 (200-2300m^3)		

7.3 Soil Chemistry

Supplementary jar samples were collected from each sample location and placed on hold pending requirements for additional chemical testing. No testing was conducted during this scope of work. It is anticipated chemical assessment for waste classification would be required if asbestos is identified at concentrations above the SAC.

Samples were collected with disposable sterile gloves and placed directly in laboratory supplied 250 mL jars with Teflon lined lids and immediately stored on ice. Sample containers were individually labelled with sample identification clearly marked on the container and sealed lid. Volatile compound losses were kept to a minimum by employing the following sampling techniques:

- Minimal disturbance of soil during sampling;
- Sample material placed in sampling jars as soon as possible;
- Sampling containers containing zero headspace;
- Samples placed directly on ice and transported to the laboratory as soon as possible; and
- Employing the most appropriate analytical method to minimise volatile losses at a NATA accredited laboratory.

7.4 Sampling Team

The sampling team comprised experienced contaminated land professionals with appropriate tertiary qualifications and accredited SafeWork NSW Licenced Asbestos Assessors (LAA).

8 RESULTS

8.1 Field Observations

The stockpile investigation was conducted on the 20th August 2021. A walkover inspection of the stockpile surface identified one (1) fragment on the surface of Stockpile No.2. The fragment

was located on the western corner of the stockpile and was observed to be greater than 7mm and did not crumble under hand pressure, which is characteristic of non-friable asbestos in soil. Test Pit No.1 (SP02-S01) was subsequently advanced at the fragment location, however no further asbestos was identified. Similarly, the walkover did not identify any other asbestos fragments on the surface of the stockpiles. The stockpiled soil was noted to comprise of generally uniform materials described as sandy loam. SP01 and SP03 were light brown in colour, where SP02 appeared slightly darker brown characteristic of topsoil. Some foreign materials were observed in SP02 including concrete and bricks with a minor quantity in portions of SP03. Sieve screening and visual inspection for asbestos was undertaken in the field for samples from the surface of the stockpiles and test pit cuttings to depths of 1.5 m. No asbestos was observed during field screening, refer to field records attached.

8.2 Laboratory Results

Laboratory Certificates of Analysis (COA) for asbestos in soil are provided in **Attachment 1**. No chemical analysis was conducted during this scope of work, samples were collected and placed on hold pending requirements for testing, if any. Upon receipt the results were compared against the Site Assessment Criteria (SAC). A summary of the results is provided in **Table 4** with sample locations in **Figure 1**.

The results for asbestos in soil are noted to be below the NEPM Health Screening Level.

Table 4: Asbestos in Soil Results

Stockpile No.	Sample ID	Concentration	NEPM 'A' Health Screening Level (HSL) (AF&FA)	Result
ENRS-SP01 (Survey ID3)	SP01/S01-S10	No Asbestos Detected (NAD)	-	Suitable for re-use on Site
ENRS-SP02 (Survey ID4)	SP02/S01-S03	No Asbestos Detected (NAD) 1x fragment observed on ground surface adjacent test pit.	-	Low level FA/AF ***<NEPM Health Screening Levels***. Suitable for re-use on Site supported by placement below final surface and clearance inspection after placement.
	SP02/S04	0.00003% w/w	0.001%	
	SP02/S05-S08	No Asbestos Detected (NAD)	-	
	SP02/S09	0.00006% w/w	0.001%	
	SP02/S10	No Asbestos Detected (NAD)	-	
ENRS-SP03 (Survey ID5)	SP03/S01-S12	No Asbestos Detected (NAD)	-	Suitable for re-use on Site

9 CONCLUSIONS

Based on the site observations and laboratory results for the three (3) soil stockpiles investigated during this scope of work, the following conclusions and recommendations may be provided:

- No asbestos was observed in the field or detected by the laboratory in SP01 or SP03. These stockpiles may be considered suitable for re-use;
- Visual inspections identified one (1) asbestos fragment on the surface of stockpile No.2 adjacent SP02-S01. No further asbestos was observed in the field or detected by the laboratory in the SP02-S01 sample. The fragment was greater than 7 mm and did not crumble under hand pressure which is characteristic of non-friable asbestos in soil;
- Field screening of sieved soil samples did not identify any visual occurrence of asbestos in the 32 samples collected from the three (3) stockpiles. No other visual or olfactory indicators of contamination were noted to trigger further chemical testing. Sample jars were collected in the field and placed on hold pending requirements for testing;
- The laboratory results report detections of asbestos in two (2) samples from SP02. The material is described as asbestos fibres (AF) bound within fibrous paper. Review of the reported concentrations against the HSL documents the results are below the SAC, which may be considered satisfactory:
    - SP02-S04: AF 0.00003% w/w < HSL 0.001%
    - SP02-S09: AF 0.00009% w/w < HSL 0.001%
- The investigation results indicate there is potential for low level asbestos in Stockpile No.2 below the Site Assessment Criteria. The material may be considered suitable for re-use on Site supported by placement at depth below the proposed final surface, and progressive clearance inspections during handling and placement by a Licensed Asbestos Assessor. The project CEMP or equivalent management plan, should be updated to include this requirement for clearance inspections;
- Should any further asbestos be uncovered works should cease and a Licensed Asbestos Assessor be notified to inspect and re-assess the Unexpected Find.

This letter including the results of testing and discussion is prepared only for the above project and must be read in full in conjunction with the ENRS statement of Limitations. The discussions should not be used for any other project. ENRS should be informed if any of the above adopted/ assumed conditions, specifications etc. changes to refine the assessment accordingly.

For and on behalf of ENRS

Rohan Last (BSc, MSc)
Hydrogeologist & Environmental Scientist
SafeWork NSW Asbestos Assessor (LAA000166)
e rohan@enrs.com.au **t** 02 4448 5490 **m** 0401 518 443
108 Jerry Bailey Road Shoalhaven Heads NSW 2535
ABN 68 600 154 596 www.enrs.com.au

Appendix 5.4 D

10 LIMITATIONS

This report and the associated services performed by ENRS are in accordance with the scope of services set out in the contract between ENRS and the Client. The scope of services was defined by the requests of the Client, by the time and budgetary constraints imposed by the Client, and by the availability of access to Site.

ENRS derived the data in this report primarily from visual inspections, and, limited sample collection and analysis made on the dates indicated. In preparing this report, ENRS has relied upon, and presumed accurate, certain information provided by government authorities, the Client and others identified herein. The report has been prepared on the basis that while ENRS believes all the information in it is deemed reliable and accurate at the time of preparing the report, it does not warrant its accuracy or completeness and to the full extent allowed by law excludes liability in contract, tort or otherwise, for any loss or damage sustained by the Client arising from or in connection with the supply or use of the whole or any part of the information in the report through any cause whatsoever.

Limitations also apply to analytical methods used in the identification of substances (or parameters). These limitations may be due to non-homogenous material being sampled (i.e. the sample to be analysed may not be representative), low concentrations, the presence of 'masking' agents and the restrictions of the approved analytical technique. As such, non-statistically significant sampling results can only be interpreted as 'indicative' and not used for quantitative assessments.

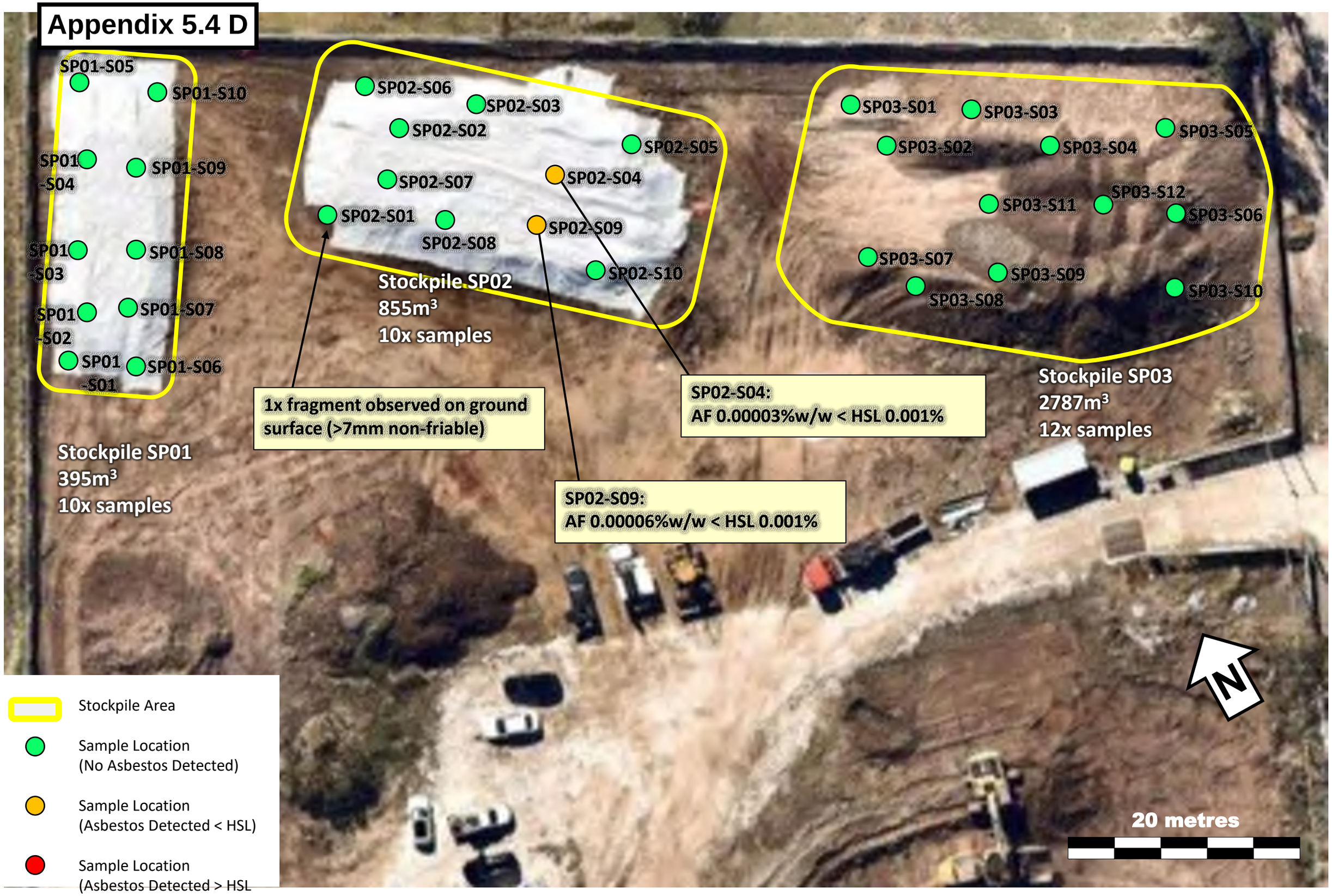
In practice, it is generally impossible to locate all asbestos in the course of an inspection due to factors including but not limited to access restrictions to certain areas including subsoil, the need to avoid damage, minimising inconvenience, operating plant, unavailability of specific information regarding the premises. The presence of asbestos and asbestos containing materials (ACM) is determined visually while the surveyor will collect samples of suspected ACM and have them analysed in a laboratory. Any restrictions on the amount of sampling will reduce confidence in the inspection findings. The ACM that cannot be seen will not be found.

The data, findings, observations, conclusions and recommendations in the report are based solely upon the state of Site at the time of the investigation. The passage of time, manifestation of latent conditions or impacts of future events (e.g. changes in legislation, scientific knowledge, land uses, etc) may render the report inaccurate. In those circumstances, ENRS shall not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on, the contents of the report.

This report has been prepared on behalf of and for the exclusive use of the Client, and is subject to and issued in connection with the provisions of the agreement between ENRS and the Client. ENRS accepts no liability or responsibility whatsoever and expressly disclaims any responsibility for or in respect of any use of or reliance upon this report by any third party or parties.

It is the responsibility of the Client to accept if the Client so chooses any recommendations contained within and implement them in an appropriate, suitable and timely manner.

Appendix 5.4 D



Stockpile Area

Sample Location
(No Asbestos Detected)

Sample Location
(Asbestos Detected < HSL)

Sample Location
(Asbestos Detected > HSL

Client:	**Lloyd Group**	Drawn:	**RL**	Figure:	**1**
Project:	**ENRS1990**	Source:	**NearMap**	Date:	**25/08/2021**
Location:	**85 Byron Road, Leppington, NSW.**	Scale:	**ScaleBar**	Title:	**Site Plan – Stockpile Sample Locations (sampled 20/8/2021)**
		Status:	**Rev 1**		

ENRS
ENVIRONMENT & NATURAL RESOURCE SOLUTIONS

Appendix 5.4 D

Attachment 1:

Laboratory COA

Appendix 5.4 D

23 August 2021

Attention: Rohan Last
Company: ENRS Pty. Ltd.
Fax/email: lab@enrs.com.au
Address: 108 Jerry Bailey Road Shoalhaven Heads, NSW 2535

SWE Reference: S109963.1
Client Reference: 85 Byron Road, Leppington NSW 2179
Date of Receipt: 20/05/2021
NATA Accreditation No: **17092**
NATA Accreditation Scope: 7.82.31 – Asbestos Fibre Identification
7.84.31 – Asbestos

The results of the tests, calibrations and/or measurements in this document are traceable to Australian/national standards. Accredited for compliance with ISO/IEC 17025.

Asbestos Identification

1. Introduction: This report presents the results of 32 samples, collected by SWE on 20 August 2021 and analysed as received for the presence of asbestos.

2. Methods: Qualitative identification of asbestos type fibres in bulk using Polarised Light Microscope carried out in accordance with AS4964-2004, NEPM; WA DoH (2009); Work Health and Safety legislation and guidelines and SWE's *In-House Method 3 – Fibre Identification*. The collection of the sampling is not covered under the below NATA Accreditation Scope.

3. Results:

SWE Ref.	SAMPLE DESCRIPTION	DIMENSIONS/ WEIGHT	ASBESTOS DETECTED
S109963.1/SP 01-S01	Brown Soil	796 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 01-S02	Brown Soil	1014 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*

Safe Work and Environments Pty Ltd
35/103 Majors Bay Road, Concord, NSW 2137
Phone: 02 8757 3611 Fax: 02 8757 3612
Email: **enquiries@swe.com.au**

Appendix 5.4 D

SWE Ref.	SAMPLE DESCRIPTION	DIMENSIONS/ WEIGHT	ASBESTOS DETECTED
S109963.1/SP 01-S03	Brown Soil	540 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 01-S04	Brown Soil	738 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 01-S05	Brown Soil	756g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 01-S06	Brown Soil	620 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*

25/103 Majors Bay Road, Concord, NSW 2137
Phone: 02 8757 3611 Fax: 02 8757 3611
Email: **enquiries@swe.com.au**

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SWE Ref.	SAMPLE DESCRIPTION	DIMENSIONS/ WEIGHT	ASBESTOS DETECTED
S109963.1/SP 01-S07	Brown Soil	1288 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 01-S08	Brown Soil	1017 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 01-S09	Brown Soil	922 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 01-S10	Brown Soil	1419 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting*

25/103 Majors Bay Road, Concord, NSW 2137
Phone: 02 8757 3611 Fax: 02 8757 3611
Email: **enquiries@swe.com.au**

Appendix 5.4 D

SWE Ref.	SAMPLE DESCRIPTION	DIMENSIONS/ WEIGHT	ASBESTOS DETECTED
			limit of 0.001 %w/w *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 02-S01	Brown Soil	723 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**1:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 02-S02	Brown Soil	568 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**1:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 02-S03	Brown Soil	645 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**1:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 02-S04	Brown Soil	794 g	No Asbestos Detected at the reporting limit of 0.1 g/kg*2 Organic fibres detected No trace asbestos detected *Quantification Comments**1:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *0.002g of chrysotile asbestos fibres detected bound*

25/103 Majors Bay Road, Concord, NSW 2137
Phone: 02 8757 3611 Fax: 02 8757 3611
Email: **enquiries@swe.com.au**

Appendix 5.4 D

SWE Ref.	SAMPLE DESCRIPTION	DIMENSIONS/ WEIGHT	ASBESTOS DETECTED
			within fibrous paper *Approximate raw weight of AF = 0.0005 g* ***Calculated FA+AF concentration of 0.00003 %w/w.***
S109963.1/SP 02-S05	Brown Soil	879 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 02-S06	Brown Soil	851 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 02-S07	Brown Soil	668 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 02-S08	Brown Soil	746 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w*

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Appendix 5.4 D

SWE Ref.	SAMPLE DESCRIPTION	DIMENSIONS/ WEIGHT	ASBESTOS DETECTED
			Approximate raw weight of FA = 0.0 g **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 02-S09	Brown Soil	811 g	No Asbestos Detected at the reporting limit of 0.1 g/kg*2 Organic fibres detected No trace asbestos detected *Quantification Comments**1:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *0.005g of chrysotile asbestos fibres detected bound within fibrous paper* *Approximate raw weight of AF = 0.0005 g* ***Calculated FA+AF concentration of 0.00006 %w/w.***
S109963.1/SP 02-S10	Brown Soil	724 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**1:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 03-S01	Brown Soil	749 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**1:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 03-S02	Brown Soil	856 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**1:* **FA:** *No asbestos or trace asbestos detected at the reporting*

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Appendix 5.4 D

SWE Ref.	SAMPLE DESCRIPTION	DIMENSIONS/ WEIGHT	ASBESTOS DETECTED
			limit of 0.001 %w/w *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 03-S03	Brown Soil	961 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 03-S04	Brown Soil	714 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 03-S05	Brown Soil	679 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 03-S06	Brown Soil	653 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting*

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Appendix 5.4 D

SWE Ref.	SAMPLE DESCRIPTION	DIMENSIONS/ WEIGHT	ASBESTOS DETECTED
			limit of 0.001 %w/w *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 03-S07	Brown Soil	749 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 03-S08	Brown Soil	773 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 03-S09	Brown Soil	746 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 03-S10	Brown Soil	690 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting*

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Appendix 5.4 D

SWE Ref.	SAMPLE DESCRIPTION	DIMENSIONS/ WEIGHT	ASBESTOS DETECTED
			limit of 0.001 %w/w *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 03-S11	Brown Soil	782 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*
S109963.1/SP 03-S12	Brown Soil	661 g	No Asbestos Detected at the reporting limit of 0.1 g/kg Organic fibres detected No trace asbestos detected *Quantification Comments**[1]**:* **FA:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of FA = 0.0 g* **AF:** *No asbestos or trace asbestos detected at the reporting limit of 0.001 %w/w* *Approximate raw weight of AF = 0.0 g*

*1: Quantification calculations and results not covered under NATA Accreditation and AS4964. AF = Asbestos Fines. FA = Friable Asbestos

*2: Asbestos was detected at a concentration estimated to be below the reporting limit of 0.1 g/kg

Analysed and reported by:

Rune Knoph
Approved Issuer of Report

NATA
WORLD RECOGNISED ACCREDITATION

25/103 Majors Bay Road, Concord, NSW 2137
Phone: 02 8757 3611 Fax: 02 8757 3611
Email: **enquiries@swe.com.au**

Appendix 5.4 D

Attachment 2:

Field Notes

Appendix 5.4 D

STOCKPILE 1

SAMPLE	DEPTH	DESCRIPTION	ASBESTOS VISUALLY IDENTIFIED?
SP01/S1/ 0.4m	0.4	LIGHT BROWN, SANDY LOAM, SOME TREE ROOTS	NO
SP01/S2/ 0.7m	0.7	"	NO
SP01/S3/ 1.5m	1.5	"	NO
SP01/S4/ 1.0m	1.0	"	NO
SP01/S5/ 1.0m	1.0	"	NO
SP01/S6/ 0.5m	0.5	"	NO
SP01/S7/ 1.2m	1.2	"	NO
SP01/S8/ 0.6m	0.6	"	NO
SP01/S9/ 1.0m	1.0m	"	NO
SP01/S10/ 0.5m	0.5	"	NO

Appendix 5.4 D

STOCKPILE 2

SAMPLE	DEPTH	DESCRIPTION	ASBESTOS VISUALLY IDENTIFIED?
SP02/S1/ 1.5m		DARK BROWN SOIL – WET WITH CONSTRUCTION DEBRIS	YES – NEAR SURFACE
SP02/S2/ 1.5m		CONCRETE & BRICKS ON MOST SAMPLES	NO
SP02/S3/ 1.5m		"	NO
SP02/S4/ 1.0m		"	NO
SP02/S5/ 1.0m		"	NO
SP02/S6/ 0.5m		"	NO
SP02/S7/ 1.0m		"	NO
SP02/S8/ 1.0m		"	NO
SP02/S9/ 1.2m		"	NO
SP02/S10/ 0.5m		"	NO

Appendix 5.4 D

STOCKPILE 3

SAMPLE	DEPTH	DESCRIPTION	ASBESTOS VISUALLY IDENTIFIED?
SP03/S1/ 1.0m		LIGHT BROWN SANDY LOAM ~~DRY~~ DRY WITH THE MOST CONSTRUCTION DEBRIS OUT OF THE STOCKPILES (CONCRETE, BRICKS, CERAMIC TILES)	NO
SP03/S2/ 1.0m		"	NO
SP03/S3/ 1.2m		"	NO
SP03/S4/ 1.0m		"	NO
SP03/S5/ 0.5m		"	NO
SP03/S6/ 0.5m		"	NO
SP03/S7/ 0.5m		"	NO
SP03/S8/ 1.0m		"	NO
SP03/S9/ 1.5m		"	NO
SP03/S10/ 0.5m		"	NO
SP03/S11/ 1.0m		"	NO
SP03/S12/ 1.0m		"	NO

Appendix 5.4 D

Attachment 3:

Photo Log

Appendix 5.4 D

Stockpile SP01 Photo Log

Plate 3 of 17

Stockpile SP01 Photo Log

Plate 1 of 17

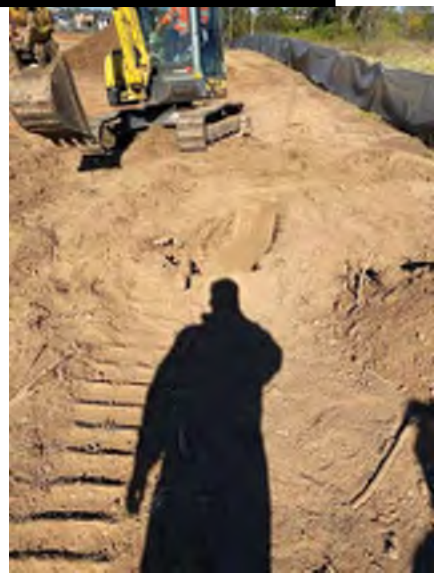
Stockpile SP01 Photo Log

Plate 4 of 17

Stockpile SP01 Photo Log

Plate 2 of 17

Appendix 5.4 D



Stockpile SP01 Photo Log

Plate 7 of 17

Stockpile SP01 Photo Log

Plate 5 of 17

Stockpile SP01 Photo Log

Plate 8 of 17

Stockpile SP01 Photo Log

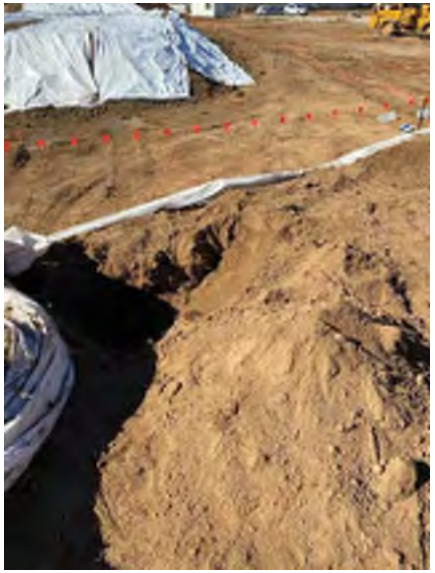
Plate 6 of 17

Appendix 5.4 D

Appendix 5.4 D

Stockpile SP01 Photo Log

Plate 15 of 17



Stockpile SP01 Photo Log

Plate 13 of 17

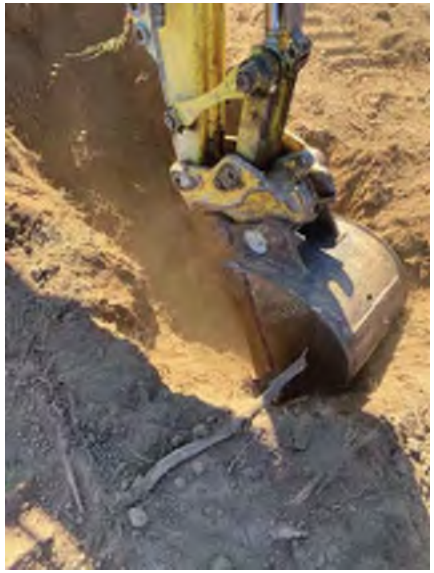
Stockpile SP01 Photo Log

Plate 16 of 17

Stockpile SP01 Photo Log

Plate 14 of 17

Appendix 5.4 D



Stockpile SP01 Photo Log

Plate 17 of 17

Appendix 5.4 D

Stockpile SP02 Photo Log

Plate 3 of 30

Stockpile SP02 Photo Log

Plate 1 of 30

Stockpile SP02 Photo Log

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Stockpile SP02 Photo Log

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Stockpile SP02 Photo Log

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Stockpile SP02 Photo Log

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Stockpile SP02 Photo Log

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Stockpile SP02 Photo Log

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Stockpile SP02 Photo Log

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Stockpile SP02 Photo Log

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Stockpile SP02 Photo Log

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Stockpile SP02 Photo Log

Plate 10 of 30

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Stockpile SP02 Photo Log

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Stockpile SP02 Photo Log

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Stockpile SP02 Photo Log

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Stockpile SP02 Photo Log

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Stockpile SP02 Photo Log

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Stockpile SP02 Photo Log

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Stockpile SP02 Photo Log

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Stockpile SP02 Photo Log

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Stockpile SP02 Photo Log

Plate 23 of 30

Stockpile SP02 Photo Log

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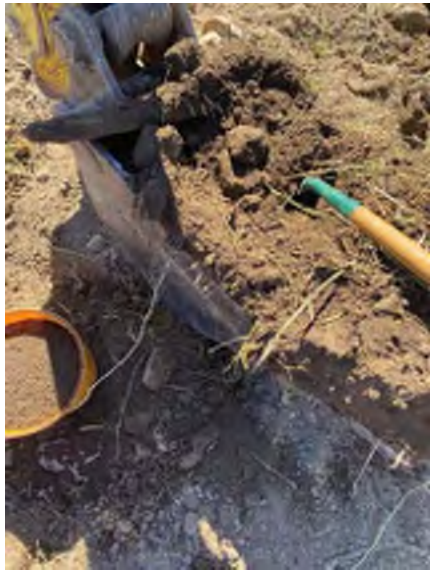
Stockpile SP02 Photo Log

Plate 24 of 30

Stockpile SP02 Photo Log

Plate 22 of 30

Appendix 5.4 D



Appendix 5.4 D

Stockpile SP02 Photo Log

Plate 29 of 30

Stockpile SP02 Photo Log

Plate 30 of 30

Appendix 5.4 D

Stockpile SP03 Photo Log

Plate 1 of 12

Stockpile SP03 Photo Log

Plate 2 of 12

Stockpile SP03 Photo Log

Plate 3 of 12

Stockpile SP03 Photo Log

Plate 4 of 12

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Stockpile SP03 Photo Log

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Stockpile SP03 Photo Log

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Stockpile SP03 Photo Log

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Stockpile SP03 Photo Log

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Stockpile SP03 Photo Log

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Stockpile SP03 Photo Log

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Stockpile SP03 Photo Log

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Stockpile SP03 Photo Log

Plate 12 of 12

Appendix 5.4G

Eastern Creek Ecology Park

Bingo Waste Services Pty Ltd

A.B.N 43162988623

1 Kangaroo Avenue

EASTERN CREEK NSW 2766

Phone: 1300 424 646

Tax Invoice GEN1341249-1

Date: 16/10/21

Time In: 8:01:12 AM | Time Out: 8:24:29 AM

Customer

Nippon Supplies

PO: LAHC

Vehicle: DWL48G

Type	UOM	Qty.	Price
Gross:	Tonne	5.00	
Tare:	Tonne	2.90	
Net: incoming: Asbestos Sheeting	Tonne	2.10	

Amount Excl. GST

Total Excl. GST

GST

Total Incl. GST

Paid By: EFTPOS

Printed: 16/10/2021 8:31:27 AM

Signature: Michael

Statement of Compliance

You are under the instruction of site personnel
All machinery has right of way at all times
No hazardous materials are accepted
All Drivers must check axle weights and GVM
All loads must be adequately restrained
You agree to take all reasonable steps to prevent breaches of heavy vehicle national laws
Any breaches of the above may be subject to extra charges

6. Waste Classifications of Materials to be Removed or Imported into Site

In accordance with the Amity College Development Consent (SSD 9227), condition C22(h) the waste classification (for materials to be removed) and validation (for materials to remain) be undertaken to confirm the contamination status in these areas of the site is to be specified.

Waste from site must be classified in accordance with the *NSW Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014), and that all materials excavated and removed from the site shall be disposed:

i. In accordance with *the Protection of the Environment Operations Act 1997* (POEO Act), and;

ii. To a facility legally able to accept the material

Additionally, the removal of waste materials from the site shall only be carried out by a licensed contractor holding the appropriate license, consent or approvals to dispose of the waste materials according to the classifications outlined in EPA waste classification and with the appropriate approvals obtained, if required, from NSW EPA.

Asbestos disposal must be tracked and reported to the EPA using WasteLocate online Tool.

Given that the contaminated areas as identified by GeoEnviro Consultancy have been remediated, this requirement will only apply to any additional unexpected finds contamination areas. The protocols for dealing with unexpected finds are detailed in Section 5.1 above.

All imported soil must comprise only VENM, ENM, or other material approved in writing by EPA is brought onto the site, in accordance with condition D24(a) of the Amity College Development Consent (SSD 9227).

Further details to be adhered to regarding the above are contained in the engineering drawings and requirements prepared by consulting engineers Martens & Associates provided with the early works tender package.

20/10/2021 Update - A small amount of asbestos fragments identified during implementation of the unexpected finds protocol has resulted in disposal of a disposal of materials.

These materials were classified, the stakeholders and auditor was notified, advice received (see below)

RE: ENRS1990 stockpile results

PM Paul Moritz <Paul.Moritz@douglaspartners.com.au>
To Joseph Elley; Peter Reed; Recep Aydogan (raydogan@amity.nsw.edu.au); rohan@enrs.com.au
Cc Kane Sabo; Nick Messiou; Vincent Phuong; Emily Eden
You forwarded this message on 15/10/2021 1:04 PM.

Joseph,

Before the material is transported off-site it should be double-bagged in plastic (and the receiving facility will probably want that to apply anyway).

Once dealt with, please provide me with:
- Analysis certificate confirming it is asbestos-containing.
- Weight of material collected and by whom, when.
- Receipt for deposition at a licensed facility.
- Details of transporter (check on vehicle licensing/registration requirements for transporting this material).

Paul

Paul Moritz *BSc PhD FRACI CEnvP*
Contaminated Sites Auditor (Vic, NSW, ACT, NT)

Principal
Douglas Partners Pty Ltd | ABN 75 053 980 117 | www.douglaspartners.com.au
231 Normanby Road South Melbourne VIC 3205 | PO Box 5051 South Melbourne VIC 3205
P: 03 9673 3500 | M: 0429 885 475 | E: paul.moritz@douglaspartners.com.au

7. Construction Traffic and Pedestrian Management

Introduction

a. Overview

The traffic management objectives for this project are as follows:

i. Ensure the safety of employees, contractors, the general public, Amity College personnel, pedestrians, cyclists and traffic in and around the school site.

ii. Maintenance of satisfactory access to the site during construction.

iii. To minimise environmental nuisance and impact as a result of construction traffic, and to keep traffic delays on Byron Road to a minimum.

iv. Minimise disturbance to the environment and to minimise the risk of noise, dust complaints or complaints in relation to construction traffic from neighbouring property owners or residents in the immediate local area.

v. The above approach and report has been provided with consultation with council (refer to attached correspondence with Camden Council)

b. Construction Access

The access requirements for construction traffic for the Stage 1 works is illustrated in the accompanying engineering drawings and requirements prepared by consulting engineers Martens & Associates provided with the Stage 1 works tender package. The authorized access points comprise the following:

i. Access to the site from Byron Road.

ii. Access to the site from Pluto Avenue.

c. Mitigation measures

Where required, Lloyd Group will engage suitably qualified and approved traffic controllers in order to undertake works in a safe and responsible manner. Traffic controllers are to carry licence tickets at all times.

Other specific traffic controls and measures would include the following:

i. All transport vehicles to have proper noise attenuation and to be maintained in good order.

ii. Queuing will be forbidden in local streets. Truck movements will be staggered to prevent queuing occurring.

iii. Oversize truck movements (predominantly floats) will only occur during approved hours 10.00am to 2.00pm.

iv. All construction vehicles (excluding worker vehicles) are to be contained wholly within the site, except if located in an approved on-street work zone, and vehicles must enter the site before stopping. Consent condition D12 requires no obstruction of any public way.

v. Adequate off-road parking will be provided for construction vehicles and construction workforce vehicles.

vi. All trucks and earthmoving machinery on site will have fitted, and will maintain, suitable reversing lights and reversing alarms for on site safety.

vii. Consent condition D10 must be complied with. It requires the following: "All construction vehicles (including site personnel vehicles) are to be contained wholly within the site, except if located in an approved on-street work zone, and vehicles must enter the site before stopping."

d. Monitoring and Corrective Actions

Construction roads will be inspected to ensure road conditions support safe working and driving. Following periods of heavy rain or adverse conditions, on-site construction roads will be inspected prior to heavy vehicle traffic use to ensure driver and vehicle safety.

In the event of a traffic incident, the relevant sub-contractor shall stop the vehicle involved in the incident and clear any spills. In the event of a complaint the Head Contractor or their representatives will investigate the complaint promptly and initiate appropriate action to reduce impact. All incidents are to be reported to Amity College.

Throughout the duration of Stage 1 construction, Lloyd Group will be responsible for providing to Amity College details of the operations undertaken, including results of all noise or vibration monitoring, details of discussions with the local council and the community, unexpected finds, incidents and accidents, complaints and actions taken in response to complaints, as well as details of material removed from or imported into the site.

e. Updates to this Traffic and Pedestrian Management Plan

This Traffic and Pedestrian Management Plan only applies to works associated with the Stage 1 building. The

Plan will need to be revised accordingly for any other future construction stages.

7.1. Purpose

This Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) has been prepared to outline and describe how Lloyd Group will, during the construction of the Project, comply with the NSW Minister for Planning's Conditions of Consent (CoC). This CTPMSP is to be used during construction of the Project. This plan is applicable to all staff and Subcontractors associated with the construction of the Project.

The purpose of this CTPMSP is to detail the specific mitigation measures and controls to avoid, mitigate and/or manage potential impacts and minimise disruption to, and ensure the safety of the wide range of stakeholders potentially affected by the works, including but not limited to: motorists, pedestrians; cyclists; public transport users, local residents and property owners; business owners; and workers/staff engaged on the Project.

7.2 Legislative requirements

Legislation relevant to traffic and transport management for this project includes:

- Environmental Planning and Assessment ACT 1979
- Roads Act 1993

- Local Government Act 1993
- Road Transport (Safety & Traffic Management) Act 1999
- Work Health and Safety Act 2011 (NSW)

7.3. Industry Standards and Guidelines

Additional guidelines and standards relating to the management of traffic and access include:

- Roads and Maritime Services (RMS) Traffic Control at Worksites (Ver: 6.0 2020 or any subsequent revision / technical direction from RMS)
- RMS Specification DCM G10 – Control of Traffic
- Transport Management Centre Road Occupancy Manual (2012 or any subsequent revision / technical direction from RMS)
- RTA – NSW Speed Zoning Guidelines (2004)
- AS 1742: Manual of Uniform Traffic Devices:
    - Part 1 - General Introduction and Index of Signs
    - Part 2 -Traffic Control Devices for General Use
    - Part 3 - Traffic Control Devices for Work on Roads
    - Part 4 - Speed Controls
    - Part 10 - Pedestrian Control and Protection
    - Part 11 - Parking Controls
- Part 13 - Local Area Traffic Management.
- NSW Bicycle Guidelines
- Relevant Austroads Guides and TfNSW (RMS) Supplements
- The NSW Rural Fire Service Bush Fire Management Plan
- TfNSW TDT 2010/07 Use of Variable Message Signs
- RTA – Delineation Guidelines (2008) • Environmental Management Plan Guideline: Guideline for Infrastructure Projects (DPIE, April 2020)

7.3. Project Summary

This report provides an assessment of a State significant development (SSD) application for a new school, Amity College (SSD-9227) located at 85 Byron Road and 63 Ingleburn Road, Leppington – STAGE 1 WORKS. Lloyd Group has been awarded with job to complete the Stage 1 Works on the project, including:

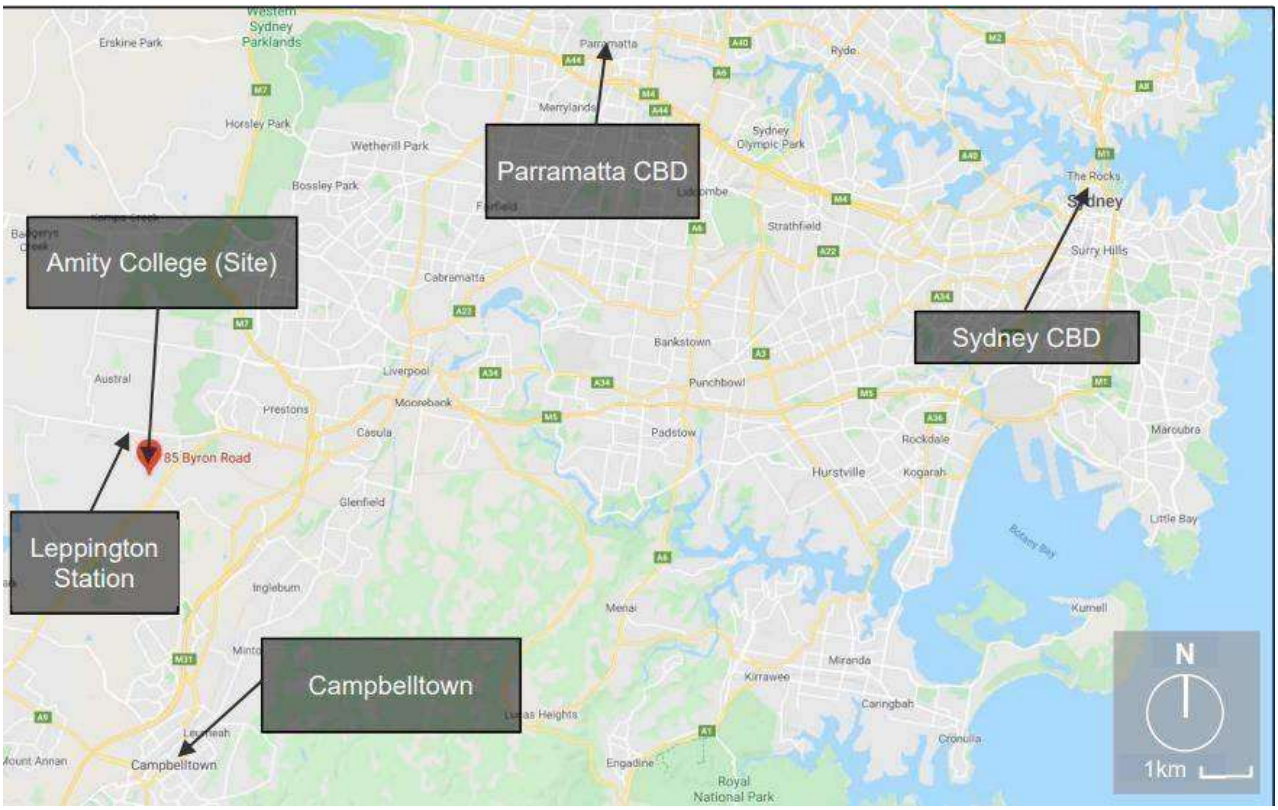
Construction of two - four storey buildings to accommodate:

- the primary and secondary school classrooms;
- multipurpose halls;
- library; and
- administrative areas;
- at grade / basement car parking and bicycle parking areas;
- Construction of bus bays on Byron Road;
- Landscaping, stormwater and public domain works;
- Construction of new local roads, on-street car parking spaces, drop-off / pick-up zones, drainage works and service connections of the located at 85 Byron Road, Leppington.

Figure 1 – Site Location

7.4. Site Description

The site is legally described as part Lot 1 DP 525996 (85 Byron Road), and part Lot 2 DP 525996 (63 Ingleburn Road), Leppington within the Camden LGA. The site is approximately 38 kilometres (km) from the Sydney Central Business District and 1.24km south-east of Leppington Station (Figure 2 below).



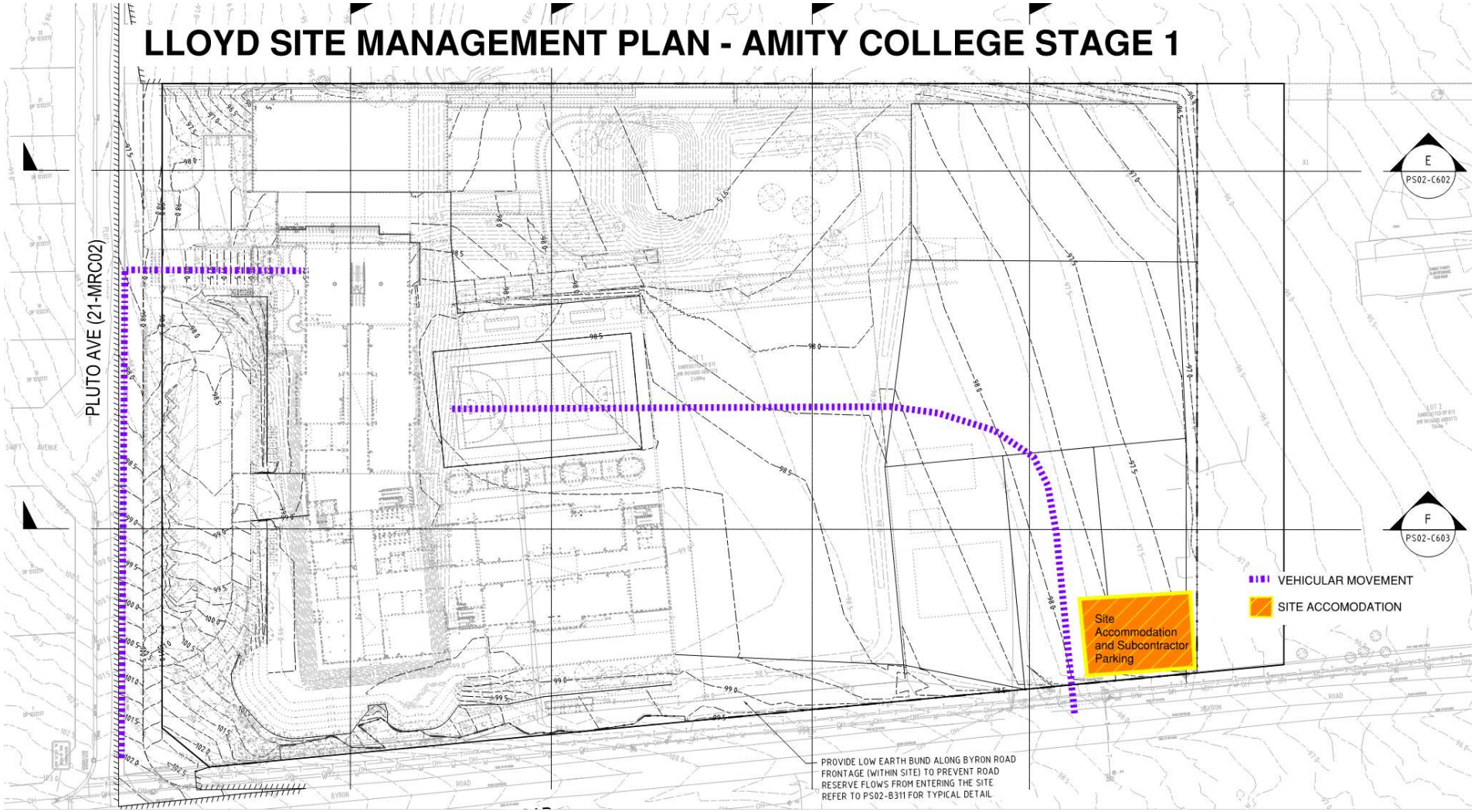
The site is 3.2 hectares (ha) in area, generally rectangular in shape, and located at the corner of Byron Road and Ingleburn Road (boundary shown in yellow in Figure 2). The future school development would be located on the southern part of this site (identified in red in Figure 2).

The site is in a region characterised by gently undulating topography. The northern part of the site is flat while the southern part has a gentle fall from 100 Australian Height Datum (AHD) in the east to between 94 and 97 AHD along the western boundary.

The site has a natural low point at the centre sloping towards Byron Road in the east and the adjoining property at 69 Ingleburn Road to the west. A minor section of the site along the western boundary comprises flood prone land. The site has a primary frontage of 286 metres (m) to Byron Road and a secondary frontage of 103m to Ingleburn Road. A partially constructed road (half-width) known as Pluto Avenue adjoins the site to the south (Please see Figure 3 of site boundaries below).


Ingleburn Road
Lot 1 DP 525996
Site
Lot 2 DP 525996
Byron Road
Pinto Avenue
75
69
63A
76
43
Existing site boundaries
Boundary of the future school
N
10m

Figure 4 – Lloyd Group Site Management Plan – Stage 1



7.5. Staging Plan - Commencement Dates and Duration

Please see staging plan in table provided below, project commencement date is scheduled to be on 10th of May 2021:

Stages	Activity	Start Date	Finish Date
01	Site Establishment	01/02/2022	15/02/2022
02	Civil Works/Earthworks/Retaining Walls	09/02/2022	14/05/2022
03	Foundation/Substructure	11/04/2022	15/06/2022
04	Structure	08/06/2022	02/09/2022
05	Roofing/Façade	20/07/2022	14/10/2022
06	Fitout	17/08/2022	05/01/2023

7.6. Hours of Work

As noted in Conditions D5 and D6; construction, including the delivery of materials to and from the site, may only be carried out between the following hours:

(a) between 7am and 6pm, Mondays to Fridays inclusive; and
(b) between 8am and 1pm, Saturdays.

No work may be carried out on Sundays or public holidays.

Construction activities may be undertaken outside of the hours in condition above if required:

(a) by the Police or a public authority for the delivery of vehicles, plant or materials; or
(b) in an emergency to avoid the loss of life, damage to property or to prevent environmental harm; or
(c) where a variation is approved in advance in writing by the Planning Secretary or nominee if appropriate justification is provided for the works.

Notification of such construction activities as referenced in condition D6 must be given to affected residents before undertaking the activities or as soon as is practical afterwards. Rock breaking, rock hammering, sheet piling, pile driving and similar activities may only be carried out between the following hours:

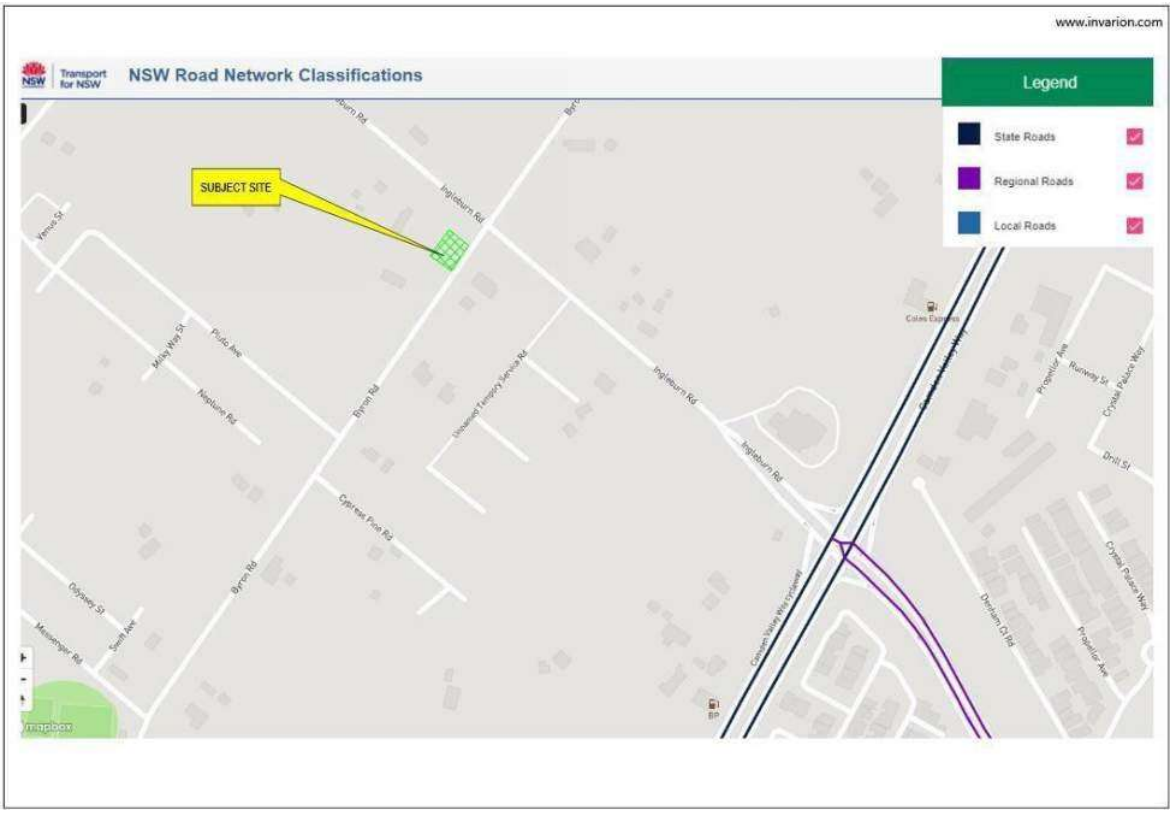
(a) 9:00am to 12pm (noon), Monday to Friday;
(b) 2:00pm to 5:00pm Monday to Friday; and
(c) 9:00am to 12pm (noon), Saturday.

7.7. Daily Onsite Workforce

Average daily workforce of approximately 30-40 people (tradesmen) and may increase to 100 at peak stages of construction

7.8. Subject Road – Byron Road

Byron Road is a local 2 way 2 lane council road. It connects with Rickard Road on the northern end and with Heath Road on southern end. Road primary carries residential traffic and it is not used by through fare traffic. It is considered as a low traffic volume road and major road improvement are planned to happen within next 4 years. Signposted speed on Byron Road is 70km/h, however due intersection with Ingleburn Road located 100m away from proposed construction site entrance factual traffic speed at the site entry point is 50km/h. Road Hierarchy Diagram is presented below:



Pluto Avenue – is a local 2 way 1 lane council road, provides access to local residents, and it will be used by school visitors in the future upon completion of the project

7.9. Public Transport Facilities

The nearest bus stops are 140m away towards north, with direct link services to Camden and Leppington Train Station. Here is a detailed information upon nearest bus stop location:

Figure 5 – nearest bus stops with services to Liverpool 856 and Leppington Train Station 858 Stop ID:2171446

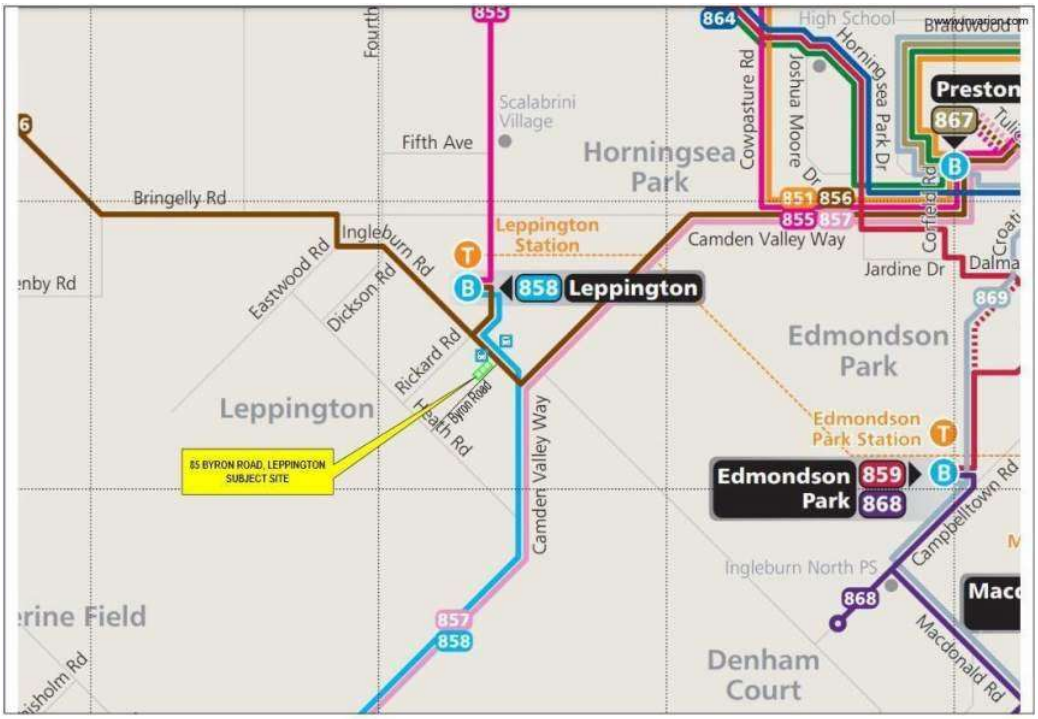


Figure 6 – Bus Network in the area

7.10. Pedestrian and Cycle Paths

Byron Road does not feature any footpaths or designated cycle routes in the area throughout all day. Pluto Avenue features uncompleted footpath on southern side. Please see diagram of cyclist network area in diagram below:

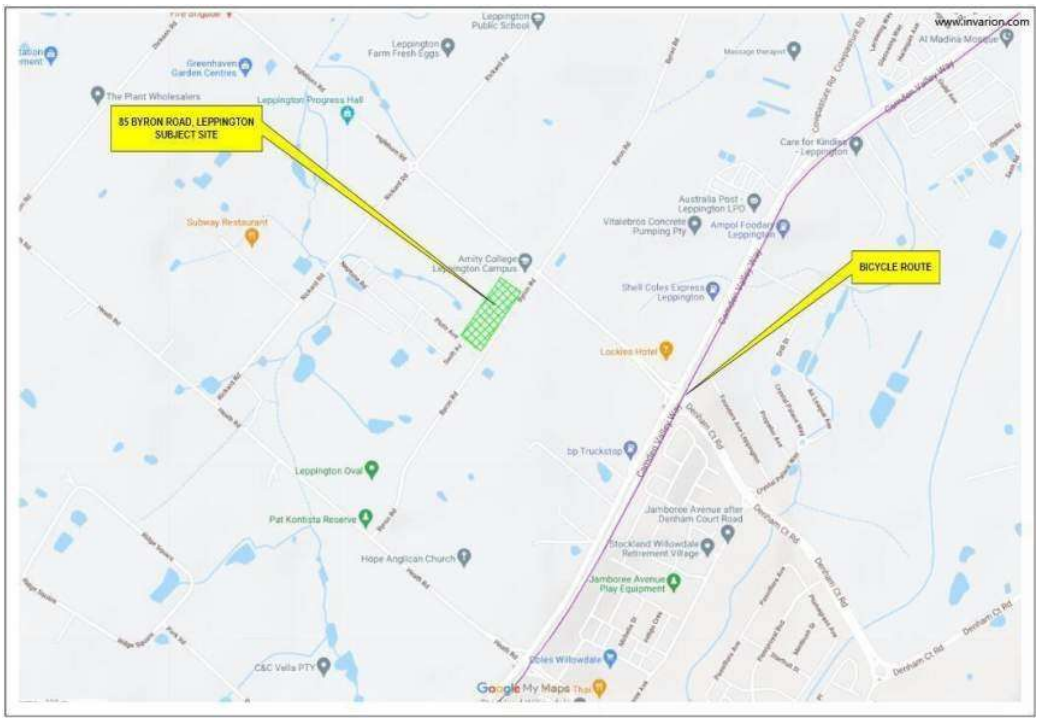


Figure 7 – Cyclist Network in the area

7.11. Location of Proposed Hoardings

Construction fence will cover permitter of the site (with Lloyd Group anti-sediment cloth), for further information please refer to site traffic management plan/site layout diagram in the appendix of this document – **Section 7.39 Appendix A Figure 8**. Site gates will be used to secure the construction site from unauthorised access.

