



28th June 2021

The Planning Secretary
Department of Planning, Industry & Environment
320 Pitt Street
Sydney, NSW 2000

Attention: Megan Fu
Project: Nihon University Newcastle Campus - SSD 9787
Re: Conditions of Consent C08

Dear Megan,

Reference is made to SSD 9787 Conditions of Consent C08 in relation to the Construction Environmental Management Plan [CEMP] requirements for the development and our correspondence dated 21st June 2021 addressing the amendments to construction hours.

Please find attached the updated Construction Environmental Management Plan [CEMP] prepared by Built Pty Ltd addressing the amendment to working hours in accordance with *Environmental Planning and Assessment [COVID-19 Development-Construction Work Days] Order [No 2] 2021*. Also attached are the updated Construction Traffic and Pedestrian Management Sub Plan and the Construction Noise and Vibration Management Sub Plan as part of the amended Construction Environmental Management Plan.

Should you require further clarification on the updated CEMP please feel free to contact either Katherine Daunt or Edward Clode at dwp Australia Pty.

Yours sincerely,



Edward Clode

Design Director

Registered Architect – NSW ARBN 4100

Email: edward.c@dwp.com

File: 17-0347_A-d01-20_let

Encl.: Built Nihon University Construction Environmental Management Plan Rev 03
Built Nihon University Construction Traffic and Pedestrian Management Sub Plan Rev 03
Built Nihon University Construction Noise and Vibration Management Sub Plan Rev 02



Construction Environmental Management Plan

Project Name:	Nihon University Newcastle Campus
Project Address:	9 Church Street, Newcastle NSW 2300
Project Number:	201229
Client:	Nihon University C/O AZUSA SEKKEI & DWP SUTERS
Revision:	Revision 03
Revision Date:	21/06/2021

Contents

0.0 Document Control	5
1.0 Introduction.....	6
1.1 Contractor Details	6
1.2 Project Contacts	6
2.0 Project Overview.....	7
2.1 Project Location	7
2.2 Project Details.....	8
2.3 Special / Unique Aspects of the Project	8
2.4 Approved Hours of Construction	9
3.0 Environmental Management System Overview.....	11
3.1 Construction Environmental Management Plan	11
3.2 Environmental Policies.....	11
3.3 Built Environmental Management System	14
3.4 Purpose of the Construction Environmental Management Plan	15
3.5 Environmental Objectives	15
4.0 Environmental Management	16
4.1 Built Organisational Chart.....	16
4.2 Roles & Responsibilities	16
4.3 Regulatory Framework.....	19
4.3.1 Legal Requirements	19
4.3.2 SSD-9787 Development Consent.....	21
4.3.3 Applications & Permits.....	25
4.4 Reporting	26
4.5 Stakeholder Communication and Community Consultation	29
4.5.1 Stakeholder Identification	29
4.5.2 Stakeholder Communication Strategies	30
4.5.3 Complaints Management.....	30
4.6 Environmental Training and Awareness.....	32
4.6.1 Pre-Commencement Assessment and Meeting	32
4.6.2 Site Induction.....	32
4.6.3 Site Meetings and Risk Workshops.....	33
4.7 Emergency and Incident Response	34
4.7.1 Emergency and Incident Management.....	34
4.7.2 Incident Notification, Reporting and Response.....	34

5.0 Implementation	36
5.1 Environmental Aspects and Impacts Register	36
5.2 Environmental Issues and Controls	36
5.2.1 Dust & Odour	36
5.2.2 Stormwater Control and Discharge	37
5.2.3 Tracking of Sediment and Other Materials onto Roads	38
5.2.4 Groundwater Management	38
5.2.5 Obtrusive Effects of External Lighting	38
5.3 Environmental Control Plans	39
5.4 Environmental Schedules	40
6.0 Construction Traffic and Pedestrian Management Sub-Plan	42
6.1 Background	42
6.2 Summary of Traffic and Pedestrian Management Control Measures	43
6.3 Summary of Traffic and Pedestrian Management Monitoring	45
7.0 Construction Noise and Vibration Management Sub-Plan	47
7.1 Background	47
7.2 Summary of Noise and Vibration Management Control Measures	47
7.3 Summary of Noise and Vibration Management Monitoring	52
8.0 Construction Waste Management Sub-Plan	57
8.1 Background	57
8.2 Waste Classification and Validation	57
8.2.1 Classification of Waste for Removal Off-Site	57
8.2.2 Validation of Waste to Remain On-Site	58
8.3 Summary of Construction Waste Management Control Measures	59
8.4 Summary of Construction Waste Management Monitoring	62
9.0 Remediation Action Plan	65
9.1 Background	65
9.2 Methods and Objectives of the RAP	65
9.3 Responsibilities	66
9.4 Remediation Strategy	67
9.5 Contingency Plan	67
9.6 Unexpected Contaminated Finds Protocol	68
10.0 Aboriginal Cultural Heritage Management Plan	71
10.1 Background	71
10.2 Unexpected Aboriginal Archaeological Finds Protocol	72

11.0 Archaeological Research Design & Excavation Methodology	74
11.1 Background.....	74
11.2 Unexpected Non-Aboriginal Heritage Finds Protocol	74
12.0 Monitoring and Review.....	75
12.1 Environmental Monitoring	75
12.2 Environmental Auditing	76
12.3 Environmental Non-Conformance and Corrective Action	77
12.3.1 <i>Environmental Non-Conformance</i>	77
12.3.2 <i>Reporting Non-Conformances</i>	77
12.3.3 <i>Corrective Actions</i>	78
12.4 Review of Environmental Management Plans.....	78
Appendix A1 – Environmental Aspect and Impact Register	80
Appendix A2 – Erosion and Sediment Control Plan	86
Appendix B – Environmental Schedules	89

0.0 Document Control

Revision	Date	Changes Description	Author
A	20/01/2020	Revision A – For submission to Dept. Planning	Ben Moss
01	13/05/2020	Amendments made as required by GHD Independent Environmental Audit 01 – Corrective Actions & Recommendations	Ben Moss
02	27/08/2020	Amendment to Section 2.4 to include extended working hours in accordance with EP&A (COVID-19 Development – Construction Work Days) Order 2020.	Ben Moss
03	21/06/2021	Amendments to Sections 1.2, 2.4, 4.1, 4.3.3, 4.4, 4.5.1, 5.2.2, 5.2.5, 5.3, and Appendix A2.	Ben Moss

Revision	Organisation	Submission	Copies
A	Dwp Newcastle	For Submission to NSW DPIE	1
	Dix Gardner Group	For Information	
01	Dwp Newcastle	For Submission to NSW DPIE	1
	Dix Gardner Group	For Information	
	GHD Newcastle	For Information	
02	Dwp Newcastle	For Submission to NSW DPIE	1
	Dix Gardner Group	For Information	
	GHD Newcastle	For Information	
03	Dwp Newcastle	For Submission to NSW DPIE	1
	SureScope Building Certifiers (formerly Dix Gardner Group)	For Information	

1.0 Introduction

The purpose of this Construction Environmental Management Plan (CEMP) is to provide project stakeholders with detailed construction methodology information relating to the new **Nihon University Australia Newcastle Campus**. The CEMP is to be read in conjunction with the Built Project HSE Plan and Appendices.

The information provided is for stakeholder reference and to highlight the strategies Built have considered to ensure that the activities occurring on site do not adversely impact the environment and the health and safety of the public and site personnel.

1.1 Contractor Details

Principal Contractor: Built Pty Ltd – Newcastle & Hunter

Address: Level 1, 155-157 Lambton Road, Broadmeadow NSW 2292

Telephone (Office): (02) 4077 5900

Fax (Office): (02) 4077 5909

1.2 Project Contacts

Company	Position	Name	Contact Details
BUILT	Site Manager (24 Hour Contact)	Ben Bates	0415 198 937
BUILT	Construction Manager	Rob McLaughlin	0478 597 116
BUILT	Project Manager / Community Liaison	Ben Moss	0401 088 850
BUILT	HSE Officer	Michael Louis	0421 844 024
Dwp Newcastle	Superintendent / Architect	Ed Clode	02 8080 7917
SureScope (formerly Dix Gardiner Group)	Private Certifying Authority	Scott O'Donohue	02 4940 0355
NSW DPIE	Planning Secretary	-	1300 305 695
NSW DPIE	Newcastle Regional Office	-	02 4904 2700
NSW EPA	Pollution / Services Hotline	-	131 555
City of Newcastle	Local Council	-	02 4974 2000
Hunter Water	Water & Sewer Authority	-	1300 657 000
AusGrid	Electrical Authority	-	13 13 88
Jemena	Gas Authority	-	131 909
SafeWork NSW		-	13 10 50
Fire & Rescue NSW	Newcastle Fire Station	-	000 (Emergency) 02 4927 25 35 (HAZMAT)
NSW Police – Newcastle Local Area Command	Newcastle Police Station	-	000 (Emergency) 02 49290947
Roads Authority	RMS	-	13 22 13

2.0 Project Overview

2.1 Project Location

The project is situated on the site of the former Newcastle Courthouse is located at Lot 1 DP1199904 - 9 Church Street, Newcastle NSW 2300.



Figure 1: Aerial view of the site



Figure 2: Site overview shown in yellow and surrounding area

2.2 Project Details

The project consists of the complete demolition of 2 x existing 3 storey buildings, site remediation (including the management of any resultant contamination, mine workings or archaeological findings), the restoration and refurbishment of the retained and state heritage listed Newcastle Courthouse building and the construction of 2 x 4 storey buildings comprising student accommodation in the eastern building and teaching space\carpark in the western building. The expected completion date of the project is May 2021.

The scope of works to be executed in relation to this project includes:

- Demolition of 2 x existing 3 storey buildings;
- Remediation of exposed ground conditions;
- Monitored excavation for items of archaeological significance (both Aboriginal & European);
- Temporary & permanent retaining structures & ground anchors to neighbouring structures;
- Bulk and detail excavation;
- Piling foundations;
- Reinforced concrete structure;
- Façade comprising painted & rendered concrete and CFC sheet with punch windows and attached aluminium louvres;
- Residential building to include ground floor cafeteria, commercial kitchen, laundry and associated common spaces with 3 levels of student accommodation above;
- Educational building to include ground floor car park with 3 levels of teaching space above;
- D&C scope for all services;
- 101 bedrooms in residential building within approx. 3200 m2 GFA.
- 21 teaching spaces in education building within approx. 1,800m2 GFA
- 20 car park spaces on ground floor of education building within approx. 800m2

2.3 Special / Unique Aspects of the Project

Special requirements and/or unique aspects of this Project include:

- Heritage component to both retained Courthouse building and perimeter retaining brick wall on southern (partial) and western boundaries.
- Site contamination, existing mine workings and archaeological significance (both Aboriginal & European) to remediate \ manage.
- Temporary \ permanent retaining required with ground anchors into neighbouring property (James Fletcher Hospital).
- Working on a site with effectively boundary to boundary construction and with sensitive neighbours i.e. Newcastle Police Station and James Fletcher Hospital either side and to the rear of the site (including

operations call centres at both premises). There are also nearby residential properties and businesses, including Newcastle Grammar School and a Hotel in the immediate vicinity.

- The project is virtually adjacent to the track for the annual Newcastle Coates 500 Supercars event held on the 3rd week of November.
- Green Star target rating of four (4).

2.4 Approved Hours of Construction

SSD-9787 Conditions D4-D7 specify the approved hours of construction and are detailed below:

D4. Construction, including the delivery of materials to and from the site, may only be carried out between the following hours:

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

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

D5. Construction activities may be undertaken outside of the hours in Condition D4 if required:

- a) by the Police or a public authority for the delivery of vehicles, plant or materials; or
- b) in an emergency to avoid the loss of life, damage to property or to prevent environmental harm; or
- c) where 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.

D6. Notification of such construction activities as referenced in Condition D5 must be given to affected residents before undertaking the activities or as soon as is practical afterwards.

D7. Rock breaking, rock hammering, sheet piling, pile driving, and similar activities may only be carried out between the following hours:

- a) 9am to 12pm, Monday to Friday;
- b) 2pm to 5pm Monday to Friday; and
- c) 9am to 12pm, Saturday.

Special Conditions

On 10th June 2021, the NSW Minister for Planning and Public Spaces introduced the Environmental Planning and Assessment (COVID-19 Development - Construction Working Days) Order (No 2) 2021 to support the construction industry during the COVID-19 pandemic.



Construction Environmental Management Plan

In response to previous consultation with the community, Built has established the following amended construction hours (pending Government advice and/or project requirements):

Monday to Friday: Normal approved working days 7:00am to 6:00pm

Saturdays: 7:00 am to 5:00 pm as permitted under the Order 2021

Sunday's & Public Holidays: No works (advanced notice will be given to the community if extended hours are planned between 9:00 am to 5:00 pm)

3.0 Environmental Management System Overview

3.1 Construction Environmental Management Plan

The primary purpose of the CEMP is to provide a project specific Environmental Management Plan that describes the environmental strategy, methods, controls and requirements of SSD-9787 Development Consent conditions outlined in Section 4.0 of the CEMP and the project's environmental studies listed below:

- Environmental Impact Statement by City Plan (dated May 2019)
- Conservation Management Plan by TKD Architects (dated August 2015)
- Statement of Heritage Impact by John Carr Heritage Design (dated May 2019)
- Aboricultural Impact Assessment Report by Joseph Pidutti Consulting Arborist (dated November 2018)
- Traffic and Parking Assessment Report by Better Transport Futures (dated March 2019)
- Noise and Vibration Assessment Report by EMM Consulting (dated May 2019)
- Remediation Action Plan by Douglas Partners (dated April 2020)
- Aboriginal Cultural Heritage Management Plan by AMAC (dated March 2020)
- Archaeological Research Design and Excavation Methodology by AMAC (dated February 2020)

The CEMP is to be read in conjunction with Built's Project HSE Plan and Appendices.

The SSD Conditions required the preparation of the following environmental issue-specific sub-plans to the CEMP with relevant Sections within the CEMP shown:

- Construction Traffic & Pedestrian Management Sub-Plan (**Section 6.0**)
- Construction Noise & Vibration Management Sub-Plan (**Section 7.0**)
- Construction Waste Management Sub-Plan (**Section 8.0**)

3.2 Environmental Policies

Built's environmental policies describe Built's commitment to continual improvement in environmental performance and compliance with applicable legal requirements and has been developed in accordance with requirements outlined in Section 4.2 of ISO 14001.

The environmental policies are displayed at all time within induction rooms and the site office and communicated to staff and other interested parties via inductions and site meetings.

Built.

Environmental Management Policy

Our Aim

Built is committed to establishing and maintaining ours and our clients work environments with priority given to minimising adverse environmental effects from our activities and fostering a culture of sustainable environmental management.

The Built environmental strategy is the ongoing development of a system based on AS/NZS ISO14001, legislation and applying the principles of best practice environmental management to our activities. Built is committed to objectives and individual programs by applying proactive approaches to environmental stewardship through:

- Identifying environmental activities, aspects and impacts and applying appropriate environmental actions
- Minimising the effects of our activities on the environment
- Preventing pollution
- Complying with applicable environmental laws and regulations, Codes of Practice and Guidelines leading to the development of appropriate monitoring, measurement and review activities
- Working cooperatively with our clients and responsible agencies in exercising environmental due diligence at all stages
- Conducting relevant environmental education and training to improve awareness, knowledge and skills
- Developing and implementing plans and procedures for the effective operation and management of our processes
- Meeting Performance Standards and Key Performance Indicators, and taking action to improve performance through regular and formal reviews
- Communicating with staff, clients and stakeholders on all areas on environmental performance

Built acknowledges this environmental policy as a commitment that involves cooperation and consultation with all stakeholders to meet the company's business objectives.

Built is committed to continual improvement in environmental management. This includes regular monitoring, assessment and review of all aspects of the system by both internal and external audits.



Brett Mason
Managing Director
1 July 2018

Built.

Environmental Sustainability Policy

Our Aim

Built is committed to environmentally sustainable work practices and aspires to be recognised as a leading environmentally responsible contractor across all business operations Australia-wide.

Consistent with our Environmental Management Policy, we will seek to continually improve on environmental outcomes within the built environment through the adoption of best practice environmental sustainability principles, including:

- Eliminating, or where this is not possible, minimising waste from our activities and recovering resources for reuse or recycling
- Minimising our consumption and use of water and natural resources
- Reduce our carbon emissions to as low as is possible, through the efficient use of electricity and fossil fuels
- Protecting land quality and biodiversity from negative impacts associated with our operations
- Working cooperatively with our clients to achieve their objectives for environmental sustainability
- Raise the level of awareness of our staff, employees and contractors through the provision of training, instruction and information on the requirements for and importance of the sustainable use of natural resources and energy efficiency
- Work cooperatively in a consultative manner with our clients, responsible agencies and other stakeholders in exercising environmental due diligence across all areas of our business operations, including openly communicating, listening and responding to concerns of those potentially affected by our project operations
- Promoting the benefits of sustainable building design through the participation in and delivery of Green Star, NABERS rated projects and other world leading sustainability rating tools



Brett Mason
Managing Director
1 July 2018

3.3 Built Environmental Management System

BUILT will be working under the Built Management System (BMS). The BMS provides an integrated HSEQ framework that manages legal compliance, risks and opportunities at all levels of the business consistently and effectively.

The system comprises of policy, planning, implementation and operation, monitoring and review. Built maintains documented policies and procedures to ensure Built's aims, priorities and overall objectives are clearly communicated and understood at all levels of the organisation.

Built's Environmental Management System (EMS) is a component of the BMS and is ISO 14001 certified, meeting the requirements of the NSW Government Environmental Management Guidelines.

An overview of Built's environmental management document system for the project is shown below in Figure 3

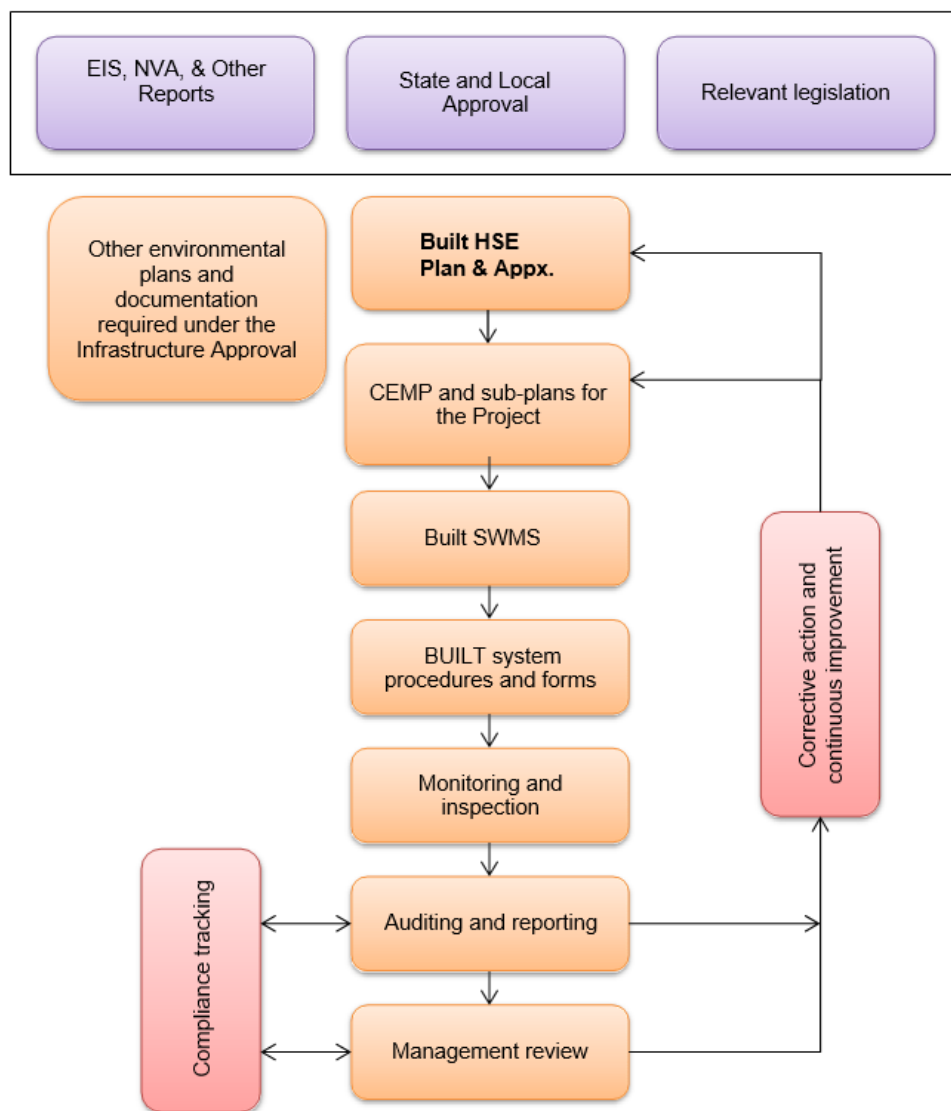


Figure 3: Built environmental management system overview

3.4 Purpose of the Construction Environmental Management Plan

The purpose of the Construction Environmental Management Plan is to:

- Identify the environmental issues (aspects and impacts) relevant to the project
- Establish the environmental and operational controls to reduce any adverse impacts on the environment from the company's activities, products and services.
- Describe the methods and processes by which the project will maintain compliance with all relevant environmental legislation, any applicable license, approval and permit, regulatory requirements
- Ensure the works are effectively managed so as to eliminate or reduce potential adverse impacts on the environment as a result of construction activities.
- Action any outcomes from incidents or accidents, project audits or other identified non-conformances and to continually improve the Environmental Management System.

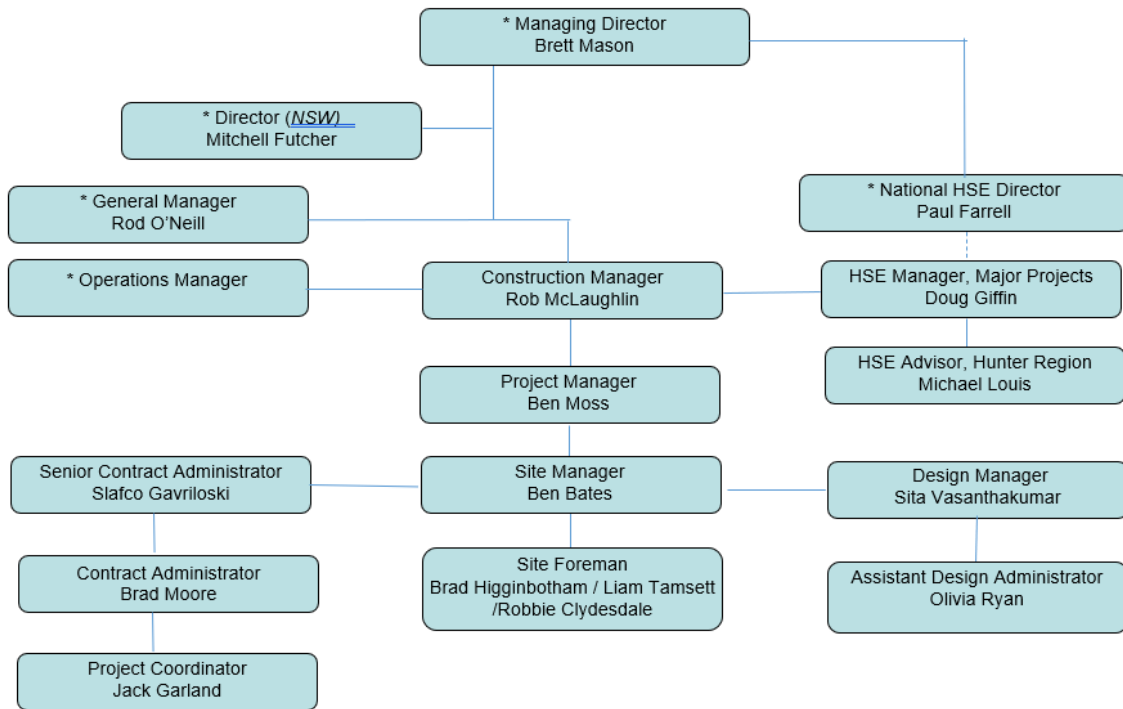
3.5 Environmental Objectives

Built's environmental objectives for the project are:

Aspect	Objective	Target	Measurement Tool
Waste / Green Star	To minimise waste going to landfill	90% landfill diversion	Audits, compliance reporting
Sediment & Erosion Control	To prevent sediment from entering waterways or stormwater	Zero incidents	Audits, monitoring, implementation and review of control plans
Water Quality	To prevent contamination of water ways	Zero incidents of water way pollution	Audits, monitoring, implementation and review of control plans
Noise & Vibration	To proactively minimise the generation of noise and vibration	Minor exceedances only and respond to community concerns within 24 hours	Audits, monitoring, implementation and review of methodology and control plans
Air Quality	To proactively minimise impacts of dust, odour, emissions to air quality	Respond to any community concerns immediately and	Audits, monitoring, regular reviews of methodology and control plans
Heritage / Archaeology	To maintain all heritage items and minimise disturbance during construction	Zero damage to heritage items or archaeological relics	Audits, monitoring, revision of management plans in response to NCRs
Regulatory Framework	Construction of the project in accordance with the environmental regulatory framework and development consent	Full compliance with statutory approvals & legal requirements	Audits, monitoring, compliance construction reporting
Community & Consultation	Engage and consult effectively with Authorities and the community, and to respond to complaints / concerns quickly.	Regular communication with community through notices and updates. Record and respond to complaints within one working day and/or as reasonably practical	Review complaints register, construction compliance reports
Site Contamination	To appropriately remediate the site and prevent additional contamination to the immediate and surrounding environment	Final validation and certification from the NSW EPA Accredited Site Auditor	Compliance reporting, site investigations and audits, monitoring, accurate site records

4.0 Environmental Management

4.1 Built Organisational Chart



4.2 Roles & Responsibilities

Construction Manager

- Always show visible leadership and lead by example;
- Allow for sufficient time and resources to implement the Company and Project HSE management systems and the Projects HSE plan;
- Review, approve and monitor the Project HSE Plan to ensure it remains up to date and in line with the project scope;
- Fulfil the assigned activities as outlined in **Built HSE Plan Appendix 3 HSE Documentation Administration Matrix** and as outlined elsewhere in this Plan;
- Fulfil and maintain HSE activities as outlined in **HSE-100 Senior Management Involvement Program**;
- Monitor project HSE performance, including lag and lead indicators, the timely closure of corrective and preventive action in respect of incidents and the results of HSE audits.

Project Manager

- Always show visible leadership and lead by example;
- Ensure a project specific HSE Plan, including the associated Appendices are developed for the project and are implemented and maintained;
- Ensure Built HSE Plan Appendix 3 HSE Documentation Administration Matrix is completed and roles are assigned to competent project team personnel;
- Fulfil the assigned activities as outlined in **Built HSE Plan Appendix 3 HSE Documentation Administration Matrix** and as outlined elsewhere in this Plan

- Review and accept Safe Work Method Statements (SWMS) for High Risk Construction Work (HRCW)
- Ensure all incidents are reported internally and externally, as required, and corrective/preventive action is closed out within applicable timeframes;
- Ensure appropriate consultation arrangements are established with the workforce, client and other stakeholders;
- Ensure that Built site staff and site personnel are provided with appropriate training, information, instruction and supervision in relation to HSE, including those necessary to comply with their assigned tasks and responsibilities as outlined in this HSE Plan;
- Ensure the company's injury management and return to work processes are implemented and maintained at the project level.
- Ensure HSE policies, management system and plans are communicated to workers as part of the site induction
- Manage the projects compliance with WHS/OHS legislation.

Design Manager

- Ensure Built's Safety in Design Evaluation (SIDE) process is implemented;
- Fulfil the assigned activities as outlined in **Built HSE Plan Appendix 3 HSE Documentation Administration Matrix** and as outlined elsewhere in this Plan
- Seek to eliminate or minimise HSE hazards associated with the design as early as possible in the design process;
- Reinforce with design consultants their obligations relative to designing within safe construction conventions wherever reasonably practicable;
- Facilitate project safety and environmental protection in design reviews and design team meetings.

Contracts Administrator

- Fulfil the assigned activities as out lined in **Built HSE Plan Appendix 3 HSE Documentation Administration Matrix** and as outlined elsewhere in this Plan
- Incorporate HSE requirements in all subcontracts and provide prospective Subcontractors with relevant HSE Documentation;
- Advise subcontractors of the process for submitting HRCW SWMS to Built for review prior to work commencing;
- Advise the subcontractor if they will be required to attend a pre-commencement meeting with members of the Built site team.

Site Manager

- Always show visible leadership and lead by example;
- Assist the most senior person on the project with the implementation and maintenance of this HSE Plan.
- Fulfil the assigned activities as outlined in **Built HSE Plan Appendix 3 HSE Documentation Administration Matrix** and as outlined elsewhere in this Plan;
- Issue directions to cease work for activities that do not comply with accepted safety and environmental controls or where work is being carried out contrary to the required HRCW SWMS;
- Review and accept Safe Work Method Statements (SWMS) for High Risk Construction Work (HRCW)
- Monitor the site and site activities to ensure these remain compliant with regulatory requirements and other requirements as identified in the HSE Management Plans;

Site Supervisor/Foreman

- Always show visible leadership and lead by example;
- Fulfil the assigned activities as outlined in **Built HSE Plan Appendix 3 HSE Documentation Administration Matrix** and as outlined elsewhere in this Plan;
- Issue directions to cease work for activities that do not comply with accepted safety and environmental controls;
- Review and understand SWMS for HRCW relating to work under their direct supervision;
- Assist in the development of SWMS for High Risk Construction Work / SOP's, JSAs and the like for Built and labour-hire employees;
- Consider workers competency in relation to assigned tasks, the operation/use of plant and equipment commensurate with the risks associated with work to be performed.

Project HSE Coordinator

- Always show visible leadership and lead by example;
- Assist the site in the preparation and maintenance of the Site HSE Management Plans.
- Fulfil the assigned activities as outlined in **Built HSE Plan Appendix 3 HSE Documentation Administration Matrix** and as outlined elsewhere in this Plan

Subcontractors

- Take reasonable care that personal acts and omissions do not adversely affect health and safety of other persons or cause harm to the environment;
- Comply with any reasonable instructions given by the Built Supervisor;
- Cooperate with Built by reporting all HSE incidents and unsafe conditions to the most senior person on the project;
- Report all work related injuries and illnesses to their supervisor and the nominated First Aider;
- Make recommendations on how to eliminate hazards or improve HSE on site;
- Seek the help of the Supervisor if unsure of any aspect of HSE requirements;
- Do not undertake any task, operate any plant or machinery unless authorised and qualified/trained to do so;
- Use correct tools and equipment and do not use them if they are not in good working order;
- Report to the Supervisor any tool/plant equipment that malfunctions and/or needs maintenance/repair;
- Use protective clothing and equipment provided;
- Work in accordance with the requirements of HRCW SWMS and Standard Operating Procedures and other task-specific documentation.

4.3 Regulatory Framework

4.3.1 Legal Requirements

Built is required to adhere to all legal requirements throughout the project, with special consideration given to those regarding heritage and the environment due to the project being a State Significant Development. The key legal requirements of the project are listed below in Table 1.

Table 1: Key Legal Requirements

Legal Requirement	Relevance
Contaminated Land Management Act 1997	Establishes a process for investigating and remediating contaminated land. This process includes the accountabilities, independent auditing, and short- and long-term management requirements.
Coal Mine Subsidence Compensation Act 2017	Relates to the assessment and management of mine subsidence risks on the project.
Dangerous Goods Act 2008	Relates to the on-road transport of dangerous goods to promote public safety and protect property and the environment. This applicable to the transport of contaminated waste from site and is addressed in the RAP prepared by Douglas Partners.
Dangerous Good Regulation 2014	Sets out the obligations of persons involved in the transport of dangerous goods from site.
Environmental Planning & Assessment Act 1979	Provides a development framework to promote sustainability, environmental (including cultural and heritage) protection, shared responsibility, and increased consultation.
Environmental Planning & Assessment Regulation 2000	Prescribed conditions of consent including shoring and adequacy of adjoining properties, notice to neighbours, erection of signage, removal of asbestos, development on contaminated land. Also provides requirements for the application and approval of Construction and Occupation Certificates.
Heritage Act 1977	Outlines the requirements to identify, protect and conserve State heritage listed elements of the project and identifies the roles and responsibilities of the Heritage Council.
Hunter Water Act 1991	Outlines requirements for the project in relation to the supply of water, provision of sewerage and drainage services and the disposal of wastewater.
National Construction Code & Building Code of Australia 2019	Outlines all technical requirements applicable to the project that are to be satisfied when undertaking building work or plumbing and drainage installations.
National Parks and Wildlife Act 1974	Relates to the conservation of objects, places or features of cultural value, specifically of Aboriginal and European significance on the project.

Newcastle Development Control Plan 2012	Provides detailed provisions relating to matters of significance to The City of Newcastle to be considered by Council when exercising its environmental assessment and planning functions under Part 4 of the Environmental Planning and Assessment Act 1979.
Newcastle Local Environmental Plan 2012	Provides provisions for developments to respect, protect and complement the natural and cultural heritage, identity and image, and sense of place in the City of Newcastle.
NSW Environment Protection Authority (EPA) 2017, Noise Policy for Industry (NPfI)	Sets out the requirements for the assessment and management of noise from industrial premises in NSW.
Protection of the Environment Operations Act 1997	Outlines requirements to protect the environment (air, noise, land, waste, notify of pollution incidents, and for mandatory environmental audits of the development.
Protection of the Environment Operations (Noise Control) Regulation 2008	Relates to prescribed noise limits of motor vehicles, time limits for the use of tools and other articles, and the inspection and testing of certain articles.
Protection of the Environment Operations (Waste) Regulation 2014	Outlines the requirements for recording, tracking, transporting and management of waste (including asbestos) throughout the development.
Roads Act 1993 (Section 138)	Outlines the requirements for when a permit is required for works and structures on public roads.
State Environmental Planning Policy (Infrastructure) 2007	Facilitates the effective delivery of infrastructure by identifying the environmental assessment category, matter to be considered in the assessment of development adjacent to types of infrastructure and providing for consultation with relevant public authorities.
State Environmental Planning Policy (SEPP) 55 – Remediation of Land	Specifies the requirements for the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment.
State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017	Identifies the general conditions of complying development certificates for educational facilities
Work Health and Safety Act 2011	Provides a national framework to secure the health and safety of workers and the workplace (the development site).
Work Health & Safety Regulation 2017	Outlines the requirements and responsibilities of persons conducting a business or undertaking at a workplace must take to manage hazards and risks including, though not limited to, information, training and instruction, workplace facilities, control measures

4.3.2 SSD-9787 Development Consent

In addition to the legislative requirements above, Built must also comply with the SSD conditions of approval aimed to prevent or minimise environmental impacts throughout the duration of the works.

The key environmental conditions are listed in Table 2 below, while the Environmental Management Sub-Plans also outline those directly related to their specific environmental issues.

Table 2: SSD-9787 Conditions for environmental management during construction

Condition Number	Condition	Addressed
Part A – Administrative Conditions		
A1	In addition to meeting the specific performance measures and criteria in this consent, all reasonable and feasible measures must be implemented to prevent, and, if prevention is not reasonable and feasible, minimise any material harm to the environment that may result from the construction and operation of the development.	Mitigation measures to be implemented are identified within the CEMP & Sub-Plans. Built will take all reasonable and feasible steps to minimise harm to the environment.
A8	Where conditions of this consent require consultation with an identified party, the Applicant must: (a) consult with the relevant party prior to submitting the subject document for information or approval; and (b) provide details of the consultation undertaken including: (i) the outcome of that consultation, matters resolved and unresolved; and (ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.	Evidence of consultation is included in: EIS CTPMSP Appendix B CNVMSP Section 10.0 CWMSP Section 6.0 & Appendix A
A18 - A20	Additional investigations for site contamination following completion of demolition works and prior to the commencement of all other construction must be undertaken in accordance with the items (a) to (g).	Built has engaged Douglas Partners Geotechnical Engineers to complete additional investigations and prepare a Remediation Action Plan that has been submitted to the Independent Site Auditor (GHD). Built will implement the requirements of the RAP for the duration of the development.
A23	Monitoring and Environmental Audits as required and defined under Division 9.4 of Part 9 of the EP&A Act.	Built undertakes regular monitoring of implemented measures onsite to ensure compliance and their effectiveness. GHD has also been engaged as the Independent Environmental Auditor on the project. CEMP Sections 6.3, 7.3, 8.4, and 12.0
A25	The Applicant must ensure that all its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.	Built provides information and instruction relating to SSD Conditions, Management Plans, site specific environmental issues, mitigation measures, and responsibilities to all employees and sub-contractors

		through Pre-Commencement Assessment Meetings, Site Inductions, and Site Meetings. CEMP Section 4.6
A26 - A30	Incident & Non-Compliance Notification, Reporting and Response to The Planning Secretary	Built has incorporated the requirements for Incident & Non-Compliance Notification, Reporting and Response into the CEMP and Sub-Plans. CEMP Section 4.7
A31	Revision of Strategies, Plans and Programs	Built undertakes regular reviews of all Strategies, Management Plans and Programs in accordance with the HSE Audit & Assessment Schedule. CEMP Section 12.4
Part B – Prior to Issue of Construction Certificate		
B4	Protection of Public Infrastructure	Consultation with relevant service providers is included in the EIS and is ongoing throughout the design and construction phase of the project. A Dilapidation Report was also prepared and submitted to City of Newcastle, PCA, and DPIE.
B5	Pre-Construction Dilapidation Report	Dilapidation Reports were completed for adjoining private properties, heritage items, and Council assets. These have been submitted to Property Owners, CoN, Heritage NSW, and PCA.
B9	(a) All vehicles must enter and leave site in a forward direction. (c) Swept path of longest construction vehicle entering & exiting site must be in accordance with AS2890.2 (d) Safety of vehicles and pedestrians accessing adjoining properties is to be addressed.	Built has addressed this condition through mitigation measures listed in the CTPMSP. CTPMSP Section 5.1.3 & Appendix D
Part C – Prior to Commencement of Construction		
C5 & C6	Demolition Work Plans in accordance with AS 2601-2001 and evidence that impacts to heritage areas of high significant fabric have been limited.	Built's demolition sub-contractor, Drumderg Services, is a licenced and suitably qualified contractor. Demolition Work Plans and a written statement were prepared in accordance AS 2601-2001 and submitted to the PCA and DPIE. CWMSP Section 6.0 & Appendix C
C7	Environmental Management Plan Requirements	Built has prepared the CEMP & Sub-Plans required under the SSD

		Consent in accordance with this Condition.
C8	Construction Environmental Management Plan	Built has prepared the CEMP required under the SSD Consent in accordance with this Condition.
C10	Construction Traffic and Pedestrian Management Sub-Plan	Built and Gateshead Traffic Solutions prepared the CTPMSP in accordance with this condition and in consultation with City of Newcastle. CEMP Section 6.0
C11	Construction Noise and Vibration Management Sub-Plan	Built and RAPT Consulting prepared the CNVMSP in accordance with this condition and in consultation with adjacent property owners. The CNVMSP incorporates all recommendations contained within the Project EIS and Noise & Vibration Assessment by EMM Consulting. CEMP Section 7.0
C12	Construction Waste Management Sub-Plan	Built has prepared the CWMSP in consultation with Drumderg Services (licenced demolition and asbestos removal contractor) in accordance with this condition. CEMP Section 8.0
C13	Aboriginal Cultural Heritage Management Plan	Built engaged AMAC Archaeological to prepare the ACHMP in consultation with Registered Aboriginal Parties. CEMP Section 10.0
C14	Construction Worker Transport Strategy	A CWTS was submitted to, and accepted by, DPIE. CTPMSP Appendix F
C17 & C18	Archaeological Salvage – Historic Archaeology	Built engaged AMAC Archaeological to prepare a Archaeological Research Design and Excavation Methodology and Program. The ARDEM has been submitted to and accepted by Heritage Council. CEMP Section 11.0
C20 - C21	Public Domain Works	Built will comply with this condition through consultation with City of Newcastle throughout the Section 138 Application process for Public Domain Works.

		CTPMSP Section 5.0
Part D – During Construction		
D1	Site Notices	Built has prominently displayed the required signage on the Church Street hoarding. CTPMSP Section 5.5
D2	Operation of Plant and Equipment	CEMP Section 7.0 CNVMSP Section 8.0
D3	Demolition	Demolition works have been undertaken in accordance with all relevant legislative requirements, consent conditions, Management Plans, and Demolition Work Plans. CWMSP Appendix A, B & C
D4 – D7	Construction Hours	These conditions are addressed within the CEMP, and both the CTPMSP and CNVMSP to outline how these specific environmental issues will comply with these conditions. CEMP Section 2.4
D8	Implementation of Management Plans	The CEMP (incorporating the ACHMP) and Sub-Plans outline how Management Plans will be implemented during construction. These requirements are communicated to all personnel in accordance with Condition A25.
D9	Construction Traffic	CTPMSP Section 5.0
D10	Hoarding Requirements	CTPMSP Section 5.0
D11	No Obstruction of Public Way	CTPMSP Section 5.0
D12 - D14	Construction Noise Limits	CNVMSP Section 5.1 & 6.2
D15 - D17	Vibration Criteria	CNVMSP Section 5.2 & 6.3
D18	Tree Protection	Addressed within the CEMP and adopted the recommendations of the Arboricultural Impact Assessment Report.
D19 & D20	Air Quality	CEMP Section 5.2
D21	Erosion and Sediment Control	CEMP Section 5.2.2 & Appendix A2
D22	Imported Soil	CEMP Section 9.0
D23	Disposal of Seepage and Stormwater	CEMP Section 8.0

D24	Unexpected Finds Protocol – Aboriginal Heritage	CEMP Section 10.2
D25	Unexpected Finds Protocol – Historic Heritage	CEMP Section 11.2
D26 - D28	Waste Storage and Processing	CEMP Section 8.0 CWMSP Section 5.0 & 6.0 CWMSP Appendix A & B
D29 - D34	Independent Environmental Audit	Addressed within the CEMP and completed by GHD in accordance with the Independent Audit Program and Post Approval Requirements. CEMP Section 12.2
Advisory Notes		
AN1	All licences, permits, approvals and consents as required by law must be obtained and maintained as required for the development. No condition of this consent removes any obligation to obtain, renew or comply with such licences, permits, approvals and consents.	CEMP Section 4.3.3, 4.6, 9.3 CWMSP Section 6.0 CWMSP Appendix A & B
AN5 - AN6	Utilities and Services	Built will consult with service providers and obtain all relevant approvals prior to commencing works related to their infrastructure. CEMP Section 4.3.3 & 4.5
AN7	Road Occupancy Licence	CTPMSP Section 5.0
AN8	SafeWork Requirements	Addressed in CEMP & Sub-Plans to ensure the safety of work personnel and the public.
AN9	Hoarding Requirements	CTPMSP Section 5.0
A10	Handling of Asbestos	CEMP Section 8.0 & 9.0 CWMSP Section 6.0 CWMSP Appendix A

It must be noted that there are additional International and Australian Standards, Guidelines & Handbooks applicable to specific environmental issues and referred to within the SSD conditions and Head Contract documents (including consultant reports). These are identified and addressed within the attached sub-plans and must be complied with throughout the duration of construction. If additional information is required, please refer to these specific documents for information or seek further advice from Built Management.

4.3.3 Applications & Permits

Built has identified the following applications and permits to enable works and comply with the regulatory framework. Each application and permit will have specific conditions (currently not known) to be satisfied prior to commencing, during, and at the completion their related element of works.

- Construction Certificates (Building Permit) for the construction work issued by SureScope (formerly Dix Gardner Group) (PCA)
 - Construction Certificate #1 – Piling, Grouting, and In-Ground Services
 - Construction Certificate #2 – Foundations and Level 1 Slabs
 - Construction Certificate #3 – Building Works (Internal & External)
- Hoarding Permit
- Road Occupancy Permit - Construction Zone (Full or Partial Closure)
- Road Occupancy Permit – Crane Application for erection of Tower Crane
- Section 138 (Type 1) – Driveway and/or a Road Opening Permit for Hunter Water Upgrade
- Section 138 (Type 2) - New Infrastructure on a Public Road/Footpath Permit for Public Domain Works
- Ausgrid Substation/Kiosk Upgrade and Connection
- Hunter Water Service Connection
- Jemena Gas Service Connection
- National Broadband Network (NBN) Services Connection

4.4 Reporting

Built's reporting requirements for the project are listed in the table below. Note that the other additional reporting is required in accordance with the development consent, however, these have been excluded where the responsibility is not within Built's scope of works (e.g. consultant engagement, etc.). These will be prepared by others directly engaged by the Client or Superintendent.

Key monthly reports include:

- Project Control Group Report
- Waste Management (Resource Recovery)
- Community Liaison Register

Report	Description	Responsible	Frequency	Distribution
Pre-Construction Dilapidation	Dilapidation reports to be prepared for all public infrastructure and adjoining properties	Built	Pre-Construction	CoN NSW Heritage SureScope Owners Residents
Staging	Staging Report in accordance with SSD Conditions A9 – A12	dwp	< 1 month prior to commencement of each stage	DPIE Built SureScope
Demolition	Demolition Work Plans required by AS 2601-2001 must be prepared and submitted in accordance with SSD Conditions C5	Built dwp	Prior to commencement	DPIE SureScope Dwp
CEMP	A project specific Construction Environmental Management Plan must be prepared in accordance with SSD Conditions C7 and C6 to address the environmental impacts and consent conditions of the development and the EIS.	Built	Prior to commencement	Dwp DPIE SureScope Subcontractors
CEMP Sub-Plans	Project specific CEMP sub-plans must be prepared in accordance with SSD Conditions C10, C11, and C12. - Noise & Vibration Management - Traffic and Pedestrian Management	Built	Prior to commencement	Dwp DPIE SureScope CoN Subcontractors

	- Construction Waste Management			
ACHMP	An Aboriginal Cultural Heritage Management Plan must be prepared to address the requirements of SSD Condition C13	AMAC Archaeology	Prior to commencement of construction (excl. demolition)	Registered Aboriginal Parties DPIE Heritage Council Built Dwp SureScope
CWTS	Construction Worker Transportation Strategy must be prepared to address parking facilities and other travel arrangements for construction workers in accordance with SSD Condition C14	Built	Prior to commencement	SureScope Dwp Subcontractors
CLP & Complaints Management	Built to establish a Community Liaison Plan and Register to management complaints and community consultation throughout construction	Built	Prior to commencement Report monthly	Included in PCG Report
ARDEM & Program	Archaeological Research Design and Excavation Methodology & Program must be prepared in accordance with SSD Conditions C17 & C18	AMAC Archaeology	Following completion of demolition works and prior to construction	Heritage NSW DPIE Dwp Built SureScope Subcontractors
Construction Monitoring	Reports related to the monitoring of issue-specific environmental control measures identified within the SSD-9787 Development Consent. This includes: - Noise & Vibration Management - Traffic & Pedestrian Management - Construction Waste Management	Built	As outlined within each issue-specific environmental management sub-plans listed.	Included in PCG Report
Compliance	Project Compliance Reports in accordance with SSD Conditions C22 – C25 and the Compliance Reporting Post Approval Requirements (DPIE, 2018).	Dwp	- Pre-Construction - During Construction (26-week intervals max.) - Pre-Operation	DPIE SureScope Built GHD
Non-Compliance	Notification in writing to The Planning Secretary in relation to a non-conformance and in accordance with SSD Conditions A28 – A30 <i>A non-compliance is defined by DPIE as an occurrence, set of circumstances or development that is a breach of the development consent.</i>	Dwp Dix Gardiner Built	As required & as soon as becoming aware	DPIE SureScope Dwp Built
Incidents (Notifiable to DPIE)	Notification, reporting and response in writing to The Planning Secretary in accordance with SSD Conditions A26 & A27 (including SSD-9787 Appendix 2).	Built Dwp	As required & as soon as becoming aware	DPIE SureScope Dwp Built

	<i>An incident is notifiable to DPIE if it;</i> <i>(a) involves actual or potential material harm to the health and safety of human beings or to the environment that is not trivial; or</i> <i>(b) results in actual or potential loss of property damage of an amount, or amounts in aggregate, exceeding \$10,000</i>			
Project Control Group	Project Control Group Report providing construction progress information including environmental management and sustainability issues.	Built	Monthly	dwp
Environmental Incidents	All environmental incidents will be reported on Built's internal system, Rapid Incident and included in PCG Reports. <i>Notifiable incidents will be reportable to DPIE</i>	Built	As required	dwp
Independent Environmental Audit	Independent Environmental Audit reports prepared by GHD in accordance with SSD Conditions D29 – D34 and the Independent Audit Post Approval Requirements (DPIE, 2018)	GHD	- Commencement (February 2020) - Construction (August 2020)	DPIE Dwp Built SureScope
Detailed Site Investigation	Additional site contamination investigations and testing including assessment of both soil and groundwater profile in accordance with SSD Conditions A18 and A19	Douglas Partners	Completion of demolition and prior to construction	GHD DPIE Built Dwp SureScope
Remediation Action Plan	RAP to be prepared for site remediation and validation work in accordance with SSD Conditions A19 and A20, including approval from the NSW EPA Accredited Site Auditor.	Douglas Partners	Completion of demolition and prior to construction	GHD DPIE Built Dwp SureScope
Post-Construction Dilapidation	Dilapidation reports and written confirmation from relevant authorities required for adjoining buildings or infrastructure in accordance with SSD Condition E4	Built	Prior to occupation	SureScope Dwp Authorities CoN
Stormwater Quality Management Plan	OMP is to be prepared in accordance with SSD Condition E21	Built / Consultants	Prior to occupation	SureScope CoN Dwp
Archaeological Salvage Interim Excavation	Interim report of the salvage excavation undertaken in accordance with SSD Condition E25	AMAC Archaeology	Within one month of completion of salvage work	Heritage Council CoN DPIE Dwp Built

Site Contamination Validation	A Validation Report as required by the RAP must be approved by the NSW EPA Accredited Site Auditor pursuant to SSD Condition A19 and be prepared in accordance with SSD Condition E30	Douglas Partners	Within one month after completion of remediation works	GHD DPIE SureScope Built dwp
Long Term Environmental Management Plan	A LTEMP as required by the RAP must be approved by the NSW EPA Accredited Site Auditor pursuant to SSD Condition A19 and be prepared in accordance with SSD Condition E32	Douglas Partners	Within one month after completion of remediation works	GHD DPIE SureScope Built dwp

4.5 Stakeholder Communication and Community Consultation

Three main stakeholder groups, each requiring varying degrees of management processes and strategies, have been identified on the project. These groups and management strategies are identified and outlined in the section below. Further stakeholder details (including contact details) can be found on the Project Contacts List maintained onsite.

4.5.1 Stakeholder Identification

Direct Project Stakeholders

- Nihon University
- Built NSW Pty Ltd
- Azusa Sekkei / dwp Australia Architects
- Project Consultants & Engineers
- Subcontractors
- Suppliers
- SureScope Building Certifiers (PCA)

Indirect Project Stakeholders

- NSW Department of Planning, Industry and Environment
- NSW Heritage Office
- The City of Newcastle
- Roads and Maritime Services
- Subsidence Advisory NSW
- GHD (Principle Environmental Consultant/Auditor)
- Service Providers
 - Ausgrid
 - Jemena
 - Hunter Water
 - National Broadband Network

External Stakeholders

- Registered Aboriginal Parties
- NSW Police Force (Newcastle Police Station)
- Hunter New England Health (James Fletcher Hospital)
- The Grand Hotel
- Newcastle Grammar School
- Neighbouring Properties (Owners / Occupiers)
- Public / Pedestrians

4.5.2 Stakeholder Communication Strategies

Built will take care to ensure that the stakeholder management strategy for each stakeholder group identified above, and any newly identified after completion of this document, is implemented throughout the project lifecycle. This strategy will allow Built to effectively communicate with the various stakeholders to best deliver the project to their satisfaction and intent.

