Development Application

Proposed Warehouse, Workshop and Office

Lots 1-2 on Diagram 22830, 29 on Diagram 23804 and 174-175 on Plan 9216, Chester Pass Road, Milpara

Harley Dykstra

PLANNING & SURVEY SOLUTIONS

DOCUMENT CONTROL

Control Version	Date	Status	Distribution	Comment
A	17/12/2024	Draft	HD	For QA
B	18/12/2024	Final	Client	For Comment
C	07/01/2025	Final	LG	For Lodgement
D	24/01/2025	Final	LG	LG comments updated for Lodgement
E	04/03/2025	Final	LG	Revised to include consultant reports

Prepared for:	Auspan Group	Date:	4 March 2025
Prepared by:	SJ	Ref:	E
Reviewed by:	KS	Job No:	24248

DISCLAIMER

This document has been prepared by HARLEY DYKSTRA PTY LTD (the Consultant) on behalf of the Client. All contents of the document remain the property of the Consultant and the Client except where otherwise noted and is subject to Copyright. The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.

This document has been exclusively drafted. No express or implied warranties are made by the Consultant regarding the research findings and data contained in this report. All of the information details included in this report are based upon the existent land area conditions and research provided and obtained at the time the Consultant conducted its analysis.

Please note that the information in this report may not be directly applicable towards another client. The Consultant warns against adapting this report's strategies/contents to another land area which has not been researched and analysed by the Consultant. Otherwise, the Consultant accepts no liability whatsoever for a third party's use of, or reliance upon, this specific document.

TABLE OF CONTENTS

1 INTRODUCTION

This planning report forms the basis of a development application for a proposed warehouse, workshop and office at Lots 1-2 on Diagram 22830, 29 on Diagram 23804 and 174-175 on Plan 9216, Chester Pass Road, Milpara ('the subject land').

The proposed development comprises of a warehouse and workshop linked to a two-storey office. A copy of the Development Plan is attached at **Appendix A.**

An assessment of the proposal against the City of Albany's Local Planning Scheme No. 2 (LPS 2) has been conducted to prepare this Planning Report, which includes a description of the proposed works, the subject land, surrounding context and a planning assessment against the relevant planning framework.

The Development Application site is subject to Conditional Subdivision Approval (WAPC 200700) which was approved by the Western Australian Planning Commission on 22 November 2024 to amalgamate the subject 5 existing lots into a single lot to support the development proposed as part of this Application.

The landowner is currently working through clearance of the conditions and issuing of the new Certificate of Title to create the single title. For the purposes of this Application, we are referring to the subject lots as the "subject land" to replicate the future intention of the site.

2 BACKGROUND AND SITE CONTEXT

2.1 Location

The subject land is 7,636m² in area and is located within the City of Albany. The subject land is located approximately 3.3km northwest of the Albany city centre. The subject land is bounded by Chester Pass Road to the east, Richard Street to the south and Lance Street to the west. A location plan is shown in **Figure 1** below, with an aerial image of the site shown at **Figure 2**, that outlines the extent of the development area.

FIGURE 1: LOCATION MAP

FIGURE 2: AERIAL IMAGE

2.2 Property Details

The property details of the subject lots are as follows:

LOT NUMBER:	DIAGRAM:	VOLUME/FOLIO:	LOT AREA:	REGISTERED PROPRIETOR:
1	22830	1283/289	1,901m²	CJD Equipment Pty Ltd
2	22830	1784/276	1,821m²	CJD Equipment Pty Ltd
29	23804	1750/501	2,092m²	CJD Equipment Pty Ltd
174	9216	1360/617	911m²	CJD Equipment Pty Ltd
175	9216	1360/618	911m²	CJD Equipment Pty Ltd

Copies of the Certificates of Title have been attached at **Appendix B** of this report.

2.3 Existing Buildings, Structures and Vegetation

The subject land is vacant and does not contain any significant vegetation.

2.4 Site Context

The subject land is zoned 'Service Commercial' under the City of Albany's Local Planning Scheme No. 2 (LPS 2) and is identified on Map 21 of the LPS 2. Residential zoned properties are located to the south of the subject land, adjacent to Richard Street. Properties to the north, east and west of the subject land comprise of a mix of commercial and light industrial properties.