7.12. Location of proposed Crane Standing Zone

Lloyd Group proposes to use different size mobile cranes within site boundaries.

7.13. Location of proposed Work (Construction Work) Zone

Construction (work) zones for Stage 1 at the Amity College project is dependent on the works being carried out throughout various phases of the project and site configurations. These are as follows:

- General Daily site access – through Pluto Avenue and Byron Rd does not require work zone (refer TCP #3040)
- Public Domain Works on Pluto Avenue – **work zone required** (refer TCP#3174)
- New Water Connection on Byron Rd – **work zone required** (refer TCP#3172)
- Stormwater Connection on Pluto Avenue **– work zone required** (refer TCP#3173)

7.15. Concrete Pour Work Zones

Lloyd Group proposes multiple concrete pours as for new buildings as for public domain works. Generally, all concrete pours will be done within site boundaries including currently fenced off area at Pluto Avenue – completion second half of Pluto Avenue pavement/kerb and gutter and footpath.

7.16. Loading / Unloading Zones

All loading and unloading activities will be done within the construction site boundaries as shown on **Figure 8 of Section 7.39 Appendix A.**

7.17. Location of Excavations

2xExcavators (18T) will be used for demolition and earth work purposes within site boundaries, all spoil material removal will be removed by tipper truck and trailers that will have to be loaded/unloaded within work site boundaries. The excavators will be delivered and dropped to site by tilt-tray truck as shown on image below:

7.18. Site Accommodations

All site accommodations will be located wholly within the site compound not on public lands – please refer to **Section 7.39 Appendix A – Figure 8.**

7.19. Material, Plant and Spoil Bin Storage Areas

These areas will be allocated within the construction site boundary. Skip bins will be contained wholly within the site boundary (garbage bin area). No storage of materials, plant or spoil will be allowed on public land or public roads. All waste/material will be collected on site in a position for easy access for both use on site and removal by trucks. As previously described, all removal trucks will have the load covered by tarpaulin or other means to secure the load and will adhere to the approved travel routes as described in this CTPMSP.

It is noted that Lloyd Group Pty Ltd must obtain a permit from the Camden Council regarding the placing of any plant/equipment o public ways, should this ever be required.

7.20. Nearby Construction Sites

New Residential Estate – 66 Byron Road, Leppington – opposite from subject site

7.21. Access Management Arrangements

Dedicated temporary construction site driveway entrance and exit will be signposted and managed by certified traffic controllers. This will remain in place to safely manage pedestrians and construction-related vehicles to the Site frontage's roadways and footpaths.

Authorised Traffic Controller will also be in place to assist with vehicle access to any private car spaces if required. It is not expected, but should there be a need to relocate any car spaces due to the spaces being inaccessible, suitable alternative arrangements will be provided to the occupant of the car space.

7.22. Vehicle Movement Plan

A vehicle movement plan has been developed for this project and is located in **Section 7.39 Appendix A Figure 9**. VMP has been designed in the way that construction traffic will use minimum of local roads and the main access roads for VMP are State Road Camden Valley Way, Ingleburn Road and Byron Road.

7.23. Impact to Residents, Businesses and the Public

Most of the works will be carried out within construction site boundaries, this project is not expected to have any significant impacts on residents, public transport and cyclists. It is recommended that high impact works as earth removing works (truck and trailer operation) need to be at off peak hours.

It has been planned that traffic control applications will cause any significant traffic delays. The most significant impact that may cause some delays in traffic flows is turning trucks accessing work site.

The rest of existing access arrangements and services to other transport modes will be maintained comparable to the existing situation. Adequate provision for motorists, pedestrians and cyclists will be made for current movements along all frontages and intersecting streets.

7.24. Neighbouring Properties

Access to neighbouring properties will be maintained at all times. No full Road Closures are planned on this stage. Neighbouring property occupants and local stakeholders will be regularly notified of the timeframes for completion and of any other impacts that may affect the local surrounds.

7.25. Transport Management for Service, Delivery, and Garbage Vehicles

Project is not expected to make any other third party truck operation impacts.

7.26. Public Transport Impacts

This project is expected to have nil impact on public transport (buses) timetables. All truck movement works will be done away from public transport routes and bus stops.

7.27. On Site Parking

Site management reserves 6 parking spots for tradesmen (light vehicles) and 3 spots for heavy machinery or truck placements within the site boundaries. Site Layout allows to use vast space of land providing parking for construction personnel needs. No truck pooling/parking will be permitted at roadways within the Camden Council Local Government Area.

7.28. Emergency Services

For any works on the roadway (not proposed at this moment), a 3.2m isle is to be maintained at all times during any road works to ensure emergency vehicle can pass if required.

7.29. Pedestrians

Project will make nil impact on pedestrian movements, as there are no footpaths in the project area along Byron and Ingleburn Roads.

7.30. Cyclists

Cyclists will be subject to the same Traffic Management Controls as registered road users and will always have the right of way over construction works and vehicles accessing the site. At current condition proposed construction traffic movement will make no impact on cyclist traffic as closest designated cyclist route is located at Camden Valley Way. (please see **Figure 7** for your information).

7.31. Driver Code of Conduct

Lloyd Group will include the following in all subcontract procurement packages:

- A copy of the approved truck routes as detailed in Figure 9
- Adhering the approved maximum truck sizes
- Operation High Impact Truck and Trailer Operation at off peak times
- Elimination use of compression breaking on theapproach to work site on Ingleburn and Byron Road
- Contracted Truck Drivers to have courteous and positive attitude towards other motor users

• Truck Drivers to use flashing amber lights within 100m approach distance to site

• Any other entry restrictions, or site access restrictions as agreed to by the authorities.

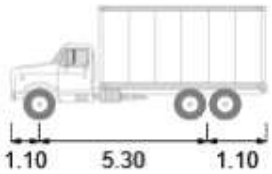
Lloyd Group will be responsible for managing all site access points and monitoring subcontractor behaviour and subcontractor truck access arrangements to ensure compliance with conditions of contract. Lloyd Group will be responsible for managing for all the site gate access to ensure there is no access to or from the site before or after approved construction hours. Drivers are to be particularly vigilant when entering

/exiting Byron Road. Vehicles are not to queue on the road network and must enter and exit work site in a forward direction. All deliveries will be pre-booked and are to check in at the site office on arrival.

7.32. Types of Trucks Approaching Site

There will be a combination of small rigid vehicles (SRV's 5.2m), heavy rigid vehicles (MR's 7.5m) pantech and flatbed, and concrete trucks accessing and egressing from the site. Site Surrounding Roads were designed to carry vehicles with short wheel base, hence there are no plans to use vehicles longer than 8m.

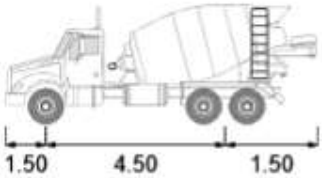
Vehicle dimensions



Single unit truck/bus

Length: 7.50 m
Width: 2.50 m
Lock to lock time: 4.0 s
Max steering angle: 36.65°
Turn radius (curb to curb): 9.91 m
Turn radius (wall to wall): 10.54 m

Vehicle dimensions



Concrete mixer - Custom

Length: 7.50 m
Width: 2.44 m
Lock to lock time: 6.0 s
Max steering angle: 35.40°
Turn radius (curb to curb): 8.79 m
Turn radius (wall to wall): 9.65 m

7.33. Estimated Daily Truck Volumes

The estimated average number of daily truck movements would be 9 per day.

The estimated construction traffic generated by the works is summarized in **Table 3** below.

TABLE 3: CONSTRUCTION VEHICLE MOVEMENTS

STAGE	TRUCKS	TRUCK TYPE	DURATION
Excavation and Civil Works	12 truck and trailers trucks in total Around 3 trucks a week	**Truck and Trailers**	4 weeks
Concrete and Structure Works	150 Deliveries or Pours in total Around 4 Concrete Pours a week Around 3 Formwork Deliveries Per week	**Concrete Agitator** **Concrete Pump** **Formwork Deliveries (Semitrailer)**	18 weeks
Façade, Structural Steel and Roofing Works	100 Deliveries in total Around 9 deliveries per week	**Semitrailer**	12 weeks
Internal Fitout Works	100 Deliveries in total Around 9 deliveries per week	**Heavy Duty Vehicle**	12 weeks
External and Landscaping works	100 Deliveries in total Around 9 deliveries per week	**Heavy Duty Vehicle**	12 weeks
Tradesmen Vehicles	40 vehicles per week	**LVs**	6 weeks

Note: Construction vehicle movements have been assumed without the input from a builder and as such is subject to change prior to submission to Camden Council

Vehicle Queueing

No queuing or marshalling of trucks is permitted on any public road. If there is no adequate space on-site or in the approved temporary work area. All construction vehicles should be coordinated to site only when sufficient space is available. Circulating construction vehicles on the network will not be tolerated.

7.34. Abnormal and Oversize/Over mass Loads

Oversize and over-mass vehicles are not allowed to travel on Local Roads (unless approval for a one-off occasion is obtained from the Camden Council Traffic Operations Unit). Requests to use these vehicles must be submitted to Camden Council 28 days prior to the vehicle's scheduled travel date.

Specific Traffic Management Plan will be developed for each abnormal movement and will be submitted for assessment to the relevant local and regulatory authorities on a case by case basis. For more information, please contact the National Heavy Vehicle Regulator (NHVR) on 1300 696 487 or https://www.nhvr.gov.au/

Temporary signposting will be implemented as per the detailed traffic plans. As documented in **Section 7.40 Appendix B** – Traffic Control Plans.

Designed TCPs cover different work scenarios, for further information please see table below:

Event	DESCRIPTION	TCP
1	**Daily Site Access – through Pluto Avenue and Byron Road**	#3040
2	**Public Domain Works on Pluto Avenue**	#3174
3	**New Water Connection on Byron Road**	#3172
4	**Stormwater Connection on Pluto Avenue**	#3173

7.35. Risk Assessment

A detailed risk assessment and control method must be documented for each stage of the works. A Safe Work Method Statement is to be developed in consultation with all stakeholders and signed off by all workers prior to commencement of work.

7.36. Stakeholder Works Notifications

Notifications will be provided to all impacted stakeholders. Local community notification and consultation processes will be undertaken with all stakeholders prior to any changes to or impact on the local road network (days of concrete pours, frequent movements of delivery trucks). A copy of the notification letter for general traffic control works to residents is in below (content of letter can be changed in order to suit particular work scenarios):

Byron Road, Leppington – Amity College Leppington Campus Project - Lloyd Group Monday 17th January – Friday 21st January 2022
07:00am to 6:00pm

Wednesday, 12th January 2022

Dear Resident,

Please be advised that a construction works (and construction related traffic movements) will be occurring on Byron Road. Access to the road way and footpath for public will remain open under the guidance traffic control signage and/or authorised traffic controllers. For any concerns on the day of the works please contact Joseph on 0408 848 050.

Apologies for any potential delays caused.

If you would like any further details, please contact Joseph on 0408 848 050 between 9.00am and 6.00pm Monday to Friday.

Community Communication Strategy: Early Works and Stage 1

Outline Planning Consultants have been engaged to provide a Community Communication Strategy for the Early Works and Stage 1. Amity College School SSD 9227 Community Communication Strategy has been provided in **Section 15 Appendix D** of this report and outlines items as required by **Condition C7** of the Development Consent Conditions.

This Communication Strategy has been provided to the Planning Department for information and provides mechanisms to facilitate communication between the Applicant, the relevant Council, and the community throughout each stage and for a minimum of 12 months following the completion of construction of each relevant stage.

Key Stakeholders for the project are outlined and described in Section 4 of The Community Communication Strategy.

As noted in this Communication Strategy, timeframes for providing notification to stakeholders for different types of works are as per the following table:

Works activity	*Minimum community notification period*
Notification to communities following major incident	*Same day*
Emergency works/unforeseen events	*Same day*
Contamination management and notification	*Within 48 hours*
Upcoming works notification (minimum disruption)	*5-7 days*
Notifications regarding traffic changes, parking impacts, road closures, and/or detours	*10-14 days*
Notifications regarding operational changes for the school community, applicable after the Stage 1 Primary School is operational (school drop-off points, entry and exit points)	*10-14 days*
Notifications regarding major construction impacts or planned out of hours work	*10-14 days*

7.37. Emergency Services Notification

Emergency Services will be informed in a timely manner of relevant activities proposed within this CTPMSP that affect the use of the roadway. It is noted that it is a condition of the Camden Council Construction Regulation Unit that emergency services be notified prior to obtaining Mobile Hoisting, Temporary Works, Road Opening or Road Closure permit from the Construction Regulation Unit.

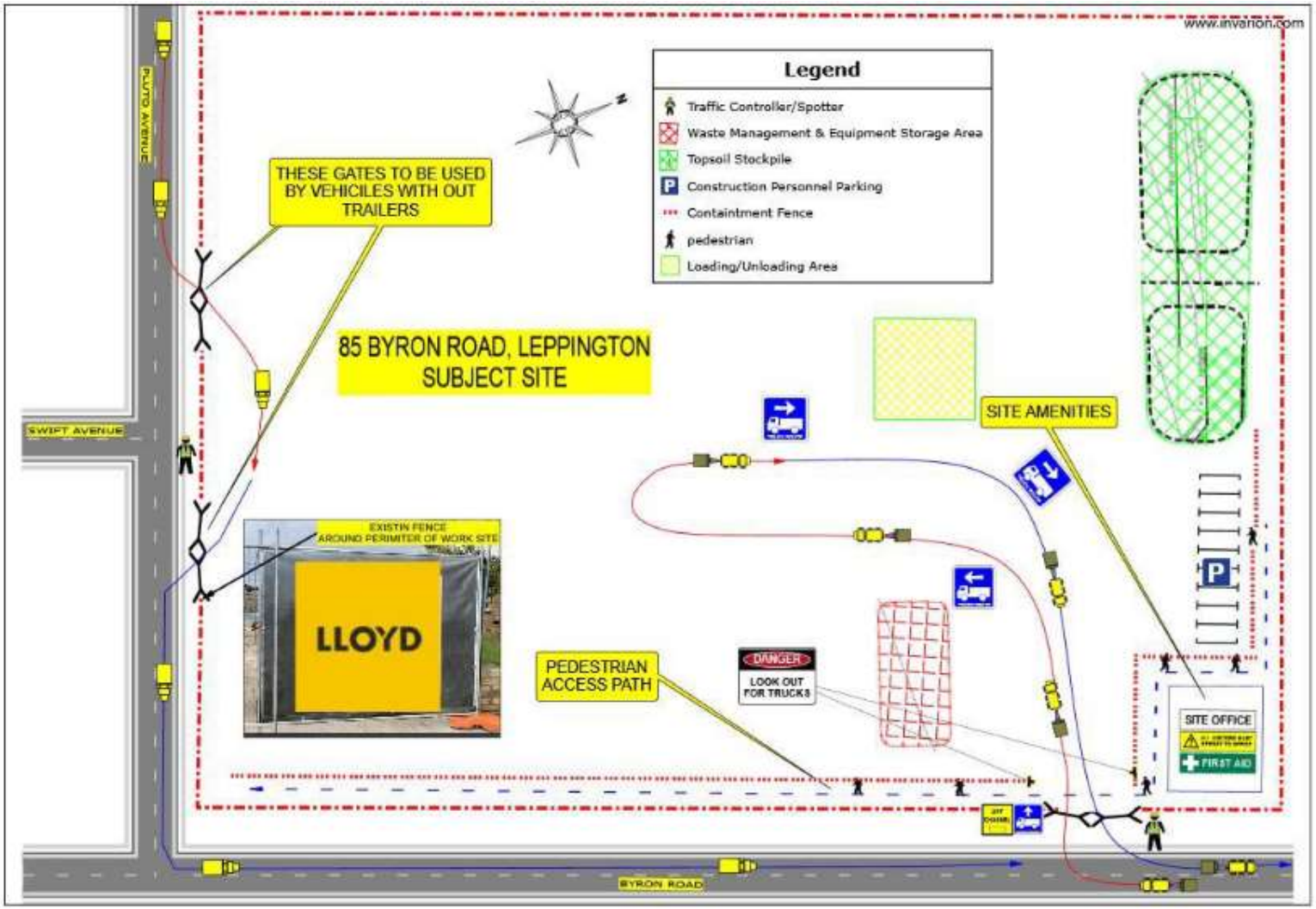
7.38. Key Contacts

NAME	POSITION	CONTACT #
Brandon Farr	Public Roads Authority Technical Officer	02 4654 7777

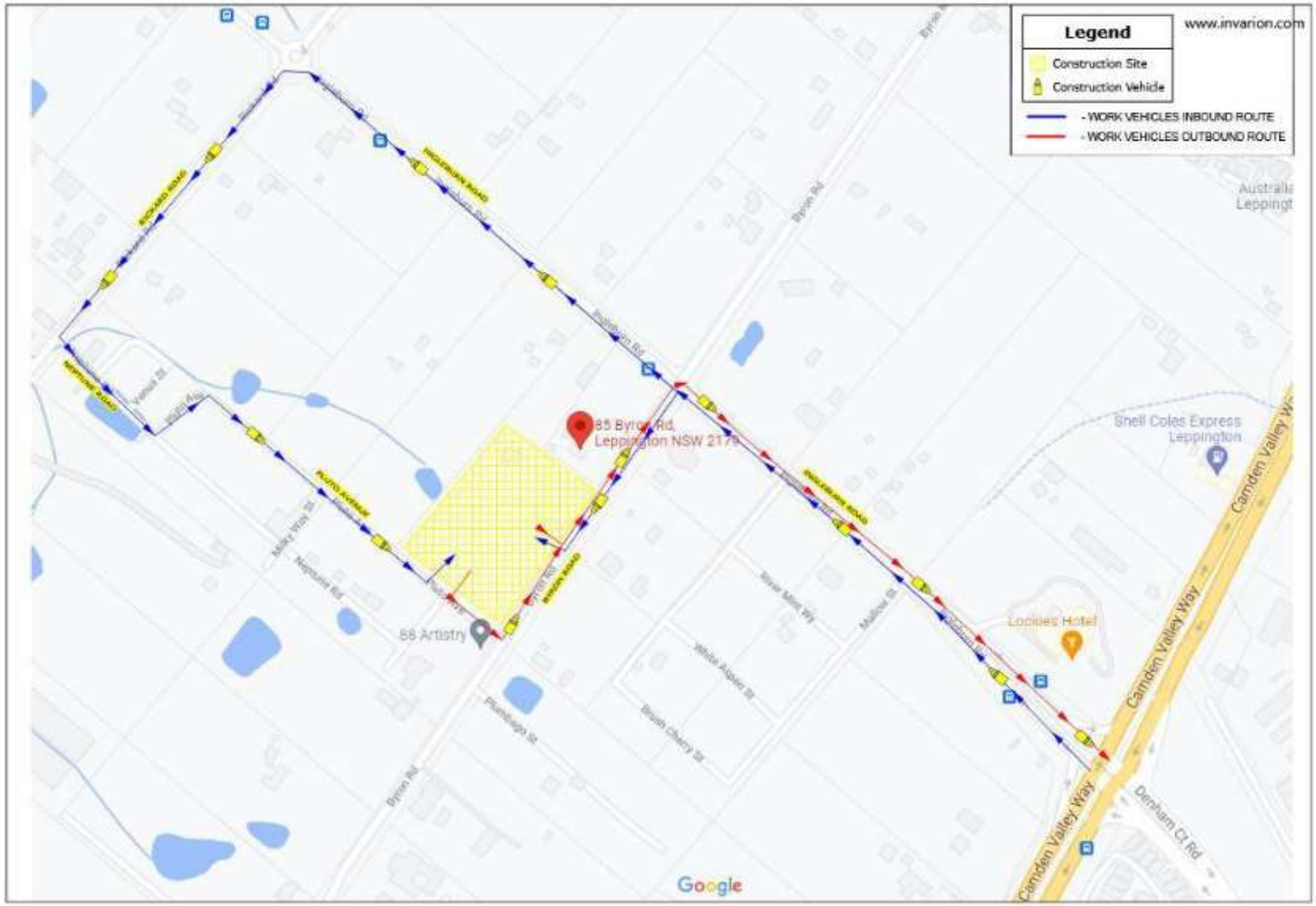
7.39. Traffic Layouts

APPENDIX A

Site Traffic Management Plan/Site Layout – Figure 8



Vehicle Movement Plan for Construction Vehicles – Figure 9

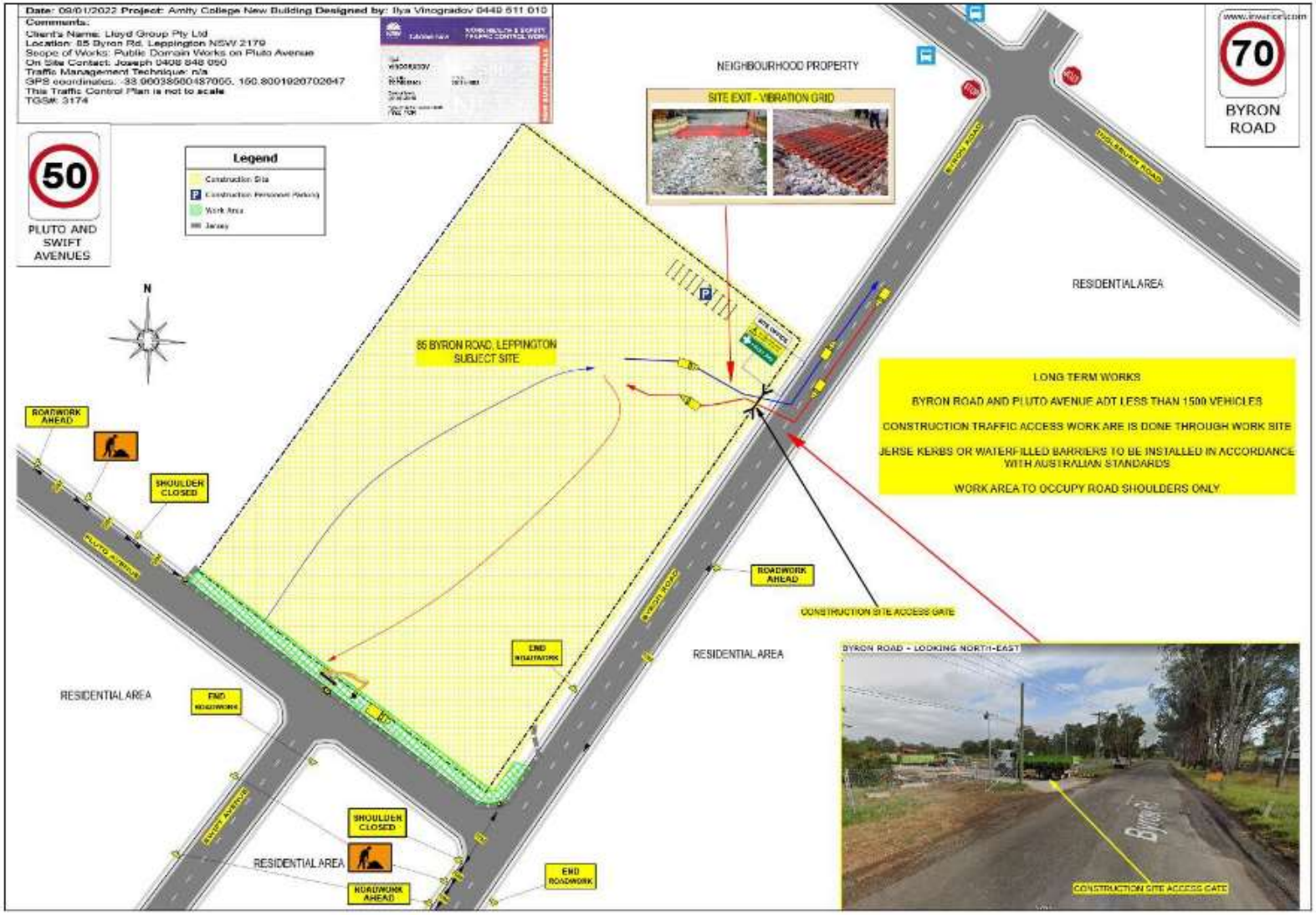


7.40. Traffic Control Plans

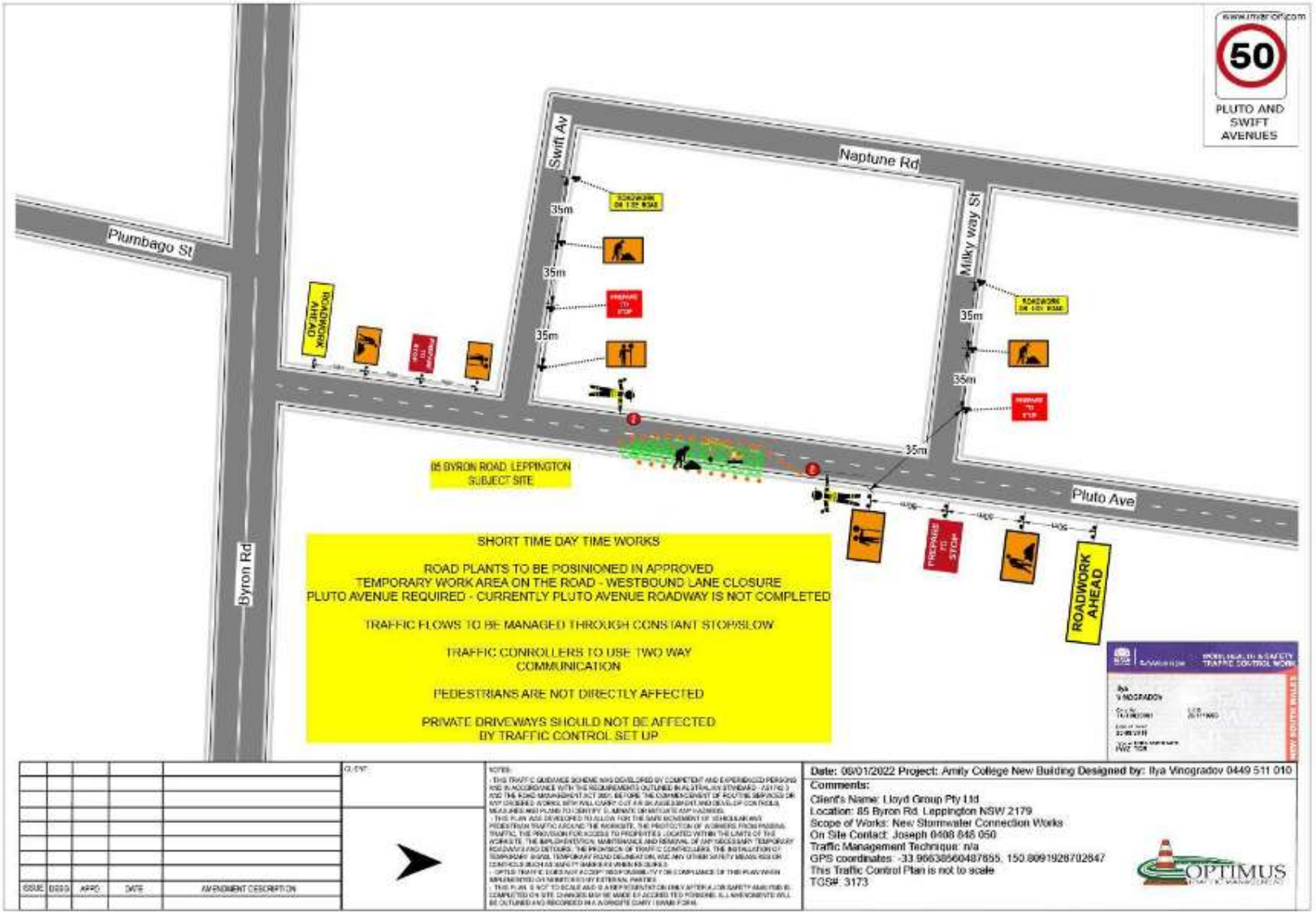
APPENDIX B

TRAFFIC CONTROL PLANS - TCP #3040 – DAILY SITE ACCESS ON BYRON ROAD

TRAFFIC CONTROL PLANS - TCP #3174 – PUBLIC DOMAIN WORKS ON PLUTO AVENUE

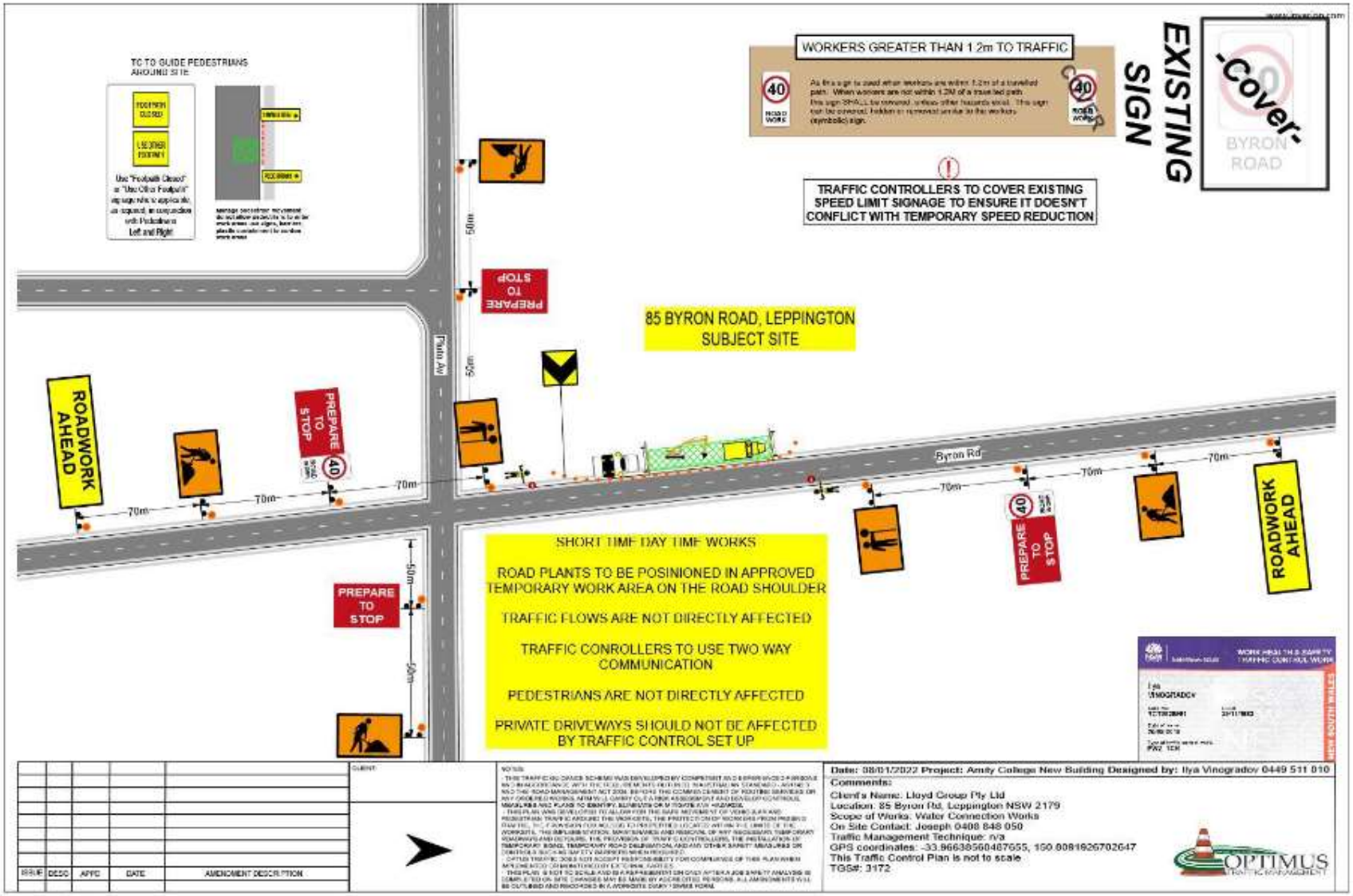


TRAFFIC CONTROL PLANS - TCP #3173 – STORMWATER CONNECTION ON PLUTO AVENUE



LLOYD

TRAFFIC CONTROL PLANS - TCP #3172 – STORMWATER CONNECTION ON BYRON ROAD



8. Construction Noise, Vibration and Dust Management

8.1. Overview

Noise and dust generated during construction are the impacts most referenced by clients and local residents. Vibration will be also a key concern during the demolition of the works.

Dilapidation reports have been prepared of the adjacent buildings prior to commencement of any works.

Noise and vibration generated during excavation and construction works is assessed at surrounding residential receivers in accordance with the *Interim Construction Noise Guideline.*

Lloyd Group is committed to achieving minimal impact on the immediate surrounds during the construction. Consultants will be used to monitor vibration, dust and noise during major excavation and earthworks, with results made available to all stakeholders for review.

Development Consent condition C25 provides a summary of the matters that must be addressed in the Construction Noise and Vibration Management Plan. *It is noted that any construction activities involving plant or power tools are going to create an environment where noise above 75dB is experienced. To mitigate the effect of these works construction activities will be carried out in accordance with the DA Hours.*

Specific conditions relating to the control of noise and vibration during construction are detailed in Development Consent conditions D13 to D17. These conditions form a part of the mitigation measures proposed for the Stage 1 works covered by this Plan.

8.2. Interim Construction Noise Guidelines EPA 2009

The *Interim Construction Noise Guideline* recognises that construction and excavation works will at times generate noise that is clearly audible at neighbouring sites. The primary focus is to provide a means of determining the severity of noise impacts at surrounding affected receiver locations and a framework for managing construction noise, generally through implementing best practice noise minimisation principles and facilitating communication between construction workers and the local community.

In regard to the latter, Lloyd Group has written to local residents seeking their views on noise impacts and mitigation measures proposed.

Construction noise criteria were also derived from measured background noise levels. This is based on LAeq,15minutes ≤ LA90,daytime + 10 dB during the recommended standard hours*.

Based on the acoustic report by Koikas Acoustics, entitled A*coustic Assessment School Operational Noise Impact Assessment Amity College Leppington Campus* dated 29/05/2019 the applicable construction noise criteria are:

- LAeq,15 min (daytime) ≤ 44 dB, for residential premises near Site Location 1 (east), and
- LAeq,15 min (daytime) ≤ 46 dB, for residential premises near Site Location 2 (west).

The location of the above noise locations is illustrated in the accompanying Figure 8.1. Note that Location 2 is well within the school site and Location 1 is near the main construction access point from Byron Road.

FIGURE 8.1: Noise Locations

(Source: Koikas Acoustics Acoustic Assessment School Operational Noise Impact Assessment Amity College Leppington Campus dated 29/05/2019 Figure 1)

Development Consent condition D13 sets down the noise standard to be satisfied. It states:

"D13. The development must be constructed to achieve the construction noise management levels detailed in the Interim Construction Noise Guideline (DECC, 2009). All feasible and reasonable noise mitigation measures must be implemented and any activities that could exceed the construction noise management levels must be identified and managed in accordance with the management and mitigation measures identified in the CNVMSP in condition C25."

Koikas Acoustics predict that noise from construction is predicted to, at times, exceed the Noise Affected level of the ICNG at nearby premises. This is due to the proximity of the adjoining residences in relation to the assessment site and the typical nature of noise associated with construction equipment.

8.3. Vibration Requirements

Development Consent condition D15 sets down the vibration standard to be satisfied. It also refers to the requirement of consent condition C25. Condition D15 states:

"D15. Vibration caused by construction at any residence or structure outside the site must be limited to:

(a) for structural damage, the latest version of DIN 4150-3 (1992-02) Structural vibration - Effects of vibration on structures (German Institute for Standardisation, 1999); and

(b) for human exposure, the acceptable vibration values set out in the Environmental Noise Management Assessing Vibration: a technical guideline (DEC, 2006) (as may be updated or replaced from time to time)."

Koikas Acoustics predict that ground during excavation and earthworks for the below-ground floor levels may impact on adjoining residences, however, by reference to Table 9 of their report the works associated with the Stage 1 works are to be undertaken at distances in excess of that identified in that table, the nearest minimum working distance being 23m (hydraulic hammer). The Koikas report also predicts that: "*The vibration generated from an excavator removing site soil during earthworks for the basement is not expected to result in structural damage or human annoyance to nearby receivers*." (p.43)

8.4. Air Quality

Development Consent conditions D20-D21 set down the applicable air quality measures and requirements. Lloyd Group will seek to achieve the requirement of consent condition DC20 which states:

"D20. The Applicant must take all reasonable steps to minimise dust generated during all works authorised by this consent."

8.5. Noise and Vibration Measures

For the Stage 1 construction, the following noise and vibration mitigation measures are adopted, incorporating the recommendations made in the Koikas Acoustics report referred to above:

- All construction work to be undertaken strictly during the approved hours of operation, namely, 7.00am to 6.00pm Monday to Friday and 8:00am to 1:00pm on Saturdays.
- Development Consent condition D8 limits rock breaking, rock hammering, sheet piling, pile driving and similar activities may only be carried out between the following hours:
  - 9:00am to 12pm (noon), Monday to Friday;
  - 2:00pm to 5:00pm Monday to Friday; and
  - 9:00am to 12pm (noon), Saturday.
- All equipment to have manufacturers noise control equipment (exhaust/mufflers/sound proofing) in sound working condition. Daily plant maintenance checks to be carried out. Any plant, equipment or vehicles fitted with acoustic canopies shall be used with the canopy closed at all times whist operational.
- The use of moveable screens for specific work practices.
- Limits on time of rock hammering, sheet piling and the like.
- Use of appropriately sized plant and equipment to undertake the earthworks, excavation and allied tasks required as a part of the Stage 1 works.
- Limits on duration of noisy activities. For activities that may generate abnormal noise levels, local residents will be informed prior to commencement. Where possible, limit excessive noise generating activities to daylight hours.
- To minimise vibration from rock breaking, it is recommended that a hydraulic hammer attachment with a pointed 'cone' type hammer is used in place of a flat 'block' type hammer.
- Carry out progressive noise monitoring.
- Minimum work distances, as tabled within the Koikas acoustic report, should be observed at all times, especially regarding structural damage guidelines.
- Ongoing community liaison, to allow occupants of local residences in close proximity to the construction works, to plan and organise their week around any noisy activities.
  - All site personnel will be made aware of potential noise sources from their operations, the noise limits are to be observed inclusive of adaptation of mitigation measures. Construction operations will be conducted during approved hours, and within the requirements of all local noise regulations. All personnel will be advised of regulatory requirements regarding air and noise in work pre briefs.
  - In the event of a noise complaint the Project Manager must be informed. Noise monitoring may be conducted to confirm actual construction noise levels

-

8.6. Community Consultation

The local community has been provided the opportunity to provide feedback for the development via a letter box drop delivered on the 24th of May 2021, 24 business days have passed and we are yet to receive any commentary from the local community but if we receive any feedback we will review and implement feedback into our CEMP for the project.

Outline Planning Consultants have been engaged to provide a Community Communication Strategy for the Early Works and Stage 1. Amity College School SSD 9227 Community Communication Strategy has been provided in **Section 15 Appendix D** of this section and outlines items as required by **Condition C7** of the Development Consent Conditions.

As noted in this Communication Strategy, timeframes for providing notification to stakeholders for different types of works are as per the following table:

Works activity	*Minimum community notification period*
Notification to communities following major incident	*Same day*
Emergency works/unforeseen events	*Same day*
Contamination management and notification	*Within 48 hours*
Upcoming works notification (minimum disruption)	*5-7 days*
Notifications regarding traffic changes, parking impacts, road closures, and/or detours	*10-14 days*
Notifications regarding operational changes for the school community, applicable after the Stage 1 Primary School is operational (school drop-off points, entry and exit points)	*10-14 days*
Notifications regarding major construction impacts or planned out of hours work	*10-14 days*

This Communication Strategy has been provided to the Planning Department for information and provides mechanisms to facilitate communication between the Applicant, the relevant Council, and the community throughout each stage and for a minimum of 12 months following the completion of construction of each relevant stage.

Further Community Consultation

The Community Communication Strategy also includes the below table containing methods and timeframes for responding to complaints and enquiries:

Type of complaint	Time it will take to acknowledge that complaint	Target response time
Telephone call made during business hours to either Amity College or construction management (if construction is underway)	• At time of call- agreement will be reached with caller as to estimated timeframe for resolution. • Follow up call within 2 hours if the above timeframe cannot be reached.	• Complaint to be closed out within 48 hours. • If this is not possible, continue contact, escalate as required and resolve within 7 business days.
Telephone call made outside of business hours to either Amity College or construction management (if construction is underway)	Within 2 hours of receiving message upon returning to office.	• Following acknowledgement, complaint to be closed out within 48 hours. • If this is not possible, continue contact, escalate as required and resolve within 7 business days.
Email received during business hours	At time of email (automatic response)	• Complaint to be closed out within 48 hours. • If this is not possible, continue contact, escalate internally as required and resolve within 7 business days.
Email received outside of business hours	At time of email (automatic response)	• Complaint to be closed out within 48 hours, once return to business hours. • If this is not possible, continue contact, escalate internally as required and resolve within 7 business days.
Enquiries (not complaints)		
Telephone call made during business hours to either Amity College or construction management (if construction is underway)	At time of call- agreement will be reached with caller as to estimated timeframe for resolution.	To be logged and closed out within 7 business days.
Telephone call made outside of business hours to either Amity College or construction management (if construction is underway)	Within 2 hours of receiving message upon returning to office.	To be logged and closed out within 7 business days.
Email received during business hours	At time of email (automatic response)	To be logged and closed out within 7 business days.
Notifications regarding major construction impacts or planned out of Email received outside of business hourshours work	At time of email (automatic response)	To be logged and closed out within 7 business days.
Letters	Not applicable	To be logged and closed out within 10 business days following receipt of the letter.

8.7. Air and Dust Control Measures

As per the Amity College Development Consent, condition C20, within three months of the issue of any construction certificate (not including demolition) for each relevant construction stage, Lloyd Group will ensure that a rainwater reuse/harvesting system for the development is developed for the site. A rainwater re-use plan must be prepared and certified by a suitably qualified hydraulic engineer and a copy of the plans submitted to the satisfaction of the Certifier.

In accordance with the *Amity College Development Consent (SSD 9227)*,condition D21, Lloyd Group will ensure that:

a) Exposed surfaces and stockpiles are suppressed by regular watering;

b) All trucks entering or leaving the site with loads have their loads covered;

c) Trucks associated with the development do not track dirt onto the public road network;

d) Public roads used by these trucks are kept clean; and

e) Land stabilisation works are carried out progressively on site to minimise exposed surfaces.

Lloyd Group will also ensure the following, as part of the air and dust control plan:

- Dust control measures will be implemented on all unsealed trafficable areas considered to generate significant wind-blown or traffic generated dust emissions. Subject to availability recycled water will be used as preference to potable water. Recycled water will come from sources that meet relevant EPA requirements.
- Roadways and work areas will be watered using approved recycled water or approved privately sourced water, to minimised dust levels outside of working hours, as necessary.
- Movements on and offsite will be reduced as far as possible during wet weather. Mud on roads will be removed by sweeping or using shovels.
- In extreme wind conditions, construction activities may need to cease until conditions improve.
- No burning off is permitted on site.
- Where appropriate, vehicle engines not in use for a period exceeding 20 minutes will be turned off to reduce greenhouse gas emissions and unnecessary noise.
- All fumes to be exhausted to open air will be released through a mobile ventilation system.
- All items of plant and equipment to be in good working order and regularly serviced to reduce exhaust emissions.
- Construction equipment will be properly maintained to ensure exhaust emissions are minimised. If visible smoke can be seen from any equipment (while working on a construction site) for longer than 10 seconds duration, the equipment will be taken out of service and adequately repaired or tuned so the smoke is no longer visible for periods longer than 10 seconds.

-

8.8. Handling of Noise/Vibration Complaints

A site contact and phone number will be distributed to all surrounding premises and displayed on the site notice-board for any complaints arising du e to noise and/or vibration generated during construction works.

Lloyd Group will have clear complaints handling procedure and staff who are well-versed in the complaints handling procedure of construction works. A register of all noise, dust and vibration complaints will be kept on site and be readily available for inspection, with copies regularly provided to Amity College representatives.

Details of the complaints register are to include details of the following:

- The date and time of the complaint.
- The person receiving a complaint.
- Complainant phone number and/or email address.
- Site contact who the complaint was referred to for action.
- Description of the complaint.
- Action to be taken to address the complaint and the time frame for action to be implemented.

All complaints should be given a fair hearing and adequately investigated. This may involve scheduling a relevant consultant tosubstantiate or refute any received complaint, and/or verifying any remedial action taken by the site manager by way of on-site testing.

8.9. Monitoring of Performance

Lloyd Group will be responsible for providing to Amity College details of the operations undertaken, including results of any and all noise or vibration monitoring, incidents and accidents, details of discussions with the local council and the community, unexpected finds, complaints and actions taken in response to complaints, as well as details of material removed from or imported into the site.

During the approved working hours it is anticipated that works will be carefully managed and appropriate noise mitigating measures will be strictly implemented where required.

It is recommended that close communication be maintained with potential sensitive noise and vibration receptors throughout the project.

Acoustic consultants will be engaged to undertake such an assessment and provide an acoustic and vibration report. The report should identify the formulated criteria for disruptive noise, natural background levels recorded from adjoining properties, foreseeable construction associated noise levels, standards and specific guidance.

As part of Lloyd Group's site setup, Contact Details of relevant site staff are displayed at the street Notice board in the event of any member of the community wishing to provide feedback or opportunities for improvement in regards to performance of noise/vibrations.

Project meetings are also held on a regular basis throughout projects and are an opportunity for Clients, consultants and other parties to identify and raise any potential improvements. Should there be any urgent matters, it is encouraged that either the PM or Site Manager is notified immediately to rectify its cause.

9. Construction Waste & Other Impacts Management

9.1. Overview: Waste Management Generally

Lloyd Group is committed to reducing the amount of waste generated onsite and uses the EPA wastes hierarchy to achieve this aim. The wastes hierarchy is an order of preference and states that waste should be managed in accordance with the hierarchy, with avoidance being the most preferred option and disposal being the least.

- No littering of the Project Site will be tolerated.
- Brief all employees on waste minimisation, management, and disposal prior to works proceeding as part of the Site Induction.
- Brief all suppliers on waste minimisation, management, and disposal of packaging. Where possible suppliers to provide products free of packaging.
- Provide appropriate waste storage containers with secure lids to prevent fauna access.
- Construction waste such as concrete, steel, brick rubble and wood is to be separated for recycling.
- Putrescible waste to be regularly disposed of to landfill.
- Cigarette butts are to be disposed of in bins appropriately.
- Residues and containers to be stored in designated areas protected from stormwater drains.
- Chemical residues, packaging, and used containers are to be disposed of in accordance with the relevant SDS.
- Portable toilets are to be emptied regularly and waste disposed off site by a licensed Contractor in accordance with local Council and EPA requirements.
- Contaminated materials (e.g. soil contaminated with oils) to be appropriately stored and contained on site and disposed or relocated at the direction of the Environmental Delegate. NB: such material may require laboratory testing prior to determining where it can be disposed.
- Spent absorbent materials will be bagged and stored in a suitable storage container labelled accordingly. Full containers will be removed by a licensed contractor to a licensed landfill.
- Stormwater collected in bunds is to be visually inspected for contamination (i.e. a sheen) prior to release onto a hardstand area away from stormwater pits.
- No on-site dumping and burning is permitted.
- All vehicles carrying loads of dry soil, rock, concrete or vegetation will be loaded to a level and then appropriately covered such that spillage and dust dispersal during travel is minimised.
- Upon removal of site facilities, areas are to be left clean and tidy.
- Debris & sediment collected behind sediment controls is to be re-used where possible (e.g. rehabilitation works) or disposed of to a designated spoil site.

9.2. Contaminated Waste Management

All materials generated on site during either demolition or excavations are to be fully evaluated for potential contamination. This process is to be scheduled with the Project Manager and/or Site Manager on an as needs basis.

Should contaminated wastes be evident (e.g. asbestos, hydrocarbons, etc.), the client will be advised so that arrangements can be made for the engagement of appropriately qualified specialists in hazardous materials handling.

Any contaminated waste will be managed in accordance with the Site WHS Plan requirements.

As per the Amity College Development Consent, condition C6 and C38 prior to the commencement of construction Lloyd Group will ensure to implement the unexpected contamination finds protocols provided at Section 10 of the Remediation Action Plan titled '*Remediation Action Plan – Proposed New Amity College Campus, Lot 1 DP 525996 No 85 Byron Road and Lot 2 DP 525996 No 63 Ingleburn Road Leppington NSW*', dated 30/5/2019 prepared by GeoEnviro Consultancy to ensure that potentially contaminated material is appropriately managed.

Any material identified as contaminated is to be disposed off-site, the disposal location and results of testing submitted to the Planning Secretary prior to its removal from the site.

Disposal of prescribed waste/contaminated materials, including contaminated spoil shall be under the following controls:

- Use of licensed prescribed waste contractors and vehicles;
- Advising waste contractors of waste composition and any special hazards associated with the waste;
- Retention of waste transport certificates.

9.2.1. Asbestos

If asbestos is identified on this site a qualified hygienist may be engaged to provide advice on the management procedures required to effectively manage asbestos onsite. The client will be asked to provide a report showing all known locations for existing asbestos within the site boundary. The following controls will be implemented:

- Areas already identified as containing asbestos will be identifiable on site via appropriate signage. All employees working on site will be briefed of the presence of asbestos in these areas via a toolboxmeeting and/or in the site induction.
- Where required an Asbestos Management Plan may be developed as a subsidiary document to this Environmental Management Plan.
- Any grey fibrous cement materials observed on site, and not previously identified as an asbestos contaminated area, must be treated as asbestos-cement materials, or sampled for asbestos fibres.
- Any pipe or other lagging or insulation identified on site that cannot be positively identified as synthetic mineral fibre (SMF) material, polystyrene foam or brown hessian organic fabric should be treated as asbestos lagging.
- If asbestos is suspected of being found during construction activities, works in the immediate vicinity are to cease immediately. Works are not to recommence in that area until confirmation by the way of a hygienist report that has confirmed the type of material.

9.3. Waste Water/Washout Areas

Washout processes and facilities for paint and/or finishing trades are to be minimised and water recycling for these activities are encouraged where possible. Finishing trades washout facilities should **NOT** be plumbed to any building services and will be of a stand-alone nature. The maintenance of these facilities should be the subcontractor's responsibility and should comply with all appropriate Environmental Legislation and local authority guidelines.

9.4. Packaging

All suppliers of building materials will be encouraged to nominate packaging minimisation and reuse initiatives, which have been implemented, as part of product supply to the project. Bulk handling and reusable transport containers will be encouraged. Methods can include:

Original Packaging	Recyclable Packaging
Shrink wrapping	Metal strapping
Plastic packaging	Paper packaging
Foam packaging	Shredded paper

9.5. Recycled Materials

Suppliers will be encouraged to nominate products that include a recycled component (e.g. using concrete with recycled aggregate) and ability/opportunity for recycling of unused components in accordance with the specified 80% waste reduction target. aspect and Impact Register

At the start of each project a Project Safety & Environmental Risk Assessment is completed. It includes environmental aspects and impacts.

