

# Construction Management Plan

[IVANHOE STAGE C1]

[26 JULY 2021] - REVISION 06



DEVELOPMENT CONSENT	CMP REF
B40 a) CEMP – Describe the relevant stage and phases of construction including work program outlining relevant timeframes for each stage/phase;	6.0 , 6.1
B40 b) CEMP – describe all activities to be undertake on the site during site establishment and construction of the development	6.2
B40 c) CEMP – include a dust management plan, incorporating the mitigation measure outline in the Air Quality Assessment, Prepared by WSP, dated October 2018	9.12
B40 d) CEMP – clearly outline the stages/phases of construction that require ongoing environmental management monitoring and reporting	10.2, 10.4, 10.5, 10.6, 10.6.1, 10.61, 10.8, 10.11, 10.12 10.13, 10.18, 10.18.1, 10.19, 10.20, 10.20.1
B40 e) CEMP – detail statutory and other obligations that the Applicant is required to fulfil during site establishment and construction, including approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies	7.0
B40 f) CEMP – be prepared in consultation with council and include specific consideration of measures to address any requirements of Council during site establishment and construction	10.2, 10.4, 10.5, 10.6, 10.6.1, 10.61, 10.8, 10.11, 10.12 10.13, 10.18, 10.18.1, 10.19, 10.20, 10.20.1
B40 g) CEMP - describe the roles and responsibilities for all relevant employees involved in the site establishment and construction of the works	5.1
B40 h) CEMP - detail how the environmental performance of the site preparation and construction works will be monitored, and what actions will be taken to address identified potential environmental impacts, including but not limited to noise, traffic and air impacts	10.19, 10.61, 10.8, 10.11, 10.12 10.13, 10.18 10.18.1, 10.19 10.20, 10.20.1, 10.20.2
B40 i) CEMP - include measures to ensure adequate groundwater entitlement is sourced in order to account for groundwater flows into the construction excavations, unless any exemption applies;	10.19, 10.8.1
B40 j) Management of groundwater during construction	10.18, 10.18.1
B40 k) CEMP - document and incorporate all relevant sub environmental management plans (Sub-Plans), control plans, studies and monitoring programs required under this part of the consent; and	10.19, 10.61, 10.8, 10.11, 10.12 10.13, 10.18 10.18.1, 10.19 10.20, 10.20.1, 10.20.2
B40 i) Include arrangements for community consultation and complaint handling	10.10

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## 1.0 PURPOSE OF THIS PLAN

This Construction Management Plan (CMP) has been developed to outline Probuild's approach to the construction planning and methodology proposed for delivery of desired project outcomes for the Ivanhoe Stage C1 project.

The CMP addresses various anticipated issues, based on Probuild's previous experience on similar projects and current understanding of the existing environment and contractual requirements. The proposed construction methodologies will be further developed throughout the planning and construction phases.

## 2.0 PROJECT SCOPE OF WORKS

The proposed Ivanhoe Estate Stage C1 forms the basis of this management plan, it is a residential development consisting of medium density apartment style living for social housing, affordable housing and market areas. The development precinct is set over 8.2 hectares. Stage C1 is made up of:

- 3 level carpark basement area
- Construction of four (4) residential apartment buildings (C1.1, C1.2, C1.3 & C1.4) consisting of 492 apartments
- Construction of (4) Terrace houses (C1.5)
- Communal landscaping in residential communal areas and public areas

### Site Location

The Ivanhoe Estate - Stage C1 site is located within Frasers Property Australia's Ivanhoe Estate (Midtown) Development, located within the Ryde Local Government Area, approximately 17km from the Sydney CBD. The site is contained within the City of Ryde Council consent authority. Stage C1 of the Ivanhoe Estate Development is in Macquarie Park near the corner of Epping Road and Herring Road. Stage C1 is located towards the northern corner of the Ivanhoe Estate.



Figure 1 – an overhead visual of the project location.

**3.0 KEY PARTICIPANTS / STAKEHOLDERS**

Participant	Stakeholder
Client	Frasers Property Australia
Client Project Manager	Frasers Property Australia
Principal Contractor	Probuild Constructions (Aust) Pty. Ltd.

**Primary Project Contacts**

Probuild Head Office

Address	Phone	Fax
85 McLachlan Ave Rushcutters Bay	02 8259 0222	02 8259 0222

Name	Position	Phone
Nick Gaudry	Managing Director – (NSW)	
John Rusak	Construction Director	
Jonathon Tuer	Project Manager	

Role	Company	Point of Contact	Phone
Architect	Candelapas	Jason Williams	
Structural	Van Der Meer	Ash Afani	
Services Engineer	WSP		
Building Surveyor	Mckenzie		

**4.0 PROJECT CHART**

The project is anticipated to be facilitated through a Design and Construct Contract.

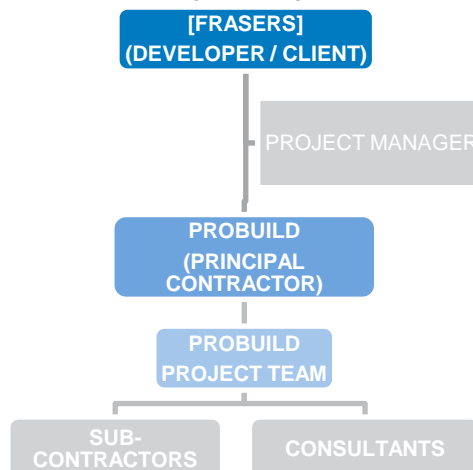


Figure 2 - an outline of the contractual relationship between the entities involved in the delivery of the project

**4.1 Organisational Chart**

The Probuild project team structure responsible for the delivery of the project is outlined within Attachment 1. This group has the responsibility and authority to ensure that works are carried out and meet the project requirements.

**5.0 RESPONSIBILITY AND AUTHORITY**

**5.1 Roles & Responsibilities**

Position	Responsibility
<p><b>Group Services</b></p> <ul style="list-style-type: none"> <li>– HSE</li> <li>– Quality</li> <li>– Program / Planning</li> <li>– Commercial</li> <li>– Design</li> <li>– Services</li> <li>– People &amp; Culture</li> </ul>	<p>The various Group Managers assume overall responsibility for all Health, Safety &amp; Environment, Quality, Design, Programming, Commercial, Human Resources and Industrial Relations related matters. Specific responsibilities include:</p> <ul style="list-style-type: none"> <li>– Overseeing safety performance for the Probuild Group in its entirety</li> <li>– Ensuring compliance to relevant legislation through the allocation of resources and the management of HSE &amp; QA Managers and Coordinators</li> <li>– Ensuring that Management Systems conform to requirements of ISO 4801, ISO 14001 &amp; ISO 9001</li> <li>– Overseeing workers' compensation, and reporting on current claims and organisational trends to the Construction Executive Group</li> <li>– Reporting to the Directors on strategic matters</li> <li>– Providing input into construction tenders and negotiations as required</li> <li>– Ensuring that assistance is provided to manage implementation of project plans</li> <li>– Ensuring that appropriate resources are allocated across all projects</li> <li>– Taking control in the event of any major incidents, and</li> <li>– Providing assistance and monitoring progress of the works</li> </ul>
<p><b>Construction Directors / Construction Managers</b></p>	<p>The Construction Director is responsible for the projects overall delivery. Key responsibilities include:</p> <ul style="list-style-type: none"> <li>– Complying with the Group's Health, Safety, Environmental, Quality, IR and Human Resources Management Systems</li> <li>– Ensuring construction works precede and are completed in accordance with all relevant contractual requirements</li> <li>– Leading project teams to achieve desired project outcomes</li> <li>– Accepting full responsibility for the achievement of construction progress and the successful completion of all nominated contracts</li> <li>– Ensuring that quality levels are achieved in accordance with the contractual obligations, as well as the Group's expectations</li> <li>– Ensuring that planning and scheduling of works occurs as required</li> <li>– Maximising the group's commercial position at each level and stage of the project</li> <li>– Development, review and submission of reports to Probuild's Construction Executive Group as required</li> <li>– Ensure the timely processing of all progress claim valuations, variations, other relevant claims and subcontractor claims</li> <li>– Identify and document potential risks to projects and develop effective control strategies to minimise risk, and</li> <li>– All other responsibilities as outlined in the relevant Position Description.</li> </ul>
<p><b>Project Managers</b></p>	<ul style="list-style-type: none"> <li>– Comply with the Group's Health, Safety, Environmental, Quality and Design Management Policies, Plans and Procedures</li> <li>– Ensure that safe work methods are adopted for all site activities</li> <li>– Participate in HSE meetings (i.e. toolbox talks etc.)</li> <li>– Participate in Safety Committee Meetings (i.e. meeting concluding safety walk)</li> </ul>



Position	Responsibility
	<ul style="list-style-type: none"> <li>– Ensure the appropriate safety equipment is worn by site personnel at all times</li> <li>– Identify and document potential risks to projects and develop effective control strategies to minimise risk</li> <li>– Understand the relevant project specifications and drawings</li> <li>– Monitor work against specifications to ensure the continuing quality and accuracy of work performed</li> <li>– Ensure construction works precede in accordance with all relevant contractual requirements</li> <li>– Accept full responsibility for the achievement of construction progress and the successful completion of all nominated contracts</li> <li>– Ensure that quality levels are achieved in accordance with the contractual obligations, as well as the Group's expectations, and</li> <li>– Ensure the timely processing of all progress claim valuations, variations, other relevant claims and subcontractor claims.</li> </ul>
<b>Design Manager / Services Manager</b>	<ul style="list-style-type: none"> <li>– Comply with the Group's Health, Safety, Environmental, Quality and Design Management Policies, Plans and Procedures</li> <li>– Manage Client and Consultants to achieve agreed outcomes for time, cost and quality</li> <li>– Manage and coordinate internal resources to support the requirements of the project</li> <li>– Facilitate client decisions to assure coordination, deliverables and timing of outputs</li> <li>– Identify and manage commercial risk (Head Contract Design obligations) associated with design outputs and deliverables</li> <li>– Identify and manage risks related to novation and/or engagement of Consultants</li> <li>– Assess and identify any gaps in Consultant scopes and Agreements where designers are novated to Probuild</li> <li>– Instigate and maintain standard pre-construction "management tools"</li> <li>– Assure Authorities obligations and requirements are being delivered in the design documents</li> <li>– Assist in the formulation of ESD initiatives required to achieve project targets and obligations, and</li> <li>– Monitor ESD deliverables for incorporation in design outputs and construction obligations.</li> </ul>
<b>Contracts Manager / Administrator</b>	<ul style="list-style-type: none"> <li>– Assist to assure that all financial / contractual systems are established at site start-up phase</li> <li>– Contribute to the development of scopes</li> <li>– Contribute to the development and tracking of the project program</li> <li>– Liaise with subcontractors and all appropriate consultants and authorities to assure that contract requirements are being met and that Probuild maintains an amicable outcome</li> <li>– Attend to general head contract and subcontract correspondence</li> <li>– Assist in planning and scheduling of various works</li> <li>– Assist to assure that all contract administrative duties are fulfilled in a timely manner, so as to maximise the financial return to the Group, while retaining appropriate relations with all relevant parties</li> <li>– Assist to assure that project forecasts &amp; cash flow statements are assessed and maintained</li> <li>– Prepare and or assist in the accurate and timely submission of progress, variation &amp; contractual claims</li> <li>– Assist to assure that subcontractor payments and variation claims are processed in an accurate and timely manner</li> <li>– Work with subcontractors, design team and Site Managers to determine the most cost effective way to let packages</li> </ul>

