OAKDALE WEST ESTATE

Waste Management Plan

Prepared for:

Goodman Property Services (Aust) Pty Ltd
GPO Box 4703
Sydney NSW 2001

SLR Ref: 610.15612-R02
Version No: -v4.0
November 2019

PREPARED BY

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612
Grd Floor, 2 Lincoln Street
Lane Cove NSW 2066 Australia
(PO Box 176 Lane Cove NSW 1595 Australia)
T: +61 2 9427 8100
E: sydney@slrconsulting.com www.slrconsulting.com

BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Goodman Property Services (Aust) Pty Ltd (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

DOCUMENT CONTROL

Reference	Date	Prepared	Checked	Authorised
610.15612-R02-v4.0	20 November 2019	Celine El-Khouri	Sean Sciberras	Sean Sciberras
610.15612-R02-v3.0	29 October 2019	Celine El-Khouri	Sean Sciberras	Sean Sciberras
610.15612-R02-v2.0	1 October 2019	Celine El-Khouri	Sean Sciberras	Sean Sciberras
610.15612-R02-v1.0	28 May 2019	Celine El-Khouri and Taylor Parsons	Andrew Quinn	Andrew Quinn

CONTENTS

1 INTRODUCTION 6
1.1 Scope 6
1.2 Objective 6
1.3 Review of WMP 7
2 PROJECT DESCRIPTION 8
2.1 Overview of Proposed Development 8
2.1.1 Overview of proposed construction work 8
2.1.2 Overview of proposed operations 9
3 BETTER PRACTICE WASTE MANAGEMENT AND RECYCLING 11
3.1 Waste Management Hierarchy 11
3.2 Benefits of Adopting Better Practice 11
4 WASTE LEGISLATION AND GUIDANCE 12
5 CONSTRUCTION WASTE MANAGEMENT 14
5.1 Targets for Resource Recovery 14
5.2 Waste Streams and Classifications 14
5.3 Waste Generation Rates 16
5.3.1 Estimation of Waste Quantities 17
5.4 Waste Avoidance Measures 18
5.5 Re-use, Recycling and Disposal 19
5.5.1 Site Specific Procedures 20
5.6 Waste Storage and Servicing 20
5.6.1 Waste Segregation 20
5.6.2 Servicing and Record Keeping 21
5.6.3 Space and Amenity 21
5.6.4 Contaminated or Hazardous Waste Management 22
5.7 Signage 22
5.8 Training and Awareness 23
5.9 Monitoring and Reporting 23
5.10 Roles and Responsibilities 24
6 OPERATIONAL WASTE MANAGEMENT 25
6.1 Targets for Resource Recovery 25
6.2 Waste Streams and Classifications 25
6.3 Waste Generation Rates 27
6.3.1 Outbuildings waste generation 28

CONTENTS

6.4 Waste Storage and Servicing Requirements 28
6.4.1 Waste and Recycling Procedure and Location 28
6.4.2 Compactor Operations and Collection 29
6.4.3 Bulky and Hazardous Waste Management 30
6.5 Waste Avoidance, Reuse and Recycling Measures 30
6.5.1 Waste Avoidance 30
6.5.2 Reuse 30
6.5.3 Recycling 30
6.6 Signage 31
6.7 Communication strategies 31
6.8 Monitoring and Reporting 32
6.9 Roles and Responsibilities 32

DOCUMENT REFERENCES

TABLES

Table 1 SSD 7348 MOD 2 Conditions for Waste Management 6
Table 2 Building Areas for Precinct 1 10
Table 3 Legislation and guidance 12
Table 4 Potential waste types, classifications and management methods 15
Table 5 Waste generation rates applied to the Development's construction 17
Table 6 Anticipated types and estimated quantities of construction waste. 17
Table 7 Construction waste management responsibility allocation 24
Table 8 Potential operational waste types, classifications and management methods 26
Table 9 Guideline Waste Generation Rates 27
Table 10 Estimated Annual Waste and Recycling Generation for Precinct 1 27
Table 11 Compaction operations at Lot 1A 29
Table 12 Summary of bin servicing at Lot 1B 29
Table 13 Operational waste management responsibility allocation 32

FIGURES

Figure 1 Precinct 1 - Warehouse Lot 1A 10
Figure 2 Waste management hierarchy 11
Figure 3 Examples of NSW EPA labels for waste skips and bins 22
Figure 4 Example of bin labels for operational waste 31

APPENDICES

Appendix A Architectural Drawings

CONTENTS

Appendix B Council Waste Management Plan Form

1 Introduction

SLR Consulting Australia Pty Ltd (SLR Consulting) was commissioned by Goodman Property Services (Aust) Pty Ltd (the Client) to prepare a Waste Management Plan (WMP) for the construction and operation of Precinct 1 consisting of warehouse and distribution facilities located at Oakdale West, Horsley Park (the Development), as part of the Modification (MOD) Application to the NSW Department of Planning and Environment (DPE).

The Development was previously approved under a previous Development Application (DA) submission in accordance with the Secretary's Environmental Assessment Requirements (SEARs) for the State Significant Development (SSD 15_7348) application.

SLR previously prepared the waste management plan for the DA submission (Waste Management Plan, 9 September 2016), however this needs to be revised due to amendments made to the original design of the Development and to be included in the MOD Application.

Further details on the Development are provided in **Section 2**. The following WMP has been prepared based upon architectural drawings provided by the Client (Refer **Appendix A**).

The relevant conditions of the SEARs for SSD 7348 MOD 2 are addressed in this report as shown in **Table 1**.

Table 1 SSD 7348 MOD 2 Conditions for Waste Management

SSD 7348 MOD 2 Conditions	Relevant Sections in this WMP
An updated description of the quantities and classification of waste streams to be generated during construction and operation.	Sections 5.2,5.3 Sections 6.2, 6.3
Details of proposed waste storage, handling, transport and disposal.	Sections 5.5, 5.6 Section 6.4
Details of the measures that would be implemented to ensure the modification is consistent with the aims, objectives and guidelines in the *NSW Waste Avoidance and Resource Recovery Strategy 2014-21.*	Section 3 Section 5 Section 6

1.1 Scope

This WMP applies to the construction and on-going operation of the Development. The provisions contained in the WMP must be implemented at all stages of the Development.

- See **Section 5** for the Construction WMP.
- See **Section 6** for the Operational WMP.

1.2 Objective

The principal objective of this WMP is to identify all potential wastes likely to be generated at the development site during construction and operational phases of the Development, including a description of how waste would be handled, processed and disposed of, or re-used or recycled, in accordance with Penrith City Council's (Council) requirements.

The specific objectives of this WMP are as follows:

- To encourage the minimisation of waste production and maximisation of resource recovery.

- To ensure the appropriate management of contaminated and hazardous waste.
- To identify procedures and chain of custody records for waste management.
- To assist in ensuring that any environmental impacts during the operational life of the Development comply with Council's development consent conditions and other relevant regulatory authorities.

1.3 Review of WMP

This WMP is not a static document. It is a working document that requires review and updating to ensure ongoing suitability for the proposed on-going operations at the site.

This WMP should be reviewed and updated:

- to remain consistent with waste and/or landfill regulations and guidelines
- should changes be made to site waste and recycling management, or
- to take advantage of new technologies, innovations and methodologies for waste or recycling management.

Changes made to the WMP, as well as the reasons for the changes made, should be documented by the site operator as part of the review process.

Copies of the original waste management plan (SLR, 2016), as well as all future versions of the WMP, should be retained by the site operator.

2 Project Description

The Client is developing the Oakdale West site (Lot 11 in DP 1178389) at Erskine Park for the purposes of providing a warehouse and distribution complex. The Oakdale West site is a precinct in the wider Oakdale Estate development and forms part of a progressive development designed to make Oakdale a regional distribution park of warehouses, distribution centres and freight logistics facilities.

The Oakdale West project is a staged development which includes bulk earthworks, civil works and the construction of infrastructure and stormwater management.

2.1 Overview of Proposed Development

A WMP was developed for this Development in 2016. This WMP is an updated version of that plan.

The Oakdale West site is a 154 ha site located in the Oakdale Estate, a 421 ha area of land in the Western Sydney Employment Area. The size of the site remains unchanged since the previous WMP was prepared. Oakdale West Estate is the third of four stages of the broader Oakdale Estate under the management of Goodman Limited.

Oakdale West remains a greenfield site previously used for stock grazing. The surrounding areas are primarily rural in nature, but, the area to the north is becoming more industrial. Land uses in the surrounding area include:

- Rural, including grazing and market gardens, and rural residential to the south-east, south and west.
- Sydney Water Pipeline and industrial land to the north, including industrial zones at Eastern Creek to the north and Erskine Park to the north-west.
- To the west, land uses include a number of sensitive uses such as an aged care facility (Catholic Health Care) and three schools named Mamre Anglican School, Emmanual Catholic College and Trinity Primary School. Other land uses include recreational and sporting facilities.

According to the Oakdale West Estate Masterplan, the site will be developed in five stages, where each stage corresponds to the development of a precinct. SLR notes the size of each precinct and the layout of Precinct 1 have undergone changes from the previous waste plan. The updated areas and measurements for Precinct 1 will be discussed as part of Stage 1 of the DA.

2.1.1 Overview of proposed construction work

The development of Precinct 1 is anticipated to include the following tasks:

- Staged bulk earthworks across the whole site;
- Stage trunk infrastructure for the site;
- Staged subdivision;
- Landscaping and public domain works; and
- Development comprising the construction of the warehouse and distribution facilities in Precinct 1.

2.1.2 Overview of proposed operations

The Precinct 1 development area comprises 21.41 ha. It contains two warehouse lots known as Lot 1A and Lot 1B, each containing warehouse space with adjoining offices. Information on Lot 1A is based on architectural drawings dated 9 September 2019[1]. Lot 1A is expected to consist of the below:

- A warehouse with six mezzanine levels used as storage areas;
- An adjoining three storey office with a skybridge walkway;
- A gatehouse and weighbridges;
- A computer room;
- A heavy vehicle workshop;
- A heavy vehicle wash;
- A diesel refuelling area;
- A battery charge area;
- Hardstands areas;
- Two energy complex; and
- Small vehicle, heavy vehicle and bicycle parking areas.

Information on Lot 1B is based on architectural drawings dated 1 May 2019[2]. Lot 1B is expected to consist of the below:

- Three smaller warehouses 1B1, 1B2 and 1B3;
- Adjoining offices for each warehouse;
- A hardstand area; and
- Adjoining carpark spaces for each warehouse.

An updated plan for Lot 1A is provided in **Figure 1**.

[1] SBA Architects Pty Ltd, Oakdale West Estate, Proposed Industrial Facility – Building 1A, Job No 15117, drawing number OAK-1A-DA-10 (S) to OAK-1A-DA-29 (F), dated 9 September 2019

[2] SBA Architects Pty Ltd, Oakdale West Estate, Precinct 1 Plan, Job No 15117, drawing number OAK MP05 (AF), dated 1 May 2019

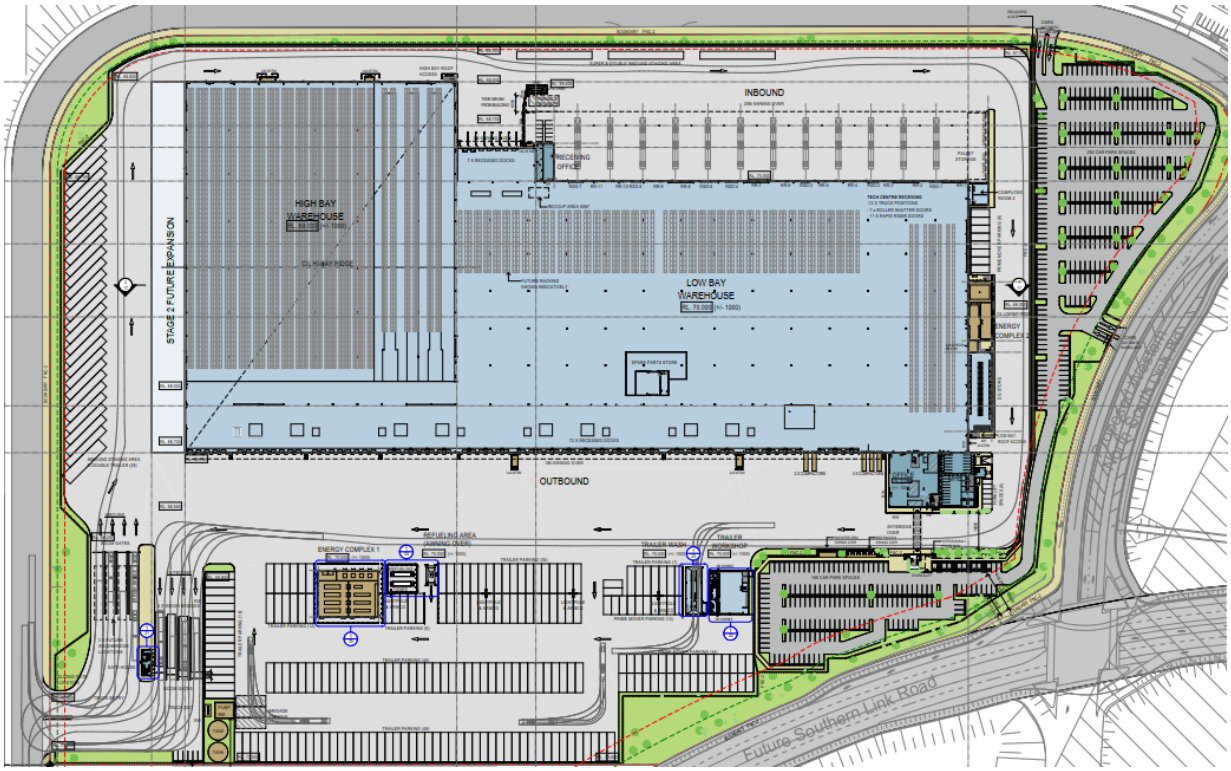


Figure 1 Precinct 1 - Warehouse Lot 1A

The updated building areas for Lot 1A and Lot 1B are outlined in **Table 2**. The building areas are based on areas provided in the architectural drawings dated 9 September 2019 and 1 May 2019. The area for the outbuildings in **Table 2** includes the buildings facilities incorporated in Lot1A other than the warehouse and office. These are mentioned in **Section 2.1.2** above.

Table 2 Building Areas for Precinct 1

Site component	Site Area (m^2)				
	Lot 1A	Lot 1B1	Lot 1B2	Lot 1B3	Total Areas
Warehouse	68,160	4,380	4,691	3,846	81,077
Offices	2,646	500	500	400	4,046
Mezzanines	32,402	N/A	N/A	N/A	32,402
Outbuildings	4,004	N/A	N/A	N/A	4,004
Total Building Area	107,212	14,317			121,529
Hardstand Area	88,610	7,440			96,050
Light Duty Area	13,295	3,755			17,050

3 Better Practice Waste Management and Recycling

3.1 Waste Management Hierarchy

This WMP has been prepared in line with the waste management hierarchy (**Figure 2**), which summarises the objectives of the *Waste Avoidance and Resource Recovery Act 2001.*

The waste management hierarchy comprises the following principles, from most to least preferable:

- Waste **avoidance**, prevention or reduction of waste generation. Achievable through better design and purchasing choices.
- Waste **reuse**, reuse without substantially changing the form of the waste.
- Waste **recycling**, treatment of waste that is no longer usable in its current form to produce new products.
- Energy **recovery**, processing of residual waste materials to recover energy.
- Waste **treatment**, reduce potential environmental, health and safety risks.
- Waste **disposal**, in a manner that causes the least harm to the natural environment.

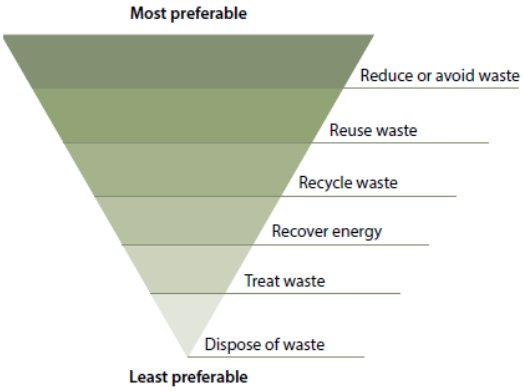


Image from NSW EPA (2014) NSW Waste Avoidance and Resource Recovery Strategy 2014-21.

Figure 2 Waste management hierarchy

3.2 Benefits of Adopting Better Practice

Adopting better practice principles in waste minimisation offers significant benefits for organisations, stakeholders and the wider community. Benefits from better practice waste minimisation include:

- Improved reputation of an organisation due to social and environmental responsibility.
- Lowered consumption of non-renewable resources.
- Reduced environmental impact, for example, pollution, from materials manufacturing and waste treatment.
- Reduced expenses from lower waste disposal.
- Providing opportunities for additional revenue streams through beneficial reuse.

4 Waste Legislation and Guidance

The legislation and guidance outlined in **Table 3** below should be referred to during the demolition, construction and operational phases of the Development.

Table 3 Legislation and guidance

Legislation and Guidance	Objectives
Council legislation and guidelines	
Secretary Environmental Assessment Requirements (SEARs)	SEARs provide the addition requirements that must be completed when a critical state significant infrastructure project is submitted in a DA in NSW. The objective of SEARs submissions is to achieve better environmental outcomes by focusing on environmentally sensitive areas and areas of the greatest community concern. The provisions of the SEARs must be met for DA approval including the provision of a construction and operational waste management plan. This Development was previously approved under the SEARS for SSD 15_7348.
Penrith Local Environmental Plan (LEP) 2010[3]	The Penrith LEP came into force for the entire Penrith local government area on 25 February 2015 and provides the legal framework of the Penrith Development Control Plan, including land use and development permitted in a set zone. The LEP also contains provisions to conserve local heritage and protect sensitive land.
Penrith Development Control Plan (DCP) 2014[4]	The Penrith DCP came into effect on 17 April 2015 and supports provision of the LEP planning controls by providing detailed planning and design guidelines. The DCP has been prepared in accordance with the *Waste Avoidance and Resource Recovery Act 2001*. One of the objectives of the DCP is to assist in reducing Penrith's ecological footprint by encouraging the diversion of waste from landfill. This WMP specifically addresses Part C5 – Waste Management of the DCP.
Waste Strategy 2017-2026, Penrith City Council	Council's waste strategy sets out the waste management targets for the Penrith local government area including working towards reduced waste generation and increased landfill diversion. The strategy was prepared in consultation with the community and informed by waste audit results. The strategy defines the actions required to reach the targets, including actions for waste diversion from landfill, resource recovery, technology innovation, community education and resource recovery facilities.
State and National legislation and guidelines	
Building Code of Australia (BCA) and relevant Australian Standards	The BCA has the aim of achieving nationally consistent, minimum necessary standards of relevant health and safety, amenity and sustainability objectives efficiently.
Council of Australian Governments National Construction Code 2016	The National Construction Code 2016 sets the minimum requirements for the design, construction and performance of buildings throughout Australia.
NSW EPA's Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities 2012	These better practice guidelines present information on waste minimisation and resource recovery as well as information on commonly used waste management provisions. The guidelines also provide benchmarks for assessing waste production rates in Australia.
NSW EPA (2014) NSW Waste Avoidance and Resource Recovery Strategy 2014-21	The *NSW Waste Avoidance and Resource Recovery Strategy 2014-21* is aimed at ultimately "improving environment and community well-being by reducing the environmental impact of waste and using resources more efficiently" by presenting a framework intended to avoid and reduce waste generation, increase recycling, divert more waste from landfill, manage problem wastes better, reduce litter and reduce illegal dumping.

[3] https://legislation.nsw.gov.au/#/view/EPI/2010/540

[4] https://www.penrithcity.nsw.gov.au/building-development/planning-zoning/planning-controls/development-control-plans

Legislation and Guidance	Objectives
NSW EPA Resource Recovery Orders and Resource Recovery Exemptions	The NSW EPA has issued a number of resource recovery orders and resource recovery exemptions under the POEO (Waste) Regulation 2014 for a range of wastes that may be recovered for beneficial re-use. These wastes typically include those from demolition and construction works, as well as operational wastes such as food waste. • Resource recovery orders present conditions which generators and processors of waste must meet to supply the waste material for beneficial re-use. • Resource recovery exemptions contain the conditions which consumers must meet to use waste for beneficial re-use.
NSW EPA's Waste Classification Guidelines 2014	The NSW EPA *Waste Classification Guidelines* assists waste generators to effectively manage, treat and dispose of waste to ensure the environmental and human health risks associated with waste are managed appropriately and in accordance with the *POEO Act 1997* and is associated regulations.
Protection of the Environment Operations Act (POEO) 1997 and Amendment Act 2011	The *POEO Act 1997* and *POEO Amendment Act 2011* are administered by the NSW Environment Protection Authority (NSW EPA) to enable the NSW Government to establish instruments for setting environmental standards, goals, protocols and guidelines. They outline the regulatory requirements for lawful disposal of wastes generated during the demolition, construction and operational phases of a development, as well as the system for licencing waste transport and disposal.
Waste Avoidance and Resource Recovery Act 2001	The *Waste Avoidance and Resource Recovery Act 2001* aims to promote waste avoidance and resource recovery and repeals the *Waste Minimisation and Management Act 1995*. Specific objectives of the *Waste Avoidance and Resource Recovery Act 2001* include: • encouraging efficient use of resources • minimising the consumption of natural resources and the final disposal of waste by encouraging the avoidance of waste and the reuse and recycling of waste • ensuring industry and the community share responsibility in reducing/dealing with waste, and • efficiently funding of waste/resource management planning, programs and service delivery. As of 2016, the addition to the Act of Part 5 defines the legislative framework for the "Return and Earn Container Deposit Scheme" whereby selected beverage containers can be returned to State Government authorities for a monetary refund.

5 Construction Waste Management

Construction stages of developments have the greatest potential for waste minimisation.

Key construction activities will include construction of warehouse buildings, offices and other associated buildings and infrastructure as specified in **Section 2.1.2**.

5.1 Targets for Resource Recovery

The performance of each new development should contribute to the following target from the NSW EPA (2014) *NSW Waste Avoidance and Resource Recovery Strategy 2014-21*:

- 75 % of total construction and demolition waste recycled, increasing to 80 % by 2021.

Additionally, in the interests of Council's additional commitments to waste management controls, the construction and excavation procedures should endeavour to reach the following outlined target from the DCP:

- Reduce the volume of demolition, construction and fit out waste, including excavation, going to landfill by 76%.

It is anticipated that the waste minimisation measures in the following sections will assist the Project to meet these targets. Waste reporting and audits can be used to determine the actual percentage of wastes that are being, or have been, recycled during the demolition and site preparation stage of the Project.

5.2 Waste Streams and Classifications

The Development is likely to generate the following broad waste streams:

- excavation material;
- construction wastes;
- plant maintenance waste;
- packaging waste;
- green waste from site clearing activities; and
- work compound waste from on-site employees.

A summary of likely waste types generated from site preparation and construction activities, along with their waste classifications and proposed management methods, is provided in **Table 4**.

For further information on how to classify a waste type refer to the NSW EPA (2014) *Waste Classification Guidelines*[5]. Further information on managing site preparation and construction wastes is available from the NSW EPA website[6].

[5] Available online from https://www.epa.nsw.gov.au/your-environment/waste/classifying-waste/waste-classification-guidelines

[6] http://www.epa.nsw.gov.au/your-environment/waste/industrial-waste/construction-demolition

Table 4 Potential waste types, classifications and management methods

Waste Types	NSW EPA Waste Classification	Proposed Management Method
Construction		
Sediment fencing, geotextile materials	General solid waste (non-putrescible)	Reuse at other sites where possible or disposal to landfill
Concrete	General solid waste (non-putrescible)	Off-site recycling for filling, levelling or road base
Bricks and pavers	General solid waste (non-putrescible)	Off-site recycling; Cleaned for reuse, rendered over or crushed for landscaping or driveway use
Gyprock or plasterboard	General solid waste (non-putrescible)	Off-site recycling or returned to supplier
Sand or soil	General solid waste (non-putrescible)	Off-site recycling
Metals such as fittings, appliances and bulk electrical cabling	General solid waste (non-putrescible)	Off-site recycling
Conduits and pipes	General solid waste (non-putrescible)	Off-site recycling
Timber	General solid waste (non-putrescible)	Off-site recycling; *Treated*: reused for formwork, bridging, blocking, propping or second hand supplier; *Untreated*: reused for floorboards, fencing, furniture, mulched second hand supplier
Doors, Windows, Fittings	General solid waste (non-putrescible)	Off-site recycling at second hand supplier
Insulation material	General solid waste (non-putrescible)	Off-site disposal
Glass	General solid waste (non-putrescible)	Off-site recycling; glazing or aggregate for concrete production
Asbestos	Hazardous waste	Off-site disposal
Fluorescent light fittings and bulbs	Hazardous waste	Off-site recycling or disposal; contact *FluoroCycle* for more information[7]
Paint	Hazardous waste	Off-site recycling, Paintback collection[8] or disposal
Synthetic Rubber or carpet underlay	General solid waste (non-putrescible)	Off-site recycling; reprocessed and used in safety devices and speed humps
Carpet	General solid waste (non-putrescible)	Off-site recycling or disposal; reused for landscaping, insulation or equestrian uses
Plant Maintenance		

7 http://www.fluorocycle.org.au/ or http://www.environment.gov.au/settlements/waste/lamp-mercury.html
8 https://www.paintback.com.au/

Waste Types	NSW EPA Waste Classification	Proposed Management Method
Empty oil and other drums or containers, such as fuel, chemicals, paints, spill clean ups	Hazardous waste: Containers were previously used to store Dangerous Goods (Class 1, 3, 4, 5 or 8) and residues have not been removed by washing or vacuuming. General solid waste (non-putrescible): Containers have been cleaned by washing or vacuuming.	Transport to comply with the transport of Dangerous Goods Code applies in preparation for off-site recycling or disposal at licensed facility
Air filters and rags	General solid waste (non-putrescible)	Off-site disposal
Oil filters	Hazardous waste	Off-site recycling
Batteries	Hazardous waste	Off-site recycling; Contact the Australian Battery Recycling Initiative[9] for more information
Packaging		
Packaging materials, including wood, plastic, including stretch wrap or LLPE, cardboard and metals	General solid waste (non-putrescible)	Off-site recycling
Wooden or plastic crates and pallets	General solid waste (non-putrescible)	Reused for similar projects, returned to suppliers, or off-site recycling. Contact *Business Recycling* for more information[10]
Work Compound and Associated Offices		
Food Waste	General solid (putrescible) waste	Compost on site. Alternatively dispose to landfill with general garbage
Recyclable beverage containers, including glass and plastic bottles, aluminium cans and steel cans	General solid waste (non-putrescible)	Co-mingled recycling at off-site licensed facility or at a local NSW container deposit scheme 'Return and Earn' off-site licensed facility[11]
Clean paper and cardboard	General solid waste (non-putrescible)	Paper and cardboard recycling at off-site licensed facility
General domestic waste generated by workers including soiled paper and cardboard, food stuffs and polystyrene	General solid waste (non-putrescible) mixed with putrescible waste	Disposal at landfill

5.3 Waste Generation Rates

The Construction Site Manager will need to specify the types and quantities of wastes produced during construction and on this basis, the numbers and capacity of skip bins can be determined.

9 http://www.batteryrecycling.org.au/home
10 http://businessrecycling.com.au/search/
11 http://returnandearn.org.au/

In the absence of readily available construction waste generation rates from Council, SLR has adopted the 'Factory' and 'Office' waste generation rates from Appendix A of The Hills Development Control Plan (DCP) 2012 for estimating the type and quantities of waste generated from construction of the Development.

In the absence of readily available published information for 'Carpark' construction waste generation rates, SLR has developed 'Carpark' (**Table 5**) construction rates based on the 'Office' rates by:

- Removing timber, bricks and gyprock as these materials are unlikely to be present in significant quantities in a modern carpark structure; and
- Increasing the rates for concrete, sand or soil, metal and 'other', in proportion, to maintain the total assumed tonnage per 1000 m^2 of construction.

Table 5 Waste generation rates applied to the Development's construction

Rate Type	Floor Area (m^2)	Waste types and quantities (m^3)						
		Timber	Concrete	Bricks	Gyprock	Sand or Soil	Metal	Other
Factory	1,000	0.25	2.10	1.65	0.45	4.80	0.60	0.50
Office	1,000	5.1	18.8	8.5	8.6	8.8	2.75	5
Carpark	1,000	--	30.6	--	--	14.3	4.5	8.1

These waste generation rates are used to estimate the waste generated from the construction of the Development. These estimates are provided in **Table 6.**

5.3.1 Estimation of Waste Quantities

Using the estimated areas of the offices, warehouses and other infrastructure mentioned in **Section 2.1.2** and the construction waste generation rates shown in **Table 5,** SLR has calculated the estimated waste quantities for the Development components. The generation rates for 'Factory' are applied to calculate the waste quantities from the construction of the warehouse, mezzanine and outbuilding areas, the rates for 'Office' are applied to calculate the waste quantities from the construction of the offices, and the 'Carpark' waste generation rates are applied to calculate the waste quantities from the construction of the hardstand and light duty areas. These are presented below in **Table 6**.

Actual waste tonnage and composition will vary, however this estimate is provided so that the Construction Site Manager can make provision for on-site or off-site re-use and recycling opportunities.

Table 6 Anticipated types and estimated quantities of construction waste.

	Development Component	Area (m^2)	Waste types and quantities (m^3)						
			Timber	Concrete	Bricks	Gyprock	Sand or Soil	Metal	Other
Lot 1A	Warehouse	68,160	20	145	115	35	330	45	35
	Offices	2,646	15	50	25	25	25	10	15
	Mezzanines	32,402	10	70	55	15	160	20	20
	Outbuildings	4,004	5	10	10	5	20	5	5
	Hardstand	88,610	0	2715	0	0	1270	400	720
	Light Duty	13,295	0	410	0	0	195	60	110
Lot 1B1	Warehouse	4,380	5	10	10	5	25	5	5
	Offices	500	5	10	5	5	5	5	5

	Development Component	Area (m^2)	Waste types and quantities (m^3)						
			Timber	Concrete	Bricks	Gyprock	Sand or Soil	Metal	Other
Lot 1B2	Warehouse	4,691	5	10	10	5	25	5	5
	Offices	500	5	10	5	5	5	5	5
Lot 1B3	Warehouse	3,846	5	10	10	5	20	5	5
	Offices	400	5	10	5	5	5	5	5
Lot 1B	Hardstand	7,440	0	230	0	0	110	35	65
	Light Duty	3,755	0	115	0	0	55	20	35
Totals		**234,629**	**80**	**3,805**	**250**	**110**	**2,250**	**625**	**1,035**

Waste estimates have been rounded up to the nearest 5 m^3.

Excavated spoil, if any, is to be classified by an appropriately experienced environmental consultant and separated into contaminated materials, if any, uncontaminated fill or ENM. Refer to **Section 5.6** for management of stockpiles. Uncontaminated fill or ENM should be retained on site and managed appropriately for beneficial re-use for filling earthworks. As a last resort, remaining uncontaminated fill of ENM is to be sent off-site to a licenced facility in accordance with the Protection of the Environment Operations (Waste) Regulation 2014.

For contaminated material management, refer **Section 5.6.4** of this WMP.

SLR recommends that a demolition quantities survey be conducted by a qualified professional on the existing site should further information on types and quantities of demolition waste be required.

A waste management plan form provided by Council is attached in **Appendix B**. The form is also available on Council's website[12]. This is to be updated by the Site Manager once waste streams, estimated quantities, and final disposal locations and recycling services have been identified.