9.6. Contaminated Material Disposal

In accordance with the Amity College Development Consent, condition C30, prior to the commencement of the removal of any waste material from the site, Lloyd Group will notify the TfNSW Traffic Management Centre of the truck route(s) to be followed by trucks transporting waste material from the site.

- Fuelling, maintenance and cleaning of vehicles and construction plant will not be carried out in areas from which fuel or oil may be discharged to street gutters or storm water drainage systems. The location of such activities needs to be fully considered so as to minimise the potential for spillage into sensitive receptors.
- Storage of fuel, oils, chemicals on site will be held to an absolute minimum. No such materials shall be stored on site without the permission of the Site Manager. The location of these shall be well clear of trafficable areas in case of collision. A spill kit will be kept in close proximity.
- Where practical impervious bunds (or a similar retention system) may be constructed around all fuel or oil storage areas to ensure retention of not less the 110 per cent of the capacity of the largest tank in each bund. Drums and tanks containing oil or other pollutants will be stored within impervious bunds. Suitable barriers shall be erected along bund walls to prevent elevated storage tanks and drums stored more than 2 drum heights, from falling outside of bunded areas. Adequate absorption materials shall be readily available to collect and recover any liquid spillages.
- Dry methods of spillage clean-up will be used wherever possible. Bunded fuel areas will not be fitted with valves or drains but shall be graded to pump out sump. Oil contaminated storm water and/or soil will be disposed of to a licensed disposal site where relevant.
- Fuelling construction plant will not be carried out without an operator or driver being in attendance at all times. Road going vehicles will not be fuelled on site.

- All spillage on to sealed areas will be cleaned up as quickly as practical and placed into suitable receptacles for reclamation or disposal in a manner that does not cause pollution of the environment.

9.7. Hazardous Materials (Fuels & Chemicals) Transport, Storage & Handling

- The storage and handling of fuels and chemicals will comply with all relevant legislation
- SDS's will be obtained when purchasing chemicals and will be available to all personal on-site for all chemicals stored and handled.
- Contaminated soils that are Prescribed Industrial Wastes (PIW) must be transported by appropriately permitted trucks with a relevant Waste Transport Certificate, or local authority equivalent, completed for each load, and disposed of at a suitably licensed site in accordance with the local Environmental Regulatory Authority.
- Minimal volumes of fuels and chemicals will be stored onsite. If required to be stored in the work area, liquid chemicals will be bunded to 110% of the total volume stored.
- Batteries are to be located in clearly defined areas. Batteries are to be sealed units to prevent acid spills (where possible). Batteries are to be charged in well ventilated areas.
- Spill response equipment will be located at various locations around the site during the construction and must be carried in all fuel transport vehicles/trailers.
- Inspection of fuel and chemical storage areas are to be undertaken daily.
- Drivers of fuel and chemical transport vehicles to the sites will be trained in the procedures for emergency response for spills.
- Persons handling chemicals will be provided with appropriate training and personal protective equipment. The operator must be present during re-fuelling operation.
- Vehicles carrying fuel for the purpose of refuelling other vehicles shall be clearly identifiable, have the fuel stored in approved containers and have a hydrocarbon spill kit on board.
- Re-fuelling areas will not be within 100m of any natural drainage line and will be within bunded areas (where possible).
- Products to be stored in designated areas only such that soil/water is not contaminated (e.g. cement products to be stored in weather proof area).
- Flammables are to be stored in approved storage areas and placarded appropriately.
- All drums/containers for use must be adequately labelled and made of appropriate material.
- Fire extinguishers to be available at storage areas where flammables are stored.
- In the event of a spill, a spill kit will be used to clean up immediately. If this is not possible the relevant authorities will be contacted.

In addition to the above, and as required by Amity College Development Consent, conditions D28 to D31:

"D28.All waste generated during construction must be secured and maintained within designated waste storage areas at all times and must not leave the site onto neighbouring public or private properties.

D29. All waste generated during construction must be assessed, classified and managed in accordance with the Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014).

D30. The Applicant must ensure that concrete waste and rinse water are not disposed of on the site and are prevented from entering any natural or artificial watercourse.

D31. The Applicant must record the quantities of each waste type generated during construction and the proposed reuse, recycling and disposal locations for the duration of construction."

9.8. Site Facilities Management

- Sediment control will be implemented in temporary laydown areas as required.
- All areas of the site are to be left neat and tidy, uncluttered with debris, random construction materials, plant and equipment etc.
- Vehicle, plant, and equipment laydown areas are to be established within designated areas only.
- Office, workshop and storage areas are to be maintained at regular intervals.
- Dust suppression by water sprays to be undertaken in site facility areas (as required). Where possible dewatering water or recycled water will be utilised as dust suppression.
- Fuel and chemical storage areas managed and maintained.
- Products to be stored such that soil / water are not contaminated (e.g. fuel and chemical storage and cement products to be protected from weather).
- No trapping of animals is to occur.

9.9. Noxious Weeds Management

- Mitigation measures will be implemented to prevent the spread of listed noxious weeds both on and off site.
- Vehicles and plant will be isolated from heavily affected areas if the area is not within the construction footprint in the form of fencing/barricading that will be affixed with signage.
- Fencing/barricading and signage will be inspected as part of the environmental Inspection to ensure appropriate segregation is maintained.
- Vehicles/plant to stick to designated crushed rock haul roads.
- Topsoil on site will not be transported offsite without being treated first.
- Plant/machinery will be inspected prior to entering and exiting site to ensure weed seeds are not being transported on or off site.

10. Construction Soil and Water Management Plan

10.1. Overview

Soil and water management controls are to be effectively maintained at all times during the course of construction of all stages of the school project and are not to be removed until each stage is satisfactorily completed. The following overarching objectives apply to the prevention of erosion and sediment run-off from the project site:

- To ensure that the water quality of the downstream environment is not worsened by the site development.
- Minimise sediment transport in surface water runoff. In this regard it is proposed to install storm water drains and sediment basins in and around the project site.
- Adequate provisions to be made to collect and discharge stormwater as required by Amity College Development Consent, condition D25 and C27.
- There must be no increase in stormwater runoff from the site to downstream properties, including No. 69 Ingleburn Road, during construction, as required by Amity College Development Consent, condition D23.
- All earthworks, drainage and erosion and sediment controls must be undertaken in accordance with the engineering drawings and technical notes prepared by Martens & Associates accompanying the Stage 1 works tender package. Refer **Figures 1.2, 1.3, 1.4, 10.1** and to **Section 12 Appendix A** for details.

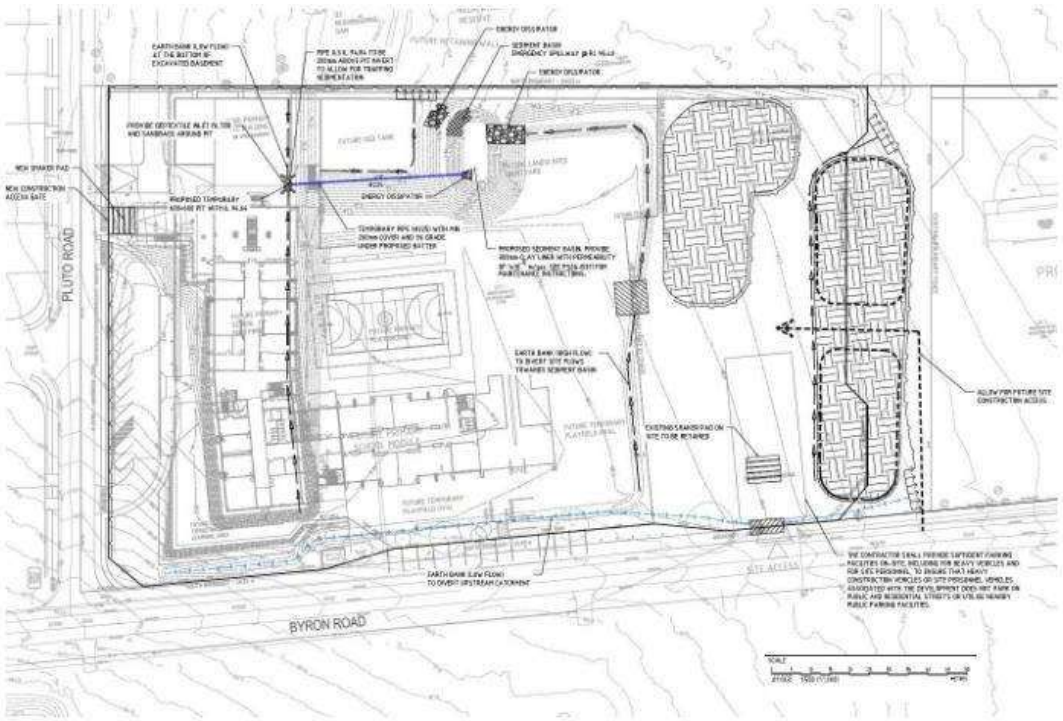


FIGURE 10.1: Early Works Sediment & Erosion Control Works

(Source: Martens & Associates 24 April 2021- refer Appendix A)

Further confirmation satisfying consent condition C27(a) below from Terry Harvey Project Manager / Senior Engineer BEng (civil) Martens & Associates Pty Ltd

MA response:

- See attached correspondences with Council regarding on-site and off-site stormwater management.
- Council has requested that interim drainage along Byron Road (i.e. to divert site upstream catchment) needs to be addressed and approved by Council to avoid internal and external adverse flooding impacts including peak flows discharged to Scalabrine Creek drainage reserve (i.e. site downstream). All Council requirements related to this have been satisfied.
- Site Construction Soil and Water Management Plans have been prepared to address all Council requirements and are in accordance with Landcom's "Blue Book".

- Additionally, Section 138 road work plans have been prepared and submitted to Council to address and fulfill the above requirements of soil and stormwater management related to off-site overland flows.

COUNCIL / MARTENS CORRESPONDENCE ON THE NEXT PAGE

From: Faraj Gibbs <Faraj.Gibbs@camden.nsw.gov.au>
Sent: Thursday, 18 March 2021 3:43 PM
To: Terry Harvey
Cc: David Atkin; Brendan Stokes
Subject: RE: 6493: Byron Road queries to Council in relation to S138 approval

Hi

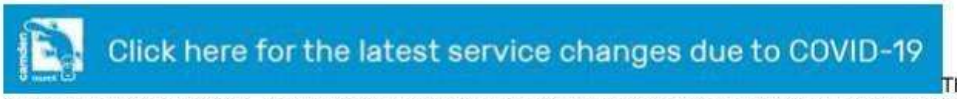
Byron Road is currently at the detailed design stage, being managed by Council Infrastructure Planning Engineer **Brendan Stokes** (cc). The proposed road section will change from that indicated in the WSP Preliminary Concept Design. A shared path is proposed along the 85 Byron Road frontage.

Council does not support the creation of a temporary overland flow path within the site. Although an interim scenario, channelised flows would render the site affected by mainstream flooding as well as below flood planning level. Interim overland flows from the major road need to be retained within the existing major road reserve. The applicant needs to provide a temporary frontage and drainage system at Byron Road

Regards

Faraj Gibbs
Infrastructure Planning Engineer

70 Central Avenue, Oran Park, 2570
(02) 4645 5665
www.camden.nsw.gov.au
PO Box 183, Camden NSW 2570
Faraj.Gibbs@camden.nsw.gov.au



From: Terry Harvey <THarvey@martens.com.au>
Sent: Thursday, 18 March 2021 12:39 PM
To: Faraj Gibbs <Faraj.Gibbs@camden.nsw.gov.au>
Cc: David Atkin <david.atkin@camden.nsw.gov.au>; Thang Ma <Thang.Ma@camden.nsw.gov.au>; Brendan Stokes

<Brendan.Stokes@camden.nsw.gov.au>; Peter Reed <preed@granassociates.com.au>; Gary Peacock <gpeacock@outline.com.au>; 'Douglas Kennedy' <dkennedy@granassociates.com.au>; 'Andrew Romanczuk' <aromanczuk@granassociates.com.au>; Sina Arbabzadeh <sarbabzadeh@martens.com.au>; Anna Wong <awong@martens.com.au>
Subject: FW: 6493: Byron Road queries to Council in relation to S138 approval

Hi Faraj,

We are currently undertaking Byron Road design works in accordance with **SSD 9227 consent conditions B2, B4 & B7 and B14**.
We would appreciate Council's feedback on two design intentions within Byron Road which will be subject to a S138 Roads Act approval, these being:

1. Byron Road formation
2. Temporary retaining/swale along the school boundary.

1. Byron Road formation

Condition B2 states:

(c) details of a 2.5m wide shared path along the north-western verge of Byron Road for future cyclist movement;

We note that condition B2(c) requirements differs from the WSP concept design for Byron Road.
The following images outline the difference between the typical Section noted by the **WSP concept design** and the **Camden Growth Centre Precincts DCP (Figure 3-12: Typical collector road**):

Comments:

- The approved road reserve width (approved site boundary) does not allow for the typical collector road to be provided based on the WSP concept design, which does not consider a 2.5m shared footpath (shown in figures below).
- We suggest the 2.5m wide footpath is constructed adjacent the Byron Road kerb (i.e no 1.5m planting) to allow the 2.5m sharepath.
- The attached sketch plans with notated cross sections demonstrates the suggested Byron Road design for Council's confirmation.
- There will likely be a need to consider pedestrian safety (temporarily) where no kerb is proposed between Byron Road and the sharepath. Does Council have a preferred method of separation?

We would appreciate Council's feedback prior to issuing road designs for S138 approval.

Camden Growth Centre Precincts DCP (Figure 3-12: Typical collector road)

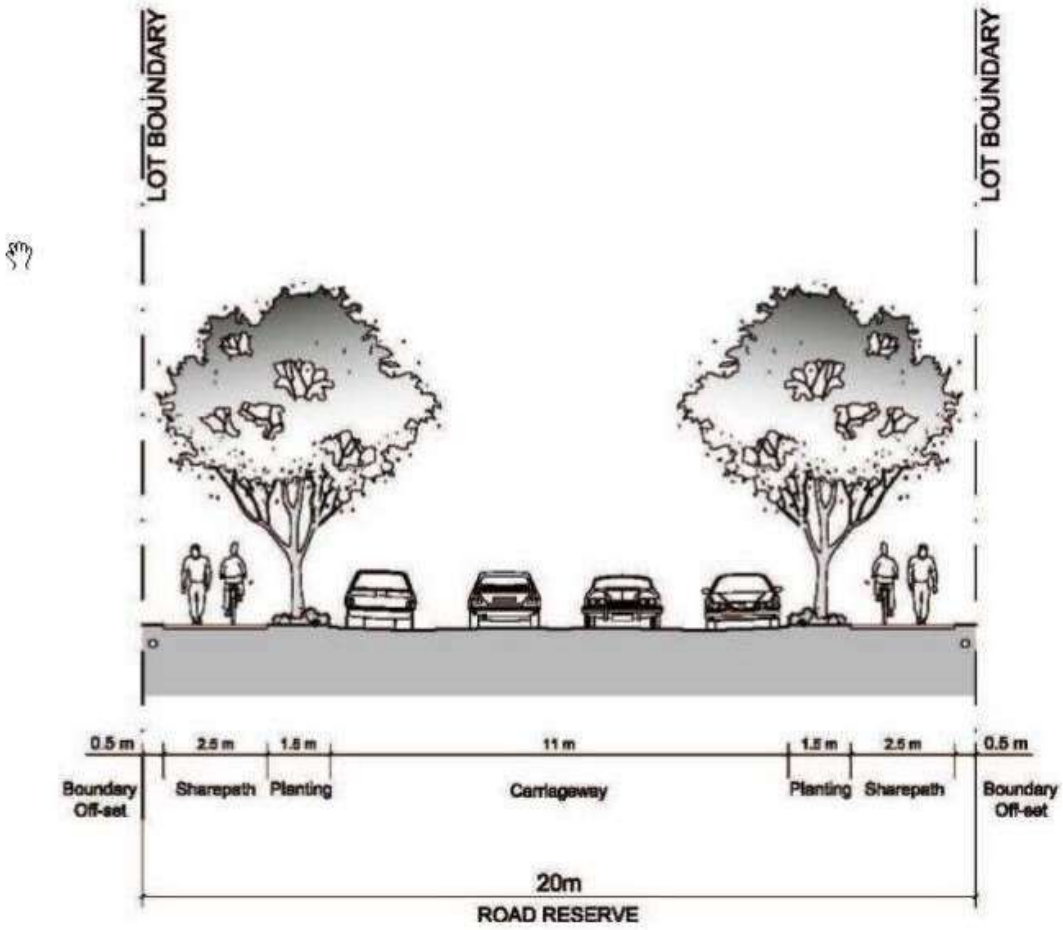
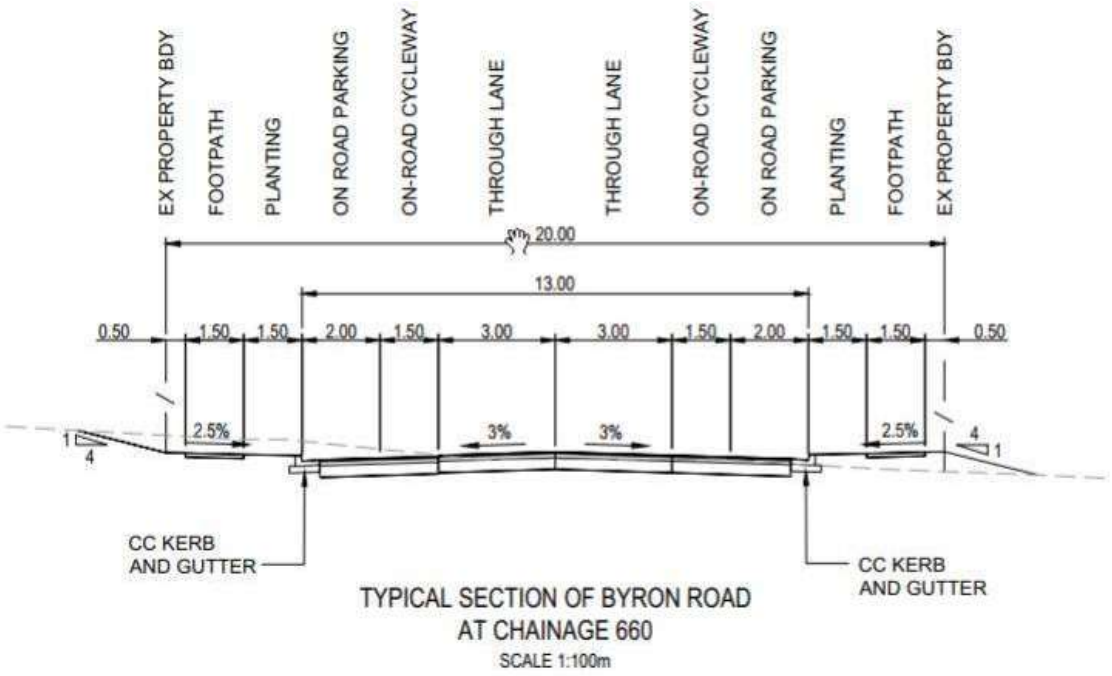


Figure 3-12: Typical collector road (off road cycle path)

WSP concept design:



TYPICAL SECTION OF BYRON ROAD AT CHAINAGE 660
SCALE 1:100m

(e) details of a footpath connection from the site, along Byron Road to the existing bus stop on Ingleburn Road;

2. Temporary berm/swale along the school boundary:

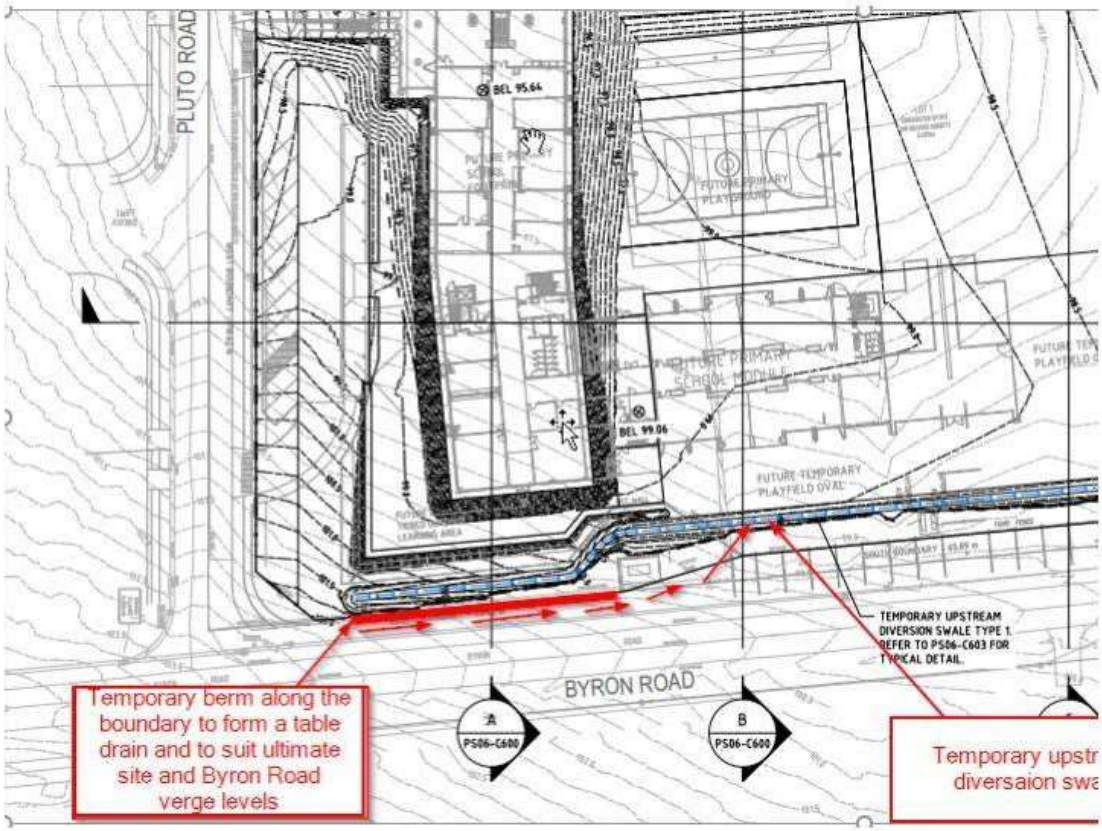
To allow permanent site works to be constructed on the School site which considers both the existing and future Byron Road constructed levels, we suggest a temporary berm (approx. 0.6m high) along a limited section of the site boundary.
This will remove the need for considerable future site works (reinstalling an electrical substation, hydrants, retaining walls, grading and landscaping) once Byron Road is constructed.

Comments:

- 0.6m berm along boundary (top of berm matches ultimate Byron Road/ site levels). Future Byron Road reserve is to be constructed (filled) up to the top of berm to form the future Byron Road verge. (See attached sketch).
- A temporary drainage swale would be located along the site boundary (within the road reserve) to convey the minor flows from the small catchment area (see sketch below and sections attached).

We would appreciate Council's feedback prior to issuing road designs for S138 approval.

ENVIRONMENTAL MANAGEMENT PLAN



Kind Regards,

Terry Harvey
Project Manager / Senior Engineer
BEng (civil)

martens
& Associates Pty Ltd

Martens & Associates Pty Ltd
Suite 201, 20 George St
Hornsby, NSW 2077
P + 61 2 9476 9999
F + 61 2 9476 8767
www.martens.com.au

ENVIRONMENTAL MANAGEMENT PLAN

Further confirmation satisfying consent condition C27(e) below

MA response:

- All soil and stormwater management measures have been design to cater for all site generated flows up to and including the 10% AEP (1 in 10 year) storm events as per following:
- Proposed earth bank (to divert upstream catchment) sized for 1% AEP flows. Refer to response to C27(a).

- Proposed earth bank (site high flows) sized for 1% AEP flows. Refer to PS06-B311 for details.
- Proposed sediment basin sized based on blue book for 10% AEP (1in 10 year) storm event. Refer to PS06-B302 for details.
- Proposed earth bank (within basement excavation) and drainage pipe designed to cater for 1% AEP.

COUNCIL / MARTENS CORRESPONDENCE ON THE NEXT PAGE

ENVIRONMENTAL MANAGEMENT PLAN

Joseph Elley

From: Sina Arbabzadeh <sarbabzadeh@martens.com.au>
Sent: Wednesday, 3 February 2021 4:28 PM
To: Faraj Gibbs
Cc: Thang Ma; David Atkin; Brendan Stokes; Gary Peacock; Terry Harvey
Subject: RE: 6493: Amity engineering works proposal

Faraj,

Thanks for your email. We have finished the conceptual hydraulic assessment for the site with the following assumptions and as suggested and confirmed by you earlier:

- Site trunk drainage has been modelled in DRAINS model (as per the condition **B14**) in order to demonstrate the overland routes and pit and pipe capacities up to 1% AEP.
- Upstream catchments (existing upstream properties and undeveloped Byron Road) has been considered in our catchment analysis and to demonstrate the existing Byron Road drainage capacity and any possible overtops onto the subject site.
- OSD pre/post results demonstrated to ensure no adverse impacts on downstream properties and compliance with Council engineering specifications.

Can you please confirm the followings:

- Prepared design will be submitted to the **Certifier** as per condition of consent B14. Brendan previously requested the submission of design to Council for the assessment.
- The prepared concept hydraulic assessment drawing plans along with DRAINS model will be submitted to the certifying authority.

Regards,

Sina Arbabzadeh | Senior Engineer & Technical Team Leader
Meng (civil), BEng (civil)
T 02 9476 9999 | F 02 9476 8767 | W www.martens.com.au
Suite 201, 20 George Street, Hornsby, NSW 2077
martens
civil | water | geotechnical | environment | projects
Martens & Associates Pty Ltd

From: Faraj Gibbs <Faraj.Gibbs@camden.nsw.gov.au>
Sent: Monday, 1 February 2021 1:31 PM
To: Sina Arbabzadeh <sarbabzadeh@martens.com.au>
Cc: Thang Ma <Thang.Ma@camden.nsw.gov.au>; David Atkin <david.atkin@camden.nsw.gov.au>; Brendan Stokes

<Brendan.Stokes@camden.nsw.gov.au>
Subject: RE: 6493: Amity engineering works proposal

Sina

Can you please clarify in writing your outstanding concerns and issues in relation to the DA and associated conditions?

Regards

Faraj Gibbs
Infrastructure Planning Engineer
70 Central Avenue, Oran Park, 2570
(02) 4645 5665
www.camden.nsw.gov.au
PO Box 183, Camden NSW 2570
Faraj.Gibbs@camden.nsw.gov.au
INNOVATION LEADERSHIP PARTNERSHIP CUSTOMER FOCUS COMMITMENT SAFETY
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10.2. Sediment & Erosion Control Plan

The sediment and erosion controls measures accord with the requirements of the relevant guidelines, including *Managing Urban Stormwater Soils and Construction*, 4th Edition published by Landcom (the so-called 'Blue Book'), as set down in the Martens & Associates plans and technical notes in **Section 12 Appendix A**.

The following outlines the procedures that will be implanted to address C29 of the consent conditions. These are the key features of the sediment and erosion control plan for the Stage 1 works, summarised from the technical notes prepared by Martens & Associates, consulting engineers for the Stage 1 works program:

- All runoff and erosion controls are to be installed before any works are carried out at the site.
- Lloyd Group shall protect overland flow paths, drains, adjoining land and downstream water quality from sedimentation, especially during periods of wet weather. Accordingly, sediment and erosion control measures must be implemented prior to excavation and maintained during construction.
- Lloyd Group shall regularly maintain SEC devices and remove accumulated silt from such devices before no more than 60% of their sediment storage capacity is lost.
- Areas of site disturbance are to be minimised at any one time with development staged such that a new area is not to commence until the previous disturbed area is fully stabilised.
- Lloyd Group will protect overland flow paths and drains identified by by Martens & Associates in the above, as well as adjoining land and downstream water quality from sedimentation. Accordingly, sediment and erosion control measures must be implemented prior to excavation and maintained during construction.
- All contaminated surface waters and debris from the site, including water from any de-watering of excavated areas, must be screened, collected and pollutants captured within the site.
- Stormwater inlets and drains receiving stormwater must be always protected during work on site.
- Movement of water must be controlled by diverting upslope clean surface runoff (via diversion drains and sediment fencing) around the disturbed areas.
- Erosion and sediment control measures must be maintained in good working order and be repaired or replaced throughout the course of works on site.
- Stockpiles of topsoil, sand, aggregate, spoil, or other material shall be stored clear of any drainage path or easement, natural watercourse, footpath, kerb or road surface and shall have measures in place to the satisfaction of the superintendent acting reasonably, to prevent the movement of such material off site, in particular during wet weather.
- Lloyd Group will commence rehabilitation immediately following any site disturbance including regrading, formation and revegetation works. Disturbed areas to be rehabilitated shall be regularly water revegetated areas until effective cover has properly established, and vegetation is growing vigorously. Maintenance is to continue until all vegetation is well established and independent of further water applications. Areas of site disturbance are to be minimised at any one time with development staged such that a new area is not to commence until the previous disturbed area is fully stabilised. Areas requiring rehabilitation, topsoiling and grass seeding are identified in the accompanying **Figure 10.2**.
- Storage of equipment during wet weather conditions will be confined to within the construction compound fronting Byron Road.

FIGURE 10.2: Rehabilitation Areas (shaded green)

(Source: Gran Associates)

10.3. Soil Management Generally

At all stages of the works are to comply with the Martens & Associates Civil documents control plans for the Stage 1 works program- refer **Section 12 Appendix A**.

During excavation works the following controls will be implemented:

- Excavated spoil will be stockpiled in 2m high mounds and covered or grass seeded to minimised dust generation.
- Stockpiles will be located away from hazards such as areas of concentrated flow, waterways, channels, gutters, drains, and steep slopes. Spoil will not be placed where it is likely to fall or wash into roads, gutters or drains.

- Topsoil will be stockpiled separately from general excavated material so that it may be used when rehabilitating the site.
- Any soil to be excavated and disposed offsite, that is known to be contaminated, will be done so in accordance with relevant Environmental Authority Guidelines.
- Contaminated soils must be transported by appropriately permitted trucks where relevant, with a Waste Transport Certificate (Australia only) completed for each load; and disposed of at a suitably licensed site in accordance with the relevant Environmental legislation.
- The number and size of soil stockpiles will be minimised.
- Soil stockpiles will not impede natural or constructed surface drainage channels or access tracks and will be confined to designated areas within the construction corridor and will be appropriately separated based on soil layers and contamination status.
- Soil stockpiles to be monitored and environmental controls installed as appropriate.
- Every attempt will be made to re-establish vegetation as soon as practicable after reinstatement earthworks to stabilise exposed soils. Erosion and sediment control structures will be retained during reinstatement until vegetation is established.
- Excavation within identified acid sulphate soil areas will be avoided in the first instance. If avoidance is not possible or an unexpected encounter occurs work will be temporarily postponed in the area until management measures can be implemented.
- Any soil to be disposed off-site (regardless of whether it is contaminated or otherwise) will be classified according to Environmental Regulator Guidelines and consigned to the appropriately licensed facility.
- If asbestos fragments are identified within excavated soil a qualified removalist will be engaged to remove the asbestos, or the soil will be transported offsite.

10.4. Road Maintenance

- Road cleaners will be engaged to clean roads as required.
- Cattle grates are to be installed where required.
- Wheel wash facilities may also be implemented where required.

10.5. Storm Flows

Storm flow calculations and details are contained in Drawing PS06-B302, prepared by consulting engineers Martens & Associates- refer **Section 12 Appendix A** for details. The calculations have been based on an assessment of storm flows and sediment basin capacities for the catchments illustrated in accompanying **Figure 10.3**.

Assessment will be made of the site area ground water catchments. Temporary dish drains may be established to direct water runoff. The drains will have straw bales and gravel to retain silt at intermittent points.

At any discharge point to the site stormwater system the pit lids are to be covered with shade cloth, filter fabric or silt socks.

The downhill sides of the site fence may have shade cloth filter fabric to a height of 300mm if the directional flow of water travels through the fence enclosure.

The new stormwater system will be installed and commissioned as early as possible to minimise the period of uncontrolled roof and road water. The fence and drainage controls will be maintained on a regular basis to ensure effectiveness.

During wet weather events plant activity will be slowed on site, care to wash down vehicles prior to exiting site will take place, any mud on the road will be cleaned regularly as well as street sweeping after the event to ensure roads remain clean of debris.

During a flood event all plant activities on site would stop, leading up to the event all sediment controls would be reviewed and reinforced where possible including temporary sand bagging over site entry to maintain where possible full barrier from inside the site to the outside.

FIGURE 10.3: Early Works Sediment Basin Catchment Plan

(Source: Martens & Associates 24 April 2021- refer Appendix A)

10.6. Concrete Agitator Wash down

Concrete agitator chutes, where possible, will be washed down off site. Where this is not possible, they will be washed down in a designated area. Sediment will be contained and disposed of with waste materials in the designated waste bins and removed by waste recycling contractor. Alternatively, chutes will be washed into sealable container or drum located on the concrete truck. The concrete residue is then treated or re-cycled back into the concrete plant.

11. Environment Management Framework

The following section outlines the framework that will be used by Organisation to manage, document, and report on environmental issues at the site.

11.1. Subcontractor Management

Sub-contractors are required to always comply with the provisions of the Environmental Management Plan. This will be documented by each sub-contractor or the nominated site representative for each organisation by the Site Induction Form which forms part of the HSEQ compliance system. Sub-contractor's environmental performance obligations shall be incorporated into sub-contractor's contract for works to be undertaken at the site.

11.2. Monitoring and Inspections

Monitoring and inspection of the site will be carried out by means of weekly site meetings and site safety and environmental walk. These measures will be used to identify areas of non-conformance and / or opportunities for improvement. Monitoring and / or inspections required on a more frequent basis by the Environmental Management Plan will be conducted as required and reviewed in the weekly site meeting.

11.3. Non-conformances

Non-conformance to the environmental procedures at the site must be addressed on the same day that they are identified. Any member of the Lloyd Group team including but not limited to Project Manager, Contracts Administrator, Site Manager or HSEQ Manager are permitted to raise non-conformances. Once identified as a non-conformance, a formal non-conformance must be issued on the day of the identification through HammerTech to the subcontractor or company responsible for rectifying the issue.

An example of this proforma is included in **Section 16 Appendix** E of this report.

The party receiving the non-conformance must either close out or provide a method of rectification (including time for rectification) to close out the issue within 24 hours of receiving the Non-Conformance. Upon review by the Project Manager, in the event this timeframe is not achieved satisfactorily; further action through contract notices will be implemented as required.

The non-conformance must be documented using the Hammertech Online Safety Management System.

On a project level, the Project Manager is responsible for tracking, raising, reviewing rectification methods and closing out of non-conformances.

The Site Manager is responsible for monitoring the project to identify non-conformances and closing out the non-conformances satisfactorily.

Through Hammertech, notifications of non-conformances are instantly provided to Lloyd's HSEQ team and will be provided attention as necessary by the NSW HSEQ manager.

Hammertech requires a member of Lloyd Group to mark the non-conformance as resolved to close out the issue.

Non-conformances are also reported weekly to the Superintendent and Principal as part of Lloyds weekly reporting and may be communicated further depending on the nature of the issue. Weekly Reports will contain tracking statistics showing number of open, closed and total non-conformances on the project.

11.4. Environmental Measuring and Test Equipment

Measuring and test equipment used on site to monitor the environment is to be appropriately identified, calibrated, maintained, and stored. Such equipment includes, but is not limited to:

- Air monitoring equipment.
- Noise monitoring equipment.

Records of current calibration for such equipment are to be provided by the service provider prior to use on site. Equipment found to be out of calibration will be removed from service until recalibrated.

Items used for indicative purposes only (e.g., applications on smartphones) will not be calibrated. These items may be used to identify the need for formal monitoring or the introduction of specific controls.

Workers using measuring and test equipment used for monitoring the environment will be trained in its use.

11.5. Community Relations and Emergency Site Contacts

Where complaints are made by the community or other third parties directly to Organisation or sub-contractors directly under its control, these will be forwarded to the Project Manager, Site Manager and/or HSEQ Manager. The complaint will be recorded on HammerTech.

NAME	POSITION	EMAIL	PHONE
Joseph Elley	Project Manager	Joseph.Elley@lloydgroup.com.au	0408 848 050
Michael Pearce	Site Manager	Michael.pearce@lloydgroup.com.au	0421 945 106

11.6. Training

All personnel working on the site during the construction activities will receive a site induction to explain the relevant environmental and safety hazards, environmental and safety protocols, sensitivities and emergency procedures for the site. The content of the induction program will be specific to the project and endorsed by the Organisation Site Manager responsible for the site and will be presented by the Site Manager or a delegated representative.

Training is recorded through the Training and Skills Plan found in **Section 18 Appendix G**

Each subcontractor is responsible for providing their employees with the relevant training and supervision, so they have the necessary competency and skills to undertake their responsibilities.

11.7. Environmental Complaints

Any environmental complaints that are received are logged in the Site Manager's Diary. All complaints are investigated and consultation with the complainant will occur. The resolution of the complaint is documented and communicated back to the complainant. Full co-operation is given to any Regulatory Authorities that may be involved in investigating a complaint by an external party.

11.8. Tendering

During the contract tendering phase the project environmental requirements will be addressed and noted within the Tender Interview document which forms part of the Purchase Order engaging the Subcontractor. This includes, as appropriate, information about potential significant environmental impacts associated with the transportation or delivery, use, end-of-life treatment and final disposal of products and services.

The contract documentation issued to the Tenderer will include all relevant parts of the Project Contract Documents, including relevant sections of Preliminaries and General Requirements.

11.9. Environmental Emergency Management

An environmental incident may include a spillage or major leak, failure of a pollution control device such as a bund, major settlement, collapse of a bank or embankment, impact to water quality, fire, impact to soil quality, off-site noise and/or prolonged generation of construction dust.

In an emergency all works will cease and the approved Emergency Response Plan will be activated.

Refer: Emergency Management Plan ***Section 17 Appendix F***

The HSEQ Manager is responsible for reviewing changes and instructing the relevant Organisation representative as to the document updates required. HSEQ Manager is also responsible for deciding whether an occurrence is an incident. Relevant changes will then be communicated across the organisation.

Information regarding updates to legal and other requirements will be gathered from the following sources:

- Regulatory Authority Alerts;
- Master Builders Association Victoria (membership).
- Environmental Protection Agency

The following authorities may be required to be contacted in the event of an emergency:

ORGANISATION	CONTACT DETAILS	
Fire / Police / Ambulance	Emergency hotline	000
Camden Council	Authorisations, notices	(02) 4654 7777
NSW - Environmental Protection Authority	Info and pollution	131 555
Sydney Water	Authorisations, notices	132092 (from NSW) or 1300 143 734 (from interstate)

11.10. Access to Legislation

Workers on site have access to relevant Health and Safety Acts, Regulations, Australian Standards, Codes of Practice and other documentation relevant to health and safety. This is communicated to each worker at the time of induction.

12. Appendix A – Stage 1 Works Tender Drawings and Technical Notes

GRAN ASSOCIATES AUSTRALIA
ARCHITECTS PTY LTD
ABN 46 115 243 073

LEVEL 1, 597 DARLING STREET
ROZELLE NSW 2039
PH +61 2 9818 8437

Nominated Architects
PETER REED, RAIA, AIA
PR I N CI PA L NSW REG. 5377
ANTHONY KEMENY, FRAIA
DIRECTOR NSW REG. 4599

DOCUMENT TRANSMITTAL / REGISTER

JOB No: 1803

PROJECT: AMITY COLLEGE LEPPINGTON – TENDER STAGE 1 DRAWINGS ARCHITECTUAL

DOCUMENT TRANSMITTAL
Refer separate Document Transmittal Sheet OR Email

DAY	12	16												
MONTH	8	8												
YEAR	21	21												

No	DRAWING/DOCUMENT TITLE												
A-000	COVER SHEET AND DRAWING LIST	A	B										
A-001	SITE PLAN	A	B										
A-011	GRID SETOUT PLAN		B										
A-101	BASEMENT OVERAL PLAN	A	B										
A-102	GROUND FLOOR OVERALL PLAN	A	B										
A-103	FIRST FLOOR OVERALL PLAN	A	B										
A-104	ROOF OVERAL PLAN	A	B										
A-111	BASEMENT GA PLAN - PART 1	A	B										
A-112	BASEMENT GA PLAN - PART 2	A	B										
A-113	GROUND FLOOR GA PLAN - PART 1	A	B										
A-114	GROUND FLOOR GA PLAN - PART 2	A	B										
A-115	GROUND FLOOR GA PLAN - PART 3	A	B										
A-116	FIRST FLOOR GA PLAN - PART 1	A	B										
A-117	FIRST FLOOR GA PLAN - PART 2	A	B										
A-118	FIRST FLOOR GA PLAN - PART 3	A	B										
A-119	ROOF HIGHTLIGHT LEVEL PLAN - PART 1 & 2	A	B										
A-120	ROOF HIGHTLIGHT LEVEL PLAN - PART 3	A	B										
A-131	BASEMENT CONCRETE SETOUT PLAN - PT 1		B										
A-132	BASEMENT CONCRETE SETOUT PLAN - PT 2		B										
A-133	GROUND FLOOR CONCRETE SETOUT PLAN - PT 1		B										
A-134	GROUND FLOOR CONCRETE SETOUT PLAN - PT 2		B										
A-135	GROUND FLOOR CONCRETE SETOUT PLAN - PT 3		B										
A-136	FIRST FLOOR CONCRETE SETOUT PLAN - PT 1		B										
A-137	FIRST FLOOR CONCRETE SETOUT PLAN - PT 2		B										
A-138	FIRST FLOOR CONCRETE SETOUT PLAN - PT 3		B										
A-139	ROOF CONCRETE SETOUT PLAN		B										
A-141	BASEMENT REFLECTED CEILING PLAN - PT 1		B										
A-142	BASEMENT REFLECTED CEILING PLAN - PT 2		B										
A-143	GROUND FLOOR REFLECTED CEILING PLAN - PT 1		B										
A-144	GROUND FLOOR REFLECTED CEILING PLAN - PT 2		B										
A-145	GROUND FLOOR REFLECTED CEILING PLAN - PT 3		B										
A-146	FIRST FLOOR REFLECTED CEILING PLAN - PT 1		B										
A-147	FIRST FLOOR REFLECTED CEILING PLAN - PT 2		B										
A-148	FIRST FLOOR REFLECTED CEILING PLAN - PT 3		B										
A-151	GROUND FLOOR FURNITURE PLAN - PT 1		B										
A-152	GROUND FLOOR FURNITURE PLAN - PT 2		B										
A-153	GROUND FLOOR FURNITURE PLAN - PT 3		B										
A-154	FIRST FLOOR FURNITURE PLAN - PART 1		B										
A-155	FIRST FLOOR FURNITURE PLAN -PART 2		B										
A-156	FIRST FLOOR FURNITURE PLAN -PART 3		B										
A-161	BASEMENT FINISHES PLAN - PART 1		B										
A-162	BASEMENT FINISHES PLAN - PART 2		B										

GRAN ASSOCIATES AUSTRALIA
ARCHITECTS PTY LTD
ABN 46 115 243 073

LEVEL 1, 597 DARLING STREET
ROZELLE NSW 2039
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YEAR	21	21												

A-163	GROUND FLOOR FINISHES PLAN - PART 1		B											
A-164	GROUND FLOOR FINISHES PLAN - PART 2		B											
A-165	GROUND FLOOR FINISHES PLAN - PART 3		B											
A-166	FIRST FLOOR FINISHES PLAN - PART 1		B											
A-167	FIRST FLOOR FINISHES PLAN - PART 2		B											
A-168	FIRST FLOOR FINISHES PLAN - PART 3		B											
A-201	SOUTH-EAST ELEVATION	A	B											
A-202	NORTH-EAST ELEVATION	A	B											
A-203	NORTH-WEST ELEVATION	A	B											
A-204	SOUTH-WEST ELEVATION	A	B											
A-205	SOUTH-WEST ELEVATION AT BOUNDARY	A	B											
A-301	SECTION AA	A	B											
A-302	SECTIONS BB & CC	A	B											
A-303	SECTIONS DD & EE	A	B											
A-304	SECTIONS FF	A	B											
A-305	SECTIONS HH & JJ	A	B											
A-306	SECTIONS KK & LL	A	B											
A-401	AMENITIES GROUND FLOOR		B											
A-402	AMENITIES FIRST FLOOR		B											
A-403	AMENITIES BASEMENT		B											
A-404	AMENITIES ABLUTION ROOMS		B											
A-405	AMENITIES IN PART 3		B											
A-411	STAIRS DETAIL - LIBRARY		B											
A-412	STAIRS DETAIL 01 & 02		B											
A-413	STAIRS AND LIFT DETAIL 04		B											
A-414	STAIRS AND RAMP DETAIL - BASEMENT		B											
A-415	STAIR & RAMP - EXTERNAL		B											
A-416	TYPICAL STAIR, HANDRAIL AND BALUSTRADE DETAILS		B											
A-421	TIERED LEARNIG THEATER ROOM ELEVATIONS													
A-422	MALE PRAYER ROOM ELEVATIONS													
A-423	FEMALE PRAYER ROOM ELEVATIONS													
A-431	STAFF KITCHENETTE		B											
A-432	MALE KITCHEN		B											
A-433	FEMALE KITCHEN		B											
A-501	GROUND FLOOR EXTERNAL WINDOW & DOOR SCHEDULE		B											
A-502	FIRST FLOOR EXTERNAL WINDOW & DOOR SCHEDULE	A	B											
A-503	ROOF HIGHLIGHT WINDOW & LOUVRE SCHEDULE	A	B											
A-504	INTERNAL WINDOW & DOORS SCHEDULE	A	B											
A-505	GLAZED SLIDERS & DETAILS	A	B											
A-506	OPERABLE WALL DETAILS	A	B											
A-507	WINDOW AND DOOR DETAILS	A	B											
A-521	DOOR SCHEDULE TYPE A	A	B											

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ARCHITECTS PTY LTD
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LEVEL 1, 597 DARLING STREET
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	YEAR	21	21											

A-522	DOOR SCHEDULE TYPE B,C & D	**A**	**B**											
A-523	DOOR SCHEDULE TYPE E,F & G	**A**	**B**											
A-601	WALL TYPE SCHEDULE 1	**A**	**B**											
A-602	WALL TYPE SCHEDULE 2	**A**	**B**											
A-603	WALL TYPE SCHEDULE 3	**A**	**B**											
A-604	WALL TYPE SCHEDULE 4	**A**	**B**											
A-611	WALL SECTIONS		**B**											
A-612	WALL SECTIONS		**B**											
A-613	WALL SECTIONS		**B**											
A-614	WALL SECTIONS - COMMON ROOM		**B**											
A-615	WALL SECTIONS - ENTRY LINK		**B**											
A-616	WALL SECTIONS - STAFF ROOM		**B**											
A-617	SKYLIGHT SECTIONS		**B**											
A-618	BASEMENT WALL SECTIONS		**B**											
A-701	HOMEBASE SECTION DETAILS													
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A-703	PLAN DETAILS		**B**											
A-704	DETAILS		**B**											
A-705	DETAILS		**B**											
A-706	SECTION DETAILS													
A-707	SECTION DETAILS													
A-708	SECTION DETAILS													
A-801	JOINERY DETAILS - LIBRARY 01		**B**											
A-802	JOINERY DETAILS - LIBRARY 02		**B**											
A-803	JOINERY DETAILS - LIBRARY 03		**B**											
A-804	JOINERY DETAILS - LIBRARY 04		**B**											
A-805	JOINERY DETAILS - LIBRARY 05		**B**											
A-806	JOINERY DETAILS - LIBRARY UNDER STAIR TUNNEL 01		**B**											
A-807	JOINERY DETAILS - LIBRARY UNDER STAIR TUNNEL 02		**B**											
A-808	JOINERY DETAILS - HOMEBASE GROUND FLOOR 01		**B**											
A-809	JOINERY DETAILS - HOMEBASE GROUND FLOOR 02		**B**											
A-810	JOINERY DETAILS - HOMEBASE GROUND FLOOR 03		**B**											
A-811	JOINERY DETAILS - HOMEBASE GROUND FLOOR 04		**B**											
A-812	JOINERY DETAILS - HOMEBASE FIRST FLOOR 01		**B**											
A-813	JOINERY DETAILS - HOMEBASE FIRST FLOOR 02		**B**											
A-814	JOINERY DETAILS - HOMEBASE FIRST FLOOR 03		**B**											
A-815	JOINERY DETAILS - HOMEBASE FIRST FLOOR 04		**B**											
A-816	JOINERY DETAILS - HOMEBASE FIRST FLOOR 05		**B**											
A-817	JOINERY DETAILS - INNOVATION HUB 01		**B**											
A-818	JOINERY DETAILS - INFORMAL LEARNING GROUND FLOOR 01		**B**											
A-819	JOINERY DETAILS - INFORMAL LEARNING GROUND FLOOR 02		**B**											
A-820	JOINERY DETAILS - INFORMAL LEARNING GROUND FLOOR 03		**B**											

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ARCHITECTS PTY LTD
ABN 46 115 243 073

LEVEL 1, 597 DARLING STREET
ROZELLE NSW 2039
PH +61 2 9818 8437

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	MONTH	8	8											
	YEAR	21	21											

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A-822	JOINERY DETAILS - INFORMAL LEARNING FIRST FLOOR 02 - LOCKERS		**B**											
A-823	JOINERY DETAILS - INFORMAL LEARNING FIRST FLOOR 03 - SEAT & STORAGE		**B**											
A-824	JOINERY DETAILS - STAFF TEA ROOM 01		**B**											
A-825	JOINERY DETAILS - STAFF PRINT & COPY 01		**B**											
A-826	JOINERY DETAILS - TEMPORARY SICK BAY 01		**B**											
A-827	JOINERY DETAILS - TEMPORARY RECEPTION 01		**B**											
A-828	JOINERY DETAILS - GROUP STUDY 01		**B**											
A-829	JOINERY DETAILS - ARTS 01		**B**											
A-830	JOINERY DETAILS - ARTS 02		**B**											
A-831	JOINERY DETAILS - MUSIC 01		**B**											
A-832	JOINERY DETAILS - MUSIC 02		**B**											
A-833	JOINERY DETAILS - WITHDRAWAL ROOM GROUND FLOOR 01		**B**											
A-834	JOINERY DETAILS - WITHDRAWAL ROOM 1 FIRST FLOOR 01		**B**											
A-835	JOINERY DETAILS - WITHDRAWAL ROOM 2 FIRST FLOOR 01		**B**											
A-836	JOINERY DETAILS - ANTE ROOM 1 / ABLUTION 01		**B**											
A-837	JOINERY DETAILS - ANTE ROOM 2 / ABLUTION 01		**B**											
A-838	JOINERY DETAILS - COMMON ROOM 1 01		**B**											
A-839	JOINERY DETAILS - COMMON ROOM 1 02		**B**											
A-840	JOINERY DETAILS - COMMON ROOM 2 01		**B**											
A-841	JOINERY DETAILS - COMMON ROOM 2 02		**B**											
A-842	JOINERY DETAILS - COMMON ROOM 3 & 5 01		**B**											
A-843	JOINERY DETAILS - REMOTE OPERABLE WALL CABINET DOOR 01		**B**											

Schedule 1	Abbreviations		**A**											
Schedule 2	Room finishes Schedule		**A**											
Schedule 3	Exterior Materials & Colours Schedule		**A**											
Schedule 4	Interior Materials & Colours Schedule		**A**											
Schedule 5	Sanitary fixtures Schedule		**A**											
Schedule 6	FixturesFittings&Equipment		**A**											
Schedule 7	Loose furniture		**A**											
Schedule 8	Door hardware		**A**											
163	number of copies	40	150	0	0	0	0	0	0	0	0	0	0	0
	3D CAD MODEL													
	REVIT MODEL													

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ARCHITECTS PTY LTD
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ROZELLE NSW 2039
PH +61 2 9818 8437

Nominated Architects
PETER REED, RAIA, AIA
PR I N CI PA L NSW REG. 5377
ANTHONY KEMENY, FRAIA
DIRECTOR NSW REG. 4599

DOCUMENT TRANSMITTAL / REGISTER

JOB No: 1803

PROJECT: AMITY COLLEGE LEPPINGTON – TENDER STAGE 1 DRAWINGS ARCHITECTUAL

DOCUMENT TRANSMITTAL
Refer separate Document Transmittal Sheet OR Email

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MONTH	8	8											
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SHEET 1 of 2
DISCIPLINE STRUCTURAL
JOB No. 202368

DESCRIPTION			DATE									
AMITY COLLEGE LEPPINGTON		D	19	29	29	06	23	30				
		M	03	04	06	07	07	07				
		Y	21	21	21	21	21	21				
DOCUMENT TITLE	**DOC No.**											
Cover Sheet And Drawing List	S00			1		2	2	3				
Specification Notes Sheet 1	S01			1		2	2	3				
Specification Notes Sheet 2	S02			1		2	2	3				
Specification Notes Sheet 3	S03			1		2	2	3				
Specification Notes Sheet 4	S04			1		2	3	4				
Basement Slab Plan – Part 1	S10		1	2			3	4				
Basement Slab Plan – Part 2	S11		1	2			3	4				
Basement Details Sheet 1	S15			1			2	3				
Ground Floor Slab Plan – Part 1	S20		1	2			3	4				
Ground Floor Slab Plan – Part 2	S21		1	2			3	4				
Ground Floor Slab Plan – Part 3	S22			1			2	3				
Ground Floor Details Sheet 1	S25						1	2				
First Floor Slab Plan – Part 1	S30		1	2			3	4				
First Floor Slab Plan – Part 2	S31		1	2			3	4				
First Floor Slab Plan – Part 3	S32			1			2	3				
First Floor Details Sheet 1	S35			1			2	3				
Lower Roof Plan – Part 1	S40				1		2	3				
Lower Roof Plan – Part 2	S41				1		2	3				
Lower Roof Plan – Part 3	S42				1		2	3				
Second Floor Details Sheet 1	S45				1		2	3				
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SHEET 2 of 2
DISCIPLINE STRUCTURAL
JOB No. 202368