Position	Responsibility
	<ul style="list-style-type: none"> <li>– Assist to assure understanding of all aspects of the contract and determine key areas of financial risk and possible control measures to reduce identified risks, and</li> <li>– Assist to assure that all progress claims are assessed against the contract to assure that the subcontractors are meeting their obligations.</li> </ul>
<b>Site Manager</b>	<ul style="list-style-type: none"> <li>– Understand the relevant project specifications and drawings</li> <li>– Development of project Health, Safety, Environmental and Quality Management Plans in consultation with the relevant Project Manager and other relevant parties</li> <li>– Implementation of project Health, Safety, Environmental and Quality Management plans</li> <li>– Monitoring site HSE &amp; QA performance to ensure that it reflects the requirements of the relevant project management plans</li> <li>– Development of procedures in consultation with the HSE &amp; QA Teams</li> <li>– Participation in the corporate HSEQ Consultative Committee (as required)</li> <li>– Development, monitoring and adherence to a project audit schedule</li> <li>– Assist with external third party audits(as required)</li> <li>– Provide system improvement advice to the HSE &amp; QA Teams</li> <li>– Ensure Probuild employees and subcontractors are compliant with Probuild HSE and Quality requirements</li> <li>– Assist site management to conduct SWMS / risk assessments for all high risk activities where required</li> <li>– Assist the HSE &amp; QA teams to review site plans to determine key areas of risk and implement appropriate controls prior to project commencement</li> <li>– Ensure that safe work methods are adopted by all parties in relation to all site activities</li> <li>– Ensure the appropriate safety equipment is worn by site personnel at all times</li> <li>– Participate in meetings (i.e. toolbox talks etc.)</li> <li>– Complete site inductions in accordance with the Group's requirements</li> <li>– Monitor work against specifications to ensure the continuing quality and accuracy of work performed</li> <li>– Notify the Project Manager/ Construction Manager of any defects, mistakes, errors, contamination or variations identified</li> <li>– Ensure construction works proceed in accordance with all relevant contractual requirements</li> <li>– Ensure that quality levels are achieved in accordance with the contractual obligations, as well as the Group's expectations</li> <li>– Undertake planning and scheduling of various works</li> <li>– Co-ordinate subcontractor/trade contractor works</li> <li>– Ensure correct set out for all building works, and</li> <li>– Provide the Construction Manager with regular reports on progress of building works.</li> </ul>
<b>Project Coordinators</b>	<ul style="list-style-type: none"> <li>– Understand the relevant project specifications and drawings</li> <li>– Development of project Health, Safety, Environmental and Quality Management Plans in consultation with the relevant Project Manager and other relevant parties</li> <li>– Implementation of project Health, Safety, Environmental and Quality Management plans</li> <li>– Monitoring site HSE &amp; QA performance to ensure that it reflects the requirements of the relevant project management plans</li> <li>– Development of procedures in consultation with the HSE &amp; QA Teams</li> <li>– Participation in the corporate HSEQ Consultative Committee (as required)</li> <li>– Development, monitoring and adherence to a project audit schedule</li> <li>– Assist with external third party audits(as required)</li> <li>– Provide system improvement advice to the HSE &amp; QA Teams</li> </ul>

Position	Responsibility
	<ul style="list-style-type: none"> <li>– Ensure Probuild employees and subcontractors are compliant with Probuild HSE and Quality requirements</li> <li>– Assist site management to conduct SWMS / risk assessments for all high risk activities where required</li> <li>– Assist the HSE &amp; QA teams to review site plans to determine key areas of risk and implement appropriate controls prior to project commencement</li> <li>– Ensure that safe work methods are adopted by all parties in relation to all site activities</li> <li>– Ensure the appropriate safety equipment is worn by site personnel at all times</li> <li>– Participate in meetings (i.e. toolbox talks etc.)</li> <li>– Complete site inductions in accordance with the Group's requirements</li> <li>– Monitor work against specifications to ensure the continuing quality and accuracy of work performed</li> <li>– Notify the Project Manager/ Construction Manager of any defects, mistakes, errors, contamination or variations identified</li> <li>– Ensure construction works proceed in accordance with all relevant contractual requirements</li> <li>– Ensure that quality levels are achieved in accordance with the contractual obligations, as well as the Group's expectations</li> <li>– Undertake planning and scheduling of various works</li> <li>– Co-ordinate subcontractor/trade contractor works, and</li> <li>– Ensure correct set out for all building works</li> </ul>
<p><b>Site Supervisors</b></p>	<ul style="list-style-type: none"> <li>– Understand the relevant project specifications and drawings</li> <li>– Implementation of project Health, Safety, Environmental and Quality Management plans</li> <li>– Monitoring site HSE &amp; QA performance to ensure that it reflects the requirements of the relevant project management plans</li> <li>– Development of procedures in consultation with the HSE &amp; QA Teams</li> <li>– Participation in the corporate HSEQ Consultative Committee (as required)</li> <li>– Development, monitoring and adherence to a project audit schedule</li> <li>– Assist with external third party audits(as required)</li> <li>– Provide system improvement advice to the HSE &amp; QA Teams</li> <li>– Ensure Probuild employees and subcontractors are compliant with Probuild HSE and Quality requirements</li> <li>– Assist site management to conduct SWMS / risk assessments for all high risk activities where required</li> <li>– Assist the HSE &amp; QA teams to review site plans to determine key areas of risk and implement appropriate controls prior to project commencement</li> <li>– Ensure that safe work methods are adopted by all parties in relation to all site activities</li> <li>– Ensure the appropriate safety equipment is worn by site personnel at all times</li> <li>– Participate in meetings (i.e. toolbox talks etc.)</li> <li>– Complete site inductions in accordance with the Group's requirements</li> <li>– Monitor work against specifications to ensure the continuing quality and accuracy of work performed</li> <li>– Notify the Project Manager/ Construction Manager of any defects, mistakes, errors, contamination or variations identified</li> <li>– Ensure construction works proceed in accordance with all relevant contractual requirements</li> <li>– Ensure that quality levels are achieved in accordance with the contractual obligations, as well as the Group's expectations</li> <li>– Undertake planning and scheduling of various works</li> </ul>

Position	Responsibility
	<ul style="list-style-type: none"> <li>– Co-ordinate subcontractor/trade contractor works,</li> <li>– Ensure the appropriate level of control, oversight and direction is exercised on the site by Probuild/subcontractor/trade contractor works; the number, timing and quality of inspections</li> <li>– Carry out inspections of the site in accordance with Probuild's procedures and</li> <li>– Ensure correct set out for all building works.</li> </ul> <p>Where licensed supervisors are required due to legislative requirements, Probuild ensures that these relevant supervisors are adequately considered in the Project Organisation Chart and remain up to date using Probuild's Learn Connect training platform.</p>
<p><b>Grads / Undergrads</b></p>	<ul style="list-style-type: none"> <li>– Understand the relevant project specifications and drawings</li> <li>– Implementation of project Health, Safety, Environmental and Quality Management plans</li> <li>– Monitoring site HSE &amp; QA performance to ensure that it reflects the requirements of the relevant project management plans</li> <li>– Development of procedures in consultation with the HSE &amp; QA Teams</li> <li>– Development, monitoring and adherence to a project audit schedule</li> <li>– Assist with external third party audits(as required)</li> <li>– Provide system improvement advice to the HSE &amp; QA Teams</li> <li>– Ensure Probuild employees and subcontractors are compliant with Probuild HSE and Quality requirements</li> <li>– Assist site management to conduct SWMS / risk assessments for all high risk activities where required</li> <li>– Assist in reviews of site plans to determine key areas of risk and implement appropriate controls prior to project commencement</li> <li>– Ensure that safe work methods are adopted by all parties in relation to all site activities</li> <li>– Ensure the appropriate safety equipment is worn by site personnel at all times</li> <li>– Participate in meetings (i.e. toolbox talks etc.)</li> <li>– Monitor work against specifications to ensure the continuing quality and accuracy of work performed</li> <li>– Notify the Project Manager/ Construction Manager of any defects, mistakes, errors, contamination or variations identified</li> <li>– Ensure construction works proceed in accordance with all relevant contractual requirements</li> <li>– Ensure that quality levels are achieved in accordance with the contractual obligations, as well as the Group's expectations</li> <li>– Undertake planning and scheduling of various works</li> <li>– Co-ordinate subcontractor/trade contractor works, and</li> <li>– Ensure correct set out for all building works.</li> </ul>

**6.0 PROGRAM**

A preliminary construction program has been prepared and included within Attachment 2.

Refer to the program in parallel with this Construction Management Plan.