An excerpt of the City of Albany Local Planning Scheme No. 2 map is shown in **Figure 3** below.

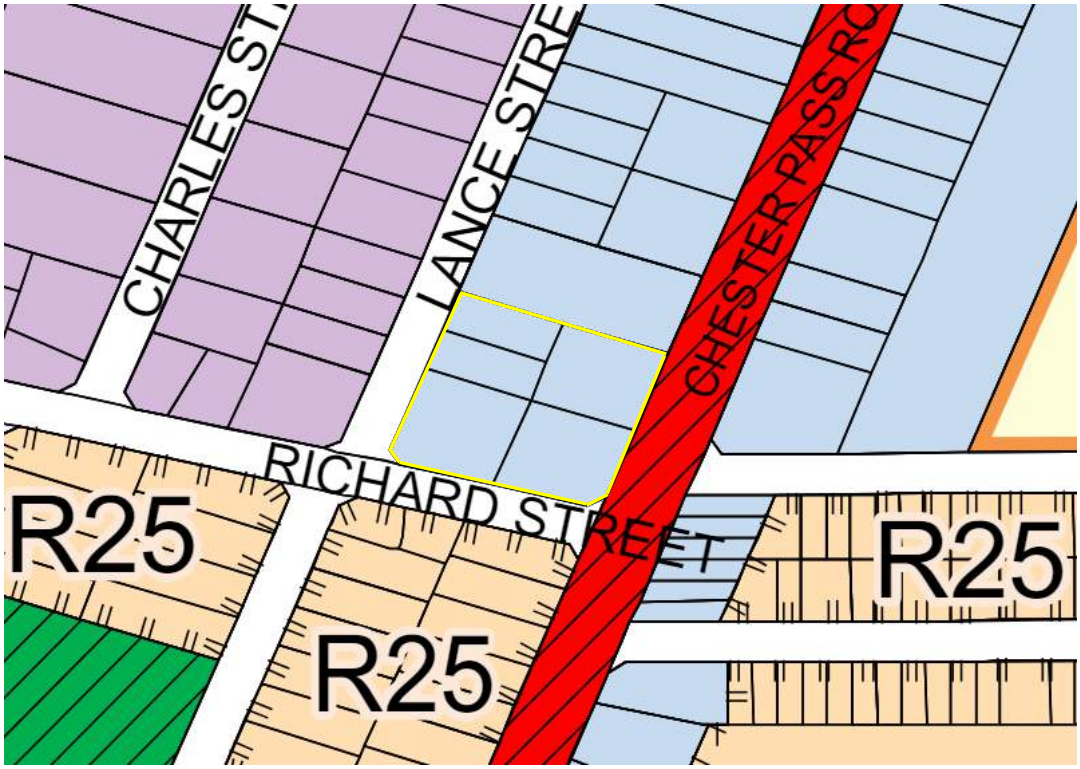


FIGURE 3: CITY OF ALBANY LOCAL PLANNING SCHEME NO. 2 – SCHEME MAP

2.5 Existing Site Contamination

Due to historic uses on the site (bulk fuel depot 1973 to 2004), the property is considered a contaminated site in accordance with the Contaminated Sites Act 2003. The contaminated site is subject to an approved Site Management Plan in conjunction with the City and Department of Water and Environmental Regulations (dated April 2023).

Copies of the Basic Summaries of Records are attached at **Appendix C** and identify that the proposed uses are considered suitable for development on the site.

No abstraction or disturbance of groundwater is proposed as part of the development of the site.

3 PROPOSED DEVELOPMENT

3.1 Development Summary

This application proposes the development of a warehouse, workshop and two-storey office. An excerpt of the site layout has been shown in **Figure 4**, while the development plans, including floor plans and elevations have been included at **Appendix A.**

FIGURE 4: SITE LAYOUT

3.2 Site Layout

Figure 4 demonstrates the spatial distribution of the buildings across the subject land. The proposal has been designed to accommodate the land's physical characteristics and dimensions.