DESCRIPTION		**DATE**									
AMITY COLLEGE LEPPINGTON	**D**	19	09	29	23	30					
	M	05	06	06	07	07					
	Y	21	21	21	21	21					

DOCUMENT TITLE	**DOC No.**	**ISSUE**									
Column Details	S50				1	2					
Typical Block Wall Details	S51				1	2					
Wall Details Sheet 1	S53				1	2					
Wall Details Sheet 2	S54				1	2					
Stair Plan & Details - Sheet 1	S55				1	2					
Stair Plan & Details - Sheet 2	S56				1	2					
Precast Details	S58				1	2					
Upper Roof Framing Plan – Part 1	S60	1		2	3	4					
Upper Roof Framing Plan – Part 2	S61	1		2	3	4					
Upper Roof Framing Plan – Part 3	S62	1		2	3	4					
Roof Framing Elevations Sheet 1	S65										
Roof Framing Details Sheet 1	S70					1					
Roof Framing Details Sheet 2	S71				1	2					
Roof Framing Details Sheet 2	S72				1	2					
Walkway Awning Plans	S80		1								

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SIZE	ie A1/A3 etc		A1	A1	A1	A1	A1					
METHOD	C = Courier H = Hand	E = Email P = Post	E	E	E	E	E					

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T 02 9437 1000 **E** general@jhaengineers.com.au
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Electrical Services

Project Name AMITY COLLEGE LEPPINGTON
Project Number 200384

Date	19	16	21	23	06	13	
Month	03	04	05	07	08	08	
Year	21	21	21	21	21	21	
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Document Title	No.	Revision						
Cover Sheet Legend Of Symbols General Notes And Drawing List	E000	**A**	P1	P2	P3	P4	P5	A
Lighting Schedule	E001	**A**	P1	P2	P3	P4	P5	A
Site Plan	E010	**A**	P1	P2	P3	P4	P5	A
Basement Lighting And Fire Detection Layout Part 1	E100	**A**	P1	P2	P3	P4	P5	A
Basement Lighting And Fire Detection Layout Part 2	E101	**A**	P1	P2	P3	P4	P5	A
Ground Floor Lighting And Fire Detection Layout Part 1	E110	**A**	P1	P2	P3	P4	P5	A
Ground Floor Lighting And Fire Detection Layout Part 2	E111	**A**	P1	P2	P3	P4	P5	A
Ground Floor Lighting And Fire Detection Layout Part 3	E112	**A**	P1	P2	P3	P4	P5	A
First Floor Lighting And Fire Detection Layout Part 1	E120	**A**	P1	P2	P3	P4	P5	A
First Floor Lighting And Fire Detection Layout Part 2	E121	**A**	P1	P2	P3	P4	P5	A
First Floor Lighting And Fire Detection Layout Part 3	E122	**A**	P1	P2	P3	P4	P5	A
Basement Power, Communications Layout Part 1	E200	**A**	P1	P2	P3	P4	P5	A
Basement Power, Communications Layout Part 2	E201	**A**	P1	P2	P3	P4	P5	A
Ground Floor Power, Communications Layout Part 1	E210	**A**	P1	P2	P3	P4	P5	A
Ground Floor Power, Communications Layout Part 2	E211	**A**	P1	P2	P3	P4	P5	A
Ground Floor Power, Communications Layout Part 3	E212	**A**	P1	P2	P3	P4	P5	A
First Floor Power, Communications Layout Part 1	E220	**A**	P1	P2	P3	P4	P5	A
First Floor Power, Communications Layout Part 2	E221	**A**	P1	P2	P3	P4	P5	A
First Floor Power, Communications Layout Part 3	E222	**A**	P1	P2	P3	P4	P5	A
Roof Power, Communications Layout Part 1	E230	**A**	P1	P2	P3	P4	P5	A
Roof Power, Communications Layout Part 2	E231	**A**	P1	P2	P3	P4	P5	A
Roof Power, Communications Layout Part 3	E232	**A**	P1	P2	P3	P4	P5	A
Ground Floor Cable Tray Layout	E240	**A**	P1	P2	P3	P4	P5	A
First Floor Cable Tray Layout	E241	**A**	P1	P2	P3	P4	P5	A
Basement Security Layout Part 1	E250	**A**	P1	P2	P3	P4	P5	A
Basement Security Layout Part 2	E251	**A**	P1	P2	P3	P4	P5	A
Ground Floor Security Layout Part 1	E260	**A**	P1	P2	P3	P4	P5	A
Ground Floor Security Layout Part 2	E261	**A**	P1	P2	P3	P4	P5	A
Ground Floor Security Layout Part 3	E262	**A**	P1	P2	P3	P4	P5	A
First Floor Security Layout Part 1	E270	**A**	P1	P2	P3	P4	P5	A
First Floor Security Layout Part 2	E271	**A**	P1	P2	P3	P4	P5	A
First Floor Security Layout Part 3	E272	**A**	P1	P2	P3	P4	P5	A
Schematics And Details Sheet 1	E300	**A**	P1	P2	P3	P4	P5	A
Schematics And Details Sheet 2	E301	**A**	P1	P2	P3	P4	P5	A
Schematics And Details Sheet 3	E302	**A**	P1	P2	P3	P4	P5	A

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Mechanical Services

Project Name AMITY COLLEGE LEPPINGTON
Project Number 200384

Date	19	16	21	23	06	13	
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Year	21	21	21	21	21	21	
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Document Title	No.	Revision						
Cover Sheet Legend Of Symbols General Notes And Drawing	M000	**A**	P1	P2	P3	P4	P5	A
Basement Air Conditioning And Ventilation Layout Part 1	M100	**A**	P1	P2	P3	P4	P5	A
Basement Air Conditioning And Ventilation Layout Part 2	M101	**A**	P1	P2	P3	P4	P5	A
Ground Floor Air Conditioning And Ventilation Layout Part 1	M110	**A**	P1	P2	P3	P4	P5	A
Ground Floor Air Conditioning And Ventilation Layout Part 2	M111	**A**	P1	P2	P3	P4	P5	A
Ground Floor Air Conditioning And Ventilation Layout Part 3	M112	**A**	P1	P2	P3	P4	P5	A
First Floor Air Conditioning And Ventilation Layout Part 1	M120	**A**	P1	P2	P3	P4	P5	A
First Floor Air Conditioning And Ventilation Layout Part 2	M121	**A**	P1	P2	P3	P4	P5	A
First Floor Air Conditioning And Ventilation Layout Part 3	M122	**A**	P1	P2	P3	P4	P5	A
Roof Air Conditioning And Ventilation Layout Part 1	M130	**A**	P1	P2	P3	P4	P5	A
Roof Air Conditioning And Ventilation Layout Part 2	M131	**A**	P1	P2	P3	P4	P5	A
Roof Air Conditioning And Ventilation Layout Part 3	M132	**A**	P1	P2	P3	P4	P5	A
Mechanical Specification		**A**						A

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CARPARKING SCHEDULE

Description	Count
Access Carpark Bay	1
Staff Carpark Bay	52
Staff Carpark Bay fuel-efficient	10
BASEMENT: 63	
Access Carpark Bay	1
Drop off Carpark Bay	16
GROUND FLOOR: 17	
Grand total: 80	

Bicycle Schedule

Level	Count
BASEMENT	14
Ground Floor	22
Grand total: 36	

FIRE COMARTMENT NOTE:

- GROUND AND FIRST FLOOR FORM A SINGLE FIRE COMPARTMENT - AREA 4866 m²
- BASEMENT FIRE COMPARTMENT- AREA IS 2010 m²

FOR TENDER

GRAN ASSOCIATES AUSTRALIA ARCHITECTS PTY LTD
LEVEL 1, 597 DARLING STREET
ROZELLE NSW 2039
PH: +61 2 9818 8437
FAX: + 61 2 9818 6288
PETER REED ARAIA, AIA NOM ARCH 5377
ANTHONY KEMENY FRAIA NSW REG No. 4599

MECHANICAL, ELECTRICAL & LEVEL 3 CONSULTANT
JHA ENGINEERS
LEVEL 3, 101 MILLER STREET SYDNEY NSW 2000
T +61 (02) 9437 1000

STRUCTURAL, FIRE & HYDRAULIC ENGINEER
NORTHROP CONSULTING
LEVEL 11, 345 GEORGE STREET SYDNEY NSW 2000
T +61 (02) 9241 4188

CIVIL ENGINEER
MARTENS & ASSOCIATES
SUITES 201, 20 GEORGE STREET NSW 2077
T +61 (02) 9476 9999

ABBREVIATIONS

BOL-1	BOLLARD TYPE 1
EC	EMERGENCY CALL BUTTON
FEV	FIRE EFFICIENT VEHICLE LINEMARKING
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL
FX	FIRE EXTINGUISHER
HWU	HOT WATER UNIT
ML-2	FIXED METAL LOUVRES

WALLS FIRE RATING

120/120/120	
-/120/120	
-/60/60	

N°	DESCRIPTION	DATE
A	ISSUE FOR CONSTRUCTION CERTIRTIFICATE	11.08.21
B	ISSUE FOR TENDER	16.08.21

SCALE	1 : 200 @A1
DATE	AUG 2021
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CHECKED BY	PR
PROJECT. No.	A1803

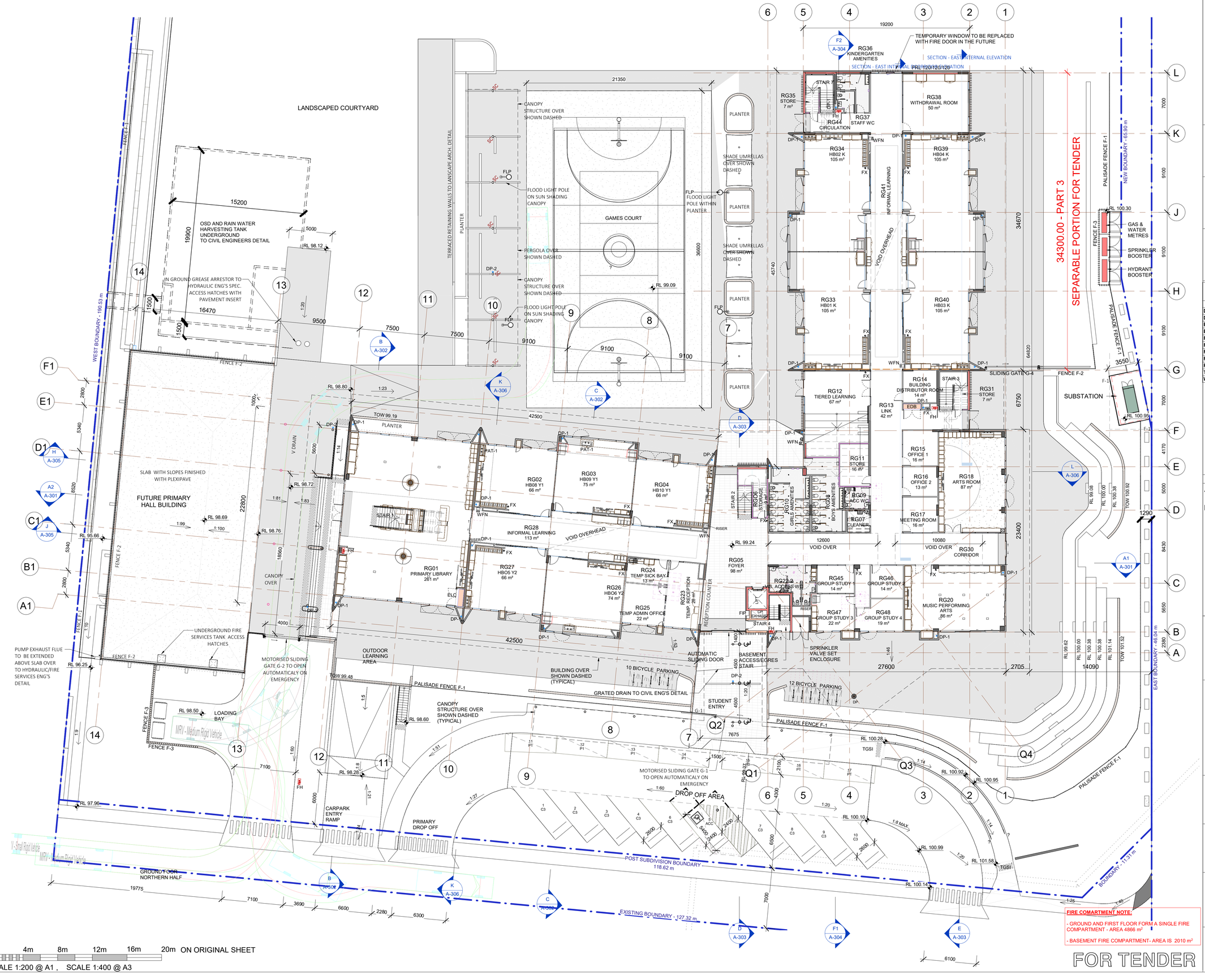
Client Name:
amity college

Project Name:
AMITY COLLEGE LEPPINGTON

Address:
85 Byron Road, Leppington NSW

Title:
BASEMENT OVERALL PLAN

DRAWING No.	REVISION No.
A-101	[B]



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ROZELLE NSW 2039
PH: +61 2 9818 8437
FAX: + 61 2 9818 6288
PETER REED ARAIA, AIA NOM ARCH 5377
ANTHONY KEMENY FRAIA NSW REG No. 4599

MECHANICAL, ELECTRICAL & LEVEL 3 CONSULTANT
JHA ENGINEERS
LEVEL 3, 101 MILLER STREET SYDNEY NSW 2000
T +61 (02) 9437 1000

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LEVEL 11, 345 GEORGE STREET SYDNEY NSW 2000
T +61 (02) 9241 4188

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T +61 (02) 9476 9999

ABBREVIATIONS

DP-1	DONWPIPE TYPE 1
DP-2	DOWNPIPE TYPE 2 IN STAINLESS STEEL
EDB	ELECTRICAL DISTRIBUTION BOARD
ELC	ELECTRICAL CABINET
FH	FIRE HYDRANT
FIP	FIRE INDICATOR PANEL
FLP	FLOOD LIGHT POLE TO ELECTRICAL ENG'S SPEC.
FX	FIRE EXTINGUISHER
PAT-1	ART SINK TYPE 1
TGSI	TACTILE GROUND SURFACE INDICATOR
WFN	WATER FOUNTAIN - BUBBLER

WALLS FIRE RATING

120/120/120	
-/120/120	
-/60/60	

N°	DESCRIPTION	DATE
A	ISSUE FOR CONSTRUCTION CERTIRTIFICATE	11.08.21
B	ISSUE FOR TENDER	16.08.21

SCALE	1 : 200 @A1
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PROJECT. NO.	A1803

Client Name:
amity college

Project Name:
AMITY COLLEGE LEPPINGTON

Address:
85 Byron Road, Leppington NSW

Title:
GROUND FLOOR OVERALL PLAN

DRAWING No.
A-102

REVISION No.
[B]

FIRE COMPARTMENT NOTE:
- GROUND AND FIRST FLOOR FORM A SINGLE FIRE COMPARTMENT - AREA 4866 m²
- BASEMENT FIRE COMPARTMENT- AREA IS 2010 m²

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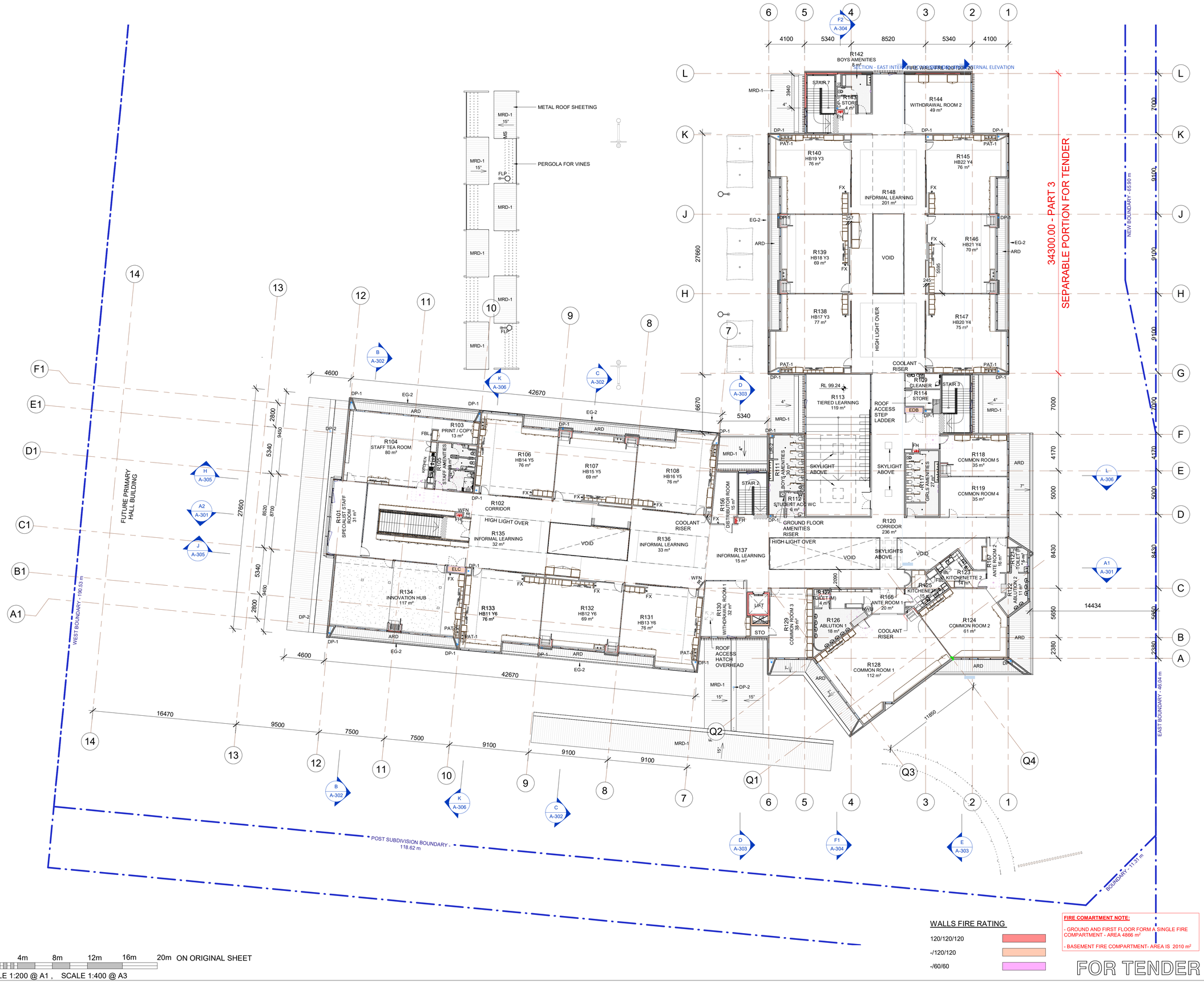

WALLS FIRE RATING

- 120/120/120
- -/120/120
- -/60/60

FIRE COMARTMENT NOTE:

- GROUND AND FIRST FLOOR FORM A SINGLE FIRE COMPARTMENT - AREA 4866 m²
- BASEMENT FIRE COMPARTMENT- AREA IS 2010 m²

FOR TENDER

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LEVEL 3, 101 MILLER STREET SYDNEY NSW 2000
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SUITES 201, 20 GEORGE STREET NSW 2077
T +61 (02) 9476 9999

ABBREVIATIONS LEGEND

ARD	
DP-1	DONWPIPE TYPE 1
DP-2	DOWNPIPE TYPE 2 IN STAINLESS STEEL
EDB	ELECTRICAL DISTRIBUTION BOARD
EG-2	CONCELLED EAVES GUTTER TYPE 2
ELC	ELECTRICAL CABINET
FBL	FIRE BLANKET
FH	FIRE HYDRANT
FLP	FLOOD LIGHT POLE TO ELECTRICAL ENG'S SPEC.
FX	FIRE EXTINGUISHER
HWU	HOT WATER UNIT
MRD-1	METAL ROOFING LYSAGHT KLIPLOK
PAT-1	ART SINK TYPE 1
UR-2	
WFN	WATER FOUNTAIN - BUBBLER

N°	DESCRIPTION	DATE
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B	ISSUE FOR TENDER	16.08.21

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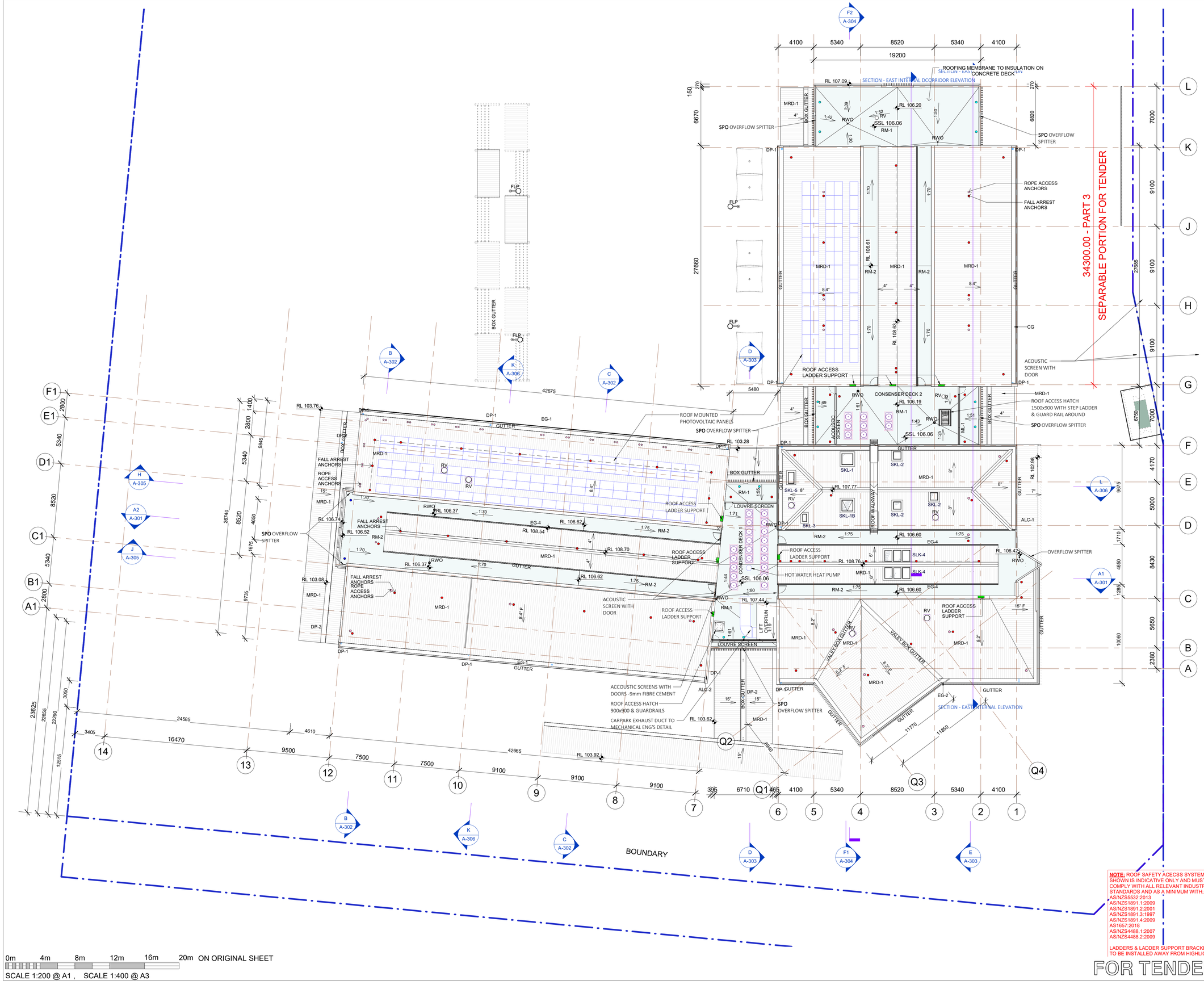
Client Name:
amity college

Project Name:
AMITY COLLEGE LEPPINGTON

Address:
85 Byron Road, Leppington NSW

Title:
FIRST FLOOR OVERALL PLAN

DRAWING NO.	REVISION NO.
A-103	[B]



NOTE: ROOF SAFETY ACECSS SYSTEM SHOWN IS INDICATIVE ONLY AND MUST COMPLY WITH ALL RELEVANT INDUSTRY STANDARDS AND AS A MINIMUM WITH;
AS/NZS5532:2013
AS/NZS1891.1:2009
AS/NZS1891.2:2001
AS/NZS1891.3:1997
AS/NZS1891.4:2009
AS1657:2018
AS/NZS4488.1:2007
AS/NZS4488.2:2009

LADDERS & LADDER SUPPORT BRACKETS TO BE INSTALLED AWAY FROM HIGHLIGHT

FOR TENDER

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JHA ENGINEERS
LEVEL 3, 101 MILLER STREET SYDNEY NSW 2000
T +61 (02) 9437 1000

STRUCTURAL, FIRE & HYDRAULIC ENGINEER
NORTHROP CONSULTING
LEVEL 11, 345 GEORGE STREET SYDNEY NSW 2000
T +61 (02) 9241 4188

CIVIL ENGINEER
MARTENS & ASSOCIATES
SUITES 201, 20 GEORGE STREET NSW 2077
T +61 (02) 9476 9999

ABBREVIATIONS LEGEND

ALC-1	ALUMINIUM CLADDING CASSETTE SYSTEM
ALC-2	ALUMINIUM CLADDING
CG	CONCEALED GUTTER
DP-1	DONWPIPE TYPE 1
DP-2	DOWNPIPE TYPE 2 IN STAINLESS STEEL
EG-1	CONCELLED EAVES GUTTER TYPE 1
EG-2	CONCELLED EAVES GUTTER TYPE 2
EG-4	EAVES GUTTER TYPE 4
FLP	FLOOD LIGHT POLE TO ELECTRICAL ENG'S SPEC.
MRD-1	METAL ROOFING LYSAGHT KLIPLOK
RM-1	PVC ROOFING MEMBRANE ON TAPERED PIR INSULATION
RM-2	PVC ROOFING MEMBRANE ON FLAT PIR INSULATION
RV	ROOF EXHAUST COWL
RWO	RAIN WATER OUTLET TO HYDRAULIC ENGINEER'S DETAIL

N°	DESCRIPTION	DATE
A	ISSUE FOR CONSTRUCTION CERTIRTIFICATE	11.08.21
B	ISSUE FOR TENDER	16.08.21

SCALE	1 : 200 @A1
DATE	AUG 2021
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PROJECT. NO.	A1803

Client Name:
amity college

Project Name:
AMITY COLLEGE LEPPINGTON

Address:
85 Byron Road, Leppington NSW

Title:
ROOF OVERALL PLAN

DRAWING NO.	REVISION NO.
A-104	[B]

NOTE:
1. FOR SPECIFICATION NOTES REFER TO DWG S01 - S04.

CONCRETE COLUMN SCHEDULE

MARK	SIZE	COMMENT(S)
CC1	600 x 300	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC2	450DIA.	CONCRETE COLUMN - 6N20 VERTICAL. N10-300 TIES
CC3	800 x 300	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC4	1200 x 200	CONCRETE COLUMN - 12N16 VERTICAL. 3N16-300 TIES
CC5	490 x 490	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC6	600 x 400	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC7	800 x 300	CONCRETE COLUMN - SUPPORTING FUTURE STRUCTURE. 8N20 VERT. BARS, 2N12-300 TIES

LEGEND

100	DENOTES SLAB THICKNESS
	DENOTES SLAB STEP
CW1/0	DENOTES LOAD BEARING CONCRETE WALL OVER
CC1/0	DENOTES REINFORCED CONCRETE COLUMN OVER
	HATCH DENOTES PAD FOOTINGS TO BE EXCAVATED TO BEDROCK AND FILL WITH MASS CONCRETE TO UNDERSIDE OF PAD FOOTING TYP.
	DENOTES GRATED DRAIN.
SJ	DENOTES SAWN JOINT

FOUNDATION SCHEDULE

MARK	SIZE	COMMENT(S)
BP1	600DIA.	BORED PIER 5N20 VERT. N12-300 HELIX. 2000 SOCKET INTO SILTSTONE BEDROCK
BP2	600DIA.	BORED PIER 5N20 VERT. N12-300 HELIX. 4000 SOCKET INTO SILTSTONE BEDROCK
BP3	600DIA.	BORED PIER 5N20 VERT. N12-300 HELIX. 7000 SOCKET INTO SILTSTONE BEDROCK
BP4	600DIA.	BORED PIER MASS CONCRETE 300 SOCKET INTO SILTSTONE BEDROCK
CP1	450DIA.	RC PILE, MIN 1500DP, INTO FIRM CLAY, 4N16 VERT. N12-300 HELIX.
ET1	600W x 400DP	STRIP FOOTING 3N16T&B R10-450 TIES
ET2	600W x 400DP	EDGE BEAM - 5L11TM BOTTOM UNO
IT1	600W x 400DP	INTERNAL BEAM
PF1	1500W x1500 x 600DP	PAD FOOTING N16-200 'U' BARS EW BTM FOUND IN BEDROCK
SF1	600W x 400DP	STRIP FOOTING 3N16T&B R10-450 TIES FOUND IN BEDROCK
SF2	600W x 400DP	STRIP FOOTING 520T&B R10-300 TIES SUPPORTED ON PIERS

WALL SCHEDULE

MARK	THICKNESS	COMMENT(S)
CW1	200	RC WALL - N12-200 HORIZ, N16-200 VERT. EACH FACE
CW2	150	RC WALL - N12-200 EACH WAY CENTRAL
DW1	200	DINCEL WALL - N16-150 SPACING VERTICAL BARS.

0m 2m 4m 6m 8m 10m ON ORIGINAL SHEET
SCALE 1:100 @ A1 , SCALE 1:200 @ A3

BASEMENT SLAB PLAN - PART 1

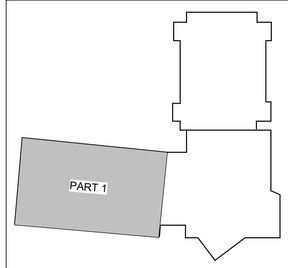
FOR TENDER

GRAN ASSOCIATES AUSTRALIA ARCHITECTS PTY LTD
LEVEL 1, 597 DARLING STREET
ROZELLE NSW 2039
PH: +61 2 9818 8437
FAX: + 61 2 9818 6288
PETER REED ARAIA, AIA NOM ARCH 5377
ANTHONY KEMENY FRAIA NSW REG No. 4599

MECHANICAL, ELECTRICAL & LEVEL 3 CONSULTANT
JHA ENGINEERS
LEVEL 3, 101 MILLER STREET SYDNEY NSW 2000
T +61 (02) 9437 1000

STRUCTURAL, FIRE & HYDRAULIC ENGINEER
NORTHROP CONSULTING
LEVEL 11, 345 GEORGE STREET SYDNEY NSW 2000
T +61 (02) 9241 4188

CIVIL ENGINEER
MARTENS & ASSOCIATES
SUITES 201, 20 GEORGE STREET NSW 2077
T +61 (02) 9476 9999



KEYPLAN

N°	DESCRIPTION	DATE
1	ISSUED FOR COORDINATION	19.03.21
2	ISSUED FOR CC	28.04.21
3	ISSUED FOR COORDINATION	23.07.21
4	ISSUED FOR TENDER	30.07.21

SCALE	1 : 100 @AI
DATE	PROJECT STATUS
DRAWN BY	K.PLAATJIES
CHECKED BY	L.BECHER
PROJECT. NO.	202368

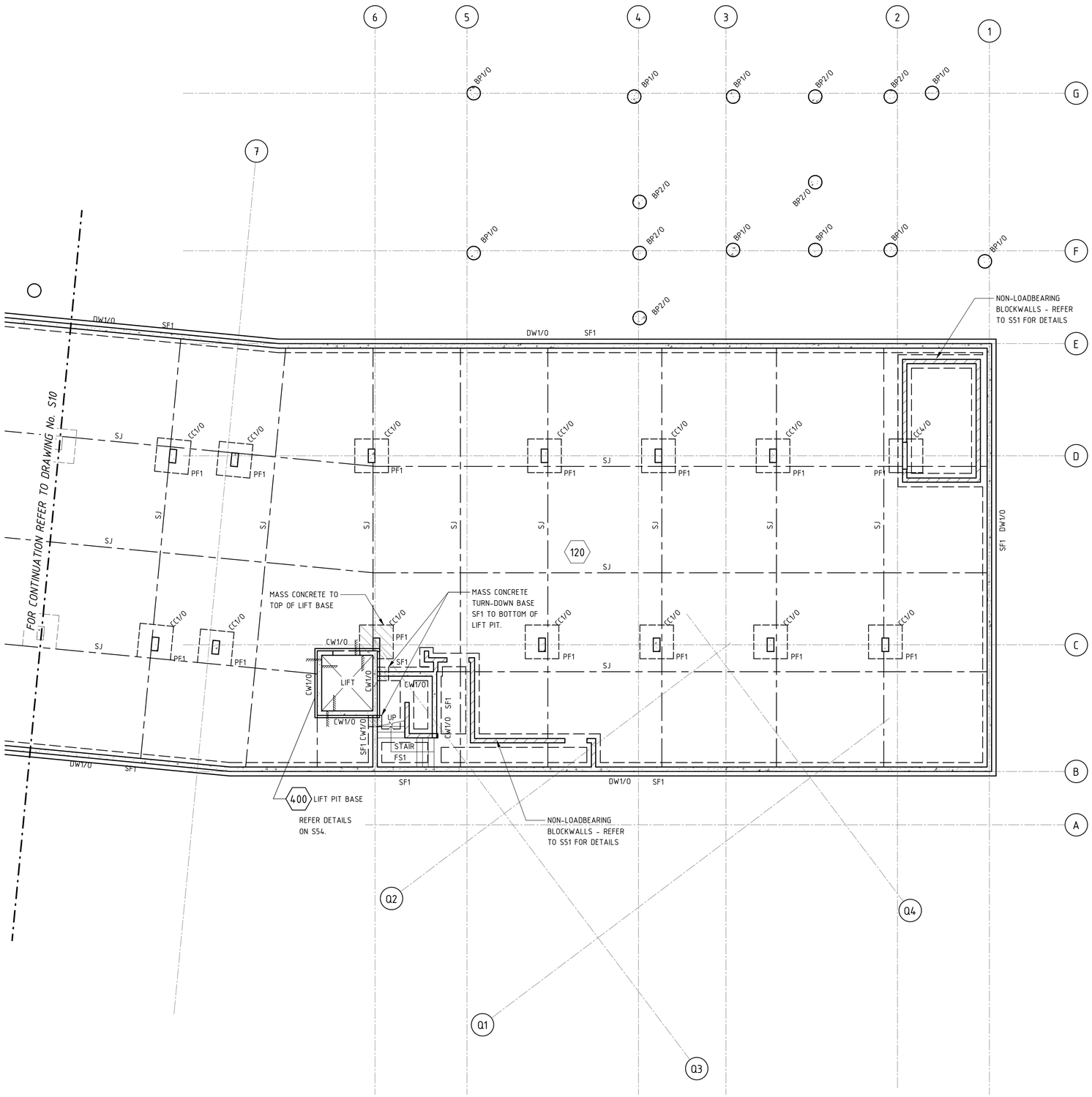
Client Name:
amity college

Project Name:
AMITY COLLEGE

Address:
85 BYRON ROAD, LEPPINGTON NSW

Title:
BASEMENT SLAB PLAN - PART 1

DRAWING No.	REVISION No.
S10	[4]



BASEMENT SLAB PLAN - PART 2

0m 2m 4m 6m 8m 10m ON ORIGINAL SHEET

SCALE 1:100 @ A1 , SCALE 1:200 @ A3

NOTE:
1. FOR SPECIFICATION NOTES REFER TO DWG S01 - S04.

CONCRETE COLUMN SCHEDULE

MARK	SIZE	COMMENT(S)
CC1	600 x 300	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC2	450DIA.	CONCRETE COLUMN - 6N20 VERTICAL. N10-300 TIES
CC3	800 x 300	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC4	1200 x 200	CONCRETE COLUMN - 12N16 VERTICAL. 3N16-300 TIES
CC5	490 x 490	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC6	600 x 400	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC7	800 x 300	CONCRETE COLUMN - SUPPORTING FUTURE STRUCTURE. 8N20 VERT. BARS, 2N12-300 TIES

FOUNDATION SCHEDULE

MARK	SIZE	COMMENT(S)
BP1	600DIA.	BORED PIER 5N20 VERT. N12-300 HELIX. 2000 SOCKET INTO SILTSTONE BEDROCK
BP2	600DIA.	BORED PIER 5N20 VERT. N12-300 HELIX. 4000 SOCKET INTO SILTSTONE BEDROCK
BP3	600DIA.	BORED PIER 5N20 VERT. N12-300 HELIX. 7000 SOCKET INTO SILTSTONE BEDROCK
BP4	600DIA.	BORED PIER MASS CONCRETE 300 SOCKET INTO SILTSTONE BEDROCK
CP1	450DIA.	RC PILE, MIN 1500DP, INTO FIRM CLAY, 4N16 VERT. N12-300 HELIX.
ET1	600W x 400DP	STRIP FOOTING 3N16T&B R10-450 TIES
ET2	600W x 400DP	EDGE BEAM - 5L11TM BOTTOM UNO
IT1	600W x 400DP	INTERNAL BEAM
PF1	1500W x1500 x 600DP	PAD FOOTING N16-200 'U' BARS EW BTM FOUND IN BEDROCK
SF1	600W x 400DP	STRIP FOOTING 3N16T&B R10-450 TIES FOUND IN BEDROCK
SF2	600W x 400DP	STRIP FOOTING 520T&B R10-300 TIES SUPPORTED ON PIERS

WALL SCHEDULE

MARK	THICKNESS	COMMENT(S)
CW1	200	RC WALL - N12-200 HORIZ, N16-200 VERT. EACH FACE
CW2	150	RC WALL - N12-200 EACH WAY CENTRAL
DW1	200	DINCEL WALL - N16-150 SPACING VERTICAL BARS

LEGEND

- 100 — DENOTES SLAB THICKNESS
- DENOTES SLAB STEP
- CW1/0 — DENOTES LOAD BEARING CONCRETE WALL OVER
- CC1/0 — DENOTES REINFORCED CONCRETE COLUMN OVER
- HATCH DENOTES PAD FOOTINGS TO BE EXCAVATED TO BEDROCK AND FILL WITH MASS CONCRETE TO UNDERSIDE OF PAD FOOTING TYP.
- DENOTES GRATED DRAIN.
- SJ — DENOTES SAWN JOINT

FOR TENDER

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LEVEL 1, 597 DARLING STREET
ROZELLE NSW 2039
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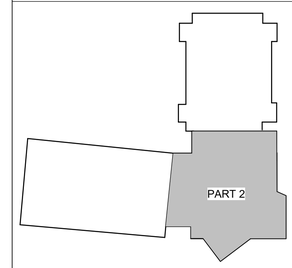

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3	ISSUED FOR COORDINATION	23.07.21
4	ISSUED FOR TENDER	30.07.21

SCALE	1 : 100 @A1
DATE	PROJECT STATUS
DRAWN BY	K.PLAATJIES
CHECKED BY	L.BECHER
PROJECT. NO.	202368

Client Name: amity college

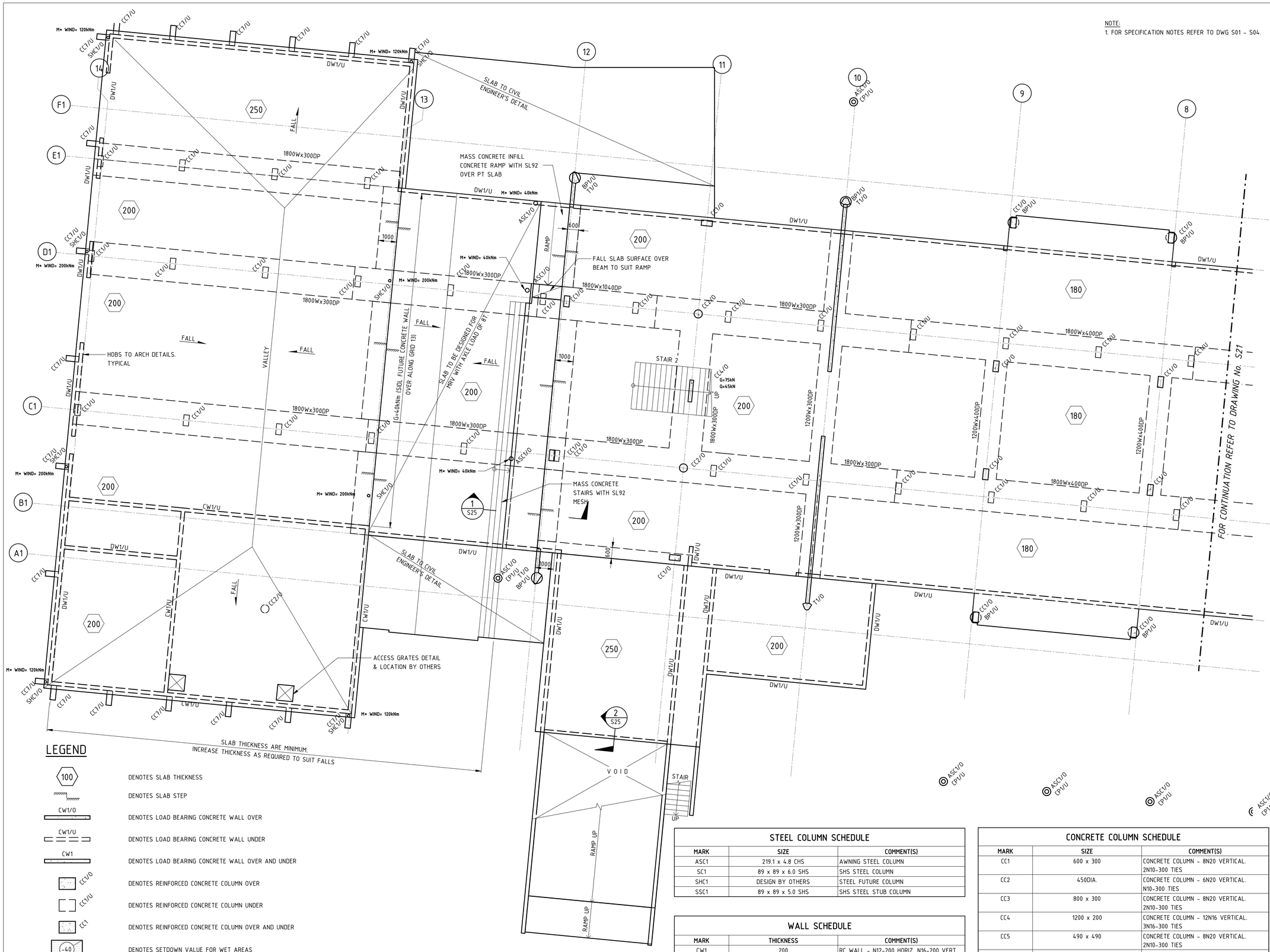
Project Name: AMITY COLLEGE

Address: 85 BYRON ROAD, LEPPINGTON NSW

Title: BASEMENT SLAB PLAN - PART 2

DRAWING NO.	REVISION NO.
S11	[4]

NOTE:
1. FOR SPECIFICATION NOTES REFER TO DWG S01 - S04.



LEGEND

100	DENOTES SLAB THICKNESS
	DENOTES SLAB STEP
CW1/0	DENOTES LOAD BEARING CONCRETE WALL OVER
CW1/U	DENOTES LOAD BEARING CONCRETE WALL UNDER
CW1	DENOTES LOAD BEARING CONCRETE WALL OVER AND UNDER
CC1/0	DENOTES REINFORCED CONCRETE COLUMN OVER
CC1/U	DENOTES REINFORCED CONCRETE COLUMN UNDER
CC1	DENOTES REINFORCED CONCRETE COLUMN OVER AND UNDER
-40	DENOTES SETDOWN VALUE FOR WET AREAS
T1	DENOTES CUSTOM PRECAST STRUCTURE

0m 2m 4m 6m 8m 10m ON ORIGINAL SHEET

SCALE 1:100 @ A1 , SCALE 1:200 @ A3

GROUND FLOOR SLAB PLAN - PART 1

DETAILED DESIGN OF ALL SUSPENDED SLABS BY PT CONTRACTOR

STEEL COLUMN SCHEDULE

MARK	SIZE	COMMENT(S)
ASC1	219.1 x 4.8 CHS	AWNING STEEL COLUMN
SC1	89 x 89 x 6.0 SHS	SHS STEEL COLUMN
SHC1	DESIGN BY OTHERS	STEEL FUTURE COLUMN
SSC1	89 x 89 x 5.0 SHS	SHS STEEL STUB COLUMN

WALL SCHEDULE

MARK	THICKNESS	COMMENT(S)
CW1	200	RC WALL - N12-200 HORIZ, N16-200 VERT. EACH FACE
CW2	150	RC WALL - N12-200 EACH WAY CENTRAL
DW1	200	DINCEL WALL - N16-150 SPACING VERTICAL BARS

CONCRETE COLUMN SCHEDULE

MARK	SIZE	COMMENT(S)
CC1	600 x 300	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC2	450DIA.	CONCRETE COLUMN - 6N20 VERTICAL. N10-300 TIES
CC3	800 x 300	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC4	1200 x 200	CONCRETE COLUMN - 12N16 VERTICAL. 3N16-300 TIES
CC5	490 x 490	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC6	600 x 400	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC7	800 x 300	CONCRETE COLUMN - SUPPORTING FUTURE STRUCTURE. 8N20 VERT. BARS, 2N12-300 TIES

FOR TENDER

GRAN ASSOCIATES AUSTRALIA ARCHITECTS PTY LTD
LEVEL 1, 597 DARLING STREET
ROZELLE NSW 2039
PH: +61 2 9818 8437
FAX: + 61 2 9818 6288
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LEVEL 3, 101 MILLER STREET SYDNEY NSW 2000
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NORTHROP CONSULTING
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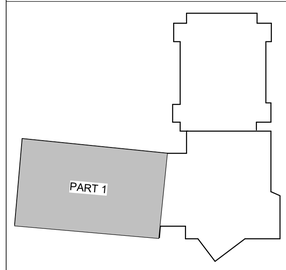


KEYPLAN

N°	DESCRIPTION	DATE
1	ISSUED FOR COORDINATION	19.03.21
2	ISSUED FOR CC	28.04.21
3	ISSUED FOR COORDINATION	23.07.21
4	ISSUED FOR TENDER	30.07.21

SCALE	1 : 100 @A1
DATE	PROJECT STATUS
DRAWN BY	K.PLAATJIES
CHECKED BY	L.BECHER
PROJECT. No.	202368

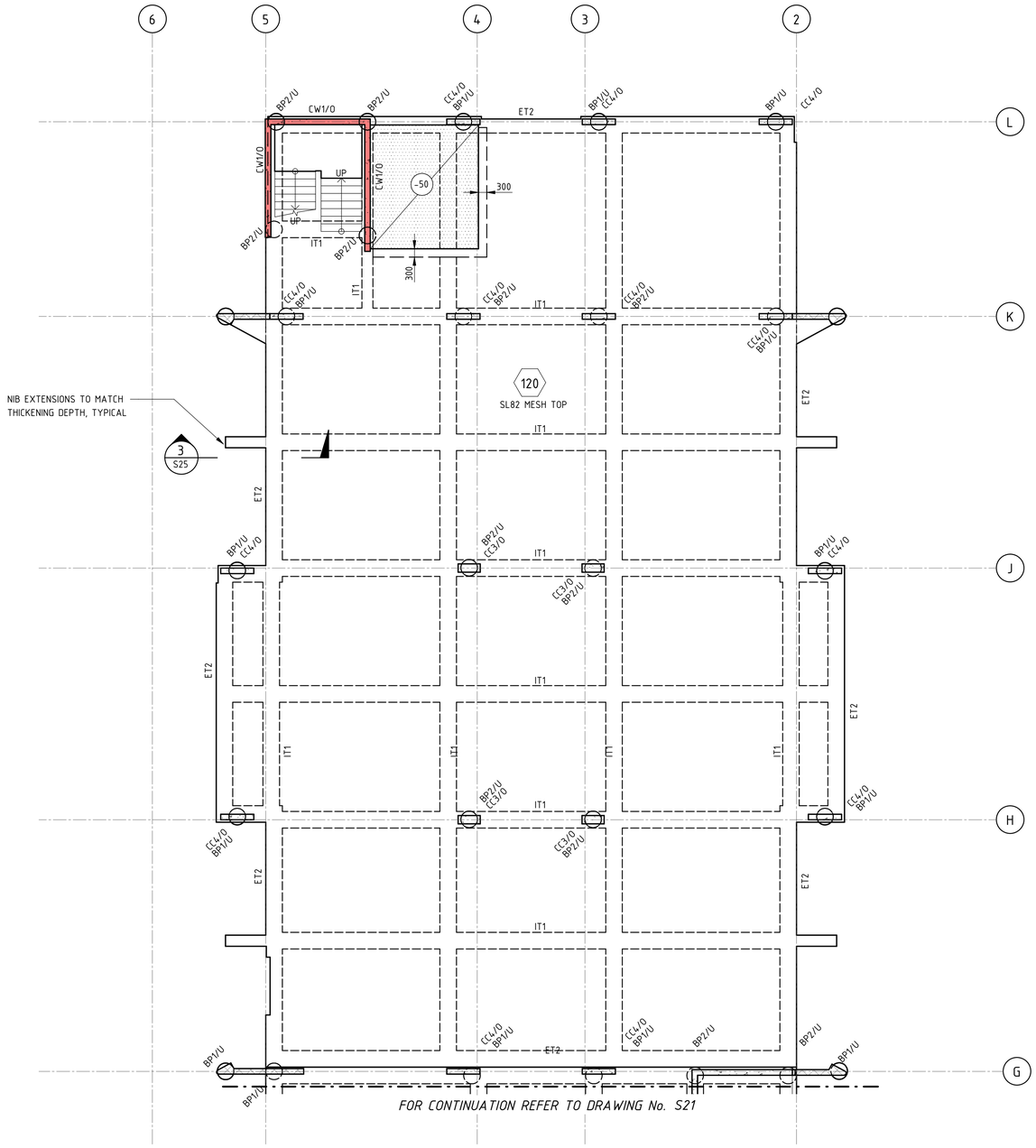
Client Name: amity college

Project Name: AMITY COLLEGE

Address: 85 BYRON ROAD, LEPPINGTON NSW

Title: GROUND FLOOR SLAB PLAN - PART 1

DRAWING No.	REVISION No.
S20	[4]



GROUND FLOOR SLAB PLAN - PART 3

NOTE:
1. FOR SPECIFICATION NOTES REFER TO DWG S01 - S04.

CONCRETE COLUMN SCHEDULE

MARK	SIZE	COMMENT(S)
CC1	600 x 300	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC2	450DIA.	CONCRETE COLUMN - 6N20 VERTICAL. N10-300 TIES
CC3	800 x 300	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC4	1200 x 200	CONCRETE COLUMN - 12N16 VERTICAL. 3N16-300 TIES
CC5	490 x 490	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC6	600 x 400	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC7	800 x 300	CONCRETE COLUMN - SUPPORTING FUTURE STRUCTURE. 8N20 VERT. BARS, 2N12-300 TIES

WALL SCHEDULE

MARK	THICKNESS	COMMENT(S)
CW1	200	RC WALL - N12-200 HORIZ, N16-200 VERT. EACH FACE
CW2	150	RC WALL - N12-200 EACH WAY CENTRAL
DW1	200	DINCEL WALL - N16-150 SPACING VERTICAL BARS

FOUNDATION SCHEDULE

MARK	SIZE	COMMENT(S)
BP1	600DIA.	BORED PIER 5N20 VERT. N12-300 HELIX. 2000 SOCKET INTO SILTSTONE BEDROCK
BP2	600DIA.	BORED PIER 5N20 VERT. N12-300 HELIX. 4000 SOCKET INTO SILTSTONE BEDROCK
BP3	600DIA.	BORED PIER 5N20 VERT. N12-300 HELIX. 7000 SOCKET INTO SILTSTONE BEDROCK
BP4	600DIA.	BORED PIER MASS CONCRETE 300 SOCKET INTO SILTSTONE BEDROCK
CP1	450DIA.	RC PILE, MIN 1500DP, INTO FIRM CLAY, 4N16 VERT. N12-300 HELIX.
ET1	600W x 400DP	STRIP FOOTING 3N16T&B R10-450 TIES
ET2	600W x 400DP	EDGE BEAM - 5L11TM BOTTOM UNO
IT1	600W x 400DP	INTERNAL BEAM
PF1	1500W x1500 x 600DP	PAD FOOTING N16-200 'U' BARS EW BTM FOUND IN BEDROCK
SF1	600W x 400DP	STRIP FOOTING 3N16T&B R10-450 TIES FOUND IN BEDROCK
SF2	600W x 400DP	STRIP FOOTING 520T&B R10-300 TIES SUPPORTED ON PIERS

LEGEND

100	DENOTES SLAB THICKNESS
	DENOTES SLAB STEP
CW1/O	DENOTES LOAD BEARING CONCRETE WALL OVER
CW1/U	DENOTES LOAD BEARING CONCRETE WALL UNDER
CW1	DENOTES LOAD BEARING CONCRETE WALL OVER AND UNDER
CC1/O	DENOTES REINFORCED CONCRETE COLUMN OVER
CC1/U	DENOTES REINFORCED CONCRETE COLUMN UNDER
CC1	DENOTES REINFORCED CONCRETE COLUMN OVER AND UNDER
-40	DENOTES SETDOWN VALUE FOR WET AREAS
T1	DENOTES CUSTOM PRECAST STRUCTURE
	DENOTES REGIONS OF GROUND BEAMS TO BE REINFORCED WITH 5N20 TOP & BOTTOM WITH N12-300 CLOSED TIES.