**6.1 Stages & Phases of Construction**

The relevant stages and phases of construction are outlined in the below summarized works program. The construction of Ivanhoe building C1 is staged in 6 phases which consist of the following:

STAGE	DESCRIPTION
<ul style="list-style-type: none"> <li>– Establishment and groundworks</li> <li>– (8 Weeks)</li> </ul>	<ul style="list-style-type: none"> <li>– Construction of pads &amp; footings, in-ground services, basement 3 slab on ground and establishment of jump form</li> </ul>
<ul style="list-style-type: none"> <li>– Podium and suspended structure</li> <li>– (11 Weeks)</li> </ul>	<ul style="list-style-type: none"> <li>– Form reinforce and pour suspended concrete structures</li> </ul>
<ul style="list-style-type: none"> <li>– West Tower (C1.1 &amp; C1.2)</li> <li>– (40 Weeks)</li> </ul>	<ul style="list-style-type: none"> <li>– Form reinforce and pour suspended concrete structures</li> <li>– Installation of façade and internal finishes</li> </ul>
<ul style="list-style-type: none"> <li>– East Tower (C1.3 &amp; C1.4)</li> <li>– (39 Weeks)</li> </ul>	<ul style="list-style-type: none"> <li>– Form reinforce and pour suspended concrete structures</li> <li>– Installation of façade and internal finishes</li> </ul>
<ul style="list-style-type: none"> <li>– Town Houses (C1.5)</li> <li>– (21 Weeks)</li> </ul>	<ul style="list-style-type: none"> <li>– Townhouse structure, façade and finishes</li> </ul>
<ul style="list-style-type: none"> <li>– Podium Finishes &amp; Fit out Completion</li> <li>– (35 Weeks)</li> </ul>	<ul style="list-style-type: none"> <li>– External public domain works, Basement Carpark and internal podium works</li> </ul>

## **6.2 Scope of Works**

The scope of works within the Construction Management Plan covers all activities associated with the construction of Building C1.1, C1.2, C1.3, C1.4 and C1.5. This scope includes all activities throughout each of the 6 stages.

Establishment and ground works: Design, development and coordination of documentation/shop drawings for construction including authority approvals to commence construction. Site set-up of amenities and offices for the head contractor and subcontractors on the project. Temporary and permanent fencing to the site inclusive of hoardings. Groundworks will consist of the excavation of footings and pads to accommodate the structure and loads above. In ground services works will be completed which include hydraulic, fire, and electrical services. Jump forms will be established and core walls will be formed, reinforced and poured. The basement 3 slab on ground will be prepared and formed, reinforced and poured in 6 concrete pours.

Podium and suspended structure: includes Basement 2, Basement 1, Lower and Upper Ground Floor. The construction of the suspended structures will include the formation, reinforcement and concrete placement to these levels.

West Tower C1.1 & 1.2: These works consist of the forming, reinforcement and placement of concrete to levels 1 - 13 for building C1.1 and levels 1-20 for building C1.2. The apartment façade works consist of concrete precast panels, glazing and cladding works. The internal finishes of the building will include the following activities: internal cavity walls and ceilings, services rough in and installation of hydraulic, electrical, mechanical and fire to lobbies and apartments. Vertical transport and garbage chutes will cater access and management of waste within the buildings. Flooring activities such as waterproofing, carpet laying and tiling will be installed. Activities such as joinery and carpentry will be required to install wardrobes, kitchens and hang doors. Furthermore, the buildings will be commissioned and defected for purchaser handover.

West Tower C1.3 & 1.4: These works consist of the forming, reinforcement and placement of concrete to levels 1 - 12 for building C1.3 and levels 1-19 for building C1.4. The apartment façade works consist of concrete precast panels, glazing and cladding works. The internal finishes of the building will include the following activities: internal cavity walls and ceilings, services rough in and installation of hydraulic, electrical, mechanical and fire to lobbies and apartments. Vertical transport and garbage chutes will cater access and management of waste within the buildings. Flooring activities such as waterproofing, carpet laying and tiling will be installed. Activities such as joinery and carpentry will be required to install wardrobes, kitchens and hang doors. Furthermore, the buildings will be commissioned and defected for purchaser handover.

Podium and fit-out completion: consists of the construction of a communal podium structure with open grass areas, soft and hard landscaping works, courtyards and lighting/security equipment. The basement completion works consist of the construction of essential plant rooms such as the substations, fire pump room, hydraulic pump rooms, mechanical plant rooms, switch rooms, waste rooms and utility rooms. The installation of storage cages, line marking, services and security will also be installed in order to complete the basement



The below table lists and describes the key requirements of Commonwealth legislation, State legislation and National Codes of Practice that Probuild must comply with.

#	Title	Key Requirements
A	Commonwealth Laws	
A.1	Work Health and Safety Act 2011 and Regulations NSW 2017	The WHS Act and WHS Regulations provide a framework to secure the health and safety of workers and workplaces by protecting workers and other persons against harm to their health, safety and welfare through the elimination of risks arising from work, in accordance with the principle that workers and other persons
A.2	Environment Protection and Biodiversity Conservation Act 1999 and Regulations 2000	Sets out the assessment and approval process for sites that have or are world or national heritage listed, threatened species or ecological communities, migratory species, commonwealth marine areas and nuclear sites.
A.3	National Greenhouse and Energy Reporting Act 2007 and Regulations 2008	Describes the requirements for companies to report on energy use and emission of greenhouse gases. Mainland Civil is obligated to report on energy consumption or greenhouse gas emissions.
A.4	National Environment Protection Council (NEPC) National Environment Protection (Assessment of Site Contamination) Measure 1999 (Amended 2013)	This Measure provides a consistent approach to the assessment of site contamination to ensure sound environment management practices by the community and stakeholders. Provides information on providing adequate protection of human health and the environment, where site contamination has occurred, through the development of an efficient and affective nation
A.5	Building and Construction Industry (Improving Productivity) Act 2016	The main object of this Act is to provide an improved workplace relations framework for building work to ensure that building work is carried out fairly, efficiently and productively, without distinction between interests of building industry participants, and for the benefit of all building industry participants and for the benefit of the Australian economy as a whole.
A.6	Fair Work (Building Industry) Act 2012	The object of this Act is to provide a balanced framework for cooperative, productive and harmonious workplace relations in the building industry by: <ul style="list-style-type: none"> <li>(a) ensuring compliance with workplace relations laws by all building industry participants; and</li> <li>(b) providing information, advice and assistance to all building industry participants about their rights and obligations; and</li> <li>(c) providing an effective means of enforcing those rights and obligations; and</li> <li>(d) providing appropriate safeguards on the use of enforcement and investigative powers; and</li> <li>(e) improving the level of occupational health and safety in the building industry</li> </ul>

#	Title	Key Requirements
A.7	Independent Contractors Act 2006	(1) The principal objects of this Act are: (a) to protect the freedom of independent contractors to enter into services contracts; and (b) to recognise independent contracting as a legitimate form of work arrangement that is primarily commercial; and (c) to prevent interference with the terms of genuine independent contracting arrangements.
<b>B</b>	<b>National Codes of Practice</b>	
B.1	National Code of Practice for the Storage and Handling of Workplace Dangerous Goods	Requirements for the storage and handling of dangerous goods and references applicable Australian Standards, e.g. AS 1940- 2017 The storage and handling of flammable and combustible liquids.
B.2	National Code of Practice for the Control of Workplace Hazardous Substances	Provides practical guidance and advice on how to comply with the National Standard for the Control of Workplace Hazardous Substances.
B.3	National Code of Practice: How to manage work health and safety risks	Provides guidance how to manage work and safety risks in the workplace
B.4	National Code of Practice: Excavation Work	Provides guidance how to manage health and safety risks associated with excavation work
B.5	National Code of Practice: Managing noise and preventing hearing loss at work code of practice	Provides guidance how to manage noise and preventing hearing loss in the workplace.
B.6	National Code of Practice: Managing the work environment and facilities	Provides practical guidance for persons conducting a business or undertaking on how to provide and maintain a physical work environment that is without risks to health and safety
B.7	National Code of Practice: Managing the risk of plant in the workplace	Practical guidance on how to manage health and safety risks of plant once it is in the workplace, from plant installation, commissioning and use through to decommissioning and dismantling
B.8	National Code of Practice: How to safely remove asbestos	Provide practical guidance how to manage the safe removal of asbestos from workplaces.
B.9	National Code of Practice: How to Manage and Control Asbestos in the Workplace	Provides practical guidance for persons conducting a business r undertaking on how to manage risks associated with asbestos and asbestos contaminated material at the workplace and thereby minimise the incidence of asbestos
B.10	National Code of Practice: Managing the risk of falls at workplaces	Provides a practical guidance to persons conducting a business or undertaking, on how to manage health and safety risks arising from falls, and information on a range of control measures to eliminate or minimise the risks.
B.11	Nation Code of Practice: Managing electrical risk in the workplace	Provides practical guidance for persons conducting a business or undertaking on managing electrical risks in the workplace.
B.12	Nation Construction Code Volume 2	The NCC Volume Two contains technical design and construction requirements for certain residential and non-habitable buildings and structures.
B.13	Building Code of Australia/Australian Standards	The Building Code of Australia (BCA) is contained within the National Construction Code (NCC) and provides the minimum necessary requirements for safety, health, amenity and sustainability in the design and construction of new buildings (and new building work in existing buildings) throughout

#	Title	Key Requirements
C	NSW Legislation	
C.1	Contaminated Land Management Act 1997	<p>The Contaminated Land Management (CLM) Act regulates the investigation and remediation of contaminated land and the various instruments the NSW Environmental Protection Authority (EPA) can use to investigate and order the remediation of contamination land.</p> <p>Section 60 imposes a duty on a person who has conducted activities on land that have resulted in contamination to inform the EPA. This duty also applies to the owner of land. Mainland Civil has a contractual duty to inform the Frasers Property, who has a duty to inform the EPA of any contamination resulting from activities at their sites.</p>
C.2	The Design and Building Practitioners Act 2020	<p>The Act created a legislative regime for builders and designers of buildings to: be registered and insured; give declarations with respect to Regulated Designs (i.e. designs for key building elements and performance solutions);</p>
C.3	Environmentally Hazardous Chemicals Act 1985	<p>The primary legislation for specifically regulating environmentally hazardous chemicals throughout their life cycle.</p>
C.4	Home Building Regulation 2014	<p>The Home Building Act 1989 (NSW) regulates the performance of most residential building work and building disputes in New South Wales. The Act also creates a number of significant protections for consumers.</p> <p>The key aspects of the Home Building Act include:</p> <ul style="list-style-type: none"> <li>Contracting Requirements including a requirement that a Contract for Residential Building Work to which the Act applies must be; in writing, contain prescribed information and particulars and be signed and dated by the parties to it.</li> <li>The implication of a number of important conditions and Statutory Warranties into any Contract for Residential Building Work including a cooling-off right and mandatory warranties that go to the quality and standard of work that a builder must achieve.</li> <li>The prohibition of residential building work or any specialist building work by or on behalf of anyone that is not the holder of a relevant Contractor License.</li> <li>A requirement for Builders to provide prescribed Consumer Building Guide to home owners before entering into a contract to do work.</li> <li>A requirement for Builders to obtain a Policy of Insurance under the Home Building Compensation Fund before carrying out any work or requesting or accepting any payment under a Contract for Residential Building Work with a price or value in excess of \$20,000.00 (incl. GST).</li> <li>The giving of jurisdiction to the NSW Civil &amp; Administrative Tribunal as the preferred forum for the resolution of home building claims with power to make enforceable rectification orders.</li> </ul>