Project Stakeholder Communication Strategy

Built will ensure that direct and indirect project stakeholders are regularly informed about construction activities and actively consult and collaborate with these parties through;

- Monthly Project Control Group Report
- Monthly Project Management Report (Internal Built Report)
- Project & Site Coordination Meetings
- Correspondence through email and Aconex

Consultation with these parties will be required for construction applications, permits, and licences throughout the project.

External Stakeholder Communication Strategy

Built understands the high-profile nature of this project and the increased awareness of potential impacts that any construction activity may have on the immediate community and external stakeholders surrounding the construction site. Built has established a Community Liaison Plan in accordance with SSD-9787 conditions of approval.

Stakeholders will be issued regular community notices / updates prior to commencement of the works and throughout the construction lifecycle as required by way of;

- Letter box drops
- Emails (nihon@built.com.au has been setup as the community liaison point of contact)
- Signage and notices
- Door knocking as required
- Phone calls
- Face to face discussions / meetings

4.5.3 Complaints Management

Built has established a community liaison address (nihon@built.com.au) and a register to record the details of Complaints and Queries / Concerns received from external stakeholders. This email address is monitored by key Built personnel; however, the key community liaison contact is Ben Moss (Built Project Manager).

The register is included in Monthly PCG Reports and captures the following information;

- a) Reference Identification
- b) Date & Time Received
- c) Individual/Organisation
- d) Description of Issue
- e) Date & Time Responded
- f) Built Person Responding
- g) Description of Response (including actions / outcomes)
- h) Status of the Issue (Open / Closed)



Construction Environmental Management Plan

All complaints received by Built will be actioned as soon as practical and responded to within one working day by the Project Manager. Any serious incidents or complaints will be forwarded to the Construction Manager for action and response as soon as reasonably practicable.

4.6 Environmental Training and Awareness

To ensure the CEMP (including Sub-Plans) are effectively implemented, all site-personnel will undergo general environmental awareness training, coordinated by the Site Manager and/or HSE Officer, regarding the management plans and their responsibilities under the CEMP.

Records of all training will be maintained onsite and include:

- Who was trained
- When the person was trained
- The name of the trainer
- General description of the training content

4.6.1 Pre-Commencement Assessment and Meeting

All subcontractors must complete a Pre-Commencement Assessment (PCA) online through Built.Safe prior to attending a PCA Meeting onsite.

The online PCA requires subcontractors to complete a questionnaire, provide detailed information, and attach specific documentation regarding HSE for review by Built. Links are also included to the following Built documents:

- HSE Requirements for Subcontractors
- Built Safe Mandatory Standards (Scaffold, Demolition, Asbestos, Formwork Reo Pour, Temporary Works)
- High Risk Work SWMS Template and Fact Sheet.

Once Built has reviewed this information, a PCA Meeting is conducted onsite that involves reviewing the subcontractor's documentation in further detail and ensuring it is compliant with the project specific requirements. PCA Meetings are conducted by the Project Manager, Site Manager, and/or HSE Officer.

4.6.2 Site Induction

All personnel (including sub-contractors) are required to attend a compulsory site induction that includes an environmental component before commencing work onsite. This is done to ensure all personnel involved in the Project are aware of the requirements of the CEMP and to ensure the implementation of environmental management measures. All site induction records are uploaded and electronically recorded on Built.Safe.

Temporary visitors to site undertaking inspections / entering the site (such as regulators) will always be required to undertake a visitor's induction and be accompanied by inducted personnel.

Temporary visitors to site for purposes such as deliveries will always be required to be accompanied by inducted personnel.

The environmental component of the site induction will include (but not limited to) an overview of:

- Built project team / organisational chart
- Site rules including Green Star compliance
- Built's Permit to Work System
- Built HSE Management Plan including the CEMP and Sub-Plans
- Built's HSE policies
- Site hazards including contamination, HAZMAT, and high-risk construction works

- Consultation and site meetings (toolbox meetings, coordination, site address, consultative walks)
- Key project environmental objectives
- Subcontractor environmental responsibilities
 - Compliance with regulatory and project requirements including heritage and archaeological finds
 - Noise and vibration including sensitive receivers
 - Air quality / dust control
 - Water quality
 - Erosion and sediment control
 - Water conservation
 - Flora and vegetation
 - Construction traffic and pedestrian management
 - Unexpected finds procedure for Contamination and Heritage/Archaeological
 - Construction waste management
- Construction Worker Transportation Strategy
- Community liaison and public interaction protocol

4.6.3 Site Meetings and Risk Workshops

Site meetings are completed daily and will be used to raise awareness and educate site personnel on construction and environmental issues.

As required, risk workshops will be held targeting personnel conducting current and/or upcoming works relevant to specific environmental issues and their controls, including (though not limited to):

- Erosion and sediment control
- Aboriginal and non-Aboriginal heritage and archaeology (specifically in relation to the ARDEM by AMAC prior to excavation works)
- Protection of trees
- Noise and vibration control
- Community management
- Emergency and spill response
- Dust control and air quality
- Dewatering
- Waste management including hazardous materials and contamination
- Traffic and pedestrian management including vehicle movements within site
- Requirements of permits

4.7 Emergency and Incident Response

4.7.1 Emergency and Incident Management

An incident is defined under the SSD-9787 Development Consent as:

- An occurrence or set of circumstances that causes, or threatens to cause, material harm and which may or may not be, or cause, a non-compliance.

Material harm is defined under the consent as:

- Is harm that:
 - a) Involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial; or
 - b) Results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment).

In the event of an environmental emergency or incident, the **HSE Plan Appendix 06 Project Emergency Response Plan (PERP)** will be implemented.

The PERP provides references to:

- Types of incidents and required responses
- Criteria for classifying incidents
- Roles and responsibilities
- Processes for responding to and managing emergency situations
- Emergency contacts (also identified within Section 1.2 of the CEMP)
- Emergency site evacuation procedures and plan
- Issue specific incident / emergency checklists

4.7.2 Incident Notification, Reporting and Response

All incident notification, reporting and response will be in accordance with the PERP and recorded within Built's electronic reporting platform Rapid Incident.

All incidents as defined by the SSD-9787 development consent will follow the procedure outlined by the SSD conditions below in addition to the requirements of the PERP:

A26. The Planning Secretary must be notified in writing to compliance@planning.nsw.gov.au immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident.

A27. Subsequent notification must be given, and reports submitted in accordance with the requirements set out in Appendix 2 of the SSD Conditions below.

1. A written incident notification addressing the requirements set out below must be emailed to the Planning Secretary at the following address: compliance@planning.nsw.gov.au within seven days after the

Applicant becomes aware of an incident. Notification is required to be given under this condition even if the Applicant fails to give the notification required under condition A26 or, having given such notification, subsequently forms the view that an incident has not occurred.

2. Written notification of an incident must:
 - a. identify the development and application number;
 - b. provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
 - c. identify how the incident was detected;
 - d. identify when the applicant became aware of the incident;
 - e. identify any actual or potential non-compliance with conditions of consent;
 - f. describe what immediate steps were taken in relation to the incident;
 - g. identify further action(s) that will be taken in relation to the incident; and
 - h. identify a project contact for further communication regarding the incident.
3. Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.
4. The Incident Report must include:
 - a. a summary of the incident;
 - b. outcomes of an incident investigation, including identification of the cause of the incident;
 - c. details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
 - d. details of any communication with other stakeholders regarding the incident.

5.0 Implementation

5.1 Environmental Aspects and Impacts Register

An Environmental Aspects and Impacts Register has been prepared for the project, taking into consideration the information included within the EIS, SSD-9787 Development Consent, detailed design, and construction methodology.

The register lists the key construction activities and identifies the actual and potential environmental impacts associated with each activity. It is used as an environmental risk assessment to design the appropriate environmental management activities, controls and monitoring to prevent or minimise the environmental impacts identified.

The Environmental Aspects and Impacts Register will be reviewed in accordance with SSD Condition A31 and/or when there is a significant change in the stage or scope of the project.

The Environmental Aspects and Impacts Register is attached in **Appendix A1**

5.2 Environmental Issues and Controls

Condition C8 requires the preparation of Sub-Plans for the following specific environmental issues; summaries of each sub-plan are found in the sections identified below:

- Construction Traffic and Pedestrian Management – Section 6.0 of this CEMP
- Construction Noise and Vibration Management – Section 7.0 of this CEMP
- Construction Waste Management – Section 8.0 of this CEMP

Summaries of additional environmental issues requiring the preparation of post-approval plans/reports specific to the project include:

- Remediation Action Plan – Section 9.0 of this CEMP
- Aboriginal Cultural Heritage Management Plan – Section 10.0 of this CEMP
- Archaeological Research Design and Excavation Methodology – Section 11.0 of this CEMP

In addition to the identified site-specific environmental issues addressed in the sub-plans and post-approval reports, Condition C8 requires details to be provided on the below environmental impacts.

Monitoring activities for these controls are found within relevant sub-plans and will be completed by Built site management through regular site inspections and monitoring using Built.Safe software.

5.2.1 Dust & Odour

Built is committed to ensuring that the air quality in and around the site is maintained at acceptable levels throughout the construction period in accordance with Conditions D19, D20, and D26. This will be achieved by adopting the following control measures:

- Exposed surfaces and stockpiles are suppressed by regular watering;
- Covering stockpiles with plastic sheeting or geotextile membranes where reasonable and practicable;
- Subcontractors are to control dust and demonstrate in SWMS;

- Use of hoarding and shade cloth on boundary fencing to contain dust;
- Reduce or cease work activities during high wind periods;
- All trucks entering or leaving the site with loads have their loads covered and secure;
- Vehicle loads will be lightly watered, where applicable, prior to leaving site;
- Trucks associated with the development do not track dirt onto the public road network;
- Public roads used by these trucks are kept clean;
- Where applicable, land stabilisation works are carried out progressively on site to minimise exposed Surfaces;
- All waste generated during construction will be secured and maintained within designated waste storage areas and not leave the site onto neighbouring properties;
- If odorous materials are uncovered, they must be re-covered immediately and Built management notified. Built will notify required parties and commence an investigation. No works to resume until written approval is given;
- Seeking and following advice from Environmental Consultants regarding the management of soils/materials onsite;
- Ensuring all construction plant and equipment is properly maintained and turned off whilst not in use (no long periods of idling);
- Provision of temporary capping over site soils such as staging areas (e.g. road base, hardstands).

Additional information on these controls and monitoring can be found in the RAP, CTPMSP and CWMSP.

5.2.2 Stormwater Control and Discharge

In accordance with Condition D21, Built is committed to ensuring all erosion and sediment control measures are implemented and maintained at or above capacity for the duration of construction works and until such time that all ground disturbed by the works has been stabilised and rehabilitated. All erosion and sediment control techniques will be in accordance with *Managing Urban Stormwater: Soils & Construction (4th Edition, Landcom, 2004)*.

Built will implement the control measures in accordance with the Erosion & Sediment Control Plan (ESCP) (Civil Drawings 8109007-CI-480 Rev B & 8109007-CI-590 Rev B) prepared by Cardno. Measures include the use of surface inlet sediment traps, sediment barriers, silt fences, and temporary construction vehicle exits.

The ESCPs are attached in **Appendix A2**.

Due to staging of the works, contours of the site, and existing retaining wall along Church Street, silt fences and sediment traps will not be applicable during the demolition, civil, and early works stages of the project. During these stages, Built will implement and maintain sediment barriers to Church Street kerb inlet pits and temporary construction vehicle exits at each vehicle gate.

Built will continue to monitor and review the effectiveness of these control measures in consultation with Cardno to determine when additional controls are required.

In accordance with Condition D23, Built will ensure adequate provisions are made to collect and discharge stormwater during construction to the satisfaction of the PCA. Built will seek prior written approval from City of Newcastle (Council) if it is required to connect or discharge site stormwater to Council's existing system or street gutters during construction of the building. Such provisions may include temporary works, guttering, downpipes, etc.

5.2.3 Tracking of Sediment and Other Materials onto Roads

To control the tracking of sediment and other materials onto roads by vehicles leaving site, Built will implement the control measures identified within the ESCP and those recommended within the RAP and CTPMSP, including:

- Loads to be covered and lightly wetted
- Vehicles leaving site are to be inspected for cleanliness before being logged out as clean (wheels and chassis) or hosed down into a wash down bay (if required). Built maintains Daily Vehicle Logs onsite.
- Removal of waste materials are to be by licenced contractors holding the appropriate licence, consent or approvals to transport and dispose of waste materials according to the waste classification.

5.2.4 Groundwater Management

To comply with Condition C8(vi), Built will implement the required measures for groundwater management as outlined by the RAP by Douglas Partners.

The RAP highlights that contaminated fill/soil materials identified on-site are unlikely to be having a significant adverse impact on the groundwater quality and down-gradient receiving water quality given the nature of the contaminants, distribution across the site and the depth and nature of the groundwater identified onsite (RAP, pg.10).

Built acknowledges Douglas Partner's advice that a groundwater interference permit through the NOW may need to be obtained prior to construction commencing if groundwater dewatering was proposed as per the requirements of the NSW Aquifer Interference Policy September 2012. Given mine workings requiring grouting have been shown to be dry, groundwater extraction / dewatering is not likely to be required for the development (RAP, pg. 23).

To mitigate risks of groundwater contamination, Built has engaged Douglas Partners for supervision and site contamination testing and validation throughout mines grouting and site remediation works.

If groundwater disposal is required, Douglas Partners will conduct sampling and analysis in accordance with Section 11.1.2 Seepage / Groundwater of the RAP. Once approval is received from DP, disposal will be conducted by a licenced contractor in accordance with statutory and regulatory requirements and classed as Liquid Waste in accordance with NSW EPA.

5.2.5 Obtrusive Effects of External Lighting

Built intends to maintain temporary external/outdoor lighting throughout the duration of the works for the safety and security of site personnel and the public.

Built will ensure that all temporary lighting is installed and monitored by a licenced electrician and in compliance with **AS 4282-2019 Control of the obtrusive effects of outdoor lighting** to mitigate potential disturbance and distress to neighbouring properties.

5.3 Environmental Control Plans

For on-site reference, the following Environmental Control Plans have been prepared for the project.

Plan	Description	Reference
Site layout plan	Overview of the site layout including access gates, perimeter fencing, hoarding, scaffold, and hoist and crane locations	CTPMSP Appendix E
Noise and vibration sensitive receivers & monitoring locations	Provides detailed information and an overview of the nearby sensitive receivers and noise monitoring locations adopted within the NVA by EMM Consulting.	CNVMSPP Section 2.2
Erosion and Sediment Control Plan	Prepared by Cardno (For Construction) and identifies the types and locations of ESC measures.	CEMP Section 5.2.2 CEMP Appendix A2
Approved Construction Work Zone Plan	Plan showing the approved Construction Work Zone on Church Street	CTPMSP Section 5.3
Swept Path Analysis	Swept path analysis for B-Double (Truck & Dog) vehicles entering and exiting the site.	CTPMSP Section 5.13
Heavy Vehicle Route	Extracted from Google Maps showing heavy vehicle route from the project site to Central Waste Station, Kurri Kurri	CTPMSP Section 5.13
Traffic and pedestrian management control plans	Traffic and pedestrian control plans prepared by Gateshead Traffic Solutions showing signage, swept path, and traffic control personnel	CTPMSP Appendix D
Demolition Works Plan	Architectural Demolition Plan prepared by dwp for the site.	CWMSP Appendix C
Demolition Methodology	Demonstrates the demolition methodology works using 3D modelling with notes.	CWMSP Appendix B
Geotechnical Test Location Plan & Capping Strategy	Plans prepared by Douglas Partners for site contamination investigations and remediation	CWMSP Appendix D
Construction Worker Parking Options	Illustrates the nearby parking facilities available to construction workers for the duration of the project	CTPMSP Appendix F CWTS Section 5.0
Newcastle Transport Network Guide	Illustrates the available public transport options from East Lake Macquarie to the project site	CTPMSP Appendix F CWTS Section 6.0

5.4 Environmental Schedules

The following environmental schedules will be used during the project for environmental management.

Plan	Description	References
Complaints Report	Form record for reporting complaints received on Rapid Incident	CEMP Appendix B1
Community Liaison Register	Community Liaison Register maintained onsite and included in monthly PCG Reports	CEMP Appendix B2 CEMP Section 4.4 CEMP Section 4.5.3
Waste Management Report	Waste Management (Resource Recovery) Report received from Central Waste Station and entered into Built.Safe	CEMP Appendix B3 CEMP Section 4.4 CWMSP Section 4.0 CWMSP Section 8.0
Pre-Commencement Assessment & Meeting Record	Built.Safe form used for subcontractor PCA and PCA Meeting record	CEMP Appendix B4 CEMP Section 4.6.1
Site Induction Record	Form used for subcontractor site induction record that is uploaded to Built.Safe	CEMP Appendix B5 CEMP Section 4.6.2
Site Meeting Record	Built.Safe form used for Site Meeting records	CEMP Appendix B6 CEMP Section 4.6.3
Risk Workshop Record	Built.Safe form used for Risk Workshop meeting records	CEMP Appendix B7 CEMP Section 4.6.3
Environmental Incident Report	Form record for reporting environmental incidents on Rapid Incident	CEMP Appendix B8 CEMP Section 4.7.2
Site Inspection Checklist	Built.Safe form used for recording site inspection activities using HSE-035 Inspection Guide	CEMP Appendix B9 CEMP Section 6.3 CEMP Section 7.3 CEMP Section 8.4 CNVMSP Section 9.4 CTPMSP Section 6.3 CWMSP Section 8.0
Monitoring Checklist	Built.Safe form used for recording monitoring activities using HSE-035 HSE Inspection Guide	CEMP Appendix B10 CEMP Section 6.3 CEMP Section 7.3 CEMP Section 8.4 CNVMSP Section 9.4 CTPMSP Section 6.3 CWMSP Section 8.0
Driver Code of Conduct	DCC used for site induction of drivers/suppliers on the project	CEMP Appendix B11 CEMP Section 6.3 CTPMSP Section 6.3

Daily Truck Log	Log used to record daily truck/vehicle movements entering and exiting the site	CEMP Appendix B12 CEMP Section 6.3 CTPMSP Section 6.3 CWMSP Section 8.0
Daily Traffic Control Inspection Checklist	Daily checklist used by traffic control personnel to ensure traffic and pedestrian management measures are in accordance with CTPMSP.	CEMP Appendix B13 CEMP Section 6.3 CTPMSP Section 6.3
Plant Inspection Checklist	Built.Safe form used for plant induction records prior to commencing works onsite.	CEMP Appendix B14 CEMP Section 6.3 CNVMSP Section 9.4 CTPMSP Section 6.3 CWMSP Section 8.0
Noise Level Spot Check Record	Record used for handheld noise monitor spot checks at sensitive receiver locations or for plant/equipment onsite.	CEMP Appendix B15 CEMP Section 6.3 CEMP Section 9.3 CNVMSP Section 9.4 CTPMSP Section 6.3
Built Safe Mandatory Standard Review Checklist	Built.Safe form used for reviewing BSMS activities and controls onsite.	CEMP Section 12.2
HSE-104 Project HSE Audit Checklist	Checklist used for Project HSE Audits by the Regional HSE Manager.	CEMP Section 12.2
Non-Conformance Report	Form record for reporting Non-Conformances on Rapid Incident	CEMP Appendix B16 CEMP Section 12.3.2
NCR Corrective Actions Report	Built.Safe form used for issuing the NCR and appropriate actions to close out in response.	CEMP Appendix B17 CEMP Section 12.3.3

6.0 Construction Traffic and Pedestrian Management Sub-Plan

6.1 Background

The CTPMSP forms part of the Construction Environmental Management Plan for the project. The CTPMSP has been prepared to address the construction traffic and pedestrian management requirements listed in the Development Consent, reference SSD 9787, issued by the NSW Department of Planning, Industry, and Environment (DPIE).

The purpose of the CTPMSP is to describe how Built proposes to manage potential impacts on traffic and pedestrians during the construction phase of the Project.

The key objective of the CTPMSP is to ensure road safety and network efficiency during construction and minimise potential impacts to general traffic, cyclists, pedestrians and bus services in compliance with the scope permitted by the planning approval. This includes management procedures to appropriately respond to complaints from the community and stakeholders relating to noise and vibration.

To achieve this objective, Built will undertake the following:

- Prepare the CTPMSP in consultation with the City of Newcastle (Council). Evidence of consultation is attached in Appendix A of the CTPMSP.
- Ensure all traffic and pedestrian management measures detailed within this sub-plan are implemented where feasible to control construction vehicle activity in the vicinity of the site and provide an appropriate and convenient environment for pedestrians.
- Detail heavy vehicle routes, access and parking arrangements to be implemented onsite and communicated to sub-contractors and suppliers.
- Develop and implement a Driver Code of Conduct to minimise impacts, conflict, and noise and ensure heavy vehicle routes are communicated to drivers.
- Develop and implement a program to monitor the effectiveness of traffic and pedestrian management measures including periodic review/update of the sub-plan.
- Detail the procedures for notifying residents and the community (including local schools) of any potential disruptions. This will be in accordance with our Community Liaison Plan.
- Implementation of the Construction Worker Transportation Strategy to minimise parking demand within the surrounding area due to the development.

6.2 Summary of Traffic and Pedestrian Management Control Measures

Table 3 below outlines how the traffic and pedestrian management measures detailed in Section 5.0 of the CTPMSP will be implemented throughout the construction of the project where reasonable and feasible in accordance with SSD Conditions and approved permit requirements.

Table 3: Summary of traffic and pedestrian management control measures

Reference	Details of management measure	Implementation		Responsibility
Implemented throughout works		PC ¹	C ²	
TPMM01	Construction works, including deliveries and material movements, will be restricted to the approved construction hours in accordance with Condition D4 to D7	✓	✓	Construction/Project Manager
TPMM02	Ensure permits, where applicable, have been received and are current prior to commencing works.	✓	✓	Project Manager
TPMM03	Ensure construction vehicles (including concrete agitator trucks) do not arrive at the site or surrounding residential precincts outside of the construction hours of work outlined under condition D4.		✓	Site Manager Foreman
TPMM04	Built personnel, subcontractors and suppliers will always be issued a copy of the current CTPMSP and instructed to comply with the requirements	✓	✓	Project Manager HSE Officer
TPMM05	All personnel including drivers will be required to complete a site induction / DCC that includes key information on the CTPMSP	✓	✓	Site Manager Foreman
TPMM06	Driver/operator qualifications and competencies checked, and copies recorded during site inductions	✓	✓	Site Manager Foreman
TPMM07	Implement, where practicable and without compromising the safety of construction staff or members of the public, the use of 'quackers' to ensure noise impacts on surrounding noise sensitive receivers are minimised.	✓	✓	Site Manager Foreman
TPMM08	Information should be provided to neighbours before and during construction through media such as letterbox drops, meetings or individual contact.	✓	✓	Project Manager
TPMM10	Implement complaint response procedures	✓	✓	Project Manager
TPMM11	The use of a site information board at the front of the site, with the name of the organisation responsible for the site and their contact details, hours of operation and regular information updates. This signage should be clearly visible from the outside and include after-hours emergency contact details.		✓	Site Manager
TPMM12	Vehicles to be subject to random inspections to ensure they are maintained and operated in an efficient manner		✓	Foreman HSE Officer

Reference	Details of management measure	Implementation		Responsibility
Implemented throughout works		PC ¹	C ²	
TPMM13	Vehicles checked prior to leaving site to ensure loads are watered, covered and/or secured as required. Vehicles are also inspected to ensure free of debris.		✓	Foreman Traffic Controller
TPMM14	All construction vehicles are to be contained wholly within the site, except if located in an approved on-street work zone. Vehicles must enter the site before stopping.		✓	Foreman Traffic Controller
TPMM15	Where practicable, construction vehicles parked within Work Zone will be directed to turn off engines to prevent excessive noise and air pollution		✓	Foreman Traffic Controller
TPMM16	Protective hoardings, fencing, and barricades used to delineate work areas, protect pedestrians and prevent unauthorised access to the site. These are to be regularly checked and maintained.	✓	✓	Site Manager Foreman
TPMM17	Qualified traffic control personnel will be used to manage vehicle ingress/egress and monitor the work zone	✓	✓	Site Manager Traffic Controller
TPMM18	Appropriate advanced and Other warning signs, Instruction signs and devices in place and positioned correctly	✓	✓	Site Manager Traffic Controller
TPMM19	Width of travel paths always maintained to required clearances and kept clear from materials and debris	✓	✓	Site Manager Foreman
TPMM20	Pathways through construction zones and Church Street gantry are adequately illuminated	✓	✓	Site Manager Foreman
TPMM21	During concrete pours, precautions outlined in the SafeWork Code of Practice for Pumping Concrete are implemented	✓	✓	Site Manager Foreman
TPMM22	Vehicle & personnel gates to be always secured and closed unless under direct supervision by traffic control personnel or Built Site Management		✓	Foreman Traffic Controller
TPMM23	Vehicle & Plant logbooks checked for maintenance and daily pre-start checks	✓	✓	Foreman HSE Officer
TPMM24	All deliveries to be scheduled in advance with Built Site Management	✓		Site Manager Foreman
TPMM25	Schedule deliveries and vehicle movements appropriately to minimise disruptions and congestion, especially during peak periods.	✓		Site Manager Foreman
TPMM26	Regular reinforcement of traffic and pedestrian management measures in toolbox meetings		✓	Site Manager Foreman
TPMM27	Enforcement of internal (5km/h) and external (50km/h or 40km/h) speed limits		✓	Foreman Traffic Controller

Reference	Details of management measure	Implementation		Responsibility
Implemented throughout works		PC ¹	C ²	
TPMM28	Site records such as truck logs and consignment notices to be maintained onsite.		✓	Project Manager Site Manager

(1) *Pre-construction* – note that this may refer to prior to commencement of specific activities rather than prior to the commencement of all construction works.

(2) *Construction*

6.3 Summary of Traffic and Pedestrian Management Monitoring

As defined under Division 9.4 of Part 9 of the EP&A Act; for the purposes of this Division, *monitoring* of a project is the monitoring of the carrying out of the project to provide data on compliance with the approval of the project or on the project's environmental impact.

To comply with Condition A23, regular inspections and monitoring activities will be completed by Built Site Management throughout construction to monitor the effectiveness of the traffic and pedestrian management measures detailed to be implemented in Section 6.2 Table 3.

All inspection and monitoring activities are completed electronically using Built.Safe (Lucidity) software platform and are outlined in Table 4 below and Section 6.3 of the CTPMSP.

Table 4: Summary of traffic and pedestrian management monitoring activities

Activity	Requirements	Frequency, reporting, and responsibility
Supervisor Inspection; of the site or specific work areas/elements to ensure management measures are implemented as required	- Review of documents prior to inspection (e.g. CTPMSP, Permits, TCP's, SSD Conditions). - Visual inspection of the site or specific work area/elements to assess if required measures are implemented and maintained. - Visual check of site records, logbooks, licences, etc. - Provide a summary of inspection: - Common checks - Activities or items reviewed - Observations - Compliances / Non-Compliances - Report any high potential hazards - Attach photographic evidence and copies of any site records viewed - Issue any actions arising with appropriate due date for rectification	Frequency: Minimum weekly and additional as required for high potential areas Reporting: Records are automatically uploaded to Built.Safe and maintained onsite. Responsibility: Project Manager Site Manager Foreman
Monitoring; of construction activities on-site to assess compliance with development approvals, permits, management plans, procedures and measures	- Identify activity to be monitored (e.g. traffic control, working on and/or near traffic and roads) - Review and reference applicable documents: - SWMS - Permit - Traffic Management Plans - Methodology documents - Provide a summary of monitoring: - Observations - Discussions - Work practices - Compliance / Non-compliance - Identify if work was required to be stopped	Frequency: Minimum monthly per responsible person and as required Reporting: Records are automatically uploaded to Built.Safe and maintained onsite. Responsibility: Project Manager

	- Report any high potential hazards identified, the responsible trade and/or process, and the situation - Log attendance of other personnel involved - Attach photographic evidence and copies of any records - If applicable, issue actions with appropriate due date for rectification	Site Manager Foreman
Plant Inspection; To check plant is fit for use prior to being permitted for use on-site	- Verify and record the following: - Plant type - Make and model - Plant identification number - Built identification / induction number - Contact details for the person responsible for plant - Date of the last service and/or inspection - Date of the next service and/or inspection - Visually inspect and record copies of the following: - No visible leaks - Recorded faults are rectified - Operators Manual - Last service report - Plant risk assessment - Operators inspection logbook - Assign status of plant - Registered and on-site - Rejected and locked out - Off-site - If applicable, issue appropriate actions.	Frequency: As required Reporting: Records maintained onsite Responsibility: Site Manager Foreman HSE Officer
Daily Traffic Control / Footpath Checklist	Traffic Control Supervisor to complete multiple daily checks of traffic control signage to ensure signs are in the correct position, not tampered with and/or obstructed. The checklist includes: - Date of the week commencing - Time signage established each day - Subsequent random inspection time (07:00 to 18:00) - Daily footpath inspection for trip hazards - Name of the qualified traffic controller	Frequency: Daily checklist Reporting: Submitted to Built weekly and records maintained onsite Responsibility: Foreman Traffic Controller
Truck / Vehicle Log	Log maintained at vehicle gates and completed for each vehicle entry/exit from the site. Log information includes: - Date - Time - Registration - Company - Driver Name - Vehicle Type - Load Type - Load Covered - Truck Washed (free of debris) - Checked By - Comments	Frequency: Daily log Reporting: Submitted to Built weekly and records maintained onsite. Responsibility: Foreman Traffic Controller

7.0 Construction Noise and Vibration Management Sub-Plan

7.1 Background

The CNVMSP was prepared in consultation with RAPT Consulting and forms part of the Construction Environmental Management Plan. The CNVMSP has been prepared to address the construction noise and vibration requirements listed in the Development Consent, reference SSD 9787, issued by the NSW Department of Planning, Industry, and Environment (DPIE) and the Noise and Vibration Assessment (NVA) dated May 2019 prepared by EMM Consulting.

The purpose of this CNVMSP is to describe how Built proposes to manage potential noise and vibration impacts during construction of the Project.

The key objective of the CNVMSP is to ensure that project noise and vibration impacts on nearby sensitive receivers are minimised and within the scope permitted by the planning approval. This includes management procedures to appropriately respond to complaints from the community and stakeholders relating to noise and vibration.

To achieve this objective, Built will undertake the following:

- Ensure appropriate controls and procedures are implemented during construction activities to avoid or reduce noise and vibration impacts and potential adverse impacts on neighbouring sensitive receivers.
- Ensure reasonable and feasible mitigation measures are implemented with the aim of achieving the requirements in the Development Consent and the management levels detailed in this CNVMSP in accordance with the NSW EPA's *Interim Construction Noise Guideline*.
- Ensure complaints from the community and stakeholders are reduced.

7.2 Summary of Noise and Vibration Management Control Measures

Table 5 below and Section 8.0 of the CNVMSP outline the noise and vibration management measures to be implemented on the project. The control measures include those specified within the NVA by EMM Consulting, including recommendations, set out in AS 2436-2010 "Guide to Noise and Vibration Control on Construction, Demolition and Maintenance Sites". Built will ensure that, where reasonable and feasible, the control measures are implemented throughout the construction of the project in accordance with Conditions D12 to D14 and D15 to D17.

Table 5: Summary of noise and vibration management control measures

Reference	Details of management measure	Implementation		Responsibility
Implemented throughout external works		PC ¹	C ²	
NVMM01	Construction hours will be restricted to the approved construction hours in accordance with Condition D4 to D7	✓	✓	Construction/Project Manager
NVMM02	In accordance with Condition D12, ensure construction vehicles (including concrete		✓	Site Manager

Reference	Details of management measure	Implementation		Responsibility
Implemented throughout external works		PC ¹	C ²	
	agitator trucks) do not arrive at the site or surrounding residential precincts outside of the construction hours of work outlined under Condition D4.			
NVMM03	Implement, where practicable and without compromising the safety of construction staff or members of the public, the use of 'quackers' to ensure noise impacts on surrounding noise sensitive receivers are minimised in accordance with Condition D14	✓	✓	Site Manager
NVMM04	All construction plant and equipment used on site must be maintained in a proper and efficient condition and operated in a proper and efficient manner in accordance with Condition D2	✓	✓	Site Manager Foreman
NVMM05	Built personnel and subcontractors will always be issued a copy of the current CNVMP and instructed to comply.	✓	✓	Construction/Project Manager
NVMM06	Regular review of work methodologies to identify potential noise and vibration effects and minimise where possible.	✓	✓	Construction/Project Manager Site Manager
NVMM07	Provide regular information to neighbours before and during construction through media such as letterbox drops, meetings or individual contact.	✓	✓	Project Manager Community Liaison Officers
NVMM08	The induction of site staff will include a reference to potential noise impacts and the identification of noise-sensitive land uses.	✓		Construction/Project Manager
NVMM09	Implement a complaint management system	✓	✓	Construction/Project Manager
NVMM10	The use of a site information board at the front of the site, with the name of the organisation responsible for the site and their contact details, hours of operation and regular information updates. This signage will be clearly visible from the outside and include after-hours emergency contact details.		✓	Site Manager
NVMM11	Erection of 2.4m high plywood hoarding to Church Street boundary to minimise noise to receivers	✓		Site Manager

Reference	Details of management measure	Implementation		Responsibility
Implemented throughout external works		PC ¹	C ²	
NVMM12	The use of existing structures, temporary site buildings and materials stockpiles as noise barriers, where practicable.		✓	Foreman
NVMM13	Where practicable, place as much distance as possible between noisy plant or equipment and residences and other sensitive land uses.		✓	Site Manager Foreman
NVMM14	Minimise the number of plant items operating concurrently when near surrounding receivers.		✓	Site Manager Foreman
NVMM15	Minimise the need for vehicle reversing for example, by arranging for one-way site traffic routes where practicable	✓	✓	Project Manager Site Manager
NVMM16	Noise and vibration monitoring will be adopted as a management strategy throughout the construction works. The purpose of monitoring would be to validate background noise levels, the construction noise predictions and to confirm that the noise and vibration levels from individual items of equipment are not excessive. Ideally, monitoring will be undertaken at the commencement of works and during (or soon after) any significant change in activities		✓	Project Manager HSE Officer
NVMM17	regular reinforcement (such as at toolbox talks) of the need to minimise noise and vibration		✓	Site Manager Foreman
NVMM18	regular identification of noisy activities and adoption of improvement techniques as practicable and reasonable	✓	✓	Project Manager Site Manager
NVMM19	avoiding the use of shouting, portable radios, public address systems or other methods of site communication that may unnecessarily impact upon nearby residents		✓	Foreman Operators / Workers
NVMM20	developing routes for the delivery of materials and parking of vehicles to minimise noise	✓	✓	Construction/Project Manager
NVMM21	where possible, avoiding the use of equipment that generates impulsive noise	✓	✓	Project Manager Site Manager
NVMM22	minimising the movement of materials and plant and unnecessary metal-on-metal contact		✓	Foreman

Reference	Details of management measure	Implementation		Responsibility
Implemented throughout external works		PC ¹	C ²	
NVMM23	minimising truck movements where practicable		✓	Site Manager Foreman
NVMM24	scheduling respite periods for intensive works as determined through consultation with potentially affected neighbours (e.g. a daily respite period for a minimum of one hour at midday).		✓	Project Manager
NVMM25	choosing quieter plant and equipment based on the optimal power and size to most efficiently perform the required tasks	✓	✓	Project Manager Site Manager
NVMM26	using temporary noise barriers (in the form of plywood hoarding or similar) to shield intensive construction noise activities from residences where practicable and reasonable	✓	✓	Site Manager Foreman
NVMM27	operating plant and equipment in the quietest and most efficient manner as is practicable and reasonable		✓	Foreman Operators
NVMM28	regularly inspecting and maintaining plant and equipment to minimise noise and vibration level increases, to ensure that all noise and vibration reduction devices are operating effectively.		✓	Foreman HSE Officer
NVMM29	scheduling activities to minimise impacts by undertaking all possible work during hours that will least adversely affect sensitive receivers and by avoiding conflicts with other scheduled events	✓	✓	Project Manager Site Manager
NVMM30	scheduling work to coincide with non-sensitive periods where it is reasonable and practicable to do so	✓	✓	Project Manager Site Manager
NVMM31	scheduling noisy activities to coincide with high levels of neighbourhood noise so that noise from the activities is partially masked and not as intrusive	✓	✓	Project Manager Site Manager
NVMM32	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		✓	Site Manager Foreman
NVMM33	optimising the number of deliveries to the site by amalgamating loads where possible and scheduling arrivals within designated hours		✓	Site Manager Foreman

Reference	Details of management measure	Implementation		Responsibility
Implemented throughout external works		PC ¹	C ²	
NVMM34	designating, designing and maintaining access routes to the site to minimise impacts	✓	✓	Project Manager Site Manager
NVMM35	include contract conditions that include penalties for non-compliance with reasonable instructions by the principal to minimise noise or arrange suitable scheduling	✓		Construction / Project Manager
NVMM36	high vibration generating activities should only be carried out in continuous blocks, with appropriate respite periods as determined through consultation with potentially affected neighbours.	✓	✓	Project Manager Site Manager
NVMM37	Plant used intermittently will be shut down or throttled down to a minimum in between use.		✓	Foreman Operators
NVMM38	Vibratory compactors must not be used closer than 30 metres from residential buildings unless vibration monitoring confirms compliance with the vibration criteria specified in Section 5.2 (as per Condition D16)	✓	✓	Project Manager Site Manager
NVMM39	Limitations to vibration intensive plant identified in Section 6.3 are to be considered and avoided where is practicable and reasonable when planning works regarding structural damage and human comfort.	✓	✓	Project Manager Site Manager
NVMM40	Stopping works if reasonable to do so when noise and/or vibration levels exceed limits and re-assess to identify additional mitigation measures		✓	Project Manager Site Manager

(1) Pre-construction – note that this may refer to prior to commencement of specific activities rather than prior to the commencement of all construction works.

(2) Construction

7.3 Summary of Noise and Vibration Management Monitoring

To maximise the effectiveness of management strategies to minimise construction noise and vibration emissions, a monitoring program has been developed to guide, manage, quantify and control emissions from construction activities.

Where monitoring results indicate exceedances of the relevant noise and vibration goals, additional practicable and reasonable mitigation measures and controls would be considered to minimise impacts to nearby sensitive receivers.

The objectives of the monitoring program are to:

- assess construction noise and vibration levels against relevant goals, with consideration given to non-site related ambient and background noise and vibration at the time of measurements;
- identify potential noise and vibratory sources and their relative contribution to impacts from construction activity;
- specify appropriate intervals for monitoring to evaluate, assess and report the relative contribution due to construction activity;
- outline the methodologies to be adopted for monitoring construction noise and vibration, including justification for monitoring intervals or triggers, weather conditions, monitoring location selection; and
- timing; and
- incorporate noise and vibration management and mitigation strategies outlined in this plan.

Regular inspections will be completed by the Built project team or a suitably qualified representative throughout construction and noise and vibration monitoring will also occur routinely during the works as detailed in Table 6 below and Section 9.3 of the CNVMSP.

Table 6: Summary of noise and vibration management monitoring activities

Activity	Monitoring Requirements	Frequency, reporting, and responsibility
Noise monitoring		
Operator attended noise survey	Noise monitoring will be carried out at the complainant and/or nearest sensitive receiver/s relevant to the construction activities at the time of monitoring.	Frequency: Minimum three (3) monthly basis for attended monitoring or as required by significant activity and/or a new stage of works.
Where a complaint is received, and monitoring is considered an appropriate response to determine if noise levels exceed predicted construction noise levels documented in this CNVSMP	The testing method includes: • Sound level meter configured for “Fast” time weighting and “A” frequency weighting. • Test environment free from reflecting objects where possible. Where noise monitoring is conducted within 3.5 metres of large walls or a building facade, then a reflection correction of up to -2.5 dB(A) will be applied to remove increased noise due to sound reflections.	As required for complaints where a spot check confirms exceedance. Reporting: Reports will be submitted to Built and contain the results of monitoring and how

Activity	Monitoring Requirements	Frequency, reporting, and responsibility
	- Tests will not be carried out during rain or when wind speed exceeds 5m/s. - Conditions such as wind velocity and direction, temperature, relative humidity, and cloud cover will be recorded from the nearest Bureau of Meteorology station or on-site weather station/observations. - The monitoring period must be sufficient such that measured noise levels are representative of noise over a 15-minute period. - measurements in one-third octave bands from 10 Hz to 8 kHz inclusive (or a broader range of bands) for the 15-minute interval - At a minimum L_{Aeq}, L_{Amin}, L_{A90}, L_{A10}, L_{A1}, and L_{Amax} levels will be measured and reported. The observations of the person undertaking the measurements will be reported including the audibility of construction noise, other noise in the environment and any discernible construction activities contributing to the noise at the receiver.	exceedances were managed. A site layout outlining locations of equipment and monitoring locations are also to be included. Records will be maintained on-site and made available to key stakeholders upon request. Responsibility: Monitoring to be undertaken by a suitably qualified acoustic specialist or suitably qualified and experienced environmental officer.
Vibration monitoring		
Pre-Construction Dilapidation Inspections	In accordance with Condition B4: - a dilapidation inspection was completed to assess the condition of existing public infrastructure in the vicinity of the project (including roads, gutters, and footpaths). In accordance with Condition B5: - dilapidation inspections were completed for adjoining private properties, heritage items and council assets likely to be affected by the development. Built issued an invitation for a dilapidation inspection to all properties likely to be affected by the development. Inspections were completed on those properties where the owner/occupier accepted the invitation. Dilapidation inspections assessed the existing condition of the properties for reference in the event of any damage potentially occurring due to construction activities. Inspection requirements include: - Unrestricted access to the property	Frequency: Prior to the commencement of construction activities on site. Reporting: Dilapidation reports containing general comments on key findings and a photographic summary were prepared and submitted to property owners, City of Newcastle, NSW Heritage Division and the Certifying Authority. Reports maintained by Built for future reference in the instance of receiving complaints. Responsibility: Qualified Structural/Civil Engineer & Built

Activity	Monitoring Requirements	Frequency, reporting, and responsibility
	- Inspection of all internal and external areas (apart from those covered by furniture, wall paintings/ornaments and the like) - Photographic records of areas inspected and any visible existing damage (cracks and the like). - Notes of the existing condition of areas inspected and any visible damage identified.	
Vibration monitoring; prior to or at the commencement of significant vibration causing activities/stage of works/works occurring within safe working distances to buildings.	Continuous vibration monitoring will be conducted on relevant activities as follows: • Geophone installed at the ground adjacent to building foundations or equivalent (or nearer) location if access not provided to the outside of the building. • Monitor to continuously record PPV and/or VDV vibration levels generated by the activity. • Measured levels to be compared to human disturbance vibration goals and/or building damage limits as appropriate. • An audio and/or visual warning alarm system will be implemented with the monitoring system • If the alarm is triggered, work will STOP and necessary measures such as modified work practices will be implemented. • Note that if the frequency of the vibration event is such that 75% of the DIN 4150-3 limit was not exceeded, then works will proceed with caution, and the alert level adjusted as appropriate.	Frequency: As required throughout each stage of construction where significant vibration is expected Reporting: A report detailing measurement results and any vibration management measures to be provided to Built. Records will be maintained onsite. Responsibility: Vibration monitoring will be undertaken by a suitably qualified specialist.
Continuous vibration monitoring; if trial/initial monitoring results determine exceedance of levels for damage or annoyance.	Where testing for vibration caused by plant & equipment, the plant/equipment will be tested in the settings in which it is expected to operate.	Frequency: As required throughout construction where trial/initial tests found that vibration levels exceeded the criteria in Section 5.2 Reporting: Report detailing measurement results and any vibration management measures to be provided to Built. Records will be maintained onsite. Responsibility: Vibration monitoring will be undertaken by a suitably qualified specialist.

Activity	Monitoring Requirements	Frequency, reporting, and responsibility
Vibration monitoring; in response to a complaint	Attended vibration monitoring will be conducted on the relevant activities as follows: • Geophone installed at the ground adjacent to building foundations or equivalent (or nearer) location if access not provided to the outside of the building. • Monitor to continuously record PPV and/or VDV vibration levels generated by the activity. • Measured levels to be compared to human disturbance vibration goals and/or building damage limits as appropriate. If necessary, following the vibration measurements: • Appropriate vibration management measures will be implemented. Continuous vibration monitoring will be considered if this is considered of benefit to address the complaint.	Frequency: As required for complaints where this is considered an appropriate response. Reporting: Report detailing measurement results and any corrective actions to be provided to the complainant and relevant stakeholders. Responsibility: Vibration monitoring will be undertaken by a suitably qualified specialist.
Structural Inspection / Assessment; in response to a complaint regarding damage potentially caused by construction damage	In the event of being notified and/or receiving a complaint of property damage by a stakeholder who received a Pre-Construction Dilapidation Inspection, Built will arrange for an inspection at the location as soon as reasonably practicable by all parties (complainant, Built, Engineer). The inspection will assess the alleged damage against the pre-construction dilapidation report. A report will be prepared to note the findings of the inspection and issued to the complainant. In the instance that the property owner did not accept the offer for a pre-construction dilapidation inspection, Built will review the details of the complaint and conduct a preliminary investigation. If deemed appropriate, Built will arrange a detailed inspection of the building.	Frequency: As required/seen as an appropriate response to a complaint Reporting: Dilapidation reports containing general comments on key findings and a photographic summary were prepared and submitted to property owners. Reports maintained by Built for future reference in the instance of receiving complaints. Responsibility: Qualified Structural/Civil Engineer & Built
Post-Construction Dilapidation Report	In accordance with Condition E4: • At the completion of the development, a dilapidation inspection of adjoining buildings and infrastructure will be completed to assess against	Frequency: At the completion of construction works / the development

Activity	Monitoring Requirements	Frequency, reporting, and responsibility
	the pre-construction dilapidation reports to ascertain whether any structural damage occurred as a result of construction works.	Reporting: To be submitted the Certifier and City of Newcastle Responsibility: Qualified Structural/Civil Engineer & Built

8.0 Construction Waste Management Sub-Plan

8.1 Background

The Construction Waste Management Sub Plan (CWMSWP) forms part of Built's Health, Safety & Environmental (HSE) Management Plan and project-specific Construction Environmental Management Plan (CEMP). The CWMSWP has been prepared by Built to address the requirements of the SSD-9787 development consent and project environmental studies relevant to waste management, including hazardous materials.

The objectives of the Construction Waste Management Sub Plan are to:

- Encourage minimisation of waste generated by the project and maximisation of resource recovery through targeting over 90% waste diversion from landfill;
- Minimise impacts from the site on the environment and on public health and safety throughout the development;
- Maximise the protection of workers and the public, especially during the removal of hazardous materials and site remediation works;
- Establish best practice waste management strategies and procedures throughout demolition and construction of the development. This encompasses on-site management and offsite disposal including transport and waste tracking/traceability;
- Render the site safe for the proposed land use and substantially reduce potential exposure pathways to contaminants.

8.2 Waste Classification and Validation

8.2.1 Classification of Waste for Removal Off-Site

In accordance with Condition D27 and the requirements of the RAP, all waste generated during construction must be assessed, classified and managed in accordance with the Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014).

Any excess contaminated materials which cannot be accommodated beneath capping must be disposed of to an appropriately licensed landfill or re-used on another site under a general or specific resource recovery exemption (where possible).

Previous investigations (DP, 2020a) indicated the following:

- The majority of fill materials tested are classified as 'General Solid Waste (non-putrescible)' based on total and leachable (TCLP) concentrations. It is noted asbestos impacted soils would be classified as 'Special Waste (asbestos waste)'. Bonded asbestos materials were observed at the surface and within filling across the site. Building demolition waste was also present within filling across the site. As a result, the fill materials across the site are classified "asbestos waste" in the absence of further detailed assessment;
- Options for re-use of site materials under a general resource recover exemption are limited due to the presence of elevated contaminant concentrations and presence of asbestos within filling. Targeted removal of natural soils not significantly impacted by contamination as VENM or ENM could be considered subject to validation and additional targeted investigation and testing with reference to NSW EPA (2014a and 2014b). Ideally this should be conducted prior to construction. Validation of stripped surfaces (if

conducted) would require an inspection, and sampling / testing for contaminants of concern on minimum 10 m x 10 m grid.

Classification of materials for off-site disposal will include inspection, sampling and analysis. The frequency of testing required for classification should be confirmed by a suitably qualified environmental consultant.

Analysis for waste classification must comprise the following target contaminants, based on previous work at the site:

- Total Recoverable hydrocarbons (TRH);
- Benzene, Toluene, Ethylbenzene and Xylene (BTEX);
- Polycyclic Aromatic Hydrocarbons (PAHs);
- Heavy Metals (As, Cd, Cr, Cu, Pb, Hg, Ni, Zn);
- Asbestos Identification testing.

Additional analytes (i.e. foreign materials, pH, EC, etc) may be required if assessment against a general RRO is proposed.

The analytical programme will be reviewed following inspection and sampling to confirm analytes for testing. Leachability (TCLP) analysis may be required if total contaminant levels are found to exceed 'General Solid Waste' criteria.

Any materials which require off-site disposal must be classified in accordance with NSW EPA (2014a). The criteria for disposal in accordance with NSW EPA (2014a) are presented in Tables 3 and 4 below. In addition, asbestos contaminated soil/fill/sediment will require disposal to a licensed landfill as 'special waste' in accordance with NSW EPA (2014a).

Truck dispatch shall be logged and recorded by the contractor for each load leaving the site. A record of the truck dispatch will be provided to DP by the subcontractor or Built. The waste tracking procedure will include the submission of EPA Consignment Notices, weighbridge receipts, and truck logs.

8.2.2 Validation of Waste to Remain On-Site

All waste materials proposed to remain on-site for re-use or to be capped must be validated by Douglas Partners or an environmental consultant.

Where required, analysis for the validation of stripped/excavated contaminated soils within landscape areas, base of bulk excavations or the stormwater easement must comprise the following:

- Total Recoverable hydrocarbons (TRH);
- Benzene, Toluene, Ethylbenzene and Xylene (BTEX);
- Polycyclic Aromatic Hydrocarbons (PAHs);
- Heavy Metals (As, Cd, Cr, Cu, Pb, Hg, Ni, Zn);
- Asbestos (WA Department of Health – 500 mL).

The analytical programme will be reviewed following excavation, segregation and sampling to confirm analytes for testing. Leachability (TCLP) analysis may be required for stockpile samples if total contaminant levels are found to exceed 'General Solid Waste' Criteria.

A validation report will be prepared by the environmental consultant with reference to the NSW EPA Contaminated Sites Guidelines for Consultants Reporting on Contaminated Sites (NSW EPA, 2011), NSW EPA Guidelines for the NSW Site Auditor Scheme (NSW EPA, 2017) and other appropriate guidance documentation. An important part of site validation (for on-site capping) will be the inspection to confirm that appropriate capping has been achieved in accordance with the RAP.

The report shall be submitted to Built for submission to the Site Auditor and Council at the completion of the remediation works program. The validation report shall confirm that the site has been remediated to a suitable standard for the proposed university development. It is noted that due to the staged construction program proposed, interim validation reports may be required for each stage.

The validation report should include details of the total volume of contaminated materials removed from site (if any), indicate the final disposal destination of the materials removed from site (if any), the final location and depth of materials retained on site, present details of the capping procedure and final capping depths, present detailed analytical results, and provide comment on the suitability of the site for the proposed university development.

Upon the completion of remediation and validation works and construction, a SMP will be drafted for long-term management of capped materials on-site (i.e. measures to reduce the likelihood of future disturbance, and procedures for handling/disposal in the event that identified contaminated materials are disturbed). Again, due to the staged construction program proposed, interim SMP reports may be required for each stage.