0m 2m 4m 6m 8m 10m ON ORIGINAL SHEET
SCALE 1:100 @ A1 , SCALE 1:200 @ A3

FOR TENDER

GRAN ASSOCIATES AUSTRALIA ARCHITECTS PTY LTD
LEVEL 1, 597 DARLING STREET
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T +61 (02) 9437 1000

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NORTHROP CONSULTING
LEVEL 11, 345 GEORGE STREET SYDNEY NSW 2000
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MARTENS & ASSOCIATES
SUITES 201, 20 GEORGE STREET NSW 2077
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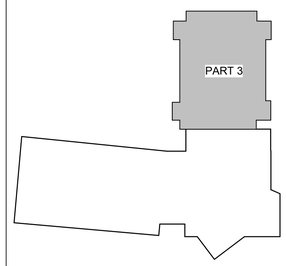


KEYPLAN

N°	DESCRIPTION	DATE
1	ISSUED FOR CC	28.04.21
2	ISSUED FOR COORDINATION	23.07.21
3	ISSUED FOR TENDER	30.07.21

SCALE	1 : 100 @A1
DATE	PROJECT STATUS
DRAWN BY	H.ABELLA
CHECKED BY	L.BECHER
PROJECT. No.	202368

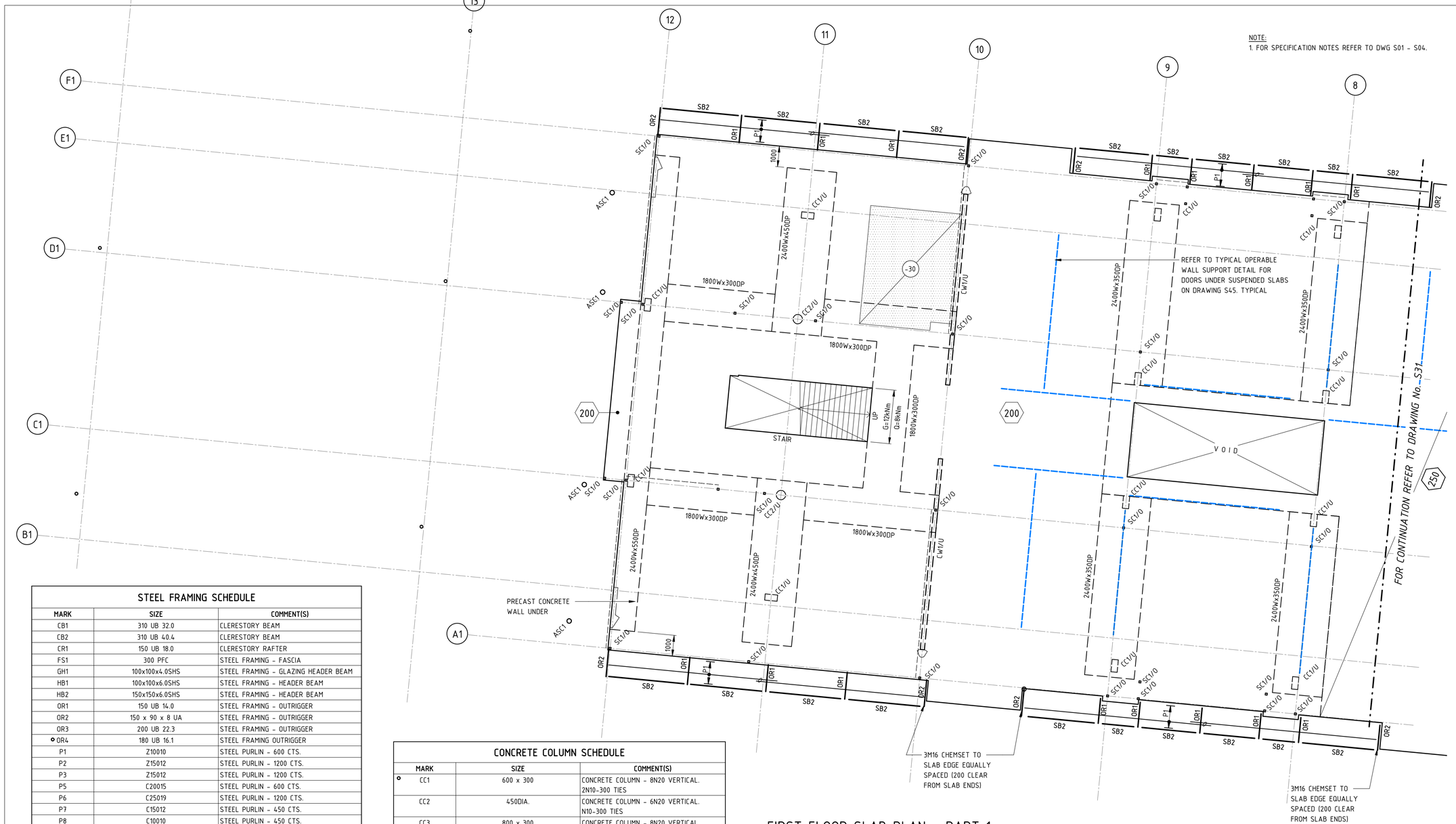
Client Name:
amity college

Project Name:
AMITY COLLEGE

Address:
85 BYRON ROAD, LEPPINGTON NSW

Title:
GROUND FLOOR SLAB PLAN - PART 3

DRAWING No.	REVISION No.
S22	[3]



STEEL FRAMING SCHEDULE

MARK	SIZE	COMMENT(S)
CB1	310 UB 32.0	CLERESTORY BEAM
CB2	310 UB 40.4	CLERESTORY BEAM
CR1	150 UB 18.0	CLERESTORY RAFTER
FS1	300 PFC	STEEL FRAMING - FASCIA
GH1	100x100x4.0SHS	STEEL FRAMING - GLAZING HEADER BEAM
HB1	100x100x6.0SHS	STEEL FRAMING - HEADER BEAM
HB2	150x150x6.0SHS	STEEL FRAMING - HEADER BEAM
OR1	150 UB 14.0	STEEL FRAMING - OUTRIGGER
OR2	150 x 90 x 8 UA	STEEL FRAMING - OUTRIGGER
OR3	200 UB 22.3	STEEL FRAMING - OUTRIGGER
OR4	180 UB 16.1	STEEL FRAMING OUTRIGGER
P1	Z10010	STEEL PURLIN - 600 CTS.
P2	Z15012	STEEL PURLIN - 1200 CTS.
P3	Z15012	STEEL PURLIN - 1200 CTS.
P5	C20015	STEEL PURLIN - 600 CTS.
P6	C25019	STEEL PURLIN - 1200 CTS.
P7	C15012	STEEL PURLIN - 450 CTS.
P8	C10010	STEEL PURLIN - 450 CTS.
RB5	180 UB 22.2	STEEL FRAMING - ROOF BEAM
RB6	310 UB 32.0	ROOF SUPPORT BEAM
RB7	360 UB 44.7	STEEL FRAMING - ROOF BEAM
RB8	410 UB 59.7	STEEL FRAMING - ROOF BEAM
RB10	150x150x6.0SHS	STEEL FRAMING - ROOF BEAM
RB11	150 x 90 x 8 UA	STEEL FRAMING - EITH M20 CHEMSET TO LEVEL 1 SLAB EDGE AT 900 CTS. PROVIDE FIXING HOLES AT 450 CTS. TO ALLOW CLEARANCE FOR PT GROUTED LIVE ENDS
SA1	100 x 100 x 10 EA	STEE FRAMING - BONDEK SUPPORT AT LIFT OVERRUN. M20-600 CHEMSET TO LIFT
SB1	200 UB 22.3	STEEL FRAMING
SB2	150 PFC	STEEL FRAMING
SB3	250 PFC	STEEL FRAMING
SB6	360 UB 44.7	STEEL FRAMING
SB7	250 UB 25.7	STEEL FRAMING
SD1	300PFC	SLIDING PARTITION HEADER BEAM
SD2	360 UB 44.7	SLIDING GLAZED DOOR HEADER BEAM
SD3	200 UC 46.2	OPERABLE WALL HEADER BEAM
WBr1	100x100x5.0SHS	WALL BRACING - DIAGONAL STRUT
WBr2	PLYWOOD WALL BRACING	WALL BRACING - REFER TYPICAL DETAIL

CONCRETE COLUMN SCHEDULE

MARK	SIZE	COMMENT(S)
CC1	600 x 300	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC2	450DIA.	CONCRETE COLUMN - 6N20 VERTICAL. N10-300 TIES
CC3	800 x 300	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC4	1200 x 200	CONCRETE COLUMN - 12N16 VERTICAL. 3N16-300 TIES
CC5	490 x 490	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC6	600 x 400	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC7	800 x 300	CONCRETE COLUMN - SUPPORTING FUTURE STRUCTURE. 8N20 VERT. BARS, 2N12-300 TIES

STEEL COLUMN SCHEDULE

MARK	SIZE	COMMENT(S)
ASC1	219.1 x 4.8 CHS	AWNING STEEL COLUMN
SC1	89 x 89 x 6.0 SHS	SHS STEEL COLUMN
SHC1	DESIGN BY OTHERS	STEEL FUTURE COLUMN
SSC1	89 x 89 x 5.0 SHS	SHS STEEL STUB COLUMN

WALL SCHEDULE

MARK	THICKNESS	COMMENT(S)
CW1	200	RC WALL - N12-200 HORIZ, N16-200 VERT. EACH FACE
CW2	150	RC WALL - N12-200 EACH WAY CENTRAL
DW1	200	DINCEL WALL - N16-150 SPACING VERTICAL BARS

AWNING MEMBER SCHEDULE

MARK	SIZE	COMMENT(S)
AP1	SZ 15015	STEEL PURLIN AT 900 CTS
AR1	230 BT 33.6	AWNING RAFTER
AR2	230 BT 33.6	AWNING RAFTER

FIRST FLOOR SLAB PLAN - PART 1

DETAILED DESIGN OF ALL SUSPENDED SLABS BY PT CONTRACTOR

LEGEND

100	DENOTES SLAB THICKNESS
	DENOTES SLAB STEP
CW1/O	DENOTES LOAD BEARING CONCRETE WALL OVER
CW1/U	DENOTES LOAD BEARING CONCRETE WALL UNDER
CW1	DENOTES LOAD BEARING CONCRETE WALL OVER AND UNDER
CC1/O	DENOTES REINFORCED CONCRETE COLUMN OVER
CC1/U	DENOTES REINFORCED CONCRETE COLUMN UNDER
CC1	DENOTES REINFORCED CONCRETE COLUMN OVER AND UNDER
-40	DENOTES SETDOWN VALUE FOR WET AREAS
TMJ	DENOTES TEMPORARY MOVEMENT JOINT. DETAILS BY PT CONTRACTOR
**	DENOTES TEMPORARY SLIDING JOINT TO TOP OF WALL (AS PER TYPICAL WAL

ASC1 ASC1 ASC1

0m 2m 4m 6m 8m 10m ON ORIGINAL SHEET

SCALE 1:100 @ A1 , SCALE 1:200 @ A3

FOR TENDER

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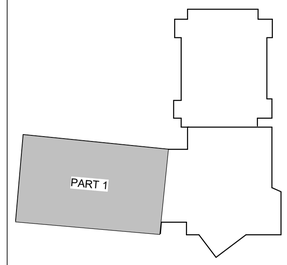

KEYPLAN

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2	ISSUED FOR CC	28.04.21
3	ISSUED FOR COORDINATION	23.07.21
4	ISSUED FOR TENDER	30.07.21

SCALE	1 : 100 @A1
DATE	PROJECT STATUS
DRAWN BY	K.PLAATJIES
CHECKED BY	L.BECHER
PROJECT. No.	202368

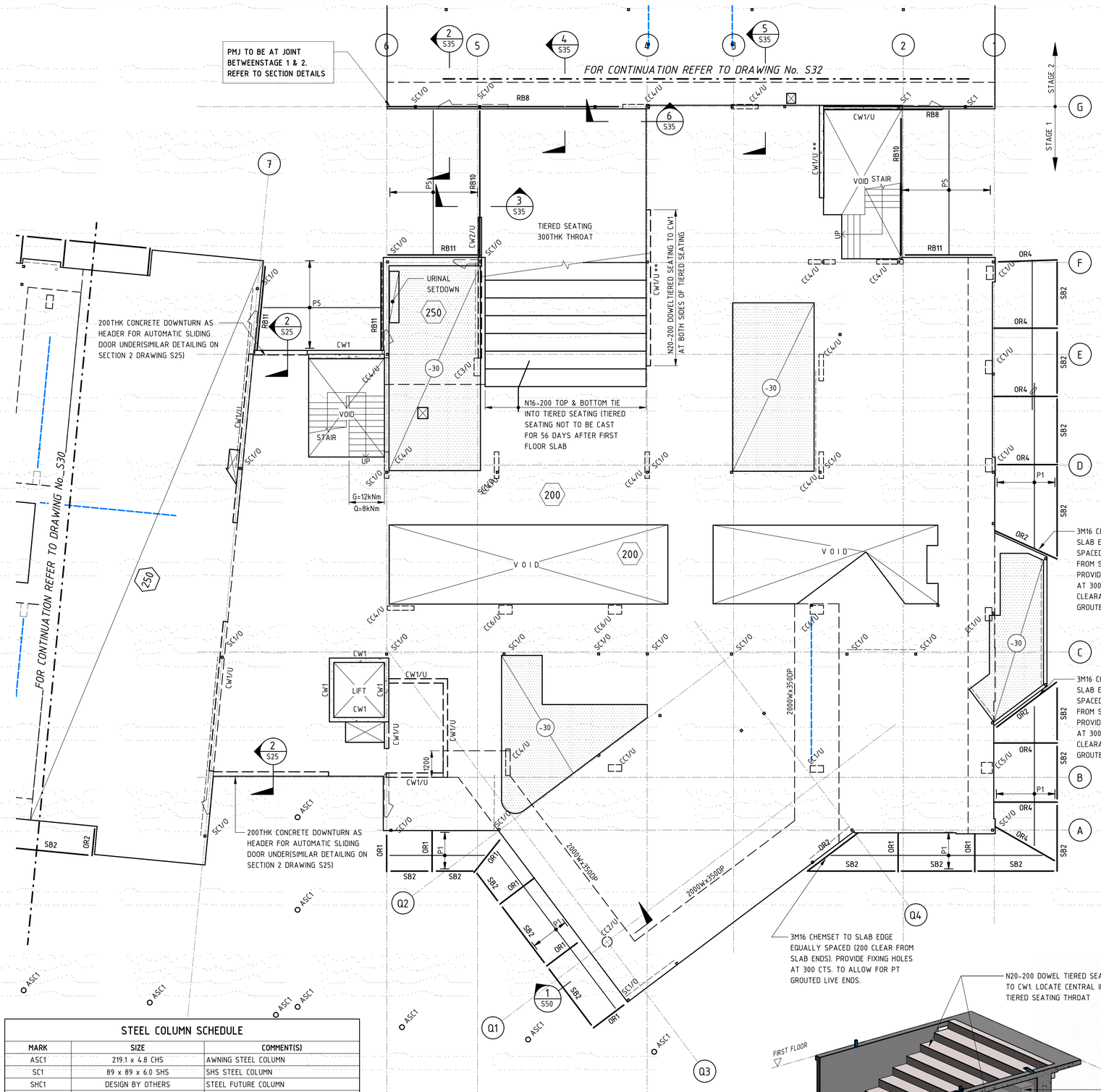
Client Name:
amity college

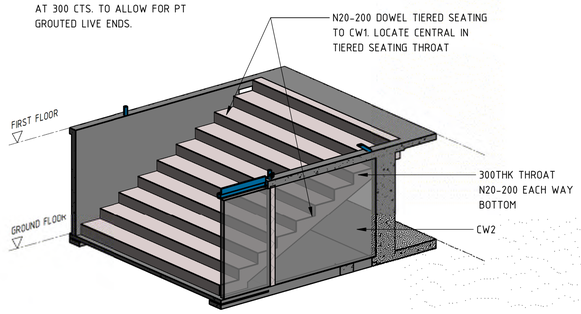
Project Name:
AMITY COLLEGE

Address:
85 BYRON ROAD, LEPPINGTON NSW

Title:
FIRST FLOOR SLAB PLAN - PART 1

DRAWING No.	REVISION No.
S30	[4]





TIERED SEATING 3D VIEW

STEEL COLUMN SCHEDULE

MARK	SIZE	COMMENT(S)
ASC1	219.1 x 4.8 CHS	AWNING STEEL COLUMN
SC1	89 x 89 x 6.0 SHS	SHS STEEL COLUMN
SHC1	DESIGN BY OTHERS	STEEL FUTURE COLUMN
SSC1	89 x 89 x 5.0 SHS	SHS STEEL STUB COLUMN

WALL SCHEDULE

MARK	THICKNESS	COMMENT(S)
CW1	200	RC WALL - N12-200 HORIZ, N16-200 VERT. EACH FACE
CW2	150	RC WALL - N12-200 EACH WAY CENTRAL
DW1	200	DINCEL WALL - N16-150 SPACING VERTICAL BARS

0m 2m 4m 6m 8m 10m ON ORIGINAL SHEET

SCALE 1:100 @ A1 , SCALE 1:200 @ A3

FIRST FLOOR SLAB PLAN - PART 2

DETAILED DESIGN OF ALL SUSPENDED SLABS BY PT CONTRACTOR

NOTE:
1. FOR SPECIFICATION NOTES REFER TO DWG S01 - S04.

CONCRETE COLUMN SCHEDULE

MARK	SIZE	COMMENT(S)
CC1	600 x 300	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC2	450DIA.	CONCRETE COLUMN - 6N20 VERTICAL. N10-300 TIES
CC3	800 x 300	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC4	1200 x 200	CONCRETE COLUMN - 12N16 VERTICAL. 3N16-300 TIES
CC5	490 x 490	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC6	600 x 400	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC7	800 x 300	CONCRETE COLUMN - SUPPORTING FUTURE STRUCTURE. 8N20 VERT. BARS, 2N12-300 TIES

STEEL FRAMING SCHEDULE

MARK	SIZE	COMMENT(S)
CB1	310 UB 32.0	CLERESTORY BEAM
CB2	310 UB 40.4	CLERESTORY BEAM
CR1	150 UB 18.0	CLERESTORY RAFTER
FS1	300 PFC	STEEL FRAMING - FASCIA
GH1	100x100x4.0SHS	STEEL FRAMING - GLAZING HEADER BEAM
HB1	100x100x6.0SHS	STEEL FRAMING - HEADER BEAM
HB2	150x150x6.0SHS	STEEL FRAMING - HEADER BEAM
OR1	150 UB 14.0	STEEL FRAMING - OUTRIGGER
OR2	150 x 90 x 8 UA	STEEL FRAMING - OUTRIGGER
OR3	200 UB 22.3	STEEL FRAMING - OUTRIGGER
OR4	180 UB 16.1	STEEL FRAMING OUTRIGGER
P1	Z10010	STEEL PURLIN - 600 CTS.
P2	Z15012	STEEL PURLIN - 1200 CTS.
P3	Z15012	STEEL PURLIN - 1200 CTS.
P5	C20015	STEEL PURLIN - 600 CTS.
P6	C25019	STEEL PURLIN - 1200 CTS.
P7	C15012	STEEL PURLIN - 450 CTS.
P8	C10010	STEEL PURLIN - 450 CTS.
RB5	180 UB 22.2	STEEL FRAMING - ROOF BEAM
RB6	310 UB 32.0	ROOF SUPPORT BEAM
RB7	360 UB 44.7	STEEL FRAMING - ROOF BEAM
RB8	410 UB 59.7	STEEL FRAMING - ROOF BEAM
RB10	150x150x6.0SHS	STEEL FRAMING - ROOF BEAM
RB11	150 x 90 x 8 UA	STEEL FRAMING - EITH M20 CHEMSET TO LEVEL 1 SLAB EDGE AT 900 CTS. PROVIDE FIXING HOLES AT 450 CTS. TO ALLOW CLEARANCE FOR PT GROUTED LIVE ENDS
SA1	100 x 100 x 10 EA	STEE FRAMING - BONDEK SUPPORT AT LIFT OVERRUN. M20-600 CHEMSET TO LIFT
SB1	200 UB 22.3	STEEL FRAMING
SB2	150 PFC	STEEL FRAMING
SB3	250 PFC	STEEL FRAMING
SB6	360 UB 44.7	STEEL FRAMING
SB7	250 UB 25.7	STEEL FRAMING
SD1	300PFC	SLIDING PARTITION HEADER BEAM
SD2	360 UB 44.7	SLIDING GLAZED DOOR HEADER BEAM
SD3	200 UC 46.2	OPERABLE WALL HEADER BEAM
WBr1	100x100x5.0SHS	WALL BRACING - DIAGONAL STRUT
WBr2	PLYWOOD WALL BRACING	WALL BRACING - REFER TYPICAL DETAIL

LEGEND

100	DENOTES SLAB THICKNESS
	DENOTES SLAB STEP
CW1/O	DENOTES LOAD BEARING CONCRETE WALL OVER
CW1/U	DENOTES LOAD BEARING CONCRETE WALL UNDER
CW1	DENOTES LOAD BEARING CONCRETE WALL OVER AND UNDER
CC1/O	DENOTES REINFORCED CONCRETE COLUMN OVER
CC1/U	DENOTES REINFORCED CONCRETE COLUMN UNDER
CC1	DENOTES REINFORCED CONCRETE COLUMN OVER AND UNDER
-40	DENOTES SETDOWN VALUE FOR WET AREAS
TMJ	DENOTES TEMPORARY MOVEMENT JOINT. DETAILS BY PT CONTRACTOR
**	DENOTES TEMPORARY SLIDING JOINT TO TOP OF WALL (AS PER TYPICAL WALL DETAILS)

FOR TENDER

GRAN ASSOCIATES AUSTRALIA ARCHITECTS PTY LTD
LEVEL 1, 597 DARLING STREET
ROZELLE NSW 2039
PH: +61 2 9818 8437
FAX: + 61 2 9818 6288
PETER REED ARAIA, AIA NOM ARCH 5377
ANTHONY KEMENY FRAIA NSW REG No. 4599

MECHANICAL, ELECTRICAL & LEVEL 3 CONSULTANT
JHA ENGINEERS
LEVEL 3, 101 MILLER STREET SYDNEY NSW 2000
T +61 (02) 9437 1000

STRUCTURAL, FIRE & HYDRAULIC ENGINEER
NORTHROP CONSULTING
LEVEL 11, 345 GEORGE STREET SYDNEY NSW 2000
T +61 (02) 9241 4188

CIVIL ENGINEER
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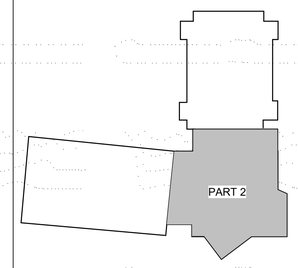
SUITES 201, 20 GEORGE STREET NSW 2077
T +61 (02) 9476 9999



KEYPLAN

N°	DESCRIPTION	DATE
1	ISSUED FOR COORDINATION	19.03.21
2	ISSUED FOR CC	28.04.21
3	ISSUED FOR COORDINATION	23.07.21
4	ISSUED FOR TENDER	30.07.21

SCALE	1 : 100 @A1
DATE	PROJECT STATUS
DRAWN BY	K.PLAATJIES
CHECKED BY	L.BECHER
PROJECT. No.	202368

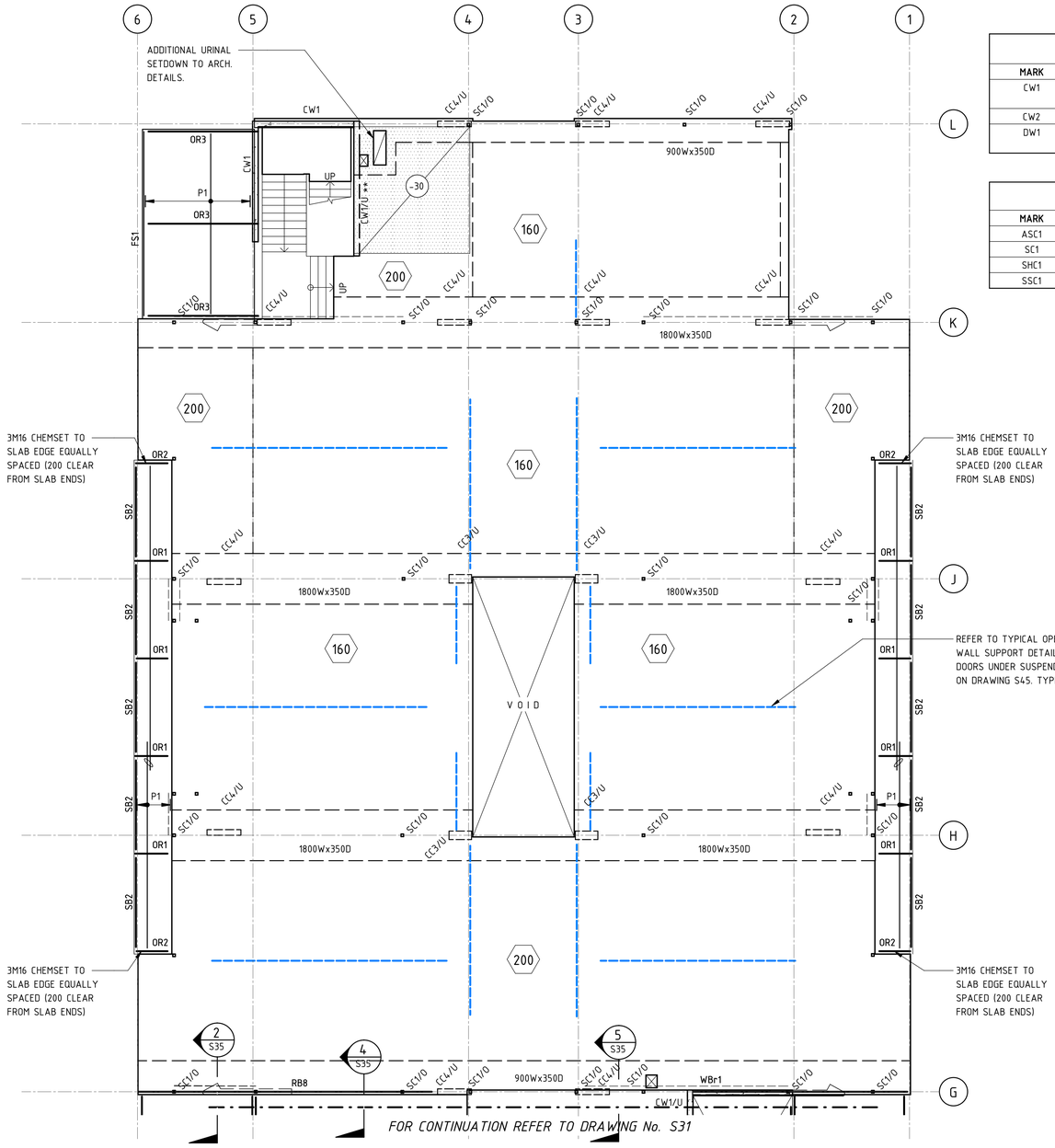
Client Name: amity college

Project Name: AMITY COLLEGE

Address: 85 BYRON ROAD, LEPPINGTON NSW

Title: FIRST FLOOR SLAB PLAN - PART 2

DRAWING No.	REVISION No.
S31	[4]



FIRST FLOOR SLAB PLAN - PART 3

DETAILED DESIGN OF ALL SUSPENDED SLABS BY PT CONTRACTOR

0m 2m 4m 6m 8m 10m ON ORIGINAL SHEET

SCALE 1:100 @ A1 , SCALE 1:200 @ A3

NOTE:
1. FOR SPECIFICATION NOTES REFER TO DWG S01 - S04.

WALL SCHEDULE

MARK	THICKNESS	COMMENT(S)
CW1	200	RC WALL - N12-200 HORIZ, N16-200 VERT. EACH FACE
CW2	150	RC WALL - N12-200 EACH WAY CENTRAL
DW1	200	DINCEL WALL - N16-150 SPACING VERTICAL BARS

STEEL COLUMN SCHEDULE

MARK	SIZE	COMMENT(S)
ASC1	219.1 x 4.8 CHS	AWNING STEEL COLUMN
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CC4	1200 x 200	CONCRETE COLUMN - 12N16 VERTICAL. 3N16-300 TIES
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CC6	600 x 400	CONCRETE COLUMN - 8N20 VERTICAL. 2N10-300 TIES
CC7	800 x 300	CONCRETE COLUMN - SUPPORTING FUTURE STRUCTURE. 8N20 VERT. BARS, 2N12-300 TIES

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OR1	150 UB 14.0	STEEL FRAMING - OUTRIGGER
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OR3	200 UB 22.3	STEEL FRAMING - OUTRIGGER
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	DENOTES SLAB STEP
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FOR TENDER

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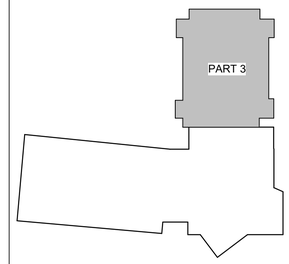


KEYPLAN

N°	DESCRIPTION	DATE
1	ISSUED FOR CC	28.04.21
2	ISSUED FOR COORDINATION	23.07.21
3	ISSUED FOR TENDER	30.07.21

SCALE	1 : 100 @A1
DATE	PROJECT STATUS
DRAWN BY	H.ABELLA
CHECKED BY	L.BECHER
PROJECT. No.	202368

Client Name:
amity college

Project Name:
AMITY COLLEGE

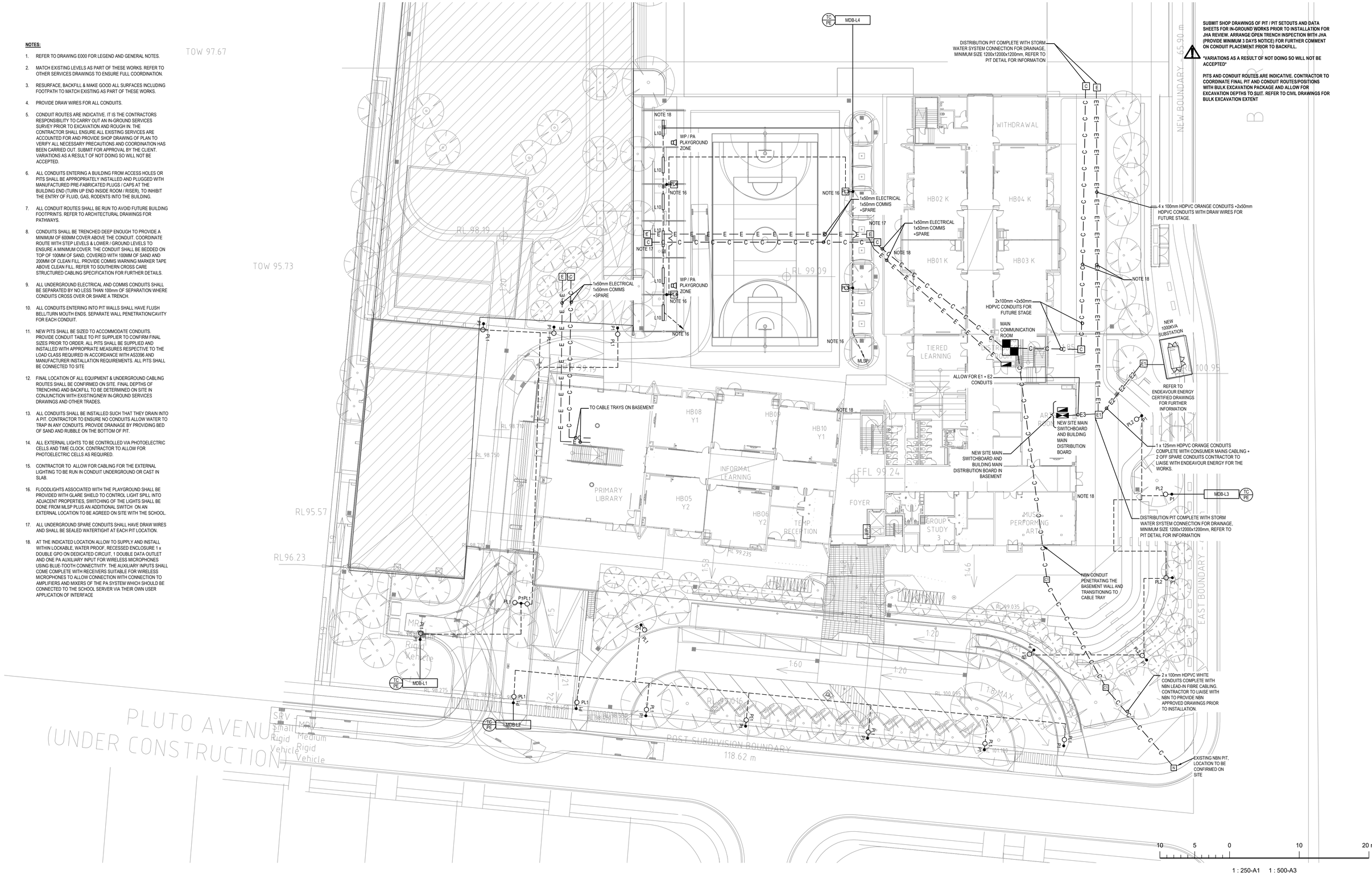
Address:
85 BYRON ROAD, LEPPINGTON NSW

Title:
FIRST FLOOR SLAB PLAN - PART 3

DRAWING No.	REVISION No.
S32	[3]

NOTES:

1. REFER TO DRAWING E000 FOR LEGEND AND GENERAL NOTES.
2. MATCH EXISTING LEVELS AS PART OF THESE WORKS. REFER TO OTHER SERVICES DRAWINGS TO ENSURE FULL COORDINATION.
3. RESURFACE, BACKFILL & MAKE GOOD ALL SURFACES INCLUDING FOOTPATH TO MATCH EXISTING AS PART OF THESE WORKS.
4. PROVIDE DRAW WIRES FOR ALL CONDUITS.
5. CONDUIT ROUTES ARE INDICATIVE. IT IS THE CONTRACTORS RESPONSIBILITY TO CARRY OUT AN IN-GROUND SERVICES SURVEY PRIOR TO EXCAVATION AND ROUGH IN. THE CONTRACTOR SHALL ENSURE ALL EXISTING SERVICES ARE ACCOUNTED FOR AND PROVIDE SHOP DRAWING OF PLAN TO VERIFY ALL NECESSARY PRECAUTIONS AND COORDINATION HAS BEEN CARRIED OUT. SUBMIT FOR APPROVAL BY THE CLIENT. VARIATIONS AS A RESULT OF NOT DOING SO WILL NOT BE ACCEPTED.
6. ALL CONDUITS ENTERING A BUILDING FROM ACCESS HOLES OR PITS SHALL BE APPROPRIATELY INSTALLED AND PLUGGED WITH MANUFACTURED PRE-FABRICATED PLUGS / CAPS AT THE BUILDING END (TURN UP END INSIDE ROOM / RISER), TO INHIBIT THE ENTRY OF FLUID, GAS, RODENTS INTO THE BUILDING.
7. ALL CONDUIT ROUTES SHALL BE RUN TO AVOID FUTURE BUILDING FOOTPRINTS. REFER TO ARCHITECTURAL DRAWINGS FOR PATHWAYS.
8. CONDUITS SHALL BE TRENCHED DEEP ENOUGH TO PROVIDE A MINIMUM OF 600MM COVER ABOVE THE CONDUIT. COORDINATE ROUTE WITH STEP LEVELS & LOWER / GROUND LEVELS TO ENSURE A MINIMUM COVER. THE CONDUIT SHALL BE BEDDED ON TOP OF 100MM OF SAND, COVERED WITH 100MM OF SAND AND 200MM OF CLEAN FILL. PROVIDE COMMS WARNING MARKER TAPE ABOVE CLEAN FILL. REFER TO SOUTHERN CROSS CARE STRUCTURED CABLING SPECIFICATION FOR FURTHER DETAILS.
9. ALL UNDERGROUND ELECTRICAL AND COMMS CONDUITS SHALL BE SEPARATED BY NO LESS THAN 100mm OF SEPARATION WHERE CONDUITS CROSS OVER OR SHARE A TRENCH.
10. ALL CONDUITS ENTERING INTO PIT WALLS SHALL HAVE FLUSH BELL/TURN MOUTH ENDS. SEPARATE WALL PENETRATION/CAVITY FOR EACH CONDUIT.
11. NEW PITS SHALL BE SIZED TO ACCOMMODATE CONDUITS. PROVIDE CONDUIT TABLE TO PIT SUPPLIER TO CONFIRM FINAL SIZES PRIOR TO ORDER. ALL PITS SHALL BE SUPPLIED AND INSTALLED WITH APPROPRIATE MEASURES RESPECTIVE TO THE LOAD CLASS REQUIRED IN ACCORDANCE WITH AS3396 AND MANUFACTURER INSTALLATION REQUIREMENTS. ALL PITS SHALL BE CONNECTED TO SITE
12. FINAL LOCATION OF ALL EQUIPMENT & UNDERGROUND CABLING ROUTES SHALL BE CONFIRMED ON SITE. FINAL DEPTHS OF TRENCHING AND BACKFILL TO BE DETERMINED ON SITE IN CONJUNCTION WITH EXISTING/NEW IN-GROUND SERVICES DRAWINGS AND OTHER TRADES.
13. ALL CONDUITS SHALL BE INSTALLED SUCH THAT THEY DRAIN INTO A PIT. CONTRACTOR TO ENSURE NO CONDUITS ALLOW WATER TO TRAP IN ANY CONDUITS. PROVIDE DRAINAGE BY PROVIDING BED OF SAND AND RUBBLE ON THE BOTTOM OF PIT.
14. ALL EXTERNAL LIGHTS TO BE CONTROLLED VIA PHOTOELECTRIC CELLS AND TIME CLOCK. CONTRACTOR TO ALLOW FOR PHOTOELECTRIC CELLS AS REQUIRED.
15. CONTRACTOR TO ALLOW FOR CABLING FOR THE EXTERNAL LIGHTING TO BE RUN IN CONDUIT UNDERGROUND OR CAST IN SLAB.
16. FLOODLIGHTS ASSOCIATED WITH THE PLAYGROUND SHALL BE PROVIDED WITH GLARE SHIELD TO CONTROL LIGHT SPILL INTO ADJACENT PROPERTIES, SWITCHING OF THE LIGHTS SHALL BE DONE FROM MLSP PLUS AN ADDITIONAL SWITCH ON AN EXTERNAL LOCATION TO BE AGREED ON SITE WITH THE SCHOOL.
17. ALL UNDERGROUND SPARE CONDUITS SHALL HAVE DRAW WIRES AND SHALL BE SEALED WATERTIGHT AT EACH PIT LOCATION.
18. AT THE INDICATED LOCATION ALLOW TO SUPPLY AND INSTALL WITHIN LOCKABLE, WATER PROOF, RECESSED ENCLOSURE 1 x DOUBLE GPO ON DEDICATED CIRCUIT, 1 DOUBLE DATA OUTLET AND ONE PA AUXILIARY INPUT FOR WIRELESS MICROPHONES USING BLUE-TOOTH CONNECTIVITY. THE AUXILIARY INPUTS SHALL COME COMPLETE WITH RECEIVERS SUITABLE FOR WIRELESS MICROPHONES TO ALLOW CONNECTION WITH CONNECTION TO AMPLIFIERS AND MIXERS OF THE PA SYSTEM WHICH SHOULD BE CONNECTED TO THE SCHOOL SERVER VIA THEIR OWN USER APPLICATION OF INTERFACE



REVISIONS / AMENDMENTS			
Rev	Date	Description	Verified
P1	19.03.21	CC ISSUE	J.F.
P2	16.04.21	CC ISSUE	C.S.
P3	21.05.21	CC ISSUE	C.S.
P4	23.07.21	CC ISSUE	C.S.
P5	06.08.21	DRAFT TENDER ISSUE	C.S.
A	13.08.21	TENDER ISSUE	C.S.

REVISIONS / AMENDMENTS			
Rev	Date	Description	Verified

CLIENT: amity college

ARCHITECT: GRAN ASSOCIATES AUSTRALIA ARCHITECTS PTY LTD

CONSULTANT: JHA
Level 23, 101 Miller Street, North Sydney NSW 2060 Australia
+61 (02) 9437 1000
general@jhaengineers.com.au
www.jhaservices.com

PROJECT: **AMITY COLLEGE LEPPINGTON**
85 BYRON ROAD
LEPPINGTON NSW

TITLE: **ELECTRICAL SERVICES**
SITE PLAN

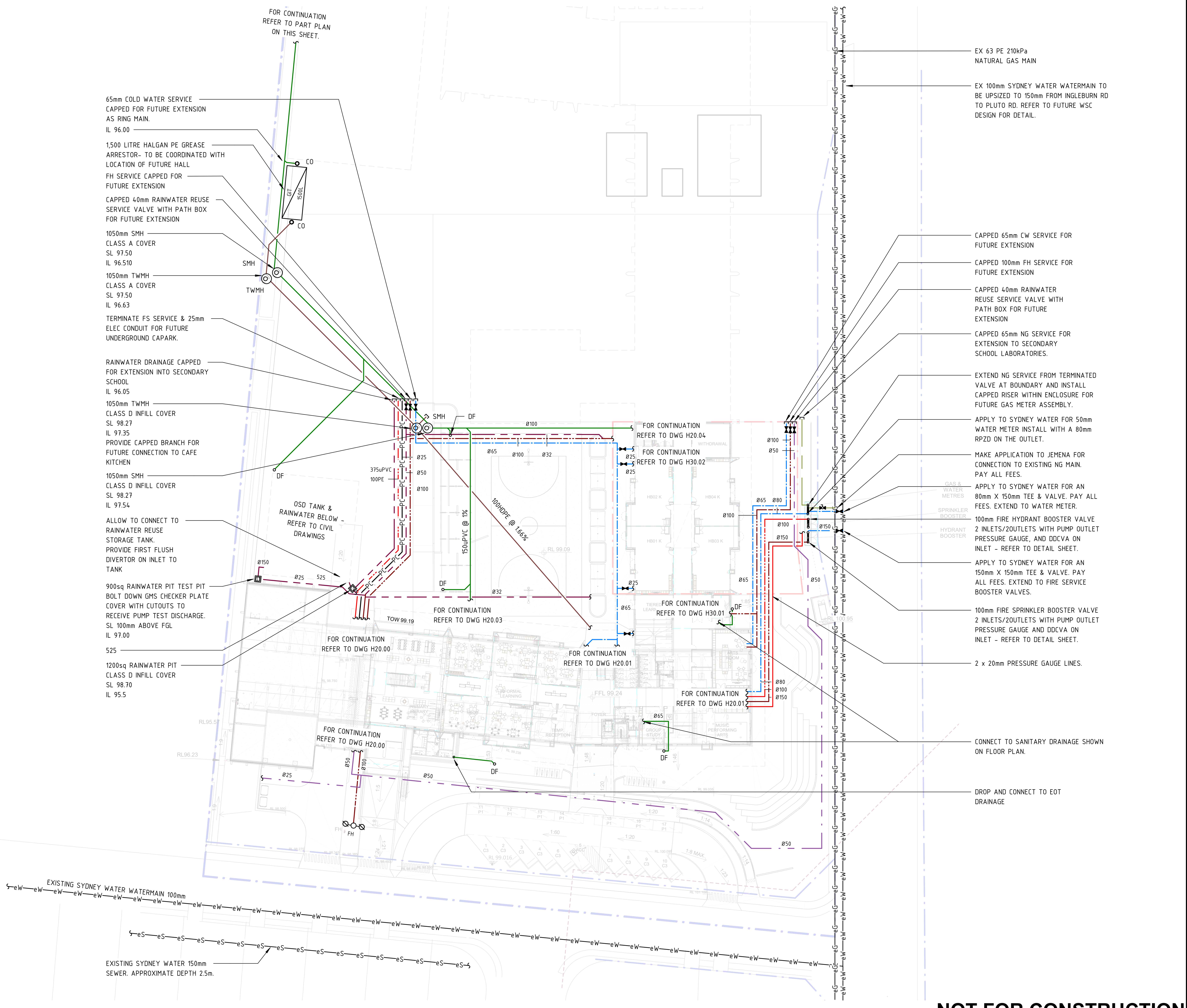
TENDER ISSUE
NOT TO BE USED FOR CONSTRUCTION

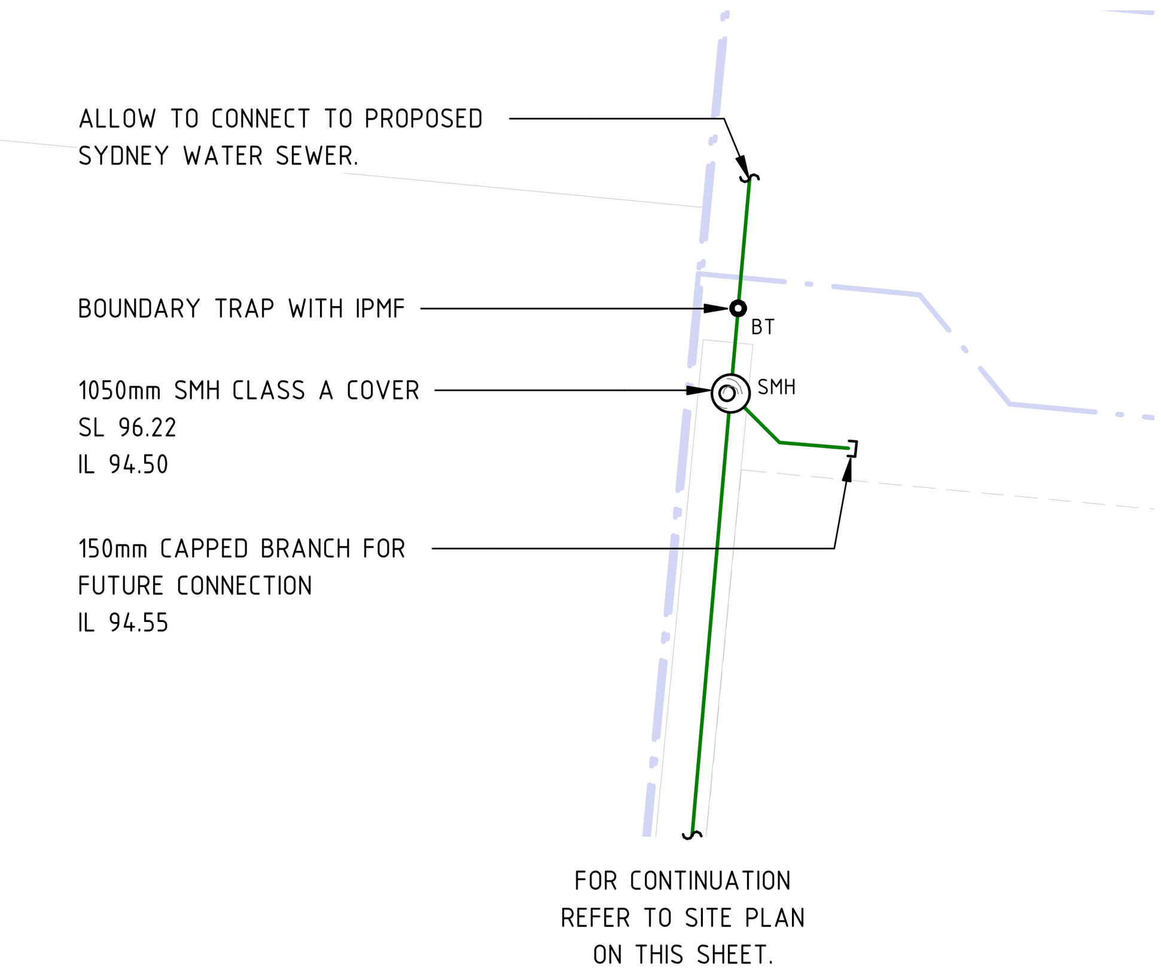
DRAWN	T.W.	SCALE @ A1
CHECKED	C.S.	1:250
APPROVED	C.S.	
CREATED	MAR 2021	

JOB No.	DRAWING No.	REV
200384	E010	A

NOTE:

1. ALL INGROUND WATER, FIRE HYDRANT, FIRE SPRINKLER AND NATURAL GAS SERVICES TO BE PE 100 PN16 UNO.
2. ALL INGROUND SEWER DRAINAGE TO BE uPVC. 100mm DIAMETER INSTALLED AT 1.66% GRADE. 150mm INSTALLED AT 1% GRADE UNO.
3. ALL INGROUND RAINWATER DRAINAGE TO BE UPVC.
4. ALL INGROUND TRADEWASTE DRAINAGE TO BE HDPE 110mm AT 1.66% GRADE UNO.
5. ALL EXTERNAL DRINKING FOUNTAINS (DF) TO BE SUPPLIED WITH AAV AND 20mm PCW.
6. REFER TO LANDSCAPE ARCHITECTS DRAWINGS FOR LOCATIONS OF QUICK CONNECT VALVE BOXES. PROVIDE 25mm RAINWATER REUSE SUPPLY TO EACH VALVE BOX - MAKE CONNECTION TO SUPPLIED VALVE BOX. ALL RAINWATER REUSE TO BE PE PIPE,FITTINGS AND VALVES.





PART SITE PLAN

DRAWN: E.O'MEARA
DESIGNED: W.JOHNSON
JOB MANAGER: W.JOHNSON
VERIFIER: S.JOHNSTONE

NOT FOR CONSTRUCTION

REV	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
A	TENDER ISSUE	DJ		TVDL	18.08.21

CLIENT: amity college

ARCHITECT: GRAN ASSOCIATES AUSTRALIA ARCHITECTS PTY LTD

ALL SETOUT TO ARCHITECT'S DRAWINGS. DIMENSIONS TO BE VERIFIED WITH ARCHITECT AND BUILDER BEFORE COMMENCING SHOP DRAWINGS OR SITE WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY.