#	Title	Key Requirements
C.5	National Environment Protection Council (NSW) Act 1985	<p>Provides for the establishment of a National Environment Protection Council that has power to make national environment protection measures. The NSW Government will implement national environment protection measures (NEPMs) in NSW in a variety of ways, including via legislation.</p> <p>NEPMs implemented using EPA legislation include those relating to:</p> <ul style="list-style-type: none"> <li>□ monitoring of ambient air quality;</li> <li>□ assessment of site contamination;</li> <li>□ used packaging materials;</li> <li>□ movement of controlled waste; and</li> <li>□ National pollutant inventory.</li> </ul>
C.6	Protection of the Environment Operations Act 1997 (POEO Act)	<p>This Act is the key environmental regulatory instrument in NSW and describes requirements for air, noise, water, and waste and land pollution. The POEO Act aims to prevent pollution but also provides a two-tiered system to regulate pollution. The EPA is responsible for regulating higher environmental risk activities listed in Schedule 1 by licensing, while local authorities and other public authorities regulate the lower risk non-scheduled activities. Chapter 5 classifies offences into three tiers for water, air, noise and land pollution including waste and litter disposal. Section 148 provides details of the general duty to notify the EPA or the local Council of environmental incidents. This duty applies</p>
C.7	Environmental Planning and Assessment Act 1979	<p>The Environmental Planning and Assessment Act 1979 specifies the types of approvals that are required to undertake building work in NSW, and the matters that must be satisfied as part of those approvals.</p>
C.6	Protection of the Environment Operations (Waste) Regulation 2014	<p>The main parts of the Waste Regulation relevant to Frasers Property activities include:</p>

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#	Title	Key Requirements
C.7	Environmental Planning and Assessment Act 1979	The Environmental Planning and Assessment Act 1979 specifies the types of approvals that are required to undertake building work
C.6	Protection of the Environment Operations (Waste) Regulation 2014	The main parts of the Waste Regulation relevant to Frasers Property activities include: <ul style="list-style-type: none"> <li>□ Proximity Principle: Offence for transport of waste;</li> <li>□ Prescribed wastes for land pollution offence; and</li> <li>□ Reduced licensing thresholds for waste activities.</li> </ul> Mainland Civil has a duty to ensure wastes are disposed of appropriately and records maintained.
C.7	Sydney Water Act 1994	This Act is applicable to the discharge of wastewater to sewer from industrial/commercial premises.
C.8	Waste Avoidance and Resource Recovery Act 2001	This Act promotes waste avoidance and resource recovery by developing waste avoidance and resource recovery strategies and programs, such as the extended producer responsibility scheme for industry. This Act allows the development and implementation of state-wide waste reduction strategies (Parts 3 and 4) and extended producer responsibility schemes (Section 15). Mainland Civil may choose to follow the following waste hierarchy: <ul style="list-style-type: none"> <li>□ Avoidance of unnecessary resource consumption; then</li> <li>□ Resource recovery (including reuse, reprocessing, recycling and energy recovery); and then</li> <li>□ Disposal.</li> </ul>
C.9	NSW EPA (2014) – Waste Classification Guidelines – Part 1: Classifying Waste	This guideline provides a step by step procedure on classifying wastes into groups that pose similar risk to the environment and human health facilities their management and appropriate disposal.
D	NSW Codes of Practice	
D.1	NSW Government Codes of Practice – Construction Work (2019)	This code provided practical guidance on how to achieve the standards of work health and safety required under the WHS ACT and the Work Health Safety Regulation and effective ways to identify and manage risks.
D.2	Construction Code of Practice	This Code of Practice on construction work is an approved code of practice under section 274 of the Work Health and Safety Act (the WHS Act). An approved code of practice provides practical guidance on how to achieve the standards of work health and safety required under the WHS Act and the Work Health and Safety Regulation (the WHS Regulation) and effective ways to identify and manage risks.
D.2	WorkCover NSW (2014) – Managing Asbestos in or on soil	This guide provide general guidance on the assessment and management of asbestos in soil.

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#	Title	Key Requirements
D.3	NSW Government Code of Practise – How to Manage and Control Asbestos in the Workplace (2019)	This Code provides practical guidance to PCBU's on how to manage risks associated with asbestos, asbestos containing material (ACM) and asbestos-contaminated dust or debris (ACD) at the workplace and thereby minimise the incidence of asbestos-related diseases such as mesothelioma, asbestosis and lung cancer.
D.4	NSW Government Code of Practise – How to safely remove asbestos (2019)	This Code provides practical guidance to PCBU's on how to manage health and safety risks associated with removing asbestos or asbestos-containing materials (ACM) from workplaces.
E	Other Legislation, COP & Guidelines	
E.1	Western Australia Department of Health (WA DoH) (2009) - Guidelines for the Assessment, remediation and Management of Asbestos – Contaminated Sites in Western Australia & Summary Update (2018)	This Document, prepared by the Western Australian (WA) Department of Health (DOH), provides guidance for the investigation, remediation and management of asbestos-contaminated sites, and it is based on both Australian and international best practices tailored to Western Australian conditions.

## 8.0 PROJECT COMMUNICATION

### 8.1 Communication Protocols

Probuild is committed to ensuring relevant information regarding the construction process and staging of works within the live environment is disseminated between relevant stakeholders and external parties involved in the development.

To ensure that positive and proactive communication and consultation occurs on the project, Probuild is committed to engaging with relevant stakeholders to address any issues raised in the following manner:

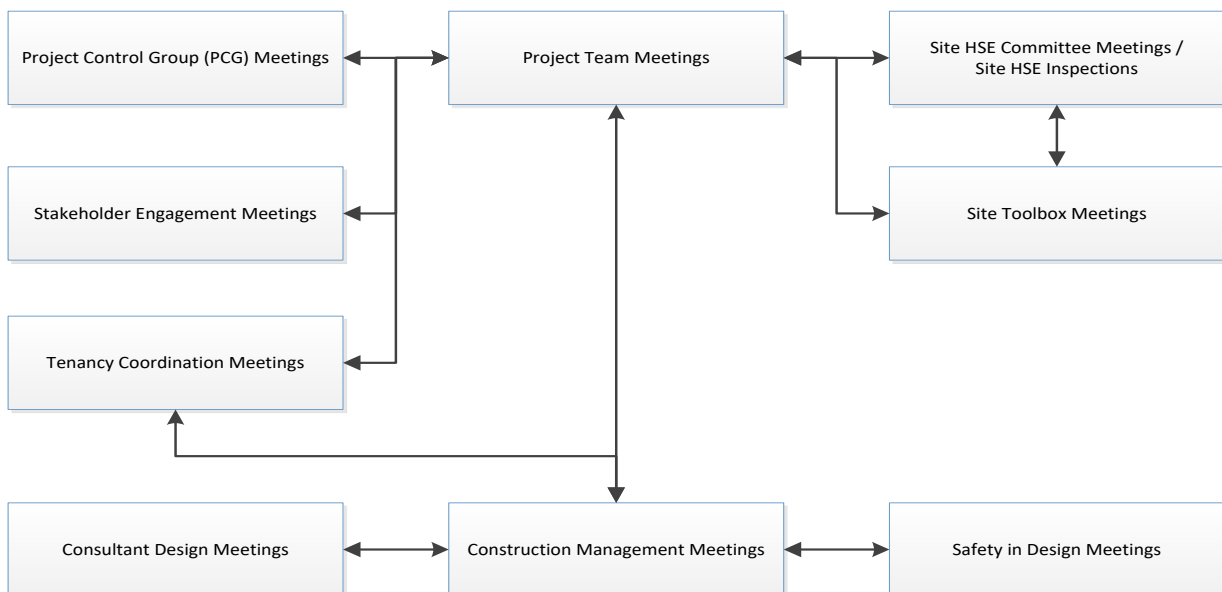


Figure 3 – typical flow of communication expected at a project-based level.



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Probuild implements and maintains a web-based notification system (Google Groups) whereby construction activities, planned shutdowns/interruptions, etc. can be electronically issued to all parties ahead of any such works. Adjoining owners are invited at the commencement of the project to submit their email addresses so that relevant notifications may be issued via this platform.

The need to provide prompt response to any complaints or disputes from adjoining owners is critical. Communications between Probuild and external parties is at the direction of the Construction Director, but all items must be logged onto a Complaint Register.

Probuild utilises the web-based Aconex & Procore systems as the primary means of producing, transferring, tracking and filing of all contractual project correspondence. All parties involved in this project must use Aconex and/or Procore.

For further information regarding any of the processes dealing with communications, refer directly to the project specific Quality Management Plan.

### **9.0 DESIGN MANAGEMENT**

Design Management procedures have been developed to provide a framework for the project team to carry out their responsibilities and obligations, and provide assurance that design compliance requirements will be met. These aspects include, but are not limited to:

- novation and/or engagement of consultants
- tracking of the status of Consultant Agreements
- Safety in Design
- Quality Risk Assessment (QRA)
- environmental considerations
- design review and consent
- design changes
- sample approval, and
- value management

For further information regarding any of the processes dealing with design aspects, refer directly to the project specific Design Management Plan.

### **10.0 CONSTRUCTION PLANNING**

A thorough analysis has been undertaken to identify the proposed construction methods and sequence to be implemented on the project. As a result, site specific workplace management plans have been developed to identify the following construction requirements:

- site access/egress and traffic management
- public safety and maintenance of amenity
- temporary hoardings/fencing
- location of site amenities, and
- crantage and loading bays

#### **10.1 Dilapidation Survey**

Prior to works commencing on site, a dilapidation survey must be commissioned (by an independent third party) to document the existing condition of adjoining properties and infrastructure. A dilapidation survey of existing services will be commissioned prior to any construction works to document existing services within the construction zones, including mechanical, electrical, hydraulic and wet fire.