5.4 Waste Avoidance Measures

In accordance with Council's DCP and better practice waste management, the Building Designer should:

- Select materials with low embodied energy properties that suit the Project, such as:
  - prefabricated components and recycled materials, such as recycled steel and glass-wool insulation;
  - concrete with slag and fly ash content; and
  - fittings and furnishings that incorporate recycled materials and have been certified as sustainable or environmentally friendly by a recognised third-party certification scheme.
- Reduce the use of PVC.
- Choose construction materials with a longer lifespan and/or high potential for re-use.
- Use low formaldehyde wood products, post-consumer reused timber, Forest Stewardship Council-certified timber, wood plastic composite or recycled plastic timber substitute.
- Select pre-finished materials and prefabricated frames, trusses and cladding.
- Design for the use of modular components and standard material sizes.
- Integrate existing trees and shrubs in the landscape plan and design for the new Development.

[12] https://www.penrithcity.nsw.gov.au/images/documents/forms/Waste_Management_Plan_Application_Form.pdf

- Design for deconstruction, rather than demolition.

The Building Contractor should:

- Estimate required quantities of materials to reduce over-purchasing and excess materials.
- Include approximate quantities of materials in a purchasing policy to ensure correct quantities are purchased.
- Arrange delivery of materials on an 'as needed' basis to mitigate material degradation by weathering or moisture damage.
- Arrange to return excess materials to suppliers where possible and practicable.
- Reduce packaging waste by:
    - returning packaging to suppliers where possible and practicable;
    - purchasing in bulk;
    - requesting cardboard or metal drums rather than plastics;
    - requesting metal straps rather than shrink wrap; and
    - using returnable packaging such as pallets and reels.
- Reduce unnecessary excavation and site disturbance.
- Ensure subcontractors are informed of and implement site waste management procedures.

5.5 Re-use, Recycling and Disposal

The Building Contractor should:

- Sort and segregate demolition and site preparation wastes to ensure efficient recycling of wastes.
- Store wastes on site appropriately to prevent cross-contamination and/or mixing of different waste types.
- Re-use formwork where appropriate.
- Recycle or dispose of waste oil in an appropriate manner.
- Retain roofing material cut-offs for re-use.
- Retain used crates for storage purposes unless damaged.
- Recycle cardboard, glass and metal wastes.
- Return packaging to suppliers where possible and practicable.
- Recycle or dispose of solid waste timber, brick, concrete, asphalt and rock, where such waste cannot be re-used on site, to an appropriately licenced construction and demolition waste recycling facility or an appropriately licenced landfill.
- Dispose of all asbestos and/or hazardous wastes in accordance with SafeWork NSW and NSW EPA requirements.
- Deliver batteries and florescent lights to drop off-site recycling facility.

5.5.1 Site Specific Procedures

The Construction Site Manager will also consider implementation of the following procedures:

- all used crates will be stored for reuse unless damaged;
- all cardboard waste is to be recycled via on-site recycling compactors which shall be collected by an appropriate recycling contractor;
- all glass and metals that can be economically recycled will be;
- colour bond roof material off cuts to be stockpiled on site for reuse or recycling;
- waste concrete will be disposed of at a crushing/recycling plant where practicable;
- waste bricks will be crushed and utilised on site. All half or damaged bricks will be stored on site to be removed for offsite crushing and recycling;
- excavation material will be reused on-site where possible with all excess reused on other projects or sold;
- All other solid waste including bitumen paving, tile, timber, rock and soil will be taken to an appropriate materials recycling facility and/or landfill site and processed in an approved manner; and
- All garbage will be disposed of via a council approved system.

5.6 Waste Storage and Servicing

5.6.1 Waste Segregation

Waste materials produced from site preparation activities are to be segregated and stored separately on site, with clear signage identifying the purpose of different storage areas. It is anticipated that the site will have available space provided by the Building Contractor for separate storage in separate skip bins and/or appropriately managed stockpiles, of the following waste types:

- Bricks, concrete and scrap metal;
- Metal and steel, if any, in a condition suitable for recycling at metal recycling facilities;
- Timber;
- Glass;
- Hardstand rubble;
- Excavation spoil, uncontaminated, if present;
- Contaminated excavation spoil, if present;
- Hazardous waste, if present;
- Paper and cardboard;
- Recyclable general waste; and
- Non-recyclable general waste.

If there is insufficient space onsite for full segregation of waste types, the Building Contractor is to consult with waste or recycling collection facilities to confirm which waste types may be co-mingled prior to removal from the site.

Areas designated for waste storage should:

- allow unimpeded access by site personnel and waste disposal contractors;
- not be located on footpaths, public reserves and street gutters without Council approval;
- employ adequate environmental management controls, for example, consideration of slope, drainage and proximity relative to waterways, stormwater outlets and vegetation, to prevent off-site migration of waste materials and/or contamination from the waste; and
- not present hazards to human health or the environment.

In accordance with Council's DCP, the WMP should identify the areas that will be used on site for the storage of materials, including areas designated for the separation of recyclables and disposal. It is recommended that the drawings for the Project are revised to indicate stockpiling and waste storage areas, with consideration of the recommendations noted above. This WMP should be revised to reflect these drawing updates.

5.6.2 Servicing and Record Keeping

The frequency of the waste removal will, in most cases, be dictated by the volume of material being deposited into each of the dedicated skips. Skips and bins are to be checked on a daily basis by the Site Manager to ensure that no overflow occurs. If skips and bins are reaching capacity, removal and replacement should be organised for the next 24 hours. All skips and bins leaving the site will be covered with a suitable tarpaulin to ensure that the spillage of wastes from the skips whilst in transit is eliminated.

The Building Contractor should:

- arrange for suitable waste collection contractors to remove the site preparation waste from site;
- ensure waste bins are not filled beyond recommended filling levels;
- ensure that all bins and loads of waste materials leaving site are covered;
- maintain waste disposal documentation detailing, at a minimum:
    - Descriptions and estimated amounts of all waste materials removed from site.
    - Details of the waste and recycling collection contractor(s) and facilities receiving the waste or recyclables.
    - Records of waste and recycling collection vehicle movements, for example date and time of loads removed, licence plate of collection vehicles, disposal dockets from receiving facility.
    - Waste classification documentation for materials disposed to off-site recycling or landfill facilities.
- ensure lawful waste disposal records are available for inspection by regulatory authorities such as Council, SafeWork NSW or NSW EPA if required; and
- remove waste during hours approved by Council.

In accordance with Council's DCP Section C5, Part 5.3.1, Council officers may ask to be presented with weighbridge dockets and invoices for waste disposal and recycling services for the Project. Weighbridge dockets and invoices are to be kept on site at all times.

5.6.3 Space and Amenity

Waste storage areas will be accessible, present at all times and allow sufficient space for storage and servicing requirements. The storage areas will also be flexible in order to cater for change of use throughout the Project.

Where space is restricted, dedicated stockpile areas are to be delineated on the site, with regular transfers to dedicated skip bins for sorting. The positions of the designated waste holding areas on site will change according to building works and the progression of the Development, but must consider visual amenity, OH&S and accessibility in their selection.

All waste placed in stockpile areas and/or skips for disposal or recycling shall be adequately contained to ensure that the waste does not fall, blow, wash or otherwise escape from the site. Appropriate siting of waste stockpile locations will take into account slope and drainage factors to avoid contamination of stormwater drains during rain events and allow manoeuvring space to facilitate ease of collection and safety.

Waste containers are to be kept clean and in a good state of repair.

5.6.4 Contaminated or Hazardous Waste Management

During the site preparation and construction phases, SLR recommends that a qualified and certified contractor is engaged to remove all contaminated or hazardous materials, for example, asbestos, and dispose of all contaminated or hazardous waste at an appropriately licenced facility.

All asbestos and other hazardous waste must be handled according to appropriate legislation and regulation including the Work Health and Safety Regulation 2011.

In accordance with Council's DCP, hazardous waste management at the site may require a licence from the EPA and approval from Council. If hazardous waste is identified for removal, Council and NSW EPA are to be consulted prior to undertaking any hazardous waste removal.

5.7 Signage

Standard signage is to be posted in all waste storage and collection areas. All waste containers should be labelled correctly and clearly to identify stored materials.

Signs approved by the NSW EPA for labelling of waste materials are available online[13] and should be used where applicable. A selection of signs prepared by NSW EPA is provided in **Figure 3**.

Figure 3 Examples of NSW EPA labels for waste skips and bins

[13] NSW EPA approved waste materials signage http://www.epa.nsw.gov.au/wastetools/signs-posters-symbols.htm

5.8 Training and Awareness

All staff, including sub-contractors and labourers, employed during the demolition and construction phases of the Development must undergo induction training regarding waste management for the Development.

Induction training is to cover, as a minimum, an outline of the WMP including:

- legal obligations;
- emergency response procedures on site;
- waste storage locations and separation of waste;
- litter management in transit and on site;
- the implications of poor waste management practices;
- correct use of general purpose spill kit; and
- responsibility and reporting, including identification of personnel responsible for waste management and individual responsibilities.

It is the responsibility of the Contractor or site operator to notify Council of the appointment of waste removal, transport or disposal contractors.

5.9 Monitoring and Reporting

The following measures are to be undertaken to improve demolition and construction waste management and to provide reliable waste generation figures:

1. Conduct waste audits of current projects where feasible.
2. Note waste generated and disposal methods.
3. Look at past waste disposal receipts.
4. Record this information to track waste avoidance, reuse and recycling performance and to help in waste estimations for future waste management plans.

Records of quantities of waste re-used, recycled or disposed to landfill are to be maintained by the Building Contractor. Council's DCP Section C5, Part 5.3.1 states that evidence, such as weighbridge dockets or receipts, verifying recycling and/or disposal must be available for presentation to Council if requested.

Daily visual inspections of waste storage areas will be undertaken by site personnel and inspection checklists and logs recorded for reporting to the Site Manager on a weekly basis or as required. These inspections will be used to identify and rectify any resource and waste management issues.

Waste audits are to be carried out by the Building Contractor to gauge the effectiveness and efficiency of waste segregation procedures and recycling and reuse initiatives. Where audits show that the above procedures are not carried out effectively, additional staff training will be undertaken and signage re-examined.

5.10 Roles and Responsibilities

All personnel have a responsibility for their own environmental performance and compliance with all legislation. It will be the responsibility of the Building Contractor to implement the WMP, and an employee and subcontractor responsibility to ensure that they comply with the WMP at all times.

Where possible, an Environmental Management Representative should be appointed for the Development. Suggested roles and responsibilities are provided in **Table 7**.

Table 7 Construction waste management responsibility allocation

Responsible Person	General Tasks
Construction Site Manager	Ensuring plant and equipment are well maintained.
	Ordering only the required amount of materials.
	Keeping materials segregated to maximise reuse and recycling.
	Ultimately responsible for routinely checking waste sorting and storage areas for cleanliness, hygiene and safety issues, contaminated waste materials, and also ensuring that all monitoring and audit results are well documented and carried out as specified in the WMP.
Environmental Management Representative or equivalent role	Approaching and establishing the local commercial reuse of materials where reuse on-site is not practical.
	Establishing separate skips and recycling bins for effective waste segregation and recycling purposes.
	Ensuring staff and contractors are aware of site requirements.
	Provision of training of the requirements of the WMP and specific waste management strategies adopted for the Development.
	Contaminated waste management and approval of off-site waste transport, disposal locations and checking licensing requirements.
	Approval of off-site waste disposal locations and checking licensing requirements.
	Assessment of suspicious potentially contaminated materials, hazardous materials and liquid wastes.
	Monitoring, inspection and reporting requirements.

Daily visual inspections of waste storage areas may be delegated to other on-site staff. All subcontractors will be responsible for ensuring that their work complies with the WMP through the project induction and contract engagement process.

6 Operational waste management

Ineffective waste management for commercial premises can lead to environmental pollution, offensive odours, litter, attraction of vermin and occupational safety and hygiene problems.

Effective waste management reduces costs through the reuse of resources and minimisation of fees associated with removal, transportation and disposal of waste, and improves environmental outcomes locally, regionally and globally.

Effective waste management is achieved through the implementation of a WMP for the operational life of the Development.

6.1 Targets for Resource Recovery

The waste management performance of each new development should contribute to the overall NSW State targets for recycling outlined in the *NSW Waste Avoidance and Resource Recovery Strategy 2014-21*. The targets include increasing waste diverted from landfill to 75% and recycling 70% of commercial, industrial and municipal solid waste[14]. Each commercial and industrial development has the ability to contribute to this NSW State target through an effective waste management plan.

It is anticipated that the waste minimisation measures in the following sections will assist the Development to meet the state's targets. Waste reporting and audits can be used to determine the actual percentage of waste that are being, or have been, recycled during operation.

6.2 Waste Streams and Classifications

The operation of the Project will generate the following broad waste streams:

- domestic wastes generated by employees, including food wastes;
- bulk packaging wastes, including polystyrene, plastic wrapping and cardboard boxes;
- office waste;
- garden organic waste from landscaped areas;
- bulky waste items such as furniture and e-waste; and
- stores, plant and general maintenance wastes.

From the site inception meeting, SLR understands the Development's waste will primarily be general wastes, paper and cardboard and plastic wrapping.

Potential operational waste types, their associated waste classifications, and management methods are provided in **Table 8.** For further information on how to determine a waste's classification, refer to the NSW EPA (2014) *Waste Classification Guidelines*.[15] Suggestions for recycling drop off locations and contacts can be found on https://businessrecycling.com.au/ for each waste type.

[14] https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/wastestrategy/140876-warr-strategy-14-21.pdf?la=en&hash=EC6685E6624995242B0538B18C2E80C0CA2E51B3

[15] Available online from https://www.epa.nsw.gov.au/your-environment/waste/classifying-waste/waste-classification-guidelines

Table 8 Potential operational waste types, classifications and management methods

Waste Types	NSW EPA Classification	Proposed Management Method
General Operations		
Clean paper	General solid (non-putrescible) waste	Paper recycling at off-site licensed facility
Cardboard and bulky cardboard boxes	General solid (non-putrescible) waste	Cardboard recycling at off-site licensed facility
Recyclable containers including glass and plastic bottles, aluminium cans and steel cans	General solid (non-putrescible) waste	Recycling at off-site licensed facility Some containers that attract a deposit under the NSW Government's *Return and Earn Scheme*, may be separated by staff or contactors for redemtion.
Food waste	General solid (putrescible) waste	Donate, if suitable; alternatively compost on or off-site or dispose to landfill with general garbage
Batteries	Hazardous waste	Off-site recycling. Contact the Australian Battery Recycling Initiative for more information
Mobile Phones	Hazardous waste	Off-site recycling. Contact Mobile Muster for more information
Clothes	General solid (non-putrescible) waste	Off-site reuse or recycling such as donations to St Vincent's De Paul
Bulky polystyrene	General solid (non-putrescible) waste	Off-site recycling or disposal at landfill
Furniture	General solid (non-putrescible) waste	Off-site reuse or disposal to landfill
E-waste	Hazardous waste	Off-site recycling
Printer toners and ink cartridges	Hazardous waste	Storage on-site, off-site recycling; free disposal box or bags and pickup service exists for printer toners and ink cartridges
General garbage, including non-recyclable plastics	General solid (putrescible and non-putrescible) waste	Disposal at landfill
Maintenance		
Glass other than containers	General solid (non-putrescible) waste	Off-site recycling
Light bulbs and fluorescent tubes	Hazardous waste	Storage on-site; off-site recycling or disposal. Contact FluoroCycle[16] or Lamp Recyclers[17] for more information
Empty oil, paint drums and chemical containers	Hazardous waste if containers used to store Dangerous Goods (Class 1, 3, 4, 5 or 8) and residues have not been removed by washing or vacuuming. General solid (non-putrescible) waste if containers cleaned by washing or vacuuming.	Storage on-site or transported to off-site recycling or disposal at licensed facility. Transport to comply with the transport of Dangerous Goods Code.
Garden organics including lawn mowing, tree branches, hedge cuttings, leaves	General solid (non-putrescible) waste	Reuse on-site or contractor removal for recycling at licenced facility

16 https://www.fluorocycle.org.au/

17 https://www.lamprecyclers.com.au/

6.3 Waste Generation Rates

Published average waste generation rates from the NSW EPA have been used to calculate the anticipated waste amounts for the proposed Development. The estimated waste generation rates are based on EPA guidance for waste generation in commercial and retail premises and are presented below in **Table 9**. These have been retained for the purposes of the Development's operation from the previous WMP.

Table 9 Guideline Waste Generation Rates

Type of Premises	Facility Area	General Waste Generation (L/100 m²/day)	Recycling Generation[1] (L/100 m²/day)
Warehouse	Warehouse and mezzanine levels	30	30
Offices	Offices	10	10

Source: NSW EPA's Better Practice Guidelines for Waste Management and Recycling in C&I Facilities (2012)

Note 1. Recyclable waste generation includes paper and cardboard waste, as well as mixed recyclables (bottles, cans etc.)

Using the above standard industry waste generation rates in **Table 9** above, the approximate weekly waste quantities for each lot have been calculated and are presented in **Table 10**.

Table 10 Estimated Annual Waste and Recycling Generation for Precinct 1

Complex	Area Type	General Waste (L/week)	Recycling (L/week)
Lot 1A	Warehouse	143,150	143,150
	Office	1,855	1,855
	Mezzanine	68,075	68,075
Lot 1B1	Warehouse	9,205	9,205
	Office	350	350
Lot 1B2	Warehouse	9,870	9,870
	Office	350	350
Lot 1B3	Warehouse	8,085	8,085
	Office	280	280
Total		**173,145**	**173,145**

Note: Waste generation rates assume warehousing facilities are operational 7 days per week.

From the site inception meeting, SLR understands that large quantities of the recycling stream will include pallets and plastic and cardboard packaging waste. To minimise packaging waste generated in the recyclables stream, it is recommended that packing waste is returned to the suppliers where possible. Standard pallets are recommended to be returned to their owners and non-standard and broken pallets are to be stockpiled and collected as required by a private waste contractor.

Additionally, it is anticipated that a substantial amount of the general was stream will consist of food waste. To minimise food waste in the general waste stream, it is recommended that the food is donated, composted on site or sent off-site to a composting facility.

If additional collection services are required, such as secured document destruction, these can be organised with a private waste contractor who can provide additional bins and take collected waste to an off-site licenced facility.

6.3.1 Outbuildings waste generation

In addition to the warehouse and office areas, Lot 1A consists of additional infrastructure and buildings as specified in **Section 2.1.2**, including a gatehouse, weighbridges, a heavy vehicle workshop, a heavy vehicle wash, a diesel refuelling area, a computer room, a battery charge area, hardstand areas, energy complexed and parking areas. The additional building equate to 4,004 m^2.

These have not been included in **Table 10** as they are not considered as areas that regularly generate substantial quantities of operational waste and recycling quantities. Even though large quantities of waste are not anticipated, better practice waste management should still be practice.

The Development is anticipated to produce minimal quantities of garden organics. Less than 100 L of garden organics are estimated to be generated per week. This waste will be taken by a landscaping contractor who will dispose of it at an off-site licenced facility.

The major waste streams of the heavy vehicle workshop are anticipated to include tyres, air and oil filters, rags, brake pads, metals, engines, batteries and pads. These are not considered to be regularly generated waste streams and include damaged heavy vehicle parts that become unsuitable for reuse by the site's heavy vehicles.

Tyres that cannot be reused are to be stockpiled off-site. The tyres are to be collected from the heavy vehicle workshop by a private waste contractor who will transport them to a licenced recycling facility where they will be stored until they are recycled.

A 7 m^3 skip bin is recommended to be stored on-site and used for the collection of metals. A private waste contractor is to be engaged for collections that can occur on an as need basis. The metals will be transported to a licenced metal recycling facility.

All heavy vehicle parts that are unsuitable for reuse or recycling will be stockpiled and collected by a private waste contractor for disposal at a licenced recycling facility or licenced landfill site.

The frequency of the waste removal will, in most cases, be dictated by the quantities of material being deposited into each of the dedicated skips. Bulk bins are to be checked as required by the Site Manager to ensure that no overflow occurs. If skip bins are reaching capacity, removal and replacement should be arranged. All bulk bins leaving the site will be covered with a suitable tarpaulin to ensure no spillage of waste during transport.

6.4 Waste Storage and Servicing Requirements

6.4.1 Waste and Recycling Procedure and Location

The waste produced by this precinct will be stored in waste compactors. Estimates have been made assuming compactors will have 35 m^3 capacity and compact to 3:1. The compactors will be stored externally to the warehouse at Lot 1A and in Lot 1B. Waste is to be taken directly to the compactors. As such, no designated waste storage area will be required.

The Development may choose to have general landfill waste and comingled recycling bins present and positioned in easily accessible areas throughout the offices for effective recycling results. Waste and recyclables from each holding area in the premises must be transferred to the centralised compaction area.

The waste and recycling compaction location should also incorporate measures to ensure best practice waste management and compliance with Council requirements, including:

- Screening from public view for visual amenity, noise control and odour control.
- Positioning away from public view, where possible.
- Flexibility in design to allow future uses, operational changes and tenancy changes.
- Positioning and design with the consideration for both the potential traffic hazards caused by the waste collection and the ease of access for tenants and contractors.
- Food scraps are to be placed in specialised containment bins.
- The construction of additional garbage areas, rooms and equipment are to comply with Building Code of Australia (BCA) requirements and Australian Standards.
- All waste areas are to be kept clean and odour and vermin free. It is the responsibility of the Operations Manager or equivalent personnel to check each area for cleanliness, hygiene and health and safety issues.

Sufficient space will be provided for the segregation and storage of hazardous wastes on site. These wastes include fluorescent tubes, smoke detectors, e-wastes and other recyclable resources. Sufficient space will also be provided for reuse items such as crates and pallets for occupational safety purposes.

6.4.2 Compactor Operations and Collection

Five compactors at Lot 1A will be divided to service the Development's primary waste streams. One compactor will process the general waste, two compactors will process paper and cardboard packaging waste and two compactors will process the plastic wrapping waste. The operations of the compactors are summarised in **Table 11**.

Table 11 Compaction operations at Lot 1A

Waste Type	Number of Compactors	Collections per Week
General Waste	1	3
Paper and Cardboard	2	2
Plastic Film	2	2

Lot 1B will be attended by bins serviced by a private contractor. These will similarly be divided into the waste streams outlined in **Table 11** and located in an external space which meets the criteria detailed in **Section 6.4.1**. The recommended bin sizes and storage space for Lot 1B are outlined in **Table 12**. The below is based on a collection frequency of three times per week for general waste and twice per week for recyclables.

To allow for ready movement of bins in and out of the bin storage area, the bin storage area outlined in **Table 12** provides a floor area of at least 150% of the total minimum bin floor area. This can also act as a contingency in the event of spikes in waste generation.

Table 12 Summary of bin servicing at Lot 1B

Complex	Area Type	General Waste Bin Size (L)	Recycling Bin Size (L)	Total Number of Bins	Space Required (m2)
Lot 1B1	Warehouse	1 x 4,500	2 x 3,000	3	20
	Office	1 x 240	1 x 240	2	5
Lot 1B2	Warehouse	1x 4,500	2 x 3,000	3	20
	Office	1 x 240	1 x 240	2	5
Lot 1B3	Warehouse	1 x 3,000	1 x 4,500	2	15

Complex	Area Type	General Waste Bin Size (L)	Recycling Bin Size (L)	Total Number of Bins	Space Required (m2)
	Office	1 x 240	1 x 240	2	5

The compactors and bins will be positioned in locations accessible to waste collection vehicles and be serviced directly. When servicing the Development, all vehicles are to service the site in a clockwise circulation.

6.4.3 Bulky and Hazardous Waste Management

Sufficient space will be provided in the Development for the storage of large and bulky items. This includes broken pallets, broken storage units, e-waste and other materials that cannot be disposed of in the general or recyclable waste stream.

Space will also be allocated to store reusable items such as crates so that storage in a public place is avoided.

Management may consider organising a skip on a monthly basis or as required to remove bulky waste items, or engage a contractor to collect and transport these items for reuse, recycling or disposal at an EPA licensed facility.

A suitably licensed e-waste recycling contractor should be engaged to collect and recycle all e-waste items generated at the facility.

6.5 Waste Avoidance, Reuse and Recycling Measures

Some examples of how the reduction, re-use and recycling of waste can be achieved are listed below.

6.5.1 Waste Avoidance

Waste avoidance measures that could be used at the Development include:

- Participating in take-back services to suppliers to reduce waste further along the supply chain;
- Avoiding printing where possible;
- Review of packaging design to reduce waste but maintain ‘fit for purpose’;
- Providing ceramic cups, mugs, crockery and cutlery rather than disposable items;
- Purchasing consumables in bulk to avoid unnecessary packaging;
- Presenting all waste reduction initiatives to staff as part of their induction program; and
- Investigating leased office equipment and machinery rather than purchase and disposal.

6.5.2 Reuse

Possible re-use opportunities that could be used at the Development include establishing systems with in-house and supply chain stakeholders to transport products in re-useable packaging where possible.

6.5.3 Recycling

Possible recycling opportunities that could be used at the Development include:

- Collecting and recycling e-waste;

- Flatten or bale cardboard to reduce number of bins required;
- Paper recycling trays provided in office areas for scrap paper collection and recycling;
- Collecting printer toners and ink cartridges in allocated bins for appropriate contractor recycling; and
- Development of 'buy recycled' purchasing policy.

6.6 Signage

Signs which clearly identify waste management procedures and provisions to staff and visitors should be distributed around the Development. Key signage considerations are:

- Clear and correct labelling on all waste and recycling bins, indicating the correct type or types of waste that can be placed into a given bin, as shown in **Figure 4;**
- Signposts and directions to location of waste storage areas;
- Clear signage in all waste storage areas to instruct users how to correctly separate waste and recycling;
- Maintaining a consistent style colour scheme and system for signs throughout the Development; and
- Emergency contact information for reporting issues associated with waste or recycling management.

Colour-coded and labelled bin lids are necessary for identifying bins. All signage should conform to the relevant Australian Standard and use labels approved by the NSW EPA[18]. The design and use of safety signs for waste rooms and enclosures should comply with Australian Standard AS 1319 Safety Signs for the Occupational Environment and clearly describes the types of materials designated for each bin.

Figure 4 Example of bin labels for operational waste

6.7 Communication strategies

Waste management initiatives and management measures should be clearly communicated to building managers, owners, employees, customers and cleaners. Benefits of providing this communication include:

- improved satisfaction with services;
- increased ability and willingness to participate in recycling;
- improved amenity and safety;

[18] NSW EPA waste signage and label designs http://www.epa.nsw.gov.au/wastetools/signs-posters-symbols.htm

- improved knowledge and awareness through standardisation of services;
- increased awareness or achievement of environmental goals and targets;
- reduced contamination of recyclables stream;
- increased recovery of recyclables and organics material, if implemented; and
- greater contribution to targets for waste reduction and resource recovery, the environment and heritage conservation.

To realise the above benefits, the following communication strategies should be considered:

- Use consistent signage and colour coding throughout the Development. Examples of signage are provided in **Section 6.6**;
- Ensure all staff are trained in correct waste separation and management procedures;
- Provide directional signage to show location of and routes to waste storage areas;
- General waste and co-mingled recycling bins should be clearly labelled and colour-coded to ensure no cross contamination, where applicable;
- Employees and cleaners should adhere to the WMP for compliance, in consultation with Management; and
- Repair signs and labels promptly to avoid breakdown of communications.

6.8 Monitoring and Reporting

Audit and visual assessment of bins prior to collection should be undertaken by Management in the first few months of being operational to ensure the waste management system is sufficient for the Development's needs, and also on a half-yearly basis to ensure WMP provisions are being maintained.

Where audits show that recycling is not carried out effectively, additional staff training should be undertaken by Management and signage re-examined.

6.9 Roles and Responsibilities

All contractors that are made with cleaners, tenants and building managers are to clearly explain the Development's waste management system and identify roles and responsibilities.

It should be the responsibility of Management to implement the WMP and a responsibility of the employees and cleaners to ensure that they comply with the WMP at all times. Management should routinely check waste sorting and storage areas for cleanliness, hygiene and safety, and also ensure all monitoring and audit results are well documented and carried out as specified in the WMP. An outline of waste management responsibilities is presented in **Table 13**.

Table 13 Operational waste management responsibility allocation

Responsible Person	General Tasks
Management	Ensure the WMP is implemented throughout the life of the operation.
	Update the WMP on a regular basis (e.g. annually) to ensure the Plan remains applicable.
	Undertake liaison and management of contracted waste collections.
	Organise internal waste audits on a regular basis.

Responsible Person	General Tasks
	Manage any complaints and non-compliances reported through waste audits etc.
	Perform inspections of all waste storage areas and waste management equipment on a regular basis.
	Organise cleaning and maintenance requirements for waste management equipment.
	Monitor bins to ensure no overfilling occurs.
	Ensure effective signage, communication and education is provided to alert visitors, employees and cleaners about the provisions of this WMP and waste management equipment use requirements.
	Monitor and maintain signage to ensure it remains clean, clear and applicable.
	Ensure waste and recycling storage rooms are kept tidy.
	Ensure that regular cleaning and daily transfer of bins is being undertaken by the cleaners
	Ultimately responsible for the management of all waste management equipment, cleaning requirements, waste transfer and collection arrangements.
Cleaners and Staff	Removal of general waste, recyclables, cardboard waste and hazardous waste from floor areas for transfer to centralised waste and recycling collection rooms on a daily basis or as required.
	Cleaning of all bins and waste and recycling rooms on a weekly basis or as required.
	Compliance with the provisions of this WMP.
Gardening Contractor, as applicable	Removal of all garden organics waste generated during gardening maintenance activities for recycling at an off-site location or reuse as organic mulch on landscaped areas.