1:400 — 0 4000 8000 12000 16000 20000

NORTHROP
Sydney
Level 11, 345 George Street, Sydney, N.S.W. 2000
Ph (02) 9241 4188 Email: sydney@northrop.com.au
ABN 81 094 433 100

PROJECT: AMITY COLLEGE LEPPINGTON
85 BYRON ROAD, LEPPINGTON
NSW 2179

DRAWING TITLE: HYDRAULIC SERVICES SITE PLAN

JOB NUMBER: SY202368
DRAWING NUMBER: H10.00
REVISION: A
DRAWING SHEET SIZE = A1

BIM 360://202368-Amity College/202368-CM-Amity College Leppington-R19_eomearaZL4A4.rvt
19/08/2021 2:29:08 PM

13. Appendix B – Risk Register

Lloyd NSW Risk Register

Project Name	Amity College - Early Works
Project #	1442
Project Manager	Joseph Elley
Client	
Revision Number	1
Revision Date	26/04/2021

LLOYD
MELBOURNE | SYDNEY | BRISBANE

complete this additional SFAIRP assesment;
Note 2: Significant Environmental Hazards scored HIGH or above, must complete this additional assessment;
Note 3: No activity can be undertaken where a SFAIRP risk score of:
• EXTREME (19 - 25) is recorded: DO NOT PROCEED a safer way must be found;
• HIGH (15-18) is recorded: risk is unacceptable- controls must be implemented
• MEDIUM (7-14) is recorded: risk is undesirable. SWMS must be produced
• LOW (8 - 11) is recorded: risk considered acceptable. SWMS to be produced

Most to Least Effective Controls

Trade Reference	Activity (chronological order)	Hazard Aspect/Source	Risk/Impact	Uncontrolled Risk Assessment: Likelihood	Consequence	Risk Rating	Company Controls (These are applied across all projects as per Lloyd Procedures) 1. Management System Controls. **TYPE IS A MANDATORY CONTROL FOR ALL WORK ACTIVITIES ON SITE*** 2. All training requirements.	Project Specific Controls ***PPE IS A MANDATORY CONTROL FOR ALL WORK ACTIVITIES ON SITE***	Hierarchy of Controls: Elimination	Substitution	Isolation	Engineering	Administration	PPE	Is an acceptable Control Measure utilised	Is this High Risk Construction Work	Is a SWMS document required.	Is a permit required for these works	Residual Risk Assessment: Likelihood	Consequence	Risk Rating	Further Action Required	Control Owner	Controls implemented Type/Frequency	Risk Status Open/Closed	Comments Notes/Instructions	Statutory Reference
LLOYD	Planning high risk activities	Planning and coordination of high risk activities.	Unplanned and uncoordinated work poses a risk to workers and the public.	Possible	Catastrophic	H-22	1. a) SWMS to be developed and approved by the site manager/supervisor prior to commencing work on site. b) SWMS to be included in all coordination meetings - Coordination plan and SWMS to form the core of work scheduling and management. 2. N/A	1. CRAW Workshops to be undertaken with all stakeholders to identify risks and discuss controls. 2. Key stakeholder to attend coordination meetings. 3. Minutes of meetings to be distributed before work activities commence.				✓	✓	✓	Yes	Yes	Yes	No	Unlikely	Moderate	M-8		Site Manager		Open		Clause 299-303 of the Work Health & Safety Regulation 2017 [NSW] Construction Work - Code of Practice
LLOYD	Emergency management.	Workers not aware of emergency processes.	Emergency events not adequately managed	Unlikely	Catastrophic	H-22	1. a) Site Emergency Management Plan to be developed. b) Emergency procedures shall be communicated to all subcontractors and employees at inductions, advising of location of fire extinguisher, first aid kit, spill kits and who is the first aider on site. c) Emergency Evacuation Procedure shall be displayed d) List of emergency contacts (including phone numbers) to be displayed e) Spill containment & fire fighting equipment must be available. f) Incident notification & investigation procedures apply. 2. Emergency drills undertaken at the indicated frequency. Site Supervisors and other identified personnel to have Emergency Response Training First Aid Training for appropriate personnel.	1. Site Specific Emergency Plan to be developed 2. Site Manager to have First Aid Training			✓	✓	✓	✓	Yes	Yes	Yes	No	Unlikely	Moderate	M-8		Site Manager		Open		Clause 43 of the Work Health & Safety Regulation 2017 [NSW] Construction Work - Code of Practice First Aid in the Workplace - Code of Practice Managing the Work Environment and Facilities - Code of Practice
LLOYD	Emergency planning & response	Lack of Communication. Not knowing contact details of emergency service personnel. Unaware of evacuation procedure	Unprepared for emergencies	Unlikely	Catastrophic	H-22	1. a) Site Emergency Management Plan to be developed. Provide Site Layout with Assembly points and map to nearest medical centre. b) Provide list of emergency contacts (including phone numbers) c) Spill containment & fire fighting equipment must be available. d) Incident notification & investigation procedures apply. e) Lloyd Group is to consult at the earliest convenience with Wilkins Public School for all emergency drills, emregency situtaions that may occur on site to avoid any confusion within the school. 2. Emergency drills undertaken at the indicated frequency. Site Supervisors and other identified personnel to have Emergency Response Training First Aid Training for appropriate personnel.	1. Site Specific Emergency Plan to be developed 2. Site Manager to have First Aid Training			✓	✓	✓	✓	Yes	Yes	Yes	No	Unlikely	Moderate	M-8		Site Manager		Open		Clause 43 of the Work Health & Safety Regulation 2017 [NSW] Construction Work - Code of Practice First Aid in the Workplace - Code of Practice Managing the Work Environment and Facilities - Code of Practice
LLOYD	First Aid	No first aider available whilst work is undertaken on site. First aid equipment and facilities not suitable to the type of works being undertaken.	Inadequate first aid personnel / facilities and equipment for the project	Likely	Major	E-21	1. a) A First Aider must be on site when works are being undertaken. b) First aider names to be posted in various locations with contact details. c) Standard type first aid kit required, suitable to the following types of injuries: Cuts and scratches; Bruises and sprain type injuries; foreign objects in eyes, dust, dirt, etc; insect bites, snake bites, minor burns (Construction Industry Standard). d Burns and Eye modules required if hot works are to be undertaken. 2. Site Supervisors are to be first aid trained. At least 1 first aider for every 25 personnel working on site	1. Site Manager to have First Aid Training						✓	Yes	Yes	No	No	Likely	Minor	M-12		Site Manager		Open		Clause 42 of the Work Health & Safety Regulation 2017 [NSW] First Aid in the Workplace Code of Practice Managing the Work Environment & Facilities Code of Practice
LLOYD	Establishment of construction site boundaries.	Unauthorised entry onto the construction site. Entry onto site without the correct PPE	Members of the public entering work areas. Subcontractors, clients, delivery personnel entering the site with inadequate PPE.	Likely	Major	E-21	1. a) Site is to be completely barricaded with temporary perimeter fencing and hoarding, ensure there are no gaps or opening in the fence. b) Danger' Do Not Enter' signs are to be placed at the established site entry and around the perimeter fence approx. 30m apart. c) Establish sign at entry indicating that all personnel are to go to the site office prior to entering the work areas d. Establish signs at the entry point indicating the mandatory personal Protective Equipment e) Sit fencing is to be installed througuout the project to prevent any run off exiting the site. f) There is to be a maximum of 150mm gap between the ground and the bottom of all hoardings, if the gap is greater than 150mm, it must be closed by plywood or an addition of extra lower fence infill panels. 2. N/A					✓		✓	Yes	Yes	Yes	No	Rare	Moderate	L-6		Site Manager		Open		Managing the Work Environment and Facilities Code of Practice
LLOYD	Site Fencing & Gate Security - Unwanted Ingress	Unauthorised access to the work site by children (School Pupils) Unwanted events from contact between workers and children / the public. Unauthorised access by persons or vehicles	Harm or injury to children or the public due to entering site without authorisation resulting in injury e.g. injury from mobile plant injury from falls etc	Likely	Major	E-21	1. a) Site Fencing to be installed around the construction zone. b) Site set up with secure protection including access restrictions and warning signage c) Establish sign at entry indicating that all personnel are to go to the site office prior to entering the work areas d) Establish signs at the entry point indicating the mandatory personal Protective Equipment. 2.	1. Temporary fencing and timber hoarding around work site with adequate signage to ensure the worksite is secured with warning. 2. Plywood hoarding at 2.4 metres high will reduce any chance for unwanted site entries; as well as lockable gates 3. Separate personnel gate to be installed. Gates to be fitted with latches & springs 4. Requirement to shut gates is to be included in the Induction. 5. Regular checks to ensure the ongoing integrity of site fencing. 6. Procedure for notification of the school should a child get in. a. Worker to immediately notify the Site Manager. b. All works to be stopped c. Site Manager to call the Emergency School contact number provided (Ross Angus, PWPS school principal - 0428 952 061) d. School representative is to arrange to have the child removed. e. Work not to resume until after the child has been removed. f. Site manager to file an incident report, determine the method of ingress and implement corrective actions. 7. Ensure keys are removed from all items of plant / machinery at the end of the shift to prevent unauthorised operation 8. Ensure all pits are covered and signage is in place. 9. Ensure barriers are placed around excavations with danger signage in place 10. Ensure caps are placed on all exposed reo 11. Ensure hazardous chemicals are locked away 12. Ensure power tools are locked away 13. Place signage on scaffolding warning of unauthorised access 14. Lloyd Group must ensure that the gate to site are locked at all times to prevent any unauthroised access to site, in particular school children.					✓		✓	Yes	Yes	Yes	No	Rare	Moderate	L-6		Site Manager		Open		Managing the Work Environment and Facilities Code of Practice
ALL	Working outdoors	Exposure to ultra violet light/ heat conditions	Skin disease/cancer, heat exhaustion/stroke, dehydration	Likely	Moderate	H-17	1. a) Wear sunscreen min. SPF 50+ and re-apply maximum every 2 hours. b) Wear broad brimmed (8-10cm) hat or flap to hard hat (close-weave fabric of UPF 50+). c) Wear sunglasses complying with AS1067. d) Regular breaks to be taken to allow for water intake and shade 2. Display information regarding dehydration and sun protection Conduct toolbox talks with regard to working safely in the heat	1. Use of appropriate PPE as per SDS and SWMS. 2. Ensure plenty of water is available at all times. 3. Assess weather conditions prior to commencement of works and only work outdoors and on the roof when safe. 4. Provide covered/ air-conditioned area for break times				✓	✓	✓	Yes	No	No	No	Unlikely	Minor	L-5		Site Manager		Open		Clause 41 of the Work Health & Safety Regulation 2017 [NSW] Managing the Work Environment and Facilities - Code of Practice
LLOYD	Traffic management access, egress and onsite.	Traffic management during construction activities Work related noise including pumps, ag trucks etc. Vehicle emissions / odour generated	Injuries to general public/pedestrians/ traffic whilst delivering product to site and during construction activities. Neighbour complaints	Possible	Catastrophic	H-22	1. a) Ensure that a detailed Traffic Management Plan for the Project has been implemented highlighting appropriate separation between the general public and vehicles entering and exiting the site b) Appropriate signs, Barricading and Stop Go Signs are to be in place as per the traffic management plan c) Ensure speed limit signage (max 10km) is installed across site d) Comply with council permitted hours of work. Where no controls are in place, for work in the metropolitan area, comply with the State Environment Protection Policy (Control of Noise from Commerce, Industry and Trade) by: • meeting the noise limits prescribed by regulation, or if this is not feasible, by, • implementing an EPA-approved environmental improvement plan (prepared in accordance with Clause 178 of the Policy, which includes community involvement). e) As per the CC requirements, a detailed Traffic Management Plan must be developed and signed off by an authorised 3rd party. This TMP is to be followed at all times. 2.	1. Temporary Fencing surrounding a high risk areas. 2. Traffic Controllers on site when needed to assist in Student and Employee movements, as well as site deliveries. 3. Traffic management plans to be discussed as part of the induction of subcontractors and periodically at toolbox meetings. 4. Vehicle movements to occur before and after school. Any vehicle movements during school need to be minor deliveries. Avoid deliveries during break times 5. Spotters required for all vehicle movements, and with this job at all times. 6. Slowing down truck movements 7. Clear communication with school and neighbourhood regarding deliveries 8. Drop off/ pick up points for parents – clearly marked out, communicated and implemented by all parties 9. Allocated delivery drop off and pick up zones 10. An internal TMP must be developed to mitigate the risk of vehicle movement and workers. Lloyd Group must delinate clear access for workers to enable them to move around the site safely at all times.					✓		✓	Yes	Yes	Yes	No	Unlikely	Major	M-14		Site Manager		Open		Clause 56-59 of the Work Health & Safety Regulation 2017 [NSW] Traffic Management Guide for Construction Work

ALL	Use of Tools and Equipment for General Tasks.	Workers using tools.	Noise, eye injuries, dust inhalation, electric shock, electrocution	Unlikely	Catastrophic	E-19	**1.** a) All electrical equipment to have a current test and tag b) All tools and equipment must be in good serviceable condition. Damaged equipment will not be allowed on site c) Guards must be fitted, and not tampered with. d) Equipment must be plugged into a RCD protected outlet. e) Where necessary; workers must be trained in the correct use of the tools and equipment f) Correct use of appropriate eye, hearing and respiratory protection as per the contractors SWMS. g) Electrical leads must be suspended off the floor on cable stands / hooks	1. Weekly safety walks to be completed to capture testing and tagging. If there is no tag or the tag is past its expiry date it is to be tagged 'out-of-service' and removed from use until tested. 2. Consult with site workers at toolbox meeting's to remind them to check tags				✓		✓	Yes	No	No	No	Unlikely	Major	M-14		Site Manager		Open	Clause 148-165 of the Work Health & Safety Regulation 2017 [NSW] Hazardous Manual Tasks - Code of Practice Manage Electrical Risks - Code of Practice AS/NZS 3760:2010
ELECTRICAL CONTRACTOR	Providing temporary power to site	Electricity	Incorrect power supply to site results in the electrocution of workers. Disruption of power supply. Fines by the regulator.	Possible	Catastrophic	E-22	**1.** a) Isolation of electrical supply by qualified Grade A electrician. b) Electricity supplied via Residual Current Device that has been tested (minimum monthly) c) Electrical leads, plugs, and power tools to be tested and tagged three monthly d) Electricity tools and equipment tested and tagged in line with AS/NZS 3760: In-service safety inspection and testing e) Cables over site sheds to be minimum 500mm above shed f) Switchboards fireproofed - cable entries to be capped e) Mandatory PPE to be worn at all times. Insulated gloves and tools to be used where required f) Tradesman trained in high risk electricity work are to be on site at all times. g) Compliance Certificates (CCEW) for temp power boards required to be kept on site h) Ensure work is being carried out in accordance with the SWMS i) Site Manager is to sight and document all relevant qualification for all electrical contractors at site induction j) All electrical works is to be conducted as per the requirments of AS 3012:2020 k) An electrical works permit must be obtained from Lloyd Group prior to the commencement of any works.	No work to be carried out on energised electrical equipment*, unless: 1) it is necessary in the interests of health and safety that the electrical work is carried out while the equipment is energised, or 2) it is necessary that the electrical equipment to be worked on is energised in order for the work to be carried out properly, or 3) it is necessary for the purposes of testing to ensure the equipment is de-energised, or 4) there is no reasonable alternative means of carrying out the work 5) An electrical works permit must be obtained from Lloyd Group prior to the commencement of any works. *A risk assessment is to be carried out prior to any work commencing			✓		✓	✓	Yes	Yes	Yes	Yes	Unlikely	Major	M-14	No	Site Manager		Open	Clause 148-165 of the Work Health & Safety Regulation 2017 [NSW] Managing Electrical Risks in the Workplace - Code of Practice AS/NZS 3000:2018 AS/NZS 3012:2020 AS/NZS 3760:2010
ELECTRICAL CONTRACTOR	Electrical work	Electrical equipment not tested and tagged. Unprotected power source used.	Electrocution, electric shock, burns	Unlikely	Catastrophic	E-19	**1.** a) Isolation of electrical supply by qualified Grade A electrician. b) Electricity supplied via Residual Current Device that has been tested (minimum monthly) c) Electrical leads, plugs, and power tools to be tested and tagged three monthly d) Electricity tools and equipment tested and tagged in line with AS/NZS 3760: In-service safety inspection and testing e) Mandatory PPE to be worn at all times. Insulated gloves and tools to be used where required f) Tradesman trained in high risk electricity work are to be on site at all times. g) Compliance Certificates for temp power boards required to be kept on site h) Site Manager is to sight and document all relevant qualification for all electrical contractors at site induction at the time of site induction. i) An electrical works permit must be obtained from Lloyd Group prior to the commencement of any works. j) All extension leads must be properly fed through the access hole in the bottom of all temporary distribution boards on suite at all times.	1. Up-to-date test and tag register to be maintained on site at all times 2. Any untagged electrical equipment to be tagged 'out-of-service' and removed from site 3. An electrical works permit must be obtained from Lloyd Group prior to the commencement of any works.			✓		✓	✓	Yes	Yes	Yes	No	Rare	Major	M-10		Site Manager		Open	Clause 148-165 of the Work Health & Safety Regulation 2017 [NSW] Managing Electrical Risks in the Workplace Code of Practice AS/NZS 3000:2018 AS/NZS 3012:2020 AS/NZS 3760:2010
ELECTRICAL CONTRACTOR	Electrical work at height	Working at heights - (Ladders)	Fall from height Falling objects	Possible	Catastrophic	E-22	**1.** a) Industrial type ladders complying with AS/NZS to be used on site - which are clearly labelled b) Extension or Platform Type Industrial Ladders rated at 120kg (minimum) are to be used and in a serviceable condition- no damage / defects c) A-Frame ladders are not permitted d) Ladder must be fit for purpose e) Ladders to be set up on a solid, secure, flat base f) Three Points of contact at all times g) Only tool that can easily be operated with 1 hand should be used on ladders, h) Work must be carried out facing the ladder at all times i) Do not overreach from ladders j) Do not setup ladders behind or obstructing doorways k) No more than 1 person on a ladder at any time. l) For electrical work insulated ladder are to be used m) Do not use ladders within 3 metres of an exposed edge or guardrail, where a person could fall over that edge n) Extension ladders to be placed on solid flat surface at 4 (vertical) to 1(horizontal) ratio and secured top and bottom from movement. o) The feet of the person using the ladder must never be higher than the third tread from the top plate p) Extension ladders used for access need to extend 900mm above the deck q) Mandatory PPE to be worn at all times r) Tool lanyards / belts should be worn where practical	1. Wherever possible, an EWP, scissor lift or mobile scaffold is to be used. 2) The site supervisor is to monitor daily, the use of ladders to ensure compliance and suitability to the task. 3) Height Safety is to be a regular discussion point at toolbox meetings 4) Where necessary, establish exclusion zones around ladder to prevent people coming into contact with ladder - this also serves as a drop-zone		✓	✓				Yes	Yes	Yes	No	Unlikely	Major	M-14		Site Manager		Open	Clause 54 of the Work Health & Safety Regulation 2017 [NSW] Clause 78-80 of the Work Health & Safety Regulation 2017 [NSW] Clause 148-165 of the Work Health & Safety Regulation 2017 [NSW] Managing the Risk of Falls at the Workplace Code of Practice Managing Electrical Risks in the Workplace Code of Practice AS/NZS 1892.5:2000 AS/NZS 3000:2018 AS/NZS 3012:2020 AS/NZS 3760:2010
ELECTRICAL CONTRACTOR	Electrical work.	Working at heights - (EWP / Scissor Lift) Mobile Plant	Fall from height Suspended Worker Falling objects Contact by mobile plant	Possible	Catastrophic	E-22	**1.** a) Positive communication with others around you b) Establish an exclusion zone or utilise a spotter c) Fill out daily pre-start log book prior to operation d) Only operate as per the manufacturers guidelines e) Never lean over, hang off, or climb basket railing f) Harness required for EWP Operator / passenger and the harness must be legged into the site harness register. g) Check harness prior to use (harness to be tagged and free from damage / fraying) h) Heights rescue plan to be in place and all workers must have training in working at heights. **2.** Only ticketed / licenced operators to operate mobile elevated working platforms: Boom lift >11m: HRWL (WP) required Boom lift<11m or scissor lift: Yellow Operator Card required	1. Ensure Heights rescue plan is incorporated ion the SWMS. All involved personnel to be briefed on rescue plan prior to commencing work		✓	✓		✓	✓	Yes	Yes	Yes	No	Unlikely	Moderate	M-9		Site Manager		Open	Clause 54 of the Work Health & Safety Regulation 2017 [NSW] Clause 78-80 of the Work Health & Safety Regulation 2017 [NSW] Clause 214-215 of the Work Health & Safety Regulation 2017 [NSW] Managing the Risk of Falls at the Workplace Code of Practice Managing Electrical Risks in the Workplace Code of Practice AS/NZS 3000:2018 AS/NZS 3012:2020 AS/NZS 3760:2010
ELECTRICAL CONTRACTOR	Roughing in cable.	Hanging cable. Coiled cable on the floor.	Eye injuries. Slip, trip and falls.	Possible	Minor	M-6	**1.** a) Ensure all cabling is rolled up and not hanging down at eye level b) All excess cabling on the ground is to coiled and out of walkways. c) Ensure all off-cuts, and other materials are regularly removed and clear of walkways d) Where possible, estcablish exclusion zone to barricade off trip hazards **2.** Electrical work to be carried out by appropriately licenced individuals (NSW contractor licence)				✓			✓	Yes	Yes	Yes	No	Unlikely	Minor	L-5		Site Manager		Open	Clause 148-165 of the Work Health & Safety Regulation 2017 [NSW] Managing Electrical Risks in the Workplace Code of Practice AS/NZS 3000:2018
ALL	Using lasers.	Use of class 2 laser Use of class 3 laser (class 3a and above are a higher risk rating)	Retinal and other eye damage risk / irradiation	Unlikely	Moderate	M-9	**1.** a) Caution signage to be in place prior to the works b) Switch laser off when not in use c) Laser to be used as per manufacturers instructions d) Laser Safety Officer Laser used according to Australian Standards **2.** Workers operating laser equipment must be trained in the proper use of the equipment						✓		Yes	Yes	Yes	No	Unlikely	Minor	L-5		Site Manager		Open	Clause 223 of the Work Health & Safety Regulation 2017 [NSW] AS 2397:2015
ALL	Handling materials	Sharp materials / manual handling injuries	Cuts and lacerations to workers / crush injury / contusions / sprains / strains	Likely	Moderate	M-12	**1.** a) Use of cut resistant gloves – equal or better than Ansell Hy-flex Dyneema11/624. b) Cover or remove sharp edges c) Long sleeve shirt and trousers d) Use of mechanical aids to remove waste materials, e.g. wheel barrow or motorised loader e) Use of correct manual handling techniques; avoid twisting, bend your knees and keep your back straight f) Do not attempt to individually lift more than 20kg. g) Team Lifts h Maintain clear walkways; Access routes cleared of trip / slip hazards i) wear gloves	1. Ensure bar caps are placed on all exposed reo bars			✓			✓	Yes	No	No	No	Unlikely	Insignificant	L-2		Site Manager		Open	Clause 78-80 of the Work Health & Safety Regulation 2017 [NSW] Hazardous Manual Tasks - Code of Practice
STRUCTURAL STEEL TRADE	Crane and hoist movement on site	Plant vs person interaction Suspended Loads Crane failure / rollover Contact with overhead electrical services	Public or other workers struck by plant or falling objects Risk of crush / fatality Electric shock / electrocution	Possible	Catastrophic	E-22	**1.** a) Documented Traffic Management Plan is to be in place (where required) b) Traffic controllers certified (if required) c) High visibility clothing for all site personnel d) Adequate separation by barricading and using relevant signage to create an exclusion zone around the work area from moving traffic, pedestrians and other workers. e) Barricade is to be put in place to protect existing buildings from damage. f) communicate with other workers the nature of the works and exclusion zones via site meeting (Especially if in a shared area) g) Only tagged and tested lifting gear to be used - check prior to use h) Crane to be operated in accordance with manufacturers instructions i) Outriggers to be fully extended on a firm, stable surface j) Load charts to be adhered to k) Plant pre-starts to be completed l) never move a suspended load over the top of people or plant m) utilise a spotter if working in the vicinity of overhead power lines n) Lifting register reports must be provided by the contractor to Lloyd Group prior to the commencement of any work. o) A geotech report must be undertaken prior to all works where the outriggers of a crance will be placed on unstable ground.	1. Only ticketed Crane Operators and Dogman to be in the exclusion zone. 2. Under no circumstances shall anyone be positioned underneath a suspended load 3. Copies of plant certificates and licences to be recorded by the supervisor 4. Plant to be recorded on the plant register			✓		✓	✓	Yes	Yes	Yes	No	Unlikely	Major	M-14		Site Manager		Open	Clause 81-85 of the Work Health & Safety Regulation 2017 [NSW] Manage Risks of Plant in the Workplace AS 2550.5:2016 AS 4497:2018 Safe Work General Guide for Cranes Guide for Overhead & Underground Electric Lines

ALL	Unidentifiable materials.	Coming into contact with unidentified materials	Exposure to hazardous materials.	Possible	Moderate	M-13	1. a) Evacuation Plan to be detailed in the Site Emergency Plan, and communicated to all employees. b) Asbestos and Unidentified Materials Procedure to be implemented if required.	1. Site Manager to be contacted as a priority					✓	✓	Yes	No	No	No	Unlikely	Minor	L-5		Site Manager		Open	Clause 419-529 of the Work Health & Safety Regulation 2017 [NSW] How to Safely Remove Asbestos - Code of Practice Managing Risks of Hazardous Chemicals in the Workplace - Code of Practice
ALL	Hazardous Materials presence in the workplace	Working with and around Asbestos, PCBs and Mineral Fibre. Lead-exposure, disease. Wrongful disposal.	Contact with carcinogens Contact with other hazardous materials and chemicals. Synthetic Mineral fibre exposure. Asbestos, PCBs, lead-exposure, disease, wrongful disposal.	Possible	Major	H-18	1. a) Hazardous Materials Survey to be considered if hazardous materials suspected. b) Exclusion zone to be established and signage established to prevent unauthorised access of contaminated areas. c) Asbestos or other hazardous materials presence must be clarified - management plan may need to be developed by specialist removalists. d) Encapsulation/isolation of hazardous materials during removal processes. e) If hazardous materials are being installed on site (i.e. Rockwool, Fibreglass etc) it shall be handled, stored and installed in accordance with the Product Information Sheet and SDS. f) Task appropriate PPE (long clothing and respiratory protection required) 2. Licensed removalist (controls depend on type of hazardous material).	1. Management Plans to be made available to all subcontractors. 2. SDS folder to be accessible in the site office 3. Asbestos Register to be maintained on site			✓		✓	✓	Yes	Yes	Yes	No	Rare	Moderate	L-6		Site Manager		Open	Clause 419-484 of the Work Health & Safety Regulation 2017 [NSW] How to Safely Remove Asbestos - Code of Practice Managing Risks of Hazardous Chemicals in the Workplace - Code of Practice
EXCAVATION CONTRACTOR	Earthworks	Underground or buried services	Contact with underground or buried services resulting in injuries or disruption to services affecting the community.	Possible	Catastrophic	E-22	1. a) A site survey is to be undertaken prior to any excavation works to ensure any unidentified services that may exist are identified. b) Identify services using the existing services drawings as well as contacting Dial Before You Dig and clearly define position and depth of all services identified. c) Clearly mark out services. d) Where possible isolate any existing services and hand dig an inspection hole to expose services. e) A Spotter is required to monitor distance from power sources (no-go zone). Positive communication at all times f) Approved excavation and trenching permit required prior to starting work 2. Only competent Excavator Operators allowed to operate excavator (minimum VOC required) Statement of Attainment preferred.	1. The subcontractors SWMS are to identify the hand digging inspection holes to identify depth and position of all services. 2. A toolbox meeting is to be held with the subcontractor to discuss the identification of live services or isolated services and ensure they are clearly identified prior to commencement of work. 3. DBYD plans and existing services drawings to be displayed on site		✓	✓		✓	✓	Yes	Yes	Yes	Yes	Unlikely	Moderate	M-9		Site Manager		Open	Clause 304-306 of the Work Health & Safety Regulation 2017 [NSW] Excavation Work - Code of Practice Managing the Risks of Plant in the Workplace - Code of Practice Guide for Overhead & Underground Electric Lines
ALL	Working in and around power sources	Drilling, holing or other activities in areas where power sources may be present.	Electrocution through contact with live wiring, use of electricity tools and equipment electrocution, electric arc, electric shock, burns.	Possible	Catastrophic	E-22	1. a) Isolation of power as per risk assessment and permit to work completed. b) All services located and marked on drawings c) Electricity supplied by Residual Current Device that has been tested d) Approved excavation and trenching permit required prior to starting work e) A Spotter is required to monitor distance from power sources (no-go zone). Positive communication at all times 2. Only competent Excavator Operators allowed to operate excavator (minimum VOC required) Statement of Attainment preferred.	1. The subcontractors SWMS are to identify the hand digging inspection holes to identify depth and position of all services. 2. A toolbox meeting is to be held with the subcontractor to discuss the identification of live services or isolated services and ensure they are clearly identified prior to commencement of work. 3. DBYD plans and existing services drawings to be displayed on site			✓	✓	✓	✓	Yes	Yes	Yes	Yes	Unlikely		M-10		Site Manager		Open	Clause 166 of the Work Health & Safety Regulation 2017 [NSW] General Guide for working in the vicinity of overhead and underground electric lines Manage Electrical Risks - Code of Practice Manage Risks of Plant in the Workplace - Code of Practice AS/NZS 3760:2010
EXCAVATION CONTRACTOR	Excavation Work - Planning an excavation	Adjacent buildings and structures at risk Work area unsecured - Insufficient preparation or site security Materials and loads in proximity to planned excavation	Collapse of adjacent structures and property loss/damage	Unlikely	Catastrophic	E-19	1. a) Develop plan/SWMS in consultation with excavation contractor, plant operator and consult geotechnical advisor regarding design of excavation structure. b) Designer of structure may also need to be consulted depending on the nature and risk of the excavation to neighbouring structures. c) Consult BOM regarding weather effects to ensure safe to proceed. Mandatory: d) Excavation and trenching procedure e) Excavation and trenching permit f) DBYD Dial before you dig must be consulted prior to any excavation works g) Lloyd Group must ensure the delineation of plant and workers by an appropriate means h) For all excavations deeper than 1.5 metres, shoaring must be used, or a geotech report	1. Excavation work is or involves high risk construction work, a person conducting a business or undertaking must prepare a SWMS before the high risk construction work starts.			✓		✓	✓	Yes	Yes	Yes	Yes	Rare	Major	M-10		Site Manager		Open	Clause 81, 304-306 of the Work Health & Safety Regulation 2017 [NSW] Excavation Work - Code of Practice Manage Risks of Plant in the Workplace - Code of Practice
EXCAVATION CONTRACTOR	Excavation & Removal of Contaminated soils - Lead & other	Contact with Hazardous Materials	Worker contact with contaminated soils, Lead exposure	Possible	Moderate	M-13	1. a) Soil testing to be undertaken to determine the extent of the contamination. b) Dust suppression techniques to be used during excavation c) Any stockpiled soil is to be covered d) Waste disposal – licensed transported and landfill and records of disposal. e) Correct PPE to be worn f) Exclusion zone to be established and signage established to prevent unauthorised access of contaminated areas. 2. Only competent Excavator Operators allowed to operate excavator (minimum VOC required) Statement of Attainment preferred.	1. Excavation work is or involves high risk construction work, a person conducting a business or undertaking must prepare a SWMS before the high risk construction work starts. 2. Discuss exclusion zone at daily prestart, and carry out daily checks on exclusion zone			✓		✓	✓	Yes	Yes	Yes	Yes	Unlikely		L-5		Site Manager		Open	Clause 304-306 of the Work Health & Safety Regulation 2017 [NSW] Excavation Work - Code of Practice Manage Risks of Hazardous Chemicals in the Workplace Manage Risks of Plant in the Workplace - Code of Practice
EXCAVATION CONTRACTOR	Excavations and plant movement on site	Contact with overhead services	Electrocution, disruption of power and communication services.	Rare	Catastrophic	H-15	1. a) All above ground services are to be highlighted with Danger Tags, avoid working near above ground services where ever possible. b) Where works are being completed near live above ground services, a spotter is required. - NO GO ZONES c) A spotter who has successfully completed an accredited spotter-training course is required where excavation work is being completed near overhead power lines. d) Plant should never work within the NO GO ZONE distances, unless they have written approval from the relevant power supply company. e) Ensure appropriate signs are in place and barricading (Where Required). 2. Only competent Excavator Operators allowed to operate excavator (minimum VOC	1. Site Supervisor is to ensure that: - All above ground services are highlighted with danger tape. - A toolbox meeting is to be held with the contractor prior to any excavation to review their SWMS, ensure the NO GO ZONES are highlighted and the operators are aware of the rules.			✓		✓	✓	Yes	Yes	Yes	Yes	Rare	Moderate	L-6		Site Manager		Open	Clause 304-306 of the Work Health & Safety Regulation 2017 [NSW] Excavation Work - Code of Practice Manage Risks of Hazardous Chemicals in the Workplace Manage Risks of Plant in the Workplace - Code of Practice
EXCAVATION CONTRACTOR	Excavation works	Unknown underground essential services Unstable weather conditions	Hitting underground essential services - local outage, injuries to persons, fire, flood Structural collapse	Unlikely	Catastrophic	E-19	1. a) A site survey is to be undertaken prior to any excavation works to ensure any unidentified services that may exist are identified. b) Identify services using the existing services drawings as well as contacting Dial Before You Dig and clearly define position and depth of all services identified. c) Clearly mark out services. d) Where possible isolate any existing services and hand dig an inspection hole to expose services. e) A Spotter is required to monitor distance from power sources (no-go zone). Positive communication at all times f) Approved excavation and trenching permit required prior to starting work 2. Only competent Excavator Operators allowed to operate excavator (minimum VOC required) Statement of Attainment preferred.	1. The subcontractors SWMS are to identify the hand digging inspection holes to identify depth and position of all services. 2. A toolbox meeting is to be held with the subcontractor to discuss the identification of live services or isolated services and ensure they are clearly identified prior to commencement of work. 3. DBYD plans and existing services drawings to be displayed on site			✓		✓	✓	Yes	Yes	Yes	Yes	Unlikely	Moderate	M-9		Site Manager		Open	Clause 304-306 of the Work Health & Safety Regulation 2017 [NSW] Excavation Work - Code of Practice Manage Risks of Plant in the Workplace - Code of Practice
ALL	Excavation and trenching	Trench collapse.	Engulfment of workers.	Possible	Catastrophic	E-22	1. a) All trenches and excavations (with a depth greater than 1.5 metres) are subject to a risk assessment and made safe by providing a ground support system, a steel shield or all walls battered back at a safe angle (or benched Spoil kept 0.5 m from edge) b) A SWMS is to be developed for all trenching/excavation tasks, The SWMS includes control measures for the safe use of, excavation plant, Employees have been inducted into the SWMS relevant to, their trenching or excavation work c) All trenching and excavation operations should be subject to daily monitoring by the site supervisor to make sure that specific SWMS safety controls and the following safety requirements are observed. d) No person ever enters an unsupported section, trenching supports are appropriate to the conditions (i.e. the need or otherwise for trench shields, close sheeting or benching) e) Spoil heaps are properly positioned at least 0.5 metres from the edges of the trench f) Safe ladder access, with side guarding is provided into the trench g) No person is working alone in an excavation h) persons do not remain in close proximity to where an excavator is operatin (slew zone) i) the excavation is protected by parawebbing barricades j) ensure workers in excavations are not exposed to an accumulation of hazardous fumes including fumes from petrol or diesel vehicles k) Contractos must use shoaring where excavations are more than 1.5 meters deep, unless the geotech report states otherwise. 2. Only competent Excavator Operators allowed to operate excavator (minimum VOC required) Statement of Attainment preferred.	1. Record of inspection and maintenance relevant to the plant. 2. Create an exclusion zone around plant, Reverse alarms and flashing light working, Correct PPE for all site workers e.g. Hard hat, High Visibility Clothing, Establish Eye contact with the Plant operator if entering the area. 3. Consult with other site personnel at toolbox meeting to explain where exclusion zones/barricades will be. 4. Permit to Excavate required before works commence			✓	✓	✓	✓	Yes	Yes	Yes	Yes	Rare	Moderate	L-6		Site Manager		Open	Clause 291-306 of the Work Health & Safety Regulation 2017 [NSW] Excavation Work - Code of Practice Manage Risks of Plant in the Workplace - Code of Practice
FRP CONTRACTOR	Formwork	Storage and handling timber and frames.	Slips, Trips, Falls, Manual Handling Injuries	Possible	Moderate	M-13	1. a) Ensure work areas are free from trip hazards b) Ensure walkways are free from trip hazards c) barricade off materials, maintain a clear path of access to all work areas. d) Ensure materials are laid flat and not leaning up against other items where they could be knocked over	1. Weekly site walk through must be conducted - look specifically at storage and lay down areas. 2. Formworker required to clean deck daily and ensure free from debris.			✓		✓	✓	Yes	Yes	Yes	No	Possible	Insignificant	L-4		Site Manager		Open	Clause 219-226 of the Work Health & Safety Regulation 2017 [NSW] Guide to Formwork

FRP CONTRACTOR	Installing re bars	Starter Bars and other protrusions. Excavations, piling holes.	Impalement, cuts, and abrasions. Engulfment.	Unlikely	Major	M-14	**1.** a) Exposed re-bar to have ends capped as soon as reasonably practicable b) cut resistant gloves and long clothing to be worn c) ensure any penetrations are covered and warning signs in place d) ensure work area is barricaded.	1. Where practicable, eliminate the need to work above any starter bars etc, 2. Site Supervisor to review the subcontractor SWMS and ensure control measures are in place to prevent possibility of impalement				✓		✓		Yes	Yes	Yes	No	Rare	Moderate	L-6		Site Manager		Open

Guide to Formwork

Hazardous Manual Tasks - Code of Practice

Lloyd Group Pty Ltd

ENVIRONMENTAL MANAGEMENT PLAN

14. Appendix C – Environmental Policy

Lloyd Group believes the protection and management of our physical and social environment is an integral part of our organisation's daily operations.

Lloyd Group is committed to protecting and preserving the environment in all circumstances, to assist in the provision of a sustainable lifestyle for both present and future generations. We are committed to continual improvement with a goal of meeting or exceeding our client's expectations.

To achieve our commitment, we will:

- develop and implement a systematic approach to the management of environmental aspects and impacts.
- ensure this policy is documented, implemented, maintained and communicated to all employees, subcontractors, clients, and the public as required.
- continuously meet our statutory obligations regarding all relevant federal, state and local regulations and other requirements.
- Continually monitor and assess the needs of stakeholders and other interested parties.
- establishing measurable objectives and targets to improve our environmental performance.
- communicate our environmental management strategies to all staff, contractors and relevant third parties including the public.
- procure products and services based on minimising pollution and waste and promoting recycling principles wherever possible.
- conduct regular training and awareness programs for all management, staff and contractors.
- monitor and audit our environmental processes and management plan with a view to continually improving our environmental management system to enhance environmental performance,
- Comply with the requirements of AS/NZS ISO 14001:2004.

Lloyd Group, through the nature of its operational activities, accepts that it must share and promote the responsibility of Environmental Sustainability and will therefore act in a morally responsible manner at all times.

Dustin Lloyd
Managing Director
28-01-2022

Clinton Lloyd
Managing Director
28-01-2022

15. Appendix D – Community Consultation Strategy

AMITY COLLEGE SCHOOL SSD 9227

PT. LOTS 1 & 2 DP 525996 No. 85 BYRON ROAD & No. 63 INGLEBURN ROAD, LEPPINGTON, NSW

Community Communication Strategy: Early Works and Stage 1

Prepared by:

Outline Planning Consultants Pty. Limited
Town Planning Consultants
Suite 2301,Level 3, Quattro Building
No. 4 Daydream Street
WARRIEWOOD NSW 2102

ABN: 34 003 473 112

Telephone: (02) 9262 3511
www.outline.com.au

On behalf of:

Amity College
163 Kurrajong Road
PRESTONS NSW 2170

Telephone: (02) 8784 3111

June 2021

AMITY COLLEGE SCHOOL PROJECT SSD-9227
Community Communication Strategy: Early Works and Stage 1

Details

Project Name	Amity College New School
Project Application Number	SSD 9227
Description of Project	New Primary School and Secondary School
Project Address	No. 85 Byron Road & No. 63 Ingleburn Road, Leppington
Proponent	Amity College
Title of Report	Amity College School SSD 9227 Community Communication Strategy
Date	June 2021

Author	Gary Peacock
Title	Director
Signature	
Qualification	Bachelor of Town Planning (UNSW)
Company	Outline Planning Consultants Pty Ltd
Company Address	Suite 2301, Level 3, Quattro Building, No. 4 Daydream Street, WARRIEWOOD NSW 2102

Contents

1.Introduction

1.1 1.1 Overview

This Community Communication Strategy has been prepared by Outline Planning Consultants Pty Ltd on behalf of Amity College Australia. It outlines a proposed approach for stakeholder and community communications and engagement throughout the construction of the various approved stages of the new school campus Development Consent SSD-9227 at Leppington, to be operated by Amity College. The new school will ultimately accommodate up to 1,000 students.

This Community Communication Strategy has been prepared to meet the requirements of condition C7 of the development consent for SSD 9227 and is submitted to the Planning Secretary for information purposes only.

The focus here is on the Community Communication Strategy relating to the early works tender package (to be completed by late 2021) as well as the accelerated Stage 1 of the project (to be completed prior to school Term 1 in 2023). Further refinements will be made in regard to later stages of the project.

Due to COVID restrictions face-to-face meetings or like forums are not encouraged. The Strategy will be amended accordingly to include such forums once COVID restrictions are lifted.

The early works tender package comprises the following:

- Clearing of vegetation on the site.
- Re-shaping the site, bulk earthworks.
- Construction of sediment and erosion control devices and stormwater drainage measures.
- Excavation work including Primary School basement car park area.
- Creation of stockpiles and importation of approved fill to the site.Provision for construction parking and construction compound.

The revised Stage 1 of the School project involves accelerating Stages 1-4 of the following:

- Construction of a new Primary School building complex, fronting Pluto Avenue.
- Construction of basement car park under the Primary School building.
- Provide accommodation for up to 300 students in a new primary School building complex.
- Provide 45 car parking spaces in a basement car park.
- Provide 17 pick up/drop off area at the front of the new Primary School.
- Provision of substantial areas dedicated to open space, landscaping, and school student play areas.
- Parking area for construction compound.

The Community Communication Strategy provides mechanisms to facilitate communication between the Amity College, Camden Council and the community (including adjoining affected landowners and businesses, and others directly impacted by the development), during the design and construction of the development and for a minimum of 12 months following the completion of construction of each relevant stage. Refer to **Figures 1.1** and **1.2**.

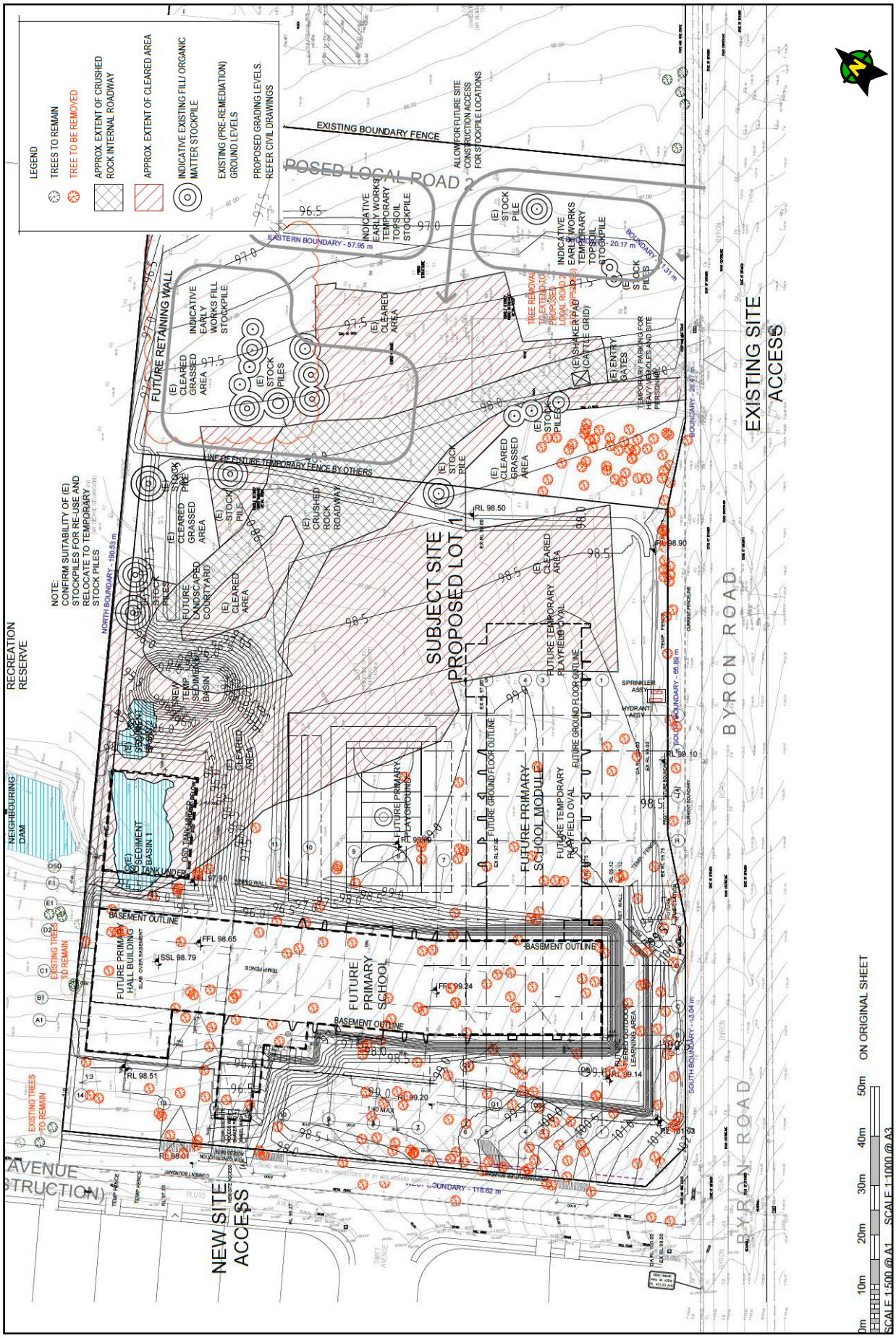
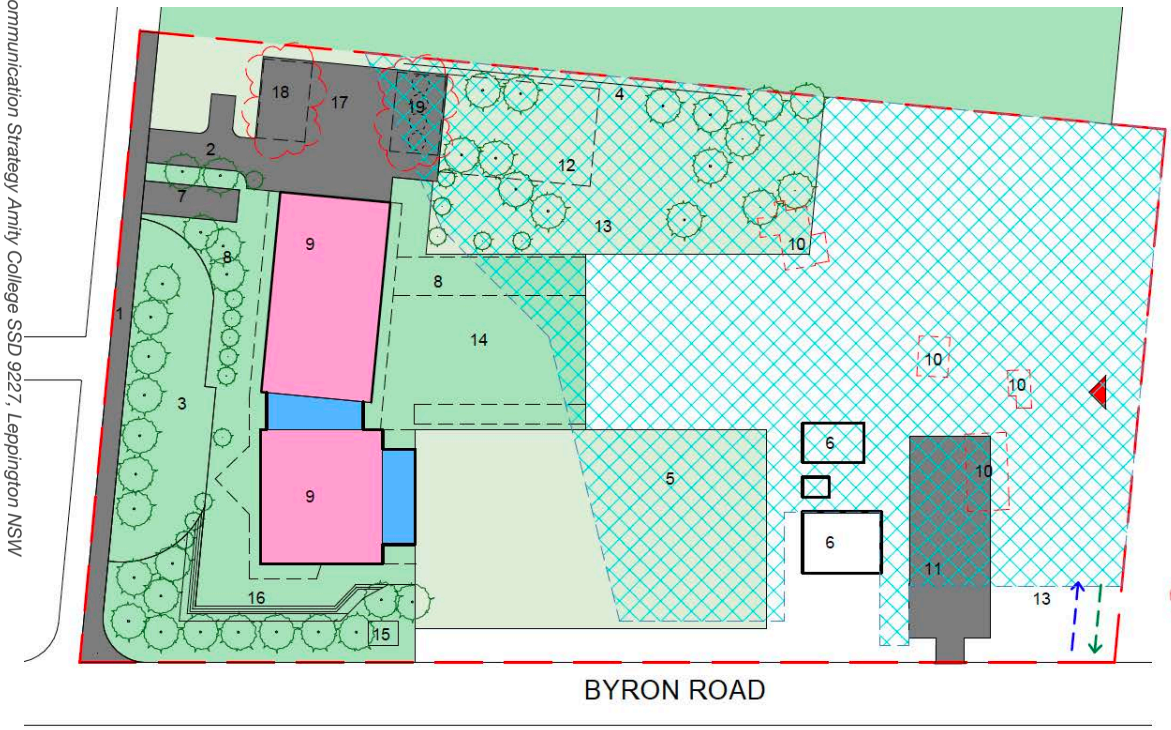


FIGURE 1.1: Early works proposed



STAGE 1

1. COMPLETE REMAINING PORTION OF ROAD AND FOOTPATH RESERVE (INCLUDES WORKS RELATING TO CONNECTION WITH BYRON ROAD)
2. LOADING ZONE
3. DROP OFF PARKING AND LANDSCAPING
4. RETAINING WALLS FOR FUTURE TERRACED LANDSCAPING ALONG THE BOUNDARY.
5. TEMPORARY PLAY FIELD/ OVAL.
6. FACILITIES - MAINTENANCE/ CONSTRUCTION (DEMOUNTABLE).
7. DRIVEWAY TO BASEMENT PARKING.
8. LANDSCAPING AND OUTDOOR LEARNING AREAS.
9. TWO STOREY PRIMARY HOME BASE MODULES WITH BASEMENT PARKING BELOW AND LINKS.
10. DEMOLISH EXISTING BUILDINGS.
11. TEMPORARY MAINTENANCE AND CONSTRUCTION PARKING.
12. ONSITE DETENTION TANK .
13. LANDSCAPED COURTYARD WITH TREE PLANTING AND GRASS.
14. PRIMARY COURTYARD WORKS.
15. SUBSTATION.
16. TERRACED LEARNING AREA EXCAVATION AND LANDSCAPING.
17. SLAB ON TOP OF BASEMENT AND GRASSED BATTER
18. FIRE SERVICES UNDERGROUND TANK & PUMP ROOM
19. RAINWATER HARVESTING TANKS

NOTE:
1. LANDSCAPING REFERS TO ROAD AND SOFT WORKS
2. SOIL, REMEDIATION, EXCAVATION AND FILL AS REQUIRED

FIGURE 1.2: Accelerated Stage 1 works proposed

1.2 1.2 Features of this Community Communication Strategy

The Community Communication Strategy has the following features:

- It will be updated to include the revised scope of works prior to the commencement of works of each stage of the development and include additional communication strategies, where relevant. In this regard, the school development has been approved over a number of stages which will take 10 or more years before completion. This Strategy focuses on the early works and revised Stage 1 (basically accelerated stages 1-4) of the project.
- The Strategy identifies people to be consulted during the various stages of the Amity College school project.
- The Strategy sets out procedures and mechanisms for the regular distribution of accessible information about or relevant to the Amity College school project.
- SSD 9227 consent condition C7(d) provides for the formation of community-based forums, if required, that focus on key environmental management issues for the development.
- The Strategy sets out procedures and mechanisms:
  - through which the community can discuss or provide feedback to Amity College;
  - through which Amity College will respond to enquiries or feedback from the community; and
  - resolve any issues and mediate any disputes that may arise in relation to construction and operation of the development, including disputes regarding rectification or compensation.
- SSD 9227 consent condition C7(f) provides that the the Strategy is to include any specific requirements around traffic, noise and vibration, visual impacts, amenity, flora and fauna, soil and water, contamination, heritage.

Community involvement does not just not stop there, as Amity College intends to not only to involve the community during the construction of the school, but also aims to allow the use of its school facilities by the community. Refer to Section 1.6 for further details.

The following Table 1.1 summarises where each of the requirements of SSD 9227 consent condition C7 are addressed in this document.

Table 1.1: Community Communication Checklist

SSD 9227 condition C7 Community Communication Strategy provision	*Where addressed in this Community Communication Strategy document*
"a) be updated to include the revised scope of works prior to the commencement of works of each subsequent stage of the development and include additional communication strategies, where relevant"	*Refer Section 1.1*
"(b) identify people to be consulted during the design and construction phases;"	*Refer Section 4*
"(c) set out procedures and mechanisms for the regular distribution of accessible information about or relevant to the development;"	*Refer Section 5*
"(d) provide for the formation of community-based forums, if required, that focus on key environmental management issues for the development;"	*Refer Section 5*

FIGURE 1.2: The approved Amity College School Campus : overall layout

(Michael Siu Landscape Architects)

amity college

"(e) set out procedures and mechanisms: *(i) through which the community can discuss or provide feedback to the Applicant;* *(ii) through which the Applicant will respond to enquiries or feedback from the community; and* *(iii) to resolve any issues and mediate any disputes that may arise in relation to construction and operation of the development, including disputes regarding rectification or compensation;*	*Refer Sections 7 & 8*
"(f) include any specific requirements around traffic, noise and vibration, visual impacts, amenity, flora and fauna, soil and water, contamination, heritage."	*Refer Section 2.3*

1.3 1.3 A Community in Transition to Urban Uses

The Community Communication Strategy will be strongly influenced by the nature of the surrounding neighbourhood and development, both now and into the future.The Amity College school site and the surrounding area forms a part of the Leppington Priority Precinct, rezoned in 2015 as a part of *State Environmental Planning Policy (Sydney Region Growth Centres) 2006.* Refer **Figure 1.3**.This rezoning not only specifically rezoned the Amity College site for the specific purpose of a school, it also set in place new zonings that would allow for the transformation of what was a rural area on the urban fringe of South-West Sydney into one accommodating up to 2,500 new homes and an population of more than 7,700 residents (Stage 1 only).

When the Amity College project was approved in July 2020 the surrounding area comprised small rural acreages with small pockets of land being developed for urban residential purposes. Since that time, a residential housing estate adjoining the school site to the south, fronting Pluto Avenue, has been developed, with further pockets of land being further developed for residential housing to the south and to the east of the Amity College school site. The message is clear: the area is being rapidly transformed into a residential housing area, with an increasing residential population surrounding the Amity College school site. Refer **Photograph 1**.