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### 10.2 Public & Property Protection

#### 10.2.1 Hoarding

To avoid unauthorised site access, and to minimise the impact of the construction works, appropriate boundary separation measures must be erected around the main construction zones and the various adjacent workspaces throughout the delivery of the works. This hoarding must be maintained and adjusted during the life of the project, in consultation with the relevant stakeholders.

Directional and/or statutory signage, to redirect the public along a designated path, as well as traffic management, must be provided for pedestrian safety.

The following classes of hoardings will be utilised on this project:

CLASS	DESCRIPTION	LOCATION
Class A - Full Height (internally contained)	Melamine, Ply (pre-finished to accept artwork or advertising) or alternatives to expanded polystyrene panels, including double, self-closing, access doors to tenancies and construction zones.	Perimeter of site and site offices, amenities
Class B – 2400mm high	Ply or modular composite panel (pre-finished to accept artwork or advertising) including double, self-closing, access doors to tenancies and construction zones.	n/a
Class C – Cyclone Fence 2100mm high	Standard chain wire fence 2100mm high with galvanized tubes fixed into ground (semi-permanent).	Boundary of site
Class D - ATF	Modular and movable temporary fence panels on heavily weighted bases.	
Class E – Water or Concrete Barriers (Traffic)	Water and concrete barriers are designed to meet the general requirements of applications for pedestrian traffic delineation. Water barriers manufactured from high density Polypropylene and are connected by way of a special linking pinto forma chain.	
Class F – Crowd Barriers (General Public)	Crowd Barriers are designed to meet the general requirements of applications for pedestrian delineation. Crowd Barriers manufactured from high density Polypropylene and are connected by way of a special linking pinto forma chain.	Operational safety zones within site

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### 10.3 Hours of Work

The permissible operating hours for the project are detailed below:

Working Hours (Anticipated)	
Monday to Friday	7.00am to 6:00pm
Saturday	8.00am to 4:00pm
Sunday & Public Holidays	Permit work under council specification (if required)

Probuild must work within the EPA Noise Control Guidelines for construction and demolition site noise. External noisy works must not be conducted outside of these hours unless prior notification has been given and agreed to by the relevant authorities. After hours works and night works must be managed between these parties and other relevant stakeholders on an as-needs basis.

### 10.4 Heritage & Archaeological Significance

Any discovery of an item of potential archaeological or heritage significance, the relevant authorities and stakeholders must be contacted.

### 10.5 Existing Operational Areas

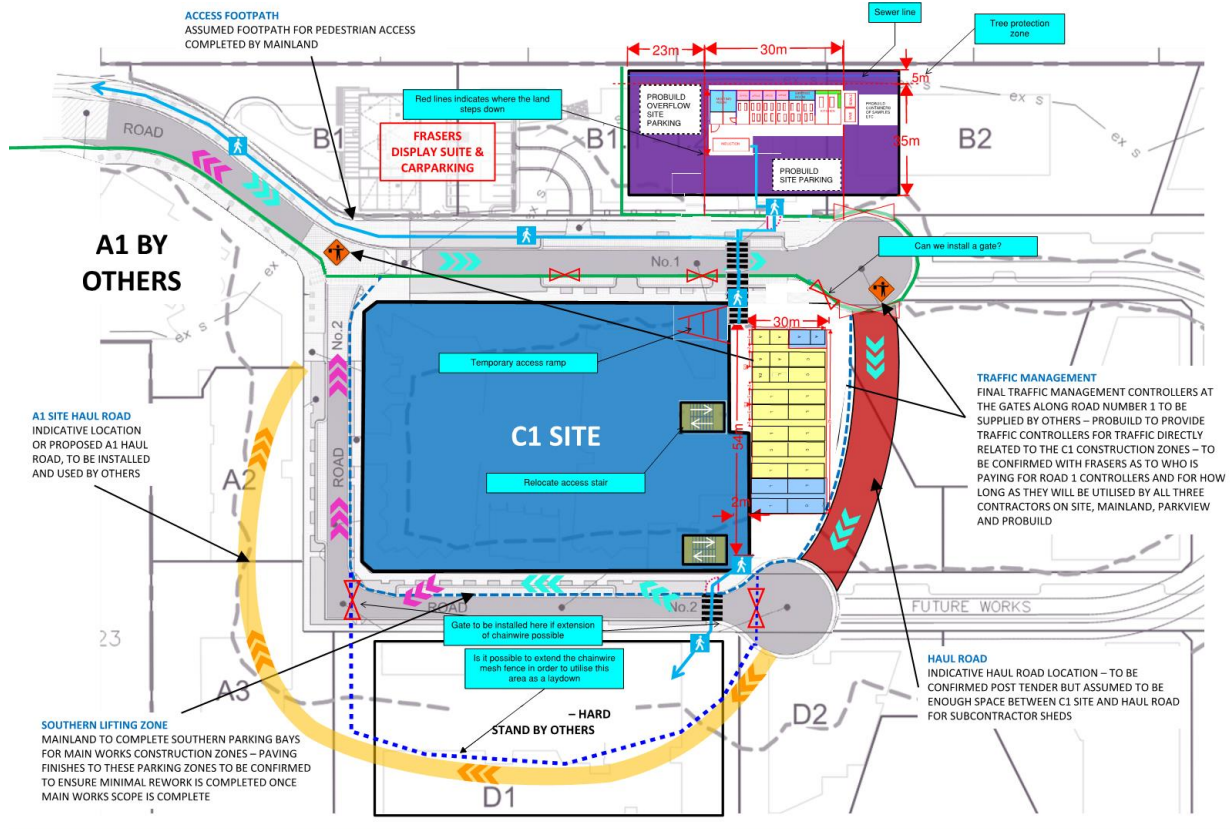
Access required within the existing operational areas, outside of the site boundaries, will be subject to Client requirements. Timing of any works will be determined on the type, location and impact on the operations of the area concerned.

### 10.6 Site Access/Egress

The below plan outlines the access and egress to the site and site office within the Ivanhoe Estate Development.

# Quality Management Construction Management Plan

## 1.2 SOIL AND WATER MITIGATION METHODS



### 10.6.1 Worker Pedestrian Access

Workers will enter the site through a series of pedestrian gates within the hoardings, located at various positions around the site, in areas that avoid uncontrolled/limited visibility egress paths that are considered unsafe, or have potential to cause nuisance to the public. These pedestrian gates can be adjusted throughout the works to facilitate the sequenced construction activities.

### 10.6.2 Public Pedestrians

Public pedestrian access must be facilitated, as far as practicable, at all times during construction. Due to the nature and inherent risks involved in construction activities, it is unavoidable that some disruption to the public can be incurred, whereby public pedestrian access is to be temporarily restricted or adjusted. This must be clearly communicated to all key stakeholders and members of the public through project specific signboards, pedestrian restriction gates, and traffic controllers.

### 10.7 Contractor Parking

Limitations to parking in the area are detailed in all site inductions. Alternative means of transport, including the train, bus, and carpooling are highlighted and encouraged.

### 10.8 Traffic Management

A Traffic Management Report for the project must be developed for the required vehicular and pedestrian movements during the delivery of the project.

The following restrictions must be considered in the development of the Traffic Management Plan:

- speed limit to be restricted on-site to 8km/h

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- flashing hazard lights must be operated at all times for mobile plant
- reversing beepers
- personnel to wear high visibility safety vests at all times
- spotters/escorts to accompany vehicles where required by JSA/SWMS
- relevant signage will be erected as required for traffic management to suit the varying access requirements, and
- subcontractors are responsible to manage traffic within their own work zones. This may involve signage and barricading over and above general access as provided by Probuild.

During various stages of work, vehicle access to and from site must be managed by the following actions:

- minimising impact of high frequency of trucks upon local traffic movements by controlling movements and marshalling of trucks off-site. Drivers must continue to report to the Traffic Controller on-site to ensure street access space exists before proceeding to site
- liaison with the adjoining neighbours, businesses and local authorities
- all relevant site personnel must be inducted into the appropriate Traffic Management Plan focussing on the interface between construction activities and the public, and
- ongoing training must be provided for all supervision and staff during the various phases of delivery.

Further to this, it is a requirement to conduct a thorough risk assessment of the traffic management requirements to ensure that no one is put at risk in the implementation of a system.

All Traffic Management Plans developed for implementation external to the workplace boundary shall be developed by a suitably qualified person in accordance with NSW Roads, Maritime Services (RMS) requirements and relevant legislation (including council bi-laws). A SWMS is required where works carried out on, in or adjacent to a road.

- Construction zones will be established in approved areas under licensed traffic control.
- Approved traffic management plan will be developed and implemented

### Chain of Responsibility

The Heavy Vehicle National Laws are a significant step in recognising that everyone in the supply chain is accountable and has a role to play in ensuring heavy vehicle safety. The laws aim to complement national workplace health and safety laws and place a positive duty of care on all heavy vehicle supply chain parties.

These laws now increase the responsibility for Probuild in the part of the chain of responsibility that we perform. Within our capacity to control, we must eliminate or minimise our risks, all breaches or suspected breaches need to be reported to Probuild and recorded using the non-conformance system.