8.3 Summary of Construction Waste Management Control Measures

Table 7 below outlines the construction waste management control measures to be implemented throughout the development to ensure compliance with the regulatory framework and is located in Section 7.0 of the CWMSMP.

Table 7: Summary of construction waste management control measures

Reference	Details of management measure	Implementation		Responsibility
Implemented throughout works		PC ¹	C ²	
WMM01	Prepare and implement the required CEMP and Sub-Plans prior to works commencing in accordance with the EIS, RAP, and Conditions C7, C8, C11	✓	✓	Project Manager
WMM02	Additional site investigations of both the soil and groundwater profile to be completed and remediation works to be carried out in accordance with the RAP by Douglas Partners pursuant to Conditions A18 – A20	✓	✓	Douglas Partners Project Manager Site Manager Sub-contractors
WMM03	Built personnel, subcontractors and suppliers will always be issued a copy of the current CEMP and Sub-Plans and instructed to comply with the requirements.	✓	✓	Project Manager HSE Officer Sub-contractors
WMM04	Ensure permits, where applicable, have been received and are current prior to commencing works. Includes consultation with SafeWork NSW, EPA, and other Authorities required for demolition, construction and management of	✓	✓	Project Manager Site Manager Sub-contractors

Reference	Details of management measure	Implementation		Responsibility
Implemented throughout works		PC ¹	C ²	
	waste on and off-site in accordance with Condition A8			
WMM05	All personnel including drivers will be required to complete a site induction / DCC that includes key information on the CWMS & CTPMS. Inductions require copies to be taken of appropriate licences and qualifications.	✓	✓	Site Manager HSE Officer
WMM06	All waste must be classified and validated by an Occupational Hygienist and Geotechnical Engineer prior to removal from site and disposed of in accordance with NSW EPA Guidelines	✓	✓	Douglas Partners Site Manager Sub-contractors
WMM07	Exposed surfaces and stockpiles materials must be suppressed by watering. Contaminated material stockpiles must be demarcated and lightly wetted or covered with geotextile or similar cover		✓	Foremen Sub-contractors
WMM08	Ensure construction vehicles (including concrete agitator trucks) do not arrive at the site or surrounding residential precincts outside of the construction hours of work outlined under condition D4.		✓	Site Manager Foreman
WMM09	Plant & equipment used for demolition, site remediation and waste management shall be maintained in a proper and efficient condition in accordance with Condition D2. Plant and equipment are inspected upon delivery and throughout the duration onsite.	✓	✓	Foremen HSE Officer Sub-contractors
WMM10	Regular inspections and monitoring to ensure Demolition (including removal of hazardous materials) is completed in accordance with the Methodology and Plans required under Conditions C5 & D3.		✓	Project Manager Site Manager Foremen HSE Officer
WMM11	All works and vehicle deliveries to and from the site will be restricted to the approved hours in accordance with Condition D4 to D7	✓	✓	Site Manager Foremen Sub-contractor
WMM12	Instruction will be given to personnel and regular inspections completed to ensure the Public Way is not obstructed at any time in accordance with D11	✓	✓	Foremen HSE Officer
WMM13	Regular inspections of vehicles entering or leaving site to ensure loads are secured and controlled (covered and/or wetted) and wheels/chassis are clean of soils and material.		✓	Foremen Traffic Controllers

Reference	Details of management measure	Implementation		Responsibility
Implemented throughout works		PC ¹	C ²	
WMM14	Stormwater management and control will be implemented and maintained in accordance with the ESCP and regularly inspected. No discharge of stormwater is permitted without consultation and approval from City of Newcastle.	✓	✓	Site Manager Foremen HSE Officer
WMM15	Secure and designated waste storage areas / skip bins will be implemented onsite. These will be regularly inspected and collected to minimise waste build up.		✓	Site Manager Foremen
WMM16	Concrete waste and rinse water will be collected onsite using dedicated washout trays and disposed offsite in accordance with regulatory requirements.		✓	Site Manager Foremen Sub-contractors
WMM17	Housekeeping & site cleanliness will be regularly reinforced onsite through toolbox talks.	✓	✓	Foremen HSE Officer
WMM18	Built will implement the community liaison plan and complaints response procedure for anything related to this sub-plan.	✓	✓	Project Manager
WMM19	Site records including truck logs, waste tracking and consignment notices maintained onsite.		✓	Foremen Sub-contractors
WMM20	Regular monitoring / audits of site records to ensure waste traceability and verification.		✓	Project Manager Site Manager
WMM21	Air monitoring to be implemented onsite during removal of ACM. Monitoring records to be maintained onsite.	✓	✓	Site Manager Sub-contractors
WMM22	Areas subject to removal of hazardous materials are to be contained and restricted to qualified / licenced personnel only.	✓	✓	Foremen HSE Officer
WMM23	All imported materials or materials to remain onsite must be validated by Douglas Partners prior to delivery to or re-use onsite	✓	✓	Site Manager Foremen
WMM24	Regular inspections of site remediation and capping works by Douglas Partners as part of validation for materials re-used (capped) onsite		✓	Site Manager Douglas Partners

(1) Pre-construction – note that this may refer to prior to commencement of specific activities rather than prior to the commencement of all construction works.

(2) Construction

8.4 Summary of Construction Waste Management Monitoring

Table 8 below outlines the construction waste management monitoring activities to be implemented throughout construction to provide the required data on compliance with the regulatory framework related to waste management, demolition and site remediation. This can be located in Section 8.0 of the CWMSP.

Table 8: Summary of construction waste management monitoring

Activity	Requirements	Frequency, reporting, and responsibility
Supervisor Inspection; of the site or specific work areas/elements to ensure management measures are implemented as required	- Review of documents prior to inspection (e.g. management plans, Permits, SSD Conditions). - Visual inspection of the site or specific work area/elements to assess if required measures are implemented and maintained. - Visual inspection of site bins, materials stockpiles, and/or designated waste areas are secure and in accordance with requirements. - Visual check of site records, logbooks, licences, etc. - Provide a summary of inspection: - Common checks - Activities or items reviewed - Observations - Compliances / Non-Compliances - Report any high potential hazards - Attach photographic evidence and copies of any site records viewed - Issue any actions arising with appropriate due date for rectification	Frequency: Weekly Reporting: Records are automatically uploaded to Built.Safe and maintained onsite. Responsibility: Project Manager Site Manager Foreman
Monitoring; of construction activities on-site to assess compliance with development approvals, permits, management plans, procedures and measures	- Identify activity to be monitored (e.g. site remediation, demolition works) - Review and reference applicable documents: - SWMS - Permits - Site records - Management plans - Methodology documents - Provide a summary of monitoring: - Observations - Discussions - Work practices - Compliance / Non-compliance - Identify if work was required to be stopped - Report any high potential hazards identified, the responsible trade and/or process, and the situation - Log attendance of other personnel involved - Attach photographic evidence and copies of any records - If applicable, issue actions with appropriate due date for rectification	Frequency: Minimum monthly per responsible person and as required Reporting: Records are automatically uploaded to Built.Safe and maintained onsite. Responsibility: Project Manager Site Manager Foreman
Plant Inspection; To check plant is fit for use prior to being	Verify and record the following: - Plant type - Make and model - Plant identification number	Frequency: As required Reporting:

permitted for use on-site	– Built identification / induction number – Contact details for the person responsible for plant – Date of the last service and/or inspection – Date of the next service and/or inspection • Visually inspect and record copies of the following: – No visible leaks – Recorded faults are rectified – Operators Manual – Last service report – Plant risk assessment – Operators inspection logbook • Assign status of plant – Registered and on-site – Rejected and locked out – Off-site • If applicable, issue appropriate actions.	Records are automatically uploaded to Built.Safe and maintained onsite Responsibility: Site Manager Foreman HSE Officer
Truck / Vehicle Logs	Log maintained at vehicle gates and completed for each vehicle entry/exit from the site. Log information includes: – Date – Time – Registration – Company – Driver Name – Vehicle Type – Load Type – Load Covered – Truck Washed (free of debris) – Checked By – Comments	Frequency: Daily log Reporting: Submitted to Built weekly and records maintained onsite. Responsibility: Foreman Traffic Controller
Monthly Reporting To ensure accurate and detailed waste management records are being maintained for compliance and validation purposes	• Site Records a) Subcontractors to submit site records to Built b) Collate waste management site records c) Consultant Inspection Reports received and actions (if any) closed out • Monthly Status Reports a) Subcontractors to submit required monthly waste reports to Built (if applicable) b) Central Waste Station to submit monthly Resource Recovery report to Built.	Frequency: Monthly Reporting: Site records maintained onsite and submitted to Environmental Consultant for validation. Monthly Waste Reports are attached to the monthly Project Control Group Report and uploaded to Built.Safe Responsibility: Project Manager Foremen
Site Validation Inspections	• Site inspection by Douglas Partners to inspect the progress of site remediation works involving the on-site management (capping) of contaminated soils. • Any actions raised to be closed out by Built and the relevant subcontractor.	Frequency: As required by DP Reporting: Site records maintained onsite by Built and submitted to Environmental Consultant for validation.

		Site inspection report to be prepared by DP and submitted to Built. Responsibility: Project Manager Foremen Douglas Partners
Site Validation Report	Site Validation Report as required by the Remediation Action Plan approved by a NSW EPA Accredited Site Auditor pursuant to Condition A19. The Validation Report must be prepared in accordance with Condition A30.	Frequency: Submitted within one month after completion of remediation works. Reporting: Be prepared in accordance with the RAP approved by a NSW EPA Accredited Site Auditor pursuant to Clause A19 Responsibility: Douglas Partners

9.0 Remediation Action Plan

9.1 Background

In accordance with SSD Conditions A18 to A19, Built engaged Douglas Partners Geotechnical Engineers (DP) to conduct additional investigations for site contamination and prepare a Remediation Action Plan (RAP) for approval by the NSW EPA Accredited Site Auditor prior to the commencement of remediation works.

The RAP has been developed based on available standards and guidelines prepared by the relevant authorities, and the results of the detailed site investigation conducted by DP for the proposed development.

This RAP supersedes the Conceptual Remediation Action Plan (cRAP) prepared by Cardno (NSW/ACT) Pty Ltd (dated 2019) for the development which was based on preliminary investigation findings conducted previously by others. Pertinent information from the cRAP has been referred to in the RAP where applicable.

The previous investigation conducted by DP (dated 2020) which included a review of previous investigations on the site by DP and others, identified bonded asbestos containing materials (ACM) within filling across the site above the adopted site assessment criteria which require remediation to render the site suitable for the proposed development.

While PAH, heavy metal and TRH impacts were identified on site exceeding the adopted Tier 1 health and conservative ecological investigation / screening levels, statistical analysis and consideration of the ecological setting and proposed development indicated that remediation for these contaminants was not warranted.

This RAP has been prepared to describe the remediation strategy via on-site management of bonded asbestos impacted filling beneath existing and proposed concrete pavements, buildings and associated landscape areas (i.e. capping of entire site).

The RAP includes an unexpected finds protocol and contingency measures to manage redevelopment works during the course of remediation.

Built has incorporated the requirements of the approved RAP into the CEMP to ensure remediation works are completed in compliance with Condition A20.

9.2 Methods and Objectives of the RAP

It is proposed that the remediation method will involve the on-site management of soils impacted by bonded ACM by capping the entire site with concrete building slabs and pavements or capping with clean imported filling (virgin excavated natural material (VENM) or excavated natural material (ENM) or validated on-site soils within landscape areas (where required).

The objective of the RAP is to ensure that the site is remediated in an acceptable manner, with minimal environmental impact, to a condition suitable for the proposed university development. The objectives of this RAP are therefore to provide a strategy for site remediation which:

- Minimises impacts from the site on the environment and on public health and safety during site remediation;
- Maximises the protection of workers involved with site remediation;

- Renders the site safe for the proposed land use and substantially reduces potential exposure pathways to contaminants;
- Minimises impacts on the local environment during and following site remediation.

The RAP also provides an outline working plan for the excavation, stockpiling, management and disposal of excess spoil and sediment controls and a contingency plan.

9.3 Responsibilities

Contractor (Built)

The contractor is responsible for on-site operations including:

- Demolition of site structures and clearance following demolition;
- Handling of fill materials (contaminated or otherwise) including excavations, stockpiles, segregation, placement, compaction, and disposal of unsuitable or excess materials;
- Disposal of contaminated soil or excess fill to a licensed landfill (after classification) if required;
- Safety of all personnel on site;
- Measures to minimise environmental effects;
- Preparation of a site-specific Construction Environmental Management Plan (CEMP) and WHS plan. The CEMP must reference this RAP and will require review and comment by DP to confirm consistency with the objectives of the RAP prior to commencement of remediation;
- Ensure required licenses and approvals from regulatory authorities are obtained prior to remediation works commencing. It is noted that an appropriately licenced contractor will be required to conduct earthworks within the site due to the presence of bonded ACM in filling;
- Collation of waste/ import tracking documentation, disposal dockets, delivery receipts, air monitoring records etc and submission to the client and DP in a timely manner for review and inclusion in the validation report.

Occupational Hygienist (OH)

- Advice on management of asbestos contamination (if required);
- Set-up and maintenance, analysis and reporting of air monitoring for air borne asbestos fibres during construction works resulting in the disturbance of fill materials (i.e. any excavations, stockpiling, placement or transport of fill materials), where required. It is noted that minor ACM fragments were observed within filling at the site, however, there is a risk that further ACM is present.

General Site Validation (Douglas Partners Pty Ltd)

- Advice on excavation and segregation of contaminated soils (where required);
- Validation of excavations (where required);
- Regular inspections of remediation and validation works;
- Waste classification of soil / fill requiring off-site disposal;
- Review of proposed imported material reports / certificates to confirm suitability for use on-site prior to importation;
- Sampling and classification of imported fill materials (where required);
- Provision of a remediation and validation report;
- Correspondence/liaison with the Site Auditor and regulatory authority (if required) throughout the remediation works;
- Provision of a long term SMP.

9.4 Remediation Strategy

The adopted remediation approach for the development is as follows:

- Off-site disposal of bonded asbestos impacted soils from the upper fill profile where required as part of earthworks construction (i.e. excess soils not able to be reused on-site) following appropriate waste classification;
- On-site management (capping) of bonded asbestos impacted soils.

On-site management of bonded asbestos contaminated soil would generally comprise the following:

- Excavation to invert depth of proposed capping layer;
- Placement of excavated contaminated materials in proposed fill areas (i.e. where beneath the invert depth for the proposed capping layer) where applicable ensuring bonded ACM is not left at the ground surface, subject to geotechnical suitability;
- Disposal of excess contaminated soils to an appropriately licensed landfill following waste classification;
- Capping of contaminated soils with concrete (ie building slabs, concrete pavements) or clean soils within landscape areas. It is noted that given the widespread nature of fill materials containing building waste (potential source of hazardous building materials (HBM) including asbestos) and observed bonded ACM across the site, capping of the entire site will be required (precautionary approach) in the absence of detailed asbestos investigation and validation.

It is noted that existing building and construction of the proposed buildings and pavements will largely provide the above capping, with only localised capping within landscape areas.

If visible bonded asbestos is encountered during earthworks, the material will either be:

- Immediately covered by clean fill to prevent exposure to personnel and demarcated to prevent future disturbance where possible;
- Excavated and placed immediately in proposed fill areas and covered over to prevent exposure to personnel;
OR
- Collected, bagged and disposed to a licensed landfill by appropriately licensed personnel in accordance with SafeWork NSW Code of Practice and regulatory requirements.

9.5 Contingency Plan

If contaminated soil quantities are such that they cannot be accommodated beneath the concrete paved areas or 300mm thick VENM/ENM capping layer (landscape areas), the excess materials will require stockpiling, classification (if required) and off-site disposal to a licensed landfill in accordance with NSW EPA requirements.

If indications of gross soil contamination are observed on-site during remediation works (i.e. staining / odours etc.), the materials must be appropriately investigated by a suitably qualified environmental consultant and either managed on site (if appropriate) or disposed off-site to a licenced landfill following classification.

9.6 Unexpected Contaminated Finds Protocol

The results of previous assessments at the site indicate the presence of PAH, TRH (long chained), heavy metal and bonded asbestos contamination within filling / soil across the site. While statistical analysis and consideration of the ecological setting and proposed development indicates that remediation for the identified PAH, TRH and heavy metal impacts are not warranted, due to the historical demolition activities and the presence of uncontrolled filling at the site, there is potential for additional contamination within site soils (including contaminants mentioned above) which may be considered 'hot spots'.

Built and Douglas Partners will undertake inspections as site excavations and remediation works progress. In the instance of an unexpected contaminated find, the following protocol will be implemented:

1. Works must cease in the area and the supervisor is to be notified immediately
2. The area should be cordoned off to prevent access by other workers and public
3. A suitably qualified environmental consultant will be engaged to provide interim advice based on visual inspection on construction health and safety, material storage and material disposal to allow construction to proceed as soon as practical.
4. Unexpected potentially contaminated material will be excavated and separately stockpiled in a secure location on strong impermeable plastic sheeting and covered top and sides with securely fitted plastic sheeting.
5. The stockpile will be protected by adequate sediment controls to collect runoff and prevent overland stormwater flow from affecting the base of the stockpile.
6. Potentially contaminated materials from different parts of the construction area will be segregated into separate stockpiles. The separate stockpiles should be signposted and the source location of the materials on site recorded.
7. When the potentially contaminated material has been removed, the area from which this material was excavated will also be isolated. Further excavation or other construction work will not occur in that area until advice from a suitably qualified environmental consultant is provided confirming that any contaminated material has been removed and that the area is suitable for further excavation or construction activity.
8. The location from which potentially contaminated materials is excavated and the location of the stockpile of excavated material will be recorded on a site plan. Records will include an outline of the area and depth of the potentially contaminated materials and the volume of material excavated.
9. A suitably qualified environmental consultant will assess the potentially contaminated material and prepare a report advising whether the material is contaminated at levels exceeding the NSW EPA endorsed guidelines for reuse on-site and/or whether the material needs to be disposed of off-site as waste, and the classification of that waste.
10. Where contaminated material is assessed as being unsuitable for reuse on site, the area where the material was excavated will require validation.

11. All excavation, handling, loading and transport of contaminated materials must be undertaken by a licenced contractor in accordance with the appropriate regulatory approvals and legislative requirements.

In the event that a person onsite identifies or disturbs suspected Asbestos Containing Materials (ACMs) that are not identified on the Asbestos Register, Built will follow all reporting and notification requirements and the following protocol:

1. Stop work in the area potentially impacted by ACM as soon as it is safe to do so and move to the upwind side of the area, or away from the area.
2. Assess the potential immediate risk to human health posed by the unexpected find and assess if evacuation is necessary.
3. Delineate an exclusion zone around the affected area using fencing and/or appropriate barriers and signage. Keeping soil / materials damp will minimise the release of fibres to air.
4. Contact the Environmental Consultant / Occupational Hygienist for advice and request a site visit to undertake a risk assessment of the unexpected find and determine what further assessment and/or remediation works are required.
5. Implement advice and validate outcomes are assessed by the Environmental Consultant / Occupational Hygienist to be satisfactory. Document outcome, presenting recommendations to the Superintendent & Planning Secretary.
6. Remove ACM from site and dispose to suitable licenced waste facility. Handling, loading and transport of contaminated materials must be undertaken by a licenced contractor in accordance with the appropriate regulatory approvals and legislative requirements.
7. Receive clearance certificate from the Environmental Consultant / Occupational Hygienist.
8. Return to work once written approval received and site personnel appropriately consulted.

The unexpected asbestos management procedure during Construction is as follows:

Where small fragments of ACM or suspected ACM are found, and provided that:

- The total number of fragments is < 20, or
- The total surface area of the fragment/piece is < 1 m², or
- The fragments are spread over an area of < 10 m², and
- The fragments are non-friable and located on ground surface or within the topsoil layer then the Contractor Environmental Scientist / Engineer will collect any fragments and place it in a 200 mm polythene bag for later disposal at an appropriate waste facility.
- A detailed visual inspection of the area will be carried out by Built and the Environmental Consultant / Occupational Hygienist which will involve wet raking of the areas to a depth of 10 cm for any further fragments. If no further fragments are identified, works can continue.

If, during the visual inspection, Built and the Environmental Consultant / Occupational Hygienist determines that the criteria described above are exceeded, or if suspected asbestos / ACM continues to be identified during excavation works and/or if it is thought that any uncovered material might be considered asbestos containing and friable, works will cease and the Environmental Consultant / Occupational Hygienist will assess the situation and determine an appropriate course of action.

If required, the Built will engage an Environmental Consultant / Occupational Hygienist to remove samples of the material for testing at a NATA-accredited laboratory and will monitor airborne dust levels. Following testing, the Environmental Consultant / Occupational Hygienist will determine and report:

- if the asbestos is non-friable or friable
- the extent of the contamination
- options for the appropriate remediation of the area
- the requirement for a licenced asbestos removalist
- The requirement for health screening of workers on site.

10.0 Aboriginal Cultural Heritage Management Plan

10.1 Background

Archaeological Management and Consulting Group (AMAC) in conjunction with Streat Archaeological Services Pty Ltd (SAS) was commissioned by Azusa Sekkei in January 2019, to prepare a full Aboriginal Cultural Heritage Assessment and Aboriginal Archaeological Assessment including full consultation and a programme of test excavation for the proposed development of an educational facility at Lot 1 DP 1199904, at the following street address 9 Church Street, Newcastle, New South Wales.

A Due Diligence Aboriginal Archaeological Assessment of the study area was undertaken by AMAC (2019), of which it was recommended that further investigation including a programme of test excavation takes place prior to any works commencing.

In accordance with Condition C13, these documents have since been upgraded to an Aboriginal Cultural Heritage Management Plan (ACHMP) after the reports were part of a successful State Significant Development (SSD # 9787) application and subsequent Development Consent by the Department of Planning, Industry and Environment on 11th December 2019.

This document has been compiled in full consultation with the Aboriginal stakeholders in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010).

The aims of the Aboriginal Cultural Heritage Management Plan (ACHMP) are to facilitate in the implementation of mitigation and conservation strategies for the project site. The development will impact on intact soil profiles and Aboriginal archaeological deposits and objects and as such this document outlines the processes that have been set in place to manage this impact on the Aboriginal cultural heritage of the project site prior to the development taking place.

Test excavation was undertaken over three days 08/01/20 - 10/01/2020. The programme was conducted under the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales and consisted of the proposed excavation of 15 test trenches (50cm x 50cm). These were situated evenly across the site in order to obtain information and data that could systematically determine a distribution pattern and/or density pattern within a localised scale of the site.

No Aboriginal archaeological and cultural material/ deposits were located as a result of the programme of test excavation. A high level of disturbance was observed, and intact soils were found to be sterile.

Further investigation is not warranted, and works may proceed with caution.

10.2 Unexpected Aboriginal Archaeological Finds Protocol

In accordance with the ACHMP, in the instance of an unexpected archaeological find that is of suspected Aboriginal cultural heritage nature or human remains, the following protocol's will be implemented:

If any suspected Aboriginal archaeological deposits and/or objects are located during the development, then the following steps should take place;

All work is to cease in the immediate vicinity of the deposits and/or objects.

- Site manager is to be informed immediately.
- The area is to be demarcated, covered with geo-tech fabric and a 5-metre radius buffer around the suspected Aboriginal archaeological deposits and/or objects. (Works not included in the demarcated area can continue without stoppage)
- The site manager shall inform all workers of the status of the demarcated area and one worker shall be left in place at the site to ensure no unintended damage occurs.
- AMAC offices are to be called or Mr Benjamin Streat (Section 6.2) or a suitably qualified archaeologist. Contact time and date to be noted in the site diary or a suitable record produced.
- The suspected Aboriginal archaeological deposits and/or objects shall be assessed by AMAC or a suitably qualified archaeologist.
- If required, the AMAC employee or a suitably qualified archaeologist shall inform the Registered Aboriginal Parties and the Department of Planning, Industry and Environment and register the site with AHIMS
- Further assessment and mitigation may need to take place (Section 7.0).
- Suitable quality reporting takes place, including RAP consultation and variations to the ACHMP.
- RAPs review and approve ACHMP.
- Amended ACHMP submitted to DPIE and RAPs.
- Written approval from Department of Planning, Industry and Environment received.
- Works in that area recommence.

Should any human remains be located during the following development;

- All work is to cease in the immediate vicinity of the human remains (works not included in the demarcated area can continue without stoppage)
- Site Manager is to be informed immediately.
- The NSW police and NSW's Environment line be informed as soon as possible (Section 6.2).
- The area is to be demarcated, covered with geo-tech fabric and a 5 metre radius buffer around the remains;
- The site manger shall inform all workers of the status of the demarcated area and one worker shall be left in place at the site to ensure no unintended damage occurs.
- If it has been established that the human remains are Aboriginal ancestral remains (this process would need to be in the hands of NSW Police and all statutory requirements and protocols would fall under NSW Police jurisdiction) then,
- AMAC offices are to be called or Mr Benjamin Streat (Section 6.2) or a suitably qualified archaeologist. Contact time and date to be noted in the site diary or a suitable record produced.
- The suspected Aboriginal archaeological deposits and/or objects shall be assessed by AMAC or a suitably qualified archaeologist.
- Further assessment and mitigation may need to take place (Section 7.0) including registration of site with AHIMS and consultation with Planning, Industry and Environment and RAPs.
- Suitable quality reporting takes place, including RAP consultation and variations to the ACHMP.
- RAPs review and approve ACHMP.
- Amended ACHMP submitted to DPIE and RAPs
- Written approval from Department of Planning, Industry and Environment received.
- Works in that area recommence.

11.0 Archaeological Research Design & Excavation Methodology

11.1 Background

In accordance with Condition C17, Built commissioned AMAC to prepare a Research Design and Excavation Methodology (RDEM) for the project.

To mitigate the heritage impact to known relics of potential local significance, a targeted archaeological monitoring program has been developed in relation to areas of archaeological potential to be impacted on by excavation works. Initial excavation within all archaeological monitoring work zones will be under the supervision and direction of a qualified archaeologist and operate under the guidance of the Research Design (see Section 6.0 of the RDEM) and Excavation Methodology (see Section 7.0 of the RDEM). Other areas of the site subject to excavation works but not part of an archaeological monitoring zone will be subject to an unexpected finds protocol.

The RDEM will form the guiding documentation for the management of any historical archaeological excavation at the study site. The onsite archaeological program has been specifically designed to monitor, excavate and record locally significant archaeological relics which will be disturbed or removed by the development, in advance of any bulk earthworks program.

Should any unexpected or unassessed relics be uncovered during excavation, works will cease while these are investigated. Further assessment and liaison with DPIE or its relevant heritage delegate (Heritage, DPC) may be required for such finds.

11.2 Unexpected Non-Aboriginal Heritage Finds Protocol

It is noted that apart from the targeted monitoring areas identified by AMAC, no known relics have been identified across all other areas to be impacted on by the proposed development. Therefore, AMAC considers these remaining portions to have nil heritage impact and archaeological monitoring unnecessary. Instead, the below unexpected finds protocol will be in place for the duration of works.

Prior to commencement of works, a qualified Archaeologist will provide on-site contractors with an archaeological site briefing. The brief will inform contractors of the historical context of the site, anticipated soil profile, types of unexpected finds that may be encountered, and the stop work procedures to follow in the instance of such.

Procedure

1. Unexpected item discovered
2. Stop work, protect item(s) and form exclusion zone around work area.
3. Notify Built site management immediately.
4. Built site management to contact the Superintendent and AMAC.
5. AMAC will attend site to inspect the potential relic.
6. AMAC will complete a preliminary assessment and recording of the potential relic. If the item is classified as non-heritage, return to work after written approval received from the Superintendent and AMAC.
7. If the item is assessed as being a relic, the Superintendent and AMAC will contact the Heritage Division. The relic and the surrounding area are to remain protected and works must not resume in this area.
8. Review CEMP and approval conditions (if required).
9. Resume work once written approval is received from the Heritage Division.

12.0 Monitoring and Review

A23. Any condition of the consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, Site audit report and independent auditing.

Note: For the purposes of this condition, as set out in the EP&A Act, “monitoring” is monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an “environmental audit” is a periodic or particular documented evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development.

12.1 Environmental Monitoring

The Construction Environmental Management Plan & Sub-Plans shall be monitored following implementation to ensure that:

- Environmental operational controls are being effectively applied and maintained;
- Project specific environmental monitoring targets specified in the Development Consent or other planning permits for air, water and noise are being met;
- Unpredicted impacts are identified, and remedial action is taken; and
- The project objectives listed above are being met.

Responsibilities for monitoring and compliance requirements are detailed in the Project Environmental Plans and the Project HSE Risk Register (Appendix 5) as outlined within Sections 5.0, 6.0, 7.0 and 8.0 of the CEMP and relevant sections of the CEMP Sub-Plans.

Monthly internal reports are provided to the Construction Manager and General Manager for review. The performance of projects against company environmental objectives and targets is reviewed on a quarterly basis.

The Site Manager/Foreman will ensure that environmental controls are inspected on a regular basis, as part of the site inspections described in the HSE Plan or as separate environmental inspections and are in accordance with the requirements outlined in the **‘Project Environmental Aspects and Impacts Register.’**

All monitoring activities will be completed by appropriately qualified persons as required and records maintained onsite for auditing and compliance reporting purposes.

- Monitoring Checklist (Appendix B10)
- Built Safe Mandatory Standards (BSMS) Review (asbestos, temporary works, demolition)

12.2 Environmental Auditing

Project audits shall be scheduled by the Regional HSE Manager and form part of the company's audit schedule (Refer to clause 36.0 Audits of the Built HSE Plan). Audits shall address the requirements of ISO9001, ISO14001, AS4801, Built's Management System and the various Management Plans.

Project HSE Audits, using **HSE-104 Project HSE Audit Checklist**, will be carried out by the HSE Officer assigned to the project within the first 3 months of project commencement, and at 6 monthly intervals thereafter. Where the project duration is under 3 months an audit is not required unless requested by the Construction Manager or above. These audits are intended to verify compliance with the HSE Plan.

Independent Environmental Audits by GHD will be conducted in accordance with the following SSD requirements:

D29. Proposed independent auditors must be agreed to in writing by the Planning Secretary prior to the preparation of an Independent Audit Program or commencement of an Independent Audit.

D30. Prior to the commencement of construction, an Independent Audit Program prepared in accordance with the Independent Audit Post Approval Requirements (Department 2018) must be submitted to the Planning Secretary and the Certifier.

D31. Table 1 of the Independent Audit Post Approval Requirements (Department 2018) is amended so that the frequency of audits required in the construction phase is:

- (a) an initial construction Independent Audit must be undertaken within eight weeks of the notified commencement date of construction;
- (b) a subsequent Independent Audit of construction must be undertaken no later than six months from the date of the initial construction Independent Audit; and

In all other respects Table 1 remains the same. The Planning Secretary may require the initial and subsequent Independent Audits to be undertaken at different times to those specified above, upon giving at least 4 weeks' notice to the applicant of the date upon which the audit must be commenced.

D32. Independent Audits of the development must be submitted to the Planning Secretary and must be carried out in accordance with:

- (a) the Independent Audit Program submitted to the Planning Secretary and the Certifier under condition D30 of this consent; and
- (b) the requirements for an Independent Audit Methodology and Independent Audit Report in the Independent Audit Post Approval Requirements (Department 2018).

D33. In accordance with the specific requirements in the Independent Audit Post Approval Requirements (Department 2018), the Applicant must:

- (a) review and respond to each Independent Audit Report prepared under condition D30 of this consent;
- (b) submit the response to the Planning Secretary and the Certifier; and
- (c) make each Independent Audit Report and response to it publicly available 60 days after submission to the Planning Secretary and notify the Planning Secretary and the Certifier in writing at least seven days before this is done.

D34. Notwithstanding the requirements of the Independent Audit Post Approval Requirements (Department 2018), the Planning Secretary may approve a request for ongoing annual operational audits to be ceased, where it has

been demonstrated to the Planning Secretary's satisfaction that an audit has demonstrated operational compliance.

12.3 Environmental Non-Conformance and Corrective Action

12.3.1 Environmental Non-Conformance

A non-conformance is the failure or refusal to comply with the requirements of the project system documentation, including this CEMP and supporting documentation, and any reasonable written or verbal instruction given.

Under the SSD-9787 development consent, a non-compliance is an occurrence, set of circumstances or development that is a breach of this consent. Non-conformances may be identified through project compliance reporting (Section 4.4 and Conditions C22 to C25), environmental monitoring (Section 12.1), environmental auditing (Section 12.2), or incident management (Section 4.7).

Notification of non-conformances must be in accordance with the conditions listed below.

A28. The Planning Secretary must be notified in writing to compliance@planning.nsw.gov.au within seven days after the Applicant becomes aware of any non-compliance. The Certifier must also notify the Planning Secretary in writing to compliance@planning.nsw.gov.au within seven days after they identify any non-compliance.

A29. The notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

A30. A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance. Under this condition, the procedure outlined in Section 4.7 will be implemented.

12.3.2 Reporting Non-Conformances

Other than external consultants and authorities, any member of Built's Project Team may raise a non-conformance or improvement opportunity through the Project Manager, Site Manager or Foreman.

All Built staff have the authority to instruct works to cease in an area concerned if they believe they do not comply with project HSEQ requirements. Works will not continue until further review by the Project Manager, Site Manager or Foreman is undertaken.

The Built Project Manager is responsible for reporting all incidents, internally and externally, as required, and ensuring corrective/preventive actions are closed out within applicable timeframes. Non-conformance Reports are completed using Rapid Incident and submitted to the required stakeholders.

An example Rapid Incident NCR template is attached in Appendix B18.

When a non-conformance occurs, Built will:

- React to the non-conformity and, as applicable:
 - Take action to control and correct it
 - Deal with the consequences, including mitigating adverse environmental impacts
- Evaluate the need for action to eliminate the causes of the non-conformance in order that it does not recur or occur elsewhere by:

- Reviewing the non-conformance
- Determining the causes of the non-conformance
- Determining if similar non-conformances exist or could potentially occur
- Implement any actions required
- Review the effectiveness of any corrective action taken, and
- Make changes to the environmental management system if necessary

Corrective actions will be appropriate to the significance of the effects of the non-conformance, including the environmental impacts.

Built will retain documented information as evidence of:

- The nature of non-conformances and any subsequent actions taken, and
- The results of any corrective actions

12.3.3 Corrective Actions

For each non-conformance identified, Built will implement corrective / preventative actions. In addition, any environmental management improvement opportunities can be initiated as a result of incidents or emergencies, monitoring and measurement, review of compliance, audit findings or other reviews. Improvement opportunities may also result in the implementation of corrective/preventative actions. Built will provide this information to the Superintendent (dwp) in monthly Project Control Group reports.

Corrective/preventative actions and improvement opportunities will be entered into Built's HSEQ system database (Built.Safe) and include detail of the issue, action required and timing and responsibilities. The record will be updated with date of close out and any necessary notes. The database will be reviewed regularly to ensure actions are closed out as required.

An example of the Built.Safe NCR Template is attached in Appendix B19.

Procedures for corrective actions will include a process for verification of how the non-conformance has been closed out and to confirm that it is effective in addressing the non-conformance.

12.4 Review of Environmental Management Plans

It is acknowledged that Condition A31 regarding the revision of strategies, plans, and programs, requires that within three (3) months of:

- (a) the submission of a compliance report under Condition C22
- (b) the submission of an incident report under Condition A27
- (c) the submission of an Independent Audit under Condition D32
- (d) the approval of any modification of the conditions of this consent; or
- (e) the issue of a direction of the Planning Secretary under Condition A2 which requires a review, the strategies, plans, and programs required under this consent must be reviewed, and the Planning Secretary and the Certifier must be notified in writing that a review is being carried out.

If necessary, to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans, programs or drawings required under this consent must be revised, to the satisfaction of the Planning Secretary and/or Certifier (where relevant). Where revisions are required, the

revised document must be submitted to the Planning Secretary and/or Certifier for approval and/or information (where relevant) within six (6) weeks of the review.

The aim of this Condition is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.

Built's standard procedure is to review all management plans every three (3) months or as required by any significant event, incident, instruction (internal or external), and significant change in the project scope and/or conditions. It must be noted that a review may not result in the revision of strategies, plans, and programs if deemed to still be adequately addressing the environmental requirements of the project.

Reviews and revisions (if required) are completed by the Built project team, typically consisting of the Project Manager, HSE Manager, and Site Manager in consultation with other stakeholders including Authorities, employees and/or the community if required.

Revised management plans are issued to all required Authorities, consultants, employees and subcontractors to ensure compliance within Condition A25 and further discussed in project / site meetings.

Appendix A1 – Environmental Aspect and Impact Register

Environmental Aspects and Impacts Risk Assessment Matrix				
Consequence (severity) – is how serious could the environment be harmed		Likelihood – is an estimate of how probable it is for the environmental hazard to occur leading to environmental harm.		
		Very Likely (VL)	Possible (POS)	Very Unlikely (VU)
HIGH SEVERITY (H) - Irreversible damage to the environment - Extensive damage to the environment e.g. large area of contamination (costs exceeding > \$500k) - Court proceedings leading to prosecution and significant fine - Damage to Built's reputation as a result of widespread adverse publicity	RISK LEVEL	HIGH	HIGH	MEDIUM
MEDIUM SEVERITY (M) - Temporary harm to the environment e.g. small area of contamination but no ongoing long-term damage - Clean-up costs < \$250k - Low level fine - No adverse media publicity on a significant level		HIGH	MEDIUM	LOW
LOW SEVERITY (L) Minor harm to the environment e.g. small-scale spill readily mitigated/cleared; Noise complaint from adjoining property		MEDIUM	LOW	LOW
RISK LEVEL		HIERARCHY OF CONTROL		
		Order of priority in the selection of controls corresponding to level of risk (Acceptable Risk Treatment)		
High Risk - Action must be taken to eliminate the risk to the environment		1 st Elimination - i.e. the permanent removal of the hazard		
Medium Risk – if the risk to the environment cannot be eliminated so far as is reasonably practicable or minimised so far as is reasonably practicable by implementing control measures listed as 2nd, 3rd or 4th (in this order of priority)		2 nd Substitution - substituting (wholly or partly) the hazard giving rise to the risk with something that gives rise to a lesser rise		
Low Risk - if the risk to the environment cannot be eliminated so far as is reasonably practicable or minimised so far as is reasonably practicable by implementing control measures listed as 2nd, 3 rd , 4 th or 5th (in this order of priority) then Administrative controls may be applied		3 rd Isolation - isolating the source of the hazard that poses a threat to the environment		
		4 th Engineering - controls to reduce the risk to the environment		
		5 th Administrative - procedural controls to eliminate or reduce the risk of environmental contamination		

Risks levels (i.e Consequence and Likelihood) in relation to environmental Aspects and Impacts rated as 'High' or 'Medium' are considered 'Significant' as they have the potential to adversely impact on the environment, result in additional costs to and potential fines or damage the company's reputation. Where an environmental aspect results in a positive impact on the environment (e.g. waste elimination or waste re-use) these are considered to also be significant.

Environmental Aspect	Environmental Impact	Risk Rating (Risks ranked as 'High' or 'Med' are deemed significant)	Legal Requirements	Environmental Actions, Controls and Criteria	Responsibility
SECTION D: ENVIRONMENTAL ASPECTS					
Dust Generation Particulate Emissions (General)	Air pollution	Low	NSW - POEO Act (Sections 124-126)	• Install shade cloth on perimeter fencing • Vehicle corridors will be clearly identified and restricted to control vehicle access onsite. • Limit vehicle speed onsite to 5km/hr • Reduce work activities / stop work during moderate to high wind velocity periods. • Turn off vehicle engines whilst not in use (no long periods of idling)	• Built • PCBU
Dust Generation (Demolition)	Air pollution	Medium	NSW - POEO Act (Sections 124-126)	• Breakers and crushing equipment to be fitted with dust filtration equipment or water sprays to control dust emissions. • Construction vehicle loads to be watered and covered • Stockpiles to be watered and covered as required	• PCBU
Dust Generation (Construction)	Air pollution	Low	NSW - POEO Act (Sections 124-126)	• Minimise areas of site disturbed, and stage works where possible. • Dust suppression strategies to be used, i.e. water sprays, soil binders, hydro mulching, controlled speed onsite, roadbase + shaker grids. • On site drilling or coring operations will be undertaken by equipment fitted with air filtration equipment. • Construction vehicle loads to be watered and covered • Stockpiles to be watered and covered as required	• Built • PCBU
Odour	Air pollution Odour	Low	NSW - Protection of the Environment Operations Act 1997, s 129; Common law of nuisance; Local Government Act 1993, s125	• If odorous materials uncovered, re-cover immediately and notify Built. • Seek advice from consultant regarding soil /materials management.	• Built • PCBU
Emissions to Air	Air pollution	Low	NSW - Protection of the Environment Operations Act 1997, s 124-125, s 139	• Ensure machinery is maintained correctly	• PCBU
Greenhouse	Resource use Air pollution Global warming Light pollution	Low	Green Star	• Ensure purchased electrical products/whitegoods products comply with specification for CFCS & energy ratings • Low solvent paints to be used as a priority • Building to conform to Green Star performance criteria • Deliveries / transport from site effectively planned to limit inefficient transport, assist back loading, minimise road traffic noise etc • Workers encouraged to carpool where possible or catch public transport • External lighting to be in compliance with AS 4282-2019 to control of the obtrusive effects of outdoor lighting	• Built • PCBU
Stormwater (Discharge from sedimentation basins, flooding)	Water contamination	Medium	NSW - Protection of the Environment Operations Act 1997, s 120, 122; Protection of the Environment Operations (General) Regulation 1998, cl 55; Local Government Act 1993, s 638 ANZECC Water Quality Guidelines NSW Department of Housing's Managing Urban Stormwater (2004) ANZECC Water Quality Guidelines Managing Urban Stormwater: Soils & Construction (4 th Edition, Landcom, 2004).	• All drains within the construction site or outside the site which are likely to be affected, are to have environmental controls such as bunding, geofab over drains etc and inspected as part of the weekly site inspections • Implementation of Built Erosion & Sediment Control Plan & regular monitoring of measures	• Built • PCBU

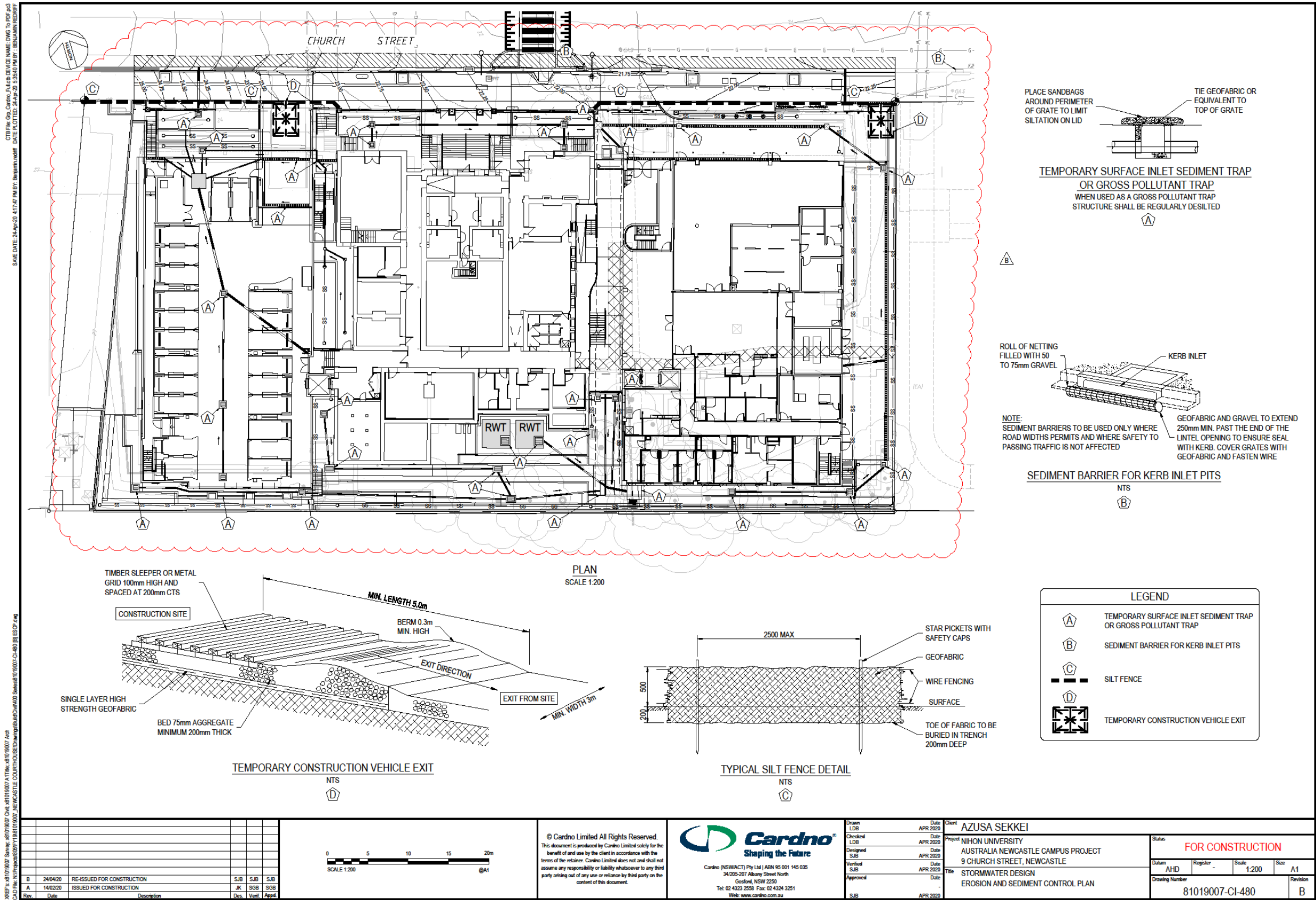
Environmental Aspect	Environmental Impact	Risk Rating (Risks ranked as 'High' or 'Med' are deemed significant)	Legal Requirements	Environmental Actions, Controls and Criteria	Responsibility
Sewer (Trade waste)	Water pollution	Low	NSW - Protection of the Environment Operations (General) Regulation 1998, cl 55, s 31; Local Government Act 1993, s 68 (cl 4 of Part C of the Table)], Consent to Discharge Industrial Trade Wastewater, Special Conditions Schedule 6 paragraphs 1-2	- No paints or other chemical to be poured down drains. - If required, obtain trade waste licence for discharge or local council approval	- Built - PCBU
Land (Acid sulphate soils, contaminated soils, imported fill)	Contaminated waterways Soil contamination	Low	NSW - Contaminated Land Management Act 1997, s 60; Contaminated Land Management Regulation 1998, cl 3 Acid Sulphate Soils Management Advisory Committee SEPP 55 – Remediation of Land	- Potential for acid sulphate soils will be assessed based on the site's proximity to low-lying coastal areas eg. Coastal plains, wetlands and mangroves where the surface elevation is less than five metres above mean sea level. - Stop work if unexpected potentially contaminated soils are encountered. - Obtain waste classification from consultant in accordance with DECC guidelines Environmental Guidelines: Assessment, Classification & Management of Liquid & Non-Liquid Wastes (June 2004) www.environment.nsw.gov.au/waste/envguidlns/index.htm. - Remediation Action Plan has been developed and implemented as per CEMP Section 9.0 - Sign off by Site Auditor may be required to validate clean up. - Any groundwater or ponded rainwater will be tested and classified by consultants prior to disposal. - Check Geotech requirements. Ensure soil classification suitable for land use i.e. Schools, residential, commercial etc. - Unexpected Finds Protocol as shown in CEMP Section 9.6	Built
Land	Contaminated waterways Soil contamination	Medium	NSW - Contaminated Land Management Act 1997, s 60, Contaminated Land Management Regulation 1998, cl 3, Protection of the Environment Operations Act 1997, s 142A-E ANZECC Publication: Organochlorin Pesticides Waste Management Plan (1999)	- If odorous soils (rotten egg gas) or grey/yellowed mottled soils encountered, stop work. - If suspected, consultant to prepare Acid Sulphate Soil Management Plan (ASSMP). - Excavation and neutralisation to be supervised by consultants as per ASSMP. - Excavation works in accordance with Remediation Action Plan - Excavation works in accordance with Erosion and Sediment Control Plan - DBYD to be completed prior to all works - Controls to be implemented as per CEMP Section 5.0, 6.0, 7.0, 8.0	- Built - PCBU
Resources – water, materials, energy	Resource use Landfill Air pollution	Low	NSW - POEO Act Hunter Water Act 1991	- For design and construct jobs, refer to the design specification for ESD requirements and product choices. - Buy local wherever possible to reduce impacts of transport on environment. - Implementation of Built Erosion & Sediment Control Plan & regular monitoring of measures - Implementation of CWMSMP and Reporting	- Built - PCBU
Noise	Community complain	High	NSW - POEO Act (Sections 139, 140) Interim Construction Noise Guideline 2009 POEO (Noise) Regulation 2008 NSW EPA 2017 (NPfl)	- Strict adherence to noise and working hour restrictions. Refer to SSD Consent Conditions. - Use hoarding an/or acoustic mats as required. - Situate generators and plant away from sensitive receivers. - Turn off machinery. Maintain equipment and stop noisy plant until repaired. - No early deliveries or construction vehicles idling before or after approved construction hours. - Implement control measures in accordance with CEMP Section 7.2 - Conduct noise monitoring during works as required by CEMP Section 7.3 - Advise community of noisy and/or disruptive work through Built Community Liaison Plan.	- Built - PCBU