APPENDIX A

Architectural Drawings

PROPOSED INDUSTRIAL FACILITIES
PRECINCT 1
OAKDALE WEST
Estate Road HORSLEY PARK, NSW 2175
Drawing List

Masterplans

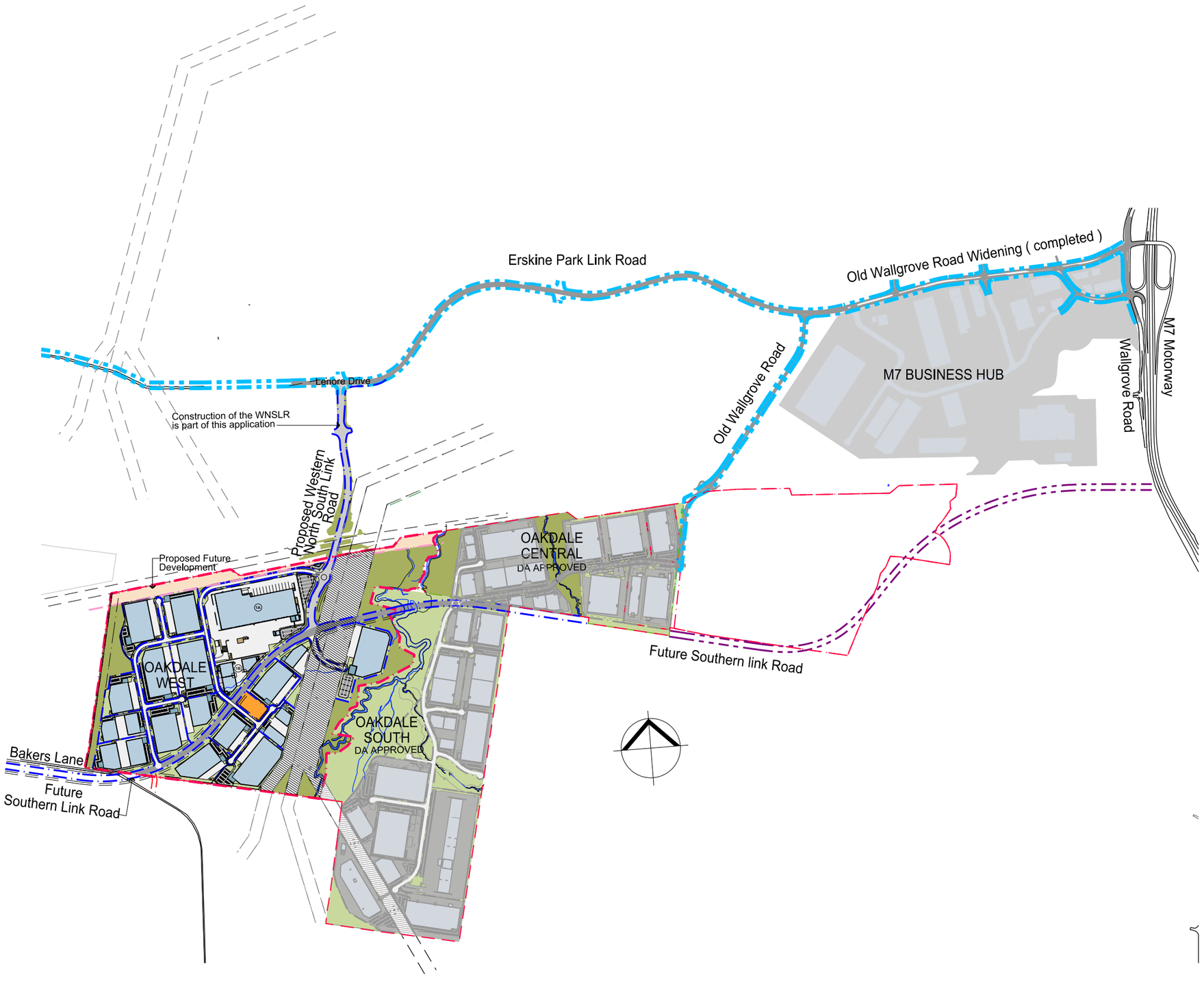
OAK MP01	Cover Sheet & Location
OAK MP02	SSDA Masterplan
OAK MP03	Western North South Link Road
OAK MP04	SSDA Stage 1 Development
OAK MP05	Precinct 1 Masterplan
OAK MP06	Precinct Plan
OAK MP07	Indicative Ultimate Lot Layout
OAK MP08	Site Ananlysis Plan
OAK MP09	Existing Zoning
OAK MP10	Not Used
OAK MP11	Building Staging Plan (Indicative)
OAK MP12	Signage Precinct 1 Plan
OAK MP13	Fire Protection Plan
OAK MP14	Biodiversity Management Plan

Lot 1A

OAK 1A DA10	Site Plan
OAK 1A DA11	Roof Plan
OAK 1A DA12	Office Plan Ground Floor
OAK 1A DA13	Office Plan First Floor
OAK 1A DA13A	Office Plan Second Floor
OAK 1A DA14	Elevations Office
OAK 1A DA15	Elevations Warehouse
OAK 1A DA16	Section 1
OAK 1A DA17	Section 2
OAK 1A DA18	Warehouse Plan
OAK 1A DA18A	Mezzanine 1 Plan
OAK 1A DA18B	Mezzanine 2 Plan
OAK 1A DA18C	Mezzanine 3 Plan
OAK 1A DA18D	Mezzanine 4 Plan
OAK 1A DA18E	Mezzanine 5 Plan
OAK 1A DA18F	Mezzanine 6 Plan
OAK 1A DA19	Skybridge Sections & Elevations
OAK 1A DA20	Receiving Office Plans
OAK 1A DA21	Gatehouse Plans
OAK 1A DA22	Trailer Workshop Plans
OAK 1A DA23	Trailer Wash
OAK 1A DA24	Diesel Refueling Area
OAK 1A DA25	Energy Complex 1
OAK 1A DA25A	Energy Complex 2
OAK 1A DA28	Stage 2 Site Plan
OAK 1A DA29	Stage 2 Elevations

Lot 1B

OAK 1C DA30	Site Plan / Floor Plan
OAK 1C DA31	Roof Plan
OAK 1C DA32	Office Floor Plans 1B1
OAK 1C DA33	Office Floor Plans 1B2
OAK 1C DA33A	Office Floor Plans 1C
OAK 1C DA34	Elevations Office
OAK 1C DA34A	Elevations Office
OAK 1C DA35	Elevations Sheet 1
OAK 1C DA36	Elevations Sheet 2
OAK 1C DA37	Sections



SBA ARCHITECTS

Oakdale West Estate
Horsley Park

Cover Sheet / Location Plan

Not To Scale
23 Oct 2019

OAK MP01 (AM)
Job No 15117

SEE DRAWING OAK MP03 FOR CONTINUATION

Goodman

BRICKWORKS LIMITED

Proposed Bridge

Proposed Western North South Link Road Subject to Just Terms Land Acquisition.

AMENITIES LOT

Substation Kiosk

New Driveway Access track

Proposed Western North South Link Road

Goodman Signage

30m Wide Road Reserve

Main Site Identification Signage

Goodman Signage Wall WNS/R Up To SLR Subject to Subdivision

'Possible future Link Road by others, as depicted on SEPP Transport Infrastructure Map, subject to Just Terms land acquisition'.

SLR Road Reserve

Aecom Concept Alignment (Ref 60301100-00-FIG-PL0001 TO PL0003)

Future Southern Link Road

Proposed Future Development

60000

Estate Road 01

Estate Road 02

Estate Road 03

Estate Road 04

Estate Road 05

Estate Road 06

Estate Road 07

Estate Road 08

1A RL 70.00 (+/- 1000mm)

RL 69.00 (+/- 1000mm)

2A RL 66.50 (+/- 1000mm)

2B RL 66.50 (+/- 1000mm)

3A RL 75.00 (+/- 1000mm)

3B RL 75.00 (+/- 1000mm)

3C RL 75.00 (+/- 1000mm)

3D RL 75.00 (+/- 1000mm)

4A RL 83.00 (+/- 1000mm)

4B RL 79.80 (+/- 1000mm)

4C RL 72.80 (+/- 1000mm)

4D RL 72.80 (+/- 1000mm)

4E RL 75.55 (+/- 1000mm)

4F RL 73.05 (+/- 1000mm)

4G RL 72.30 (+/- 1000mm)

5A RL 60.55 (+/- 1000mm)

1B1 RL 74.80 (+/- 1000mm)

1B2 RL 74.80 (+/- 1000mm)

1C RL 74.80 (+/- 1000mm)

2E RL 67.30 (+/- 1000mm)

2F RL 69.80 (+/- 1000mm)

2G RL 69.80 (+/- 1000mm)

2H RL 72.05 (+/- 1000mm)

2J RL 72.05 (+/- 1000mm)

Services Lot (Substation)

Transmission Easement

7500 SETBACK

6000 ELECTRICAL EASEMENT

40000 SETBACK

98000 SETBACK

20000 SETBACK

Emmaus Residential Aged Care Average RL 56.00

Emmaus Catholic College Average RL 64.00

OAKDALE SOUTH
Lot 12 DP1178389

Site Area Schedule

Total Site Area	**154.12 ha**
Less:	
Non Developable Land	20.70 ha
Easements	22.45 ha
Regional Roads	6.74 ha
Services Lot	1.26 ha
Estate Roads	8.09 ha
E2 Zone non developable	1.43 ha
	60.67 ha
Development Areas	
Precinct 1	21.92 ha
Precinct 2	19.51 ha
Precinct 3	18.50 ha
Precinct 4	22.39 ha
Precinct 5	6.02 ha
Proposed Future Development	4.85 ha
Amenities Lot	.258 ha
Total Developable	**93.45 ha**
Total Warehouse	423,592 sqm
Total Office	20,994 sqm
Others (for Site 1A)	4,004 sqm
Mezzanines (for Site 1A)	32,402 sqm
Total GFA	480,992 sqm
Total GLA	448,590 sqm

SBA ARCHITECTS

Oakdale West Estate

Horsley Park

SSDA Estate Masterplan

0 60 300

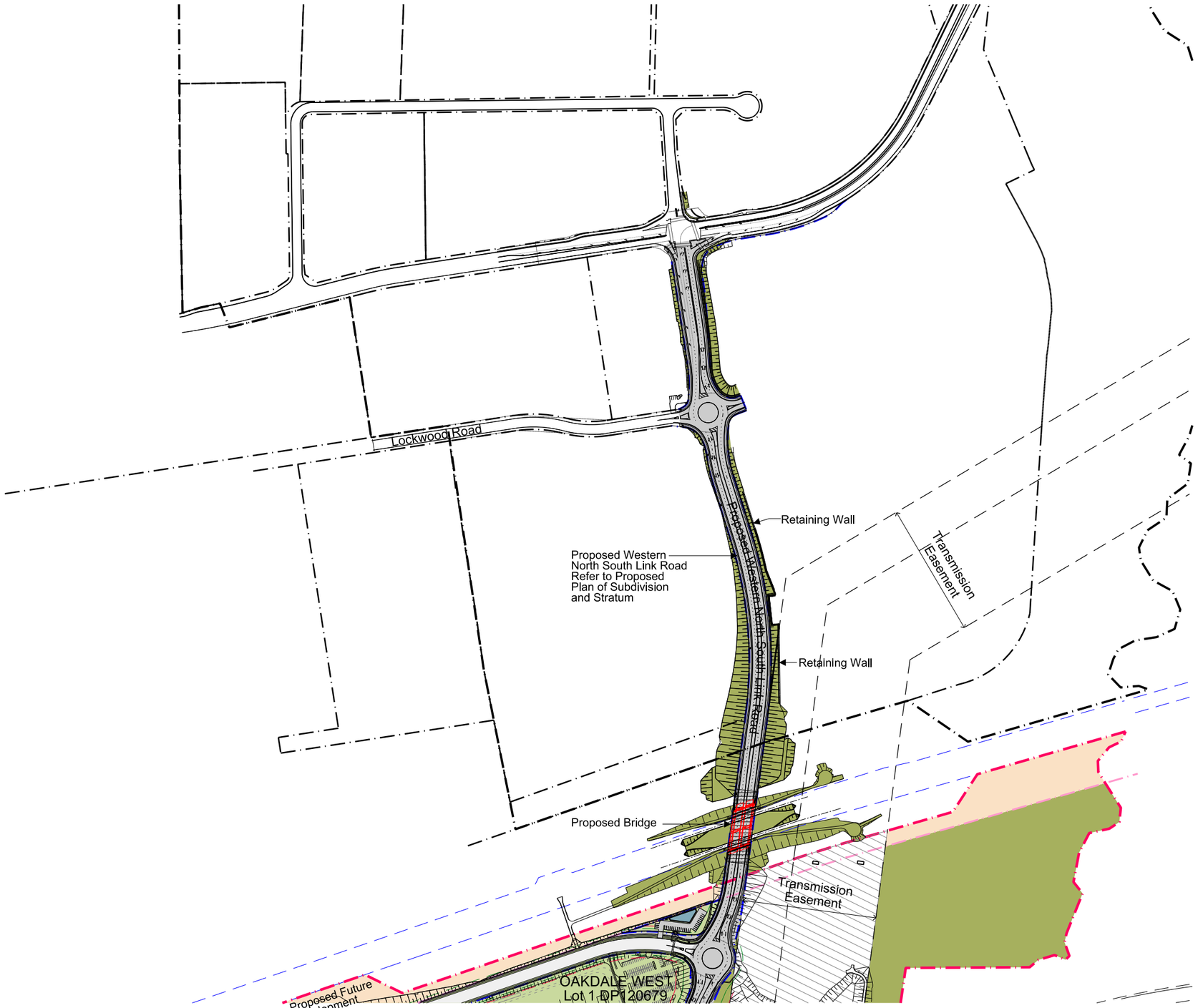
1:3000 @ A1
1:6000 @ A3

23 Oct 2019

OAK MP02 (BQ)
Job No 15117

Goodman

BRICKWORKS LIMITED



SEE DRAWING OAK MP02 FOR CONTINUATION

SBA ARCHITECTS

Oakdale West Estate

Horsley Park

Western North South Link Road

0 60 300

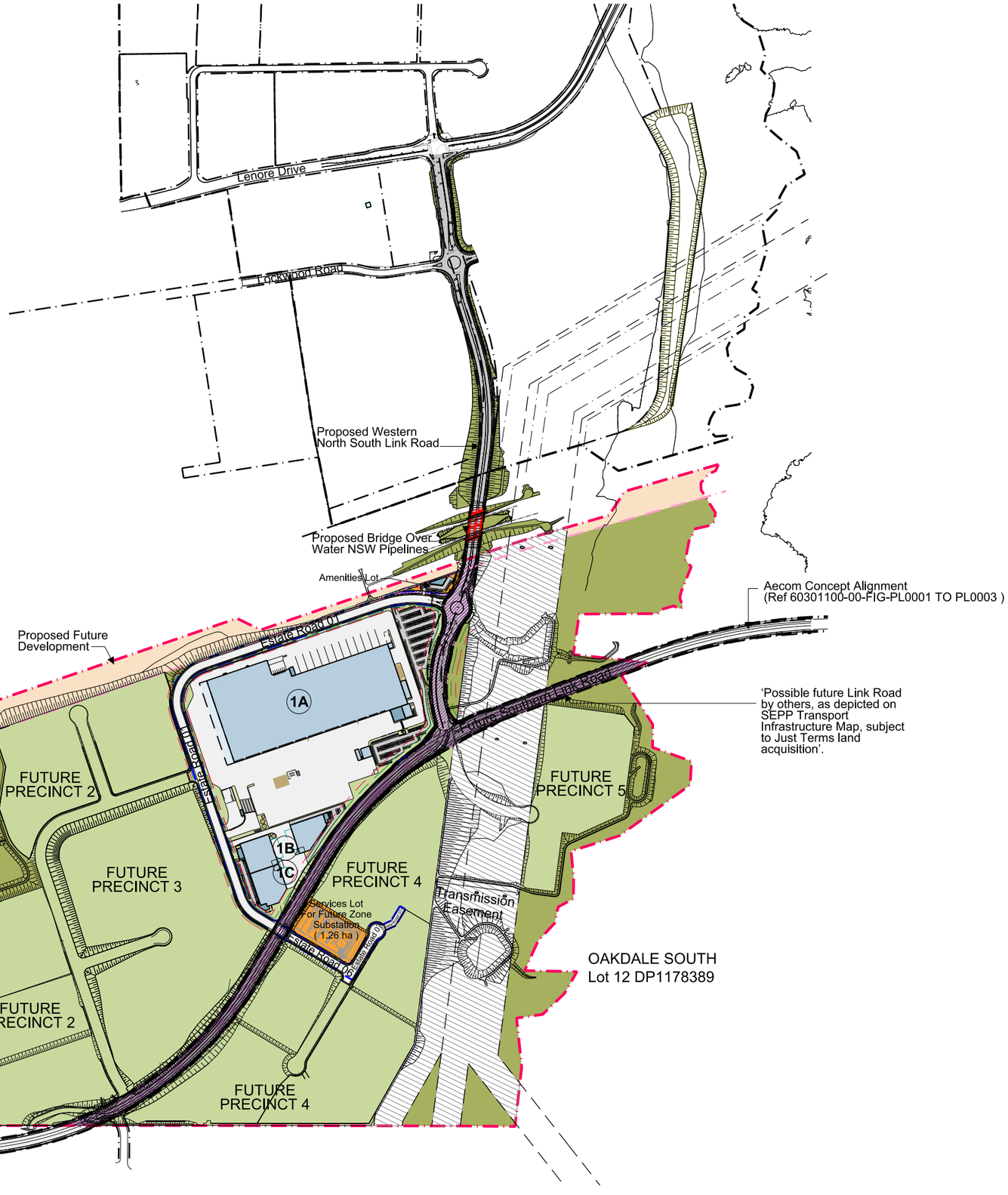
1:3000 @ A1
1:6000 @ A3

23 Oct 2019

OAK MP03 (AH)
Job No 15117

Goodman

BRICKWORKS LIMITED



Site Area Schedule

Total Site Area	**154.12 ha**
Less:	
Non Developable Land	20.70 ha
Easements	22.45 ha
Regional Roads	6.74 ha
Services Lot	1.26 ha
Estate Roads	8.09 ha
E2 Zone non delopable	1.43 ha
	60.67 ha
Development Areas	
Precinct 1	21.9242 ha
Total Developable (Precinct 1)	**21.9242 ha**
Total Warehouse (includes Stage 2)	81,773 sqm
Total Office	3,903 sqm
Total Others	4,004 sqm
Total Mezzanines (includes Stage 2)	32,402 sqm
Total GFA	122,082 sqm
Total GLA	89,680 sqm

SBA ARCHITECTS

Oakdale West Estate

Horsley Park

SSDA Stage 1 Development - Precinct 1

0 100 500

1:5000 @ A1
1:10000 @ A3

23 Oct 2019

OAK MP04 (AM)
Job No 15117

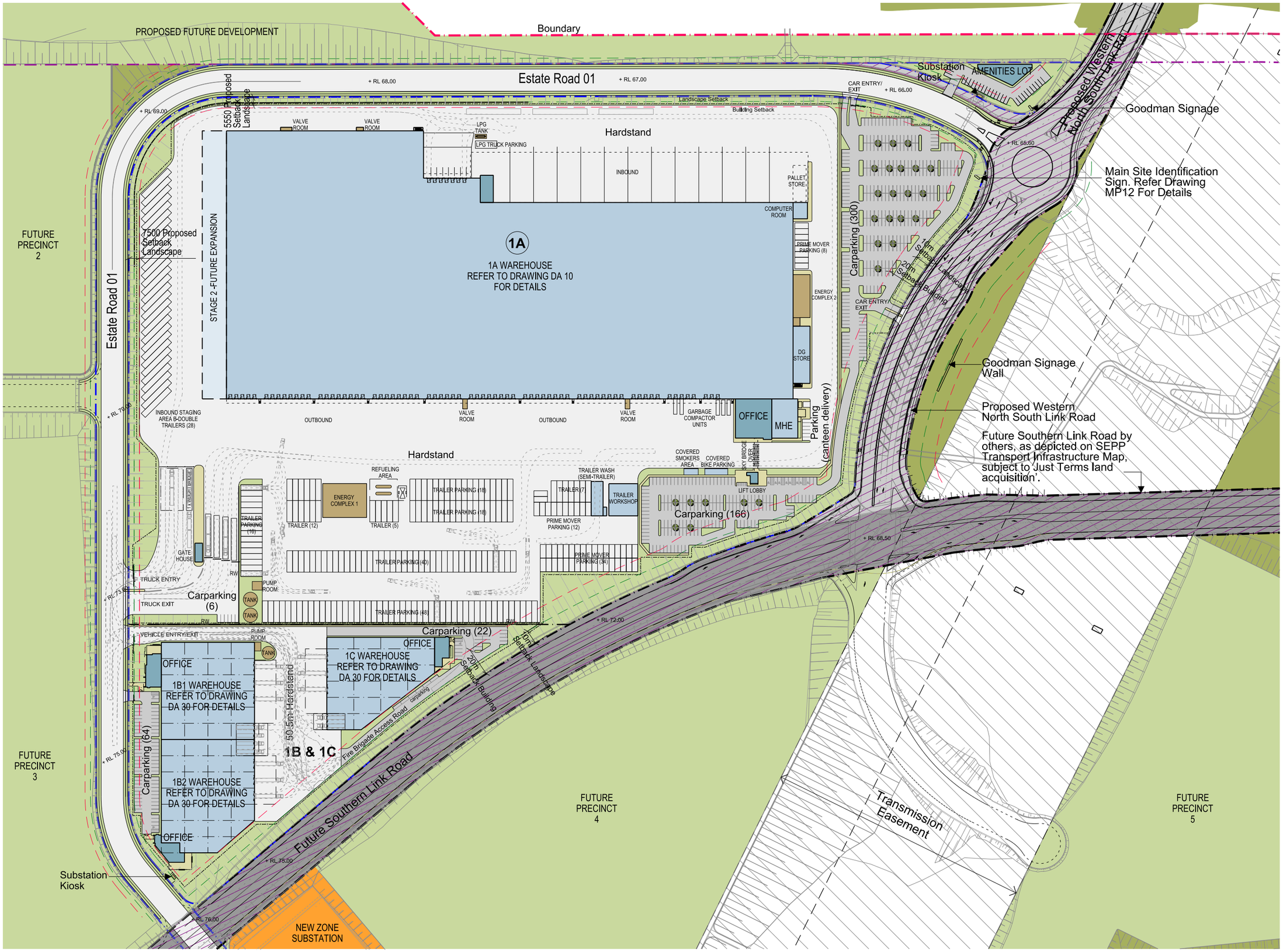
Goodman

BRICKWORKS LIMITED

Development Area Schedule	
Total Site Area	219,242 sqm
Total Warehouse	81,773 sqm
Total Office	3,903 sqm
Others (for Lot 1A)	4,004 sqm
Mezzanines (for Lot 1A)	32,402 sqm
Total Gross Floor Area (includes all Mezzanines)	**122,082 sqm**
Total Gross Leasable Area (excludes all Mezzanines)	**89,680 sqm**
Carparking (total)	558

Lot 1A	
Site Area	187,270 sqm
Warehouse (includes Stage 2 future expansion 3,318 sqm)	68,160 sqm
Office (3 level)	2,646 sqm
Others (includes dock office, trailer workshop, trailer wash, dangerous goods store, computer room, gate house, energy complex 1 & 2, refuelling area, battery charge, skybridge & lobby)	4,004 sqm
Mezzanines (includes Stage 2 mezzanine 3,101 sqm)	32,402 sqm
Total Building Area	107,212 sqm
Awning	8,620 sqm
Site Cover (exc. awning)	57 %
Floor Space Ratio	0.57 : 1
Hardstand Area	88,610 sqm
Light Duty Area	14,030 sqm
Prime Mover Parking	54
Trailer Parking	164
Carparking (inclusive of 6 for Gatehouse)	472
Carparking (motorcycles)	6

Lot 1B & 1C	
Site Area	31,972 sqm
Warehouse 1B1	4,625 sqm
Warehouse 1B2	4,998 sqm
Warehouse 1C	3,990 sqm
Office 1B1 (2 level)	500 sqm
Office 1B2 (2 level)	415 sqm
Office 1C (2 level)	342 sqm
Total Building Area	14,870 sqm
Awning	2,095 sqm
Site Cover (exc. awning)	47 %
Floor Space Ratio	0.47 : 1
Hardstand Area	7,440 sqm
Light Duty Area	3,755 sqm
Carparking	86



SBA ARCHITECTS

Oakdale West Estate

Horsley Park

Precinct 1 Plan

0 25 125

1:1250 @ A1
1:2500 @ A3

23 Oct 2019

OAK MP 05 (AZ)
Job No 15117

Goodman

BRICKWORKS LIMITED

Precinct 1

Precinct 2

Precinct 3

Precinct 4

Precinct 5

Substation
Zone
Lot (1.26 ha)

Precinct Area Schedule

Precinct 1	28.97 ha
Net Developable area	21.92 ha
Precinct 2	30.52 ha
Net Developable area	19.56 ha
Precinct 3	19.00 ha
Net Developable area	18.50 ha
Precinct 4	23.75 ha
Net Developable area	22.39 ha
Precinct 5	13.51 ha
Net Developable area	6.02 ha

SBA ARCHITECTS

Oakdale West Estate

Horsley Park

Precinct Plan

0 60 300

1:3000 @ A1
1:6000 @ A3

23 Oct 2019

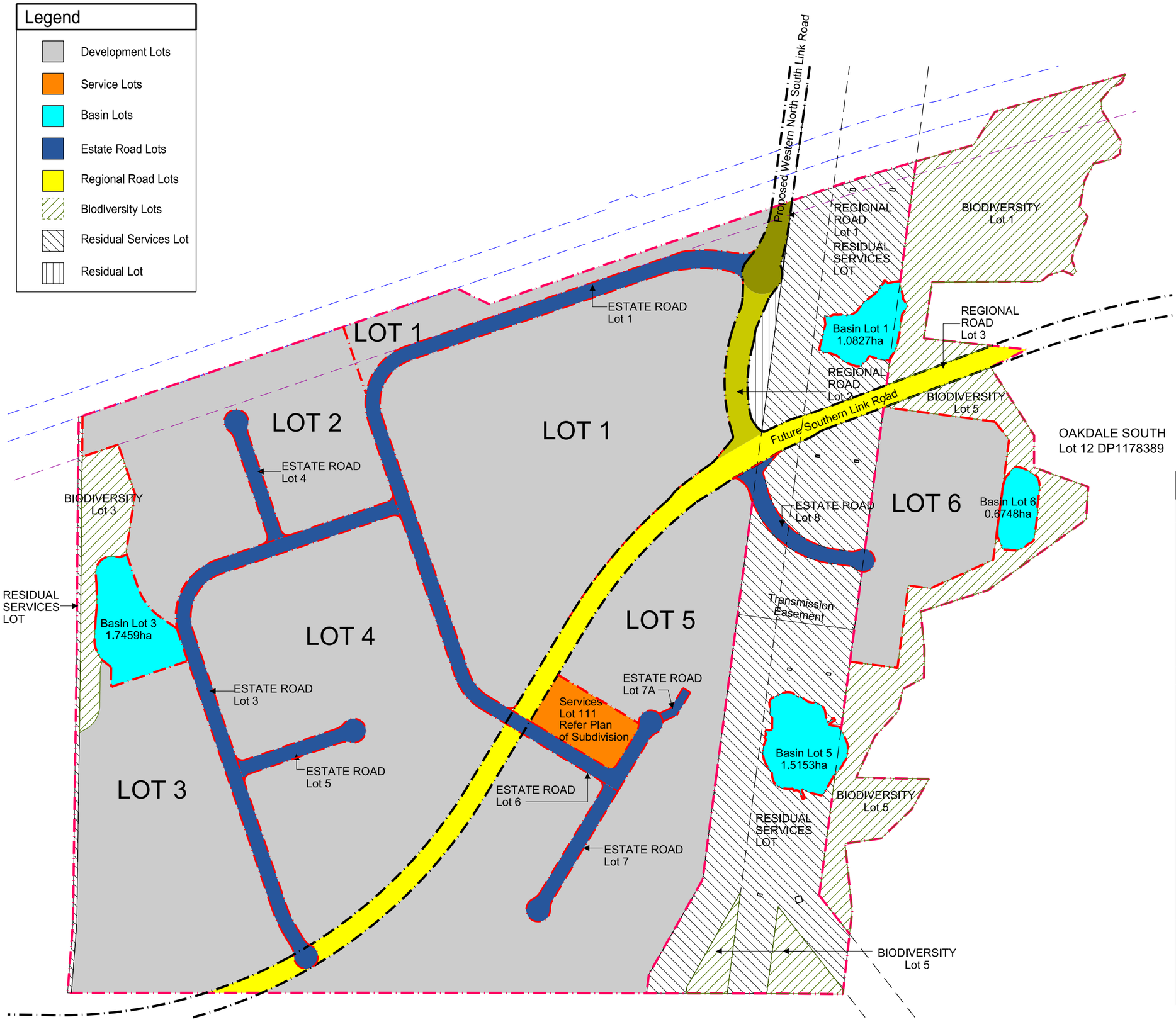
OAK MP06 (AH)
Job No 15117

Goodman

BRICKWORKS LIMITED

Legend

- Development Lots
- Service Lots
- Basin Lots
- Estate Road Lots
- Regional Road Lots
- Biodiversity Lots
- Residual Services Lot
- Residual Lot



Lot 1 DP120679		Sub Total
Total Land Area	WEST	154.12 ha
Biodiversity Lot 1	8.0710 ha	
Biodiversity Lot 2	Not Used	
Biodiversity Lot 3	1.9238 ha	
Biodiversity Lot 4	Not Used	
Biodiversity Lot 5	7.242 ha	17.2368 ha
Regional Road Lot 1	.6057 ha	
Regional Road Lot 2	.915 ha	
Regional Road Lot 3	4.9813 ha	6.502 ha
Services Lot	1.2614ha	1.2614 ha
Residiual Lot	.5918 ha	.5918 ha
Residual Services Lot	20.0564 ha	20.0564 ha
Estate Road Lot 1	2.8266 ha	
Estate Road Lot 2	Deleted	
Estate Road Lot 3	2.2808 ha	
Estate Road Lot 4	.5228 ha	
Estate Road Lot 5	.5064 ha	
Estate Road Lot 6	.763 ha	
Estate Road Lot 7	.5843 ha	
Estate Road Lot 7A	.0845 ha	
Estate Road Lot 8	.747 ha	8.3153 ha
Basin Lot 1	1.0828 ha	
Basin Lot 2	Not Used	
Basin Lot 3	1.7459 ha	
Basin Lot 4	Not Used	
Basin Lot 5	1.5153 ha	
Basin Lot 6	0.6748	5.0188 ha
Development Lot 1	24.4825 ha	
Development Lot 2	11.2859 ha	
Development Lot 3	12.4588 ha	
Development Lot 4	18.5031ha	
Development Lot 5	22.3902 ha	
Development Lot 6	6.0196 ha	95.1402 ha

*All areas subject to survey.

