

# Dilapidation Survey Report

Prepared for

# Stephen Edwards

Gate 3 in and out gates, Pymble Ladies' College, Avon Road, Pymble NSW



# **Dilapidation Report**

Project: PLC Grey House

**Address** 

Gate 3 in and out gates, Pymble Ladies' College, Avon Road, Pymble NSW

**Client** Stephen Edwards

**Conducted on** 05.02.2024 15:21 AEDT

#### Photo of front of dwelling or asset





Photo 1

Report reference W20379.PLC.GT3.DLP

Prepared by Cansu Bulbul

Reviewed by Engineer Cansu Bulbul

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#### Instructions

We confirm your instructions to inspect the safely accessible areas at the above address for the purpose of recording existing condition and any notable cracking, subsidence and damage

#### Existing condition

#### Is there any movement to the asset or area?

The surfaces appears generally sound and there is minimal movement and damage

#### Details of movement

Excessive cracking and movement was noted to road base

A full description of the more notable cracking/movement and damage can be found in the 'Record of Inspection' section.

NB. We may not photograph or comment on surfaces, rooms or areas if there is no notable movement or damage present. This includes 'cracking up to 1 mm in width and/or considered non-structural or insignificant or rectifiable during routine maintenance.

#### Methodology

During our site inspections we observe the subject areas and/or assets in view from safely accessible ground levels only. We do not move or alter assets in any way to observe their condition.

Our photographs are provided in pdf format within our reports for ease of reference only. JPEG copies of photographs taken at view are provided to clients for detailed view and these should be referred to in all instances where assessment of asset condition is required.

All photographs provided are unaltered and not digitally enhanced in any way.

When assessing any damage to structures and assets we do not use crack gauges or other measuring devices unless specifically instructed to do so in writing by our clients and in such circumstances our fees will be altered to allow for additional time required to document those areas in view.

We do not measure cracks in Council assets or transport infrastructure elements such as roads, kerb/guttering, rail corridors and airplane runways.

Any comments made relating to severity of cracks in buildings within our reports is based on reference to Tables C1 and C2 in AS2870-2011 – refer to Appendix A.

We may document areas in view, often referred to as 'general view' to provide context to locations where it is practical and safe to do so without compromising privacy and intellectual property of persons and/or organization.

See end of report for photographic record

Our inspection is limited to the safely accessible exterior and interior habitable areas (if access is provided) of the property.

Our inspection does not include roof and voids etc. or areas where no inspection access is possible, e.g., those covered by stored goods, furniture including built-ins, paintings and floor coverings etc.

#### Recommendations

This report should be provided to all relevant project stakeholders

#### Record of inspection

#### For the purposes of this report

Southwest- northeast

the road runs along a North South

#### General Panoramic Photos

#### General Panoramic Photos 1

#### Area photographed

Avon Rd

Start Location 53 Avon Rd

**End Location** Avon Rd Avon Cl Intersection

#### Photos taken approximately at a distance of

#### Add photos





Photo 4





Photo 6



Photo 7



Photo 8





Photo 10



Photo 11



Photo 12





Photo 14





Photo 16



Photo 17







Photo 20



Photo 21





Photo 23



Photo 24



Photo 25



Photo 26



Photo 27



Photo 28



Photo 29



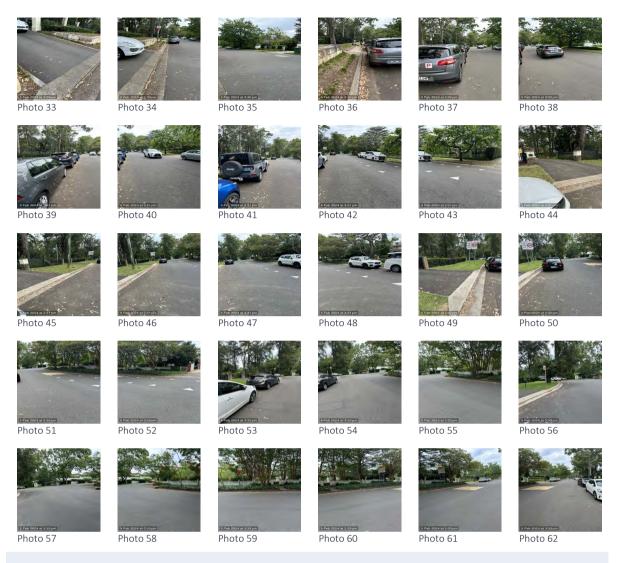
Photo 30



Photo 31



Photo 32



Items of significance and or damage to area photographed above

Items of significance and or damage to area photographed above  $\boldsymbol{1}$ 

**Location** 63 Avon Rd

#### Defect description

Cracking/subsidence to road base



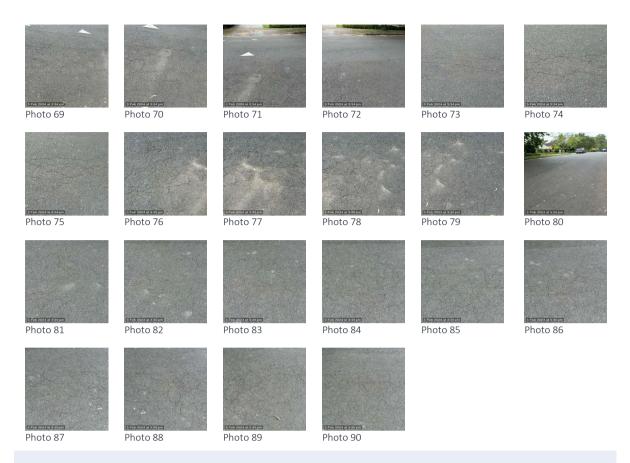












Items of significance and or damage to area photographed above 2

**Location** Gate 3 exit

**Defect description** Cracking



Items of significance and or damage to area photographed above 3

**Location** Gate 3 exit

**Defect description**Wear and tear





Photo 95

Photo 96

Items of significance and or damage to area photographed above 4

**Location** Adjacent to Gate 3

**Defect description**Cracking to kerb and gutter













Photo 97

Items of significance and or damage to area photographed above 5

**Location** Gate 3 entrance driveway

**Defect description**Cracking to gutter









Photo 103

Photo 104

Photo 105

Photo 106

Items of significance and or damage to area photographed above 6

Location Gate 3 entrance driveway

**Defect description**Cracking to kerb





Photo 108





Photo 110



Photo 111



Photo 112









Items of significance and or damage to area photographed above 7

Location Adjacent Gate 3 entrance

**Defect description** Cracking to road base



Photo 116



Photo 117



Photo 118



Photo 119



Photo 120



Photo 121



Photo 122



Photo 123



Photo 124

### Items of significance and or damage to area photographed above 8

Location Gate 3 to 53 Avon Rd

**Defect description** Cracking throughout



Photo 125



Photo 126



Photo 127



Photo 128



Photo 129

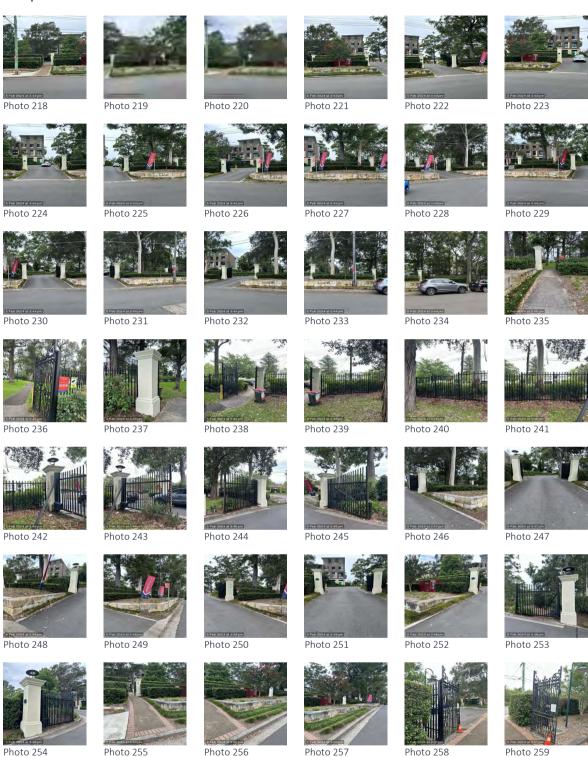


Photo 130





#### Add photos



Items of significance and or damage to area photographed above

Items of significance and or damage to area photographed above  $\boldsymbol{1}$ 

Location Gate 3 columns

#### **Defect description**

Cracking to corner of column





















Photo 267

Items of significance and or damage to area photographed above 2

Location Adjacent to Gate 3

**Defect description** 

Cracking to kerb and gutter







Photo 270



Photo 271



Photo 272



Photo 273



Were there areas where access was not gained?

### Extract from AS2870-2011 Residential slabs and footings

#### CLASSIFICATION OF DAMAGE DUE TO FOUNDATION MOVEMENTS

**TNDermalive** 

Commission of duringge with latterinos to was is given in Table C1. Classification of duringge with reference to concrete foors is given in Table C2.

# TABLE C1 CLASSIFICATION OF DAMAGE WITH REFERENCE TO WALLS

| Description of typical damage and required repair  | Approximate crack<br>width limit (see Note 1)                         | Damage<br>category |
|--|---|--------------------|
| Hairline cracks  | <0.1 mm   | 0<br>Negligible    |
| Fine cracks that do not need repair  | <1 mm   | 1<br>Very slight   |
| Cracks noticeable but easily filled,<br>Doors and windows stick slightly   | <5 mm   | 2<br>Slight        |
| Cracks can be repaired and possibly a small amount of wall will need to be replaced. Doors and windows stick.<br>Service pipes can fracture. Weather tightness often impaired.   | 5 mm to 15 mm<br>(or a number of cracks 3 mm or<br>more in one group) | 3<br>Moderate      |
| Extensive repair work involving breaking out and<br>replacing sections of walls, especially over doors and<br>windows. Window frames and door frames distort. Walls lean<br>or bulge noticeably, some loss of bearing in beams. Service<br>pipes disrupted | 15 mm to 25 mm but<br>also depends on<br>number of cracks             | 4<br>Severe        |

#### NOTES:

- Where the cracking occurs in easily repaired plasterboard or similar cad-framed partitions, the crack width limits may be increased by 5 for each damage category.
- 2 Crack width is the main factor by which damage to walls is categorized. The width may be supplemented by other factors includ serviceability, in assessing category of damage.
- in assessing the degree of damage, account shall be taken of the location in the building or structure where it occurs, and also of the funct of the building or structure.

# Media summary



Photo 1



Photo 3



Photo 2

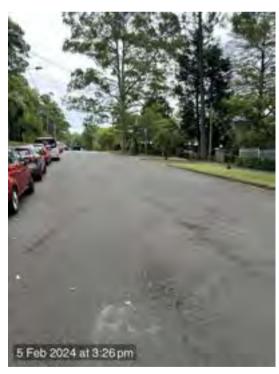


Photo 4



Photo 5

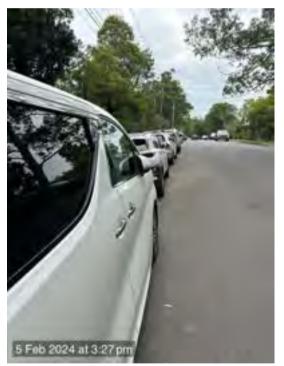


Photo 7



Photo 6



Photo 8

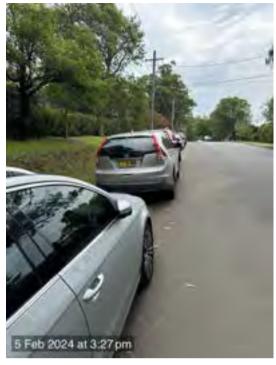






Photo 11

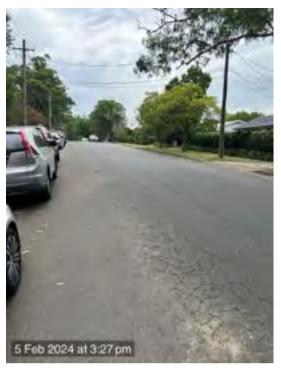


Photo 10



Photo 12



Photo 13





Photo 14

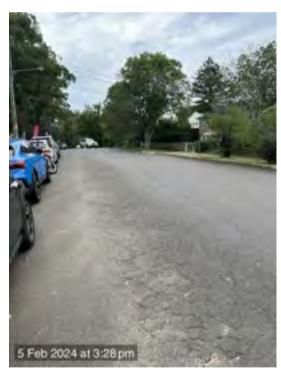


Photo 16



Photo 17



Photo 19



Photo 18

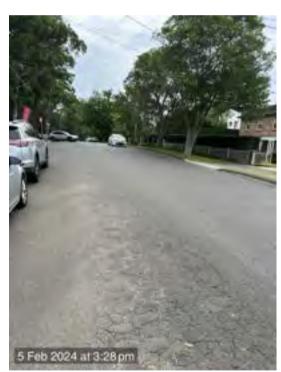


Photo 20







Photo 23

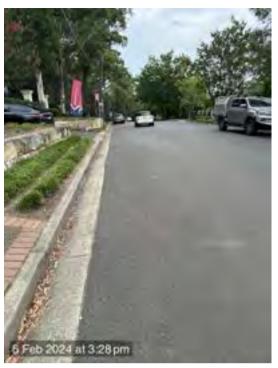


Photo 22



Photo 24





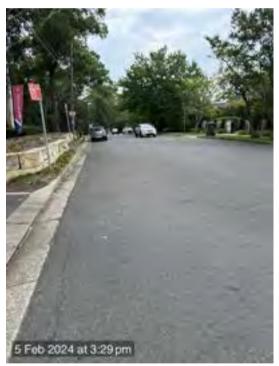


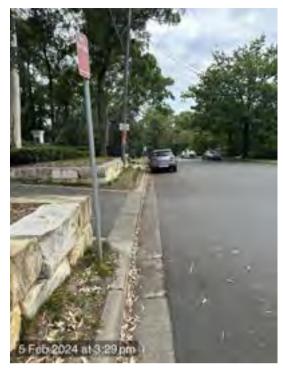
Photo 27



Photo 26



Photo 28







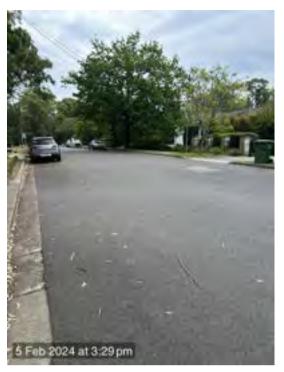


Photo 30



Photo 32



Photo 33

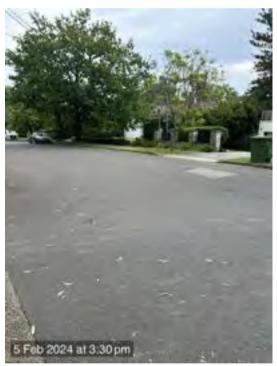


Photo 35



Photo 34



Photo 36



Photo 37



Photo 39



Photo 38



Photo 40



Photo 41



Photo 43



Photo 42

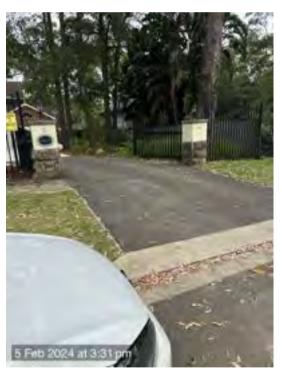


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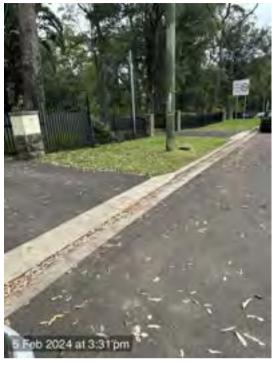


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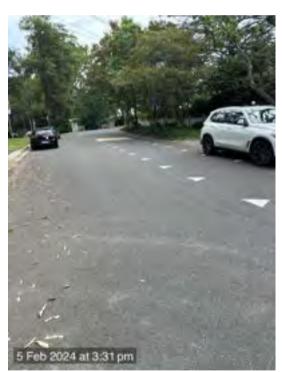


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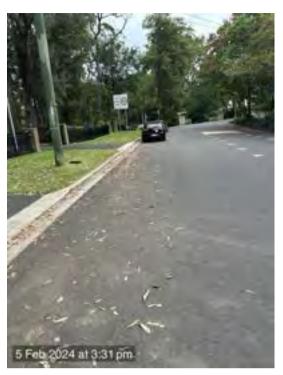


Photo 46



Photo 48







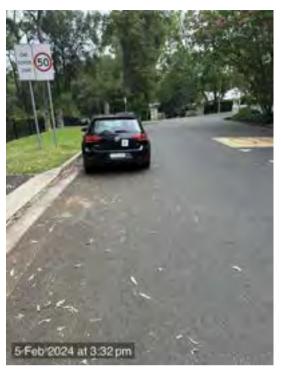


Photo 50



Photo 52





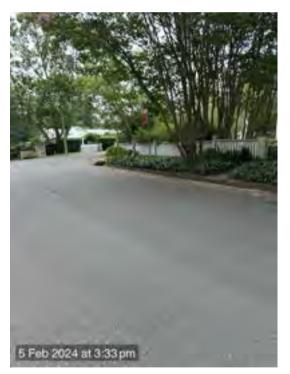


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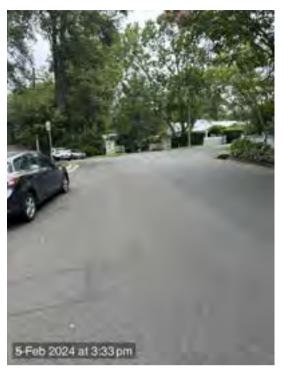


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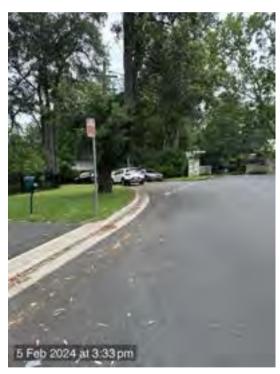


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Photo 57

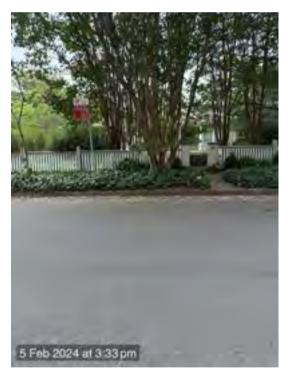


Photo 59



Photo 58

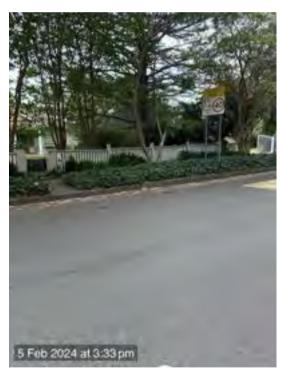


Photo 60



Photo 61

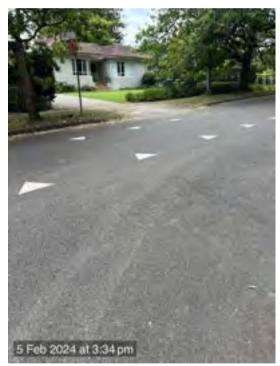


Photo 63



Photo 62

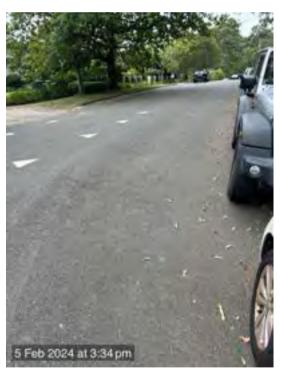


Photo 64











Photo 67 Photo 68











Photo 71 Photo 72









Photo 75











Photo 80



















Photo 88





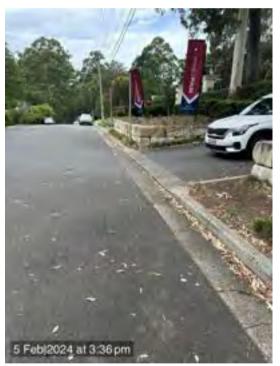


Photo 91



Photo 90

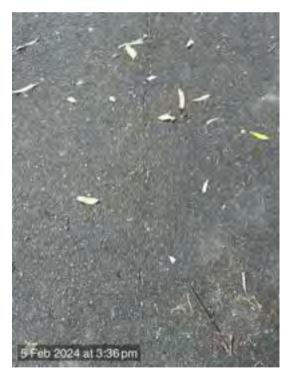


Photo 92





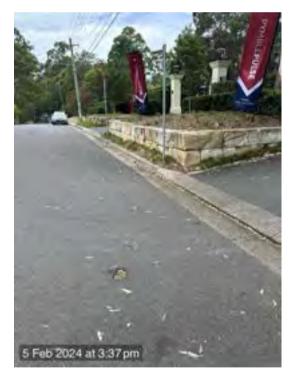


Photo 95



Photo 94

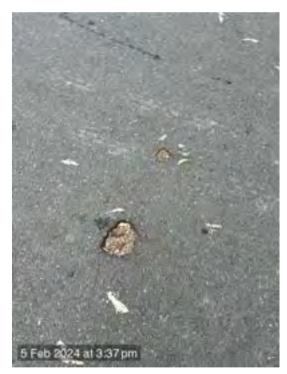


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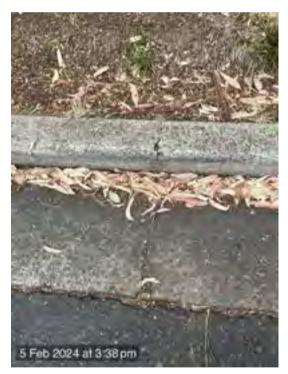


Photo 99



Photo 98



Photo 100



Photo 101



Photo 103



Photo 102

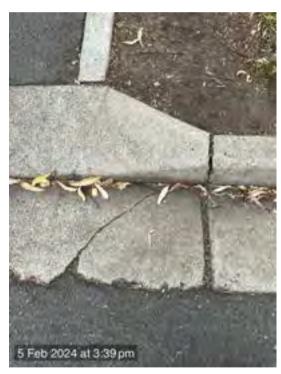


Photo 104



Photo 105



Photo 107



Photo 106



Photo 108



Photo 109



Photo 111



Photo 110



Photo 112



Photo 113



Photo 115



Photo 114



Photo 116











Photo 119 Photo 120

















Photo 127



5 Feb 2024 at 3:56 pm







Photo 130



Photo 131 Photo 132



Photo 133



Photo 135



Photo 134



Photo 136



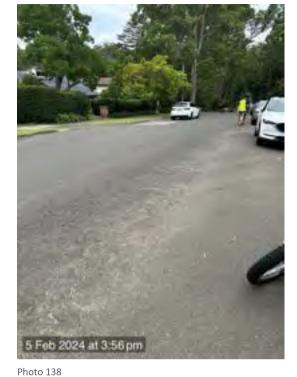








Photo 139 Photo 140





Photo 143



Photo 142



Photo 144











Photo 148





Photo 150



Photo 151



Photo 152











Photo 155 Photo 156







Photo 158



Photo 160

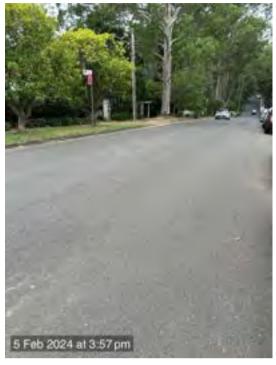






Photo 163



Photo 162



Photo 164











Photo 167 Photo 168











Photo 171 Photo 172



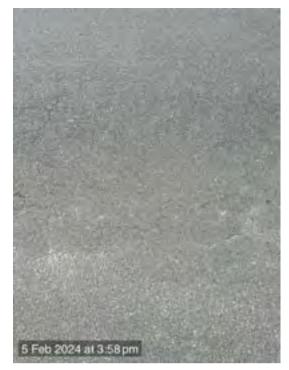
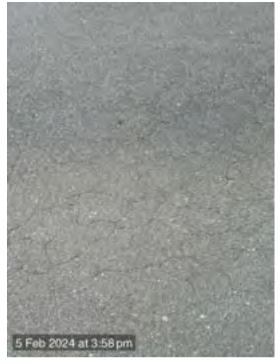




Photo 174



Photo 175









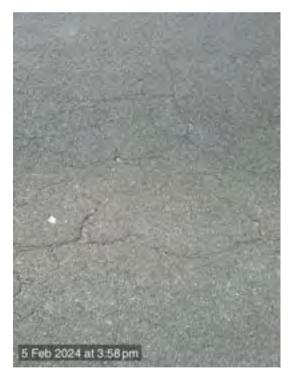


Photo 179 Photo 180



Photo 181

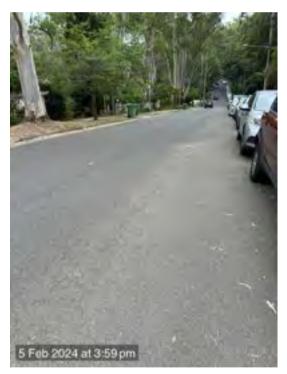


Photo 183



Photo 182



Photo 184

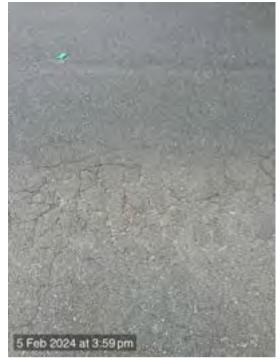










Photo 187 Photo 188

















Photo 194



Photo 195









Photo 199





















Photo 208



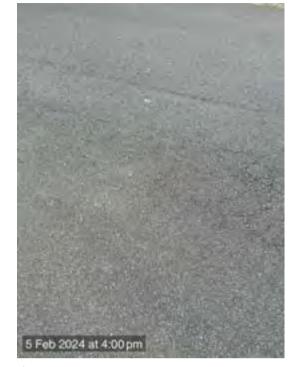




Photo 210



Photo 211 Photo 212





Photo 214



Photo 215



Photo 216

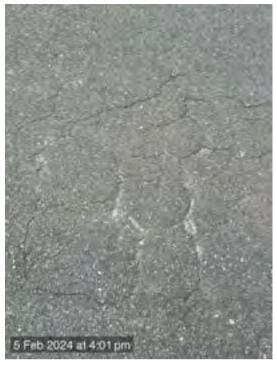


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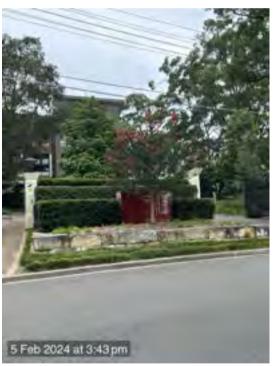


Photo 219



Photo 218



Photo 220



Photo 221



Photo 223

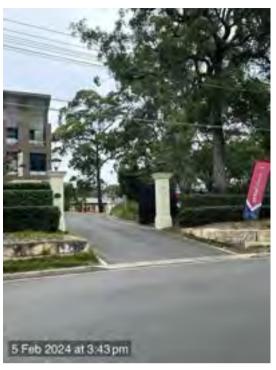


Photo 222



Photo 224



Photo 225



Photo 227



Photo 226

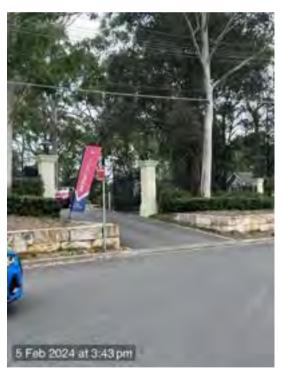


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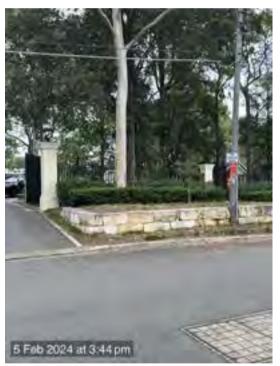


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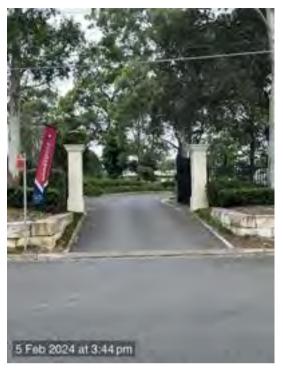


Photo 230



Photo 232



Photo 233



Photo 235

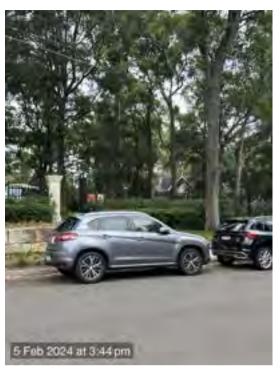


Photo 234



Photo 236



Photo 237



Photo 239



Photo 238

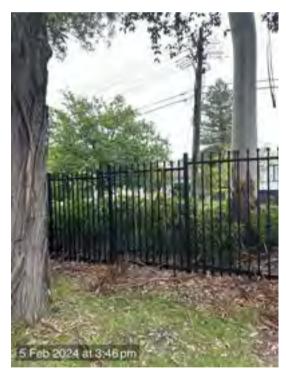


Photo 240



Photo 241



Photo 243



Photo 242



Photo 244



Photo 245



Photo 247



Photo 246



Photo 248



Photo 249



Photo 251



Photo 250



Photo 252



Photo 253



Photo 255



Photo 254



Photo 256



Photo 257



Photo 259



Photo 258



Photo 260



Photo 261





Photo 262



Photo 264



Photo 265



Photo 267



Photo 266



Photo 268



Photo 269



Photo 271

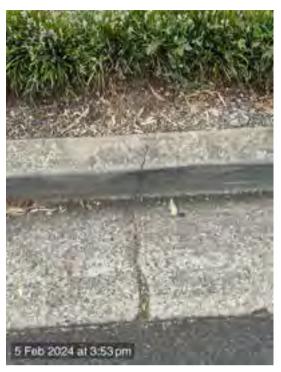


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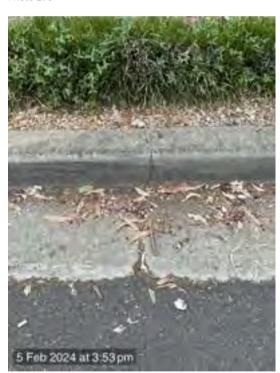


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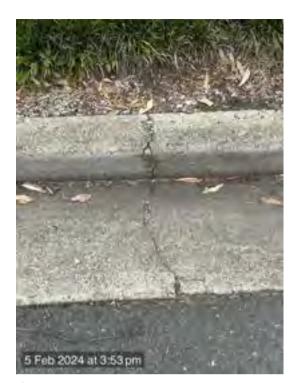
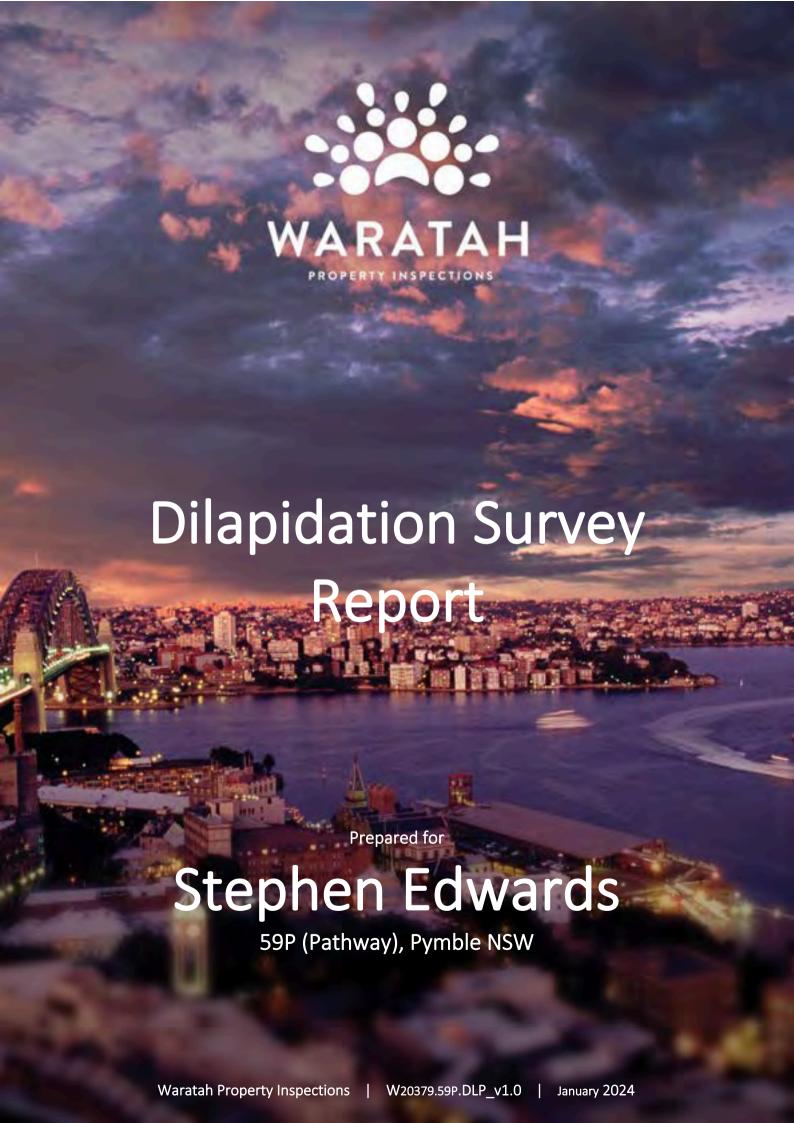


Photo 273 Photo 274





# **Dilapidation Report**

| Address      | 59 Pymble Ave, Pymble |
|--------------|-----------------------|
| Client       | Stephen Edwards       |
| Conducted on | 15.01.2024 10:17 AEDT |

# Photo of front of dwelling or asset



| Report reference     | W20379.59P.DLP |
|----------------------|----------------|
| Prepared by          | Dax Love       |
| Reviewed by Engineer | Cansu Bulbul   |

# **Table of Contents**

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| Methodology  | 4  |
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| Items of significance and or damage to area photographed above | 7  |
| Appendix A   | 10 |
| Media summary  | 11 |

#### Instructions

We confirm your instructions to inspect the safely accessible areas at the above address for the purpose of recording existing condition and any notable cracking, subsidence and damage

#### Existing condition

#### Is there any movement to the asset or area?

The surfaces appears generally sound and there is minimal movement and damage

#### Details of movement

Minimal cracking and movement generally throughout

A full description of the more notable cracking/movement and damage can be found in the 'Record of Inspection' section.

NB. We may not photograph or comment on surfaces, rooms or areas if there is no notable movement or damage present. This includes 'cracking up to 1 mm in width and/or considered non-structural or insignificant or rectifiable during routine maintenance.

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We do not measure cracks in Council assets or transport infrastructure elements such as roads, kerb/guttering, rail corridors and airplane runways.

Any comments made relating to severity of cracks in buildings within our reports is based on reference to Tables C1 and C2 in AS2870-2011 – refer to Appendix A.

We may document areas in view, often referred to as 'general view' to provide context to locations where it is practical and safe to do so without compromising privacy and intellectual property of persons and/or organization.

See end of report for photographic record

Our inspection is limited to the safely accessible exterior and interior habitable areas (if access is provided) of the property.

Our inspection does not include roof and voids etc. or areas where no inspection access is possible, e.g., those covered by stored goods, furniture including built-ins, paintings and floor coverings etc.

#### Recommendations

This report should be provided to all relevant project stakeholders

# Record of inspection

# For the purposes of this report

the road runs along a North South axis

# General Panoramic Photos

#### General Panoramic Photos 1

# Area photographed

Pathway

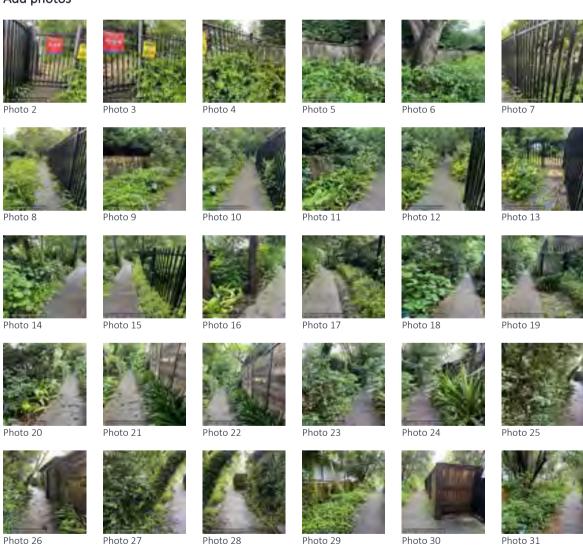
Start Location Gate to PLC

End Location Pymble Road

# Photos taken approximately at a distance of

5 metres

#### Add photos





Items of significance and or damage to area photographed above

Items of significance and or damage to area photographed above  $\boldsymbol{1}$ 

**Location** Adjacent Pymble Ave and No 59

**Defect description**Subsided edging



Items of significance and or damage to area photographed above 2

**Location** Adjacent 59 pool

**Defect description** Grade to timber fence/posts





Photo 55





Photo 57







Items of significance and or damage to area photographed above 3

Location Adjacent 59B

**Defect description** Cracking to pathway



Photo 61



Photo 62



Photo 63



Photo 64



Photo 65



Photo 66



Items of significance and or damage to area photographed above 4

Location Adjacent 59b gate

**Defect description** Cracked pathway







Photo 70



Photo 71

| Were there areas where access was not gained? | Yes                                |  |
|---|------------------------------------|--|
| What areas were not accessible?               | Adjoining fences due to vegetation |  |

# Extract from AS2870-2011 Residential slabs and footings

# CLASSIFICATION OF DAMAGE DUE TO FOUNDATION MOVEMENTS

**TNormalive** 

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| Cracks can be repaired and possibly a small amount of wall will need to be replaced. Doors and windows stick.<br>Service pipes can fracture. Weather tightness often impaired.   | 5 mm to 15 mm<br>(or a number of cracks 3 mm or<br>more in one group) | 3<br>Moderate      |
| Extensive repair work involving breaking out and<br>replacing sections of walls, especially over doors and<br>windows. Window frames and door frames distort. Walls lean<br>or bulge noticeably, some loss of bearing in beams. Service<br>pipes disrupted | 15 mm to 25 mm but<br>also depends on<br>number of cracks             | 4<br>Severe        |

#### NOTES:

- Where the cracking occurs in easily repaired plasterboard or similar cad-framed partitions, the crack width limits may be increased by 5 for each damage category.
- 2 Crack width is the main factor by which damage to walls is categorized. The width may be supplemented by other factors includ serviceability, in assessing category of damage.
- 3 in assessing the degree of damage, account shall be taken of the location in the building or structure where it occurs, and also of the function the building or structure.

# Media summary

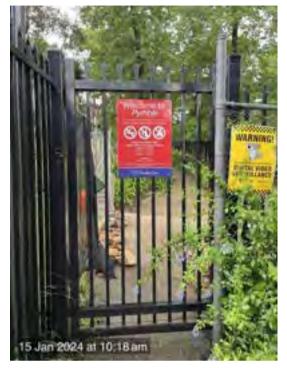


Photo 1



Photo 3



Photo 2

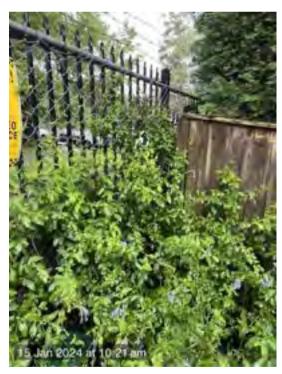


Photo 4



Photo 5



Photo 7



Photo 6

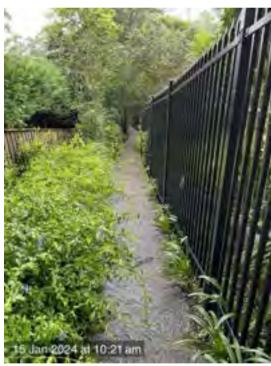


Photo 8











Photo 12









Photo 16



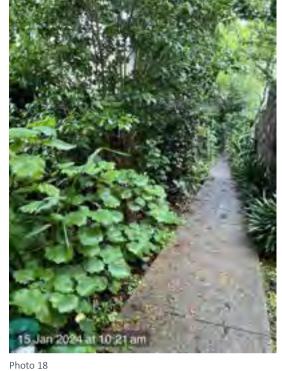








Photo 20



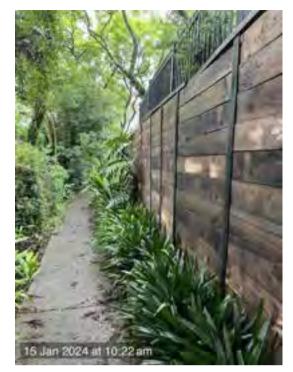








Photo 24









Photo 28



Photo 29



Photo 31



Photo 30



Photo 32





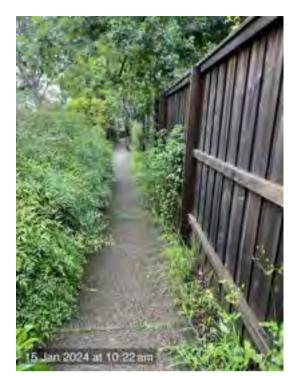


Photo 34





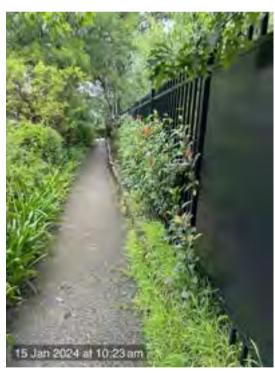


Photo 36











Photo 39 Photo 40



Photo 41



Photo 43



Photo 42



Photo 44

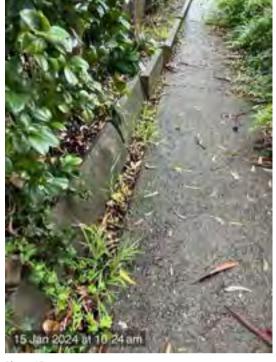






Photo 47



Photo 46



Photo 48



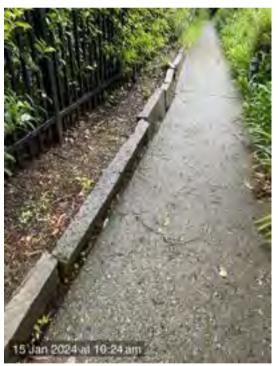


Photo 51



Photo 50

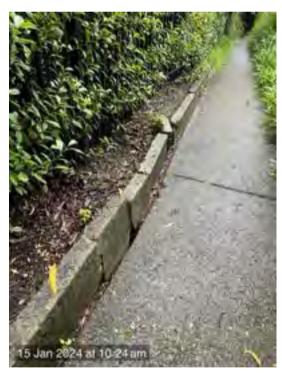


Photo 52



Photo 53



Photo 55



Photo 54

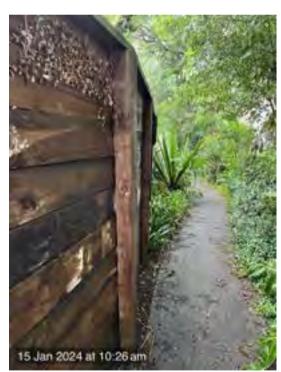


Photo 56







Photo 59

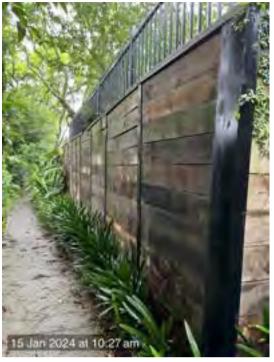


Photo 58



Photo 60



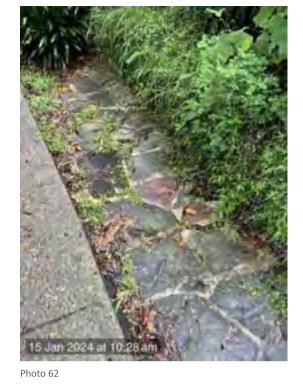


Photo 61





Photo 63

Photo 64





Photo 65



Photo 66

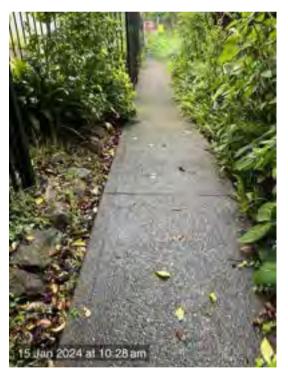


Photo 67 Photo 68

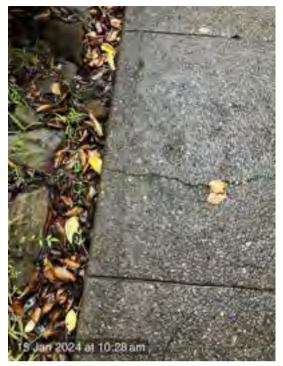


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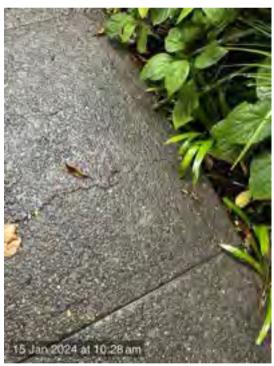


Photo 71



Photo 70



#### Meeting #1

#### Tuesday 14 November 2023

4:00pm to 5:30pm.

At: Pymble Ladies College, IH Meeting Room, Avon Road, Pymble.

Chair: Professor Helen Lochhead.

#### **Invitees**

#### **Community Representatives:**

- 1. Natalie Chan
- 2. Scott Hawker
- 3. lan King
- 4. Roy Morgan
- 5. Lynne Soon

#### **Local Government Representatives:**

No representative nominated.

#### **Pymble Ladies College Representatives:**

- 1. Greg Hastie
- 2. Jenny Roberts

#### **Attendees:**

1. Chantelle Pepper, Note taker.

#### **Apologies**

1. Natalie Chan

#### **Declarations of interest**

None.

#### **Welcome and Introductions**

The Chair, Helen Lochhead provided an Acknowledgment of Country and welcomed the Committee at the beginning of the meeting.

All attendees then introduced themselves and provided some background on their interest in the Grey House Precinct, their role in the community or College, and personal and professional attributes that they can bring to the committee.

#### **Overview of Community Consultive Committee**

The Chair provided an overview of the Committee's purpose, scope and code of conduct.



#### **Purpose**

The purpose of the Pymble Ladies College Community Consultative Committee (PLC CCC) is to enable community input and feedback to be provided to the College during the construction of the Grey House Precinct. The terms of development consent require a Community Consultative Committee be established prior to commencement of construction of the Grey House Precinct and for the duration of the construction. Further, the consent stipulates a range of other conditions that the applicant must adhere to.

The community representatives on the PLC CCC have been selected from a pool of candidates, following a public expression of interest promoted in daily newspapers, the College website and a community Facebook page. Nominations were only received from individuals within the neighbourhood and representatives from the College. Kuringai Council was invited to nominate a representative but declined. The invitation to Council still stands if they choose to participate at a later date.

#### **Scope and Limitations**

It was noted that the remit of the PLC CCC is only with respect to the development of the Grey House Precinct and does not encompass broader College issues that can be addressed though the College's normal channels.

It was noted that individuals have been appointed by the Department of Planning directly and cannot send alternates if unable to attend. Only incorporated community groups or associations can send alternates.

#### **Code of Conduct**

It was confirmed that everyone had signed the Code of Conduct and the Chair reminded all of their responsibilities including respect for others in the meeting, allowing each to speak without interruption and ensuring all have an opportunity to express their views on issues pertinent to the Grey House Precinct development.

#### **Overview of the Grey House Precinct**

Greg Hastie, presented an PowerPoint of the Grey House Precinct development summarised below.

#### Overview of the proposed development

- Years 5 -6 classrooms
- STEM laboratories
- Dance studios
- Out of school hours care
- Early learning centre for 90 children
- Health and wellness facilities
- Landscaping



#### **Project status**

- Development approved 9<sup>th</sup> December 2022 by Independent Planning Commission (IPC)
- Pre-commencement conditions were imposed on the project. An additional 5 metres setback the building from the southern boundary was imposed.
- Redesign of the works has been undertaken. Setback from boundary now 16 metres.
- Condition has been satisfied through IPC approval on 19<sup>th</sup> May 2023.
- An external project manager has been appointed.
- A contractor is yet to be identified imminent.
- Works to commence in December, with fencing and site mobilisation.

#### **Relevant Conditions**

The following conditions have been imposed on the project:

- Work to be undertaken Monday to Friday
  - Work hours 7am-6pm.
  - o No work on Saturday, Sunday or Public Holidays.
  - Work may take place on Saturdays if the works are not audible.
  - Residents (within 30 metres of site boundaries on Pymble Ave and Avon Road) will be advised if and what work is considered to be done on Saturdays.
- Parking
  - o ELC staff and visitors to park in existing car park (Centenary Car Park 37 spaces).
  - On-site parking for the contractor to be provided (on tennis courts 40- 50 vehicle spaces).
  - o 59B Pymble Ave, owned by school to be used by contractor as site office and 4-5 vehicles
- Preconstruction survey to neighbouring properties to be undertaken (Dilapidation reports) letter drop requesting permission to access and photograph properties in January 2024 (inspections over 3-4 week period).
- Construction noise and vibration to be monitored noise loggers and vibration monitors on the boundary.
- Complaints management system to be implemented—cause and effect of the complaint will be logged through the builder.
- Trees removal and replacement
  - o 37 trees to be removed and replaced with 37 trees.
  - Seed collection to be undertaken prior to tree removal. Seeds of native tree species have been collected and will be propagated and planted onsite. Seedlings that cannot be planted on site will go to community and planted elsewhere.
  - Nesting boxes to be relocated 5 have been relocated for flying foxes.



- Traffic calming to be initiated—Local Area Traffic Management (LATM) such as speed bumps externally along Pymble and Avon Road will be implemented in conjunction with Council's Traffic Committee. These are permanent traffic calming measures.
- Construction access road
  - Traffic control on Gate 3 (Avon Road) for trucks via temporary road to be routed behind tennis courts to the Grey House Precinct construction site (safest route).
  - Traffic controller also at Gate3.
  - o Crane is a luffing Jib no oversailing of any houses.

#### **Modification of Condition - Grey House Walk**

- 1 x Modification (to Conditions) has been submitted to the Department of Planning
- The modification requests that Grey House Walk remain open for staff and students 7:00am-9:30am and 2:00pm-6:00pm, school days)
- Approximately 150 students use this walk
- Safe access for students and staff only to be maintained
- No access by the contractor
- Monitoring of access by staff during peak times proposed
- Grey House Walk will remain shut during non-term times
- Link to **Grey House Walk Modification** is at: <a href="https://www.planningportal.nsw.gov.au/major-projects/pymble-ladies-college-grey-house-precinct-modification-1">https://www.planningportal.nsw.gov.au/major-projects/pymble-ladies-college-grey-house-precinct-modification-1</a>

#### **Estimated Construction Timeline**

- 1. Award contract: 1<sup>st</sup> December 2023.
- 2. Commence site mobilisation: 12<sup>th</sup> December 2023.
- 3. Commence works on site: 27<sup>th</sup> January 2024.
- 4. Works completion: 30<sup>th</sup> September 2025.

#### Contacts

| Event   | Name         | Contact No   |
|---|--------------|--------------|
| General College Issues Relating to Construction | Greg Hastie  | 0411 477 006 |
| Construction Issues                             | Builder-TBA  |              |
| Grey House Planning and Development             | Nahid Mahmud | 02 9995 5228 |
| Website Links:                                  |              |              |



| Event                                | Name  | Contact No |
|--------------------------------------|---|------------|
| Pymble Ladies College Masterplanning | https://pymble.nsw.edu.au/about-pymble/master-planning/   |            |
| Dept of Planning                     | https://www.planningportal.nsw.gov.au/major-<br>projects/projects/pymble-ladies-college-grey-house-precinct |            |

#### Discussion Plus Q & A

| Iss | Issues raised   |   | Confirmations   |  |
|-----|---|---|---|--|
| 0   | Onsite induction for all construction contactors      | 0 | All workers will receive on-site induction  |  |
| 0   | Monitoring construction vehicles and workers parking. | 0 | Team to monitor controls.   |  |
| 0   | Impacts on roads/property (Dilapidation Reports)      | 0 | Dilapidation reports of adjacent properties in January 2024   |  |
| 0   | Monitoring of noise/vibration/dust.                   | 0 | Construction noise and vibration to be monitored – noise loggers and vibration monitors – on the boundary.  Dust suppression – site will be watered when digging, silt fences/dust cloth at boundaries.   |  |
| 0   | Construction traffic hours                            | 0 | A Construction Management Plan (CMP) stipulates hours   |  |
| 0   | Policing of traffic and parking would be preferred.   | 0 | of operation- eg drop of and pick up periods – vehicles not allowed onto site during these times – any delivery that come outside required hours are turned away.  Design of building has not been changed – only moved 5m north + additional landscaping – IPC has signed off. |  |
| 0   | Future use of Grey House Walk – BAU                   |   |   |  |

#### **Actions**

| Action                                | Responsible | Status                            |
|---------------------------------------|-------------|-----------------------------------|
| Construction Management Plan          | Contractor  | Pending                           |
| Share Presentation with CCC & Website | Greg Hastie | PPT circulated with meeting notes |



| Action  | Responsible | Status   |
|---|-------------|--|
| Check overshadowing with increased setback                            | Greg Hastie | Please see attached  |
| Check trees at rear of Lynne Soon's house (53 Pymble Ave) are staying | Greg Hastie | No trees will be removed at rear of 53 Pymble Avenue   |
| Share link for modification application                               | Greg Hastie | https://www.planningportal.nsw.gov.au/major-<br>projects/projects/pymble-ladies-college-grey-<br>house-precinct-modification-1 |

#### **Other Business**

Greg Hastie to brief with Natalie Chan week beginning 27 November 2023.

#### **Next Meeting Date**

12<sup>th</sup> of March – To be confirmed - Meeting notice distributed at the end of February.

# Pymble Ladies College COMMUNITY CONSTRUCTION COMMUNICATION STRATEGY

# **GREY HOUSE PRECINCT**

January 2024



Indicative Artist's impression of proposed concept design



# Question today Imagine tomorrow Create for the future

Pymble Ladies College Community Construction Communication Strategy

#### **Grey House Precinct**

WSP Level 27, 680 George Street Sydney NSW 2000 GPO Box 5394 Sydney NSW 2001

Tel: +61 2 9272 5100 Fax: +61 2 9272 5101

wsp.com

| Rev   | Date            | Details       |
|-------|-----------------|---------------|
| 1     | 23 July 2022    | Draft         |
| 2     | 28 April 2023   | Updated draft |
| 3     | 16 January 2024 | Updated draft |
| FINAL | 29 January 2024 | Finalised     |

WSP acknowledges that every project we work on takes place on First Peoples lands.
We recognise Aboriginal and Torres Strait Islander Peoples as the first scientists and engineers and pay our respects to Elders past and present.

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Appendix A Community Consultative Committee Terms of Reference

Appendix B Community Consultative Committee Agenda – Meeting 1

Appendix C Community Consultative Committee Minutes – Meeting 1

# 1 Introduction

#### 1.1 About the project

The Grey House Precinct (GHP) will deliver a multi-use building housing Years 5 and 6 classrooms and STEM labs, the Health and Wellbeing Centre, Dance Facility, After Hours School Care (OHSC) and Early Learning Centre (ELC).

The world-class educational and co-curricular facility is designed to:

- foster leading pedagogical practices
- prioritise student and staff health and wellbeing
- embed flexibility to accommodate developments in learning and teaching methods
- respect and enhance the existing built form and natural environs
- contribute to a connected campus that is accessible.

Communications and engagement will support the delivery of this important project which is part of the Pymble Ladies College Campus Masterplan.

### 1.2 Objective of this strategy

Construction communications will build on communications and engagement during planning with continued commitment to clear and proactive communications with neighbours and stakeholders, maintaining reputation, meeting DPE and council expectations and supporting the timely delivery of the project. The engagement strategy will guide continued proactive open, honest and clear lines of communication.

The strategy has been developed to meet the requirements of the Independent Planning Commission of NSW Conditions of Consent outlined at C8. and F8. and will support the delivery of requirements agreed in the Construction Environmental Management Plan (CEMP) and any consultation required to mitigate impacts as planning and on-site work progresses.

This Community Communications Strategy has been developed to achieve the following community engagement objectives:

- guide community communications for the project in the lead up to, during and for a minimum of 12 months following completion of construction
- meet the requirements of the Development Consent
- provide timely information to impacted stakeholders, college community and the broader community
- communicate the benefits of the project
- build the college community stakeholder relationships and maintain goodwill with the surrounding community
- manage community expectations and build trust by delivering on commitments
- address and correct misinformation in the public domain
- reduce the risk of project delays
- leave a positive legacy in the Pymble Ladies College community.

#### 1.3 Community liaison

Pymble Ladies College will ensure a point of contact is established with responsibility for community liaison in collaboration with the project manager and project contractors.

#### 1.3.1 Responsibilities

Proactively keep the local community and the college community informed about:

- what to expect during construction
- timing
- how to make contact with questions about the development and to raise concerns or provide feedback.

#### Construction

#### **PLC**

 Provide point of contact for queries about the development and future operations and provide alternative point of contact for construction related queries (Construction Contractor to be first point of contact)

The usual communications channels for the college community will apply.

Email communityengagement@pymblelc.nsw.edu.au

Phone +61 2 9855 7799

- Proactively communicate through Community Updates at key milestones.
- Establish the Community Consultative Committee with regular meetings between committee members and key project team members.
- Respond to community and stakeholder questions and feedback during construction and operations.
- Maintain a Complaints Register which will be uploaded to the website and updated monthly during construction.
- Ensure project documentation is uploaded to the College website as required by the Planning Secretary.

#### Construction contractor

Provide point of contact for construction related queries.

Construction contractor, Stephen Edwards Constructions, will provide 24-hour contact details for the site manager. This will be used for complaints and questions about construction.

Name/phone: Peter Pawlyszyn, 0403 676 038

Email: ppawlyszyn@stephenedwards.com. au

PLC Project Director, Masterplanning and Capital Works, will be informed of any community contact and complaints will be passed on for response as required. Feedback received will be shared. A register will be maintained.

 Responsible for construction signage and wayfinding and construction notifications if required related to road closures, remediation, out of hours works etc.

#### Post construction / operations

- Following construction and during operations, any queries will be responded to by the PLC Project Director,
   Masterplanning and Capital Works or alternative College representative.
- The college has a formal internal and external community queries contact and resolution process in place to facilitate
  effective response processes which is ongoing.

#### 1.3.2 Community Consultative Committee (CCC)

#### Representatives of community and stakeholders

- In accordance with the Department's Community Consultative Committee Guideline: State Significant Projects (2019), a Community Consultative Committee (CCC) has been established. The Department appointed an independent chairperson on 10 July 2023 and the CCC held their first meeting on 14 November 2023. The CCC functions in accordance with the Department's CCC Guideline and will continue to do so throughout construction and operation of the proposed development or other timeframe agreed by the Planning Secretary.
- The CCC includes representation from members of the local community who were recruited via Expressions of Interest by the independent chairperson as well as from PLC.
- The CCC is an advisory committee only and acts as a conduit for information and feedback between PLC, stakeholders and the community.
- The CCC's focus is on key environmental management issues related to the GHP during construction and operations. The CCC chairperson will report annually on the activities of the committee which will be made public via the Department's website.
- Copies of the CCC's Terms of Reference and Agenda and Minutes of their first meeting are at Appendices A, B and C, respectively.

#### 1.3.3 How to find out more or share feedback

Pymble Ladies College will ensure a point of contact is established with responsibility for community liaison in collaboration with the project manager and project contractors.

A summary of proposed communications follows with details of Community and Stakeholders and the Tools and Techniques used to keep them informed and to provide effective two-way communications are outlined at 2.1 and 3.1 of the strategy.

Communications and engagement will be targeted according to level of interest:

- immediate neighbours
- neighbours and local who have demonstrated a level of interest in College operations and capital works
- wider community
- College community some of whom are also neighbours.

#### All community and stakeholders

#### Community updates

As the project progresses to the pre-construction phase the first community update will be shared. This update will provide the immediate neighbours, wider community and stakeholders with an overview of the Grey House Precinct project including renders, information about what to expect during construction, how they will be kept informed and opportunities to find out more and importantly the contact details for questions or concerns.

WSP January 2024 Page 3 • Community updates will be provided throughout construction at key milestones.

#### Website updates

- The College website will be used as a key point for information about the project and construction and will be proactively kept up to date as work progresses. All communications will provide links to the <u>website</u>.
- At least 48 hours before the start of construction and until completion of all works under the Development Consent, or such other time as agreed by the Planning Secretary, the following information and documents (as they are obtained or approved) must be made publicly available on the website:
  - the documents referred to in condition B2 of the Development Consent
  - all current statutory approvals for the development
  - all approved strategies, plans and programs required under the conditions of the Development 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 the Development Consent
  - a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of the Development 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 complaint register updated monthly
  - audit reports prepared as part of any independent audit of the development and the College's response to the recommendations in any audit report
  - any other matter required by the Planning Secretary.

This information is to be kept up to date, to the satisfaction of the Planning Secretary, and publicly available for 12 months after the start of operations.

#### Construction notifications

- Works notifications as required by the conditions of consent e.g. traffic changes, out of hours work etc., these will
  include contact details for queries.
- Doorknock / call to support notification as required.

#### Signage

Works signage as required to ensure safety and communicate contact details.

#### Contact us

The point of contact details for questions and feedback will be communicated to the local community and key stakeholders ahead of the commencement of works via community newsletter letterbox drop, project CCC and direct contact where community members had asked to be kept up to date and are not members of the project CCC.

#### Immediate neighbours

#### Engagement

• Immediate neighbours identified as having a very high level of interest were engaged during the planning phase and

were also invited to participate in the CCC.

Pre-construction dilapidation survey

- Prior to the commencement of any construction, a pre-construction survey by a suitably qualified and experienced expert will be offered to owners of residential buildings that are likely to be impacted by the development.
- Where the offer is accepted, the pre-construction surveys will be undertaken before the start of vibration generating works that could impact the identified buildings. A copy of the survey will be provided to owners before the start of any vibration generating works.

#### 1.3.4 Complaints and Enquiries Register

PLC will maintain a register of complaints and enquiries received and will take all reasonable steps to investigate and close out complaints and enquiries in a timely manner. Information about the project's complaints and enquiries procedures will be set out in the initial letterbox drop to neighbouring residents and businesses.

A complaints register with date and type of complaint, and whether the complaint is open or closed, will be uploaded to the College website.

#### 1.3.5 Dispute Resolution

Should any complaints and enquiries require escalation they will be referred to the PLC Project Director in the first instance who will escalate via the Principal and College Board if required.

Where satisfactory resolution for both parties cannot be achieved independent mediators would be engaged.

#### 1.3.6 Media

All media queries are to be referred to communityengagement@pymblelc.nsw.edu.au

# 2 Stakeholder analysis

## 2.1 Key stakeholders and approach

Stakeholders can be categorised in two distinct groups - external and internal.

The below table lists the various groups that fall within these two overarching categories and outlines their likely interest, interest level and suggested engagement techniques to best communicate with them during the project lifetime.

#### 2.1.1 External Stakeholders

| Stakeholder   | Likely interest   | Interest<br>level | Engagement techniques  |
|---|---|-------------------|--|
| External  |   |                   |  |
| Immediate neighbours  | <ul> <li>Construction impacts – dust, noise and vibration, traffic and parking.</li> <li>Design and operations - building bulk and scale, hours of operation – noting Dance Studio lights and noise, Grey House Walk – access and utilisation, traffic and parking.</li> <li>Privacy</li> </ul> | High              | <ul> <li>Opportunity to participate in the Community Consultative Committee (CCC)</li> <li>Early engagement</li> <li>Introduction to key project team members via CCC</li> <li>Community updates, PLC Website - project page</li> <li>Letterbox drop – works notification, community updates</li> <li>Community liaison contact details</li> <li>Signage</li> <li>Doorknock – if required</li> </ul> |
| Nearby residents and<br>any stakeholders<br>engaged during<br>planning phases<br>Community members<br>included on college<br>contact register for<br>relevant updates | <ul> <li>Traffic impacts on local roads</li> <li>Construction impacts such as noise, dust and vibration</li> <li>Operations</li> <li>Availability of a point of contact to direct issues / questions</li> </ul>   | High /<br>medium  | <ul> <li>Opportunity to participate in the<br/>Community Consultative Committee</li> <li>Community updates, PLC Website -<br/>project page</li> <li>Letterbox drop – works notification,<br/>community updates</li> <li>Community liaison contact details</li> <li>Signage</li> <li>Doorknock – if required</li> </ul>   |
| Wider community   | <ul> <li>» Traffic impacts</li> <li>» Operations</li> <li>» Availability of a point of contact to direct issues / questions</li> </ul>  | Medium /<br>low   | <ul> <li>Opportunity to participate in the<br/>Community Consultative Committee</li> <li>Community updates, website</li> </ul>   |
| Ku-ring-gai Council   | <ul><li>» Community concern</li><li>» Impact on local traffic</li><li>» Impact on condition of local roads</li></ul>  | Medium            | <ul> <li>Representation on the Community<br/>Consultative Committee</li> <li>Direct contact</li> </ul>   |

| Stakeholder   | Likely interest  | Interest<br>level | Engagement techniques  |
|---|--|-------------------|--|
|   | » Availability of a point of contact to<br>direct issues / questions   |                   | <ul><li>» Share notifications for info</li><li>» Community liaison contact details</li></ul> |
| The Hon. Alister<br>Henskens, Member for<br>Ku-ring-gai | <ul><li>Community concern</li><li>Availability of a point of contact to direct issues / questions</li></ul>                              | Low               | <ul><li>» Direct contact</li><li>» Community liaison contact details</li></ul>               |
| Transport for NSW                                       | <ul><li>» Impact on transport scheduling</li><li>» Potential delays to local bus routes</li><li>» Impact on condition of roads</li></ul> | Low               | » Direct contact as required   |

#### 2.1.2 Internal stakeholders

| Stakeholder Likely interest | Interest Engagement techniques level |
|-----------------------------|--------------------------------------|
|-----------------------------|--------------------------------------|

#### Internal

Construction contractors will work closely with the Pymble Ladies College internal communications team to ensure the college community is kept informed of any safety measures in place including changes to internal and external pedestrian and vehicle access and restricted areas.