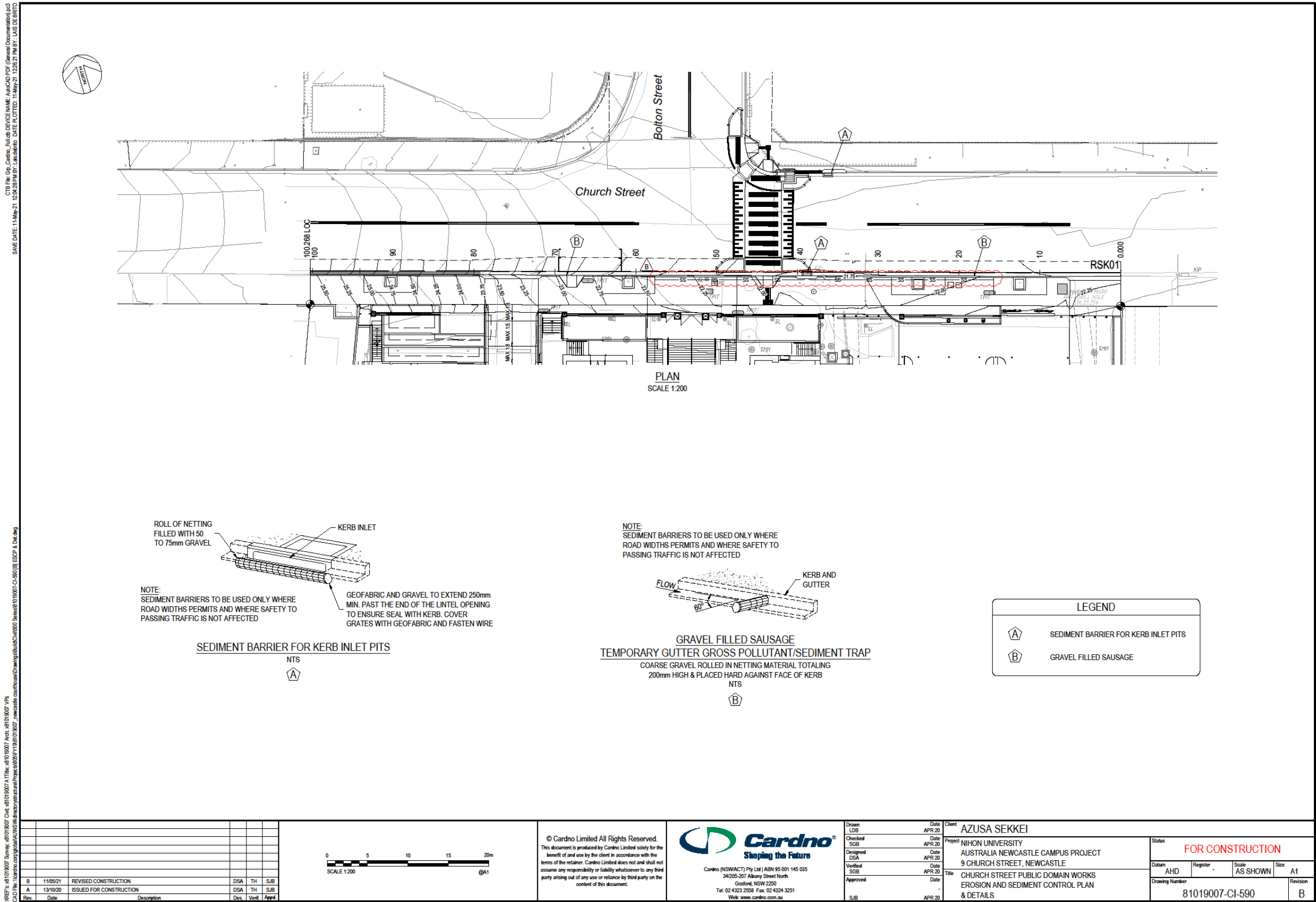
Environmental Aspect	Environmental Impact	Risk Rating (Risks ranked as 'High' or 'Med' are deemed significant)	Legal Requirements	Environmental Actions, Controls and Criteria	Responsibility
Vibration	Community complaints, Damage structures to	Medium	NSW - POEO Act (Sections 139, 140) Environmental Noise Management Assessing Vibration: a technical guideline 2009 DIN 4150-3:1992-02 Structural Vibration	• Strict adherence to vibration and working hour restrictions. Refer to SSD Consent Conditions. • Conduct dilapidation report prior to work starting. • Limit the use of vibratory rollers, rock breakers, impact piling etc adjacent to buildings (>7m). • Regenerated noise may also transfer through bedrock and building structures. • Obtain advice if required • Adherence with noise and vibration limits and criteria as outlined in CNVMSP • Implement control measures in accordance with CEMP Section 7.2 • Conduct vibration monitoring during works as required by CEMP Section 7.3 • Advise community of vibration causing and/or disruptive work through Built Community Liaison Plan.	• Built • PCBU
Community	Community Concerns Noise Restricted access Vibration	High	SSD Conditions of Consent EPA Act 1979 EPA Regulation 2000	• Provide information (e.g. Signage, letterbox drops) to community on programmed works • Provide contact name for inquiries. • Advise locals of “noisy” and/or disruptive work through Built Community Liaison Plan. • If required in noise sensitive areas and/or in response to complaints, engage consultants to undertake monitoring at nominated receivers. • Vehicles will not be permitted to queue outside the site or in residential areas unless a defined area is established which does not adversely impact on neighbours. • Control in accordance with CEMP Section 6.0, 7.0 and relevant sub-plans	• Built
Flora	Destruction of flora Erosion	Low	NSW - State Environmental Planning Policy No 14 - Coastal Wetlands, s 7(1, 5), 7A; Native Vegetation Act 2003, s 12; Forestry Act 1916, s27(1); National Parks and Wildlife Act 1974, s 117(1), 118(1)]	• Review planning documentation to determine the presence of any protected, threatened or significant flora. Obtain approvals as required. • Trees to be protected and retained as required by SSD & City of Newcastle Requirements.	• Built
Waste Litter	Landfill Contamination of waterways Soil contamination	Low	NSW - POEO Act 1997, s 116, s 142, s 143, 144-146NSW - Waste Avoidance and Resource Recovery Act 2001, NSW Crown Lands Act 1989, s 155, Management of Waters and Waterside Lands Regulations - N.S.W., cl 13, POEO (Waste) Regulation 2014, cl 49, 12, 16, 17, 23 Dangerous Goods Act 2008 & Regulation 2014	• Hazardous materials surveys to be completed. • Materials to be removed prior to demolition • Registers and waste disposal requirements as per NSW WHS Regulator and DECC/EPA requirements for removal, storage, transport and disposal. • General site wastes –use one bin system and sort in contractors' yard to produce quantities of material for recycling, reuse, disposal etc. • Do not overfill skip bins. Provide plenty for use. Cover where potential for windblown litter. • All waste to be classified prior to removal offsite • All waste management controls and monitoring to be in accordance with CEMP Section 8.0 and CWMS.	• Built • PCBU
Chemicals	Contamination of waterways Soil contamination Fumes Worker safety	Low	NSW - POEO Act s 116, s 142, NSW -Work Health and Safety Regulation 2011	• Chemicals to be stored in bunded areas (impervious + 110% of largest container) away from stormwater drains & pits. • Refer NSW OHS Regulator Code of Practice for Storage & Handling of Dangerous Goods, DECC Guidelines for Bunding & Spill Management. Appropriate chemicals storage is in conformance with: → AS 1940 The Storage and Handling of Flammable and Combustible Liquids → Storage and Handling of Dangerous Goods State/Territory WHS/OHS Regulator Code of Practice 2005– refer p. 86 • DEC requirements http://www.environment.nsw.gov.au/mao/bundingspill.htm • Ponded water within bunds will not be discharged to stormwater. • Fuel and hydraulic leaks to be cleaned up immediately.	• Built • PCBU

Environmental Aspect	Environmental Impact	Risk Rating (Risks ranked as 'High' or 'Med' are deemed significant)	Legal Requirements	Environmental Actions, Controls and Criteria	Responsibility
				• Drilling muds to be contained within bunds and reused. • Liquid paints NOT to be poured down drains. Spread on waste cardboard or similar and leave to dry. Paint brushes to be rinsed and paint solids allowed to settle. Container of paint solids to be disposed to liquid waste facility. • Construct concrete washout will be off site. • Concrete cuttings to be contained and wetvac to prevent runoff into stormwater drains. • Fuel storage areas must be bunded. Where practicable refuelling shall be undertaken by a mobile facility with appropriate spill control and containment control equipment. • SDS's must be provided to the Foreman prior to a chemical being received on site and by subcontractors using chemicals/products. • All waste management controls and monitoring to be in accordance with CEMP Section 8.0 and CWMS.	
Traffic	Site access restrictions Community safety Pollution	Low	Local Government Requirements Dangerous Goods Act 2008 Dangerous Goods Regulation 2014 Roads Act 1993 (s.138)	• Develop and implement traffic management plans. Submit to local council as required. • Signage and notices regarding disruptions. • Install shakers and wheel wash as required. • Organise regular street sweeping as required. • All loads of soil, demolition wastes, general wastes etc are to be tarped • All traffic and pedestrian management control and monitoring to be in accordance with CEMP Section 6.0 and CTPMSP.	• Built • PCBU
Hazardous Materials (Lead paint)	Air contamination Contaminated waterways Soil contamination	Low	NSW - POEO Act s 142	• If disturbing or removing dust or paint that could contain lead, wear a respirator or dust mask and protective clothing. • Seal the rooms with plastic. • Do not use open-flame torches on lead paint as they create lead fumes. If you must use a heat gun, use it on the lower setting to keep the paint temperature below 370 degrees C. • Avoid using dry-sanding techniques: keep the surface wet to minimise dust. • Don't sweep or use a domestic vacuum cleaner to clean up; lead dust will pass right through it. Use a high-efficiency particulate air (HEPA) vacuum cleaner. These can be hired. • When finished, wipe all surfaces with a damp cloth and high-phosphate detergent. • Wash face and hands before eating, drinking or smoking. • Refer to Lead Safe: A Renovator's Guide to the Dangers of Lead and the Australian Standard AS4361.2 Guide to Lead Paint Management: Part 2 Residential and Commercial Buildings 1998	• Built • PCBU
Hazardous Materials (Asbestos)	Worker health Air contamination Contaminated waterways Soil contamination	High	NSW - POEO Act s 142, NSW POEO (Waste) Regulation 2005, cl 42 Asbestos materials regulations, standards, codes and guidelines Dangerous Goods Act 2008 Dangerous Goods Regulation 2014 EPA Regulation 2000	• A licence subcontractor must be used to demolish, remove, repair or disturb asbestos. • A NSW WHS Regulator asbestos licence is required to remove 10 square metres or more of bonded asbestos • A NSW WHS Regulator licence is required to remove, repair or disturb friable asbestos • Final inspection survey to be conducted by qualified Hygienist & Clearance Certificates issued prior to construction works commencing. • All transport of hazardous waste is to be by a licenced contractor in accordance with NSW EPA Guidelines • All waste management controls and monitoring to be in accordance with CEMP Section 8.0 and CWMS. • Unexpected Finds Protocol as shown in CEMP Section 9.6	• Built • PCBU
Aboriginal heritage Uncovered artefacts	Damage or destruction of heritage items	Low	NSW - Heritage Act 1977, s 146, National Parks and Wildlife Act 1974, s 90-91 EPA Act 1979 & Regulation 2000	• Education and training at site toolbox meetings and induction. • It is illegal to destroy heritage items. • Review local or regional environmental plans, or on the State Heritage Register is to be consulted prior to work starting onsite. • Obtain excavation permit issued by the Heritage Council of NSW if required. • Any heritage relics or sites discovered during construction shall be reported to the NSW Heritage Office. • Work in the subject area to cease until specialist advice is obtained.	• Built • PCBU

Environmental Aspect	Environmental Impact	Risk Rating (Risks ranked as 'High' or 'Med' are deemed significant)	Legal Requirements	Environmental Actions, Controls and Criteria	Responsibility
				- Any evidence of Aboriginal relics discovered during construction shall be reported to the National Parks and Wildlife Service. - The area will be fenced, and signs erected to restrict access. - Heritage consultants may be required to provide advice on demolition/construction processes and finishes. - Implementation of Unexpected Finds Protocol as outlined in CEMP Section 10.2	
European heritage (Court House items) Uncovered artefacts	Damage or destruction of heritage items	High	NSW - Heritage Act 1977, s 146, National Parks and Wildlife Act 1974, s 90-91 EPA Act 1979 & Regulation 2000 Newcastle LEP 2012	- Education and training at site toolbox meetings and induction. It is illegal to destroy heritage items. - Check of the register of the National Estate. - Obtain approval from NPWS (Section 90 consent). - Local Land Council representatives and other Consultants may be required to monitor stripping/excavation works. - Work in the subject area to cease until specialist advice is obtained. - The area will be fenced, and signs erected to restrict access - Personnel to be briefed prior to commencement of groundworks in accordance with CEMP Section 11.0 - Implementation of Unexpected Finds Protocol as outlined in CEMP Section 11.2	- Built - PCBU
Emergency Preparedness	Worker health Air contamination Contaminated waterways Soil contamination	Low	Environmental Protection Act 1994 Environmental Protection Regulation 2008 Work Health and Safety Act 2011 Work Health and Safety Regulations 2011	- Spill kit onsite. - Refer to the SDS for advice and procedures. - All spills must be reported to the Site Manager & cleaned up. Complete BUILT Accident /Incident report & follow SSD Incident Notification, Reporting, and Response Procedure - Implementation of Built Erosion & Sediment Control Plan & regular monitoring of measures - Emergency Preparedness and Incident Response in accordance with CEMP Section 4.7	- Built - PCBU

Appendix A2 – Erosion and Sediment Control Plan





Appendix B – Environmental Schedules



Appendix B1 – Complaints Record

Event Report



No : 007759
Date Of Event : 13/05/2020
Location : Newcastle, Construction, Nihon Univeristy

Reported By : Benjamin Moss
Report Description : TEST_Complaint Report
Event Type : Complaint from Interested Party

1. Primary Event Type

Complaint from Interested Party

TEST_Complaint Report

2. Secondary Event Type

Report Only

3. External Notification Required

Was External Notification Required? Yes

Details

Client

Documents Uploaded

No Files uploaded

4. Location Details

Newcastle - Construction - Nihon Univeristy

Date Of Event 13/05/2020 Time of Incident : 15:10

Exact location :

5. Person/s Involved in the Event

Name	Type	Company	Contact Number
Benjamin Moss	Employee	Built	

6. Person Reporting the Event

Benjamin Moss

7. Event Reported To

Name

Benjamin Moss

Event Reported Time : 13/05/2020 3:10:00 PM

8. Witness(es) to the Event

Name	Type	Company	Contact Number
Benjamin Moss	Employee	Built	

9. Description of Event

TEST - Complaint Report

- Include all details of the complaint as required under the Community Liaison Plan and as recorded on the Community Liaison Register

10. Work Classification

Other:TEST

11. Alcohol or Drugs

Was testing undertaken? : Yes

Alcohol test result: Test not taken

Drug test result: Test not taken

Mobile Use result: Unknown

12. Immediate Actions

TEST

- Immediate actions to resolve the complaint or mitigate disturbance
- Proposed follow-up actions if known
- Provide any additional information required

13. Distribution List

Name	Job Title	Location
Amanda Nicolo	HSE Coordinator	Newcastle
Ben Bates	Site Manager	Nihon Univeristy
Benjamin Moss	Project Manager	Nihon Univeristy
Bill Fousteris	Safety Advisor	
Chloe Mitchell	Administrator	
Clare Gallagher	Sustainability Engineer	
Corey Monk	Director of Strategy and Marketing	
Doug Giffin	Regional HSE Manager North	
Jessica Mendes	HSEQ Administrator	
Joe Karten	Sustainability Manager	4 Parramatta Square
Lee Schiller	Regional HSE Manager - South	
Leif Aleksic	Site Manager	Nihon Univeristy
Liam Tamsett	Site Foreman	Nihon Univeristy
Michael Louis	HSE Coordinator	Newcastle
Paul Farrell	Director HSE	
Rob McLaughlin	Construction Manager	Nihon Univeristy
Scott Grover	HSEQ Manager	SA
Shane Marcus	HSE Manager QLD	
Stacey Karppinen	Marketing Communications Manager	
Steve Parker	Safety Advisor	
Tanya Lim	National Marketing & Communications Manager	



Appendix B2 – Community Liaison Register

Community Liaison Register				Built.			
Project: Nihon University				Complaints Register		Last Updated: 21/01/2020	
REF ID	DATE / TIME RECEIVED	RECEIVED FROM	DESCRIPTION	DATE / TIME RESPONDED	RESPONSE BY	DESCRIPTION	CLOSED (Y / N)
2001-CC001	21/01/2020 1:00pm	Name	Brief description of the complaint	21/01/2020 4:00pm	Built person responding	Brief description of the response including any actions taken or planned, responses received, and outstanding issues.	Y
							N

Community Liaison Register				Built.			
Project: Nihon University				Notices Register		Last Updated: 21/01/20	
REF ID	DATE ISSUED	ISSUED TO	ISSUED BY	METHOD	DESCRIPTION	RESPONSES RECEIVED / DETAILS	CLOSED (Y / N)
2001-CN001	21/01/2020	Name / Group / All	Brief description of the complaint	Letter Email Doorknock Meeting	Brief description of community notice or consultation.	Brief description of the responses received, actions taken or planned, and any outstanding issues.	Y
							N

Community Liaison Register					Built.		
Project: Nihon University			Queries Register			Last Updated: 21/01/20	
REF ID	DATE / TIME RECEIVED	RECEIVED FROM	DESCRIPTION	DATE / TIME RESPONDED	RESPONSE BY	DESCRIPTION	CLOSED (Y / N)
2001-CQ001	21/01/2020 12:00pm	Name	Brief description of the query or concern	21/01/2020 4:00pm	Built person responding	Brief description of the response including any actions taken or planned, responses received, and outstanding issues.	Y
							N



Appendix B3 – Waste Management Report

Recycling Site Reporting

Details

Form id	123590
Created at	13/05/2020
Completed at	13/05/2020
Status	Complete
Respondent	Benjamin Moss
Division	NSW
Business unit	NSW Construction
Department	
Project	Nihon University Newcastle Campus
Subcontractor	[Test/Training Subcontractor]

GUIDANCE NOTES ON HOW TO COMPLETE THE FORM

Record the tonnes of waste recycled by category for the month, and the tonnes of non-recyclable general waste sent to landfill.

Please enter all figures in tonnes.

If no waste was sent for the category, please enter 0 rather than leaving the field blank so the form gets marked as complete.

If your recycling reports are provided in volume (m3), please apply the following conversion factors before entering into the form:

- Metal = 0.9t/m3
- Concrete, Masonry & Tile = 1.3t/m3
- Timber = 0.3t/m3
- Plasterboard = 0.2t/m3
- Commingled Recycling = 0.9t/m3
- Cardboard = 0.1t/m3
- Plastic = 0.2t/m3
- Glass = 0.3t/m3
- Polystyrene = 0.01t/m3
- General Waste = 0.2t/m3
- Excavation Waste = 1.6t/m3

Month	2020/05
-------	---------

Select the year/month for which you're recording waste.

Metal	0
-------	---

Includes steel, aluminium, copper etc (Tonnes).

Concrete, Masonry and Tile	0
----------------------------	---

Includes clean and unclean concrete, concrete blocks, bricks, pavers, asphalt and ceramic and roof tiles (Tonnes).

Timber	0
--------	---

Includes green waste, however excludes excavation waste (Tonnes).

Plasterboard	0
--------------	---

(Tonnes).

Comingled Recycling	0
---------------------	---

Includes items recycled that are not individually

Recycling Site Reporting

identified such as insulation, or are recycled but not displayed in this list (Tonnes).

Cardboard 0

Includes paper (Tonnes).

Plastic 0

(Tonnes).

Glass 0

(Tonnes).

Polystyrene 0

(Tonnes).

General Waste 0

All non-recycled material, including components of recyclable material that are not recovered (Tonnes).

Excavation Waste 0

Includes soil, VENM, ENM, GSW etc, excludes green waste (Tonnes).

Hazardous Waste 0

Includes asbestos, lead, PCBs, and contaminated soils, e.g. hydrocarbons and acid sulphate soils (Tonnes).

Additional

Photos

Attachments

- No file attachments

Actions Summary

ID	Due date	Date closed	Action description	Status	Last Comment
Actions					



Appendix B4 – Pre-Commencement Assessment & Meeting Record

Pre-Commencement Assessment (PCA)

Details	
Form id	123592
Created at	13/05/2020
Completed at	
Status	In Progress
Respondent	Benjamin Moss
Division	NSW
Business unit	NSW Construction
Department	
Project	Nihon University Newcastle Campus
Subcontractor	[Test/Training Subcontractor]
Score	100%

You are here because you received an email from us asking you to prepare for a pre-commencement health and safety meeting on the upcoming project. In preparation for the pre-commencement meeting we ask that you complete a questionnaire about the type of work you will be undertaking. These questions are designed to help improve our health and safety controls and also commences the important process of consultation between your organisation and Built.

The completed questionnaire will generate an agenda for the pre-commencement health and safety meeting and ensure the pre-commencement meeting is specific to the scope of works that you will be undertaking on this project.

1. Subcontractor Details

a) Proposed Key Staff

At least 1 supervisor must be listed. All above persons will be invited to the project correspondence platform as indicated below. Please ensure the details entered are correct so an account can be set up.

Name	Role	Phone	Address	Email
Test	Test	49494949	Test	test

b) What previous projects has the Supervisor supervised?

List previous projects. e.g type of build (apartments, commercial building, hospital ect) and approximate value

Test

c) What qualifications, licences or certificates of competency does the supervisor have?

This would include; Accredited training in WHS/OHS, National licences, Certificate of attainments, Trade Certificates

Test

d) Do you intend to engage secondary sub-contractors on this project?

No, we do not intend to use secondary subcontractors in our scope

Secondary Subcontractor Details (if applicable)

Company Name	Contact Name	Email	Phone	Brief description of works
--------------	--------------	-------	-------	----------------------------

Pre-Commencement Assessment (PCA)

e) Will you be working on site for more than 1 week?

Yes

f) Lead Time

List confirmed lead time on major equipment and materials

Equipment/Materials	Lead time (Weeks)
Test	7

2. Occupational/Work Health & Safety

a) High Risk Construction Work and Safe Work Method Statements

Please select the High Risk Construction Work (HRCW) that will be undertaken in your scope of work. .

HRCW is defined by the WHS Regulation or OHS Regulation in your state by the Regulator.

- ☒ involves a risk of a person falling more than 2 metres
- ☒ involves demolition of an element of a structure that is load-bearing or otherwise related to the physical integrity of the structure or (Vic/WA only) Involves demolition
- ☒ Involves removal of, or is likely to involve the disturbance of, asbestos
- ☒ involves structural alterations or repairs that require temporary support to prevent collapse
- ☒ is carried out in or near a shaft or trench with an excavated depth greater than 1.5 metres
- ☒ is carried out on or near pressurised gas distribution mains or piping,
- ☒ is carried out in an area that may have a contaminated or flammable atmosphere
- ☒ is carried out on, in or adjacent to a road, railway, or other traffic corridor
- ☒ is carried out in an area at a workplace in which there is any movement of powered mobile plant

Describe the way Built will be receiving your SWMS for review

By the simpliSWMS platform

Describe the way you will confirm that your SWMS satisfies the requirement of the WHS/OHS Regulation and Built

By the review process in the simpliSWMS platform

Please identify who your SWMS Creator will be

Test

Information required is their name, email address and phone number. Please note, a simpliSWMS invitation will be sent by the project team for your company.

Describe the steps that will be taken to consult with workers to allow them to contribute to the SWMS, including any subsequent revisions

Test

Describe the process for monitoring your workers' compliance to the SWMS.

Test

Built requires that the SWMS are monitored as soon as work commences, and regularly during the course of the project (more frequently if the risks are greater).

Pre-Commencement Assessment (PCA)

How will you manage any workers or your secondary subcontractors who are non English speaking workers?

Test

b) Hazardous Other Tasks (HOTS)

Select from the below Hazardous Other Tasks that will be performed by your workers.

- ☒ Use of concrete coring or cutting machines
- ☒ Use of fuel driven tools or equipment

How do you provide evidence of information, instruction or training for the selected Hazardous Other Tasks?

Test

This may include SOP's, Training manuals, Specialised training etc

How do you provide and record training for your workers use of hazardous substance and/or dangerous goods?

Test

This may include SOP's, specialised training, SDS Awareness courses etc

c) Drugs and Alcohol

The Built Drug and Alcohol Management Plan (DAMP) will be implemented on this project. Do you foresee any issues in the implementation of the DAMP with your workforce?

Yes. We have reviewed the DAMP and will leave comment at the bottom of this PCA with the identified issues.

To review the DAMP, follow the link identified at the bottom of this PCA

d) Health Surveillance and Monitoring

Which of the following hazards will your workers be exposed to on this project?

- ☒ None of the above

Please note that many of the below hazards are High Risk Construction Work and require a SWMS (Contaminated atmosphere)

e) Inspections

Do you agree to undertake a weekly documented inspection of your work areas in respect of your specific scope of work and provide Built with a copy of actions arising from the inspection?

Yes

f) Emergency Procedures and Injury Management

Please provide details of emergency situations your workers may become involved in that are specific to your scope of works including an outline of the training, equipment and competencies required.

Test

Pre-Commencement Assessment (PCA)

Example emergency situations include; plant roll-over, fall arrest in harness, trench collapse

Do your workers have any specialised emergency training? Where "yes" please outline.

Test

Training may include; first aid, fire extinguisher use, EWP recovery. harness recovery etc

Built will provide first aid facilities on site. In the event your worker requires further medical assessment (not requiring an ambulance), what is your process for ensuring the injured person is able to get to an off site medical facility safely?

Test

Do you have a List of Suitable Duties (LoSD) for a treating Doctor to review in the event your worker is injured on site.

Yes. We have an established LoSD for our workforce

A LoSD will allow the treating Doctor to complete an educated assessment of duties the worker may be able to perform on site if it is assessed they have the ability to. A template is available to you in this PCA below

g) Equipment and Mobile Plant

Do you intend to bring moving mobile plant to site?

Yes

What moving mobile plant will you bring to site?

☒ EWP (Elevated work platforms)
☒ Excavator or Skid steer
☒ Other

Do you have a maintenance schedule or similar for planned, routine maintenance of plant and equipment?

Yes. We have an established regime for our plant and equipment

Plant or Equipment would include; Electrical tools and leads Lasers and survey equipment Lifting gear Etc

Do you acknowledge that Boom type EWPs are required to have secondary guarding system installed before the plant is permitted on site where work is to be carried out underneath a structure?

Yes

Secondary guarding is an engineering control implemented by the supplier to prevent operators being crushed by the plant

i) Reference documents

Links to Built documents

Pre-Commencement Assessment (PCA)

HSE Requirements for Subcontractors

DAMP

DAMP (NSW Specific)

BSMS Scaffold

BSMS Electrical

BSMS Demolition

BSMS Asbestos

BSMS Formwork Reo Pour

BSMS Temporary Works

HSE-041 (Vic_WA) SWMS review HRCW

HSE-041 SWMS review HRCW

Suitable Duties Outline

Safe Work Method Statement useful links

simpliSWMS

Example SWMS

SWMS Template

SWMS Fact Sheet

3. Quality

Subcontractors engaged on Built Projects shall establish, implement and maintain a Project Specific Quality Assurance System. Subcontractors will be expected to provide completed ITP/checklists (for respective areas) as required by Built for ongoing & final inspection status, for the relevant construction phases of Superstructure, Services, Fit out, Finishes works

a) Please select all trades which apply to your scope of works

☒ None of the above

Ensure to provide all template project specific documentation for QA deliverables when completing Pre Commencement Assessment. (Documentation Uploaded to this PCA form)

Documentation Uploaded to this PCA form

c) Inspection & Test Plans, Records/Checklists

(an Example is available at request)

Pre-Commencement Assessment (PCA)

Check the below boxes (where applicable) to acknowledge agreement

- ☒ Inspection and Test Plans using a format acceptable by BUILT shall be generated for the constituent phases of the Trade Package defining
- ☒ The sequence of performing all aspects of the works (where applicable) for generation of procurement (shop drawings, submission of samples), supply of goods/materials, offsite manufacture / fabrication, site construction / installation, final / completion activities, including servicing & maintenance.
- ☒ The SC's Quality Control/Inspection points which shall include in-coming goods inspection, in-process inspection, final inspection and the responsible party or person for fulfilling the inspection activity, must be noted on the Work Flow Diagram / Inspection and Test Plan.
- ☒ Where the Subcontractor uses separately Warranted Products (ie: paint system, waterproofing) the SC shall ensure the Supplier carries out site inspections and verifies that product/system has been installed / applicated to manufacturer's recommendations
- ☒ The acceptance criteria or references to applicable procedures, specification clauses, Australian Standards etc.
- ☒ The Records/Checklists to be generated and maintained by the Subcontractor verifying compliance.
- ☒ Inspection Records/Checklists shall identify the inspection criteria to provide the objective evidence that the requirements of the project have been met. Inspection Records/Checklists shall be generated to reflect inspection and or tests to be performed at the nominated points. Inspections to be carried out should be logical and reflective of what would be normally carried out by the Subcontractor.
- ☒ Installation/Final inspection records
- ☒ Commissioning/Testing records

Where the Subcontractor uses manufacturer warranted products (e.g. paint systems, waterproofing) the Subcontractor shall ensure the manufacturer carries out site inspections and verifies that product/system has been installed / applicated to manufacturer's recommendations.

Reference Documents

PD19-18 Subcontractor Quality Plan Review Checklist

PD19-17a Subcontractor QA Plan (example)

PD19-18a Subcontractor ITP Review Template

PD19-10 Measuring Test Equipment Register

Agree

4. Sustainability

a) Green Standard

Accept

Built is committed to the use of healthy and sustainable materials across all our projects. To that end, we request a forecast of all relevant

Pre-Commencement Assessment (PCA)

materials that you or your subcontractors will use
if the project you are on's total value is over \$25
Million

b) Monthly Reporting

Please answer the below regarding monthly reporting for Sustainability

Will you be disposing of materials other than in onsite bins? No

Will you be using more than 100L of fuel on site? No

5. Finalisation

a) Subcontractor Feedback

List details below of person completing this form. All fields must be filled

Full Name	Phone Number	Email Address
Test	4949494949	Test

Please provide any feedback you would like to give Built regarding this Pre-Commencement Assessment questionnaire.

b) Built Finalisation

Built Project Staff to Complete

PCA assessed by;

This section is to be completed by Built to identify the assessor of the PCA.

Reviewed by Site Management and; Meeting Required - Safety & Quality

6. Meeting Minutes

Minutes of PCA Meeting Test

PCA Review Meeting date 13/05/2020

Additional

Photos

Attachments

- No file attachments

Actions Summary

ID	Due date	Date closed	Action description	Status	Last Comment
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Pre-Commencement Assessment (PCA)

Actions



Appendix B5 – Site Induction Record

HSE-001 Worker Registration (Part A)

Induction Sticker No.



This form supports the new software system **Built Safe** (powered by *Lucidity*) and is to be printed out and completed by workers as part of their site induction. Worker will lay out their tickets on this form and Built will take a photo of this form so that this may be recorded against Part B of the digital record of the worker's registration.

1. Worker details			
First Name:		Last Name:	
Date of Birth:		Occupation:	
First Language:		Postcode:	
Interpretation Assistance required:	Yes ☐ No ☐		
Are you of Aboriginal or Torres Strait Islander descent? Yes ☐ No ☐ Note: the information collected enables Built to measure progress and success of our Aboriginal and Torres Strait Islander Employment Statement of Support. Information collected shall only be used and disclosed in accordance with privacy legislation.			
2. General Industry Induction			
State where your induction was held (<i>White Card, Green Card</i>)	NSW: ☐ Vic: ☐ Qld: ☐ WA: ☐ ACT: ☐ SA: ☐ NT: ☐ TAS: ☐		
	<i>Note; Proof of General Industry Induction is required to be presented and photographed during your worker registration on site.</i>		
3. Construction Industry Experience (tick only one of the boxes)			
Are you an Apprentice or Cadet?	Yes ☐ No ☐		
Less than 1 year: ☐	2 years to 5 years: ☐	5 to 10 years: ☐	10 years plus: ☐
Trade:			
4. Employment Details			
Name of company you will be working for:			
How long have you been employed by this company:			
Are you a labour hire employee:	Yes ☐ No ☐		
How long have been employed by the labour hire company:			
5. Plant Operators			
Will you be operating powered mobile plant :	Yes ☐ No ☐		
6. Licences			
Do you have a licence for High Risk Work:	Yes ☐ No ☐		
Do you have a trade licence:	Yes ☐ No ☐		
	<i>Note; Proof of High Risk Work Licence and Trade Licences are required to be presented and photographed during your worker registration on site.</i>		
7. Medical conditions			
If you have a medical condition that you wish Built to be notified of please notify the Built First Aider or Supervisor. This information will be kept in strict confidence. (Complete Built Form HSE-017 Worker Medical Emergency Information)			
8. Employer contact details in the event of a medical emergency			
Name:		Phone No.:	

Once this document has been uploaded to the Worker's record in HSE-001 Part B, this document may be filed or destroyed in a secured manner.



Appendix B6 – Site Meeting Record

Meeting

Details	
Form id	123596
Created at	13/05/2020
Completed at	13/05/2020
Status	Complete
Respondent	Benjamin Moss
Division	NSW
Business unit	NSW Construction
Department	
Project	Nihon University Newcastle Campus
Subcontractor	[Test/Training Subcontractor]
Type of Meeting	Site-Wide Address
Title of Activity, Process or Section of Work Being Reviewed	Earthworks
Built Attendance	

Built Staff and CW's
Benjamin Moss

Others in Attendance	Name	Company
	Subcontractor	
	Consultant	

Minutes of Meeting	Environmental Issues specific to groundworks
<i>Exclude any actions from this field</i>	Controls listed within CEMP and Sub-Plans
	Permits required for works
	Ongoing monitoring activities
	Upcoming High Risk Construction Works

Meeting

Additional

- Photos
- Attachments
- *No file attachments*

Actions Summary

ID	Due date	Date closed	Action description	Status	Last Comment
Actions					



Appendix B7 – Risk Workshop Record

Meeting

Details	
Form id	123519
Created at	13/05/2020
Completed at	13/05/2020
Status	Complete
Respondent	Benjamin Moss
Division	NSW
Business unit	NSW Construction
Department	
Project	Nihon University Newcastle Campus
Subcontractor	[Test/Training Subcontractor]
Type of Meeting	Risk Workshop
Built person responsible for this Risk Workshop	Benjamin Moss
<i>This person is responsible for the coordination of the stakeholders, engaging in meaningful consultation during workshop, identification of hold points, the identification of actions and permitting the activity to commence.</i>	
Title of Activity, Process or Section of Work Being Reviewed	Test Template
Built Attendance	

Built Staff and CW's
Michael Louis

Others in Attendance	Name	Company
	Test	

Risk Workshop Items Discussed	☒ Logistics / Deliveries ☒ Engineering (Slab loadings, Geotech) ☒ High Risk Work Licenses / Competencies ☒ Plant to be used ☒ Live services ☒ Emergency Procedures ☒ Hold points ☒ Supervision ☒ Sequence / Methodologies ☒ Quality ☒ Materials (Hazardous Subs / Dangerous Goods) ☒ Falling Objects ☒ PPE ☒ Other
-------------------------------	--

Meeting

Logistics / Deliveries	Test
<i>Discuss the vehicles used Identify the path of travel Heights, weights and how many vehicles. Discuss Chain of Responsibilities such as; the securing of loads, unloading areas, lay down areas, time on the road, wide-loads</i>	
Engineering (Slab loadings, Geotech)	Test
<i>Engineering can include; Slab loading, Geo technical advice, lifting apparatus, lifting points etc Discuss the known engineering of the work area Identify any further engineering confirmations</i>	
High Risk Work Licenses / Competencies	Test
<i>Discuss the requirement for training and High Risk Work Licenses. What competencies are required for the workers completing the work and the supervision. (Refer to HSE Plan Appendix 8)</i>	
Plant to be used	Test
<i>Identify the major items of plant, their weight and size and impact on any suspended slabs or work near excavations Discuss the Vehicle Movement Plan</i>	
Live services	Test
<i>What are the services that need to be managed. How will these services be managed. Power, water, data, sewer etc</i>	
Emergency Procedures	Test
<i>Discuss the activity specific rescue procedures. What equipment is required for the emergency procedure. Who is trained to use the emergency equipment</i>	
Hold Points	Test
<i>What are the items that are to be confirmed prior to the activity commencing. What are the hold points that will stop the activity once commenced.</i>	
Supervision	Test
<i>Identify the Supervisors who will have a lead role in this activity, both subcontractors and Built. How will the Supervisors communicate this Risk Workshop to workers? How will the Supervisors monitor and record implementation of this Risk Workshop?</i>	
Sequence / Methodologies	Test
<i>Discuss the methodologies of the activity. How will stakeholders be consulted with these methodologies and sequencing</i>	

Meeting

Quality	Test
<i>What inspections are required? What confirmations are required?</i>	
Materials	Test
<i>What materials will be used? What confirmations are required before their arrival to site? What training or prevention measures are required for Haz Subs / DGs?</i>	
Falling Objects	Test
<i>Where could objects fall? What are the preventative measures? What are the mitigation measures?</i>	
PPE	Test
<i>What activity specific PPE is required. Who is trained to use the PPE</i>	
Other	Test
<i>Outline any other discussions had relating to the Risk Workshop</i>	
Minutes of Meeting	Test
<i>Exclude any actions from this field</i>	
Status of Risk Workshop	Activity ok to commence

Additional

- Photos
- Attachments
- *No file attachments*

Actions Summary

ID	Due date	Date closed	Action description	Status	Last Comment
Actions					



Appendix B8 – Environmental Incident Report

Event Report



No : 007759
Date Of Event : 13/05/2020
Location : Newcastle, Construction, Nihon Univeristy

Reported By : Benjamin Moss
Report Description : TEST_Environmental Incident Report
Event Type : Environmental Incident

1. Primary Event Type

Environmental Incident

TEST_Environmental Incident Report

2. Secondary Event Type

Visit from a Regulator (Environment)

3. External Notification Required

Was External Notification Required? Yes

Details

Client Environmental Agency

Other : Planning Secretary

Documents Uploaded

No Files uploaded

4. Location Details

Newcastle - Construction - Nihon Univeristy

Date Of Event 13/05/2020 Time of Incident : 15:10

Exact location :

5. Person/s Involved in the Event

Name	Type	Company	Contact Number
Benjamin Moss	Employee	Built	

6. Person Reporting the Event

Benjamin Moss

7. Event Reported To

Name

Benjamin Moss

Event Reported Time : 13/05/2020 3:10:00 PM

8. Witness(es) to the Event

Name	Type	Company	Contact Number
Benjamin Moss	Employee	Built	

9. Description of Event

TEST - Environmental Incident Report

- Details to be included as required by SSD-9787 Development Consent Conditions A26 & A27 including Appendix 2 as detailed within the CEMP Section 4.7.2

10. Work Classification

Other:TEST

11. Alcohol or Drugs

Was testing undertaken? : Yes

Alcohol test result: Unknown

Drug test result: Unknown

Mobile Use result: Unknown

12. Immediate Actions

TEST

- Immediate actions to make area safe and minimise impacts on the environment and/or human health and safety

- Proposed follow-up actions if known

13. Distribution List

Name	Job Title	Location
Amanda Nicolò	HSE Coordinator	Newcastle
Ben Bates	Site Manager	Nihon Univeristy
Benjamin Moss	Project Manager	Nihon Univeristy
Bill Fousteris	Safety Advisor	
Brett Mason	Managing Director	
Chloe Mitchell	Administrator	
Clare Gallagher	Sustainability Engineer	
Corey Monk	Director of Strategy and Marketing	
Doug Giffin	Regional HSE Manager North	
Jessica Mendes	HSEQ Administrator	
Joe Karten	Sustainability Manager	4 Parramatta Square
Lee Schiller	Regional HSE Manager - South	
Leif Aleksic	Site Manager	Nihon Univeristy
Liam Tamsett	Site Foreman	Nihon Univeristy
Marco Rossi	Executive Chairman	
Michael Louis	HSE Coordinator	Newcastle
Mitch Fatcher	Director	Business Unit
Paul Farrell	Director HSE	
Rob McLaughlin	Construction Manager	Nihon Univeristy
Scott Grover	HSEQ Manager	SA
Shane Marcus	HSE Manager QLD	
Stacey Karpinen	Marketing Communications Manager	
Steve Parker	Safety Advisor	
Tanya Lim	National Marketing & Communications Manager	



Appendix B9 – Site Inspection Checklist

Site Inspection

Details

Form id

123598

Created at

13/05/2020

Completed at

13/05/2020

Status

Complete

Respondent

Benjamin Moss

Division

NSW

Business unit

NSW Construction

Department

Project

Nihon University Newcastle Campus

Subcontractor

[Test/Training Subcontractor]

Type of Site Inspection

Environmental Inspection

Built Attendance

Include the person who is logged in as well.

Name

Benjamin Moss

Others in attendance

Subcontractor Name	Persons Name
	Subcontractor

Areas or Locations Inspected

Test

Identify the area/s reviewed during the inspection.

The may include; whole of project, certain levels or certain locations.

Summary of inspection

Test

This may include; common checks, activities or items reviewed, good practices observed or general commentary of the inspection. Note; all actions need to be registered in the "Actions" area at the bottom of this page.

- Checks of control measures implemented

- Check of work activities

- Note any NCRs

- Attach photographic evidence of areas, controls and works inspected

High Potential Hazard Reporting

High Potential Classification <i>Select from the drop down list those which apply. Use the Add button to add one line per issue</i>	Trade/Process <i>State the trade who has been identified as being responsible for the hazard. If unknown please state 'Unknown'</i>	Comments <i>Describe the situation that is classified as High Potential</i>
Traffic Management	Test	Test
Struck by Mobile Plant	Test	Test

Site Inspection

Contamination	Test	Test
---------------	------	------

Additional

- Photos
- Attachments
- No file attachments

Actions Summary

ID	Due date	Date closed	Action description	Status	Last Comment
----	----------	-------------	--------------------	--------	--------------

Actions



Appendix B10 – Monitoring Checklist

Monitoring

Details

Form id

123600

Created at

13/05/2020

Completed at

13/05/2020

Status

Complete

Respondent

Benjamin Moss

Division

NSW

Business unit

NSW Construction

Department

Project

Nihon University Newcastle Campus

Subcontractor

[Test/Training Subcontractor]

Monitoring Activity

SWMS Monitoring

Outline of activity being monitored

TEST
- Demolition

Documents referenced during monitoring

TEST
- SWMS 001 - Demolition
- Work Zone Permit
- Demolition Methodology
- HSE 035 - HSE Inspection Guide

This could include; SWMS, Permit, Traffic Management Plans, Methodology documents, Engineering advice, SOP/JSA. Where possible provide the exact name and version number of the document.

Summary of monitoring

TEST
- Works in accordance with SWMS 001 & Permit Conditions
- Environmental Controls implemented and being maintained
- Plant operators licenced and logbooks signed

NOTE: Attach photos/documents relevant to monitoring activity

Was work required to be stopped?

No

High Potential Hazard Reporting

High Potential Select from the drop down list those which apply. Use the Add button to add one line per issue	Trade/process State the trade who has been identified as being responsible for the hazard. If unknown please state 'Unknown'	Comments Describe the situation that is classified as High Potential
Structural	Demolition	TEST
Traffic Management	Waste Management	TEST
Struck by Mobile Plant	Demolition	TEST

Built staff in attendance

Include the person who is logged in to the software in this section as well as the other attendees

Attendee name

Benjamin Moss

Monitoring

Others in attendance

This could include workers involved in the activity, the subcontractor supervisor or others

Subcontractor name	Persons name
Subcontractor	

Additional

Photos

Attachments

- No file attachments

Actions Summary

ID	Due date	Date closed	Action description	Status	Last Comment
Actions					



Appendix B11 – Driver Code of Conduct

Driver Code of Conduct Induction Form

Project Name:	Nihon University Newcastle Campus	Project No:	201229
Supplier / Contractor: Delivery			
Contractor:			
Name of Driver:			
Vehicle Registration No:		Unit No:	
Date:			

The project is committed to providing a safe and healthy workplace. You are required to read, review and agree to comply with these conditions before signing the form.

General Industry Card

The driver must produce a General Industry Card when entering the site.

Competencies / HRCW Licence

The driver or worker must produce a competency or HRCW Licence as required.

Personal Protective Equipment (PPE)

The driver must wear a safety hard hat, steel capped boots and safety vest at all times when out of the cab.

Loading and Unloading of Trucks

Unloading must not commence until a safe unloading method is understood and agreed by both delivery and site personal.

Designated Routes

All drivers to take the designated route specified on the attached induction.

Signatures

I have read and understand the above requirements and the safety items listed overleaf. I am aware that failure to agree to comply with the site requirements may result in my removal from site.

Drivers

Date:

Signature:

I have explained these requirements and Built's standard safety requirements to the above driver and have explained and ticked the relevant boxes on the 'Driver's Basic Safety Site Induction' overleaf.

Site Personnel:

Date:

Once signed, this form must be held by the delivery driver at all times and must be presented on request.

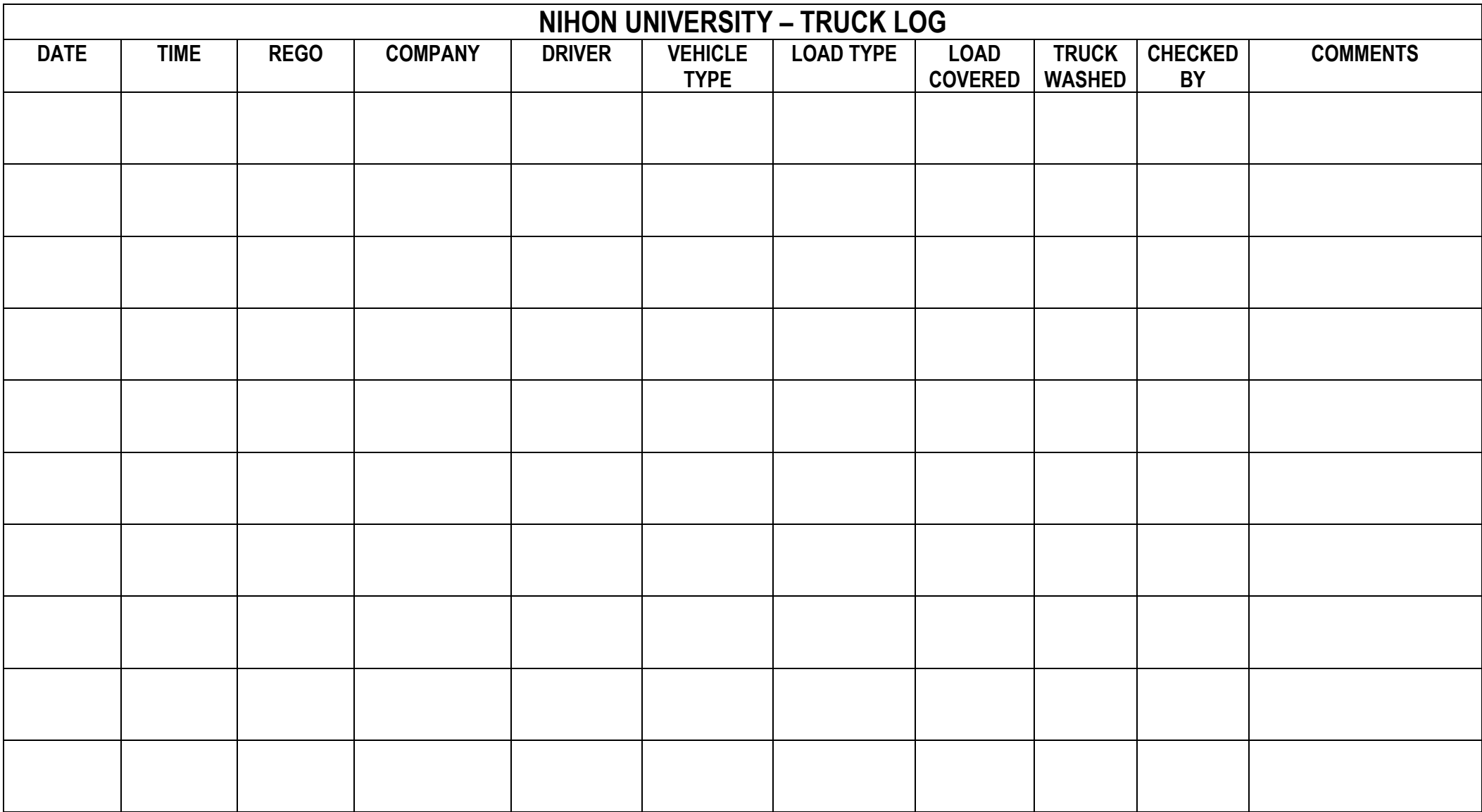
Delivery driver basic safety site induction

This form constitutes a basic safety site induction for deliveries or pick-ups. Communicate the following safety requirements to the driver. The driver must then sign the form on the previous page, accepting that he/she has understood the site requirements for entry, unloading or loading and exiting the work site.

- ☐ The Site Workplace Safety and Health Coordinator is **Michael Louis**
- ☐ A Safety and Health Committee is established. The project intends to monitor and review the effectiveness of its control measures through the Safety & Health Committee.
- ☐ Site UHF radio channel is: (used to contact Supervisor, Foreman or Leading Hand)
- ☐ Site First Aid Officers are: **All Built Personnel**
- ☐ First aid kits are held in: **First Aid Room in Level 1 Heritage Courthouse Building**
- ☐ All accidents and incidents must be reported to site management
- ☐ All vehicles should be fitted with reverse 'quacker' alarms
- ☐ PPE is always to be worn (Safety Boots, Vest, Hard Hat)
- ☐ Emergency Procedure requires all instructions given by site staff to be obeyed. Leave site if directed to.
- ☐ Daily Pre-start (or SWMS if delivery involves high risk activities) shall encompass all delivery hazards and be communicated to persons involved with the unloading before unloading commences.
- ☐ Speed limit of **5km/h** and signage must be obeyed
- ☐ Be aware of pedestrians when entering or leaving site
- ☐ If spotter cannot be seen in the truck mirrors, do not reverse
- ☐ Watch for and avoid other construction machinery
- ☐ Park vehicle away from work areas as directed by site personnel. Do not park behind working or parked construction equipment.
- ☐ Before approaching work machinery, make eye contact with the operator
- ☐ Do not untie load until stationary at unloading point
- ☐ All loads to be covered and transported with enviro tarp, tarps are to be automatic to reduce risk of fall from height
- ☐ 'Hiab' type cranes are to be operated by certified persons. Loads to be slung by certified dogman.
- ☐ Lift chains must be fitted with safety latch lock hooks and must be stamped with current testing certification
- ☐ Lifting equipment for unloading pipes may be fitted with C type lifting clamp but must be in test period stamped on the SWL tag.
- ☐ When accessing loads to secure lifting equipment, load must be stable to allow access. Some form of fall prevention is required if load is over 2.0m above the ground.
- ☐ No load is to pass over any barricade or person
- ☐ Keep all persons out of arc of slew
- ☐ If a forklift or similar machine is used for unloading, the operator must be certified.
- ☐ Concrete trucks must wash out at designated points.
- ☐ Tip trucks must lower hoists before proceeding from dump point.
- ☐ Driver must stay within cab during loading.
- ☐ Truck/trailer combos must clean debris from draw bar before exiting site.
- ☐ When ground is muddy and/or it is raining, all vehicle wheels must be washed at designated exit points, no spoil is to exit site.
- ☐ Ensure no person is standing behind tilt tray when tilting and unloading or loading.
- ☐ Before using your mobile phone, stop work or stop vehicle, park in safe position and then make or take call.
- ☐ Drivers are to respect the local community incl. no idling in front of homes, no littering, approved hours



Appendix B12 – Daily Truck Log





Appendix B13 – Daily Traffic Control Inspection Checklist

DAILY TRAFFIC & PEDESTRIAN CONTROL CHECKLIST



Qualified Traffic Controller:							
TCP Reference:							
Checklist Items: - Traffic Control signage placement and type is in accordance with approved TCP's - Protective barricades in place (where applicable) - Signage is secured to prevent accidental movement e.g. blown over in strong winds - Signage has not been damaged, tampered with and is not obstructed from view e.g. by vehicles - Traffic Control personnel are equipped with appropriate PPE - Footpaths free and clear of debris and trip hazards for safe access - Work zone, access driveways, and roads free of debris from vehicles/plant - Vehicles/plant parked within Work Zone have engines switched off where applicable - Access gates closed and monitored (opened only for vehicle ingress/egress) NOTIFY BUILT SITE MANAGEMENT IF ANY IMMEDIATE CONCERNS / ISSUES							
DATE OF WEEK COMMENCING:	MON	TUES	WED	THUR	FRI	SAT	SUN
Set Up Time:							
<i>Tick Inspection Time</i>							
07:00							
08:00							
09:00							
10:00							
11:00							
12:00							
13:00							
14:00							
15:00							
16:00							
17:00							
18:00							
Removal Time:							
Footpath / Wok Zone / Access Inspections	AM (time)						
	PM (time)						
Comments / Issues:							
Mon							
Tue							
Wed							
Thu							
Fri							
Sat							
Sun							



Appendix B14 – Plant Inspection Checklist

Plant Inspection

Details

Form id	120478
Created at	01/05/2020
Completed at	01/05/2020
Status	Complete
Respondent	Michael Louis
Division	NSW
Business unit	NSW Construction
Department	
Project	Nihon University Newcastle Campus
Subcontractor	ALORRA PILING PTY LTD
Plant Type	Other
Make and model of plant	Piling Rig IMT A215CW

Example; Komatsu 30t. JLG 30ft. Putzmeister 45m

Plant Identification Number	254
-----------------------------	-----

This is the asset number or serial number specific to this item of plant and can be found on the compliance plate or other identifying area.