3.2.1 Access & Carparking

Site access is planned from Chester Pass Road and Lance Street as identified on the Development Plans. The proposed development aims to utilise existing crossovers on Lance Street and one of the existing crossovers on Chester Pass Road. It is planned to use a single existing crossover onto Chester Pass Road, reducing the number of crossovers from three to one. Supplementary correspondence regarding previous discussions on this topic with the City of Albany is provided in **Appendix E.**

Due to the proposed use of the site, vehicular movements to and from the site are expected to be low with minimal face-to-face customer interactions and no retail interactions. A Transport Impact Statement has been prepared and is discussed further in section 4.1.4 of this report.

In accordance with the Traffic Flow & Parking Plan (included within **Appendix A** of this report), the car parking is to be situated predominantly within the eastern and southern portion of the site adjoining the perimeter boundary. A total of 49 car parking bays are proposed on site. The total number includes 2 accessible bays and 2 bike bays, consistent with the car parking requirements included within Table 15, Schedule 6 of LPS 2.

3.2.2 Stormwater

A stormwater plan has been prepared and is included within **Appendix A** of the development report.

The stormwater plan indicates the conveyance of stormwater via an interconnected series of soak wells with overflow provisions into the Council system. The design of the stormwater system is in accordance with the City of Albany's requirements.

3.2.3 Landscaping & Retaining

A landscaping plan has been prepared and is included within **Appendix A** of the development report. The landscaping will include a 3m wide landscaping strip to all street frontages. A minimum of 764m², representing 10% of the site area, will be landscaped. One tree will be planted for every 6 car bays.

Retaining walls will be constructed along the western, eastern and southern street frontages. The retaining walls will be constructed using limestone blocks to a maximum height of 1.84m.

3.2.4 Land Use

In discussions the City of Albany, several questions were asked regarding the operational aspects of the site once in operation. The table below sets out the responses to these questions:

Table 1 – Land Use Q&A

Question	Answer
1. What specific vehicles (including any trailers or attachments) are proposed to be serviced and/or repaired on the premises? Please include specifications and classifications of the different types of vehicles.	Rigid trucks up to 12 tonnes; Prime movers up to 10 tonnes; Single truck and trailer up to 32 tonnes; and Combination estimated length about 18 metres.
2. How will the servicing and repair of these vehicles be conducted?	Servicing and repairs will be undertaken inside a covered workshop.
3. Will any machinery be serviced/repaired on site and what kind of machinery (including specifications and classifications)?	The largest will be construction machinery including L350 and EC550. Specifications are contained within the PDF's attached at **Appendix D.**
4. Is servicing and repair the dominant use or would wholesale and showrooms/sale of machinery be the predominant land use?	The dominant site use will be servicing and repair.
5. Number of vehicles to be serviced and/or repaired entering and exiting from the site on average per day.	Four to eight movements are expected to take place each day.
6. What would the training room be used for and how often?	Internal specialist training will be undertaken approximately once per quarter.
7. What specific machinery would be on display along Chester Pass Road and how many? Please include specifications and classifications.	The site is not planned to be a sales yard as all sales originate from Perth, but a machine may be on display, as per the machine types detailed in **Appendix D**.
8. What vehicles/machines would be for sale or hire from the site?	Please refer to the above comment - no hire or sales are planned for this site.
9. How long will drivers be present on the site?	At most, 8 hours during daylight hours. No drivers will be staying overnight.

10. What activities will be taking place in the workshop area? Is any manufacturing taking place and if so, what manufacturing processes will be undertaken? Will there be any assembly processes taking place?	As noted earlier, only servicing and repairs will be undertaken with no manufacturing taking place at this site.
11. What will be stored in the warehouse?	Parts recommended by the operator's Original Equipment Manufacturers, Volvo Construction Equipment and PACCAR Trucks.
12. What vehicles would be used to bring items to the warehouse?	Rigid delivery trucks as used by other local Albany businesses.
13. What noise mitigation measures are planned for the site?	The facility will operate during regular business hours, which are 7:00 AM to 5:00 PM from Monday to Friday and 7:00 AM to 12:00 PM on Saturdays. Activities outside these hours are not anticipated, except in emergencies or during equipment breakdowns. Furthermore, the buildings have been designed to minimise noise from the workshop, with strategic placement to shield residential areas to the south.