The college will be responsible for its internal communications informed by ongoing updates from the contractors. Barriers, signage, notifications would be the responsibility of the contractor.

| Engagement techniques would be informed by usual college processes, but could include the following: |  |        |  |  |  |  |
|--|--|--------|--|--|--|--|
| Pymble Ladies College staff  | <ul> <li>Impact on normal college routine</li> <li>Impact on internal footpaths – getting to and from buildings</li> <li>Construction impacts such as nois dust and vibration</li> <li>Safety of students</li> </ul> | High * | and ongoing at key milestones where impacts change  Internal college communications channels could include:  — email via Principal / Executive  — notifications posted to staff notice boards  — intranet  — distribution of project notifications. Newsletters /edm  — website - project page  Signage and barriers |  |  |  |
| Students   | <ul> <li>Impact on normal college routine</li> <li>Impact on internal footpaths –</li> </ul>   | High   | Internal college communications channels could include:  |  |  |  |
|  | getting to and from buildings  |        | <ul> <li>- 'what to expect' briefing</li> </ul>  |  |  |  |
|  | » Construction impacts such as nois dust and vibration   | e,     | <ul> <li>newsletters /edm</li> </ul>   |  |  |  |

» Safety of students

- announcements
- emails
- teaching staff
- noticeboards
- website project page
- » Signage and barriers
- » Traffic and pedestrian controllers as required

- Pymble Parents Association
- » Impact on normal college routine
- High
- » Impact on internal footpaths getting to and from buildings
- » Construction impacts such as noise, dust and vibration
- » Safety of students

#### » Could include:

- briefings ahead of start of work and ongoing at key milestones where impacts change
- website updates
- signage and barriers
- traffic and pedestrian controllers as required
- email via Principal / Executive
- construction notification
- college newsletter /edm update

- Pymble Ladies College » parents »
  - Impact on normal college routine
- High
- » Impact on internal footpaths getting to and from buildings
- » Construction impacts such as noise, dust and vibration
- » Safety of students

- » Could include:
  - via Parents Association
  - website updates
  - email via Principal/ Executive
  - construction notification
  - college newsletter /edm update
- » Signage and barriers
- » Traffic and pedestrian controllers as required

# 3 Engagement tools and timeframes

The Strategy outlines procedures and mechanisms for distribution of information to stakeholders. Effective communication between the project team and stakeholders serves as a risk mitigation tool, and also supports both the project team and stakeholders to achieve positive outcomes in relation to the project.

#### 3.1 Tools and timeframes

Collateral content will be informed by the Construction & Environmental Management Plan (CEMP) which provides key information about 'what to expect during construction.'

| <b>Engagement tool</b>                | Who   | Why  | When  |
|---------------------------------------|---|--|---|
| Community Consultative Committee      | <ul> <li>Interested external local community and stakeholders</li> <li>Council</li> </ul>   | <ul> <li>Provide a forum for discussion between the College and contractors and representatives of the community, stakeholder groups and local council</li> <li>Advisory and consultative</li> <li>Establish good working relationships and promote information sharing</li> </ul> | Session Ses |
| Contact number and email address      | 1 » Interested external community and stakeholders  | » Provide point of contact for<br>community and<br>stakeholders to provide<br>feedback or raise concerns<br>around the project   | » Establish prior to start of works   |
| College website update                | <ul> <li>» Interested external community and stakeholders</li> <li>» Parents and students</li> <li>» Meet Development Consent requirements</li> </ul> | <ul> <li>Create college and wider community awareness of project</li> <li>Provide up to date project information point for all</li> <li>Provide update on milestones achieved</li> </ul>   | <ul> <li>At least 48 hours prior to start of works provide information and documentation as directed by the Development Consent</li> <li>Immediately prior to start of works to advise what to expect during construction and provide contact details</li> <li>Updated throughout project</li> <li>Add any newsletters or notifications</li> </ul>  |
| Direct contact Call / email / meeting | <ul><li>» Pymble Parent<br/>Association</li><li>» Govt agencies</li><li>» Ku-ring-gai Counci</li></ul>  | » Provide project information including potential impacts  | » Immediately prior to start<br>of works to advise what to<br>expect during<br>construction and provide<br>contact details  |

| ngagement tool   | Who  | Why   | When   |
|--|--|---|--|
|  |  |   | » Various stages of project lifetime   |
|  |  |   | » Wrapped around project milestones  |
| etterbox drops – borknocks may be dertaken if required ewsletters otifications | » Nearby residents                             | Proactively advise:  » start of construction commencing, providing contact details for updates and queries  » of any works that may produce extreme noise/ vibration / dust  » of any hazardous materials removal  » about major project milestones  » project completion | <ul> <li>Immediately prior to start of works to advise what to expect during construction and provide contact details</li> <li>Various stages of project lifetime</li> </ul> |
| eetings  | » Nearby residents                             | » In response to concerns if required   | » As required  |
| The following may form   | part of internal commun                        | nications   |  |
| ollege intranet  | » Staff  | » Provide staff with project<br>updates specific to day to<br>day activity  | <ul> <li>Immediately prior to start of works to advise what to expect during construction and provide contact details</li> <li>Updated throughout</li> </ul>                 |
|  |  |   | <ul><li>project</li><li>Add any newsletters or</li></ul>   |
| Vhat to expect' briefing   | » Staff  | Proactively advise:   | notifications  > Prior to start of works to  |
| ewsletters /edm<br>nnouncements<br>nails<br>eaching staff<br>oticeboards       | <ul><li>» Students</li><li>» Parents</li></ul> | <ul> <li>start of construction commencing, providing contact details for updates and queries</li> <li>changes to access and movement</li> <li>any safety information</li> <li>of any works that may produce extreme noise/vibration / dust</li> </ul>                     | advise what to expect during construction and provide contact details  > Throughout work   |
|  |  | <ul> <li>of any hazardous materials<br/>removal</li> <li>about major project<br/>milestones</li> </ul>  |  |
|  |  |   |  |

# 3.2 Implementation action plan

An implementation action plan with detailed actions and responsibilities will be prepared to manage the communications and engagement process and ensure the engagement outlined above is delivered proactively and effectively provides information and how to find out more or raise concerns.

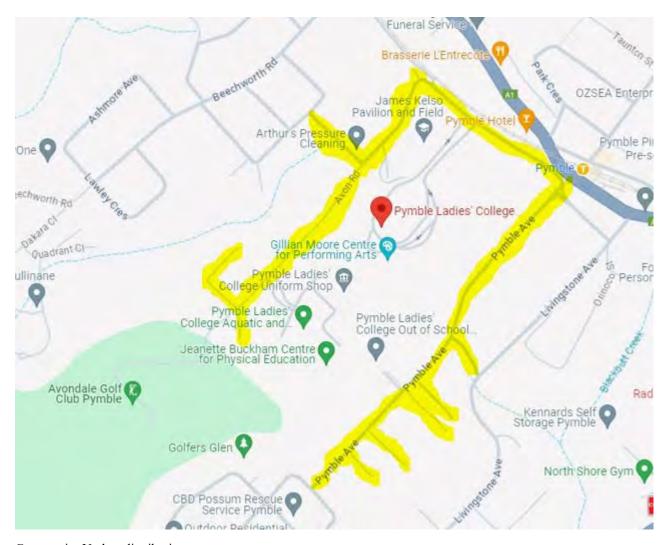
Preparation of the implementation action plan will be done in collaboration with the project manager and construction contractor.

# 4 Administration and record keeping

Record keeping and reporting throughout engagement will:

- Acknowledge contact and respond to all issues within 72 hours
- Advise any issues as identified
- Establish and apply escalation protocols safety being a priority.
- Establish a follow up reminder mechanism to ensure agreed actions are carried out.
- Establish and maintain a stakeholder list for ongoing communications as communications progress.
- Report activities undertaken as well as outcomes.

# 5 Distribution area



Community Update distribution area map

# Appendix A

Community Consultative Committee
Terms of Reference



## Terms of reference

The Community Consultative Committee terms of reference is in accordance with the NSW Department of Planning and Environment's *Community consultative committee guideline: State Significant Projects 2023.* 

# Purpose of the community consultative committee

The committee has been established to provide a forum for open discussion between , representatives of the community, stakeholder groups and on issues directly relating to the

#### Purpose and scope

The purpose of this committee is to serve as a forum for ongoing communication about the project and its environmental performance. It is not a decision-making body but performs an advisory and consultative role.

The scope of this committee includes:

discussing the resolution of community concerns and complaints
discussing the implementation of any conditions of approval or consent and management plans
consulting on any proposed amendments or modifications to projects
reviewing the results of any monitoring, annual reviews or independent audits
consulting on any community initiatives
conducting site visits to view the project
add other items as necessary

# Committee membership

#### Chairperson

The appointed chairperson is

#### Committee members

The committee members are:

community member
 community member
 community member
 community member

5.:representative6.:representative7.:representative8.:representative

9. : the proponent10. : the proponent11. : the proponent

#### Alternate representatives

The appointed alternate representatives are:

1. : alternate community member

2. alternate representative
3. : alternate representative
4. : alternate representative

# Meeting frequency, location and timing

#### Meeting frequency

The committee will meet at least times for the . The meeting frequency is to be a minimum of once a year unless otherwise specified by the conditions of consent or approval.

The chairperson will give members at least week/s notice before a regular committee meeting.

#### **Extraordinary meetings**

Any committee member may ask the chairperson to convene an extraordinary committee meeting if there are important and urgent matters requiring consideration.

The chairperson will decide if the extraordinary meeting is called for, or if the matters can be addressed in other ways.

The chairperson will give members week/s notice before an extraordinary meeting.

#### Site visits

Site visits may be organised, as needed, including as part of the regular meeting, or immediately before the meeting for convenience.

is responsible for ensuring that work health and safety measures are in place for all who attend the site visit. Committee members must follow any requirements of the proponent, including work health and safety requirements, while on site.

#### Meeting venue and format

Committee meetings may be held

in person at or

via MS Teams/Zoom/Google meets or similar collaboration tool or

as a mix of in-person and online meetings.

#### Meeting time

The normal meeting time will be to , unless the chairperson proposes an alternative.

# Meeting procedures

#### Meeting agenda

The chairperson will call for agenda items at least week/s before the scheduled meeting.

The chairperson will distribute the agenda and any supporting documents to committee members at least week/s before the meeting.

The chairperson may decide if the committee will consider late items at the meeting or defer them to a following one. This includes:

- late agenda items raised after the agenda has been circulated
- late supporting documents provided within a week of the meeting
- late agenda items proposed by a committee member during the meeting.

The chairperson should consider how much time the committee members will need to review and consider the matters adequately, if enough information has been provided to discuss the matter, as well as its urgency and importance.

#### Standard agenda items

Declarations of interest should be included as a standard agenda item at the start of each meeting. It is the responsibility of each member to keep their declaration of interests up to date.

#### Annual agenda items

A discussion and approval of these terms of reference must be included as an annual agenda item.

#### **Meeting minutes**

The chairperson (or identified note-taker) will take minutes for each committee meeting.

These minutes must accurately summarise the matters that were discussed at the meeting, including:

- any community feedback expressed, and enquiries made
- any opposing views of members on a matter (recorded on request)
- any actions to be taken before the next meeting, who is responsible for them, and by when.

The chairperson will distribute draft minutes to all committee members within week/s of the meeting. Within 2 weeks of the meeting is the maximum period for distribution.

Committee members have week/s to give their feedback.

The minutes will be finalised and published within week/s of receiving this feedback.

If there are any disagreements between members on the minutes, the chairperson will have the final say on the matter.

#### Recording of meeting

Recording of meetings by recording device, telephone or any other electronic device is not permitted.

only permitted with agreement beforehand of the chairperson and the committee.

Meeting recordings are only for the benefit of members/chairperson and cannot be published.

Publishing of meeting recordings can only occur with permission of the chairperson.

#### Attendance and conduct

#### **Attendance**

The chairperson should be notified as soon as possible if a community or stakeholder group member cannot attend an upcoming meeting so that an appointed alternate member may be invited.

Other members should advise the chairperson in advance of the meeting if an alternate representative is attending on their behalf. Any alternate representatives must sign the committee members' code of conduct and declaration of interest form before attending their first meeting.

The chairperson may reconvene the meeting if not enough members (including at least one proponent member) can attend.

#### Observers, advisers and subject matter experts

Observers may attend a meeting, at the invitation of the chairperson. The chairperson may invite the observer to give input into the discussions of the committee.

The committee may call upon advisers or subject matter experts, including specialist environmental consultants or construction contractors, to attend meetings to give information as needed. The proponent will engage and facilitate the attendance of independent advisers or specialists for meetings, at the request of the chairperson.

The agenda will advise if non-committee members will attend.

#### Conduct

Everyone in attendance at the meeting must act in accordance with the relevant committee code of conduct. Each committee member is to verbally re-confirm their commitment to abide by the code of conduct on an annual basis. This should be recorded in the meeting minutes.

## Changes to membership

The chairperson will inform the committee of any newly appointed members or other changes to membership.

#### Review

The chairperson will annually review a committee's performance and effectiveness over the previous 12 months. The committee may update the terms of reference following the review.

# Agreement

| The                                       | agrees to these terms of reference as at                               |  |  |  |  |
|---|--|--|--|--|--|
| and they will remain in force until other | they will remain in force until otherwise changed, replaced or voided. |  |  |  |  |
|   |  |  |  |  |  |
| Chairperson:                              |  |  |  |  |  |
| Signature:                                | Date:  |  |  |  |  |

# **Appendix B**

Community Consultative Committee Agenda – Meeting 1



**Details** 

**Meeting**: Pymble Ladies College

Community Consultative Committee

Location: Meet in main reception

IH Meeting Room
Pymble Ladies College,
Avon Road, Pymble

**Date/time**: Tuesday 14th November 2023

4:00 PM to 5:30 PM

Chair: Professor Helen Lochhead

#### **Invitees**

#### **Community Representatives**

- 1. Natalie Chan
- 2. Scott Hawker
- 3. Ian King
- 4. Roy Morgan
- 5. Lynne Soon

#### **Local Government representatives:**

No representative nominated.

#### **Pymble Ladies College representatives**

- 1. Greg Hastie
- 2. Jenny Roberts

#### Attendees:

1. Chantelle Pepper, Note taker

#### Agenda items

| No. | Description  | Time | Responsible    | Actions  |
|-----|--|------|----------------|----------|
| 1   | Acknowledgement of Country and welcome   | 2    | Helen Lochhead |          |
| 2   | Overview of Community Consultative Committee - Purpose - Grey House Precinct development - Scope and limitations - Code of Conduct: respect  | 10   | Helen Lochhead | Note     |
| 3   | Apologies: Natalie Chan  | 1    | All            | Note     |
| 4   | Declarations of Pecuniary and other interests  | 2    | All            | Note     |
| 5   | Around the table introductions   | 15   | All            |          |
| 6   | Overview of the Grey House Precinct - Overview of proposed development - Project status - Program of work - Construction timeline - Contacts | 15   | Greg Hastie    |          |
| 7   | Discussion plus Q & A  | 10   | All            |          |
| 8   | Summary of issues raised and action items  | 10   | Helen Lochhead | Note     |
| 9   | Other business   | 10   | All            |          |
| 10  | Next meeting date - TBC  | 5    | Helen Lochhead | Decision |

# **Appendix C**

Community Consultative Committee Minutes – Meeting 1



## Meeting #1

## Tuesday 14 November 2023

4:00pm to 5:30pm.

At: Pymble Ladies College, IH Meeting Room, Avon Road, Pymble.

Chair: Professor Helen Lochhead.

### **Invitees**

## **Community Representatives:**

- 1. Natalie Chan
- 2. Scott Hawker
- 3. lan King
- 4. Roy Morgan
- 5. Lynne Soon

## **Local Government Representatives:**

No representative nominated.

## **Pymble Ladies College Representatives:**

- 1. Greg Hastie
- 2. Jenny Roberts

### **Attendees:**

1. Chantelle Pepper, Note taker.

## **Apologies**

1. Natalie Chan

## **Declarations of interest**

None.

## **Welcome and Introductions**

The Chair, Helen Lochhead provided an Acknowledgment of Country and welcomed the Committee at the beginning of the meeting.

All attendees then introduced themselves and provided some background on their interest in the Grey House Precinct, their role in the community or College, and personal and professional attributes that they can bring to the committee.

## **Overview of Community Consultive Committee**

The Chair provided an overview of the Committee's purpose, scope and code of conduct.



### **Purpose**

The purpose of the Pymble Ladies College Community Consultative Committee (PLC CCC) is to enable community input and feedback to be provided to the College during the construction of the Grey House Precinct. The terms of development consent require a Community Consultative Committee be established prior to commencement of construction of the Grey House Precinct and for the duration of the construction. Further, the consent stipulates a range of other conditions that the applicant must adhere to.

The community representatives on the PLC CCC have been selected from a pool of candidates, following a public expression of interest promoted in daily newspapers, the College website and a community Facebook page. Nominations were only received from individuals within the neighbourhood and representatives from the College. Kuringai Council was invited to nominate a representative but declined. The invitation to Council still stands if they choose to participate at a later date.

## **Scope and Limitations**

It was noted that the remit of the PLC CCC is only with respect to the development of the Grey House Precinct and does not encompass broader College issues that can be addressed though the College's normal channels.

It was noted that individuals have been appointed by the Department of Planning directly and cannot send alternates if unable to attend. Only incorporated community groups or associations can send alternates.

### **Code of Conduct**

It was confirmed that everyone had signed the Code of Conduct and the Chair reminded all of their responsibilities including respect for others in the meeting, allowing each to speak without interruption and ensuring all have an opportunity to express their views on issues pertinent to the Grey House Precinct development.

## **Overview of the Grey House Precinct**

Greg Hastie, presented an PowerPoint of the Grey House Precinct development summarised below.

## Overview of the proposed development

- Years 5 -6 classrooms
- STEM laboratories
- Dance studios
- Out of school hours care
- Early learning centre for 90 children
- Health and wellness facilities
- Landscaping



## **Project status**

- Development approved 9<sup>th</sup> December 2022 by Independent Planning Commission (IPC)
- Pre-commencement conditions were imposed on the project. An additional 5 metres setback the building from the southern boundary was imposed.
- Redesign of the works has been undertaken. Setback from boundary now 16 metres.
- Condition has been satisfied through IPC approval on 19<sup>th</sup> May 2023.
- An external project manager has been appointed.
- A contractor is yet to be identified imminent.
- Works to commence in December, with fencing and site mobilisation.

### **Relevant Conditions**

The following conditions have been imposed on the project:

- Work to be undertaken Monday to Friday
  - Work hours 7am-6pm.
  - o No work on Saturday, Sunday or Public Holidays.
  - Work may take place on Saturdays if the works are not audible.
  - Residents (within 30 metres of site boundaries on Pymble Ave and Avon Road) will be advised if and what work is considered to be done on Saturdays.
- Parking
  - o ELC staff and visitors to park in existing car park (Centenary Car Park 37 spaces).
  - On-site parking for the contractor to be provided (on tennis courts 40- 50 vehicle spaces).
  - o 59B Pymble Ave, owned by school to be used by contractor as site office and 4-5 vehicles
- Preconstruction survey to neighbouring properties to be undertaken (Dilapidation reports) letter drop requesting permission to access and photograph properties in January 2024 (inspections over 3-4 week period).
- Construction noise and vibration to be monitored noise loggers and vibration monitors on the boundary.
- Complaints management system to be implemented—cause and effect of the complaint will be logged through the builder.
- Trees removal and replacement
  - o 37 trees to be removed and replaced with 37 trees.
  - Seed collection to be undertaken prior to tree removal. Seeds of native tree species have been collected and will be propagated and planted onsite. Seedlings that cannot be planted on site will go to community and planted elsewhere.
  - Nesting boxes to be relocated 5 have been relocated for flying foxes.



- Traffic calming to be initiated—Local Area Traffic Management (LATM) such as speed bumps externally along Pymble and Avon Road will be implemented in conjunction with Council's Traffic Committee. These are permanent traffic calming measures.
- Construction access road
  - Traffic control on Gate 3 (Avon Road) for trucks via temporary road to be routed behind tennis courts to the Grey House Precinct construction site (safest route).
  - Traffic controller also at Gate3.
  - o Crane is a luffing Jib no oversailing of any houses.

## **Modification of Condition - Grey House Walk**

- 1 x Modification (to Conditions) has been submitted to the Department of Planning
- The modification requests that Grey House Walk remain open for staff and students 7:00am-9:30am and 2:00pm-6:00pm, school days)
- Approximately 150 students use this walk
- Safe access for students and staff only to be maintained
- No access by the contractor
- Monitoring of access by staff during peak times proposed
- Grey House Walk will remain shut during non-term times
- Link to **Grey House Walk Modification** is at: <a href="https://www.planningportal.nsw.gov.au/major-projects/pymble-ladies-college-grey-house-precinct-modification-1">https://www.planningportal.nsw.gov.au/major-projects/pymble-ladies-college-grey-house-precinct-modification-1</a>

## **Estimated Construction Timeline**

- 1. Award contract: 1<sup>st</sup> December 2023.
- 2. Commence site mobilisation: 12<sup>th</sup> December 2023.
- 3. Commence works on site: 27<sup>th</sup> January 2024.
- 4. Works completion: 30<sup>th</sup> September 2025.

## Contacts

| Event   | Name         | Contact No   |
|---|--------------|--------------|
| General College Issues Relating to Construction | Greg Hastie  | 0411 477 006 |
| Construction Issues                             | Builder-TBA  |              |
| Grey House Planning and Development             | Nahid Mahmud | 02 9995 5228 |
| Website Links:                                  |              |              |



| Event                                | Name  | Contact No |
|--------------------------------------|---|------------|
| Pymble Ladies College Masterplanning | https://pymble.nsw.edu.au/about-pymble/master-planning/   |            |
| Dept of Planning                     | https://www.planningportal.nsw.gov.au/major-<br>projects/projects/pymble-ladies-college-grey-house-precinct |            |

## Discussion Plus Q & A

| Iss | Issues raised   |   | Confirmations   |  |
|-----|---|---|---|--|
| 0   | Onsite induction for all construction contactors      | 0 | All workers will receive on-site induction  |  |
| 0   | Monitoring construction vehicles and workers parking. | 0 | Team to monitor controls.   |  |
| 0   | Impacts on roads/property (Dilapidation Reports)      | 0 | Dilapidation reports of adjacent properties in January 2024   |  |
| 0   | Monitoring of noise/vibration/dust.                   | 0 | Construction noise and vibration to be monitored – noise loggers and vibration monitors – on the boundary.  Dust suppression – site will be watered when digging, silt fences/dust cloth at boundaries.   |  |
| 0   | Construction traffic hours                            | 0 | A Construction Management Plan (CMP) stipulates hours   |  |
| 0   | Policing of traffic and parking would be preferred.   | 0 | of operation- eg drop of and pick up periods – vehicles not allowed onto site during these times – any delivery that come outside required hours are turned away.  Design of building has not been changed – only moved 5m north + additional landscaping – IPC has signed off. |  |
| 0   | Future use of Grey House Walk – BAU                   |   |   |  |

## **Actions**

| Action                                | Responsible | Status                            |
|---------------------------------------|-------------|-----------------------------------|
| Construction Management Plan          | Contractor  | Pending                           |
| Share Presentation with CCC & Website | Greg Hastie | PPT circulated with meeting notes |



| Action  | Responsible | Status   |
|---|-------------|--|
| Check overshadowing with increased setback                            | Greg Hastie | Please see attached  |
| Check trees at rear of Lynne Soon's house (53 Pymble Ave) are staying | Greg Hastie | No trees will be removed at rear of 53 Pymble Avenue   |
| Share link for modification application                               | Greg Hastie | https://www.planningportal.nsw.gov.au/major-<br>projects/projects/pymble-ladies-college-grey-<br>house-precinct-modification-1 |

## **Other Business**

Greg Hastie to brief with Natalie Chan week beginning 27 November 2023.

## **Next Meeting Date**

12<sup>th</sup> of March – To be confirmed - Meeting notice distributed at the end of February.

## Department of Planning, Housing & Infrastructure



Our ref: SSD-17424905-PA06

Greg Hastie Project Director Pymble Ladies College 20 Avon Road PYMBLE, NSW 2073

Attn: Sally Prowd (sprowd@willowtp.com.au)

09/02/2024

## Pymble Ladies College – Grey House Precinct (SSD-17424905) Community Communication Strategy, Condition D9

Dear Mr Hastie

I refer to the Community Communication Strategy (CCS) submitted to the Planning Secretary for approval in accordance with condition D9, Schedule 2 of the project Development Consent for Pymble Ladies College – Grey House Precinct (SSD-17424905).

### I note the CCS:

- was reviewed by the Applicant, and no issues were raised to the Department;
- contains the information required under condition D9; and
- has been submitted to the Department prior to the commencement of construction.

Accordingly, as nominee of the Planning Secretary, I approve the Community Construction Communication Strategy, Rev Final dated 29 January 2024, prepared by WSP, under condition D9 of SSD-17424905.

I remind you to facilitate communication between the Applicant, Council, community, and others impacted by the development during the design and construction of the school, and for a minimum of 12 months following the completion of construction.

Please note that if there are any inconsistencies between the approved CCS and the conditions of consent, the conditions will prevail.

Also, please ensure the approved CCS is available for public access on the project website as per condition B26.

If you have any questions or wish to discuss the matter further, please contact Jeremy Martin on jeremy.martin@dpie.nsw.gov.au.

Yours sincerely

Shiraz Ahmed

Team Leader - Social Infrastructure Projects Infrastructure Management

As nominee of the Planning Secretary

## Pymble Ladies College COMMUNITY CONSTRUCTION COMMUNICATION STRATEGY

## **GREY HOUSE PRECINCT**

January 2024



Indicative Artist's impression of proposed concept design



# Question today Imagine tomorrow Create for the future

Pymble Ladies College Community Construction Communication Strategy

## **Grey House Precinct**

WSP Level 27, 680 George Street Sydney NSW 2000 GPO Box 5394 Sydney NSW 2001

Tel: +61 2 9272 5100 Fax: +61 2 9272 5101

wsp.com

| Rev   | Date            | Details       |
|-------|-----------------|---------------|
| 1     | 23 July 2022    | Draft         |
| 2     | 28 April 2023   | Updated draft |
| 3     | 16 January 2024 | Updated draft |
| FINAL | 29 January 2024 | Finalised     |

WSP acknowledges that every project we work on takes place on First Peoples lands.
We recognise Aboriginal and Torres Strait Islander Peoples as the first scientists and engineers and pay our respects to Elders past and present.

This document may contain confidential and legally privileged information, neither of which are intended to be waived, and must be used only for its intended purpose. Any unauthorised copying, dissemination or use in any form or by any means other than by the addressee, is strictly prohibited. If you have received this document in error or by any means other than as authorised addressee, please notify us immediately and we will arrange for its return to us.



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## 1 Introduction

## 1.1 About the project

The Grey House Precinct (GHP) will deliver a multi-use building housing Years 5 and 6 classrooms and STEM labs, the Health and Wellbeing Centre, Dance Facility, After Hours School Care (OHSC) and Early Learning Centre (ELC).

The world-class educational and co-curricular facility is designed to:

- foster leading pedagogical practices
- prioritise student and staff health and wellbeing
- embed flexibility to accommodate developments in learning and teaching methods
- respect and enhance the existing built form and natural environs
- contribute to a connected campus that is accessible.

Communications and engagement will support the delivery of this important project which is part of the Pymble Ladies College Campus Masterplan.

## 1.2 Objective of this strategy

Construction communications will build on communications and engagement during planning with continued commitment to clear and proactive communications with neighbours and stakeholders, maintaining reputation, meeting DPE and council expectations and supporting the timely delivery of the project. The engagement strategy will guide continued proactive open, honest and clear lines of communication.

The strategy has been developed to meet the requirements of the Independent Planning Commission of NSW Conditions of Consent outlined at C8. and F8. and will support the delivery of requirements agreed in the Construction Environmental Management Plan (CEMP) and any consultation required to mitigate impacts as planning and on-site work progresses.

This Community Communications Strategy has been developed to achieve the following community engagement objectives:

- guide community communications for the project in the lead up to, during and for a minimum of 12 months following completion of construction
- meet the requirements of the Development Consent
- provide timely information to impacted stakeholders, college community and the broader community
- communicate the benefits of the project
- build the college community stakeholder relationships and maintain goodwill with the surrounding community
- manage community expectations and build trust by delivering on commitments
- address and correct misinformation in the public domain
- reduce the risk of project delays
- leave a positive legacy in the Pymble Ladies College community.

## 1.3 Community liaison

Pymble Ladies College will ensure a point of contact is established with responsibility for community liaison in collaboration with the project manager and project contractors.

## 1.3.1 Responsibilities

Proactively keep the local community and the college community informed about:

- what to expect during construction
- timing
- how to make contact with questions about the development and to raise concerns or provide feedback.

### Construction

### **PLC**

 Provide point of contact for queries about the development and future operations and provide alternative point of contact for construction related queries (Construction Contractor to be first point of contact)

The usual communications channels for the college community will apply.

Email communityengagement@pymblelc.nsw.edu.au

Phone +61 2 9855 7799

- Proactively communicate through Community Updates at key milestones.
- Establish the Community Consultative Committee with regular meetings between committee members and key project team members.
- Respond to community and stakeholder questions and feedback during construction and operations.
- Maintain a Complaints Register which will be uploaded to the website and updated monthly during construction.
- Ensure project documentation is uploaded to the College website as required by the Planning Secretary.

### Construction contractor

Provide point of contact for construction related queries.

Construction contractor, Stephen Edwards Constructions, will provide 24-hour contact details for the site manager. This will be used for complaints and questions about construction.

Name/phone: Peter Pawlyszyn, 0403 676 038

Email: ppawlyszyn@stephenedwards.com. au

PLC Project Director, Masterplanning and Capital Works, will be informed of any community contact and complaints will be passed on for response as required. Feedback received will be shared. A register will be maintained.

 Responsible for construction signage and wayfinding and construction notifications if required related to road closures, remediation, out of hours works etc.

### Post construction / operations

- Following construction and during operations, any queries will be responded to by the PLC Project Director,
   Masterplanning and Capital Works or alternative College representative.
- The college has a formal internal and external community queries contact and resolution process in place to facilitate effective response processes which is ongoing.

## 1.3.2 Community Consultative Committee (CCC)

### Representatives of community and stakeholders

- In accordance with the Department's Community Consultative Committee Guideline: State Significant Projects (2019), a Community Consultative Committee (CCC) has been established. The Department appointed an independent chairperson on 10 July 2023 and the CCC held their first meeting on 14 November 2023. The CCC functions in accordance with the Department's CCC Guideline and will continue to do so throughout construction and operation of the proposed development or other timeframe agreed by the Planning Secretary.
- The CCC includes representation from members of the local community who were recruited via Expressions of Interest by the independent chairperson as well as from PLC.
- The CCC is an advisory committee only and acts as a conduit for information and feedback between PLC, stakeholders and the community.
- The CCC's focus is on key environmental management issues related to the GHP during construction and operations. The CCC chairperson will report annually on the activities of the committee which will be made public via the Department's website.
- Copies of the CCC's Terms of Reference and Agenda and Minutes of their first meeting are at Appendices A, B and C, respectively.

## 1.3.3 How to find out more or share feedback

Pymble Ladies College will ensure a point of contact is established with responsibility for community liaison in collaboration with the project manager and project contractors.

A summary of proposed communications follows with details of Community and Stakeholders and the Tools and Techniques used to keep them informed and to provide effective two-way communications are outlined at 2.1 and 3.1 of the strategy.

Communications and engagement will be targeted according to level of interest:

- immediate neighbours
- neighbours and local who have demonstrated a level of interest in College operations and capital works
- wider community
- College community some of whom are also neighbours.

### All community and stakeholders

## Community updates

As the project progresses to the pre-construction phase the first community update will be shared. This update will provide the immediate neighbours, wider community and stakeholders with an overview of the Grey House Precinct project including renders, information about what to expect during construction, how they will be kept informed and opportunities to find out more and importantly the contact details for questions or concerns.

WSP January 2024 Page 3 • Community updates will be provided throughout construction at key milestones.

### Website updates

- The College website will be used as a key point for information about the project and construction and will be proactively kept up to date as work progresses. All communications will provide links to the <u>website</u>.
- At least 48 hours before the start of construction and until completion of all works under the Development Consent, or such other time as agreed by the Planning Secretary, the following information and documents (as they are obtained or approved) must be made publicly available on the website:
  - the documents referred to in condition B2 of the Development Consent
  - all current statutory approvals for the development
  - all approved strategies, plans and programs required under the conditions of the Development 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 the Development Consent
  - a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of the Development 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 complaint register updated monthly
  - audit reports prepared as part of any independent audit of the development and the College's response to the recommendations in any audit report
  - any other matter required by the Planning Secretary.

This information is to be kept up to date, to the satisfaction of the Planning Secretary, and publicly available for 12 months after the start of operations.

## Construction notifications

- Works notifications as required by the conditions of consent e.g. traffic changes, out of hours work etc., these will
  include contact details for queries.
- Doorknock / call to support notification as required.

### Signage

Works signage as required to ensure safety and communicate contact details.

### Contact us

The point of contact details for questions and feedback will be communicated to the local community and key stakeholders ahead of the commencement of works via community newsletter letterbox drop, project CCC and direct contact where community members had asked to be kept up to date and are not members of the project CCC.

### Immediate neighbours

## Engagement

• Immediate neighbours identified as having a very high level of interest were engaged during the planning phase and

were also invited to participate in the CCC.

Pre-construction dilapidation survey

- Prior to the commencement of any construction, a pre-construction survey by a suitably qualified and experienced expert will be offered to owners of residential buildings that are likely to be impacted by the development.
- Where the offer is accepted, the pre-construction surveys will be undertaken before the start of vibration generating works that could impact the identified buildings. A copy of the survey will be provided to owners before the start of any vibration generating works.

## 1.3.4 Complaints and Enquiries Register

PLC will maintain a register of complaints and enquiries received and will take all reasonable steps to investigate and close out complaints and enquiries in a timely manner. Information about the project's complaints and enquiries procedures will be set out in the initial letterbox drop to neighbouring residents and businesses.

A complaints register with date and type of complaint, and whether the complaint is open or closed, will be uploaded to the College website.

## 1.3.5 Dispute Resolution

Should any complaints and enquiries require escalation they will be referred to the PLC Project Director in the first instance who will escalate via the Principal and College Board if required.

Where satisfactory resolution for both parties cannot be achieved independent mediators would be engaged.

## 1.3.6 Media

All media queries are to be referred to communityengagement@pymblelc.nsw.edu.au

## 2 Stakeholder analysis

## 2.1 Key stakeholders and approach

Stakeholders can be categorised in two distinct groups - external and internal.

The below table lists the various groups that fall within these two overarching categories and outlines their likely interest, interest level and suggested engagement techniques to best communicate with them during the project lifetime.

## 2.1.1 External Stakeholders

| Stakeholder   | Likely interest   | Interest<br>level | Engagement techniques  |
|---|---|-------------------|--|
| External  |   |                   |  |
| Immediate neighbours  | <ul> <li>Construction impacts – dust, noise and vibration, traffic and parking.</li> <li>Design and operations - building bulk and scale, hours of operation – noting Dance Studio lights and noise, Grey House Walk – access and utilisation, traffic and parking.</li> <li>Privacy</li> </ul> | High              | <ul> <li>Opportunity to participate in the Community Consultative Committee (CCC)</li> <li>Early engagement</li> <li>Introduction to key project team members via CCC</li> <li>Community updates, PLC Website - project page</li> <li>Letterbox drop – works notification, community updates</li> <li>Community liaison contact details</li> <li>Signage</li> <li>Doorknock – if required</li> </ul> |
| Nearby residents and<br>any stakeholders<br>engaged during<br>planning phases<br>Community members<br>included on college<br>contact register for<br>relevant updates | <ul> <li>Traffic impacts on local roads</li> <li>Construction impacts such as noise, dust and vibration</li> <li>Operations</li> <li>Availability of a point of contact to direct issues / questions</li> </ul>   | High /<br>medium  | <ul> <li>Opportunity to participate in the<br/>Community Consultative Committee</li> <li>Community updates, PLC Website -<br/>project page</li> <li>Letterbox drop – works notification,<br/>community updates</li> <li>Community liaison contact details</li> <li>Signage</li> <li>Doorknock – if required</li> </ul>   |
| Wider community   | <ul> <li>» Traffic impacts</li> <li>» Operations</li> <li>» Availability of a point of contact to direct issues / questions</li> </ul>  | Medium /<br>low   | <ul> <li>Opportunity to participate in the<br/>Community Consultative Committee</li> <li>Community updates, website</li> </ul>   |
| Ku-ring-gai Council   | <ul><li>» Community concern</li><li>» Impact on local traffic</li><li>» Impact on condition of local roads</li></ul>  | Medium            | <ul> <li>Representation on the Community<br/>Consultative Committee</li> <li>Direct contact</li> </ul>   |

| Stakeholder   | Likely interest  | Interest<br>level | Engagement techniques  |
|---|--|-------------------|--|
|   | » Availability of a point of contact to<br>direct issues / questions   |                   | <ul><li>» Share notifications for info</li><li>» Community liaison contact details</li></ul> |
| The Hon. Alister<br>Henskens, Member for<br>Ku-ring-gai | <ul><li>Community concern</li><li>Availability of a point of contact to direct issues / questions</li></ul>                              | Low               | <ul><li>» Direct contact</li><li>» Community liaison contact details</li></ul>               |
| Transport for NSW                                       | <ul><li>» Impact on transport scheduling</li><li>» Potential delays to local bus routes</li><li>» Impact on condition of roads</li></ul> | Low               | » Direct contact as required   |

## 2.1.2 Internal stakeholders

| Stakeholder Likely interest | Interest Engagement techniques level |
|-----------------------------|--------------------------------------|
|-----------------------------|--------------------------------------|

### Internal

Construction contractors will work closely with the Pymble Ladies College internal communications team to ensure the college community is kept informed of any safety measures in place including changes to internal and external pedestrian and vehicle access and restricted areas.

The college will be responsible for its internal communications informed by ongoing updates from the contractors. Barriers, signage, notifications would be the responsibility of the contractor.

| Engagement techniques would be informed by usual college processes, but could include the following: |  |        |  |  |  |  |
|--|--|--------|--|--|--|--|
| Pymble Ladies College staff  | <ul> <li>Impact on normal college routine</li> <li>Impact on internal footpaths – getting to and from buildings</li> <li>Construction impacts such as nois dust and vibration</li> <li>Safety of students</li> </ul> | High * | and ongoing at key milestones where impacts change  Internal college communications channels could include:  — email via Principal / Executive  — notifications posted to staff notice boards  — intranet  — distribution of project notifications. Newsletters /edm  — website - project page  Signage and barriers |  |  |  |
| Students   | <ul> <li>Impact on normal college routine</li> <li>Impact on internal footpaths –</li> </ul>   | High   | Internal college communications channels could include:  |  |  |  |
|  | getting to and from buildings  |        | <ul> <li>- 'what to expect' briefing</li> </ul>  |  |  |  |
|  | » Construction impacts such as nois dust and vibration   | e,     | <ul> <li>newsletters /edm</li> </ul>   |  |  |  |

» Safety of students

- announcements
- emails
- teaching staff
- noticeboards
- website project page
- » Signage and barriers
- » Traffic and pedestrian controllers as required

- Pymble Parents Association
- » Impact on normal college routine
- High
- » Impact on internal footpaths getting to and from buildings
- » Construction impacts such as noise, dust and vibration
- » Safety of students

## » Could include:

- briefings ahead of start of work and ongoing at key milestones where impacts change
- website updates
- signage and barriers
- traffic and pedestrian controllers as required
- email via Principal / Executive
- construction notification
- college newsletter /edm update

- Pymble Ladies College » parents »
  - Impact on normal college routine
- High
- » Impact on internal footpaths getting to and from buildings
- » Construction impacts such as noise, dust and vibration
- » Safety of students

- » Could include:
  - via Parents Association
  - website updates
  - email via Principal/ Executive
  - construction notification
  - college newsletter /edm update
- » Signage and barriers
- » Traffic and pedestrian controllers as required

## 3 Engagement tools and timeframes

The Strategy outlines procedures and mechanisms for distribution of information to stakeholders. Effective communication between the project team and stakeholders serves as a risk mitigation tool, and also supports both the project team and stakeholders to achieve positive outcomes in relation to the project.

## 3.1 Tools and timeframes

Collateral content will be informed by the Construction & Environmental Management Plan (CEMP) which provides key information about 'what to expect during construction.'

| <b>Engagement tool</b>                | Who   | Why  | When  |
|---------------------------------------|---|--|---|
| Community Consultative Committee      | <ul> <li>Interested external local community and stakeholders</li> <li>Council</li> </ul>   | <ul> <li>Provide a forum for discussion between the College and contractors and representatives of the community, stakeholder groups and local council</li> <li>Advisory and consultative</li> <li>Establish good working relationships and promote information sharing</li> </ul> | Session Ses |
| Contact number and email address      | 1 » Interested external community and stakeholders  | » Provide point of contact for<br>community and<br>stakeholders to provide<br>feedback or raise concerns<br>around the project   | » Establish prior to start of works   |
| College website update                | <ul> <li>» Interested external community and stakeholders</li> <li>» Parents and students</li> <li>» Meet Development Consent requirements</li> </ul> | <ul> <li>Create college and wider community awareness of project</li> <li>Provide up to date project information point for all</li> <li>Provide update on milestones achieved</li> </ul>   | <ul> <li>At least 48 hours prior to start of works provide information and documentation as directed by the Development Consent</li> <li>Immediately prior to start of works to advise what to expect during construction and provide contact details</li> <li>Updated throughout project</li> <li>Add any newsletters or notifications</li> </ul>  |
| Direct contact Call / email / meeting | <ul><li>» Pymble Parent<br/>Association</li><li>» Govt agencies</li><li>» Ku-ring-gai Counci</li></ul>  | » Provide project information including potential impacts  | » Immediately prior to start<br>of works to advise what to<br>expect during<br>construction and provide<br>contact details  |

| ngagement tool   | Who  | Why   | When   |
|--|--|---|--|
|  |  |   | » Various stages of project lifetime   |
|  |  |   | » Wrapped around project milestones  |
| etterbox drops – borknocks may be dertaken if required ewsletters otifications | » Nearby residents                             | Proactively advise:  » start of construction commencing, providing contact details for updates and queries  » of any works that may produce extreme noise/ vibration / dust  » of any hazardous materials removal  » about major project milestones  » project completion | <ul> <li>Immediately prior to start of works to advise what to expect during construction and provide contact details</li> <li>Various stages of project lifetime</li> </ul> |
| eetings  | » Nearby residents                             | » In response to concerns if required   | » As required  |
| The following may form   | part of internal commun                        | nications   |  |
| ollege intranet  | » Staff  | » Provide staff with project<br>updates specific to day to<br>day activity  | <ul> <li>Immediately prior to start of works to advise what to expect during construction and provide contact details</li> <li>Updated throughout</li> </ul>                 |
|  |  |   | <ul><li>project</li><li>Add any newsletters or</li></ul>   |
| Vhat to expect' briefing   | » Staff  | Proactively advise:   | notifications  > Prior to start of works to  |
| ewsletters /edm<br>nnouncements<br>nails<br>eaching staff<br>oticeboards       | <ul><li>» Students</li><li>» Parents</li></ul> | <ul> <li>start of construction commencing, providing contact details for updates and queries</li> <li>changes to access and movement</li> <li>any safety information</li> <li>of any works that may produce extreme noise/vibration / dust</li> </ul>                     | advise what to expect during construction and provide contact details  > Throughout work   |
|  |  | <ul> <li>of any hazardous materials<br/>removal</li> <li>about major project<br/>milestones</li> </ul>  |  |
|  |  |   |  |

## 3.2 Implementation action plan

An implementation action plan with detailed actions and responsibilities will be prepared to manage the communications and engagement process and ensure the engagement outlined above is delivered proactively and effectively provides information and how to find out more or raise concerns.

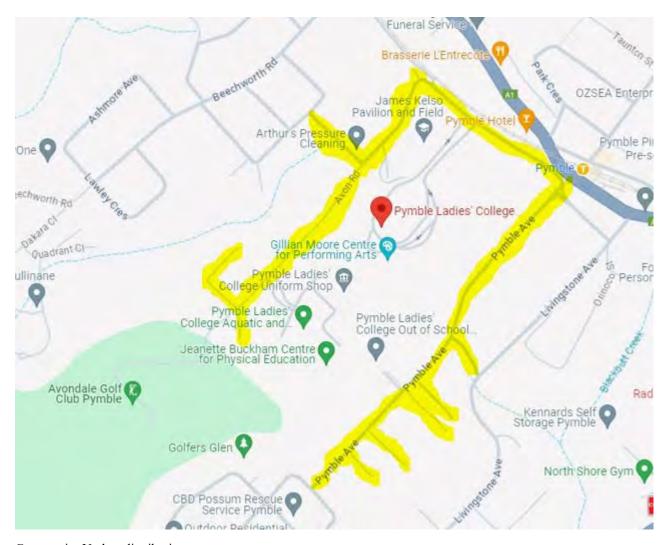
Preparation of the implementation action plan will be done in collaboration with the project manager and construction contractor.

## 4 Administration and record keeping

Record keeping and reporting throughout engagement will:

- Acknowledge contact and respond to all issues within 72 hours
- Advise any issues as identified
- Establish and apply escalation protocols safety being a priority.
- Establish a follow up reminder mechanism to ensure agreed actions are carried out.
- Establish and maintain a stakeholder list for ongoing communications as communications progress.
- Report activities undertaken as well as outcomes.

## 5 Distribution area



Community Update distribution area map

## Appendix A

Community Consultative Committee
Terms of Reference



## Terms of reference

The Community Consultative Committee terms of reference is in accordance with the NSW Department of Planning and Environment's *Community consultative committee guideline: State Significant Projects 2023.* 

## Purpose of the community consultative committee

The committee has been established to provide a forum for open discussion between , representatives of the community, stakeholder groups and on issues directly relating to the

## Purpose and scope

The purpose of this committee is to serve as a forum for ongoing communication about the project and its environmental performance. It is not a decision-making body but performs an advisory and consultative role.

The scope of this committee includes:

discussing the resolution of community concerns and complaints
discussing the implementation of any conditions of approval or consent and management plans
consulting on any proposed amendments or modifications to projects
reviewing the results of any monitoring, annual reviews or independent audits
consulting on any community initiatives
conducting site visits to view the project
add other items as necessary

## Committee membership

## Chairperson

The appointed chairperson is

## Committee members

The committee members are:

community member
 community member
 community member
 community member

5.:representative6.:representative7.:representative8.:representative

9. : the proponent10. : the proponent11. : the proponent

## Alternate representatives

The appointed alternate representatives are:

1. : alternate community member

2. alternate representative
3. : alternate representative
4. : alternate representative

## Meeting frequency, location and timing

## Meeting frequency

The committee will meet at least times for the . The meeting frequency is to be a minimum of once a year unless otherwise specified by the conditions of consent or approval.

The chairperson will give members at least week/s notice before a regular committee meeting.

## **Extraordinary meetings**

Any committee member may ask the chairperson to convene an extraordinary committee meeting if there are important and urgent matters requiring consideration.

The chairperson will decide if the extraordinary meeting is called for, or if the matters can be addressed in other ways.

The chairperson will give members week/s notice before an extraordinary meeting.

## Site visits

Site visits may be organised, as needed, including as part of the regular meeting, or immediately before the meeting for convenience.

is responsible for ensuring that work health and safety measures are in place for all who attend the site visit. Committee members must follow any requirements of the proponent, including work health and safety requirements, while on site.

## Meeting venue and format

Committee meetings may be held

in person at or

via MS Teams/Zoom/Google meets or similar collaboration tool or

as a mix of in-person and online meetings.

## Meeting time

The normal meeting time will be to , unless the chairperson proposes an alternative.

## Meeting procedures

## Meeting agenda

The chairperson will call for agenda items at least week/s before the scheduled meeting.

The chairperson will distribute the agenda and any supporting documents to committee members at least week/s before the meeting.

The chairperson may decide if the committee will consider late items at the meeting or defer them to a following one. This includes:

- late agenda items raised after the agenda has been circulated
- late supporting documents provided within a week of the meeting
- late agenda items proposed by a committee member during the meeting.

The chairperson should consider how much time the committee members will need to review and consider the matters adequately, if enough information has been provided to discuss the matter, as well as its urgency and importance.

## Standard agenda items

Declarations of interest should be included as a standard agenda item at the start of each meeting. It is the responsibility of each member to keep their declaration of interests up to date.

## Annual agenda items

A discussion and approval of these terms of reference must be included as an annual agenda item.

## **Meeting minutes**

The chairperson (or identified note-taker) will take minutes for each committee meeting.

These minutes must accurately summarise the matters that were discussed at the meeting, including:

- any community feedback expressed, and enquiries made
- any opposing views of members on a matter (recorded on request)
- any actions to be taken before the next meeting, who is responsible for them, and by when.

The chairperson will distribute draft minutes to all committee members within week/s of the meeting. Within 2 weeks of the meeting is the maximum period for distribution.

Committee members have week/s to give their feedback.

The minutes will be finalised and published within week/s of receiving this feedback.

If there are any disagreements between members on the minutes, the chairperson will have the final say on the matter.

## Recording of meeting

Recording of meetings by recording device, telephone or any other electronic device is not permitted.

only permitted with agreement beforehand of the chairperson and the committee.

Meeting recordings are only for the benefit of members/chairperson and cannot be published.

Publishing of meeting recordings can only occur with permission of the chairperson.

## Attendance and conduct

## **Attendance**

The chairperson should be notified as soon as possible if a community or stakeholder group member cannot attend an upcoming meeting so that an appointed alternate member may be invited.

Other members should advise the chairperson in advance of the meeting if an alternate representative is attending on their behalf. Any alternate representatives must sign the committee members' code of conduct and declaration of interest form before attending their first meeting.

The chairperson may reconvene the meeting if not enough members (including at least one proponent member) can attend.

## Observers, advisers and subject matter experts

Observers may attend a meeting, at the invitation of the chairperson. The chairperson may invite the observer to give input into the discussions of the committee.

The committee may call upon advisers or subject matter experts, including specialist environmental consultants or construction contractors, to attend meetings to give information as needed. The proponent will engage and facilitate the attendance of independent advisers or specialists for meetings, at the request of the chairperson.

The agenda will advise if non-committee members will attend.

## Conduct

Everyone in attendance at the meeting must act in accordance with the relevant committee code of conduct. Each committee member is to verbally re-confirm their commitment to abide by the code of conduct on an annual basis. This should be recorded in the meeting minutes.

## Changes to membership

The chairperson will inform the committee of any newly appointed members or other changes to membership.

## Review

The chairperson will annually review a committee's performance and effectiveness over the previous 12 months. The committee may update the terms of reference following the review.

## Agreement

| The                                       | agrees to these terms of reference as at                               |  |  |  |  |
|---|--|--|--|--|--|
| and they will remain in force until other | they will remain in force until otherwise changed, replaced or voided. |  |  |  |  |
|   |  |  |  |  |  |
| Chairperson:                              |  |  |  |  |  |
| Signature:                                | Date:  |  |  |  |  |

## **Appendix B**

Community Consultative Committee Agenda – Meeting 1



**Details** 

**Meeting**: Pymble Ladies College

Community Consultative Committee

Location: Meet in main reception

IH Meeting Room
Pymble Ladies College,
Avon Road, Pymble

**Date/time**: Tuesday 14th November 2023

4:00 PM to 5:30 PM

Chair: Professor Helen Lochhead

## **Invitees**

## **Community Representatives**

- 1. Natalie Chan
- 2. Scott Hawker
- 3. Ian King
- 4. Roy Morgan
- 5. Lynne Soon

### **Local Government representatives:**

No representative nominated.

## **Pymble Ladies College representatives**

- 1. Greg Hastie
- 2. Jenny Roberts

## Attendees:

1. Chantelle Pepper, Note taker

## Agenda items

| No. | Description  | Time | Responsible    | Actions  |
|-----|--|------|----------------|----------|
| 1   | Acknowledgement of Country and welcome   | 2    | Helen Lochhead |          |
| 2   | Overview of Community Consultative Committee - Purpose - Grey House Precinct development - Scope and limitations - Code of Conduct: respect  | 10   | Helen Lochhead | Note     |
| 3   | Apologies: Natalie Chan  | 1    | All            | Note     |
| 4   | Declarations of Pecuniary and other interests  | 2    | All            | Note     |
| 5   | Around the table introductions   | 15   | All            |          |
| 6   | Overview of the Grey House Precinct - Overview of proposed development - Project status - Program of work - Construction timeline - Contacts | 15   | Greg Hastie    |          |
| 7   | Discussion plus Q & A  | 10   | All            |          |
| 8   | Summary of issues raised and action items  | 10   | Helen Lochhead | Note     |
| 9   | Other business   | 10   | All            |          |
| 10  | Next meeting date - TBC  | 5    | Helen Lochhead | Decision |

## **Appendix C**

Community Consultative Committee Minutes – Meeting 1



## Meeting #1

## Tuesday 14 November 2023

4:00pm to 5:30pm.

At: Pymble Ladies College, IH Meeting Room, Avon Road, Pymble.

Chair: Professor Helen Lochhead.

### **Invitees**

## **Community Representatives:**

- 1. Natalie Chan
- 2. Scott Hawker
- 3. lan King
- 4. Roy Morgan
- 5. Lynne Soon

## **Local Government Representatives:**

No representative nominated.

## **Pymble Ladies College Representatives:**

- 1. Greg Hastie
- 2. Jenny Roberts

### **Attendees:**

1. Chantelle Pepper, Note taker.

## **Apologies**

1. Natalie Chan

## **Declarations of interest**

None.

## **Welcome and Introductions**

The Chair, Helen Lochhead provided an Acknowledgment of Country and welcomed the Committee at the beginning of the meeting.

All attendees then introduced themselves and provided some background on their interest in the Grey House Precinct, their role in the community or College, and personal and professional attributes that they can bring to the committee.

## **Overview of Community Consultive Committee**

The Chair provided an overview of the Committee's purpose, scope and code of conduct.



### **Purpose**

The purpose of the Pymble Ladies College Community Consultative Committee (PLC CCC) is to enable community input and feedback to be provided to the College during the construction of the Grey House Precinct. The terms of development consent require a Community Consultative Committee be established prior to commencement of construction of the Grey House Precinct and for the duration of the construction. Further, the consent stipulates a range of other conditions that the applicant must adhere to.

The community representatives on the PLC CCC have been selected from a pool of candidates, following a public expression of interest promoted in daily newspapers, the College website and a community Facebook page. Nominations were only received from individuals within the neighbourhood and representatives from the College. Kuringai Council was invited to nominate a representative but declined. The invitation to Council still stands if they choose to participate at a later date.

## **Scope and Limitations**

It was noted that the remit of the PLC CCC is only with respect to the development of the Grey House Precinct and does not encompass broader College issues that can be addressed though the College's normal channels.

It was noted that individuals have been appointed by the Department of Planning directly and cannot send alternates if unable to attend. Only incorporated community groups or associations can send alternates.

### **Code of Conduct**

It was confirmed that everyone had signed the Code of Conduct and the Chair reminded all of their responsibilities including respect for others in the meeting, allowing each to speak without interruption and ensuring all have an opportunity to express their views on issues pertinent to the Grey House Precinct development.

## **Overview of the Grey House Precinct**

Greg Hastie, presented an PowerPoint of the Grey House Precinct development summarised below.

## Overview of the proposed development

- Years 5 -6 classrooms
- STEM laboratories
- Dance studios
- Out of school hours care
- Early learning centre for 90 children
- Health and wellness facilities
- Landscaping



## **Project status**

- Development approved 9<sup>th</sup> December 2022 by Independent Planning Commission (IPC)
- Pre-commencement conditions were imposed on the project. An additional 5 metres setback the building from the southern boundary was imposed.
- Redesign of the works has been undertaken. Setback from boundary now 16 metres.
- Condition has been satisfied through IPC approval on 19<sup>th</sup> May 2023.
- An external project manager has been appointed.
- A contractor is yet to be identified imminent.
- Works to commence in December, with fencing and site mobilisation.

#### **Relevant Conditions**

The following conditions have been imposed on the project:

- Work to be undertaken Monday to Friday
  - Work hours 7am-6pm.
  - o No work on Saturday, Sunday or Public Holidays.
  - Work may take place on Saturdays if the works are not audible.
  - Residents (within 30 metres of site boundaries on Pymble Ave and Avon Road) will be advised if and what work is considered to be done on Saturdays.
- Parking
  - o ELC staff and visitors to park in existing car park (Centenary Car Park 37 spaces).
  - On-site parking for the contractor to be provided (on tennis courts 40- 50 vehicle spaces).
  - o 59B Pymble Ave, owned by school to be used by contractor as site office and 4-5 vehicles
- Preconstruction survey to neighbouring properties to be undertaken (Dilapidation reports) letter drop requesting permission to access and photograph properties in January 2024 (inspections over 3-4 week period).
- Construction noise and vibration to be monitored noise loggers and vibration monitors on the boundary.
- Complaints management system to be implemented—cause and effect of the complaint will be logged through the builder.
- Trees removal and replacement
  - o 37 trees to be removed and replaced with 37 trees.
  - Seed collection to be undertaken prior to tree removal. Seeds of native tree species have been collected and will be propagated and planted onsite. Seedlings that cannot be planted on site will go to community and planted elsewhere.
  - Nesting boxes to be relocated 5 have been relocated for flying foxes.



- Traffic calming to be initiated—Local Area Traffic Management (LATM) such as speed bumps—externally along Pymble and Avon Road will be implemented in conjunction with Council's Traffic Committee. These are permanent traffic calming measures.
- Construction access road
  - Traffic control on Gate 3 (Avon Road) for trucks via temporary road to be routed behind tennis courts to the Grey House Precinct construction site (safest route).
  - Traffic controller also at Gate3.
  - Crane is a luffing Jib no oversailing of any houses.

## **Modification of Condition - Grey House Walk**

- 1 x Modification (to Conditions) has been submitted to the Department of Planning
- The modification requests that Grey House Walk remain open for staff and students 7:00am-9:30am and 2:00pm-6:00pm, school days)
- Approximately 150 students use this walk
- Safe access for students and staff only to be maintained
- No access by the contractor
- Monitoring of access by staff during peak times proposed
- Grey House Walk will remain shut during non-term times
- Link to **Grey House Walk Modification** is at: <a href="https://www.planningportal.nsw.gov.au/major-projects/projects/pymble-ladies-college-grey-house-precinct-modification-1">https://www.planningportal.nsw.gov.au/major-projects/pymble-ladies-college-grey-house-precinct-modification-1</a>

## **Estimated Construction Timeline**

- 1. Award contract: 1<sup>st</sup> December 2023.
- 2. Commence site mobilisation: 12<sup>th</sup> December 2023.
- 3. Commence works on site: 27<sup>th</sup> January 2024.
- 4. Works completion: 30<sup>th</sup> September 2025.

## Contacts

| Event   | Name         | Contact No   |
|---|--------------|--------------|
| General College Issues Relating to Construction | Greg Hastie  | 0411 477 006 |
| Construction Issues                             | Builder-TBA  |              |
| Grey House Planning and Development             | Nahid Mahmud | 02 9995 5228 |
| Website Links:                                  |              |              |



| Event                                | Name  | Contact No |  |
|--------------------------------------|---|------------|--|
| Pymble Ladies College Masterplanning | https://pymble.nsw.edu.au/about-pymble/master-planning/   |            |  |
| Dept of Planning                     | https://www.planningportal.nsw.gov.au/major-<br>projects/projects/pymble-ladies-college-grey-house-precinct |            |  |

## Discussion Plus Q & A

| Iss | Issues raised   |   | Confirmations   |  |
|-----|---|---|---|--|
| 0   | Onsite induction for all construction contactors      | 0 | All workers will receive on-site induction  |  |
| 0   | Monitoring construction vehicles and workers parking. | 0 | Team to monitor controls.   |  |
| 0   | Impacts on roads/property (Dilapidation Reports)      | 0 | Dilapidation reports of adjacent properties in January 2024   |  |
| 0   | Monitoring of noise/vibration/dust.                   | 0 | Construction noise and vibration to be monitored – noise loggers and vibration monitors – on the boundary.  Dust suppression – site will be watered when digging, silt fences/dust cloth at boundaries.   |  |
| 0   | Construction traffic hours                            | 0 | A Construction Management Plan (CMP) stipulates hours   |  |
| 0   | Policing of traffic and parking would be preferred.   | 0 | of operation- eg drop of and pick up periods – vehicles not allowed onto site during these times – any delivery that come outside required hours are turned away.  Design of building has not been changed – only moved 5m north + additional landscaping – IPC has signed off. |  |
| 0   | Future use of Grey House Walk – BAU                   |   |   |  |

## **Actions**

| Action                                | Responsible | Status                            |
|---------------------------------------|-------------|-----------------------------------|
| Construction Management Plan          | Contractor  | Pending                           |
| Share Presentation with CCC & Website | Greg Hastie | PPT circulated with meeting notes |



| Action  | Responsible | Status   |
|---|-------------|--|
| Check overshadowing with increased setback                            | Greg Hastie | Please see attached  |
| Check trees at rear of Lynne Soon's house (53 Pymble Ave) are staying | Greg Hastie | No trees will be removed at rear of 53 Pymble Avenue   |
| Share link for modification application                               | Greg Hastie | https://www.planningportal.nsw.gov.au/major-<br>projects/projects/pymble-ladies-college-grey-<br>house-precinct-modification-1 |

## **Other Business**

Greg Hastie to brief with Natalie Chan week beginning 27 November 2023.

## **Next Meeting Date**

12<sup>th</sup> of March – To be confirmed - Meeting notice distributed at the end of February.

## FW: Grey House Precinct, Pymble Ladies College - SSDA D10 - Demolition

## Rosanna Petteno < Rosanna@pierproperty.com.au>

Fri 2/23/2024 2:13 PM

To:Alison Brown <alisonb@cityplan.com.au>

Cc:Chris Michaels <ChrisM@cityplan.com.au>;ghastie@pymblelc.nsw.edu.au <ghastie@pymblelc.nsw.edu.au>;Scott Egelton <Scott@pierproperty.com.au>

Some people who received this message don't often get email from rosanna@pierproperty.com.au. <u>Learn why this is important</u>

#### Alison.

Confirming our Teams discussion of 16 January per the below PPC agenda that condition D10 is not applicable as there is no structural building to be demolished. There will be demolition of concrete pathways and a small slab on ground to be removed as part of the SEC earthworks, but no standing structure requiring demolition. There were standing structures removed within the GHP site, however these were undertaken by PLC as part of an early works package.

Could you please confirm what further information CPS require from PLC or SEC to close out Condition D10.

#### regards,



Rosanna Petteno | Senior Project Manager | Pier Property Corporation Suite 305, Level 3, 25 Lime St King Street Wharf NSW 2000 Tel (02) 9249 0400 | Fax 02 9249 0499 | Mob 0420 959 064 rosanna@pierproperty.com.au | | www.pierproperty.com.au

From: Scott Egelton <Scott@pierproperty.com.au>

Sent: Monday, January 15, 2024 12:01 PM

To: Alison Brown <alisonb@cityplan.com.au>; Chris Michaels <ChrisM@cityplan.com.au>

**Cc:** Gregory Hastie <ghastie@pymblelc.nsw.edu.au>; Rosanna Petteno <Rosanna@pierproperty.com.au>; Andrew Kyrillos <akyrillos@stephenedwards.com.au>; Tony Macri <tmacri@stephenedwards.com.au>; King, Stephen <stephen.king@stantec.com>

Subject: RE: Grey House Precinct, Pymble Ladies College

HI Alison/Chris

Please see below agenda for the meeting re Grey House at PLC tomorrow

- 1. Review list of activities below as proposed pre CC1 site establishment scope.
- Site establishment (temp fencing/hoarding installation, site shed installation) plan to be tabled on the call tomorrow.
- Walkway construction from Grey House Walk to Junior School Entrance
- Tree removal and site clearing (vegetation)
- Existing stockpile removal
- Temporary ramp construction
- Access road preparation
- Site investigation works (pot-holing)
- Temp services works (power, water, sewer)

- 2. Discuss the following in relation to the CC1 submission:
- Discuss the level of design documentation for CC1 ie architectural, structural, civil drawings.
- Discuss if condition D10 applies as no structural demolition is taking place.
- CC1 will include
  - Retention system
  - Earthworks
  - Foundations and Piling
  - OSD
  - In-ground services
- SEC targeting following CC submission dates:
  - CC1 19/02/2024
- 3. Sprinkler design update via Stantec Fire 11am 11.30 PCA/Stantec/PLC/PPC

## Regards, Scott



#### Scott Egelton | Director | Pier Property Corporation

Suite 305 , Level 3, 25 Lime St King Street Wharf NSW 2000 **Tel** (02) 9249 0400 | **Fax** 02 9249 0499 | **Mob** 0412 279 782

scott@pierproperty.com.au | www.pierproperty.com.au

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----Original Appointment----

From: Alison Brown <alisonb@cityplan.com.au>
Sent: Wednesday, January 10, 2024 9:36 AM
To: Alison Brown; Scott Egelton; Chris Michaels

Cc: Gregory Hastie; Rosanna Petteno

Subject: Grey House Precinct, Pymble Ladies College

When: Tuesday, 16 January 2024 9:00 AM-10:30 AM (UTC+10:00) Brisbane.

Where: Microsoft Teams Meeting

Meeting to discuss site set up items prior to the issue of the CC and initial CC1 queries. Additional discussion on peer review on non-inclusion of sprinklers for last 30 minutes of meeting.