Built Identification number	42
-----------------------------	----

This is the number on the top of the Blue Sticker that will be issued to the plant once it has satisfied all areas of the inspection.

Contact details of the person responsible for the plant	Dean Bettin
---	-------------

Insert the person responsible for scheduling the plant maintenance, and authorising those who are allowed to operate the plant on site)

Date of last service or inspection	24/04/2020
------------------------------------	------------

This may be found on the pre-delivery inspection report or maintenance report. Note; This must not exceed the periods specified in the Manufacturers Instructions

Approximate date of next service	01/06/2020
----------------------------------	------------

This may be found on the pre-delivery inspection report or maintenance report. Note; This must not exceed the periods specified in the Manufacturers Instructions

General inspection items	☒ No visible oil leaks
--------------------------	--

Items to be reviewed and photographed during the inspection	☒ Operators manual
---	--

Select these items as they are recorded

☒ Last service report

☒ Plant risk assessment

☒ Operators inspection log book

Plant Inspection

Status of plant

Registered and on site

Plant Inspection

Additional

Photos



Plant Inspection



Attachments

- A215 Daily Log Book Record.pdf
- ALO-043 - NDT Annual 20200423.pdf
- IMT Drilling Rig PHA.doc
- IMT 200221 Minor Repair 660hr.pdf
- IMT 200421 Service 1000hr.pdf
- IMT A215 Service history.docx
- Main Rope Cert ULE26691.pdf
- Plant Risk Assessment.doc

Actions Summary

ID	Due date	Date closed	Action description	Status	Last Comment
Actions					



Appendix B15 – Noise Level Spot Check Record

Noise Level Spot Check Report**Date:****Assessor Name and Position:****People Present:****Equipment Used: QM 1598****Calibration Date: 15/04/20****Area/location and time/duration of noise monitoring:****Sources of noise (including background noise):****Sensitive Receivers (prior complaints and reports):****Is this monitoring being conducted as a result of a complaint? If yes, provide brief details:****Results:**

DB Level Range (min – max)	Duration of Monitoring	Location

Noise Assessment Report Summary:**(Attach Photos of Monitoring Locations & Readings)**

BASELINE CONSTRUCTION NOISE DATA & CRITERIA

Table 4 Attended noise monitoring summary

Location	Date	Start Time	Period ¹	L _{Aeq}	L _{A90} (RBL)	L _{Amax}	Comments
L1 Corner of Bolton & Church Streets	17/4/19	11:52	Day (7am – 6pm)	58	49	80	Urban hum (nearby fans, pumps, etc.) and distant traffic noise consistent. Car passbys frequent. Bird noise, aircraft noise, pedestrian noise and wind in trees occasionally.
	17/4/19	21:45	Evening (6pm – 10pm)	56	45	75	Urban hum (nearby fans, pumps, etc.) and insects consistent. Distant traffic, car passbys and nearby hotel noise frequent. Resident noise, pedestrian noise and dog barking occasionally.
	17/4/19	22:15	Night (10pm – 7am)	55	45	71	Urban hum (nearby fans, pumps, etc.) and insects consistent. Distant traffic and car passbys frequent. Pedestrian noise occasionally.

Table 5 Noise management levels for residential land use

Time of day	NML, L _{Aeq} 15min	Notes
Recommended Standard Hours: Monday to Friday 7:00am to 6:00pm Saturday 8:00am to 1:00pm No work on Sundays or public holidays	Noise affected: RBL + 10 dB(A)	May be some community reaction to noise. - Where the predicted or measured construction noise level exceeds the noise affected level, all feasible and reasonable work practices should be applied to meet the noise affected level. - All residents potentially impacted by the works should be informed of the nature of the works.

Time of day	NML, L _{Aeq} 15min	Notes
		the expected noise levels, and duration, and provided with site contact details.
	Highly noise affected: 75 dB(A)	May be a strong community reaction to noise. - Where construction noise is predicted or measured to be above this level, the relevant authority may require respite periods that restrict the hours that the very noisy activities can occur. - Respite activities would be determined considering times identified by the community when they are less sensitive to noise, and if the community is prepared to accept a longer period of construction to accommodate respite periods.
Outside recommended Standard Hours	Noise affected: RBL - 10 dB(A)	- A strong justification would typically be required for works outside the recommended standard hours. - The proponent should apply all feasible and reasonable work practices to meet the affected noise level. - Where all feasible and reasonable practices have been applied and noise is more than RBL - 10 dB(A) above the affected noise level, the proponent should negotiate with the affected community.

Table 12 Construction noise source power levels

Equipment	Quantity (worst case per 15-min period)	Sound power level per item, L _{Aeq} 15 minute (dB) ¹
Demolition, earthworks & piling		
Piling rig	1	116
Excavator including rock-hammer	1	120
Excavator	2	105
Compactor	1	106
Dozer	1	108
Roller (up to 20T)	1	107
Truck & Dog	2	104
Structural works		
Concrete trucks	3	108
Concrete pump	1	110
Crane	1	99
Delivery truck	1	106
Power tools	4	105
Hand tools	Numerous	102
Internal fit-out and civil works		
Concrete trucks	3	108
Crane	1	99
Delivery truck	1	106
Hand tools	Numerous	102
Generator	1	99

Table 13 Construction noise predictions

Representative Receiver	Distance	Indicative predicted noise level L _{Aeq} 15 minute	Construction noise goal L _{Aeq} 15 minute
Nearest residences (to north)	20-105m	Demolition and earthworks 74-88 dB Structural works 66-81 dB Internal fit-out and civil works 66-80 dB	Noise affected: 59 dB (Recommended standard hours) Highly noise affected: 75 dB
Commercial / Offices	5-105m	Demolition and earthworks 74-100 dB Structural works 66-93 dB Internal fit-out and civil works 66-92 dB	70 dB (when in use)
Hospitals	5-105m	Demolition and earthworks 74-100 dB Structural works 66-93 dB Internal fit-out and civil works 66-92 dB	55 dB (when in use)



Appendix 16 – Non-Conformance Report

Event Report



No :	007759	Reported By :	Benjamin Moss
Date Of Event :	13/05/2020	Report Description :	TEST_Non-Conformance Record_Regulatory Breach (Environmental)
Location :	Newcastle, Construction, Nihon Univeristy	Event Type :	HSE Non-conformance Consultation Record

1. Primary Event Type

HSE Non-conformance Consultation Record

TEST_Non-Conformance Record_Regulatory Breach (Environmental)

2. Secondary Event Type

Regulatory Breach Notice (Environment)

3. External Notification Required

Was External Notification Required? Yes

Details

Client Environmental Agency

Other : Planning Secretary

Documents Uploaded

No Files uploaded

4. Location Details

Newcastle - Construction - Nihon Univeristy

Date Of Event 13/05/2020 Time of Incident : 15:10

Exact location :

5. Person/s Involved in the Event

Name	Type	Company	Contact Number
Benjamin Moss	Employee	Built	

6. Person Reporting the Event

Benjamin Moss

7. Event Reported To

Name

Benjamin Moss

Event Reported Time : 13/05/2020 3:10:00 PM

8. Witness(es) to the Event

Name	Type	Company	Contact Number
Benjamin Moss	Employee	Built	

9. Description of Event

TEST

- Include all details of the NCR as required by SSD-9787 Development Consent Conditions A28 & A29.
- Include all details of the Non-Compliance as required by Built's HSE Plan and CEMP Section 12.3

10. Work Classification

Other:TEST

11. Alcohol or Drugs

Was testing undertaken? : Yes

Alcohol test result: Unknown

Drug test result: Unknown

Mobile Use result: Unknown

12. Immediate Actions

TEST

- Immediate actions undertaken to mitigate any further or potential impacts to the environment and/or health and safety of people
- Proposed follow-up actions and details if known
- Provide any additional information required by Authorities or Stakeholders.

13. Distribution List

Name	Job Title	Location
Amanda Nicolo	HSE Coordinator	Newcastle
Ben Bates	Site Manager	Nihon Univeristy
Benjamin Moss	Project Manager	Nihon Univeristy
Bill Fousteris	Safety Advisor	
Chloe Mitchell	Administrator	
Doug Giffin	Regional HSE Manager North	
Jessica Mendes	HSEQ Administrator	
Joe Karten	Sustainability Manager	4 Parramatta Square
Lee Schiller	Regional HSE Manager - South	
Leif Aleksic	Site Manager	Nihon Univeristy
Liam Tamsett	Site Foreman	Nihon Univeristy
Michael Louis	HSE Coordinator	Newcastle
Paul Farrell	Director HSE	
Rob McLaughlin	Construction Manager	Nihon Univeristy
Scott Grover	HSEQ Manager	SA
Shane Marcus	HSE Manager QLD	
Stacey Karppinen	Marketing Communications Manager	
Steve Parker	Safety Advisor	



Appendix 17 – NCR Corrective Actions Report

Non-Conformance Report

Details

Form id	123473
Created at	13/05/2020
Completed at	13/05/2020
Status	Complete
Respondent	Benjamin Moss
Division	NSW
Business unit	NSW Construction
Department	
Project	Nihon University Newcastle Campus
Subcontractor	[Test/Training Subcontractor]
Category	Subcontractor
<i>Select a category based on the following: - Subcontractor (for Project Teams) - Consultant (for Project Teams) - Internal Audit Project (for Quality Team) - Internal Audit Regional office (for Quality Team)</i>	
Trade	Demolition
Type	Poor procedure
Date Issued	13/05/2020
Status	Issued
Description	TEST - NCR regarding breach of environmental controls
<i>Describe the details of the non-conformance. Files and photos can be uploaded at the end of the form as attachments if necessary.</i>	
Corrective Actions	TEST: Implement required controls as documented. Review Management Plans & SWMS and communicate changes to workers.
<i>Describe what action needs to be taken in order to correct the non-conformance. Specific actions can be raised and assigned to individuals at the end of the form.</i>	
Preventative Actions	TEST: Consult with workers and ensure environmental controls are implemented prior to commencing works
<i>Describe what preventative actions could be taken in order to prevent the non-conformance from re-occurring. These can provide lessons learned for other projects.</i>	
Date Disputed	
Closeout Details	Actions completed as instructed. Evidence attached to this NCR Form
<i>Describe what actions were taken to close out this non-conformance.</i>	
Closeout Date	13/05/2020
<i>The date when the non-conformance was closed out.</i>	

Non-Conformance Report

Additional

- Photos
- Attachments
- Appendix B18_NCR Rapid.pdf

Actions Summary

ID	Due date	Date closed	Action description	Status	Last Comment
33674	14/05/2020		Implement environmental controls	Open	

Actions

- ID:** 33674 **Due date:** 2020-05-14 **Status:** Open
- Actionee:** Benjamin Moss **Date closed:**
- Action description:** Implement environmental controls

- Attachments
- No file attachments
-

Built.



Construction Traffic and Pedestrian Management Sub Plan Nihon University Newcastle Campus Project

9 Church Street

Newcastle

NSW 2300

Revision History

Revision	Date	Description	Reviewed By
A	16/01/2020	For Approval	BM (BUILT NSW)
01	09/04/2020	Amendments in response to corrective actions & recommendations identified within GHD Newcastle Independent Environmental Audit Report 1 dated March 2020. Refer to Appendix A – Revision Register	BM (BUILT NSW) LB (GTS)
02	17/08/2020	Inclusion of additional consultation records with CoN, Traffic Control Plans for concrete pours, and inclusion of Road Occupancy Permit to Table 2.	BM (BUILT NSW) LB (GTS)
03	21/06/2021	Amendments made to reflect current stage of construction works and s.138 works to road and footpath on Church Street. Update to Section 5.1 regarding construction work days (COVID-19 Development Order No 2 2021). Refer to Appendix A – Revision Register.	BM (BUILT NSW) LB (GTS)

Distribution

Revision	Organisation	Submission	Copies
A	Dwp Newcastle	For Submission to NSW DPIE	1
	Dix Gardner Group	For Information	
01	Dwp Newcastle	For Submission to NSW DPIE	1
	City of Newcastle	For Information	
	Dix Gardner Group	For Information	
02	Dwp Newcastle	For Submission to NSW DPIE	1
	City of Newcastle	For Information	
	Dix Gardner Group	For Information	
03	Dwp Newcastle	For Submission to NSW DPIE	1
	City of Newcastle	For Information	
	SureScope Building Certifiers Pty Ltd	For Information	

Contents

1.0 Introduction.....	5
1.1 Project Summary	5
1.2 Purpose and Objectives	5
2.0 Project Information	7
2.1 Site Description & Location.....	7
3.0 Regulatory Framework	9
4.0 Existing Environment	12
4.1 Existing Local Road Network	12
4.2 Existing Traffic Conditions	17
4.3 Public Transport.....	18
4.4 Walking and Cycling	18
5.0 Construction Traffic and Pedestrian Management	19
5.1 Construction Hours of Work & Program	19
5.2 General Requirements	20
5.3 Work Zone.....	20
5.4 Traffic Control Measures	21
5.5 Pedestrian Access and Protection.....	21
5.6 Construction Worker Transportation Strategy.....	22
5.7 Work Site Security.....	22
5.8 Site Specific Inductions	22
5.9 Emergency Vehicles.....	22
5.10 Work Health and Safety.....	22
5.11 Maintenance of Roads and Footpaths	23
5.12 Construction Vehicle Types & Volume	23
5.13 Construction Vehicle Access, Routes, and Parking	23
5.14 Special Deliveries / Vehicle Movements	28
5.15 Driver Code of Conduct	29
5.16 Community Notification Procedures.....	29
5.17 Implementation of Management Measures.....	30
6.0 Compliance Management.....	33

6.1 Roles and Responsibilities	33
6.2 Training	33
6.3 Monitoring and Inspections Program	33
6.4 Periodic Reviews and Updates.....	35
7.0 Appendices	37

1.0 Introduction

1.1 Project Summary

Built has prepared a Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) in consultation with Gateshead Traffic Solutions (GTS) and City of Newcastle (Council) for major alterations and additions works of the Nihon University Newcastle Campus Project (the Project) located at 9 Church Street, Newcastle NSW 2290. The works involve the demolition of the existing Administration and Supreme Court Buildings and external areas, construction of two new four-story buildings, restoration and refurbishment to the heritage-listed Newcastle Courthouse, as well as external works within the site boundary and in the public domain.

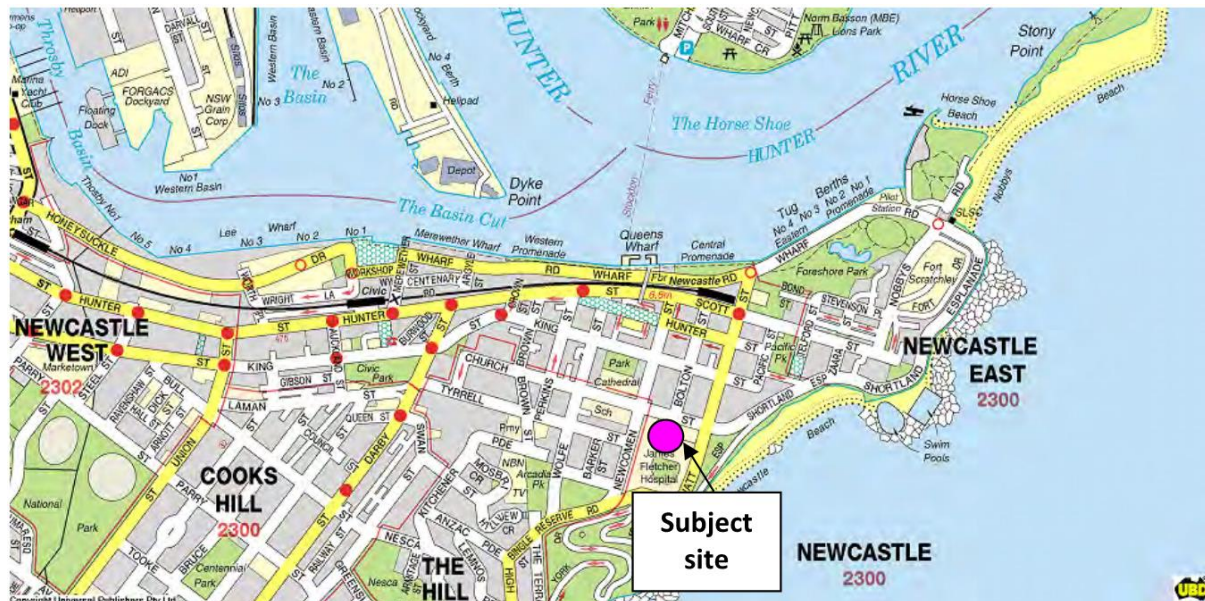


Figure 1: Site location

1.2 Purpose and Objectives

This CTPMSP forms part of the Construction Environmental Management Plan for the project. This CTPMSP has been prepared to address the construction traffic and pedestrian management requirements listed in the Development Consent, reference SSD 9787, issued by the NSW Department of Planning, Industry, and Environment (DPIE).

The purpose of this CTPMSP is to describe how Built proposes to manage potential impacts on traffic and pedestrians during the construction phase of the Project.

The key objective of the CTPMSP is to ensure road safety and network efficiency during construction and minimise potential impacts to general traffic, cyclists, pedestrians and bus services in compliance with the scope permitted by the planning approval. This includes management procedures to appropriately respond to complaints from the community and stakeholders relating to noise and vibration.

To achieve this objective, Built will undertake the following:

- Prepare the CTPMSP in consultation with the City of Newcastle (Council). Evidence of consultation is attached in **Appendix B**.

- Ensure all traffic and pedestrian management measures detailed within this sub-plan are implemented where feasible to control construction vehicle activity in the vicinity of the site and provide an appropriate and convenient environment for pedestrians.
- Detail heavy vehicle routes, access and parking arrangements to be implemented onsite and communicated to sub-contractors and suppliers.
- Develop and implement a Driver Code of Conduct to minimise impacts, conflict, and noise and ensure heavy vehicle routes are communicated to drivers.
- Develop and implement a program to monitor the effectiveness of traffic and pedestrian management measures including periodic review/update of the sub-plan.
- Detail the procedures for notifying residents and the community (including local schools) of any potential disruptions. This will be in accordance with our Community Liaison Plan.
- Implementation of the Construction Worker Transportation Strategy to minimise parking demand within the surrounding area due to the development.

2.0 Project Information

2.1 Site Description & Location

The Project is located at 9 Church Street, Newcastle and is situated on the site of the former Newcastle Courthouse. It is surrounded by buildings with Church Street and both commercial and residential properties to the north, Newcastle Police Station to the east, and James Fletcher Hospital to the south and west.

Figure 2 below shows the immediate site location.



Figure 3 below shows Newcastle Grammar School Senior Campus (Year 7 to 12) is located approximately 100 metres west of the site on Church Street and Newcastle East Primary School is approximately 550 metres from the site (dependent on route).



Nihon University Newcastle Project
Construction Traffic and Pedestrian Management Sub Plan



In consultation with Newcastle Grammar School and site observations, the peak times for student and pedestrian activity along Church Street are:

Morning: 7:30 am to 9:30 am

Afternoon: 3:00 pm to 5:30pm

3.0 Regulatory Framework

The CTPMSP has been prepared as recommended by the Traffic & Parking Assessment dated March 2019 by Better Transport Futures and to address the requirements specified in the SSD-9787 Development Consent. These requirements are listed in detail in Table 1 below.

Table 1: SSD-9787 Conditions for construction and pedestrian management

Condition No.	Condition
B9	Prior to the issue of the relevant Construction Certificate, compliance with the following requirements must be submitted to the satisfaction of the Certifier:
(c)	the swept path of the longest construction vehicle entering and exiting the Site in association with the new work, as well as manoeuvrability through the Site, must be in accordance with the latest version of AS 2890.2;
C7	Management plans required under this consent must be prepared in accordance with relevant guidelines, and include:
(c)	A description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria
(d)	A program to monitor and report on the: (i) impacts and environmental performance of the development (ii) effectiveness of the management measures set out pursuant to paragraph (c)
C10	The Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) must address, but not be limited to, the following:
(a)	be prepared by a suitably qualified and experienced person(s);
(b)	be prepared in consultation with Council;
(c)	detail the measures that are to be implemented to ensure road safety and network efficiency during construction in consideration of potential impacts on general traffic, cyclists and pedestrians and bus services;
(d)	detail heavy vehicle routes, access and parking arrangements;
(e)	include a Driver Code of Conduct to: (i) minimise the impacts of earthworks and construction on the local and regional road network; (ii) minimise conflicts with other road users; (iii) minimise road traffic noise; and (iv) ensure truck drivers use specified routes
(f)	include a program to monitor the effectiveness of these measures; and
(g)	if necessary, detail procedures for notifying residents and the community (including local schools), of any potential disruptions to routes
C14	Prior to the commencement of construction, the Applicant must submit a Construction Worker Transportation Strategy to the satisfaction of the Certifier. The Strategy must detail the provision of sufficient parking facilities or other travel arrangements for construction workers in order to minimise demand for parking in nearby public and residential streets or public parking facilities.
C21	Prior to the commencement of any footpath or public domain works, the Applicant must consult with Council and demonstrate to the Certifier that the public domain design and treatment, as required by condition C20, meets the Council's requirements, including addressing pedestrian management. The Applicant must submit documentation of approval for each stage from Council to the Certifier.
D2	All construction plant and equipment used on site must be maintained in a proper and efficient condition and operated in a proper and efficient manner.
D4	Construction, including the delivery of materials to and from the site, may only be carried out between the following hours:
(a)	between 7 am and 6 pm, Mondays to Fridays inclusive; and

(b)	between 8 am and 1 pm, Saturdays. No work may be carried out on Sundays or public holidays.
D5	Construction activities may be undertaken outside of the hours in condition D4 if required:
(a)	by the Police or a public authority for the delivery of vehicles, plant or materials; or
(b)	in an emergency to avoid the loss of life, damage to property or to prevent environmental harm; or
(c)	where 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.
D6	Notification of such construction activities as referenced in condition D5 must be given to affected residents before undertaking the activities or as soon as is practical afterwards.
D7	Rock breaking, rock hammering, sheet piling, pile driving, and similar activities may only be carried out between the following hours:
(a)	9am to 12pm, Monday to Friday;
(b)	2pm to 5pm Monday to Friday; and
(c)	9am to 12pm, Saturday.
D9	All construction vehicles (excluding site personnel vehicles) are to be contained wholly within the site, except if located in an approved on-street work zone, and vehicles must enter the site before stopping.
D10	The following hoarding requirements must be complied with:
(a)	no third-party advertising is permitted to be displayed on the subject hoarding/ fencing; and
(b)	the construction site manager must be responsible for the removal of all graffiti from any construction hoardings or the like within the construction area within 48 hours of its application.
D11	The public way (outside of any approved construction works zone) must not be obstructed by any materials, vehicles, refuse, skips or the like, under any circumstances.
D12	The development must be constructed to achieve the construction noise management levels detailed in the Interim Construction Noise Guideline (DECC, 2009). All feasible and reasonable noise mitigation measures must be implemented and any activities that could exceed the construction noise management levels must be identified and managed in accordance with the management and mitigation measures identified in the approved Construction Noise and Vibration Management Plan.
D13	The Applicant must ensure construction vehicles (including concrete agitator trucks) do not arrive at the site or surrounding residential precincts outside of the construction hours of work outlined under condition D4.
D14	The Applicant must implement, where practicable and without compromising the safety of construction staff or members of the public, the use of 'quackers' to ensure noise impacts on surrounding noise sensitive receivers are minimised.
D20	During construction, the Applicant must ensure that:
(b)	all trucks entering or leaving the site with loads have their loads covered;
(c)	trucks associated with the development do not track dirt onto the public road network;
(d)	public roads used by these trucks are kept clean;
E17	Prior to the commencement of operation, the cost of repairing any damage caused to Council or other Public Authority's assets in the vicinity of the Subject Site as a result of construction works associated with the approved development must be met in full by the Applicant
AN1	All licences, permits, approvals and consents as required by law must be obtained and maintained as required for the development. No condition of this consent removes any obligation to obtain, renew or comply with such licences, permits, approvals and consents.
AN7	A Road Occupancy Licence must be obtained from the relevant road authority for any works that impact on flows during construction activities.

AN8	To protect the safety of work personnel and the public, the work site must be adequately secured to prevent access by unauthorised personnel, and work must be conducted at all times in accordance with relevant SafeWork requirements.
AN9	The Applicant must submit a hoarding application to Council for the installation of any hoardings over Council footways or road reserve.
AN10	The applicant must consult with SafeWork NSW concerning the handling of any asbestos waste that may be encountered during construction. The requirements of the Protection of the Environment Operation (Waste) Regulation 2014 with particular reference to Part 7 – 'Transportation and management of asbestos waste' must also be complied with.

In addition to the development consent conditions, Built must apply for, maintain, and comply with the following relevant requirements for the applicable legislation and approvals/permits shown in Table 2 below.

Table 2: Relevant Legal Requirements

Requirement	Relevance	Responsibility
Road Opening Permit	Section 138, Roads Act 1993 Required to carry out nominated works on a road under the control of Council. The nominated works are: - Connect to a public utility such as the water supply	Built
Road Opening Permit	Section 138, Roads Act 1993 Required to carry out nominated works on a road under the control of Council. The nominated works are: - Construct or reconstruct a driveway	Dwp Newcastle / Built
Road Occupancy Permit	Roads Act 1993 Required to operate a crane or similar device on a road/land or to occupy space on a road reserve for construction purposes. The nominated works are: - Concrete Pours - Erection / Dismantle of Tower Crane - Misc. Works requiring road / footpath occupancy	Built
Permit to Erect a Structure (Hoarding) Over a Public Road/Footway	Approval has been granted to erect a hoarding 95.2 metres long by 2.4 metres wide for a period between 2 March 2020 to 28 February 2021 subject to Conditions outlined in Section 5.5 of this sub-plan.	Built
Work Zone Permit	Approval has been granted to establish a Work Zone along the Church Street frontage for an initial duration of 15 weeks. This will be extended as required throughout the duration of the works.	Built
POEO (Waste) Regulation 2014	Built and their demolition subcontractor, Drumderg Services has consulted with SafeWork NSW concerning the handling of any asbestos waste that may be encountered during construction. The requirements of the Protection of the Environment Operation (Waste) Regulation 2014 with particular reference to Part 7 – 'Transportation and management of asbestos waste' must also be complied with. All asbestos waste transport is registered with the EPA and consignment notices/records maintained onsite.	Drumderg Services / Built
AS 1742 - 2009	Traffic Control / Management Plans will be prepared and implemented in accordance with AS 1742 – 2009 - Part 2: Traffic control devices for general use - Part 3: Traffic control for works on roads. - Part 4: Speed controls - Part 10: Pedestrian Control and Protection - Part 13: Local area traffic management	GTS / Built

Newcastle Development Control Plan 2012	Newcastle Development Control Plan (DCP) 2012 Section 7.03 (Revision 3 dated 2017) applies to developments generating demand for parking and outlines the requirements for a Construction Traffic Management Plan. The DCP also lists additional environmental planning instruments and legislation, associated technical manuals and additional information that have been incorporated where applicable.	Built / GTS
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4.0 Existing Environment

4.1 Existing Local Road Network

Church Street

Church Street is a two-lane, two-way urban street, with one traffic lane in each direction and enough width for kerbside parallel parking in each direction. The posted speed limit is 50km/h & 40km/h during enforced school zone hours. Parking is timed and pay parking is, controlled by street meters.

There is an existing pedestrian crossing (shown in Figures 4 & 5) that traverses Church Street to Bolton Street.

Church Street provides both vehicular and pedestrian access to Newcastle Police Station, as well as parking bays for emergency & government vehicles.

The only access to the subject site, both vehicular and pedestrian, is provided from Church Street. Vehicle access is via existing driveways, one adjacent to Newcastle Police Station, the other into the Supreme Court Building carpark on the western area of the site.



Figure 4: Church Street looking West. The site is shown on the left-hand side with the ex-Administration Building in the foreground. Note existing pedestrian crossing to be relocated temporarily during works.



Figure 5: Church Street looking East. The site is on the right. Heritage Courthouse centre with Supreme Court Building in the foreground.

Bolton Street

Bolton Street is a local road connecting Church Street to Scott Street. Running North-South, it is a two-lane two-way urban street, with one traffic lane in each direction, and sufficient width for kerbside parallel parking in each direction. The posted speed limit is 50km/h. Parking is timed and is pay parking using street meters.

The Bolton Street Carpark is located just to the North of the subject site, and is available for public parking as well as tenant parking, on an as timed and fee for pay parking basis.



Figure 6: Church Street / Bolton Street intersection looking South toward the project site. Note Administration & Supreme Court Buildings to left and right of heritage courthouse respectively

Watt Street

Watt Street is a local road connecting Reserve Road near King Edward Park to Wharf Road and the Hunter River foreshore. Running North to South, it is a two-lane two-way urban street, with one traffic lane in each direction, and sufficient width for kerbside parallel parking in each direction. The posted speed limit is 50km/h. Parking is times and is pay parking, controlled by street meters.



Figure 7: Watt Street / Church Street / Shortland Esplanade intersection looking West toward the project site. Note Newcastle Police Station on the left.

Newcomen Street

Newcomen Street is a local road connecting Reserve Road to Scott Street in the North. Running North to South from King Edward Park, it is a two-lane two-way urban street, with one traffic lane in each direction, and enough width for kerbside parking in each direction. The posted speed limit is 50km/h.

Within the vicinity of Newcastle Grammar School and James Fletcher Hospital site, there is angled parking on the Eastern kerb line. Parking is times and is pay parking controlled by street meters.



Figure 8: Church Street / Newcomen Street intersection looking East. Note James Fletcher Hospital on the right



Figure 9: Newcomen Street / Church Street intersection looking South. Note Newcastle Grammar School on the top right.

Local Intersections

All local road intersections in the vicinity of the subject site operate under priority control, with priority control, or a stop sign / give way sign control to reinforce priority on the 4-way junctions.

4.2 Existing Traffic Conditions

In February 2019, Better Transport Futures (BTF) conducted traffic surveys at the request from Transport for NSW Roads and Maritime Services (RMS) at the junctions and roads within the immediate vicinity of the project site to determine the existing traffic conditions. Additional information for existing conditions can be found with the Traffic and Parking Assessment Report dated March 2019 by BTF.

Table 3 below provides a summary of the recorded approach volumes for the roads in the vicinity of the project site relating flow to capacity.

Table 3: Summary of Traffic Volumes & Volume / Capacity Ratios

Road	Location	Peak Period	Peak Flow ¹	Mid-Block Road Capacity ²	Volume / Capacity
Church Street	W of Newcomen	AM peak	65 eastbound 202 westbound	900 (one-way)	0.07 E/B 0.22 W/B
	W of Newcomen	PM peak	40 eastbound 157 westbound	900 (one-way)	0.04 E/B 0.17 W/B
Church Street	W of Bolton	AM peak	189 eastbound 133 westbound	900 (one-way)	0.21 E/B 0.15 W/B
	W of Bolton	PM peak	84 eastbound 237 westbound	900 (one-way)	0.09 E/B 0.26 W/B
Church Street	W of Watt	AM peak	102 eastbound 126 westbound	900 (one-way)	0.11 E/B 0.14 W/B
	W of Watt	PM peak	119 eastbound 103 westbound	900 (one-way)	0.13 E/B 0.11 W/B
The Esplanade	E of Watt	AM peak	181 eastbound 215 westbound	900 (one-way)	0.20 E/B 0.24 W/B
	E of Watt	PM peak	163 eastbound 364 westbound	900 (one-way)	0.18 E/B 0.40 W/B
Bolton Street	Nth of Church	AM peak	147 northbound 58 southbound	900 (one-way)	0.16 N/B 0.06 S/B
	Nth of Church	PM peak	25 northbound 183 southbound	900 (one-way)	0.03 N/B 0.20 S/B
Newcomen Street	Nth of Church	AM peak	140 northbound 60 southbound	900 (one-way)	0.16 N/B 0.07 S/B
	Nth of Church	PM peak	84 northbound 110 southbound	900 (one-way)	0.09 N/B 0.12 S/B

Newcomen Street	Sth of Church	AM peak	340 northbound 67 southbound	900 (one-way)	0.38 N/B 0.07 S/B
	Sth of Church	PM peak	162 northbound 224 southbound	900 (one-way)	0.18 N/B 0.25 S/B
Watt Street	Nth of Church	AM peak	364 northbound 207 southbound	900 (one-way)	0.089 N/B 0.122 S/B
	Nth of Church	PM peak	298 northbound 252 southbound	900 (one-way)	0.33 N/B 0.28 S/B
Watt Street	Sth of Church	AM peak	447 northbound 296 southbound	900 (one-way)	0.50 N/B 0.33 S/B
	Sth of Church	PM peak	329 northbound 500 southbound	900 (one-way)	0.37 N/B 0.56 S/B

Note 1: Peak flows from 8th February 2019 Thursday traffic surveys results (Trans Traffic Surveys for by Better Future Transport Futures)

Note 2: RTA 2002, Urban Road Conditions Level C of Services C

4.3 Public Transport

Public transport (bus) services are available in the immediate vicinity of the project as shown in the Public Transport Network Map attached within the Construction Worker Transport Strategy.

Bus routes run along Church Street, and nearby Watt Street and King Street. The now operational Newcastle Light Rail (LRT) is located a short walking distance, about 400 metres to the north of the site, with LRT stations located at Pacific Park and Market Street. The LRT and many bus services connect directly to the regional heavy rail network at the Newcastle Interchange located on the western fringe of the Newcastle CBD at Wickham.

The combination of bus routes and LRT services linking to the heavy rail network provides public transport across the Hunter Region, and beyond.

As such, the subject site is well located to allow movement to and from the site from across the Greater Newcastle Metropolitan region.

4.4 Walking and Cycling

Walking and cycling facilities in the immediate vicinity of the site are typical of an established business district, with footpaths formed along both sides of the road.

The existing pedestrian infrastructure for pedestrians within the vicinity of the site is considered adequate for the medium level of pedestrian activity and is in good condition. Currently, the footpaths are approximately 2.5m wide and located on both sides of each road as shown within Section 4.1 figures.

There are two existing pedestrian crossings located on the corners of Bolton Street and Church Street directly adjacent to the Grand Hotel. One crossing connects the southern Church Street footpath to the corner of Bolton Street, while the other runs east to west connecting both corners of Church and Bolton Streets.

The Church Street frontage along the project site is the only significant section of footpath that will be directly affected by construction activities and will also be redeveloped under a Section 138 application to the City of Newcastle for Public Domain Works.

5.0 Construction Traffic and Pedestrian Management

This section provides additional detail regarding the traffic and pedestrian management measures that will be implemented as part of the construction works in accordance with Built's Site Health, Safety & Environmental Plan Appendix 09 Traffic & Pedestrian Management Plan implemented on all projects.

A copy of the Site HSE Plan Appendix 09 is attached in **Appendix C**

All feasible management measures will be implemented during construction and as required by regulatory and development consent requirements. Identification of all reasonable and feasible mitigation methods will be conducted by the site supervisor and/or environmental representative on a regular basis in consultation with Gateshead Traffic Solutions and relevant Authorities such as Council.

In relation to the implementation of mitigation measures, feasibility addresses engineering considerations regarding what is practical to implement. Reasonableness relates to the application of judgment in arriving at a decision, considering the following factors:

- work hours
- the extent of mitigation achieved
- number of people or other uses benefited
- cost of the measure
- delay to schedule and whether the measure will prolong exposure to the hazard
- community views
- pre-existing or current conditions

While the management measures presented will always not necessarily result in mitigating all traffic and pedestrian impacts, they are expected to reduce impacts to levels most stakeholders should find acceptable considering the anticipated benefits of the completed project as a whole.

5.1 Construction Hours of Work & Program

The approved construction hours of work are outlined in SSD Conditions D4 to D7:

- Monday to Friday: 7:00 am to 6:00 pm
- Saturday: 8:00 am to 1:00 pm
- No work on Sundays or Public Holidays

Out of Hours / Special Conditions Works

On 10th June 2021, the NSW Minister for Planning and Public Spaces issued the Environmental Planning and Assessment (COVID-19 Development – Construction Work Days) Order (No 2) 2021 (the Order). The Order permits approved weekday construction hours to be extended to weekends and public holidays in response to the global COVID-19 pandemic.

In response to the Order, Built intends to carry out construction work as per the below days/hours;

- Monday – Friday 7:00am to 6:00pm
- Saturday 7:00am to 6:00pm
- No work on Sundays or public holidays

Built understands that these special conditions are subject to change dependent on advice received from DPIE and will continue to monitor updates.

The Head Contract program shows the duration of works of 18 months with the project scheduled for completion in August 2021.

5.2 General Requirements

In accordance with Road and Maritime Services (RMS) requirements, all vehicles transporting loose materials will have the entire load covered and/or secured to prevent any large items, excess dust or dirt particles depositing onto the roadway during travel to and from the site. All subcontractors must be inducted by Built to ensure that the procedures are met for all vehicles entering and exiting the construction site. Built and their subcontractors will monitor the roads leading to and from the site and take all necessary steps to rectify any road deposits caused by site vehicles.

Vehicles operating to, from and within the site shall do so in a manner, which does not create unreasonable or unnecessary noise or vibration. No tracked vehicles will be permitted or required on any paved roads unless located within the designated and approved Work Zone. Public roads and access points will not be obstructed by any materials, vehicles, refuse skips or the like, under any circumstances.

Built and their subcontractors are required to maintain all required permits and abide by their specific requirements throughout the duration of the works.

5.3 Work Zone

Built has received approval from the City of Newcastle for the establishment of a Work Zone along the Church Street frontage as shown in Figure 10 below. The Work Zone provides increased protection to both workers and the public by providing delineated areas during approved hours of construction and will remain in place for the duration of works.

As part of the Work Zone establishment and in consultation with Council and Newcastle Grammar School, Built has temporarily relocated the pedestrian crossing to the corner of Church Street and Newcomen Street. This measure will minimise pedestrian activity within the Work Zone and provide safe access with minimal disruption to normal activity.

The Work Zone is monitored by both Built and qualified traffic control personnel to ensure compliance with specific conditions and is to be used for material handling and short-term construction vehicle parking during the approved construction hours only in accordance with Condition D9.

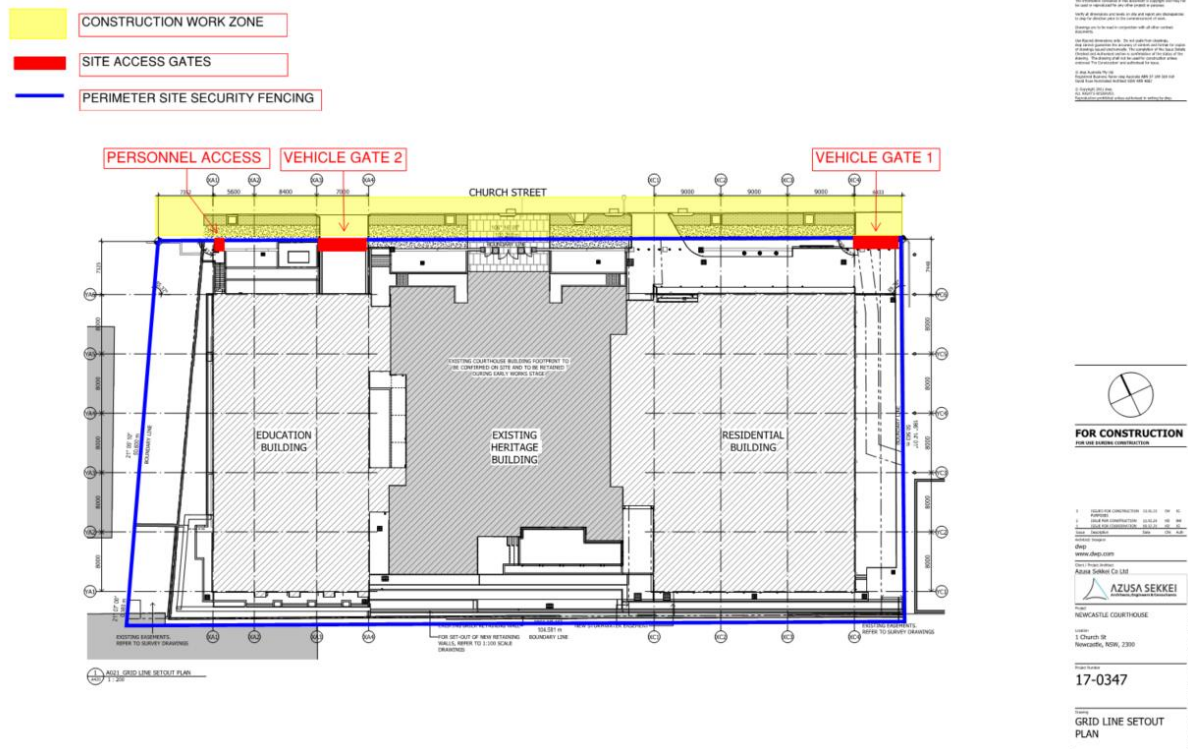


Figure 10: Approved Construction Work Zone

5.4 Traffic Control Measures

Traffic control will be provided for access and egress to all gates and will be in accordance with AS 1742-2009 and RMS Guide to Traffic Control at Work Sites. Traffic controllers will be required to manage vehicle movements along Church Street and the intersection with Bolton Street.

Traffic controllers will be used to ensure that all trucks exit the site right towards Watt Street and do not exit left and drive west on Church Street or left onto Bolton Street.

Traffic Control Plans have been prepared by Gateshead Traffic Solutions and are attached in **Appendix D**

5.5 Pedestrian Access and Protection

In accordance with Condition D11, pedestrian access is to be maintained outside of any approved construction works zone. To ensure pedestrian safety, Built has been granted approval for a Road Occupancy Permit (footpath closure) by City of Newcastle to dismantle the existing A & B Class Hoarding and erect new temporary fencing and barriers along the Church Street frontage to enable works within the public domain.

A Site Layout Plan is attached in **Appendix E** for information showing the staging of the temporary fencing and barriers to enable public domain works.

Hoarding, fences and footpaths are to be regularly inspected and maintained by Built site management to comply with Condition D10, permit conditions, and to ensure the safety of pedestrians.

5.6 Construction Worker Transportation Strategy

Built submitted a Construction Worker Transportation Strategy (CWTS) to the Planning Secretary and this document has been accepted by DPIE to satisfy SSD-9787 Condition C14. The CWTS provides a strategy for minimising parking demand issues caused by construction workers through alternative modes of transport and other travel arrangements such as public transport and car-pooling.

This strategy is communicated to personnel during site inductions and toolbox talks.

The CWTS has been attached in **Appendix F**.

5.7 Work Site Security

To provide security to the works site and protection to the construction staff and the general public, the site is bounded by temporary fencing on the northern boundary as outlined in *Figure 10* & Section 5.5 and chain link fencing with shade cloth on the western and southern boundaries. This fence will define the extent of the works site. All access points to the site are located on Church Street and are to be monitored by personnel during construction hours and securely locked after hours with CCTV and security patrols implemented to prevent unauthorized access.

5.8 Site Specific Inductions

All staff and subcontractors engaged on-site will be required to undergo a site-specific induction. The induction will include permitted access routes to and from the construction site for all vehicles and personnel, as well as standard environmental, WH&S, driver protocols and emergency procedures. Additionally, Built will discuss TMP requirements regularly as a part of toolbox talks and advise workers of public transport and car-pooling opportunities as outlined in the CWTS.

5.9 Emergency Vehicles

The site is located immediately adjacent to Newcastle Police Station and James Fletcher Hospital (Mental Health). This sub-plan has been prepared in consideration of these emergency services and strictly enforced to ensure that at no time emergency services vehicles and/or access are affected by the works.

Any works that may cause changes in Church Street, such as public domain/external works will be clearly communicated with these key stakeholders and planned in consultation to prevent any disruptions to emergency operations.

In the event of an emergency/incident onsite, access for emergency vehicles and/or personnel will be via the safest Church Street access point under direction by Built site management.

5.10 Work Health and Safety

Any workers required to undertake works or traffic control within the public domain shall be suitably trained and will be covered by adequate and appropriate insurances. All traffic control personnel will be required to hold RMS accreditation in accordance with Section 8 of Traffic Control at Worksites.

Copies of all licences and qualifications are checked and will always be taken by Built management during site inductions with records maintained onsite. All personnel are required to possess the appropriate PPE and sign onto the relevant high-risk safe work method statements prior to commencing works.

New personnel are also briefed on all current site activities, procedures, hazards, and high-risk work in accordance with Built's Site HSE Management Plan.

5.11 Maintenance of Roads and Footpaths

The roads and footpaths along the route of travel will always be kept in a serviceable state. Any damage arising as a result of the proposed vehicle movements will be treated/repaid by Built at no cost to Council.

5.12 Construction Vehicle Types & Volume

The maximum construction vehicle size likely to be entering and egressing the site during construction is a Medium Rigid Truck.

Larger vehicles during the construction phase will be directed to park within the designated Church Street work zone for loading and unloading.

During the peak construction periods, it is estimated that the construction activity is likely to generate up to 20 vehicle movements per day (approximately 2 vehicles per hour). Construction vehicle activity will be programmed (wherever possible) to occur outside network peak times and the school drop off and pick-up periods.

Built's management system will aim to:

- Stagger all contractors' deliveries to ensure that backlogs do not occur with multiple deliveries arriving at the same time. This is common practice and involves radio contact with approaching truck drivers.
- The provision of internal layover areas for vehicles to stand and wait to be loaded/unloaded. Where this is not possible, Built will utilise the Church Street Work Zone. Drivers will be instructed to turn engines off (where reasonable & practicable) to prevent excessive noise/disturbance.
- Traffic control measures to be in place at all entry and exit points to the site including supervision of the Church Street Work Zone.
- Works to be sequenced so that activities that require multiple deliveries (i.e. concrete pours and removal of spoil) do not occur on the same day.
- Prefabrication (wherever possible) of materials off-site.

5.13 Construction Vehicle Access, Routes, and Parking

Construction vehicles will access the site via the Church Street Gates located on the Eastern (Building C – Gate 1) and Western (Building A – Gate 2) areas of the site via Watt Street shown in *Figure 10*. On approach, drivers will use radio communication to advise traffic control personnel located at site entry/egress gates to implement the required traffic control management procedure.

All gates will be monitored and secured during construction hours and lockable after hours in accordance with Built Site Rules to prevent unauthorised access.

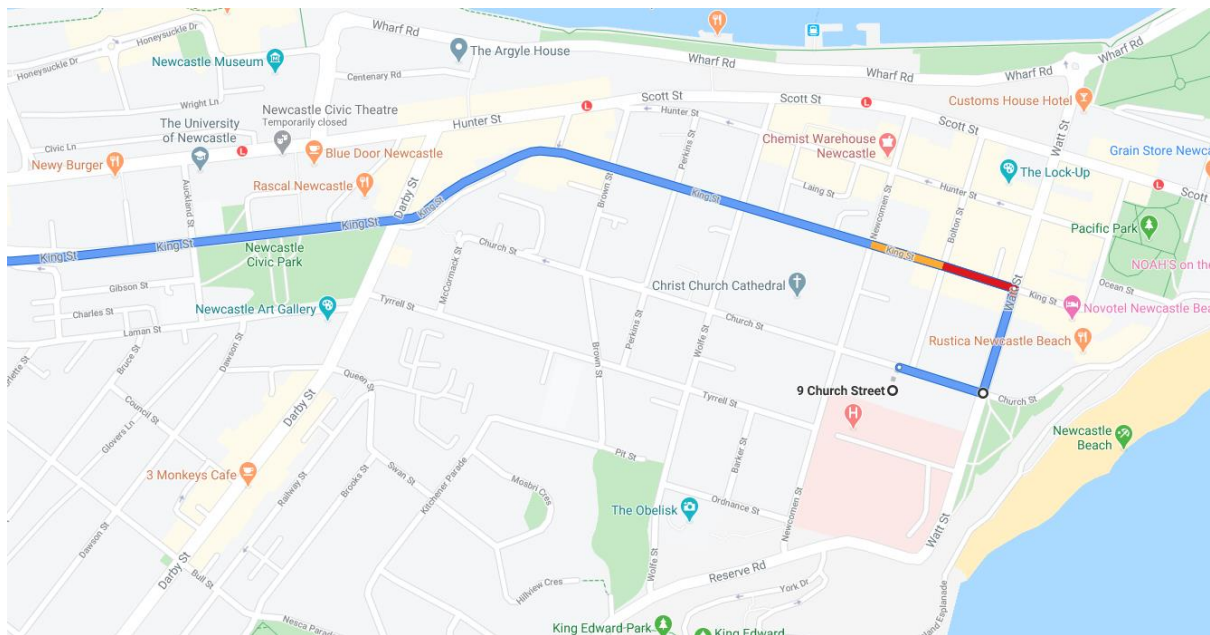
All vehicle entry/egress will be completed under strict traffic control management including the appropriate signage and qualified personnel as shown in the Traffic Management Plan and Control Plans by Gateshead Traffic Solutions.

Built has engaged Central Waste Station for waste removal services for the duration of the project. The Central Waste Station facility is located at 8 Styles St, Kurri Kurri NSW 2327 and is approximately 35km from the site with an estimated 1-hour time of travel. An overview of the heavy vehicle route to be followed during these project stages is shown below in Items 1 to 6.

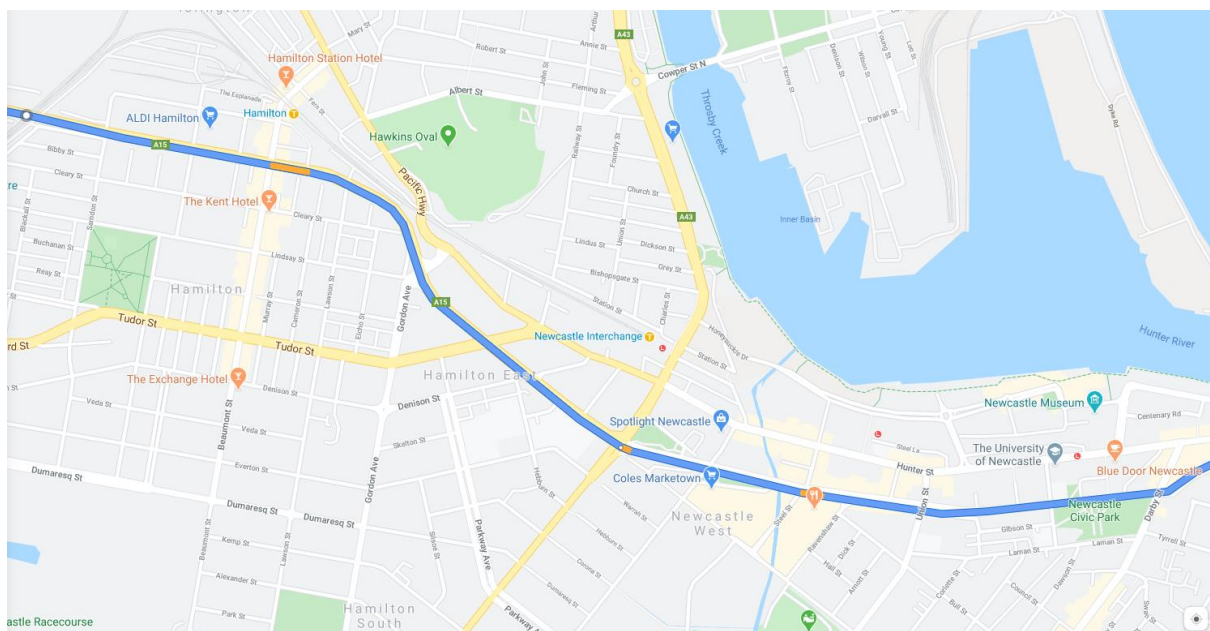
It must be noted that alternative routes will be required due to additional suppliers, traffic and/or incidents, however, Built will communicate the CTPMSP with all subcontractors and suppliers to ensure vehicle movements prioritise safety, minimise disruption and potential impacts as much as possible.