4 PLANNING FRAMEWORK

4.1 City of Albany Local Planning Scheme No. 2

4.1.1 Land Use Permissibility

The subject land is zoned 'Service Commercial' under LPS2. The objectives of the 'Service Commercial' zone, are as follows:

- *To accommodate commercial activities which, because of the nature of the business, require good vehicular access and/or large sites.*
- *To provide for a range of wholesale sales, showrooms, trade and services which, by reason of their scale, character, operational or land requirements, are not generally appropriate in, or cannot conveniently or economically be accommodated in, the central area, shops and offices or industrial zones.*

The proposed development aligns with the zoning provisions of the City of Albany's Local Planning Scheme No. 2, as the following land uses proposed for this development are approved uses within the zoning table:

- motor vehicle/boat repair
- motor vehicle wash
- office
- trade display
- warehouse/storage

As each of these uses is explicitly permitted under the applicable zoning, the proposed development is compliant with the planning framework is therefore consistent with the provisions of the LPS 2.

4.1.2 Schedule 5 – Additional Requirements – Service Commercial

Table 12 within Schedule 5 of LPS 2 details the additional requirements that apply to development within the Service Commercial zone. The table below provides a detailed description of the requirements and how the proposed development complies with these requirements and/or provides an appropriate variation for consideration by Council.

Table 2 – Service Commercial Zone Requirements

Site Requirements	Development Requirements	Proposed Development Outcome
Setbacks	i. Primary Street Setback: 7.5m ii. Side and Rear Setback: Nil	i. 7.5m ii. Nil
Landscaping	10% of the site area is to be landscaped.	10% of the site area is to be landscaped.
Plot Ratio	Max plot ratio of 0.6 for the Service Commercial zone	The proposed plot ratio is 0.42
Building Design	Development should utilize design elements and materials which break down the bulk of development and provide visual interest through the articulation of their built form.	The development proposes to utilise a range of cladding materials and visual design that will break down the bulk and create visual interest. Examples of this include the use of glass, feature fins and shade awnings.
Storage – Materials	i. Where the open storage of goods or materials is proposed and the goods and materials stored are, in the opinion of the local government, of an untidy nature and likely to give offence to adjoining owners or have an adverse effect upon the general appearance of the area, the local government may require the owner or occupier to: 1) Restrict the height and areas to which goods and materials may be stored; and 2) Effectively screen the open storage area by a closed fence and/or the planting of trees and/or shrubs. ii. No goods are to be stored, or services provided which extend beyond the land the subject of the development application.	No external/exposed storage is proposed.
Access	i. Any access/egress point(s) onto adjoining roads requires the approval of the state department(s) responsible for road control. ii. All premises within the Service Commercial zone shall be provided with: 1) A sealed and/or paved access to the specifications of the responsible state department(s) for road control; 2) A designated loading/unloading area on site, designed so that	i. Access/egress to the site is addressed in Sections 3.2.1 and 4.1.4 of this report. ii. All hard surfaces will be sealed/paved. A traffic flow plan has been prepared and is included within **Appendix A** of the development report. This plan demonstrates that vehicles will enter and

	delivery vehicles leave and enter the street in forward gear.	exit the site in a forward gear.
Signage	Signage associated with an approved development should be incorporated into the fabric of buildings and structures on site and the use of bunting should be avoided.	Section 4.1.6 of this report addresses signage.

As identified in the above table, the proposed development is considered consistent with the objectives and site requirements for development within the Service Commercial area and generally complies with the specific requirements.

4.1.3 Acoustic Reporting

Herring Storer Acoustics completed and Environmental Acoustic Assessment of the development. Their report assessed noise emissions from the premises with regards to compliance with the requirements of the Environmental Protection (Noise) Regulations 1997.

The report noted that noise emissions associated with the proposed development have been found to be compliant with the relevant Assigned Noise Levels at all times with the exception of the night period. Hence, if the workshop is restricted to the day/evening (and Sunday day/ public holiday) time periods, the proposed development is compliant with the Assigned Noise Levels stipulated by the Environmental Protection (Noise) Regulations 1997.