Our key risks that we can influence include:

- The loading and unloading of a vehicle,
- The scheduling of deliveries,
- The mass and dimension of load

Activity	Hazard Aspects	Risk / Impact	Controls

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Activity	Hazard Aspects	Risk / Impact	Controls
<b>Increase in traffic around the Ivanhoe Estate Development</b>	Interaction between Other contractors construction traffic	<ul style="list-style-type: none"> <li>– Increase in car traffic</li> <li>– Traffic Incident</li> </ul>	<ul style="list-style-type: none"> <li>– Construction worker traffic to enter site and park in dedicated carpark</li> <li>– No construction traffic to park in Sydney Trains commuter carpark</li> <li>– Dedicated traffic controllers to manage construction traffic into the project</li> <li>– Ensure that people directing traffic hold appropriate qualifications / tickets.</li> <li>– Traffic controllers always have communication with First Aid via 2 way .</li> <li>– Traffic controllers are to ensure roads are clear of any workers, vehicles or plant prior to allowing trucks to exit the site</li> </ul>
<b>Traffic Management</b>  Is carried out on, in or adjacent to a road, railway, or other traffic corridor that is used by traffic other than pedestrians.	<ul style="list-style-type: none"> <li>– Moving vehicles / mobile plant</li> </ul>	<ul style="list-style-type: none"> <li>– Struck by / roll over</li> </ul>	<ul style="list-style-type: none"> <li>– No driveways, public access ways or emergency access paths to be blocked.</li> <li>– Traffic Management / Control Plan developed and implemented as required.</li> <li>– Signage and traffic controls to be used as required to direct safe temporary access including speed of vehicles entering site to be reduced.</li> <li>– Speed limits to be restricted to 10km/hr</li> <li>– Closest works being carried out to the site are 23m from the station concourse or rail corridor</li> <li>– No metal objects (such as ladders, tapes and machinery), or conductive material are to be used within 6 horizontal metres of any live electrical equipment.</li> </ul>

### 10.9 Tree Protection

If required, a Tree Protection Management Plan (TPMP) for the site can be developed. The TPMP must be prepared in accordance with AS 4970:2009 in consultation with the relevant authorities.

### 10.10 Community Consultation and Complaint Handling

The community has been notified of this development through public notification as part of the development application process. Probuild will continue to consult and handle any complaints from the community by nominating a construction community liaison officer within the Probuild set team in which the local community can contact this officer directly for any information.

Probuild's construction management plans will be issued to council for review and consultation.

### 10.11 Noise & Vibration

The site objectives are to minimise the noise and vibration generated by construction activities, and its impact on adjoining properties and infrastructure, surrounding residents, businesses and workers.

The following measures must be considered for implementation to control noise and vibration:

- establish & maintain good relations with the community and neighbouring sites
- where possible, silencing equipment to be considered when conducting works outside of normal operating hours, and/or where works are likely to occur for an extended period of time
- Safe Work Method Statements must be submitted which include the schedule of demolition and construction works, including the plant and equipment to be used
- any municipal requirements for allowable limits on emitted noise from mechanical plant & equipment



# Quality Management

## Construction Management Plan

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- identification of works areas likely to generate noise and vibration, with warning signage in compliance with AS1319, to alert personnel to use personal protective equipment, and
- scheduling of adjacent works to mitigate potential exposure to noise and vibration.

For details of specific workplace controls for noise and vibration, refer to the Health, Safety & Environmental Management Plan.

### **10.12 Air Quality and Dust Control**

The site objectives are to minimise the dust generated by construction activities, and its impact on adjoining properties and infrastructure, surrounding residents, businesses and workers. The Air Quality report mitigation measures have been incorporated into the Construction Management Plans Air Quality and Dust Control Measures.

The following measures must be considered for implementation to control dust:

- suppression measures such as water sprays, shade cloths, plastic canvas or the like to ensure there is minimal impact outside of the site
- ensuring that trucks transporting materials to and from site are covered
- reviewing of dust control measures implemented on a regular basis for effectiveness.
- vehicles/plant and equipment must be fitted with appropriate emission control equipment and serviced and maintained in accordance with the manufacturer's recommendations
- drop heights of materials will be minimised to control the fall of materials
- cutting of materials such as concrete or bricks will be undertaken with extraction or suppression where possible. Pouring water and confining the dust will also be mitigated to reduce the amount of dust generated
- skips will be securely covered
- materials should be removed from site as soon as practical or stored on site with appropriate coverings and dampening until removal is possible

### **10.13 Waste Management**

The site objectives are to minimise waste generated by construction activities.

The following measures must be considered for implementation to control waste:

- waste bins provided on site, and recycling off site, to ensure minimal wastage occurs and unnecessary landfill being generated.
- concrete and brick material to be recycled.
- waste generated from food scraps, and general waste from workers, to be stored in separate receptacles and removed from site on a regular basis.

To reduce waste sent to landfill by reduction, redirection and management of waste materials. Waste can be avoided through design, reduction at source, re-using waste both on and off site and to recycle waste on-site through separation.

Subcontractors are to be encouraged to minimise packaging brought to the workplace and to re-use off-cuts.

Regular auditing and reporting of the waste program will be conducted by Probuild management, with monthly recycling percentages to be provided by the waste management provider.

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Environmental Management Activity	Hazard Aspects	Risk / Impact	Controls
Waste Management	– Recycling	– Increased waste sent to landfill	<ul style="list-style-type: none"> <li>– Establish agreement with appropriate contractor to remove and recycle waste from site.</li> <li>– Monitor waste dockets from contractor to determine levels of recycling if below 80%, determine additional controls.</li> <li>– Refer to <a href="#">Waste Management Guidance Note</a></li> </ul>
	– Waste minimisation	– Packaging sent to landfill	<ul style="list-style-type: none"> <li>– Request that contractors limit the amount of packaging used for products being bought to site.</li> <li>– Ensure that concrete estimates are accurate to reduce concrete wastage</li> </ul>

For further information, refer to the following:

- [Waste Management Procedure](#)
- [Waste Minimization & Management Plan](#)

### 10.14 Deliveries

To ensure the impact of deliveries to site is minimised for the benefit of the surrounding residents and businesses, deliveries will be managed by:

- ensuring all deliveries enter the site through designated entry gates, using nominated loading bay(s)
- positioning the loading area to minimise the noise levels from unloading and traffic congestion
- utilising the “Probuild Construction System” which takes existing construction processes and critically challenges them to remove any wasteful activity, then applying continuous improvement methodologies to create industry leading benchmark processes, and
- providing dedicated access pathways for stakeholders around the works.

### 10.15 Amenities/Site Office Locations

#### Probuild Project Office

The Probuild site office is located within the Ivanhoe Estate Development and is adjacent to the Frasers Site office and across the private road from site C1.

#### Construction Worker Amenities

Construction worker amenities will be located adjacent to the C1 site with direct access to site via access stairs. Changerooms, lunchrooms, first aid and amenities will be located within this vicinity

### 10.16 Site Amenities/Shared Facilities Description

Our subcontractors are provided with shared amenities and facilities which include the use of lunch rooms, toilets, wash up areas, showers and change rooms. The facilities will be constructed and maintained in accordance with Work Health Safety Regulator requirements.

### 10.17 Site Security

Probuild will take necessary steps to assure that the site remains secure during and after working hours. Areas of consideration include but are not limited to:

- Site Access & Egress
- Site Lighting

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- Site Offices (including CCTV & alarms)

Probuild personnel are responsible to check all egress and access points at the end of each working day to confirm that all contractors have exited, and that all main entry are secure and locked. A complete check of all perimeter hoardings/fences at the end of each working day will also be completed to confirm they are secure. Fences and hoardings will be maintained in good presentable condition.

### 10.18 SOIL AND WATER MITIGATION METHODS

Prior to the commencement of construction consideration should be given avoid the release of contaminate to waterways and drainage systems.

If it is identified that discharge of construction waste into sewer is to occur the relevant authorities are to be contacted to establish a suitable trade waste agreement.

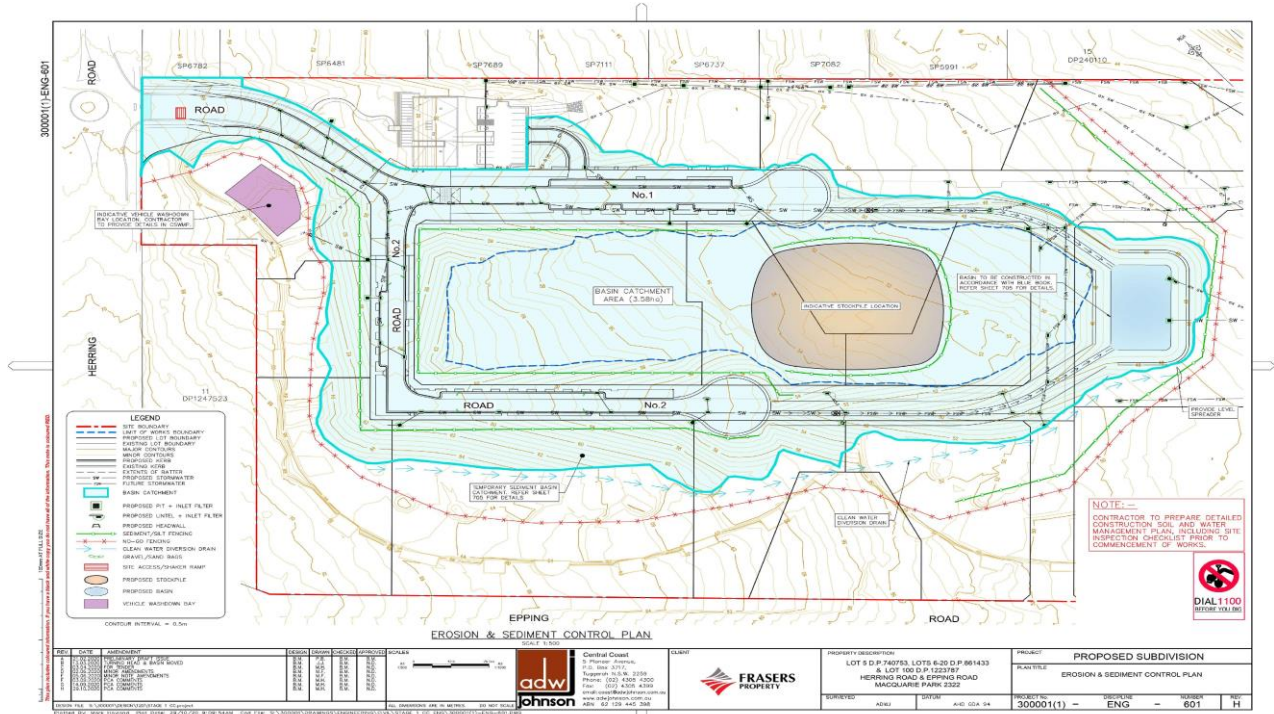
Should a trade waste agreement be in place, inspection and monitoring is to occur as detailed within the agreement.

When discharging into stormwater waste is to be treated in accordance with the jurisdictional and local water quality guidelines.

All drain ways within in the workplace and on the perimeter of the workplace are to be inspected to assure that construction waste is not being discharged via these water ways.