SBA ARCHITECTS

Oakdale West Estate

Horsley Park

Indicative Ultimate Lot Layout

0 60 300

1:3000 @ A1
1:6000 @ A3

23 Oct 2019

OAK MP07 (AE)
Job No 15117

Goodman

BRICKWORKS LIMITED

Site Constraints

- Aboriginal Sensitivity Zone
- HeritageTesting Zone
- Existing Native Vegetation

Proposed Western North South Link Road

Future Southern Link Road

Estate Road 01

Estate Road 01

Transmission Easement

New Zone Substation Lot

1A

1B

1C

PRECINCT 1

PRECINCT 2

PRECINCT 3

PRECINCT 4

PRECINCT 5

+RL.67.00

+RL.54.50

+RL.55.00

+RL.55.50

+RL.61.50

+RL.56.00

+RL.51.75

+RL.51.00

+RL.66.50

+RL.56.00

+RL.87.00

+RL.59.00

+RL.87.00

+RL.57.00

+RL.70.00

+RL.57.50

+RL.58.00

+RL.93.00

+RL.78.50

+RL.64.50

+RL.59.50

OAKDALE SOUTH
Lot 12 DP1178389

SBA ARCHITECTS

Oakdale West Estate

Horsley Park

Site Analysis Plan

0 60 300

1:3000 @ A1
1:6000 @ A3

23 Oct 2019

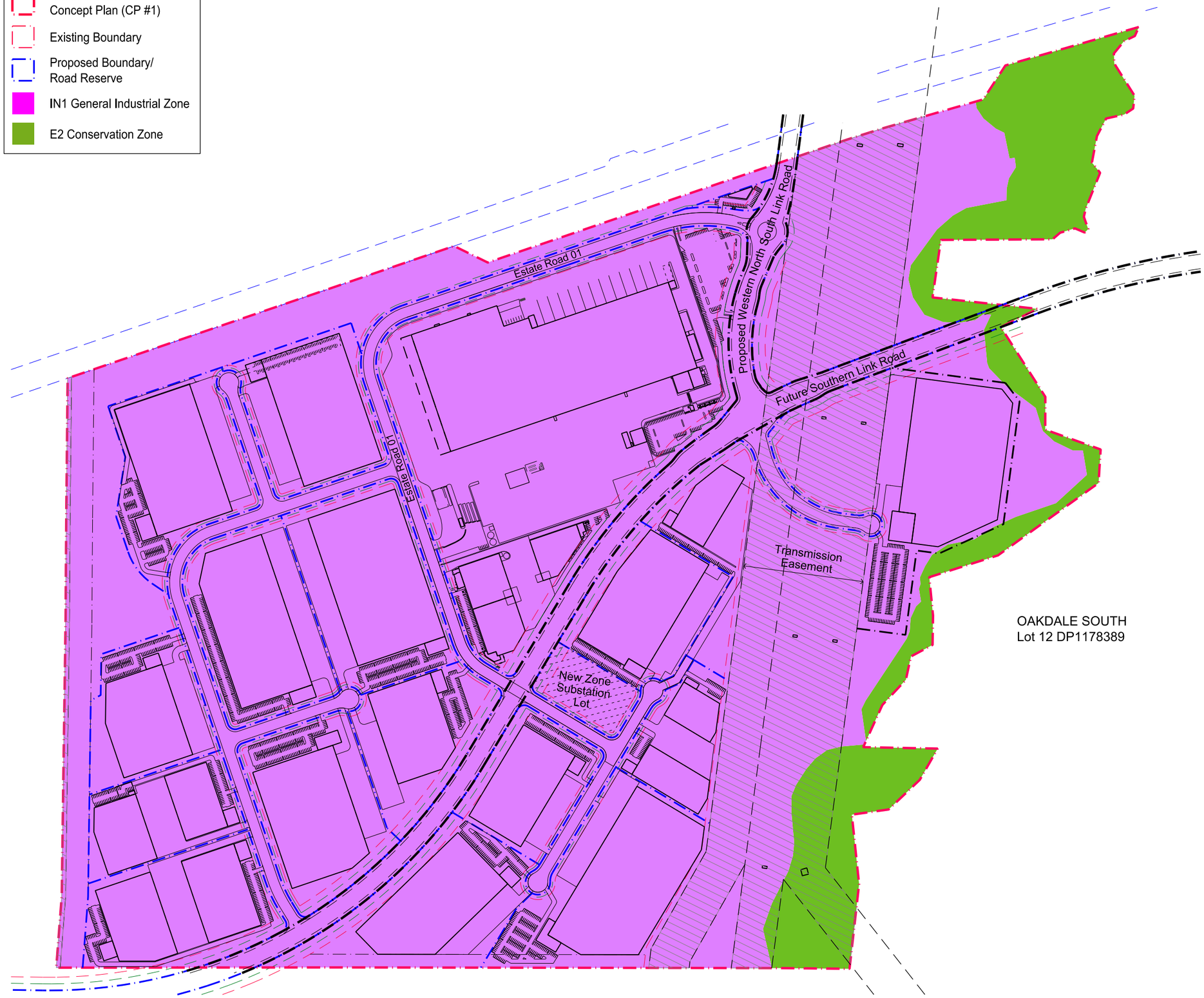
OAK MP08 (AG)
Job No 15117

Goodman

BRICKWORKS LIMITED

Legend

- Oakdale WEST Concept Plan (CP #1)
- Existing Boundary
- Proposed Boundary/ Road Reserve
- IN1 General Industrial Zone
- E2 Conservation Zone



SBA ARCHITECTS

Oakdale West Estate

Horsley Park

Existing Zoning

0 60 300

1:3000 @ A1
1:6000 @ A3

23 Oct 2019

OAK MP09 (AC)
Job No 15117

Goodman

BRICKWORKS LIMITED

OAKDALE SOUTH
Lot 12 DP1178389

SBA ARCHITECTS

Oakdale West Estate

Horsley Park

Building Staging plan (Indicative)

0 60 300

1:3000 @ A1
1:6000 @ A3

23 Oct 2019

OAK MP11 (AE)
Job No 15117

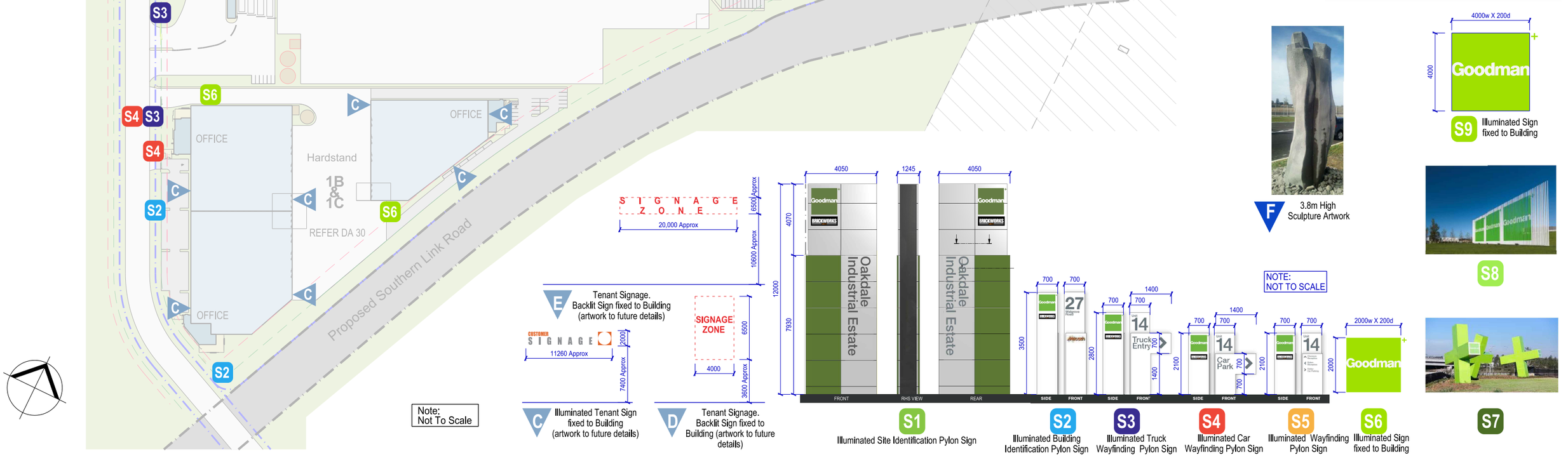
Goodman

BRICKWORKS LIMITED

Signage Legend

- S1 Identification - Site
- S2 Identification - Building
- S3 Wayfinding - Truck
- S4 Wayfinding - Car
- S5 Wayfinding - Pedestrian
- S6 Goodman Light Box (Type 1) on Warehouse
- S7 Goodman Signage
- S8 Goodman Signage Wall
- S9 Goodman Light Box (Type 2) on Warehouse
- C Customer Signage (Type 1)
- D Customer Signage (Type 2)
- E Customer Signage (Type 3)
- F Sculpture Artwork

Boundary
Landscape Setback
Building Setback
Estate Road 01
Hardstand
1A
REFER DA 10
OFFICE
Hardstand
Proposed Western North South Link Road
20m Setback Landscape
20m Setback Building
OFFICE
OFFICE
Hardstand
1B & 1C
REFER DA 30
OFFICE
Proposed Southern Link Road



3.8m High Sculpture Artwork

Illuminated Sign fixed to Building

S8

S7

SBA ARCHITECTS

Oakdale West Estate

Horsley Park

Signage Precinct 1 Plan

0 25 125

1:1250 @ A1
1:2500 @ A3

23 Oct 2019

OAK MP12 (AC)
Job No 15117

Goodman

BRICKWORKS LIMITED

Legend

Defendable Space

Proposed Bridge

Proposed Western North South Link Road, Subject to Just Terms Land Acquisition.

Proposed Western North South Link Rd

Biodiversity Lot 1

'Possible future Link Road by others, as depicted on SEPP Transport Infrastructure Map, subject to Just Terms land acquisition'.

30m Wide Road Reserve

30.9m Wide Road Reserve

Aecom Concept Alignment (Ref 60301100-00-FIG-PL0001 TO PL0003)

Proposed Future Development

Estate Road 01

Future Southern Link Road

Minimum 7.5m wide Defendable Space from Boundary

6000

Biodiversity Lot 3

PRECINCT 2

2A

2B

1A

PRECINCT 1

Estate Road 01

4D

5A

PRECINCT 5

OAKDALE SOUTH Lot 12 DP1178389

Minimum 50m wide Defendable Space by width of road & building set back.

3A

3B

PRECINCT 3

1B & 1C

4C

Transmission Easement

Minimum 7.5m wide Defendable Space from Boundary

Services Lot (Substation)

2E

3C

4G

Biodiversity Lot 5

Minimum 7.5m wide Defendable Space from Boundary

2F

PRECINCT 2

3D

4B

PRECINCT 4

4F

Minimum 12m wide Defendable Space from Boundary

2G

4A

4E

Minimum 20m wide Defendable Space from Estate Boundary

SBA ARCHITECTS

Oakdale West Estate

Horsley Park

Fire Protection Plan

0 60 300

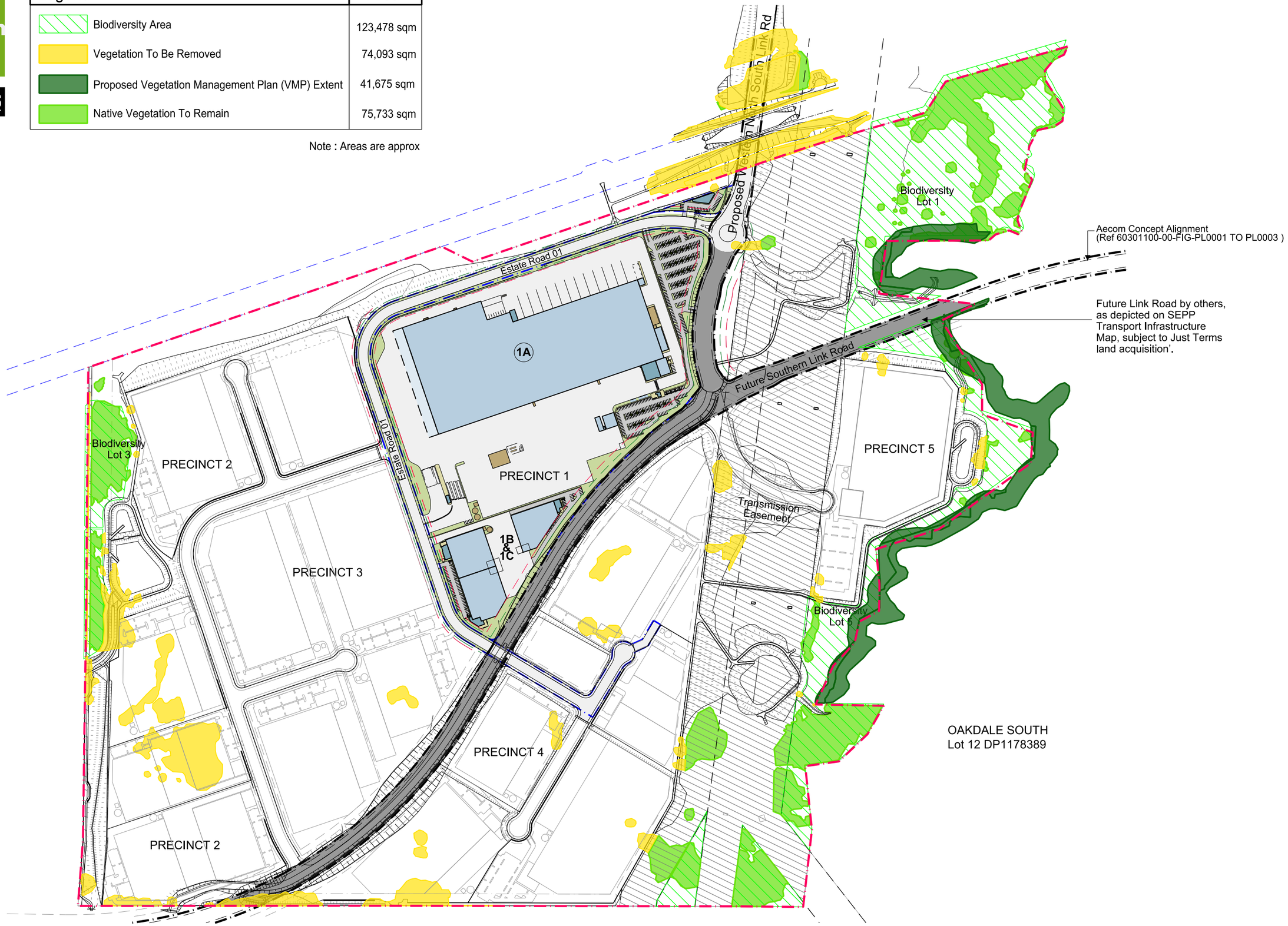
1:3000 @ A1
1:6000 @ A3

23 Oct 2019

OAK MP13 (AE)
Job No 15117

Legend	Area
Biodiversity Area	123,478 sqm
Vegetation To Be Removed	74,093 sqm
Proposed Vegetation Management Plan (VMP) Extent	41,675 sqm
Native Vegetation To Remain	75,733 sqm

Note : Areas are approx



Oakdale West Estate

Horsley Park

Biodiversity Management Plan

0 60 300

1:3000 @ A1
1:6000 @ A3

23 Oct 2019

OAK MP14 (AM)
Job No 15117

Goodman

BRICKWORKS LIMITED

3 16 | 2 16 | 1 16

LANDSCAPE PROPOSED SETBACK 6000

BOUNDARY FNC-2

PED ACCESS & GATE

CARS AUTOMATIC SLIDING GATE

RL. 68.400

SUPER B-DOUBLE INBOUND STAGING AREA

RL. 67.700

RL. 68.600

VALVE RM

VALVE RM

HIGH BAY ROOF ACCESS

RL. 69.000

RW

RL. 69.400

LPG TANK

PARKING & AWNING

TANK MIN 8M FROM BUILDING

INBOUND

35M AWNING OVER

RW

RL. 68.700

3M AWNING OVER

VALVE RM

7 X RECESSED DOCKS

RECEIVING OFFICE

PALLET STORAGE

LOUVRE WALL

AWNING END WALL

RL. 70.000

RSD-7 RR-11 RR-10 RSD-6 RR-9 RR-8 RSD-5 RSD-4 RR-7 RR-6 RSD-3 RR-5 RR-4 RSD-2 RR-3 RR-2 RSD-1 RR-1

COMPUTER ROOM 2

RECOUP AREA 50M²

TECH CENTRE RECEIVING
-12 X TRUCK POSITIONS
- 7 x ROLLER SHUTTER DOORS
- 11 X RAPID RISER DOORS

HIGH BAY WAREHOUSE
RL. 69.000 (+/- 1000)

C/L HI-BAY RIDGE

PRIME MOVER PARKING (8)

FNC-2

300 CAR PARK SPACES

STAGE 2 FUTURE EXPANSION

FUTURE RACKING SHOWN INDICATIVELY

LOW BAY WAREHOUSE
RL. 70.000 (+/- 1000)

RL. 69.200

C/L LOW BAY RIDGE

ENERGY COMPLEX 2

CARS AUTOMATIC SLIDING GATE

SPARE PARTS STORE

VALVE ROOM 6M X 6M

DG STORE

RL. 69.000

RL. 68.700

72 X RECESSED DOCKS

LOW BAY ROOF ACCESS

RSD

WH ACCESS

RL. 68.700

3M AWNING OVER

VALVE RM

OUTBOUND

VALVE RM

2 X COMPACTORS

3 X COMPACTORS

OFFICE
RL. 70.000
(+/- 1000)

MHE

RW

ENT.

CANTEEN DELIVERIES

FNC-2

INBOUND STAGING AREA
B-DOUBLE TRAILER (28)

RL. 68.550

INBOUND

RL. 89.200

BOOM GATES

SKYBRIDGE OVER

REFUELING AREA (AWNING OVER)

RL. 70.000 (+/- 1000)

ENERGY COMPLEX 1

RL. 70.000 (+/- 1000)

TRAILER WASH

RL. 70.000 (+/- 1000)

TRAILER WORKSHOP

RL. 70.000 (+/- 1000)

SMOKERS AREA AWNING OVER

BIKE RACKS & AWNING OVER

WITRON BASALT PYLON SIGN

FNC-2

FNC-2

FNC-2

TRAILER PARKING (36)

TRAILER PARKING (7)

3M AWNING

166 CAR PARK SPACES

MBIKES

STAIRS & LIFT

LIFT

REFUELING

TANKS

LIGHTPOLE & ARMCO

LIGHTPOLE & ARMCO

LIGHTPOLE & ARMCO

LIGHTPOLE & ARMCO

PAINT

3M AWNING

TRAILER PARKING (12)

TRAILER PARKING (5)

PRIME MOVER PARKING (14)

BUILDING SETBACK

LANDSCAPE SETBACK

BOUNDARY FNC-2

OUTBOUND

RL. 69.800

4 X WEIGH BRIDGES

WEIGH BRIDGE

1 X WEIGHBRIDGE LOCATION

TRAILER PARKING (16)

TRAILER PARKING (40)

PRIME MOVER PARKING (34)

GATE HOUSE

SLIDING GATE LOCATION

BOOM GATES

RL. 72.900

TRUCK ENTRY

TRUCK EXIT

PUMP RM.

TANK

TANK

BRIGADE PARKING

TRAILER PARKING (48)

RL. 73.200

RL. 73.600

RL. 73.600

SDP
PROJECT BASE POINT

(6) CAR SPACES FOR SECURITY GATEHOUSE STAFF

PUMP ROOM AND TANKS PAINTED TO MATCH COLORBOND MONUMENT

BOUNDARY FNC-1

Future Southern Link Road

Proposed Western North South Link Rd

7500 LANDSCAPE PROPOSED SETBACK

TO BDY 15140

2360 | 3300 | 1700 | 9340 | 3720 | 9340 | 3820 | 9340 | 4480 | 187060

68190 TO BDY | 16860 | 137210 | 39912 | 218298 | 395420

Development Area Schedule

Lot 1A

Site Area	187,270 sqm
Warehouse (inc stage 2 expansion)	68,160 sqm
Office (3 Level)	2,646 sqm
Mezzanines (inc stage 2 expansion)	32,402 sqm
Outbuildings	4,004 sqm
(inc Dock office, Trailer Workshop, Trailer wash, D.G. Store, Computer Room, Gatehouse, Energy Complex, Refueling area, Battery charge, Skybridge & Lobby)	
Total Building Area	107,212 sqm
Awning	8,620 sqm
Site Cover (exc. awning)	57 %
Floor Space Ratio	0.57 : 1
Hardstand Area	88,610 sqm
Light Duty Area	14,030 sqm
Prime Mover Parking	54
Trailer Parking	164
Carparking	472
Motorcycle Parking	6

LEGEND

- Site Boundary
- Lot Boundary
- Building 7.5m Setback
- Landscape 3.75m Setback
- FNC-1 Chainwire Fencing
- FNC-2 Palisade Fencing
- RW Retaining Wall

SBA ARCHITECTS

Oakdale West Estate

Horsley Park

Proposed Industrial Facility - Building 1A

Site Plan

1 : 750 @ B1

23rd Oct 2019

OAK-1A-DA- 10 (V)

Job No 15117

Goodman

BRICKWORKS LIMITED

VALVE ROOM

VALVE ROOM

3/16

HIGH BAY STAIR ACCEES

2/16

1/16

LPG CANOPY

TRUCK POSITIONS BELOW

3M AWNING

AWNING ROOF

MAINTENANCE WALKWAY

STEP IN ROOF

STEP IN ROOF

COMPUTER ROOM 2

HIGH BAY ROOF

C/L HI-BAY RIDGE

FUTURE SOLAR PANEL LOCATION

STEP IN ROOF

LOW BAY ROOF

ENERGY COMPLEX 2 ROOF

C/L LOW BAY RIDGE

VALVE ROOM

DG STORE ROOF

LOW BAY STAIR ACCESS

2/17

1/17

ROOF MOUNTED A/C UNITS SHOWN INDICATIVELY TO MECH.ENG DETAIL DESIGN WITH ACOUSTIC SCREENING IN ACCORDANCE WITH NOISE ASSESSMENT REPORT

HIGH BAY 137525

VALVE ROOM

3M AWNING

LOW BAY 257895

VALVE ROOM

OFFICE ROOF

SKYBRIDGE

LIFT & STAIRS

REFUELING AREA

ENERGY COMPLEX 1

TRAILER WORKSHOP

TRAILER WASH

GATEHOUSE

LEGEND

BG	Box Gutter
EG	Eaves Gutter
MR	Metal Roof Sheeting
TR	Translucent Sheeting
EJ	Expansion Joint

SBA ARCHITECTS

Oakdale West Estate

Horsley Park

Proposed Industrial Facility - Building 1A

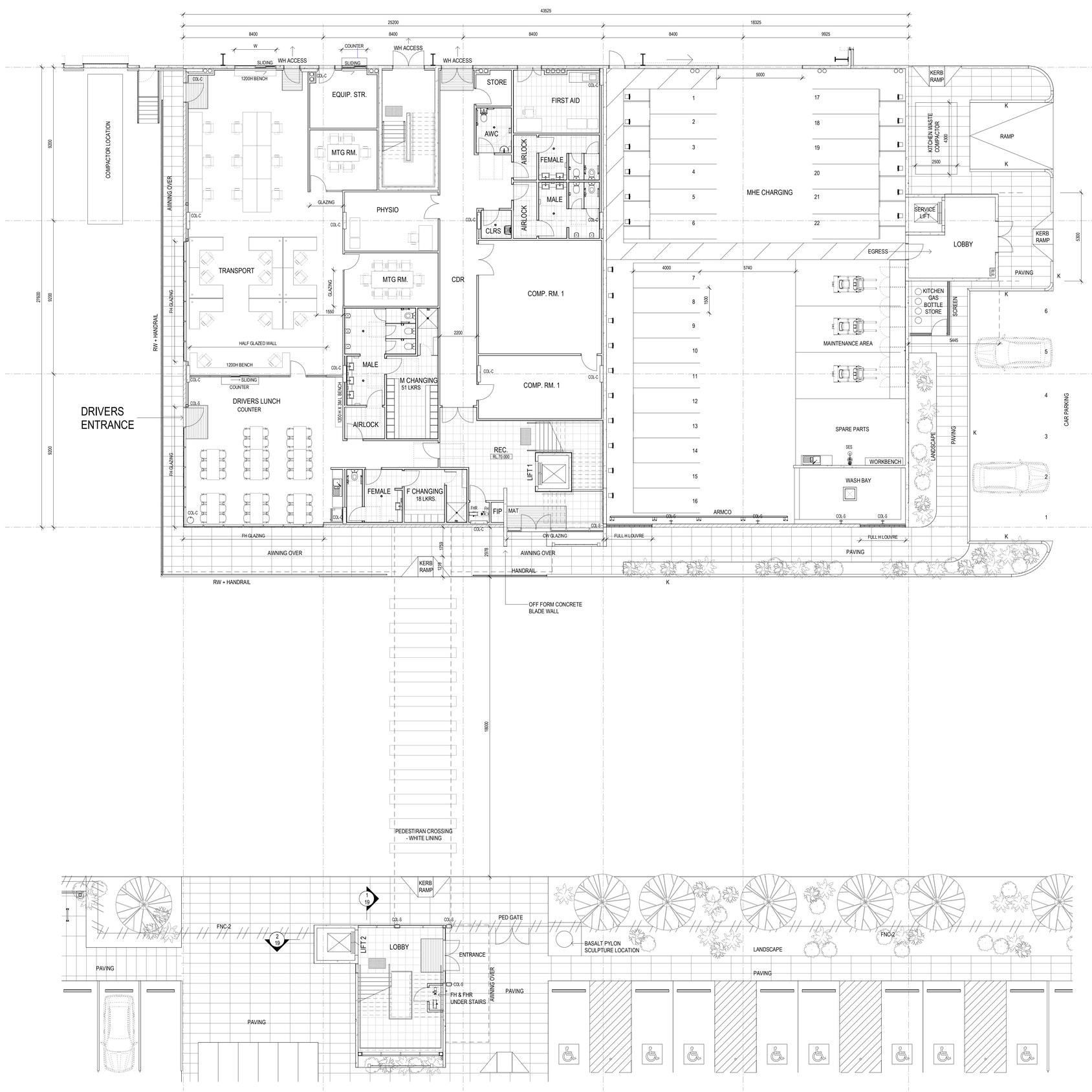
Roof Plan

1 : 500 @ B1

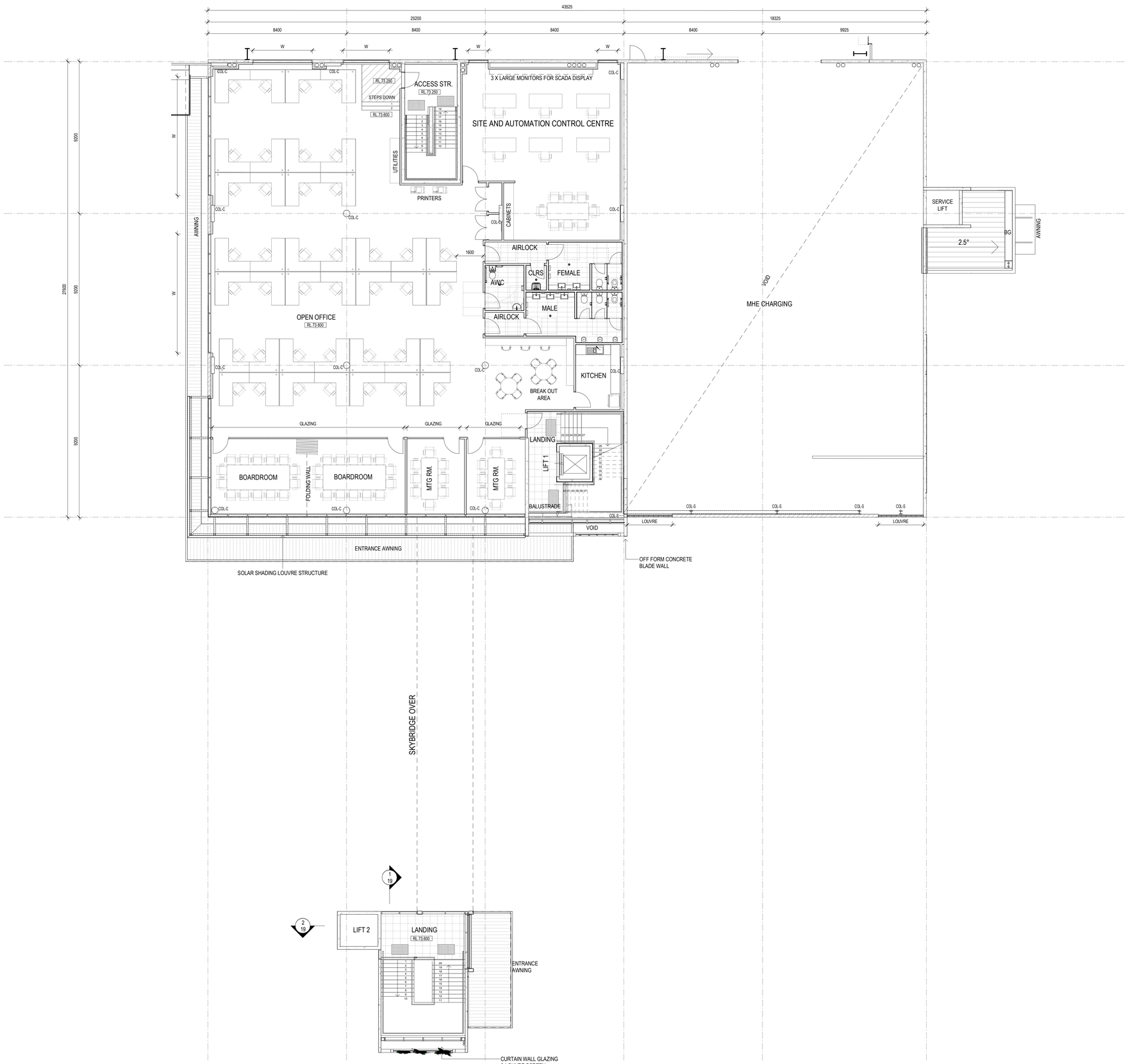
23rd Oct 2019

OAK-1A-DA- 11 (N)

Job No 15117



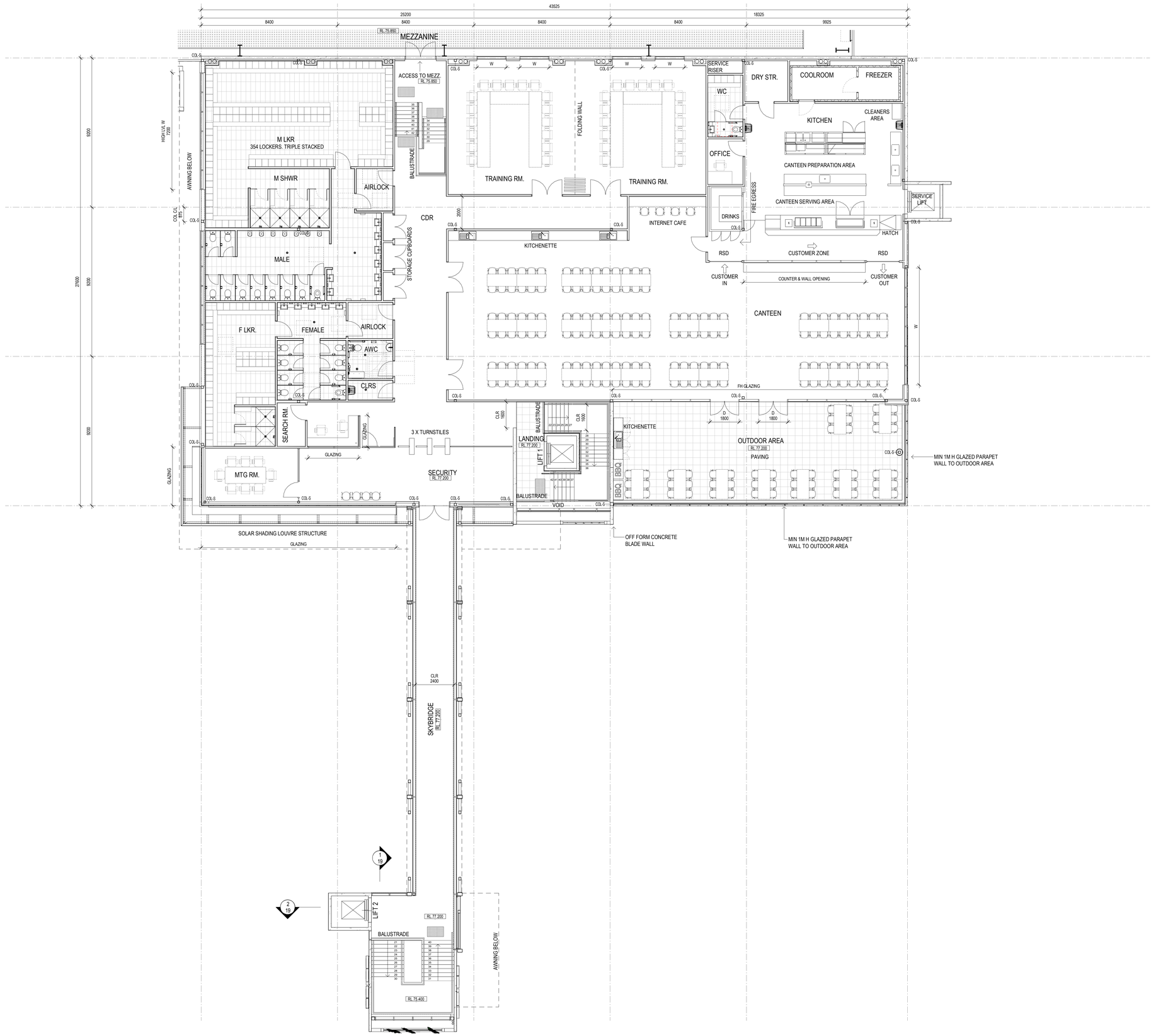
SBA ARCHITECTS	Oakdale West Estate Horsley Park	Proposed Industrial Facility - Building 1A	**Office - Ground Floor Plan**	1 : 100 @ B1 23rd Oct 2019	OAK-1A-DA-12 (M) Job No 15117