Nihon University Newcastle Project Construction Traffic and Pedestrian Management Sub Plan

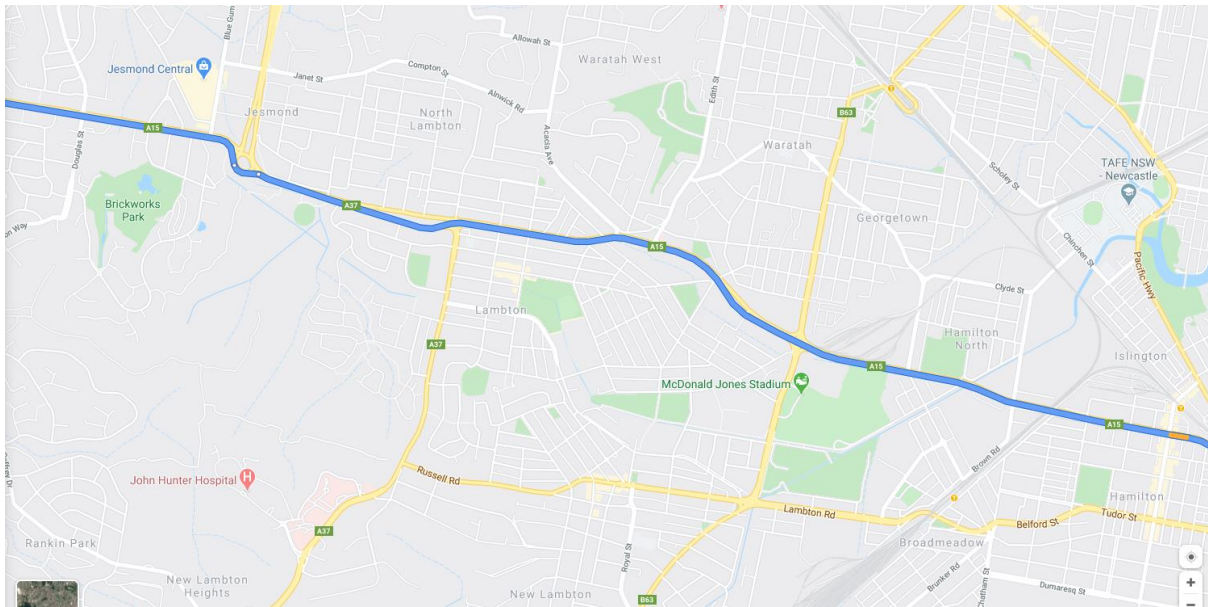
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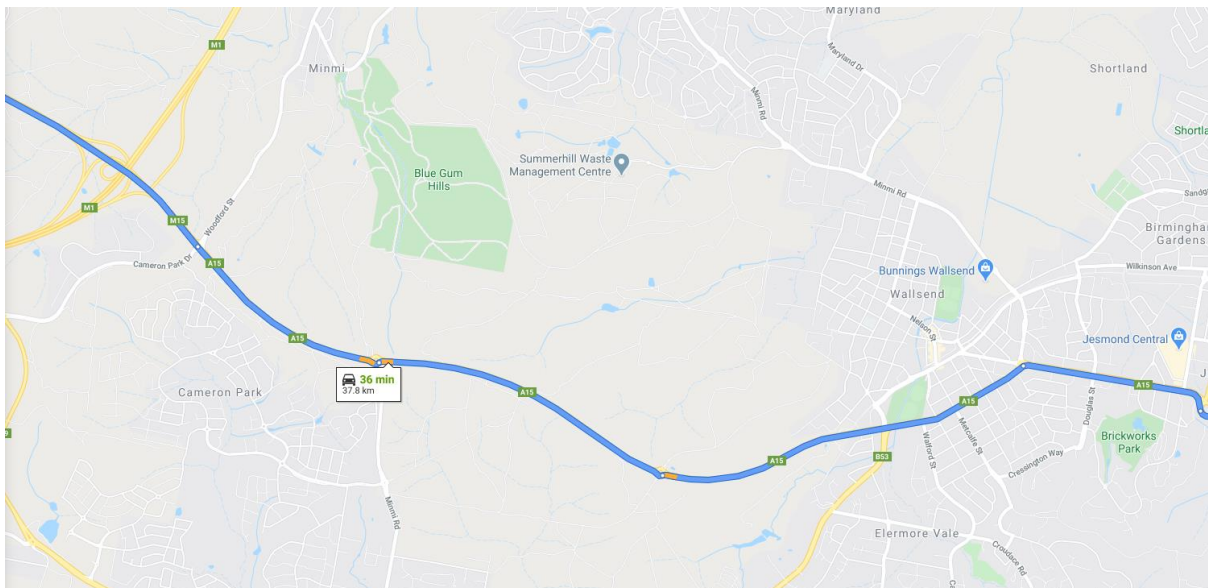
2.



3.



4.



The map displays the Richmond Vale area with the proposed Pacific Motorway route highlighted in blue. The route starts near Richmond Vale, passes through Henholme, and continues south towards Seahampton. Key locations labeled include Richmond Vale, Henholme, Stockington, Seahampton, and Mount Sugarloaf. The Pacific Motorway is shown as a yellow line, and the proposed route is highlighted in blue. The map also shows the Pacific Motorway, M1, M15, and A15.

A map of the area around 8 Styles Street. A blue line indicates a route starting from a red pin at 8 Styles Street, heading south along Main Rd, then curving east along the M15 motorway, and finally heading south along George Booth Dr. The map shows several locations including Heddon Greta, Kurri Kurri, Stanford Merthyr, Pelaw Main, Fernlea, Buchanan, and Buttal. Roads are labeled with names like Mitchell Ave, Lang St, Main Rd, and M15. A large green area is visible in the lower-left quadrant. The map also shows various water bodies and smaller roads like Government Rd, Buchanan Rd, and George Booth Dr.

Internal vehicle movements within the site boundary are subject to a speed limit of 5 km/h and will be limited due to the constraints of the site, including footprints of the new buildings. Therefore, internal large vehicle movements will be restricted to the extent of driveway corridors only as shown in Figure 11 below.

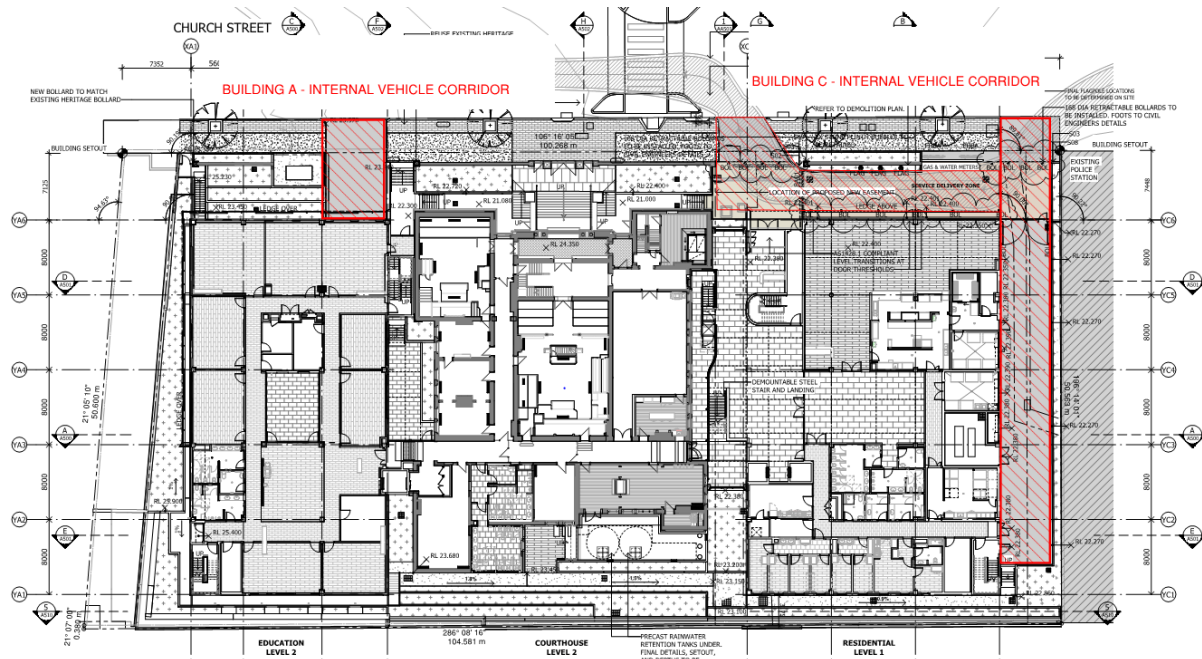


Figure 11: Internal vehicle corridors.

Built will utilise the Church Street Work Zone and crane as required for large vehicle deliveries, material handling and short-term parking of construction vehicles during work hours. All material handling activities will be under the strict supervision of Built management, traffic control, and crane personnel.

5.14 Special Deliveries / Vehicle Movements

Whilst not anticipated, any oversized vehicle that is required to travel to the site will be dealt with separately, with the submission of required permits to and subsequent approval by Council and/or the relevant Authority prior to any delivery. Requests shall be submitted 28 days prior to the scheduled date of use of an oversized vehicle and appropriate traffic and pedestrian control measures implemented in accordance with any applicable statutory or specified requirements.

Special vehicle movements for the removal of contaminated soils and/or waste from the site will be placed in a lockable solid waste bin or skip which will be sealed when the work has been completed pending removal offsite.

The special waste will be transported by an EPA licenced contractor to an approved disposal facility in a manner that will prevent the liberation of contaminated materials into the atmosphere and/or environment.

Records will be kept onsite of all contaminated waste along with the EPA tracking number and consignment notices for compliance/audit purposes.

5.15 Driver Code of Conduct

Built will implement a Driver Code of Conduct (DCC) on the Nihon University project. The DCC aims to;

- Minimise the impacts of earthworks and construction on the local and regional road network
- Minimise conflict with other road users
- Minimise road traffic noise
- Ensure drivers use the specified routes

The Driver Code of Conduct will be issued to all subcontractors and suppliers prior to commencing works on-site, during their site inductions and/or upon a driver entering site.

A copy of the DCC is attached in **Appendix G**.

5.16 Community Notification Procedures

Built will continue to liaise with the community in accordance with the Community Liaison Plan accepted by the DPIE Planning Secretary.

Built has established a community liaison email address (nihon@built.com.au) which will be used to:

- Send work notifications
- Send project updates and alerts
- Receive community queries and complaints
- Respond to community queries and complaints

In the instance where Built foresees any potential disruptions to pedestrian or traffic routes, Community Notifications will be sent out typically by email correspondence to all properties on the community liaison register and any additional potentially affected, including all required Authorities with advanced notice.

The Community Notice will provide specific details of the works including reasons, nature, duration, potential disruptions, and the contact details of Built personnel.

The Built Project Manager acts as the Community Liaison Officer and monitors this email address (along with other Built personnel) daily to ensure prompt action and response. All notifications and complaints are responded to appropriately and recorded in the community consultation register maintained onsite.

Other methods of communication will be used, including:

- Letterbox drops
- Face to face (door knocking, meetings, etc.)
- Phone calls
- Notices

5.17 Implementation of Management Measures

Table 4 outlines how the traffic and pedestrian management measures detailed in Section 5 will be implemented throughout the construction of the project where reasonable and feasible in accordance with SSD Conditions and approved permit requirements:

Table 4: Implementation of management measures

Reference	Details of management measure	Implementation		Responsibility
Implemented throughout works		PC ¹	C ²	
TPMM01	Construction works, including deliveries and material movements, will be restricted to the approved construction hours in accordance with Condition D4 to D7	✓	✓	Construction/Project Manager
TPMM02	Ensure permits, where applicable, have been received and are current prior to commencing works.	✓	✓	Project Manager
TPMM03	Ensure construction vehicles (including concrete agitator trucks) do not arrive at the site or surrounding residential precincts outside of the construction hours of work outlined under condition D4.		✓	Site Manager Foreman
TPMM04	Built personnel, subcontractors and suppliers will always be issued a copy of the current CTPMSP and instructed to comply with the requirements	✓	✓	Project Manager HSE Officer
TPMM05	All personnel including drivers will be required to complete a site induction / DCC that includes key information on the CTPMSP	✓	✓	Site Manager Foreman
TPMM06	Driver/operator qualifications and competencies checked, and copies recorded during site inductions	✓	✓	Site Manager Foreman
TPMM07	Implement, where practicable and without compromising the safety of construction staff or members of the public, the use of 'quackers' to ensure noise impacts on surrounding noise sensitive receivers are minimised.	✓	✓	Site Manager Foreman
TPMM08	Information should be provided to neighbours before and during construction through media such as letterbox drops, meetings or individual contact.	✓	✓	Project Manager
TPMM10	Implement complaint response procedures	✓	✓	Project Manager
TPMM11	The use of a site information board at the front of the site, with the name of the organisation responsible for the site and their contact details, hours of operation and regular information updates. This signage should be clearly visible from the outside and include after-hours emergency contact details.		✓	Site Manager

Reference	Details of management measure	Implementation		Responsibility
Implemented throughout works		PC ¹	C ²	
TPMM12	Vehicles to be subject to random inspections to ensure they are maintained and operated in an efficient manner		✓	Foreman HSE Officer
TPMM13	Vehicles checked prior to leaving site to ensure loads are watered, covered and/or secured as required. Vehicles are also inspected to ensure free of debris.		✓	Foreman Traffic Controller
TPMM14	All construction vehicles are to be contained wholly within the site, except if located in an approved on-street work zone. Vehicles must enter the site before stopping.		✓	Foreman Traffic Controller
TPMM15	Where practicable, construction vehicles parked within Work Zone will be directed to turn off engines to prevent excessive noise and air pollution		✓	Foreman Traffic Controller
TPMM16	Protective hoardings, fencing, and barricades used to delineate work areas, protect pedestrians and prevent unauthorised access to the site. These are to be regularly checked and maintained.	✓	✓	Site Manager Foreman
TPMM17	Qualified traffic control personnel will be used to manage vehicle ingress/egress and monitor the work zone	✓	✓	Site Manager Traffic Controller
TPMM18	Appropriate advanced and Other warning signs, Instruction signs and devices in place and positioned correctly	✓	✓	Site Manager Traffic Controller
TPMM19	Width of travel paths always maintained to required clearances and kept clear from materials and debris	✓	✓	Site Manager Foreman
TPMM20	Pathways through construction zones and Church Street gantry are adequately illuminated	✓	✓	Site Manager Foreman
TPMM21	During concrete pours, precautions outlined in the SafeWork Code of Practice for Pumping Concrete are implemented	✓	✓	Site Manager Foreman
TPMM22	Vehicle & personnel gates to be always secured and closed unless under direct supervision by traffic control personnel or Built Site Management		✓	Foreman Traffic Controller
TPMM23	Vehicle & Plant logbooks checked for maintenance and daily pre-start checks	✓	✓	Foreman HSE Officer
TPMM24	All deliveries to be scheduled in advance with Built Site Management	✓		Site Manager Foreman

Reference	Details of management measure	Implementation		Responsibility
Implemented throughout works		PC ¹	C ²	
TPMM25	Schedule deliveries and vehicle movements appropriately to minimise disruptions and congestion, especially during peak periods.	✓		Site Manager Foreman
TPMM26	Regular reinforcement of traffic and pedestrian management measures in toolbox meetings		✓	Site Manager Foreman
TPMM27	Enforcement of internal (5km/h) and external (50km/h or 40km/h) speed limits		✓	Foreman Traffic Controller
TPMM28	Site records such as truck logs and consignment notices to be maintained onsite.		✓	Project Manager Site Manager

(1) *Pre-construction – note that this may refer to prior to commencement of specific activities rather than prior to the commencement of all construction works.*

(2) *Construction*

6.0 Compliance Management

6.1 Roles and Responsibilities

The Project Team's roles and responsibilities are outlined in Section 4.0 of the Site HSE Plan Appendix 09.

Specific responsibilities for the implementation of traffic and pedestrian management measures are detailed in Section 5.17 Table 4.

Specific responsibilities for monitoring and inspection activities are detailed in Section 7.3 Table 5.

6.2 Training

All employees, sub-contractors and utility staff working on-site will undergo site induction training relating to traffic and pedestrian management issues, including:

- Existence and requirements of this CTPMSP.
- Approved Working Hours.
- Work Zone and Hoarding/Footway Permit conditions and maintenance.
- General management requirements, including monitoring and inspection procedures.
- Community notifications and complaints reporting.
- Non-compliances

The project's site induction documentation will be updated to adopt all changes to traffic and pedestrian management measures and procedures as required.

All Built personnel receive internal training on completing monitoring and inspection activities using Built.Safe (Lucidity) software.

6.3 Monitoring and Inspections Program

As defined under Division 9.4 of Part 9 of the EP&A Act; for the purposes of this Division, *monitoring* of a project is the monitoring of the carrying out of the project to provide data on compliance with the approval of the project or on the project's environmental impact

In accordance with Condition A23, regular inspections and monitoring activities will be completed by Built Site Management throughout construction to monitor the effectiveness of the management measures detailed to be implemented within Section 5.0.

All inspection and monitoring activities are completed electronically using Built.Safe (Lucidity) software platform.

Table 5: Traffic and pedestrian management monitoring program

Activity	Requirements	Frequency, reporting, and responsibility
Supervisor Inspection; of the site or specific work areas/elements to	• Review of documents prior to inspection (e.g. CTPMSP, Permits, TCP's, SSD Conditions).	Frequency: Minimum weekly and additional as required for high potential areas

ensure management measures are implemented as required	• Visual inspection of the site or specific work area/elements to assess if required measures are implemented and maintained. • Visual check of site records, logbooks, licences, etc. • Provide a summary of inspection: – Common checks – Activities or items reviewed – Observations – Compliances / Non-Compliances • Report any high potential hazards • Attach photographic evidence and copies of any site records viewed • Issue any actions arising with appropriate due date for rectification	Reporting: Records are automatically uploaded to Built.Safe and maintained onsite. Responsibility: Project Manager Site Manager Foreman
Monitoring; of construction activities on-site to assess compliance with development approvals, permits, management plans, procedures and measures	• Identify activity to be monitored (e.g. traffic control, working on and/or near traffic and roads) • Review and reference applicable documents: - SWMS - Permit - Traffic Management Plans - Methodology documents • Provide a summary of monitoring: - Observations - Discussions - Work practices - Compliance / Non-compliance • Identify if work was required to be stopped • Report any high potential hazards identified, the responsible trade and/or process, and the situation • Log attendance of other personnel involved • Attach photographic evidence and copies of any records • If applicable, issue actions with appropriate due date for rectification	Frequency: Minimum monthly per responsible person and as required Reporting: Records are automatically uploaded to Built.Safe and maintained onsite. Responsibility: Project Manager Site Manager Foreman
Plant Inspection; To check plant is fit for use prior to being permitted for use on-site	• Verify and record the following: – Plant type – Make and model – Plant identification number – Built identification / induction number – Contact details for the person responsible for plant – Date of the last service and/or inspection – Date of the next service and/or inspection • Visually inspect and record copies of the following: – No visible leaks – Recorded faults are rectified – Operators Manual – Last service report – Plant risk assessment – Operators inspection logbook • Assign status of plant – Registered and on-site – Rejected and locked out – Off-site • If applicable, issue appropriate actions.	Frequency: As required Reporting: Records maintained onsite Responsibility: Site Manager Foreman HSE Officer

Daily Traffic Control / Footpath Checklist	Traffic Control Supervisor to complete multiple daily checks of traffic control signage to ensure signs are in the correct position, not tampered with and/or obstructed. The checklist includes: – Date of the week commencing – Time signage established each day – Subsequent random inspection time (07:00 to 18:00) – Daily footpath inspection for trip hazards – Name of the qualified traffic controller	Frequency: Daily checklist Reporting: Submitted to Built weekly and records maintained onsite Responsibility: Foreman Traffic Controller
Truck / Vehicle Log	Log maintained at vehicle gates and completed for each vehicle entry/exit from the site. Log information includes: • Date • Time • Registration • Company • Driver Name • Vehicle Type • Load Type • Load Covered • Truck Washed (free of debris) • Checked By • Comments	Frequency: Daily log Reporting: Submitted to Built weekly and records maintained onsite. Responsibility: Foreman Traffic Controller

6.4 Periodic Reviews and Updates

It is acknowledged that Condition A31 regarding the revision of strategies, plans, and programs, requires that within three (3) months of:

- (a) the submission of a compliance report under Condition C22
- (b) the submission of an incident report under Condition A27
- (c) the submission of an Independent Audit under Condition D32
- (d) the approval of any modification of the conditions of this consent; or
- (e) the issue of the direction of the Planning Secretary under Condition A2 which requires a review, the strategies, plans, and programs required under this consent must be reviewed, and the Planning Secretary and the Certifier must be notified in writing that a review is being carried out.

If necessary, to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans, programs or drawings required under this consent must be revised, to the satisfaction of the Planning Secretary and/or Certifier (where relevant). Where revisions are required, the revised document must be submitted to the Planning Secretary and/or Certifier for approval and/or information (where relevant) within six (6) weeks of the review.

The aim of this Condition is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.

Built's standard procedure is to review all management plans every three (3) months or as required by any significant event, incident, instruction (internal or external), change in project scope and/or conditions. It must be noted that a review may not result in the revision of strategies, plans, and programs if deemed to still be adequately addressing the noise and vibration requirements of the project.

Reviews and revisions (if required) are completed by the Built project team, typically consisting of the Project Manager, HSE Manager, and Site Manager. Revised management plans are issued to all required consultants, employees and subcontractors to ensure compliance within Condition A25.

7.0 Appendices

Appendix A - Revision Register

Appendix B – Consultation with City of Newcastle

Appendix C – Built Site HSE Plan Appendix 09

Appendix D – Traffic Control Plans prepared by GTS

Appendix E – Site Layout Plan

Appendix F – Construction Worker Transportation Strategy

Appendix G – Driver Code of Conduct

Appendix A - Revision Register

Revision	Date	Section	Description of Change
01	09/04/2020	Contents	Format of management plan amended for readability and navigation in accordance with Condition C10
		Section 1.0	Purpose and Objectives combined
		Section 2.0	Figure 3 included to show locations of nearby schools
		Section 3.0	Regulatory Framework included to show relevant Development Conditions and Permits
		Section 4.2	Table 3 showing BTA summary of traffic volumes re-formatted. No change to summary data
		Section 4.3	Additional Section added for information on existing Public Transport
		Section 4.4	Section heading changed from 'Existing Pedestrian Infrastructure' to 'Walking and Cycling'
		Section 5.0	Section re-formatted to better detail measures to be implemented in accordance with Condition C10(b)
		Section 5.4	Updated Traffic Control Plans prepared by Gateshead Traffic Solutions and attached in Appendix D
		Section 5.13	Swept Path Analysis shown in accordance with GHD Corrective Action and Condition B9(c)
		Section 5.17	Table 4 prepared to outline implementation of detailed measures and responsibilities
		Section 6.0	Section included for Compliance Management to outline how Built intends to comply with Development and Permit Conditions
		Section 6.3	Table 5 prepared to outline Monitoring Program in accordance with Condition C10(f)
		Section 6.4	Details included on how Built intends to periodically review and update the CTPMSP
02	17/08/2020	Section 3.0	Road Occupancy Permit included in Table 2.
		Section 5.13	Building & Vehicle Access Gates renamed in accordance with site changes. Updated photos of vehicle gates included.
		Appendix B	Consultation record with City of Newcastle as evidence of submission and acceptance of additional Traffic Control Plans.
		Appendix D	Additional Traffic Control Plans for concrete pours utilising Church Street included.
03	21/06/2021	Section 5.1	Updated to reflect EPA (COVID-19 Development – Construction Work Days) Order (No 2) 2021. Project duration and completion date amended
		Section 5.5	Updated to reflect removal of Class A & B hoarding and Council approval.
		Section 5.7	Updated to include CCTV and security patrols.
		Section 5.12	Changes to maximum construction vehicle size entering and egressing the site.
		Section 5.13	Figures showing swept path analysis removed due to change in maximum construction vehicle size. Figure 10 – amended internal vehicle movement plan
		Section 5.14	Changed reference from ACM waste to contaminated waste.
		Appendix B	Inclusion of additional City of Newcastle consultation records.
		Appendix D	Update of Traffic Control Plans to reflect current stage of works.
		Appendix E	Updated Site Layout & Staging Plan for S.138 Works.

Appendix B – Consultation with City of Newcastle

Benjamin Moss

From: Traffic <traffic@ncc.nsw.gov.au>
Sent: Thursday, 4 March 2021 9:47 AM
To: Olivia Ryan; Traffic
Cc: Benjamin Moss; Leif Aleksic; Robert McLaughlin
Subject: REVISED CONSTRUCTION TRAFFIC & PEDESTRIAN MANAGEMENT SUB PLANS - 9 CHURCH STREET, NEWCASTLE

[EXTERNAL EMAIL]

Hi Olivia,

Thanks for sending this through.

CN can confirm acceptance (the updated TCPs), while noting that all previous comments/conditions regarding CTMPs remain valid and in-force.

Kind regards,

Aaron Visser | Traffic Engineer

City of Newcastle | Governance

Transport & Compliance | Traffic

T: [+61249742000](tel:+61249742000) | E: traffic@ncc.nsw.gov.au



*Newcastle - a smart, liveable, sustainable global city.
Cooperation | Respect | Excellence | Wellbeing*

From: Olivia Ryan <OliviaRyan@built.com.au>
Sent: Wednesday, 3 March 2021 11:35 AM
To: Traffic <traffic@ncc.nsw.gov.au>
Cc: Benjamin Moss <benmoss@built.com.au>; Leif Aleksic <LeifAleksic@built.com.au>; Robert McLaughlin <robertmclaughlin@built.com.au>
Subject: ROP8197 REVISED CONSTRUCTION TRAFFIC & PEDESTRIAN MANAGEMENT SUB PLANS - 9 CHURCH STREET, NEWCASTLE

Good Morning CoN Team / Aaron,

Please find attached our revised CTPMSP for your information and records.

We confirm we have revised our traffic & management plans as per previous consultation and discussions with NoC.

It would be appreciated if you could confirm your acceptance of the revised plans by COB Thursday 4th March 2021 if possible.

Kind Regards,

Olivia Ryan

Contract Administrator



Sydney • Melbourne • Brisbane • Perth • Canberra • Adelaide • Auckland • Newcastle & Hunter • built.com.au

Suite 1, 155-157 Lambton Rd Broadmeadow NSW 2292

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ROAD OPENING PERMIT

Section 138 of the Roads Act

9 October 2020

dwp
6 Telford Street
NEWCASTLE NSW 2300



PO Box 489, Newcastle
NSW 2300 Australia
Phone: 4974 2000
Fax: 4974 2222
Email: mail@ncc.nsw.gov.au
www.newcastle.nsw.gov.au

Dear Sir/Madam

Application No:	RA2020/00157
Land:	Lot 1 DP 1199904
Property Address:	9 Church Street, Newcastle NSW 2300
Proposed Development:	Road construction works in Church Street adjacent to the site frontage

As the Roads Authority, Newcastle City Council grants consent to the works specified in the approved plans as detailed in Table 1, with amendments by Council in red (if any), specifications and the conditions specified in Schedule 1, in accordance with Section 138 of the Roads Act 1993.

Table 1

Reference / Drawing	Revision	Prepared By	Date
81019007-C1-500, 505, 530, 590	3	Cardno	21/08/2020
81019007-C1- 510, 515, 520, 521, 525, 540, 546, 551, 570	5	Cardno	08/10/2020
81019007 -C1- 545, 552, 555	4	Cardno	01/09/2020
81019007-C1- 571, 590	4	Cardno	08/10/2020
1691- LP00, LP01, LP02, LP03	D	Moir Landscape Architecture	06/10/2020

Consent to operate from: 9 October 2020

Consent to lapse on: 9 October 2022

Rights of Appeal: There are no appeal rights for works approved under s138 Roads Act, 1993. However, Council is keen to discuss any related issues to ensure works are completed to Council's satisfaction.

Yours faithfully

David Ryner
SENIOR DEVELOPMENT OFFICER

9 OCTOBER 2020
Date of Determination

**For Newcastle City Council
(Road Authority)**

**ROAD OCCUPANCY PERMIT
CERTIFICATE**

Street(s):	Church Street (9), Newcastle between Watt Street and Newcomen Street
Date and Time:	1 February-30 June 2021
Purpose:	Dismantling of site hoarding and erection of new temporary fencing and water barriers for Section 138 works
Parking spaces used:	Footpath closure along Work Zone
Company/Applicant:	Built Pty Ltd - Olivia Ryan
Application received:	20/01/2021
Contact details:	0423 552 792
Approval conditions:	1) Permit fee: \$130.00 2) Permit approves the occupation of the southern shoulder and footpath of Church St, Newcastle, between Newcomen St and Watt St, as shown in the supplied TCPs. 3) Strictly only one TCP to be implemented at any one time. 4) Pedestrian/cyclist safety around the site to be maintained at all times; Traffic controllers to assist/control movements as needed. 5) Notify affected businesses/residents of possible impacts at least 3 business day prior to works commencing. 6) Any damage done to assets of City of Newcastle (CN) or other public/private authority must be immediately reported and reinstated by the applicant at their own cost. 7) All work related vehicles, including Traffic control vehicles and vehicles not directly involved in proposed works within the work area, are to be located off-street as a first preference; vehicles which must be located on-street are to comply with all signposted restrictions. 8) This permit is not an approval of the proponent's traffic control plan. Please note Work Cover requires the traffic control plans comply with AS1742.3. 9) Only Work Zone restriction to be affected under these works. 10) Police parking on Church Street, as well as the driveway to the police station, must be fully accessible and open at all times or this permit is rendered void.

Signature**Approved By:****A Visser**

A copy of this permit and TCP must be available at anytime for CN Officer/Ranger perusal, or penalties may apply

Appendix C – Built Site HSE Plan Appendix 09



APPENDIX 9 TO HSE PLAN

Traffic and Pedestrian Management Plan

TRAFFIC & PEDESTRIAN MANAGEMENT PLAN

Nihon University

1.0 PURPOSE

The Traffic and Pedestrian Management Plan (TPMP) outlines the control measures to be implemented when carrying out construction and related works at [Nihon University](#).

The TPMP is a stand-alone plan which forms a part of the overall Project Management Plan and as such is a “live” working document and therefore may be amended and reissued from time to time as necessary.

2.0 OBJECTIVES

Traffic and Pedestrian management shall be undertaken in a manner that will provide a safe work site for Built staff and employees, subcontractors and the public, and at the same time shall ensure that road and footpath users are not exposed to foreseeable risks.

3.0 SCOPE

This document addresses the systems and procedures Built will implement and maintain to warn, inform, guide and control Traffic and Pedestrian movements past, through or around the works related to the project site.

The control and management of traffic involves:

- the co-ordination of all delivery trucks, including the loading and unloading of these delivery trucks;
- concrete pumping
- the control of vehicular and pedestrian traffic to ensure their safety and minimal disruption to the general public and work on site.

All workers, employees, subcontractors, employers and the management team, involved in the construction of the project will adhere to this Traffic Management Plan. Specific details shall be communicated to workers, as required, through the site-specific induction.

It is not feasible in this document to cover all traffic management situations that can and will arise. It may therefore be necessary for the relevant Built personnel to modify this plan based on hazard identification and risk assessment of the particular works in order to adopt the best reasonably practical control measures to be adopted as dictated by changing circumstances. However, where significant changes are made to this plan the plan shall be amended to reflect such changes

4.0 RESPONSIBILITIES

Built Supervisors

There are two areas in traffic management that supervisors have responsibilities for and they are the **Work Area** and the **Employees** under their control.

The responsibilities of the supervisor are:

Work Area

- Ensure a risk assessment for traffic management has been conducted and documented as part of **Appendix 5 of the HSE Plan** and that the control measures and procedures are implemented at the site;
- Ensure, where applicable, any proposed work in the road reserve by Built has received the required permission and approvals from the relevant authority;
- Ensure both road users, pedestrians and Built staff can continue with their respective undertakings in relative safety and with the minimum of inconvenience;
- Ensure the works are correctly sign-posted using the relevant approved signs;
- Ensure the works are correctly guarded;
- Ensure safety signs & devices used are in good condition and are removed at the completion of works;
- Ensure the works do not commence until all signage is in place (even in an emergency it is essential that safety is observed for both staff and road/footpath users);
- Ensure all lamps are switched off during daylight and checked at night time that they are working and correctly positioned;
- To regularly monitor the traffic management plan to ensure its ongoing suitability and adequacy;
- Record all incident and complaints on the standard Built Incident Notification form. If any person is injured, then there is a legal requirement to report the incident to the appropriate authorities and immediate supervisor.

Employees

- Ensure workers are competent to work on or near the roadways and have a general awareness of traffic safety issues;
- Instructing workers of the public relations aspect of the work in that they should not allow themselves to be provoked by members of the public.

Workers

- Workers shall follow the traffic and pedestrian management plan provided by their supervisor;

TRAFFIC & PEDESTRIAN MANAGEMENT PLAN

Nihon University

- Where there is uncertainty as to what the appropriate traffic management requirements are to contact their supervisor for advice **before** proceeding with the work.
- To wear their high visibility vest or shirt
- To always take reasonable care for their safety and of those around them.
- To obey the rules of the road and to display safe driving practices always. This means driving, according to posted speed limits, in correct lanes and in a manner that is safe to the driver, passengers and public.
- To park in conformance with any parking signs or parking rules and avoid creating any form of safety hazard.

5.0 GENERAL REQUIREMENTS

- a) All deliveries will be planned, where possible, to avoid peak hour traffic in the mornings and afternoons.
- b) Delivery vans and trucks entering and exiting the site will be using the driveway on **9 Church Street**.
- c) Warning signs and a rotating light will be placed on a boom gate in the street to notify all vehicles and pedestrians that a crane is working overhead.
- d) During the excavation phase, the following precautions will be taken:
 - A trained attendant wearing suitably attired clothing (fluorescent coloured vest) will direct traffic and excavation trucks. This attendant will also be using a "STOP/SLOW" sign to assist in the direction of traffic; and
 - The trucks will follow a set traffic route to minimise disruption to traffic.
- e) During concrete pours, the following precautions will be taken:
 - The WorkCover Code of Practice for pumping concrete will be strictly adhered to;
 - If a 'pump-line' is set up from the street, then the safe and unobstructed access for the general public will be ensured;
 - Potential trip and slip hazards will be eliminated and an attendant will always be on hand to ensure that unauthorised persons are kept away from immediate area of pump machine;
 - An access ramp will be provided where required where the pump line passes over the footpath; and
 - The attendants will be wearing appropriate PPE (fluorescent vests, helmets, safety boots, etc.) at all times during concreting to control traffic and concrete deliveries.
- f) Any necessary applications for council permits or notification to the relevant authorities (e.g. police, RTA, etc.) will be carried out prior to any concrete pours.
- g) Any work that will affect pedestrians and traffic (e.g. awning work, work to footpath and driveway, work above footpath, etc.), will be supervised such that pedestrian and traffic safety is maintained at all times. All necessary applications

TRAFFIC & PEDESTRIAN MANAGEMENT PLAN

Nihon University

for permits, approvals and notification of relevant authorities will be carried out prior to these works taking place.

- h) No parking or unloading of vehicles along the Church Street site frontage without permission from Built Management.
- i) No traffic control is to be conducted by persons without the appropriate training / qualifications.
- j) Site personnel and vehicles must be aware of emergency services facilities, personnel, and vehicles in the immediate vicinity (Newcastle Police Station adjacent to site).
- k) Site personnel and vehicles must always be aware of the high volume of pedestrian traffic around the site, especially during school term periods. This includes school zone speed limits of 40km/h.

6.0 TRAFFIC & PEDESTRIAN MANAGEMENT

When Built conducts its works in the road or footpath it creates an abnormal situation that, under its Duty of Care, requires it to provide suitable signing/guarding etc for the users that includes vehicular and pedestrian traffic.

Regardless of the nature or complexity of the works in the road reserve or footpath, or how long it will take, the key objective to be achieved by the implementation of this TPMP is the safety of both Built staff and employees, subcontractors and the general public and to cause the least amount of inconvenience and disruption as possible.

The basic communication requirements of the TPMP are to provide:

- Advance warning of a change in traffic/pedestrian access conditions in time for the users to adjust;
- Information and Guidance so as to navigate safely around the work site, i.e. delineation of travel path and its separation from the work site and any necessary barricading.

Where the works involve a relatively simple part road closure then the minimum planning requirement will be to sketch the protective devices and delineation required on a plan and to prepare a list of the devices required for the task.

Where the works require complex traffic arrangements - for example where Built is proposing to conduct long-term kerbside work in the vicinity of an urban intersection, it will be necessary for a suitably qualified person to fully document the traffic and pedestrian control measures to show temporary traffic paths, their delineation and position of warning devices and any after-hours traffic arrangements

In order to achieve minimum disruption and inconvenience to vehicular traffic only the minimum practical length and width of road shall be closed off at any time. The control measures shall allow for sufficient width within the work area for the safety of the workers for the method of work to be employed. This results in a clearance between the edge of the work area and the edge of the adjacent traffic lane of at least 1.2m.

7.0 APPROPRIATE SIGNING AND TRAFFIC CONTROL

Principles of Signing

No matter how brief the work site is occupied careful consideration shall be given to the displaying of appropriate and adequate safety/warning signs to:

- Provide advance warnings to drivers of changes in the surface of the roadway and/or in the changed traffic conditions and that personnel and/or plant are engaged in work;
- Adequately instruct and guide traffic safely through, past or around the work site;
- Provide separation of the travel path and the works area.

The following **important principles** shall be observed regarding traffic management signage:

- Signs and devices must comply with those listed in AS 1742.3;
- Signs and devices shall be erected and displayed before work commences. On approaches to the work area they shall be erected in the following sequence and then removed in the reverse order;
 - (1) Advance warning signs.
 - (2) Other warning signs.
 - (3) Instruction signs
- Signs shall be placed within the driver's line of sight and at the same time not obscure other traffic devices from the driver's line of sight;
- All signs & devices shall be placed in the most advantageous positions having regard for the location and nature of the hazard, and the warning being conveyed, to provide the maximum visual impact for approaching traffic. Such signs & devices shall have an adequate clear view in advance of them;
- They shall be placed in a manner and position, so they are not obscured from view by vegetation or parked vehicles;
- They shall be placed in a manner and position so as not to become a possible hazard to workers, pedestrians or vehicles (e.g. divert traffic into an undesirable path);
- Signs and devices shall be regularly checked for effectiveness and maintained in a satisfactory condition;
- Signs and devices shall be selected and placed in a manner so as not to require a driver to disobey a law unless so directed by an authorised officer such as a police officer;
- Permanent signs which conflict with the signs required for the temporary work situation shall be covered or removed;
- Signs and devices shall be removed from the site when practical once the hazard ceases to exist. This not only restores the road/footpath to normal but is also an essential part of maintaining the credibility of the signs.

8.0 PROTECTIVE BARRICADING

Under certain circumstances, such as for a major excavation, it may be necessary to provide a more formidable barrier such as the use of rails etc in lieu of the bollards and tape. Where excavations leave insufficient footpath width to allow for a reasonable path for pedestrians to pass the work site in safety some form of containment fence, together with appropriate road warning signs, shall be installed from the footpath to the road and then back again onto the footpath.

If it becomes necessary to divert the pedestrian traffic around the work site, trucks and/or major plant then barrier posts and rails together with appropriate road warning signs must be installed.

To protect pedestrians along the Church Street frontage, a Class B Hoarding will be installed with a Class A Hoarding on the internal face for site security and separation from works.

9.0 TRAFFIC CONTROLLERS

Where the works require vehicles to be stopped or slowed down to enable delivery trucks to enter or exit the worksite or public vehicles to navigate through or past the work site, then it will be necessary to use qualified Traffic Controllers.

Some typical situations where traffic controllers are to be used include but is not limited to:

- Where one lane of a two-lane, two-way road is closed;
- Where conditions at the work site are such that low speed operations are essential;
- Where construction machinery regularly crosses or enters an existing road;
- Where sight distance to the work site is limited;
- Where plant, trucks and the like can only reverse out from the site.

10.0 WORK ON THE FOOTPATH

Pedestrian Considerations

Due consideration to pedestrians shall be given before proceeding with any works on or adjacent to footpaths considering, the different modes of travel used by pedestrians, such as walking or cycling, and for people with disabilities.

Some of the considerations to be taken in any design for a travel path are listed below.

Width of Travel Path

People with ambulant disabilities (i.e. using a walking aid) require a clear width of 1,000 mm

People who use wheel chairs require a clear width of 1,200 mm.

If it is not practical to provide the above widths on the footpath it may be necessary to consider part closure of the road together with appropriate barriers, etc.

Pedestrian Safety Points

The following pedestrian safety points should be included in the final control measures by the Built supervisor. These points should be observed **before** the work is commenced. This is not an exhaustive list and should be updated by the supervisor according to the circumstances at the work site.

All pedestrians

- Always look at the pedestrian's routes. For example, can pedestrians safely negotiate the work site? Can they negotiate any “squeeze” points in and around the work site?
- Check that the pedestrians’ routes are continuous through/adjacent to the work site
- Determine the most applicable time of the day to conduct the works considering both normal and peak hour times.
- Determine what is the most appropriate means for pedestrians to negotiate the site? That is either through, past or around the site.
- Where applicable ensure that any barriers erected do not force pedestrians to cross at an inappropriate location.
- Can parking of site vehicles be managed to maximise the sight lines?

Elderly Pedestrians

- Is the travel path relatively smooth and clear of overhanging foliage?
- Is the work site adequately illuminated?

Young Pedestrians

- Are barriers erected to guide children past or through the work site?
- Are travel paths continuous through the scheme?
- Will any road signs/devices obstruct the vision of or visibility to, the young pedestrian?
- Can parking of the site vehicles be managed to maximise the sight lines?

Intoxicated Pedestrians

- Is the area one in which intoxicated pedestrians can be expected?
- Where appropriate are barriers in place to guide them past or through the work site?
- Are drivers given every chance of seeing the pedestrian?
- Can parking of the site vehicles be managed to maximise the sight lines?

People with Disabilities or Prams

- Can the work site be identified by visually impaired people?
- Is the width of the travel path sufficient to cater for wheelchairs, prams, etc?

TRAFFIC & PEDESTRIAN MANAGEMENT PLAN

Nihon University

Construction Traffic and Vehicles

When considering the traffic control measures, it should be noted that construction traffic and vehicles needs to be considered as this can affect the traffic control measures adopted.

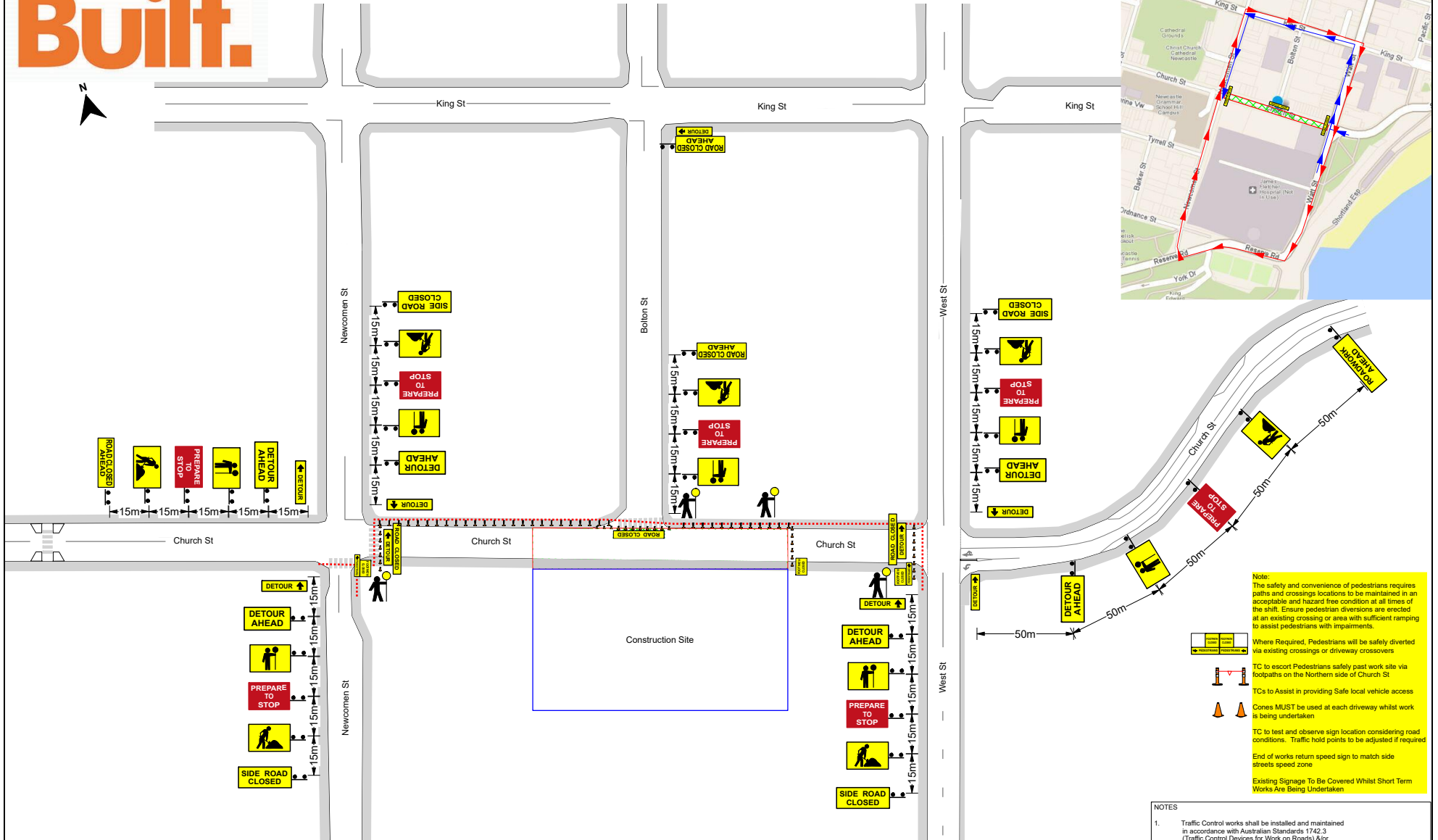
The current Traffic Management Plan & Traffic Control Plan is attached in Appendix A.

Appendix D – Traffic Control Plans prepared by GTS

Built.

www.invarion.com

DETOUR PLAN



Note:
The safety and convenience of pedestrians requires paths and crossings locations to be maintained in an acceptable and hazard free condition at all times of the shift. Ensure pedestrian diversions are erected at an existing crossing or area with sufficient ramping to assist pedestrians with impairments.

Where Required, Pedestrians will be safely diverted via existing crossings or driveway crossovers

TC to escort Pedestrians safely past work site via footpaths on the Northern side of Church St

TCs to Assist in providing Safe local vehicle access

Cones MUST be used at each driveway whilst work is being undertaken

TC to test and observe sign location considering road conditions. Traffic hold points to be adjusted if required

End of works return speed sign to match side streets speed zone

Existing Signage To Be Covered Whilst Short Term Works Are Being Undertaken

- NOTES**
- Traffic Control works shall be installed and maintained in accordance with Australian Standards 1742.3 (Traffic Control Devices for Work on Roads) &/or TCAWS (Traffic Control at Work Sites Manual Version 5 July 2018 18 898)
 - Local constraints may not allow signs and devices to be placed exactly in accordance with the TCP judgement, therefore it may be necessary to place signs and/or devices as close as possible to the spacing indicated
 - All conflicting signage is to be covered
 - Pedestrians and Cyclist to be managed through site under Traffic Control
 - Delineation in tapers to be at a maximum of 12m centres
 - Delineation adjacent to live traffic must be at a maximum of 12m centres
 - All signage must be setup so it is clear of obstructions and visible from a minimum of 150m
 - All speed signs must be a minimum of 600mm from the bottom edge of the sign to the ground
 - Signs are to be Class 1 retro-reflective, positioned adjacent to footpath or where vehicle parking occurs place signs in the parking lane or elevated on posts. They must be positioned so that they are in clear view of passing motorists
 - All signage must be in accordance with RMS - Sign Design
 - All portable traffic signals must be manned by qualified traffic controllers



Lack Group t/a
K & D Traffic Management
2/13 Stanton Rd,
Seven Hills NSW 2147
P: 1300-205-579
email: lgp@lackgroup.com.au

NOT TO SCALE



**TCP BEST VIEWED
WHEN PRINTED IN
A3**

Client: Built
Location: 1 Church St, Newcastle
Description: Road Close
Plan Number: 2020-0849
Date Drawn: 29/05/2020

Plan Drafted By: Johann Potgieter

Prepare Work Zone TMP: 0052043646

Date Revised:

Rev 1:

Rev 2:

Rev 3:

Rev 4:

Description of Revision:

Checked By: Corey Bolton

Prepare Work Zone TMP: 0051913779





Transport
Roads & Maritime
Services

This qualification enables you to prepare Traffic Management Plans and conduct inspections on Traffic Management Plans.

LUKE
BANNISTER

Expiry Date:
13/07/2021

Prepare a Work Zone
Traffic Management Plan
Card No. 0051736303



This card is not a proof of identity.

Gateshead Traffic Solutions Pty Ltd
PO Box 277
Wickham
NSW 2291

Client - Built

Site - Church St - Newcastle - West

Plan prepared by Luke Bannister:
Prepare a Work Zone Traffic Management Plan No 0051736303

Ref : RMS Traffic Control at Worksites ver TCP

Please Note : - This TCP is not drawn to scale .
- Plan is only a representation of the site and
work area is subject to change.
- All Gateshead Traffic Solutions plans comply with WHS Standards,
Road Rule Legislation and Australian Traffic Control Standards.

Gateshead Traffic Solutions Pty Ltd
PO Box 277
Wickham
NSW 2291

Client - Built

Site - Church St - Newcastle

Plan prepared by Luke Bannister:
Prepare a Work Zone Traffic Management Plan No 0051736303

Ref : RMS Traffic Control at Worksites ver TCP

Please Note : - This TCP is not drawn to scale .
- Plan is only a representation of the site and work area is subject to change.
- All Gateshead Traffic Solutions plans comply with WHS Standards, Road Rule Legislation and Australian Traffic Control Standards.

 Prepare a Work Zone Traffic Management Plan
Card No. 0051736303

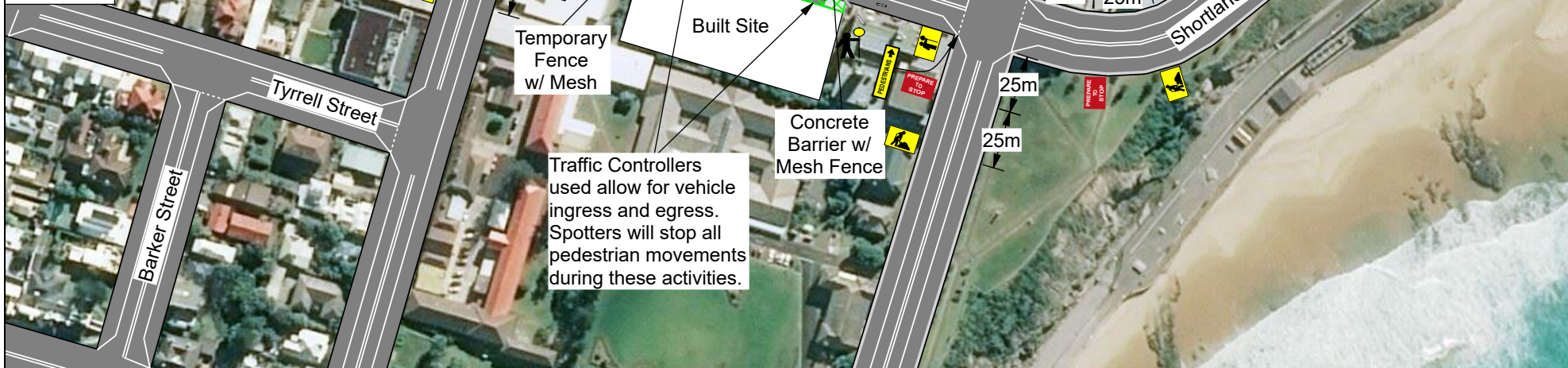
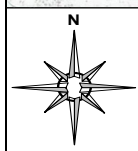
This qualification enables you to prepare Traffic Management Plans and conduct inspections on Traffic Management Plans.