As noted in 3.2.4 of this report, the CJD facility will not operate at night time and hence the development is compliant with the noise regulations.

4.1.4 Transport Impact Statement

PTG Consulting completed the Transport Impact Assessment of the development. Their report assessed the operations of the proposed development internally and its connections to the adjacent road network, with a focus on traffic volumes, access and accessibility. Their report has also outlined the requirements and opportunities associated with traffic and transport within the development, referencing relevant Council and WAPC policies and guidelines as well as best-practice planning within Western Australia.

The report concluded that the development will generate manageable traffic volumes, with 33 vehicles during both the AM and PM peak periods and a total of 90 vehicles per day. It also confirmed that all staff vehicles and trucks, whether rigid or combination, will access the site via Lance Street. Staff vehicles will exit through the Lance Street crossovers, while the Chester Pass Road crossover will be designated exclusively for truck exits and customer light vehicles (LVs) entering and exiting the premises. The proposed parking provisions, including 49 car bays (with accessible and electric vehicle parking), along with two bicycle racks, comply with the statutory requirements of the City's Local Planning Scheme No. 2. Lastly, the report found that the surrounding area has recorded a low number of crashes over the past five years, indicating a negligible impact on road safety.

4.1.5 Waste Management Plan

PTG Consulting completed a Waste Management Plan in support of the proposed development. The report includes recommendations for the appropriate collection, storage, handling, and transportation of waste and recycling, in accordance with the requirements outlined by Western Australia Local Government Association (WALGA) Commercial and Industrial Waste Management Plan Guidelines.

The report concludes that the proposed development provides sufficient provision for general waste and recyclable waste based on the estimated waste generation.

4.1.6 Signage

This application proposes a development that includes signage installation. Detailed signage plans are yet to be finalised. A separate Development Application will be submitted in due course to outline the plans and demonstrate compliance with relevant policies.

4.2 State Planning Policy 3.7 – Planning in Bushfire Prone Areas

The objective of *State Planning Policy 3.7 - Planning in Bushfire Prone Areas* (SPP 3.7), is to implement effective, risk-based land use planning and development to preserve life and reduce the impact of bushfire on property and infrastructure.

Figure 5 demonstrates that the subject land is not located within a bushfire prone area, as designated by the Department of Fire and Emergency Commissioner and as such, the development is considered exempt of bushfire reporting under the Guidelines for Planning in Bushfire Prone Areas Ver 1.4, and no detailed fire assessment is required.

Therefore, the development as proposed, meets the objectives of SPP 3.7.

FIGURE 5: BUSHFIRE PRONE MAPPING

5 SERVICING

5.1 Power

Overhead power is available along the eastern, western and southern boundaries of the subject land.

5.2 Reticulated Water

Reticulated water is available within the adjoining road reserves of the subject land. A fire hydrant is located along the southern boundary.

5.3 Reticulated Sewer

Reticulated sewer is available on the southern side of the subject land.

5.4 Telecommunications

Telco infrastructure is available within the road reserve. The subject site can be connected to this service.

5.5 Access

As noted in Section 3.2.1 of this report, access to the property is currently from Chester Pass Road to the east and from Lance Street to the west. A traffic flow and parking plan is included in drawing No. A701 of the Development Plans (see **Appendix A**).

6 CONCLUSION

The proposed development is consistent with the requirements of the Service Commercial zone. The use of the subject land for a warehouse, workshop and office is capable of approval and is compliant with all the provisions within the City of Albany Local Planning Scheme No. 2 and the applicable state planning framework.

Accordingly, Development Approval is respectfully sought for the proposed warehouse, workshop and office subject to advertising in accordance with the Planning and Development (Local Planning Scheme) Regulations 2015. Approval is sought and justified on the following grounds:

1. The proposed development provides for a single lot capable of supporting future service commercial development;
2. The lot can be connected to all required services;
3. The proposed development is in accordance with the City of Albany's Local Planning Scheme No 2 and SPP 3.7; and
4. The proposed development is in accordance with the principles of orderly and proper planning.