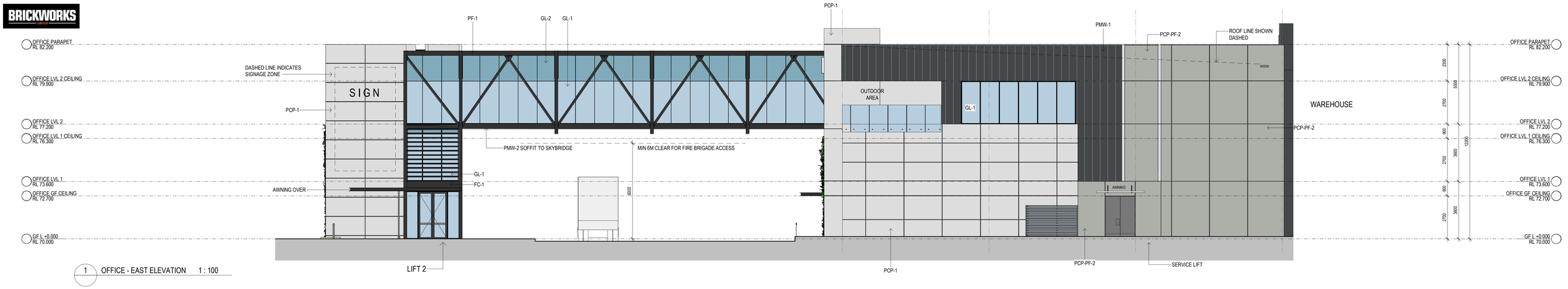


SBA ARCHITECTS	Oakdale West Estate	Proposed Industrial Facility - Building 1A	**Office - First Floor Plan**	1 : 100 @ B1
	Horsley Park			23rd Oct 2019
				OAK-1A-DA-13 (M)
				Job No 15117

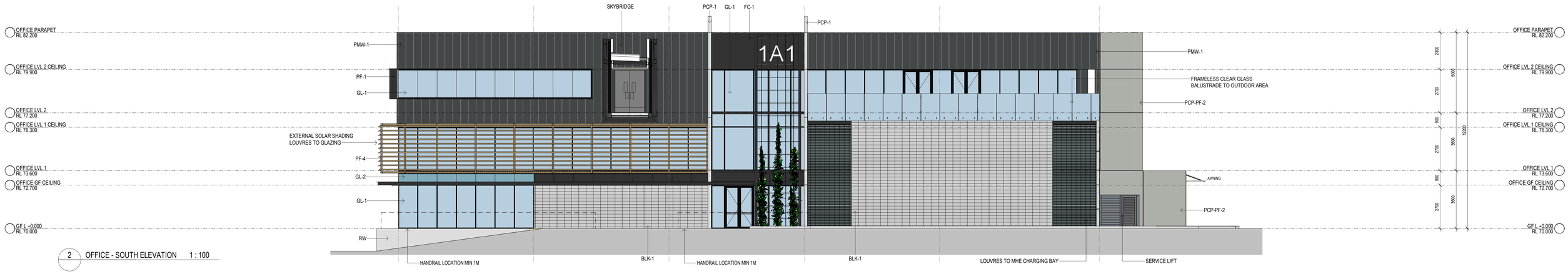
Goodman

BRICKWORKS LIMITED

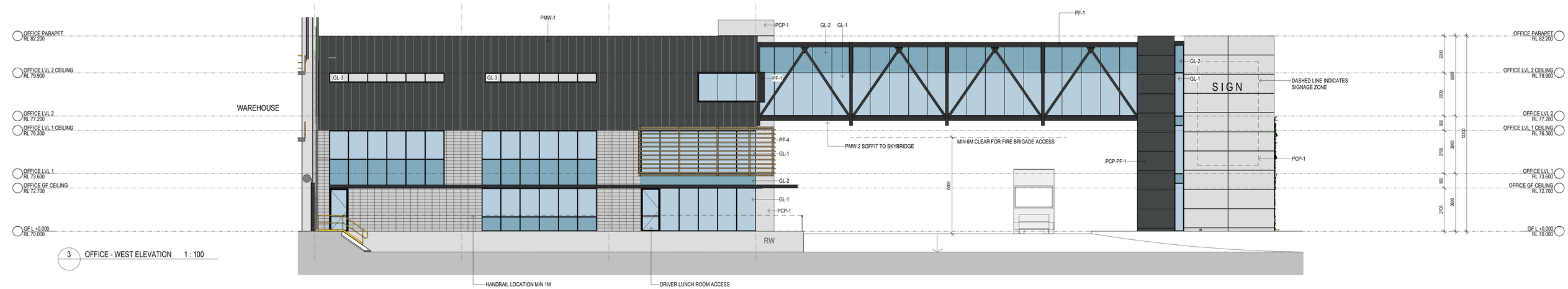




1 OFFICE - EAST ELEVATION 1 : 100



2 OFFICE - SOUTH ELEVATION 1 : 100



3 OFFICE - WEST ELEVATION 1 : 100

INDICATIVE EXTERNAL FINISHES LEGEND

- **BLK-1** STACKED BOND BLOCK LIGHT GREY
- **FC-1** PREFINISHED FIBRE CEMENT WALL SHEETING
- **GL-1** GLAZING DARK GREY TINT
- **GL-2** SPANDREL GLAZING DARK GREY (OPAQUE)
- **GL-3** PRIVACY GLAZING - TRANSLUSCENT
- **GL-4** CLEAR GLASS
- **IWP-1** INSULATED WALL PANEL COLORBOND - MONUMENT
- **IWP-2** INSULATED WALL PANEL COLORBOND - SHALE GREY
- **IWP-3** INSULATED WALL PANEL COLORBOND - WHITE
- **MDR-1** METAL DECK ROOFING COLORBOND - SURFMIST
- **MDR-2** METAL DECK ROOFING COLORBOND - COOLMAX
- **PCP-1** PRECAST CONCRETE PANELS OFF FORM CONCRETE
- **PCP-PF-1** PRECAST CONCRETE PANELS PAINT FINISH - MONUMENT
- **PCP-PF-2** PRECAST CONCRETE PANELS PAINT FINISH - MID GREY
- **PF-1** PAINT FINISH - 1 MONUMENT
- **PF-2** PAINT FINISH - 2 MID GREY
- **PF-3** PAINT FINISH - 3 SHALE GREY
- **PF-4** ANODISED BRONZE FINISH
- **PMW-1** PREFINISHED METAL WALL SHEETING MONUMENT (OR SIMILAR)
- **PMW-2** PREFINISHED METAL WALL SHEETING DARK GREY (OR SIMILAR)
- **PMW-3** PREFINISHED METAL WALL SHEETING WHITE (OR SIMILAR)
- **PMW-4** PREFINISHED METAL WALL SHEETING "GOODMAN GREEN"
- **TRS-1** TRANSLUCENT ROOF SHEET - OPAL COLOUR (OR SIMILAR)
- **TRS-2** DANPALON TRANSULCENT WALL CLADDING - OPAL COLOUR

SBA ARCHITECTS

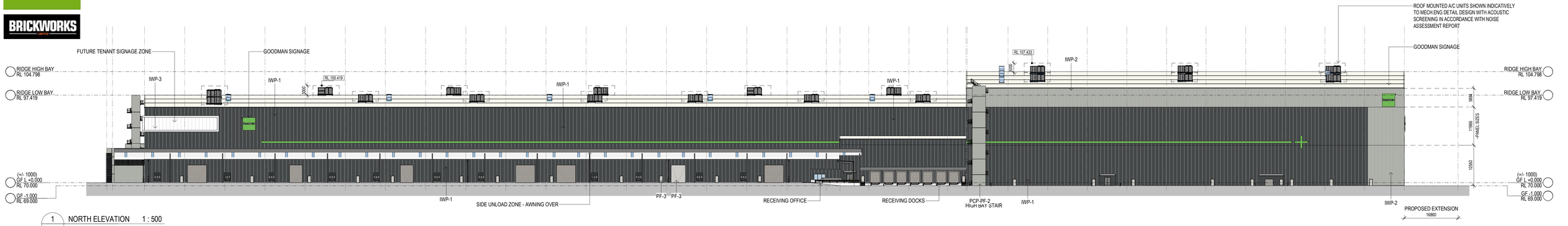
Oakdale West Estate
Horsley Park

Proposed Industrial Facility - Building 1A

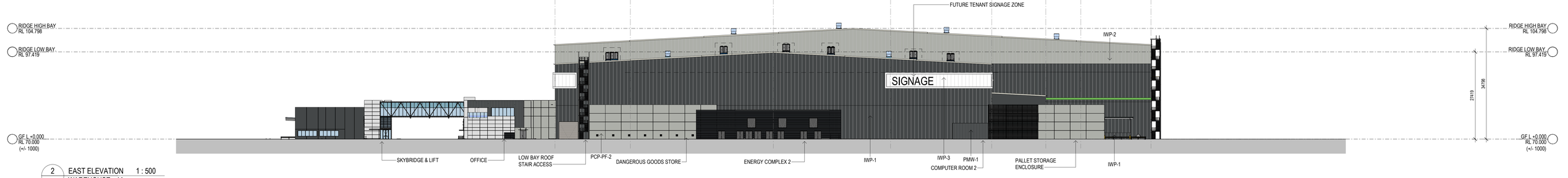
Office Elevations

As indicated @ B1
23rd Oct 2019

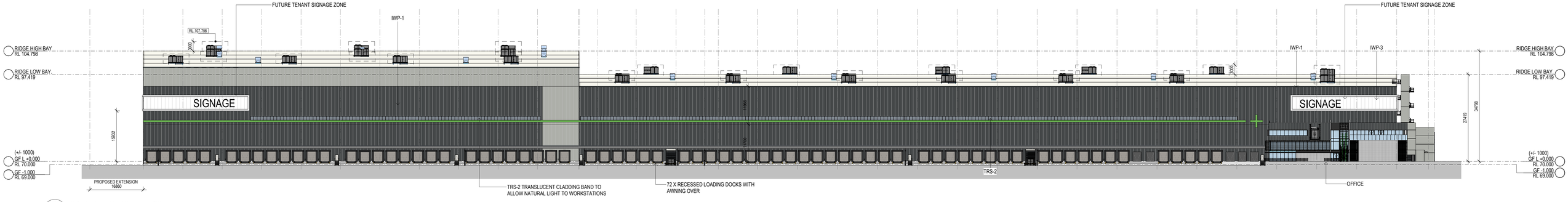
OAK-1A-DA-14 (M)
Job No 15117



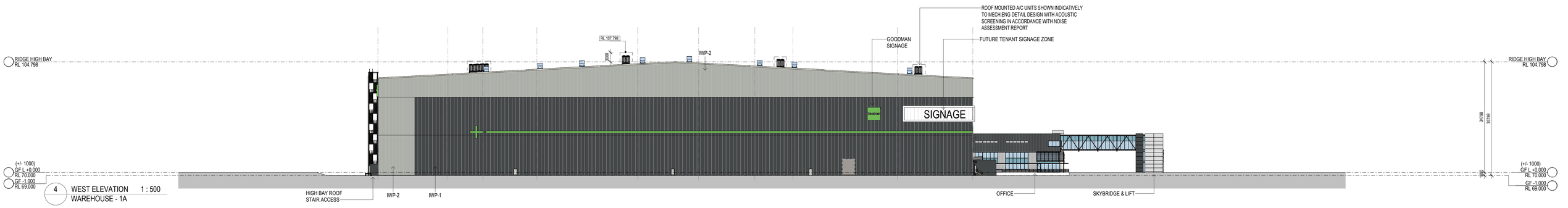
1 NORTH ELEVATION 1 : 500
WAREHOUSE - 1A



2 EAST ELEVATION 1 : 500
WAREHOUSE - 1A



3 SOUTH ELEVATION 1 : 500
WAREHOUSE - 1A



4 WEST ELEVATION 1 : 500
WAREHOUSE - 1A

INDICATIVE EXTERNAL FINISHES LEGEND

- **BLK-1** STACKED BOND BLOCK LIGHT GREY
- **FC-1** PREFINISHED FIBRE CEMENT WALL SHEETING
- **GL-1** GLAZING DARK GREY TINT
- **GL-2** SPANDREL GLAZING DARK GREY (OPAQUE)
- **GL-3** PRIVACY GLAZING - TRANSLUSCENT
- **GL-4** CLEAR GLASS
- **IWP-1** INSULATED WALL PANEL COLORBOND - MONUMENT
- **IWP-2** INSULATED WALL PANEL COLORBOND - SHALE GREY
- **IWP-3** INSULATED WALL PANEL COLORBOND - WHITE
- **MDR-1** METAL DECK ROOFING COLORBOND - SURFMIST
- **MDR-2** METAL DECK ROOFING COLORBOND - COOLMAX
- **PCP-1** PRECAST CONCRETE PANELS OFF FORM CONCRETE
- **PCP-PF-1** PRECAST CONCRETE PANELS PAINT FINISH - MONUMENT
- **PCP-PF-2** PRECAST CONCRETE PANELS PAINT FINISH - MID GREY
- **PF-1** PAINT FINISH - 1 MONUMENT
- **PF-2** PAINT FINISH - 2 MID GREY
- **PF-3** PAINT FINISH - 3 SHALE GREY
- **PF-4** ANODISED BRONZE FINISH
- **PMW-1** PREFINISHED METAL WALL SHEETING MONUMENT (OR SIMILAR)
- **PMW-2** PREFINISHED METAL WALL SHEETING DARK GREY (OR SIMILAR)
- **PMW-3** PREFINISHED METAL WALL SHEETING WHITE (OR SIMILAR)
- **PMW-4** PREFINISHED METAL WALL SHEETING "GOODMAN GREEN"
- **TRS-1** TRANSLUCENT ROOF SHEET - OPAL COLOUR (OR SIMILAR)
- **TRS-2** DANPALON TRANSLUCENT WALL CLADDING - OPAL COLOUR

SBA ARCHITECTS

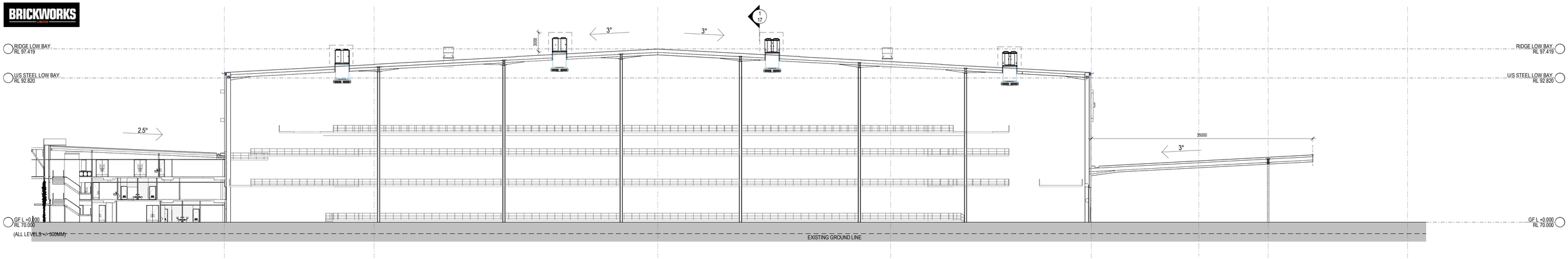
Oakdale West Estate
Horsley Park

Proposed Industrial Facility - Building 1A

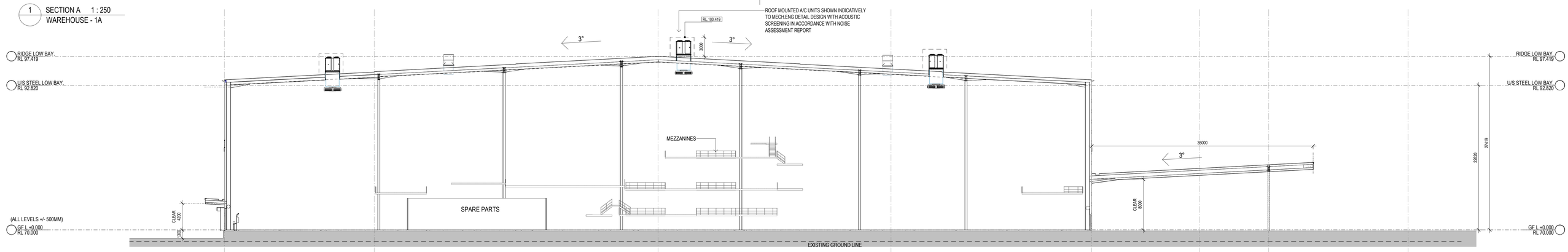
Warehouse Elevations

As indicated @ B1
23rd Oct 2019

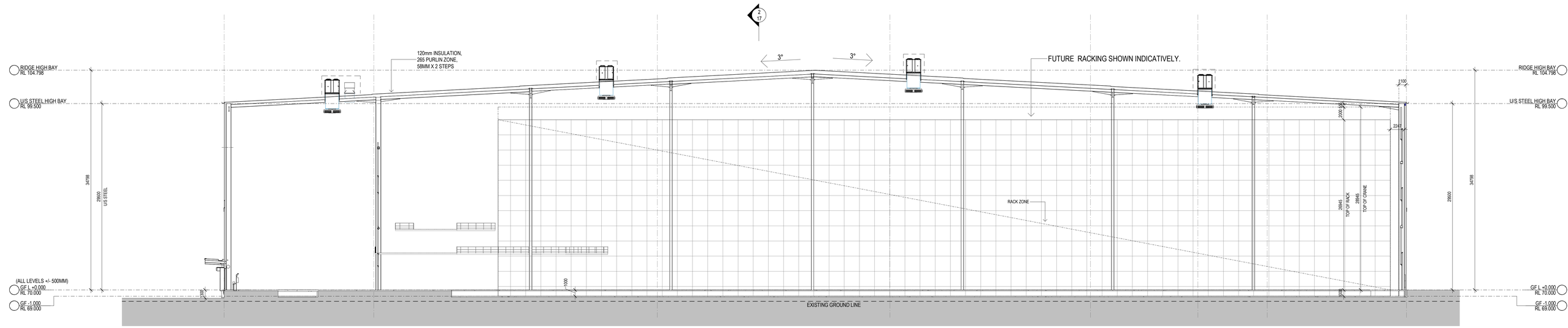
OAK-1A-DA- 15 (N)
Job No 15117



1 SECTION A 1 : 250
WAREHOUSE - 1A



2 SECTION B. 1 : 250
WAREHOUSE - 1A



3 SECTION C 1 : 250
WAREHOUSE - 1A

SBA ARCHITECTS

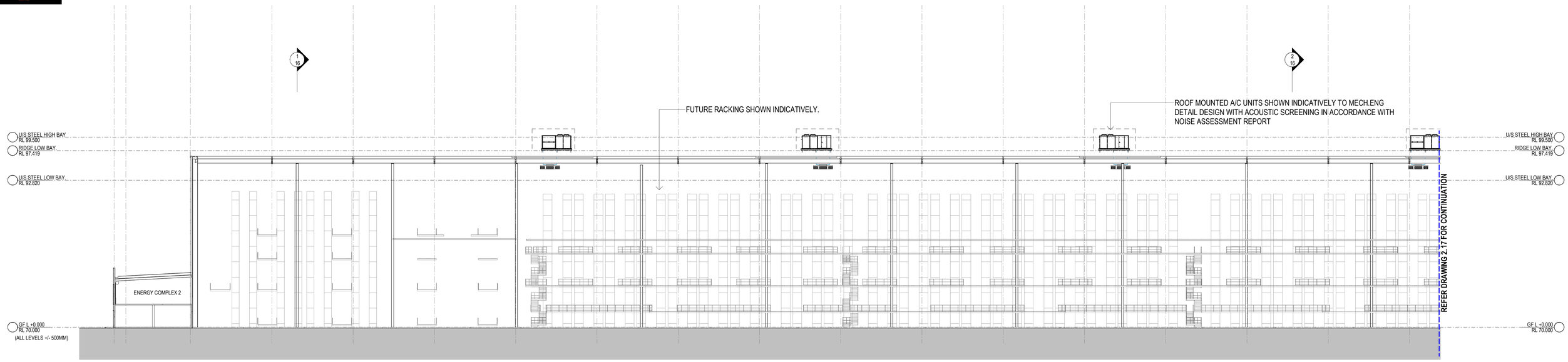
Oakdale West Estate
Horsley Park

Proposed Industrial Facility - Building 1A

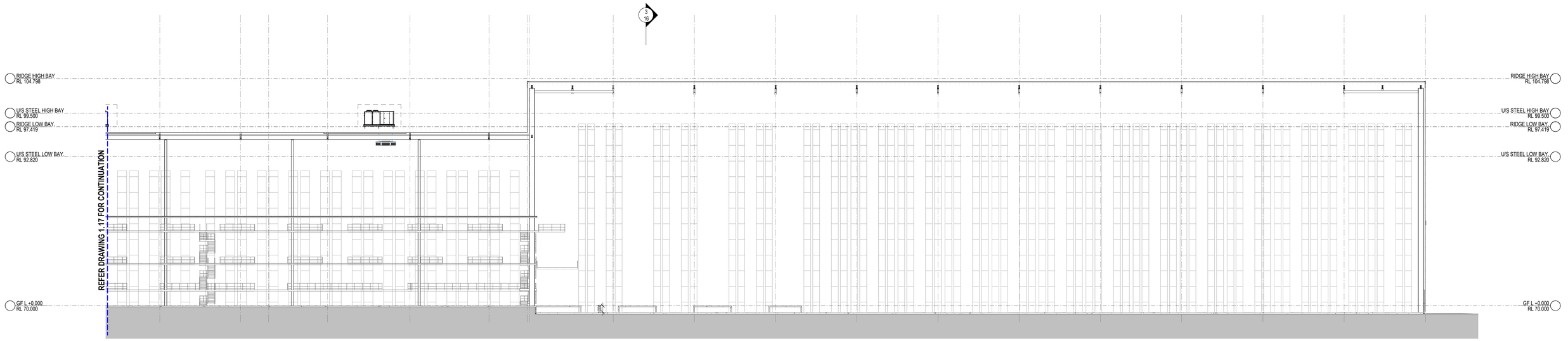
Warehouse Sections - 1

1 : 250 @ B1
23rd Oct 2019

OAK-1A-DA- 16 (N)
Job No 15117



1 SECTION D - PART 1 1 : 250
WAREHOUSE - 1A



2 SECTION D - PART 2 1 : 250
WAREHOUSE - 1A

SBA ARCHITECTS

Oakdale West Estate
Horsley Park

Proposed Industrial Facility - Building 1A

Warehouse Sections - 2

1 : 250 @ B1
23rd Oct 2019

OAK-1A-DA- 17 (H)
Job No 15117

Goodman

BRICKWORKS LIMITED

Oakdale West Estate

Horsley Park

Proposed Industrial Facility - Building 1A

Warehouse Plan

1 : 500 @ B1

23rd Oct 2019

OAK-1A-DA- 18 (H)

Job No 15117

SBA ARCHITECTS

STAGE 2 FUTURE EXPANSION

FUTURE EXPANSION 16950

HIGH BAY WAREHOUSE
RL 69.000 (+/- 500)
RECESSED SLAB

LOW BAY WAREHOUSE
RL 70.000 (+/- 500)

INBOUND

OUTBOUND

CENTELINE HI-BAY RIDGE

CENTRELINE LOW-BAY RIDGE

HIGH BAY ROOF ACCESS STAIR

LOW BAY ROOF ACCESS STAIR

VALVE ROOM 8M X 2.5M

VALVE ROOM 5M X 2.5M

VALVE ROOM 4M X 2M

VALVE ROOM 5M X 5M

TANK

RW ARMCO

3M AWNING OVER

AWNING OVER

7 X RECESSED DOCKS

72 X RECESSED DOCKS

RECEIVING OFFICE

LINE OF ROOF BOX GUTTER ABOVE

PALLET STORAGE

COMPUTER ROOM 2

TECH CENTRE RECEIVING
-12 X TRUCK POSITIONS
- 7 x ROLLER SHUTTER DOORS
- 11 X RAPID RISER DOORS

RECOUP AREA 50M²

PIT RL 69.000

STAIR 0 TO +5850

STAIR 0 TO +14350

STAIR 0 TO +6500

STAIR 0 TO +2450 TO +6500

STAIR 7 0 TO +6500

STAIR 3 0 TO +6500

STAIR 2 0 TO +5850

STEP PLATFORMS +630

RL -1000
TYPICAL RECESSED SLAB PITS

RL 69.000

FUTURE MEZZANINE PLATFORM +460

MEZZANINE PLATFORM +460

ENERGY COMPLEX 2

UPS

LV MAIN SWITCHBOARD

HV TRANS. & SWITCH GEAR

DG STORAGE

SLIDING DOOR

OFFICE ACCESS

RSD

RSD ACCESS TO COMPACTORS

2 X COMPACTORS

3 X COMPACTORS

VALVE ROOM

AWNING ABOVE SHOWN DASHED

3M AWNING ABOVE SHOWN DASHED

RL 70.000

RL 69.000

RL 68.900

RL 70.000

RL 68.900

RL 70.000

RL 68.900

RL 70.000

RL 69.000

RL 70.000

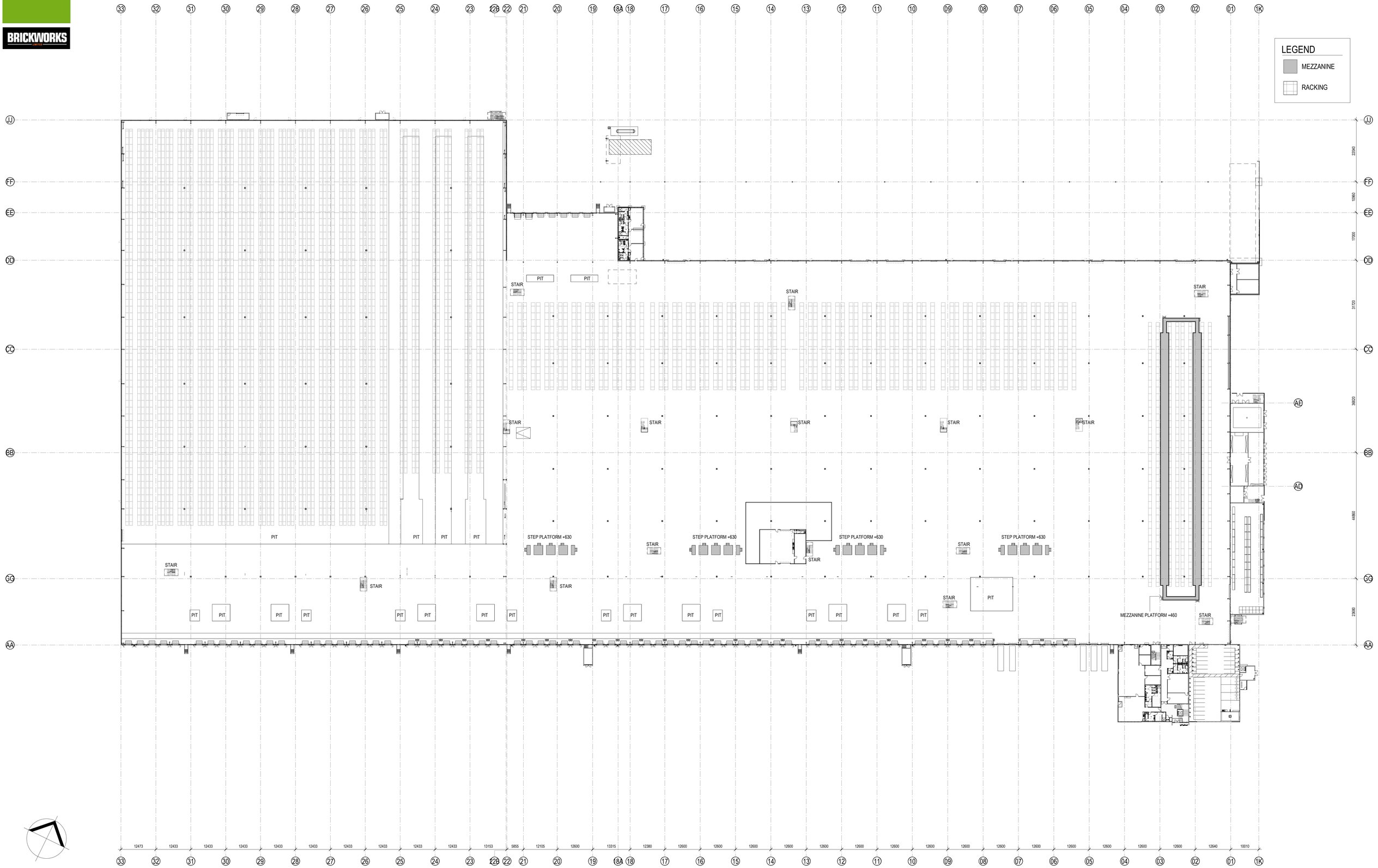
RL 69.000

RL 70.000

RL 69.000

Goodman

BRICKWORKS LIMITED



SBA ARCHITECTS	Oakdale West Estate	Proposed Industrial Facility - Building 1A	**Mezzanine Plan - 1**	1 : 500 @ B1
	Horsley Park			23rd Oct 2019

OAK-1A-DA18A (F)
Job No 15117

Goodman

BRICKWORKS LIMITED

LEGEND

MEZZANINE

RACKING

MEZZANINE PLATFORM +2450

MEZZANINE PLATFORM +2370

GANTRY ACCESS +3900

SERVICE PLATFORM +2370

PIT

STAIR

33 32 31 30 29 28 27 26 25 24 23 22B 22 21 20 19 18A 18 17 16 15 14 13 12 11 10 09 08 07 06 05 04 03 02 01 1K

JJ FF EE DD CC BB GG AA AE AD

12473 12433 12433 12433 12433 12433 12433 12433 12433 12433 12433 13153 5855 12105 12600 13315 12380 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12640 10010

22940 1980 17000 31720 39600 14560 23680

SBA ARCHITECTS

Oakdale West Estate

Horsley Park

Proposed Industrial Facility - Building 1A

Mezzanine Plan - 2

1 : 500 @ B1

23rd Oct 2019

OAK-1A-DA18B (F)

Job No 15117

Goodman

BRICKWORKS LIMITED

LEGEND

MEZZANINE

RACKING

EQUIPMENT PLATFORM +5350

EQUIPMENT PLATFORM +5350

EQUIPMENT PLATFORM +5350

EQUIPMENT PLATFORM +5350

MEZZANINE +5850

STAIR

STAIR

HBW

OPM2

STAIR

STAIR

STAIR

STAIR

STAIR

STAIR

MEZZANINE +6500

AIO 2

STAIR

STAIR

STAIR

STAIR

STAIR

STAIR

STAIR

MEZZANINE +5850

STAIR

STAIR

STAIR

SHIPPING

MEZZANINE +5850

STAIR

MEZZANINE +5850

33 32 31 30 29 28 27 26 25 24 23 22B 22 21 20 19 18A 18 17 16 15 14 13 12 11 10 09 08 07 06 05 04 03 02 01 1K

JJ FF EE DD CC BB GG AA AE AD

12473 12433 12433 12433 12433 12433 12433 12433 12433 12433 12433 12838 6170 12105 12600 13315 12380 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12640 10010

22940 10960 17000 31720 39820 44660 23680

Goodman

BRICKWORKS LIMITED

LEGEND

MEZZANINE

RACKING

HBW

OPM2

SHIPPING

AIO 2

STAIR

SERVICE MEZZANINE +8700

MEZZANINE +7000

MEZZANINE +7400

33 32 31 30 29 28 27 26 25 24 23 22B 22 21 20 19 18A 18 17 16 15 14 13 12 11 10 09 08 07 06 05 04 03 02 01 1K

12473 12433 12433 12433 12433 12433 12433 12433 12433 12433 12433 12838 6170 12105 12600 13315 12380 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12640 10010

JJ FF EE DD CC BB GG AA AE AD

22940 10960 17000 31720 38820 44860 29360

SBA ARCHITECTS

Oakdale West Estate

Horsley Park

Proposed Industrial Facility - Building 1A

Mezzanine Plan - 4

1 : 500 @ B1

23rd Oct 2019

OAK-1A-DA18D (F)