## Microsoft Teams meeting

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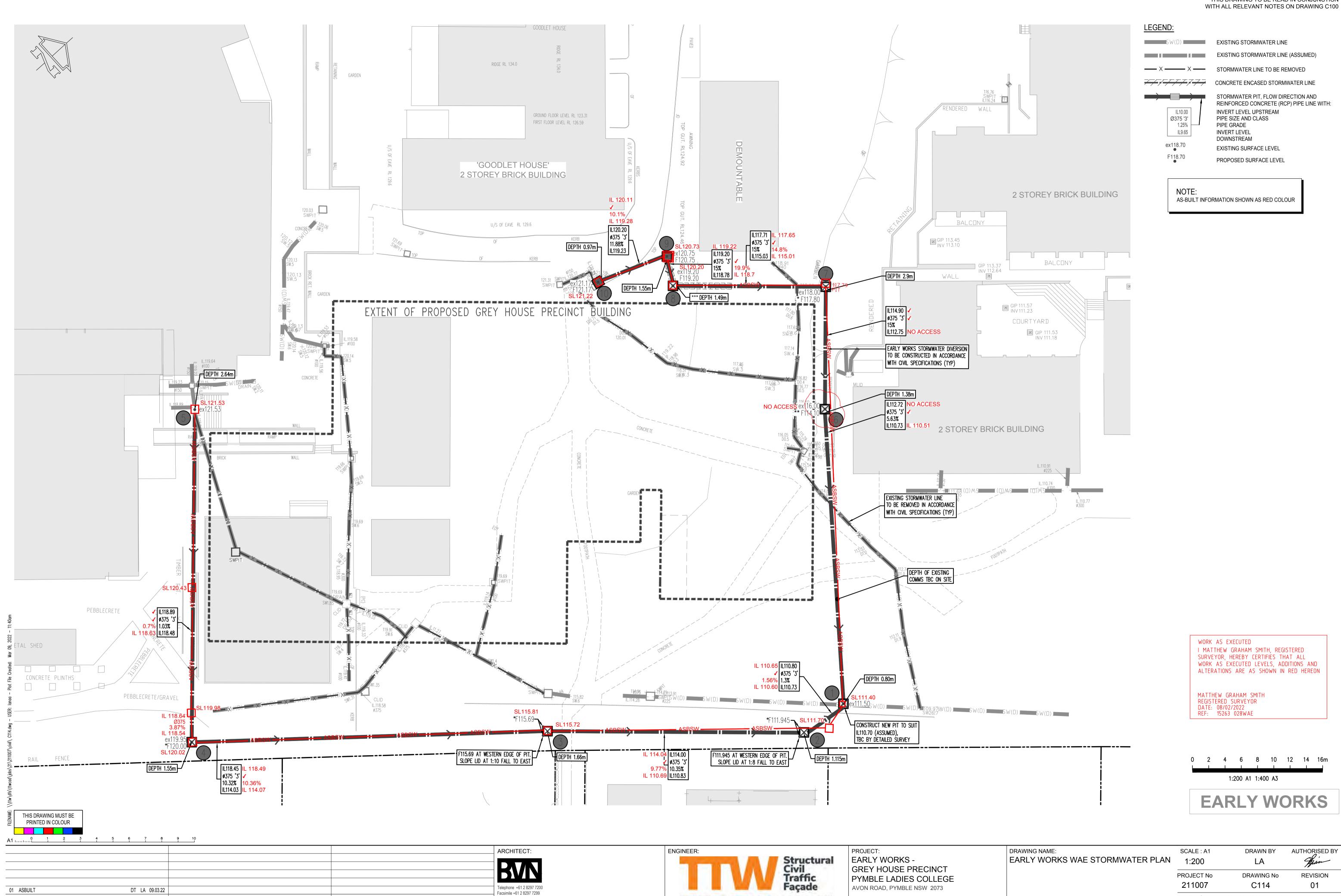
Meeting ID: 441 508 853 947

Passcode: 6CKerv

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## SSDA Condition D11 - Stormwater Diversion

## Rosanna Petteno < Rosanna@pierproperty.com.au>

Fri 2/23/2024 5:25 PM

To:Alison Brown <alisonb@cityplan.com.au>

1 attachments (826 KB)

C114-01.pdf;

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### Hi Alison,

Please see attached Stormwater As-Built drawings provided by PLC as evidence of the stormwater diversion works already completed to satisfy Condition D11. CPS were the certifiers for this work.

#### regards,



Rosanna Petteno | Senior Project Manager | Pier Property Corporation Suite 305, Level 3, 25 Lime St King Street Wharf NSW 2000 Tel (02) 9249 0400 | Fax 02 9249 0499 | Mob 0420 959 064 rosanna@pierproperty.com.au | | www.pierproperty.com.au

From: Gregory Hastie <ghastie@pymblelc.nsw.edu.au>

Sent: Friday, February 23, 2024 4:36 PM

**To:** Rosanna Petteno < Rosanna@pierproperty.com.au > **Subject:** RE: SSDA Condition D11 - Stormwater Diversion

Hi Ros

Please see attached.

We have received the OC for these works from the certifier, so they are aware that the work is complete.

Regards

Greg Hastie

## Project Director Masterplanning and Capital Works

Pymble Ladies' College Avon Road, Pymble NSW 2073 T: +61 2 9855 7628 | M: +61 411 477 006

www.pymblelc.nsw.edu.au

I work and send correspondence at times that are traditionally not seen as work hours. That is my choice. Please understand there is no expectation, nor should you feel any implied pressure to read emails nor respond other than in normal work hours.



C

From: Rosanna Petteno < Rosanna@pierproperty.com.au >

Sent: Friday, February 23, 2024 2:28 PM

**To:** Gregory Hastie < ghastie@pymblelc.nsw.edu.au > **Subject:** SSDA Condition D11 - Stormwater Diversion

**CAUTION** This email originated outside the organisation. Please verify the sender is legitimate and do not click anything unless you are expecting it.

## Hi Greg,

Condition D11 is marked as Contractor requirement, however the condition relates to stormwater diversion works not approved by this consent. Could you please provide a copy of PLCs As-Built Stormwater diversion works design and certification to provide to the PCA to cover off scope of works already completed as part of early works approval.

#### Stormwater diversion

D11. Prior to the commencement of any construction on the site pursuant to this development consent (except demolition and tree removal works), the Applicant must submit evidence to the satisfaction of the Certifier that the stormwater diversion works (not approved by this consent) have been completed.

**Ecologically Sustainable Development** 

regards,



Rosanna Petteno | Senior Project Manager | Pier Property Corporation Suite 305, Level 3, 25 Lime St King Street Wharf NSW 2000 Tel (02) 9249 0400 | Fax 02 9249 0499 | Mob 0420 959 064 rosanna@pierproperty.com.au | | www.pierproperty.com.au

## **INSTALLATION CERTIFICATE: STORMWATER DRAINAGE**

Issued under Clause A5.1 & A5.2 of the Building Code of Australia 2019 (Amendment 1), Volume 1

| PROJECT:          | [insert report reference number]                                 | Date: | 28/02/22 |  |  |
|-------------------|--|-------|----------|--|--|
| Project Name:     | Pymble Ladies College Grey House Precinct – Comms Enabling Works |       |          |  |  |
| Project Address:  | 20 Avon Road, Pymble NSW 2073                                    |       |          |  |  |
| Lot & DP:         | N/A  |       |          |  |  |
| Part of Building: | As documented  |       |          |  |  |
| Exclusions:       | NO   |       |          |  |  |
|                   | If yes, detail:  |       |          |  |  |

I / We hereby certify that the components / measures listed below, relating to the abovementioned project have been installed, commissioned and comply with the standards of performance identified below:

| Building Component |                     | Standard of Performance |  |
|--------------------|---------------------|-------------------------|--|
|                    | Stormwater Drainage | AS/NZS 3500.3 - 2018    |  |

#### Details of the person verifying this Installation Certificate

I confirm I am a properly qualified person and have a good working knowledge of the relevant codes and standards referenced above.

| Name:                            | Paul Anders | Paul Anderson                               |  |       |          |
|----------------------------------|-------------|---|--|-------|----------|
| Qualifications & Accreditations: | Licenced Pl | Licenced Plumber, Drainer, Gasfitter        |  |       |          |
| Licence Number:                  | L9012       | L9012                                       |  |       |          |
| Company:                         | McPherson   | McPherson Plumbing Services Pty Ltd         |  |       |          |
| Contact Details:                 | Address:    | Address: 2 Sailfind Road, Somersby NSW 2250 |  |       |          |
|                                  | Phone:      | (02) 4343 4200 Mob: 0419 600 311            |  |       |          |
|                                  | Email:      | admin@mcplumbing.com.au                     |  |       |          |
| Signature:                       | (3)         |   |  | Date: | 28/02/22 |

#### Schedule A – Plans certified / relied upon

C-100/B, C-101/B, C-102/B, C-110/B, C-120/B,

| Schedule B – | Design | certification | relied | nogu |
|--------------|--------|---------------|--------|------|
|              |        |               |        |      |

N/A

## Department of Planning and Environment



Our ref: SSD-SSD-17424905-PA-3

Greg Hastie Project Director Pymble Ladies College 20 Avon Road Pymble, 2073 NSW

Attn: Sally Prowd (sprowd@willowtp.com.au)

01/11/2023

Pymble Ladies College – Grey House Precinct (SSD-17424905) Ecologically Sustainable Development, Condition D12(b)

Dear Mr Hastie

I refer to your request for an alternative Ecologically Sustainable Development (ESD) certification process, submitted for approval under condition D12(b) of SSD-17424905. I also acknowledge and thank you for your response to the Department's request for additional information.

The Department has carefully reviewed your request and accompanying document that supports the proposed alternative ESD certification for the project.

I note the alternative ESD report:

- has been reviewed by the Applicant, and no issues have been raised to the Department;
- indicates the project will be designed to target an ESD performance level to a 5-star Green Star Design & As Built v1.3 equivalent standard (62 points); and
- has been submtted to the Department prior to the commencement of construction works.

Accordingly, as nominee of the Planning Secretary, I approve the alternative ESD certification process as described in the ESD report prepared by Stantec Australia Pty Ltd, Revision 3 dated 27 September 2023, in accordance with condition D12(b) of SSD-17424905. Please ensure that the approved alternative ESD report is placed on the project website at the earliest covenience as per condition B26.

I remind you to submit evidence of compliance of implementation to the Planning Secretary and Certifier demonstrating that the project has met the approved alternative ESD certification process within six months of commencement of operation as per condition G18.

Please note that if there are any inconsistencies between the submitted alternative ESD report and the conditions of consent, the conditions will prevail.

If you have any questions or require any clarifications, please contact Alex Richard at alexander.richard@dpie.nsw.gov.au.

Yours sincerely

Shelley Reed Acting Director Infrastructure Management

As nominee of the Planning Secretary

## Pymble Ladies' College Grey House Precinct

## **ESD** Report

Ecologically Sustainable Design Report

Prepared for: Pymble Ladies' College

**Attention: Scott Egelton** 

Date: 27 September 2023

Prepared by: Madhu Muthumalai

Ref: 301350239

## Stantec Australia Pty Ltd

Level 9, The Forum, 203 Pacific Highway, St Leonards NSW 2065

Tel: +61 2 8484 7000 Web: www.stantec.com

\\AU2012-PPNTAP01\SHARED\_PROJECTS\\301350239\PROJECT DOCUMENTATION\SUSTAINABILITY\GENERAL\\210810 SSDA REPORT\SU-RE\_003\_QA DOCX



## Revision

| Revision | Date       | Comment     | Prepared By | Approved By |
|----------|------------|-------------|-------------|-------------|
| 01       | 16/07/2021 | Draft issue | ANG         | LHT         |
| 02       | 06/08/2021 | For issue   | ANG         | LHT         |
| 03       | 27/09/2023 | For Issue   | MPM         | ANG         |
|          |            |             |             |             |
|          |            |             |             |             |
|          |            |             |             |             |

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## 1. Executive Summary

This Ecologically Sustainable Design (ESD) report has been prepared to support a State Significant Development Application (SSDA) submitted to the Department of Planning, Industry and Environment (DPIE) for the proposed development of Pymble Ladies' College (PLC) Grey House Precinct (GHP), located within the school grounds at 20 Avon Road, Pymble, New South Wales, 2073.

This report is intended to provide an overview of the sustainable initiatives to be considered within the project as a design response to the Secretary's Environmental Assessment Requirements (SEARs) and to the Development Consent- Section 4.38 of the Environmental Planning and Assessment Act 1979. The report further addresses other ecologically sustainable aspects that will be considered during the detailed design phase.

Information contained within this report has been prepared in response to:

- The Secretary's Environmental Assessment Requirements (SEARs) for this development including:
  - Building design response statement to NARCliM projections
  - Integrated Water Management Plan
- Development Consent- Section 4.38 of the Environmental Planning and Assessment Act 1979
- NCC 2022 Section J Volume 1, Amendment 1 Compliance

Consideration has also been made with regards to:

- Ku-ring-gai Local Environment Plan (LEP) 2015
- Ku-ring-gai Development Control Plan (DCP) 2016

In coordination with the above, the project will consider and implement appropriate sustainable design principles including initiatives to mitigate the environmental impact through the following:

- Energy & Carbon- including on-site renewable energy and improved energy efficiency across the building
- Water Management including water reuse, reduced potable water demand and improved stormwater quality.
- **Health & Wellbeing** improving indoor air quality, maximising daylight, and providing comfortable amenities through improved indoor environmental quality features to enhance wellbeing among students and staff.
- **Materials** Careful material selection to reduce embodied energy and focus on natural products with biophilic qualities.
- Future Resilience 100% electric building services design, no fossil fuels burnt on-site within the building.

The following sections describe the development's specific sustainable design response in more detail.

## 2. Introduction

## 2.1 Project Overview

Established in 1916, Pymble Ladies College is a nonselective, independent school for girls from Kindergarten to Year 12, with Boarding available from Year 7. The school grounds are located within Sydney's metropolitan area at 20 Avon Road, Pymble, NSW, 2073. The location context of the site is illustrated in Figure 1.

The proposed Grey House Precinct is a new school building that aims to be a world-class educational and co-curricular facility. The new development will house a new Early Learning Centre, Out of School Hours Care (OSHC), Dance studios, year 5 & 6 learning spaces, including STEM (Science, Technology, Engineering and Mathematics) labs, and outdoor learning spaces.



Figure 1 PLC GHP render image, Source: BVN Architecture

## 2.2 Project Site

The proposed development is located on the southeast side away from Avon Road. The proposed works are to be built towards the southern portion of the site, along the southeast boundary. The GHP PLC site is identified as Lot 1 DP69541 by the NSW Land Registry Services. (LRS)

The area slopes towards the southeast and is surrounded by a number of school buildings. The historic, two storey, Goodlet House building is located directly to the northwest, the double storey Junior School is located directly to the northeast and the contemporary multistorey Aquatic and Fitness Centre is located to the southwest. To the south, the site is adjacent to the school boundary, with a number of private, residential dwellings on the opposite side.

The site currently contains several contemporary, single storey, demountable classroom structures located towards the southwest portion of the site, which will be replaced with the new facility.



Figure 2: Context plan. PLC school grounds and site location circled in blue. Source: Six Maps, NSW

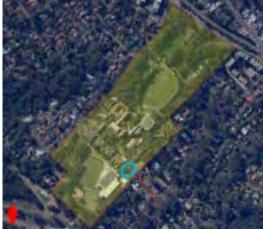


Figure 3: Aerial Photo. PLC school grounds and site location circled in blue - Source: Six Maps, NSW

## 3. Project ESD Drivers

PLC's design intent is to achieve the sustainability targets while maintaining minimal impact to the overall form, function, and aesthetic of the space. The following section presents an overview of the applicable ESD drivers for this project.

## 3.1 Secretary's Environmental Assessment Requirements

This report has been prepared having regard to the Secretary's Environmental Assessment Requirements (SEARs) issued on 17<sup>th</sup> May 2021, Application No SSD-17424905. The SEARs document outlines the general requirements and key issues that the development must address as part of the Environmental Impact Statement (EIS). The following excerpt has been extracted from the EIS outlining the ESD specific matters that must be identified and delivered within this report:

| Ecologically Sustainable Development SEARs   | Reference   |  |
|--|---|--|
| Identify how ESD principles (as defined in clause 7(4) of Schedule 2 of the Regulation) would be incorporated in the design and ongoing operation phases of the development.   |   |  |
| Identify proposed measures to minimise consumption of resources, water (including water sensitive urban design) and energy.  | Refer to section 4 of this  |  |
| Identify how the future development would be designed to consider and reflect national best practice sustainable building principles to improve environmental performance and reduce ecological impact. This should be based on a materiality assessment and include waste reduction design measures, future proofing, use of sustainable and low-carbon materials, energy and water efficient design (including water sensitive urban design) and technology and use of renewable energy. | report. Section 4 outlines each of the ESD targets which in whole respond to this SEAR. |  |
| Identify how environmental design will be achieved in accordance with the GANSW Environmental Design in Schools Manual (GANSW, 2018)   |   |  |
| Provide an assessment against an accredited ESD rating system or an equivalent program of ESD performance. This should include a minimum rating scheme target level.   | Refer to Section 4.1 of this report.  |  |
| Provide a statement regarding how the design of the development is responsive to the NARClim projected impacts of climate change   | Refer to Section 4.4 of this report.  |  |
| Provide an integrated Water Management Plan detailing any proposed alternative water supplies, proposed end uses of potable and non-potable water, and water sensitive urban design.   | Refer to Section 4.5 of this report.  |  |

## 3.2 Development Consent- Section 4.38 of the Environmental Planning and Assessment Act 1979

This report has been prepared having regard to the Development Consent- Section 4.38 of the Environmental Planning and Assessment Act 1979 issued on 9<sup>th</sup> December 2022. The following excerpt has been extracted from section *D12 Ecologically Sustainable Development* of the Development Consent outlining the ESD specific matters that must be identified and delivered within this report:

| Development Consent   | Reference   |
|---|---|
| Prior to the commencement of construction, unless otherwise agreed by the Planning Secretary, the Applicant must demonstrate that Ecologically Sustainable Development (ESD) is being achieved by either:  (a) registering for a minimum 5-star Green Star rating with the Green Building Council Australia and submit evidence of registration to the Certifier; or  (b) providing design details for ESD measures equivalent to a minimum 5-star Green Star rating and seeking approval from the Planning Secretary for this alternative certification process. | Refer to section 4.1 of this report. Section 4.1 outlines each of the ESD targets which in whole respond to this development consent for providing ESD measures equivalent to a minimum 5-star Green Star rating. |

## 3.3 NSW Environmental Planning and Assessment Regulation 2000

The following summarizes the ESD principles outlined in clause 7(4) of Schedule 2 of the EPA Regulation 2000:

- "Precautionary principle": Where possible the design is to be developed to avoid serious and irreversible environmental degradation.
- "Inter-generational equity": the design is to maintain, or enhance the health, diversity and productivity of the environment for future generations.
- "Conservation of biological diversity and ecological integrity": the design is to consider the conservation of biological diversity and ecological integrity.
- "improved valuation, pricing and incentive mechanisms": design decisions should be made in consideration of
  environmental factors, including the ongoing operation of systems and how this will impact the environment over
  the course of the projects lifetime.

## 3.4 GANSW Environmental Design in Schools Manual 2018

The SEARs requirements reference the GANSW Environmental Design in School's Manual which identifies strategies and recommendations to drive sustainable design in schools including:

- Passive design features: These include thermal mass to absorb and store heat energy for use during cooler times, cross ventilation to reduce energy consumption, passive heating/cooling through orientation of new buildings, shading and glazing selection to control solar heat gain.
- **Biophilic design:** to facilitate a connection with nature. This can be done through the use of indoor planting, green walls, use of natural materials and nature views.
- **Specialist environmental design initiatives:** These include Covered outdoor learning areas (COLA) to promote engagement with nature and outdoors, and the use of solar photovoltaic (PV) panels as the energy production during the day enables most to be used on site.

## 3.5 NCC Section J – Energy Efficiency

NCC Section J establishes the minimum energy efficiency provisions for all classes of buildings. The provisions are designed to achieve the functional objective of Section J which is to reduce greenhouse gas emissions.

NCC Section J 2022 [1] will likely apply to the design and construction of the development. NCC Section J 2022 represents a 'step change' substantial increase in the minimum energy efficiency requirements for a building. The energy efficiency performance requirements are now significantly more stringent, with the overall aim of reducing future operational energy consumption and greenhouse gas emissions.

The development will demonstrate compliance with the minimum design provisions as identified within National Construction Code (NCC) 2022 Volume One Section J – Energy Efficiency, including:

- Part J1- Energy efficiency performance requirements
- Part J2- Energy efficiency
- Part J3- Elemental provisions for a sole-occupancy unit of a Class 2 building or a Class 4 part of a building
- Part J4- Building fabric
- Part J5- Building sealing
- Part J6- Air-conditioning and ventilation
- Part J7- Artificial lighting and power
- Part J8- Heated water supply and swimming pool and spa pool plant
- Part J9- Energy monitoring and on-site distributed energy resources

## 3.6 Ku-ring-gai Council DCP ESD Considerations

The following items include the ESD principles outlined in the local Ku-ring-gai DCP for non-residential developments:

- Water Efficiency: provide systems to minimise mains water usage.
- Energy Generation: building design is to demonstrate a reduced reliance on mains power and provision of alternate energy sources.
- Heating and Cooling: use of mechanical air conditioning and heating is to be minimised. Where it is unavoidable, the systems are to be of a high efficiency in technology choice to reduce peak energy demand.
- Lighting: buildings are to be designed to reduce the need for artificial light use.

## 4. Project Sustainability Design Response

The design response for the proposed development will consider and implement (where feasible) the relevant ESD requirements and drivers (identified within Section 3) as follows. Where relevant, industry-based rating tools such as Green Star Design & As Built v1.3 [2] by the Green Building Council of Australia have been referenced to assist with suggestions of efficiency measures.

## 4.1 Best Practice Sustainable Development Framework

The SEARs requirements call for an "assessment of the proposed development against an accredited ESD rating system or an equivalent program of ESD performance". Accordingly, the project will be designed to target an ESD performance level that is comparable to a 5 Star Green Star Design & As Built v1.3 Equivalent standard.

The Green Building Council of Australia's Green Star Design & As Built v1.3 rating scheme is the most appropriate reference ESD tool for this project. Green Star is a credits-based star rating system ranging from one through to six stars.

Green Star assesses the environmental performance of projects in design, construction, and operation via the following category frameworks:

- Management
- Indoor Environment Quality
- Energy
- Transport
- Water
- Materials
- Land use & Ecology
- Emissions; and
- Innovation

A provisional 5 Star Green Star Equivalent benchmarking pathway is included in **Appendix A** of this report. It is noted that the provisional list of ESD initiatives will be subject to further amendment and feasibility analysis during project detailed design phase.

## 4.2 NCC Section J Compliance

NCC 2022, Volume 1, Section J – energy efficiency provisions will likely apply to the design and construction of the development with the intent to ensure the building envelope and associated building services demonstrate a minimum level of energy efficiency performance.

## 4.3 ESD Opportunities & Initiatives

The following section identifies ESD opportunities and initiatives for consideration on the project (including the Green Star equivalent related items). The main initiatives have been outlined in this section and are separated into the following categories:

## 4.3.1 Energy and Carbon

- Building envelope: High performance thermally insulated building fabric will significantly reduce peak cooling and heating loads on HVAC systems. High performance energy efficient double glazing will be utilised as required to improve the overall building energy performance. This passive design strategy aligns with the GANSW Environmental Design in School's Manual recommendations.
- **Floor plan layout:** Relevant windows in the perimeter area of the building may be openable to allow for natural ventilation under optimal external ambient conditions.
- Natural ventilation and Mixed Mode Ventilation: The project will accommodate the possibility of mixed mode
  ventilation for the most relevant spaces. Openable windows will allow for natural ventilation when external ambient
  conditions are suitable. High efficiency mechanical HVAC systems will operate in the relevant spaces outside of the
  favourable ambient conditions.
- Ceiling Fans: Ceiling mounted fans will be installed in relevant areas to reduce cooling air-conditioning energy.
- **Lighting:** Energy efficient LED electric lighting will be utilised in conjunction with good natural daylight levels. Occupancy sensors and daylight sensors will be installed where required.
- Natural daylighting: the design intent is to utilise good levels of daylighting and reduce the use of electric lighting.
   Potential design strategies to achieve this include access to natural daylighting through windows, doors, and atrium.
- On site energy generation: PV solar panels (approx. 70 kW) and a solar hot water system will be installed to supplement the building energy and domestic hot water demand. This initiative aligns with the GANSW Environmental Design in School's Manual recommendations.
- **Internal Equipment Power:** Where possible, energy efficient tenancy fit-out equipment (computers, printers, dishwashers, Boiling & Chilled Water units, whitegoods etc.) will be considered for installation

## 4.3.2 Water Management

- **Fixtures and fittings:** Low-flow (high WELS Star rated) showers, WCs and taps will reduce the potable (and domestic hot water) demand across the development.
- Rainwater harvesting: A 20kL Rainwater tank is proposed for rainwater harvesting to reduce the consumption of
  potable water for landscape irrigation.
- **On-site stormwater run-off management:** an OSD tank will be incorporated in the project to assist in reducing peak discharge and mitigate stormwater run-off.
- Landscape: Selection of local native planting to reduce water consumption for irrigation where possible.

## 4.3.3 Health & Wellbeing

- **Daylighting:** Daylighting has several benefits for human health and wellbeing, including improving the levels of alertness, mood, sleep, regulation of body temperature, and hormones release. Thus, the project will aim to maximize controlled levels of natural daylight while considering the negative impact of glare and unwanted solar heat gain.
- **Thermal Comfort:** thermal comfort is one of the most important factors for occupant satisfaction inside a building. The building design aims to achieve optimum thermal comfort through a high performing building fabric and a mixed-mode ventilation system.

- **Views:** The project's surrounding area is characterized by mature gardens with large trees as well as the areas of retained Blue Gum Forest. The design aims to maximize views to the exterior and enhance connection to nature for the students and staff.
- **Biophilia**: The project will prioritize the selection of biophilic elements and materials for the interior spaces (e.g. timber finishes, green plants) with the aim of creating positive learning environments, and improving occupant experience, mood and happiness. This design strategy aligns with the GANSW Environmental Design in School's Manual recommendations.
- Covered Outdoor Learning: As recommended within the GANSW Environmental Design in School's Manual, the
  building will incorporate covered learning areas (COLAs) in each level to promote engagement with nature and
  outdoors. COLAs within the Atrium spaces will count with ceiling fans and a louvered façade for improved outdoor
  thermal comfort and weather protection.

## 4.3.4 Materials

Choice of materials is a key aspect for sustainable outcomes both in terms of reducing embodied carbon and in creating healthy environments. The material strategy includes the following:

- **Timber finishes**: timber and warm colours have psychological benefits for people. The selection of these materials will have a positive impact on students and teachers' health and wellness. Consideration will be given to the use of environmentally responsibly sourced timber (FSC/PEFC certified).
- Volatile Organic Compounds (VOCs) reduction: high concentrations of VOCs in internal finishes are known to trigger nausea, headaches, asthma and allergies. These result from the off gassing of building materials such as paints, adhesives, coatings, carpets, and insulation. A selection of low VOC verified products in line with Green Star general requirements will help create a healthier environment.
- **PVC elements:** Materials such as pipes, cables, flooring, blinds, and electrical, shall be PVC free, or meet best practice guidelines for PVC, in line with Green Star general requirements.

### 4.3.5 Future Resilience

- Future Resilience 100% electric building services design, including for HVAC and Domestic Hot Water production. No fossil fuels burnt on-site within the building
- **Urban Heat Island effect:** The proposed development will endeavour to reduce heat island impacts at the local scale through the following strategies:
  - External Façade Glazing Selection: The glazing will be selected to have a lower solar energy reflectivity.
     This reduces the energy being reflected from the sun, down into the local school precinct
  - Greenery on Roofs & Terraces: Green planting will be adopted for the roof and terrace areas where feasible. The planting intent is to increase vegetation cover, improve local biodiversity, and help mitigate stormwater runoff.

## 4.4 NARCliM Design Response Statement

The SEARs requirements call for a statement regarding how the design of the development is responsive to the NARClim projected impacts of climate change. The proposed Greyhouse Precinct development for PLC is located within the school grounds at 20 Avon Road, Pymble, New South Wales, 2073. Given its location, the site is found within the **Metropolitan Sydney Region**; thus, the corresponding region has been analysed.

Known for its large natural harbour and its status as a global city, the Metropolitan Sydney Region encompasses the Cumberland Plain and extends west to the Blue Mountains in the Great Dividing Range. The Metropolitan Sydney Region extends from Broken Bay in the north to Garie Beach in the Royal National Park in the south. With over 4 million people, the Metropolitan Sydney Region is the most populous region in New South Wales. NARCliM's modelling is on a regional basis.

## 4.4.1 Temperature & Heat Projections and Design Responses

#### **Temperature Projections**

#### 2020-2039

Mean temperatures are projected to rise **by 0.7** °C by 2030. The increases are occurring across the region. All models show there are no declines in mean temperatures across Metropolitan Sydney.

#### 2060-2079

Mean temperatures are projected to rise **by 1.9** °C by 2070. The greatest increases are being seen during summer and spring. All models show there are no declines in mean temperatures across the Metropolitan Region.

#### **Heat Projections**

#### 2020-2039

+3.9 days a year with temperature > 35°C, mostly to occur in summer.

Hot days are projected to increase across the region by an average of 4 days per year by 2030. The greatest increases are seen in the central part of the region near Penrith during summer and spring, where they are projected to experience an additional 5-10 more days per year. There is little change along the coast.

#### 2060-2079

+10.4 days a year with temperature > 35°C, mostly to occur in summer but will see more hot days in spring also.

Hot days are projected to increase across the region by an average of 11 days per year by 2070. The greatest increases are seen in the central part of the region from Picton to north of Wiseman's Ferry and out to Katoomba. These regions are projected to have additional 10-20 hot days per year.

## Project's Design Responses to Temperature & Heat Projections:

Since NARCliM's projections are showing an overall increase in temperature, the project's design responses for climate predictions of temperature and heat significantly overlap. These are outlined below:

## **Building Envelope**

- Provision of high-performance glazed systems in conjunction with reasonable façade window-to-wall area ratio to avoid excessive solar heat gains,
- Façade design incorporates shading devices to glazed façades
- Well insulated building fabric (walls, roof, floors) to reduce external heat gains

## Project Design

Floor plan layout and operable glazing type selection to improve natural ventilation



- Consideration of well shaded outdoor spaces for blocking of summer sun
- Inclusion of greenery on roofs and terraces,
- Reduction of hard surfaces and increased landscaping

#### Mechanical Air Conditioning System

- HVAC systems adequately sized with sufficient spare capacity for future whilst still allowing for efficient operation.
- Amend building comfort expectations (room temperature bands) during peak temperature days and educate occupants for tolerance to wider temperature bands (adaptive thermal comfort)
- Installation of high efficiency VRV heat recovery system.
- Installation of 70kW system of Solar PV to reduce grid energy consumption of HVAC systems
- User-controlled systems via local control points.

## 4.4.2 Rainfall Projections

#### 2020-2039

By 2030 there is little change in annual rainfall. Rainfall is projected to increase across the region during autumn with the largest increase seen north of Wiseman's Ferry. Rainfall is variable across the region during the other seasons.

The projected annual rainfall increase for the region is +1.7%

#### 2060-2079

Annual rainfall is projected to increase by 2070. Increases are projected across the whole region for summer and autumn. Winter and spring rainfall is more variable, with a slight decrease in rainfall in the Blue Mountains during winter.

The projected annual rainfall increase for the region is +8.9%

### Project's Design Response to Rainfall Projections:

Although an average increase in annual rainfall is expected, rainfall is expected to come in infrequent short downpours. Therefore, water conservation management between rain events and flood management are important and are addressed below.

## Water Conservation:

- Design air-conditioning system with waterless heat rejection (air-cooled)
- Use of drought tolerant and native plants where possible
- Provide subsoil irrigation system to improve watering effectiveness where possible.
- Design rainwater tanks for rainwater reuse for toilet flushing and landscape irrigation
- Water efficient appliances and hydraulic fixtures
- Rainwater tank provision

## Flood Mitigation:

Provide multiple access to the building and safer access routes that are above the peak flood levels.



- On-site stormwater tank will be incorporated in the project to assist in reducing peak discharge and mitigate stormwater run-off.
- Critical building infrastructure (switchboards etc.) to be in appropriate locations to reduce risk of damage from flood events

## 4.4.3 Fire Projections

#### 2020-2039

+0 Changes in number of days a year FFDI > 50

Forest Fire Danger Index (FFDI) is used in NSW to quantify fire weather. The FFDI combines observations of temperature, humidity, and wind speed. Fire weather is classified as severe when the FFDI is above 50. By 2030 severe fire weather is projected to have a slight increase in summer and along the Blue Mountains during spring. Decreases are projected during autumn and across the Sydney Basin in spring. Declines during Autumn are likely due to increases in rainfall. These increases are seen during the peak fire risk season (summer).

#### 2060-2079

+0.6 Changes in number of days a year FFDI > 50

Forest Fire Danger Index (FFDI) is used in NSW to quantify fire weather. The FFDI combines observations of temperature, humidity and wind speed. Fire weather is classified as severe when the FFDI is above 50. Severe fire weather is projected to increase during summer and spring by 2070. Declines are projected for autumn and winter. These increases are being seen during the peak prescribed burning season (spring) and peak fire risk season (summer).

#### Project's Design Response to Fire Projections:

- Provisions of compliant fire and life safety design of the building to protect fire and life safety strategy (e.g. provisions of exits and egress, fire hydrant systems, smoke hazard management, etc.)
- Provide multiple access routes to the site

#### Risk Matrix for PLC GHP as a response to NARClim Projections 4.4.4

| Risk   | 2020-<br>2039 | 2060-<br>2079 | Comment  | Design Response  |
|--|---------------|---------------|--|--|
| Extreme temperatures within the building causing discomfort to indoor occupants.                     | Low           | Medium        | Peak temperatures increasing and becoming more common creating larger loads upon HVAC to maintain thermal comfort inside. Also, can lead to deterioration and failure of HVAC equipment.   | High performance building envelope and façade. HVAC system to support natural ventilation during extreme external conditions, sized with sufficient spare capacity to maintain acceptable comfort conditions during peak days. |
| Increase in temperatures causing discomfort to occupants outdoors.                                   | Medium        | High          | Peak temperatures increasing and becoming more common creating outdoor amenity space to exceed thermal comfort.  | Well shaded outdoor spaces blocking summer sun. Incorporation of ceiling mounted fans to outdoor circulation area (atrium) for improved thermal comfort.   |
| Heat island effect   | Low           | Medium        | The number of days a year with temperature > 35°C, will increase slightly and will mostly occur during summer break so it's not considered a high risk in the short term. However, the risk increases in the 2070s scenario so reducing heat at local scale is critical. | To reduce heat island effect<br>during peak days, the project will<br>include greenery on roofs where<br>possible, reduce hard surfaces<br>where possible and increase<br>landscaping  |
| Access to site blocked, preventing, or restricting access and egress to the site caused by flooding. | Low           | Medium        | The site is not located in a flood prone area therefore, this is considered a low risk. However, stormwater management strategy should be set to mitigate the 8.9% projected annual rainfall increase for the 2070s scenario.  | An OSD tank will be installed to mitigate stormwater runoff and the project will ensure multiple access points above flood plain level.  |
| Structural integrity of<br>the buildings<br>undermined by<br>extreme weather<br>events               | Low           | Low           | Instances of flooding in the area with high erosion soils are low, therefore it is considered a low risk.  | Structural works to plan foundations accordingly   |
| Increased costs of mains potable water due to hotter and drier climate                               | Low           | Medium        | Projections depict hotter drier climate with short intense storms. This suggests water scarcity between storms and therefore an increase in price.   | A 20 kL Rainwater to be implemented for toilet flushing and irrigation. Solar hot water system will be installed to reduce energy loads for hot water.   |
| Access to site<br>blocked, preventing,<br>or restricting access<br>to the site caused by<br>bushfire | Low           | Medium        | Due to the nature of the site, localised bushfire is unlikely in the short-term projection. However, the risk increases toward the 2070s scenario where temperatures and number of hot days during summer increase.  | Ensure multiple access points to site.   |

## 4.5 Integrated Water Management Plan

The SEARs requirements call for an Integrated Water Management Plan detailing proposed alternative water supplies and proposed end uses of potable and non-potable water.

Alternative (non-potable) water supplies include rainwater collection and re-use, and this will be utilised for toilet flushing and landscape irrigation. Potable water will be utilised for all other end-uses relevant to the building. The building design will seek to reduce the building's overall potable water consumption. The following water sensitive design initiatives will be pursued by the project and can be treated as the project's integrated water management plan.

#### 4.5.1 Potable water conservation

The sustainable water strategy will focus on reducing potable water consumption through efficient fixtures, alternative sources of water, and monitoring water use. The following water sensitive design strategies are to be implemented:

#### Rainwater collection

Rainwater harvesting and reuse will be key to reduce the demand on drinking water supplies. A 20kL rainwater harvesting tank water will be installed in the building to collect rainwater from non-trafficable areas. The tank will supply non-potable water to toilets for flushing and to landscape irrigation systems for adjacent landscape/gardens. The major preference will be for gravity fed supply to minimise ongoing maintenance.

## Fixture efficiency

It is recommended that all relevant hydraulic fixtures and fittings have high Water Efficiency Labelling and Standards (WELS) star ratings. For example:

- Taps to target 5 Star WELS ratings
- WCs to target 4 Star WELS ratings
- Showers to target 4 Star WELS ratings
- Relevant appliances (dishwashers etc.) to target high levels of WELS Star ratings or equivalent water efficiency

In addition, flow restrictors and/or flow timers can be utilised where relevant to minimise water usage and wastage for staff and students' amenities.

#### Water sub-metering

In addition to the main water meter for the site, the project will provide cold water sub meters that will allow manual monitoring of major water consumption end uses and help identify potential water leaks early enough.

## Waterless HVAC Heat Rejection

The proposed HVAC system will be an air-cooled VRV heat recovery system, thus avoiding the need for evaporative heat rejection systems such as cooling towers.

## 4.5.2 Stormwater Pollution Management

The project design will aim to minimise the transportation of pollutants to waterways and other offsite environments and maintain the existing hydrological regimes by mitigating stormwater runoff. This will be achieved through the incorporation of the following:

- On-site stormwater run-off management: an OSD tank will be incorporated in the project to assist in reducing peak discharge and mitigate stormwater run-off.
- Rainwater capture & Reuse for irrigation
- Soft landscaping areas



## 4.5.3 Hydraulic services

Hydraulic services will be designed to:

- Support sustainable design principles including reducing water consumption and waste production.
- Appropriately treat any trade waste to ensure minimal environmental impact.
- Be accessible and serviceable easy to maintain with minimal impact on school use when maintenance is being performed.
- Use products with a long-life span many hydraulic services are concealed so durability is essential.

## 4.5.4 Water Conservation Awareness

The importance of reducing potable water consumption should be recognized throughout the school precinct and building to engage staff and students in the strategies for water conservation. This can be done by educating users through communication of a water conservation strategy.

Water Conservation Signs located in kitchens and toilet amenities are a good approach for raising awareness for the occupants. Students can also be reminded of water conservation strategies periodically during teaching sessions.

The development of the water conservation strategy for staff and students should include messaging consistent with the following general principles:

- Reduce: avoid water use when possible and when it can't be done try to use as little as possible.
- Report Leaks: Identification and repairing of leaks are critical for water savings.
- Re-use: when possible and safe, try to re-use potable water before discharge

## 5. Summary

Ecologically Sustainable Design is a driving consideration in the development of the proposed Pymble Ladies College Grey House Precinct new development located at 20 Avon Road, Pymble, New South Wales. As described, the project will incorporate ESD initiatives in both design and operation, aimed at ensuring the principles of sustainable development are implemented in accordance with the project drivers.

The ESD initiatives cover a range of categories including:

- Energy & Carbon

  including on-site renewable energy and improved energy efficiency across the building
- Water Management including water reuse, reduced potable water demand and improved stormwater quality.
- **Health & Wellbeing** improving indoor air quality, maximising daylight, and providing comfortable amenities through improved indoor environmental quality features to enhance wellbeing among students and staff.
- Materials

   Careful material selection to reduce embodied energy and focus on natural products with biophilic
  qualities.
- Future Resilience 100% electric building services design, no fossil fuels burnt on-site within the building.

These ESD initiatives together with the benchmarking against Green Star, NARClim design response statement and the Integrated Water Management Plan were developed in response to the Secretary's Environmental Assessment Requirements (SEARs) and section 4.38 of the Environmental Planning and Assessment Act 1979 of the Development Consent. The development's commitment to reducing its overall environmental impact is a holistic approach in relation to long-term sustainability.

## 6. References

[1] NCC Section J 2022 Amendment 1, ABCB, 2022

[2] Green Star Design & As Built Guidelines v1.3, Green Building Council of Australia, September 2019

## Appendix A – Preliminary benchmarking comparison against Green Star

## **Green Star - Design & As Built v1.3 Benchmarking**

| Project:         | PLC GreyHouse                  | Revision Date: 07/12/2021 |
|------------------|--------------------------------|---------------------------|
| Targeted Rating: | 5 Star - Australian Excellence |                           |

| Core Points | Total Score |
|-------------|-------------|
| Available   | Targeted    |
| 100         | 62          |

| CATEGORY / CREDIT                     | AIM OF THE CREDIT / SELECTION   | CODE | CREDIT CRITERIA   | POINTS<br>AVAILABLE | POINTS<br>TARGETED |
|---------------------------------------|---|------|---|---------------------|--------------------|
| Management                            |   |      |   | 14                  |                    |
| Green Star Accredited<br>Professional | To recognise the appointment and active involvement of a Green Star Accredited Professional in order to ensure that the rating tool is applied effectively and as intended.   | 1.1  | Accredited Professional                                 | 1                   | 1                  |
|                                       |   | 2.0  | Environmental Performance Targets                       | -                   | Complies           |
| Commissioning and Tuning              | To encourage and recognise commissioning, handover and tuning initiatives that ensure all   | 2.1  | Services and Maintainability Review                     | 1                   | 1                  |
| •                                     | building services operate to their full potential   | 2.2  | Building Commissioning                                  | 1                   | 0                  |
|                                       | •   | 2.3  | Building Systems Tuning                                 | 1                   | 1                  |
|                                       |   | 2.4  | Independent Commissioning Agent                         | 1                   | 0                  |
| Adaptation and Resilience             | To encourage and recognise projects that are resilient to the impacts of a changing climate and natural disasters.  | 3.1  | Implementation of a Climate Adaptation<br>Plan          | 2                   | 2                  |
| Building Information                  | To recognise the development and provision of building information that facilitates understanding of a building's systems, operation and maintenance requirements, and environmental targets to enable the optimised performance.   | 4.1  | Building Information                                    | 1                   | 1                  |
| Commitment to                         | To recognise practices that encourage building owners, building occupants and facilities management teams to set targets and monitor environmental performance in a collaborative way.  | 5.1  | Environmental Building Performance                      | 1                   | 1                  |
|                                       | , in the second | 5.2  | End of Life Waste Performance A. Contractual Agreements | 1                   | 1                  |
| Metering and Monitoring               | To recognise the implementation of effective energy and water metering and monitoring   | 6.0  | Metering  | -                   | Does not comp      |
| metering and monitoring               | systems.  | 6.1  | Monitoring Systems                                      | 1                   | 0                  |
|                                       |   | 7.0  | Environmental Management Plan                           | -                   | Complies           |
| Responsible Construction<br>Practices | To reward projects that use best practice formal environmental management procedures during construction.   | 7.1  | Environmental Management System                         | 1                   | 1                  |
|                                       | p. seedands during constitution.  | 7.2  | High Quality Staff Support                              | 1                   | 1                  |
| Operational Waste                     | A. Performance Pathway  | 8A   | Performance Pathway: Specialist Plan                    | 1                   | 1                  |
| Total                                 |   |      |   | 14                  | 11                 |

| Indoor Environme   | nt Quality   |   |  |   | 17 |          |
|--|--|---|--|---|----|----------|
| ]  |  | 9.1   | Ventilation System Attributes                      |   | 1  | 1        |
| ndoor Air Quality  | To recognise projects that provide high air quality to occupants.  | 9.2   | Provision of Outdoor Air                           | ☐A. Comparison to Industry Standards ☐B. Performance Based Approach ☐C. Natural Ventilation           | 2  | 0        |
| ]  |  | 9.3   | Exhaust or Elimination of Pollutants               | A. Removing the Source of Pollutants  | 1  | 1        |
| ı  |  | 10.1  | Internal Noise Levels                              |   | 1  | 1        |
| coustic Comfort  | To reward projects that provide appropriate and comfortable acoustic conditions for occupants.                 | 10.2  | Reverberation                                      |   | 1  | 1        |
| _  | _  | 10.3  | Acoustic Separation                                | A. Sound Reduction  | 1  | 0        |
| ☐ To encourage and recognise well-lit spaces that provide a high degree of comfort to users. |  | 11.0  | Minimum Lighting Comfort                           |   | -  | Complies |
|  | To encourage and recognise well-lit spaces that provide a high degree of comfort to users.                     | 11.1 General<br>Illuminance and<br>Glare Reduction    | 11.1.1 General Illuminance  11.1.2 Glare Reduction | ☑A. Non Residential Spaces ☐B. Residential Spaces ☑A. Prescriptive Method 1 ☐B. Prescriptive Method 2 | 1  | 1        |
|  | -  | <u> </u>  | Surface Illuminance                                | ☐C. Performance Method ☐A. Prescriptive Method  | 1  | 0        |
| _  | -  | 11.3  | Localised Lighting Control                         | B. Performance Method   | 1  | 0        |
|  |  | 12.0  | Glare Reduction                                    |   | -  | Complies |
| isual Comfort  | To recognise the delivery of well-lit spaces that provide high levels of visual comfort to building occupants. | 12.1  | Daylight   |   | 2  | 1        |
|  |  | 12.2  | Views  |   | 1  | 1        |
|  |  | 13.1 Paints,<br>Adhesives,<br>Sealants and<br>Carpets | 13.1.1 Paints, Adhesives and Sealants              | ☑A. Product Certification     ☐B. Laboratory Testing     ☐C. No Paints, Adhesives or Sealants         | 1  | 1        |
| Indoor Pollutants  | To recognise projects that safeguard occupant health through the reduction in internal air pollutant levels.   | 13.1 F<br>Adhe<br>Sealar<br>Car                       | 13.1.2 Carpets                                     | □A. Product Certification     □B. Laboratory Testing     □C. No Carpets                               | ,  | ,        |
| Ī  |  | 13.2  | Engineered Wood Products                           |   | 1  | 1        |
| ⊥<br>Fhermal Comfort   | To encourage and recognise projects that   | 14.1  | Thermal Comfort                                    | □A. Naturally Ventilated Spaces □B. Mechanically Ventilated Spaces □C. Residential Spaces             | 1  | 1        |
| nermai Comfort   | achieve high levels of thermal comfort.  | 14.2  | Advanced Thermal Comfort                           | □A. Naturally Ventilated Spaces □B. Mechanically Ventilated Spaces □C. Residential Spaces             | 1  | 1        |
| Γotal  |  |   |  |   | 17 | 11       |

| LEAD DISCIPLINE      | COMMENT   |
|----------------------|---|
|                      |   |
| ESD, Head Contractor | Green Star Accredited Professional (GSAP) to be engaged from schematic design through to construction completion.   |
| ESD, Head Contractor | Note - 'Complies' means that the design and installation will have to comply with this conditional requirement  PLC will need to identify project specific Environmental Performance targets (e.g. concerning the project's energy and water consumption targets).  Design team shall develop design intent report after tender to describe building services, main components, intended operations, maintenance requirements, metering strategy and other related information.   |
| ESD, Head Contractor | Services and Maintainability Review to be carried out by the contractor prior to construction commencement. Include reviewing services items for commissionability, controllability, maintainability, operability and safety as per GS criteria.  |
| N/A                  | Credit not targeted.  |
| Head contractor, FM  | Contractual commitment by Head Contractor & sub-contractors to undertake 12 month post occupancy building systems tuning period including quarterly adjustments. Building Tuning Manual/Plan to be developed by Head Contractor. Commissioning, re-commissioning, tuning & checking to be undertaken by Head Contractor & subcontractors.   |
| N/A                  | Credit not targeted.  |
| ESD                  | Requires preparation and implementation of a Climate Adaptation Plan by Head Contractor. Risk mitigation against items such as flooding, increased ambient temperatures etc. to be considered Design & Construction Team to review & implement future Climate Adaptation Plan   |
| Head Contractor      | Building Log Book, Building Users Guide and O&M manuals to be developed in line with Green Star requirements. Building information to be provided in digital format such as training matieral, phone application, website etc.  |
| PLC                  | PLC to formally commit to setting/monitoring/reporting of at least 2 environmental targets for the facility in operation: - Greenhouse gas emissions (energy consumption); - Water usage; - Operational waste; - Indoor environment quality.  Head Contractor & Services Sub-contractors to ensure Metering & monitoring infrastructure is installed to enable monitoring of these targets.   |
| PLC                  | PLC to commit to extending the life of interior fitout for at least 10 years, barring minor wear and tear or minor repairs. This can be achieved through careful selection of finishes, furniture etc.  |
| N/A                  | Credit not targeted. Requires metering connected to BMCS/EMS to be provided to all major uses of electricity and water (e.g. for electrical, independent sub-metering of uses greater than 5% of demand (Air Con, DHW)) or 100kW.   |
| N/A                  | Credit not targeted.  |
| Head contractor      | Head contractor to provide & implement a project specific Environmental Management Plan as outlined in accordance with NSW Environmental Management Systems Guidelines.   |
| Head contractor      | The Head Contractor must provide a formal audited Environmental Management System for the project against ISO 14001 throughout construction process.  |
| Head contractor      | Head Contractor to promote mental and physical health information for all site workers as well as knowledge of sustainable health practices.  |
| Waste Consultant     | Qualified waste auditor to prepare an updated Green Star Operational Waste Management Plan ((OWMP) for the project (to allow for greater flexibility of design). Operational Waste Management Plan to include diversion from landfill targets, waste streams, storage areas and monitoring procedures. Head Contractor to allow for production of OWMP.  The operational waste management plan must show that the design of the project complies with best practice approaches - requirements for storage, access, collection etc. as identified in the plan must be reflected in the architectural design of the facility. |

| Mechanical Consultant                         | Requires access to both sides of coils (or equivalent), filters and bagging of all ductwork during construction.  |
|---|---|
| N/A   | For mechanical ventilation, this requires +50% OA improvement over AS1668.2 to be specified as per 9.2A. For Natural Ventilation, this requires compliance against AS 1668.4-2012.  Credit not targeted.  |
| Mechanical Consultant                         | Kitchens to be ventilated in accordance with AS1668.2. Printers/photocopiers to comply with Green Star emissions standards (ECMA-328, RAL-UZ 171, -or- GGPS.003) OR be located in an enclosed print room that is exhausted directly to the outside. |
| Acoustic Consultant,<br>Mechanical, Architect | Pulse White Noise Acoustics notes this credit will be targeted. Aconex Ref Number:StantecA-RFI-000002  Internal noise levels to be no more than 5dB(A) above the lower figure in Table 1 of AS/NZS2107:2016.  |
| Acoustic Consultant,<br>Architect             | Pulse White Noise Acoustics notes this credit will be targeted. Aconex Ref Number:StantecA-RFI-000002.  Reverberation times below the maximum in Table 1 of AS/NZS2107:2016.  |
| N/A   | Credit not targeted as per Pulse White Noise Acoustics advise. Hard and expensive to achieve.   |
| Electrical Consultant,<br>Architect           | Luminaires to be flicker free with LED lighting electronic drivers with 12 bit or greater resolution. All lighting Colour Rendering index must be > 80.   |
| Electrical Consultant                         | Lighting levels to comply with best practice guidelines in AS/NZS 1680. Isolux calculations required to demonstrate this.   |
| Electrical Consultant,<br>Architect           | Glare from electric lighting to be minimised by providing diffusers to all luminiares or UGR calculations.  |
| N/A   | Credit not targeted.  |
| N/A Architect                                 | Credit not targeted.  Requires GS compliant blinds (VLT < 10%) to all vision glazing and skylights that is part of primary spaces including clasrooms and office spaces.  |
| Architect, Façade Engineer                    | Requires good level of natural daylight to primary spaces including clasrooms and office spaces.  |
| Architect, Façade Engineer                    | Minimum 60% of relevant areas to have clear line of sight to high quality internal or external view   |
| Head Contractor, Architect                    | At least 95% of all internally applied paints, adhesives, sealants and carpets to meet Green Star VOC limits. All trades will need to comply as relevant. Internally applied paints, adhesives and sealants to meet Green Star VOC limits.          |
| Head Contractor. Architect                    | At least 95% of all engineered wood products must meet GBCA formaldehyde limits. Includes joinery, doors, partitions, furniture, decorative timber etc. All trades will need to comply as relevant.   |
| Façade Engineer,<br>Mechanical Consultant,    | Requires demonstraion of indoor thermal comfort to meet -1 <pmv<+1< td=""></pmv<+1<>  |
| ESD   | Requires demonstraion of indoor thermal comfort to meet -0.5 < PMV < +0.5   |

| Energy                                   |                              |   |   | 22                |          |  |
|--|------------------------------|---|---|-------------------|----------|--|
|  |                              | 15E.0                                     | Conditional Requirement: Reference Building Pathway | -                 | Complies |  |
|  |                              | 15E.1                                     | GHG Emissions Reduction: Building Fabric            | 4                 | 0        |  |
|  |                              | 15E.2                                     | GHG Emissions Reduction                             | 16                | 5        |  |
| Greenhouse Gas                           | E Peferance Building Dathway | 15E.3                                     | Off-Site Renewables                                 | 8                 |          |  |
| Emissions  E. Reference Building Pathway | Treference building Falliway | E. Reference building Falliway            | 15E.4   | District Services | 7        |  |
|  |                              | onal                                      | 15E.5.1 Transition Plan                             | 1                 |          |  |
|  |                              | 15E.5 Additional<br>Prescriptive Measures | 15E.5.2 Fuel Switching                              | 2                 | 2        |  |
|  |                              | 15E<br>Presor                             | 15E.5.3 On-Site Storage                             | 1                 |          |  |
| Peak Electricity Demand<br>Reduction     | B. Performance Pathway       | 16B                                       | Modelled Performance Pathway: Reference Building    | 2                 | 1        |  |
| Total                                    |                              |   |   | 22                |          |  |

| Transport                  |                         |                               |                                     |  | 10 |   |
|----------------------------|-------------------------|-------------------------------|-------------------------------------|--|----|---|
|                            | 17B.1                   | Access by Public Transport    |                                     | 3                                      | 2  |   |
|                            | 17B.2                   | Reduced Car Parking Provision |                                     | 1                                      | 1  |   |
| □<br>Sustainable Transport | B. Prescriptive Pathway | 17B.3                         | Low Emission Vehicle Infrastructure | A. Parking for Fuel-Efficient Vehicles | 1  | 0 |
|                            |                         | 17B.4                         | Active Transport Facilities         |  | 1  | 0 |
|                            |                         | 17B.5                         | Walkable Neighbourhoods             | B. Walkscore                           | 1  | 1 |
| Total                      |                         |                               |                                     |  | 7  | 4 |

| Water         |                        |     |                                     | 12 |   |
|---------------|------------------------|-----|-------------------------------------|----|---|
| Potable Water | A. Performance Pathway | 18A | Potable Water - Performance Pathway | 12 | 5 |
| ■<br>Total    |                        |     |                                     | 12 | 5 |

| Materials                         |  |                                  |   |  | 14             |          |
|-----------------------------------|--|----------------------------------|---|--|----------------|----------|
|                                   |  | e)te                             | 19B.1.1 Portland Cement Reduction                         |  | 2              | 0        |
|                                   |  | 19B.1 Concrete                   | 19B.1.2 Water Reduction                                   |  | 0.5            | 0.5      |
|                                   |  | 19B                              | 19B.1.3 Aggregates Reduction                              | B. Fine Aggregate Reduction  | 0.5            | 0.5      |
|                                   |  | 19B.2<br>Steel                   | A. Reduced Mass of Steel Framing                          | A. High Strength Steel   | 1              |          |
| Life Cycle Impacts                | B. Prescriptive Pathway - Life Cycle Impacts   |                                  |   | 19B.3.1 Façade Reuse   | 2              |          |
|                                   |  | 19B.3                            | Building Reuse  | 19B.3.2 Structure Reuse  | 2              |          |
|                                   |  |                                  | 19B.4.0 Responsible Sourcing                              | -  | Does not compl |          |
|                                   |  | 19B.4                            | Structural Timber   | 19B.4.1 Reduced Embodied Impacts   | 3              | 0        |
|                                   | 20.1   | Structural and Reinforcing Steel | 20.1.0 Responsible Steel Maker                            | -  | Complies       |          |
|                                   |  | 20.1                             | es assurant and monoring offeri                           | B. Energy-Reducing Processes in Steel<br>Reinforcement Production  | 1              | 1        |
| Responsible Building<br>Materials | To reward projects that include materials that are responsibly sourced or have a sustainable supply chain. | 20.2                             | Timber  | ☑A. Certified Timber<br>☐<br>B. Reused Timber  | 1              | 1        |
|                                   |  | 20.3                             | Permanent Formwork, Pipes, Flooring,<br>Blinds and Cables | B. Best Practice Guidelines for PVC  | 1              | 1        |
| Sustainable Products              | To encourage sustainability and transparency in product specification.                                     | 21.1                             | Product Transparency and Sustainability                   | □A. Reused Products     □B. Recycled Content Products     □C. Environmental Product Declarations     □D. Third Party Certification     □     E. Stewardship Programs | 3              | 2        |
| Construction and                  | R Percentage Renchmark   | 22.0                             | Reporting Accuracy  | A. Compliance Verification Summary   | -              | Complies |
| Demolition Waste                  | B. Percentage Benchmark  | 22B                              | Percentage Benchmark                                      |  | 1              | 1        |
| Total                             |  |                                  |   |  | 12             | 7        |

| Façade Engineer,<br>Mechanical Consultant,<br>Electrical Consultant, ESD | GHG emissions of proposed building to be less than 10% improvement on NCC 2022 reference building.  |
|--|---|
| N/A  | Requires improvement upon a reference building with NCC 2022 deemed-to-satisfy building fabric.   |
| Façade Engineer,<br>Mechanical Consultant,<br>Electrical Consultant, ESD | Estimated improvement compared to NCC 2022 deemed-to-satisfy services. Estimate includes provision of solar PV, efficient lighting and services |
| N/A  |   |
| N/A  |   |
| N/A  |   |
| All services   | Assume all electric building, no gas for cooking or DHW or space heating. Also assume that there is no standby diesel generator.                |
| N/A  |   |
| Façade Engineer,<br>Mechanical Consultant,<br>Electrical Consultant, ESD | Target to reduce peak electricity demand of building by 20% compared to reference building.   |

| ESD, Transport Consultant | 5min walking distance from Train station  |
|---------------------------|---|
| PLC                       | Assumed no new car parking provisions are being built.  |
|                           |   |
|                           |   |
| PLC                       | The project is located so that at least four (4) amenities for industrial buildings, or at least eight (8) amenities for all other types of buildings, are within 400m of the project. The distance is to be measured from the centre of the project's site |

| Estimate based on 20KL rainwater tank serving toilet flushing and irrigation, efficient fixtures & fittings, native landscape |
|---|

| N/A  | Crerdit not targeted. Requires 30% Portland Cement reduction for concrete.   |
|--|--|
| Head contractor, Structural consultant                                 | Head Contractor to ensure Min 50% Reclaimed Water for Concrete   |
| Head contractor, Structural consultant                                 | Head Contractor to ensure Min 25% fine aggregate as manufactured sand or alternative   |
| N/A  |  |
| N/A  |  |
| N/A  |  |
| N/A  | Head Contractor to ensure Structural Timber to be FSC/PEFC certified   |
| N/A  | Structural timber to be used for at least 30% GFA - CLT structure removed, credit no longer targeter   |
| Head contractor, Structural consultant                                 | At least 95% of steel to be sourced from a Responsible Steel Maker (ISO14001 EMS for steel making facilities, member of World Steel Associations Climate Action Program). Head Contracror to allow for this requirement.   |
| Head contractor, Structural consultant                                 | Assume building is concrete framed. Steel to be sourced from Responsible Steel Maker & at least 60% by mass of reinforcing bar & mesh is produced using energy-reducing processes. Head Contractor to allow for this requirement.  |
| Head contractor  | This would require 95% (by cost) of timber to be sourced from forest certification scheme that meets GBCAs list of criteria. Requires use of FSC/PEFC certified timber (or re-used timber) for all timber products (including formwork and temporary hoardings). For example, doors, joinery, formwork, cladding, finishes, installed furniture etc. Head Contractor to allow for this requirement.  |
| Head contractor, All services  | At least 90% by cost of all permanent formwork, pipes, flooring, blinds, cables shall be PVC-free or<br>Green Star "Best practice" sustainable PVC. This includes any fit-out items (electrical + comms<br>cabling, pipes, blinds, flooring, carpets within rooms etc.).   |
|  | Head Contractor to allow for this requirement.   |
| Head Contractor, Architect,<br>All services                            | 6% of total material cost to be certified to sustainability framework. To be further reviewed and may be achieved through product specifications that emphasise use of sustainable certified products for major construction cost items including:  - Steel with Environmental Product Declarations (EPDs) - Liberty Primary Steel, BlueScope, Australian Reinforcing Company, Infrabuild - Concrete with EPDs - Boral - Paints with EPDs (e.g. Dulux) |
|  | Plasterboard with Eco Certification - Knauf/Gyprock specific products     Joinery/Partitions with Eco Certification (Green Tag) - Laminex specific products     Carpets with Eco Certification Furniture can be excluded.  |
|  | Head Contractor to allow for this requirement.   |
| Head Contractor, Waste<br>Contractor, Demo +<br>Excavation +Main works | Min 90% of construction and demolition waste to be diverted from landfill. ALL demo/construction<br>waste contractors and waste processing facilities MUST have Green Star Compliance Verification<br>certification. E.g. Bingo Recycling, Grasshopper Environmental etc. Head Contractor to allow for this<br>requirement.  |

| Land Use & Ecolo        | <b>ду</b>  |      |  |  | 6   |          |
|-------------------------|--|------|--|--|-----|----------|
| Ecological Value        | To reward projects that improve the ecological value of their site.  | 23.0 | Endangered, Threatened or Vulnerable                   | SA. EPBC                                       | -   | Complies |
|                         | - Tallac of allow olds.  |      | Ecological Value                                       |  | 3   | 0        |
|                         |  | 24.0 | Conditional Requirement                                |  | -   | Complies |
| Sustainable Sites       | To reward projects that choose to develop sites that have limited ecological value, re-use previously developed land and remediate contaminate land. | 24.1 | Reuse of Land  | A. Previously Developed Land                   | 1   | 1        |
| _                       | contaminate land.  |      |  | □A. Site Contamination                         |     |          |
| _                       |  | 24.2 | Contamination and Hazardous Materials                  | ☑B. Hazardous Materials                        | - 1 | 1        |
| Heat Island Effect      | To encourage and recognise projects that<br>reduce the contribution of the project site to<br>the heat island effect.                                | 25.1 | Heat Island Effect Reduction                           |  | 1   | 0        |
|                         |  |      |  |  |     |          |
| Гotal                   |  |      |  |  | 6   | 2        |
| <b>Fotal</b>            |  |      |  |  | 6   | 2        |
| Fotal<br>Emissions      |  |      |  |  | 5   | 2        |
| Emissions               | To reward projects that minimise peak  | 26.1 | Stormwater Peak Discharge                              |  |     | 1        |
|                         | To reward projects that minimise peak stormwater flows and reduce pollutants entering public sewer infrastructure.                                   | 26.1 | Stormwater Peak Discharge Stormwater Pollution Targets |  | 5   |          |
| Emissions<br>Stormwater | stormwater flows and reduce pollutants —   |      |  |  | 5   | 1        |
| Emissions               | stormwater flows and reduce pollutants entering public sewer infrastructure.   | 26.2 | Stormwater Pollution Targets                           | A. Control of Upward Light Output Ratio (ULOR) | 1   | 1        |

| Innovation                           |  |     |                                    | 10          |    |
|--------------------------------------|--|-----|------------------------------------|-------------|----|
| Innovative Technology or<br>Process  | The project meets the aims of an existing credit using a technology or process that is considered innovative in Australia or the   | 30A | Innovative Technology or Process   |             | 1  |
| Market Transformation                | The project has undertaken a sustainability initiative that substantially contributes to the broader market transformation towards   | 30B | Market Transformation              |             | 0  |
| mproving on Green Star<br>Benchmarks | The project has achieved full points in a<br>Green Star credit and demonstrates a<br>substantial improvement on the benchmark  | 30C | Improving on Green Star Benchmarks |             | 3  |
| Innovation Challenge                 | Where the project addresses an sustainability issue not included within any of the Credits in the existing Green Star rating tools.  | 30D | Innovation Challenge               | 10          | 5  |
| Global Sustainability                | Project teams may adopt an approved credit<br>from a Global Green Building Rating tool that<br>addresses a sustainability issue that is<br>currently outside the scope of this Green Star<br>rating tools. | 30E | Global Sustainability              | <del></del> | 1  |
| [otal                                |  |     |                                    | 10          | 10 |

29.1 Refrigerants Impacts

To encourage operational practices that minimise the environmental impacts of refrigeration equipment.

| AVAILABLE | TARGETED |
|-----------|----------|
| 100       | 52.0     |
|           | 52.0     |
| 10        | 10.0     |
|           | 62.0     |
|           |          |

1

A. Calculating TSDEI

0

| N/A   |   |
|---|---|
| N/A   |   |
| N/A   | Site is not an old growth forest, prime agricultural land, wetland of high national significance or<br>impacts on matters of national significance. |
| N/A   | Greater than 75% of the site was previously developed land.   |
| PLC to provide Hazmat<br>survey and certification of<br>clearance | Hazmat survey to be carried out and hazardous materials to be removed in accordance with best practice guidelines.                                  |
| N/A   |   |

| Civil consultant      | Post-development stromwater discharge must be less than pre-development discharge<br>TTW notes the credit can be targeted. Aconex Ref. No: StantecA-RFI-000001   |
|-----------------------|--|
| Civil consultant      | Column B Stormwater pollution reduction targets to be met. TTW notes the credit can be targeted. Aconex Ref. No: StantecA-RFI-000001   |
| Electrical Consultant | External lighting design must comply with AS 4282:1997 Control of the Obtrusive Effects of outdoor<br>Lighting. Electrical/lighting sub-contractor to design and install for compliance  |
| Electrical Consultant | External luminaires to have Upward Light Output Ratio ULOR < 5%, OR external lighting design to<br>be evaluated for light spill to site boundary and night sky. Electrical/lighting sub-contractor to design<br>and install for compliance |
| Mechanical Consultant | Target this point based on the understanding of HVAC and any process cooling to be all Air-cooled (waterless heat rejection)   |
| N/A                   | Typically requires low GWP refrigerants for AC units which are less common. Credit not targeted pending design & construction team feedback.   |

| ESD                                | Renewable Energy Contribution of 15% (1 point)  |
|------------------------------------|---|
| N/A                                |   |
| Architect, Civil, Head contractor  | Ultra low VOC paints (1 point) Stormwater Run off Pollution Reduction Column B (1 point ) Sustainable transport - No New Car Parks on Site (1 point)  |
| Head Contractor, Architect,<br>PLC | Financial Transparency (1 point) Local Procurement - Local Services and Skilled Labour (1 point) High Performance Site Office (1 point) - Contractor site office Incorporation of Indigenous Design (1 point) - Uncle Laurie Workshops Design for Active Living (1 point) |
| Architect, Head Contractor         | Quality of Amenities from Green Star Interiors v1.2 (1 point)   |

Portain with formation

> Level 9, The Forum 203 Pacific Highway St Leonards NSW 2065 Tel +61 2 8484 7000

For more information please visit www.stantec.com





#### Post Approval

#### **Proponent Details**

#### Personal Details

| Title         | Mr  |
|---------------|---|
| First Name    | Greg  |
| Last name     | Hastie  |
| Email         | ghastie@pymblelc.nsw.edu.au                       |
| Phone         | 0411477006  |
| Role/Position | Project Director                                  |
|               | SCHOOL PYMBLE LADIES 20 AVON ROAD PYMBLE 2073 AUS |

#### **Company Details**

Applying as a company/business?