Environmental Management Activity	Hazard Aspects	Risk / Impact	Controls
Water Quality	<ul style="list-style-type: none"> <li>- Runoff Control</li> <li>- Sediment Control</li> </ul>	<ul style="list-style-type: none"> <li>- Contaminating stormwater and nearby waterways</li> </ul>	<ul style="list-style-type: none"> <li>- Drains are to be covered with silt socks or are fenced off (silt fenced) in circumstances that may lead to sediment control issues</li> <li>- Silt socks/ hay bales wrapped in geo fabric material are placed in front of storm water pits</li> <li>- Civil Engineer Sediment and Erosion plan to be always followed</li> <li>- Cattle grid and wash down bays implemented to reduce any mud being dragged outside of the site</li> <li>- Implement use of street sweepers as required</li> <li>- Silt fencing to be utilised to the low side of all excavations as well as temporary stockpiles</li> <li>- Sediment laden water that accumulates within the site is not to be discharged into any water body or stormwater system without first being treated and tested for pH and turbidity.</li> <li>- Sediment controls (see above)</li> <li>- Dewatering of ponded stormwater or infiltrated groundwater</li> <li>- Subsequent collection to the site water cart for reuse for dust suppression</li> <li>- filled geotextile socks or coil matts around stormwater drains to prevent sediment runoff</li> </ul>
Pending confirmation of water test results	<ul style="list-style-type: none"> <li>- Trade Waste</li> </ul>	<ul style="list-style-type: none"> <li>- Contaminating stormwater</li> <li>- Contaminating Sewerage</li> </ul>	<ul style="list-style-type: none"> <li>- Water being discharged from site (inclusive of excavations) is tested for contaminants, where required and in accordance with the trade waste agreement. If contaminated, ensure that appropriate controls are implemented in alignment with recommendations from Occupational Hygienists</li> <li>- If minor quantities of contaminated water are present, arrange for water to be removed from site using an EPA approved removalist.</li> </ul>

# Quality Management Construction Management Plan



## 10.18.1 EROSION AND SEDIMENT CONTROL

To minimise land degradation and erosion so as to protect air quality, water quality, and drainage infrastructure the workplace management team is to implement necessary sediment fences around the workplace boundary and to identify high risk areas within the workplace.

Haul roads should be installed with gravel/road base where required to minimise dust protection, trundle trays should be installed at entry/exit points.

Sediment control and stockpiles are to be inspected as part of the weekly health safety and environmental inspection.

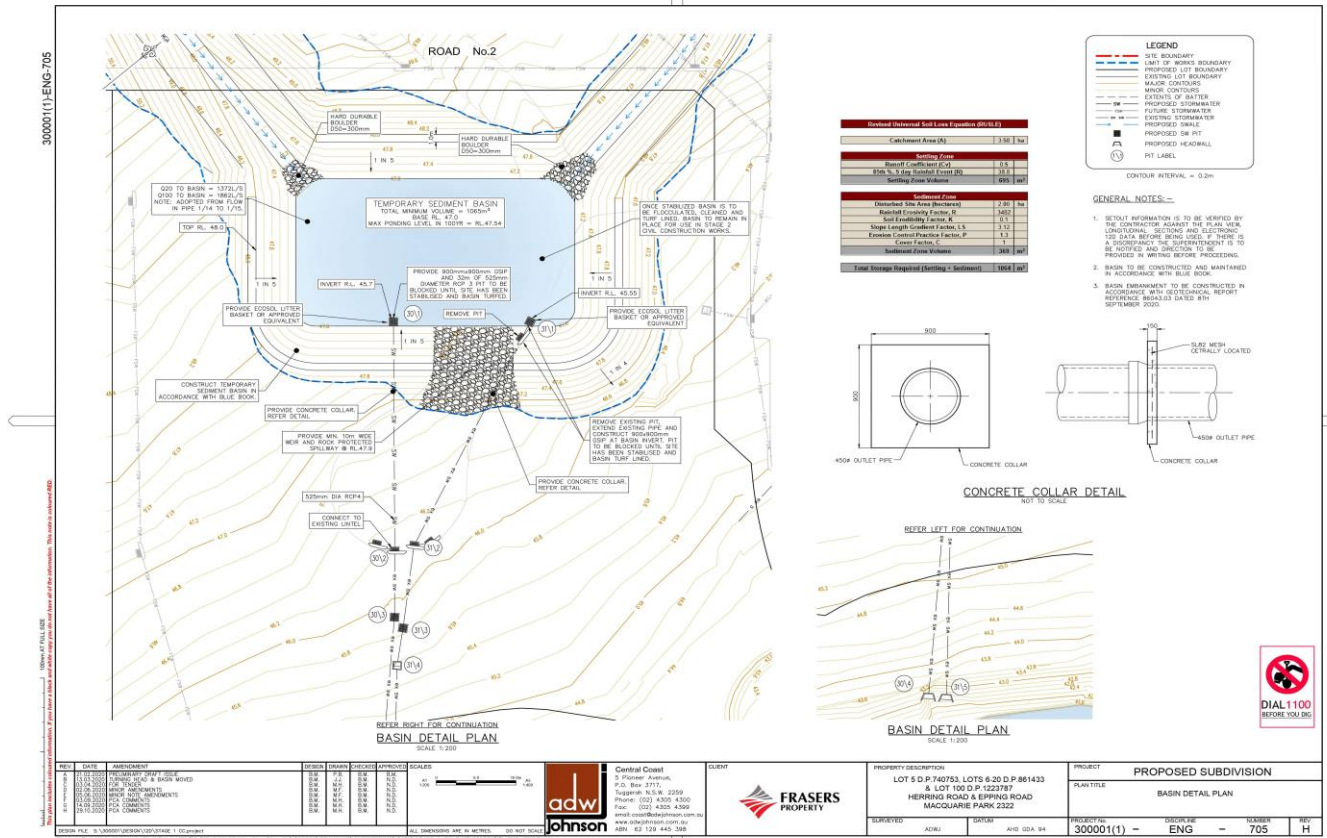
	Hazard Aspects	Risk / Impact	Controls
<b>Stockpiling of Soils</b>	<ul style="list-style-type: none"> <li>Working with contaminated soil</li> </ul>	<ul style="list-style-type: none"> <li>Illness through exposure to contaminated soils.</li> </ul>	<ul style="list-style-type: none"> <li>Conduct soil sampling to determine levels of contaminants</li> <li>Follow appropriate hygiene measures at all times (wash hands before eating or smoking)</li> <li>Refer to <a href="#">Hazardous Waste Disposal Procedure</a></li> </ul>
	<ul style="list-style-type: none"> <li>Contaminated water runoff</li> </ul>	<ul style="list-style-type: none"> <li>Contamination of waterways through runoff</li> </ul>	<ul style="list-style-type: none"> <li>Condition 47 11022303-F-CC1 Civil Drawings</li> <li>Condition 47 11022303-D-CC1 Civil Drawings</li> <li>Condition 47 11022303-CC118-E-CC1 Civil Drawings</li> </ul>



# Quality Management

## Construction Management Plan

A temporary sediment basin has been designed to intercept sediment-laden site runoff and retain sediment and other materials in order to protect the creek (and other waterways) downstream from pollution



### 10.19 GROUNDWATER TESTING, TREATMENT & DISCHARGE

Groundwater that accumulates within the site is not to be discharged into any water body or stormwater system without first being tested for pH, turbidity visual/odour inspection and treated prior to any discharge. As per the previous design, there will be temporary sump pits which will collect water which will then be pumped into the temporary sediment basin. The water within this basement will then get tested by Mainland Civil prior to any discharge.

Groundwater entitlement is not expected to flow into the excavation zones. According to Douglas Partners Groundwater Monitoring report, the ground water levels are typically below the bulk excavation levels of the works and therefore groundwater entitlement into the construction excavations is not expected and highly unlikely. No dewatering is to occur if any of the water quality falls outside of the ANZECC water quality values.

In the case that the pH of sediment pond water is outside the range of 6.5-8.5, it will need to be treated to bring it within the acceptable range. If the water pH is above 8.5, hydrochloric acid is used to lower the pH. Ensure correct PPE worn – Nitrile gloves, respirator mask, apron and safety goggles and follow relevant SDS and SWMS. A 500mL dose of acid to 7000L of water will lower the pH by approximately 1.5 and If the water pH is below 6.5, a base such as agricultural lime, with a pH of about 8.2, will be used to raise the pH.

If the turbidity of the water is greater than 50 NTU then the water will be treated with a flocculent at a dosing rate of 30kg per 100m<sup>3</sup> (e.g. gypsum, liquid alum or flocculent blocks) will make the sediments drop to the bottom. Only environmentally safe flocculants are to be used based on the HSE Manager's review of SDS information.

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### 10.20 FLORA AND FAUNA

To assure that the impact on flora and fauna native to the workplace is minimised Probuild management is to identify work areas and work practices that have the potential to impact on flora and fauna.

Areas where cultural values are identified shall be fenced off to assure that the workplace is not disturbed.

Where flora and fauna are discovered, personnel are to cease work in the affected area and implement practical protection measure. The relevant authorities are to be advised of significant discoveries regarding flora and fauna.

Environmental Management Activity	Hazard Aspects	Risk / Impact	Controls
Impact on Flora and Fauna	<ul style="list-style-type: none"> <li>– Sensitive flora</li> </ul>	<ul style="list-style-type: none"> <li>– Damage to / removal of sensitive flora</li> </ul>	<ul style="list-style-type: none"> <li>– Removal of trees / felling of tree is to occur in strict accordance with the requirements</li> <li>– Where required local flora is assessed, to ensure that no sensitive flora is present, prior to undertaking construction activities (including civil works);</li> <li>– If sensitive flora is present, ensure that adequate controls are implemented to mitigate impact. (EG. No go areas)</li> <li>– Refer to <a href="#">Environmental Impact and Aspect Procedure</a></li> </ul>
	<ul style="list-style-type: none"> <li>– Damage to sensitive fauna</li> </ul>	<ul style="list-style-type: none"> <li>– Injury to / removal of sensitive fauna</li> </ul>	<ul style="list-style-type: none"> <li>– Where required local fauna is assessed, to ensure that no sensitive fauna is present, prior to undertaking construction activities (including civil works).</li> <li>– If sensitive fauna is present, ensure that adequate controls are implemented to mitigate impact. (EG. No go areas)</li> <li>– Monitor fauna on an ongoing basis for impact.</li> </ul>
	<ul style="list-style-type: none"> <li>– Protected species</li> </ul>	<ul style="list-style-type: none"> <li>– Injury / damage to protected species</li> </ul>	<ul style="list-style-type: none"> <li>– If protected species are present. ensure that appropriate wildlife professionals are engaged to determine appropriate controls for protected species;</li> <li>– Where require the impact on protected species is to be monitored throughout the duration of the project.</li> </ul>

#### 10.20.1 DREDGING & LAND RECLAMATION

Dredging and land reclamation works will be carried out in accordance with best management practices to minimise impacts on the immediate and surrounding environment.