Job No 15117

Goodman

BRICKWORKS LIMITED

LEGEND

MEZZANINE

RACKING

HBW

OPM2

SERVICE MEZZANINE +10400

MEZZANINE +11500

STAIR

AIO 2

MEZZANINE +9600

MEZZANINE +10000

MEZZANINE +8400

MEZZANINE +10660

SERVICE MEZZANINE +9600

SHIPPING

12473 12433 12433 12433 12433 12433 12433 12433 12433 12433 12433 12838 6170 12105 12600 13315 12380 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12640 10010

22940 10960 17000 31720 38820 44860 23830

SBA ARCHITECTS

Oakdale West Estate

Horsley Park

Proposed Industrial Facility - Building 1A

Mezzanine Plan - 5

1 : 500 @ B1

23rd Oct 2019

OAK-1A-DA18E (F)

Job No 15117

Goodman

BRICKWORKS LIMITED

LEGEND

MEZZANINE

RACKING

OPM2

SERVICE MEZZANINE +13700

HBW

AIO 2

MEZZANINE +14350

SHIPPING

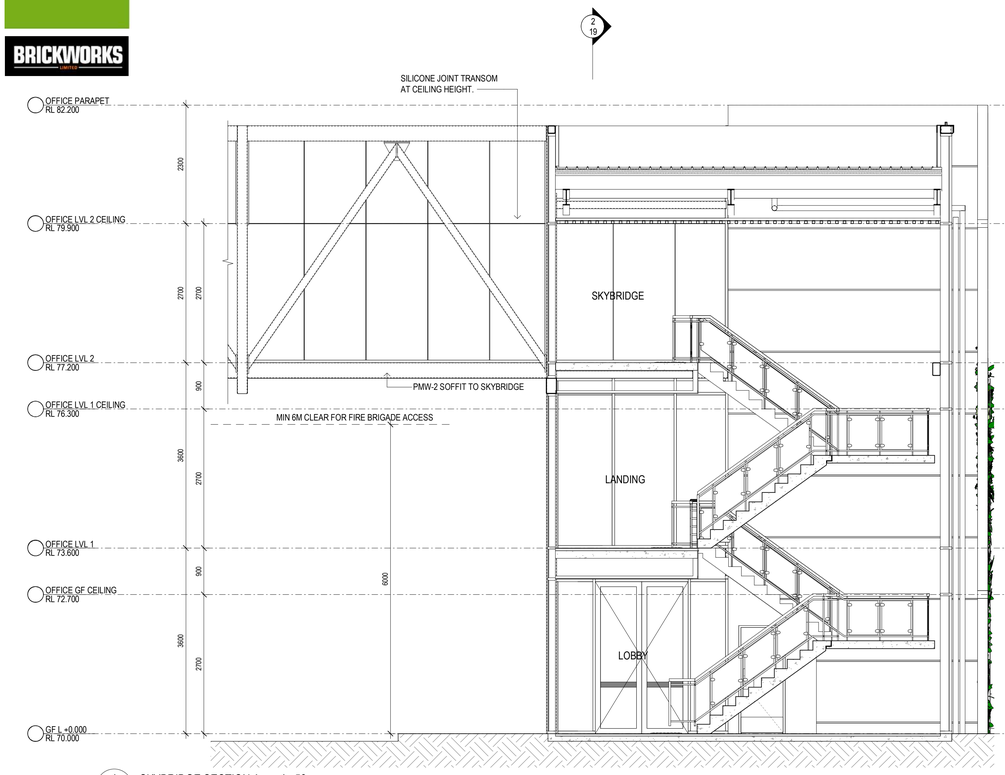
MEZZANINE +14350

12473 12433 12433 12433 12433 12433 12433 12433 12433 12433 12433 13153 5855 12105 12600 13315 12380 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12600 12640 10010

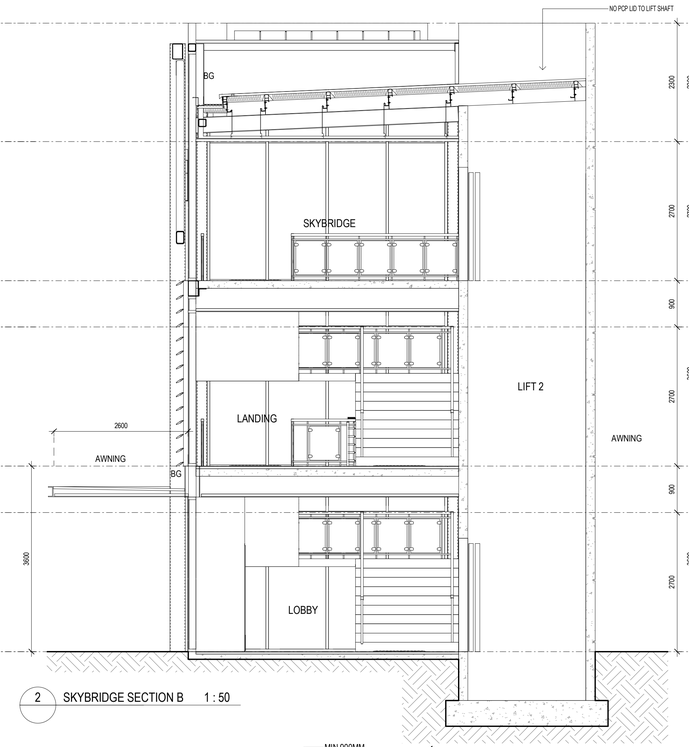
22040 10960 11000 31720 38820 44880 23680

Goodman

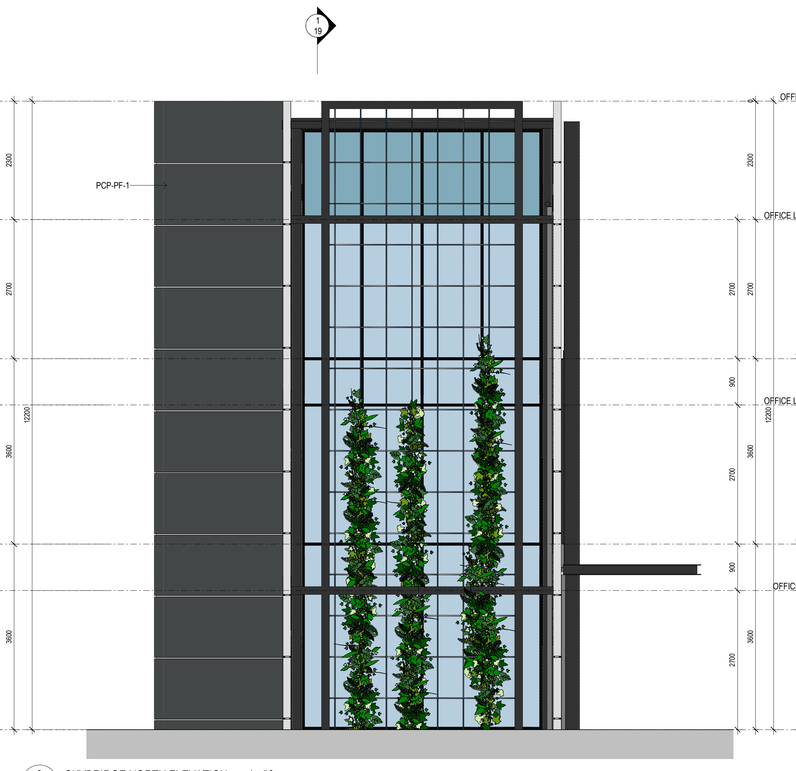
BRICKWORKS LIMITED



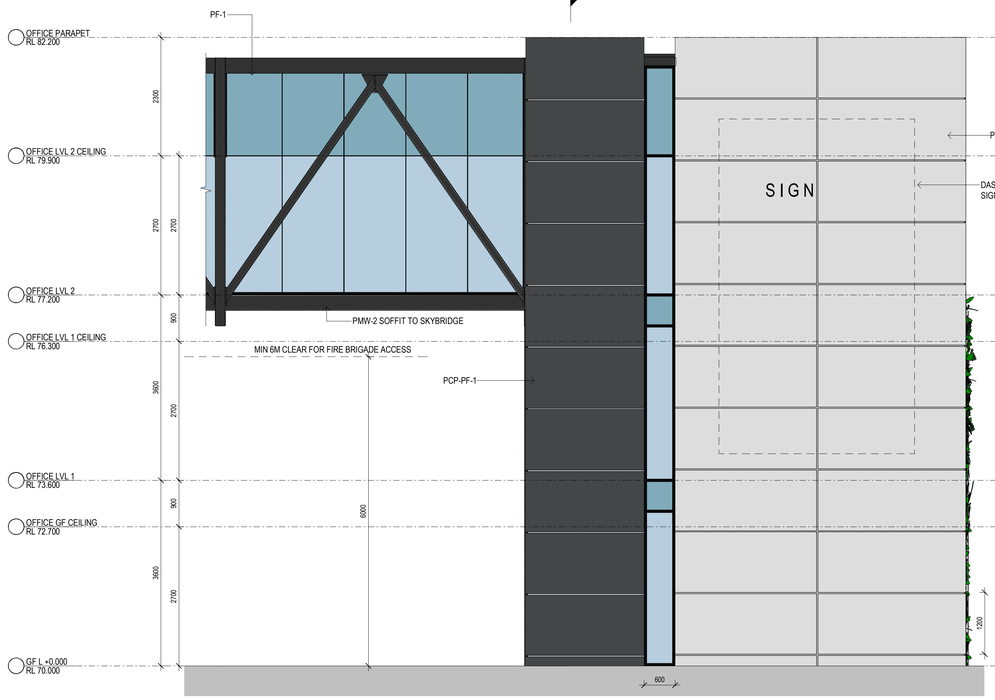
1 SKYBRIDGE SECTION A 1 : 50



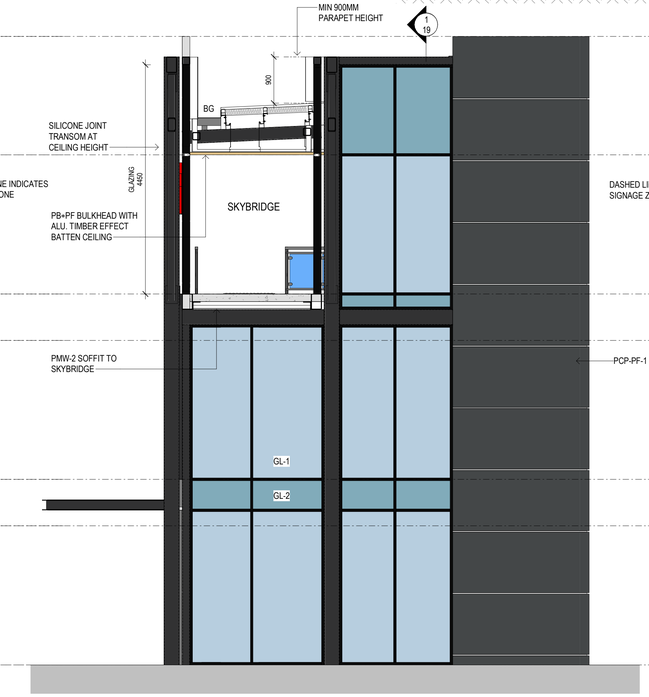
2 SKYBRIDGE SECTION B 1 : 50



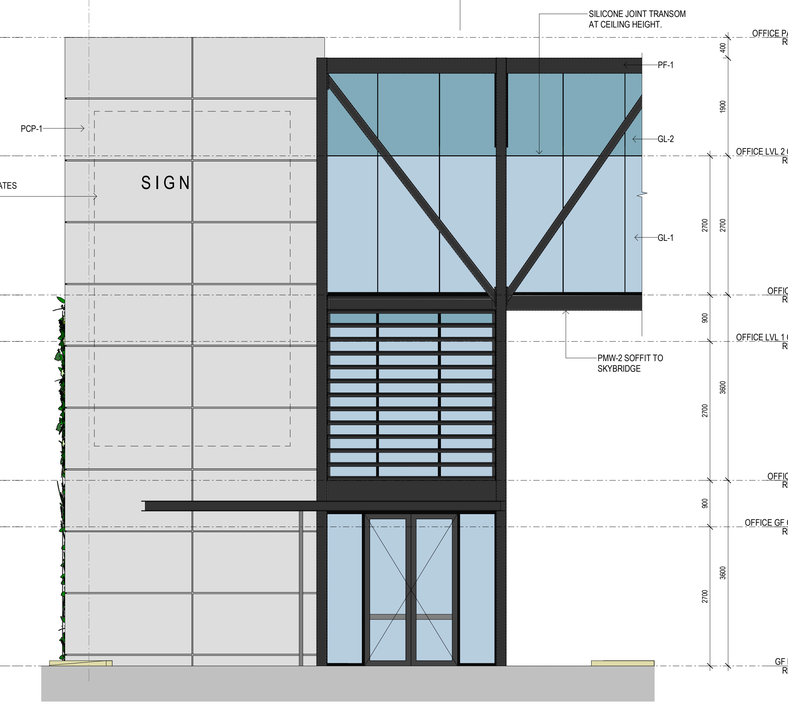
3 SKYBRIDGE NORTH ELEVATION 1 : 50



4 SKYBRIDGE EAST ELEVATION 1 : 50



5 SKYBRIDGE SOUTH ELEVATION 1 : 50



6 SKYBRIDGE WEST ELEVATION 1 : 50

SBA ARCHITECTS

Oakdale West Estate

Horsley Park

Proposed Industrial Facility - Building 1A

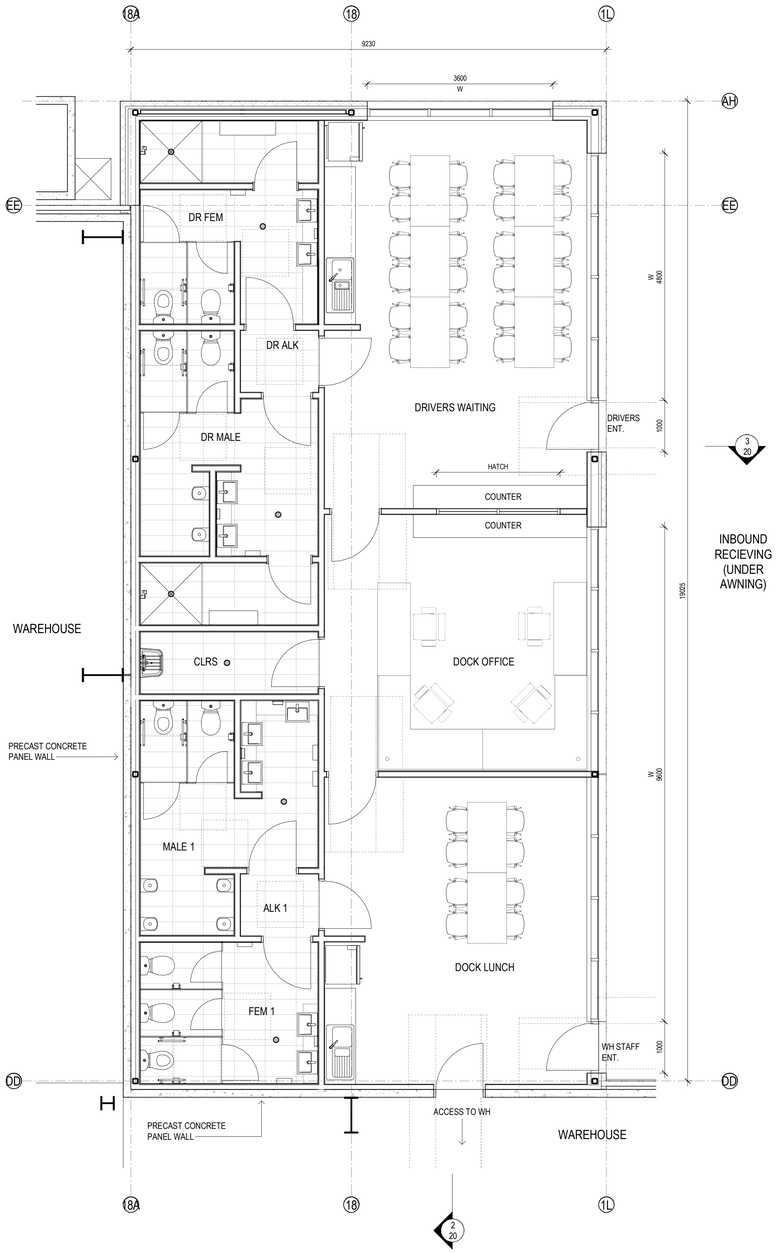
Skybridge Sections & Elevations

1 : 50 @ B1

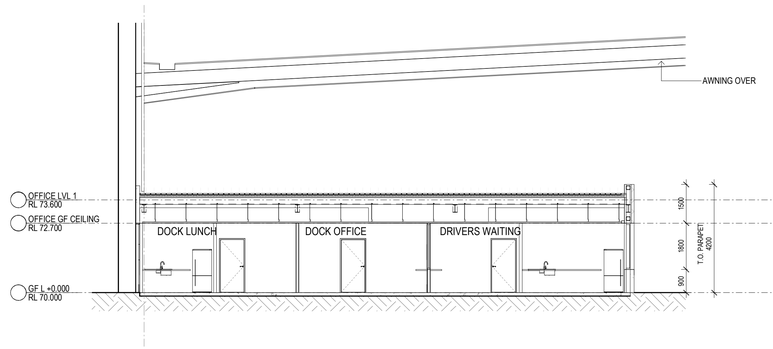
23rd Oct 2019

OAK-1A-DA- 19 (H)

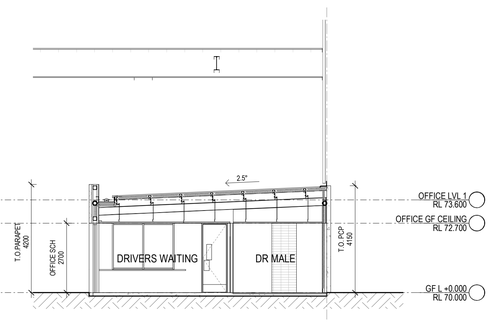
Job No 15117



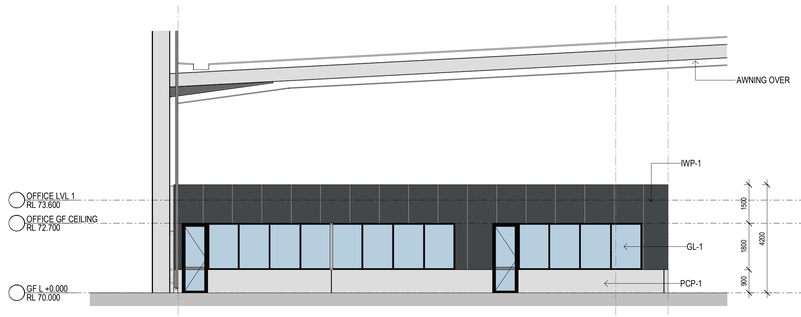
1 DOCK OFFICE - PLAN 1 : 50
WAREHOUSE 1A



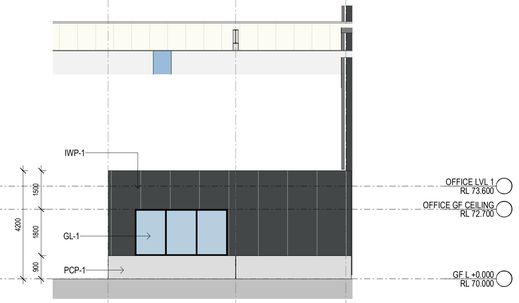
2 SECTION A 1 : 100
WAREHOUSE 1A



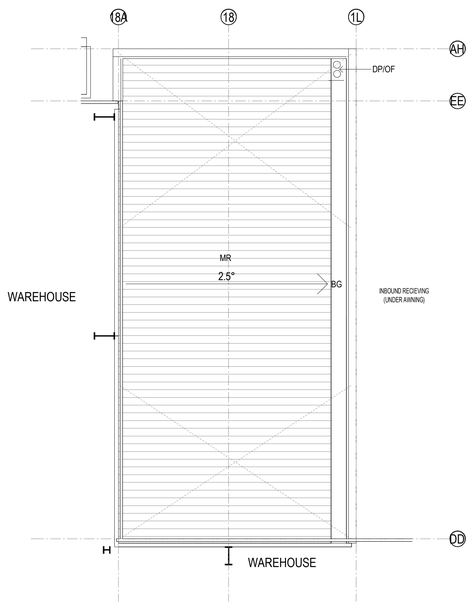
3 SECTION B 1 : 100
WAREHOUSE 1A



4 EAST ELEVATION 1 : 100
WAREHOUSE 1A



5 NORTH ELEVATION 1 : 100
WAREHOUSE 1A



6 ROOF PLAN 1 : 100
WAREHOUSE 1A

LEGEND	
BG	Box Gutter
EG	Eaves Gutter
MR	Metal Roof Sheeting
TR	Translucent Sheeting
EJ	Expansion Joint

INDICATIVE EXTERNAL FINISHES LEGEND

- **BLK-1** STACKED BOND BLOCK LIGHT GREY
- **FC-1** PREFINISHED FIBRE CEMENT WALL SHEETING
- **GL-1** GLAZING DARK GREY TINT
- **GL-2** SPANDREL GLAZING DARK GREY (OPAQUE)
- **GL-3** PRIVACY GLAZING - TRANSLUSCENT
- **GL-4** CLEAR GLASS
- **IWP-1** INSULATED WALL PANEL COLORBOND - MONUMENT
- **IWP-2** INSULATED WALL PANEL COLORBOND - SHALE GREY
- **IWP-3** INSULATED WALL PANEL COLORBOND - WHITE
- **MDR-1** METAL DECK ROOFING COLORBOND - SURFMIST
- **MDR-2** METAL DECK ROOFING COLORBOND - COOLMAX
- **PCP-1** PRECAST CONCRETE PANELS OFF FORM CONCRETE
- **PCP-PF-1** PRECAST CONCRETE PANELS PAINT FINISH - MONUMENT
- **PCP-PF-2** PRECAST CONCRETE PANELS PAINT FINISH - MID GREY
- **PF-1** PAINT FINISH - 1 MONUMENT
- **PF-2** PAINT FINISH - 2 MID GREY
- **PF-3** PAINT FINISH - 3 SHALE GREY
- **PF-4** ANODISED BRONZE FINISH
- **PMW-1** PREFINISHED METAL WALL SHEETING MONUMENT (OR SIMILAR)
- **PMW-2** PREFINISHED METAL WALL SHEETING DARK GREY (OR SIMILAR)
- **PMW-3** PREFINISHED METAL WALL SHEETING WHITE (OR SIMILAR)
- **PMW-4** PREFINISHED METAL WALL SHEETING "GOODMAN GREEN"
- **TRS-1** TRANSLUCENT ROOF SHEET - OPAL COLOUR (OR SIMILAR)
- **TRS-2** DANPALON TRANSLUCENT WALL CLADDING - OPAL COLOUR

SBA ARCHITECTS

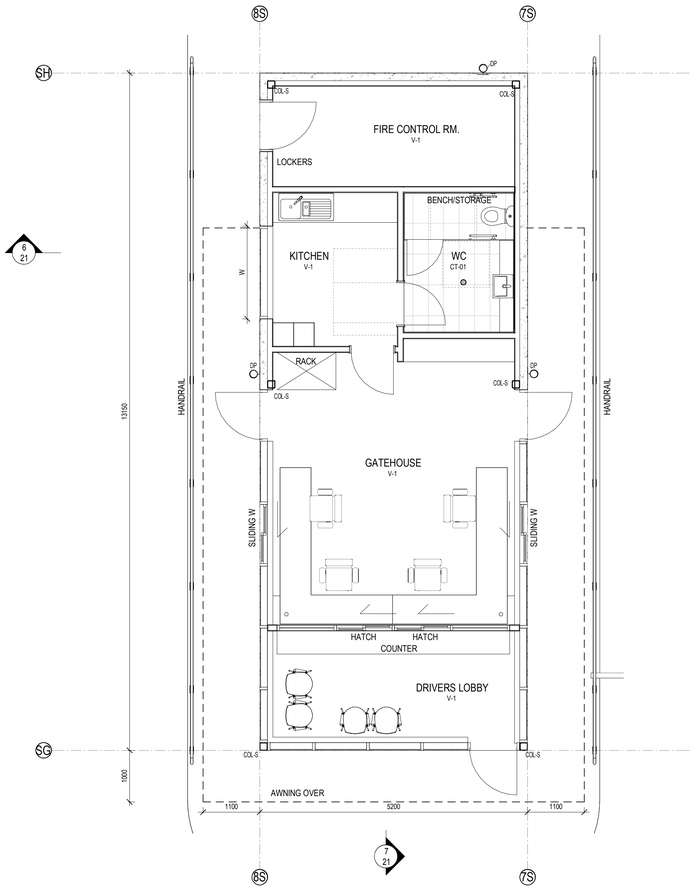
Oakdale West Estate
Horsley Park

Proposed Industrial Facility - Building 1A

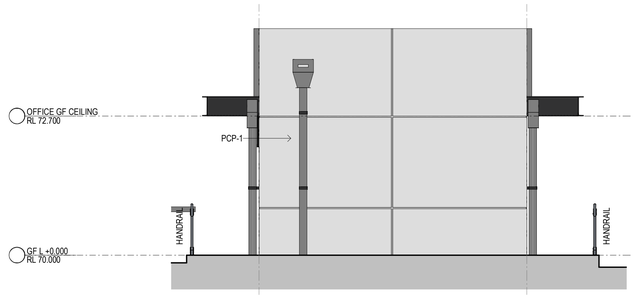
Dock Office Plans

As indicated @ B1
23rd Oct 2019

OAK-1A-DA-20 (G)
Job No 15117

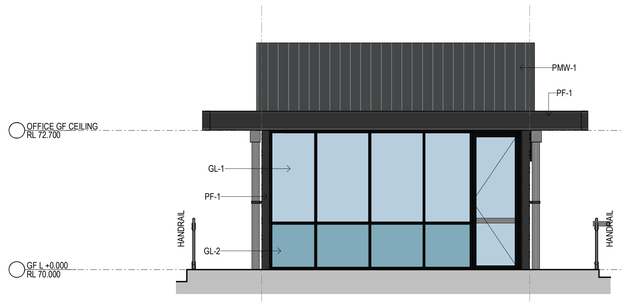


1 GATEHOUSE FLOOR PLAN 1 : 50
WAREHOUSE 1A



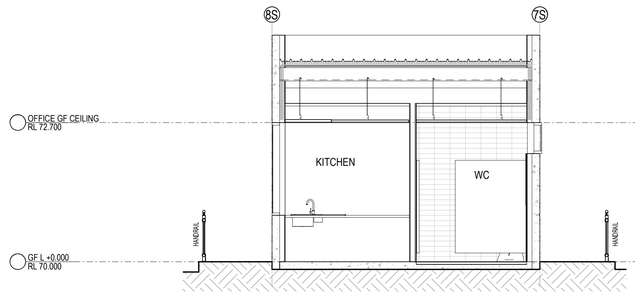
2 GATEHOUSE - NORTH 1 : 50
WAREHOUSE 1A

3 GATEHOUSE - EAST 1 : 50
WAREHOUSE 1A

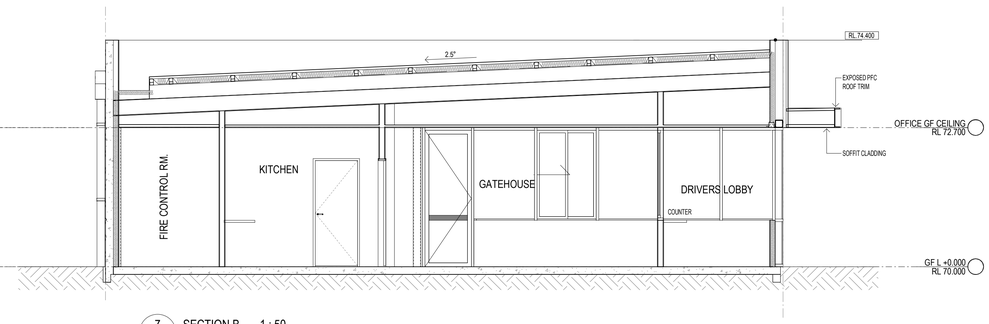


4 GATEHOUSE - SOUTH 1 : 50
WAREHOUSE 1A

5 GATEHOUSE - WEST 1 : 50
WAREHOUSE 1A



6 SECTION A 1 : 50
WAREHOUSE 1A



7 SECTION B 1 : 50
WAREHOUSE 1A

INDICATIVE EXTERNAL FINISHES LEGEND

- **BLK-1** STACKED BOND BLOCK LIGHT GREY
- **FC-1** PREFINISHED FIBRE CEMENT WALL SHEETING
- **GL-1** GLAZING DARK GREY TINT
- **GL-2** SPANDREL GLAZING DARK GREY (OPAQUE)
- **GL-3** PRIVACY GLAZING - TRANSLUSCENT
- **GL-4** CLEAR GLASS
- **IWP-1** INSULATED WALL PANEL COLORBOND - MONUMENT
- **IWP-2** INSULATED WALL PANEL COLORBOND - SHALE GREY
- **IWP-3** INSULATED WALL PANEL COLORBOND - WHITE
- **MDR-1** METAL DECK ROOFING COLORBOND - SURFMIST
- **MDR-2** METAL DECK ROOFING COLORBOND - COOLMAX
- **PCP-1** PRECAST CONCRETE PANELS OFF FORM CONCRETE
- **PCP-PF-1** PRECAST CONCRETE PANELS PAINT FINISH - MONUMENT
- **PCP-PF-2** PRECAST CONCRETE PANELS PAINT FINISH - MID GREY
- **PF-1** PAINT FINISH - 1 MONUMENT
- **PF-2** PAINT FINISH - 2 MID GREY
- **PF-3** PAINT FINISH - 3 SHALE GREY
- **PF-4** ANODISED BRONZE FINISH
- **PMW-1** PREFINISHED METAL WALL SHEETING MONUMENT (OR SIMILAR)
- **PMW-2** PREFINISHED METAL WALL SHEETING DARK GREY (OR SIMILAR)
- **PMW-3** PREFINISHED METAL WALL SHEETING WHITE (OR SIMILAR)
- **PMW-4** PREFINISHED METAL WALL SHEETING "GOODMAN GREEN"
- **TRS-1** TRANSLUCENT ROOF SHEET - OPAL COLOUR (OR SIMILAR)
- **TRS-2** DANPALON TRANSILUCENT WALL CLADDING - OPAL COLOUR