LUKE BANNISTER

Expiry Date:
13/07/2021



This card is not a proof of identity.



Gateshead Traffic Solutions Pty Ltd
PO Box 277
Wickham
NSW 2291

Client - Built

Site - Church St - Newcastle - Road Closure Plan

Plan prepared by Luke Bannister:
Prepare a Work Zone Traffic Management Plan No 0051736303

Ref : RMS Traffic Control at Worksites ver TCP

Please Note : - This TCP is not drawn to scale .
- Plan is only a representation of the site and work area is subject to change.
- All Gateshead Traffic Solutions plans comply with WHS Standards, Road Rule Legislation and Australian Traffic Control Standards.

 Prepare a Work Zone Traffic Management Plan
Card No. 0051736303

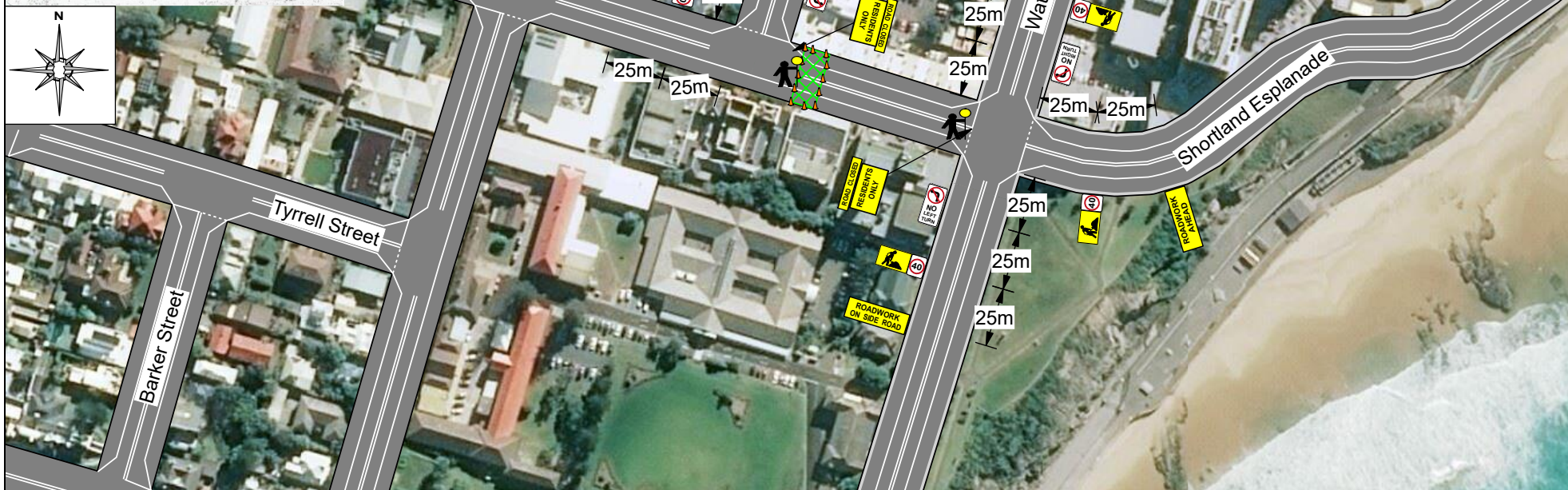
This qualification enables you to prepare Traffic Management Plans and conduct inspections on Traffic Management Plans.

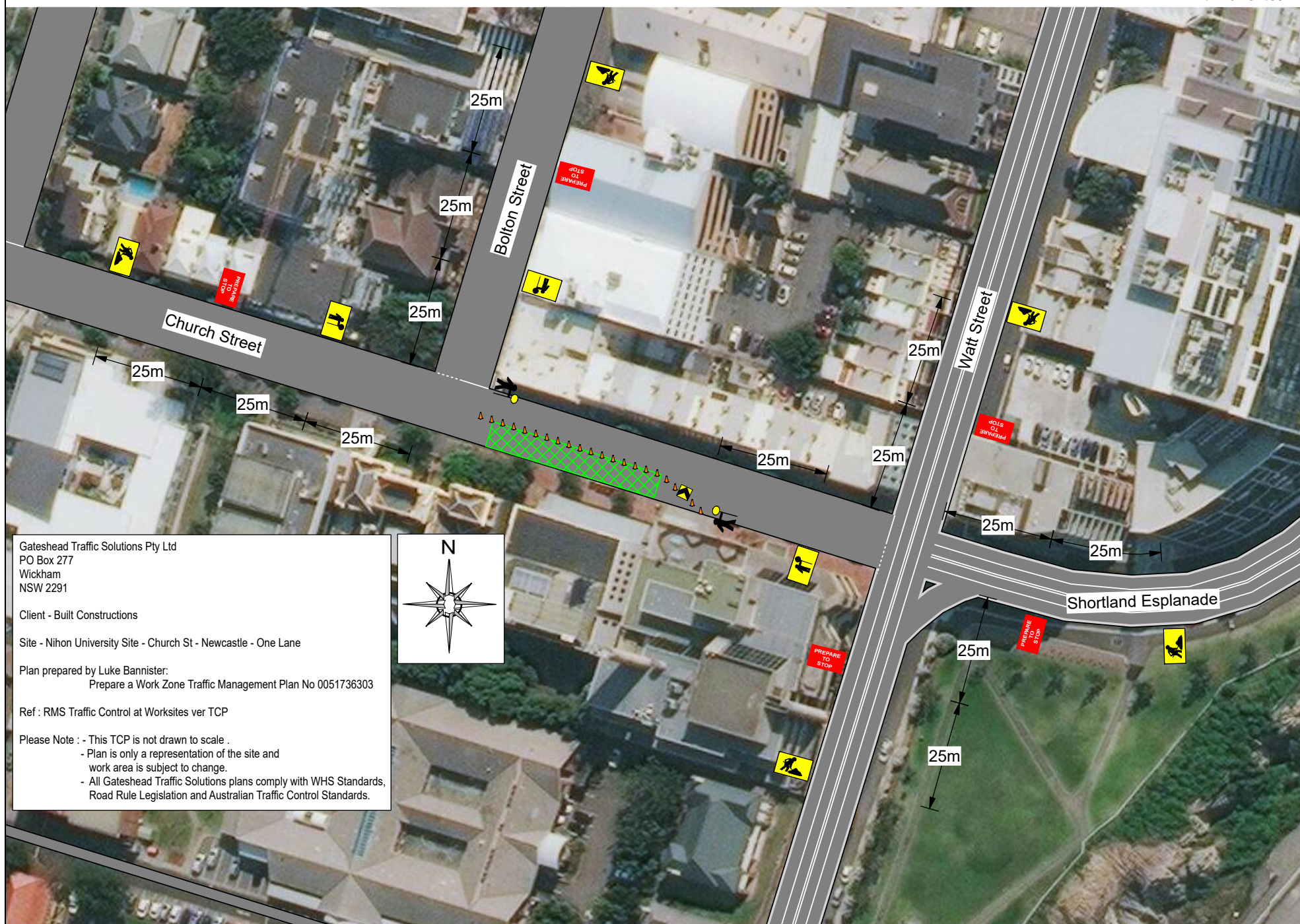
LUKE BANNISTER

Expiry Date:
13/07/2021



This card is not a proof of identity.





Gateshead Traffic Solutions Pty Ltd
PO Box 277
Wickham
NSW 2291

Client - Built Constructions

Site - Nihon University Site - Church St - Newcastle - One Lane

Plan prepared by Luke Bannister:
Prepare a Work Zone Traffic Management Plan No 0051736303

Ref : RMS Traffic Control at Worksites ver TCP

Please Note : - This TCP is not drawn to scale .
- Plan is only a representation of the site and work area is subject to change.
- All Gateshead Traffic Solutions plans comply with WHS Standards, Road Rule Legislation and Australian Traffic Control Standards.

Appendix E – Site Layout Plan

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CAD File: \\cardno-opp-globa1\AU\NSW\Infrastructure\Drawings\Build\Civil\500 Series\81019007_newcastle_courthouse\81019007_Pave Plan.dwg

STAGE 1

- Complete kerb & gutter works

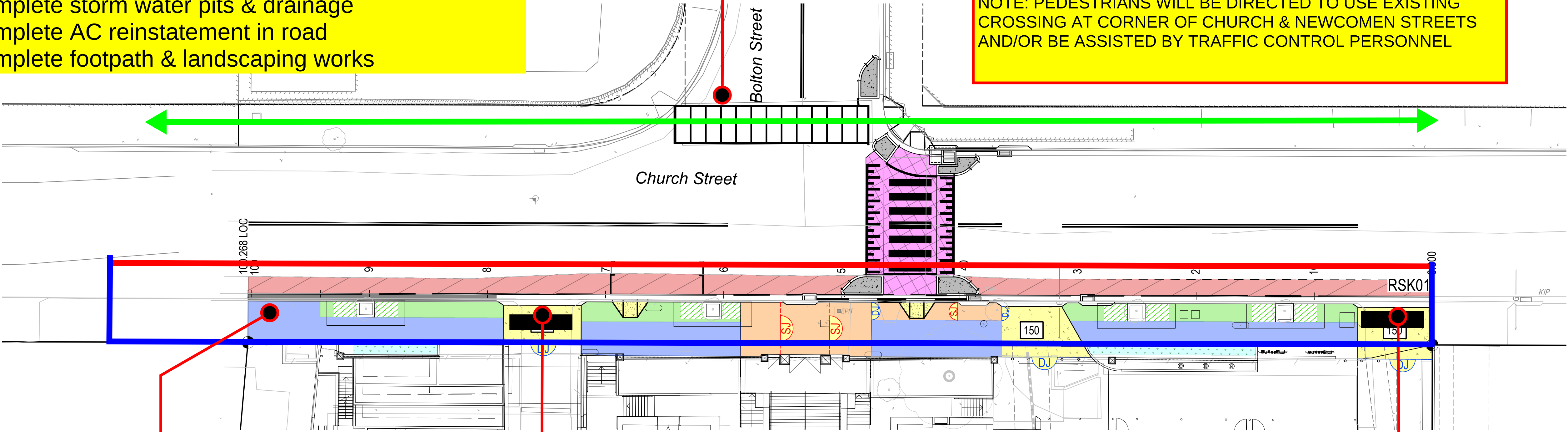
- Complete storm water pits & drainage

- Complete AC reinstatement in road

- Complete footpath & landscaping works

EXISTING PEDESTRIAN CROSSING

NOTE: PEDESTRIANS WILL BE DIRECTED TO USE EXISTING CROSSING AT CORNER OF CHURCH & NEWCOMEN STREETS AND/OR BE ASSISTED BY TRAFFIC CONTROL PERSONNEL



CONSTRUCTION WORK ZONE & FOOTPATH CLOSURE FOR DURATION OF WORKS

CONSTRUCTION ENTRANCE

CONSTRUCTION ENTRANCE

PLAN
SCALE 1:200

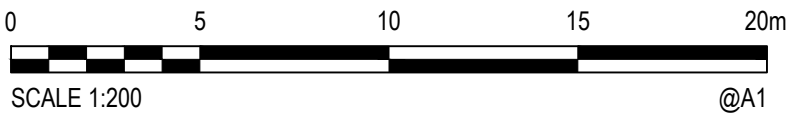
CONCRETE BARRIERS WITH 2.4 METER HIGH FENCING FIXED ATOP

TEMPORARY FENCE PANELS WITH MESH SCREENING

PEDESTRIAN ACCESS PATH

PAVEMENT DETAILS	
	TYPE 1 - HERITAGE BRICK PAVERS ON STRUCTURAL SOIL BASE
	TYPE 1A - HERITAGE BRICK PAVERS OVER SOIL MIX REFER TO LANDSCAPING DOCUMENTATION
	TYPE 2 - ASPHALT FOOTPATH
	TYPE 3 - HERITAGE BRICK PAVERS ON CONCRETE BASE
	TYPE 4 - CONCRETE DRIVEWAY CROSSOVER OR KERB RAMP
	TYPE 5 - PLANTER BEDS/ LANDSCAPING
	TYPE 6 - RAISED ASPHALT PEDESTRIAN CROSSING
	TYPE 7 - CONCRETE MEDIAN INFILL
	TYPE 8 - FLEXIBLE PAVEMENT RECONSTRUCTION
	SAWCUT JOINT - REFER DETAIL ON DRAWING CI-551
	DOWEL JOINT - REFER DETAIL ON DRAWING CI-551
	CONCRETE SLAB THICKNESS

Rev	Date	Description	Des.	Verif.	Appd.
A	13/10/20	ISSUED FOR CONSTRUCTION	DSA	TH	SJB



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Drawn	JJ	Date	APR 20
Checked	SGB	Date	APR 20
Designed	DSA	Date	APR 20
Verified	SGB	Date	APR 20
Approved	SJB	Date	APR 20

Client	AZUSA SEKKEI
Project	NIHON UNIVERSITY AUSTRALIA NEWCASTLE CAMPUS PROJECT 9 CHURCH STREET, NEWCASTLE
Title	CHURCH STREET PUBLIC DOMAIN WORKS PAVEMENT PLAN

Status	FOR CONSTRUCTION			
Datum	AHD	Register	-	Scale
				1:200
Drawing Number	81019007-CI-550			Size
				A1
				Revision
				A

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SAVE DATE: 13-Oct-20 10:45:17 AM BY: Las debrin DATE PLOTTED: 13-Oct-20 10:49:00 AM BY: LAS DE BRITO
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CAD File: \\cardno\cpg\gobal\AU\NSW\Wireframe\Structure\Projects\81019007_Newcastle Courthouse\Drawings\Build\Civil\500 Series\81019007 CI-550 [A] Pav Plan.dwg

STAGE 2

- Complete kerb & gutter works to corner of Church & Bolton Streets.
- Complete storm water pits & drainage.

CONSTRUCTION WORK ZONE

Church Street

Bolton Street

NOTE: PEDESTRIANS WILL BE DIRECTED TO USE EXISTING CROSSING AT CORNER OF CHURCH & NEWCOMEN STREETS AND/OR BE ASSISTED BY TRAFFIC CONTROL PERSONNEL

CONSTRUCTION ENTRANCE

CONSTRUCTION ENTRANCE

PLAN
SCALE 1:200

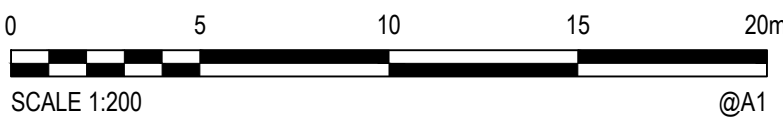
CONCRETE BARRIERS WITH 2.4 METER HIGH FENCES FIXED ATOP

TEMPORARY FENCING WITH MESH SCREENING

PEDESTRIAN ACCESS PATH

PAVEMENT DETAILS

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- TYPE 7 - CONCRETE MEDIAN INFILL
- TYPE 8 - FLEXIBLE PAVEMENT RECONSTRUCTION
- SAWCUT JOINT - REFER DETAIL ON DRAWING CI-551
- DOWEL JOINT - REFER DETAIL ON DRAWING CI-551
- CONCRETE SLAB THICKNESS



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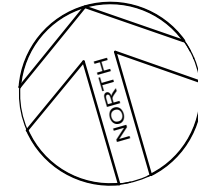
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Checked SGB Date APR 20
Designed DSA Date APR 20
Verified SGB Date APR 20
Approved SJB Date APR 20
Client **AZUSA SEKKEI**
Project **NIHON UNIVERSITY**
AUSTRALIA NEWCASTLE CAMPUS PROJECT
9 CHURCH STREET, NEWCASTLE
Title **CHURCH STREET PUBLIC DOMAIN WORKS**
PAVEMENT PLAN

Status **FOR CONSTRUCTION**

Datum AHD Register - Scale 1:200 Size A1
Drawing Number **81019007-CI-550** Revision **A**

Rev.	Date	Description	Des.	Verif.	Appd.
A	13/10/20	ISSUED FOR CONSTRUCTION	DSA	TH	SJB

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STAGE 3

- Road closure (approx. 3 days) to complete works
- Complete AC works
- Complete concrete blisters / raised crossing
- Complete line marking

EXISTING PEDESTRIAN CROSSING

CONSTRUCTION WORK ZONE

Church Street

Bolton Street

NOTE: PEDESTRIANS WILL BE DIRECTED TO USE EXISTING CROSSING AT CORNER OF CHURCH & NEWCOMEN STREETS AND/OR BE ASSISTED BY TRAFFIC CONTROL PERSONNEL

CONSTRUCTION ENTRANCE

PLAN
SCALE 1:200

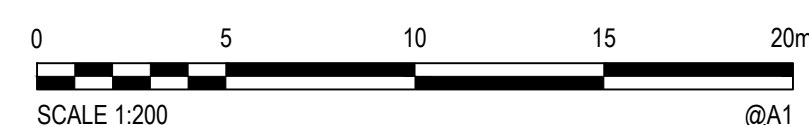
CONSTRUCTION ENTRANCE

PAVEMENT DETAILS

- | | |
|--|--|
| | TYPE 1 - HERITAGE BRICK PAVERS ON STRUCTURAL SOIL BASE |
| | TYPE 1A - HERITAGE BRICK PAVERS OVER SOIL MIX REFER TO LANDSCAPING DOCUMENTATION |
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| | SAWCUT JOINT - REFER DETAIL ON DRAWING CI-551 |
| | DOWEL JOINT - REFER DETAIL ON DRAWING CI-551 |
| | CONCRETE SLAB THICKNESS |

TEMPORARY FENCING WITH MESH SCREENING

PEDESTRIAN ACCESS PATH



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Checked	SGB	Date	APR 20	Project	NIHON UNIVERSITY
Designed	DSA	Date	APR 20		AUSTRALIA NEWCASTLE CAMPUS PROJECT
Verified	SGB	Date	APR 20		9 CHURCH STREET, NEWCASTLE
Approved		Date		Title	CHURCH STREET PUBLIC DOMAIN WORKS PAVEMENT PLAN

Status	FOR CONSTRUCTION							
Datum	AHD	Register	-	Scale	1:200	Size	A1	
Drawing Number	81019007-CI-550						Revision	A

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Rev.	Date	Description	Des.	Verif.	Appd.
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Appendix F – Construction Worker Transportation Strategy



NIHON UNIVERSITY

Construction Worker Transportation Strategy

1.0 PURPOSE

The Construction Worker Transportation Strategy outlines the overall strategy for both Built employees and subcontractors on the Nihon University project to satisfy SSD Condition C14.

2.0 OBJECTIVE

Detail provision of sufficient parking facilities or other travel arrangements for construction workers in order to minimize demand for parking in nearby public & residential streets or public parking facilities.

3.0 SCOPE

This document identifies the various transportation options available to construction workers to minimise demand for both public and private parking facilities. It also identifies the neighbouring properties that must be considered when devising and implementing the strategy.

All workers, employees, subcontractors, employers and the management team, involved in the construction of the project will be made aware of the transportation strategy through communications both prior to commencing and during the completion of their works. Specific details shall be communicated to workers, as required, through the site-specific induction.

4.0 NEIGHBOURING PROPERTIES & STAKEHOLDERS

Built undertake planning on all our projects and always keep our impact on surrounding communities and businesses front of mind.

As part of our planning process for the Nihon University project we are aware of our neighbours' and have identified the following key considerations to mitigate and minimise any impact the development will have;

- James Fletcher Hospital;
- Newcastle Police Station;
- Newcastle Grammar School;
- Commonwealth and Federal Law Courts;
- The Grand Hotel;
- Nearby residential properties;
- Nearby commercial businesses.

As a result of this we understand Newcastle East has an existing high demand for parking.

5.0 CURRENT AVAILABLE PARKING OPTIONS

We have researched the current parking options available in the vicinity of the project being;

- Hunter Car Park at 50 Bolton Street with 570 spaces and open 24 hrs a day 7 days a week;
- King Street Parking Garage at 92 King Street with 489 spaces and open 7am to 7pm Monday to Friday and 7am to 4.30pm on Saturdays;
- Limited all day public parking on Reserve Road and in King Edward Park;

- Limited paid car parking in surrounding streets Inc. Church Street, Newcomen Street restricted to either 2 or 4 hours.

Figure 1 below illustrates the nearby parking facilities available to construction workers for the duration of the project.



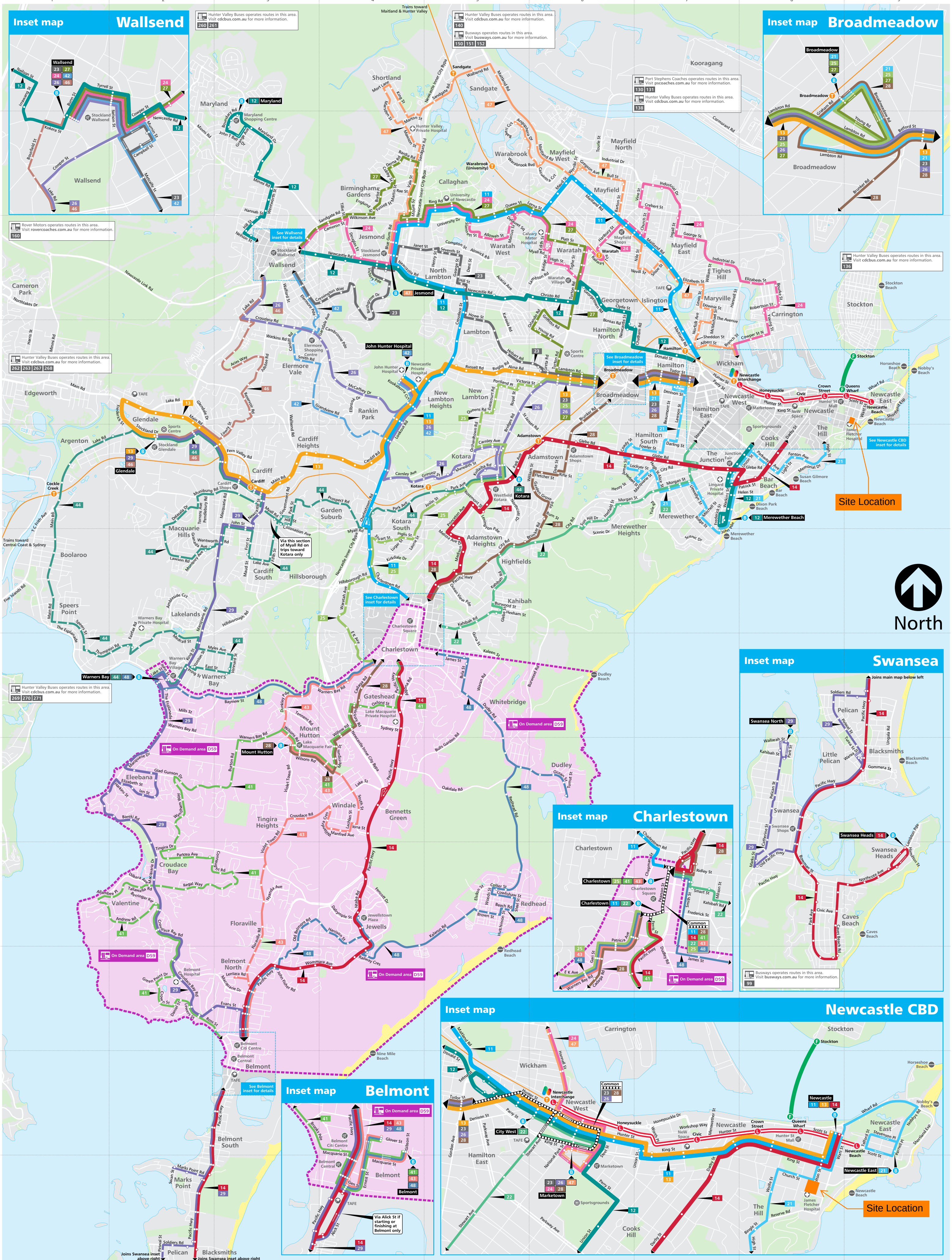
Figure 1: Parking Options

6.0 AVAILABLE ALTERNATIVE TRANSPORT OPTIONS

In relation to our workforce we will be actively encouraging the following;

- Public transport wherever possible including the use of available bus routes 11, 13, 14, 21 and the light rail from Newcastle Beach in Newcastle East to Newcastle Interchange in Newcastle West linking with the existing heavy rail network;
- Carpooling when possible and utilising the Bolton or King Street parking facilities or the available all-day public parking on Reserve Road and in King Edward Park

The Newcastle Transport Network Guide Map below illustrates the available public transport options extending from East Lake Macquarie to the site location in Newcastle. These services run regularly Monday to Saturday both during and outside of normal working hours.



7.0 COMMUNICATION OF STRATEGY TO WORKERS

We will be actively discouraging the use of the available paid short-term public parking in Church Street and nearby streets.

There will no parking of any vehicle in the James Fletcher grounds, with any workers found to be breaching this site rule being appropriately disciplined.

This strategy will form part of our subcontractor engagement process with each respective trade and will also form part of our site inductions that every worker will undertake. The Newcastle Transport network guide will be made available to all workers and posted in the site amenities.

We will also further be reinforcing this strategy in our regular toolbox talks and site-wide addresses with the workforce.

Appendix G – Driver Code of Conduct

Driver Code of Conduct Induction Form

Project Name:	Nihon University Newcastle Campus	Project No:	201229
Supplier / Contractor:			
Contractor:			
Name of Driver:			
Vehicle Registration No:		Unit No:	
Date:			

The project is committed to providing a safe and healthy workplace. You are required to read, review and agree to comply with these conditions before signing the form.

General Industry Card

The driver must produce a General Industry Card when entering the site.

Competencies / HRCW Licence

The driver or worker must produce a competency or HRCW Licence as required.

Personal Protective Equipment (PPE)

The driver must wear a safety hard hat, steel capped boots and safety vest at all times when out of the cab.

Loading and Unloading of Trucks

Unloading must not commence until a safe unloading method is understood and agreed by both delivery and site personnel.

Designated Routes

All drivers to take the designated route specified by Built / traffic control personnel

Signatures

I have read and understand the above requirements and the safety items listed overleaf. I am aware that failure to agree to comply with the site requirements may result in my removal from site.

Drivers

Signature:

Date:

I have explained these requirements and Built's standard safety requirements to the above driver and have explained and ticked the relevant boxes on the 'Driver's Basic Safety Site Induction' overleaf.

Site Personnel:

Date:

Once signed, a copy of this form must be held by the delivery driver at all times and must be presented on request (photo acceptable).

Delivery driver basic safety site induction

This form constitutes a basic safety site induction for deliveries or pick-ups. Communicate the following safety requirements to the driver. The driver must then sign the form on the previous page, accepting that he/she has understood the site requirements for entry, unloading or loading and exiting the work site.

- ☐ The Site Workplace Safety and Health Coordinator is **Michael Louis**
- ☐ A Safety and Health Committee is established. The project intends to monitor and review the effectiveness of its control measures through the Safety & Health Committee.
- ☐ Site UHF radio channel is: (used to contact Supervisor, Foreman or Leading Hand)
- ☐ Site First Aid Officers are: **All Built Personnel**
- ☐ First aid kits are held in: **Site Office - Building A (Education) Level 2**
- ☐ All accidents and incidents must be reported to site management
- ☐ All vehicles should be fitted with reverse 'quacker' alarms
- ☐ PPE is always to be worn (Safety Boots, Vest, Hard Hat)
- ☐ Emergency Procedure requires all instructions given by site staff to be obeyed. Leave site if directed to.
- ☐ Daily Pre-start (or SWMS if delivery involves high risk activities) shall encompass all delivery hazards and be communicated to persons involved with the unloading before unloading commences.
- ☐ Speed limit of **5km/h** and signage must be obeyed
- ☐ Be aware of pedestrians when entering or leaving site
- ☐ If spotter cannot be seen in the truck mirrors, do not reverse
- ☐ Watch for and avoid other construction machinery
- ☐ Park vehicle away from work areas as directed by site personnel. Do not park behind working or parked construction equipment.
- ☐ Before approaching work machinery, make eye contact with the operator
- ☐ Do not untie load until stationary at unloading point
- ☐ All loads to be covered and transported with enviro tarp, tarps are to be automatic to reduce risk of fall from height
- ☐ 'Hiab' type cranes are to be operated by certified persons. Loads to be slung by certified dogman.
- ☐ Lift chains must be fitted with safety latch lock hooks and must be stamped with current testing certification
- ☐ Lifting equipment for unloading pipes may be fitted with C type lifting clamp but must be in test period stamped on the SWL tag.
- ☐ When accessing loads to secure lifting equipment, load must be stable to allow access. Some form of fall prevention is required if load is over 2.0m above the ground.
- ☐ No load is to pass over any barricade or person
- ☐ Keep all persons out of arc of slew
- ☐ If a forklift or similar machine is used for unloading, the operator must be certified.
- ☐ Concrete trucks must wash out at designated points.
- ☐ Tip trucks must lower hoists before proceeding from dump point.
- ☐ Driver must stay within cab during loading.
- ☐ Truck/trailer combos must clean debris from draw bar before exiting site.
- ☐ When ground is muddy and/or it is raining, all vehicle wheels must be washed at designated exit points, no spoil is to exit site.
- ☐ Ensure no person is standing behind tilt tray when tilting and unloading or loading.
- ☐ Before using your mobile phone, stop work or stop vehicle, park in safe position and then make or take call.
- ☐ Drivers are to respect the local community incl. no idling, no littering, approved work hours

Built.



Construction Noise and Vibration Management Sub Plan

Nihon University Newcastle Campus Project

9 Church Street

Newcastle

NSW 2300



18&19 / 10 Kenrick Street
The Junction, NSW 2291
April 9, 2020

Benjamin Moss
Built
Suite 1, 155-157 Lambton Road
Broadmeadow NSW 2292

Nihon University – Construction Noise and Vibration Management Plan Requirements

Dear Ben,

Thank you for contacting me regarding assistance to review and endorse the Nihon University Construction Noise and Vibration Management Plan (CNVMP).

I can confirm I have over 25 years' experience in a wide range of Acoustics and Air Quality projects. I have previously been the Air and Noise Technical Service line leader and The Global Environmental Technical Sector Leader for international professional service firms and have the appropriate experience to undertake this review of your plan.

Approval Condition C7 Environment Management Plan requirements and C11 Construction Noise and Vibration Management Sub-Plan requirements for the proposal include:

Environment Management Plan Requirements	
C7	Management plans required under this consent must be prepared in accordance with relevant guidelines, and include: (a) detailed baseline data; (b) details of: (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions); (ii) any relevant limits or performance measures and criteria; and (iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures; (c) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria; (d) a program to monitor and report on the: (i) impacts and environmental performance of the development; (ii) effectiveness of the management measures set out pursuant to paragraph (c) above; (e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible; (f) a program to investigate and implement ways to improve the environmental performance of the development over time; (g) a protocol for managing and reporting any: (i) incident and any non-compliance (specifically including any exceedance of the impact assessment criteria and performance criteria); (ii) complaint; (iii) failure to comply with statutory requirements; and (h) a protocol for periodic review / update of the plan and any updates in response to incidents or matters of non-compliance. Note: The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans



RAPT
CONSULTING

C11	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; (b) describe procedures for achieving the noise management levels in EPA's Interim Construction Noise Guideline (DECC, 2009); (c) describe the measures to be implemented to manage high noise generating works such as piling, in close proximity to sensitive receivers; (d) include strategies that have been developed with the community for managing high noise generating works; (e) describe the community consultation undertaken to develop the strategies in condition C11(d); (f) include a complaints management system that would be implemented for the duration of the construction; and (g) 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 C7(d). The program should be developed in accordance with the report titled Noise and Vibration Assessment – Operational and Construction report dated May 2019 and prepared by EMM Consulting, and included, but not limited to: (i) alert triggers where project trigger noise levels are exceeded; and (ii) procedures for respite periods when sensitive receivers become 'highly noise affected' (i.e. noise levels exceed 75 dB(A)).
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I can confirm I have reviewed the CNVMP for the Nihon University Project and it satisfies the requirements for the CNVMP outlined above.

Should you have any further questions, please do not hesitate to contact Greg Collins on 0488512224 or greg@raptconsulting.com.au.

Thank you,

Greg Collins, Director – RAPT Consulting

Revision History

Revision	Date	Description	Reviewed By
A	16/01/2020	For Approval	BM (BUILT NSW)
B	25/02/2020	Amendments to Appendix A – Construction Noise & Vibration Monitoring Programme due to initial results and changes in demolition / construction methodology to reduce noise and vibration levels	BM (BUILT NSW)
C	18/03/2020	Reviewed by RAPT Consulting. Amendments made to Section 5.5 Vibration Criteria.	GC (RAPT)
01	09/04/2020	Reviewed by RAPT Consulting. Amendments made in response to corrective actions arising from GHD Independent Environmental Audit Report 1 dated March 2020 Refer to attached Appendix A - Revision Change Register.	GC (RAPT)
02	21/06/2021	Section 7.1 updated to reflect EPA (COVID-19 Development – Construction Work Days) Order (No 2) 2021. A copy of the Order 2021 is now included in Appendix B.	BM (BUILT NSW)

Distribution

Revision	Organisation	Submission	Copies
A	Dwp Newcastle	For Submission to NSW DPIE	1
	Dix Gardner Group	For Information	
B	GHD Newcastle	For Review	1
	Dwp Newcastle	For Information	
C	Dwp Newcastle	For Submission to NSW DPIE	1
01	Dwp Newcastle	For Submission to NSW DPIE	1
	Dix Gardner Group	For Information	
02	Dwp Newcastle	For Submission to NSW DPIE	1
	Dix Gardner Group	For Information	

Contents

1.0 Introduction.....	5
2.0 Project Information.....	6
2.1 Description & Location	6
2.2 Sensitive Receivers.....	6
3.0 Regulatory Framework.....	8
4.0 Existing Noise Environment	12
4.1 Attended Noise Monitoring.....	12
5.0 Construction Noise and Vibration Criteria.....	13
5.1 Construction Noise	13
5.1.1 Standard Hours of Construction.....	13
5.1.2 Residential Land Uses	13
5.1.3 Other Sensitive Land Uses	14
5.1.4 Project Specific Noise Management Levels	15
5.2 Construction Vibration.....	16
5.2.1 Cosmetic and Structural Damage	16
5.2.2 Human Exposure and Comfort.....	17
6.0 Construction Noise and Vibration Assessment	19
6.1 Construction Activities	19
6.2 Construction Noise Assessment.....	19
6.2.1 Construction Noise Sources	19
6.2.2 Predicted Construction Noise Levels	20
6.3 Construction Vibration.....	21
7.0 Construction Hours	23
7.1 Standard Construction Hours	23
7.2 Out of Hours Work.....	23
7.3 High Impact Work Hours.....	24
8.0 Noise and Vibration Management Measures	25
8.1 Implementation of Management Measures.....	25
9.0 Compliance Management.....	30
9.1 Roles and Responsibilities	30

9.2 Training	30
9.3 Monitoring and Inspections	30
9.4 Compliance Reporting	34
9.5 Incident Notification and Reporting	35
9.6 Non-Compliance Notification	35
9.7 Noise and Vibration Compliance Audits.....	36
9.8 Periodic Reviews and Updates.....	36
10.0 Community Consultation and Complaint Management	38
10.1 Community Consultation for Development of Sub Plan.....	38
10.2 Ongoing Community Consultation	40
10.3 Complaint Management System.....	40
11.0 Appendices	42

1.0 Introduction

Built has prepared a Construction Noise and Vibration Management Sub-Plan (CNVMSP) in consultation with RAPT Consulting for major alterations and additions works of the Nihon University Newcastle Campus Project (the Project) located at 9 Church Street, Newcastle NSW 2290. The works involve the demolition of the existing Administration and Supreme Court Buildings and external areas, construction of two new four-story buildings, restoration and refurbishment to the heritage-listed Newcastle Courthouse, as well as external works within the site boundary and the public domain.

This sub-plan forms part of the Construction Environmental Management Plan, which is an appendix of the overarching Built Site Health, Safety and Environmental (HSE) Plan for the project. The CNVMSP has been prepared to address the construction noise and vibration requirements listed in the Development Consent, reference SSD 9787, issued by the NSW Department of Planning, Industry, and Environment (DPIE) and the Noise and Vibration Assessment (NVA) dated May 2019 prepared by EMM Consulting.

The purpose of this CNVMSP is to describe how Built proposes to manage potential noise and vibration impacts during construction of the Project.

The key objective of the CNVMSP is to ensure that project noise and vibration impacts on nearby sensitive receivers are minimised and within the scope permitted by the planning approval. This includes management procedures to appropriately respond to complaints from the community and stakeholders relating to noise and vibration.

To achieve this objective, Built will undertake the following:

- Ensure appropriate controls and procedures are implemented during construction activities to avoid or reduce noise and vibration impacts and potential adverse impacts on neighbouring sensitive receivers.
- Ensure reasonable and feasible mitigation measures are implemented with the aim of achieving the requirements in the Development Consent and the management levels detailed in this CNVMSP in accordance with the NSW EPA's *Interim Construction Noise Guideline*.
- Ensure complaints from the community and stakeholders are reduced.

2.0 Project Information

2.1 Description & Location

The Project is located at 9 Church Street, Newcastle and is situated on the site of the former Newcastle Courthouse. It is surrounded by buildings with Church Street and both commercial and residential receivers to the north, Newcastle Police Station to the east, and James Fletcher Hospital to the south and west.

Figure 1 shows the site location.



Figure 1 - Site Location

2.2 Sensitive Receivers

The Project area is located within a high-density area immediately adjacent to Newcastle Police Station, James Fletcher Hospital, The Grand Hotel, and residential receivers.

The NVA identified that the nearest noise-sensitive receptors potentially affected by noise from the subject site are residences on Church and Bolton Streets (located to the north of the project site) and adjacent commercial businesses. The nearest residences are located approximately 20 m from the northern boundary of the subject site while the nearest commercial properties are approximately 5-10 m from the eastern, southern and western boundaries of the site.

Figure 2 shows the site location with potentially affected receivers as identified within the NVA.



Figure 2 - Sensitive receiver locations

The sensitive land uses shown in Figure 2 are summarised in Table 1 alongside a description of the land use.

Table 1 Noise and vibration-sensitive land uses

Reference	Description
Residential Buildings	
R1 – 58 Bolton Street	Residential properties located opposite the site to the north. All properties are approximately 20-25m from the site boundary.
R3 – 30 Church Street	
Commercial	
R2 – The Grand Hotel, 32 Church Street	Commercial property/hotel located opposite the site to the north approximately 20-25m from the site boundary.
R4 – Newcastle Police Station, 1 Church Street	Commercial property located on the immediate eastern boundary of the site.
Hospital	
R5 – James Fletcher Hospital, 72 Watt Street	Health facility/hospital located on an elevated position opposite the site to the south approximately 5m from the site boundary
R6 – James Fletcher Hospital, 15 Church Street	Health facility/hospital located on an elevated position opposite the site to the west approximately 10-20m from the site boundary.

It is also noted that the NVA did not include additional neighbouring residential and commercial properties opposite the site boundary on Church Street during their assessment. Built has considered these properties within the preparation of the CNVMSP.

3.0 Regulatory Framework

The CNVMSP has been prepared to address the regulatory framework for the management of noise and vibration in accordance with the relevant legislation, policies, standards, guidelines, and SSD Development Consent, specifically Conditions C7, C11, D2, D4 to D7, D12 to D14 and D15 to D17.

Table 2 below outlines the relevant legislation, policies, standards and guidelines identified within the NVA by EMM Consulting while the specific SSD Consent Conditions are shown in Table 3.

Table 2 Legal Requirements

Legal Requirement	Relevance
Protection of the Environment Operations Act 1997 (POEO Act) (Sections 139, 140)	Relates to noise pollution / excessive noise due to the operation of plant and dealing (process, handle, move, store or dispose of) with materials.
Protection of the Environment Operations (Noise Control) Regulation 2008.	Relates to prescribed noise limits of motor vehicles, time limits for the use of tools and other articles, and the inspection and testing of certain articles
NSW Environment Protection Authority (EPA) 2017, Noise Policy for Industry (NPfI)	Sets out the requirements for the assessment and management of noise from industrial premises in NSW
State Environmental Planning Policy (Infrastructure) 2007.	Facilitates the effective delivery of infrastructure by identifying the environmental assessment category, matter to be considered in the assessment of development adjacent to particular types of infrastructure, and providing for consultation with relevant public authorities
NSW Department of Environment and Climate Change (DECC) 2009, Interim Construction Noise Guideline (ICNG)	Aimed at managing noise from construction works, specifically high noise levels that can adversely affect sleep, concentration, and mental and physical health
NSW Department of Environment and Conservation (DEC) 2006, Assessing Vibration: a technical guideline	The prescribed vibration criteria for human comfort on the project. Presents preferred and maximum vibration values for use in assessing human response (comfort) to vibration. Provides recommendations for measurement and evaluation techniques.
Standards Australia – AS 1055-2018 Acoustics - Description and measurement of environmental noise	Used in the evaluation of environmental noise in order to meet the needs of public bodies and persons interested in its management. It applies primarily to noise emitted from industrial, commercial and residential premises, and is intended for use in the evaluation of existing problems, as well as for planning purposes.
Australian Standard AS 2436-2010 Guide to Noise Control on Construction, Maintenance, and Demolition Sites	Provides guidance in noise and vibration control on construction, maintenance and demolition sites including guidance on investigation and identification of sources, measurement, assessment/planning for measures and monitoring their effectiveness
DIN 4150-3 (1992-02) Structural Vibration – Effects of vibration on structures (German Institute for Standardisation, 1999)	The relevant and prescribed vibration criteria for structural (cosmetic) damage on the project.
Australian Standard AS IEC 61672.1—2004 - Electroacoustics—Sound level meters, Part 1: Specifications (Standards Australia, 2004)	Provides electro-acoustical performance specifications of sound level meters.

Table 3 SSD-9787 Development Consent conditions for noise and vibration

Condition No.	Condition
C7	Management plans required under this consent must be prepared in accordance with relevant guidelines, and include:
(c)	A description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria
(d)	A program to monitor and report on the: (i) impacts and environmental performance of the development (ii) effectiveness of the management measures set out pursuant to paragraph (c)
C11	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;
(b)	describe procedures for achieving the noise management levels in EPA's Interim Construction Noise Guideline (DECC, 2009);
(c)	describe the measures to be implemented to manage high noise generating works such as piling, in close proximity to sensitive receivers
(d)	include strategies that have been developed with the community for managing high noise generating works;
(e)	describe the community consultation undertaken to develop the strategies in condition C11(d);
(f)	include a complaints management system that would be implemented for the duration of the construction; and
(g)	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 C7(d). The program should be developed in accordance with the report titled Noise and Vibration Assessment – Operational and Construction report dated May 2019 and prepared by EMM Consulting, and included, but not limited: (i) alert triggers where project trigger noise levels are exceeded; and (ii) procedures for respite periods when sensitive receivers become 'highly noise affected' (i.e. noise levels exceed 75 dB(A).
D2	All construction plant and equipment used on site must be maintained in a proper and efficient condition and operated in a proper and efficient manner.
D4	Construction, including the delivery of materials to and from the site, may only be carried out between the following hours:
(a)	between 7 am and 6 pm, Mondays to Fridays inclusive; and
(b)	between 8 am and 1 pm, Saturdays. No work may be carried out on Sundays or public holidays.

Condition No.	Condition
D5	Construction activities may be undertaken outside of the hours in condition D4 if required:
(a)	by the Police or public authority for the delivery of vehicles, plant or materials; or
(b)	in an emergency to avoid the loss of life, damage to property or to prevent environmental harm; or
(c)	where 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.
D6	Notification of such construction activities as referenced in condition D5 must be given to affected residents before undertaking the activities or as soon as it is practical afterwards.
D7	Rock breaking, rock hammering, sheet piling, pile driving, and similar activities may only be carried out between the following hours:
(a)	9am to 12pm, Monday to Friday;
(b)	2pm to 5pm Monday to Friday; and
(c)	9am to 12pm, Saturday.
D12	The development must be constructed to achieve the construction noise management levels detailed in the Interim Construction Noise Guideline (DECC, 2009). All feasible and reasonable noise mitigation measures must be implemented and any activities that could exceed the construction noise management levels must be identified and managed in accordance with the management and mitigation measures identified in the approved Construction Noise and Vibration Management Plan.
D13	The Applicant must ensure construction vehicles (including concrete agitator trucks) do not arrive at the site or surrounding residential precincts outside of the construction hours of work outlined under condition D4.
D14	The Applicant must implement, where practicable and without compromising the safety of the construction staff or members of the public, the use of 'quackers' to ensure noise impacts on surrounding noise sensitive receivers are minimised.
D15	Vibration caused by construction at any residence or structure outside the site must be limited to:
(a)	for structural damage, the latest version of DIN 4150-3 (1992-02) Structural vibration - Effects of vibration on structures (German Institute for Standardisation, 1999); and
(b)	for human exposure, the acceptable vibration values set out in the Environmental Noise Management Assessing Vibration: a technical guideline (DEC, 2006) (as may be updated or replaced from time to time).
D16	Vibratory compactors must not be used closer than 30 metres from residential buildings unless vibration monitoring confirms compliance with the vibration criteria specified in condition D15.

Condition No.	Condition
D17	The limits in conditions D15 and D16 apply unless otherwise outlined in a Construction Noise and Vibration Management Plan approved as part of the CEMP required by condition C11 of this consent.

4.0 Existing Noise Environment

4.1 Attended Noise Monitoring

In preparation for the NVA, attended noise monitoring was undertaken by EMM Consulting on 17/04/2019 to establish the existing ambient noise environment surrounding the proposed development site. The location of monitoring was selected to record background and ambient noise levels at locations representative of receptors potentially most affected by noise from the proposed development. The operator attended noise monitoring location (L1) is shown in Figure 2.

A summary of the noise monitoring results showing the Rated Background Level (RBL) and average ambient noise level (L_{Aeq}) is provided in Table 4 below.

Table 4 Attended noise monitoring summary

Location	Date	Start Time	Period ¹	L_{Aeq}	L_{A90} (RBL)	L_{Amax}	Comments
L1 Corner of Bolton & Church Streets	17/4/19	11:52	Day (7am – 6pm)	58	49	80	Urban hum (nearby fans, pumps, etc.) and distant traffic noise consistent. Car passbys frequent. Bird noise, aircraft noise, pedestrian noise and wind in trees occasionally.
	17/4/19	21:45	Evening (6pm – 10pm)	56	45	75	Urban hum (nearby fans, pumps, etc.) and insects consistent. Distant traffic, car passbys and nearby hotel noise frequent. Resident noise, pedestrian noise and dog barking occasionally.
	17/4/19	22:15	Night (10pm – 7am)	55	45	71	Urban hum (nearby fans, pumps, etc.) and insects consistent. Distant traffic and car passbys frequent. Pedestrian noise occasionally.

5.0 Construction Noise and Vibration Criteria

5.1 Construction Noise

Construction noise in New South Wales is assessed using the NSW EPA's *Interim Construction Noise Guideline* (ICNG, 2009). The ICNG is also defined as the relevant guideline for construction noise and vibration by the development consent issued by DPIE.

The ICNG aims to manage noise from construction works regulated by the EPA. It is also intended to provide guidance to other interested parties in the management of construction noise and has therefore been adopted for this construction noise assessment.

The ICNG prescribes $L_{Aeq, 15min}$ Noise Management Levels (NML) for sensitive receivers as part of a quantitative construction noise assessment. Where the predicted or measured construction noise level exceeds these management levels, then all feasible and reasonable work practices should be implemented to reduce construction noise, and community consultation regarding construction noise is required to be undertaken.

5.1.1 Standard Hours of Construction

The ICNG recommended standard hours of construction are as follow:

- Monday to Friday: 7:00 am to 6:00 pm
- Saturday: 8:00 am to 1:00 pm
- No work on Sundays or Public Holidays

To encourage work during the Standard Hours of Construction, and to reflect the lower impact of work at these times, the ICNG prescribes less stringent Standard Hours NMLs. The construction hours described in Condition D4 of the development consent aligns with the ICNG Standard Hours.

It should be noted that the Standard Hours of Construction are only applicable to residential (or similar) land uses. At other land uses, the impact of construction noise is assessed based on the times that the land use operates.

5.1.2 Residential Land Uses

The daytime standard work hours NMLs prescribed for residential land use by the ICNG are presented in Table 5. The ICNG out of hours NMLs would not be applicable to this assessment as Condition D5 requires construction activities to be inaudible.

The levels apply at the most exposed property boundary of the noise-sensitive receiver at a height of 1.5 metres above ground level

Table 5 Noise management levels for residential land use

Time of day	NML, $L_{Aeq, 15min}$	Notes
Recommended Standard Hours: Monday to Friday 7:00am to 6:00pm Saturday 8:00am to 1:00pm No work on Sundays or public holidays	Noise affected: RBL + 10 dB(A)	May be some community reaction to noise. • Where the predicted or measured construction noise level exceeds the noise affected level, all feasible and reasonable work practices should be applied to meet the noise affected level. • All residents potentially impacted by the works should be informed of the nature of the works,

Time of day	NML, $L_{Aeq, 15min}$	Notes
		the expected noise levels, and duration, and provided with site contact details.
	Highly noise affected: 75 dB(A)	May be a strong community reaction to noise. - Where construction noise is predicted or measured to be above this level, the relevant authority may require respite periods that restrict the hours that the very noisy activities can occur. - Respite activities would be determined considering times identified by the community when they are less sensitive to noise, and if the community is prepared to accept a longer period of construction to accommodate respite periods.
Outside recommended Standard Hours	Noise affected: RBL - 10 dB(A)	- A strong justification would typically be required for works outside the recommended standard hours. - The proponent should apply all feasible and reasonable work practices to meet the affected noise level. - Where all feasible and reasonable practices have been applied and noise is more than RBL - 10 dB(A) above the affected noise level, the proponent should negotiate with the affected community.

5.1.3 Other Sensitive Land Uses

The ICNG also prescribes NMLs for other sensitive land uses, including educational buildings, offices, and hospital wards. The NMLs for other non-residential sensitive land uses are summarised in Table 6 and apply only when those land uses are in use.

Table 6 ICNG noise management levels for other sensitive land uses

Land use	NML $L_{Aeq, 15min}$
Industrial premises	External noise level 75 dB (when in use)
Offices, retail outlets	External noise level 70 dB (when in use)
Classrooms at schools and other educational institutions	Internal noise level 45 dB (when in use)
Hospital wards and operating theatres	Internal noise level 45 dB (when in use)
Places of worship	Internal noise level 45 dB (when in use)
Active recreation areas	External noise level 65 dB (when in use)
Passive recreation areas	External noise level 60 dB (when in use)

5.1.4 Project Specific Noise Management Levels

The adopted Project Construction NMLs for each identified receiver location has been determined based on the measured noise levels in Section 4.1 and are in accordance with ICNG. These are listed in Table 7, and more specifically in Table 8 below.