Therefore, it is respectfully requested that the City of Albany assess this application and approve the proposed warehouse, workshop and office over Lots 1-2 on Diagram 22830, 29 on Diagram 23804 and 174-175 on Plan 9216, Chester Pass Road, Milpara (subject to amalgamation) subject to advertising in accordance with the requirements of LPS 2 and the LPS Regulations 2015.

APPENDIX A | DEVELOPMENT PLANS

SITE ADDRESS:

CNR CHESTER PASS RD & RICHARD ST
ALBANY, WA 6330

PROJECT:

PROPOSED WORKSHOP, WAREHOUSE & OFFICE

DRAWING SCHEDULE

DWG#	SHEET NAME	REV	DATE
A000	COVER PAGE	B	20/12/2024
A100	SITE - SURVEY & LOCALITY PLAN	A	05/12/2024
A101	SITE - PLAN	D	21/02/2025
A200	FLOOR PLAN - OVERALL	C	16/01/2025
A201	FLOOR PLAN - WORKSHOP	D	16/01/2025
A202	FLOOR PLAN - WAREHOUSE & OFFICES GROUND FLOOR	C	16/01/2025
A203	FLOOR PLAN - WAREHOUSE & OFFICES UPPER FLOOR	C	16/01/2025
A204	ROOF PLAN	A	05/12/2024
A300	ELEVATIONS 1	C	22/01/2025
A301	ELEVATIONS 2	B	16/01/2025
A302	3D ELEVATIONS	C	22/01/2025
A303	ELEVATIONS - RETAINING	B	22/01/2025
A400	SECTIONS 1	A	05/12/2024
A401	SECTIONS 2	A	05/12/2024
A500	ACCESS & MOBILITY LAYOUTS	A	05/12/2024
A700	LANDSCAPING PLAN	C	21/02/2025
A701	TRAFFIC FLOW & PARKING PLAN	C	21/02/2025
A702	FIRE SERVICES PLAN	D	22/01/2025

CONSULTANT DRAWINGS

DWG#	SHEET NAME	REV	DATE
LAN-24-01	STORMWATER PLAN & DETAILS	0	DEC 2024

AUSPAN

Perth
5 Martin Place
Canningvale, WA 6155

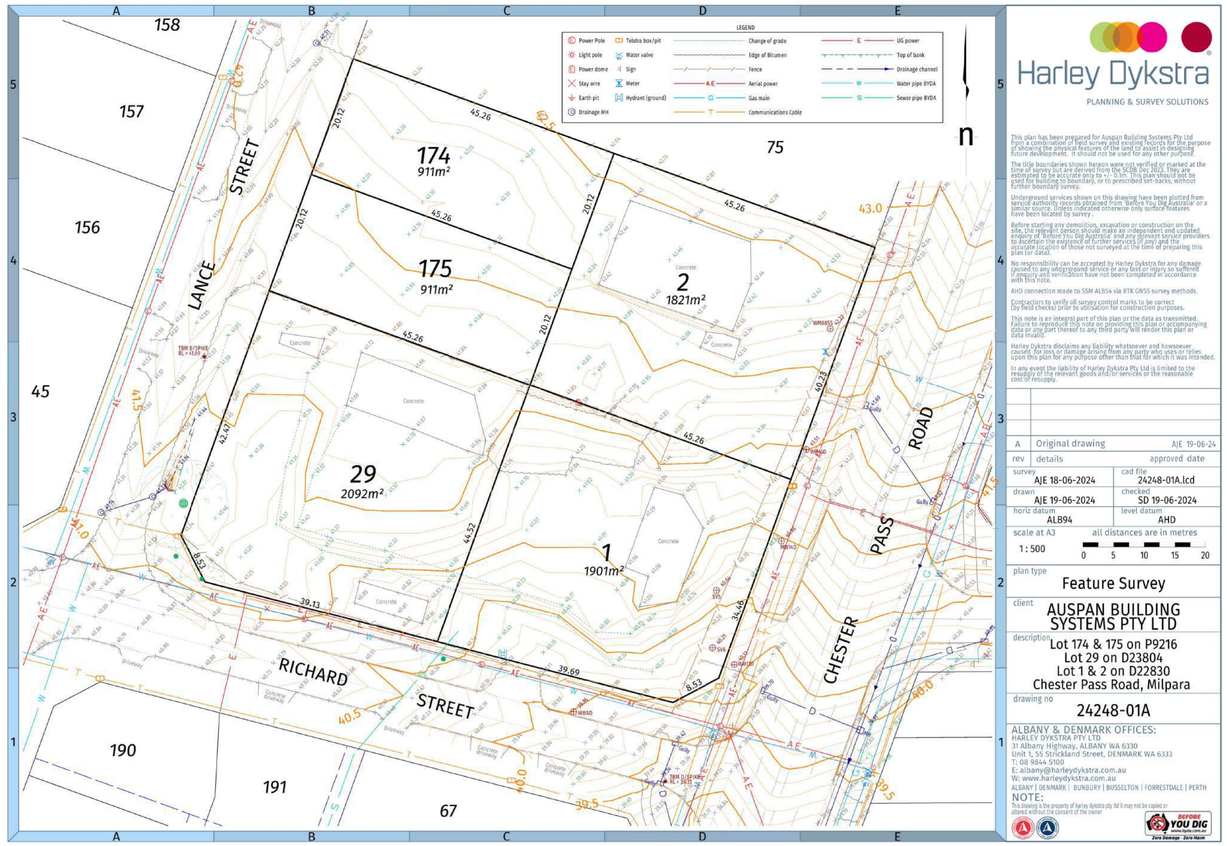
Albany
169 Chesterpass Road
Milpara, WA 6330