SBA ARCHITECTS

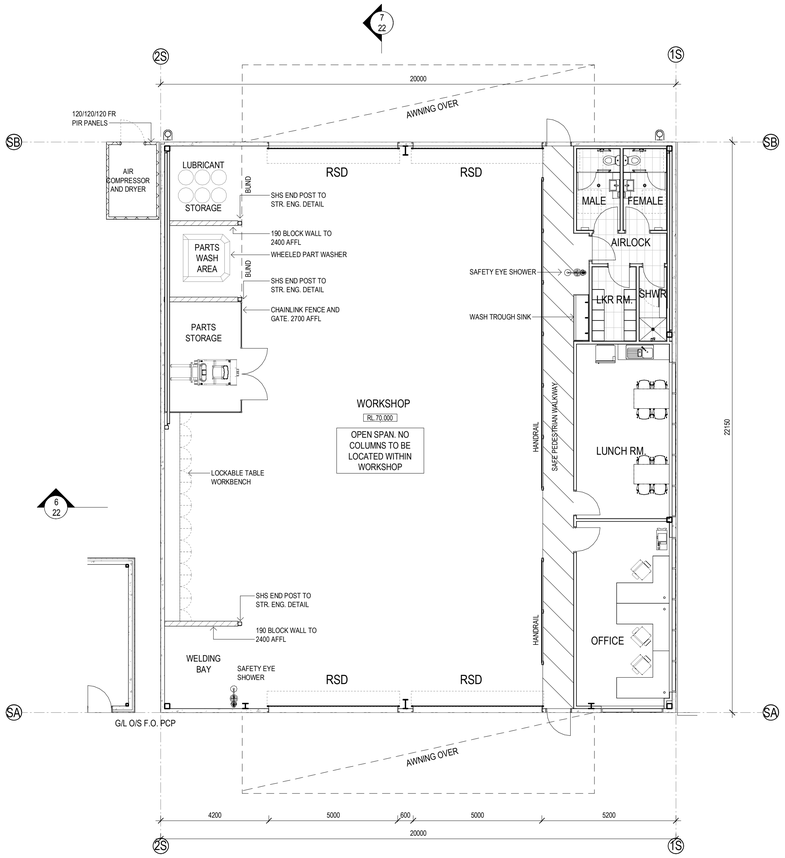
Oakdale West Estate
Horsley Park

Proposed Industrial Facility - Building 1A

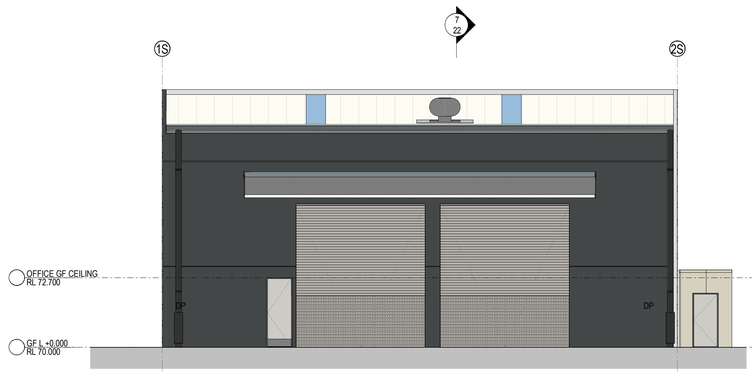
Gatehouse Plans

As indicated @ B1
23rd Oct 2019

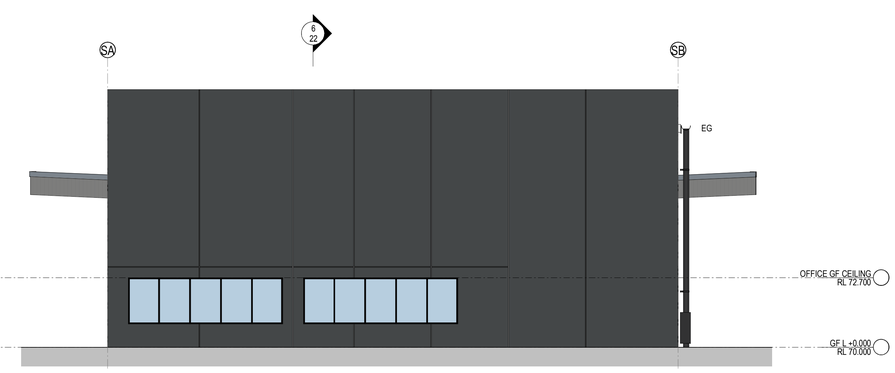
OAK-1A-DA- 21 (H)
Job No 15117



1 WORKSHOP FLOOR PLAN - DA 1 : 100
WAREHOUSE 1A

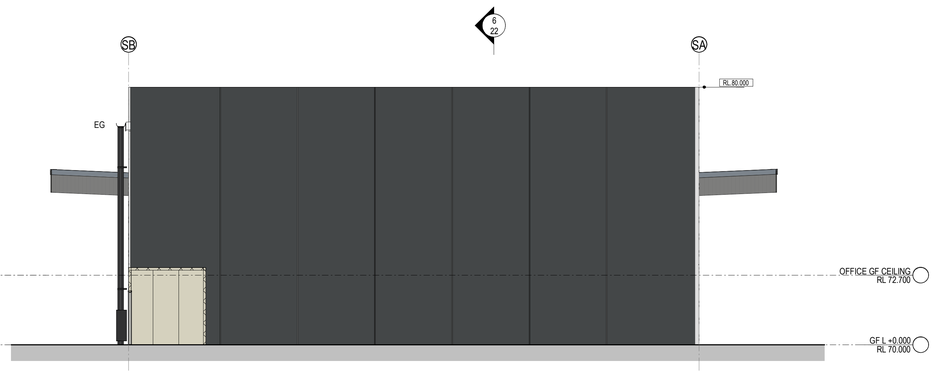


2 WORKSHOP - NORTH ELEVATION 1 : 100
WAREHOUSE 1A

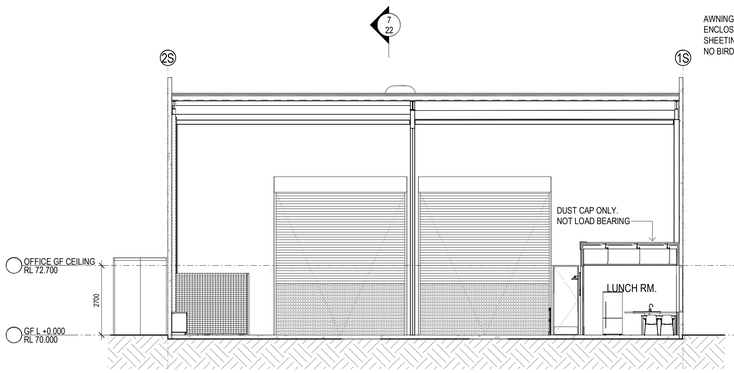


3 WORKSHOP - EAST ELEVATION 1 : 100
WAREHOUSE 1A

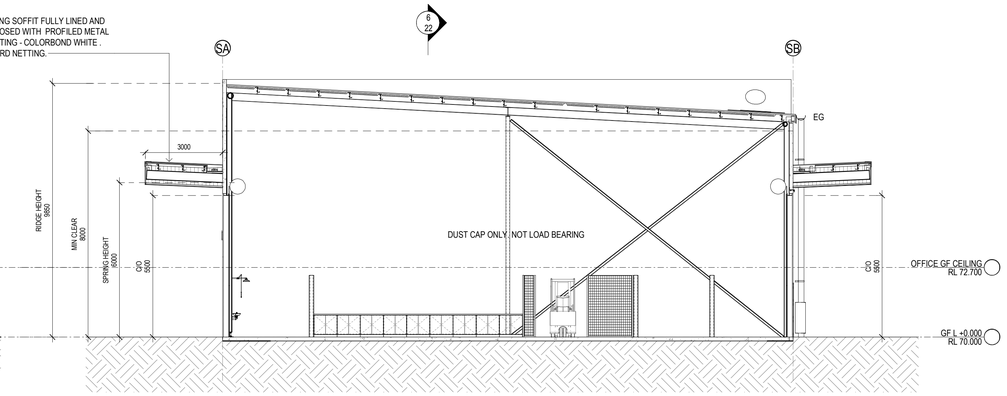
4 WORKSHOP - SOUTH ELEVATION 1 : 100
WAREHOUSE 1A



5 WORKSHOP - WEST ELEVATION 1 : 100
WAREHOUSE 1A



6 TRAILER WORKSHOP - SECTION A 1 : 100
WAREHOUSE 1A



7 TRAILER WORKSHOP - SECTION B 1 : 100
WAREHOUSE 1A

INDICATIVE EXTERNAL FINISHES LEGEND

- **BLK-1** STACKED BOND BLOCK LIGHT GREY
- **FC-1** PREFINISHED FIBRE CEMENT WALL SHEETING
- **GL-1** GLAZING DARK GREY TINT
- **GL-2** SPANDREL GLAZING DARK GREY (OPAQUE)
- **GL-3** PRIVACY GLAZING - TRANSLUSCENT
- **GL-4** CLEAR GLASS
- **IWP-1** INSULATED WALL PANEL COLORBOND - MONUMENT
- **IWP-2** INSULATED WALL PANEL COLORBOND - SHALE GREY
- **IWP-3** INSULATED WALL PANEL COLORBOND - WHITE
- **MDR-1** METAL DECK ROOFING COLORBOND - SURFMIST
- **MDR-2** METAL DECK ROOFING COLORBOND - COOLMAX
- **PCP-1** PRECAST CONCRETE PANELS OFF FORM CONCRETE
- **PCP-PF-1** PRECAST CONCRETE PANELS PAINT FINISH - MONUMENT
- **PCP-PF-2** PRECAST CONCRETE PANELS PAINT FINISH - MID GREY
- **PF-1** PAINT FINISH - 1 MONUMENT
- **PF-2** PAINT FINISH - 2 MID GREY
- **PF-3** PAINT FINISH - 3 SHALE GREY
- **PF-4** ANODISED BRONZE FINISH
- **PMW-1** PREFINISHED METAL WALL SHEETING MONUMENT (OR SIMILAR)
- **PMW-2** PREFINISHED METAL WALL SHEETING DARK GREY (OR SIMILAR)
- **PMW-3** PREFINISHED METAL WALL SHEETING WHITE (OR SIMILAR)
- **PMW-4** PREFINISHED METAL WALL SHEETING "GOODMAN GREEN"
- **TRS-1** TRANSLUCENT ROOF SHEET - OPAL COLOUR (OR SIMILAR)
- **TRS-2** DANPALON TRANSLUCENT WALL CLADDING - OPAL COLOUR

SBA ARCHITECTS

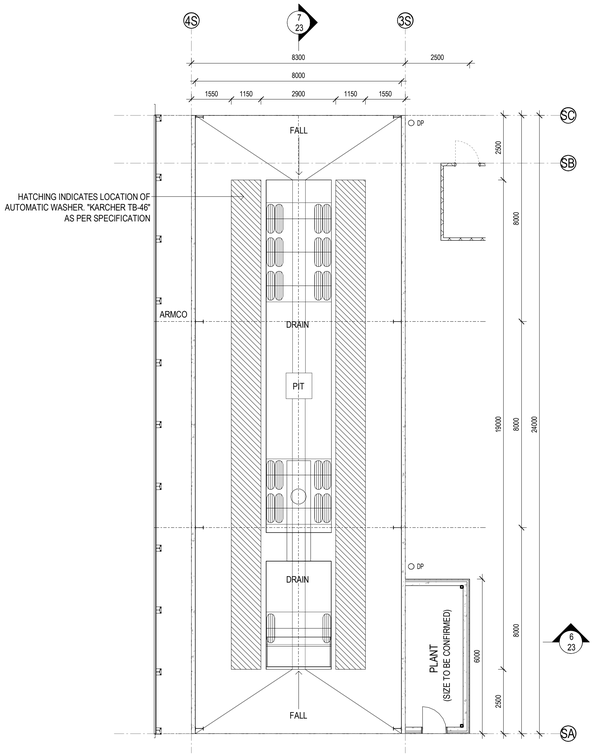
Oakdale West Estate
Horsley Park

Proposed Industrial Facility - Building 1A

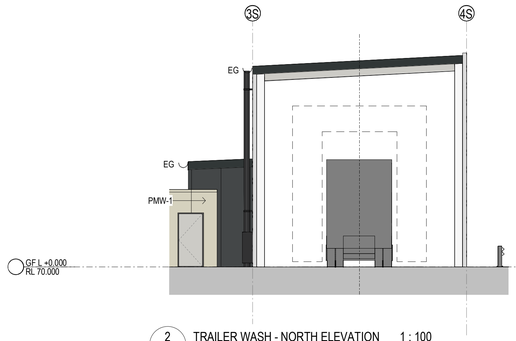
Trailer Workshop Plans

As indicated @ B1
23rd Oct 2019

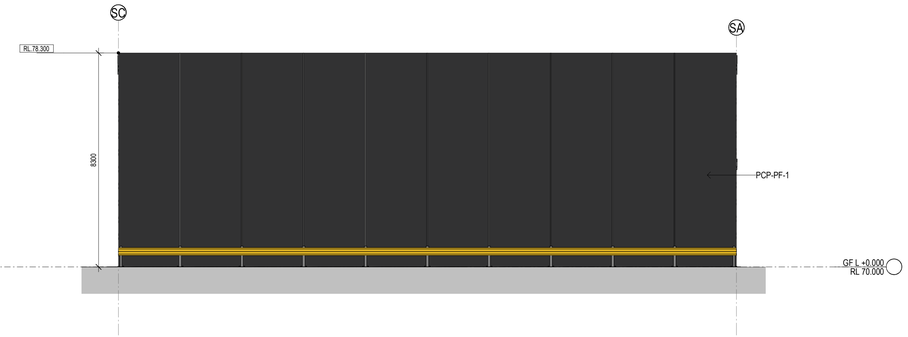
OAK-1A-DA- 22 (H)
Job No 15117



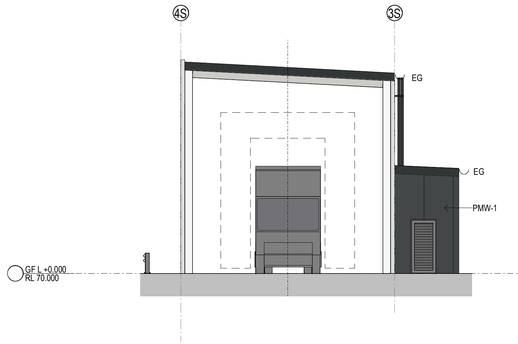
1 TRAILER WASH PLAN 1 : 100
WAREHOUSE 1A



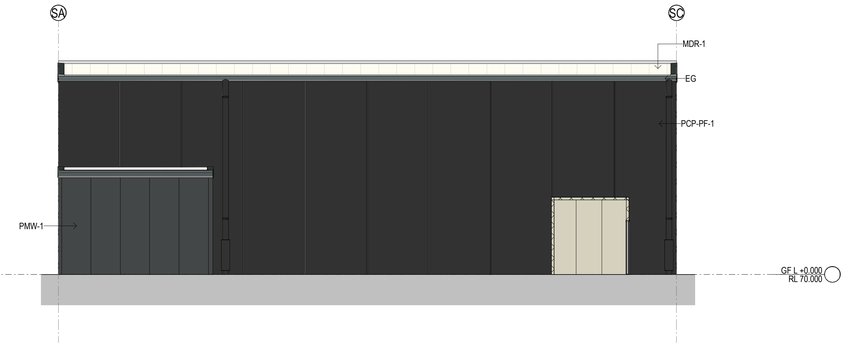
2 TRAILER WASH - NORTH ELEVATION 1 : 100
WAREHOUSE 1A



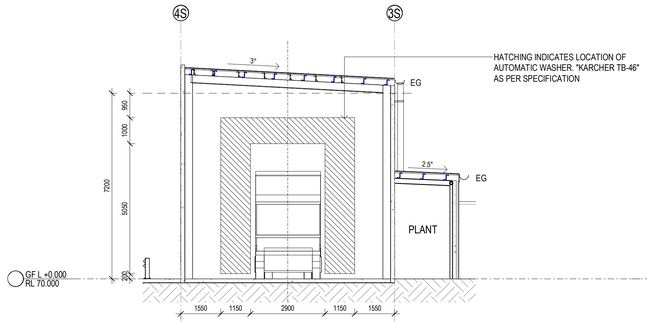
3 TRAILER WASH - WEST ELEVATION 1 : 100
WAREHOUSE 1A



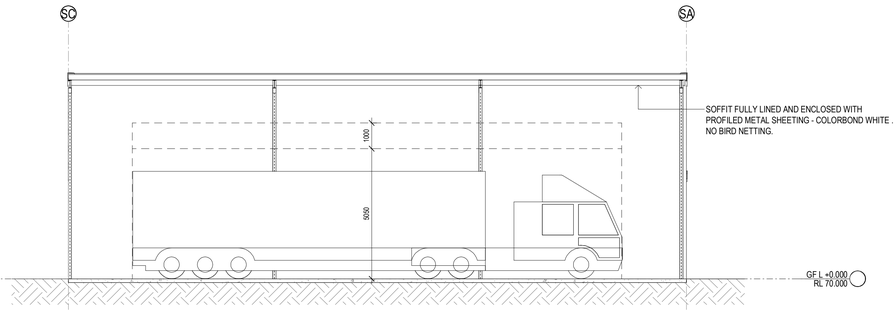
4 TRAILER WASH - SOUTH ELEVATION 1 : 100
WAREHOUSE 1A



5 TRAILER WASH - EAST ELEVATION 1 : 100
WAREHOUSE 1A



6 TRAILER WASH - SECTION A 1 : 100
WAREHOUSE 1A



7 TRAILER WASH - SECTION B 1 : 100
WAREHOUSE 1A

INDICATIVE EXTERNAL FINISHES LEGEND

- BLK-1 STACKED BOND BLOCK LIGHT GREY
- FC-1 PREFINISHED FIBRE CEMENT WALL SHEETING
- GL-1 GLAZING DARK GREY TINT
- GL-2 SPANDREL GLAZING DARK GREY (OPAQUE)
- GL-3 PRIVACY GLAZING - TRANSLUSCENT
- GL-4 CLEAR GLASS
- IWP-1 INSULATED WALL PANEL COLORBOND - MONUMENT
- IWP-2 INSULATED WALL PANEL COLORBOND - SHALE GREY
- IWP-3 INSULATED WALL PANEL COLORBOND - WHITE
- MDR-1 METAL DECK ROOFING COLORBOND - SURFMIST
- MDR-2 METAL DECK ROOFING COLORBOND - COOLMAX
- PCP-1 PRECAST CONCRETE PANELS OFF FORM CONCRETE
- PCP-PF-1 PRECAST CONCRETE PANELS PAINT FINISH - MONUMENT
- PCP-PF-2 PRECAST CONCRETE PANELS PAINT FINISH - MID GREY
- PF-1 PAINT FINISH - 1 MONUMENT
- PF-2 PAINT FINISH - 2 MID GREY
- PF-3 PAINT FINISH - 3 SHALE GREY
- PF-4 ANODISED BRONZE FINISH
- PMW-1 PREFINISHED METAL WALL SHEETING MONUMENT (OR SIMILAR)
- PMW-2 PREFINISHED METAL WALL SHEETING DARK GREY (OR SIMILAR)
- PMW-3 PREFINISHED METAL WALL SHEETING WHITE (OR SIMILAR)
- PMW-4 PREFINISHED METAL WALL SHEETING "GOODMAN GREEN"
- TRS-1 TRANSLUCENT ROOF SHEET - OPAL COLOUR (OR SIMILAR)
- TRS-2 DANPALON TRANSULCENT WALL CLADDING - OPAL COLOUR

SBA ARCHITECTS

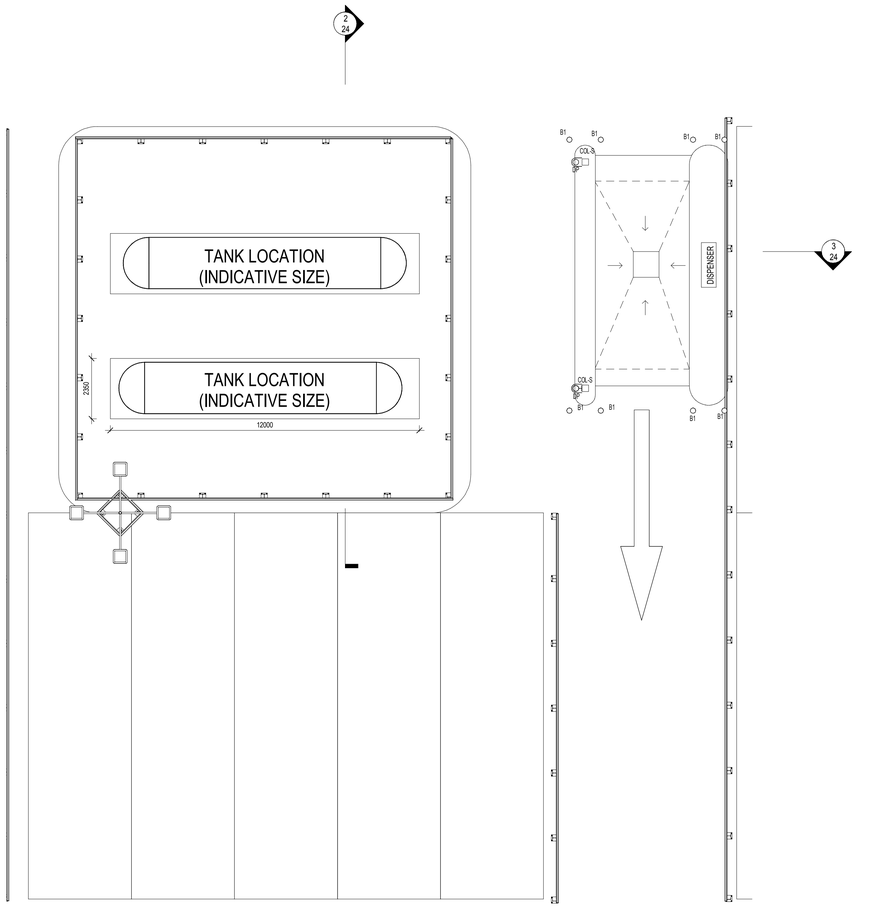
Oakdale West Estate
Horsley Park

Proposed Industrial Facility - Building 1A

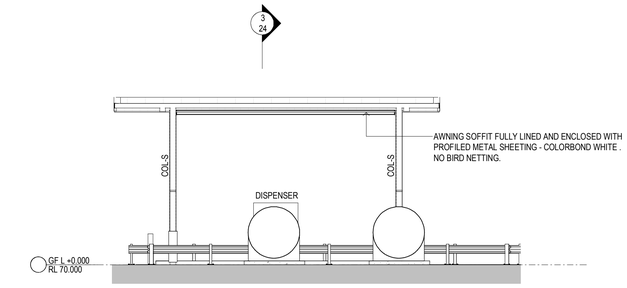
Trailer Wash Plans

As indicated @ B1
23rd Oct 2019

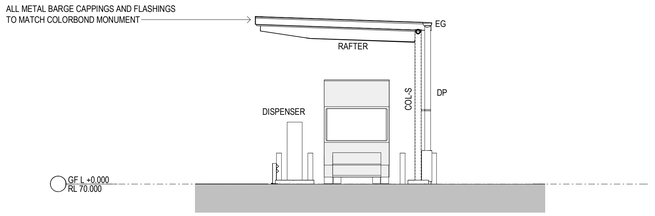
OAK-1A-DA- 23 (J)
Job No 15117



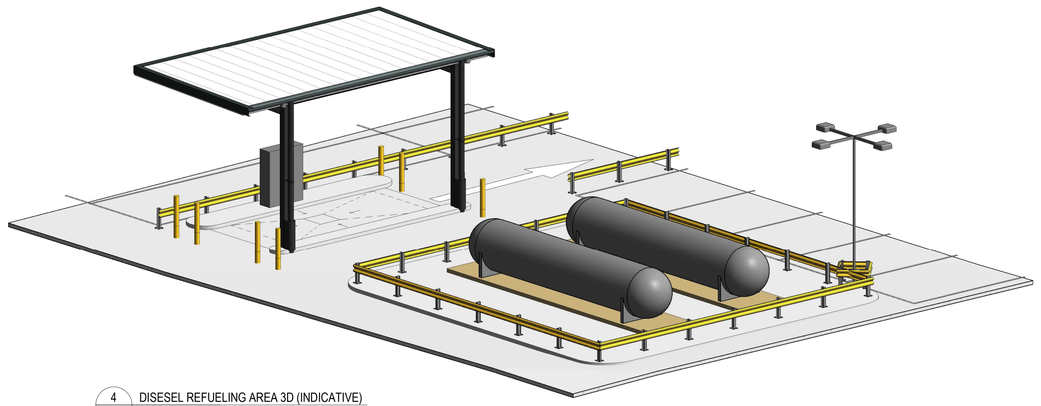
1 DIESEL REFUELING AREA - GA PLAN 1 : 100
WAREHOUSE 1A



2 DIESEL REFUELING AREA - SECTION A 1 : 100
WAREHOUSE 1A



3 DIESEL REFUELING AREA - SECTION B 1 : 100
WAREHOUSE 1A



4 DISESEL REFUELING AREA 3D (INDICATIVE)
WAREHOUSE 1A

SBA ARCHITECTS

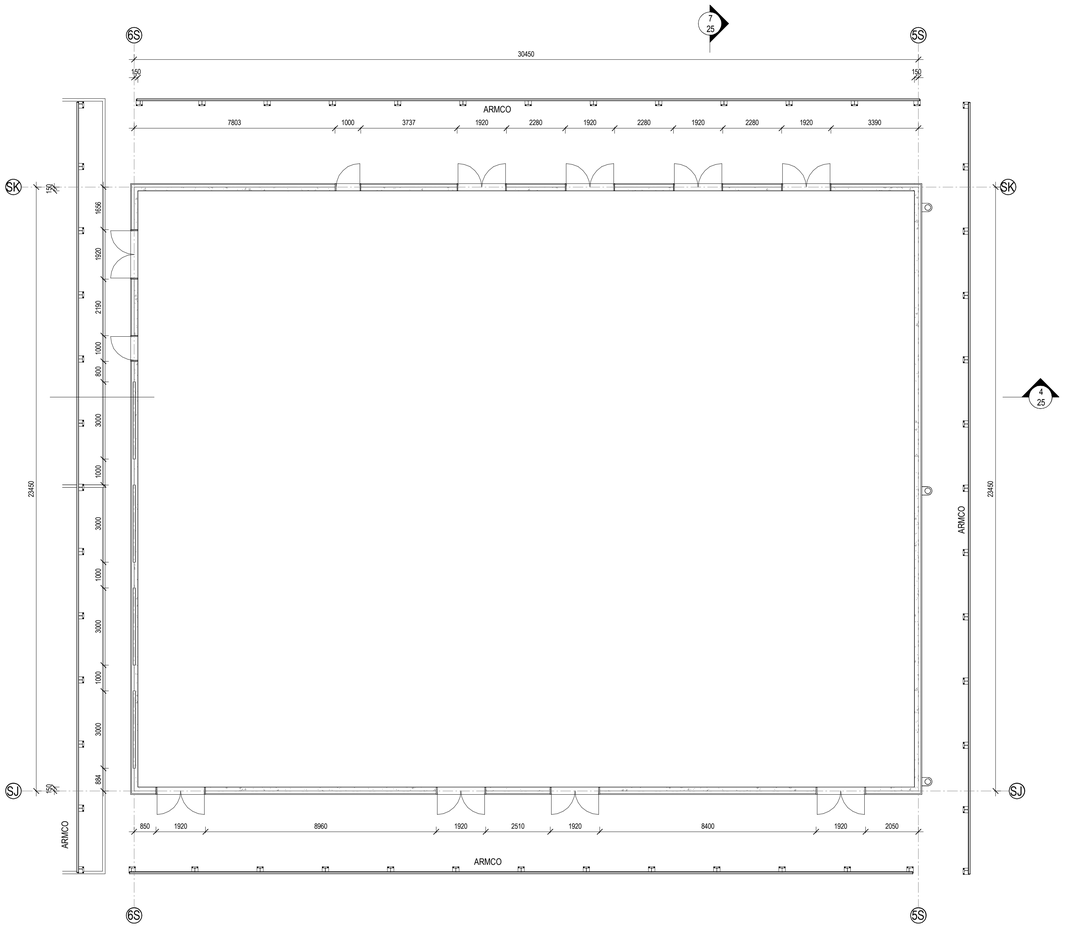
Oakdale West Estate
Horsley Park

Proposed Industrial Facility - Building 1A

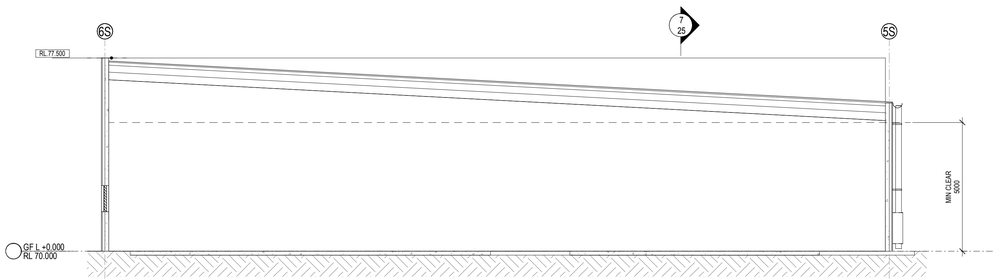
Diesel Refueling Area Plans

1 : 100 @ B1
23rd Oct 2019

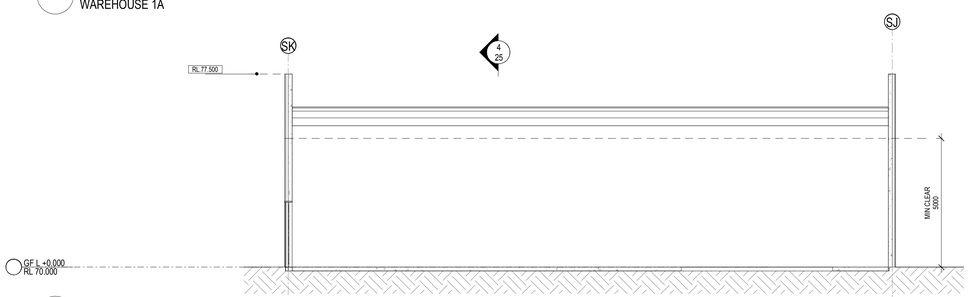
OAK-1A-DA- 24 (G)
Job No 15117



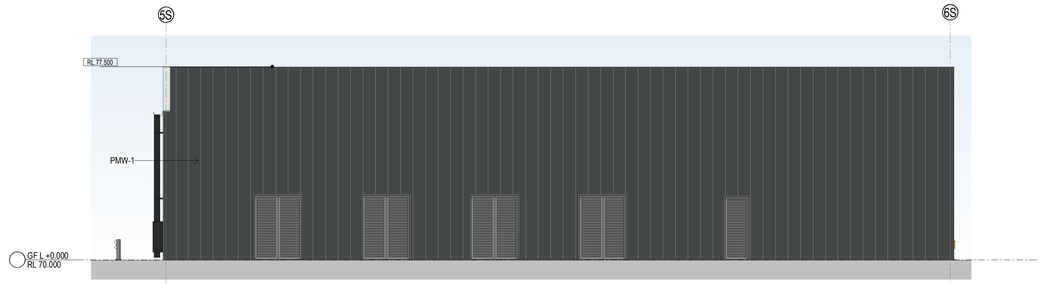
1 ENERGY COMPLEX 1 - FLOOR PLAN 1 : 100
WAREHOUSE 1A