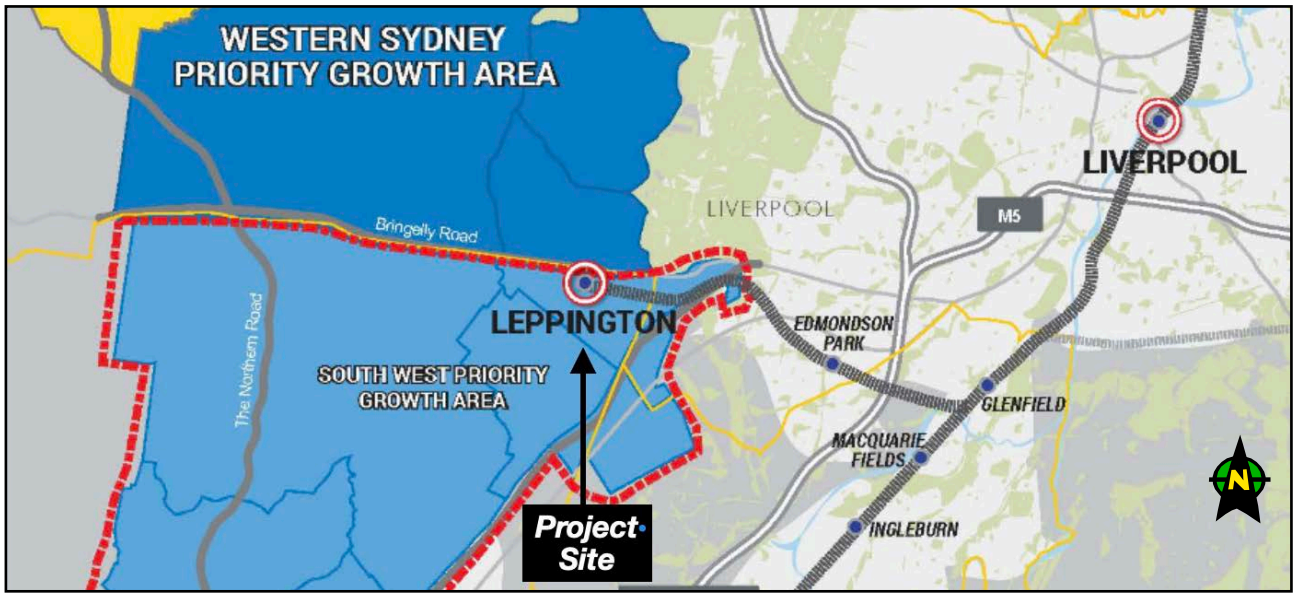
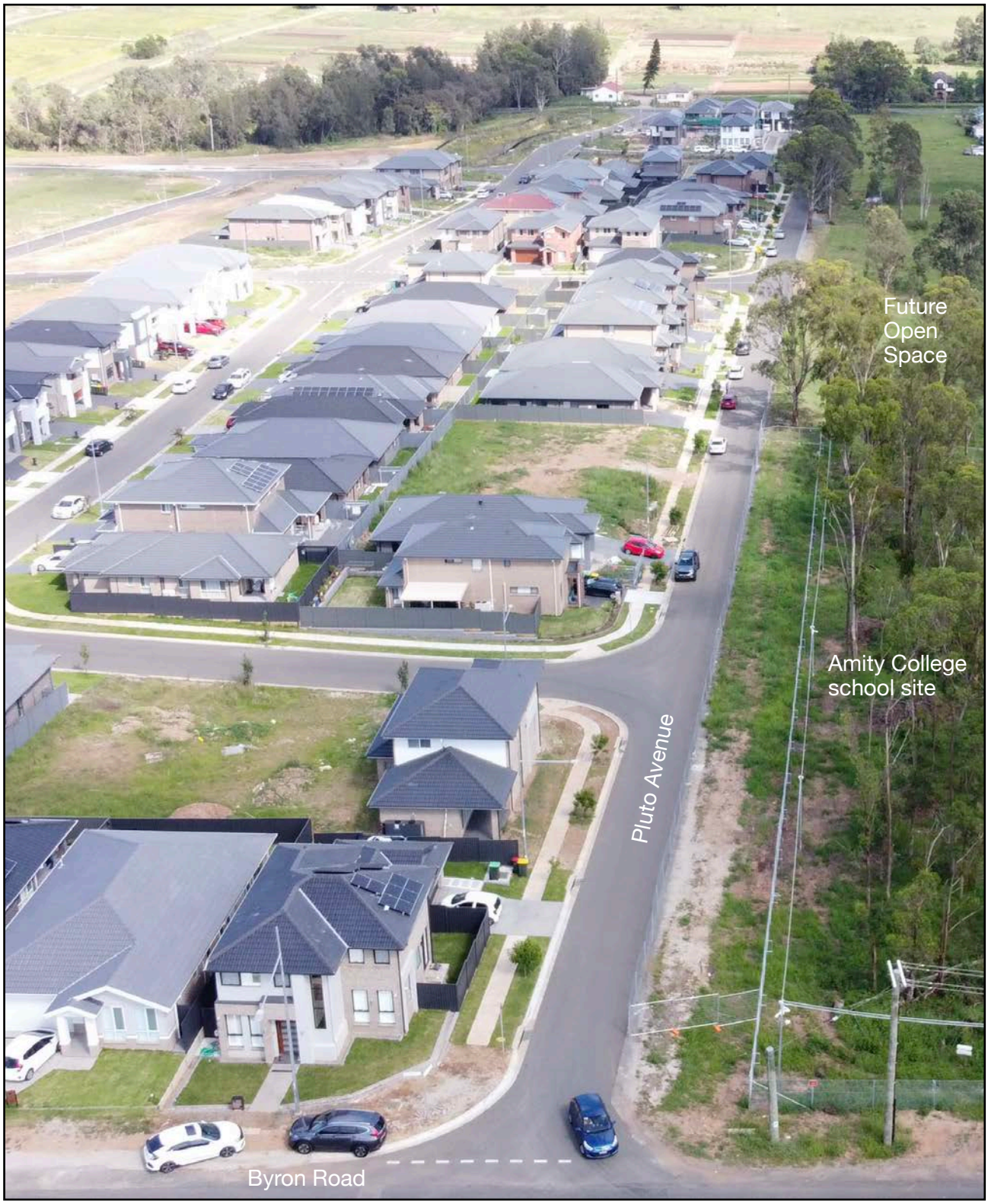


FIGURE 1.3: The Project Site is located at Leppington, in Sydney's South West Priority Growth Area



PHOTOGRAPH 1: LeppingtonPriority Precinct is a rapidly growing urban area. When the DA was lodged for the Amity College project, in August 2019, the land adjoining to the south was a 'greenfields' site with no housing development. By the time the SSD 9227 DA was approved, in July 2020, a new housing estate was well established, sharing a common frontage with the school to Pluto Avenue. These dwellings are the most proximate to Stage 1 of the school project. (Drone photography January 2021)

Add to this the fact that at the southern end of Byron Road is another approved school campus, to be run by the Sydney Anglican Schools Corporation, with an ultimate school population of 894 students. The influence of both schools will be felt on the local community. Once the two schools are completed there will be two large school campuses located at either end of Byron Road, with Byron Road is likely to become a transport artery heavily used by school students, parents and teachers alike, with cycleways planned to run along the entire length of this road.

The above presents both challenges and opportunities in terms of devising an appropriate strategy for Amity College in communicating with this growing community.

1.4 About the Overall Amity College School Project

Amity College is building a new school at 85 Byron Road, Leppington. The project will deliver the staged construction and operation of a new kindergarten, primary school and high school, including the following:

- Construction of multiple school buildings (two to four storeys) for up to 1,000 primary and secondary students (Kindergarten – Year 12).
- Construction of two multi-purpose halls, one serving the primary school, the other serving the secondary school.
- Playing courts, open spaces and covered outdoor learning areas (COLAs).
- Library and administration block, including canteen.
- Bus bay located on Byron Road.
- On-site car parking spaces, including basement car parking doe the secondary school and primary school buildings.
- Stormwater, landscaping works and external roadworks, the latter including widening of Pluto Avenue, Byron Road and construction of a new local street on the northern perimeter of the site.

Refer **Figure 1.4**, which shows the overall layout of the approved school.

NOTE: This Strategy focusses on the early works and revised Stage 1 of the project.

Designed by leading architectural firm, Gran Associates Australia, with input from specialist consultants and informed by the latest thinking in the design of modern teaching and learning spaces, the purpose-built school that will deliver a quality learning and working environment for both students and staff. This project was granted approval in July 2020 as State Significant Development SSD 9227.

Site preparation will involve site remediation followed by clearing of trees & vegetation and earthworks. The construction of the school will be carried out in stages which will result in in a campus comprising buildings of variable height from two storeys on the southern side (primary school), up to three storeys for the secondary school, and a maximum of four storeys for the main administration building. These buildings will be arranged around two north facing play courtyards, opening to the north west towards a larger play area and the future recreation reserve, the latter intended to be co-shared with Council for passive and active play, linked to the school's central open space area.

The bus bay fronting Byron Road, will be constructed in an early stage of the project, capable of accommodating up to five (5) buses or four (4) coaches.

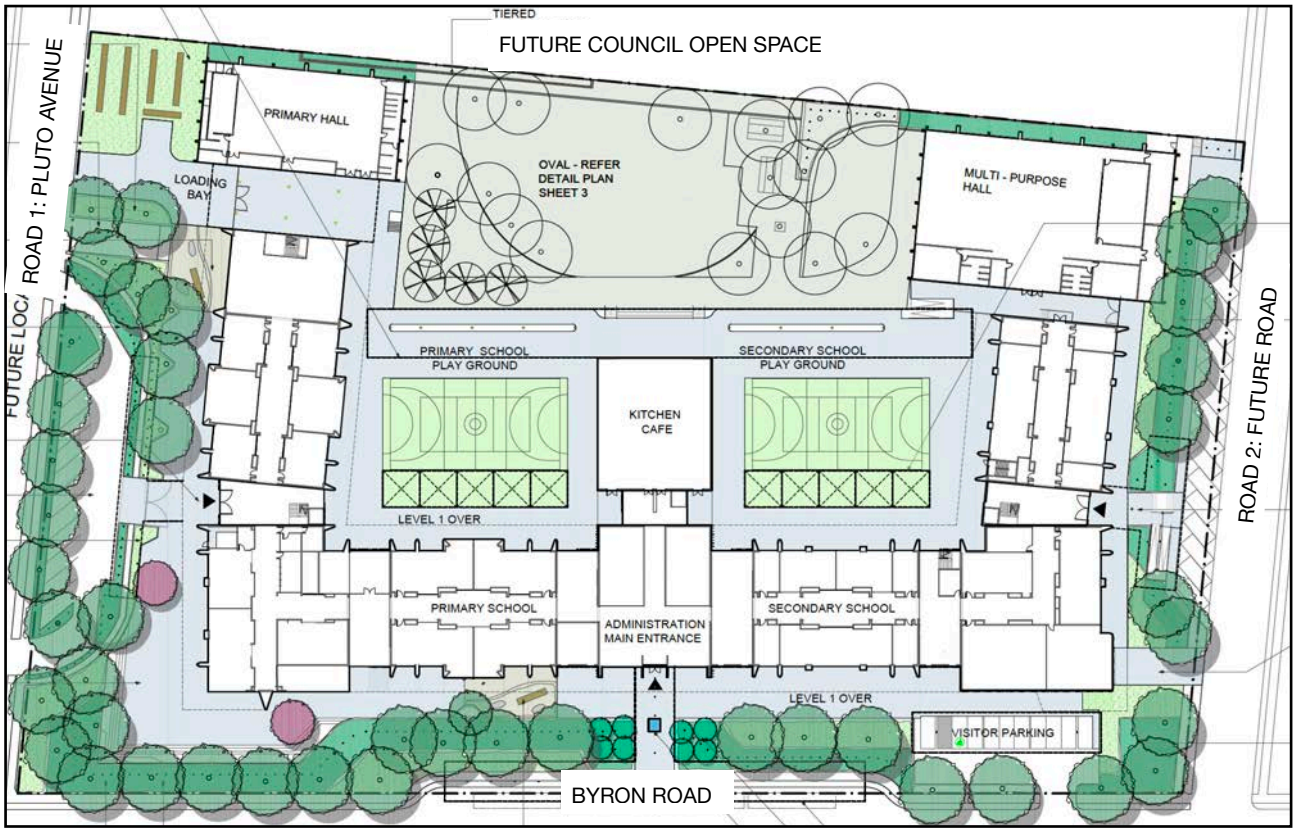


FIGURE 1.4: Approved Amity College School Project Site

(Source: Michael Siu Landscape Architects)

Vehicular access also to be available from two local roads, one that is currently partially constructed (Pluto Avenue, designated as Road 1) and one which is yet to be constructed (designated as Road 2).

Once the school development is fully developed, it will have capacity to accommodate a total of 104 on-site car parking spaces (94 basement parking spaces plus 10 drop-off spaces), plus parallel bays capable of accommodating a further 7 cars. A further 15 angled on street car parking spaces are proposed on the northern local road (Road 2).

Landscaping of the school campus incorporates formal and informal outdoor learning areas, general congregation and circulation areas, an 'inner green' and 'outer green' lawn areas, canopy shade trees, perimeter mass planting and canopy tree plantings, and seating.

The general hours of operation for the school for all stages will be between 7.00am and 9.00pm (source: the hours of operation of educational establishments as specified in Section 4.4.3 of *Camden Growth Centre Precincts Development Control Plan*). These operating hours will cover almost all school-related activities, including out-of-hours community use of school facilities.

1.5 1.5 Physical Site Address

Amity College has approval to establish a new primary and secondary school campus on land covering part Lots 1 and 2 in Deposited Plan 525996 No. 85 Byron Road and No. 63 Ingleburn Road, at Leppington (Project Site or Site).

The approved school is located approximately 39km south-west of the Sydney CBD and forms a part of the NSW Government's South West Priority Growth Area within the Camden Local Government Area. The Project Site lies approximately 1.2km away from the Leppington railway station.

Refer **Figure 1.5**.

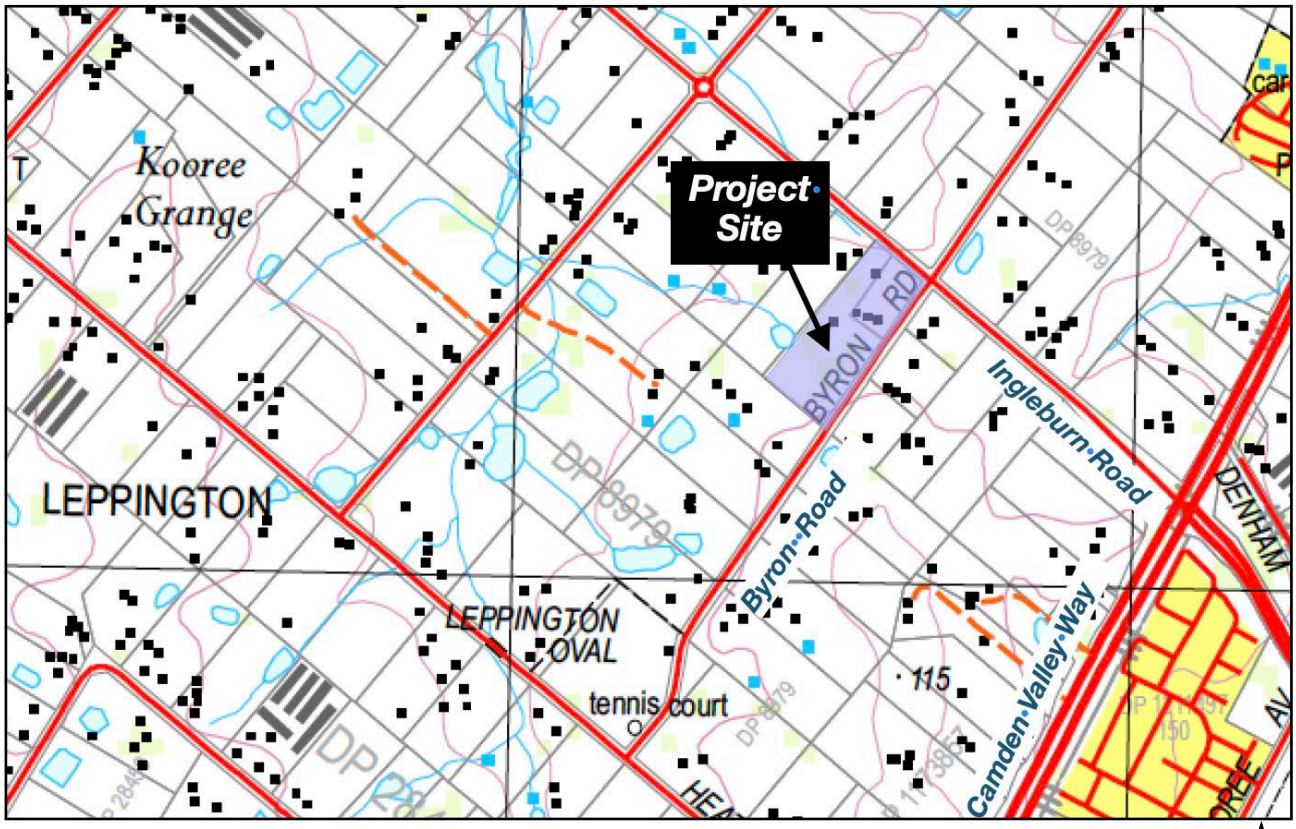


FIGURE 1.5: Location of Amity College School Project Site- shaded

(Map Base Source: excerpt Land and Property Information Liverpool 9030-2S 1:25,000 online map 1km grid)

1.6 1.6 Community Use of School Facilities

Amity College already offers the use of its facilities at it's Prestons and Auburn campuses to the community- principally the use of the multi-purpose hall for sporting and exercise pursuits. A range of school facilities will be made available for use by the wider community outside of normal school hours at the proposed school campus at Leppington, as described in the EIS accompanying the development application, referred to in the issued consent.

Similar to existing arrangements at Amity College's Prestons school campus, the facilities that will be made available to individuals and groups will be only for purposes that are appropriate for a school site. Not-for-Profit organisations will receive preference in facility hire applications.

Amity College school facilities proposed for community use

The following school facilities at the Leppington campus are planned to be made available for community use (refer to **Figure 1.6**):

- Multipurpose School Hall – Secondary (main community use facility). Site 1 on Figure 1.6.
- Primary School Hall – (minimal use). Site 2 on Figure 1.6.
- Lecture Room – Secondary. Site 3 on Figure 1.6.
- Community rooms - Administration building. Site 4 on Figure 1.6.
- General Learning areas – Primary & Secondary. (Most of the primary School to be constructed in Stage 1)
- The drop off/pick up zone at the front of the primary school (Stage 1).

Other potential facilities that may also be available for hire at the School include: Cafeteria, Library, Wood Technology room, Food Technology room, and sports playground areas,

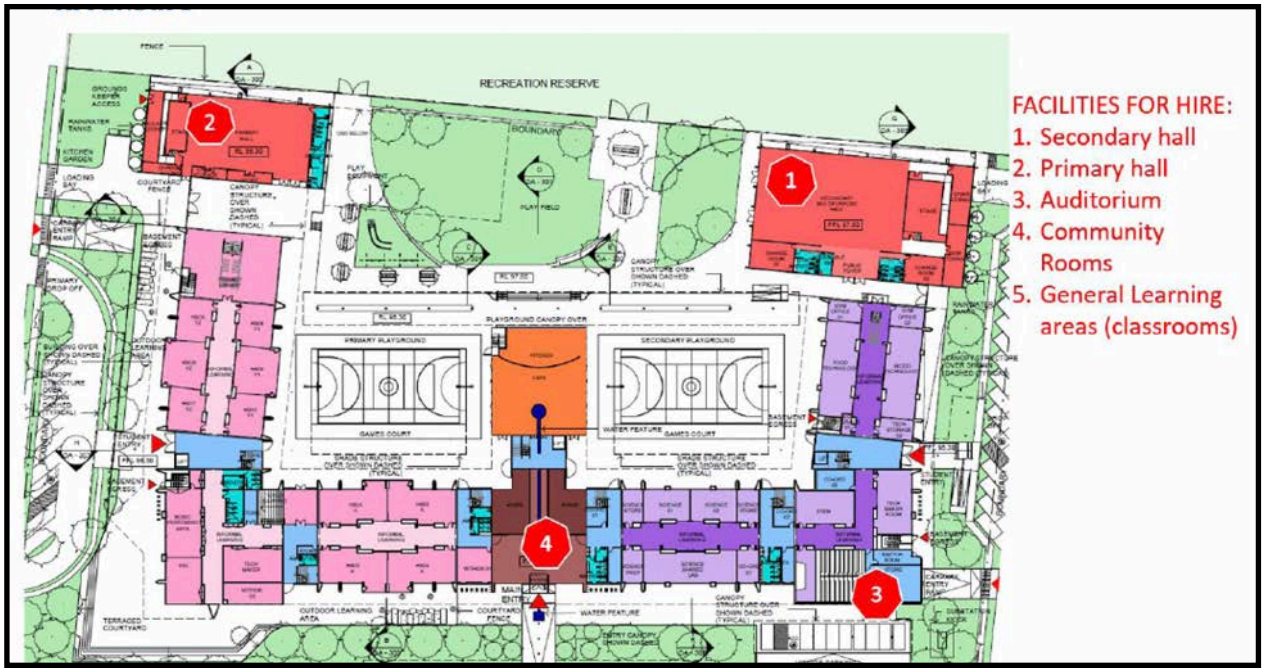


FIGURE 1.4: School Facilities Proposed for Community Use

(Source: Gran Associates Australia, architects)

Currently at both Prestons and Auburn campuses of Amity College the school halls are used by the community two evenings per week for martial arts classes, parent group sport nights one evening per week, Alumni Sports events several times a year, community lectures and professional development training days by not-for-profit local groups several times a year.

Prestons Campus has Urdu language classes on Saturday mornings and Auburn Campus has Afghan language classes on Saturday mornings run by community groups at peppercorn rents.

Criteria for use of Amity College's school facilities

School facilities can be used for any activities that are compatible with the ethos of the School. These include cultural, educational, recreational, sporting and other uses.

Educational programs must take priority when determining use. Some discretion will also need to be exercised in decision making about applications for use which appear to be incompatible with the efficient running of the school or which pose a danger to persons or property.

Respect for neighbourhood amenity

Amity College is aware of the of the school's growing residential neighbourhood. The School will be an alcohol and tobacco free environment and will not approve excessively noisy or disorderly hire activities on campus. Facility hire will be restricted to not exceed 9pm at all times. Specifically, the hours of use of school facilities used by the community will be restricted to the following times:

- Monday to Friday 6.00pm to 9.00pm.
- Saturdays 10.00am to 9.00pm.
- Sundays 12.00pm to 7.00pm.

2. Community Engagement Objectives

2.1 2.1 Overview

This Community Communication Strategy has been prepared to support and enable the planning and delivery of the various approved stages of the approved Amity College SSD 9227 school project, ***but in particular the early works and accelerated Stage 1 stages of the project. Further refinements will be made in regard to later stages of the project***. This Community Communications Strategy will be implemented through the construction phases of the school project, and extend for 12 months following construction completion. ***Given the projected life of the project (10+ years), the local population surrounding the school is likely to significantly increase from that now existing***. Refer to **Figure 2.1**, showing the current extent of housing estates surrounding harmoniously with the community, Camden Council and the Department of Planning Industry and Environment throughout the completion of this school project. In particular, it has regard for the fact that residential development will, in time, surround the school site on its southern, eastern and northern flanks, with a Council open space reserve adjoining its western flanks. Amity College will undertake regular reviews and updates of the Community Communications Strategy to address any changes in the relating to the management of the project, or in response to comments and feedback by relevant stakeholders, or any other changes identified and deemed necessary as a result of the operation of the Strategy.

2.2 2.2 Community Engagement Objectives

The key objectives of Amity College's Community Communication Strategy will be to:

- Keep the local community and stakeholders informed in a timely and transparent manner about the progress with and works relating to the Amity College school project through the construction phases of the project and (12 months) beyond.
- Amity College will aim to advise neighbours of potential disturbances and provide advance notice of any major works to be undertaken on or adjoining the school site during any construction stage likely to have the potential to affect local neighbourhood amenity eg road works on Pluto Avenue in Stage 1. A recently developed residential housing estate lies adjoining the school site, sharing a common frontage to Pluto Avenue. More immediate neighbours will be the focus of consultation where impacts are more likely to be of a more localised nature, whereas a wider community will be consulted in the case of works that have a wider impact eg. road works on Byron Road.
- Promote the benefits of the project to the School and students, as well as to interested local residents and stakeholders.
- Outline interfaces with other disciplines, including safety, construction, design and environment, to ensure all activities are co-ordinated and drive best practice project outcomes.
- Address and correct misinformation about the project in the public domain.
- Amity College will aim to minimise disturbance to local amenity.
- Amity College will endeavour to ensure that community and stakeholder enquiries and complaints are managed and resolved effectively. In so doing, the risk of project delays caused by third-party intervention or complaint will be minimised.
- Leave a positive legacy of the Amity College school project from a wider community perspective.

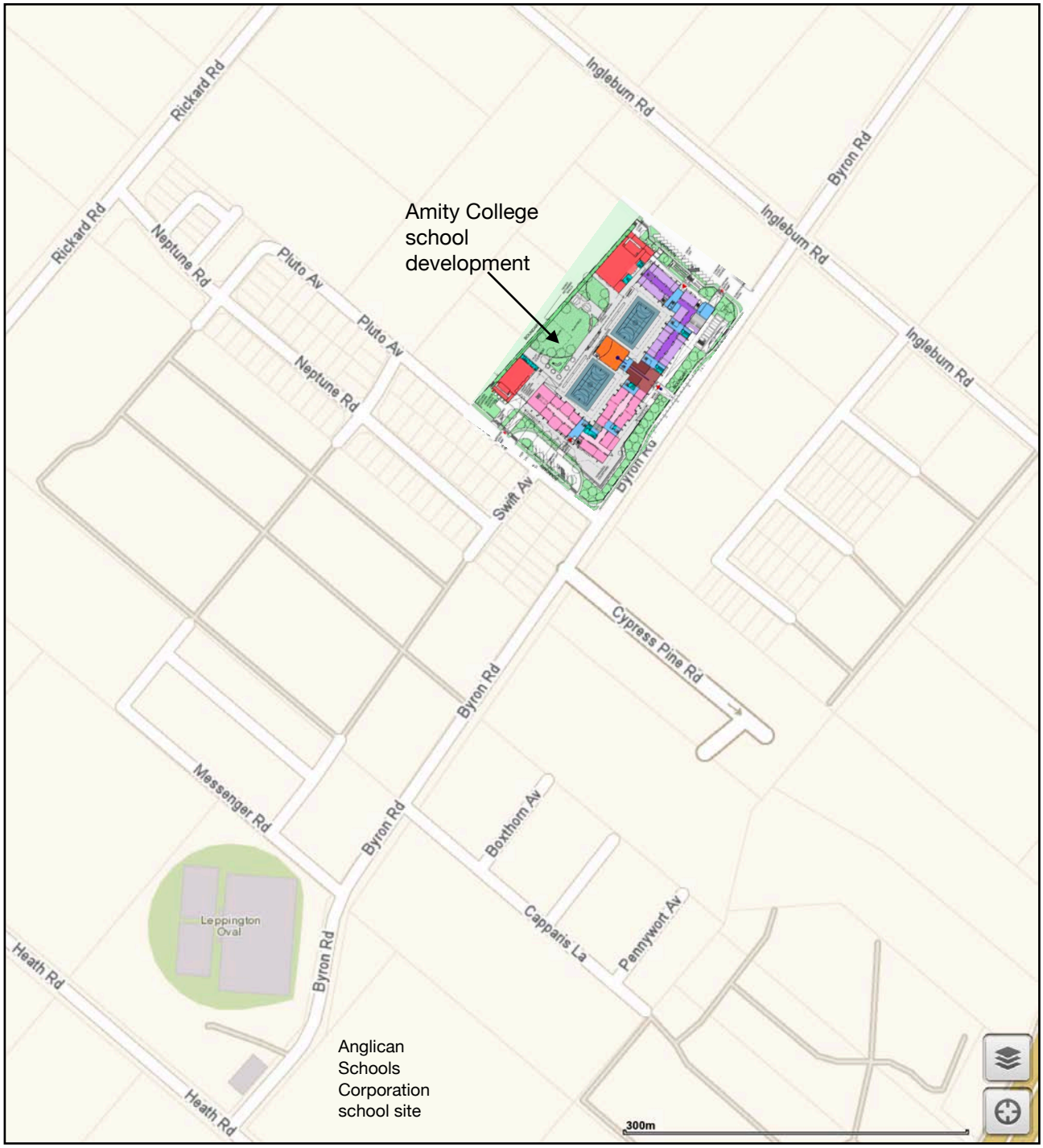


FIGURE 2.1: Amity College development and existing surrounding residential housing estates included in this Strategy. The School forms a part of the Leppington Priority Precinct, planned to accommodate 2,500 new homes and and a population of more than 7,700 residents over the next 10 years or so (Stage 1 only). Further commercial, industrial and medium density residential development is planned for lands north of Ingleburn Road

(Source: Whereis website, with overlay showing approx. location and extent of Amity College school project)

2.3 2.3 Higher Level Messages

Through each stage of construction of the Amity College Leppington project, the key messages and means of engagement will be regularly reviewed, refined and updated. Information that is currently in the public domain is outlined below.

For instance, the approved school abuts land zoned for future public open space, at No. 69 Ingleburn Road, yet to be acquired by Camden Council. There is the potential to be 'shared-use' of this open space area, that is, used by both Amity College and by the broader community, once this open space zoned land is acquired and developed by Council for this purpose.

The potential for this co-sharing of use was specifically identified in the Department's *Leppington (Stage 1) Finalisation Report* dated October 2015, in Section 4.6.1 where it stated, inter alia: "*that adjoining public open space will be co-shared with Council for passive play*…."

The new school will be built in accordance with current sustainability principles. These measures are outlined in detail in the EIS prepared by Outline Planning Consultants accompanying the development application for SSD 9227, and which now forms a part of the consent (condition A2(c)).

Construction Environmental Management Plan

A Construction Environmental Management Plan has been prepared for the project, currently relating to what is described as the 'early works construction' package, being preparatory works associated with Stages 1-4 of the project. It includes but is not limited to the following:

- Clearing of vegetation on the site.
- Re-shaping the site, bulk earthworks.
- Construction of sediment and erosion control devices and stormwater drainage measures.
- Excavation work including Primary School basement car park area.
- Creation of stockpiles and importation of approved fill to the site.

The purpose of the early works Construction Environmental Management Plan document is to broadly outline how the above early works will be managed, including nature of measures likely to be used, control measures and environmental responsibilities. It will assist in ensuring:

- Best practice environmental management procedures are applied.
- Environmental risks associated with the project are properly identified and managed, and provide protection to workers, visitors and the general public from traffic and environmental hazards and risks that may arise as a result of the construction activity.
- To ensure that corrective actions, when required, are completed in a timely manner.
- Provide a safe environment for all surrounding residents, road users and workers on-site.
- Compliance with all current, relevant environmental legislation.
- Compliance with the requirements of the development consent.

The early works will be undertaken from mid 2021 onwards. Stage 1 is predicted to be completed by 2023.

The Construction Environmental Management Plan contains various sub-plans relating to noise, traffic, waste, soil and water management, as well as unexpected finds protocols and waste classification and validation requirements.

Traffic Management: Construction Stages

A Traffic and Pedestrian Management Sub-Plan has been prepared, to ensure that vehicle movements are managed with minimal disruption to the local community. All construction vehicles (excluding worker vehicles) are to be contained wholly within the site, and vehicles must enter the site before stopping. A primary school pick up and drop off zone is being constructed in Stage 1 of the project, as well as a basement car parking facility serving the primary school. The combined effect of these project initiatives will be to to minimise parking congestion on local streets.

Noise, Vibration and Dust Management: Construction Stages

Any activity that could exceed approved construction noise management levels will be managed in strict accordance with the *Protection of the Environment Operations Act 1997*.

Mitigation measures will be in place during construction to manage noise and dust levels, including acoustic and traffic controls to minimise the effects of noise and dust, to ensure the safety of the school and local community. Community consultation required per condition C25(h) of eh SSD 9227 consent- refer **Appendix A** for copy of recent letter sent to nearby residents, seeking their comments relating to noise.

Construction works, including the delivery of materials to and from the site, will only be carried out between 7.00am & 6.00pm from Monday to Friday (excluding public holidays) and 8.00am to 1.00pm on Saturdays. No works will be carried out on Sundays or public holidays without a specific permit.

In accordance with the Amity College Development Consent (SSD 9227), condition D6 construction activities may be undertaken outside of the above hours if required:

- by the Police or a public authority for the delivery of vehicles, plant or materials; or
- in an emergency to avoid the loss of life, damage to property or to prevent environmental harm; or
- where a variation is approved in advance in writing by the Planning Secretary or nominee if appropriate justification is provided for the works.

Where out of hours works are required, permits shall be sought in accordance with the requirements of Camden City Council. It is anticipated that permits shall only be required sporadically for items such as service shutdowns and connections, transport, using canes, of large plant items, delivery & removal of piling rigs, or for other reasons that we may not be able to anticipate at this stage.

In accordance with the Amity College Development Consent (SSD 9227), condition D7, notification of such construction activities as referenced above must be given to affected residents before undertaking the activities or as soon as is practical afterwards.

In accordance with the Amity College Development Consent (SSD 9227), condition D8, rock breaking, rock hammering, sheet piling, pile driving and similar activities will only be carried out between the following hours:

- 9:00am to 12:00pm (noon), Monday to Friday;
- 2:00pm to 5:00pm Monday to Friday; and
- 9:00am to 12:00pm (noon), Saturday

3. Project Governance

Amity College strives to engage with stakeholders, school communities and neighbours from planning, design and delivery, through to maintenance.

As part of this process, a Project Control Group (PCG) has been established. The current membership includes the Director of Finance, Director of Property, Architect and other casual members from time to time to represent particular project aspects.

The permanent members of the PCG are as follows:

- Amity College Director of Finance representing the executive branch of Amity College.
- Amity College Director of Property with responsibility for school assets and facilities.
- Architect with responsibility for management of design and project delivery.

Casual members will attend meetings from time to time to represent particular project aspects. These members would include:

- School Principal to advise on academic and pedagogical matters.
- Building Contractor to assist with construction matters.
- Specialist consultants to provide input where required.

The PCG meets regularly. Input will be sought from the community at major milestones.Specifically to communications and engagement related matters, the PCG will also:

- Provide a forum for discussion and exchange of information relating to the planning and delivery of the project.
- Identify local issues and concerns to assist the project team with the development of mitigation strategies – to manage and minimise construction impacts to the schools communities and residents.
- Act as a two-way communication link between the school community and the project team to provide feedback at meetings.
- Provide an opportunity for advice on school engagement activities.

4. Stakeholders

The accompanying Table 4.1 provides a list of stakeholders who will be consulted during the design and construction stages of the School project, including a further 12 month period once construction has been completed. The table also indicates likely interests, as well as the potential methods of engagement, the latter to be refined and utilised as appropriate, dependent on the need at the time.

Table 4.1: Community Stakeholders

Stakeholder	*Interest and involvement*	*Engagement*
Local, Federal and State members	• *Community concerns.* • *Point of contact to direct issues/ questions.* • *Addressing local issues eg. traffic movements associated with construction of School.* • *Delivery of any government-funded school infrastructure.*	• *Direct contact- provide written invitation to meet the School/ inspect the site.* • *Provide briefing notes and regular updates.* • *Share notifications.*
Other government agencies including EPA, TfNSW, Sydney Water, Fire & Rescue NSW, SafeWork NSW	• *Provision of services infrastructure.* • *Ensuring that work on site, including building work, is compliant eg. Safety and fire evacuation, incidents.* • *Transport routes to the site.* • *Documentation relating to works undertaken, including but not limited to remediation works, the delivery of fill, and removal of contaminated material.*	• *Direct contact/briefings by telephone and in writing.* • *Obtain approvals.*
Camden Council, including councillors and Council officers	• *Obtaining approvals for road works on public roads and drainage external to the site, as well as involvement in design aspects of the project.* • *Traffic management.* • *Community complaints eg. about noise, dust.*	• *Continued open and accountable contact via email, lodgement of documents with Council officers direct, telephone calls and meetings/ tele-conferences.* • *Obtain approvals where required.*
Adjoining affected landowners and residents [NOTE: coverage dependent on nature of works involved on the school site/local roads]	• *Noise and dust generation during construction.* • *Construction truck traffic on Byron Road.* • *Pedestrian safety.* • *Changed traffic conditions with opening of various stages of the school development eg. opening of primary school fronting Pluto Avenue, with new ingress and egress points.* • *Use of community facilities offered by Amenity College over time.*	• *Door knocks.* • *Letterbox drops.* • *Consultation meetings, facilitated by Amity College.* • *Amity College website.* • *Email correspondence, where details provided.* • *Local press advertisement and articles.* • *Site signage.*

Leppington Public School *Anglican Schools Corporation school at No.50 Heath Road, Leppington, at the southern end of Byron Road*	• *Potential impacts on current students or teaching staff, impacts on other nearby schools due to changes in enrolments, inter-school social/sporting events.* • *Construction truck traffic on Byron Road.*	• *To be informed at project milestones through newsletters, notifications and the Amity College website, as well as face-to-face meetings/ phone calls.* • *Site signage.* • *Email correspondence.* • *Local press advertisement and articles.*
Community groups and organisations including Leppington Progress Association, KUD dance Group and local Aboriginal community	• *Potential impacts on the surrounding community including Byron Road (truck traffic), facilities, playing fields.* • *Tree clearing on the school site and landscaping program proposed to ameliorate impacts.* • *Indigenous scholarships available.* • *Use of community facilities offered by Amenity College over time.*	• *Access to Amity College website.* • *Consultation meetings, facilitated by Amity College.* • *Email correspondence, where details provided.* • *Local press advertisement and articles.* • *Site signage.*
Amenity College students (existing and prospective students), staff and school community generally	• *Information regarding school opening – targeting 2023.* • *Quality of infrastructure and resources upon opening.* • *Public transport options and parking/ access.*	• *Access to Amity College website.* • *Consultation meetings, facilitated by Amity College.* • *Email correspondence, where details provided.* • *Local press advertisement and articles.* • *Site signage.* *(Updated regularly. Contacts via phone, web site and email possible past project completion)*
Department of Planning Industry and Environment	• *Monitoring progress of the project, oversight of compliance and reporting, mediation of disputes, audits, notification of incidents/non-compliance with operative consent, approval of modifications or other changes in staging, strategies, plans of programs.*	• *Continued open and accountable contact via email, lodgement of documents on the NSW Planning Portal, telephone calls and meetings/ tele-conferences.*

5. Engagement Approach

5.1 5.1 Engagement Approach

Amity College is committed to ensuring that it makes it as easy as possible for anyone with an interest in the project to find out what's going on.

In order to achieve this outcome, a multi-pronged communication strategy will be involved, tailored also to the type of works involved as well as the sphere of likely impacts arising from those works.

Amity College will take on the community liaison responsibilities in collaboration with the project contractor for each successive stage of the project. Amity College will keep the local community and the college community informed about what to expect during construction including timing and provide the community with contact details for queries and questions. The local community will be provided with email and phone contact details for project related queries. Queries will be directed to Amity College's Director of Finance or nominated representative for response.

Amity College will be focussing on delivering its message involving two distinct streams of engagement:

- The first is with the school community, that is, students, parents/caregivers, teachers, administration staff unencumbered by broader community issues.
- The second is with the broader community, unencumbered by school community wants and needs. Broad community stakeholders include local residents, neighbours and local community groups, as well as nearby schools. ***As the population of Leppington within the near vicinity of the school site continues to grow, the number of residents that will need to be notified will also correspondingly grow over the life of the school project***.

5.2 5.2 Communication Tools

The communication tools and techniques to be used to keep stakeholders and the local community involved as summarised in Table 5.1 below.

For reference, project high level milestones during the delivery phase include site establishment/early works, as well as construction of school buildings and car parks. The focus here is on the early works.

Table 5.1: Amity College Communication Tools

Communication Tool	*Description of the Activity Involved*	*Frequency, Use*
Advertising (print)	• *Advertising in local newspapers is undertaken with at least 7 days' notice of significant construction activities, major disruptions and or to find out more about the project.*	• *At major project milestones or periods of disruption eg. Road works on Byron Road (Stages 1 & 2), Pluto Avenue road widening works (Stage 1), construction of the new Road 2 (later stage).*
Face-to-face meetings/ briefings	• *Activities include meeting, briefings and "walking the site" to engage directly with key stakeholders, directly impacted residents and the wider community.*	• *As required, but only when and* ***where allowed under COVID-19 pandemic guidelines applicable at the time****.*

Display boards	• *Information boards to be displayed in appropriate places (school admin office for example).*	• *As required, once a school office has been constructed on site but subject to COVID-19 pandemic guidelines applicable at the time. (Does not apply to Stage 1, as no school office will be available at that time)* • *Accessible for 12 months post completion of each stage of the school project.*
Fact Sheet/ Newsletter	• *Available in hard copy (A4 single or double-sided sheets) and electronic format. A monthly or quarterly newsletter providing updated information on project scope, benefits, construction progress, achievement of project milestones and other project related issues of interest.* • *Used as a regular high level update for the community, to be updated as required and included on the website if appropriate.*	• *Throughout life of project and as required, related to high level project milestones.* • *Distributed via letterbox drop to local residents or on Amity College website.*
Information sessions (drop-in)	• *Held on site using information boards, screens and an information pack handout- including project scope, planning approvals, any impacts on the school community or residents, project timeline, FAQs.* • *Member of School and project team available to answer questions.* • *Pedestrian safety.* • *Changed traffic conditions with opening of various stages of the school development eg. opening of primary school fronting Pluto Avenue, with new ingress and egress points.* • *Use of community facilities offered by Amenity College over time.*	• *As required, once a school office has been constructed on site. (Does not apply to Stage 1) and* ***subject to COVID-19 pandemic guidelines applicable at the time****.*
Media releases	• *Media releases are distributed upon media milestones. They promote major project milestones and activities and assisting in generating broader community awareness of the Amity College project. Principally to be provided on Amity College's website.*	*Media milestones include the following:* • *Commencement of works.* • *Completion of works and opening up of new school facilities.*
Presentations, community forums	• *Details project information for presentations to stakeholders and community groups.* • *Community forum to be prepared on an as-needed basis, with dates and times to be advised via letterbox drop to local residents and emails to other stakeholders.*	• *As required, but only when and* ***where allowed under COVID-19 pandemic guidelines applicable at the time****.* • *Online community forum could be set up by the School for community engagement, as required.*

Notifications	• *Available in hard copy (A4 single or double-sided sheets) and electronic format that can include FAQs about the project if required. To take the form of a works notification, relating to specific works/impacts arising- aimed primarily at nearby residents likely to be affected by specific construction works- or project updates- the latter aimed at a broader community.*	• *As required, according to the construction program. Refer Section 7.3.* • *On site works will require require notifications of near neighbours surrounding the school site- a more localised notification area.Refer Figure 2.1 & Section 7.3 for coverage area.* • *Any road works will require notification of all residents that have live on or have access to Byron Road- a much wider notification area. Refer Section 7.3 & Figure 2.1 for coverage area.* • *Distributed via letterbox drop to local residents or on Amity College website prior to construction works commencing or protocols required per Section 5 and Section 7.3.*
Priority correspondence	• *Department correspondence that is subject to strict response timeframes.*	• *As required. Includes compliance reporting required by the consent.*
Project signage	• *A sign will be erected and maintained in a prominent position on the site in accordance with Clause 98A(2) of the EP&A Regulation 2000, and per consent condition D1.On the same signage a complaint contact number will be displayed, enabling complainants to contact the Head Contractor in a prompt manner.*	• *Throughout the life of construction of the project and for 12 months post completion of each stage of the project.*
Site visits	• *Demonstrate project works and progress and facilitate a maintained level of interest in the project. Includes media visits to promote the reporting of progress with the various stages of the Amity College project.*	• *As required, but only when and* ***where allowed under COVID-19 pandemic guidelines applicable at the time****.*
School email address and website	• *A dedicated project page, including email address details, for the Amity College SSD 9227 Leppington project will be located on the Amity College website: https://www.amity.nsw.edu.au/leppington-campus/*	• *Throughout the life of construction of the project and for 12 months post completion of each stage of the project.* • *Website updated on a monthly basis.*

5.3 5.3 Provision of Information on Amity College's Website

Amity College will provide detailed information including the following (as they are obtained or approved) publicly available on its website **https://www.amity.nsw.edu.au/leppington-campus/**:

- The SSD 9227 consent documents;
- All current statutory approvals for the development;
- All approved strategies, plans and programs required under the conditions of the SSD consent;
- Regular reporting on the environmental performance of the development in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent;
- A comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of the SSD 9227 consent, or any approved plans and programs;
- A summary of the current stage and progress of the development;
- Contact details to enquire about the development or to make a complaint;
- A complaints register, updated monthly;
- Audit reports prepared as part of any independent audit of the development and
- Amity College's response to the recommendations in any audit report;
- Any other matter required by the Planning Secretary.
- This information will be kept up to date by Amity College.

[NOTE: Website in process of being updated at time of writing]

6. Engagement Delivery Timeline

Amity College will be commencing shortly with the early works program, with construction of the accelerated Stage 1 of the project to be completed by Term 1 of 2023. This will be first of many stages of construction of the school.

For both the early works and building involved in Stage 1 all of the communication tools will be employed at commencement and during the undertaking of any major works on site. The early works will be completed in late 2021.

At project completion of Stage 1 (by sTerm 1 in 2023), being for the new Primary School, the following communication tools will be employed:

- Media release.
- Website update.
- Newsletter sent to all nearby residents (with thank you message from the School included).

Post opening of Stage 1 the following communication tools will be in place:

- Website remains live.
- Project signage remains.
- School remains contactable by all.
- Site visits by potential/future users of community facilities at the School.

7. Procedures and Protocols

7.1 7.1 Communications Management Procedures

Amity College will be in communication with stakeholders during the course of construction and operation of the various stages of the School. Contacts (or feedback) from/with these stakeholders may be received through a range of communication means, including email, telephone, face-to-face contact 9subject to COVID protocols applicable at the time), letters, meetings or activities.

Any of these communications will be duly recorded by Amity College on an electronic register with full details relating to the following:

- The full name and contact details of the stakeholder making the contact with Amity College;
- Date and time of the contact with the stakeholder;
- Description of the contact and/or issues raised;
- Nature of the contact (i.e. enquiry, notification, complaint);
- Action required and the timing, particularly if commitments are made around timeframes;
- The action taken by Amity College with respect to the contact made;
- Person responsible for the remedial action.

All relevant government agencies, including Camden Council, will be consulted as required on planned delivery and construction activities, including the possible effects on any infrastructure or utility services eg. construction of new or upgraded local roads surrounding the school site.

The Community Communication Strategy will function for a minimum of 12 months following the completion of construction of each stage of the project.

7.2 7.2 Media Releases

Amity College will manage all media relations and will be responsible for responding to all media enquiries and provide responses to media reports.

7.3 7.3 Works Notification Process

Works notifications are required when Amity College commences any new major work on site, or those which the School deems to be necessary to provide advance notice of, to neighbouring properties in the interests of transparent community communications.

Along with the distribution of newsletters, these notifications serve as the primary mechanism exercised on behalf of the School to let the surrounding community and other key stakeholders know about the staging of the project, along with potential impacts. As such, these notifications will serve to provide timely advice ahead of any activities and planned disruptions, as per the notice periods outlined below in Table 7.1.

By promptly notifying stakeholders and community members it allows them to not only make alternative arrangements if required (eg. a partial road closure on Byron Road ahead of planned road upgrade works) it also allows them to plan for any impacts. Notifications will be distributed in person via letterbox drop, via the School and electronically via email.

Amity College will work under advice from the project management team on all relevant works notification requirements and timeframes to be adhered to.

Table 7.1: Notification periods

Works activity	*Minimum community notification period*
Notification to communities following major incident	*Same day*
Emergency works/unforeseen events	*Same day*
Contamination management and notification	*Within 48 hours*
Upcoming works notification (minimum disruption)	*5-7 days*
Notifications regarding traffic changes, parking impacts, road closures, and/or detours	*10-14 days*
Notifications regarding operational changes for the school community, applicable after the Stage 1 Primary School is operational (school drop-off points, entry and exit points)	*10-14 days*
Notifications regarding major construction impacts or planned out of hours work	*10-14 days*

7.4 7.4 Incidents

An incident is an occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance.

Incident management procedures form a part of the Amity College project Construction Environmental Management Plan.

SSD 9227 consent condition A23 requires Amity College to notify the Planning Secretary in writing of any incidents immediately after the School becomes aware of the incident. The consent condition provides as follows:

> *"A23. The Planning Secretary must be notified in writing to compliance@planning.nsw.gov.au immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident."*

In this regard Amity College undertakes to also provide to the Planning Secretary the following:

- Identify any actual or potential non-compliance with conditions of consent;
- Details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
- Details of any communication with other stakeholders regarding the incident.

All incidents are to be duly recorded on the School's project website.

8. Disputes and Conflict Resolution

Amity College will aim to deal with complaints in a timely and responsive manner.

During construction of the school project delivery, a complaint could relate to such matters as disruption to traffic flows on the local street system, loss of amenity, hours of work, safety, perceived property damage, dust, noise, traffic, access to private property, service disruption, or to the conduct or behaviour of construction workers, other environmental impacts.

If a phone call, email or face-to-face complaint is received by either Amity College or the contractor working on the school site at the time during construction, they must be duly recorded, actively managed, closed out and resolved by Amity College as soon as reasonably possible-the aim being within 48 hours. An electronic contact database will be maintained by the school Principal (or nominee).

If the complainant is not satisfied with Amity College's response, and they approach Amity College for rectification, the process will involve a secondary review of their complaint as per the outlined process.

Complaints will be escalated when:

- An activity at the Amity College school site generates three complaints within a 24-hour period (separate complainants).
- Three or more complaints are received in regard to Any construction activity over a 24-hour period.
- A single complainant reports within a three day period.
- A complainant threatens to escalate their issue to the media or government representative.
- The complaint was avoidable.
- The complaint relates to a compliance matter.

Where satisfactory resolution for both parties cannot be achieved independent mediators will be engaged. If a complaint still cannot be resolved by Amenity College to the satisfaction of the complainant, Amity College will advise them to contact the NSW Ombudsman - https://www.ombo.nsw.gov.au/complaints.

The below table summarises timeframes for responding to enquiries and complaints, through each correspondence method- refer accompanying Table 8.1.

Table 8.1: Complaints and enquiry response time

Type of complaint	*Time it will take to acknowledge that complaint*	*Target response time*
Telephone call made during business hours to either Amity College or construction management (if construction is underway)	• *At time of call- agreement will be reached with caller as to estimated timeframe for resolution.* • *Follow up call within 2 hours if the above timeframe cannot be reached.*	• *Complaint to be closed out within 48 hours.* • *If this is not possible, continue contact, escalate as required and resolve within 7 business days.*

Telephone call made outside of business hours to either Amity College or construction management (if construction is underway)	*Within 2 hours of receiving message upon returning to office.*	• *Following acknowledgement, complaint to be closed out within 48 hours.* • *If this is not possible, continue contact, escalate as required and resolve within 7 business days.*
Email received during business hours	*At time of email (automatic response)*	• *Complaint to be closed out within 48 hours.* • *If this is not possible, continue contact, escalate internally as required and resolve within 7 business days.*
Email received outside of business hours	*At time of email (automatic response)*	• *Complaint to be closed out within 48 hours, once return to business hours.* • *If this is not possible, continue contact, escalate internally as required and resolve within 7 business days.*
Enquiries (not complaints)		
Telephone call made during business hours to either Amity College or construction management (if construction is underway)	*At time of call- agreement will be reached with caller as to estimated timeframe for resolution.*	*To be logged and closed out within 7 business days.*
Telephone call made outside of business hours to either Amity College or construction management (if construction is underway)	*Within 2 hours of receiving message upon returning to office.*	*To be logged and closed out within 7 business days.*
Email received during business hours	*At time of email (automatic response)*	*To be logged and closed out within 7 business days.*
Notifications regarding major construction impacts or planned out of Email received outside of business hourshours work	*At time of email (automatic response)*	*To be logged and closed out within 7 business days.*
Letters	*Not applicable*	*To be logged and closed out within 10 business days following receipt of the letter.*

9. Community Communication Strategy Review and Improvement

This Community Communication Strategy focusses on a Strategy that covers both the early works tender package as well as the accelerated Stage 1 stages of the project.

Further refinements will be made to the Community Communication Strategy in regard to later stages of the project, and having regard to COVID-19 guidelines applicable at the time.

APPENDIX A

Recent letter sent to nearby residents re: consultation, noise

amity college

LLOYD

24th May 2021

Dear Resident

We are pleased to inform you that Lloyd Group will be commencing work on site at Amity College Leppington in the month of June 2021. We are proud to have been selected as the head contractor for the early works on this development and look forward to contributing to this significant community project. The early works are the earthworks associated with the first few stages of the school development. It will not include construction works.

As a local resident there you may experience activities that partly disrupt the typical day to day traffic and noise around the site. There are guidelines for how Lloyd must operate outlined in the Development Consent for the project.

See below some of the key criteria Lloyd will adhere to

Per the Development Consent SSD9227 our working hours for construction activities are as follows:

▸ Construction hours are between 7.00am-6.00pm Monday to Friday, and 8.00am to 1.00pm on Saturday.

As part of these works, we as the Head Contractor will conform with the noise and vibration control recommendations of the Acoustic Assessment prepared by Koikas Acoustics which forms part of the development specifically section *6.4 Construction Noise & Vibration Criteria – Part 4*. These include:

- Use of exhaust silencers where required
- Undertake construction works during standard hours
- Carry out noise intensive works at less noise sensitive times of the day
- Maintain minimum work distances
- Consultation with the community and encouraging feedback

For more detailed information refer to the full document that is available at the below URL:

https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-9227%2120190814T063301.858%20GMT

LLOYD GROUP PTY LTD 14 Harvey Street, Pyrmont, Sydney, NSW 2009
(02) 8565 6777 www.lloydgroup.com.au

We will be providing shade cloth to the perimeter of the site and conducting works within the construction hours described above to mitigate disruption to the local community.

We have developed a traffic management plan which will strictly control the movement of trucks to minimise the impact on the local community

We invite you as a local resident to provide feedback to Lloyd to ensure we engage and fulfill our responsibilities to complete our works while working together with the local community.