Consideration will be given to natural bunding, habitat, fisheries, flora and fauna protection as applicable.

All material to be removed will be subject to applicable jurisdictional legislative requirements.

No dredging or land reclamation is relevant to the works under this DA.

#### 10.20.2 ECOLOGICAL SUSTAINABLE DEVELOPMENTS

Probuild is committed to constructed high quality environmental performing buildings, were requested by the client.

During design development consideration will be given to design and construction the most resource efficient building within the budget. Throughout this process Probuild employees and subcontractors will be educated on and encouraged to adopt ESD building practices.

# Quality Management

## Construction Management Plan

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### 10.21 Lighting

Paths of access and egress will be illuminated, inclusive of emergency battery back-up lighting, throughout the site. Lighting will be provided to the underside of gantries, external to site, as public amenity.

### 11.0 PROJECT RISK MANAGEMENT

To ensure that potential risks are identified, and suitable controls are implemented, Probuild undertakes various assessments to identify key project risks relating to high risk construction activities, including and not limited to, public safety and security.

The following assessments outlined within Probuild's Management Systems are a mandatory requirement on all projects:

- Workplace Risk Assessment (WHS)
- Safety in Design (SID)
- Risk & Opportunity Schedule (Commercial)
- Environmental Impact/Aspect Register , and
- Quality Risk Assessment. (QRA)

These assessment processes are developed in the lead-up to project commencement, and maintained throughout the life of the project.

### 11.1 Health, Safety & Environment

A Health, Safety & Environmental Management Plan (HSEMP) will be developed to plan and control the construction operations, and to ensure that wellbeing of all personnel, including workers and members of the public, is maintained, and that environmental considerations are taken into account.

Health & Safety aspects that will be covered, in line with the principles of ISO 4801, include but are not limited to, electrical, fire, manual handling, hazardous substances and dangerous goods.

Environmental aspects that will be covered, in line with the principles of ISO 14001, include but are not limited to, stormwater, noise, dust control, hazardous materials, contaminated soil and waste management.

**NOTE:** *where it is determined that subcontractors have the potential to impact negatively on the environment, they will be required to develop and submit a project-specific Environmental Management Plan of their own.*

For further information regarding any of the processes dealing with Health, Safety or Environment related matters, refer directly to the project-specific HSE Management Plan.

### 11.2 Emergency Management

A project-specific Emergency Management Plan will be developed outlining the procedures to be followed in the event of an emergency. Evacuation Plans, with emergency contact details, will be posted in relevant locations around the site.

For further information regarding any of the processes dealing with emergency related matters, refer directly to the project-specific Emergency Management Plan.

### 11.3 Quality Management

A Quality Management Plan (QMP) will be developed to plan and control the construction operations, and to ensure that the project team is able to remain compliant with ISO 9001 principles, Probuild's management systems, contractual requirements, as well as the requirements of any relevant stakeholders.

For further information regarding any of the processes dealing with Quality related matters, refer directly to the project-specific Quality Management Plan.



# Quality Management

## Construction Management Plan

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### 12.0 CONSTRUCTION METHODOLOGY

#### 12.1 Staging/Logistics Plans

Detailed staging and logistic plans, developed in consultation with key stakeholders and relevant Authorities, have been produced in preparation for the commencement of the construction works on site. The over-arching outcome of this process is to ensure that adequate separation between the public and the construction zone is maintained at all times. The primary considerations include, but are not limited to:

- Ensure Public Safety, amenity and site security
- Manage operating hours, noise and vibration controls
- Monitor and manage air and dust management
- Waste and materials reuse
- Traffic management
- Continuity for neighbouring businesses, and
- Provision of safe and efficient access to and from the construction zone.

#### LOGISTIC PLANS (refer Attachment 3)

Specific plans will be created for hoardings, gates, covered walkways, site amenities, loading bays, crane locations, etc., as required to undertake the works.

#### TRAFFIC MANAGEMENT (refer Attachment 4)

A report will be commissioned to evaluate requirements for construction and peripheral traffic, in consultation with relevant stakeholders. This will be used as the basis to prepare a project specific Traffic Management Plan.

#### 12.2 Plant & Equipment Requirements

Plant and equipment selection is critical to the success of any building project. The main plant and equipment involves cranes (mobile), concrete pumps, access equipment (hoists, elevated work platforms, scaffolds), and materials handling (trucks, forklifts, telehandlers, etc.).

Due to their importance to construction, potential impacts to amenity outside the work zone, comparative size, safety requirements, the location and use of the above will be identified and considered prior to the engagement of any such plant and equipment. For safety and road operation considerations, should this work need to occur outside normal working hours, permission will be sought.

The mobilisation of extremely large equipment, in particular cranes, will be carried out in consultation with the relevant authorities. All plant and equipment is inducted in accordance with OH&S requirements, and in line with Probuild's internal procedures and record keeping requirements.

All plant & Equipment is to be registered and inducted through Procure on Probuild workplaces.

For further information regarding any of the processes dealing with plant & equipment related matters, refer directly to the project-specific HSE Management Plan.

#### 12.3 Commissioning Management

Probuild will ensure applicable subcontractors submit detailed Commissioning Plans for acceptance by the relevant consultant(s), prior to issuing to the Client for information, and prior to any testing and commissioning activities taking place. The plans will generally include the following:

- pre-commissioning check sheets
- high level description of system(s) to be tested
- responsible party(s) to carry out and/or witness commissioning tests
- relevant project specification clauses, and
- copies of commissioning documentation, certificates, etc. issued as part of the tests

# Quality Management

## Construction Management Plan

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**NOTE:** *Commissioning Plans will vary in complexity and variety depending on the nature and type of systems being commissioned, and therefore may not be identical in form or format.*

Commissioning Plans from the relevant subcontractors will be submitted in advance of any commissioning to allow sufficient time for review and discussion.

Subcontractors will appoint their own commissioning leaders, who will report to Probuild's supervisors and coordinators as necessary. Probuild is responsible to provide assurance that the requirements of the individual services trades will be met, and that the commissioning elements of the project will be afforded the necessary timeframe to complete the commissioning process.

As the Works progress and the level of resources on site intensify, regular meetings will be held to track, plan, review and agree upcoming commissioning activities. These meetings will additionally serve to identify and mitigate any risks associated with testing and commissioning activities.

Systems will be commissioned as soon as practicably possible, on an area by area basis, with updates provided in an agreed format. Once systems have been commissioned and integrated utilising the Building Management System (BMS) network and/or individual stand-alone systems, witness testing and demonstrations can take place. System wide tests may include:

- individual building services failure
- load tests as defined in the specifications
- life safety and essential services
- central plant and/or mains utilities failures, and
- building services interface testing as defined within the specifications.

In conjunction with the testing and commissioning process, preparation of the “as built” documentation will commence in readiness for handover. O&M manuals, incorporating the various operating and maintenance requirements, will be compiled on a progressive basis.

### 12.4 Project Completion

As completion and handover approaches, all statutory documentation will be obtained from suppliers and subcontractors to satisfy the Building Surveyor's requirements, and to satisfy handover operational and maintenance manual requirements. Where applicable authorities will be consulted in order to facilitate site inspections provide assurance with as-built conditions.

In the final lead up to receiving a Certificate of Occupancy, the Building Surveyor will be expected to attend site a number of times prior to the final inspection walk(s).

Prior to an area or stage of the project being handed over to the Client, an initial inspection of the area or stage will be conducted by Probuild, and any issues identified will be listed using a nominated platform (Aconex Field/Procure).

The Area Supervisor will be responsible to ensure that the rectification works are completed to the required standard and within the nominated time frame. Prior to the final inspection, the Area Site Supervisor shall re-inspect the defect works previously identified to ensure adequate and effective rectification has occurred.

Following completion of Probuild inspections and rectifications, the project consultants and client representatives will be invited to carry out their own inspections prior to final acceptance.

For further information regarding any of the processes dealing with completion & commissioning related matters, refer directly to the project-specific Handover Management Plan.

**NSW Note:** Class 2 buildings in NSW, in line with the requirements of the Residential Apartment Buildings (Compliance and Enforcement Powers) Act 2020 (RBA): *a developer must provide 6 – 12 months' notice before the developer applies for an occupation certificate, setting out the expected date of application for the certificate. An exception applies for short-term building works to be completed within six months, for which notice must be given within 30 days of commencement of the works.*

# Quality Management

## Construction Management Plan

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### **13.0 SITE INDUCTIONS**

All site personnel must have an industry induction card, and will undertake a project specific site induction, including a project overview, information on site specific safety issues and emergency procedures.

### **14.0 PEOPLE & CULTURE**

Probuild recognises that our people are what drives the business and allows us to build the projects. To ensure that we continue to attract and retain high calibre employees, and remain legislatively compliant, the Policies, Procedures and Code of Conduct outlined within our Management System are adhered to throughout the Company.

Key areas of the Management System include:

- Code of Conduct
- Recruitment
- Equal Employment Opportunity
- Harassment, Bullying and Occupational Violence
- Training & Development
- Graduate & Undergraduate Program
- Apprentice & Cadet Program
- Work and Life Balance
- Smoking, Drugs and Alcohol

### **15.0 INDUSTRIAL RELATIONS**

Probuild is committed to providing a workplace that is free from industrial disputes. To accomplish this, Probuild facilitate ongoing communication and consultation with its people, subcontractors, employee and employer associations, and other stakeholders to maintain a harmonious working environment.

Consultation and negotiations undertaken by Probuild are done in order to remain compliant with Building Code 2016 (ABCC), and our current Enterprise Bargaining Agreement (state specific).

# Attachment 1

## Preliminary Construction Program