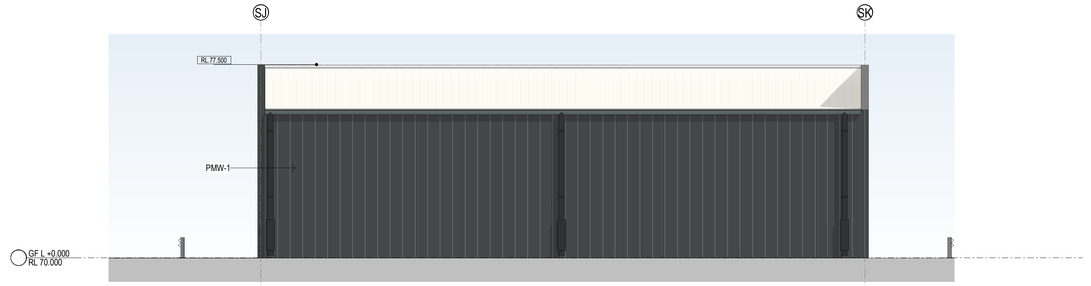
4 SECTION A 1 : 100
WAREHOUSE 1A



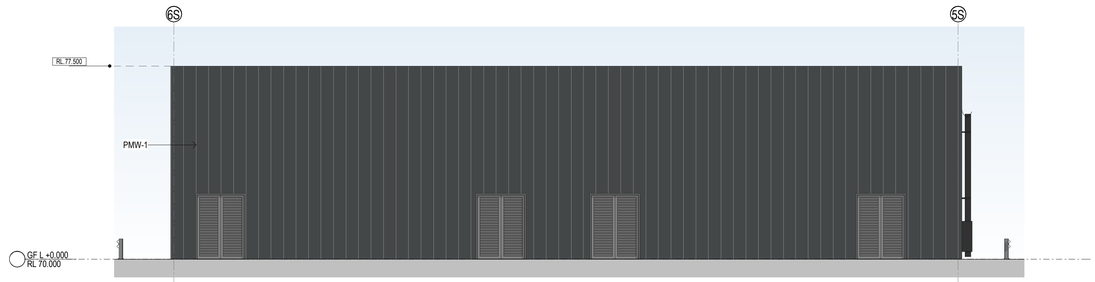
7 SECTION B 1 : 100
WAREHOUSE 1A



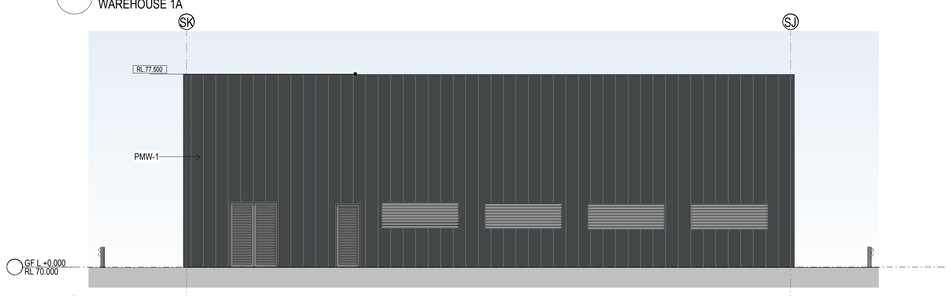
2 NORTH ELEVATION 1 : 100
WAREHOUSE 1A



3 EAST ELEVATION 1 : 100
WAREHOUSE 1A



5 SOUTH ELEVATION 1 : 100
WAREHOUSE 1A



6 WEST ELEVATION 1 : 100
WAREHOUSE 1A

INDICATIVE EXTERNAL FINISHES LEGEND

- BLK-1 STACKED BOND BLOCK LIGHT GREY
- FC-1 PREFINISHED FIBRE CEMENT WALL SHEETING
- GL-1 GLAZING DARK GREY TINT
- GL-2 SPANDREL GLAZING DARK GREY (OPAQUE)
- GL-3 PRIVACY GLAZING - TRANSLUSCENT
- GL-4 CLEAR GLASS
- IWP-1 INSULATED WALL PANEL COLORBOND - MONUMENT
- IWP-2 INSULATED WALL PANEL COLORBOND - SHALE GREY
- IWP-3 INSULATED WALL PANEL COLORBOND - WHITE
- MDR-1 METAL DECK ROOFING COLORBOND - SURFMIST
- MDR-2 METAL DECK ROOFING COLORBOND - COOLMAX
- PCP-1 PRECAST CONCRETE PANELS OFF FORM CONCRETE
- PCP-PF-1 PRECAST CONCRETE PANELS PAINT FINISH - MONUMENT
- PCP-PF-2 PRECAST CONCRETE PANELS PAINT FINISH - MID GREY
- PF-1 PAINT FINISH - 1 MONUMENT
- PF-2 PAINT FINISH - 2 MID GREY
- PF-3 PAINT FINISH - 3 SHALE GREY
- PF-4 ANODISED BRONZE FINISH
- PMW-1 PREFINISHED METAL WALL SHEETING MONUMENT (OR SIMILAR)
- PMW-2 PREFINISHED METAL WALL SHEETING DARK GREY (OR SIMILAR)
- PMW-3 PREFINISHED METAL WALL SHEETING WHITE (OR SIMILAR)
- PMW-4 PREFINISHED METAL WALL SHEETING "GOODMAN GREEN"
- TRS-1 TRANSLUCENT ROOF SHEET - OPAL COLOUR (OR SIMILAR)
- TRS-2 DANPALON TRANSULCENT WALL CLADDING - OPAL COLOUR

SBA ARCHITECTS

Oakdale West Estate
Horsley Park

Proposed Industrial Facility - Building 1A

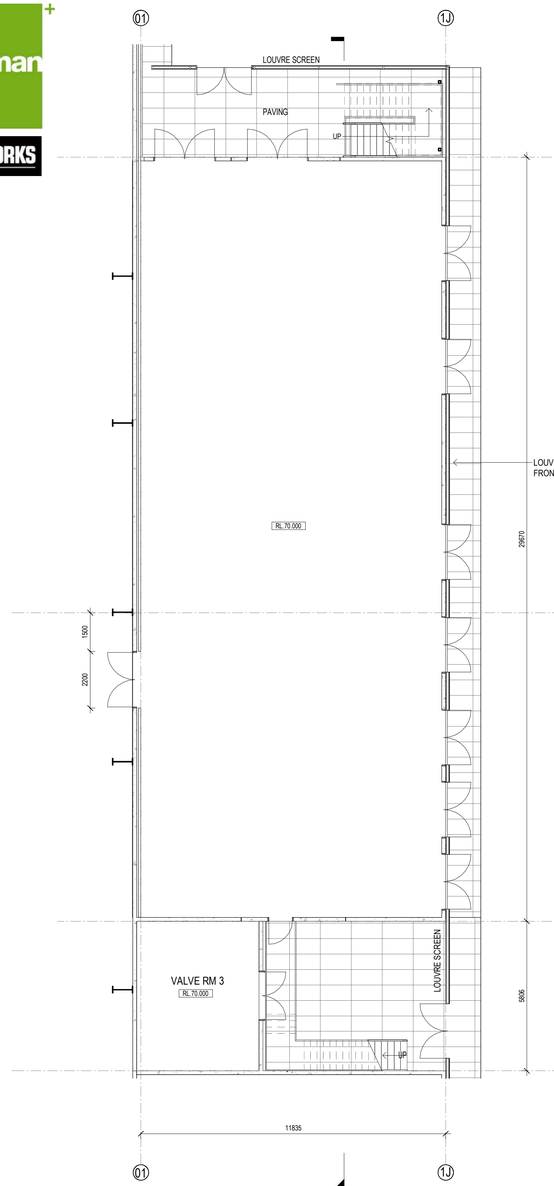
Energy Complex - 1

As indicated @ B1
23rd Oct 2019

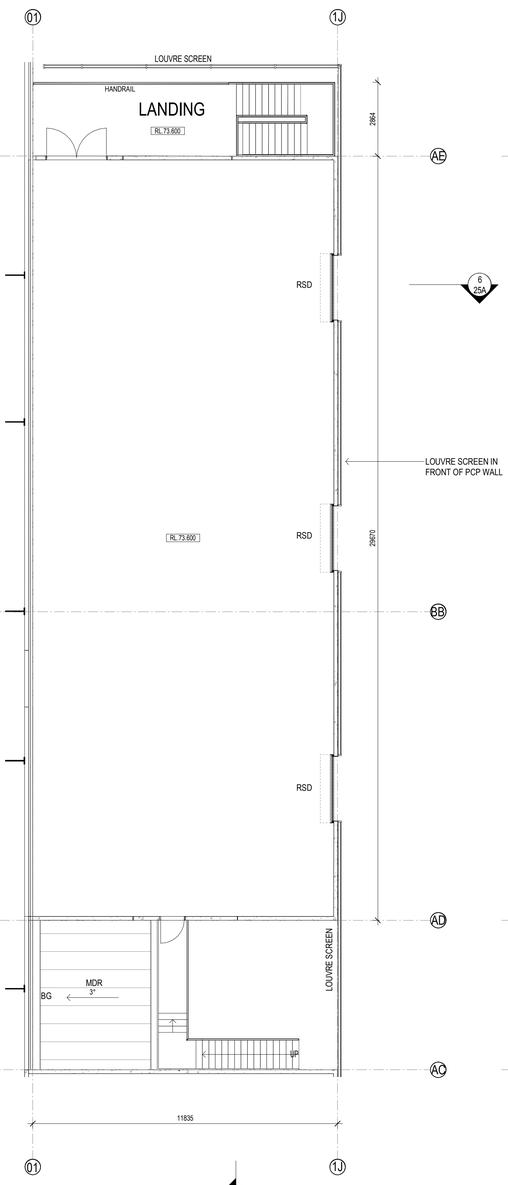
OAK-1A-DA-25 (G)
Job No 15117

Goodman

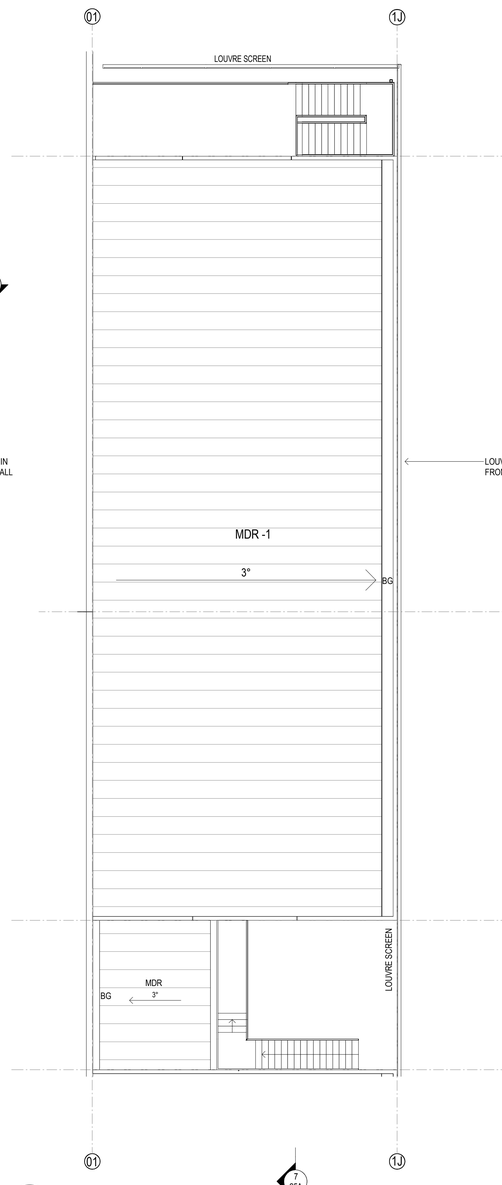
BRICKWORKS LIMITED



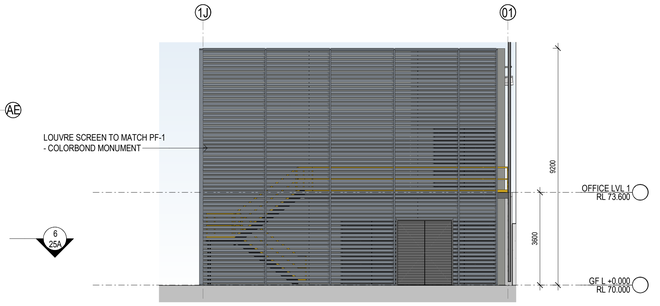
1 GROUND FLOOR PLAN 1 : 100
WAREHOUSE 1A



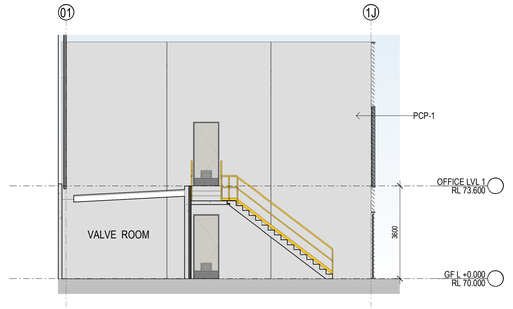
2 LEVEL 1 1 : 100
WAREHOUSE 1A



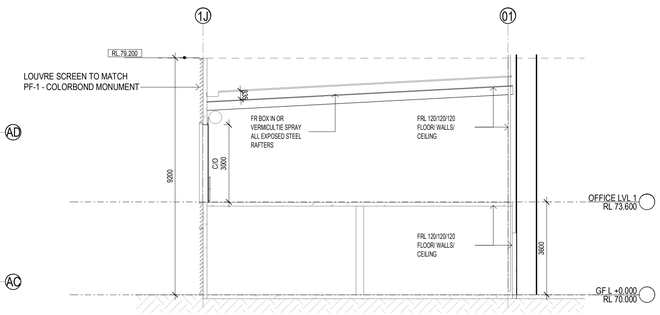
8 ROOF PLAN 1 : 100
WAREHOUSE 1A



4 NORTH ELEVATION 1 : 100
WAREHOUSE 1A

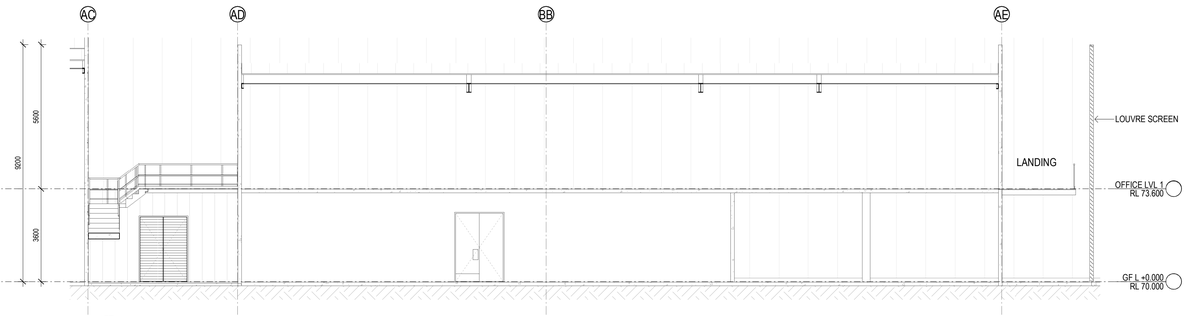


5 SOUTH ELEVATION 1 : 100
WAREHOUSE 1A



6 ENERGY COMPLEX 2 - SECTION B 1 : 100
WAREHOUSE 1A

3 EAST ELEVATION 1 : 100
WAREHOUSE 1A



7 SECTION A 1 : 100
WAREHOUSE 1A

INDICATIVE EXTERNAL FINISHES LEGEND

- **BLK-1** STACKED BOND BLOCK LIGHT GREY
- **FC-1** PREFINISHED FIBRE CEMENT WALL SHEETING
- **GL-1** GLAZING DARK GREY TINT
- **GL-2** SPANDREL GLAZING DARK GREY (OPAQUE)
- **GL-3** PRIVACY GLAZING - TRANSLUSCENT
- **GL-4** CLEAR GLASS
- **IWP-1** INSULATED WALL PANEL COLORBOND - MONUMENT
- **IWP-2** INSULATED WALL PANEL COLORBOND - SHALE GREY
- **IWP-3** INSULATED WALL PANEL COLORBOND - WHITE
- **MDR-1** METAL DECK ROOFING COLORBOND - SURFMIST
- **MDR-2** METAL DECK ROOFING COLORBOND - COOLMAX
- **PCP-1** PRECAST CONCRETE PANELS OFF FORM CONCRETE
- **PCP-PF-1** PRECAST CONCRETE PANELS PAINT FINISH - MONUMENT
- **PCP-PF-2** PRECAST CONCRETE PANELS PAINT FINISH - MID GREY
- **PF-1** PAINT FINISH - 1 MONUMENT
- **PF-2** PAINT FINISH - 2 MID GREY
- **PF-3** PAINT FINISH - 3 SHALE GREY
- **PF-4** ANODISED BRONZE FINISH
- **PMW-1** PREFINISHED METAL WALL SHEETING MONUMENT (OR SIMILAR)
- **PMW-2** PREFINISHED METAL WALL SHEETING DARK GREY (OR SIMILAR)
- **PMW-3** PREFINISHED METAL WALL SHEETING WHITE (OR SIMILAR)
- **PMW-4** PREFINISHED METAL WALL SHEETING "GOODMAN GREEN"
- **TRS-1** TRANSLUCENT ROOF SHEET - OPAL COLOUR (OR SIMILAR)
- **TRS-2** DANPALON TRANSLUCENT WALL CLADDING - OPAL COLOUR

SBA ARCHITECTS

Oakdale West Estate
Horsley Park

Proposed Industrial Facility - Building 1A

Energy Complex - 2

As indicated @ B1
23rd Oct 2019

OAK-1A-DA25A (F)
Job No 15117

Goodman

BRICKWORKS LIMITED

Estate Road 01

AMENITIES LOT

Proposed Western North South Link Rd

Future Southern Link Road

BOUNDARY FNC-1

BOUNDARY FNC-2

PED ACCESS & GATE

CARS AUTOMATIC SLIDING GATE

SUPER B-DOUBLE INBOUND STAGING AREA

HIGH BAY ROOF ACCESS

VALVE RM

RW

LPG REFUEL

INBOUND

35M AWNING OVER

3M AWNING OVER

7 X RECESSED DOCKS

RECEIVING OFFICE

RL. 70.000

TECH CENTRE RECEIVING - 12 X TRUCK POSITIONS

PALLET STORAGE

AWNING END WALL

RSD-7 RSD-6 RSD-5 RSD-4 RSD-3 RSD-2 RSD-1

RECOUP AREA 50M²

COMPUTER ROOM 2

PRIME MOVER PARKING

STAGE 2 EXPANSION

HIGH BAY WAREHOUSE

RL. 69.000 (+/- 1000)

LOW BAY WAREHOUSE

RL. 70.000 (+/- 1000)

VALVE ROOM 5M X 5M

D.G STORE

LOW BAY ROOF ACCESS

72 X RECESSED DOCKS

3M AWNING OVER

OUTBOUND

OFFICE

MHE

GARBAGE COMPACTOR UNITS

SKYBRIDGE OVER

SMOKERS AREA CANOPY OVER

BIKE RACKS

STAIRS & LIFT

CAR PARK

BUILDING ATTACK LADDER

LARGE FIRE BRIGADE VEHICLE

CARS AUTOMATIC SLIDING GATE

INBOUND STAGING AREA 25 B-DOUBLE TRAILER

BOOM & SWING GATES

WEIGH BRIDGE

GATE HOUSE

RL. 69.800

POTENTIAL SLIDING GATE LOCATION

TRUCK ENTRY

TRUCK EXIT

PUMP RM

BRIGADE PARKING

TANK

TANK

S'OP

PROJECT BASE POINT

2 x CAR SPACES FOR SECURITY GATEHOUSE STAFF

PUMP ROOM AND TANKS PAINTED TO MATCH COLORBOND MONUMENT

ENERGY COMPLEX 1

REFUELING AREA (AWNING OVER)

REFUELING

TANKS

LIGHTPOLE & ARMCO

TRAILER PARKING

PRIME MOVER PARKING

TRAILER WASH

TRAILER WORKSHOP

EXCLUSION ZONE

AWNING OVER

LPG TANK

LPG PARKING SPACE

TO BDY 10440

187360 33000 17000 31720 36820 44860 23980

68190 TO BDY 137210 39912 218298

16860 395420

Development Area Schedule

Lot 1A

Site Area	187,270 sqm
Warehouse (inc stage 2 expansion)	68,160 sqm
Office (3 Level)	2,646 sqm
Mezzanines (inc stage 2 expansion)	32,402 sqm
Outbuildings (inc Dock office, Trailer Workshop, Trailer wash, D.G. Store, Computer Room, Gatehouse, Energy Complex, Refueling area, Battery charge, Skybridge & Lobby)	4,004 sqm
Total Building Area	107,212 sqm
Awning	8,620 sqm
Site Cover (exc. awning)	57 %
Floor Space Ratio	0.57 : 1
Hardstand Area	88,610 sqm
Light Duty Area	14,030 sqm
Prime Mover Parking	54
Trailer Parking	164
Carparking	472
Motorcycle Parking	6

LEGEND

- Site Boundary
- Lot Boundary
- Building 7.5m Setback
- Landscape 3.75m Setback
- FNC-1 Chainwire Fencing
- FNC-2 Palisade Fencing
- RW Retaining Wall

SBA ARCHITECTS

Oakdale West Estate

Horsley Park

Proposed Industrial Facility - Building 1A

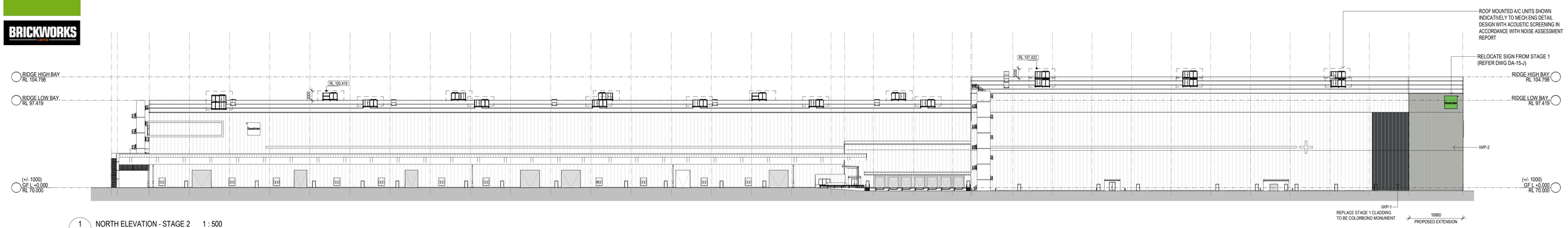
Stage 2 - Site Plan

1 : 750 @ B1

23rd Oct 2019

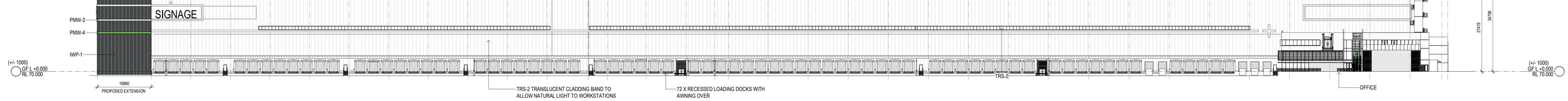
OAK-1A-DA- 28 (J)

Job No 15117

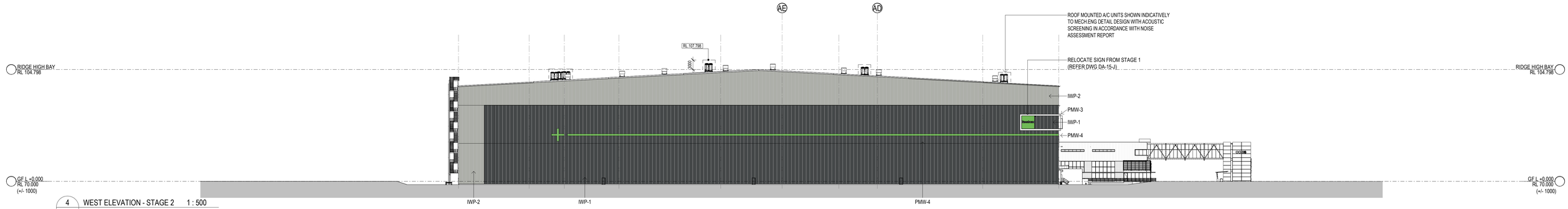


1 NORTH ELEVATION - STAGE 2 1 : 500
WAREHOUSE 1A

2 EAST ELEVATION - STAGE 2 1 : 500
WAREHOUSE 1A



3 SOUTH ELEVATION - STAGE 2 1 : 500
WAREHOUSE 1A



4 WEST ELEVATION - STAGE 2 1 : 500
WAREHOUSE 1A

INDICATIVE EXTERNAL FINISHES LEGEND

- **BLK-1** STACKED BOND BLOCK LIGHT GREY
- **FC-1** PREFINISHED FIBRE CEMENT WALL SHEETING
- **GL-1** GLAZING DARK GREY TINT
- **GL-2** SPANDREL GLAZING DARK GREY (OPAQUE)
- **GL-3** PRIVACY GLAZING - TRANSLUSCENT
- **GL-4** CLEAR GLASS
- **IWP-1** INSULATED WALL PANEL COLORBOND - MONUMENT
- **IWP-2** INSULATED WALL PANEL COLORBOND - SHALE GREY
- **IWP-3** INSULATED WALL PANEL COLORBOND - WHITE
- **MDR-1** METAL DECK ROOFING COLORBOND - SURFMIST
- **MDR-2** METAL DECK ROOFING COLORBOND - COOLMAX
- **PCP-1** PRECAST CONCRETE PANELS OFF FORM CONCRETE
- **PCP-PF-1** PRECAST CONCRETE PANELS PAINT FINISH - MONUMENT
- **PCP-PF-2** PRECAST CONCRETE PANELS PAINT FINISH - MID GREY
- **PF-1** PAINT FINISH - 1 MONUMENT
- **PF-2** PAINT FINISH - 2 MID GREY
- **PF-3** PAINT FINISH - 3 SHALE GREY
- **PF-4** ANODISED BRONZE FINISH
- **PMW-1** PREFINISHED METAL WALL SHEETING MONUMENT (OR SIMILAR)
- **PMW-2** PREFINISHED METAL WALL SHEETING DARK GREY (OR SIMILAR)
- **PMW-3** PREFINISHED METAL WALL SHEETING WHITE (OR SIMILAR)
- **PMW-4** PREFINISHED METAL WALL SHEETING "GOODMAN GREEN"
- **TRS-1** TRANSLUCENT ROOF SHEET - OPAL COLOUR (OR SIMILAR)
- **TRS-2** DANPALON TRANSLUCENT WALL CLADDING - OPAL COLOUR

SBA ARCHITECTS

Oakdale West Estate
Horsley Park

Proposed Industrial Facility - Building 1A

Stage 2 - Elevations

As indicated @ B1
23rd Oct 2019

OAK-1A-DA- 29 (H)
Job No 15117

APPENDIX B

Council Waste Management Plan Form

OUTLINE OF THE PROPOSAL			
Site Address:	2 Aldington Road, Kemps Creek		
Name of Applicant:	Goodman Property Services (Aust) Pty Ltd		
Address of Applicant	GPO Box 4703, Sydney NSW 2001		
Phone:	02 9230 7400	Fax:	
Buildings and other structures currently on the site:			
No structures present			
Description of Proposal:			
An industrial precinct with two warehouse lots, hardstand and car parking built with hard material, timber and plasterboard			
Applicant's Signature:		Date:	

Table 1 Table of Demolition Waste

Materials	Destination			
	Re-use and recycling		Disposal	
Material	Estimated Volume (m^2 or m^3)	ON SITE Specify proposed reuse or on-site recycling	OFF-SITE Specify contractor or recycling outlet	Specify Contractor and Landfill Site
Excavation Material	2,250	NIL	Off-site recycling at a centre lawfully able to accept it. This is to be advised.	NIL
Green Waste		NIL	Reuse at other sites where possible or disposal to a landfill centre (such as Penrith landfill depot) lawfully able to accept it. This is to be advised.	NIL

Table 2 Table of Construction Waste

Materials	Destination			
	Re-use and recycling		Disposal	
Material	Estimated Volume (m^2 or m^3)	ON SITE Specify proposed reuse or on-site recycling	OFF-SITE Specify contractor or recycling outlet	Specify Contractor and Landfill Site
Hard Material		NIL	Disposed at an off-site centre lawfully able to accept it. This is to be advised.	NIL
Concrete	3,805	NIL	Off-site recycling for filling, levelling or road base at a centre lawfully able to accept it. This is to be advised.	NIL
Timber to be specified by Construction Manager	80	*Treated*: reused for formwork, bridging, blocking, propping or second hand supplier; *Untreated*: reused for floorboards, fencing, furniture, mulched second hand supplier	NIL	NIL
Plasterboard	110	NIL	Returned to supplier or recycled off-site at a centre lawfully able to accept it. This is to be advised.	NIL
Metals to be specified by Construction Manager	625	NIL	Off-site recycling centre at a lawfully able to accept it. This is to be advised.	NIL
Plastics		NIL	Off-site recycling centre at a lawfully able to accept it. This is to be advised.	NIL
Cardboard		NIL	Off-site recycling centre at a lawfully able to accept it. This is to be advised.	NIL

Table 3 Table of Ongoing Use wastes for the premises

Type of Waste to be Generated	Volume (m^3 or litres per week)	Proposed On Site Storage and Treatment Facilities	Destination
General wastes • Non-recyclable packaging wastes • Domestic wastes • Plant and general maintenance wastes	173,145	Wastes will be collected and deposited in the external compactor facility or in external bins if selected. These will hold the wastes until time of collection.	General waste will be collected four times per week and deposited at Penrith landfill depot
Recyclables • Office wastes • Packaging wastes	173,145	Wastes will be collected and deposited in the external compactor facility or in external bins if selected. These will hold the wastes until time of collection.	Recyclables will be collected twice weekly and deposited at Penrith Community Recycling Centre
Bulky wastes	Variable	Wastes will be stored in an area of sufficient size to accommodate the wastes in an interim phase until the Development contacts a contractor for reuse, recycling or disposal at an EPA licensed facility.	Disposal will occur at a facility lawfully able to accept the material. This is to be advised.
Hazardous wastes	Variable	Wastes will be stored in an area of sufficient size to accommodate the wastes in an interim phase until the Development contacts a contractor for reuse, recycling or disposal at an EPA licensed facility.	Disposal will occur at a facility lawfully able to accept the material. This is to be advised.

Table 4 Summary of the Ongoing Management of the premises

Describe how you intend to ensure the ongoing management of waste on site
1) Waste storage areas are to be signposted to ensure correct operation and use
2) Audits and visual assessments of bins will occur after initial construction and on a half-yearly basis to ensure waste capacity is sufficient to meet the development's needs
3) Management will employ cleaners and garden contractors, as applicable, to undertake the roles outlined in **Section 6.9** of the waste management plan, including transport of wastes from any interim storage to the designated compactor
4) Management will ensure the staff are aware of waste management procedures, update the waste management plan as required and undertake the monitoring and maintenance as outlined in **Section 6.9**.

ASIA PACIFIC OFFICES

BRISBANE
Level 2, 15 Astor Terrace
Spring Hill QLD 4000
Australia
T: +61 7 3858 4800
F: +61 7 3858 4801

CANBERRA
GPO 410
Canberra ACT 2600
Australia
T: +61 2 6287 0800
F: +61 2 9427 8200

DARWIN
5 Foelsche Street
Darwin NT 0800
Australia
T: +61 8 8998 0100
F: +61 2 9427 8200

GOLD COAST
Level 2, 194 Varsity Parade
Varsity Lakes QLD 4227
Australia
M: +61 438 763 516

MACKAY
21 River Street
Mackay QLD 4740
Australia
T: +61 7 3181 3300

MELBOURNE
Suite 2, 2 Domville Avenue
Hawthorn VIC 3122
Australia
T: +61 3 9249 9400
F: +61 3 9249 9499

NEWCASTLE
10 Kings Road
New Lambton NSW 2305
Australia
T: +61 2 4037 3200
F: +61 2 4037 3201

PERTH
Ground Floor, 503 Murray Street
Perth WA 6000
Australia
T: +61 8 9422 5900
F: +61 8 9422 5901

SYDNEY
2 Lincoln Street
Lane Cove NSW 2066
Australia
T: +61 2 9427 8100
F: +61 2 9427 8200

TOWNSVILLE
Level 1, 514 Sturt Street
Townsville QLD 4810
Australia
T: +61 7 4722 8000
F: +61 7 4722 8001

TOWNSVILLE SOUTH
12 Cannan Street
Townsville South QLD 4810
Australia
T: +61 7 4772 6500

AUCKLAND
68 Beach Road
Auckland 1010
New Zealand
T: +64 27 441 7849

NELSON
6/A Cambridge Street
Richmond, Nelson 7020
New Zealand
T: +64 274 898 628