This can be done by making contact with myself Joseph Elley, Lloyds Project Manager, by the below contact details

Regards

JOSEPH ELLEY
PROJECT MANAGER
LLOYD

SYDNEY | MELBOURNE | BRISBANE | GEELONG | NEWCASTLE | BALLINA

A: **14 Harvey Street, Pyrmont, Sydney, NSW 2009**
P: **(02) 8565 6777**
E: **Joseph.Elley@lloydgroup.com.au**


COVID-19
PROTECT YOURSELF AND OTHERS
WASH HANDS
KEEP DISTANCE
WEAR A MASK
STAY SAFE

16. Appendix E – Example Environmental Management Documents

This section includes the following:

- Non-Conformance Example
- Environmental Management Inspection Checklist
- Environmental Incident Form

Issue Details

Reference	Type	Location	Identified By	Priority	Date Identified
ISS-7228	Non Conformance Negative		Jordan Ling	High	28/01/2022

Description	Example
Compliance Criteria	Example
Observations	Example
Evidence Reviewed	Example

Issue Picture 1

Resolution Details

Due Date	Previously Rejected?	Responsible	Date Resolved
29/01/2022	No	Lloyd Group	

Comment History

Lloyd Group User - Jordan Ling 1:40 PM28/01/2022

Example

Inspection Details - Environmental Management Checklist

Inspection Status	Location	Description
Complete		Example Environmental Checklist

Subcontractor Details

Subcontractor
Lloyd Group

Attendees

Name	Company	Position	Signature
Jordan Ling	Lloyd Group	Contracts Administrator	

Checklists

ENVIRONMENTAL MANAGEMENT CHECKLIST

Work areas free from rubbish and bins not overflowing ○ Compliant ◉ Non-Compliant ○ Not Applicable

Ref	Classification	Location	Responsible	Priority	Due Date	Date Closed
ISS-7230 Example	Negative Corrective Action		Lloyd Group	Low		29/01/2022

Issue Picture 1

Resolution Picture

Work areas free from slip/trip hazards ○ Compliant ○ Non-Compliant ◉ Not Applicable

Site perimeter fencing is in place and assessed as being able to resist potential severe weather conditions including wind ○ Compliant ○ Non-Compliant ◉ Not Applicable

All known underground services locations have been adequately signed on site	○ Compliant	○ Non-Compliant	◉ Not Applicable
All trenches and pits are covered/backfilled or barricaded where appropriate	○ Compliant	○ Non-Compliant	◉ Not Applicable
Stock/material is stored safely	○ Compliant	○ Non-Compliant	◉ Not Applicable
Adequate task lighting in place	○ Compliant	○ Non-Compliant	◉ Not Applicable
Materials and equipment are secured overnight with locks in place where necessary	○ Compliant	○ Non-Compliant	◉ Not Applicable
Temporary structures and covered walkways adequately built and secured	○ Compliant	○ Non-Compliant	◉ Not Applicable
Is noisy work controlled and conducted within the approved council working hours	○ Compliant	○ Non-Compliant	◉ Not Applicable
Are dust control measures in place [I.e. use of dust suppression chemicals or regular watering]	○ Compliant	○ Non-Compliant	◉ Not Applicable
Have trees or any other flora species been appropriately protected	○ Compliant	○ Non-Compliant	◉ Not Applicable
Where there is a risk of loose soil contaminating surrounding waterways, silt fencing is installed	○ Compliant	○ Non-Compliant	◉ Not Applicable
Where there is a risk of contaminating stormwater drains, provision is available for hay bales or geo fabric material	○ Compliant	○ Non-Compliant	◉ Not Applicable
Where there is a risk of excessive mud being discharged onto public roads, a shaker grid is installed near the project entry/exit points	○ Compliant	○ Non-Compliant	◉ Not Applicable
Dust emissions from stockpiles is controlled via dust suppression agents or regular watering.	○ Compliant	○ Non-Compliant	◉ Not Applicable
Have underground decommissioned fuel storage tanks been identified and reported to Lloyd Group's HSEQ Manager	○ Compliant	○ Non-Compliant	◉ Not Applicable
Hazardous materials are stored within appropriate storage containers with warning placarding and according to safety data sheet storage requirements	○ Compliant	○ Non-Compliant	◉ Not Applicable
Truck wash out bay set up with hose and Signage	○ Compliant	○ Non-Compliant	◉ Not Applicable
Rumble Grids in position at truck entrance and exit	○ Compliant	○ Non-Compliant	◉ Not Applicable
Silt traps are in correct locations and in appropriate condition	○ Compliant	○ Non-Compliant	◉ Not Applicable
Silt fencing set up in correct locations	○ Compliant	○ Non-Compliant	◉ Not Applicable
Wind rows set up in correct location	○ Compliant	○ Non-Compliant	◉ Not Applicable
Sediment control moates and hail bails set up	○ Compliant	○ Non-Compliant	◉ Not Applicable
Roads and gutters clean from soil	○ Compliant	○ Non-Compliant	◉ Not Applicable
Damage to nature strips reported and repaired	○ Compliant	○ Non-Compliant	◉ Not Applicable

UPLOAD OTHER ATTACHMENTS

Add Attachment Image 1	
Add Attachment Image 2	
Add Attachment Image 3	
Add Attachment Image 4	
Add Attachment Image 5	
Add Attachment Image 6	
Add Attachment Image 7	
Add Attachment Image 8	
Add Attachment Image 9	
Add Attachment Image 10	
Add Attachment Image 11	
Add Attachment Image 12	
Add Attachment Image 13	
Add Attachment Image 14	
Add Attachment Image 15	
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Add Attachment File 26	
Add Attachment File 27	
Add Attachment File 28	
Add Attachment File 29	

Add Attachment File 30

Other Observations

Ref	Classification	Location	Responsible	Priority	Due Date	Date Closed
ISS-7229 Example	Positive Corrective Action		Lloyd Group	Low		29/01/2022

Issue Picture 1

Outcomes

Metric	Count	%
Negative Observations	1	50%
Positive Observations	1	50%
Open Issues	0	0%
Closed Issues	2	100%
Yes	0	0%
No	1	4%
N/A	25	96%

Focus For Next Environmental Management Checklist
Example

Incident Summary

Reference	INC-461	
Incident Type	Environmental	
Is Near Miss	○ **Yes**	◉ **No**
Date Added	2022-01-29T13:57	

Relevant Authority Reporting

Needs to be reported to relevant authority	○ **Yes**	◉ **No**

Details of Person Completing Record

Person's Name	Jordan Ling
Position / Title	Contracts Administrator
Phone	0424068388

Incident Details

Date & Time of Event	29/01/2022 1:57 PM
Advised of Event	29/01/2022 1:58 PM
Description of Event	Example
Status	Is Draft

Injuries (0)
Issues (0)

Additional Information

When to complete this form: For all LTI's, High Risk Near Misses and Reportable Incidents per legislative authority or as directed by senior management..

IMMEDIATE ACTION TAKEN

1.	Example
2.	
3.	
4.	
5.	

NAMES OF WITNESSES

Name	Example
Mobile	
Name	
Mobile	

NAMES OF THOSE INTERVIEWED

Name	Example
Mobile	
Employer	
Name	
Mobile	
Employer	

Name

Mobile

Employer

Was a SWMS available?	◉ **Yes**	○ **No**
Did it reflect the works being undertaken?	◉ **Yes**	○ **No**
Were all relevant workers inducted into SWMS?	◉ **Yes**	○ **No**

EXTERNAL NOTIFICATION TO STATE OHS AUTHORITY

Is this a reportable incident to?

WorkSafe or Equivalent	☐
State Electrical Statutory Body ie EnergySafe	☐

Has the incident been reported?

Yes	☐

Reported by whom (Name)

Date & Time Reported

Reference number provided

CLIENT NOTIFICATION	○ **Yes**	○ **No**	○ **N/A**

To Whom

Date

ROOT CAUSE: (What was the factor that, if removed, the incident would not have occurred?)

PREVENTATIVE ACTIONS: Action/s taken to prevent future reoccurrence:

COMPLETED BY

Name

Title

Date

REVIEWED BY PROJECT MANAGER

Name

Title

Date

Important note: Report must be forwarded to senior management.

Investigation

17. Appendix F – Emergency Management Plan

Emergency Management Plan

CLIENT NAME:	Amity College Leppington
PROJECT NAME:	Amity College Stage 1
SITE ADDRESS:	85 Byron Road, Leppington NSW 2179
REVISION:	1
ISSUE DATE:	31/01/2022

ABBREVIATIONS

ABBREVIATION	DEFINITION
The Organisation	Lloyd Group
BDM	Business Development Manager
CA	Contract Administrator
Critical Incident	A critical incident is any incident in the workplace that results in death; major structural damage, or serious/permanent disability or injury
CM	Construction Manager
DIR	Director/s
EMP	All Company Employees
EST	Estimator
ESTM	Estimating Manager
FAI	First Aid Injury
HIRAC	Hazard Identification, Risk Assessment & Controls
HSE	Health Safety & Environment
HSR	Health & Safety Representative
IMS	Integrated Management System
HSEQ	Health Safety Environment and Quality
HSEQC	HSEQ Coordinator
HSEQM	HSEQ Manager
HSEQA	HSEQ Administrator
Lloyd Group	Lloyd Group/the Organisation
LTI	Lost Time Injury – At least one full shift lost due to injury
LTIFR	Lost Time Injury Frequency Rate = No. (LTI's/hours worked) x 1,000,000
MD	Managing Director
MTI	Medical Treatment Injury
MTIFR	Medical Treatment Injury Frequency Rate
NTL	National Team Leader – Safety & Compliance
OM	Office Manager
PPE	Personal Protection Equipment
PM	Project Manager
SDS	Safety Data Sheet (Formally referred to as MSDS)
Senior Management	Director, Managing Director, General Manager, Chief Financial Officer, Estimating Manager, Business Development Manager, Procurement Manager, Construction Manager, HSEQ Manager
SM	Site Manager
SSC	Site Safety Committee

REGISTER OF REVIEW - MASTER				
REVISION	**DATE**	**SECTION**	**DESCRIPTION OF AMENDMENTS**	**AMENDED BY**
1	18/11/20	All	Initial issue	S Willoughby

REGISTER OF REVIEW - PROJECT				
REVISION	**DATE**	**SECTION**	**DESCRIPTION OF AMENDMENTS**	**AMENDED BY**
1	31/01/21	All	Project Specific Issue	Jordan ling

APPROVALS			
NAME	**POSITION**	**SIGNATURE**	**DATE**
Matthew Licuria	Construction Manager	Matthew Licuria	31/01/22
Scott Willoughby	HSEQ Manager	S Willoughby	31/01/22
Joseph Elley	Project Manager		31/01/22
Michael Pearce	Site Manager		31/01/22

SITE PERSONNEL INDUCTION

Project team personnel are to be inducted into this plan before starting work on the project. Insert your name and role in the register below, then sign and date to acknowledge that you have read and understood the company requirements and agree to implement the procedures as applicable to your role. Note: Nominated approvers who have signed above are not required to sign below.

NAME	POSITION	SIGNATURE	DATE

TABLE OF CONTENTS

1. Purpose & Objectives

1.1 Purpose

The purpose of the Emergency Management Plan is to identify all the foreseeable project specific emergencies that may occur, the method addressing them and recording them as required.

1.2 Objective

The objectives of the Emergency Management Plan are to:

- Provide a list of possible emergency scenarios relevant to the project;
- Provide an action plan for each identified scenario;
- Provide guidelines for training of emergency personnel;
- Provide guideline for reporting and communication.

1.3 Monitoring and Review

This EMP will be reviewed as follows:

- After an emergency evacuation has been undertaken and the outcome indicates that the plan requires updating;
- After a significant incident;
- When the site changes significantly.

2. Plan Review and Update

This plan has been updated specifically for this project. This plan details the minimum Organisation requirements across the project. Unless specifically requested by the client information within this plan will be retained as it provides valuable guidance material to our project teams.

This plan will be reviewed and updated as required, as follows:

- Reviewed by all personnel with emergency responsibilities on this project;
- Every 6 months;
- After a significant incident;
- After significant changes on site.

3. Client Specific Requirements

Adherence to Amity College WHS Policies and Procedures through the project duration.

Reporting of all incidents that occur on site to Project Superintendent, Principal and Independent Auditor.

4. Emergency Scenario Assessment

POSSIBLE EMERGENCY SITUATION	RELEVANT ✓
General Emergency	✓
Medical Emergency	✓
Asbestos find	✓
Worker stuck in a raised EWP	✓
Smoke/Fire/Explosion	✓
Gas Leak/Unplanned Release of Toxic Chemical Procedure	✓
Structural Collapse	✓
Excavation/Trench Collapse	✓
Injury while working at height	✓
Arrested fall	✓
Precast Panel Collapse	✓
Entrapment in jump form/core	✓
Traffic/Pedestrian Accident	✓
Rescue of person from an EWP	✓
Contact with Overhead/ Underground Services	✓
Electric Shock	✓
Plant Failure	✓
Tower Crane Emergency	✓
Heat Stress	✓
Severe weather/Cyclone	✓
Earthquake	✓
Bomb Threat	✓
Mental Health Incidents	✓
Other:	
ADD CLIENT SPECIFIC EMERGENCIES BELOW	**RELEVANT ✓**

5. Emergency Response Team - Role Allocations

EMERGENCY ROLE	NAME	POSITION ON SITE TEAM
Emergency Response Team Manager	Michael Pearce	Site Manager
Chief Warden	Michael Pearce	Site Manager
Floor Warden	Michael Pearce	Site Manager
First Aider	Michael Pearce	Site Manager

5.1 Responsibilities

5.1.1 Emergency Response Team Manager

Responsibilities:

- Has overall responsibility for ensuring emergencies are managed in line with company procedures;
- Identifying emergency scenarios relevant to this project;
- Will be the main point of contact for any emergency related issues;
- Ensuring all positions on the ERT are filled to adequately cover the site taking into account backups when people are absent;
- Ensuring that members of the ERT are aware of and can fulfil their duties;
- Ensuring that emergency evacuations are conducted within 3 months of project commencement and then 6 monthly or when the site changes significantly;
- Ensuring that any corrective actions arising from evacuations are closed out and confirmed and evaluated for effectiveness;
- Emergency procedures are communicated to all personnel on site.

5.1.2 Chief Warden

Responsibilities:

Overall management and coordination of emergency evacuations either real or mock;

Review the outcomes of evacuations and improve the system where possible to ensure the safety of all personnel on site;

Ensure that emergency equipment is adequate, in place and in good working order.

Duties/Actions during an emergency:

- In the event of an incident the Chief Warden will ascertain circumstances of the incident and determine appropriate actions to be taken;
- Ensure appropriate emergency services are contacted at the earliest opportunity and client notification made where required. Inform key Organisation Management, as appropriate;
- Advise Floor wardens of the situation and direct them as required, activate any alarm systems as required;
- Initiate evacuation of the site and control entry to the site;
- If required arrange treatment of the injured;
- Arrange for site numbers/personnel list to be taken to the must point;
- Ensure personnel are accounted for following an evacuation muster point;

- Brief emergency services on the situation, type and scope of the incident, and confirm the status of an evacuation or the injured;
- Thereafter take action as directed by emergency services;
- Ensure that the Emergency Evacuation Form is completed, and actions closed out;
- Ensure that the area/areas are made an exclusion zone until emergency services, or other relevant authority, advise that this is no longer required.

5.1.3 Floor Wardens

Responsibilities:

- Floor wardens will assist with the evacuation of the site during an emergency situation
- Take instruction from the Chief Warden during evacuations

Duties/Actions during an emergency:

- Assist in the safe and orderly evacuation from the work area;
- Alert or contact the appropriate emergency service as required;
- Advise the Chief Warden of an incident if the Warden is the first person to become aware of an incident;
- Activate the emergency alarm systems as required;
- Check that fire doors or smoke doors are properly closed;
- Search the floor to ensure that all persons have evacuated the affected area;
- Assist those that require help with evacuation;
- Act as the leader for groups moving to the evacuation assembly point;
- Advise the Chief Warden if anyone is missing.

6. Emergency Preparedness

6.1 Site Evacuation Diagram

The Evacuation Diagram shows the location of the following regarding emergencies;

- First Aid room;
- Nurse call stations (where relevant);
- Firefighting equipment locations;
- Site evacuation assembly area/must point;
- Emergency services access and egress locations;
- “You are here” to be clearly indicated.

The Site Evacuation Diagram shall be displayed in prominent locations including offices, lunch rooms and common areas as relevant. For multilevel buildings, the Site Evacuation Diagram will be displayed in a consistent location on each level i.e. near the lift shaft, hoist or stairwell. The Site manager shall ensure the Site Evacuation Diagram is up to date and relevant given changing construction activities.

6.2 Emergency Contact Details

Emergency contact information will be displayed in prominent locations in site offices, lunchooms and throughout the site. Contact details will be up to date at all times.

6.3 Training

The Emergency Response Team Manager shall ensure all personnel who have responsibilities for the implementation of this plan have received relevant training for the role they are undertaking including:

- Fire Warden Training;
- First Aid Training;
- Evacuation drill training;
- Review of this EMP;
- Relevant refresher training

ROLE	TRAINING REQUIREMENTS
Emergency Response Team Manager	Chief Fire Warden training
Chief Fire Warden	Chief Fire Warden Training
Floor Warden	Fire Warden training
First Aider	Level 2 First Aid training

Refer: Guidance Material - SafeWork Australia Emergency Plans Fact Sheet

Refer: SafeWork Australia
https://www.safeworkaustralia.gov.au/system/files/documents/1702/emergency_plans_fact_sheet.pdf

6.4 Emergency Procedure Awareness

All personnel on site are made aware of the emergency procedure via the following:

- Emergency plans and procedures are included in the site induction;
- Display of Emergency Evacuation Diagram and contact details of emergency personnel throughout the site.

6.5 Emergency Equipment & First Aid

A risk assessment is completed by a person with a minimum of fire warden and Level 2 Senior First Aid (or equivalent) training. This assessment is used to identify site first aid equipment and requirements in accordance with relevant legislation, codes of practice and Australian standards.

6.5.1 First Aid

- First aid facilities shall be provided and serviced in accordance with legislation, AS/NZ standards, codes of practice and other relevant information;
- The location of the First Aid room shall be shown on the Site Layout Plan.
- The first aid room will be signed and will always contain necessary first aid equipment;
- The nominated First Aid officers will be identified in the Emergency Contacts list and displayed on the site notice board;
- Emergency first aid kits may be located across the site where this is possible;
- First aid facilities and first aid kit contents shall be checked during inspections in accordance with the procedure for Site Inspections.

Refer Form: HSE 1.03 Emergency Equipment & First Aid Risk Assessment (HT)
Refer Form: HSE 7.06 Emergency Equipment Testing Register

6.5.2 Suitability, Location and Accessibility of Emergency Equipment

- The suitability, location and accessibility of emergency equipment shall be assessed by site personnel who has/have completed Chief Fire Warden Training;
- Project teams may also seek advice from local Emergency Services organisations (e.g. First Five Minutes, Fire Brigade, SES) to assess access and egress for emergency vehicles and any other additional requirements;

- The locations of the equipment shall be shown on the Site Layout Plan.

6.5.3 Fire Fighting Equipment

The number, type and location of fire extinguishers and fire blankets shall be in accordance with AS 2444: Portable Fire Extinguishers & Fire Blankets - Selection & Location, with relevant signage depicting type, size and AS/NZS Portable fire extinguishers.

The following extinguisher types shall be used on Organisation sites;

- Powder (dry chemical) extinguishers complying with AS/NZS 1841.5
- Carbon Dioxide extinguishers complying with AS/NZS 1841.6

Note: Water type extinguishers shall not be used.

- The location of fire extinguishers and blankets (if installed) on site shall be included on the Site Evacuation Diagram;
- Fire extinguishers, fire blankets and fire hose reels (if installed) on site and in the Site office shall be monitored for most relevant location, given changing site conditions and serviced at 6 monthly intervals in accordance with AS/NZS 1850: Portable Fire Extinguishers - Classification, rating & performance testing;
- FFE will be registered on the Emergency Equipment Testing Register and updated as items are used, damaged, or defective;
- FFE shall be checked during inspections in accordance with the procedure for Site Inspections.

7. Evacuations

7.1 Evacuation Assembly Area

An evacuation assembly area will be set up for this project in accordance with the following:

- The location of the Evacuation Assembly Area shall be shown on the Site Evacuation Diagram
- Signage will be posted in the designated area
- In the event of an emergency all personnel are instructed to gather at the assembly area in accordance with the Site Evacuation procedure
- Each subcontractor supervisor will advise the Site Manager, or designated representative, of the current attendance and that all employees are accounted for.

7.2 Emergency Response Drills

Emergency Response drills are required to test emergency scenarios and to ensure that those on site are aware of the emergency evacuation procedure and the related responsibilities.

Drills are scheduled as follows:

- Within 3 months from project commencement;
- Then at minimum six monthly intervals during the project;
- when the site layout significantly changes.

Drills may take the form of:

- Desktop exercise;
- Mock evacuation;
- Emergency Response Team mock evacuation (trial run involving only the ERT).

The Emergency Response Drills Report form will be used to record each drill and actual emergency evacuation.

Emergency Response Drills are scenario based and test a variety of the identified potential emergency situations on site. They are recorded and evaluated for effectiveness. When an evacuation drill identifies an issue or requirement for a corrective action, a subsequent drill shall be scheduled and conducted to test the effectiveness of the improvements. This Site Manager will ensure the implementation of corrective actions arising from drills.

Refer Form: HSE 5.01 Emergency Response Drill

7.3 Emergency Access/Egress Lighting

Egress/Access from any part of the building is to be maintained clear of obstructions. Egress paths shall be checked during inspections in accordance with the procedure for Site Inspections. Emergency Lighting must be installed, with adequate lighting natural or mechanical with designated exits signage where applicable.

7.4 Communications

Communications shall be via 2-way radios and/or mobile phones.

7.5 Critical Incident Response

The following shall be followed in the event of a critical incident on site. Note: A backup person must be predetermined for both the Site Manager and Chief Warden if they are not on site at the time.

The following shall be followed in the event of a critical incident on site. Note: A backup person must be predetermined for both the Site Manager and Chief Warden if they are not on site at the time.

A **Critical Incident** is any incident that results in death; major structural damage, serious/permanent disability or injury or major impact on a client's operations.

CRITICAL INCIDENT RESPONSE FLOWCHART:

EVENT	ACTION EQUIRED	BY WO
1. Incident occurs	Call emergency services - 000	Site Manager
	Injured worker/s cared for. First aid provided if safe to do so	First Aider
	Place people at all road entry points and within the site on the way to the incident to direct ambulance and avoid delays	Site Manager/ Chief Warden
	Ensure all other workers are safe. Evacuate if necessary or relocate workers to amenities.	Chief Warden/Or Designated Person
	Preserve incident scene. Prevent access. Barricade if necessary or take photos.	Site Manager
	Notify injured worker's employer	Site Manager
2. While waiting for Emergency Services to arrive	Instructions given by emergency services over phone to be followed	Site Manager
	Inform Project Manager, HSEQM and HSEQC	Site Manager
	Project manager to notify senior management and the client.	Project Manager
	Copy of the induction form of any injured person is awaiting emergency services	Site Manager
3. Emergency Services Arrive	Follow all instructions from emergency services	Site Team
	Provide copy of induction form to emergency services	Site Manager
4. All other communications	Immediate: Notification to regulatory body as required	HSEQM
	Notification to Next of Kin	Emergency Services
	Within 1 hour: Notification to Director & other relevant senior management	Project Manager
	Within 1 hour: Notification to Company Legal Representative as required	Director
	Within 2 hours: Counselling arranged for those remaining on site	Construction Manager
	Within 3 hours: Arrange for site security to protect worker's tools and personal items left on site as required	CM/PM
	Within 6 hours: Notification to PR Management consultant as required	Director
	Commence Internal investigation (dependent on legal advice)	Director/HSEQM

7.5.1 Counselling Arrangements

The General Manager, or delegated authority, in consultation with senior management, will arrange for counselling, including trauma counselling to be provided to relevant workers and employees effected by a critical incident. The company Employee Assistance program may be utilised for this purpose.

The General Manager shall ensure that any worker who is exposed to a critical / traumatic incident at any of its workplaces, have access to, and are provided the necessary medical assistance and rehabilitation requirements and transportation to medical centres as required.

8. Emergency Response Scenarios

The following notification and follow up process is applicable to all scenarios:

NOTIFICATIONS:

- Notify Director and PAP.
- Notify Nat. Safety & Compliance Mgr
- Notify Project Manager
- Utility / Service provider if relevant
- Client (if affected)
- WorkSafe or other statutory body if notifiable
- Other parties if reliant on services that have been disrupted
- Reporting of all incidents that occur on site as per SINSW/DET Contractor WHS Reporting Framework

FOLLOW-UP:

- Conduct Incident Investigation where required
- Debrief the site team to identify causes and corrective/preventive action
- Provide site personnel with information on the incident including required corrective actions
- Review SWMS, Risk Assessment and other related HSE documentation to ensure lessons learned are captured
- Reporting of all learning that occur on site following an incident is as per SINSW/DET Contractor WHS Reporting Framework

8.1 General Emergency Procedure

If a person is seriously hurt or injury is suspected

Responding Emergency Service – 000 Specify the issue

IMMEDIATE ACTIONS:

1. Stop work
1. Assess the situation
2. Identify the severity
3. Evacuate area if necessary by sounding evacuation alarm
4. Contact emergency services
    - Type of emergency
    - Address of site
    - Nearest Cross Street
5. Send person to street to meet and direct emergency services
6. Check to ensure area is safe
7. Render first aid assistance as required
8. Barricade area to make safe if required
9. Warden to go to assembly area to take names
10. Maintain scene for investigation purposes

8.2 Medical Emergency Procedure

Responding Emergency Service – Ambulance

IMMEDIATE ACTIONS:

1. Assess the situation
2. Identify the severity
3. First aider to attend and administer first aid to the level their training allows
4. If injury is serious (site treatment / medical centre not appropriate) call Emergency Services 000 & ask for an Ambulance.
    - Type of emergency
    - Address of site
    - Nearest Cross Street
5. Send person to street to meet and direct emergency services
6. Check to ensure area is safe
7. Render first aid assistance until ambulance arrives
8. Barricade area to make safe if required
9. Maintain scene for investigation purposes

8.3 Asbestos Contamination Procedure

Responding Emergency Service – EPA or equivalent state regulatory body

IMMEDIATE ACTIONS:

1. Assess the situation and identify the severity i.e. Friable/Non- Friable
2. Evacuate the immediate area if required
3. Put in place exclusion zones to keep people out of the area. Consider direction of air borne dusts.
4. Contain any wind borne asbestos dust by covering and/or wetting down
5. Contact EPA providing following details:
    - Type of emergency
    - Address of site
    - Nearest Cross Street
6. Type of emergency
7. Address of site
8. Nearest Cross Street
9. Take instructions from EPA
10. Maintain scene for investigation purposes where practical

8.4 Retrieval of Person from EWP Procedure

Responding Emergency Service – Fire Brigade/Ambulance

IMMEDIATE ACTIONS:

1. Assess the situation and identify the severity
2. Evacuate the immediate area if necessary
3. If possible to do so, use the emergency decent device controls to carefully lower the platform (be aware that the ground controls will override the platform controls for emergency purposes).
4. Ensure there are no persons underneath the platform, or in the direct drop vicinity of the EWP when using the emergency device.
5. If the person in the EWP is in need of emergency treatment and the lowering devices are not working a second EWP shall be used to retrieve the injured worker.
6. Contact the EWP supplier/maintenance supplier and ask them to come to site immediately to fix.
    - Call Emergency Services.

- Type of emergency
- Address of site

7. Nearest Cross Street
8. Take instructions from emergency services
9. Maintain scene for investigation purposes

8.5 Retrieval of Crane Operator from Tower Crane Cabin Procedure

Responding Emergency Service – Fire Brigade (High Angle Rescue Team) /Ambulance

IMMEDIATE ACTIONS:

1. Gain access to the crane cabin and provide immediate first aid assistance
2. Contact relevant emergency service making it clear it is a height rescue
3. Assess ability to use mobile crane on site to get first aid box to injured person.
4. Assess availability of crane on a nearby job that can assist
5. Take instructions from emergency services with regard to commencing the rescue using the first aid box.
6. Create a clear landing area for the first aid box in case it is required.
7. Maintain scene for investigation purposes

8.6 Smoke/Fire/Explosion Procedure

Responding Emergency Service – Fire Brigade

IMMEDIATE ACTIONS:

1. Assess the situation. Identify the severity
2. Evacuate area if necessary.
3. If safe to do so, attempt to extinguish the fire. Use portable firefighting equipment where trained and safe to do so; do not put yourself at risk.
4. If fire cannot be extinguished, call Emergency services 000 and ask for Fire Brigade.
    - Type of emergency
    - Address of site
    - Nearest Cross Street
5. Ensure all persons are evacuated to assembly area.
6. Send someone to the street to meet and direct the fire brigade.
7. Provide assistance as directed.
8. Do not enter an area that could be unsafe for you.
9. Take instructions from emergency services
10. Do not enter site until instructed by emergency services.
11. Maintain scene for investigation purposes

8.7 Gas Leak/Unplanned Release of Toxic Chemical Procedure

Responding Emergency Service – Fire Brigade

IMMEDIATE ACTIONS:

1. Evacuate immediate/effected are
2. If full evacuation is required sound the alarm
3. Contact emergency services – fire brigade
    - Type of emergency
    - Address of site

- Nearest Cross Street

4. Send someone to the street to meet and direct the fire brigade.
5. DO NOT use mobile phones or two-way radios in affected area
6. No Smoking or any ignition sources.
7. Isolate electrical appliances
8. Render first aid assistance as required.
9. Provide assistance as directed.
10. Do not enter an area that could be unsafe for you.
11. Take instructions from emergency services
12. Do not enter site until instructed by emergency services.
13. Maintain scene for investigation purposes
14. Ensure services are checked and working correctly

8.8 Precast Panel Collapse

Responding Emergency Service – Fire Brigade/Ambulance

IMMEDIATE ACTIONS:

PARTIAL LOSS OF CONTAINMENT i.e. single clutch failure

1. Clear immediate area – consider proximity of neighbouring properties which may also require evacuation
2. Administer first aid as required
3. Ensure load secured with minimal movement if possible
4. Crane crew and site team to immediately assess situation and develop action plan to lower panel safety to ground or other appropriate location taking into account the following:
    - Weight of panel
    - available set down locations WLL of location panel to be placed (suspended slab etc)
    - Proximity of neighbouring properties and general public
    - Wind load
    - Overhead obstructions

COMPLETE LOSS OF CONTAINMENT i.e. panel has fallen and is no longer secured

1. Clear immediate area – consider proximity of neighbouring properties which may also require evacuation
2. Administer first aid as required if safe to do so
3. Do not enter area unless safe to do so
4. Initiate Critical Response Plan

GENERAL

1. Call Emergency services 000. Advise the emergency services operator of the following:
    - Type of emergency
    - Address of site
    - Nearest Cross Street
2. Take instructions from emergency services
3. Do not enter site until instructed by emergency services.
4. Some areas of the building may be able to be opened while others may remain closed until deemed structurally safe
5. Hold a toolbox meeting with all workers to notify of relevant exclusion zones

6. Maintain scene for investigation purposes
7. An engineer's report may be required before any rectification work takes place.

8.9 Structural Collapse Procedure

Responding Emergency Service – Fire Brigade/Ambulance

IMMEDIATE ACTIONS:

1. Assess the situation. Identify the severity
2. Ensure no-one is trapped
3. If someone is trapped do not put yourself in danger to get close. Remain at a safe distance and try to keep them calm.
4. Evacuate area and potentially whole site if unstable
5. Call Emergency services 000 and ask for Fire Brigade.
    - Type of emergency
    - Address of site
    - Nearest Cross Street
6. Ensure all persons are evacuated to assembly area.
7. Send someone to the street to meet and direct the fire brigade.
8. Provide assistance as directed.
9. Do not enter an area that could be unsafe for you.
10. Take instructions from emergency services
11. Do not enter site until instructed by emergency services.
12. Some areas of the building may be able to be opened while others may remain closed until deemed structurally safe
13. Hold a Toolbox Meeting with all workers to notify them of relevant exclusion zones
14. Maintain scene for investigation purposes
15. An engineer's report is required before any rectification work takes place. A detailed SWMS is required for all further works in the area

8.10 Jump Form Rescue Procedure (Injured Worker Unable to Exit Core)

Responding Emergency Service – Fire Brigade/Ambulance

IMMEDIATE ACTIONS:

1. Assess the situation. Identify the severity
2. Contact emergency services 000. Make it clear that access to the injured person is restricted.
3. Notify site management
    - Give details of the core system location, (i.e. lift core or Stair core, what level, top deck or trailing deck.
    - Clearly state details of the incident (i.e. what has happened, current situation, is an Ambulance required)
    - Give details of the level that the core can be accessed from.
4. First Aiders to proceed immediately to core to administer treatment if safe to do so.
5. Defib to be taken if potential heart attack
6. If cranes are operating; Management/ First Aid staff to advise Crane Crew of situation, instruct them to cease work and collect stretcher box.
    - Dogman 1 – Ensures existing load is safe and unhooks from crane.
    - Dogman 2 – Is to make their way to the stretcher box location and hook up.

- Dogman – Attends core ready to receive stretcher box and await further instruction from Emergency Services

7. Site Management or nominated Representative is to go to the street to meet ambulance/emergency services and direct them as required.
8. Ensure stretcher box is located on top of core ready for use by emergency services.
9. Ensure core area is clear of all personnel not directly involved in the rescue operation
10. Site Management will nominate a 2way radio channel to be kept clear throughout the rescue. First Aid calls only - no unnecessary calls during the rescue period.
11. Follow all instructions given by emergency services.
12. Initiate critical incident response plan as required

IMPORTANT NOTE*: A rescue plan specific to the core system in use on site is to be developed based on the above and all relevant personnel consulted.*

8.11 Trench / Excavation Collapse Procedure

Responding Emergency Service – Ambulance

IMMEDIATE ACTIONS – EXCAVATION COLLAPSE:

1. Assess the scene to determine what has happened
2. Alert Site Management
3. Identifying the number of victims, their location, and the nature of their injuries – pass this information on to emergency services
4. Assist victims out of excavation/trench who are not trapped by the collapse, but DO NOT ENTER the excavation/trench at any time until shoring has been put in place and only IF SAFE TO DO SO. Administer first aid well back from the edge.
5. Send someone to each site entrance point to direct emergency services when they arrive.
6. Assessing any other potential hazards i.e. possible damage to underground services, gas leaks etc and provide information to emergency services.
7. Turn off any known electrical, gas or other services in the vicinity
8. Stop the movement of all plant and eliminate all other possible sources of vibration within 100m
9. Move all bystanders away from the area
10. Assess the availability of shoring equipment available (timbers, steel beams, shoring etc) on site and communicate to emergency services
11. Follow instruction of emergency services
12. Contact WorkSafe in consultation with head contractor on site
13. Complete incident report

-

IMMEDIATE ACTIONS – TRENCH COLLAPSE:

1. Assess the situation. Identify the severity
2. Do not access the trench under any circumstances
3. Ensure no-one is trapped
4. If someone is trapped **do not put yourself in danger** to get close. Remain away from the trench edge as it may be prone to collapse.
5. Identify an object that may be used to pass down to the person so that they can be pulled out i.e. harness, rope etc
6. Evacuate area and potentially whole site if other ground works are unstable
7. Call Emergency services 000 and ask for Fire Brigade. Advise the emergency services operator of the following:

8. Type of emergency
9. Address of site
10. Nearest Cross Street
11. Ensure all persons are evacuated to assembly area.
12. Send someone to the street to meet and direct the fire brigade.
13. Provide assistance as directed.
14. Do not enter an area that could be unsafe for you.
15. Take instructions from emergency services
16. Do not enter site until instructed by emergency services.
17. Some areas of the building may be able to be opened while others may remain closed until deemed structurally safe
18. Hold a toolbox meeting with all workers to notify of relevant exclusion zones
19. Maintain scene for investigation purposes
20. An engineer's report is required before any rectification work takes place. A detailed SWMS is required for all further works in the area

8.12 Traffic Incident Procedure

Responding Emergency Service – Ambulance/Fire Brigade

IMMEDIATE ACTIONS:

1. Assess the situation. Identify the severity
2. Ensure no-one is trapped
3. If someone is trapped **do not put yourself in danger** to get close. Remain at a safe distance and try to keep them calm.
4. Call Emergency services 000. Advise the emergency services operator of the following:
    - Type of emergency
    - Address of site
    - Nearest Cross Street
5. If there is a danger of FIRE direct someone to obtain a fire extinguisher/s for use if required
6. Evacuate area of site impacted
7. Direct ticketed traffic controllers to direct traffic as required noting that conditions may have changed
8. Send someone to the street to meet and direct the fire brigade/ambulance.
9. Provide assistance as directed.
10. Take instructions from emergency services
11. Hold a toolbox meeting with all workers to notify of relevant exclusion zones

8.13 Severe Weather Event

A severe weather event such as a storm, high winds, torrential rain, hail etc can cause significant damage on site. Early preparation in ensuring all loose materials are secured is key to managing safer outcomes.

Responding Emergency Service – Fire Brigade /Ambulance

IMMEDIATE ACTIONS:

1. Listen to the radio, check internet etc to ensure latest updates are available
2. Follow all instructions provided by government agencies
3. Ensure all loose materials are secured
4. Stop all works and direct contractors to secure all loose items and leave site and return home if safe to do so

ENSURE YOU ARE NOT PLACING YOURSELF OR OTHERS IN ANY DANGER.

5. Shut down all plant and electrical equipment.
6. Where persons have been injured contact the First Aider and dial triple zero (**000**) for an ambulance and/ or emergency services.
7. If an ambulance/ emergency services is called, send a person to the site access gate to direct the ambulance to the casualty location.
   Unless there is immediate danger to life (i.e. possible fire due to fuel spillage) treat serious injuries before moving the casualty.

8.14 Hitting Electrical Services Procedure

Responding Emergency Service – Fire Brigade/Ambulance

IMMEDIATE ACTIONS IF PERSON IS OPERATING MOBILE PLANT:

1. Instruct driver to remain in the cabin and wait until the line is de-energised.
2. If there is smoke and a danger of fire instruct the driver to:
   - Jump from the cabin without touching the machine
   - Land with both feet together at the same time (DO NOT FALL OVER)
   - Shuffle away from the machine always keeping both feet on the ground
   - Clear the machine by 30m
3. Ensure a 30m clear zone is kept in place from machine
4. NEVER touch a person who is in contact with a power line. It must be de-energised first
5. NEVER touch power lines even if you think they are dead until instructed that it is clear to do so by emergency services
6. Maintain scene for investigation purposes

8.15 Electric Shock Procedure

Responding Emergency Service – Ambulance

IMMEDIATE ACTIONS:

1. Assess the situation. Identify the severity
2. Assist the person only if safe to do so
3. Make area safe by turning off electrical items if safe to do so
4. Call emergency services and ask for ambulance. Explain what has happened and take instruction from them. They may instruct that the person remain on site and an ambulance will be dispatched or they may instruct that the injured person be taken to the nearest hospital for checks and monitoring.

8.16 Plant Failure/Incident

Plant failure/ incidents may include, but not be limited to the following: plant roll-over, falls from plant, collision with people, collision with other plant, entanglement/ crushing/ trapped between moving parts, crushing by falling objects.

Responding Emergency Service – Fire Brigade /Ambulance

IMMEDIATE ACTIONS:

7. Immediately assess the situation and decide on the priorities of action.

ENSURE YOU ARE NOT PLACING YOURSELF OR OTHERS IN ANY DANGER.

8. Stop all work immediately, shut down all plant if necessary and any electrical equipment.

9. Where persons have been injured contact the First Aider and dial triple zero (**000**) for an ambulance and/ or emergency services.
10. If an ambulance/ emergency services is called, send a person to the site access gate to direct the ambulance to the casualty location.
11. Unless there is immediate danger to life (i.e. possible fire due to fuel spillage) treat serious injuries before moving the casualty.

8.17 Retrieval of Crane Operator from Tower Crane Cabin

Responding Emergency Service – Fire Brigade (High Angle Rescue Team) /Ambulance

IMMEDIATE ACTIONS:

1. Gain access to the crane cabin and provide immediate first aid assistance
2. Contact relevant emergency service making it clear it is a height rescue
3. Assess availability to use mobile crane on site to get first aid cage to injured person. Is there a crane on a nearby job that can assist?
4. Take instructions from emergency services with regard to commencing the rescue using the first aid box.
5. Create a clear landing area for the first aid box in case it is required.
6. Maintain scene for investigation purposes

8.18 Bomb Threat Procedure

Responding Emergency Service – Police

IMMEDIATE ACTIONS:

1. Treat situation as genuine
2. Record all information for police
3. **If phone call** - prolong call and ask:
    - Location of bomb
    - Time set to explode
    - Listen for any background sounds
    - Was the call taped?
    - Was the caller well spoken, coherent, irrational, message read by caller, abusive:
    - Contact police
4. **DO NOT REPLACE THE HANDSET** so the call can be traced
5. If a suspicious package is found:
    - Do not tough it
    - Keep area clear
    - Contact police
6. If threat is by letter:
    - Handle letter and envelope as little as possible
    - Place item into a plastic pocket to preserve evidence
7. TURN OFF ALL MOBILE PHONES AS THEY MAY TRIGGER A DEVICE
8. Raise the alarm:
    - Call police
    - Do not use Break Glass Alarms, EWIS, PA or mobile phones etc.
9. Evacuate as instructed by emergency services

8.19 Mental Health Incident Procedure

Responding Emergency Service – Ambulance

INCIDENTS CAN INCLUDE:

- Panic attacks / Psychosis / Trauma reaction / Self harm or threat of self-harm / Drug/Alcohol abuse
- Panic attacks
- Psychosis
- Trauma reaction
- Self-harm or threat of self-harm
- Drug/Alcohol abuse

IMMEDIATE ACTIONS:

1. Do not leave the person alone
2. Assess danger to themselves or others – keep them away from potential danger
3. Reassure the person by talking calmly to them
4. Try to get them to control their breathing
5. Maintain eye contact
6. Engage the person by talking. Ask straight forward questions. Do not judge them.
7. Ask if there is someone you can call to come and be with them
8. Must ensure that they get home safely
9. Contact next of kin listed on induction form so that they can come and get them

IF PERSON IS VIOLENT TO OTHERS OR THREATENING TO HARM THEMSELVES:

1. Contact emergency services
2. Try to de-escalate the situation by talking calmly to them
3. Establish what their concerns are and try to develop a positive course of action if only as a delaying tactic
4. Always maintain clear personal boundaries
5. Evacuate the site if required

HELP LINES:

- LifeLine Ph: 13 11 14
- Beyond Blue Ph: 1300 22 4636

8.20 Arrested Fall Procedure

Responding Emergency Service – Ambulance/High Access Rescue Team (HART)

IMMEDIATE ACTIONS:

SELF RESCUE:

1. If save to do so the worker can climb back up to the level from which they fell
2. If save to do so the worker can disconnect the harness and make way to ground or level below. This should only be attempted where secondary fall protection is in place.

RESCUE USING MOBILE PLANT:

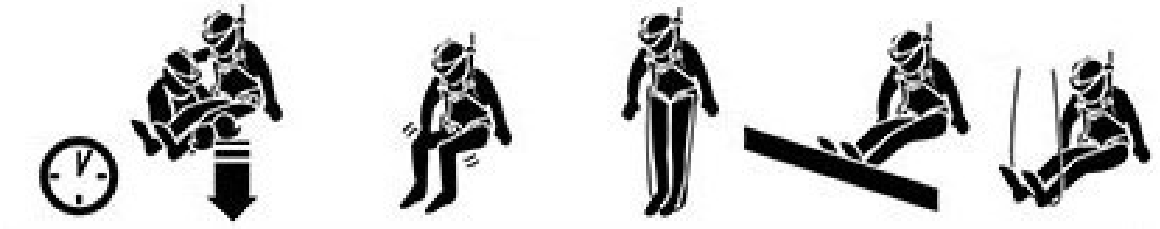
1. Where possible and as soon as possible, ensure people's weight is not held suspended only by the harness. It is important to maintain blood flow through the body. Pressure caused by hanging in the harness can cut off blood flow
2. Utilise available mobile plant to rescue the person. Assess how long it will take to get each piece of plant into correct location etc. Choose quickest possible option.

    - Crane with man box
    - Elevated work platform
    - Scissor lift

HART – CONTACT HIGH ACCESS RESCUE TEAM

1. If rescue is not possible, contact emergency services and request the High Access Rescue Team
2. Follow all instructions provided over the phone

If person is hanging in a harness and immediate rescue is not possible, ensure the following while you wait for emergency services:



1.Get the person down as quickly as possible

2. Tell the person to lift their legs and/or pump their leg muscles to maintain blood flow

3. Use trauma straps if available

4. Push legs against any structure

5. Lower down a rope to help lift their legs

FURTHER ACTIONS

- First aider to attend and administer first aid to the level their training allows
- If person is injured call Emergency Services 000 & ask for an Ambulance. Advise the emergency services operator of the following:
    - Type of emergency
    - Address of site
    - Nearest Cross Street
- Send person to street to meet and direct emergency services

- Check to ensure area is safe
- Render first aid assistance until ambulance arrives
- Barricade area to make safe if required
- Maintain scene for investigation purposes

8.21 Heat Stress/Heat Stroke

HEAT STRESS STAGES	SYMPTOMS	TREATMENT (FIRST AID)
Heat Cramps	- Heavy perspiration, tired and thirsty - Irritability, loss of appetite - Prickly heat rash, nausea - Muscle spasms / twitching, moist cool skin - Painful muscle cramps (limbs and abdomen	- Drink more water - Have a cold shower/bath - Lie in a cool place with legs supported and slightly elevated - Massage limbs gently to ease spasms, or firmly if cramped, then apply ice packs and drink glucose solution. (e.g. cordial) - Do not have salt
Heat Exhaustion	- Profuse perspiration - Cold, clammy, pale skin - Fatigue, weakness and restlessness - Headache and vomiting - Weak but rapid pulse - Poor Coordination - Normal temperature, but faintness	- Lay victim down in a cool place as for heat cramps. - Loosen clothing and apply wet cloths to head and body - Fan the victim, or move them to an air-conditioned environment - Give sips of cold water - If vomiting continues, seek medical assistance immediately
Heat Stroke	- Confusion, headache, nausea, dizziness - Skin flushed, hot and unusually dry - Dry swollen tongue - High body temperature (>40˚C) - Deep unconsciousness may develop rapidly	- Seek medical assistance urgently - Lay victim in a cool place and remove outer clothing - If unconscious, check airway and breathing - Cool victim quickly by applying cold water or wrap in a wet sheet and fan them (keep the sheet wet) - When conscious, give sips of water

8.22 Shock

Almost every accident or injury is followed by shock. The victim may be pale and have clammy skin, a feeble and rapid pulse and may be unconscious.

- Put patient at rest.
- Keep patient quiet and warm.
- Loosen tight clothing.
- Keep the patient calm and confident of receiving help quickly.

8.23 Snake Bites

- Check that the snake is not in the vicinity endangering the victim, other personnel or yourself.
- Calm the victim and keep the victim still.
- Apply pressure immobilization bandage in accordance with First Aid requirements.
- Do not wash venom off the skin. (this helps identification of species).
- Do not use an arterial tourniquet.
- Do not attempt to catch the snake.

- Write down the time of the bite and when the bandage was applied.
- Call 000 or 112 from any mobile phone or get someone to do so.
- Without endangering yourself or others if you see the snake, try to identify the species from a safe distance and if possible, take a photo with mobile camera.

8.24 Unauthorised Access by School Children

IMMEDIATE ACTIONS

- All works across the entire site is to cease immediately.
- Contact the site manager immediately.
- Ensure that the school aged child is kept out of harm's way until the site manager arrives.
- Site manger to contact the school principal immediately.
- Under the guidance of the site manager only, ensue that the school aged child is escorted to the site office until such time that the school principal/authorised school representative arrives to take care of the school aged child.
- Once the school aged child has been safely removed from site, the site manager is to notify SINSW/DET immediately.
- The site manager is to undertake a formal investigation into the incident, with the report communicated to all relevant stakeholders within the Contractor WHS Reporting Guidelines.

18. Appendix G – Training and Skilling Plan

Training & Skilling Plan

CLIENT NAME:	Amity College
PROJECT NAME:	Amity College Stage 1
SITE ADDRESS:	85 Byron Road, Leppington NSW 2179
REVISION:	1
ISSUE DATE:	31/01/2022

ABBREVIATIONS

ABBREVIATION	DEFINITION
The Organisation	Lloyd Group
BDM	Business Development Manager
CA	Contract Administrator
Critical Incident	A critical incident is any incident in the workplace that results in death; major structural damage, or serious/permanent disability or injury
CM	Construction Manager
DIR	Director/s
EMP	All Company Employees
EST	Estimator
ESTM	Estimating Manager
FAI	First Aid Injury
HIRAC	Hazard Identification, Risk Assessment & Controls
HSE	Health Safety & Environment
HSR	Health & Safety Representative
IMS	Integrated Management System
HSEQ	Health Safety Environment and Quality
HSEQC	HSEQ Coordinator
HSEQM	HSEQ Manager
HSEQA	HSEQ Administrator
Lloyd Group	Lloyd Group/the Organisation
LTI	Lost Time Injury – At least one full shift lost due to injury
LTIFR	Lost Time Injury Frequency Rate = No. (LTI's/hours worked) x 1,000,000
MD	Managing Director
MTI	Medical Treatment Injury
MTIFR	Medical Treatment Injury Frequency Rate
NTL	National Team Leader – Safety & Compliance
OM	Office Manager
PPE	Personal Protection Equipment
PM	Project Manager
SDS	Safety Data Sheet (Formally referred to as MSDS)
Senior Management	Director, Managing Director, General Manager, Chief Financial Officer, Estimating Manager, Business Development Manager, Procurement Manager, Construction Manager, HSEQ Manager
SM	Site Manager
SSC	Site Safety Committee

REGISTER OF REVIEW – MASTYER TEMPLATE				
REVISION	**DATE**	**SECTION**	**DESCRIPTION OF AMENDMENTS**	**AMENDED BY**
1	18/11/20	All	Initial issue	S. Willoughby

REGISTER OF REVIEW - PROJECT				
REVISION	**DATE**	**SECTION**	**DESCRIPTION OF AMENDMENTS**	**AMENDED BY**
1	31/01/22	All	Project Specific Issue	J.Ling

APPROVALS			
NAME	**POSITION**	**SIGNATURE**	**DATE**
Joseph Elley	Project Manager		9/03/21
Michael Pearce	Site Manager		9/03/21

TABLE OF CONTENTS

1. Purpose

The purpose of this plan is to ensure that the project team has the required skills and training to meet the requirements of the project and where gaps are identified that a plan is developed to close these out as quickly as possible so as to not impact the project.

Note: The training covered in this plan is site specific and does not include basic company required training.

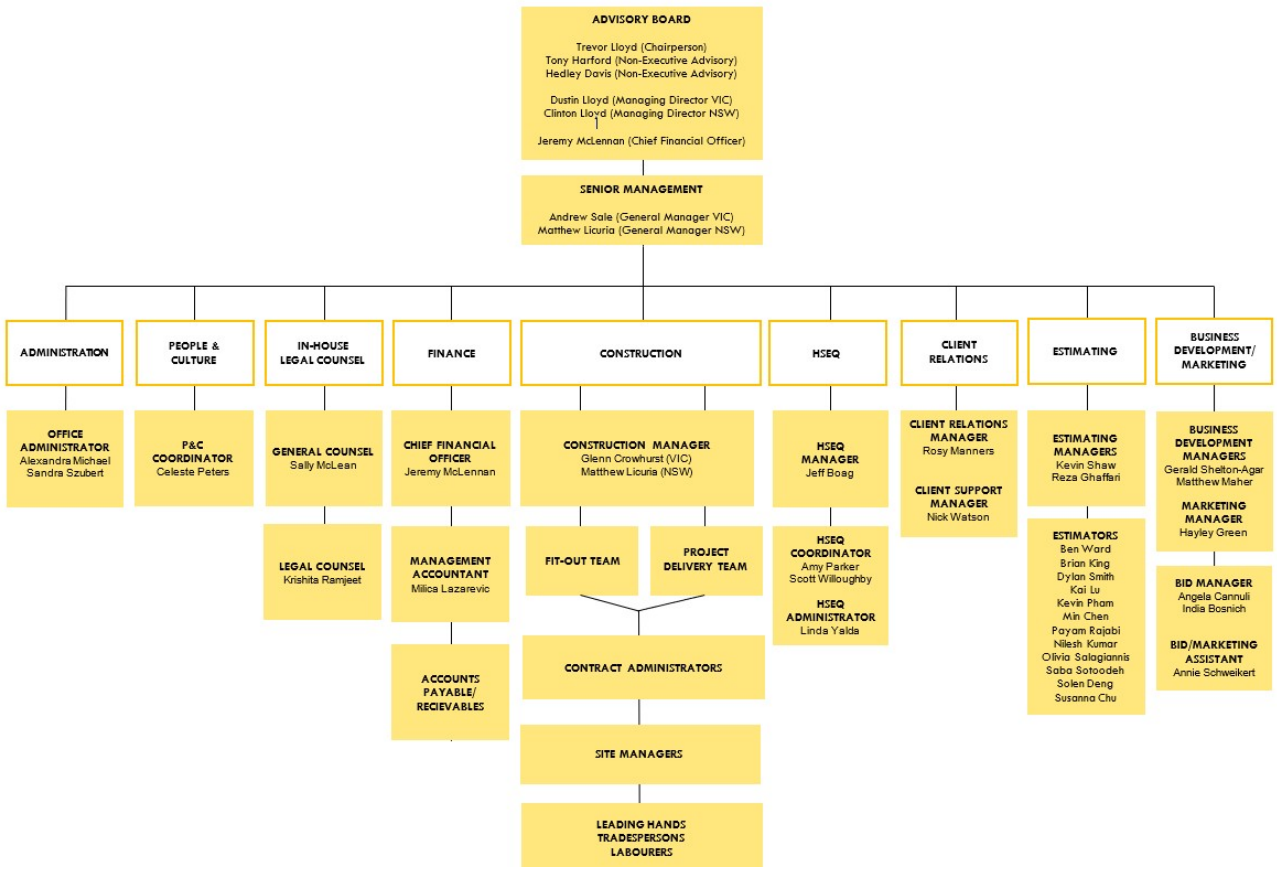
2. Scope

This plan and the information it contains applies to this project.

3. Project Duration

PROJECT DURATION:	42 Weeks
PROJECT START (ESTIMATE):	02/02/2022
PROJECT FINISH (ESTIMATE):	TBC (Jan 2023)

4. Proposed Project Organisation Chart



5. Training Matrix

The following training is specific training required for this project:

REQUIRED TRAINING	Project Mgr	Site Mgr	Foreman/ Supervisor	HSEQC	Contract Admin	Graduate	HSR	Other	
Due Diligence	✓	✓		✓					
Company Induction (including HIRAC)	✓	✓	✓	✓	✓	✓	✓		
Site Induction	✓	✓	✓	✓	✓	✓	✓		
Construction Induction Training (white card)	✓	✓	✓	✓	✓	✓	✓		
Fire Warden			✓	✓					
Chief Fire Warden		✓							
Senior First Aid		✓	✓	✓					
Asbestos Awareness									
Excavation & Trenching Awareness (internal)	✓	✓	✓	✓	✓	✓	✓		
Other:									

6. Training Matrix

All roles/names are to be listed below stating training status. Where training is not up to date, section 7 is to be completed and updated as required. Note: This is to cover Project Specific Training.

REQUIRED TRAINING	NAMES/ROLE																								
	<insert name/Role>																								
Due Diligence																									
Company Induction (HIRAC Training)																									
Site Induction																									
Construction Induction Training (white card)																									
Fire Warden																									
Chief Fire Warden																									
Senior First Aid																									
Asbestos Awareness																									
Excavation & Trenching Awareness (internal)																									
HSR Training																									
Other:																									

7. Training Plan

NAME	ROLE	TRAINING REQUIRED	BY WHEN	COMPLETE