Yes

| Company Name | Pymble Ladies' College |
|--------------|------------------------|
| ABN          | 78619140464            |
| Branch Name  |                        |

#### Primary contact

| Title         | Miss                   |
|---------------|------------------------|
| First Name    | Sally                  |
| Last Name     | Prowd                  |
|               | sprowd@willowtp.com.au |
| Phone         | 0448972959             |
| Role/Position | Associate              |

#### **Post Approval Details**

Project:

Pymble Ladies College - Grey House Precinct - SSD-17424905-PA-7

Name of Document

Construction Management Plan

Related matter

Management Plan or Strategy

Type of Document Lodgement

New Document

Description of the document and reason for submission / Overview of changes made to existing documents

Construction Management Plan

#### **Applicable Conditions**

| Schedule   | Condition |  |
|------------|-----------|--|
| Schedule 2 | D17       |  |

#### Consultation through the Major Projects portal

Consultation required as part of the preparation of the document?

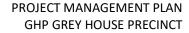
No

#### **Attachment of Post Approval application**

| PP  |                        |
|---|------------------------|
| File Name   | Category               |
| Construction Traffic and Pedestrian Management Sub-Plan Rev B.pdf | Post Approval Document |
| BIODIVERSITY MANAGEMENT PLAN.pdf                                  | Post Approval Document |
| CEMP - COMBINED REVA.pdf  | Post Approval Document |

EMERGENCY RESPONSE PLAN REVA.pdf Post Approval Document

CNVMSP.pdf Post Approval Document







## PROJECT MANAGEMENT PLAN

(Incorporating Quality, Safety & Environment)

# **GHP GREY HOUSE PRECINCT**

**PROJECT NUMBER: 647** 

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Any printed version is uncontrolled and may not be current.

# APPENDIX 11 Environmental Management Plans Rev B

STEPHEN EDWARDS CONSTRUCTIONS PTY LTD

ABN 65 001 824 139





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#### **PROJECT ENVIRONMENTAL ASPECT & IMPACT REGISTER**

**PLC GREY HOUSE** 

| PROJECT NAME:                     | PLC GREY HOUSE   | 15/03/2024 |  |  |  |  |  |  |
|-----------------------------------|--|------------|--|--|--|--|--|--|
| SITE ADDRESS:                     | ate 3 60 Avon Road, Pymble NSW 2073                      |            |  |  |  |  |  |  |
| DEVELOPED BY:<br>( Consultation ) | Tony Macri / Andrew Kyrillos / Paul Homan                |            |  |  |  |  |  |  |
| PRINCIPAL CONTRACTOR:             | STEPHEN EDWARDS CONSTRUCTIONS PTY LTD ABN 65 001 824 139 |            |  |  |  |  |  |  |

This Project Environmental Aspect and Impact Register forms part of the Project Management plan for the above project.

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| EC1 Preconstruction Planning        | EC9 Flora and Fauna                       | EC17 Emergency Preparedness     |
| EC2 Site Establishment and planning | EC10 Rehabilitation & replanting programs | EC18 Incident and Investigation |
| EC3 Erosion and sediment controls   | EC11 Indigenous and Non – Heritage        |                                 |
| EC4 Water Quality                   | EC12 Waste                                |                                 |
| EC5 Ground Water                    | EC13 Hazardous Materials                  |                                 |
| EC6 Air Quality                     | EC14 Graffiti & Advertising               |                                 |
| EC7 Noise                           | EC15 Sustainability                       |                                 |
| EC8 Vibration                       | EC16 Communication                        |                                 |



# **Project Risk/Issues Considered**

| ltem | Environmental<br>ASPECT  | Environmental<br>IMPACT                                | Risk Ranking | Significance | Controls  | Responsibility      | References   |
|------|--------------------------|--|--------------|--------------|---|---------------------|--|
| EC1  | Preconstruction planning | Establish Objectives and targets     ( Environmental ) |              |              | <ul> <li>Review head contract documents and establish stated contractual objectives and targets or key environmental issues         <ul> <li>Project Environmental Scope (F114)</li> </ul> </li> <li>Review consent conditions and establish compliance requirements         <ul> <li>DA Review Checklist (F159)</li> </ul> </li> <li>Review scope of work and determine any "legal and other requirements"         <ul> <li>Project Legal and other requirements (F113)</li> </ul> </li> <li>Document an action plan for each Objective and target listed in (F114), compliance with consent conditions, legal and other requirements         <ul> <li>Project environmental aspect &amp; impact register (F106)</li> <li>Supplementary environmental plans</li> </ul> </li> </ul> | SEC (PM )           | <ul> <li>PMP 5.2 Environmental Objectives<br/>&amp; Targets</li> <li>Refer to DA/DC, Client Contract</li> <li>Legal &amp; Other Requirement<br/>Register (Projects) (F113)</li> <li>Protection of the Environment<br/>Operations Act 1997</li> </ul> |
|      |                          | Compliance with<br>Objectives and<br>targets           |              |              | <ul> <li>Traffic &amp; pedestrian management</li> <li>Noise &amp; vibration management</li> <li>Air Quality management</li> <li>Storage &amp; use of hazardous materials</li> <li>Contaminated land including sulphate soils</li> <li>Environmental incident reporting management</li> <li>Waste management</li> <li>Non-conformance &amp; corrective/preventative action</li> </ul>  | SEC (PM)<br>SEC (F) | <ul> <li>PMP 5.2 Environmental Objectives<br/>&amp; Targets</li> <li>Project Scope &amp; Environmental<br/>Description (F114)</li> </ul>   |

REVISION: B





| ltem | Environmental<br>ASPECT | Environmental<br>IMPACT                       | Risk Ranking | Significance | Controls   | Responsibility       | References  |
|------|-------------------------|---|--------------|--------------|--|----------------------|---|
|      |                         |   |              |              | sustainability   |                      |   |
|      |                         | Legal and other<br>requirements               |              |              | Environmental control management to be<br>undertaken in accordance with current State,<br>Federal Legal, local and other requirements  | SEC (PM )<br>SEC (F) | <ul> <li>Legal &amp; Other Requirement         Register (Projects) (F113)</li> <li>Protection of the Environment         Operations Act 1997</li> </ul> |
|      |                         | Complaints from<br>neighbouring<br>properties | 5            | М            | <ul> <li>Identify DA requirements and develop controls         <ul> <li>DA Review Checklist (F159)</li> </ul> </li> <li>Induct workers into the PMP and of their responsibilities         <ul> <li>Site Induction Form (F133)</li> </ul> </li> </ul> | SEC<br>( PM )        | PMP 5.10.13 Community     Consultation  |
|      |                         | Hours of work                                 |              |              | <ul> <li>Hours of work are to comply with DA/DC or other authority requirements and limitations</li> <li>07:00 to 18:00 Monday to Friday</li> <li>No Saturdays, Sundays and Public Holidays.</li> <li>Hours of work to be monitored</li> </ul>       | SEC<br>( PM )        | PMP 5.5 Environmental Aspects<br>and Impacts  |
|      |                         | Client and     Stakeholder     requirements   |              |              | <ul> <li>Contract review to be undertaken and controls measures to be incorporated</li> <li>Populate requirements</li> <li>Refer to Project Environmental Scope (F114)</li> </ul>  | SEC<br>( PM          | <ul> <li>PMP 5.12 Communication from<br/>3rd Parties</li> <li>PMP 5.2 Environmental Objectives<br/>&amp; Targets</li> </ul>                             |
|      |                         | Complaints & Non<br>Conformances              |              |              | <ul> <li>Record complaints &amp; Non Conformances to be maintained</li> <li>Improvement Request and Procore Observation (F006)</li> </ul>  | SEC<br>( PM )        | <ul> <li>PMP 5.11 Community Complaints</li> <li>PMP 5.2 Environmental Objectives</li> <li>&amp; Targets</li> </ul>                                      |

FORM REF: F106.11 20220511





| ltem | Environmental<br>ASPECT               | Environmental<br>IMPACT  | Risk Ranking | Significance | Controls   | Responsibility                | References   |
|------|---------------------------------------|--|--------------|--------------|--|-------------------------------|--|
|      |                                       |  |              |              | <ul> <li>Actions required to be acknowledged, addressed<br/>&amp; closed out</li> </ul>  |                               |  |
|      |                                       | Legal and other<br>requirements  |              |              | <ul> <li>Environmental control management to be undertaken in accordance with current State and Federal Legal and other requirements</li> <li>Refer to Legal and Other Requirements</li> <li>Register</li> </ul>   | SEC<br>(PM)<br>SEC<br>(F)     | <ul> <li>Protection of the Environment<br/>Operations Act 1997</li> <li>Department Infrastructure,<br/>Planning and Natural Resources,<br/>2004</li> <li>Legal &amp; Other Requirement<br/>Register (Projects) (F113)</li> <li>PMP 5.2 Environmental Objectives<br/>&amp; Targets</li> </ul> |
| EC 2 | Site<br>Establishment<br>and planning |  |              |              | <ul> <li>Complete Erosion &amp; Sediment Control Plan         <ul> <li>(F158) to identify</li> <li>Site boundaries</li> <li>Existing and Proposed drainage patterns indicating storm water discharge points</li> <li>Location of access road/s and other impervious areas including parking areas</li> <li>Location of spoil/material stockpiles and proposed methods of protection</li> <li>Proposed maintenance of controls</li> </ul> </li> </ul> | SEC<br>( PM )<br>SEC<br>( F ) | <ul> <li>Guidelines for Erosion &amp; Sediment<br/>Controls on Construction Sites</li> <li>Guide-Managing Urban<br/>Stormwater – Soils &amp; Construction<br/>(2004) Edition 4 (Landcom)</li> </ul>  |
|      |                                       | Environmental &<br>Community issues<br>through construction<br>traffic movements | 5            | М            | <ul> <li>Traffic Management plan to be developed identifying:</li> <li>Site entry &amp; Exit locations</li> <li>Car parking locations</li> <li>Speed signage</li> </ul>  | SEC<br>( PM )<br>SEC<br>( F ) |  |





| ltem | Environmental<br>ASPECT | Environmental<br>IMPACT                      | Risk Ranking | Significance | Controls   | Responsibility                |   | References                |
|------|-------------------------|--|--------------|--------------|--|-------------------------------|---|---------------------------|
|      |                         |  |              |              | <ul> <li>Measures installed to mitigate debris being<br/>tracked onto the road</li> </ul>  |                               |   |                           |
|      |                         | • Site Facilities                            |              |              | <ul> <li>Toilet facilities must be available or provided at the work site before works begin and must be maintained until the works are completed at a ratio of one toilet plus one additional toilet for every 20 persons employed at the site.</li> <li>Standard flushing toilets connected to the sewer or</li> <li>Approved On-site effluent disposal system or</li> <li>Approved temporary chemical closet</li> </ul> | SEC<br>( PM )<br>SEC<br>( F ) | • | Local Government Act 1993 |
|      |                         | • Inductions                                 |              |              | <ul> <li>Prior to workers commencing on site worker shall<br/>be outlined the requirements of the ERP and the<br/>responsibilities and accountabilities of all site<br/>personnel</li> <li>Workers to be made aware site Environmental<br/>Control Map on display</li> </ul>   | SEC<br>(F)                    | • | PMP 5.10.1 Site induction |
|      |                         | Environmental     Monitoring &     Reporting |              |              | <ul> <li>Project environmental aspects to be monitored &amp; reported using the methods listed:         <ul> <li>Daily visual</li> <li>Weekly inspection report (F121)</li> <li>Fortnightly Environmental Inspection Checklist (F223)</li> <li>Environmental statistics to be submitted Monthly Statistics Summary (F046)</li> </ul> </li> </ul>   | SEC<br>(F)                    | • | PMP 5.9 Monitoring        |





| ltem | Environmental<br>ASPECT       | Environmental<br>IMPACT  | Risk Ranking | Significance | Controls  | Responsibility | References  |
|------|-------------------------------|--|--------------|--------------|---|----------------|---|
|      |                               |  |              |              | <ul> <li>Environmental Impact &amp; Aspect Register to be reviewed monthly during Project Team Meetings (F307)</li> <li>Monthly Waste Recycling &amp; Procurement Report (F302) (WRAPP) to be submitted</li> <li>Clients representative to be advised of environmental Incidents</li> </ul>   |                |   |
| EC 3 | Erosion and sediment controls | Soil erosion and soil loss     Sedimentation entering waterways and drainage networks due to erosion from disturbed ground | 2            | S            | <ul> <li>Plan Erosion Prevention and Sediment/silt controls prior to the commencement of any ground disturbance</li> <li>The following should be considered:</li> <li>One - Erosion Prevention Measures</li> <li>Maintaining grass/vegetation and ground covered areas as long as possible</li> <li>Types of temporary ground cover for ground that will be bare for long period</li> <li>Water overland flow direction paths</li> <li>Diversions e.g. berms into existing impervious areas</li> <li>Two - Sediment/silt controls</li> <li>Location of Sediment and silt controls</li> <li>Refer to site sedimentation drawings for sediment/silt fence locations if available         <ul> <li>If No -undertake following steps</li> <li>Water overland flow direction paths</li> <li>Location of drainage inlets including waterways</li> </ul> </li> </ul> | SEC<br>(F)     | <ul> <li>Guidelines for Erosion &amp; Sediment<br/>Controls on Construction Sites</li> <li>Guide-Managing Urban<br/>Stormwater – Soils &amp; Construction<br/>(2004) Edition 4 (Landcom)</li> <li>PMP 5.2 Environmental Objectives<br/>&amp; Targets</li> </ul> |





| ltem | Environmental<br>ASPECT | Environmental<br>IMPACT                             | Risk Ranking | Significance | Controls  | Responsibility | References |
|------|-------------------------|---|--------------|--------------|---|----------------|------------|
|      |                         |   |              |              | <ul> <li>Location of potential stock pile areas</li> <li>Install sediment/Silt fencing</li> <li>Cover drainage inlets with Geofabric</li> <li>Place sand bags in hard surface drains/kerb         <ul> <li>(Refer to fact sheet 3 Guidelines for erosion and sediment controls on building sites)</li> </ul> </li> <li>Diversions e.g. berms into existing impervious areas or redirected back into site</li> <li>The controls shall be in accordance with</li> <ul> <li>Project Erosion &amp; Sediment Control Plan (F158) and reviewed using Environmental Preconstruction checklist (F129)</li> </ul> <li>All environmental measures erosion &amp; sediment, other environmental controls to be mark up on suitable site Environmental Control Map e.g. A3 &amp; on display</li> <li>Sediment to be cleaned from control devices and disposed of on a regular basis in an acceptable manner.         <ul> <li>WHS Inspection (F121)</li> <li>Environmental Checklist (F223)</li> <li>Sediment/silt fence to be inspected daily and fallen areas to be reinstated</li> </ul> </li></ul> |                |            |
|      |                         | Sedimentation<br>entering waterways<br>and drainage |              |              | <ul> <li>Sediment/Silt Fencing to be installed in<br/>accordance with the blue Book Best Practices</li> </ul>   |                |            |

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| ltem | Environmental<br>ASPECT | Environmental<br>IMPACT                            | Risk Ranking | Significance | Controls  | Responsibility                | References |
|------|-------------------------|--|--------------|--------------|---|-------------------------------|------------|
|      |                         | networks due to ineffective sediment/silt controls |              |              | Where posts are < 1.5 m spacing to be at 1.5m     Sediment/silt fence to be inspected daily and fallen areas to be reinstated   |                               |            |
|      |                         | Erosion from stock piles                           | 5            | M            | <ul> <li>Stockpiles of topsoil, sand, aggregate, spoil or other material capable of being moved by water, to be placed in locations more than (preferably 5) metres from existing vegetation, concentrated water flow, roads and hazard areas including stored clear of any drainage line, easement, natural watercourse, footpath, kerb or roadside.</li> <li>Construct stockpiles on the contour as low, flat and elongated mounds</li> <li>Stockpiles to be sloped at &gt; 10° and of a height &gt;2.0</li> <li>Construct earth banks on the upslope side to divert water around stockpiles</li> </ul> | SEC<br>( PM )<br>SEC<br>( F ) |            |





| ltem | Environmental<br>ASPECT | Environmental<br>IMPACT   | Risk Ranking | Significance | Controls   | Responsibility   | References |
|------|-------------------------|---|--------------|--------------|--|------------------|------------|
|      |                         |   |              |              | <ul> <li>All stock piles should be covered by at least 70 % Where not possible maintain in a moist condition</li> <li>Stockpiles on sloping bare ground to be assessed for sediment/silt controls</li> <li>Install sediment fencing 1 to 2 metres downslope</li> <li>(Refer to fact sheet 6 Guidelines for erosion and sediment controls on building sites)</li> </ul>   |                  |            |
|      |                         | Erosion and soil run<br>off from open<br>service trenches                   | 8            | М            | <ul> <li>Place spoil at least 1.0 away from the trench on the up side</li> <li>Fill and compact trenches as soon as possible after services have been laid</li> <li>Inspect regularly (if open)         <ul> <li>(Refer to fact sheet 9 Guidelines for erosion and sediment controls on building sites)</li> </ul> </li> </ul>   | SC               |            |
|      |                         | Mud / excess spoil /<br>litter being<br>deposited on<br>trafficked roadways | 5            | М            | <ul> <li>Establish a single stabilised all weather access point entry / exit point. The recommended construction method for stabilising the access point is 200mm of aggregate at 30-60mm in size (note: crushed sandstone is not suitable).         <ul> <li>(Refer to fact sheet 2 Guidelines for erosion and sediment controls on building sites)</li> </ul> </li> <li>Clearly mark the access point on an access map for all deliveries</li> <li>Display construction signage including Foreman's contact details</li> <li>Install shaker device or similar at site exit points</li> </ul> | SEC<br>(F)<br>SC |            |

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| ltem | Environmental<br>ASPECT | Environmental<br>IMPACT                                      | Risk Ranking | Significance | Controls  | Responsibility | References  |
|------|-------------------------|--|--------------|--------------|---|----------------|---|
|      |                         |  |              |              | <ul> <li>Sweep external road and footpath</li> <li>If practicable install temporary water source near exit points to wash excess mud/spoil and litter from vehicle wheels</li> </ul>  |                |   |
|      |                         | Erosion caused by<br>unplumbed<br>guttering                  | 5            | М            | <ul> <li>Temporary or permanent downpipes should be installed at the same time as the roof is installed.</li> <li>Refer to fact sheet 10 Guidelines for erosion and sediment controls on building sites)</li> </ul>   | SEC<br>(F)     |   |
| EC 4 | Water Quality           | Silty runoff entering<br>drainage systems or<br>watercourses | 2            | S            | <ul> <li>Maintain grass filter strips where possible to slow speed of water and trap sediment         <ul> <li>(Refer to fact sheet 7 Guidelines for erosion and sediment controls on building sites)</li> </ul> </li> <li>Sediment fencing and other controls measures to be inspected and recorded daily in accordance with the Blue Book</li> <li>Surface water discharges will be monitored daily and in particular after heavy rains</li> <li>Cover drainage pits with Geotextile fabric and clean regularly</li> <li>Ongoing documented/recorded modification of controls in advance of the progress of works (see also Blue Book Chapter 8 Maintenance)</li> </ul> | SEC<br>(F)     | Blue Book (I.e. Soils and Construction: Volume 1, 4 <sup>th</sup> ed., available via the following link <a href="https://www.environment.nsw.gov.au/resources/water/BlueBookVol1.pdf">https://www.environment.nsw.gov.au/resources/water/BlueBookVol1.pdf</a> ) |
|      |                         | Silty runoff entering<br>drainage systems or<br>watercourses | 2            | S            | Surface water discharges will be monitored daily and in particular after heavy rains and inspected and recorded fortnightly using     Environmental Inspection Checklist (F223)   | SEC<br>(F)     |   |





| ltem | Environmental<br>ASPECT | Environmental<br>IMPACT                                      | Risk Ranking | Significance | Controls  | Responsibility | References  |
|------|-------------------------|--|--------------|--------------|---|----------------|---|
|      |                         |  |              |              | Cover drainage pits with Geotextile fabric and clean regularly  |                |   |
| EC 4 | Water Quality           | Silty runoff entering<br>drainage systems or<br>watercourses | 2            | S            | <ul> <li>Maintain grass filter strips where possible to slow speed of water and trap sediment</li> <li>(Refer to fact sheet 7 Guidelines for erosion and sediment controls on building sites)</li> <li>Sediment fencing and other controls measures to be inspected and recorded daily in accordance with the Blue Book</li> <li>Surface water discharges will be monitored daily and in particular after heavy rains</li> <li>Cover drainage pits with Geotextile fabric and clean regularly</li> <li>Ongoing documented/recorded modification of controls in advance of the progress of works (see also Blue Book Chapter 8 Maintenance)</li> </ul> | SEC<br>(F)     | Blue Book (I.e. Soils and Construction: Volume 1, 4 <sup>th</sup> ed., available via the following link <a href="https://www.environment.nsw.gov.au/resources/water/BlueBookVol1.pdf">https://www.environment.nsw.gov.au/resources/water/BlueBookVol1.pdf</a> ) |
|      |                         | Silty runoff entering<br>drainage systems or<br>watercourses | 2            | S            | <ul> <li>Surface water discharges will be monitored daily and in particular after heavy rains and inspected and recorded fortnightly using         <ul> <li>Environmental Inspection Checklist (F223)</li> </ul> </li> <li>Cover drainage pits with Geotextile fabric and clean regularly</li> </ul>  | SEC<br>(F)     |   |
| EC 5 | <b>Ground Water</b>     | Pollution caused<br>through dewatering<br>activities         | 8            | М            | <ul> <li>Onsite storm water should be pumped into a sediment basin or holding tank</li> <li>Assessed for any visual signs of :         <ul> <li>Oil</li> </ul> </li> </ul>  | (SEC)<br>F     | <ul> <li>Guide-Managing Urban</li> <li>Stormwater – Soils &amp; Construction</li> <li>(2004) Edition 4 (Landcom)</li> <li>Appendix E4</li> </ul>  |

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| ltem | Environmental<br>ASPECT | Environmental<br>IMPACT | Risk Ranking | Significance | Controls  | Responsibility | References |
|------|-------------------------|-------------------------|--------------|--------------|---|----------------|------------|
|      |                         |                         |              |              | <ul> <li>Grease         <ul> <li>sediment</li> </ul> </li> <li>Rough field testing - Acceptable level of suspended solids content 50 milligrams per litre</li> <ul> <li>Fill a clear plastic or glass 65 mm diameter soft drink bottle with the water and hold it up to the light</li> <li>If seeing very clearly through the sample is not possible, it is probably above 50 milligrams per litre and needs further treatment.</li> </ul> <li>Testing Should there be any visual signs of oil, grease or sediment the water is to be treated with Flocculation agents prior to dewatering such as: Sediment basins with Gypsum (Calcium sulfate)</li> <ul> <li>Gypsum should be applied at a rate of about 30 kilograms per 100 cubic metres of stored water</li> <li>Spreading it very evenly over the entire pond surface is essential for proper treatment of sediment-laden water.</li> </ul> <li>Test samples should be taken each day in individual marked bottles with date prior to dewatering to a assess for any visual signs of contamination:</li> </ul> |                |            |





| Item | Environmental<br>ASPECT | Environmental<br>IMPACT                             | Risk Ranking | Significance | Controls   | Responsibility                  | References                                     |
|------|-------------------------|---|--------------|--------------|--|---------------------------------|--|
|      |                         |   |              |              | <ul> <li>Stormwater will be considered to be reused<br/>on site where feasible to do so e.g. dust<br/>suppression</li> </ul>   |                                 |  |
| EC 6 | Air Quality             | Dust generated by site activities                   | 5            | M            | <ul> <li>All stockpiles of building material such as sand and soil must be protected to prevent scour and erosion or moisten with water</li> <li>Stockpiles covers to be secured to prevent being blown away</li> <li>Stockpiles to be removed as soon as practicable</li> <li>Install sufficient water outlets to suppress works that generate dust e.g. Concrete and masonry cutting</li> <li>Large areas of unsealed surfaces e.g. car parks to be kept moist by using water carts</li> <li>Work practices should be used to minimise dust generation</li> <li>Work areas to be swept regularly to remove saw dust etc.</li> <li>Shade cloth to be attached to site fencing to minimise dust impacting on neighbouring properties</li> <li>Demolition work must not be carried out during high wind, which may cause dust to spread beyond the boundaries of the site.</li> </ul> | SEC<br>( PM )<br>SEC<br>All S/C |  |
|      |                         | Dust generated by<br>plant and vehicle<br>movements | 5            | М            | <ul> <li>Stabilise roads and set down areas using road<br/>base</li> <li>Cover loads prior to leaving site</li> </ul>  | (SEC)<br>F                      | PMP 5.2 Environmental Objectives     & Targets |

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| ltem | Environmental<br>ASPECT | Environmental<br>IMPACT                                     | Risk Ranking | Significance | Controls  | Responsibility                | References                                     |
|------|-------------------------|---|--------------|--------------|---|-------------------------------|--|
|      |                         |   |              |              | <ul> <li>Shade cloth to be attached to site fencing to<br/>minimise dust impacting on neighbouring<br/>properties</li> <li>Install shaker device or similar at site exit points</li> </ul>  | All S/C                       |  |
|      |                         | Emissions from<br>construction plant<br>and equipment       | 2            | S            | <ul> <li>Plant and equipment to be in good working order and maintenance report provided</li> <li>All construction plant and machinery to be fitted with emission control devices complying with Australian Design Standards.         <ul> <li>Plant Certification (F110)</li> <li>Plant Risk Assessment (F111)</li> </ul> </li> <li>Plant or equipment that emit excessive emissions not to be used onsite</li> <li>Construction plant to be switched or Limit idling time</li> <li>Avoid over loading of mobile plant</li> <li>Minimise plant movements in windy conditions on unsealed surfaces</li> </ul> | (SEC)<br>F<br>All S/C         | PMP 5.2 Environmental Objectives     & Targets |
|      |                         | Odours from use of<br>chemical e.g. Paint                   | 5            | М            | <ul> <li>Product to be used and handled in accordance with Safety Data Sheet</li> <li>Neighbouring properties to be notified of potential odour emissions and the expected duration</li> </ul>  | SEC<br>( PM )                 |  |
|      |                         | Removal of     Hazardous material     dust entering the air | 2            | S            | All work requiring the removal of hazardous<br>materials e.g. Asbestos and Lead debris to be<br>controlled by encapsulating areas in accordance<br>with the removal of hazardous materials  | SEC<br>( PM )<br>SEC<br>( F ) |  |

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| ltem | Environmental<br>ASPECT | Environmental<br>IMPACT   | Risk Ranking | Significance | Controls   | Responsibility                  | References  |
|------|-------------------------|---|--------------|--------------|--|---------------------------------|---|
|      |                         |   |              |              | Monitoring of air to be conducted by hygienist and reports provided to the site foreman  | SC                              |   |
| EC 7 | Noise                   | Noise emissions from construction activities including motorised plant and equipment impacting of neighbouring properties | 5            | M            | <ul> <li>Construction activities including motorised plant and equipment should only operate in work hours approve by the DA/DC and Client requirements</li> <li>Are there any specific times High Noise Generating activities are not permitted         <ul> <li>Yes/No</li> </ul> </li> <li>Indicative High Noise Generation Activities:         <ul> <li>Vibratory rolling</li> <li>Cutting of pavement, concrete or steel</li> </ul> </li> <li>Operations to be scheduled within approved hours of work</li> <li>outside of work areas to be minimal and notification to neighbouring properties to be undertaken</li> <li>Plant and equipment to be in good working order</li> <li>All construction plant and machinery to be fitted with noise control devices complying with Australian Design Standards such as Non-Tonal beepers</li> <li>Plant or equipment that emit excessive noise not to be used onsite         <ul> <li>Plant Certification (F110)</li> <li>Plant Risk Assessment (F111)</li> </ul> </li> </ul> | SEC<br>(PM)<br>SEC<br>(F)<br>SC | <ul> <li>Protection of the Environment<br/>Operations (Noise Control)<br/>Regulation 2008</li> <li>Department of Environment and<br/>Climate Change (Interim<br/>Construction Noise Guideline)</li> <li>PMP 5.2 Environmental Objectives<br/>&amp; Targets</li> </ul> |





| ltem | Environmental<br>ASPECT | Environmental<br>IMPACT                | Risk Ranking | Significance | Controls   | Responsibility                  | References                                     |
|------|-------------------------|--|--------------|--------------|--|---------------------------------|--|
|      |                         |  |              |              | <ul> <li>Establish and implement other measure to minimise the generation of noise such as:         <ul> <li>Work areas e.g. concrete and masonry cutting behind screen or as far away as practicable from neighbouring properties</li> <li>Limit idling time on plant &amp; delivery vehicles</li> <li>Avoid over loading of mobile plant</li> <li>Wherever practical, piling activities shall be completed using non-percussive piles.</li> <li>Avoid the use of radios or stereos outdoors.</li> <li>Avoid shouting, and minimise talking loudly and slamming vehicle doors</li> <li>Stormwater drain grates and shakers should be secured to minimise noise when vehicles pass over the grate.</li> <li>Plan so known noisy activities aren't occurring simultaneously</li> <li>Conduct sound levels of activities and record</li> <li>Workplace noise emission level</li> <li>WHS Inspection (F121)</li> <li>WHS Inspection (F121)</li> </ul> </li> </ul> |                                 |  |
| EC 8 | Vibration               | Damage to<br>surrounding<br>structures | 5            | М            | Will vibration be a likely concern on this project     Yes/No  | SEC<br>(PM)<br>SEC<br>(F)<br>SC | PMP 5.2 Environmental Objectives     & Targets |





| ltem | Environmental<br>ASPECT | Environmental<br>IMPACT                            | Risk Ranking | Significance | Controls  | Responsibility             | References   |
|------|-------------------------|--|--------------|--------------|---|----------------------------|--|
| EC 9 | Flora and Fauna         | Protection and management of flora of significance | 2            | S            | <ul> <li>Have any protection of Flora/Fauna requirements been identified         <ul> <li>Refer to DA Review Checklist (F210)</li> <li>Yes/No</li> </ul> </li> <li>Develop Flora protection management plan to identify: (Attached)         <ul> <li>Species types</li> <li>Identify specific species to be protected and their management requirements that may include:</li></ul></li></ul> | SEC<br>(F)<br>SC<br>All SC | <ul> <li>Protection of the Environment Act<br/>1997</li> <li>Refer Biodiversity Management<br/>Sub-Plan</li> </ul>   |
|      |                         | Protection of     Flora of     significance        |              |              | <ul> <li>Protection will be implemented where construction activities will or have the potential to encroach trees of significance</li> <li>Barricade or 1.8m Mesh Fencing, signpost trees and other areas of significance to be protected</li> </ul>   | SEC<br>(F)<br>SC<br>All SC | <ul> <li>Australian Standard AS4970-<br/>2009 Protection of Trees on<br/>Development Sites</li> <li>Protection of trees on<br/>development sites, (AS 4970)</li> </ul> |

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| Item  | Environmental<br>ASPECT              | Environmental<br>IMPACT | Risk Ranking | Significance | Controls  | Responsibility             | References  |
|-------|--------------------------------------|-------------------------|--------------|--------------|---|----------------------------|---|
|       |                                      |                         |              |              | <ul> <li>If fencing or barricading is not possible due to location issues, trunk protection is required</li> <li>Do not operate construction machinery or vehicles within protected areas unless approved</li> <li>No unapproved or unnecessary work to be carried out effecting surrounding flora and fauna</li> </ul>   |                            | Refer Biodiversity Management Sub-Plan  |
|       |                                      | Weed spread             | 2            | S            | <ul> <li>Removal of all noxious weeds to be disposed at certified disposal facilities</li> <li>Deposal certificated to be obtained</li> <li>Ensure all incoming fill is certified</li> </ul>  | SEC<br>(F)<br>SC<br>All SC |   |
|       |                                      | • Fire                  | 2            | S            | <ul> <li>No naked flames near vegetation</li> <li>Remove all flammable materials</li> <li>Ensure controls have been implemented when carrying out tasks that generate sparks</li> <li>Welding screens are being used</li> <li>Ensure flashback arrestors are fitted at the blow pipe at the regulator on oxygen and lines of oxyfuel gas systems.         <ul> <li>Complete Permit for Hot Works (F148)</li> </ul> </li> <li>No cutting, welding, grinding or other activities likely to generate fires to be undertaken in the open during total fire ban</li> </ul> | SEC<br>(F)<br>SC<br>All SC | <ul> <li>AS 1554 Welding</li> <li>Welding Process Code of Practice</li> </ul> |
| EC 10 | Rehabilitation & replanting programs |                         | 8            | М            | Site rehabilitation of disturbed areas to be undertaken progressively as stages are completed   | SEC<br>(F)                 | Refer Biodiversity Management     Sub-Plan                                    |





| ltem  | Environmental<br>ASPECT          | Environmental<br>IMPACT                                    | Risk Ranking | Significance | Controls   | Responsibility             | References |
|-------|----------------------------------|--|--------------|--------------|--|----------------------------|------------|
|       |                                  |  |              |              | <ul> <li>Damaged to property owner flora e.g. trees, shrubs, lawn &amp; garden to be rectified at no cost to owner</li> <li>All cleared vegetation shall be replaced and or offset in accordance with client, owner or other relevant body.</li> <li>All vegetation planted will consist of locally native species unless agreed by others</li> </ul>  |                            |            |
| EC 11 | Indigenous and<br>Non – Heritage | Irreparable damage<br>to area or object of<br>significance | 5            | M            | <ul> <li>Have any Indigenous heritage aspects been identified in the contract scope of work         <ul> <li>Yes/No</li> </ul> </li> <li>All works on site and particularly on any Indigenous heritage aspects would be undertaken in line with the DA conditions</li> <li>Undertake a heritage photographic survey of the site prior to any works</li> <li>Should archaeological remains be uncovered during construction, all works are to cease within the vicinity of the material/find and the Department of Planning Heritage Branch contacted.</li> <li>In an item (or suspected item of indigenous heritage is discovered stop work, barricade the area and notify client representative</li> <li>A program of testing, excavation and monitoring will be undertaken during earthworks to allow</li> </ul> | SEC<br>(F)<br>SC<br>All SC |            |





| ltem  | Environmental<br>ASPECT | Environmental<br>IMPACT   | Risk Ranking | Significance | Controls  | Responsibility             | References   |
|-------|-------------------------|---|--------------|--------------|---|----------------------------|--|
|       |                         |   |              |              | for the recording, analysis and recovery of archaeological features.  If an item (or suspected item of indigenous heritage is discovered stop work, barricade the area and notify client representative   |                            |  |
| EC 12 | Waste                   | <ul> <li>Litter entering<br/>drainage systems<br/>or watercourses</li> <li>Blocking of<br/>stormwater<br/>system</li> </ul> | 5            | M            | <ul> <li>Litter e.g. packaging products to be disposed of in designated refuse bins</li> <li>Bins should not be allowed to exceed capacity         <ul> <li>Refer to fact sheet 8 Guidelines for erosion and sediment controls on building site</li> </ul> </li> </ul>  | SEC<br>(F)<br>SC<br>All SC |  |
|       |                         | Minimising waste<br>being disposed of<br>into land fill   |              |              | <ul> <li>It would also be managed in accordance with the philosophy of the waste minimisation hierarchy as follows:</li> <li>Avoidance, where possible;</li> <li>Waste management will be conducted in accordance with WRAPP         <ul> <li>Treated, as required and reused on site;</li> <li>Recycled, either within the process or of site'</li> <li>Where other alternatives are not possible, wastes should be disposed of at appropriately licensed waste management facilities.</li> </ul> </li> <li>There is to be no burning of waste.</li> <li>All noxious weeds and exotic plant species removed are to be bagged and disposed of at a licensed landfill facility.</li> </ul> | SEC<br>(F)<br>All SC       | <ul> <li>Wastes generated by the proposal to be classified in accordance with the DECCW: Waste Classification Guidelines, Part 1: Classifying Waste (Dec 2009).</li> <li>PMP 5.2 Environmental Objectives &amp; Targets</li> </ul> |





| ltem  | Environmental<br>ASPECT | Environmental<br>IMPACT | Risk Ranking | Significance | Controls   | Responsibility       |   | References   |
|-------|-------------------------|-------------------------|--------------|--------------|--|----------------------|---|--|
|       |                         |                         |              |              | <ul> <li>Wastes not to be stored for long periods during construction</li> <li>Empty drums of fuels, oils or chemicals and fluids to not to be stored on site during construction.</li> <li>Maintain a series of clearly identifiable disposal containers for the separation and appropriate distribution of the various "waste" products generated from the project.</li> <li>Excess steel products to be collected in a "skip" and forwarded to an appropriate recycling centre (e g: Simsmetal).</li> <li>Excess concrete and masonry products will be collected in a "skip" and forwarded to an appropriate recycling centre (e g: Concrete Recyclers).</li> <li>Cleaning up shall be carried out at the end of each day.</li> <li>Waste materials must be disposed of at a waste or resource management facility and sorted.</li> <li>Waste Management and Recycling Report to be obtained</li> </ul> |                      |   |  |
| EC 13 | Hazardous<br>Materials  | • Spills                | 5            | М            | <ul> <li>SDS for all hazardous chemicals used on site are to be assessed, recorded and location communicated to workers</li> <li>Hazmat Register (F109)</li> <li>Hazardous materials wherever practicable not to be stored onsite</li> </ul>   | SEC<br>(F)<br>All SC | • | Protection of the Environment<br>Operations Act 1997 |

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| ltem | Environmental<br>ASPECT   | Environmental<br>IMPACT | Risk Ranking | Significance | Controls   | Responsibility | References |
|------|---------------------------|-------------------------|--------------|--------------|--|----------------|------------|
|      |                           |                         |              |              | <ul> <li>Minimum volume of diesel fuel only to be stared onsite</li> <li>Spill kit to be present at hazardous chemicals storage areas and fuelling locations</li> <li>Where a spill to a water course is identified as a risk a spill kit must kept near the potential discharge point</li> <li>Where required by Safety Data Sheet information hazardous chemicals to be stored in ventilated lockable containers</li> <li>Containers containing hazardous chemicals to be checked regularly for leaks</li> <li>Storage areas of hazardous chemicals to have signage attached stating what to do if there is a leaks</li> <li>Spills or leaks to be reported</li> </ul> |                |            |
| EC14 | Graffiti &<br>Advertising | Visual or Offensive     | 5            | М            | <ul> <li>Regular inspections to be conducted to identify any graffiti or unauthorised advertising during scheduled inspection using WHS Inspection (F121) &amp; at other times entered into the site diary</li> <li>Treatment as follows:         <ul> <li>Offensive graffiti will be removed or concealed within 24 hours</li> <li>highly visible (yet inoffensive) graffiti will be removed or concealed within a week</li> </ul> </li> </ul>  | SEC<br>(F)     |            |





| ltem  | Environmental<br>ASPECT | Environmental<br>IMPACT                              | Risk Ranking | Significance | Controls   | Responsibility     | References |
|-------|-------------------------|--|--------------|--------------|--|--------------------|------------|
|       |                         |  |              |              | <ul> <li>graffiti that is neither offensive or highly visible will be removed or concealed within a month</li> <li>only approved advertising to been attached to any external face of fencing or hoardings</li> <li>any unauthorised advertising material will be removed or concealed within 24 hours</li> </ul>  |                    |            |
| EC 15 | Sustainability          | Products and activities impacting on the environment | 5            | М            | <ul> <li>Wherever practicable sustainability initiatives should be considered during construct such as and not limited to the following:         <ul> <li>Purchasing of local products and the use of local suppliers</li> <li>Purchasing of products from accredited sustainable suppliers</li> <li>Recycling of waste</li> <li>Reuse of spoil</li> <li>Maintaining of plant, equipment and appliances e.g. air conditioners</li> <li>Minimise plant operations</li> <li>Plan and schedule product and supplies to site to avoid multiple deliveries</li> <li>Use alternative products, materials and substances to minimise safety and environmental impacts</li> <li>Promote sustainable initiatives to workers and stakeholder through tool box talks</li> </ul> </li> </ul> | SEC<br>(F)<br>(PM) |            |





| ltem  | Environmental<br>ASPECT               | Environmental<br>IMPACT  | Risk Ranking | Significance | Controls  | Responsibility | References   |
|-------|---------------------------------------|--|--------------|--------------|---|----------------|--|
| EC 16 | Communication                         | Client unaware of<br>environmental<br>issues affecting the<br>project    | 5            | М            | <ul> <li>Project Manager to report on Environmental incidents the CLIENTS representative</li> <li>Environmental performance to be reported to the client or client representative on a monthly basis</li> </ul>   | SEC<br>(PM)    | PMP 5.13 Communication to<br>Client  |
| EC 17 | Emergency<br>Preparedness             | Insufficient     resources to deal     pollution and other     incidents | 5            | M            | <ul> <li>Emergency equipment, exit, exit signs, paths of travel, spill kits and alarms systems to be inspected during Foreman's Weekly Site Inspections (F121)</li> <li>Emergency Equipment such as fire extinguishers to be tested and maintained at regular interval in accordance with legislation and other requirements</li> </ul>   | SEC<br>(F)     | <ul> <li>PMP 5.14 Emergency         Preparedness and Reporting     </li> <li>PMP 5.16.1 Office of         Environmental &amp; Heritage     </li> <li>Protection of the Environment         Operations Act 1997     </li> </ul> |
|       | Authorised<br>Person and<br>Reporting | Environmental incidents & other issues                                   |              |              | <ul> <li>Any Class 1 or 2 incident causing or threatening material harm to the environment to be reported to the Office of Environmental &amp; Heritage         <ul> <li>Failure to report maximum penalty is \$2,000,000 for corporations or \$500,000 for individuals.</li> </ul> </li> <li>Primary authorised person to report environmental incidents &amp; other issues to CLIENTS representative         <ul> <li>INSERT NAME</li> </ul> </li> <li>Office of Environmental and Heritage reporting authorised person         <ul> <li>Paul Homan - 0424 236 060</li> </ul> </li> </ul> | SEC<br>(PM)    |  |



#### PROJECT ENVIRONMENTAL ASPECT & IMPACT REGISTER

PLC GREY HOUSE

| Item | Environmental<br>ASPECT    | Environmental<br>IMPACT      | Risk Ranking | Significance | Controls  | Responsibility | References  |
|------|----------------------------|------------------------------|--------------|--------------|---|----------------|---|
| EC18 | Incident and Investigation | Future<br>environmental harm | 2            | S            | <ul> <li>All environmental incidents occurring in or around site to be reported to CLIENTS representative within 24 hours</li> <li>Incident to be investigated using Incident Investigation form (F104)</li> <li>Non-conformance report (Improvement Request F006) to be issued for all non-conformances</li> </ul> | SEC<br>(F)     | <ul> <li>PMP 5.9 Monitoring</li> <li>PMP 5.15 Incident and<br/>Investigation</li> </ul> |

installations or services, or is carried out in an area that may have a contaminated or flammable atmosphere, or

or is carried out in or near water or other liquid that involves a risk of drowning, or involves diving work.

involves tilt-up or precast concrete, or is carried out on, in or adjacent to a road, railway, shipping lane or other traffic

contidor that is in use by traffic other than pedestrians, or is carried out in an area at a workplace in which there is any movement of powered mobile plant, or is carried out in an area in which there are artificial extremes of temperature.



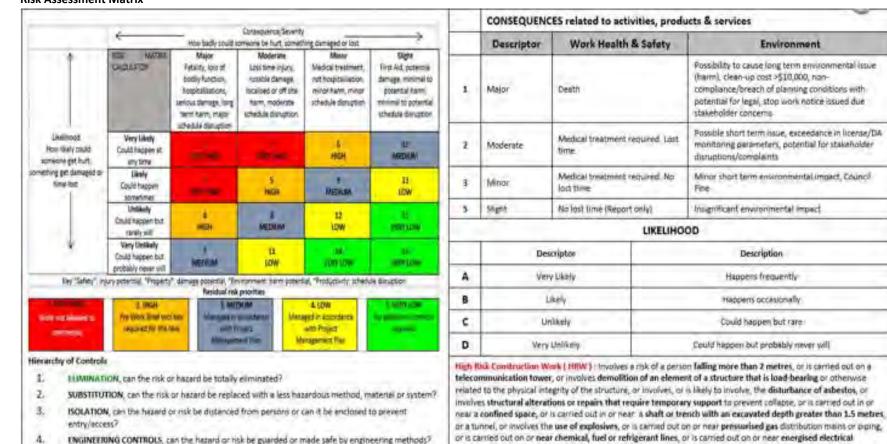
5.

6.

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#### Risk Assessment Matrix



ADMINISTRATIVE CONTROLS, can braining, increased supervision, rotation or signage assist?

PERSONAL PROTECTIVE EQUIPMENT, can PPE protect the worker from the hazard or risk?

FORM REF: F106.11 20220511



#### **Hierarchy of Controls**

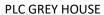
- 1. **ELIMINATION**, can the risk or hazard be totally eliminated?
- 2. **SUBSTITUTION**, can the risk or hazard be replaced with a less hazardous method, material or system?

ISOLATION, can the hazard or risk be distanced from persons or can it be enclosed to prevent entry/access?

- 3. **ENGINEERING CONTROLS**, can the hazard or risk be guarded or made safe by engineering methods?
- 4. **ADMINISTRATIVE CONTROLS**, can training, increased supervision, rotation or signage assist?
- 5. **PERSONAL PROTECTIVE EQUIPMENT**, can PPE protect the worker from the hazard or risk?

| Each env | ironmental aspect shall be assessed t       | for significance: |   |  |  |  |  |  |  |
|----------|---|-------------------|---|--|--|--|--|--|--|
| Code     | Significance                                | Risk ratings      |   |  |  |  |  |  |  |
| S        | Significant in Routine Operations           | 1 to 3            | Legal requirement                               |  |  |  |  |  |  |
| M        | Minor significance in Routine Operations    | 4 to 13           |   |  |  |  |  |  |  |
| N        | No significant impact in Routine Operations | 14 to 16          |   |  |  |  |  |  |  |
| E        | Significant in Emergency Situations         |                   | Environmental impact due to emergency situation |  |  |  |  |  |  |
| В        | Beneficial environmental impact             |                   | Beneficial impact on the environment            |  |  |  |  |  |  |

EG an Environmental aspect that has a risk rating of 1 to 3 OR is a Legal Requirement shall be deemed as significant





#### **Environmental Control Map**

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**GHP GREY HOUSE PRECINCT** 



### SITE ESTABLISHMENT + EROSION & SEDIMENT CONTROL PLAN (ESCP)

| The fo | llowing notes apply to the Site Establishment + ESCP for the project:   |
|--------|---|
|        | A site plan ( survey plan ) indicating boundaries, adjoining roads, approximate grades and direction of fall  |
|        | <ul> <li>Timing / staging of the works indicating areas of disturbance ( &lt; 2500 m2 )</li> <li>Identify ex trees and vegetation and indicate trees to be removed, areas to be disturbed</li> <li>Minimise area to be cleared and leave as much vegetation as possible</li> <li>Install temporary fences to define "no go" areas that are not to be disturbed</li> <li>Maintain grass filter strips where possible to slow speed of water and trap sediment</li> <li>Revegetate the site as soon as possible. The erosion and sediment control devices are to remain in place until 70 % of the site is revegetated</li> </ul> |
|        | Existing and proposed drainage patterns indicating storm water discharge points   |
|        | <ul> <li>Location of site access, proposed access tracks, site fencing / hoardings + other impervious areas including parking areas and site establishment</li> <li>Establish a single stabilized entry / exit point. Clearly mark the access point on an access map for all deliveries</li> <li>Sweep external road and footpath and put the soil behind the sediment controls</li> </ul>  |
|        | <ul> <li>Extent of earthworks, including the amount of cut &amp; fill</li> <li>Stabilise exposed earth banks (vegetation, erosion control mats)</li> <li>Fill and compact trenches as soon as practical after services installed</li> </ul>   |
|        | Proposed diversion of run-off from upslope lands around the disturbed areas  • Divert water around the work site and stabilize channels.  • Connect downpipes from the guttering to Onsite Detention (OSD) or storm water drain as soon as practical after the roof is installed  |
|        | Location of spoil stockpiles + material stockpiles, and proposed methods of protection  • Locate stockpiles behind sediment controlled zone   |
|        | Location of proposed erosion and sediment control measures  • Locate sediment fences along the low side of the site before work begins.   |
|        | Proposed maintenance of controls ( Frequency & nature )  • Site Foreman to check on a daily basis   |

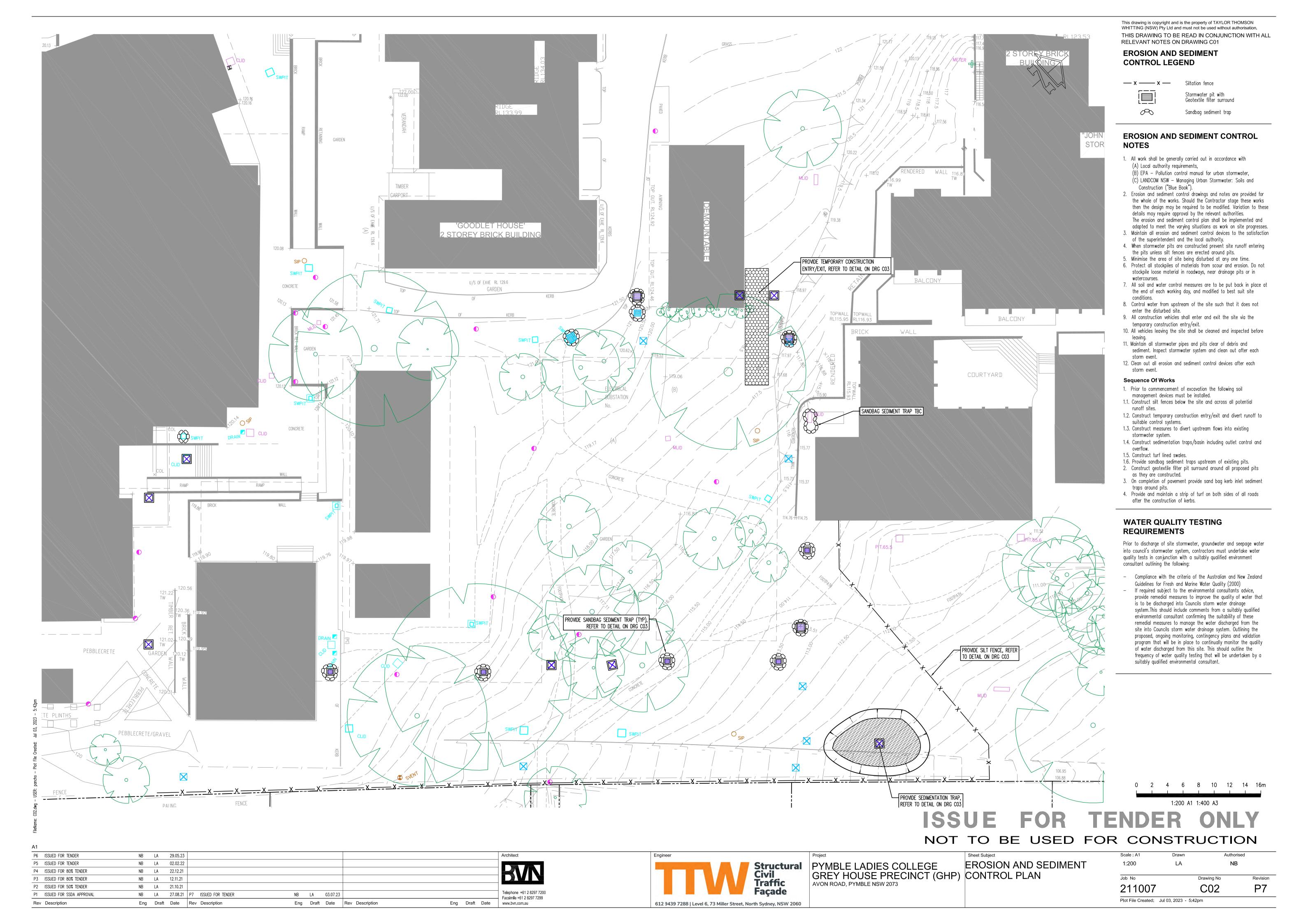
#### **Guidance notes:**

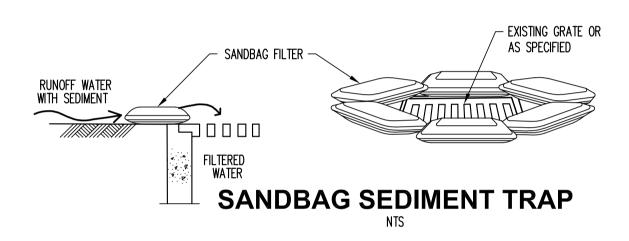
ESCP is to be prepared in accordance with the SEC Project Management Plan [PMP] and address relevant Conditions of Consent and applicable legislation.

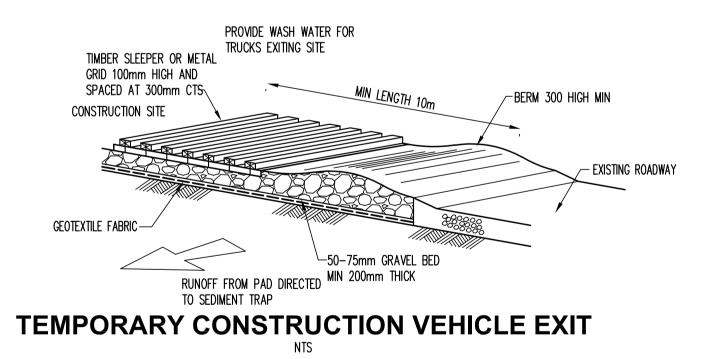
#### References:

- S:\Proformas\04 Reference Documents\Guidelines\Guide-Guidelines For Erosion & Sediment Control On Building Sites (Bluebook)
- S:\Proformas\04 Reference Documents\Guidelines\Guide-Managing Urban Stormwater- Soils & Construction (2004)

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# ISSUE FOR TENDER

NOT TO BE USED FOR CONSTRUCTION

| ı I            |                          |     |       |          |                      |     |       |          |                 |     |       |      |  |
|----------------|--------------------------|-----|-------|----------|----------------------|-----|-------|----------|-----------------|-----|-------|------|--|
| <sup>2</sup> 6 | ISSUED FOR TENDER        | NB  | LA    | 29.05.23 |                      |     |       |          |                 |     |       |      | Architect  |
| <sup>2</sup> 5 | ISSUED FOR TENDER        | NB  | LA    | 02.02.22 |                      |     |       |          |                 |     |       |      |  |
| 94             | ISSUED FOR 80% TENDER    | NB  | LA    | 22.12.21 |                      |     |       |          |                 |     |       |      |  |
| 23             | ISSUED FOR 80% TENDER    | NB  | LA    | 12.11.21 |                      |     |       |          |                 |     |       |      | NWIK   |
| 2              | ISSUED FOR 50% TENDER    | NB  | LA    | 21.10.21 |                      |     |       |          |                 |     |       |      |  |
| 71             | ISSUED FOR SSDA APPROVAL | NB  | LA    | 27.08.21 | P7 ISSUED FOR TENDER | NB  | LA    | 03.07.23 |                 |     |       |      | Telephone +61 2 8297 7200<br>Facsimile +61 2 8297 7299 |
| Rev            | Description              | Eng | Draft | Date     | Rev Description      | Eng | Draft | Date     | Rev Description | Eng | Draft | Date | www.bvn.com.au   |







# WASTE MANAGEMENT PLAN REV B

# **Pymble Grey House**

**PROJECT NUMBER: 647** 

ISSUED: 15/03/2024 (Initial Issue)

This Waste Management Plan forms part of the Project Management plan for the above project.

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REVISION: A
ISSUE DATE: 05/02/24



#### **REVISION STATUS**

| DATE:    | REV | PURPOSE                         | REVIEWED BY |
|----------|-----|---------------------------------|-------------|
| 01/02/24 | Α   | Initial distribution            | A KYRILLOS  |
| 15/03/24 | В   | Amended to capture PCA Comments | A KYRILLOS  |
|          |     |                                 |             |
|          |     |                                 |             |



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# **Key Project Contacts & Details**

The following are the key personnel for the project to ensure these objectives are met:

# **Stephen Edwards Constructions Pty Ltd**

| Title                   | Name            | Phone        | Email                            |
|-------------------------|-----------------|--------------|----------------------------------|
| Project Director:       | Tony Macri      | 0414 306 185 | tmacri@stephenedwards.com.au     |
| Project Manager:        | Andrew Kyrillos | 0415 257 844 | akyrillos@stephenedwards.com.au  |
| Site Manager            | Peter Pawlyszyn | 0403 676 038 | ppawlyszyn@stephenedwards.com.au |
| QHSE Manager            | Paul Homan      | 0424 236 060 | phoman@stephenedwards.com.au     |
| Contracts Administrator | Fotini Bouranta | 0449 784 731 | fbouranta@stephenedwards.com.au  |
|                         |                 |              |                                  |
|                         |                 |              |                                  |

## **Pymble Ladies' College**

|                  | •           |              |                             |
|------------------|-------------|--------------|-----------------------------|
| Project Director | Greg Hastie | 0411 477 006 | ghastie@pymblelc.nsw.edu.au |
|                  |             |              |                             |

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#### 1 Purpose

Stephen Edwards Constructions Pty Ltd (SEC) is committed to the principle that the generation of waste is minimised.

This plan sets out the control mechanisms for minimising and managing wastes on the project, with the overall aim of minimising waste and maximising resource efficiency.

#### 2 Scope

This plan is applicable to the construction phase of the project. It provides a framework for all site personnel to follow to ensure that compliance is achieved with regards to waste minimisation, management and tracking requirements in line with relevant legislation, guidelines, policies, the project REF and other project environmental documents.

#### 3 Waste Management Legislation and Policies

NSW Waste Avoidance and Resource Recovery Act 2001

NSW Protection of the Environment Operations Act 1997

Protection of the Environment Operations Amendment (Illegal Waste Disposal) Act 2013

Protection of the Environment Operations (Waste) Regulation 2014

**Environmentally Hazardous Chemicals Act 1985** 

NSW Waste Avoidance and Resource Recovery Strategy 2013 - 21

#### 4 Guidance Documents

- EPA Waste Classification Guideline Part-1 Classify-Waste
- EPA Waste Classification Guideline Part-2 Immobilisation-Waste
- EPA Waste Classification Guideline Part-3 Radioactive-Waste
- EPA Waste Classification Guideline Part-4 Acid-Sulfate-Soils
- Australian Dangerous Goods Code

#### 5 Aims and Objectives

To implement a waste management hierarchy on this project, with waste avoidance as a priority, followed by resource recovery through reuse and recycling/reprocessing, with disposal as a last resort.

SEC aims to achieve the following:

- meet the waste hierarchy
- improve and properly record and monitor waste management on the project
- ensure management of chemical, fuel and lubricant containers, solid and liquid wastes complies with the requirements of the EPA and the relevant local Council
- ensure resource recovery is undertaken efficiently
- ensure recycling is undertaken efficiently.

#### 6 Storage

All waste will be stored in an environmentally safe manner and in accordance with relevant statutory requirements. At a minimum:

- Where a waste storage licence is required, all storage will be in accordance with the conditions attached to the licence.
- Clear, simple and pictorial signage will be provided to indicate where materials can be stored and any specific requirements for their storage.
- Labels and signage will conform to any legal requirements.
- Waste storage areas will be located away from sensitive environments or waterways.
- Waste will be covered to prevent dust, odours or rainwater wherever possible.

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- Wastes will be separated where possible to allow for increased reuse/salvage opportunities.
- Where waste is stored in containers, the containers shall be appropriate for the type of waste being stored and the containers correctly labelled.
- Bins and other receptacles will be located such that there is adequate access and manoeuvring area for collection vehicles and that the collection vehicles can enter and exit the site in a forwards direction. The collection point for bins and other receptacles shall be located to allow waste collection to be undertaken without the need to block traffic.
- Only licensed asbestos removalists working under a permit issued by Safework NSW will be engaged for work
  involving the removal of asbestos and the Safework NSW Code of Practice for safe removal of asbestos will
  be followed rigorously. Asbestos waste will be wetted and sealed in heavy-duty plastic prior to transportation
  to a licensed landfill.
- Storage of dangerous goods shall be in accordance with the Safework NSW Code of Practice for Storage and Handling of Dangerous Goods.
- All incompatible dangerous goods and materials such as flammable goods and corrosive liquids will be kept separately.
- Liquid wastes shall be contained in a controlled area such as a holding pit, or portable tank prior to treatment and/or disposal.
- Containment devices will be structurally sound and leak free.
- Containment devices will be of sufficient quantity or volume to completely contain the liquid wastes generated.
- Containment devices will be located in an impervious bunded area which is ideally protected by an overhead shelter. The bund volume shall be:
  - ° For liquids stored in tanks: at least 110% of the largest tank; or
  - ° For liquids stored in drums or small containers: at least 25% of the total volume of liquid stored
- Spill kits are available adjacent to liquid waste storage areas. The spill kits will be appropriate for cleaning up the specific type of liquid waste that is stored.

Details of storage receptacles and areas are included in Table 2.

#### 7 Transportation

The following general requirements will be applied for the transport of all waste irrespective of whether a licence is required.

- Vehicles used for transportation will be kept clean and maintained to prevent waste spillage.
- Storage containers will be secured on vehicles.
- Wastes will be covered when loaded so as to prevent spillage and loss of waste and emission of odours.
- Only compatible wastes will be transported together.
- Any material segregated for recycling will not be mixed with any other type of waste or with any other material during transport.
- Wastes will be tracked as required by legislation. This includes appropriate classification prior to offsite transport and the provision of all relevant information about the waste to those transporting and accepting the wastes. Table 3 contains details of waste tracking documentation.
- A signed Section 143 (s.143) certificate will be received prior to transporting waste offsite to land that is not owned by RMD and is not a licensed landfill. The wastes will be consistent with the s.143 certificate.
- Waste will not be transported for disposal more than 150kms from the place of generation, unless no waste facility exists within 150km, when it will be taken to one of the two nearest facilities.

# 8 Importation of materials to site

Where materials need to be imported to the site, the use of recycled or recovered materials will be maximised wherever feasible.

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# 9 Waste recovery, disposal and tracking

#### **Resource Recovery Exemptions**

RMS holds a number of Exemptions designed to allow the reuse of waste rather than disposal at landfill. The exemption to be used is dependent on the type of material to be re-used, where the material was excavated from and the location of the receivable site. **Table 1** provides a quick reference on road related resource recovery exemptions. It is used in making the resource recovery and/or disposal decisions detailed in **Table 2 & Table 3**.

**Table 1: Road Related Resource Recovery Exemptions** 

|  | SOURCE OF MATERIAL AND LOCATION OF RECEIVING SITE |                                  |                                  |                               |  |
|--|---|----------------------------------|----------------------------------|-------------------------------|--|
| EXEMPTION                              | Road Corridor →<br>Road Corridor                  | Road Corridor →<br>Non Road Site | Non Road Site →<br>Road Corridor | Non Road Site → Non Road Site |  |
| Excavated Public Road Materials (EPRM) | ✓   | ×                                | ×                                | ×                             |  |
| Excavated Natural Material             | More appropriate<br>to use EPRM<br>Exemption      | ✓<br>(Testing Required)          | ✓<br>(Testing Required)          | ✓<br>(Testing Required)       |  |
| Recovered Aggregates                   | More appropriate<br>to use EPRM<br>Exemption      | ✓<br>(Testing Required)          | ✓<br>(Testing Required)          | ✓<br>(Testing Required)       |  |
| Recycled Asphalt Pavement              | ✓<br>(can also use<br>EPRM Exemption)             | ×                                | ×                                | ×                             |  |
| Raw Mulch                              | ✓   | ✓                                | ✓                                | ✓                             |  |

## 10 Waste Classification, Recovery, Disposal and Tracking

Typical wastes that will be generated on this project and the measures to be adopted for storage, reuse, recycling or disposal of waste materials for the project are outlined in **Table 2** below.

A project waste register (Form F302) is kept on site which records quantities of waste created, recovered, stockpiled, disposed, site where disposal occurred and details of any waste transporters used.

Refer to ECON Environmental Detailed Site Investigation Report dated 5<sup>th</sup> February 2024 in line with SSDA consent condition E5 containing site contamination status, as well as subsequent ECON Environmental Remediation Action Plan (RAP) dated 14<sup>th</sup> March 2024 in line with SSDA consent condition E36.

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Table 2: Waste classification, recovery, disposal and tracking

| Types of<br>Wastes  | Waste<br>Classification                                     | Receptacle used for storage prior to reuse /recycling/disposal | 1. Recovery methods (Reuse/Recycling) | 2. Disposal methods         | Waste<br>transport<br>licence<br>required | Waste<br>Tracking<br>Required |
|---------------------|---|--|---------------------------------------|-----------------------------|---|-------------------------------|
| Spoil               | GSW   | Stockpile  | Retain on site and fill as directed.  | Tip truck                   | No  | No                            |
| Concrete            | Solids  | Skip Bin   | Recycle via recycling facility.       | Skip Bin via road transport | No  | No                            |
| Structural<br>Steel | Solids  | Skip Bin   | Recycle via recycling facility.       | Skip Bin via road transport | No  | No                            |
| Roofing             | Solids &<br>Insulation                                      | Skip Bin   | Recycle via recycling facility.       | Skip Bin via road transport | No  | No                            |
| Cladding            | Solid (Timber)  | Skip Bin   | Recycle via recycling facility.       | Skip Bin via road transport | No  | No                            |
| Internal<br>Linings | Solid<br>(Gyprock, Stud<br>& Track,<br>Furring<br>Channels) | Skip Bin   | Recycle via recycling facility.       | Skip Bin via road transport | No  | No                            |
| Carpentry           | Solid (Timber)  | Skip Bin   | Recycle via recycling facility.       | Skip Bin via road transport | No  | No                            |
| Services            | Solid (Metal/<br>Wires/<br>Cardboard<br>Packaging)          | Skip Bin   | Recycle via recycling facility.       | Skip Bin via road transport | No  | No                            |

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## 11 Waste Disposal

Note: Any materials disposed to land other than an approved landfill facility requires that a Notice under Section 143 of the POEO Act 1997 be completed. The following actions must be taken to complete a S. 143 Notice:

- 1) Identify the waste classification, the type and amount of waste that is to be disposed of and where it is to be placed on the private landholder's property.
- 2) Call or write to the local Council providing details of the type of waste, the quantity and where it is to be disposed of. Seek written approval for the disposal. Note: a Development Application (DA) may be required.
- 3) Complete the Section 143 Notice with the landowner.
- 4) Dispose of the waste to the landowner's property in accordance with any conditions
- Waste materials resulting from the construction of this project shall be disposed of at:

| Name and Address of Disposal Facility / Private Landholder/ Stockpile Site (strike out whichever not applicable) | Section 143 Notice completed (Y/N/NA) |
|--|---------------------------------------|
| TBC  | TBC                                   |
| TBC  | TBC                                   |
| TBC  | TBC                                   |

## 12 Waste tracking

Waste tracking is designed to minimise the risk that the wastes that present the highest risk to the environment will be transported or disposed of inappropriately.

Waste tracking will be undertaken to minimise the risk that the wastes generated on this project that present the highest risk to the environment will be transported or disposed of inappropriately.

The following wastes generated on this project require tracking.