Gnowangerup
15 Corbett Street
Gnowangerup, WA 6335

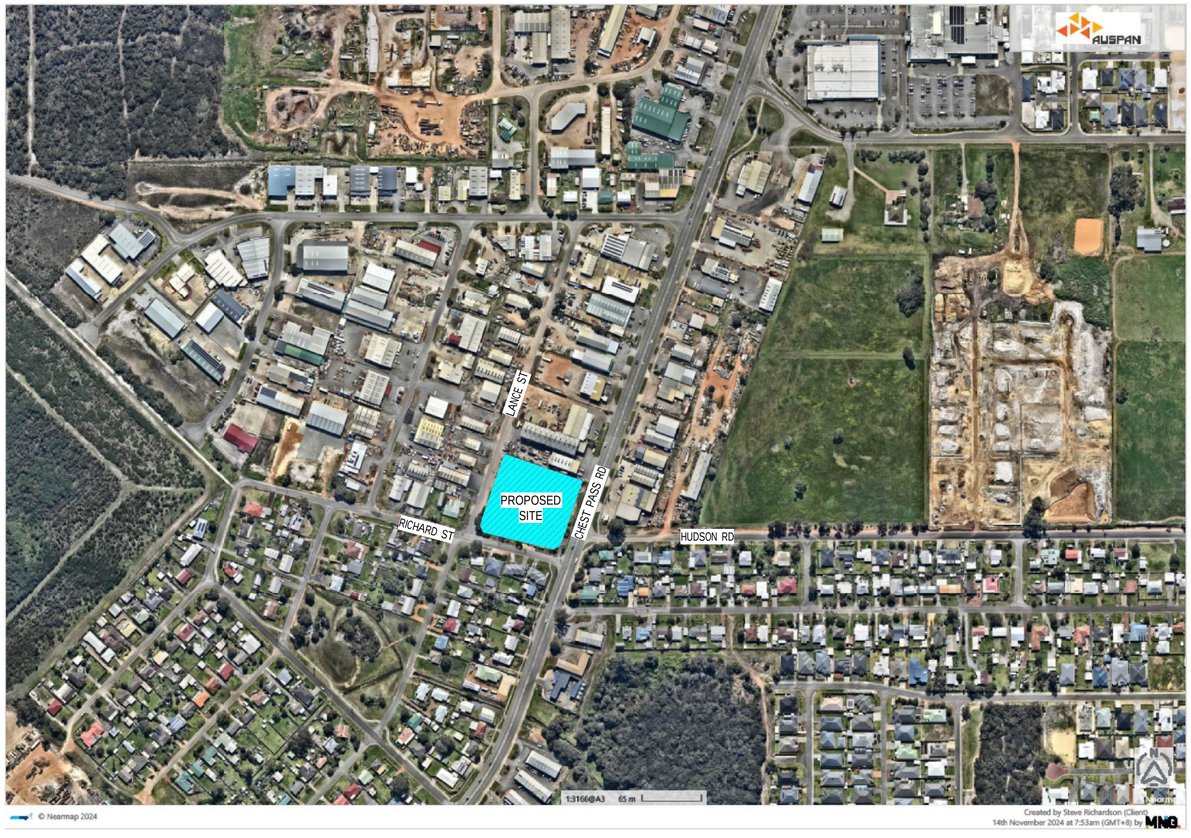
Phone: 1300 271 220

PROJECT NUMBER:

TK3026



SITE SURVEY



LOCALITY PLAN

DATE	REV	AMENDMENT	BY
05/12/2024	A	ISSUED FOR DA	ER

DESIGNER:

AUSPAN

Perth
5 Martin Place
Canningvale, WA 6155

Albany
169 Chesterpass Road
Milpara, WA 6330

Gnowangerup
15 Corbett Sreet
Gnowangerup, WA 6335

Phone: 1300 271 220

CLIENT: CJD EQUIPMENT

SITE ADDRESS: CNR CHESTER PASS RD & RICHARD ST ALBANY, WA 6330

ARCHITECTURAL DRAWINGS

PROJECT: PROPOSED WORKSHOP, WAREHOUSE & OFFICE

DRAWING TITLE: SITE - SURVEY & LOCALITY PLAN

SCALE:	AS NOTED
SHEET SIZE:	A1
DATE:	05/12/2024
DESIGNED:	ER
DRAWN:	ER
CHECKED:	DD

PROJECT NUMBER: TK3026

STAGE: DA

REVISION: A

DRAWING NUMBER: A100

C:\Users\EmmaReynolds\AuspanGr\odrive\Procore\Auspanbu\projects\TK3026 - CJD Albany Workshop & Offices\06 DWGS & DESIGN\01 Architectural\03 REVIT\04 Models\TK3026 - CJD ALBANY_DA_PLAN_20220225.rvt

DEVELOPMENT SUMMARY

CITY OF ALBANY