Table 7 Construction Noise Management Levels

Receiver	Period	Representative RBL, dB(A)	NML ¹ L _{Aeq, 15-minute} , dB(A)
Residential - west (nearest potentially affected)	Recommended standard hours	49	Noise affected: 59 Highly noise affected: 75
Offices, retail outlets	When in use	N/A	70
Neighbouring industrial premises	When in use	N/A	75
Classrooms	When in use	N/A	45 (Internal) / 55 (External)
Hospital wards and operating theatres	When in use	N/A	45 (Internal) / 55 (External)
Places of worship	When in use	N/A	45 (Internal) / 55 (External)

Table 8 Specific construction noise management levels

Receiver	No. of Buildings	Land Use	NML ¹ L _{Aeq, 15-minute} , dB(A)
James Fletcher Hospital	2	Hospital	45 (Internal) / 55 (External)
Newcastle Grammar School	1	Education	45 (Internal) / 55 (External)
Christ Church Cathedral	1	Place of Worship	45 (Internal) / 55 (External)
30 Church Street ¹	1	Residential	59 (Noise affected) / 75 (Highly noise affected)
58 Bolton Street ²	1	Residential	59 (Noise affected) / 75 (Highly noise affected)
The Grand Hotel	1	Commercial	70
Newcastle Police Station	1	Offices	70
Commonwealth Law Courts	2	Offices	70
WSP Australia	1	Offices	70
Braye Cragg Solicitors	1	Offices	70
Newcastle Chambers	1	Offices	70
Bolton Street Pantry	1	Offices	70

Note 1: Neighbouring residential properties to 30 Church Street are also considered

Note 2: Neighbouring residential properties to 58 Bolton Street on Church Street are also considered

5.2 Construction Vibration

Ground vibration generated by construction can have a range of effects on buildings and building occupants. The main effects are generally classified as:

- human disturbance – disturbance to building occupants: vibration which inconveniences or interferes with the activities of the occupants or users of the building
- effects on building structures – vibration which may compromise the condition of the building structure itself.

In general, vibration criteria for human disturbance are more stringent than vibration criteria for effects on buildings. Building occupants will normally feel vibration readily at levels well below those which may cause a risk of cosmetic or structural damage to a structure. However, it may not always be practical to achieve human comfort criteria.

Furthermore, unnecessary restriction of construction activities can prolong construction works longer than necessary, potentially resulting in other undesirable effects for the local community.

Construction vibration criteria have been adopted from the following sources:

- Cosmetic and structural damage to buildings: German Standard DIN 4150-3:1992-02 Structural Vibration – Effects of vibration on structures (German Institute for Standardisation, 1999)
- Human comfort: Environmental Noise Management Assessing Vibration – A Technical Guideline (DEC, 2006) (the Guideline)

5.2.1 Cosmetic and Structural Damage

SSD Condition D15 (a) states that potential structure damage caused by construction vibration at any residence or structure outside the site must be limited to the levels specified in the latest version of DIN 4150-3. DIN 4150-3 summarises the structural and cosmetic damage assessment criteria for different types of buildings, which are presented in Table 9, and are widely used for the assessment of construction vibration effects on buildings in Australia. The criteria are specified as Peak Particle Velocity (PPV) levels measured in any direction at or adjacent to the building foundation.

Table 9 DIN 4150-3 vibration cosmetic and structural damage criteria

Structure type	Peak Particle Velocity (PPV), mm/s			
	Foundation of Structure			Vibration at horizontal plane of the highest floor at all frequencies
	<10 Hz	10-50 Hz	50-100 Hz	
Buildings used for commercial, industrial purposes, industrial buildings and buildings of similar design	20	20 to 40	40 to 50	40
Dwelling and buildings of a similar design and/or use	5	5 to 15	15 to 20	15
Structures that, because of their particular sensitivity to vibration, do not correspond to those listed in rows 1 and 2, and are of great intrinsic value (e.g. heritage-listed buildings)	3	3 to 8	8 to 10	8

DIN 4150-3 states that exposing buildings to vibration levels higher than that recommended would not necessarily result in damage. Rather, it recommends these values as maximum levels of short-term construction vibration at which experience has shown damage reducing the serviceability of structures will not occur due to vibration effects.

Special consideration is required to comply with SSD Condition D16, ensuring that vibratory compactors must not be used closer than 30 metres from residential buildings unless vibration monitoring confirms compliance with the vibration criteria specified in condition D15.

The limits in Conditions D15 and D16 apply unless otherwise outlined in a Construction Noise and Vibration Management Plan, approved as part of the CEMP required by condition C11 of this consent.

5.2.2 Human Exposure and Comfort

The ICNG recommends that vibration from construction works be assessed under *Environmental Noise Management Assessing Vibration – a technical guideline* (DEC, 2006) (the Guideline), consistent with Condition D15 (b) of the development consent.

The vibration assessment criteria defined in the Guideline are for human comfort and represent goals that, where predicted or measured to be exceeded, require the application of all feasible and reasonable mitigation measures. At vibration values below the preferred values, there is a low probability of adverse comment or disturbance to building occupants. Where all feasible and reasonable mitigation measures have been applied and vibration values are still beyond the maximum value, it is recommended the operator negotiate directly with the affected community.

The Guideline defines vibration assessment criteria for continuous, impulsive and intermittent vibration. Vibration can be classified according to the following definitions:

- **Continuous vibration:** continues uninterrupted for a defined period. Applies to continuous construction activity such as tunnel boring machinery.
- **Impulsive vibration:** Infrequent: Activities that create up to 3 distinct vibration events in an assessment period, e.g. occasional dropping of heavy equipment, occasional loading, and unloading.
- **Intermittent vibration:** interrupted periods of continuous vibration (such as drilling) or repeated periods of impulsive vibration (such as a jackhammer).

The majority of construction activities as part of the proposed works would be expected to be continuous and intermittent in nature, however, some impulsive vibration activity is expected during the demolition and early works stages.

Table 10 presents the management levels for continuous and impulsive vibration at different land uses. The management levels specified are as overall unweighted RMS vibration velocity levels. The Guideline specifies the management levels as suitable for vibration sources predominantly in the frequency range 8-80 Hz as would be expected for construction vibration.

Table 10 RMS vibration velocity management levels for continuous and impulsive vibration

Land use	Continuous vibration – RMS vibration velocity, mm/s		Impulsive vibration – RMS vibration velocity, mm/s	
	Preferred	Maximum	Preferred	Maximum
Critical areas ¹	0.1	0.2	0.1	0.2
Residences and hospital wards – daytime ²	0.2	0.4	6.0	12.0
Residences and hospital wards – night time ³	0.14	0.28	2.0	4.0

Land use	Continuous vibration – RMS vibration velocity, mm/s		Impulsive vibration – RMS vibration velocity, mm/s	
	Preferred	Maximum	Preferred	Maximum
Offices, schools	0.4	0.8	13.0	26.0
Workshops	0.8	1.6	13.0	26.0

(1) Critical operating areas include hospital operating theatres and precision laboratories where sensitive operations are occurring.

(2) Daytime is defined by the Vibration Guideline to be 7 am to 10 pm.

(3) Night time is defined by the Vibration Guideline to be 10 pm to 7 am.

For intermittent vibration, the Vibration Dose Value (VDV) is used as the metric for assessment as it accounts for the duration of the source, which will occur intermittently over the assessment period. The VDV management levels at different land uses for intermittent vibration sources are presented in Table 11.

Table 11 VDV management levels for intermittent vibration

Land use	VDV – Intermittent vibration, mm/s	
	Preferred	Maximum
Critical areas ¹	0.1	0.2
Residences and hospital wards – daytime ²	0.2	0.4
Residences and hospital wards – night time ³	0.13	0.26
Offices, schools	0.4	0.8
Workshops	0.8	1.6

(1) Critical operating areas include hospital operating theatres and precision laboratories where sensitive operations are occurring.

(2) Daytime is defined by the Vibration Guideline to be 7 am to 10 pm.

(3) Night time is defined by the Vibration Guideline to be 10 pm to 7 am.

6.0 Construction Noise and Vibration Assessment

6.1 Construction Activities

The planned sequence of construction works for the Nihon University project are broadly identified as follows:

- Demolition, earthworks & piling
- Structural works
- Internal fit-out and civil (external) works

6.2 Construction Noise Assessment

6.2.1 Construction Noise Sources

The construction noise impact assessment has adopted equipment noise emission values obtained from the EMM noise database for plant used on similar projects and the UK Department for Environment, Food and Rural Affairs (DEFRA) *Update of noise database for prediction of noise on construction and open sites*. Table 12 summarises typical equipment items, sound power level and quantities adopted in the noise modelling for each proposed phase of works.

Table 12 Construction noise source power levels

Equipment	Quantity (worst case per 15-min period)	Sound power level per item, L _{Aeq, 15 minute} (dB) ¹
Demolition, earthworks & piling		
Piling rig	1	116
Excavator including rock-hammer	1	120
Excavator	2	105
Compactor	1	106
Dozer	1	108
Roller (up to 20T)	1	107
Truck & Dog	2	104
Structural works		
Concrete trucks	3	108
Concrete pump	1	110
Crane	1	99
Delivery truck	1	106
Power tools	4	105
Hand tools	Numerous	102
Internal fit-out and civil works		
Concrete trucks	3	108
Crane	1	99
Delivery truck	1	106
Hand tools	Numerous	102
Generator	1	99

6.2.2 Predicted Construction Noise Levels

Typical worst-case predicted noise levels are shown in Table 13 for each receiver location and each stage of works. Predicted noise levels were calculated using distance attenuation.

Construction equipment has been modelled at possible locations nearest to and furthest away from the nearest residence to represent the range of noise levels that may be experienced over the relevant periods.

Based on the predictions, construction noise from the site is likely to exceed the project-specific NMLs at all locations.

It is important to note that these predictions are typical worst-case predictions as they assume that:

- The receiver is located at the boundary of each receiver property.
- All plant/equipment within each stage is operating concurrently.
- The noisiest construction sources are operating continuously for the entire 15-minute period. This will always not occur as equipment will regularly be stood down or idled while other activities are undertaken.

Regardless of worst-case predictions, Built will actively manage construction noise from the site.

Table 13 Construction noise predictions

Representative Receiver	Distance	Indicative predicted noise level L_{Aeq}, 15 minute	Construction noise goal L_{Aeq}, 15 minute
Nearest residences (to north)	20-105m	Demolition and earthworks 74-88 dB Structural works 66-81 dB Internal fit-out and civil works 66-80 dB	Noise affected: 59 dB (Recommended standard hours) Highly noise affected: 75 dB
Commercial / Offices	5-105m	Demolition and earthworks 74-100 dB Structural works 66-93 dB Internal fit-out and civil works 66-92 dB	70 dB (when in use)
Hospitals	5-105m	Demolition and earthworks 74-100 dB Structural works 66-93 dB Internal fit-out and civil works 66-92 dB	55 dB (when in use)

6.3 Construction Vibration

The safe working distances listed in Table 14 have been sourced from *Transport Infrastructure Development Corporation Construction's Construction Noise Strategy (Rail Projects)*, November 2007 and provide guidance on safe working distances for typical vibration intensive plant. The safe working distances are quoted for both "Cosmetic Damage" (refer British Standard BS 7385) and "Human Comfort" (refer British Standard BS 6472-1).

Table 14 presents the recommended safe working distances for vibratory rollers, hydraulic hammers, pile boring and jackhammers that may be used for the construction of the project.

Table 14 Recommended safe working distances for vibration intensive plant

Plant item	Rating / Description	Safe working distance	
		Cosmetic Damage (BS 7385)	Human Response (BS 6472)
Vibratory Roller	< 50 kN (Typically 1-2 tonnes)	5m	15 to 20m
	< 100 kN (Typically 2-4 tonnes)	6m	20m
	< 200 kN (Typically 4-6 tonnes)	12m	40m
	< 300 kN (Typically 7-13 tonnes)	15m	100m
	> 300 kN (Typically 13-18 tonnes)	20m	100m
	> 300 kN (> 18 tonnes)	25m	100m
Small hydraulic hammer	(300 kg - 5 to 12t excavator)	2m	7m
Medium hydraulic hammer	(900 kg - 12 to 18t excavator)	7m	23m
Large hydraulic hammer	(1600 kg - 18 to 34t excavator)	22m	73m
Pile boring	≤ 800 mm	2m (nominal)	N/A
Jackhammer	Handheld	1m (nominal)	Avoid contact with the structure

The minimum working distances are indicative and will vary depending on the particular item of plant and local geotechnical conditions. They apply to cosmetic damage of typical buildings under typical geotechnical conditions. Vibration monitoring is recommended to confirm the minimum working distances at specific sites and once plant selection has been confirmed for each stage of works.

Vibration intensive equipment/plant, i.e. vibratory roller, hydraulic hammers, jackhammers and pile boring are anticipated to be used in Stage 1 and Stage 3 works. Where feasible and reasonable, all vibration intensive works would be undertaken outside the cosmetic damage safe working distances to avoid structural vibration impact.

The nearest receivers that would potentially be impacted by the vibration of the project's construction activities are the residential properties opposite the site's northern boundary and other adjoining properties including Newcastle Police Station (receiver R4) to the east, and James Fletcher Hospital (receiver R5 and R6) to the south and west of the site.

The nearest residential receivers are approximately 30 metres or more from the site where vibration intensive plant will be used, vibration impacts have been assessed to be:

- negligible and deemed to comply with the cosmetic damage vibration management levels when vibratory roller, hydraulic hammer, pile boring or jackhammer is used
- negligible and deemed to comply with the human comfort vibration management levels when vibratory roller < 7 tonnes, small to medium hydraulic hammers, pile boring or jackhammers are used

- in exceedance of the human comfort vibration management levels when vibratory roller > 4 tonnes or a large hydraulic hammer is used

7.0 Construction Hours

7.1 Standard Construction Hours

The approved project standard construction hours, as outlined in Condition D4, are as follows.

Construction, including the delivery of materials to and from the site, may only be carried out between the following hours:

- (a) between 7 am and 6 pm, Mondays to Fridays inclusive; and
- (b) between 8 am and 1 pm, Saturdays
- (c) No work may be carried out on Sundays or public holidays

Special Conditions

On 10th June 2021, the NSW Minister for Planning and Public Spaces introduced the Environmental Planning and Assessment (COVID-19 Development - Construction Working Days) Order (No 2) 2021 to support the construction industry during the COVID-19 pandemic.

A copy of the Order 2021 is included in **Appendix B**.

In response to previous consultation with the community, Built has established the following construction hours (pending Government advice and/or project requirements):

Monday to Friday: Normal approved working days 7:00am to 6:00pm

Saturdays: 7:00 am to 5:00 pm as permitted under the Order 2021

Sunday's & Public Holidays: No works (advanced notice will be given to the community if extended hours are planned between 9:00 am to 5:00 pm)

7.2 Out of Hours Work

The approved out of hours work, as outlined in Conditions D5 and D6, are as follows.

Activities may be undertaken outside of the hours in condition D4 if required:

- (a) by the Police or a public authority for the delivery of vehicles, plant or materials; or
- (b) in an emergency to avoid the loss of life, damage to property or to prevent environmental harm; or
- (c) where 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.

Notification of such activities must be given to affected residents before undertaking the activities or as soon as practical afterwards.

7.3 High Impact Work Hours

The approved work hours for high impact activities, as outlined in Condition D7, are as follows.

Rock breaking, rock hammering, sheet piling, pile driving, and similar activities may only be carried out between the following hours:

- (a) 9 am to 12 pm, Monday to Friday
- (b) 2 pm to 5 pm, Monday to Friday; and
- (c) 9 am to 12 pm, Saturday

8.0 Noise and Vibration Management Measures

This section outlines noise and vibration management measures that will be implemented as part of the construction works, including consultation and complaint handling procedures.

It may always not be feasible to adopt all management measures during construction, and identification of all practicable and reasonable mitigation methods will be conducted by the site supervisor and/or environmental representative on a regular basis during noisy works near sensitive land uses.

In relation to the implementation of mitigation measures, practicability addresses engineering considerations regarding what is practical to build. Reasonableness relates to the application of judgment in arriving at a decision, considering the following factors:

- work hours
- noise reduction achieved
- number of people or other uses benefited
- cost of the measure
- delay to schedule and whether the measure will prolong exposure to noise
- community views
- pre-construction noise levels at receivers

While the management measures presented will always not necessarily result in mitigating all noise and vibration impacts, they are expected to reduce impacts to levels most stakeholders should find acceptable considering the anticipated benefits of the completed project.

8.1 Implementation of Management Measures

Table 15 outlines the noise management measures provided within the NVA by EMM, including recommendations, set out in AS 2436-2010 “*Guide to Noise and Vibration Control on Construction, Demolition and Maintenance Sites*”, will be implemented throughout the construction of the project where reasonable and feasible in accordance with Conditions D12 to D14 and D15 to D17:

Table 15 Noise and vibration management measures

Reference	Details of management measure	Implementation		Responsibility
Implemented throughout external works		PC ¹	C ²	
NVMM01	Construction hours will be restricted to the approved construction hours in accordance with Condition D4 to D7	✓	✓	Construction/Project Manager
NVMM02	In accordance with Condition D12, ensure construction vehicles (including concrete agitator trucks) do not arrive at the site or surrounding residential precincts outside of the construction hours of work outlined under Condition D4.		✓	Site Manager

Reference	Details of management measure	Implementation		Responsibility
Implemented throughout external works		PC ¹	C ²	
NVMM03	Implement, where practicable and without compromising the safety of construction staff or members of the public, the use of 'quackers' to ensure noise impacts on surrounding noise sensitive receivers are minimised in accordance with Condition D14	✓	✓	Site Manager
NVMM04	All construction plant and equipment used on site must be maintained in a proper and efficient condition and operated in a proper and efficient manner in accordance with Condition D2	✓	✓	Site Manager Foreman
NVMM05	Built personnel and subcontractors will always be issued a copy of the current CNVMP and instructed to comply.	✓	✓	Construction/Project Manager
NVMM06	Regular review of work methodologies to identify potential noise and vibration effects and minimise where possible.	✓	✓	Construction/Project Manager Site Manager
NVMM07	Provide regular information to neighbours before and during construction through media such as letterbox drops, meetings or individual contact.	✓	✓	Project Manager Community Liaison Officers
NVMM08	The induction of site staff will include a reference to potential noise impacts and the identification of noise-sensitive land uses.	✓		Construction/Project Manager
NVMM09	Implement a complaint management system	✓	✓	Construction/Project Manager
NVMM10	The use of a site information board at the front of the site, with the name of the organisation responsible for the site and their contact details, hours of operation and regular information updates. This signage will be clearly visible from the outside and include after-hours emergency contact details.		✓	Site Manager
NVMM11	Erection of 2.4m high plywood hoarding to Church Street boundary to minimise noise to receivers	✓		Site Manager
NVMM12	The use of existing structures, temporary site buildings and materials stockpiles as noise barriers, where practicable.		✓	Foreman
NVMM13	Where practicable, place as much distance as possible between noisy plant or equipment and residences and other sensitive land uses.		✓	Site Manager Foreman
NVMM14	Minimise the number of plant items operating concurrently when near surrounding		✓	Site Manager

Reference	Details of management measure	Implementation		Responsibility
Implemented throughout external works		PC ¹	C ²	
	receivers.			Foreman
NVMM15	Minimise the need for vehicle reversing for example, by arranging for one-way site traffic routes where practicable	✓	✓	Project Manager Site Manager
NVMM16	Noise and vibration monitoring will be adopted as a management strategy throughout the construction works. The purpose of monitoring would be to validate background noise levels, the construction noise predictions and to confirm that the noise and vibration levels from individual items of equipment are not excessive. Ideally, monitoring will be undertaken at the commencement of works and during (or soon after) any significant change in activities		✓	Project Manager HSE Officer
NVMM17	regular reinforcement (such as at toolbox talks) of the need to minimise noise and vibration		✓	Site Manager Foreman
NVMM18	regular identification of noisy activities and adoption of improvement techniques as practicable and reasonable	✓	✓	Project Manager Site Manager
NVMM19	avoiding the use of shouting, portable radios, public address systems or other methods of site communication that may unnecessarily impact upon nearby residents		✓	Foreman Operators / Workers
NVMM20	developing routes for the delivery of materials and parking of vehicles to minimise noise	✓	✓	Construction/Project Manager
NVMM21	where possible, avoiding the use of equipment that generates impulsive noise	✓	✓	Project Manager Site Manager
NVMM22	minimising the movement of materials and plant and unnecessary metal-on-metal contact		✓	Foreman
NVMM23	minimising truck movements where practicable		✓	Site Manager Foreman
NVMM24	scheduling respite periods for intensive works as determined through consultation with potentially affected neighbours (e.g. a daily respite period for a minimum of one hour at midday).		✓	Project Manager
NVMM25	choosing quieter plant and equipment based on the optimal power and size to most efficiently perform the required tasks	✓	✓	Project Manager Site Manager

Reference	Details of management measure	Implementation		Responsibility
Implemented throughout external works		PC ¹	C ²	
NVMM26	using temporary noise barriers (in the form of plywood hoarding or similar) to shield intensive construction noise activities from residences where practicable and reasonable	✓	✓	Site Manager Foreman
NVMM27	operating plant and equipment in the quietest and most efficient manner as is practicable and reasonable		✓	Foreman Operators
NVMM28	regularly inspecting and maintaining plant and equipment to minimise noise and vibration level increases, to ensure that all noise and vibration reduction devices are operating effectively.		✓	Foreman HSE Officer
NVMM29	scheduling activities to minimise impacts by undertaking all possible work during hours that will least adversely affect sensitive receivers and by avoiding conflicts with other scheduled events	✓	✓	Project Manager Site Manager
NVMM30	scheduling work to coincide with non-sensitive periods where it is reasonable and practicable to do so	✓	✓	Project Manager Site Manager
NVMM31	scheduling noisy activities to coincide with high levels of neighbourhood noise so that noise from the activities is partially masked and not as intrusive	✓	✓	Project Manager Site Manager
NVMM32	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		✓	Site Manager Foreman
NVMM33	optimising the number of deliveries to the site by amalgamating loads where possible and scheduling arrivals within designated hours		✓	Site Manager Foreman
NVMM34	designating, designing and maintaining access routes to the site to minimise impacts	✓	✓	Project Manager Site Manager
NVMM35	include contract conditions that include penalties for non-compliance with reasonable instructions by the principal to minimise noise or arrange suitable scheduling	✓		Construction / Project Manager
NVMM36	high vibration generating activities should only be carried out in continuous blocks, with appropriate respite periods as determined through consultation with potentially affected neighbours.	✓	✓	Project Manager Site Manager

Reference	Details of management measure	Implementation		Responsibility
Implemented throughout external works		PC ¹	C ²	
NVMM37	Plant used intermittently will be shut down or throttled down to a minimum in between use.		✓	Foreman Operators
NVMM38	Vibratory compactors must not be used closer than 30 metres from residential buildings unless vibration monitoring confirms compliance with the vibration criteria specified in Section 5.2 (as per Condition D16)	✓	✓	Project Manager Site Manager
NVMM39	Limitations to vibration intensive plant identified in Section 6.3 are to be considered and avoided where is practicable and reasonable when planning works regarding structural damage and human comfort.	✓	✓	Project Manager Site Manager
NVMM40	Stopping works if reasonable to do so when noise and/or vibration levels exceed limits and re-assess to identify additional mitigation measures		✓	Project Manager Site Manager

(1) Pre-construction – note that this may refer to prior to commencement of specific activities rather than prior to the commencement of all construction works.

(2) Construction

9.0 Compliance Management

9.1 Roles and Responsibilities

The Project Team's organisational structure and overall roles and responsibilities are outlined in the Environmental Site Management Plan. Specific responsibilities for the implementation of noise and vibration management measures are detailed in Section 8.1.

9.2 Training

All employees, sub-contractors and utility staff working on-site will undergo site induction training relating to noise and vibration management issues, including:

- Existence and requirements of this CNVMSP.
- Approved Working Hours.
- Location of noise-sensitive areas and receivers.
- General noise and vibration management measures, including monitoring and inspection procedures.
- Complaints reporting.
- Non-compliances

The project's site induction documentation will be updated to adopt all changes to noise and vibration related requirements.

All personnel involved in noise and vibration monitoring will be adequately trained and up to date with relevant measurement standards, methodologies and product technology with respect to noise and vibration measurements.

9.3 Monitoring and Inspections

To maximise the effectiveness of management strategies to minimise construction noise and vibration emissions, a monitoring program will be developed to guide, manage, quantify and control emissions from construction activities. Where monitoring results indicate exceedances of the relevant noise and vibration goals, additional practicable and reasonable mitigation measures and controls would be considered to minimise impacts to nearby sensitive receivers.

The objectives of the monitoring program are to:

- assess construction noise and vibration levels against relevant goals, with consideration given to non-site related ambient and background noise and vibration at the time of measurements;
- identify potential noise and vibratory sources and their relative contribution to impacts from construction activity;
- specify appropriate intervals for monitoring to evaluate, assess and report the relative contribution due to construction activity;

- outline the methodologies to be adopted for monitoring construction noise and vibration, including justification for monitoring intervals or triggers, weather conditions, monitoring location selection and
- timing; and
- incorporate noise and vibration management and mitigation strategies outlined in this plan.

Regular inspections will be completed by the Built project team or a suitably qualified representative throughout construction.

Noise and vibration monitoring will also occur routinely during the works as detailed in Table 16.

Table 16 Noise and vibration monitoring program

Activity	Monitoring Requirements	Frequency, reporting, and responsibility
Noise monitoring		
Operator attended noise survey	Noise monitoring will be carried out at the complainant and/or nearest sensitive receiver/s relevant to the construction activities at the time of monitoring.	Frequency: Minimum three (3) monthly basis for attended monitoring or as required by significant activity and/or a new stage of works. As required for complaints where a spot check confirms exceedance. Reporting: Reports will be submitted to Built and contain the results of monitoring and how exceedances were managed. A site layout outlining locations of equipment and monitoring locations are also to be included. Records will be maintained on-site and made available to key stakeholders upon request. Responsibility: Monitoring to be undertaken by a suitably qualified acoustic specialist or suitably qualified and experienced environmental officer.
Where a complaint is received, and monitoring is considered an appropriate response to determine if noise levels exceed predicted construction noise levels documented in this CNVSMP	The testing method includes: • Sound level meter configured for “Fast” time weighting and “A” frequency weighting. • Test environment free from reflecting objects where possible. Where noise monitoring is conducted within 3.5 metres of large walls or a building facade, then a reflection correction of up to -2.5 dB(A) will be applied to remove increased noise due to sound reflections. • Tests will not be carried out during rain or when wind speed exceeds 5m/s. • Conditions such as wind velocity and direction, temperature, relative humidity, and cloud cover will be recorded from the nearest Bureau of Meteorology station or on-site weather station/observations. • The monitoring period must be sufficient such that measured noise levels are representative of noise over a 15-minute period. • measurements in one-third octave bands from 10 Hz to 8 kHz inclusive (or a broader range of bands) for the 15-minute interval • At a minimum L_{Aeq}, L_{Amin}, L_{A90}, L_{A10}, L_{A1}, and L_{Amax} levels will be measured and reported. The observations of the person undertaking the measurements will be reported including the audibility of construction noise, other noise in the environment and any discernible construction activities contributing to the noise at the receiver.	

Activity	Monitoring Requirements	Frequency, reporting, and responsibility
Vibration monitoring		
Pre-Construction Dilapidation Inspections	In accordance with Condition B4: - a dilapidation inspection was completed to assess the condition of existing public infrastructure in the vicinity of the project (including roads, gutters, and footpaths). In accordance with Condition B5: - dilapidation inspections were completed for adjoining private properties, heritage items and council assets likely to be affected by the development. Built issued an invitation for a dilapidation inspection to all properties likely to be affected by the development. Inspections were completed on those properties where the owner/occupier accepted the invitation. Dilapidation inspections assessed the existing condition of the properties for reference in the event of any damage potentially occurring due to construction activities. Inspection requirements include: - Unrestricted access to the property - Inspection of all internal and external areas (apart from those covered by furniture, wall paintings/ornaments and the like - Photographic records of areas inspected and any visible existing damage (cracks and the like). - Notes of the existing condition of areas inspected and any visible damage identified.	Frequency: Prior to the commencement of construction activities on site. Reporting: Dilapidation reports containing general comments on key findings and a photographic summary were prepared and submitted to property owners, City of Newcastle, NSW Heritage Division and the Certifying Authority. Reports maintained by Built for future reference in the instance of receiving complaints. Responsibility: Qualified Structural/Civil Engineer & Built
Vibration monitoring prior to or at the commencement of significant vibration causing activities/stage of works/works occurring within safe working distances to buildings.	Continuous vibration monitoring will be conducted on relevant activities as follows: - Geophone installed at the ground adjacent to building foundations or equivalent (or nearer) location if access not provided to the outside of the building. - Monitor to continuously record PPV and/or VDV vibration levels generated by the activity. - Measured levels to be compared to human disturbance vibration goals and/or building damage limits as appropriate. - An audio and/or visual warning alarm system will be implemented with the monitoring system - If the alarm is triggered, work will STOP and necessary measures such as modified work practices will be implemented.	Frequency: As required throughout each stage of construction where significant vibration is expected Reporting: A report detailing measurement results and any vibration management measures to be provided to Built. Records will be maintained onsite. Responsibility: Vibration monitoring will be undertaken by a suitably qualified specialist.
Continuous vibration monitoring if trial/initial monitoring results determine exceedance	Note that if the frequency of the vibration event is such that 75% of the DIN 4150-3 limit was not exceeded, then works will proceed with caution, and the alert level adjusted as appropriate.	Frequency: As required throughout construction where trial/initial tests found that vibration levels

Activity	Monitoring Requirements	Frequency, reporting, and responsibility
of levels for damage or annoyance.	Where testing for vibration caused by plant & equipment, the plant/equipment will be tested in the settings in which it is expected to operate.	exceeded the criteria in Section 5.2 Reporting: Report detailing measurement results and any vibration management measures to be provided to Built. Records will be maintained onsite. Responsibility: Vibration monitoring will be undertaken by a suitably qualified specialist.
Vibration monitoring in response to a complaint	Attended vibration monitoring will be conducted on the relevant activities as follows: • Geophone installed at the ground adjacent to building foundations or equivalent (or nearer) location if access not provided to the outside of the building. • Monitor to continuously record PPV and/or VDV vibration levels generated by the activity. • Measured levels to be compared to human disturbance vibration goals and/or building damage limits as appropriate. If necessary, following the vibration measurements: • Appropriate vibration management measures will be implemented. Continuous vibration monitoring will be considered if this is considered of benefit to address the complaint.	Frequency: As required for complaints where this is considered an appropriate response. Reporting: Report detailing measurement results and any corrective actions to be provided to the complainant and relevant stakeholders. Responsibility: Vibration monitoring will be undertaken by a suitably qualified specialist.
Structural Inspection / Assessment in response to a complaint regarding damage potentially caused by construction damage	In the event of being notified and/or receiving a complaint of property damage by a stakeholder who received a Pre-Construction Dilapidation Inspection, Built will arrange for an inspection at the location as soon as reasonably practicable by all parties (complainant, Built, Engineer). The inspection will assess the alleged damage against the pre-construction dilapidation report. A report will be prepared to note the findings of the inspection and issued to the complainant. In the instance that the property owner did not accept the offer for a pre-construction dilapidation inspection, Built will	Frequency: As required/seen as an appropriate response to a complaint Reporting: Dilapidation reports containing general comments on key findings and a photographic summary were prepared and submitted to property owners.

Activity	Monitoring Requirements	Frequency, reporting, and responsibility
	review the details of the complaint and conduct a preliminary investigation. If deemed appropriate, Built will arrange a detailed inspection of the building.	Reports maintained by Built for future reference in the instance of receiving complaints. Responsibility: Qualified Structural/Civil Engineer & Built
Post-Construction Dilapidation Report	In accordance with Condition E4: At the completion of the development, a dilapidation inspection of adjoining buildings and infrastructure will be completed to assess against the pre-construction dilapidation reports to ascertain whether any structural damage occurred as a result of construction works.	Frequency: At the completion of construction works / the development Reporting: To be submitted the Certifier and City of Newcastle Responsibility: Qualified Structural/Civil Engineer & Built

9.4 Compliance Reporting

All noise and vibration monitoring results will be assessed against the nominated management levels. Noise and vibration monitoring data, and any other relevant information, will be provided in a noise/vibration report to the contractor to assist in producing the Compliance Reporting as required under Conditions C22 to C25 of the Development Consent.

The following should be included as a minimum (where relevant) in the noise/vibration monitoring reports:

- The type of monitoring conducted (for example, at a stage of the project or following complaints) and a brief statement of the measurement method;
- The noise/vibration conditions in the Development Consent, or the relevant noise management levels;
- Descriptions of the nearest affected residences and other sensitive land uses or, in the case of complaints, description of the complainant location and complaint;
- Description of the instrumentation used;
- The results of monitoring at each monitoring location, including a comparison with the consent conditions or relevant noise/vibration management levels;
- Vibration monitoring results in summary together with notes describing any vibration intensive activities (if applicable);
- Summary of measurements exceeding the vibration management levels and descriptions of the plant or operations causing these exceedances (if available);
- Details of corrective action applicable to vibration management levels exceedances and confirmation of its successful implementation. Where corrective action has not yet been implemented, it may be shown as pending and the status of its implementation will be carried forward to the following reports;

- The location of the construction works in relation to the monitoring position (sketch plan & sections, photos);
- Details of the various construction equipment in use during the measurement period;
- Details as to the likely dominant noise sources;
- Meteorological conditions (i.e. temperature, humidity, cloud cover, and wind speed and direction);
- A clear statement outlining the Project's compliance or non-compliance with the conditions or management levels where the monitored level is higher than the conditions or management levels; and
- The reasons for non-compliance should be stated, strategies for minimising noise/vibration identified and stated, and the appropriate actions to implement the mitigation and or management strategies.

9.5 Incident Notification and Reporting

In the event of an incident (as defined under the SSD-9787 Development Consent) occurring onsite relating to noise and vibration, the following protocol applies in accordance with Conditions A26 and A27:

- (1) Built will notify the Superintendent, dwp Newcastle immediately after becoming aware of an incident.
- (2) The Superintendent will notify the Planning Secretary in writing to compliance@planning.nsw.gov.au immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident.
- (3) An investigation will be completed by Built and any required parties to gather the information required to comply with Step 4
- (4) Subsequent notification must be given, and reports submitted in accordance with the requirements set out in SSD-9787 Development Consent Appendix 2

9.6 Non-Compliance Notification

In the event of a non-compliance (as defined under the SSD-9787 Development Consent) relating noise and vibration, the following protocol applies in accordance with Conditions A28 to A30:

- (1) If identified by a party other than dwp Newcastle, Built and/or the identifying party must notify dwp Newcastle immediately after becoming aware of the non-compliance.
- (2) Dwp Newcastle will notify the Planning Secretary in writing to compliance@planning.nsw.gov.au within seven days after the Applicant becomes aware of any non-compliance. The Certifier must also notify the Planning Secretary in writing to compliance@planning.nsw.gov.au within seven days after they identify any non-compliance.
- (3) The notification must identify the development and the application number for it set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-

compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance. A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

- (4) Built to complete any actions arising from the non-compliance (as required)

9.7 Noise and Vibration Compliance Audits

Audits (both internal and external) will be undertaken on the project to assess the effectiveness of noise and vibration controls, compliance with this CNVMSP, consent conditions and other relevant approvals, licenses, and guidelines.

Internal environmental audits are conducted every three (3) months on a rotating basis.

The internal audit types include:

- **HSE System Audit** completed by the HSE Manager. This audit typically involves a review of the Project Environmental Management system/plans to ensure they address the current activities and noise and vibration impacts on site. Inspection and monitoring records will also be reviewed to assess compliance with the monitoring program.
- **HSE Assessment** completed by the HSE Manager and/or Officer. This audit typically involves a detailed site inspection to assess the effectiveness of the noise and vibration management measures implemented onsite and environmental performance of the project.

SSD-9787 Conditions D29 – D34 require an Independent Environmental Audit to be completed within eight (8) weeks of the notified date of commencement and subsequently no later than six (6) months from the initial audit. The Planning Secretary may require additional audits to be undertaken at different times upon giving BUILT four (4) weeks' notice upon which the audit must be commenced. GHD Newcastle (GHD) has been nominated by the Superintendent (dwp Newcastle) to complete independent environmental audits on the project.

GHD will prepare a report based on the audit findings highlighting the environmental impacts and performance of the project as well as compliance with SSD-9787 Conditions of Consent. The report identifies corrective actions and recommendations for improving the project's environmental management system and/or performance on site (implementation of management measures).

9.8 Periodic Reviews and Updates

It is acknowledged that Condition A31 regarding the revision of strategies, plans, and programs, requires that within three (3) months of:

- (a) the submission of a compliance report under Condition C22
- (b) the submission of an incident report under Condition A27
- (c) the submission of an Independent Audit under Condition D32
- (d) the approval of any modification of the conditions of this consent; or
- (e) the issue of a direction of the Planning Secretary under Condition A2 which requires a review, the strategies, plans, and programs required under this consent must be reviewed, and the Planning Secretary and the Certifier must be notified in writing that a review is being carried out.

If necessary, to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans, programs or drawings required under this consent must be revised, to the satisfaction of the Planning Secretary and/or Certifier (where relevant). Where revisions are required, the revised document must be submitted to the Planning Secretary and/or Certifier for approval and/or information (where relevant) within six (6) weeks of the review.

The aim of this Condition is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.

Built's standard procedure is to review all management plans every three (3) months or as required by any significant event, incident, instruction (internal or external), change in project scope and/or conditions. It must be noted that a review may not result in the revision of strategies, plans, and programs if deemed to still be adequately addressing the noise and vibration requirements of the project.

Reviews and revisions (if required) are completed by the Built project team, typically consisting of the Project Manager, HSE Manager, and Site Manager. Revised management plans are issued to all required consultants, employees and subcontractors to ensure compliance within Condition A25.

10.0 Community Consultation and Complaint Management

10.1 Community Consultation for Development of Sub Plan

Built has implemented all recommendations within the NVA by EMM Consulting, however, in accordance with Condition A8, C11(d) and C 11(e), Built consulted with the key stakeholders on a number of occasions to identify any concerns regarding noise and vibration and to develop strategies for managing high noise and vibration generating works.

Descriptions and outcomes of the community consultation are detailed in Table 17 below.

Table 17 Description of community consultation in the development of mitigation strategies

Date	Type	Description	Outcome
04/11/19	LB ¹	- Identified Built as being awarded the project - Advised of upcoming demolition works. - Offered stakeholders a dilapidation inspection of their property prior to commencement of works at Built's expense. - Advised to contact the undersigned for any queries.	- Most stakeholders accepted the offer for a pre-construction dilapidation report. - Dilapidation inspections were completed by a qualified Structural Engineer to assess the existing condition of neighbouring properties. - Dilapidation Reports were finalised and submitted to required parties.
13/12/19	M ²	Consultation meeting held with Hunter New England Health / James Fletcher Hospital (JFH). Key points raised were: - Main contacts for JFH & their operations - Main contacts for Built - Discussed potential environmental impacts around access, noise, vibration, dust and approved hours of construction. - JFH requested proactive communication. - Built advised of construction program including demolition, piling, crane erection - Agreed to ongoing meetings/discussions regarding the program and potential impacts	- JFH key contacts included in the community liaison contact register. - JFH highlighted as a sensitive receiver and operation requirements are taken into consideration for planning of works. - Noise and vibration monitoring implemented at JFH as required and data submitted for their records. - Built to consult with JFH regarding retention works to heritage retaining wall on the southern boundary. - Built reviewed and altered demolition methodology to minimise noise and vibration by using shears instead of jackhammers.
19/12/19	C ³	Notice of Commencement of Works - Advised of site establishment and early works - Advised of commencing demolition beginning of January 2020 - Advised that demolition works will generate noise and that Built will implement appropriate mitigation and control measures - Acknowledged that these works may be disruptive - Advised of community liaison contact – nihon@built.com.au - Advised to contact the undersigned for any queries, concerns or complaints	No responses received

Nihon University Newcastle Project
Construction Noise and Vibration Management Sub Plan

20/01/20	C	Notice of Planned Asbestos Removal Works Although not related to noise and vibration, an additional opportunity was given for stakeholders to raise any queries or concerns “to the above or the project in general”.	No responses received
23/01/20	M	Consultation meeting with Newcastle Police Station - Discussed upcoming works and potential disruptions due to noise, specifically to their operations/call centre on the adjoining boundary. - Built advised mitigation measures could be implemented to windows and/or doors.	- Newcastle Police Station advised on 04/02/2020 that they would like to proceed with acoustic measures discussed. - Built engaged RAPT Consulting to assess the locations and installed recommended acoustic seals to Operation Centre external doors.
05/02/20	M	Consultation meeting held with Newcastle Grammar School (NGS) - No concerns were raised regarding noise and vibration. - Requested that they are included in future community consultation/notices.	NGS key contacts included on the community liaison contact register.
20/02/20	C	Construction Progress Update - Notified residents of upcoming structural demolition. - Advised of Work Zone permit approval. - Notified residents of decommissioning and relocating existing pedestrian crossing - Provided opportunity for stakeholders to raise any queries	- NGS responded thanking Built for the update. - No further responses/queries received.
03/04/20	C	Extended Construction Hours - Advised stakeholders of the introduction of the Environmental Planning and Assessment (COVID-19 Development – Construction Working Days) Order 2020 by the NSW Planning Minister. - Provided advance notice of changed/extended working hours being implemented onsite (Saturdays, Sundays and public holidays) in accordance with the Order 2020 and SSD-Conditions D5 and D6.	- Multiple community complaints from residents were received in response to normal working hours extending to Saturday's and Sunday's. - In response to the community complaints, Built revised the extended hours onsite in the short term to Saturdays only and notified the community. - Built will notify the community in advance if there are further changes to the revised extended hours in accordance with Condition D6.

(1) Letter Box Drop including parked cars on Church Street

(2) Meeting with key stakeholder

(3) Community Notice sent to all stakeholders via email correspondence

10.2 Ongoing Community Consultation

Ongoing consultation between BUILT, project stakeholders, the community and relevant agencies regarding the management of noise and vibration impacts will be undertaken during the construction of the Project as required. The process for the consultation is documented in the Community Liaison Plan (CLP) previously submitted to the NSW Dept. Planning, Industry and Environment.

BUILT will consult with receivers identified as being subject to levels that may exceed the Highly Noise Affected criteria with the objective of ensuring the construction hours specified within SSD-9787 are suitable to their hours of operation and will not adversely affect them. BUILT will always endeavour to consult and cooperate with the community to prevent complaints and to assure sensitive receivers that their needs are being considered.

During construction of the Project, it may be necessary for BUILT to undertake work outside the standard approved hours of work outlined in Condition D4. In the circumstances listed under Condition D5, on becoming aware of the need for such works, BUILT will notify the Planning Secretary of the need for such works. Prior to carrying out such works, BUILT will use their best endeavours to notify all affected sensitive receivers of the likely impact and duration of the works, as required by SSD-9787 Condition D6.

Prior to commencing significant stages of construction, BUILT will consult with the potentially affected community, educational institutions and noise and vibration-sensitive businesses to identify and discuss concerns around construction noise and vibration generated during the works. This will be in accordance with the CLP and includes letterbox drops, door knocking, and email notices through the community liaison address nihon@built.com.au. This email address is monitored daily by the BUILT Community Liaison Officers and will be used for:

- Project alerts and progress updates
- Formal notices
- Complaints and consultation

10.3 Complaint Management System

Complaints will be handled in an efficient manner, with immediate action by BUILT and a formal response issued by the Project Manager. The response will include details of the actions taken by BUILT and how BUILT intends to prevent similar complaints in the future. All complainants will be offered a face to face meeting to discuss their concerns. The complete complaints management procedure is as follows:

- The proponent will supply the relevant governing authorities with the names and appropriate contact numbers for the site construction manager during the construction period and one other senior staff member.
- An emergency after-hours contact phone number will be put in place to allow contact with the proponent in relation to any environmental matter including those concerned with noise and vibration issues. This phone number will be clearly displayed on the fence surrounding the construction site.
- All information relating to such complaints will be kept in a register. The register will include but not be restricted to the following information:
 - Date and time of complaint;

- Complainant details (i.e. full name, address and contact details);
 - Nature and source of the complaint;
 - Action taken; and
 - Follow-up details with the complainant.
- The complaint register will be made available to any relevant regulatory authority upon request.
 - The proponent will endeavour to action the complaint immediately and formally respond to any complaint within one working day of its receipt.

The complaint handling process adopted following complaints regarding noise and/or vibration include:

- 1) Identify the source that has caused the complaint through consultation with the complainant.
- 2) If related to noise, undertake immediate noise level spot check at the sensitive receiver/complaint location to verify exceedance of noise goals.
- 3) Assess whether the issue can be resolved easily and take immediate action if possible.
- 4) If not, assess the construction site and activities and determine whether there is any reason to believe noise or vibration levels are higher than anticipated.
- 5) Ensure all planned management measures have been appropriately implemented.
- 6) If steps 3 and 4 are correct, no further site actions are required (proceed to step 8).
- 7) If steps 3 and 4 are incorrect, implement all reasonable and practicable mitigation measures where possible and implement correct consultation procedures.
- 8) If deemed an appropriate response, engage an acoustic specialist to undertake additional monitoring
- 9) Ensure the complainant is well briefed on the existing mitigation measures in place during the activity and the justification for the activity and understands the details of the works.
- 10) Advise the complainant of actions undertaken.

Following the adoption of additional or alternative mitigation, if any, a further noise and/or vibration survey would be conducted at the complainant's location to demonstrate the effectiveness of the mitigation strategy if deemed necessary.

11.0 Appendices

Appendix A – Revision Change Register

Revision	Date	Section	Description
01	09/04/2020	Endorsement	Updated Letter of Endorsement by Greg Collins of RAPT Consulting dated 09/04/2020
		Contents	Complete reformat of management plan amended for readability and navigation in accordance with Condition C11
		Section 1.0	Minor amendments to Introduction section and included as individual section.
		Section 2.0	Project Information section simplified to be more precise.
		Section 3.0	Regulatory Framework included to show relevant development conditions and statutory requirements to the project and sub-plan.
		Section 5.2	DIN 4150-3:1992-02 identified as vibration criteria for cosmetic and structural damage in accordance with GHD corrective action and Condition D15
		Section 6.2	Additional predicted construction noise level data sourced from the NVA dated May 2019 by EMM Consulting
		Section 6.3	Additional information on assessed safe working distances and vibration impacts included
		Section 7.1	Amendments made regarding extended construction hours in accordance with NSW DPIE Environmental Planning and Assessment (COVID-19 Development - Construction Working Days) Order 2020
		Section 8.1	Amended noise and vibration measures to be implemented included in Table 14 showing stage of implementation and responsibility
		Section 9.2	Additional information included detailing training/communication of CNVMSP to personnel
		Section 9.3	Additional information on monitoring and inspections included and amended monitoring program prepared.
		Section 9.4	Section on Compliance Reporting included in accordance with Conditions C22 to C25
		Section 9.5	Procedure for Incident Notification and Reporting included
		Section 9.6	Non-compliance notification procedure included
		Section 9.7	Noise and vibration compliance audit information included detailing both internal and external audits.
		Section 9.8	Details on the periodic reviews and updates of management plans included
		Section 10.1	Descriptions and outcomes of community consultation in development of the mitigation strategies and sub-plan detailed in Table 16 in accordance with Condition A8
		Section 10.2	Complaint management procedure provided in further detail
02	21/06/2021	Section 7.1	Updated to reflect EPA (COVID-19 Development – Construction Work Days) Order (No 2) 2021
		Appendix B	Inclusion of EPA (COVID-19 Development – Construction Work Days) Order (No 2) 2021

Appendix B – EPA (COVID-19 Development – Construction Work Days) Order (No 2) 2021

Environmental Planning and Assessment (COVID-19 Development—Construction Work Days) Order (No 2) 2021

I, Rob Stokes, the Minister for Planning and Public Spaces, make the following Order under section 10.17 of the *Environmental Planning and Assessment Act 1979*.

I am satisfied the Order is necessary to protect the health, safety and welfare of members of the public during the COVID-19 pandemic. I have also consulted with the Minister for Health and Medical Research in relation to the making of this Order.



The Hon. Rob Stokes, MP
Minister for Planning and Public Spaces

Dated: 10th June 2021

Explanatory note

The object of this Order is to permit any building work or work, or the demolition of a building or work on a Saturday between the hours of 7 am and 5 pm and specified works on a Sunday between the hours of 9 am and 5 pm.

Environmental Planning and Assessment (COVID-19 Development—Construction Work Days) Order (No 2) 2021

under the

Environmental Planning and Assessment Act 1979

Part 1 Preliminary

1 Name of Order

This Order is the *Environmental Planning and Assessment (COVID-19 Development—Construction Work Days) Order (No 2) 2021*.

2 Commencement

This Order commences on the day it is published in the Gazette and remains in force for the prescribed period within the meaning of section 10.17 of the Act.

3 Definitions

(1) In this Order—

the Act means the *Environmental Planning and Assessment Act 1979*.

Note. The Act and the *Interpretation Act 1987* contain definitions and other provisions that affect the interpretation and application of this Order.

(2) Notes included in this Order do not form part of this Order.

4 Relationship with orders under the *Public Health Act 2010*

To the extent that this Order is inconsistent with an order under Part 2 of the *Public Health Act 2010*, the order under that Part prevails.

Part 2

5 Development authorised by this Order

The development specified for this Order may be carried out without the need for any approval under the Act if it complies with the conditions specified for the development.

6 Construction work

- (1) The carrying out of building work or work, or the demolition of a building or work, on a Saturday between the hours of 7 am and 5 pm is development specified for this Order.
- (2) The carrying out of the following works or activities on a Sunday between the hours of 9 am and 5 pm is development specified for this Order:
 - (a) Professional works and administrative activities related to the construction site, such as inspections by certifiers, designers, engineers, or builders, which do not involve any physical construction works
 - (b) Painting
 - (c) Wall and Floor Tiling
 - (d) Waterproofing
 - (e) Silicone work (sealing)
 - (f) Builders clean (being the final clean by professional cleaners before handover, including vacuum and window cleaning, but does not include site clearing by use of bobcats or similar machinery).
 - (g) Carpet laying
 - (h) Prefabricated joinery installation
 - (i) Any other works occurring indoors which do not produce substantial noise.
- (3) The conditions specified for the development are that the development must—
 - (a) be the subject of a development consent, and
 - (b) comply with all conditions of the consent other than any condition that restricts the hours of work or operation on a Saturday or a Sunday, and
 - (c) take all feasible and reasonable measures to minimise noise, and
 - (d) for work or operations on a Saturday— not involve the carrying out of rock breaking, rock hammering, sheet piling, pile driving or similar activities during the hours of work or operation that would not be permitted but for this Order,

- (e) for works or activities permitted under subclause (2) on a Sunday –
 - i. not involve the use of the following:
 - 1. pneumatic or gas-powered fastening tools or equipment (including nail guns),
 - 2. explosive powered tools and equipment,
 - 3. petrol- or diesel-powered tools and equipment, and
 - 4. electric power tools and equipment, and
 - ii. the person carrying out the work or activity must not play music on any device or equipment or use a radio.

7 Suspension of regulatory instruments

- (1) For the purpose of enabling development to be carried out in accordance with clause 6 of this Order, the following regulatory instruments do not apply to the extent necessary to serve that purpose:
 - (a) any agreement, covenant or other similar instrument that restricts the carrying out of that development, and
 - (b) an environment protection licence under the *Protection of the Environment Operations Act 1997* that was issued before the commencement of this Order.

Note. All other conditions of an environment protection licence continue to apply.