Table 3: Waste tracking checklist

| Action  | Waste type: | Waste type: | Waste type: |
|---|-------------|-------------|-------------|
| Consignment authorisation for the waste obtained (from the EPA).      | Yes / No    | Yes / No    | Yes / No    |
| Waste transport certificate for the waste completed.                  | Yes / No    | Yes / No    | Yes / No    |
| Waste transport certificate provided to the transporter of the waste. | Yes / No    | Yes / No    | Yes / No    |
| Waste transporter's license to transport the waste sighted            | Yes / No    | Yes / No    | Yes / No    |
| Waste facility's legal authorisation to accept the waste confirmed.   | Yes / No    | Yes / No    | Yes / No    |

#### 13 Regular checks and monitoring activities

The following measures will be undertaken to ensure that waste management measures are implemented during the project:

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| Stage of Works   | Frequency                             | Comments and results  | Responsibility |  |  |
|--|---------------------------------------|---|----------------|--|--|
| Before-Works   | Before-Works                          |   |                |  |  |
| Establish the Waste and<br>Recyclable Materials Register   | Once                                  |   | SEC            |  |  |
| During-Works   |                                       |   |                |  |  |
| Inspection to ensure the work site is left free of rubbish.  | Daily &<br>Weekly                     | Daily – Visual check Recorded in the Weekly Environmental Site Inspection checklist | Site Manager   |  |  |
| Complete Registers   | As waste is generated or disposed of. |   | SEC            |  |  |
| Monthly Waste Summary information collected in the project Registers is provided to the Principal              | Bi-Monthly                            | Monthly Report  | SEC            |  |  |
| Post-Works   |                                       |   |                |  |  |
| Check the work site to ensure that it is left in a tidy and rubbish free state upon completion of the project. | End of job                            |   | SEC            |  |  |
| Ensure all Registers are complete and submit to Principal  | End of job.                           |   | SEC            |  |  |

#### 14 Documentation and records

The following records and documentation will be maintained on project files:

- Register of Waste and Recyclable Materials Generated and their Disposal Details
- Copies of completed Section 143 Forms (if required).
- Copies of any waste transport, storage or disposal licences (if required).
- Consignment Authorisations (if required)
- Waste Transport Certificates (if required)
- Inspection records

Copies of Registers and Forms will be provided to the Principal on project completion at the end of month or end of financial year for ongoing projects.

Consignment Authorisations and Waste Transport Certificates for any waste generated on the project that requires tracking will be kept on project files for at least four years.

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# PROJECT MANAGEMENT PLAN

(Incorporating Quality, Safety & Environment)

# **GHP GREY HOUSE PRECINCT**

**PROJECT NUMBER: 647** 

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# APPENDIX 10 Traffic Management Plans Rev B

STEPHEN EDWARDS CONSTRUCTIONS PTY LTD

ABN 65 001 824 139





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# **Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP)**

Pymble Ladies' College - Grey House Precinct

CTMP Version: 1.0

Development Application: SSD 17424905

LGA: Ku-ring-gai Council

Prepared for: Stephen Edwards Constructions

Prepared for Stephen Edwards Constructions

Version: 1.0

| Document Release |   |
|------------------|---|
| Document Title:  | CTMP - Pymble Ladies' College - Grey House Precinct.pdf |

| Table of M | Table of Modifications |                          |           |           |  |  |  |
|------------|------------------------|--------------------------|-----------|-----------|--|--|--|
| Revision   | Date                   | Modifications to content | Author    | Signature |  |  |  |
| 1.0        | 4/3/2024               | Initial Submission       | Kyle Fieg | K. Fieg   |  |  |  |
|            |                        |                          |           |           |  |  |  |
|            |                        |                          |           |           |  |  |  |
|            |                        |                          |           |           |  |  |  |
|            |                        |                          |           |           |  |  |  |
|            |                        |                          |           |           |  |  |  |

| PWZTMP Qualified Per  | PWZTMP Qualified Person |  |  |
|-----------------------|-------------------------|--|--|
| Name:                 | Kyle Fieg               |  |  |
| Role:                 | Traffic Planner         |  |  |
| Organisation:         | The Traffic Planner     |  |  |
| Qualification Number: | SafeWork NSW TCT0041658 |  |  |
| Signature:            | K. Fieg                 |  |  |
| Date:                 | 4/3/2024                |  |  |

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# 1. Introduction

ETM Traffic has been commissioned by Stephen Edwards Constructions to prepare a Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) to be implemented during the construction works located at Pymble Ladies' College - Grey House Precinct.

# 1.1. Purpose of this Plan

This CTMP provides a structured approach to manage traffic and access during construction to provide a safe road environment, minimise impact on the surrounding road network and maintain access for all road users and local community.

The objectives with respect to the Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) ("CTMP") are to:

| Information for CTMP   |            |
|--|------------|
| Requirement  | Section    |
| Surrounding traffic environment showing State, Regional and Local Roads, road network configuration and use, public transport facilities and existing parking restrictions   | 2          |
| Provide details of the impact of the works on residents, businesses, pedestrians, cyclists, local traffic and emergency services and management of staff parking.  | 2          |
| Details of the project including site location, scope of works, general breakdown of activities and hours of operation   | 4          |
| Works Zones will need to be considered if trucks cannot enter or exit the site in a forward direction at all times   | 4.6        |
| All vehicles associated with the development shall be parked wholly within the site. All site staff related with the works are to park in a designated off-street area or be encouraged to use public transport and not park on the public road. | 4.8        |
| Details and location of site accommodation and toilets   | 4.12       |
| The largest vehicle that will be used during construction in accordance with the Councils Standard Requirements  | 5.1        |
| Frequency of truck movements   | 5.1        |
| Truck routes to and from the site utilising State and Regional Roads – map of the routes must be provided  | 6          |
| Demonstrate using swept path diagrams how trucks enter, circulate and exit the site or Works Zone in a forward direction   | Appendix B |
| Demonstrate using swept path diagrams how trucks will navigate to and from the site along the nominated truck route in narrow and tight locations  | Appendix B |
| The approvals of Works Zones and Road Closures (to install cranes) is a separate process that requires Traffic Committee endorsement   | 7.1        |

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| Provide a plan showing where vehicles stand to load and unload, where plant will stand, location of storage areas for equipment, materials and waste, | Appendix C          |
|---|---------------------|
| location of Works Zones (if required) and location of cranes (if required)  | Site Plan           |
| Existing driveways should be shown and proposed temporary driveways should be dimensioned   | Appendix C          |
|   | Site Plan           |
| Appendices – Traffic Guidance Scheme/Pedestrian Management Plan   | Α                   |
| Appendices – Vehicle Movement Plan/Swept Path Diagrams  | В                   |
| Documents Required  |                     |
| Site Plans  | Yes                 |
| DA Conditions   | Yes                 |
|   | NSW Independent     |
|   | Planning Commission |
|   | SSD 17424905        |
| Transport Impact Assessment   | Yes                 |
|   | Stantec Grey House  |
|   | Precinct TIA Rev. 4 |

# 1.2. Abbreviations and Terminology

The following terms, abbreviations and definition are used in this plan:

| Terms  | Explanation  |
|--------|--|
| СТМР   | Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) |
| ITCP   | Implement Traffic Guidance Schemes                               |
| PWZTMP | Prepare Work Zone Traffic Management Plan                        |
| ROL    | Road Occupancy Licence   |
| TfNSW  | Transport for New South Wales                                    |
| TGS    | Traffic Guidance Scheme  |
| TMP    | Traffic Management Plan  |
| TTM    | Temporary Traffic Management                                     |
| VMP    | Vehicle Movement Plan  |

# 1.3. Legislative Requirements

This Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) complies with Australian Standard 1742.3-2019 Manual of uniform traffic control devices, Part 3: Traffic control for works on roads. All TGS's have been drawn to the TFNSW Traffic Control at Worksites Manual V6.1 standards.

All personnel dealing with traffic control, being either contractors or sub-contractors are to have the following current accreditation, for the management of each item listed below:

| Qualification                  | Requirements                              | Restrictions                         |
|--------------------------------|---|--------------------------------------|
| Traffic Controller             | Persons holding this qualification are    | Persons holding this                 |
| This qualification provides    | permitted or required to:                 | qualification must not:              |
| the necessary certification to | Stop or direct road users using a         | Select or adjust a site              |
| control traffic with a         | STOP/SLOW bat or other accepted           | suitable TGS;                        |
| prescribed traffic control     | traffic control device;                   | <ul> <li>Implement a TGS;</li> </ul> |
| device.                        | Maintain traffic incident reports;        | <ul> <li>Modify a TGS; or</li> </ul> |
|                                | Operate a 2-way radio;                    | Design a TGS.                        |
|                                | Understand the TGSs for the site;         |                                      |
|                                | Check traffic control signs are installed |                                      |
|                                | in accordance with the relevant TGS;      |                                      |
|                                | Assess and respond to changes in the      |                                      |
|                                | environment, e.g., traffic volumes,       |                                      |
|                                | weather conditions, road conditions,      |                                      |
|                                | WHS and operational requirements;         |                                      |
|                                | and                                       |                                      |
|                                | Carry out risk assessments for            |                                      |
|                                | personal safety.                          |                                      |
| Implement Traffic Guidance     | Persons holding this qualification are    | Persons holding this                 |
| <u>Schemes</u>                 | permitted to:                             | qualification must not:              |
| This qualification allows for  | Set up, monitor, and close down traffic   | Control traffic with a               |
| qualified personnel to set up  | control devices according to              | STOP/SLOW bat or other               |
| and work with TGSs at a        | nominated TGS;                            | traffic control device;              |

work site and complete safety inspections.

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- Identify safety implications of traffic control at roadworks;
- Check, clean and store equipment on completion of work and close down a TGS;
- Select an approved TGS to suit site conditions, traffic volumes and work activities;
- Make adjustments to an existing TGS within the tolerances specified in <u>Section 7.10.3 Tolerances on positioning of signs and devices in the TCWSM V6.1;</u>
- Conduct an onsite check of a TGS to identify risks and hazards;
- Ensure spacing between signs and traffic control devices is in line with a TGS;
- Maintain traffic incident reports; and
- Monitor traffic controllers.

- Make adjustments to an existing TGS which exceeds the tolerances specified in <u>Section 7.10.3</u>
   <u>Tolerances on positioning of signs and devices in the TCWSM V6.1;</u> or
- Design a TGS.

# Prepare Work Zone Traffic Management Plan

This qualification allows for qualified personnel to design and modify Traffic Management Plans (TMPs), Vehicle Movement Plans (VMPs) and traffic guidance schemes (TGSs).

Persons holding this qualification are permitted to:

- Prepare a Work Zone TMP;
- Collect all required information about a given roadwork project to enable the preparation of a TGS;
- Design a TGS, based on risk assessment, statutory and regulatory requirements, standards, road authority requirements and project brief;
- Select and modify a TGS based on risk assessment, statutory and regulatory requirements, standards, road authority requirements and project brief;
- Determine the recommended spacing between signs and traffic control devices in line with standards, measure width of trafficable surface and calculate edge clearances to barriers, cones, and clearance to work personnel;

Persons holding this qualification must not:

- Control traffic with a STOP/SLOW bat or other traffic control device; or
- Implement a TGS.

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| Undertake safety inspections/checks    |
|--|
| on the effectiveness of TMPs and       |
| TGSs;                                  |
| Conduct an onsite check and            |
| inspection of the plan and to identify |
| any hazards or risks; and              |
| Seek approvals required for a TMP and  |
| TGS                                    |
|  |

**TABLE 1. LEGISLATIVE REQUIREMENTS** 

# 2. Existing Conditions

# 2.1. Site Location



FIGURE 1. SITE LOCATION

# 2.2. Surrounding Road Classifications

| Road Name   | Speed Limit                                    | Lanes                          | Road Type | Road Authority         |
|---|--|--------------------------------|-----------|------------------------|
| Avon Road   | 40km/h (school<br>zone speed limit)     50m/h  | 1 lane in each<br>direction    | Local     | Ku-ring-gai<br>Council |
| Pymble Avenue   | 40km/h (school<br>zone speed limit)     50km/h | 1 lane in each<br>direction    | Local     | Ku-ring-gai<br>Council |
| Everton Street  | 40km/h (school<br>zone speed limit)     50m/h  | 1 lane in each<br>direction    | Local     | Ku-ring-gai<br>Council |
| Livingston Avenue<br>(between Pacific Highway<br>& Everton Street)  | • 50km/h                                       | 2 lanes in each<br>direction   | Local     | Ku-ring-gai<br>Council |
| Beechworth Road<br>(between Pacific Highway<br>& Mayfield Avenue)   | • 50km/h                                       | 1 lane in each<br>direction    | Local     | Ku-ring-gal<br>Council |
| Pacific Highway (between<br>Livingston Avenue &<br>Beechworth Road) | • 60km/h                                       | 2-3 lanes in each<br>direction | State     | TINSW                  |

**TABLE 2. ROAD CLASSIFICATIONS** 

## 2.3. Pedestrian Infrastructure

All the streets surrounding the work site are provided with paved pedestrian footpaths. The peak pedestrian movements are expected to occur between 7:00am and 6:00pm with an increase in pedestrian traffic during school drop-off and pick-up.

#### 2.4. Cyclists Infrastructure

No dedicated cyclist paths have been identified in this location. 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.

# 2.5. Public Transport

This project is not expected to have any significant impact on public transport timetables.

# 2.6. Events and Surrounding Developments

At the time of developing this CTMP, there are no existing events or developments identified in the immediate surrounding area that would affect the plans detailed in this CTMP.

# 3. Pedestrian Management Plan

#### 3.1.Pedestrian Access to Site

Pedestrian access is mainly through the pedestrian entry along Avon Road, adjacent to Gate 1 (Marden Gates). This access is directly off the raised pedestrian crossing along Avon Road, as shown in Figure 2, and provides connection between the College and the pedestrian tunnel leading to Pymble Train Station.

A zebra crossing is provided in front of the pedestrian tunnel to provide a crossroad connection at Avon Road, and a raised pedestrian crossing is provided closer to Marden Gates. A traffic controller is stationed at the raised pedestrian crossing during drop-off and pick-up hours.

Pedestrian access is also available through the Grey House Walk via Pymble Avenue.

Note that for the construction phase, all construction traffic enters the school grounds at Gate 3 and not at Gate 1, which acts as the main pedestrian access point into the school.

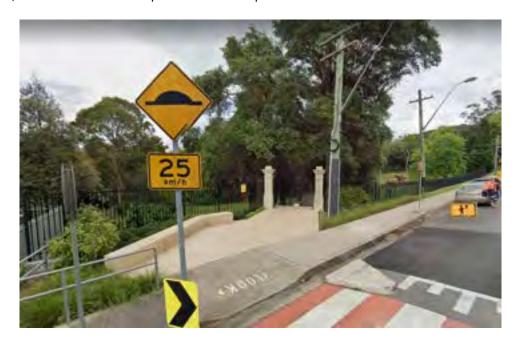


FIGURE 2. MAIN PEDESTRIAN ACCESS

A pedestrian access, called the Grey House Walk, is also provided along Pymble Avenue which is located between 57 and 59 Pymble Avenue. This pathway is also directly off a raised pedestrian crossing.



FIGURE 3. GREY HOUSE WALK

## 3.2.Pedestrian Management

During the construction works, pedestrian movements around the site will be maintained as there is clear delineation between the construction site and the school grounds (fencing & hoarding).

SEC will encourage deliveries outside of school pick-up and drop-off times as much as is reasonably possible to ensure that pedestrians are not put at risk and also to ensure that any impact to the school is minimised as much as possible. The Traffic Controller at Gate 3 / SEC staging area will assist in bringing deliveries from the Gate 3 entrance to the boom gate at the start of the service road, and will also assist in pedestrian management at Gate 3, particularly during school drop-off/pick-up times.

Appropriate signage will be used throughout the school grounds to alert pedestrians of the construction activities and to divert pedestrians where required.

The Grey House Walk will be closed to all construction staff for the duration of the construction period. Only student and staff access will be permitted via Grey House Walk for the school drop off and pickup times only. A temporary walkway from the Grey House walk entry gate to the Junior School building will be constructed to provide safe and uninterrupted access to students via Pymble Avenue for pickup and drop off times only. The Grey House Walk gate is controlled by the school.

In the event where large construction vehicles (e.g. trucks delivering construction plant to the site) need to reverse within school grounds, a dedicated spotter / traffic controller will be provided at both the front of the truck and the back of the truck, to ensure that any pedestrian risk is mitigated.

An example of this is seen in the below, where a construction delivery vehicle needs to reverse towards the boom gate at the start of the service road within school grounds (i.e. past the SEC staging area). In this instance, the vehicle will enter at Gate 3 (under traffic control direction), will turn left at the end of the driveway (under spotter direction) and will then reverse towards the boom gate (under another spotter's direction). In this instance and where construction plant (e.g. an excavator) needs to be

dropped off at the boom gate from the reversing truck, a spotter will be in place with the construction plant while it travels down the service road and into the construction site. NB: This only applies for non-road plant and not for road worthy vehicles.

# 4. Proposed Construction Activities

# 4.1. Project Overview

Site Location

Gate 3, 60 Avon Road, Pymble, NSW 2073

#### **Project Description:**

The Grey House Precinct development will deliver a world-class educational and co-curricular facility that fosters leading pedagogical practices, prioritizes student and staff health and wellbeing, embeds flexibility to accommodate future developments in learning and teaching methods, attains best practice sustainability, respects and enhances the existing built form and natural environs, and positively contributes to a campus public realm that is connected, legible and accessible.

The Grey House Precinct will provide a new home for years 5 and 6, Out of School Hours Care (OSHC), Early Learning Centre (ELC), Health Care and Dance Academy. The years 5 and 6 junior school component will provide high quality general and specialist learning, with a focus on STEM learning. The development will be stitched into the wider campus through convenient and direct connections to the Main Hall, Junior School, Centenary Precinct car park and to Grey House Walk.

#### Scope of work:

The Pymble Ladies' College - Grey House Precinct development includes the design, construction and delivery of a new multi-use building and precinct.

The key components of the Project are:

- Junior School facilities for Years 5 & 6
- Early Learning Centre facilities
- Dance Studios
- After School Care facilities
- Health and Wellbeing facilities
- Landscaping and Play Equipment

Approved Plans and Diagrams are in Appendix C – Project Plans and Diagram.

#### 4.2. Hours of Work

The hours of construction and work on the development must be as follows:

a) All work, including demolition, excavation and building work, and activities in the vicinity of the site generating noise associated with preparation for the commencement of work (loading and unloading of goods, transferring of tools etc) in connection with the proposed development must only be carried out between the hours of 7.00am and 6.00pm on Mondays to Friday inclusive, and no work must be carried out on Weekends or public holidays.

- b) No construction vehicle movements are to occur in Livingstone Avenue, Everton Road and Avon Road during school drop-off (8.00AM to 9.00AM) and pick up (3.00PM to 4.00PM) times on school days. Traffic Controller duties are only to occur outside of the AM/PM school zone periods.
- c) All work, including demolition, excavation and building work must comply with the Code of Practice for Construction Hours/Noise 1992 and Australian Standard 2436-2010 Guide to Noise Control on Construction, Maintenance and Demolition Sites.
- d) Notwithstanding the above, the use of a crane for special operations, including the delivery of materials, hoisting of plant and equipment and erection, and dismantling of on-site tower cranes which warrant the on-street use of mobile cranes outside of above hours can occur, subject to a permit being issued by Council under Section 68 of the Local Government Act 1993 and/or Section 138 of the Roads Act 1993.

## 4.3. Daily Workforce

The number of construction workers at the site is anticipated to vary throughout the various construction activities. During the busiest activity, the following maximum expected personnel on site at any one time are as follows: 100 Personnel

#### 4.4. Construction Work Areas

All demolition, excavation and construction activities will be carried out from within the site boundary.

#### 4.5.Construction Work Zone

No on-street construction work zones are proposed on this project.

#### 4.6. Construction Site Access.

Vehicular access to the site will be from the existing driveway crossover off Gate 3, 60 Avon Road, Pymble.

All vehicles are to enter and exit the construction site in a forward direction unless under the direction of an Authorised Traffic Controller.

No queueing or marshalling will be permitted. Construction vehicles are to radio or call on approach to ensure adequate access to the site is available. Truck drivers will be advised of the designated truck routes to/from the site and be required to adhere to the nominated routes.

#### 4.7. Site Parking

On-site car parking will be provided during all construction stages. The parking zone is noted on the site plans located in Appendix C.

#### 4.8. Timing of Deliveries

Deliveries to only be carried out between the approved hours of 7.00am and 6.00pm on Mondays to Friday as per SSDA conditions. No deliveries will be carried out on Weekends or public holidays.

#### 4.9. Vehicle & Truck Staging Area

Staging area as shown in Appendix C to be utilised for staging of vehicles/ trucks in co-ordination with Traffic Controllers staged at the critical site access points. A maximum of 3 vehicles, depending on size, to be queued in staging area at any given time. The Gate 3 Traffic Controller will assist in bringing deliveries entering at Gate 3 through to the staging area/boom gate entrance to the service road.

# 4.10. Materials and Handling Area

All materials and equipment are to be stored wholly within the work site. 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.

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 CTMP.

## 4.11. Loading and Unloading of Equipment and Materials

All loading and unloading of equipment, materials, and machinery will be carried out from within the site boundary.

## 4.12. Site Safety and Security

Site fencing will be installed at the site boundary to secure the site from unauthorised access. The road reserve and footpath are to be kept clear at all times. No storage of materials or equipment will be permitted on the footpath. No storage of materials or equipment will be permitted on the road reserve without prior consent from Ku-ring-gai Council.

#### 4.13. Site Accommodations

All site accommodations will be located wholly within the site compound on not on public land.

# 5. Construction Traffic Assessment and Impact

## 5.1. Construction Vehicle Traffic Generation

A schedule of maximum truck movements on any given day and during peak commuter periods for all stages of works as follows:

|              |            | Traffic Generation                          |              |          |
|--------------|------------|---|--------------|----------|
|              | Maximum    |   | Largest      |          |
|              | trucks per |   | vehicle type | Duration |
| Stage        | day        | Types of vehicles and trucks                | and length   | in weeks |
|              |            |   |              |          |
| Demolition   | 20         | Medium Rigid Vehicles, Heavy Rigid Vehicles | HRV 12.5m    | 2        |
|              |            |   |              |          |
| Excavation   | 20         | Medium Rigid Vehicles, Heavy Rigid Vehicles | HRV 12.5m    | 5        |
|              |            |   |              |          |
| Construction | 18         | Medium Rigid Vehicles, Heavy Rigid Vehicles | HRV 12.5m    | 50       |
| Fit out and  |            |   |              |          |
| Landscaping  | 14         | Medium Rigid Vehicles, Heavy Rigid Vehicles | HRV 12.5m    | 23       |

**TABLE 3. SITE TRAFFIC GENERATION** 

#### 5.2.Construction Vehicle Routes

To minimise the impact of construction traffic on local streets, dedicated construction routes have been developed to provide the shortest distances to/from the arterial road network.

Truck drivers will be advised of the designated truck routes to/from the site. All construction trucks will be restricted to the truck routes as shown in Appendix B.

It is noted that no oversized or over-massed vehicles will be operating on this development.

# 5.3. Pedestrian and Cyclist Access

Pedestrian access is to be maintained via existing pedestrian facilities surrounding the work site. Fencing is to be installed around the site perimeter to ensure pedestrian safety when walking adjacent the work site.

Authorised Traffic controllers will be present at the site access and internal works zone to manage pedestrian and vehicle interactions.

## 5.4. Public Transport

Construction activities are not expected to result in any detrimental impact on existing public transport services. School Transport services will remain active as per existing conditions. All construction staff will be encouraged to use public transport whenever possible to travel to and from the site.

## 5.5.Emergency Services

The proposed construction activities are not expected to create any impacts to emergency vehicle access. As such, no special provisions for emergency service vehicles will be required as part of the proposed construction works.

# 5.6. Transport Management for Service, Delivery, and Garbage Vehicles

No impact on existing services is expected during the works. Stakeholder consultation will occur throughout the project should this change.

## 5.7. Neighbouring Properties

Access to neighbouring properties will be always maintained.

# 6. Vehicle Movement Plan

A vehicle movement plan has been provided in Appendix B.

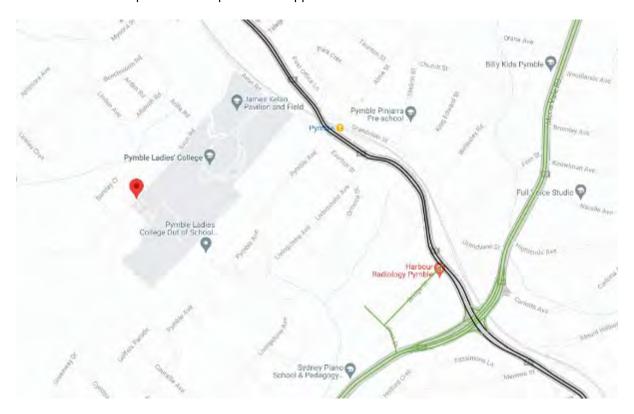


FIGURE 4. TENSW OVERSIZE OVER-MASS LOAD CARRYING VEHICLES NETWORK MAP

#### 6.1.Truck Routes

Protocols will be in place to ensure:

- Site induction to include procedures for accessing the site
- Drivers adhere to the nominated truck routes, as shown in Appendix B
- Drivers are aware that pedestrians are in the vicinity of the site, and
- Drivers are aware of the sign posted speed limit especially during school hours.

#### 6.2. Driver Code of Conduct

Objectives of the Drivers Code of conduct

- To minimise the impact of construction traffic on the local and regional road network;
- To minimise conflict with other road users;
- To minimise road traffic noise; and
- To ensure truck drivers use specified heavy vehicles routes between the Site and the sub regional road network.

#### **Code of Conduct**

#### All vehicle operators accessing the site must:

- Take reasonable care for his or her own personal health and safety;
- Not adversely, by way of actions or otherwise, impact on the health and safety of other persons;
- Notify their employer if they are not fit for duty prior to commencing their shift;
- Obey all applicable road rules and laws at all times;
- In the event an emergency vehicle behind your vehicle, pull over and allow the emergency vehicle to pass immediately;
- Obey the applicable driving hours in accordance with legislation and take all reasonable steps to manage their fatigue and not drive with high levels of drowsiness;
- Obey all on-site signposted speed limits and comply with directions of traffic control supervisors in relation to movements in and around temporary or fixed work areas;
- Ensure all loads are safely contained / restrained, as necessary;
- Drive over devices located at the site's access to vibrate off and wash off any loose material attached to heavy vehicles;
- Operate their vehicles in a safe and professional manner, with consideration for all other road users;
- Hold a current Australian State or Territory issued driver's licence;
- Notify their employer or operator immediately should the status or conditions of their driver's license change in any way;
- Comply with other applicable workplace policies, including a zero tolerance of driving while under the influence of alcohol and/or illicit drugs;
- Not use mobile phones when driving a vehicle or operating equipment. If the use of a mobile device is required, the driver shall pull over in a safe and legal location prior to the use of any mobile device;
- Advise management of any situations of which you know, or think, may present a threat to workplace health and safety;
- Drive according to prevailing conditions (such as during inclement weather) and reduce speed, if necessary; and
- Have necessary identification documentation at hand and ready to present to security staff on entry and departure from the Site, as necessary, to avoid unnecessary delays to other vehicles.

#### **Crash or incident Procedure**

- Stop your vehicle as close to it as possible to the scene, making sure you are not hindering traffic.
   Ensure your own safety first, then help any injured people and seek assistance immediately if required.
- Ensure the following information is noted:
  - Details of the other vehicles and registration numbers;
  - Names and addresses of the other vehicle drivers;
  - Names and addresses of witnesses; and
  - Insurers details.
- Give the following information to the involved parties:
  - Name;
  - Address; and
  - Company details
- If the damaged vehicle is not occupied, provide a note with your contact details for the owner to contact
  - the company.
- Ensure that the police are contacted should the following circumstances occur:
  - If there is a disagreement over the cause of the crash;
  - If there are injuries; and / or
  - If you damage property other than your own.
- As soon as reasonably practical, report all incident details to your manager.

# 7. Approval from Authorities

# 7.1.Local Council Permit Approvals

Should the applicant require alteration of the existing kerbside parking restrictions, or the provision of a work zones, the appropriate application must be made to Ku-ring-gai Council and the fee paid.

The following structures and works associated with a development require a separate approval:

- **Work Zones**
- **Road Closures**
- Hoardings
- Scaffolding
- Shoring or excavation
- Standing of cranes and concrete pumps
- Storage of skip bins or equipment on council property

Permit approvals must be obtained from Ku-ring-gai Council and need to be lodged and approved prior to works proceeding.

Work/Site specific Traffic Guidance Schemes are to be submitted with each application. Application forms for road occupancy and road opening permits as well as works zone are available on Council website.

The relevant forms can be obtained from Ku-ring-gai Council.

# 7.2.Transport for NSW

TfNSW Road Occupancy Approvals will be required for any works on a State Road or within 100m of traffic signals.

It is noted that TfNSW approval will not be required for works in this location.

Approval from National Heavy Vehicle Regulator (NHVR) is required for vehicles prohibited on the public roads without consent from the regulator (over-sized and over mass vehicles).

8. Communications Strategy

# 8.1. Worksite Communications

There will be two-way communications throughout the worksite to assist with traffic management of vehicles travelling into, through and/or around the worksite.

#### 8.2. 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 road network. The builder's direct contact number will be provided to businesses adjoining or impacted by the construction. The applicant is responsible for ensuring the builder's direct contact number is current during any stage of construction.

# 8.3. Emergency Services Notifications

Emergency Services will be informed in a timely manner of relevant activities proposed within this document that affect the use of the roadway. Approval from the local area command will be required for all temporary full road closures including changes to road network configurations.

# 8.4. Site Contact Details

| Name            | Position   | Contact #    |
|-----------------|--|--------------|
| Peter Pawlyszyn | Site Manager – Stephen Edwards<br>Constructions    | 0403 676 038 |
| Andrew Kyrillos | Project Manager – Stephen<br>Edwards Constructions | 0415 257 844 |
|                 |  |              |
|                 |  |              |

**TABLE 4. SITE CONTACT LIST** 

# 9. Construction Traffic Management Measures

# **Traffic Management Measures**

Site-specific Traffic Guidance Schemes (TGS) have been prepared and are presented in Appendix A.

Advisory road signages are to be installed along surrounding streets to warn drivers approaching the site of construction vehicles entering and exiting the site and works areas. TfNSW accredited traffic controllers will be used on site as required. Site-specific Traffic Guidance Schemes (TGS) will be developed for each work activity using traffic controllers.

All advisory signs are to be installed in accordance with AS 1742.3-2019 Manual of Uniform Traffic Control Devices – Traffic Control Devices for Works on Roads and the TfNSW Traffic Control at Worksites Manual V6.1. Signs are to be installed and maintained throughout the construction period where it applies. Monitor and Review

## 9.1. Monitoring Program

This CTMP shall be subject to ongoing review and will be updated accordingly. Regular reviews will be undertaken by the on-site project manager. Review of the CTMP shall occur monthly. All and any reviews undertaken should be documented, however key considerations regarding the review of the CTMP shall be:

- To identify any shortfalls and develop an updated action plan to address issues that may arise during construction (Parking and access issues)
- To ensure TGS's are updated (if necessary) by "Prepare a Work Zone Traffic Management Plan" card holders to ensure they remain consistent with the set-up on-site.
- Regular checks to ensure all loads are entering and leaving site covered as outlined within this CTMP.
- The roadway (including footpath) must be kept in a serviceable condition for the duration of construction.

# 9.2. Work Site Inspections, Recording and Reporting

Recording and reporting of the monitoring programs shall be done in accordance with Section E.3, E.4 and E.5 of the TCAWs Manual. As such, the structure, schedule, and frequency of these activities have been considered and identified.

To inspect, review and audit the temporary traffic management (TTM) arrangements implemented on site, the following actions are to be undertaken by suitably qualified personnel in accordance with TCAWS 6.1 requirement during all phases of construction, being:

| Activity           |      |     | Frequency or Details |
|--------------------|------|-----|----------------------|
| Shift Inspections  | □Yes | □No |                      |
| Weekly Inspections | □Yes | □No |                      |
| TMP Review         | □Yes | □No |                      |

| er | □No |
|----|-----|
|    |     |

Given that the length of construction and that no regular works have been proposed outside of the site, monthly TTM inspections is considered to be sufficient.

# 9.3. Contingency Plan

The table below outlines an indicative plan to be undertaken by the builder in the event that the monitoring program identifies the management plan is not effective in managing the construction impacts.

| Risk                   |          | Condition Green  | Condition Amber   | Condition Red  |
|------------------------|----------|--|---|--|
| Construction Movements | Trigger  | Construction traffic volume is in accordance with permissible and programmed volume and time constraints | Construction traffic volumes exceed programmed volume but is within permissible volume constraints  | Construction traffic volumes exceed permissible volume and time constraints  |
|                        | Response | No response required   | Review and investigate construction activities, and where appropriate, implement additional remediation measures such as:  Review CVPPM and update where necessary  Provide additional training | As with Condition Amber, plus;  If it is concluded that construction activities where directly responsible, an incident report is to be completed  Stop all transport into and out of the site |
|                        | Trigger  | No construction<br>vehicle<br>movement during<br>peak periods  | Construction vehicle movement close to peak periods   | Construction vehicle movement during peak periods  |
|                        | Response | No response required  Continue monitoring  | Review and investigate  Construction activities, and where appropriate, implement additional  | As with Condition  Amber, plus;  If it is concluded that construction  |

|         |          | program                | remediation measures                   | activities were                                     |
|---------|----------|------------------------|--|---|
|         |          |                        | such as:                               | directly responsible                                |
|         |          |                        | Provide additional                     | for the exceedance,                                 |
|         |          |                        | training (including                    | submit an incident                                  |
|         |          |                        | toolbox talks and                      |   |
|         |          |                        |  | report.   |
|         |          |                        | further notification of Driver Code of | • Stop all transportation into and out of the site. |
|         |          |                        | Conduct)                               | Review CTPMP and<br>update where<br>necessary.      |
|         |          |                        |  | ,   |
| Queuing | Trigger  | No queuing identified  | Queuing identified within site         | Queuing identified on the public road               |
|         |          |                        |  |   |
|         | Response | No response required   | Review the delivery                    | As with Condition                                   |
|         |          |                        | schedule prepared by                   | Amber, plus   |
|         |          | Continue<br>monitoring | the builder. If drivers                | Review and  |
|         |          |                        | are not following the                  | investigate   |
|         |          | program                | correct schedule, then they should be  | Construction activities.                            |
|         |          |                        | provided with                          | If it is concluded that                             |
|         |          |                        | additional training and                | construction  |
|         |          |                        | copy of the Driver Code of Conduct     | activities were                                     |
|         |          |                        | or conduct                             | directly responsible                                |
|         |          |                        |  | for the exceedance,                                 |
|         |          |                        |  | submit an incident                                  |
|         |          |                        |  | report  |
|         |          |                        |  | Temporary halting of                                |
|         |          |                        |  | activities and                                      |
|         |          |                        |  | resuming when                                       |
|         |          |                        |  | conditions have                                     |
|         |          |                        |  | improved.   |

|                               |          |   |   | • Stop all   |
|-------------------------------|----------|---|---|--|
|                               |          |   |   | transportation into  |
|                               |          |   |   | and out of the site.   |
|                               |          |   |   | <ul> <li>Review CTPMP and<br/>update were necessary,<br/>provide additional<br/>training.</li> </ul>   |
| Noise                         | Trigger  | Noise levels do<br>not<br>exceed imposed<br>noise constraints | Noise levels in minor excess of imposed noise constraints                 | Noise levels greatly in excess of imposed noise constraints  |
|                               | Response | No response required  | Undertake all feasible and reasonable                                     | As with Condition<br>Amber;  |
|                               |          |   | mitigation and management measures to minimise noise impacts.             | If noise levels cannot be kept below applicable limits, then a different construction method or equipment must be utilised.  |
| Traffic<br>Guidance<br>Scheme | Trigger  | No observable issues  | Minor inconsistencies with TGS to onsite operations                       | Near miss or incident occurring regardless of / as a result of the TGS being implemented   |
|                               | Response | No response required  | Traffic Controller to  amend TGS on site and to keep a log of all changes | Stop work until an investigation has been undertaken into the incident. There are to be changes made to the TGS to ensure that the safety of all workers and the public. |
| Dust                          | Trigger  | No observable dust  | Minor quantities of<br>dust in the air and<br>tracking on to the road     | Large quantities of dust in the air and tracking on to the road  |
|                               | Response | No response required  | Review and investigate  | As with Condition  |

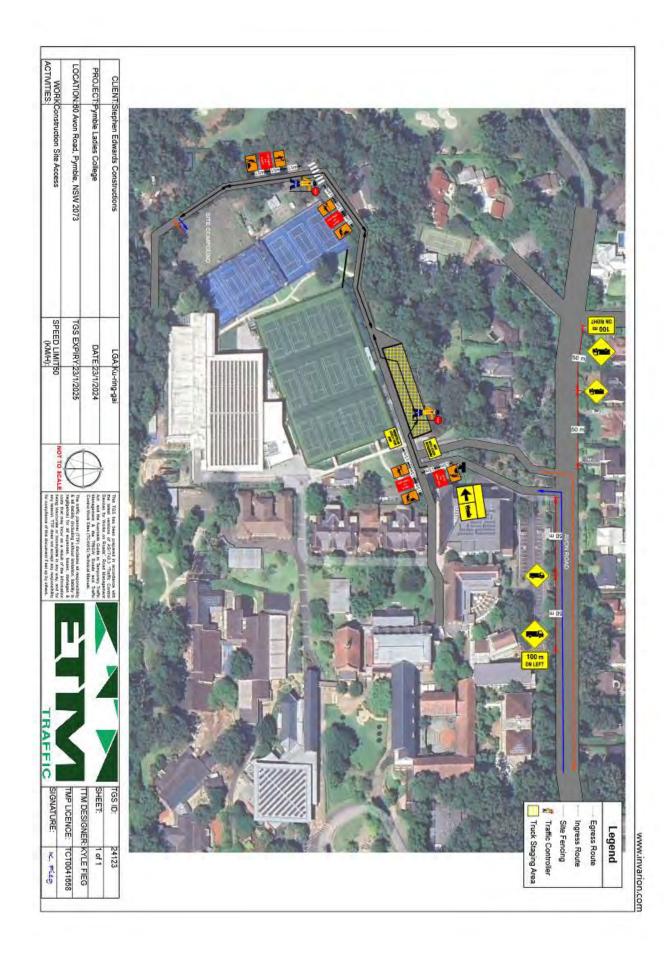
**Prepared for Stephen Edwards Constructions** 

construction activities Amber; and respective control • If it is concluded that measures, where construction appropriate. activities were Implement additional remedial measures, directly responsible such as: for the exceedance, • Deployment of submit an incident additional water report sprays • Implement relevant • Relocation or responses and undertake immediate modification of dust review to avoid such generating occurrence in future. sources • Check condition of vibrating grids to ensure they are functioning correctly. • Temporary halting of activities and resuming when conditions have improved

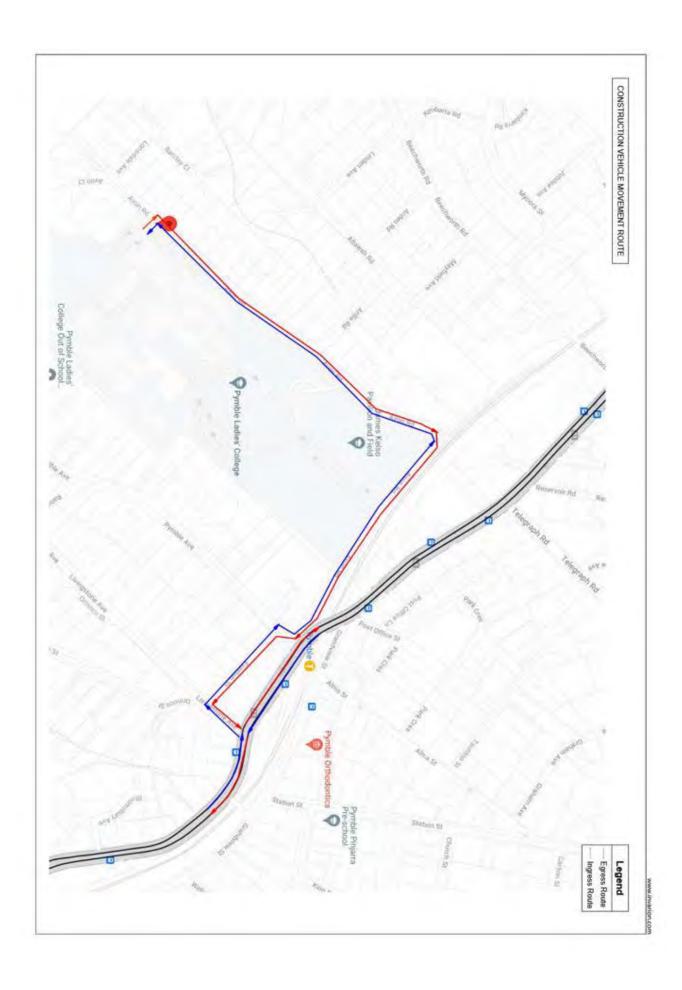
**TABLE 5. MONITORING CONTINGENCY PLAN** 

# 10. Appendix A – Traffic Guidance Schemes

Prepared for Stephen Edwards Constructions

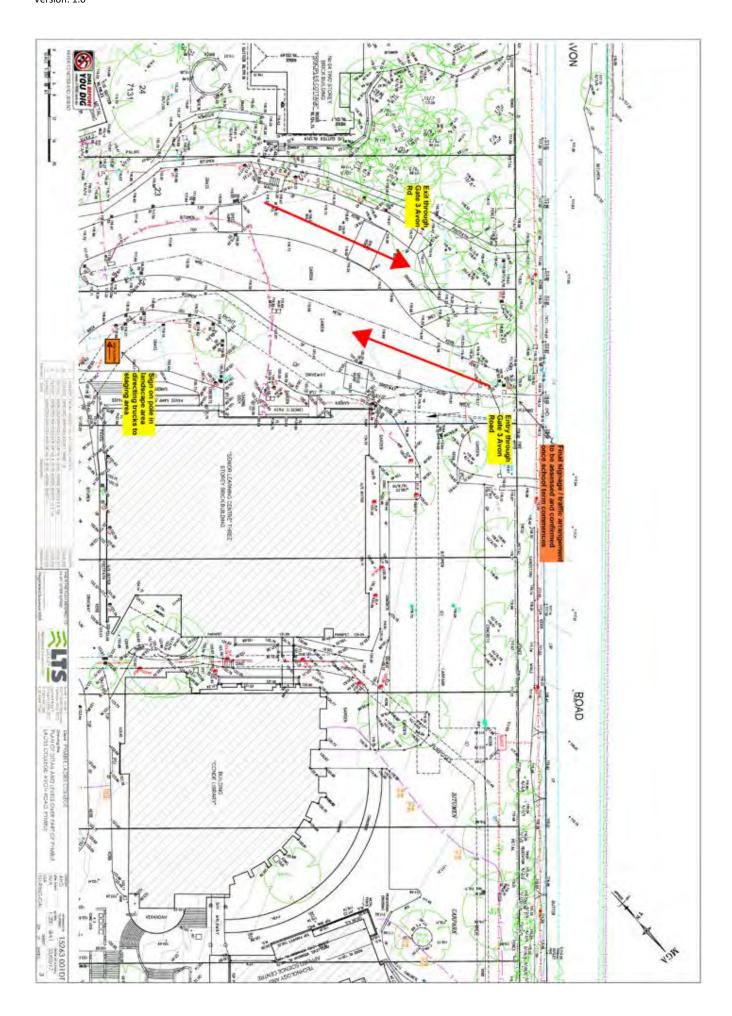


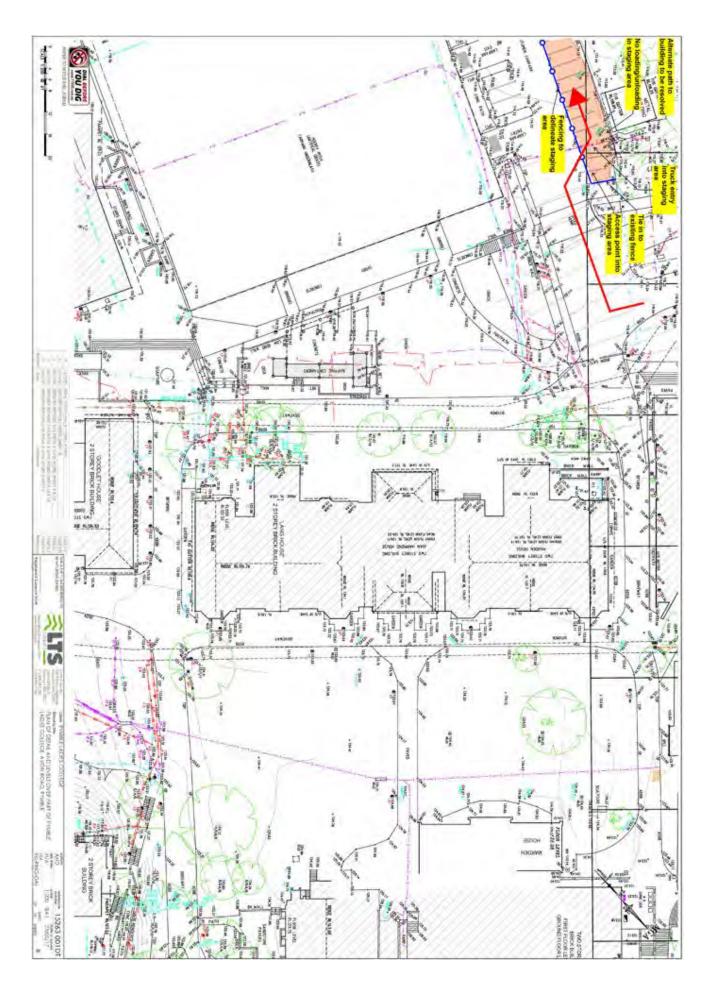
# 11. Appendix B – Vehicle Movement Routes

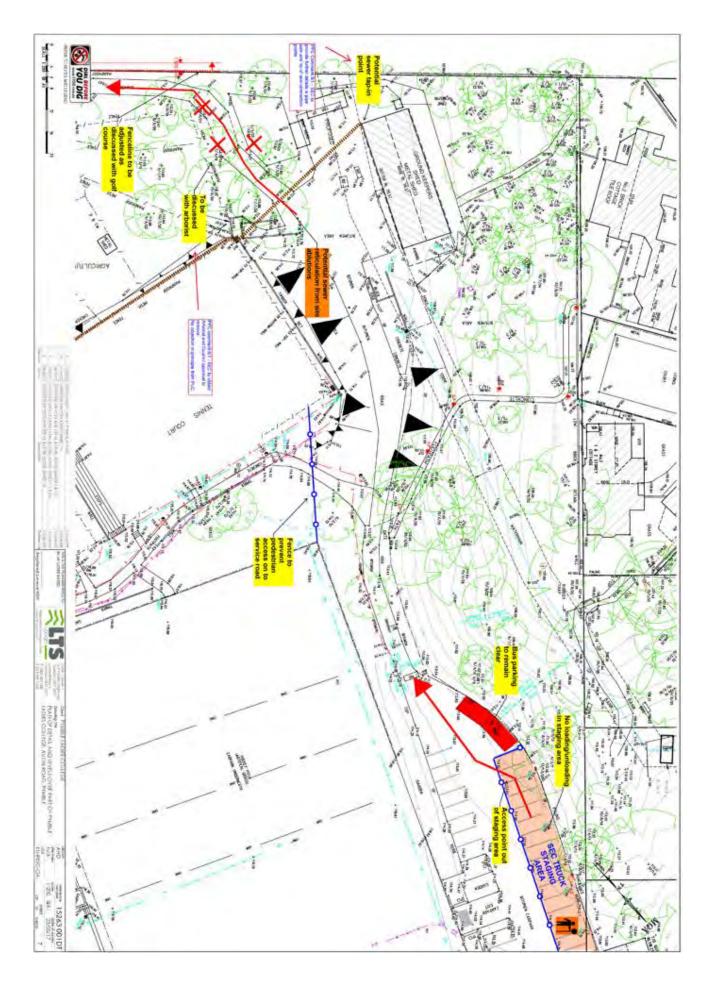


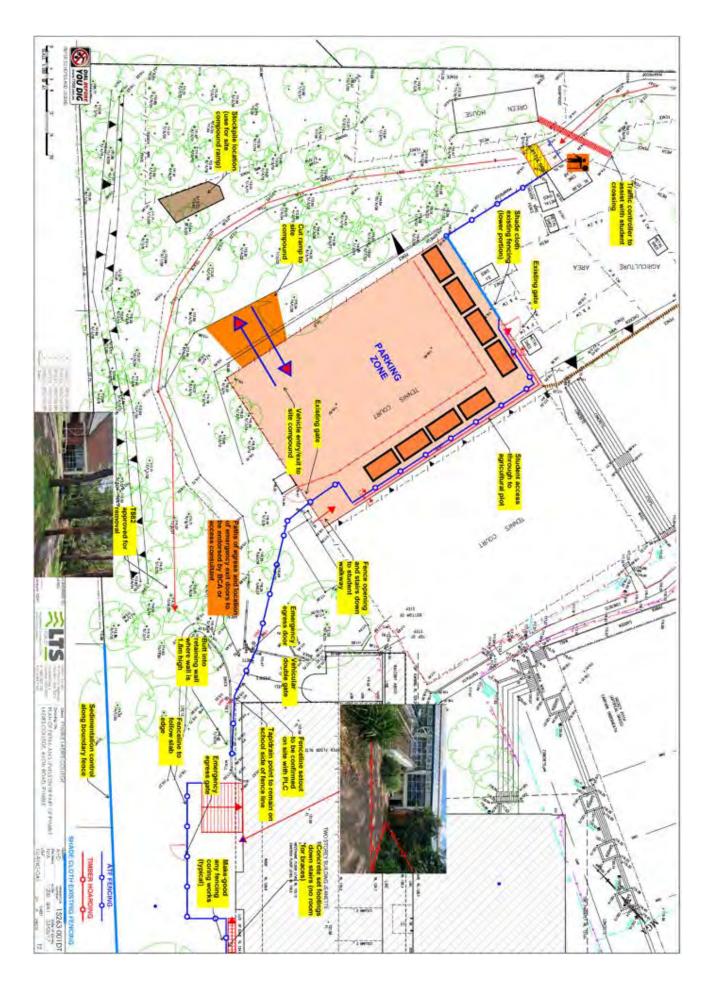
# 12. Appendix C - Project Plans and Diagrams

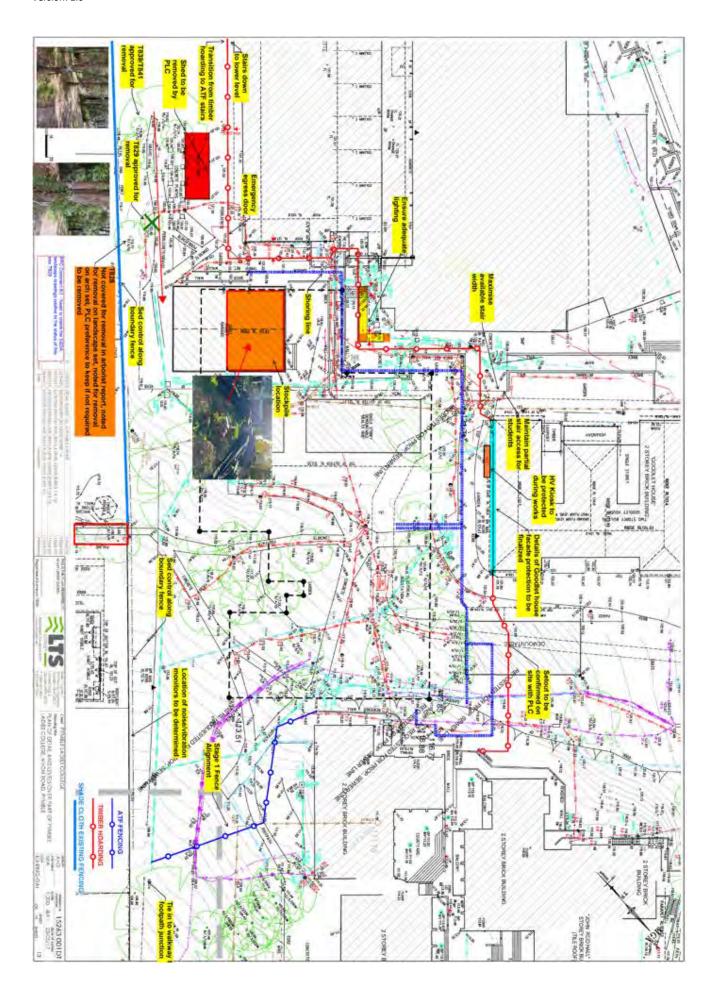








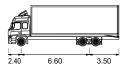








#### **Vehicle dimensions**



#### **Heavy Rigid Vehicle**

Length: 12.50 m Max width: 2.50 m Lock to lock time: 6.0 s Max steering angle: 35.17°
Turn radius (curb to curb): 12.50 m
Turn radius (wall to wall): 13.92 m

#### Notes:

VEHICLE PATHS CALCULAATED USING INVARION RAPIDPATH

DIAGRAM ILLUSTRATES TURNING MANOEUVRES REQUIRED FOR TRUCKS TO ENTER AND EXIT THE SITE

# Scale: 1:235 @ A3

WHEEL PATH

Rev Notes: A - Initial Submission

Legend:

SWEPT PATH DIAGRAM FORWARD DIRECTION WORK SITE ACCESS

Project: Pymble Ladies College

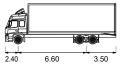
Prepared by: Kyle Fieg

Issue: Date: VEHICLE BODY 4/3/2024 SW01 A VEHICLE PATH

The Traffic Planner kyle@thetrafficplanner.com 30CM CLEARANCE







#### **Heavy Rigid Vehicle**

Length: 12.50 m Max width: 2.50 m Lock to lock time: 6.0 s Max steering angle: 35.17°
Turn radius (curb to curb): 12.50 m
Turn radius (wall to wall): 13.92 m

#### Notes:

VEHICLE PATHS CALCULAATED USING INVARION RAPIDPATH

DIAGRAM ILLUSTRATES TURNING MANOEUVRES REQUIRED FOR TRUCKS TO MANOUVER INTERSECTIONS FOR INGRESS AND EGRESS TO AND FROM SITE

#### Scale: 1:470 @ A3

Rev Notes: A - Initial Submission

■ WHEEL PATH

Legend:

## SWEPT PATH DIAGRAM FORWARD DIRECTION WORK SITE ACCESS

Project: Pymble Ladies College

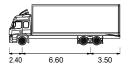
Prepared by: Kyle Fieg

Issue: Date: VEHICLE BODY 4/3/2024 SW02 A VEHICLE PATH

The Traffic Planner kyle@thetrafficplanner.com 30CM CLEARANCE







**Heavy Rigid Vehicle** 

Length: 12.50 m Max width: 2.50 m Lock to lock time: 6.0 s Max steering angle: 35.17°
Turn radius (curb to curb): 12.50 m
Turn radius (wall to wall): 13.92 m Notes:

VEHICLE PATHS CALCULAATED USING INVARION RAPIDPATH

DIAGRAM ILLUSTRATES TURNING MANOEUVRES REQUIRED FOR TRUCKS TO MANOUVER INTERSECTIONS FOR INGRESS AND EGRESS TO AND FROM SITE

Scale: 1:470 @ A3

Rev Notes: A - Initial Submission

SWEPT PATH DIAGRAM FORWARD DIRECTION WORK SITE ACCESS

Project: Pymble Ladies College

Prepared by: Kyle Fieg

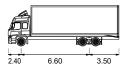
Legend: Issue: Date: VEHICLE BODY 4/3/2024 SW03 A VEHICLE PATH The Traffic Planner ■ WHEEL PATH

kyle@thetrafficplanner.com 30CM CLEARANCE





#### Vehicle dimensions



#### **Heavy Rigid Vehicle**

Length: 12.50 m Max width: 2.50 m Lock to lock time: 6.0 s Max steering angle: 35.17°
Turn radius (curb to curb): 12.50 m
Turn radius (wall to wall): 13.92 m

#### Notes:

VEHICLE PATHS CALCULAATED USING INVARION RAPIDPATH

DIAGRAM ILLUSTRATES TURNING MANOEUVRES REQUIRED FOR TRUCKS TO MANOUVER INTERSECTIONS FOR INGRESS AND EGRESS TO AND FROM SITE

#### Scale: 1:470 @ A3

Rev Notes: A - Initial Submission

## Project: Pymble Ladies

SWEPT PATH DIAGRAM FORWARD DIRECTION WORK SITE ACCESS

College Prepared by: Kyle Fieg

Legend: Issue: Date: VEHICLE BODY 4/3/2024 SW04 A

VEHICLE PATH The Traffic Planner

■ WHEEL PATH kyle@thetrafficplanner.com 30CM CLEARANCE

## **Construction Traffic Management Plan**

Pymble Ladies' College - Grey House Precinct

CTMP Version: 1.0

Development Application: SSD 17424905

LGA: Ku-ring-gai Council

Prepared for: Stephen Edwards Constructions

| Document Release |   |
|------------------|---|
| Document Title:  | CTMP - Pymble Ladies' College - Grey House Precinct.pdf |

| Table of Modifications |          |                          |           |           |  |
|------------------------|----------|--------------------------|-----------|-----------|--|
| Revision               | Date     | Modifications to content | Author    | Signature |  |
| 1.0                    | 6/2/2024 | Initial Submission       | Kyle Fieg | K. Fieg   |  |
|                        |          |                          |           |           |  |
|                        |          |                          |           |           |  |
|                        |          |                          |           |           |  |
|                        |          |                          |           |           |  |
|                        |          |                          |           |           |  |

| PWZTMP Qualified Person |                         |  |  |
|-------------------------|-------------------------|--|--|
| Name:                   | Kyle Fieg               |  |  |
| Role:                   | Traffic Planner         |  |  |
| Organisation:           | The Traffic Planner     |  |  |
| Qualification Number:   | SafeWork NSW TCT0041658 |  |  |
| Signature:              | K. Fieg                 |  |  |
| Date:                   | 6/2/2024                |  |  |

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## 1. Introduction

Version: 1.0

ETM Traffic has been commissioned by Stephen Edwards Constructions to prepare a Construction Traffic Management Plan to be implemented during the construction works located at Pymble Ladies' College - Grey House Precinct.

## 1.1. Purpose of this Plan

This CTMP provides a structured approach to manage traffic and access during construction to provide a safe road environment, minimise impact on the surrounding road network and maintain access for all road users and local community.

The objectives with respect to the Construction Traffic Management Plan ("CTMP") are to:

| Information for CTMP   |         |
|--|---------|
| Requirement  | Section |
| Surrounding traffic environment showing State, Regional and Local Roads, road network configuration and use, public transport facilities and existing parking restrictions   | 2       |
| Provide details of the impact of the works on residents, businesses, pedestrians, cyclists, local traffic and emergency services and management of staff parking.  | 2       |
| Details of the project including site location, scope of works, general breakdown of activities and hours of operation   | 3       |
| Works Zones will need to be considered if trucks cannot enter or exit the site in a forward direction at all times   | 3.6     |
| All vehicles associated with the development shall be parked wholly within the site. All site staff related with the works are to park in a designated off-street area or be encouraged to use public transport and not park on the public road. | 3.8     |
| Details and location of site accommodation and toilets   | 3.12    |
| The largest vehicle that will be used during construction in accordance with the Councils Standard Requirements  | 4.1     |
| Frequency of truck movements   | 4.1     |
| Truck routes to and from the site utilising State and Regional Roads – map of the routes must be provided  | 5       |
| Demonstrate using swept path diagrams how trucks enter, circulate and exit the site or Works Zone in a forward direction   | 5.2     |
| Demonstrate using swept path diagrams how trucks will navigate to and from the site along the nominated truck route in narrow and tight locations  | 5.2     |
| The approvals of Works Zones and Road Closures (to install cranes) is a separate process that requires Traffic Committee endorsement   | 6.1     |

| Provide a plan showing where vehicles stand to load and unload, where plant will stand, location of storage areas for equipment, materials and waste, | Appendix C          |
|---|---------------------|
| location of Works Zones (if required) and location of cranes (if required)  | Site Plan           |
| Existing driveways should be shown and proposed temporary driveways should be dimensioned   | Appendix C          |
|   | Site Plan           |
| Appendices – Traffic Guidance Scheme/Pedestrian Management Plan   | А                   |
| Appendices – Vehicle Movement Plan/Swept Path Diagrams  | В                   |
| Documents Required  |                     |
| Site Plans  | Yes                 |
| DA Conditions   | Yes                 |
|   | NSW Independent     |
|   | Planning Commission |
|   | SSD 17424905        |
| Transport Impact Assessment   | Yes                 |
|   | Stantec Grey House  |
|   | Precinct TIA        |

## 1.2. Abbreviations and Terminology

Version: 1.0

The following terms, abbreviations and definition are used in this plan:

| Terms  | Explanation                               |  |  |
|--------|---|--|--|
| СТМР   | Construction Traffic Management Plan      |  |  |
| ITCP   | Implement Traffic Guidance Schemes        |  |  |
| PWZTMP | Prepare Work Zone Traffic Management Plan |  |  |
| ROL    | Road Occupancy Licence                    |  |  |
| TfNSW  | Transport for New South Wales             |  |  |
| TGS    | Traffic Guidance Scheme                   |  |  |
| TMP    | Traffic Management Plan                   |  |  |
| TTM    | Temporary Traffic Management              |  |  |
| VMP    | Vehicle Movement Plan                     |  |  |

## 1.3. Legislative Requirements

This Construction Traffic Management Plan complies with Australian Standard 1742.3-2019 Manual of uniform traffic control devices, Part 3: Traffic control for works on roads. All TGS's have been drawn to the TFNSW Traffic Control at Worksites Manual V6.1 standards.

All personnel dealing with traffic control, being either contractors or sub-contractors are to have the following current accreditation, for the management of each item listed below:

| Qualification                 | Requirements  | Restrictions   |
|-------------------------------|---|--|
| Traffic Controller            | Persons holding this qualification are permitted or required to:  | Persons holding this qualification must not:  • Select or adjust a site suitable TGS;  • Implement a TGS;  • Modify a TGS; or  • Design a TGS. |
|                               | environment, e.g., traffic volumes, weather conditions, road conditions, WHS and operational requirements; and  Carry out risk assessments for personal safety. |  |
| Implement Traffic Guidance    | Persons holding this qualification are  | Persons holding this   |
| <u>Schemes</u>                | permitted to:   | qualification must not:  |
| This qualification allows for | • Set up, monitor, and close down traffic   | Control traffic with a   |
| qualified personnel to set up | control devices according to  | STOP/SLOW bat or other   |
| and work with TGSs at a       | nominated TGS;  | traffic control device;  |

# work site and complete safety inspections.

- Identify safety implications of traffic control at roadworks;
- Check, clean and store equipment on completion of work and close down a TGS;
- Select an approved TGS to suit site conditions, traffic volumes and work activities;
- Make adjustments to an existing TGS within the tolerances specified in <u>Section 7.10.3 Tolerances on positioning of signs and devices in the TCWSM V6.1;</u>
- Conduct an onsite check of a TGS to identify risks and hazards;
- Ensure spacing between signs and traffic control devices is in line with a TGS;
- Maintain traffic incident reports; and
- Monitor traffic controllers.

- Make adjustments to an existing TGS which exceeds the tolerances specified in <u>Section 7.10.3</u>
   <u>Tolerances on positioning of signs and devices in the TCWSM V6.1;</u> or
- Design a TGS.

## Prepare Work Zone Traffic Management Plan

This qualification allows for qualified personnel to design and modify Traffic Management Plans (TMPs), Vehicle Movement Plans (VMPs) and traffic guidance schemes (TGSs).

Persons holding this qualification are permitted to:

- Prepare a Work Zone TMP;
- Collect all required information about a given roadwork project to enable the preparation of a TGS;
- Design a TGS, based on risk assessment, statutory and regulatory requirements, standards, road authority requirements and project brief;
- Select and modify a TGS based on risk assessment, statutory and regulatory requirements, standards, road authority requirements and project brief;
- Determine the recommended spacing between signs and traffic control devices in line with standards, measure width of trafficable surface and calculate edge clearances to barriers, cones, and clearance to work personnel;

Persons holding this qualification must not:

- Control traffic with a STOP/SLOW bat or other traffic control device; or
- Implement a TGS.

| • | Undertake safety inspections/checks    |  |
|---|--|--|
|   | on the effectiveness of TMPs and       |  |
|   | TGSs;                                  |  |
| • | Conduct an onsite check and            |  |
|   | inspection of the plan and to identify |  |
|   | any hazards or risks; and              |  |
| • | Seek approvals required for a TMP and  |  |
|   | TGS                                    |  |
|   |  |  |
|   |  |  |

**TABLE 1. LEGISLATIVE REQUIREMENTS** 

# 2. Existing Conditions

## 2.1. Site Location

Version: 1.0



FIGURE 1. SITE LOCATION

## 2.2. Surrounding Road Classifications

| Road Name   | Speed Limit                                    | Lanes                          | Road Type | Road Authority         |
|---|--|--------------------------------|-----------|------------------------|
| Avon Road   | 40km/h (school<br>zone speed limit)     50m/h  | 1 lane in each<br>direction    | Local     | Ku-ring-gal<br>Council |
| Pymble Avenue   | 40km/h (school<br>zone speed limit)     50km/h | 1 lane in each<br>direction    | Local     | Ku-ring-gai<br>Council |
| Everton Street  | 40km/h (school<br>zone speed limit)     50m/h  | 1 lane in each<br>direction    | Local     | Ku-ring-gai<br>Council |
| Livingston Avenue<br>(between Pacific Highway<br>& Everton Street)  | • 50km/h                                       | 2 lanes in each<br>direction   | Local     | Ku-ring-gai<br>Council |
| Beechworth Road<br>(between Pacific Highway<br>& Mayfield Avenue)   | • 50km/h                                       | 1 lane in each<br>direction    | Local     | Ku-ring-gal<br>Council |
| Pacific Highway (between<br>Livingston Avenue &<br>Beechworth Road) | • 60km/h                                       | 2-3 lanes in each<br>direction | State     | TINSW                  |

**TABLE 2. ROAD CLASSIFICATIONS** 

## 2.3. Pedestrian Infrastructure

Version: 1.0

All the streets surrounding the work site are provided with paved pedestrian footpaths. The peak pedestrian movements are expected to occur between 7:00am and 6:00pm with an increase in pedestrian traffic during school drop-off and pick-up.

## 2.4. Cyclists Infrastructure

No dedicated cyclist paths have been identified in this location. 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.

## 2.5. Public Transport

This project is not expected to have any significant impact on public transport timetables.

## 2.6. Events and Surrounding Developments

At the time of developing this CTMP, there are no existing events or developments identified in the immediate surrounding area that would affect the plans detailed in this CTMP.

# 3. Proposed Construction Activities

## 3.1. Project Overview

Site Location

Gate 3, 60 Avon Road, Pymble, NSW 2073

#### **Project Description:**

The Grey House Precinct development will deliver a world-class educational and co-curricular facility that fosters leading pedagogical practices, prioritizes student and staff health and wellbeing, embeds flexibility to accommodate future developments in learning and teaching methods, attains best practice sustainability, respects and enhances the existing built form and natural environs, and positively contributes to a campus public realm that is connected, legible and accessible.

The Grey House Precinct will provide a new home for years 5 and 6, Out of School Hours Care (OSHC), Early Learning Centre (ELC), Health Care and Dance Academy. The years 5 and 6 junior school component will provide high quality general and specialist learning, with a focus on STEM learning. The development will be stitched into the wider campus through convenient and direct connections to the Main Hall, Junior School, Centenary Precinct car park and to Grey House Walk.

#### Scope of work:

The Pymble Ladies' College - Grey House Precinct development includes the design, construction and delivery of a new multi-use building and precinct.

The key components of the Project are:

- Junior School facilities for Years 5 & 6
- Early Learning Centre facilities
- Dance Studios
- After School Care facilities
- Health and Wellbeing facilities
- Landscaping and Play Equipment

Approved Plans and Diagrams are in Appendix C – Project Plans and Diagram.

## 3.2. Hours of Work

The hours of construction and work on the development must be as follows:

- a) All work, including demolition, excavation and building work, and activities in the vicinity of the site generating noise associated with preparation for the commencement of work (loading and unloading of goods, transferring of tools etc) in connection with the proposed development must only be carried out between the hours of 7.00am and 6.00pm on Mondays to Friday inclusive, and no work must be carried out on Weekends or public holidays.
- b) All work, including demolition, excavation and building work must comply with the Code of Practice for Construction Hours/Noise 1992 and Australian Standard 2436-2010 Guide to Noise Control on Construction, Maintenance and Demolition Sites.
- c) Notwithstanding the above, the use of a crane for special operations, including the delivery of materials, hoisting of plant and equipment and erection, and dismantling of on-site tower cranes

which warrant the on-street use of mobile cranes outside of above hours can occur, subject to a permit being issued by Council under Section 68 of the Local Government Act 1993 and/or Section 138 of the Roads Act 1993.

## 3.3. Daily Workforce

The number of construction workers at the site is anticipated to vary throughout the various construction activities. During the busiest activity, the following maximum expected personnel on site at any one time are as follows: 100 Personnel

#### 3.4. Construction Work Areas

All demolition, excavation and construction activities will be carried out from within the site boundary.

#### 3.5. Construction Work Zone

No on-street construction work zones are proposed on this project.

### 3.6. Construction Site Access.

Vehicular access to the site will be from the existing driveway crossover off Gate 3, 60 Avon Road, Pymble.

All vehicles are to enter and exit the construction site in a forward direction unless under the direction of an Authorised Traffic Controller.

No queueing or marshalling will be permitted. Construction vehicles are to radio or call on approach to ensure adequate access to the site is available. Truck drivers will be advised of the designated truck routes to/from the site and be required to adhere to the nominated routes.

## 3.7. Site Parking

On-site car parking will be provided during all construction stages. The parking zone is noted on the site plans located in Appendix C.

## 3.8. Materials and Handling Area

All materials and equipment are to be stored wholly within the work site. 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.

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 CTMP.

## 3.9.Loading and Unloading of Equipment and Materials

All loading and unloading of equipment, materials, and machinery will be carried out from within the site boundary.

## 3.10. Site Safety and Security

Site fencing will be installed at the site boundary to secure the site from unauthorised access. The road reserve and footpath are to be kept clear at all times. No storage of materials or equipment will be permitted on the footpath. No storage of materials or equipment will be permitted on the road reserve without prior consent from Ku-ring-gai Council.

#### 3.11. Site Accommodations

All site accommodations will be located wholly within the site compound on not on public land.

## 4. Construction Traffic Assessment and Impact

## 4.1. Construction Vehicle Traffic Generation

A schedule of maximum truck movements on any given day and during peak commuter periods for all stages of works as follows:

| Traffic Generation |            |   |              |          |  |  |
|--------------------|------------|---|--------------|----------|--|--|
|                    | Maximum    |   | Largest      |          |  |  |
|                    | trucks per |   | vehicle type | Duration |  |  |
| Stage              | day        | Types of vehicles and trucks                | and length   | in weeks |  |  |
|                    |            |   |              |          |  |  |
| Demolition         | 20         | Medium Rigid Vehicles, Heavy Rigid Vehicles | HRV 12.5m    | 2        |  |  |
|                    |            |   |              |          |  |  |
| Excavation         | 20         | Medium Rigid Vehicles, Heavy Rigid Vehicles | HRV 12.5m    | 5        |  |  |
|                    |            |   |              |          |  |  |
| Construction       | 18         | Medium Rigid Vehicles, Heavy Rigid Vehicles | HRV 12.5m    | 50       |  |  |
| Fit out and        |            |   |              |          |  |  |
| Landscaping        | 14         | Medium Rigid Vehicles, Heavy Rigid Vehicles | HRV 12.5m    | 23       |  |  |

**TABLE 3. SITE TRAFFIC GENERATION** 

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#### 4.2. Construction Vehicle Routes

To minimise the impact of construction traffic on local streets, dedicated construction routes have been developed to provide the shortest distances to/from the arterial road network.

Truck drivers will be advised of the designated truck routes to/from the site. All construction trucks will be restricted to the truck routes as shown in Appendix B.

It is noted that no oversized or over-massed vehicles will be operating on this development.

### 4.3. Pedestrian and Cyclist Access

Pedestrian access is to be maintained via existing pedestrian facilities surrounding the work site. Fencing is to be installed around the site perimeter to ensure pedestrian safety when walking adjacent the work site.

Authorised Traffic controllers will be present at the site access and internal works zone to manage pedestrian and vehicle interactions.

### 4.4. Public Transport

Construction activities are not expected to result in any detrimental impact on existing public transport services. School Transport services will remain active as per existing conditions. All construction staff will be encouraged to use public transport whenever possible to travel to and from the site.

### 4.5. Emergency Services

The proposed construction activities are not expected to create any impacts to emergency vehicle access. As such, no special provisions for emergency service vehicles will be required as part of the proposed construction works.

## 4.6. Transport Management for Service, Delivery, and Garbage Vehicles

No impact on existing services is expected during the works. Stakeholder consultation will occur throughout the project should this change.

## 4.7. Neighbouring Properties

Access to neighbouring properties will be always maintained.

# 5. Vehicle Movement Plan

A vehicle movement plan has been provided in Appendix B.



FIGURE 2. TENSW OVERSIZE OVER-MASS LOAD CARRYING VEHICLES NETWORK MAP

There is no access to the site permitted via Livingstone Avenue. Livingstone Avenue has a 3t limit for all vehicles.

## 5.1.Truck Routes

Protocols will be in place to ensure:

- Site induction to include procedures for accessing the site
- Drivers adhere to the nominated truck routes, as shown in Appendix B
- Drivers are aware that pedestrians are in the vicinity of the site, and
- Drivers are aware of the sign posted speed limit especially during school hours.

## 6. Approval from Authorities

## 6.1.Local Council Permit Approvals

Should the applicant require alteration of the existing kerbside parking restrictions, or the provision of a work zones, the appropriate application must be made to Ku-ring-gai Council and the fee paid.

The following structures and works associated with a development require a separate approval:

Work Zones

Version: 1.0

- Road Closures
- Hoardings
- Scaffolding
- Shoring or excavation
- Standing of cranes and concrete pumps
- Storage of skip bins or equipment on council property

Permit approvals must be obtained from Ku-ring-gai Council and need to be lodged and approved prior to works proceeding.

Work/Site specific Traffic Guidance Schemes are to be submitted with each application. Application forms for road occupancy and road opening permits as well as works zone are available on Council website.

The relevant forms can be obtained from Ku-ring-gai Council.

## 6.2. Transport for NSW

TfNSW Road Occupancy Approvals will be required for any works on a State Road or within 100m of traffic signals.

It is noted that TfNSW approval will not be required for works in this location.

Approval from National Heavy Vehicle Regulator (NHVR) is required for vehicles prohibited on the public roads without consent from the regulator (over-sized and over mass vehicles).

## 7. Communications Strategy

### 7.1. Worksite Communications

There will be two-way communications throughout the worksite to assist with traffic management of vehicles travelling into, through and/or around the worksite.

### 7.2. 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 road network. The builder's direct contact number will be provided to businesses adjoining or impacted by the construction. The applicant is responsible for ensuring the builder's direct contact number is current during any stage of construction.

## 7.3. Emergency Services Notifications

Emergency Services will be informed in a timely manner of relevant activities proposed within this document that affect the use of the roadway. Approval from the local area command will be required for all temporary full road closures including changes to road network configurations.

### 7.4. Site Contact Details

| Name            | Position   | Contact #    |
|-----------------|--|--------------|
| Peter Pawlyszyn | Site Manager – Stephen Edwards<br>Constructions    | 0403 676 038 |
| Andrew Kyrillos | Project Manager – Stephen<br>Edwards Constructions | 0415 257 844 |
|                 |  |              |
|                 |  |              |

**TABLE 4. SITE CONTACT LIST** 

## 8. Construction Traffic Management Measures

## **Traffic Management Measures**

Version: 1.0

Site-specific Traffic Guidance Schemes (TGS) have been prepared and are presented in Appendix A.

Advisory road signages are to be installed along surrounding streets to warn drivers approaching the site of construction vehicles entering and exiting the site and works areas. TfNSW accredited traffic controllers will be used on site as required. Site-specific Traffic Guidance Schemes (TGS) will be developed for each work activity using traffic controllers.

All advisory signs are to be installed in accordance with AS 1742.3-2019 Manual of Uniform Traffic Control Devices – Traffic Control Devices for Works on Roads and the TfNSW Traffic Control at Worksites Manual V6.1. Signs are to be installed and maintained throughout the construction period where it applies.

| WORKSITE TRAFFIC MANAGEMENT ASSESSMENT CHECKLIST |  |  |  |  |  |
|--|--|--|--|--|--|
| Pymble Ladies College                            |  |  |  |  |  |
| Private Roads                                    |  |  |  |  |  |
| XISTING SITE CONDIT                              | TIONS)   |  |  |  |  |
| 1.2m-3m  | TRAFFIC<br>SPEED KM/H:   | Shared Zone  |  |  |  |
|  |  |  |  |  |  |
| G  |  |  |  |  |  |
| PLANS REQUIRED: Yes                              |  |  |  |  |  |
| TEP 4 – HAZARD CON                               | ITROL MEASURES   | 5  |  |  |  |
| PRESENT AT WORK                                  | (SITE (YES/NO)   | HAZARD CONTROL MEASURE(S)  |  |  |  |
| Yes  |  | Advanced warning signs to be erected as per TGS  |  |  |  |
| No   |  |  |  |  |  |
| Yes  |  | Advanced warning - symbolic worker and traffic controller  |  |  |  |
|  | XISTING SITE CONDITOR  1.2m-3m  G  Yes  TEP 4 – HAZARD CON  PRESENT AT WORK  Yes  No  No  No | Pymble Lad  Private  XISTING SITE CONDITIONS)  1.2m-3m TRAFFIC SPEED KM/H:  G  Yes  TEP 4 – HAZARD CONTROL MEASURES  PRESENT AT WORKSITE (YES/NO)  Yes  No  No  No  No |  |  |  |

|  |          | 7   |
|--|----------|---|
| Excavations adjacent to worksite                                     | No       |   |
| Presence of unprotected hazards within the clear zone                | No       |   |
| Rough or unsealed road surface                                       | Possible | Principle contractor to ensure damaged access roads are required              |
| High volume of traffic through worksite (>10,000 vpd)                | No       |   |
| End-of-que build-up of traffic / Poor sight distance to end-of-queue | No       |   |
| High volume of heavy vehicles  | Yes      | Advanced warning - symbolic truck symbol                                      |
| Works vehicles entering/leaving worksite                             | Yes      | As above  |
| Cyclists/pedestrians through worksite                                | Yes      | Pedestrians to be assisted by traffic controller                              |
| Public transport affected  | No       |   |
| School zone being affected   | Yes      | Works are within the school precinct. All works to comply with approved hours |
| Other  |          |   |

## 9. Monitor and Review

### 9.1.Monitoring Program

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This CTMP shall be subject to ongoing review and will be updated accordingly. Regular reviews will be undertaken by the on-site project manager. Review of the CTMP shall occur monthly. All and any reviews undertaken should be documented, however key considerations regarding the review of the CTMP shall be:

- To identify any shortfalls and develop an updated action plan to address issues that may arise during construction (Parking and access issues)
- To ensure TGS's are updated (if necessary) by "Prepare a Work Zone Traffic Management Plan" card holders to ensure they remain consistent with the set-up on-site.
- Regular checks to ensure all loads are entering and leaving site covered as outlined within this CTMP.
- The roadway (including footpath) must be kept in a serviceable condition for the duration of construction.

### 9.2. Work Site Inspections, Recording and Reporting

Recording and reporting of the monitoring programs shall be done in accordance with Section E.3, E.4 and E.5 of the TCAWs Manual. As such, the structure, schedule, and frequency of these activities have been considered and identified.

To inspect, review and audit the temporary traffic management (TTM) arrangements implemented on site, the following actions are to be undertaken by suitably qualified personnel in accordance with TCAWS 6.1 requirement during all phases of construction, being:

| Activity           |      |     | Frequency or Details |
|--------------------|------|-----|----------------------|
| Shift Inspections  | □Yes | □No |                      |
| Weekly Inspections | □Yes | □No |                      |
| TMP Review         | □Yes | □No |                      |
| Other              | □Yes | □No |                      |

Given that the length of construction and that no regular works have been proposed outside of the site, monthly TTM inspections is considered to be sufficient.

### 9.3.Contingency Plan

The table below outlines an indicative plan to be undertaken by the builder in the event that the monitoring program identifies the management plan is not effective in managing the construction impacts.

| Risk    |  | Condition Green                | Condition Amber      | Condition Red        |
|---------|--|--------------------------------|----------------------|----------------------|
| Trigger |  | Construction traffic volume is | Construction traffic | Construction traffic |

| Construction |          | in accordance    | volumes exceed                          | volumes exceed            |
|--------------|----------|------------------|---|---------------------------|
| Movements    |          | with permissible | 3.2                                     | 2.22                      |
|              |          | and              | programmed volume                       | permissible volume and    |
|              |          |                  | but is within                           | time constraints          |
|              |          | programmed       | permissible volume                      |                           |
|              |          | volume and time  | constraints                             |                           |
|              |          | constraints      |   |                           |
|              | Response | No response      | Review and investigate                  | As with Condition         |
|              |          | required         | construction activities,                | Amber, plus;              |
|              |          |                  | and where appropriate,                  |                           |
|              |          |                  | implement additional                    | If it is concluded that   |
|              |          |                  | remediation measures                    | construction activities   |
|              |          |                  | such as:                                | where directly            |
|              |          |                  | Davison CVDDM and                       | responsible, an incident  |
|              |          |                  | Review CVPPM and                        | report is to be           |
|              |          |                  | update where                            | completed                 |
|              |          |                  | necessary                               | Stop all transport into   |
|              |          |                  | Provide additional                      | and out of the site       |
|              |          |                  | training                                |                           |
|              |          |                  |   |                           |
|              | Trigger  | No construction  | Construction vehicle                    | Construction vehicle      |
|              |          | vehicle          | movement close to                       | movement during peak      |
|              |          | movement during  | peak periods                            | periods                   |
|              |          | peak periods     | pour porrous                            |                           |
|              | Response | No response      | Review and investigate                  | As with Condition         |
|              |          | required         |   |                           |
|              |          |                  | Construction activities,                | Amber, plus;              |
|              |          | Continue         | and where appropriate,                  | If it is concluded that   |
|              |          | monitoring       | implement additional                    | construction              |
|              |          | program          | , |                           |
|              |          |                  | remediation measures                    | activities were           |
|              |          |                  | such as:                                | directly responsible      |
|              |          |                  | Provide additional                      | for the exceedance,       |
|              |          |                  | training (including                     | submit an incident        |
|              |          |                  | toolbox talks and                       | report.                   |
|              |          |                  | further notification of                 | Stop all transportation   |
|              |          |                  | Driver Code of                          | into and out of the site. |
|              |          |                  | Conduct)                                |                           |
| <u> </u>     | <u> </u> | I .              | 1                                       | 1                         |

|         |                   |                       |                                | Review CTPMP and update where necessary.            |
|---------|-------------------|-----------------------|--------------------------------|---|
| Queuing | Trigger           | No queuing identified | Queuing identified within site | Queuing identified on the public road               |
| Queuing | Trigger  Response | -                     | -                              | _   |
|         |                   |                       |                                | update were necessary, provide additional training. |

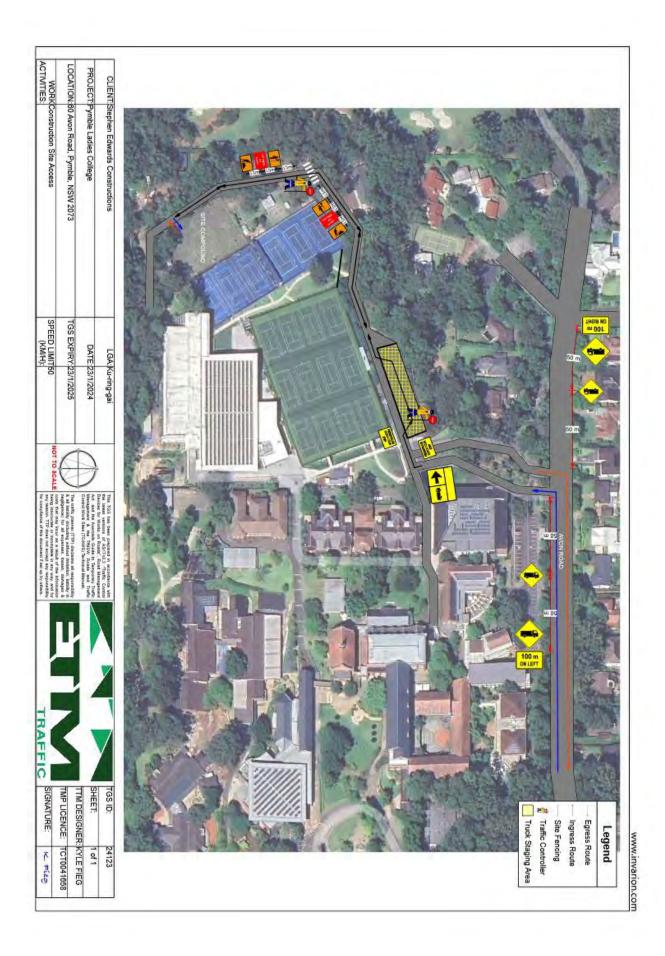
| Noise                         | Trigger  | Noise levels do not exceed imposed noise constraints  No response required | Noise levels in minor excess of imposed noise constraints  Undertake all feasible and reasonable mitigation and management measures to minimise noise impacts.         | Noise levels greatly in excess of imposed noise constraints  As with Condition Amber;  If noise levels cannot be kept below applicable limits, then a different construction method or equipment must be utilised. |
|-------------------------------|----------|--|--|--|
| Traffic<br>Guidance<br>Scheme | Trigger  | No observable issues   | Minor inconsistencies with TGS to onsite operations  | Near miss or incident occurring regardless of / as a result of the TGS being implemented   |
|                               | Response | No response required   | Traffic Controller to amend TGS on site and to keep a log of all changes   | investigation has been undertaken into the incident. There are to be changes made to the TGS to ensure that the safety of all workers and the public.  |
| Dust                          | Trigger  | No observable dust   | Minor quantities of dust in the air and tracking on to the road  | Large quantities of dust in the air and tracking on to the road  |
|                               | Response | No response required   | Review and investigate  construction activities  and respective control measures, where appropriate. Implement additional remedial measures, such as:  • Deployment of | As with Condition  Amber;  If it is concluded that construction activities were directly responsible for the exceedance,   |

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|  | additional water  | submit an incident  |
|--|---|---|
|  | sprays  | report  |
|  | <ul> <li>Relocation or<br/>modification of dust<br/>generating</li> </ul>           | Implement relevant responses and undertake immediate review to avoid such |
|  | sources   | occurrence in future.   |
|  | Check condition of<br>vibrating grids to  |   |
|  | ensure they are   |   |
|  | functioning correctly.  |   |
|  | Temporary halting of<br>activities and resuming<br>when conditions have<br>improved |   |

TABLE 5. MONITORING CONTINGENCY PLAN

# 10. Appendix A – Traffic Guidance Schemes



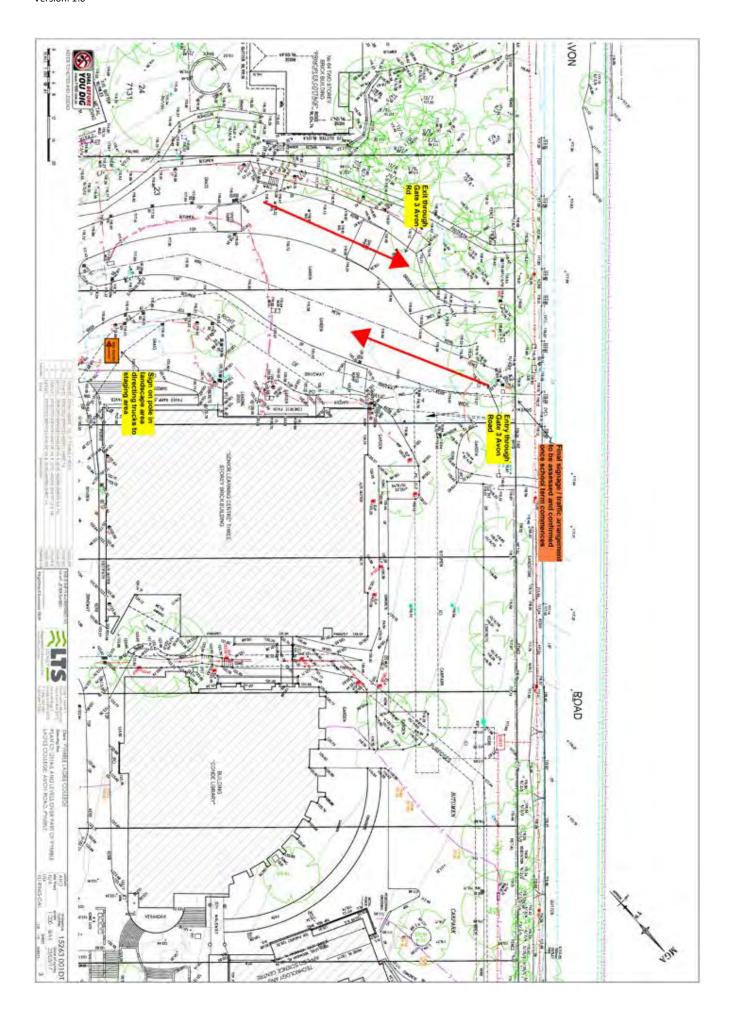
# 11. Appendix B – Vehicle Movement Routes

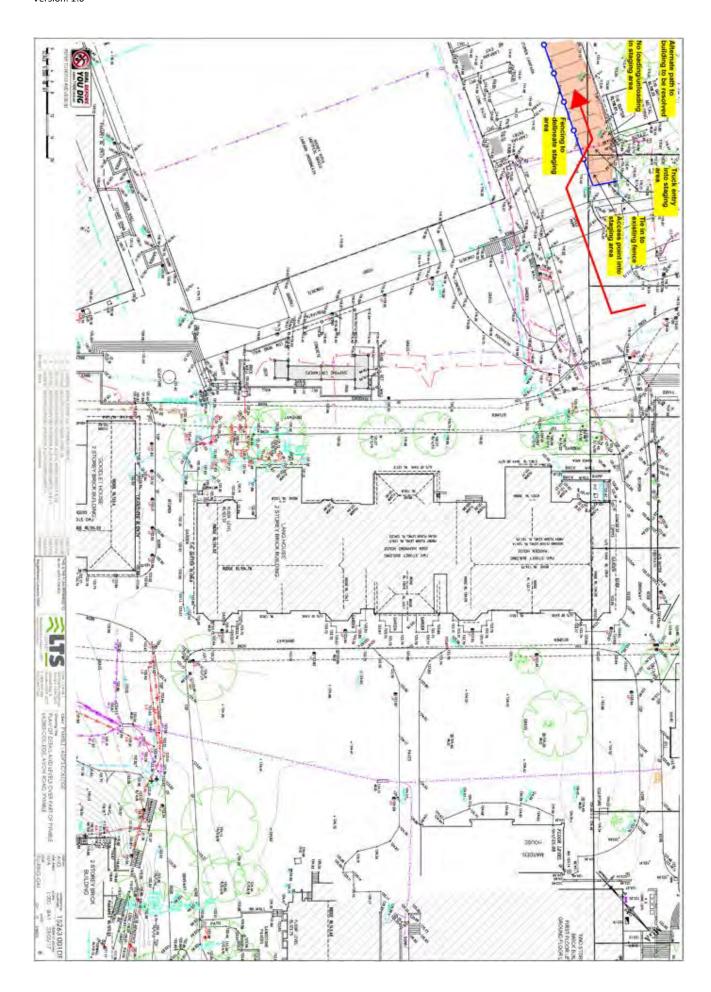
Version: 1.0

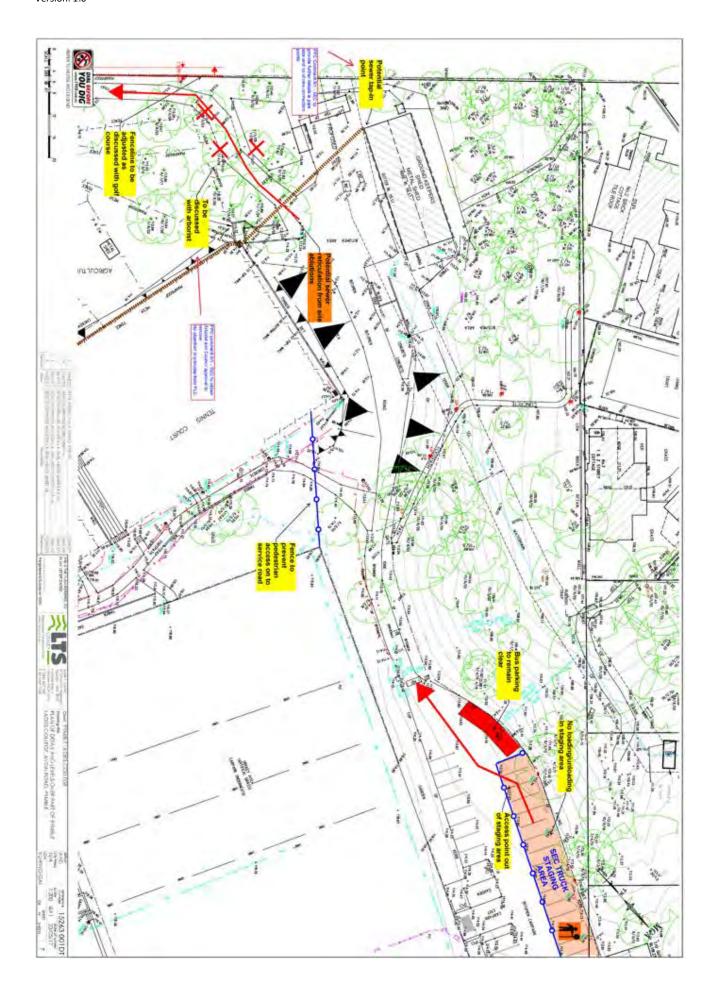


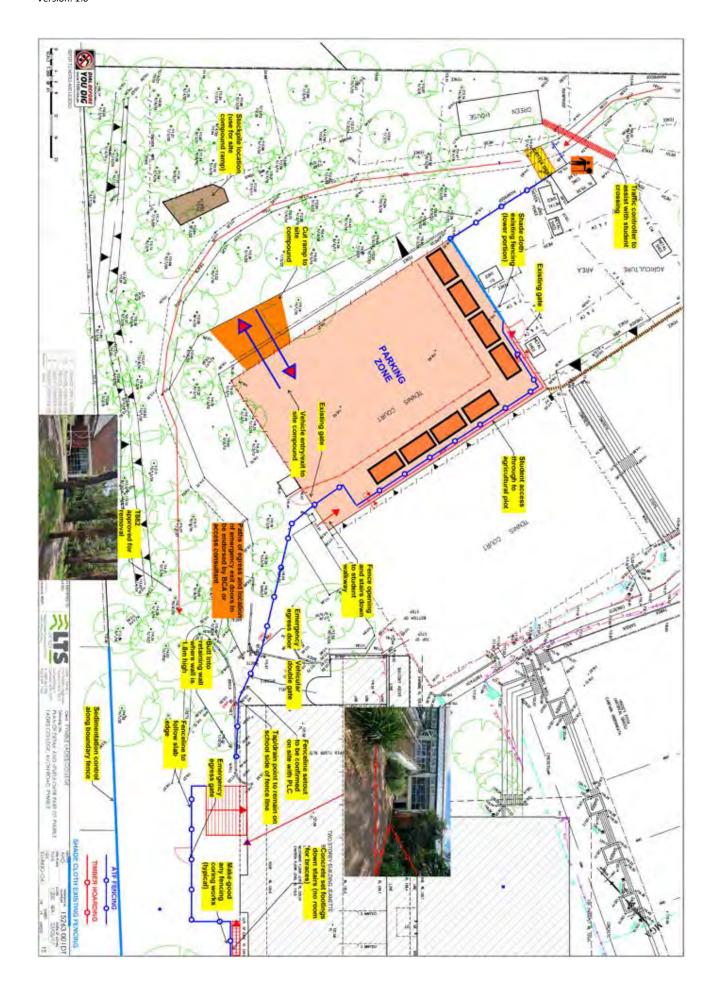
# 12. Appendix C - Project Plans and Diagrams



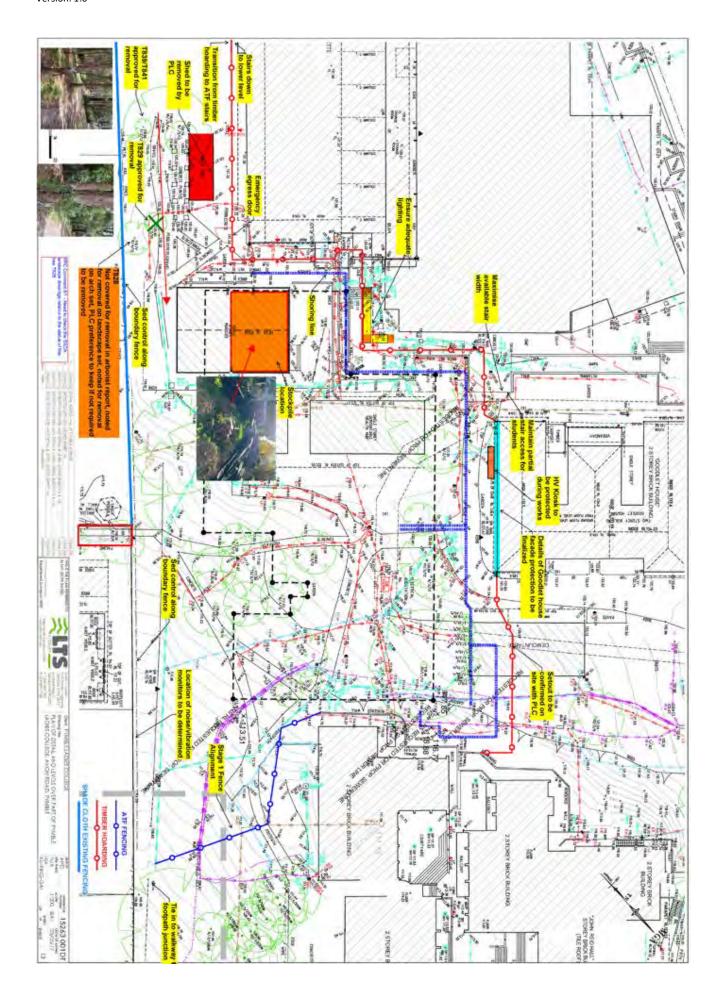








Version: 1.0



### **Geetha Jayaram**

From: Joseph Piccoli <piccoli@krg.nsw.gov.au>
Sent: Wednesday, 13 March 2024 12:39 PM

**To:** Fotini Bouranta

Cc: Andrew Kyrillos; to: ETM Traffic; Tony Macri; Bruna Malfatti

**Subject:** RE: SSD 17424905 - Pymble Ladies College

Thank you Fotini, much appreciated.

Regards,

Joseph Piccoli • Strategic Traffic Engineer • Ku-ring-gai Council 9424 0962 • piccoli@krg.nsw.gov.au • krg.nsw.gov.au

From: Fotini Bouranta <fbouranta@stephenedwards.com.au>

**Sent:** Tuesday, March 12, 2024 8:23 AM **To:** Joseph Piccoli coli@krg.nsw.gov.au>

Cc: Andrew Kyrillos <akyrillos@stephenedwards.com.au>; to: ETM Traffic <traffic@etmholdings.com.au>; Tony Macri <tmacri@stephenedwards.com.au>; Bruna Malfatti

<bruna@etmholdings.com.au>

Subject: RE: SSD 17424905 - Pymble Ladies College

Hi Joseph,

Please find attached final version of the CTPMSP for the Pymble Ladies' College Grey House Precinct Project for your information and records.

# Fotini Bouranta Contracts Administrator



0011011100110110

Mob: 0449 784 731 | Ph: (02) 9891 3099

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From: Joseph Piccoli < <a href="mailto:piccoli@krg.nsw.gov.au">piccoli@krg.nsw.gov.au</a>>

Sent: Friday, February 23, 2024 9:44 AM

**To:** Fotini Bouranta < <a href="mailto:fbouranta@stephenedwards.com.au">fbouranta@stephenedwards.com.au</a>>

**Cc:** Andrew Kyrillos@stephenedwards.com.au>; to: ETM Traffic <traffic@etmholdings.com.au>; Tony Macri <tmacri@stephenedwards.com.au>;

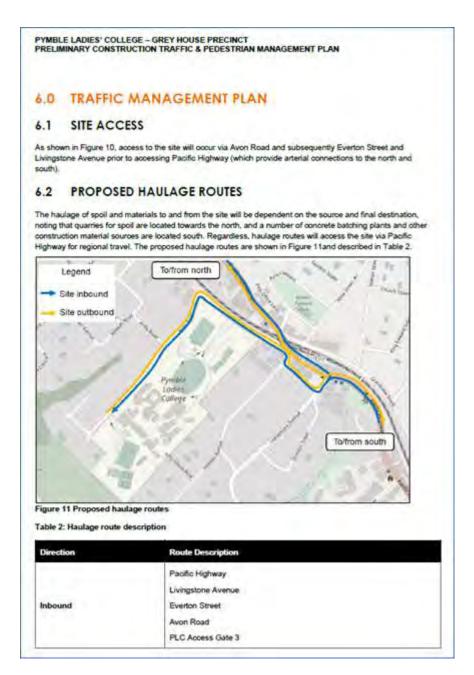
Nahid.Mahmud@dpie.nsw.gov.au; Bruna Malfatti < bruna@etmholdings.com.au >

**Subject:** RE: SSD 17424905 - Pymble Ladies College

Hi Fotini,

After being reviewed by our Development Engineers, Traffic Team and Rangers, here are our comments to the CTMP:

• <u>Heavy vehicle routes</u>: The preliminary CTPMP submitted with development application (see below) indicates construction vehicles would be using Pacific Highway, Livingstone Ave, Everton Rd, Avon Rd to access the site:



The proposed construction vehicle route in this draft CTMP is now proposed to be via Pacific Hwy, Beechworth Rd, Mayfield Rd, Allawah Rd, Arilla Rd and Avon Rd:



The reason mentioned in the CTMP is that Livingstone Avenue has a 3t limit for all vehicles, so no access to the site permitted via Livingstone Avenue. However Mayfield Rd, Allawah Rd, Arilla Rd are not suitable roads for construction vehicles due to the narrow road width and tight corners.

Whilst Livingstone Avenue is acknowledged as a 3T limit, the heavy vehicle routes should be as per the Preliminary CPTMP. Therefore, construction vehicle routes are to be amended to include Pacific Highway, Livingstone Ave, Everton Rd, Avon Rd to access the site given that the construction vehicles concerned have an origin/destination within the area. Other/previous construction projects in the area have also used this truck route.

### • Swept Paths of Construction Vehicles

The preliminary CPTMP states that swept path assessments will need to be undertaken during the preparation of the detailed CTMP to ensure that construction vehicles are able to turn at key intersections and enter/exit via Gate 3, but this has not been provided with this CTMP. Swept paths are to be provided to demonstrate

heavy vehicles can turn at key intersections. Swept path analysis for the ingress and egress for the largest truck size (HRV – 12.5m) for the demolition, excavation and the construction stage is to be provided. The Site Plan is to clearly show entry and exit points.

The Swept Path Analysis Plans shall show the existing trees being retained and their tree protective fencing requirements. These plans shall be to scale to ensure that truck access and tree fencing requirements do not conflict.

#### Heavy vehicle movement times.

The Preliminary CPTMP recommended that the movement of heavy vehicles be limited during drop-off and pick-up times (generally 8AM to 9AM and 3PM to 4PM weekdays), to limit adding more traffic to an already peak-heavy land use, and that truck movements will be minimized during peak school periods and during peak commuter periods. Other/previous construction projects in the area had conditions imposed on them that no truck activity was permitted by vehicles larger than 6.4m (Medium Rigid Vehicles or larger) between 7.30 AM - 8:30 AM and 2:30 PM - 4 PM on weekdays (the school peaks) during school terms. This was for the safety of students and parents/carers of the school.

There is no discussion in this CTMP about limiting heavy vehicle movements during school drop-off and pick-up times. This CTMP states that deliveries to only be carried out between the approved hours of 7.00AM and 6.00PM on Mondays to Friday as per SSDA conditions, and no deliveries will be carried out on Weekends or public holidays. However, the consent states that this CTMP must "be consistent with the preliminary construction traffic management plan submitted with the Transport Impact Assessment Report prepared by Stantec dated June 2022" (i.e. the Preliminary CPTMP).

Therefore, as per the Preliminary CPTMP for this project, we request that for safety and amenity, no construction vehicle movements are to occur in Livingstone Avenue, Everton Road and Avon Road during school drop-off (8.00AM to 9.30AM) and pick up (2.30PM to 4.00PM) times on school days. Traffic Controller duties are only to occur outside of the AM/PM school zone periods.

Please reviise the draft CTMP incorporating these comments. If there are any questions regarding this, let me know and I will pass it on to the team for feedback.

Regards, Joseph

Joseph Piccoli • Strategic Traffic Engineer • Ku-ring-gai Council 9424 0962 • piccoli@krg.nsw.gov.au • krg.nsw.gov.au

From: Fotini Bouranta < fbouranta@stephenedwards.com.au >

**Sent:** Thursday, 22 February 2024 9:28 AM **To:** Joseph Piccoli < piccoli@krg.nsw.gov.au >

Cc: Andrew Kyrillos@stephenedwards.com.au>; to: ETM Traffic <traffic@etmholdings.com.au>; Tony Macri <tmacri@stephenedwards.com.au>;

Nahid.Mahmud@dpie.nsw.gov.au; Bruna Malfatti < bruna@etmholdings.com.au >

Subject: RE: SSD 17424905 - Pymble Ladies College

Great thank you for confirming Joseph.

Fotini Bouranta Contracts Administrator



Mob: 0449 784 731 | Ph: (02) 9891 3099

140 Wicks Rd, Macquarie Park NSW 2113 | www.stephenedwards.com.au

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Nahid.Mahmud@dpie.nsw.gov.au; Bruna Malfatti < bruna@etmholdings.com.au >

Subject: RE: SSD 17424905 - Pymble Ladies College

Hi Fotini, we are working on it at the moment and should be able to get comments/feedback to you by the end of the week.

Regards,

Joseph Piccoli • Strategic Traffic Engineer • Ku-ring-gai Council 9424 0962 • piccoli@krg.nsw.gov.au • krg.nsw.gov.au

From: Fotini Bouranta < fbouranta@stephenedwards.com.au >

**Sent:** Wednesday, 21 February 2024 10:38 AM **To:** Joseph Piccoli < <a href="mailto:piccoli@krg.nsw.gov.au">piccoli@krg.nsw.gov.au</a>>

Cc: Andrew Kyrillos@stephenedwards.com.au>; to: ETM Traffic <traffic@etmholdings.com.au>; Tony Macri <tmacri@stephenedwards.com.au>;

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With works commencing imminently, it would be very much appreciated if we could get something back this week so we can close out and integrate any comments.

Let me know if we can assist in any way.

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To: Fotini Bouranta <fbouranta@stephenedwards.com.au>; Bruna Malfatti <br/>bruna@etmholdings.com.au>

Cc: Andrew Kyrillos@stephenedwards.com.au>; to: ETM Traffic <traffic@etmholdings.com.au>; Tony Macri <tmacri@stephenedwards.com.au>;

Nahid.Mahmud@dpie.nsw.gov.au

Subject: RE: SSD 17424905 - Pymble Ladies College

Thank you for this Fotini.

Regards,

**Joseph Piccoli** • Strategic Traffic Engineer • Ku-ring-gai Council 9424 0962 • piccoli@krg.nsw.gov.au • krg.nsw.gov.au

From: Fotini Bouranta <fbouranta@stephenedwards.com.au>

Sent: Friday, 16 February 2024 4:53 PM

To: Joseph Piccoli < <a href="mailto:piccoli@krg.nsw.gov.au">piccoli@krg.nsw.gov.au</a>>; Bruna Malfatti < <a href="mailto:bruna@etmholdings.com.au">bruna@etmholdings.com.au</a>>

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Nahid.Mahmud@dpie.nsw.gov.au

Subject: RE: SSD 17424905 - Pymble Ladies College

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Let me know if you need anything further.

Regards,

# Fotini Bouranta Contracts Administrator



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Sent: Friday, February 16, 2024 4:21 PM

To: Bruna Malfatti <bruna@etmholdings.com.au>

Cc: Andrew Kyrillos <a href="mailto:akyrillos@stephenedwards.com.au">
 ; to: ETM Traffic <a href="mailto:traffic@etmholdings.com.au">
 ; Fotini Bouranta@stephenedwards.com.au</a>
 ; Tony

Macri < tmacri@stephenedwards.com.au >; Nahid.Mahmud@dpie.nsw.gov.au

Subject: RE: SSD 17424905 - Pymble Ladies College

Hello Bruna,

Thank you for sending the CTMP to us. I have registered it into our records system and have notified it to the Development Engineers, Traffic Operations and Rangers sections for review.

I just noticed that Condition D18 of the approval states the CTMP needs to:

(b) be consistent with the preliminary construction traffic management plan submitted with the Transport Impact Assessment Report prepared by Stantec dated June 2022;

Part 14 of the Transport Impact Assessment Report prepared by Stantec dated June 2022 states that "a preliminary CTPMP will be submitted with the TIA as part of the SSDA submission." Could this be provided to us so that we can do a proper review.

Thanks,

Joseph Piccoli • Strategic Traffic Engineer • Ku-ring-gai Council 9424 0962 • piccoli@krg.nsw.gov.au • krg.nsw.gov.au

From: Bruna Malfatti < bruna@etmholdings.com.au >

Sent: Friday, 16 February 2024 10:27 AM

To: CallCentre < callcentre@krg.nsw.gov.au >; Nahid.Mahmud@dpie.nsw.gov.au; Joseph Piccoli < piccoli@krg.nsw.gov.au >

Cc: Andrew Kyrillos <a href="mailto:center-number-2">akyrillos@stephenedwards.com.au</a>; to: ETM Traffic <a href="mailto:traffic@etmholdings.com.au">traffic@etmholdings.com.au</a>; cc: Fotini Bouranta <a href="mailto:fbouranta@stephenedwards.com.au">fbouranta@stephenedwards.com.au</a>; Tony

Subject: SSD 17424905 - Pymble Ladies College

Good morning Joseph,

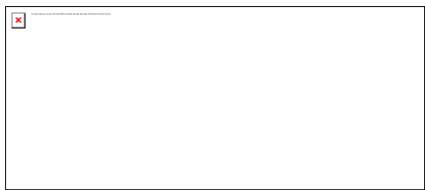
I hope this email finds you well.

Could you please let me know if you need any further information from us on the CTMP for Pymble Ladies College attached to this email?

Kindly note I have attached the DA information.

Please let me know if you have any questions or concerns please do not hesitate to contact me.

#### **Kind Regards**



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### **Geetha Jayaram**

From: Fotini Bouranta

Sent: Tuesday, 12 March 2024 8:23 AM

To: Joseph Piccoli

Cc: Andrew Kyrillos; to: ETM Traffic; Tony Macri; Bruna Malfatti

**Subject:** RE: SSD 17424905 - Pymble Ladies College

**Attachments:** GHP – Construction Traffic and Pedestrian Management Sub-Plan Rev B.pdf

Hi Joseph,

Please find attached final version of the CTPMSP for the Pymble Ladies' College Grey House Precinct Project for your information and records.

# Fotini Bouranta Contracts Administrator



Mob: 0449 784 731 | Ph: (02) 9891 3099

140 Wicks Rd, Macquarie Park NSW 2113 | www.stephenedwards.com.au

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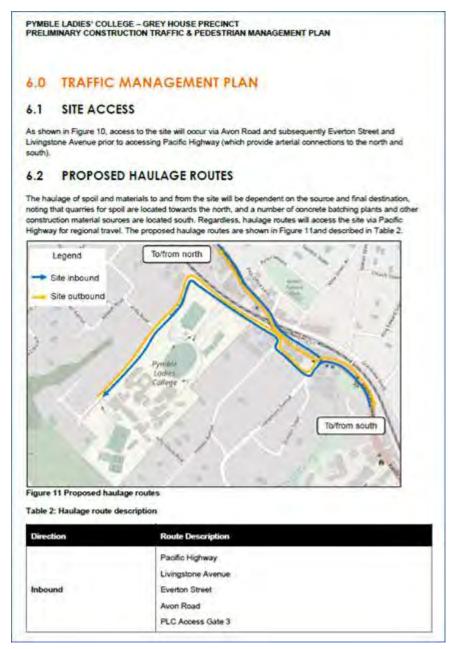
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Hi Fotini,

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• <u>Heavy vehicle routes</u>: The preliminary CTPMP submitted with development application (see below) indicates construction vehicles would be using Pacific Highway, Livingstone Ave, Everton Rd, Avon Rd to access the site:



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The Swept Path Analysis Plans shall show the existing trees being retained and their tree protective fencing requirements. These plans shall be to scale to ensure that truck access and tree fencing requirements do not conflict.

#### · Heavy vehicle movement times.

The Preliminary CPTMP recommended that the movement of heavy vehicles be limited during drop-off and pick-up times (generally 8AM to 9AM and 3PM to 4PM weekdays), to limit adding more traffic to an already peak-heavy land use, and that truck movements will be minimized during peak school periods and during peak commuter periods. Other/previous construction projects in the area had conditions imposed on them that no truck activity was permitted by vehicles larger than 6.4m (Medium Rigid Vehicles or larger) between 7.30 AM - 8:30 AM and 2:30 PM - 4 PM on weekdays (the school peaks) during school terms. This was for the safety of students and parents/carers of the school.

There is no discussion in this CTMP about limiting heavy vehicle movements during school drop-off and pick-up times. This CTMP states that deliveries to only be carried out between the approved hours of 7.00AM and 6.00PM on Mondays to Friday as per SSDA conditions, and no deliveries will be carried out on Weekends or public holidays. However, the consent states that this CTMP must "be consistent with the preliminary construction traffic management plan submitted with the Transport Impact Assessment Report prepared by Stantec dated June 2022" (i.e. the Preliminary CPTMP).

Therefore, as per the Preliminary CPTMP for this project, we request that for safety and amenity, no construction vehicle movements are to occur in Livingstone Avenue, Everton Road and Avon Road during school drop-off (8.00AM to 9.30AM) and pick up (2.30PM to 4.00PM) times on school days. Traffic Controller duties are only to occur outside of the AM/PM school zone periods.

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Subject: RE: SSD 17424905 - Pymble Ladies College

Great thank you for confirming Joseph.

## Fotini Bouranta Contracts Administrator



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From: Joseph Piccoli <piccoli@krg.nsw.gov.au>

Sent: Friday, February 16, 2024 4:21 PM

**To:** Bruna Malfatti < <a href="mailto:bruna@etmholdings.com.au">bruna@etmholdings.com.au</a>>

Cc: Andrew Kyrillos <a href="mailto:akyrillos@stephenedwards.com.au">
 ; to: ETM Traffic <a href="mailto:traffic@etmholdings.com.au">
 ; Fotini Bouranta@stephenedwards.com.au</a>
 ; Tony

Macri < tmacri@stephenedwards.com.au >; Nahid.Mahmud@dpie.nsw.gov.au

Subject: RE: SSD 17424905 - Pymble Ladies College

Hello Bruna,

Thank you for sending the CTMP to us. I have registered it into our records system and have notified it to the Development Engineers, Traffic Operations and Rangers sections for review.

I just noticed that Condition D18 of the approval states the CTMP needs to:

(b) be consistent with the preliminary construction traffic management plan submitted with the Transport Impact Assessment Report prepared by Stantec dated June 2022;

Part 14 of the Transport Impact Assessment Report prepared by Stantec dated June 2022 states that "a preliminary CTPMP will be submitted with the TIA as part of the SSDA submission." Could this be provided to us so that we can do a proper review.

Thanks,

From: Bruna Malfatti < bruna@etmholdings.com.au >

Sent: Friday, 16 February 2024 10:27 AM

To: CallCentre <callcentre@krg.nsw.gov.au>; Nahid.Mahmud@dpie.nsw.gov.au; Joseph Piccoli <piccoli@krg.nsw.gov.au>

Cc: Andrew Kyrillos <a href="mailto:center-number-2">akyrillos@stephenedwards.com.au</a>; to: ETM Traffic <a href="mailto:center-number-2">traffic@etmholdings.com.au</a>; cc: Fotini Bouranta <a href="mailto:sephenedwards.com.au">fbouranta@stephenedwards.com.au</a>; to: ETM Traffic <a href="mailto:center-number-2">traffic@etmholdings.com.au</a>; cc: Fotini Bouranta <a href="mailto:sephenedwards.com.au">fbouranta@stephenedwards.com.au</a>; Tony

Macri < <a href="macri@stephenedwards.com.au">tmacri@stephenedwards.com.au</a> <a href="macri@stephenedwards.com.au">Subject: SSD 17424905 - Pymble Ladies College</a>

Good morning Joseph,

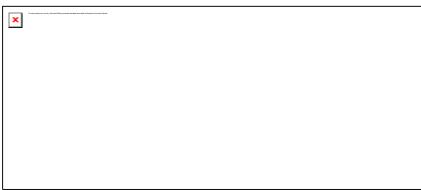
I hope this email finds you well.

Could you please let me know if you need any further information from us on the CTMP for Pymble Ladies College attached to this email?

Kindly note I have attached the DA information.

Please let me know if you have any questions or concerns please do not hesitate to contact me.

#### Kind Regards



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#### **Geetha Jayaram**

From: Joseph Piccoli <piccoli@krg.nsw.gov.au>
Sent: Wednesday, 13 March 2024 12:39 PM

**To:** Fotini Bouranta

Cc: Andrew Kyrillos; to: ETM Traffic; Tony Macri; Bruna Malfatti

**Subject:** RE: SSD 17424905 - Pymble Ladies College

Thank you Fotini, much appreciated.

Regards,

Joseph Piccoli • Strategic Traffic Engineer • Ku-ring-gai Council 9424 0962 • piccoli@krg.nsw.gov.au • krg.nsw.gov.au

From: Fotini Bouranta <fbouranta@stephenedwards.com.au>

**Sent:** Tuesday, March 12, 2024 8:23 AM **To:** Joseph Piccoli coli@krg.nsw.gov.au>

Cc: Andrew Kyrillos <akyrillos@stephenedwards.com.au>; to: ETM Traffic <traffic@etmholdings.com.au>; Tony Macri <tmacri@stephenedwards.com.au>; Bruna Malfatti

<bruna@etmholdings.com.au>

Subject: RE: SSD 17424905 - Pymble Ladies College

Hi Joseph,

Please find attached final version of the CTPMSP for the Pymble Ladies' College Grey House Precinct Project for your information and records.

## Fotini Bouranta Contracts Administrator



0011011100110110

Mob: 0449 784 731 | Ph: (02) 9891 3099

140 Wicks Rd, Macquarie Park NSW 2113 | www.stephenedwards.com.au

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From: Joseph Piccoli < <a href="mailto:piccoli@krg.nsw.gov.au">piccoli@krg.nsw.gov.au</a>>

Sent: Friday, February 23, 2024 9:44 AM

**To:** Fotini Bouranta < <a href="mailto:fbouranta@stephenedwards.com.au">fbouranta@stephenedwards.com.au</a>>

**Cc:** Andrew Kyrillos@stephenedwards.com.au>; to: ETM Traffic <traffic@etmholdings.com.au>; Tony Macri <tmacri@stephenedwards.com.au>;

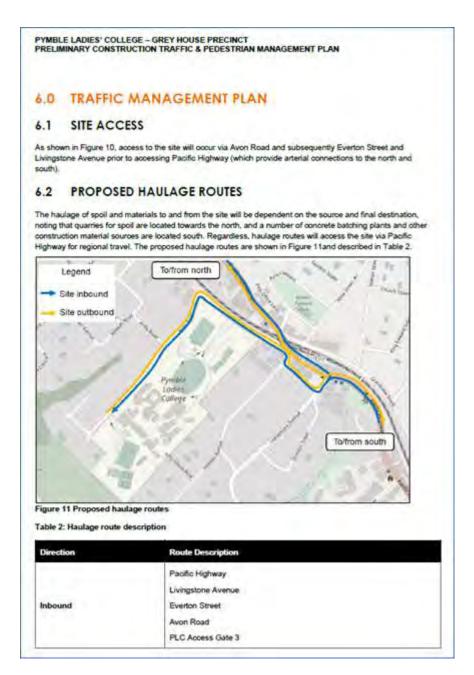
Nahid.Mahmud@dpie.nsw.gov.au; Bruna Malfatti < bruna@etmholdings.com.au >

**Subject:** RE: SSD 17424905 - Pymble Ladies College

Hi Fotini,

After being reviewed by our Development Engineers, Traffic Team and Rangers, here are our comments to the CTMP:

• <u>Heavy vehicle routes</u>: The preliminary CTPMP submitted with development application (see below) indicates construction vehicles would be using Pacific Highway, Livingstone Ave, Everton Rd, Avon Rd to access the site:



The proposed construction vehicle route in this draft CTMP is now proposed to be via Pacific Hwy, Beechworth Rd, Mayfield Rd, Allawah Rd, Arilla Rd and Avon Rd:



The reason mentioned in the CTMP is that Livingstone Avenue has a 3t limit for all vehicles, so no access to the site permitted via Livingstone Avenue. However Mayfield Rd, Allawah Rd, Arilla Rd are not suitable roads for construction vehicles due to the narrow road width and tight corners.

Whilst Livingstone Avenue is acknowledged as a 3T limit, the heavy vehicle routes should be as per the Preliminary CPTMP. Therefore, construction vehicle routes are to be amended to include Pacific Highway, Livingstone Ave, Everton Rd, Avon Rd to access the site given that the construction vehicles concerned have an origin/destination within the area. Other/previous construction projects in the area have also used this truck route.

#### • Swept Paths of Construction Vehicles

The preliminary CPTMP states that swept path assessments will need to be undertaken during the preparation of the detailed CTMP to ensure that construction vehicles are able to turn at key intersections and enter/exit via Gate 3, but this has not been provided with this CTMP. Swept paths are to be provided to demonstrate

heavy vehicles can turn at key intersections. Swept path analysis for the ingress and egress for the largest truck size (HRV – 12.5m) for the demolition, excavation and the construction stage is to be provided. The Site Plan is to clearly show entry and exit points.

The Swept Path Analysis Plans shall show the existing trees being retained and their tree protective fencing requirements. These plans shall be to scale to ensure that truck access and tree fencing requirements do not conflict.

#### Heavy vehicle movement times.

The Preliminary CPTMP recommended that the movement of heavy vehicles be limited during drop-off and pick-up times (generally 8AM to 9AM and 3PM to 4PM weekdays), to limit adding more traffic to an already peak-heavy land use, and that truck movements will be minimized during peak school periods and during peak commuter periods. Other/previous construction projects in the area had conditions imposed on them that no truck activity was permitted by vehicles larger than 6.4m (Medium Rigid Vehicles or larger) between 7.30 AM - 8:30 AM and 2:30 PM - 4 PM on weekdays (the school peaks) during school terms. This was for the safety of students and parents/carers of the school.

There is no discussion in this CTMP about limiting heavy vehicle movements during school drop-off and pick-up times. This CTMP states that deliveries to only be carried out between the approved hours of 7.00AM and 6.00PM on Mondays to Friday as per SSDA conditions, and no deliveries will be carried out on Weekends or public holidays. However, the consent states that this CTMP must "be consistent with the preliminary construction traffic management plan submitted with the Transport Impact Assessment Report prepared by Stantec dated June 2022" (i.e. the Preliminary CPTMP).

Therefore, as per the Preliminary CPTMP for this project, we request that for safety and amenity, no construction vehicle movements are to occur in Livingstone Avenue, Everton Road and Avon Road during school drop-off (8.00AM to 9.30AM) and pick up (2.30PM to 4.00PM) times on school days. Traffic Controller duties are only to occur outside of the AM/PM school zone periods.

Please reviise the draft CTMP incorporating these comments. If there are any questions regarding this, let me know and I will pass it on to the team for feedback.

Regards, Joseph

Joseph Piccoli • Strategic Traffic Engineer • Ku-ring-gai Council 9424 0962 • piccoli@krg.nsw.gov.au • krg.nsw.gov.au

From: Fotini Bouranta < fbouranta@stephenedwards.com.au >

**Sent:** Thursday, 22 February 2024 9:28 AM **To:** Joseph Piccoli < piccoli@krg.nsw.gov.au >

Cc: Andrew Kyrillos@stephenedwards.com.au>; to: ETM Traffic <traffic@etmholdings.com.au>; Tony Macri <tmacri@stephenedwards.com.au>;

Nahid.Mahmud@dpie.nsw.gov.au; Bruna Malfatti < bruna@etmholdings.com.au >

Subject: RE: SSD 17424905 - Pymble Ladies College

Great thank you for confirming Joseph.

Fotini Bouranta Contracts Administrator



Mob: 0449 784 731 | Ph: (02) 9891 3099

140 Wicks Rd, Macquarie Park NSW 2113 | www.stephenedwards.com.au

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From: Joseph Piccoli < <a href="mailto:piccoli@krg.nsw.gov.au">piccoli@krg.nsw.gov.au</a> Sent: Wednesday, February 21, 2024 4:28 PM

To: Fotini Bouranta <fbouranta@stephenedwards.com.au>

Cc: Andrew Kyrillos <a href="mailto:com.au">ct. Andrew Kyrillos (akyrillos@stephenedwards.com.au)com.au</a>; to: ETM Traffic (atraffic@etmholdings.com.au)com.au(atraffic.au)com.au)com.au(atraffic.au)com.au)com.au(atraffic.au)com.au(

Nahid.Mahmud@dpie.nsw.gov.au; Bruna Malfatti < bruna@etmholdings.com.au >

Subject: RE: SSD 17424905 - Pymble Ladies College

Hi Fotini, we are working on it at the moment and should be able to get comments/feedback to you by the end of the week.

Regards,

Joseph Piccoli • Strategic Traffic Engineer • Ku-ring-gai Council 9424 0962 • piccoli@krg.nsw.gov.au • krg.nsw.gov.au

From: Fotini Bouranta < fbouranta@stephenedwards.com.au >

**Sent:** Wednesday, 21 February 2024 10:38 AM **To:** Joseph Piccoli < <a href="mailto:piccoli@krg.nsw.gov.au">piccoli@krg.nsw.gov.au</a>>

Cc: Andrew Kyrillos@stephenedwards.com.au>; to: ETM Traffic <traffic@etmholdings.com.au>; Tony Macri <tmacri@stephenedwards.com.au>;

Nahid.Mahmud@dpie.nsw.gov.au; Bruna Malfatti < bruna@etmholdings.com.au >

Subject: RE: SSD 17424905 - Pymble Ladies College

Hi Joseph,

Just following up on the progress of the review for the below.

With works commencing imminently, it would be very much appreciated if we could get something back this week so we can close out and integrate any comments.

Let me know if we can assist in any way.

## Fotini Bouranta Contracts Administrator



Mob: 0449 784 731 | Ph: (02) 9891 3099

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From: Joseph Piccoli < <a href="mailto:piccoli@krg.nsw.gov.au">piccoli@krg.nsw.gov.au</a> Sent: Monday, February 19, 2024 2:11 PM

To: Fotini Bouranta <fbouranta@stephenedwards.com.au>; Bruna Malfatti <br/>bruna@etmholdings.com.au>

Cc: Andrew Kyrillos@stephenedwards.com.au>; to: ETM Traffic <traffic@etmholdings.com.au>; Tony Macri <tmacri@stephenedwards.com.au>;

Nahid.Mahmud@dpie.nsw.gov.au

Subject: RE: SSD 17424905 - Pymble Ladies College

Thank you for this Fotini.

Regards,

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From: Fotini Bouranta <fbouranta@stephenedwards.com.au>

Sent: Friday, 16 February 2024 4:53 PM

To: Joseph Piccoli < <a href="mailto:piccoli@krg.nsw.gov.au">piccoli@krg.nsw.gov.au</a>>; Bruna Malfatti < <a href="mailto:bruna@etmholdings.com.au">bruna@etmholdings.com.au</a>>

Cc: Andrew Kyrillos@stephenedwards.com.au>; to: ETM Traffic@etmholdings.com.au>; Tony Macri <tmacri@stephenedwards.com.au>;

Nahid.Mahmud@dpie.nsw.gov.au

Subject: RE: SSD 17424905 - Pymble Ladies College

Hi Joseph,

Thank you for confirming receipt of the below.

Please find attached preliminary CTPMP as requested.

Let me know if you need anything further.

Regards,

## Fotini Bouranta Contracts Administrator



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Cc: Andrew Kyrillos <a href="mailto:center-number-2">akyrillos@stephenedwards.com.au</a>; to: ETM Traffic <a href="mailto:center-number-2">traffic@etmholdings.com.au</a>; cc: Fotini Bouranta <a href="mailto:sephenedwards.com.au">fbouranta@stephenedwards.com.au</a>; to: ETM Traffic <a href="mailto:center-number-2">traffic@etmholdings.com.au</a>; cc: Fotini Bouranta <a href="mailto:sephenedwards.com.au">fbouranta@stephenedwards.com.au</a>; Tony

Subject: SSD 17424905 - Pymble Ladies College

Good morning Joseph,

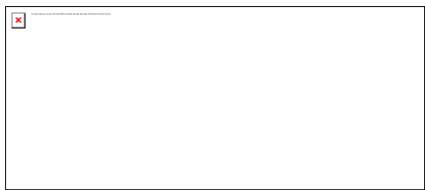
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Please let me know if you have any questions or concerns please do not hesitate to contact me.

#### **Kind Regards**



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## Pymble Ladies College, Grey House Precinct

# Construction Noise and Vibration Management Sub Plan (CNVMSP)

**Stephen Edwards Construction** 

Report number: 240063-PLCGH-CNVMSP-R1

Date: 15 March 2024 Version: For Construction

Project Number: 240063



#### **DOCUMENT CONTROL**

| Project Name     | Grey House                   |
|------------------|------------------------------|
| Project Number   | 240063                       |
| Report Reference | 240063-PLCGH-CNVMSP-R0       |
| Client:          | Stephen Edwards Construction |

| Revision | Description         | Reference              | Date                | Prepared  | Checked         | Authorised |
|----------|---------------------|------------------------|---------------------|-----------|-----------------|------------|
| 0        | For<br>Construction | 240063-PLCGH-CNVMSP-R0 | 19 February<br>2024 | Ben White | Matt<br>Furlong | Ben White  |
| 1        | For<br>Construction | 240063-PLCGH-CNVMSP-R1 | 15 March 2024       | Ben White | Matt<br>Furlong | Ben White  |

#### PREPARED BY:

Pulse White Noise Acoustics Pty Ltd ABN 95 642 886 306 Level 5, 73 Walker Street, North Sydney, 2060 1800 4 PULSE

This report has been prepared by Pulse White Noise Acoustics Pty Ltd with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with the Stephen Edwards Construction. Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

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No warranties or guarantees are expressed or should be inferred by any third parties.

This report may not be relied upon by other parties without written consent from Pulse White Noise Acoustics.

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Pulse White Noise Acoustics disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.



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#### 1 INTRODUCTION

Pulse White Noise Acoustics (PWNA) has been engaged to prepare a Construction Noise and Vibration Management Sub Plan (CNVMSP) for the construction works associated with the Pymble Ladies College, Grey House Precinct project located at 20 Avon Road, Pymble and include lot 1 DP 69541.

This report includes the project Construction Noise and Vibration Management Sub Plan as required by the projects SSD 17424905.

Onsite unattended and attended noise levels have previously been determined for the project and included in the PWNA *Noise Impact Assessment* with reference 210049-Pymble Ladies College, Grey House Precinct-Noise Impact Assessment-R1 and dated 11 October 2021 and include in the documentation. The details of the acoustic survey included in the *Noise Impact Assessment* report have been used in this assessment.

A glossary of acoustic terminology used throughout this report is included in Appendix A.

The author of this report is a director of Pulse White Noise Acoustics who is a member of the Australian Acoustic Society, details including Ben's CV and membership of the AAS are included in Appendix B.

#### 1.1 Site Layout and Development Overview

This report has been prepared on behalf of the Pymble Ladies College, Grey house Precinct project.

Pymble Ladies College is located at 20 Avon Road, Pymble and includes Lot 1 DP 69541. The proposed development is for construction and operation of a new Grey House Precinct building. The proposed development will include the following:

- A 4 story building including:
  - o A new home for Dance contained internally within the building.
  - OSHC (after School Care).
  - o Health and Wellbeing.
  - o Stem and classrooms for Years 5 and 6.
  - o The site will also provide a brand new Early Learning Centre (ELC) catering for 0-5 year olds.

The project has an approved Development Consent including the SSD 17424905.

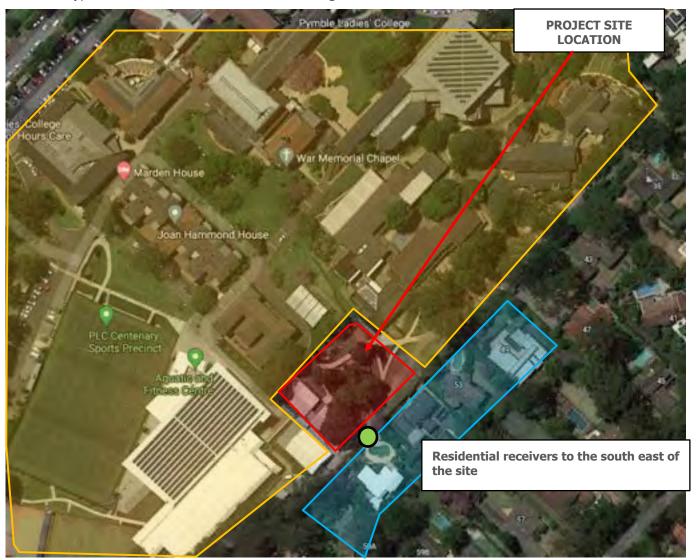
The Grey House Precinct site is located within the grounds of the exiting Pymble Ladies College and include residential receivers which are located to the south east of the site. Details of the residential receivers are included below

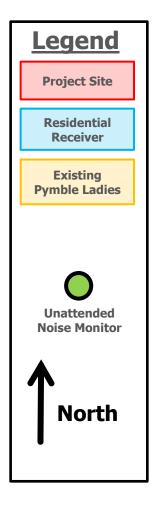
**Receiver 1:** Residential receivers to the south east of the site including those located at 59-49 Pymble Avenue.

Details of the site locations are included in the figure below.



Figure 1 Site Map, Measurement Locations and Surrounding Receivers





Pulse White Noise Acoustics Pty Ltd



#### **1.2** SSD Compliance

This report has been undertaken in accordance with the requirements of Item D19 of the project's SSD conditions of consent.

Details of conditions of consent and sections of the report which include the required items required by the consent are included in the table below.



Table 1 SSD Compliance Table

| SSD Condition number | Requirement   | Report Reference for<br>Satisfaction  |
|----------------------|---|---|
| D19                  | B19. The Construction Noise and Vibration Management Sub-Plan must address, but not be limited to, the following:   | -   |
| (a)                  | be prepared by a suitably qualified and experienced noise expert;   | Ben white is a director of Pulse<br>White Noise Acoustics, Ben's CV<br>and membership of the Australian<br>Acoustic Society is included in<br>Appendix B. |
| (b)                  | describe procedures for achieving the<br>noise management levels in EPA's<br>Interim Construction Noise Guideline<br>(DECC, 2009);  | Section 4.1   |
| (c)                  | incorporate the acoustic mitigation measures recommended to achieve the construction noise management levels recommended in the Noise and Impact Assessment prepared by Pulse White Noise Acoustics dated 11 October 2021, including but not limited to acoustic screening around static construction equipment and hoardings, where appropriate, to minimise adverse impacts on neighbouring properties; | Section 6.1   |
| (d)                  | incorporate the vibration<br>management strategies, including<br>ensuring safe working<br>distances for vibration intensive plant<br>outlined in the Noise and Impact<br>Assessment<br>prepared by Pulse White Noise<br>Acoustics dated 11 October 2021;  | Section 5.4   |
| (e)                  | describe the measures to be implemented to manage high noise generating works such as piling, in close proximity to sensitive receivers;  | Section 6.1 and 6.2   |



| (f)             | describe the measures to be undertaken to ensure that the ongoing operations of the PLC campus are not disrupted due to highly affecting construction noise;   | Section 6.1 and 6.2             |
|-----------------|--|---------------------------------|
| (g)             | include strategies that have been developed with the community for managing high noise generating works;   | Section 6.2 and Section 6.8     |
| (h)             | describe the community consultation undertaken to develop the strategies in condition D19(f);  | Section 6.5.4                   |
| (i)             | include a complaints management<br>system that would be implemented<br>for the duration of the construction;<br>and  | Section 6.5                     |
| (j)             | include a program to monitor and report on the impacts and environmental performance of the development and the effectiveness of the implemented management measures in accordance with the requirements of condition D15  | Section 6.2.2 and Section 6.3.2 |
| Item D 23 – (c) | A Driver Code of Conduct must be prepared and communicated by the Applicant to heavy vehicle drivers and must address the following:  (a) minimise the impacts of earthworks and construction on the local and regional road network;  (b) minimise conflicts with other road users;  (c) minimise road traffic noise; and  (d) ensure truck drivers use specified routes. | Section 6.9                     |



#### 2 EXISTING ACOUSTIC ENVIRONMENT

Measured noise levels from the attended noise survey undertaken as part of the PWNA *Noise Impact Assessment* with reference 210049-Pymble Ladies College, Grey House Precinct-Noise Impact Assessment-R1 and dated 11 October 2021 and include in the documentation have been used in this assessment.

As part of the PWNA *Noise Impact Assessment* with reference 210049-Pymble Ladies College, Grey House Precinct-Noise Impact Assessment-R1 and dated 11 October 2021 and include in the documentation background noise levels within the vicinity of the site has been undertaken including locations of noise logging (including the locations detailed in Figure 1 above). The PWNA *Noise Impact Assessment* includes an assessment which has been stated to be in accordance with the NSW EPA's *Noise Policy for Industry* (NPI, 2017).

The Rating Background Noise Level (RBL) is the background noise level used for assessment purposes and includes the 90<sup>th</sup> percentile of the daily background noise levels during each assessment period, being day, evening and night. The RBL LA90 (15minute) and L<sub>Aeq</sub> noise levels presented within the PWNA *Noise Impact Assessment* in Table 2.

Table 2 Measured Ambient Noise Levels corresponding to the NPI's Assessment Time Periods

| Measurement<br>Location                  | Daytime <sup>1</sup> 7:00 am to 6:00 pm |                             | Evening <sup>1</sup><br>6:00 pm to 10:00 pm |                            | Night-time <sup>1</sup><br>10:00 pm to 7:00 am |                            |
|--|---|-----------------------------|---|----------------------------|--|----------------------------|
|  | L <sub>A90</sub> <sup>2</sup> (dBA)     | L <sub>Aeq</sub> 3<br>(dBA) | L <sub>A90</sub> 2<br>(dBA)                 | LAeq <sup>3</sup><br>(dBA) | L <sub>A90</sub> 2<br>(dBA)                    | LAeq <sup>3</sup><br>(dBA) |
| Logger 1 – To the south east of the site |   | 52                          | 37  | 49                         | 30   | 46                         |

- Note 1: For Monday to Saturday, Daytime 7:00 am 6:00 pm; Evening 6:00 pm 10:00 pm; Night-time 10:00 pm 7:00 am. On Sundays and Public Holidays, Daytime 8:00 am 6:00 pm; Evening 6:00 pm 10:00 pm; Night-time 10:00 pm 8:00 am
- Note 2: The LA90 noise level is representative of the "average minimum background sound level" (in the absence of the source under consideration), or simply the background level.
- Note 3: The Laeq is the energy average sound level. It is defined as the steady sound level that contains the same amount of acoustical energy as a given time-varying sound.



#### 3 PROJECTS CONDITIONS OF CONSENT

Relevant noise and vibration criteria for construction activities includes item D19 of the SSD which includes the following:

- D19. The Construction Noise and Vibration Management Sub-Plan (CNVMSP) must address, but not be limited to, the following:
  - (a) be prepared by a suitably qualified and experienced noise expert;
  - describe procedures for achieving the noise management levels in EPA's Interim Construction Noise Guideline (DECC, 2009);
  - (d) Incorporate the acoustic mitigation measures recommended to achieve the construction noise management levels recommended in the Noise and Impact Assessment prepared by Pulse White Noise Acoustics dated 11 October 2021, including but not limited to acoustic screening around static construction equipment and hoardings, where appropriate, to minimize adverse impacts on neighbouring properties;
  - (d) Incorporate the vibration management strategies, including ensuring safe working distances for vibration intensive plant outlined in the Noise and Impact Assessment prepared by Pulse White Noise Acoustics dated 11 October 2021;
  - describe the measures to be implemented to manage high noise generating works such as pilling, in close proximity to sensitive moeivers;
  - describe the measures to be undertaken to ensure that the ongoing operations of the PLC campus are not disrupted due to highly affecting construction noise;
  - Include strategies that have been developed with the community for managing high noise generating works;
  - describe the community consultation undertaken to develop the strategies in condition D19(f);
  - include a complaints management system that would be implemented for the duration of the construction; and
  - include a program to monitor and report on the impacts and environmental performance of the development and the effectiveness of the management measures in accordance with condition D15.

#### 3.1 Approved Working Hours

Works on the site will be undertaken in accordance with the approved hours included in the SSA Consent including those included in Items E9, E10, E11 and E12 which include the following:

#### Construction Hours

- E9. 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.

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

- E10. Construction activities may be undertaken outside of the hours or days in condition E9 if required.
  - (a) 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
  - (c) where the works are inaudible at the nearest sensitive receivers; or
  - (d) where a variation is approved in advance in writing by the Planning Secretary or his
    nominee if appropriate justification is provided for the works.
- E11 Notification of such construction activities as referenced in condition E10 must be given to affected residents before undertaking the activities or as soon as is practical afterwards.
- E12. Rock breaking, rock saw cutting, rock hammering, sheet piling, pile driving and seniar activities may only be carried out between the following hours: unless otherwise approved under the CNVMSP:
  - (a) Bam to 12pm, Monday to Friday; and
  - (b) 2pm to 5pm Monday to Friday.



#### 4 NOISE AND VIBRATION CRITERIA

Relevant noise and vibration criteria for construction activities are detailed below.

#### **4.1 Construction Noise Objectives**

Relevant construction noise objectives applicable to this project are outlined below.

#### 4.1.1 NSW EPA Interim Construction Noise Guideline (ICNG) 2009

Noise objective for construction and demolition activities are discussed in the *Interim Construction Noise Guideline* (ICNG). The ICNG also recommends procedures to address potential impacts of construction noise on residences and other sensitive land uses. The main objectives of the ICNG are summarised as follows:

- Promote a clear understanding of ways to identify and minimise noise from construction works;
- Focus on applying all "feasible" and "reasonable" work practices to minimise construction noise impacts;
- Encourage construction to be undertaken only during the recommended standard hours unless approval is given for works that cannot be undertaken during these hours;
- Streamline the assessment and approval stages and reduce time spent dealing with complaints at the project implementation stage; and
- Provide flexibility in selecting site-specific feasible and reasonable work practices in order to minimise noise impacts.

The ICNG contains a quantitative assessment method which is applicable to this project. Guidance levels are given for airborne noise at residences and other sensitive land uses.

The quantitative assessment method involves predicting noise levels at sensitive receivers and comparing them with the Noise Management Levels (NMLs). The NML affectation categories for residential receivers have been reproduced from the guideline and are listed in the table below.



Table 3 NMLs for quantitative assessment at residences

| Time of Day  | Noise<br>Management<br>Level<br>LAeq(15minute) 1,2   | How to Apply   |
|--|--|--|
| During approved hours of work included in Items E9, E10, E11 and E12 of the SSD. | Noise affected<br>RBL + 10 dB  | <ul> <li>The noise affected level represents the point above which there may be some community reaction to noise.</li> <li>Where the predicted or measured LAeq(15minute) is greater than the noise affected level, the proponent should apply all feasible and reasonable work practices to meet the noise affected level.</li> <li>The proponent should also inform all potentially impacted residents of the nature of works to be carried out, the expected noise levels and duration, as well as contact details.</li> </ul>  |
|  | Highly noise<br>affected<br>75 dBA   | <ul> <li>The highly noise affected level represents the point above which there may be strong community reaction to noise.</li> <li>Where noise is above this level, the relevant authority (consent, determining or regulatory) may require respite periods by restricting the hours that the very noisy activities can occur, taking into account:</li> <li>1. Times identified by the community when they are less sensitive to noise (such as before and after school for works near schools, or mid-morning or mid-afternoon for works near residences.</li> <li>2. If the community is prepared to accept a longer period of construction in exchange for restrictions on construction times.</li> </ul> |
| Outside the approved working hours   | Noise affected<br>RBL + 5 dB   | <ul> <li>A strong justification would typically be required for works outside the recommended standard hours.</li> <li>The proponent should apply all feasible and reasonable work practices to meet the noise affected level.</li> <li>Where all feasible and reasonable practices have been applied and noise is more than 5 dB above the noise affected level, the proponent should notify the community.</li> </ul>  |
| m above gro<br>measuring or<br>levels may be<br>Note 2 The RBL is the o          | und level. If the property<br>predicting noise levels is<br>higher at upper floors of<br>everall single-figure backgr<br>precommended standard | adary that is most exposed to construction noise, and at a height of 1.5 by boundary is more than 30 m from the residence, the location for at the most noise-affected point within 30 m of the residence. Noise if the noise affected residence. The noise level measured in each relevant assessment period (during hours). The term RBL is described in detail in the NSW Industrial Noise  |

Construction noise levels at other noise receivers are outlined below:

- Construction noise levels within classrooms other educational institutions is not recommended to exceed 45dBA L<sub>Aeq,15minute</sub>, when measured internally.
- Construction noise levels at offices and retail outlets are not recommended to exceed 70dBA LAeq,15minute, when measured externally.

Based on the measured background noise levels summarised in Section 2, and the NMLs outlined above, the construction noise criteria to be used in this assessment are listed in Table 4.



Table 4 NMLs as basis for the acoustic assessment

| Receiver Types                                  | NML, dB L <sub>Aeq(15minute)</sub> |                  |   |  |
|---|------------------------------------|------------------|---|--|
|   | Standard Hours Including approve   | ed working hours | Outside Standard Hours All hours not listed in the adjacent column. |  |
| Residential receivers located to the south east | NAFL: 51<br>(RBL (41) + 10dB)      | HNAL: 75         | RBL + 5dB   |  |

#### 4.2 Vibration Criteria

Effects of ground borne vibration on buildings may be segregated into the following three categories:

- Human comfort vibration in which the occupants or users of the building are inconvenienced or possibly disturbed.
- Effects on building contents where vibration can cause damage to fixtures, fittings and other non-building related objects.
- Effects on building structures where vibration can compromise the integrity of the building or structure itself.

#### **4.2.1** Vibration Criteria – Human Comfort

Vibration effects relating specifically to the human comfort aspects of the project are taken from AV-TG. This type of impact can be further categorised and assessed using the appropriate criterion as follows:

- Continuous vibration from uninterrupted sources.
- Impulsive vibration up to three instances of sudden impact e.g., dropping heavy items, per monitoring period.
- Intermittent vibration such as from drilling, compacting or activities that would result in continuous vibration if operated continuously.



Table 5 Continuous vibration acceleration criteria (m/s²) 1 Hz-80 Hz

| Location   | Assessment            | Preferred Values |                   | Maximum Values |                   |
|--|-----------------------|------------------|-------------------|----------------|-------------------|
|  | period                | z-axis           | x- and y-<br>axis | z-axis         | x- and y-<br>axis |
| Critical working areas<br>(e.g. hospital operating<br>theatres, precision<br>laboratories) | Day or night-<br>time | 0.0050           | 0.010             | 0.10           | 0.20              |
| Residences   | Daytime               | 0.010            | 0.0071            | 0.020          | 0.014             |
|  | Night-time            | 0.007            | 0.005             | 0.014          | 0.010             |
| Offices, schools,  | Day or night-         | 0.020            | 0.014             | 0.040          | 0.028             |
| educational institutions and places of worship   | time                  | 0.04             | 0.029             | 0.080          | 0.058             |
| Workshops  | Day or night-<br>time | 0.04             | 0.029             | 0.080          | 0.058             |

Table 6 Impulsive vibration acceleration criteria (m/s²) 1 Hz-80 Hz

| Location  | Assessment period     | Preferred Values |                   | Maximum Values |                   |
|---|-----------------------|------------------|-------------------|----------------|-------------------|
|   |                       | z-axis           | x- and y-<br>axis | z-axis         | x- and y-<br>axis |
| Critical working areas (e.g. hospital operating theatres, precision laboratories) | Day or night-<br>time | 0.0050           | 0.010             | 0.10           | 0.20              |
| Residences  | Daytime               | 0.30             | 0.21              | 0.60           | 0.42              |
|   | Night-time            | 0.10             | 0.071             | 0.20           | 0.14              |
| Offices, schools, educational institutions and places of worship                  | Day or night-<br>time | 0.64             | 0.46              | 1.28           | 0.92              |
| Workshops   | Day or night-<br>time | 0.64             | 0.46              | 1.28           | 0.92              |

Table 7 Intermittent vibration impacts criteria (m/s<sup>1.75</sup>) 1 Hz-80 Hz

| Location  | Daytime             |                   | Night-time          |                   |  |
|---|---------------------|-------------------|---------------------|-------------------|--|
|   | Preferred<br>Values | Maximum<br>Values | Preferred<br>Values | Maximum<br>Values |  |
| Critical working areas (e.g. hospital operating theatres, precision laboratories) | 0.10                | 0.20              | 0.10                | 0.20              |  |
| Residences  | 0.20                | 0.40              | 0.13                | 0.26              |  |
| Offices, schools, educational institutions and places of worship                  | 0.40                | 0.80              | 0.40                | 0.80              |  |
| Workshops   | 0.80                | 1.60              | 0.80                | 1.60              |  |



#### **4.2.2** Vibration Criteria – Building Contents and Structure

The vibration effects on the building itself are assessed against international standards as follows:

- For transient vibration: British Standard BS 7385: Part 2-1993 "Evaluation and measurement for vibration in buildings Part 2: Guide to damage levels from ground borne vibration" (BSI 1993); and
- For continuous or repetitive vibration: German DIN 4150: Part 3 1999 "Effects of Vibration on Structure" (DIN 1999).

#### 4.2.3 Standard BS 7385 Part 2 - 1993

For transient vibration, as discussed in standard BS 7385 Part 2-1993, the criteria are based on peak particle velocity (mm/s) which is to be measured at the base of the building. These are summarised below.

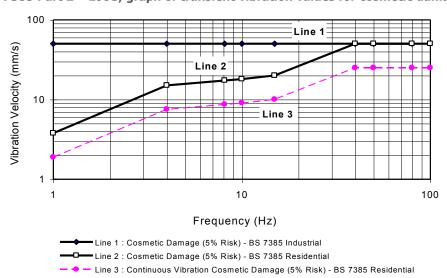
Table 8 Transient vibration criteria as per standard BS 7385 Part 2 - 1993

| Line in<br>Figure 2 | Type of Building   | Peak Component Particle Velocity in Frequency Range of Predominant Pulse |   |  |  |
|---------------------|--|--|---|--|--|
|                     |  | 4 Hz to 15 Hz  | 15 Hz and Above   |  |  |
| 1                   | Reinforced or framed structures<br>Industrial and heavy commercial<br>buildings.       | 50 mm/s at 4 Hz and above  |   |  |  |
| 2                   | Unreinforced or light framed structures Residential or light commercial type buildings | 15 mm/s at 4 Hz increasing to 20 mm/s at 15 Hz                           | 20 mm/s at 15 Hz increasing to 50 mm/s at 40 Hz and above |  |  |

Standard BS 7385 Part 2-1993 states that the values in Table 8 relate to transient vibration which does not cause resonant responses in buildings.

Where the dynamic loading caused by continuous vibration events is such that it results in dynamic magnification due to resonance (especially at the lower frequencies where lower guide values apply), then the values in Table 8 may need to be reduced by up to 50% (refer to Line 3 in Figure 2).

Figure 2 BS 7385 Part 2 – 1993, graph of transient vibration values for cosmetic damage





In the lower frequency region where strains associated with a given vibration velocity magnitude are higher, the recommended values corresponding to Line 2 are reduced. Below a frequency of 4 Hz, where a high displacement is associated with the relatively low peak component particle velocity value, a maximum displacement of 0.6 mm (zero to peak) is recommended. This displacement is equivalent to a vibration velocity of 3.7 mm/s at 1 Hz.

The standard also states that minor damage is possible at vibration magnitudes which are greater than twice those given in Table 8, and major damage to a building structure may occur at values greater than four times the tabulated values.

Fatigue considerations are also addressed in the standard and it is concluded that unless the calculation indicates that the magnitude and number of load reversals is significant (in respect of the fatigue life of building materials) then the values in Table 8 should not be reduced for fatigue considerations.

#### 4.2.4 Standard DIN 4150 Part 3 - 1999

For continuous or repetitive vibration, standard DIN 4150 Part 3-1999 provides criteria based on values for peak particle velocity (mm/s) measured at the foundation of the building; these are summarised in Table 9. The criteria are frequency dependent and specific to particular categories of structures.

Table 9 Structural damage criteria as per standard DIN 4150 Part 3 - 1999

| Type of Structure  | Peak Component Particle Velocity, mm/s |                   |                                 |  |  |
|--|--|-------------------|---------------------------------|--|--|
|  | Vibration at the                       | Vibration of      |                                 |  |  |
|  | 1 Hz to 10 Hz                          | 10 Hz to 50<br>Hz | 50 Hz to 100<br>Hz <sup>1</sup> | horizontal<br>plane of<br>highest floor<br>at all<br>frequencies |  |
| Buildings used for commercial purposes, industrial buildings and buildings of similar design   | 20                                     | 20 to 40          | 40 to 50                        | 40   |  |
| Dwellings and buildings of similar design and/or use   | 5                                      | 5 to 15           | 15 to 20                        | 15   |  |
| Structures that, because of their sensitivity to vibration, do not correspond to those listed in lines 1 and 2 and are of great intrinsic value (e.g. buildings that are under a preservation order) | 3                                      | 3 to 8            | 8 to 10                         | 8  |  |

Note 1: For frequencies above 100Hz, at least the values specified in this column shall be applied.

#### 4.2.5 Project Vibration Criteria

Based on the details included in the sections above the project specific vibration criteria to protect the surrounding residential receivers from structural or architectural damage includes the following:

Project construction vibration management level at all surrounding building structures – 8 mm/s.

In the event that this vibration criteria is exceeded, further investigation is required, including an assessment of the nature of the vibration and frequency characteristics to determine if the vibration criteria can be relaxed for the specific nature of the works.



#### 4.3 Construction Traffic Noise Criteria

For existing residences and other sensitive land uses affected by additional traffic on existing roads, the NSW *Road Noise Policy (RNP)* states that for noise associated with increased road traffic generated by land use developments, any increase in the total traffic noise level should be limited to 2 dB during both day and night-time periods. An increase of 2 dB represents a minor impact that is considered barely perceptible to the average person.

#### 5 NOISE AND VIBRATION ASSESSMENT

#### **5.1** Construction Noise Assessment

Sound power levels have been predicted for the construction tasks identified in the project program. The equipment anticipated for use in each task is based on previous project experience. The sound power levels for the equipment likely to be used for each of the listed tasks are provided in Table 10 below.

Table 10 Summary of predicted sound power levels

| Tasks                        | Equipment                          | Sound Power Levels<br>(dBA re 1pW) | Aggregate Sound<br>Power Level per Task<br>(dBA re 1pW) |  |
|------------------------------|------------------------------------|------------------------------------|---|--|
| Site                         | Mobile crane                       | 110                                | 113   |  |
| Establishment<br>Works       | Power hand tools                   | 109                                | _   |  |
| Works                        | Semi Rigid Vehicle <sup>1</sup>    | 105                                |   |  |
| Ground Works                 | Excavator                          | 112                                | 119   |  |
|                              | Hand held jack hammer <sup>1</sup> | 111                                | _   |  |
|                              | Dump truck <sup>1</sup>            | 104                                | _   |  |
|                              | Concrete saw 1                     | 114                                | _   |  |
|                              | Skid steer                         | 110                                | _   |  |
|                              | Power hand tools                   | 109                                |   |  |
| Structure                    | Hand held jack hammer <sup>1</sup> | 106                                | 117   |  |
|                              | Concrete saw 1                     | 114                                | _   |  |
|                              | Power hand tools                   | 109                                | _   |  |
|                              | Welder                             | 101                                | _   |  |
|                              | Concrete pump truck                | 110                                | _   |  |
|                              | Concrete agitator truck            | 108                                |   |  |
| Internal Works               | Power hand tools                   | 109                                | 109   |  |
| Common and<br>External Works | Concrete agitator truck            | 108                                | _ 117   |  |
|                              | Saw cutter <sup>1</sup>            | 104                                |   |  |
|                              | Dump truck <sup>1</sup>            | 104                                | _   |  |
|                              | Concrete saw 1                     | 114                                | _   |  |
|                              | Power hand tools                   | 109                                | _   |  |
|                              |                                    |                                    |   |  |

Note 1: An assumed time correction has been applied, this being 5 minutes of operation in any 15-minute interval.



#### **5.2** Predicted Construction Noise Levels

Predicted construction noise levels are presented below for each of the surrounding receiver in accordance with the NSW EPA ICNG.

#### Note:

- Predicted noise levels presented below are given in a range, this includes the expected minimums as well
  as the maximums.
- With regards to the maximum noise levels in the range, these are typically experienced when plant/works
  are within close proximity to a boundary. In our experience whilst these levels above NML's and considered
  intrusive they will only occur for a short time and is not a representation of noise levels during the entire
  construction period.



Table 11 Receiver 1 – Summary of preliminary predicted construction noise levels – Residence to the north

| Phase                        | Activity                | Aggregate Sound<br>Power Level<br>(dBA re 1pW) | Predicted <u>Individual</u><br>Noise Level at<br>Receiver<br>dBA L <sub>Aeq 15 minutes</sub> | Predicted Combined Noise Level at Receiver dBA L <sub>Aeq 15 minutes</sub> | Criteria<br>dBA L <sub>Aeq</sub> 15 minutes | Summary of Result   |
|------------------------------|-------------------------|--|--|--|---|---|
| Site<br>Establishment        | Mobile crane            | 113  | 54 to 72   | 57 to 76   | During Approved Working Hours  41 + 10 = 51 | Works indicatively predicted to have the potential to exceed the internal noise management level when working near a receiver.  Management of construction noise including community engagement it required as detailed in this section of the report |
|                              | Power hand tools        |  | 53 to 71   |  |   |   |
| Works                        | Semi Rigid Vehicle      |  | 49 to 68   |  |   |   |
|                              | Excavator               | 119  | 56 to 74   | 62 to 81   |   |   |
|                              | Handheld jack hammer    |  | 50 to 69   |  | Highly Noise<br>Affected Level              |   |
| Ground Works                 | Dump truck              |  | 48 to 67   |  |   |   |
| and Demolition               | Concrete saw            |  | 58 to 77   |  |   |   |
|                              | Skid steer              |  | 54 to 72   |  |   |   |
|                              | Power hand tools        |  | 53 to 71   |  |   |   |
|                              | Handheld jack hammer    | 117  | 50 to 69   | 62 to 80   |   |   |
|                              | Concrete saw            |  | 58 to 77   |  |   |   |
| Churchina                    | Power hand tools        |  | 53 to 71   |  |   |   |
| Structure                    | Welder                  |  | 45 to 63   |  |   |   |
|                              | Concrete pump truck     |  | 54 to 72   |  |   |   |
|                              | Concrete agitator truck |  | 52 to 70   |  |   |   |
| Internal Works               | Power hand tools        | 109  | 53 to 71   | 53 to 71   |   |   |
| Common and<br>External Works | Concrete agitator truck | 117  | 52 to 70   | 61 to 79   |   |   |
|                              | Saw cutter              |  | 48 to 67   |  |   |   |
|                              | Dump truck              |  | 48 to 67   |  |   |   |
| Executal Works               | Concrete saw            |  | 58 to 77   |  |   |   |
|                              | Power hand tools        |  | 53 to 71   |  |   |   |

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### 5.3 Construction Traffic Noise Assessment

Construction traffic required to access the site as part of the works to be undertaken on the site will be management in accordance with a *Construction Management Plan* which will be developed once a building contractor has been appointed.

#### 5.4 Vibration Assessment

In order to maintain compliance with the human comfort vibration criteria discussed in Section 4.2, it is recommended that the indicative safe distances listed in table below should be maintained. These indicative safe distances should be validated prior to the start of construction works by undertaking measurements of vibration levels generated by construction and demolition equipment to be used on site.

Since the criteria for scientific or medical equipment (should any of these exist close to the site) can be more stringent than those required for human comfort, vibration validating measurements should be conducted at each site to determine the vibration level and potential impact onto this sensitive equipment.

Additionally, any vibration levels should be assessed in accordance with the criteria discussed in Section 4.2.

Table 12 Recommended indicative safe working distances for vibration intensive plant

|                           |   | Safe Working Distances (m)                               |   |  |
|---------------------------|---|--|---|--|
| Plant                     | Rating / Description                        | Cosmetic Damage<br>(BS 7385: Part 2<br>DIN 4150: Part 3) | Human Comfort<br>(AVTG)                                     |  |
|                           | < 50 kN (Typically 1 – 2 tonnes)            | 5  | 15 – 20   |  |
|                           | < 100 kN (Typically 2 – 4 tonnes)           | 6  | 20  |  |
| Vibratory roller          | < 200 kN (Typically 4 – 6 tonnes)           | 12   | 40  |  |
|                           | < 300 kN (Typically 7 – 13 tonnes)          | 15   | 100   |  |
|                           | > 300 kN (Typically more than 13 tonnes)    | 20   | 100   |  |
| Small hydraulic hammer    | 300 kg, typically 5 – 12 tonnes excavator   | 2  | 7   |  |
| Medium hydraulic hammer   | 900 kg, typically 12 – 18 tonnes excavator  | 7  | 23  |  |
| Large hydraulic<br>hammer | 1600 kg, typically 18 – 34 tonnes excavator | 22   | 73  |  |
| Vibratory pile<br>driver  | Sheet piles                                 | 2 – 20   | 20  |  |
| Jackhammer                | Hand held                                   | 1  | Avoid contact with<br>structure and steel<br>reinforcements |  |

Based on the required construction activities to be undertaken as part of the project as well as the proximity of the surrounding receivers to the site the resulting construction vibration is unlikely to negatively impact on any of the surrounding receivers.



### **6 NOISE AND VIBRATION MANAGEMENT PLAN**

### **6.1 Acoustic Management Procedures**

Table 13 below summarises the management procedures recommended for airborne noise and vibration impact. These procedures are also further discussed in the report. Hence, where applicable, links to further references are provided in Table 13.

**Table 13 Summary of mitigation procedures** 

| Procedure                                  | Abbreviation | Description   | Further Reference  |
|--|--------------|---|--|
| General<br>Management<br>Measures          | GMM          | Introduce best-practice general mitigation measures in the workplace which are aimed at reducing the acoustic impact onto the nearest affected receivers.   | Refer to Section 5 For noise impact, also refer to Section 6.2.1 For vibration impact, also refer to Section 6.3.1 |
| Project<br>Notification                    | PN           | Issue project updates to stakeholders, discussing overviews of current and upcoming works. Advanced warning of potential disruptions can be included.   | Refer to Section 6.5.4   |
|  |              | Content and length to be determined on a project-by-project basis.  |  |
| Verification<br>Monitoring                 | V            | Monitoring to comprise attended or unattended acoustic surveys. The purpose of the monitoring is to confirm measured levels are consistent with the predictions in the acoustic assessment, and to verify that the mitigation procedures are appropriate for the affected receivers.  If the measured levels are higher than those predicted, then the measures will need to be reviewed and the management plan will need to be amended. | For noise impact, refer to Section 6.2.2. For vibration impact, refer to Section 6.3.2                             |
| Complaints<br>Management<br>System         | CMS          | Implement a management system which includes procedures for receiving and addressing complaints from affected stakeholders  | Refer to Section 6.5   |
| Specific<br>Notification                   | SN           | Individual letters or phone calls to notify stakeholders that noise levels are likely to exceed noise objectives.  Alternatively, contractor could visit stakeholders individually in order to brief them in regards to the noise impact and the mitigation measures that will be implemented.  | Refer to Section 6.5.3   |
| Respite Offer                              | RO           | Offer provided to stakeholders subjected to an ongoing impact.  | -  |
| Alternative<br>Construction<br>Methodology | AC           | Contractor to consider alternative construction options that achieve compliance with relevant criteria. Alternative option to be determined on a case-by-case basis.  | -  |

The application of these procedures is in relation to the exceedances over the relevant criteria. For airborne noise, the criteria are based on NMLs. The allocation of these procedures is discussed in Section 6.1.1

For vibration, the criteria either correspond to human comfort, building damage or scientific and medical equipment. The application of these procedures is discussed in Section 6.1.2.



### **6.1.1** Allocation of Noise Management Procedures

For residences, the management procedures have been allocated based on noise level exceedances at the affected properties, which occur over the designated NMLs (refer to section 4.1). The allocation of these procedures is summarised in Table 14 below.

Table 14 Allocation of noise management procedures – residential receivers

| Construction Hours   | Exceedance over NML (dB) | Management Procedures (see definition above) |  |  |  |
|--|--------------------------|--|--|--|--|
| Standard Hours   | 0 - 3                    | GMM  |  |  |  |
|  | 4 - 10                   | GMM, PN, V <sup>1</sup> , CMS, AC            |  |  |  |
|  | > 10                     | GMM, PN, V, CMS, SN, AC                      |  |  |  |
| Outside Standard Hours   | 0 - 10                   | GMM, AC                                      |  |  |  |
|  | 11 - 20                  | GMM, PN, V <sup>1</sup> , CMS, AC            |  |  |  |
|  | > 20                     | GMM, PN, V, CMS, SN, RO, AC                  |  |  |  |
| Notes  |                          |  |  |  |  |
| 1. Verification monitoring to be undertaken upon complaints received from affected receivers |                          |  |  |  |  |

Please note the following regarding the allocation of these procedures:

- The exceedances have been estimated as part of the acoustic assessment, and these are summarised in Section 5.1.
- The allocation of procedures is based on the assumptions used for noise level predictions (refer to Section 5.1). Consequently, these allocations can be further refined once additional details of the construction program become available.

For non-residential receivers (such as commercial), management measures are provided in Section 6.2.3.

### **6.1.2** Allocation of Vibration Management Procedures

Table 15 below summarises the vibration management procedures to be adopted based on exceedance scenarios (i.e., whether the exceedance occurs over human comfort criteria, building damage criteria, or criteria for scientific and medical equipment). Please note these management procedures apply for any type of affected receiver (i.e., for residences as well as non-residential receivers).

Table 15 Allocation of vibration management procedures

| <b>Construction Hours</b> | Exceedance Scenario                                  | Management Procedures |
|---------------------------|--|-----------------------|
| Standard Hours            | Over human comfort criteria (refer to Section 4.2)   | GMM, PN, V, RO        |
|                           | Over building damage criteria (refer to Section 4.2) | GMM, V, AC            |
| Outside Standard Hours    | Over human comfort criteria (refer to Section 4.2)   | GMM, SN, V, RO, CMS   |
|                           | Over building damage criteria (refer to Section 4.2) | GMM, V, AC            |



### 6.2 Site Specific Noise Mitigation Measures – High Noise Affected Appliances

Predicted noise levels outlined in section 5.1 indicate exceedances above the Noise Management Levels (NMLs) as well as the Highly Noise Affected Level (HNAL) when in proximity to a boundary. To militate against any exceedances, the site will need to introduce periods of respite for activities which are creating noise levels above the HNAL only (i.e. greater than 75dBA). See below.

**Table 16 Recommended Respite Periods** 

| Monday to Friday                                    | Saturday                             |
|---|--------------------------------------|
| 7:00am to 9:00am – No noisy works (Respite Period)  | No Works based on the SSD Conditions |
| 9:00am to 12:00pm – Works                           |                                      |
| 12:00pm to 2:00pm – No noisy works (Respite Period) | _                                    |
| 2:00pm to 5:00pm – Works                            | _                                    |

### **6.2.1 General Comments**

The contractor will, where reasonable and feasible, apply best practice noise mitigation measures. These measures shall include the following:

- Maximising the offset distance between plant items and nearby noise sensitive receivers.
- Preventing noisy plant working simultaneously and adjacent to sensitive receivers.
- Minimising consecutive works in the same site area.
- Orienting equipment away from noise sensitive areas.
- Carrying out loading and unloading away from noise sensitive areas.

In order to minimise noise impacts during the works, the contractor will take all reasonable and feasible measures to mitigate noise effects.

The contractor will also take reasonable steps to control noise from all plant and equipment. Examples of appropriate noise control include efficient silencers and low noise mufflers.

The contractor should apply all feasible and reasonable work practices to meet the NMLs and inform all potentially impacted residents of the nature of works to be carried out, the expected noise levels, duration of noise generating construction works, and the contact details for the proposal.



### **6.2.2 Noise Monitoring**

Noise monitoring, if required, will be performed by an acoustical consultant directly engaged by the contractor.

Noise monitoring is recommended to be undertaken by attended noise measurements at the start of any new phase of works (i.e. demolition, excavation or remediation works etc.). The statistical parameters to be measured should include the following noise descriptors: LAmin, LA90, LA10, LA1, LAmax and LAeq. Unattended noise measurements should be conducted over consecutive 15 minute periods.

This monitoring should also be complemented by undertaking attended noise measurements in order to:

- Differentiate between construction noise sources and other extraneous noise events (such as road traffic and aircraft noise)
- Note and identify any excessive noise emitting machinery or operation.

Noise monitoring and measurements on the site will include the following:

- Noise monitoring during the required demolition to be completed on the site.
- Periodic attended noise measurements during the bulk earthworks to be completed on the site, typically monthly.

In addition to the above detailed measurements, should any complaints be received which have not been determined previously, it should be confirmed by conducting additional attended noise measurements.

The survey methodology and any equipment should comply with the requirements discussed in Standard AS 1055.1-1997.

### 6.2.3 Noise Mitigation Measures for Non-Residential Receivers

Where exceedances have been identified, the following mitigation measures are recommended:

- Undertake general mitigation measures as discussed in Section 6
- Issue project updates to tenants in affected premises. The updates can include overview of current and upcoming works, as well as advanced warning of potential disruptions. These updates can also be issued through an email distribution list or via social media.
- Signage to be posted in order to provide stakeholders information regarding project details, emergency contacts and enquiry contact information.

### **6.2.4 Alternate Equipment or Process**

Exceedance of the site's NMLs should result in an investigation as to whether alternate equipment could be used, or a difference process could be undertaken.

In some cases, the investigation may conclude that no possible other equipment can be used, however, a different process could be undertaken.

### **6.2.5** Acoustic Enclosures/Screening

Typically, on a construction site there are three different types of plant that will be used: mobile plant (i.e., excavators, skid steers, etc.), semi mobile plant (i.e., hand tools generally) or static plant i.e. (diesel generators).

For plant items which are static it is recommended that, in the event exceedances are being measured due to operation of the plant item, an acoustic enclosure/screen is constructed to reduce impacts. These systems can be constructed from Fibre Cement (FC) sheeting, plywood or, if airflow is required, acoustic attenuators or louvres.



For semi mobile plant, relocation of plant should be investigated to either be operated in an enclosed space or at locations away from a receiver.

With mobile plant it is generally not possible to treat these sources. However, investigations into the machine itself may result in a reduction of noise (i.e., mufflers/attenuators etc).

### **6.2.6 Required Piling**

Works on the site are not required to include driven or vibration piling.

### **6.3 Vibration Mitigation Measures**

### **6.3.1 General Comments**

As part of the CNVMP, the following vibration mitigation measures should be implemented:

- Any vibration generating plant and equipment is to be in areas within the site in order to lower the vibration impacts.
- Investigate the feasibility of rescheduling the hours of operation of major vibration generating plant and equipment.
- Use lower vibration generating items of construction plant and equipment; that is, smaller capacity plant.
- Minimise conducting vibration generating works consecutively in the same area (if applicable).
- Schedule a minimum respite period of at least 30 minutes before activities commence which are to be undertaken for a continuous 4-hour period.
- Use only dampened rock breakers and/or "city" rock breakers to minimise the impacts associated with rock breaking works.
- Conduct attended measurements of vibration generating plant at commencement of works in order to validate the indicative safe working distances advised in Table 25 and, consequently, to establish safe working distances suitable to the project. Measurements should be conducted at the nearest affected property boundary. These safe working distances should be defined by considering the vibration criteria discussed in Section 1.2 (i.e., criteria for structural damage, human comfort and impact to scientific or medical equipment).

### **6.3.2 Vibration Monitoring**

Vibration monitoring will be undertaken at the nearest most affected structures and include the following:

1. Attended vibration surveys resulting from high vibration generating activities which are within the recommended safe working distances detailed in Table 12 above. Vibration assessments should include attended vibration measurements of proposed activities to be undertaken on the site.

The vibration monitoring equipment would be operated and analysed by the acoustical consultant.

Reports of the measured vibration levels and their likely impacts would be prepared by the acoustical consultant and issued to the contractor.



### 6.4 Noise and Vibration Monitoring

As part of the management of noise from the proposed construction activities to be undertaken on the site the following noise and vibration monitoring is to be undertaken:

- 1. Noise Monitoring—Attended noise monitoring of excavation and construction activities is to be undertaken during the following periods:
  - a. Commencement of any rock breaking or sawing on the site.
  - b. In response to any ongoing complaints received from neighbours.
- Vibration Based on the proximity of the surrounding receivers to the works magnitudes of vibration resulting from construction activities required to be undertaken on the site are not expected to approach vibration limits detailed in Section 4.2 of this report, therefore permanent continuous vibration monitoring is not recommended.

Attended vibration monitoring is to be undertaken at the following periods:

- a. Commencement of any high vibration generating activities including hydrail hammering, rock breaking or vibration rolling on the site.
- receiver location in the event complaints resulting from construction activities resulting from the
  perception of vibration are experienced by the occupants of buildings within the vicinity of the
  site.

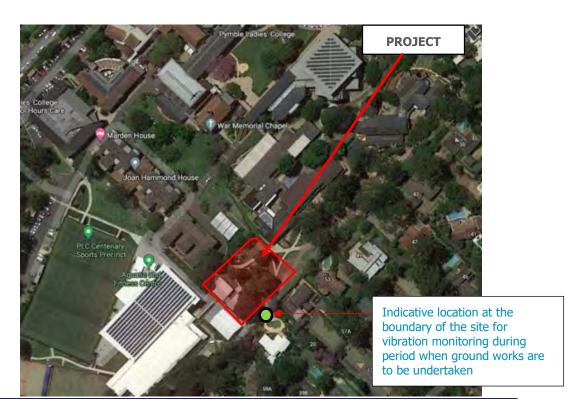
### Permanent vibration logging

c. A permanent vibration logger to be installed at the boundary of the properties to the south east of the site. Monitoring to include a vibration logger with the capability of recording Peak Particle Velocity as mm/s. Equipment to include real time alarming including SMS alerts.

Monitoring to include the period when ground works (excavation) are required to be completed.

An indication location of the required location for vibration logging is included in the figure below.

Figure 3 Location of Vibration Monitoring





# 6.5 Complaints management process as outlined in the Community Communication

### 6.5.1 Enquiries and complaints management

The Contractor is to establish a communication register for recording incoming complaints. The registration of a particular item will remain open until the complaint has been appropriately dealt with.

All complaints should be investigated by the Contractor in accordance with the procedures outlined in Australia Standard 2436-2010. In addition, the following procedures are an example of the procedures that are to be specifically adopted for complaints relating to noise.

Upon receipt of a complaint the Contractor is to:

- Try to ascertain from the complaint which appliance is causing the problem i.e., inside or outside the site and in what position.
- Establish from the monitoring equipment if the allowable noise levels have been complied with.
- Establish if the appliance positioning has previously been highlighted as a problem area. If not and the noise levels are above the allowable limit, then the equipment and its position shall be noted.
- Move machinery if the allowable levels have been exceeded or take other acoustic remedial action.
- The Site Supervisor is to ensure that a report of any incident is provided to the Project Manager.
- The Project Manager is to provide a report on the incident to the relevant stakeholders.
- The Contractor is to provide a 24-hour telephone contact number and this number is to be prominently displayed on the site.

### **6.5.2 Complaints management process**

All complaints will be conducted in accordance with the projects Community Communication Strategy. Any face to face complaints will be directed to the hotline as detailed in the Community Communication Strategy as required by Item D9 of the SSD.



### **6.5.3 Community Notifications**

Prior to the works onsite being undertaken, it is recommended that community consultation with the neighbouring affected parties be undertaken. These include the locations detailed in the figure below.

Figure 4 Required Community Notification Area



Communication notification, should not be limited to the beginning of the onsite works but throughout, providing the community with constant updates on the progress and upcoming works. In our experience these could include:

- Project website.
- · Email notifications; and
- Letterbox drops.

### **6.5.4 Community Engagement**

It is proposed that throughout the duration of the project, continued meetings with both the school principals will be undertaken on a regular basis to monitor and mitigate any impacts of construction noise and vibration on the school community.

As part of the construction works to be undertaken to deliver the project ongoing communication with Pymble Ladies College will be undertaken such that disruption from construction noise can be managed. The consultation with Pymble Ladies College will be undertaken such that impact on sensitive activities being undertaken within College will not be impacted such as exam periods, special events on the school and the like.



During the periods when construction noise may disrupt the school high noise generating equipment may not be operated, which will be coordinated in consultation with Pymble Ladies College representatives.

The consultation will be undertaken in accordance with the *Pymble Ladies College – Community Construction Community Strategy – Grey House Precinct* report which has been approved for the project.

### **6.6 Complaints Management System**

Should complaints arise they must be dealt with in a responsible and uniform manner, therefore, a management system to deal with complaints is detailed above.

### **6.7 Contingency Plans**

Contingency plans are required to address noise or vibration problems if excessive levels are measured at surrounding sensitive receivers and/or if justified complaints occur. Such plans include:

- Stop the onsite works.
- Identify the source of the main equipment within specific areas of the site which is producing the most construction noise and vibration at the sensitive receivers; and
- Review the identified equipment and determine if an alternate piece of equipment can be used or the process can be altered.
- In the event an alternate piece of equipment or process can be used, works can re-commence.
- In the event an alternate piece of equipment or process cannot be determined implement a construction assessment to be performed by a suitably qualified acoustic consultant.

The Superintendent shall have access to view the Contractor's noise measurement records on request. The Superintendent may undertake noise monitoring if and when required.

### 6.8 General Mitigation Measures (Australia Standard 2436-2010)

As well as the above project specific noise mitigation controls, AS 2436-2010 "Guide to Noise and Vibration Control on Construction, Demolition and Maintenance Sites" sets out numerous practical recommendations to assist in mitigating construction noise emissions. Examples of strategies that could be implemented on the subject project are listed below, including the typical noise reduction achieved, where applicable.

### **6.8.1 Adoption of Universal Work Practices**

- Regular reinforcement (such as at toolbox talks) of the need to minimise noise and vibration.
- Regular identification of noisy activities and adoption of improvement techniques.
- Avoiding the use of portable radios, public address systems or other methods of site communication that may unnecessarily impact upon nearby sensitive receivers.
- Where possible, avoiding the use of equipment that generates impulsive noise.
- Minimising the need for vehicle reversing for example (particularly at night), by arranging for one-way site traffic routes.
- Use of broadband audible alarms on vehicles and elevating work platforms used on site.
- · Minimising the movement of materials and plant and unnecessary metal-on-metal contact.
- Minimising truck movements.



### 6.8.2 Plant and Equipment

- Choosing quieter plant and equipment based on the optimal power and size to most efficiently perform the required tasks.
- Selecting plant and equipment with low vibration generation characteristics.
- Operating plant and equipment in the guietest and most efficient manner.

### **6.8.3 On Site Noise Mitigation**

- Maximising the distance between noise activities and noise sensitive land uses.
- Installing purpose-built noise barriers, acoustic sheds and enclosures.

### 6.8.4 Work Scheduling

- Providing respite periods which could include restricting very noisy activities to time periods that least affect
  the nearby noise sensitive locations, restricting the number of nights that after-hours work is conducted near
  residences or by determining any specific requirements.
- Scheduling work to coincide with non-sensitive periods.
- Planning deliveries and access to the site to occur quietly and efficiently and organising parking only within designated areas located away from the sensitive receivers.
- Optimising the number of deliveries to the site by amalgamating loads where possible and scheduling arrivals within designated hours.
- Including contract conditions that include penalties for non-compliance with reasonable instructions by the principal to minimise noise or arrange suitable scheduling.

### **6.8.5 Source Noise Control Strategies**

Some ways of controlling noise at the source are:

- Where reasonably practical, noisy plant or processes should be replaced by less noisy alternatives.
- Modify existing equipment: Engines and exhausts are typically the dominant noise sources on mobile plant such as cranes, graders, excavators, trucks, etc. In order to minimise noise emissions, residential grade mufflers should be fitted on all mobile plant utilised on site.
- Siting of equipment: locating noisy equipment behind structures that act as barriers, or at the greatest distance from the noise-sensitive area; or orienting the equipment so that noise emissions are directed away from any sensitive areas, to achieve the maximum attenuation of noise.
- Regular and effective maintenance.

### **6.8.6 Miscellaneous Comments**

Deliveries should be undertaken, where possible, during standard construction hours.

Maximise hammer penetration (and reduce blows) by using sharp hammer tips. Keep stocks of sharp profiles at site and monitor the profiles in use.

It is advised that mobile plant and trucks operating on site for a significant portion of the project are to have reversing alarm noise emissions minimised. This is to be implemented subject to recognising the need to maintain occupational safety standards.

No public address system should be used on site (except for emergency purposes).



#### 6.9 Driver Code

All drivers of trucks and construction vehicles are required to be trained in the sites requirements for the operation of equipment and routes to be used to access the site. The driver code is required to be developed in accordance with the project SSD Conditions including Item D23 (c) which includes the following.

### **Driver Code of Conduct**

- D23. A Driver Code of Conduct must be prepared and communicated by the Applicant to heavy vehicle drivers and must address the following:
  - (a) minimise the impacts of earthworks and construction on the local and regional road network;
  - (b) minimise conflicts with other road users:
  - c) minimise road traffic noise; and
  - (d) ensure truck drivers use specified routes.

Truck drivers are to be instructed to mitigate noise impacts including the following:

- 1. Mitigate engine braking from truck when possible, including deactivating breaks within the vicinity of residential receivers.
- 2. Reduce aggressive acceleration from the site.
- 3. Ensure all trucks and equipment are well maintained.
- 4. Other relevant noise reducing operations where possible.

Details of the required driver codes are included in the projects Construction Management Plan.



### 7 CONCLUSION

This report details the Construction Noise and Vibration Management Sub Plan for the construction of the proposed alterations and additions to Pymble Ladies College, Grey House Precinct project located at 20 Avon Road, Pymble and include lot 1 DP 69541.

An assessment of noise and vibration impacts from the required processes to be undertaken during the construction period of the project (including ground works and construction) has been undertaken and suitable treatments, management controls, perioding measurements and community engagement has been detailed in this report.

Providing the recommendations in this report are included in the construction of the site, compliance with the relevant EPA's *Interim Construction Noise Guideline* and the projects *SSD 17424905* will be achieved.

Based on the required construction activities to be undertaken on the site and the distance separation to the neighbouring receivers, compliance with the relevant vibration criteria is expected to be achieved without additional mitigations. Conformation of compliance with the relevant criteria will be undertaken using attended vibration monitoring.

For any additional information please do not hesitate to contact the person below.

Renards

Ben White Director

Pulse White Noise Acoustics



### APPENDIX A: ACOUSTIC GLOSSARY

The following is a brief description of the acoustic terminology used in this report:

Ambient Sound The totally encompassing sound in a given situation at a given time, usually composed of sound from all sources

near and far.

Audible Range The limits of frequency which are audible or heard as sound. The normal ear in young adults detects sound

having frequencies in the region 20 Hz to 20 kHz, although it is possible for some people to detect frequencies

outside these limits.

Character, acoustic The total of the qualities making up the individuality of the noise. The pitch or shape of a sound's frequency

content (spectrum) dictate a sound's character.

Decibel [dB] The level of noise is measured objectively using a Sound Level Meter. The following are examples of the decibel

readings of every day sounds;

0dB the faintest sound we can hear

30dB a quiet library or in a quiet location in the country 45dB typical office space. Ambience in the city at night

60dB Martin Place at lunch time

70dB the sound of a car passing on the street

80dB loud music played at home

90dB the sound of a truck passing on the street

100dB the sound of a rock band

115dB limit of sound permitted in industry

120dB deafening

dB(A) A-weighted decibels The ear is not as effective in hearing low frequency sounds as it is hearing high

frequency sounds. That is, low frequency sounds of the same dB level are not heard as loud as high frequency sounds. The sound level meter replicates the human response of the ear by using an electronic filter which is called the "A" filter. A sound level measured with this filter switched on is denoted as dB(A). Practically all noise is measured using the A filter. The sound pressure level in dB(A) gives a close indication of the subjective

loudness of the noise.

Frequency Frequency is synonymous to *pitch*. Sounds have a pitch which is peculiar to the nature of the sound generator.

For example, the sound of a tiny bell has a high pitch and the sound of a bass drum has a low pitch. Frequency

or pitch can be measured on a scale in units of Hertz or Hz.

Loudness A rise of 10 dB in sound level corresponds approximately to a doubling of subjective loudness. That is, a sound

of 85 dB is twice as loud as a sound of 75 dB which is twice as loud as a sound of 65 dB and so on

LMax The maximum sound pressure level measured over a given period.

LMin The minimum sound pressure level measured over a given period.

L1 The sound pressure level that is exceeded for 1% of the time for which the given sound is measured.

L10 The sound pressure level that is exceeded for 10% of the time for which the given sound is measured.

L90 The level of noise exceeded for 90% of the time. The bottom 10% of the sample is the L<sub>90</sub> noise level expressed

in units of dB(A).

Leq The "equivalent noise level" is the summation of noise events and integrated over a selected period of time.

dB (A) 'A' Weighted overall sound pressure level

Sound Pressure Level, LP dB

A measurement obtained directly using a microphone and sound level meter. Sound pressure level varies with distance from a source and with changes to the measuring environment. Sound pressure level equals 20 times the logarithm to the base 10 of the ratio of the rms sound pressure to the reference sound pressure of 20 micro

Pascals.

Sound Power Level,

Lw dB

Sound power level is a measure of the sound energy emitted by a source, does not change with distance, and cannot be directly measured. Sound power level of a machine may vary depending on the actual operating load and is calculated from sound pressure level measurements with appropriate corrections for distance and/or environmental conditions. Sound power levels is equal to 10 times the logarithm to the base 10 of the ratio of the sound power of the source to the reference sound power of 1 picoWatt



### APPENDIX B - BEN WHITE CV AND AAS MEMBERSHIP



# Curriculum Vitae – Benjamin White





## **Employment Experience:**

Director – Pule White Noise Acoustics Present

**Director - White Noise Acoustics:** 

Director/Engineer - Acoustic Logic Consultancy: July 2018

November 2020 -

March 2019 – Present March 2001 –

### **Experience:**

Ben White the Director of White Noise has over 17 years of experience in acoustic.

Ben has significant experience in providing acoustic services and expert advice in the following areas:

- Residential acoustic reports including aircraft noise (AS2021) assessments, traffic noise, train noise and vibration assessments.
- Noise emission assessments for various projects including assessments with planning requirements using EPA, Department of Planning, Council DCP's and similar regulatory requirements.
- Planning approvals including Development Applications for multi dwelling residential developments, commercial developments, hotels and boarding houses, places of entertainment, carparks, mixed use developments, shopping centres and the like.
- Expert court witness including Land and Environment Court and other expert witness work.
- Project planning and specifications for types of projects including residential, commercial, retail, hotel accommodation, warehouses and industrial developments and mixed-use projects.
- Project delivery for all types of projects including, design advice and project delivery requirements at all stages of projects during design and construction.
- Certification works including on site testing for the provision of certification of all types of projects including items required to comply with Part F5 of the BCA as well as project specific acoustic requirements.
- Mechanical design and advice for the treatments of mechanical services with project requirements.
- External façade design and specification.
- Specialised acoustic design advice including areas of projects.
- Issues with existing building include site surveys and audits as well as advice regarding rectification if required.



# AUSTRALIAN ACOUSTICAL SOCIETY



This is to certify that

# BENJAMIN WHITE

was admitted to the grade of

# MEMBER

of the Australian Acoustical Society

on

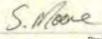
27th October 2020

and is entitled to use the letters

M.A.A.S.

issued on

26th November 2020



President



Common Seal Of

This certificate remains the property of the Australian Acoustical Society





# WASTE MANAGEMENT PLAN REV B

# **Pymble Grey House**

**PROJECT NUMBER: 647** 

ISSUED: 15/03/2024 (Initial Issue)

This Waste Management Plan forms part of the Project Management plan for the above project.

### THIS DOCUMENT IS UNCONTROLLED WHEN PRINTED.

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STEPHEN EDWARDS CONSTRUCTIONS PTY LTD

ABN 65 001 824 139

140 Wicks Road Macquarie Park NSW 2150

**2**: 02 9891 3099

: www.stephenedwards.com.au

REVISION: A
ISSUE DATE: 05/02/24



### **REVISION STATUS**

| DATE:    | REV  | PURPOSE              | REVIEWED BY |
|----------|--|----------------------|-------------|
| 01/02/24 | Α  | Initial distribution | A KYRILLOS  |
| 15/03/24 | 15/03/24 B Amended to capture PCA Comments |                      | A KYRILLOS  |
|          |  |                      |             |
|          |  |                      |             |



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### **Key Project Contacts & Details**

The following are the key personnel for the project to ensure these objectives are met:

### **Stephen Edwards Constructions Pty Ltd**

| Title                   | Name            | Phone        | Email                            |
|-------------------------|-----------------|--------------|----------------------------------|
| Project Director:       | Tony Macri      | 0414 306 185 | tmacri@stephenedwards.com.au     |
| Project Manager:        | Andrew Kyrillos | 0415 257 844 | akyrillos@stephenedwards.com.au  |
| Site Manager            | Peter Pawlyszyn | 0403 676 038 | ppawlyszyn@stephenedwards.com.au |
| QHSE Manager            | Paul Homan      | 0424 236 060 | phoman@stephenedwards.com.au     |
| Contracts Administrator | Fotini Bouranta | 0449 784 731 | fbouranta@stephenedwards.com.au  |
|                         |                 |              |                                  |
|                         |                 |              |                                  |

### **Pymble Ladies' College**

|                  | •           |              |                             |
|------------------|-------------|--------------|-----------------------------|
| Project Director | Greg Hastie | 0411 477 006 | ghastie@pymblelc.nsw.edu.au |
|                  |             |              |                             |

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### 1 Purpose

Stephen Edwards Constructions Pty Ltd (SEC) is committed to the principle that the generation of waste is minimised.

This plan sets out the control mechanisms for minimising and managing wastes on the project, with the overall aim of minimising waste and maximising resource efficiency.

### 2 Scope

This plan is applicable to the construction phase of the project. It provides a framework for all site personnel to follow to ensure that compliance is achieved with regards to waste minimisation, management and tracking requirements in line with relevant legislation, guidelines, policies, the project REF and other project environmental documents.

### 3 Waste Management Legislation and Policies

NSW Waste Avoidance and Resource Recovery Act 2001

NSW Protection of the Environment Operations Act 1997

Protection of the Environment Operations Amendment (Illegal Waste Disposal) Act 2013

Protection of the Environment Operations (Waste) Regulation 2014

**Environmentally Hazardous Chemicals Act 1985** 

NSW Waste Avoidance and Resource Recovery Strategy 2013 - 21

### 4 Guidance Documents

- EPA Waste Classification Guideline Part-1 Classify-Waste
- EPA Waste Classification Guideline Part-2 Immobilisation-Waste
- EPA Waste Classification Guideline Part-3 Radioactive-Waste
- EPA Waste Classification Guideline Part-4 Acid-Sulfate-Soils
- Australian Dangerous Goods Code

### 5 Aims and Objectives

To implement a waste management hierarchy on this project, with waste avoidance as a priority, followed by resource recovery through reuse and recycling/reprocessing, with disposal as a last resort.

SEC aims to achieve the following:

- meet the waste hierarchy
- improve and properly record and monitor waste management on the project
- ensure management of chemical, fuel and lubricant containers, solid and liquid wastes complies with the requirements of the EPA and the relevant local Council
- · ensure resource recovery is undertaken efficiently
- ensure recycling is undertaken efficiently.

### 6 Storage

All waste will be stored in an environmentally safe manner and in accordance with relevant statutory requirements. At a minimum:

- Where a waste storage licence is required, all storage will be in accordance with the conditions attached to the licence.
- Clear, simple and pictorial signage will be provided to indicate where materials can be stored and any specific requirements for their storage.
- Labels and signage will conform to any legal requirements.
- Waste storage areas will be located away from sensitive environments or waterways.
- Waste will be covered to prevent dust, odours or rainwater wherever possible.

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- Wastes will be separated where possible to allow for increased reuse/salvage opportunities.
- Where waste is stored in containers, the containers shall be appropriate for the type of waste being stored and the containers correctly labelled.
- Bins and other receptacles will be located such that there is adequate access and manoeuvring area for collection vehicles and that the collection vehicles can enter and exit the site in a forwards direction. The collection point for bins and other receptacles shall be located to allow waste collection to be undertaken without the need to block traffic.
- Only licensed asbestos removalists working under a permit issued by Safework NSW will be engaged for work
  involving the removal of asbestos and the Safework NSW Code of Practice for safe removal of asbestos will
  be followed rigorously. Asbestos waste will be wetted and sealed in heavy-duty plastic prior to transportation
  to a licensed landfill.
- Storage of dangerous goods shall be in accordance with the Safework NSW Code of Practice for Storage and Handling of Dangerous Goods.
- All incompatible dangerous goods and materials such as flammable goods and corrosive liquids will be kept separately.
- Liquid wastes shall be contained in a controlled area such as a holding pit, or portable tank prior to treatment and/or disposal.
- Containment devices will be structurally sound and leak free.
- Containment devices will be of sufficient quantity or volume to completely contain the liquid wastes generated.
- Containment devices will be located in an impervious bunded area which is ideally protected by an overhead shelter. The bund volume shall be:
  - ° For liquids stored in tanks: at least 110% of the largest tank; or
  - ° For liquids stored in drums or small containers: at least 25% of the total volume of liquid stored
- Spill kits are available adjacent to liquid waste storage areas. The spill kits will be appropriate for cleaning up the specific type of liquid waste that is stored.

Details of storage receptacles and areas are included in Table 2.

### 7 Transportation

The following general requirements will be applied for the transport of all waste irrespective of whether a licence is required.

- Vehicles used for transportation will be kept clean and maintained to prevent waste spillage.
- Storage containers will be secured on vehicles.
- Wastes will be covered when loaded so as to prevent spillage and loss of waste and emission of odours.
- Only compatible wastes will be transported together.
- Any material segregated for recycling will not be mixed with any other type of waste or with any other material during transport.
- Wastes will be tracked as required by legislation. This includes appropriate classification prior to offsite transport and the provision of all relevant information about the waste to those transporting and accepting the wastes. Table 3 contains details of waste tracking documentation.
- A signed Section 143 (s.143) certificate will be received prior to transporting waste offsite to land that is not owned by RMD and is not a licensed landfill. The wastes will be consistent with the s.143 certificate.
- Waste will not be transported for disposal more than 150kms from the place of generation, unless no waste facility exists within 150km, when it will be taken to one of the two nearest facilities.

### 8 Importation of materials to site

Where materials need to be imported to the site, the use of recycled or recovered materials will be maximised wherever feasible.

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### 9 Waste recovery, disposal and tracking

### **Resource Recovery Exemptions**

RMS holds a number of Exemptions designed to allow the reuse of waste rather than disposal at landfill. The exemption to be used is dependent on the type of material to be re-used, where the material was excavated from and the location of the receivable site. **Table 1** provides a quick reference on road related resource recovery exemptions. It is used in making the resource recovery and/or disposal decisions detailed in **Table 2 & Table 3**.

**Table 1: Road Related Resource Recovery Exemptions** 

|  | SOURCE OF MATERIAL AND LOCATION OF RECEIVING SITE |                                  |                               |                               |
|--|---|----------------------------------|-------------------------------|-------------------------------|
| EXEMPTION                              | Road Corridor →<br>Road Corridor                  | Road Corridor →<br>Non Road Site | Non Road Site → Road Corridor | Non Road Site → Non Road Site |
| Excavated Public Road Materials (EPRM) | ✓   | ×                                | ×                             | ×                             |
| Excavated Natural Material             | More appropriate<br>to use EPRM<br>Exemption      | ✓<br>(Testing Required)          | ✓<br>(Testing Required)       | ✓<br>(Testing Required)       |
| Recovered Aggregates                   | More appropriate<br>to use EPRM<br>Exemption      | ✓<br>(Testing Required)          | ✓<br>(Testing Required)       | ✓<br>(Testing Required)       |
| Recycled Asphalt Pavement              | ✓<br>(can also use<br>EPRM Exemption)             | ×                                | ×                             | ×                             |
| Raw Mulch                              | ✓   | ✓                                | ✓                             | ✓                             |

### 10 Waste Classification, Recovery, Disposal and Tracking

Typical wastes that will be generated on this project and the measures to be adopted for storage, reuse, recycling or disposal of waste materials for the project are outlined in **Table 2** below.

A project waste register (Form F302) is kept on site which records quantities of waste created, recovered, stockpiled, disposed, site where disposal occurred and details of any waste transporters used.

Refer to ECON Environmental Detailed Site Investigation Report dated 5<sup>th</sup> February 2024 in line with SSDA consent condition E5 containing site contamination status, as well as subsequent ECON Environmental Remediation Action Plan (RAP) dated 14<sup>th</sup> March 2024 in line with SSDA consent condition E36.

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Table 2: Waste classification, recovery, disposal and tracking

| Types of<br>Wastes  | Waste<br>Classification                                     | Receptacle used for storage prior to reuse /recycling/disposal | 1. Recovery methods (Reuse/Recycling) | 2. Disposal methods         | Waste<br>transport<br>licence<br>required | Waste<br>Tracking<br>Required |
|---------------------|---|--|---------------------------------------|-----------------------------|---|-------------------------------|
| Spoil               | GSW   | Stockpile  | Retain on site and fill as directed.  | Tip truck                   | No  | No                            |
| Concrete            | Solids  | Skip Bin   | Recycle via recycling facility.       | Skip Bin via road transport | No  | No                            |
| Structural<br>Steel | Solids  | Skip Bin   | Recycle via recycling facility.       | Skip Bin via road transport | No  | No                            |
| Roofing             | Solids &<br>Insulation                                      | Skip Bin   | Recycle via recycling facility.       | Skip Bin via road transport | No  | No                            |
| Cladding            | Solid (Timber)  | Skip Bin   | Recycle via recycling facility.       | Skip Bin via road transport | No  | No                            |
| Internal<br>Linings | Solid<br>(Gyprock, Stud<br>& Track,<br>Furring<br>Channels) | Skip Bin   | Recycle via recycling facility.       | Skip Bin via road transport | No  | No                            |
| Carpentry           | Solid (Timber)  | Skip Bin   | Recycle via recycling facility.       | Skip Bin via road transport | No  | No                            |
| Services            | Solid (Metal/<br>Wires/<br>Cardboard<br>Packaging)          | Skip Bin   | Recycle via recycling facility.       | Skip Bin via road transport | No  | No                            |

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### 11 Waste Disposal

Note: Any materials disposed to land other than an approved landfill facility requires that a Notice under Section 143 of the POEO Act 1997 be completed. The following actions must be taken to complete a S. 143 Notice:

- 1) Identify the waste classification, the type and amount of waste that is to be disposed of and where it is to be placed on the private landholder's property.
- 2) Call or write to the local Council providing details of the type of waste, the quantity and where it is to be disposed of. Seek written approval for the disposal. Note: a Development Application (DA) may be required.
- 3) Complete the Section 143 Notice with the landowner.
- 4) Dispose of the waste to the landowner's property in accordance with any conditions
- Waste materials resulting from the construction of this project shall be disposed of at:

| Name and Address of Disposal Facility / Private Landholder/ Stockpile Site (strike out whichever not applicable) | Section 143 Notice completed (Y/N/NA) |
|--|---------------------------------------|
| TBC  | TBC                                   |
| TBC  | TBC                                   |
| TBC  | TBC                                   |

### 12 Waste tracking

Waste tracking is designed to minimise the risk that the wastes that present the highest risk to the environment will be transported or disposed of inappropriately.

Waste tracking will be undertaken to minimise the risk that the wastes generated on this project that present the highest risk to the environment will be transported or disposed of inappropriately.

The following wastes generated on this project require tracking.

Table 3: Waste tracking checklist

| Action  | Waste type: | Waste type: | Waste type:       |  |
|---|-------------|-------------|-------------------|--|
|   | TBC         | TBC         | TBC               |  |
| Consignment authorisation for the waste obtained (from the EPA).      | Yes / No    | Yes / No    | Yes / No          |  |
| Waste transport certificate for the waste completed.                  | Yes / No    | Yes / No    | Yes / No          |  |
| Waste transport certificate provided to the transporter of the waste. | Yes / No    | Yes / No    | Yes / No Yes / No |  |
| Waste transporter's license to transport the waste sighted            | Yes / No    | Yes / No    |                   |  |
| Waste facility's legal authorisation to accept the waste confirmed.   | Yes / No    | Yes / No    | Yes / No          |  |

### 13 Regular checks and monitoring activities

The following measures will be undertaken to ensure that waste management measures are implemented during the project:

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| Stage of Works   | Frequency                             | Comments and results  | Responsibility |
|--|---------------------------------------|---|----------------|
| Before-Works   |                                       |   |                |
| Establish the Waste and<br>Recyclable Materials Register   | Once                                  |   | SEC            |
| During-Works   |                                       |   |                |
| Inspection to ensure the work site is left free of rubbish.  | Daily &<br>Weekly                     | Daily – Visual check Recorded in the Weekly Environmental Site Inspection checklist | Site Manager   |
| Complete Registers   | As waste is generated or disposed of. |   | SEC            |
| Monthly Waste Summary information collected in the project Registers is provided to the Principal              | Bi-Monthly                            | Monthly Report  | SEC            |
| Post-Works   | 1                                     |   |                |
| Check the work site to ensure that it is left in a tidy and rubbish free state upon completion of the project. | End of job                            |   | SEC            |
| End of job.  complete and submit to  Principal   |                                       |   | SEC            |

### 14 Documentation and records

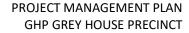
The following records and documentation will be maintained on project files:

- Register of Waste and Recyclable Materials Generated and their Disposal Details
- Copies of completed Section 143 Forms (if required).
- Copies of any waste transport, storage or disposal licences (if required).
- Consignment Authorisations (if required)
- Waste Transport Certificates (if required)
- Inspection records

Copies of Registers and Forms will be provided to the Principal on project completion at the end of month or end of financial year for ongoing projects.

Consignment Authorisations and Waste Transport Certificates for any waste generated on the project that requires tracking will be kept on project files for at least four years.

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### PROJECT MANAGEMENT PLAN

(Incorporating Quality, Safety & Environment)

# **GHP GREY HOUSE PRECINCT**

**PROJECT NUMBER: 647** 

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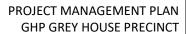
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# APPENDIX 11 Environmental Management Plans Rev B

STEPHEN EDWARDS CONSTRUCTIONS PTY LTD

ABN 65 001 824 139





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### **PROJECT ENVIRONMENTAL ASPECT & IMPACT REGISTER**

**PLC GREY HOUSE** 

| PROJECT NAME:                     | PLC GREY HOUSE   | 15/03/2024 |  |  |  |  |  |  |
|-----------------------------------|--|------------|--|--|--|--|--|--|
| SITE ADDRESS:                     | Gate 3 60 Avon Road, Pymble NSW 2073                     |            |  |  |  |  |  |  |
| DEVELOPED BY:<br>( Consultation ) | Tony Macri / Andrew Kyrillos / Paul Homan                |            |  |  |  |  |  |  |
| PRINCIPAL CONTRACTOR:             | STEPHEN EDWARDS CONSTRUCTIONS PTY LTD ABN 65 001 824 139 |            |  |  |  |  |  |  |

This Project Environmental Aspect and Impact Register forms part of the Project Management plan for the above project.

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| Index                               |   |                                 |
|-------------------------------------|---|---------------------------------|
| EC1 Preconstruction Planning        | EC9 Flora and Fauna                       | EC17 Emergency Preparedness     |
| EC2 Site Establishment and planning | EC10 Rehabilitation & replanting programs | EC18 Incident and Investigation |
| EC3 Erosion and sediment controls   | EC11 Indigenous and Non – Heritage        |                                 |
| EC4 Water Quality                   | EC12 Waste                                |                                 |
| EC5 Ground Water                    | EC13 Hazardous Materials                  |                                 |
| EC6 Air Quality                     | EC14 Graffiti & Advertising               |                                 |
| EC7 Noise                           | EC15 Sustainability                       |                                 |
| EC8 Vibration                       | EC16 Communication                        |                                 |

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# **Project Risk/Issues Considered**

| ltem | Environmental<br>ASPECT  | Environmental<br>IMPACT                                | Risk Ranking | Significance | Controls  | Responsibility       | References   |
|------|--------------------------|--|--------------|--------------|---|----------------------|--|
| EC1  | Preconstruction planning | Establish Objectives and targets     ( Environmental ) |              |              | <ul> <li>Review head contract documents and establish stated contractual objectives and targets or key environmental issues         <ul> <li>Project Environmental Scope (F114)</li> </ul> </li> <li>Review consent conditions and establish compliance requirements         <ul> <li>DA Review Checklist (F159)</li> </ul> </li> <li>Review scope of work and determine any "legal and other requirements"         <ul> <li>Project Legal and other requirements (F113)</li> </ul> </li> <li>Document an action plan for each Objective and target listed in (F114), compliance with consent conditions, legal and other requirements         <ul> <li>Project environmental aspect &amp; impact register (F106)</li> <li>Supplementary environmental plans</li> </ul> </li> </ul> | SEC (PM )            | <ul> <li>PMP 5.2 Environmental Objectives<br/>&amp; Targets</li> <li>Refer to DA/DC, Client Contract</li> <li>Legal &amp; Other Requirement<br/>Register (Projects) (F113)</li> <li>Protection of the Environment<br/>Operations Act 1997</li> </ul> |
|      |                          | Compliance with<br>Objectives and<br>targets           |              |              | <ul> <li>Traffic &amp; pedestrian management</li> <li>Noise &amp; vibration management</li> <li>Air Quality management</li> <li>Storage &amp; use of hazardous materials</li> <li>Contaminated land including sulphate soils</li> <li>Environmental incident reporting management</li> <li>Waste management</li> <li>Non-conformance &amp; corrective/preventative action</li> </ul>  | SEC (PM )<br>SEC (F) | <ul> <li>PMP 5.2 Environmental Objectives<br/>&amp; Targets</li> <li>Project Scope &amp; Environmental<br/>Description (F114)</li> </ul>   |

REVISION: B

ISSUE DATE: 15/03/24





| ltem | Environmental<br>ASPECT | Environmental<br>IMPACT                       | Risk Ranking | Significance | Controls   | Responsibility       | References  |
|------|-------------------------|---|--------------|--------------|--|----------------------|---|
|      |                         |   |              |              | sustainability   |                      |   |
|      |                         | Legal and other<br>requirements               |              |              | Environmental control management to be<br>undertaken in accordance with current State,<br>Federal Legal, local and other requirements  | SEC (PM )<br>SEC (F) | <ul> <li>Legal &amp; Other Requirement         Register (Projects) (F113)</li> <li>Protection of the Environment         Operations Act 1997</li> </ul> |
|      |                         | Complaints from<br>neighbouring<br>properties | 5            | М            | <ul> <li>Identify DA requirements and develop controls         <ul> <li>DA Review Checklist (F159)</li> </ul> </li> <li>Induct workers into the PMP and of their responsibilities         <ul> <li>Site Induction Form (F133)</li> </ul> </li> </ul> | SEC<br>( PM )        | PMP 5.10.13 Community     Consultation  |
|      |                         | Hours of work                                 |              |              | <ul> <li>Hours of work are to comply with DA/DC or other authority requirements and limitations</li> <li>07:00 to 18:00 Monday to Friday</li> <li>No Saturdays, Sundays and Public Holidays.</li> <li>Hours of work to be monitored</li> </ul>       | SEC<br>( PM )        | PMP 5.5 Environmental Aspects<br>and Impacts  |
|      |                         | Client and     Stakeholder     requirements   |              |              | <ul> <li>Contract review to be undertaken and controls measures to be incorporated</li> <li>Populate requirements</li> <li>Refer to Project Environmental Scope (F114)</li> </ul>  | SEC<br>( PM          | <ul> <li>PMP 5.12 Communication from<br/>3rd Parties</li> <li>PMP 5.2 Environmental Objectives<br/>&amp; Targets</li> </ul>                             |
|      |                         | Complaints & Non<br>Conformances              |              |              | <ul> <li>Record complaints &amp; Non Conformances to be maintained</li> <li>Improvement Request and Procore Observation (F006)</li> </ul>  | SEC<br>( PM )        | <ul> <li>PMP 5.11 Community Complaints</li> <li>PMP 5.2 Environmental Objectives</li> <li>&amp; Targets</li> </ul>                                      |





| Item | Environmental<br>ASPECT               | Environmental<br>IMPACT  | Risk Ranking | Significance | Controls  | Responsibility                | References   |
|------|---------------------------------------|--|--------------|--------------|---|-------------------------------|--|
|      |                                       |  |              |              | <ul> <li>Actions required to be acknowledged, addressed<br/>&amp; closed out</li> </ul>   |                               |  |
|      |                                       | Legal and other requirements   |              |              | <ul> <li>Environmental control management to be undertaken in accordance with current State and Federal Legal and other requirements</li> <li>Refer to Legal and Other Requirements         Register     </li> </ul>  | SEC<br>( PM )<br>SEC<br>( F ) | <ul> <li>Protection of the Environment<br/>Operations Act 1997</li> <li>Department Infrastructure,<br/>Planning and Natural Resources,<br/>2004</li> <li>Legal &amp; Other Requirement<br/>Register (Projects) (F113)</li> <li>PMP 5.2 Environmental Objectives<br/>&amp; Targets</li> </ul> |
| EC 2 | Site<br>Establishment<br>and planning |  |              |              | <ul> <li>Complete Erosion &amp; Sediment Control Plan (F158) to identify</li> <li>Site boundaries</li> <li>Existing and Proposed drainage patterns indicating storm water discharge points</li> <li>Location of access road/s and other impervious areas including parking areas</li> <li>Location of spoil/material stockpiles and proposed methods of protection</li> <li>Proposed maintenance of controls</li> </ul> | SEC<br>( PM )<br>SEC<br>( F ) | <ul> <li>Guidelines for Erosion &amp; Sediment<br/>Controls on Construction Sites</li> <li>Guide-Managing Urban<br/>Stormwater – Soils &amp; Construction<br/>(2004) Edition 4 (Landcom)</li> </ul>  |
|      |                                       | Environmental &<br>Community issues<br>through construction<br>traffic movements | 5            | М            | <ul> <li>Traffic Management plan to be developed identifying:</li> <li>Site entry &amp; Exit locations</li> <li>Car parking locations</li> <li>Speed signage</li> </ul>   | SEC<br>( PM )<br>SEC<br>( F ) |  |





| ltem | Environmental<br>ASPECT | Environmental<br>IMPACT                      | Risk Ranking | Significance | Controls   | Responsibility                |   | References                |
|------|-------------------------|--|--------------|--------------|--|-------------------------------|---|---------------------------|
|      |                         |  |              |              | <ul> <li>Measures installed to mitigate debris being<br/>tracked onto the road</li> </ul>  |                               |   |                           |
|      |                         | • Site Facilities                            |              |              | <ul> <li>Toilet facilities must be available or provided at the work site before works begin and must be maintained until the works are completed at a ratio of one toilet plus one additional toilet for every 20 persons employed at the site.</li> <li>Standard flushing toilets connected to the sewer or</li> <li>Approved On-site effluent disposal system or</li> <li>Approved temporary chemical closet</li> </ul> | SEC<br>( PM )<br>SEC<br>( F ) | • | Local Government Act 1993 |
|      |                         | • Inductions                                 |              |              | <ul> <li>Prior to workers commencing on site worker shall<br/>be outlined the requirements of the ERP and the<br/>responsibilities and accountabilities of all site<br/>personnel</li> <li>Workers to be made aware site Environmental<br/>Control Map on display</li> </ul>   | SEC<br>(F)                    | • | PMP 5.10.1 Site induction |
|      |                         | Environmental     Monitoring &     Reporting |              |              | <ul> <li>Project environmental aspects to be monitored &amp; reported using the methods listed:         <ul> <li>Daily visual</li> <li>Weekly inspection report (F121)</li> <li>Fortnightly Environmental Inspection Checklist (F223)</li> <li>Environmental statistics to be submitted Monthly Statistics Summary (F046)</li> </ul> </li> </ul>   | SEC<br>(F)                    | • | PMP 5.9 Monitoring        |

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| ltem | Environmental<br>ASPECT       | Environmental<br>IMPACT  | Risk Ranking | Significance | Controls   | Responsibility | References  |
|------|-------------------------------|--|--------------|--------------|--|----------------|---|
|      |                               |  |              |              | <ul> <li>Environmental Impact &amp; Aspect Register to be reviewed monthly during Project Team Meetings (F307)</li> <li>Monthly Waste Recycling &amp; Procurement Report (F302) (WRAPP) to be submitted</li> <li>Clients representative to be advised of environmental Incidents</li> </ul>  |                |   |
| EC3  | Erosion and sediment controls | Soil erosion and soil loss     Sedimentation entering waterways and drainage networks due to erosion from disturbed ground | 2            | S            | <ul> <li>Plan Erosion Prevention and Sediment/silt controls prior to the commencement of any ground disturbance</li> <li>The following should be considered:</li> <li>One - Erosion Prevention Measures         <ul> <li>Maintaining grass/vegetation and ground covered areas as long as possible</li> <li>Types of temporary ground cover for ground that will be bare for long period</li> <li>Water overland flow direction paths</li> <li>Diversions e.g. berms into existing impervious areas</li> </ul> </li> <li>Two - Sediment/silt controls         <ul> <li>Location of Sediment and silt controls</li> <li>Refer to site sedimentation drawings for sediment/silt fence locations if available</li></ul></li></ul> | SEC<br>(F)     | <ul> <li>Guidelines for Erosion &amp; Sediment<br/>Controls on Construction Sites</li> <li>Guide-Managing Urban<br/>Stormwater – Soils &amp; Construction<br/>(2004) Edition 4 (Landcom)</li> <li>PMP 5.2 Environmental Objectives<br/>&amp; Targets</li> </ul> |





| ltem | Environmental<br>ASPECT | Environmental<br>IMPACT                             | Risk Ranking | Significance | Controls  | Responsibility | References |
|------|-------------------------|---|--------------|--------------|---|----------------|------------|
|      |                         |   |              |              | <ul> <li>Location of potential stock pile areas</li> <li>Install sediment/Silt fencing</li> <li>Cover drainage inlets with Geofabric</li> <li>Place sand bags in hard surface drains/kerb         <ul> <li>(Refer to fact sheet 3 Guidelines for erosion and sediment controls on building sites)</li> </ul> </li> <li>Diversions e.g. berms into existing impervious areas or redirected back into site</li> <li>The controls shall be in accordance with</li> <ul> <li>Project Erosion &amp; Sediment Control Plan (F158) and reviewed using Environmental Preconstruction checklist (F129)</li> </ul> <li>All environmental measures erosion &amp; sediment, other environmental controls to be mark up on suitable site Environmental Control Map e.g. A3 &amp; on display</li> <li>Sediment to be cleaned from control devices and disposed of on a regular basis in an acceptable manner.         <ul> <li>WHS Inspection (F121)</li> <li>Environmental Checklist (F223)</li> <li>Sediment/silt fence to be inspected daily and fallen areas to be reinstated</li> </ul> </li></ul> |                |            |
|      |                         | Sedimentation<br>entering waterways<br>and drainage |              |              | <ul> <li>Sediment/Silt Fencing to be installed in<br/>accordance with the blue Book Best Practices</li> </ul>   |                |            |

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| ltem | Environmental<br>ASPECT | Environmental<br>IMPACT                                     | Risk Ranking | Significance | Controls  | Responsibility                | References |
|------|-------------------------|---|--------------|--------------|---|-------------------------------|------------|
|      |                         | networks due to<br>ineffective<br>sediment/silt<br>controls |              |              | Where posts are < 1.5 m spacing to be at 1.5m     Sediment/silt fence to be inspected daily and fallen areas to be reinstated   |                               |            |
|      |                         | Erosion from stock piles                                    | 5            | M            | <ul> <li>Stockpiles of topsoil, sand, aggregate, spoil or other material capable of being moved by water, to be placed in locations more than (preferably 5) metres from existing vegetation, concentrated water flow, roads and hazard areas including stored clear of any drainage line, easement, natural watercourse, footpath, kerb or roadside.</li> <li>Construct stockpiles on the contour as low, flat and elongated mounds</li> <li>Stockpiles to be sloped at &gt; 10° and of a height &gt;2.0</li> <li>Construct earth banks on the upslope side to divert water around stockpiles</li> </ul> | SEC<br>( PM )<br>SEC<br>( F ) |            |





| ltem | Environmental<br>ASPECT | Environmental<br>IMPACT   | Risk Ranking | Significance | Controls   | Responsibility   | References |
|------|-------------------------|---|--------------|--------------|--|------------------|------------|
|      |                         |   |              |              | <ul> <li>All stock piles should be covered by at least 70 % Where not possible maintain in a moist condition</li> <li>Stockpiles on sloping bare ground to be assessed for sediment/silt controls</li> <li>Install sediment fencing 1 to 2 metres downslope</li> <li>(Refer to fact sheet 6 Guidelines for erosion and sediment controls on building sites)</li> </ul>   |                  |            |
|      |                         | Erosion and soil run<br>off from open<br>service trenches                   | 8            | М            | <ul> <li>Place spoil at least 1.0 away from the trench on the up side</li> <li>Fill and compact trenches as soon as possible after services have been laid</li> <li>Inspect regularly (if open)         <ul> <li>(Refer to fact sheet 9 Guidelines for erosion and sediment controls on building sites)</li> </ul> </li> </ul>   | SC               |            |
|      |                         | Mud / excess spoil /<br>litter being<br>deposited on<br>trafficked roadways | 5            | М            | <ul> <li>Establish a single stabilised all weather access point entry / exit point. The recommended construction method for stabilising the access point is 200mm of aggregate at 30-60mm in size (note: crushed sandstone is not suitable).         <ul> <li>(Refer to fact sheet 2 Guidelines for erosion and sediment controls on building sites)</li> </ul> </li> <li>Clearly mark the access point on an access map for all deliveries</li> <li>Display construction signage including Foreman's contact details</li> <li>Install shaker device or similar at site exit points</li> </ul> | SEC<br>(F)<br>SC |            |

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| ltem | Environmental<br>ASPECT | Environmental<br>IMPACT                                      | Risk Ranking | Significance | Controls  | Responsibility | References  |
|------|-------------------------|--|--------------|--------------|---|----------------|---|
|      |                         |  |              |              | <ul> <li>Sweep external road and footpath</li> <li>If practicable install temporary water source near exit points to wash excess mud/spoil and litter from vehicle wheels</li> </ul>  |                |   |
|      |                         | Erosion caused by<br>unplumbed<br>guttering                  | 5            | М            | <ul> <li>Temporary or permanent downpipes should be installed at the same time as the roof is installed.</li> <li>Refer to fact sheet 10 Guidelines for erosion and sediment controls on building sites)</li> </ul>   | SEC<br>(F)     |   |
| EC 4 | Water Quality           | Silty runoff entering<br>drainage systems or<br>watercourses | 2            | S            | <ul> <li>Maintain grass filter strips where possible to slow speed of water and trap sediment         <ul> <li>(Refer to fact sheet 7 Guidelines for erosion and sediment controls on building sites)</li> </ul> </li> <li>Sediment fencing and other controls measures to be inspected and recorded daily in accordance with the Blue Book</li> <li>Surface water discharges will be monitored daily and in particular after heavy rains</li> <li>Cover drainage pits with Geotextile fabric and clean regularly</li> <li>Ongoing documented/recorded modification of controls in advance of the progress of works (see also Blue Book Chapter 8 Maintenance)</li> </ul> | SEC<br>(F)     | Blue Book (I.e. Soils and Construction: Volume 1, 4 <sup>th</sup> ed., available via the following link <a href="https://www.environment.nsw.gov.au/resources/water/BlueBookVol1.pdf">https://www.environment.nsw.gov.au/resources/water/BlueBookVol1.pdf</a> ) |
|      |                         | Silty runoff entering<br>drainage systems or<br>watercourses | 2            | S            | Surface water discharges will be monitored daily and in particular after heavy rains and inspected and recorded fortnightly using     Environmental Inspection Checklist (F223)   | SEC<br>(F)     |   |





| ltem | Environmental<br>ASPECT | Environmental<br>IMPACT                                      | Risk Ranking | Significance | Controls  | Responsibility | References  |
|------|-------------------------|--|--------------|--------------|---|----------------|---|
|      |                         |  |              |              | Cover drainage pits with Geotextile fabric and clean regularly  |                |   |
| EC 4 | Water Quality           | Silty runoff entering<br>drainage systems or<br>watercourses | 2            | S            | <ul> <li>Maintain grass filter strips where possible to slow speed of water and trap sediment</li> <li>(Refer to fact sheet 7 Guidelines for erosion and sediment controls on building sites)</li> <li>Sediment fencing and other controls measures to be inspected and recorded daily in accordance with the Blue Book</li> <li>Surface water discharges will be monitored daily and in particular after heavy rains</li> <li>Cover drainage pits with Geotextile fabric and clean regularly</li> <li>Ongoing documented/recorded modification of controls in advance of the progress of works (see also Blue Book Chapter 8 Maintenance)</li> </ul> | SEC<br>(F)     | Blue Book (I.e. Soils and Construction: Volume 1, 4 <sup>th</sup> ed., available via the following link <a href="https://www.environment.nsw.gov.au/resources/water/BlueBookVol1.pdf">https://www.environment.nsw.gov.au/resources/water/BlueBookVol1.pdf</a> ) |
|      |                         | Silty runoff entering<br>drainage systems or<br>watercourses | 2            | S            | <ul> <li>Surface water discharges will be monitored daily and in particular after heavy rains and inspected and recorded fortnightly using         <ul> <li>Environmental Inspection Checklist (F223)</li> </ul> </li> <li>Cover drainage pits with Geotextile fabric and clean regularly</li> </ul>  | SEC<br>(F)     |   |
| EC 5 | <b>Ground Water</b>     | Pollution caused<br>through dewatering<br>activities         | 8            | М            | <ul> <li>Onsite storm water should be pumped into a sediment basin or holding tank</li> <li>Assessed for any visual signs of :         <ul> <li>Oil</li> </ul> </li> </ul>  | (SEC)<br>F     | <ul> <li>Guide-Managing Urban</li> <li>Stormwater – Soils &amp; Construction</li> <li>(2004) Edition 4 (Landcom)</li> <li>Appendix E4</li> </ul>  |

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|------|-------------------------|-------------------------|--------------|--------------|---|----------------|------------|
|      |                         |                         |              |              | <ul> <li>Grease         <ul> <li>sediment</li> </ul> </li> <li>Rough field testing - Acceptable level of suspended solids content 50 milligrams per litre</li> <ul> <li>Fill a clear plastic or glass 65 mm diameter soft drink bottle with the water and hold it up to the light</li> <li>If seeing very clearly through the sample is not possible, it is probably above 50 milligrams per litre and needs further treatment.</li> </ul> <li>Testing Should there be any visual signs of oil, grease or sediment the water is to be treated with Flocculation agents prior to dewatering such as: Sediment basins with Gypsum (Calcium sulfate)</li> <ul> <li>Gypsum should be applied at a rate of about 30 kilograms per 100 cubic metres of stored water</li> <li>Spreading it very evenly over the entire pond surface is essential for proper treatment of sediment-laden water.</li> </ul> <li>Test samples should be taken each day in individual marked bottles with date prior to dewatering to a assess for any visual signs of contamination:</li> </ul> |                |            |





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|------|-------------------------|---|--------------|--------------|--|---------------------------------|--|
|      |                         |   |              |              | <ul> <li>Stormwater will be considered to be reused<br/>on site where feasible to do so e.g. dust<br/>suppression</li> </ul>   |                                 |  |
| EC 6 | Air Quality             | Dust generated by site activities                   | 5            | M            | <ul> <li>All stockpiles of building material such as sand and soil must be protected to prevent scour and erosion or moisten with water</li> <li>Stockpiles covers to be secured to prevent being blown away</li> <li>Stockpiles to be removed as soon as practicable</li> <li>Install sufficient water outlets to suppress works that generate dust e.g. Concrete and masonry cutting</li> <li>Large areas of unsealed surfaces e.g. car parks to be kept moist by using water carts</li> <li>Work practices should be used to minimise dust generation</li> <li>Work areas to be swept regularly to remove saw dust etc.</li> <li>Shade cloth to be attached to site fencing to minimise dust impacting on neighbouring properties</li> <li>Demolition work must not be carried out during high wind, which may cause dust to spread beyond the boundaries of the site.</li> </ul> | SEC<br>( PM )<br>SEC<br>All S/C |  |
|      |                         | Dust generated by<br>plant and vehicle<br>movements | 5            | М            | <ul> <li>Stabilise roads and set down areas using road<br/>base</li> <li>Cover loads prior to leaving site</li> </ul>  | (SEC)<br>F                      | PMP 5.2 Environmental Objectives     & Targets |

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|------|-------------------------|---|--------------|--------------|---|-------------------------------|--|
|      |                         |   |              |              | <ul> <li>Shade cloth to be attached to site fencing to<br/>minimise dust impacting on neighbouring<br/>properties</li> <li>Install shaker device or similar at site exit points</li> </ul>  | All S/C                       |  |
|      |                         | Emissions from<br>construction plant<br>and equipment       | 2            | S            | <ul> <li>Plant and equipment to be in good working order and maintenance report provided</li> <li>All construction plant and machinery to be fitted with emission control devices complying with Australian Design Standards.         <ul> <li>Plant Certification (F110)</li> <li>Plant Risk Assessment (F111)</li> </ul> </li> <li>Plant or equipment that emit excessive emissions not to be used onsite</li> <li>Construction plant to be switched or Limit idling time</li> <li>Avoid over loading of mobile plant</li> <li>Minimise plant movements in windy conditions on unsealed surfaces</li> </ul> | (SEC)<br>F<br>All S/C         | PMP 5.2 Environmental Objectives     & Targets |
|      |                         | Odours from use of<br>chemical e.g. Paint                   | 5            | M            | <ul> <li>Product to be used and handled in accordance with Safety Data Sheet</li> <li>Neighbouring properties to be notified of potential odour emissions and the expected duration</li> </ul>  | SEC<br>( PM )                 |  |
|      |                         | Removal of     Hazardous material     dust entering the air | 2            | S            | All work requiring the removal of hazardous<br>materials e.g. Asbestos and Lead debris to be<br>controlled by encapsulating areas in accordance<br>with the removal of hazardous materials  | SEC<br>( PM )<br>SEC<br>( F ) |  |

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|------|-------------------------|---|--------------|--------------|--|---------------------------------|---|
|      |                         |   |              |              | Monitoring of air to be conducted by hygienist and reports provided to the site foreman  | SC                              |   |
| EC7  | Noise                   | Noise emissions from construction activities including motorised plant and equipment impacting of neighbouring properties | 5            | М            | <ul> <li>Construction activities including motorised plant and equipment should only operate in work hours approve by the DA/DC and Client requirements</li> <li>Are there any specific times High Noise Generating activities are not permitted         <ul> <li>Yes/No</li> </ul> </li> <li>Indicative High Noise Generation Activities:         <ul> <li>Vibratory rolling</li> <li>Cutting of pavement, concrete or steel</li> </ul> </li> <li>Operations to be scheduled within approved hours of work</li> <li>outside of work areas to be minimal and notification to neighbouring properties to be undertaken</li> <li>Plant and equipment to be in good working order</li> <li>All construction plant and machinery to be fitted with noise control devices complying with Australian Design Standards such as Non-Tonal beepers</li> <li>Plant or equipment that emit excessive noise not to be used onsite         <ul> <li>Plant Certification (F110)</li> <li>Plant Risk Assessment (F111)</li> </ul> </li> </ul> | SEC<br>(PM)<br>SEC<br>(F)<br>SC | <ul> <li>Protection of the Environment<br/>Operations (Noise Control)<br/>Regulation 2008</li> <li>Department of Environment and<br/>Climate Change (Interim<br/>Construction Noise Guideline)</li> <li>PMP 5.2 Environmental Objectives<br/>&amp; Targets</li> </ul> |





| ltem | Environmental<br>ASPECT | Environmental<br>IMPACT                | Risk Ranking | Significance | Controls   | Responsibility                  | References                                     |
|------|-------------------------|--|--------------|--------------|--|---------------------------------|--|
|      |                         |  |              |              | <ul> <li>Establish and implement other measure to minimise the generation of noise such as:         <ul> <li>Work areas e.g. concrete and masonry cutting behind screen or as far away as practicable from neighbouring properties</li> <li>Limit idling time on plant &amp; delivery vehicles</li> <li>Avoid over loading of mobile plant</li> <li>Wherever practical, piling activities shall be completed using non-percussive piles.</li> <li>Avoid the use of radios or stereos outdoors.</li> <li>Avoid shouting, and minimise talking loudly and slamming vehicle doors</li> <li>Stormwater drain grates and shakers should be secured to minimise noise when vehicles pass over the grate.</li> <li>Plan so known noisy activities aren't occurring simultaneously</li> <li>Conduct sound levels of activities and record</li> <li>Workplace noise emission level</li> <li>WHS Inspection (F121)</li> <li>WHS Inspection (F121)</li> </ul> </li> </ul> |                                 |  |
| EC 8 | Vibration               | Damage to<br>surrounding<br>structures | 5            | М            | Will vibration be a likely concern on this project     Yes/No  | SEC<br>(PM)<br>SEC<br>(F)<br>SC | PMP 5.2 Environmental Objectives     & Targets |





| ltem | Environmental<br>ASPECT | Environmental<br>IMPACT                            | Risk Ranking | Significance | Controls  | Responsibility             | References   |
|------|-------------------------|--|--------------|--------------|---|----------------------------|--|
| EC 9 | Flora and Fauna         | Protection and management of flora of significance | 2            | S            | <ul> <li>Have any protection of Flora/Fauna requirements been identified         <ul> <li>Refer to DA Review Checklist (F210)</li> <li>Yes/No</li> </ul> </li> <li>Develop Flora protection management plan to identify: (Attached)         <ul> <li>Species types</li> <li>Identify specific species to be protected and their management requirements that may include:</li></ul></li></ul> | SEC<br>(F)<br>SC<br>All SC | <ul> <li>Protection of the Environment Act<br/>1997</li> <li>Refer Biodiversity Management<br/>Sub-Plan</li> </ul>   |
|      |                         | Protection of     Flora of     significance        |              |              | <ul> <li>Protection will be implemented where construction activities will or have the potential to encroach trees of significance</li> <li>Barricade or 1.8m Mesh Fencing, signpost trees and other areas of significance to be protected</li> </ul>   | SEC<br>(F)<br>SC<br>All SC | <ul> <li>Australian Standard AS4970-<br/>2009 Protection of Trees on<br/>Development Sites</li> <li>Protection of trees on<br/>development sites, (AS 4970)</li> </ul> |

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|-------|--------------------------------------|-------------------------|--------------|--------------|---|----------------------------|---|
|       |                                      |                         |              |              | <ul> <li>If fencing or barricading is not possible due to location issues, trunk protection is required</li> <li>Do not operate construction machinery or vehicles within protected areas unless approved</li> <li>No unapproved or unnecessary work to be carried out effecting surrounding flora and fauna</li> </ul>   |                            | Refer Biodiversity Management Sub-Plan  |
|       |                                      | Weed spread             | 2            | S            | <ul> <li>Removal of all noxious weeds to be disposed at certified disposal facilities</li> <li>Deposal certificated to be obtained</li> <li>Ensure all incoming fill is certified</li> </ul>  | SEC<br>(F)<br>SC<br>All SC |   |
|       |                                      | • Fire                  | 2            | S            | <ul> <li>No naked flames near vegetation</li> <li>Remove all flammable materials</li> <li>Ensure controls have been implemented when carrying out tasks that generate sparks</li> <li>Welding screens are being used</li> <li>Ensure flashback arrestors are fitted at the blow pipe at the regulator on oxygen and lines of oxyfuel gas systems.         <ul> <li>Complete Permit for Hot Works (F148)</li> </ul> </li> <li>No cutting, welding, grinding or other activities likely to generate fires to be undertaken in the open during total fire ban</li> </ul> | SEC<br>(F)<br>SC<br>All SC | <ul> <li>AS 1554 Welding</li> <li>Welding Process Code of Practice</li> </ul> |
| EC 10 | Rehabilitation & replanting programs |                         | 8            | М            | Site rehabilitation of disturbed areas to be undertaken progressively as stages are completed   | SEC<br>(F)                 | Refer Biodiversity Management     Sub-Plan                                    |





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|-------|----------------------------------|--|--------------|--------------|--|----------------------------|------------|
|       |                                  |  |              |              | <ul> <li>Damaged to property owner flora e.g. trees, shrubs, lawn &amp; garden to be rectified at no cost to owner</li> <li>All cleared vegetation shall be replaced and or offset in accordance with client, owner or other relevant body.</li> <li>All vegetation planted will consist of locally native species unless agreed by others</li> </ul>  |                            |            |
| EC 11 | Indigenous and<br>Non – Heritage | Irreparable damage<br>to area or object of<br>significance | 5            | M            | <ul> <li>Have any Indigenous heritage aspects been identified in the contract scope of work         <ul> <li>Yes/No</li> </ul> </li> <li>All works on site and particularly on any Indigenous heritage aspects would be undertaken in line with the DA conditions</li> <li>Undertake a heritage photographic survey of the site prior to any works</li> <li>Should archaeological remains be uncovered during construction, all works are to cease within the vicinity of the material/find and the Department of Planning Heritage Branch contacted.</li> <li>In an item (or suspected item of indigenous heritage is discovered stop work, barricade the area and notify client representative</li> <li>A program of testing, excavation and monitoring will be undertaken during earthworks to allow</li> </ul> | SEC<br>(F)<br>SC<br>All SC |            |





| ltem  | Environmental<br>ASPECT | Environmental<br>IMPACT   | Risk Ranking | Significance | Controls  | Responsibility             | References   |
|-------|-------------------------|---|--------------|--------------|---|----------------------------|--|
|       |                         |   |              |              | for the recording, analysis and recovery of archaeological features.  If an item (or suspected item of indigenous heritage is discovered stop work, barricade the area and notify client representative   |                            |  |
| EC 12 | Waste                   | <ul> <li>Litter entering<br/>drainage systems<br/>or watercourses</li> <li>Blocking of<br/>stormwater<br/>system</li> </ul> | 5            | M            | <ul> <li>Litter e.g. packaging products to be disposed of in designated refuse bins</li> <li>Bins should not be allowed to exceed capacity         <ul> <li>Refer to fact sheet 8 Guidelines for erosion and sediment controls on building site</li> </ul> </li> </ul>  | SEC<br>(F)<br>SC<br>All SC |  |
|       |                         | Minimising waste<br>being disposed of<br>into land fill   |              |              | <ul> <li>It would also be managed in accordance with the philosophy of the waste minimisation hierarchy as follows:</li> <li>Avoidance, where possible;</li> <li>Waste management will be conducted in accordance with WRAPP         <ul> <li>Treated, as required and reused on site;</li> <li>Recycled, either within the process or of site'</li> <li>Where other alternatives are not possible, wastes should be disposed of at appropriately licensed waste management facilities.</li> </ul> </li> <li>There is to be no burning of waste.</li> <li>All noxious weeds and exotic plant species removed are to be bagged and disposed of at a licensed landfill facility.</li> </ul> | SEC<br>(F)<br>All SC       | <ul> <li>Wastes generated by the proposal to be classified in accordance with the DECCW: Waste Classification Guidelines, Part 1: Classifying Waste (Dec 2009).</li> <li>PMP 5.2 Environmental Objectives &amp; Targets</li> </ul> |





| ltem  | Environmental<br>ASPECT | Environmental<br>IMPACT | Risk Ranking | Significance | Controls   | Responsibility       |   | References   |
|-------|-------------------------|-------------------------|--------------|--------------|--|----------------------|---|--|
|       |                         |                         |              |              | <ul> <li>Wastes not to be stored for long periods during construction</li> <li>Empty drums of fuels, oils or chemicals and fluids to not to be stored on site during construction.</li> <li>Maintain a series of clearly identifiable disposal containers for the separation and appropriate distribution of the various "waste" products generated from the project.</li> <li>Excess steel products to be collected in a "skip" and forwarded to an appropriate recycling centre (e g: Simsmetal).</li> <li>Excess concrete and masonry products will be collected in a "skip" and forwarded to an appropriate recycling centre (e g: Concrete Recyclers).</li> <li>Cleaning up shall be carried out at the end of each day.</li> <li>Waste materials must be disposed of at a waste or resource management facility and sorted.</li> <li>Waste Management and Recycling Report to be obtained</li> </ul> |                      |   |  |
| EC 13 | Hazardous<br>Materials  | • Spills                | 5            | М            | <ul> <li>SDS for all hazardous chemicals used on site are to be assessed, recorded and location communicated to workers</li> <li>Hazmat Register (F109)</li> <li>Hazardous materials wherever practicable not to be stored onsite</li> </ul>   | SEC<br>(F)<br>All SC | • | Protection of the Environment<br>Operations Act 1997 |

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| ltem | Environmental<br>ASPECT   | Environmental<br>IMPACT | Risk Ranking | Significance | Controls   | Responsibility | References |
|------|---------------------------|-------------------------|--------------|--------------|--|----------------|------------|
|      |                           |                         |              |              | <ul> <li>Minimum volume of diesel fuel only to be stared onsite</li> <li>Spill kit to be present at hazardous chemicals storage areas and fuelling locations</li> <li>Where a spill to a water course is identified as a risk a spill kit must kept near the potential discharge point</li> <li>Where required by Safety Data Sheet information hazardous chemicals to be stored in ventilated lockable containers</li> <li>Containers containing hazardous chemicals to be checked regularly for leaks</li> <li>Storage areas of hazardous chemicals to have signage attached stating what to do if there is a leaks</li> <li>Spills or leaks to be reported</li> </ul> |                |            |
| EC14 | Graffiti &<br>Advertising | Visual or Offensive     | 5            | М            | <ul> <li>Regular inspections to be conducted to identify any graffiti or unauthorised advertising during scheduled inspection using WHS Inspection (F121) &amp; at other times entered into the site diary</li> <li>Treatment as follows:         <ul> <li>Offensive graffiti will be removed or concealed within 24 hours</li> <li>highly visible (yet inoffensive) graffiti will be removed or concealed within a week</li> </ul> </li> </ul>  | SEC<br>(F)     |            |





| ltem  | Environmental<br>ASPECT | Environmental<br>IMPACT                              | Risk Ranking | Significance | Controls   | Responsibility     | References |
|-------|-------------------------|--|--------------|--------------|--|--------------------|------------|
|       |                         |  |              |              | <ul> <li>graffiti that is neither offensive or highly visible will be removed or concealed within a month</li> <li>only approved advertising to been attached to any external face of fencing or hoardings</li> <li>any unauthorised advertising material will be removed or concealed within 24 hours</li> </ul>  |                    |            |
| EC 15 | Sustainability          | Products and activities impacting on the environment | 5            | М            | <ul> <li>Wherever practicable sustainability initiatives should be considered during construct such as and not limited to the following:         <ul> <li>Purchasing of local products and the use of local suppliers</li> <li>Purchasing of products from accredited sustainable suppliers</li> <li>Recycling of waste</li> <li>Reuse of spoil</li> <li>Maintaining of plant, equipment and appliances e.g. air conditioners</li> <li>Minimise plant operations</li> <li>Plan and schedule product and supplies to site to avoid multiple deliveries</li> <li>Use alternative products, materials and substances to minimise safety and environmental impacts</li> <li>Promote sustainable initiatives to workers and stakeholder through tool box talks</li> </ul> </li> </ul> | SEC<br>(F)<br>(PM) |            |





| ltem  | Environmental<br>ASPECT               | Environmental<br>IMPACT  | Risk Ranking | Significance | Controls  | Responsibility | References   |
|-------|---------------------------------------|--|--------------|--------------|---|----------------|--|
| EC 16 | Communication                         | Client unaware of<br>environmental<br>issues affecting the<br>project    | 5            | М            | <ul> <li>Project Manager to report on Environmental incidents the CLIENTS representative</li> <li>Environmental performance to be reported to the client or client representative on a monthly basis</li> </ul>   | SEC<br>(PM)    | PMP 5.13 Communication to<br>Client  |
| EC 17 | Emergency<br>Preparedness             | Insufficient     resources to deal     pollution and other     incidents | 5            | M            | <ul> <li>Emergency equipment, exit, exit signs, paths of travel, spill kits and alarms systems to be inspected during Foreman's Weekly Site Inspections (F121)</li> <li>Emergency Equipment such as fire extinguishers to be tested and maintained at regular interval in accordance with legislation and other requirements</li> </ul>   | SEC<br>(F)     | <ul> <li>PMP 5.14 Emergency         Preparedness and Reporting     </li> <li>PMP 5.16.1 Office of         Environmental &amp; Heritage     </li> <li>Protection of the Environment         Operations Act 1997     </li> </ul> |
|       | Authorised<br>Person and<br>Reporting | Environmental incidents & other issues                                   |              |              | <ul> <li>Any Class 1 or 2 incident causing or threatening material harm to the environment to be reported to the Office of Environmental &amp; Heritage         <ul> <li>Failure to report maximum penalty is \$2,000,000 for corporations or \$500,000 for individuals.</li> </ul> </li> <li>Primary authorised person to report environmental incidents &amp; other issues to CLIENTS representative         <ul> <li>INSERT NAME</li> </ul> </li> <li>Office of Environmental and Heritage reporting authorised person         <ul> <li>Paul Homan - 0424 236 060</li> </ul> </li> </ul> | SEC<br>(PM)    |  |



#### PROJECT ENVIRONMENTAL ASPECT & IMPACT REGISTER

PLC GREY HOUSE

| Item | Environmental<br>ASPECT    | Environmental<br>IMPACT      | Risk Ranking | Significance | Controls  | Responsibility | References  |
|------|----------------------------|------------------------------|--------------|--------------|---|----------------|---|
| EC18 | Incident and Investigation | Future<br>environmental harm | 2            | S            | <ul> <li>All environmental incidents occurring in or around site to be reported to CLIENTS representative within 24 hours</li> <li>Incident to be investigated using Incident Investigation form (F104)</li> <li>Non-conformance report (Improvement Request F006) to be issued for all non-conformances</li> </ul> | SEC<br>(F)     | <ul> <li>PMP 5.9 Monitoring</li> <li>PMP 5.15 Incident and<br/>Investigation</li> </ul> |

installations or services, or is carried out in an area that may have a contaminated or flammable atmosphere, or

or is carried out in or near water or other liquid that involves a risk of drowning, or involves diving work.

involves tilt-up or precast concrete, or is carried out on, in or adjacent to a road, railway, shipping lane or other traffic

contidor that is in use by traffic other than pedestrians, or is carried out in an area at a workplace in which there is any movement of powered mobile plant, or is carried out in an area in which there are artificial extremes of temperature.



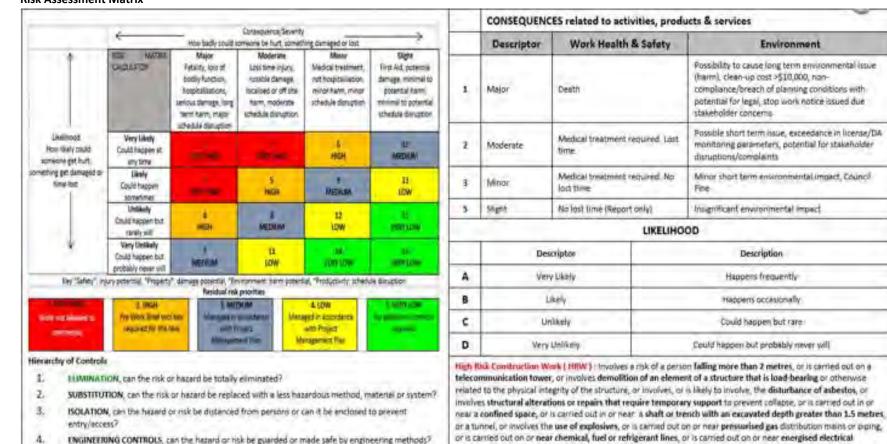
5.

6.

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#### Risk Assessment Matrix



ADMINISTRATIVE CONTROLS, can braining, increased supervision, rotation or signage assist?

PERSONAL PROTECTIVE EQUIPMENT, can PPE protect the worker from the hazard or risk?

FORM REF: F106.11 20220511



#### **Hierarchy of Controls**

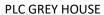
- 1. **ELIMINATION**, can the risk or hazard be totally eliminated?
- 2. **SUBSTITUTION**, can the risk or hazard be replaced with a less hazardous method, material or system?

ISOLATION, can the hazard or risk be distanced from persons or can it be enclosed to prevent entry/access?

- 3. **ENGINEERING CONTROLS**, can the hazard or risk be guarded or made safe by engineering methods?
- 4. **ADMINISTRATIVE CONTROLS**, can training, increased supervision, rotation or signage assist?
- 5. **PERSONAL PROTECTIVE EQUIPMENT**, can PPE protect the worker from the hazard or risk?

| Each env | ironmental aspect shall be assessed t       | for significance: |   |  |  |  |  |
|----------|---|-------------------|---|--|--|--|--|
| Code     | Significance                                | Risk ratings      | Other requirement                               |  |  |  |  |
| S        | Significant in Routine Operations           | 1 to 3            | Legal requirement                               |  |  |  |  |
| M        | Minor significance in Routine Operations    | 4 to 13           |   |  |  |  |  |
| N        | No significant impact in Routine Operations | 14 to 16          |   |  |  |  |  |
| E        | Significant in Emergency Situations         |                   | Environmental impact due to emergency situation |  |  |  |  |
| В        | Beneficial environmental impact             |                   | Beneficial impact on the environment            |  |  |  |  |

EG an Environmental aspect that has a risk rating of 1 to 3 OR is a Legal Requirement shall be deemed as significant





### **Environmental Control Map**

**REVISION: B** 

**GHP GREY HOUSE PRECINCT** 



## SITE ESTABLISHMENT + EROSION & SEDIMENT CONTROL PLAN (ESCP)

| The fo | llowing notes apply to the Site Establishment + ESCP for the project:   |
|--------|---|
|        | A site plan ( survey plan ) indicating boundaries, adjoining roads, approximate grades and direction of fall  |
|        | <ul> <li>Timing / staging of the works indicating areas of disturbance ( &lt; 2500 m2 )</li> <li>Identify ex trees and vegetation and indicate trees to be removed, areas to be disturbed</li> <li>Minimise area to be cleared and leave as much vegetation as possible</li> <li>Install temporary fences to define "no go" areas that are not to be disturbed</li> <li>Maintain grass filter strips where possible to slow speed of water and trap sediment</li> <li>Revegetate the site as soon as possible. The erosion and sediment control devices are to remain in place until 70 % of the site is revegetated</li> </ul> |
|        | Existing and proposed drainage patterns indicating storm water discharge points   |
|        | <ul> <li>Location of site access, proposed access tracks, site fencing / hoardings + other impervious areas including parking areas and site establishment</li> <li>Establish a single stabilized entry / exit point. Clearly mark the access point on an access map for all deliveries</li> <li>Sweep external road and footpath and put the soil behind the sediment controls</li> </ul>  |
|        | <ul> <li>Extent of earthworks, including the amount of cut &amp; fill</li> <li>Stabilise exposed earth banks (vegetation, erosion control mats)</li> <li>Fill and compact trenches as soon as practical after services installed</li> </ul>   |
|        | Proposed diversion of run-off from upslope lands around the disturbed areas  • Divert water around the work site and stabilize channels.  • Connect downpipes from the guttering to Onsite Detention (OSD) or storm water drain as soon as practical after the roof is installed  |
|        | Location of spoil stockpiles + material stockpiles, and proposed methods of protection  • Locate stockpiles behind sediment controlled zone   |
|        | Location of proposed erosion and sediment control measures  • Locate sediment fences along the low side of the site before work begins.   |
|        | Proposed maintenance of controls ( Frequency & nature )  • Site Foreman to check on a daily basis   |

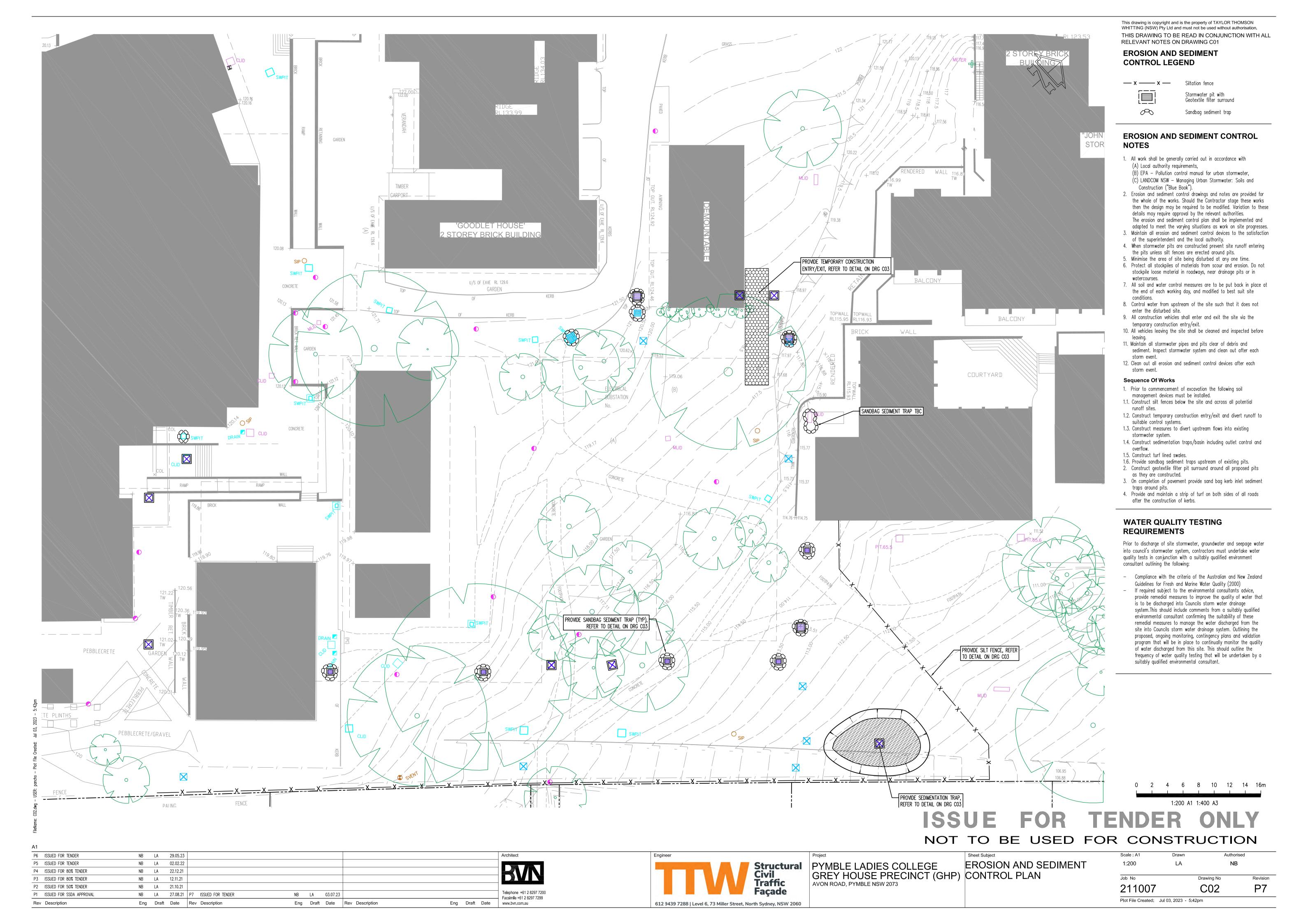
#### **Guidance notes:**

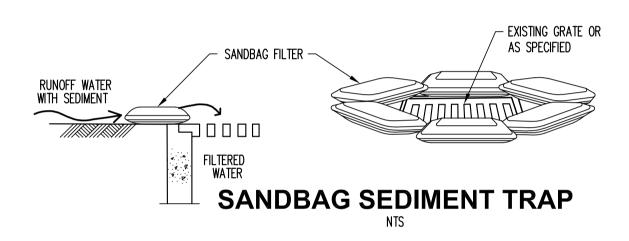
ESCP is to be prepared in accordance with the SEC Project Management Plan [PMP] and address relevant Conditions of Consent and applicable legislation.

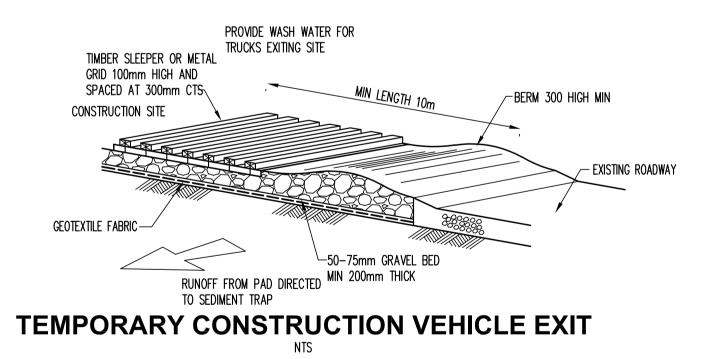
#### References:

- S:\Proformas\04 Reference Documents\Guidelines\Guide-Guidelines For Erosion & Sediment Control On Building Sites (Bluebook)
- S:\Proformas\04 Reference Documents\Guidelines\Guide-Managing Urban Stormwater- Soils & Construction (2004)

REVISION: A THIS DOCUMENT IS UNCONTROLLED WHEN PRINTED. The electronic version of this document is the approved and most current. Any printed version is uncontrolled and may not be current the approved and most current.







0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6m

1:20 A1 1:40 A3

# ISSUE FOR TENDER

NOT TO BE USED FOR CONSTRUCTION

| ı I            |                          |     |       |          |                      |     |       |          |                 |     |       |      |  |
|----------------|--------------------------|-----|-------|----------|----------------------|-----|-------|----------|-----------------|-----|-------|------|--|
| <sup>2</sup> 6 | ISSUED FOR TENDER        | NB  | LA    | 29.05.23 |                      |     |       |          |                 |     |       |      | Architect  |
| <sup>2</sup> 5 | ISSUED FOR TENDER        | NB  | LA    | 02.02.22 |                      |     |       |          |                 |     |       |      |  |
| 94             | ISSUED FOR 80% TENDER    | NB  | LA    | 22.12.21 |                      |     |       |          |                 |     |       |      |  |
| 23             | ISSUED FOR 80% TENDER    | NB  | LA    | 12.11.21 |                      |     |       |          |                 |     |       |      | DALA   |
| 2              | ISSUED FOR 50% TENDER    | NB  | LA    | 21.10.21 |                      |     |       |          |                 |     |       |      |  |
| 71             | ISSUED FOR SSDA APPROVAL | NB  | LA    | 27.08.21 | P7 ISSUED FOR TENDER | NB  | LA    | 03.07.23 |                 |     |       |      | Telephone +61 2 8297 7200<br>Facsimile +61 2 8297 7299 |
| Rev            | Description              | Eng | Draft | Date     | Rev Description      | Eng | Draft | Date     | Rev Description | Eng | Draft | Date | www.bvn.com.au   |



#### **Geetha Jayaram**

From: Viola Yao <viola.yao@ttw.com.au>
Sent: Tuesday, 6 February 2024 4:25 PM

**To:** krg@krg.nsw.gov.au

**Subject:** Attention: Ross Guerrera - Project at Pymble Ladies College - SSD 17424905 - Condition D21

**Attachments:** C03 P7.pdf; C02 P7.pdf

Hi Ross,

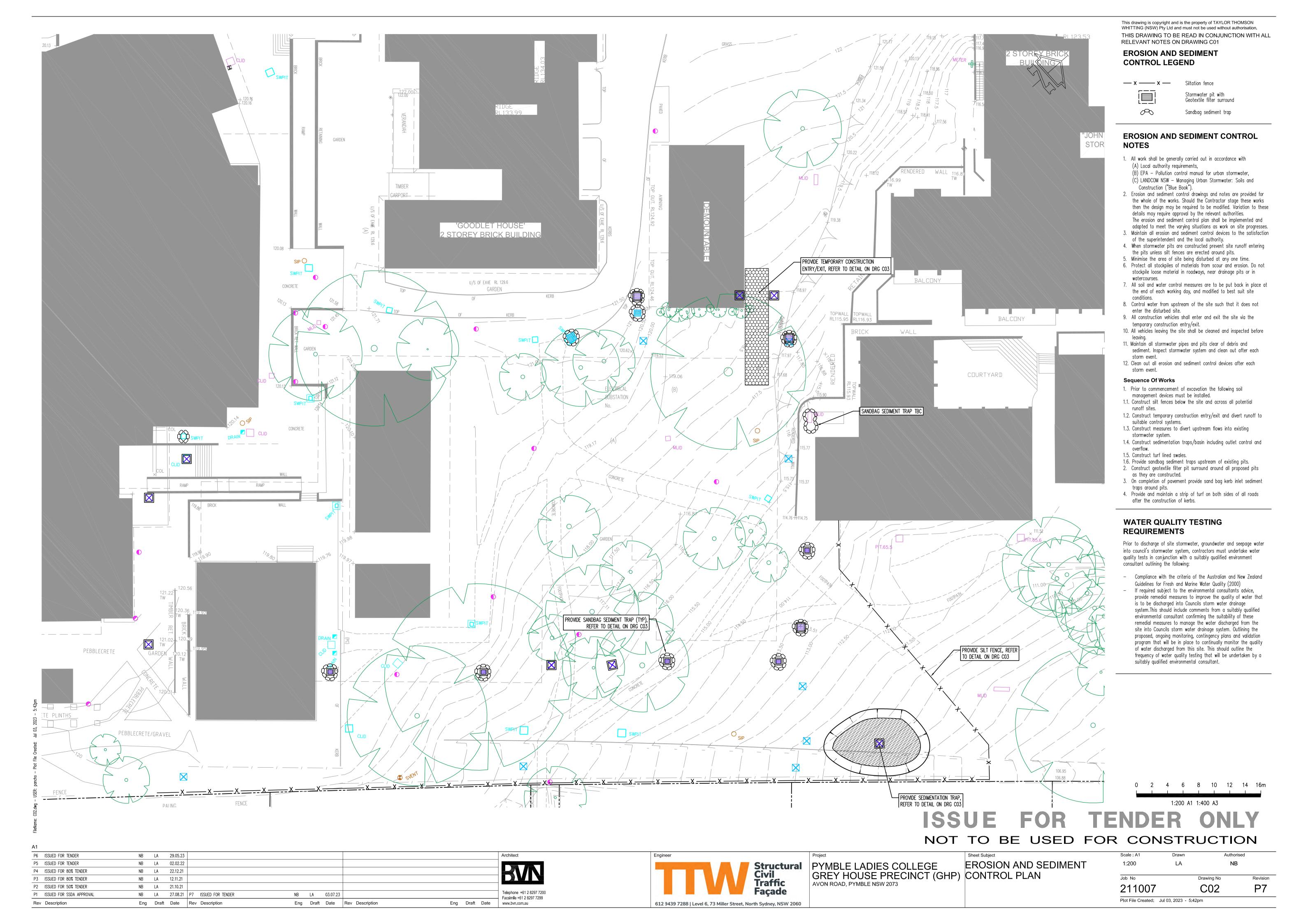
Hope this email finds you well. We are the civil engineers working on the project at Pymble Ladies College.

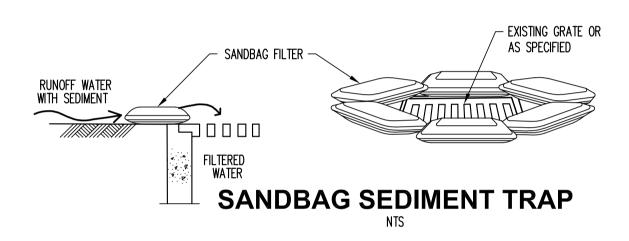
Regarding condition D21, please refer to the screenshot below. Could you kindly advise if the council has any record of consultation regarding the current Sediment and Erosion Plan?

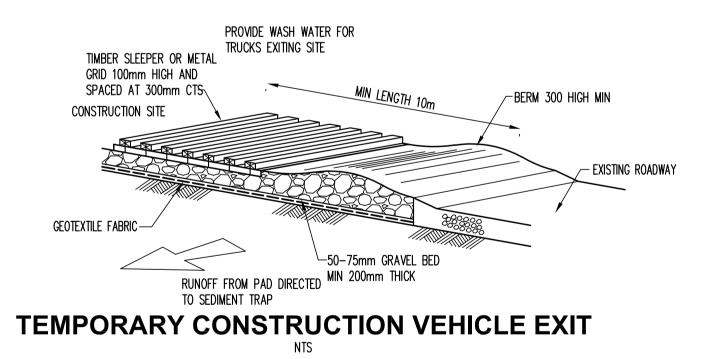
If not, please find attached the current Sediment and Erosion Control Plan and Details. We would appreciate your input on the next steps to satisfy this condition.

- D21. The Applicant must prepare a Construction Soil and Water Management Plan (CSWMSP) and the plan must address, but not be limited to the following:
  - (a) be prepared by a suitably qualified expert, in consultation with Council;
  - (b) describe all erosion and sediment controls to be implemented during construction, as a minimum, in accordance with the publication Managing Urban Stormwater: Soils & Construction (4<sup>th</sup> edition, Landcom 2004) commonly referred to as the 'Blue Book';
  - (c) provide a plan of how all construction works will be managed in a wet-weather events (i.e. Storage of equipment, stabilisation of the site); and
  - (d) detail all off-Site flows from the site.

Regards, Viola







0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6m

1:20 A1 1:40 A3

# ISSUE FOR TENDER

NOT TO BE USED FOR CONSTRUCTION

| ı I            |                          |     |       |          |                      |     |       |          |                 |     |       |      |  |
|----------------|--------------------------|-----|-------|----------|----------------------|-----|-------|----------|-----------------|-----|-------|------|--|
| <sup>2</sup> 6 | ISSUED FOR TENDER        | NB  | LA    | 29.05.23 |                      |     |       |          |                 |     |       |      | Architect  |
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| 94             | ISSUED FOR 80% TENDER    | NB  | LA    | 22.12.21 |                      |     |       |          |                 |     |       |      |  |
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| 2              | ISSUED FOR 50% TENDER    | NB  | LA    | 21.10.21 |                      |     |       |          |                 |     |       |      |  |
| 71             | ISSUED FOR SSDA APPROVAL | NB  | LA    | 27.08.21 | P7 ISSUED FOR TENDER | NB  | LA    | 03.07.23 |                 |     |       |      | Telephone +61 2 8297 7200<br>Facsimile +61 2 8297 7299 |
| Rev            | Description              | Eng | Draft | Date     | Rev Description      | Eng | Draft | Date     | Rev Description | Eng | Draft | Date | www.bvn.com.au   |



#### **Geetha Jayaram**

**From:** noreply@zohosalesiq.com

Sent: Wednesday, 14 February 2024 9:48 AM

To: viola.yao@ttw.com.au

**Subject:** Ku-ring-gai Council - Chat with Viola

You don't often get email from noreply@zohosalesiq.com. Learn why this is important

[External Email]: Do not click links or open attachments unless you recognize the sender and know the content is safe.

## **Chat Transcript**

#### Hello! I would like to follow up with the email I sent through to Ross Guerrera last Tuesday

| Viola | Hello! I would like to follow up with the email I sent through to Ross Guerrera last Tuesday   | 9:31:28 AM |
|-------|--|------------|
| Chris | Hi, Please call us on 94240000 between now and 10am to speak to the engineer, Ross.  | 9:32:12 AM |
| Viola | Ok thanks  | 9:32:40 AM |
|       | I sent the email to krg@krg.nsw.gov.au is there a way you can find out if this has been forward to Ross?   | 9:33:44 AM |
| Chris | Yes, records would then forward the email to ross and you should have received a receipt that the email has been received. It may take some time for the officer to respond. | 9:36:57 AM |
| Viola | Thank you. I couldn't get through to customer services on 94240000. Could you send a follow up email to Ross?  | 9:37:53 AM |

| Chris | Just spoke to Ross and he has received your email. Ross advised to tell me to let yo know he will call you back later today or tomorrow, | 9:44:13 AM |
|-------|--|------------|
| Viola | Sounds good thanks!  | 9:44:54 AM |



#### **Geetha Jayaram**

noreply@zohosalesiq.com From:

Sent: Monday, 19 February 2024 11:53 AM

To: viola.yao@ttw.com.au

Subject: Ku-ring-gai Council - Chat with Viola Yao

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[External Email]: Do not click links or open attachments unless you recognize the sender and know the content is safe.

# **Chat Transcript**

19 Feb 2024, 11

11:0

11:0

11:1

11:2

11:2

Chat Duration: 0

Viola Yao - viola.yao@ttw.com.au e: https://www.krg.nsw.gov.au/Home

Hi

ed By: Jessie

### Transcript-

| Viola Yao | ні   | 1 |
|-----------|--|---|
| Jessie    | Hello  | 1 |
| Viola Yao | Hello, Just would like to follow up on Ross Guerrera about the email sent on 6th Feb about Pymble Ladies<br>College - SSD 17424905 - Condition D21 | 1 |
|           | I've spoken to Chris from customer service and was advised that Ross will respond to the email last friday.  | 1 |
| Jessie    | One moment pls   | 1 |
|           | Ill send an email to Ross to respond to you.   | 1 |
|           | Can I have your best contact number and email address?   | 1 |
|           | Alternatively, please ring 9424 0950 for Ross  | 1 |
|           |  |   |