LOCAL PLANNING SCHEME No. 2

ADDRESS CNR OF CHESTER PASS RD & RICHARD ST, ALBANY, WA
ZONING HIGHWAY COMMERCIAL
SITE AREA 7,638m² (*AMALGIMATED*)
LAND USE WORKSHOP, WAREHOUSE & OFFICES

BUSHFIRE ZONE
BUILDING **IS NOT** WITHIN A BUSHFIRE PRONE AREA

FLOOR AREAS

WORKSHOP	894m²
WASH BAY	114m²
WAREHOUSE	866m²
MEZZANINE	268m²
OFFICE GROUND FLOOR	320m²
OFFICE UPPER FLOOR	200m²
CANOPIES	504m²
LOADING AWNING	20m²
ENTRY AWNING	21m²
LEAN-TO	39m²
TOTAL	3,246m²

SETBACKS

PRIMARY STREET	7.5m
REAR & SIDE	NIL

EXISTING SERVICES
CONNECTIONS TO BE CONFIRMED:
- WATER SUPPLY
- FIRE SERVICUE
- SEWER
- POWER
- NBN & COMMS

SITE PLAN
1 : 250

DATE	REV	AMENDMENT	BY
21/02/2025	D	CHESTER PASS RD CROSSOVER MODIFIED TO SUIT VEHICLE TURNING REQUIREMENTS	ER
22/01/2025	C	CHESTER PASS RD CROSSOVER RELOCATED TO SUIT EXISTING. MACHINERY DISPLAY AREA EXPANDED.	ER
20/12/2024	B	SOAKWELL RELOCATED TO SUIT UPDATED CONSULTANT STORMWATER DESIGN. SURVEY ADDED FOR CLARITY	ER
05/12/2024	A	ISSUED FOR DA	ER

DESIGNER: AUSPAN

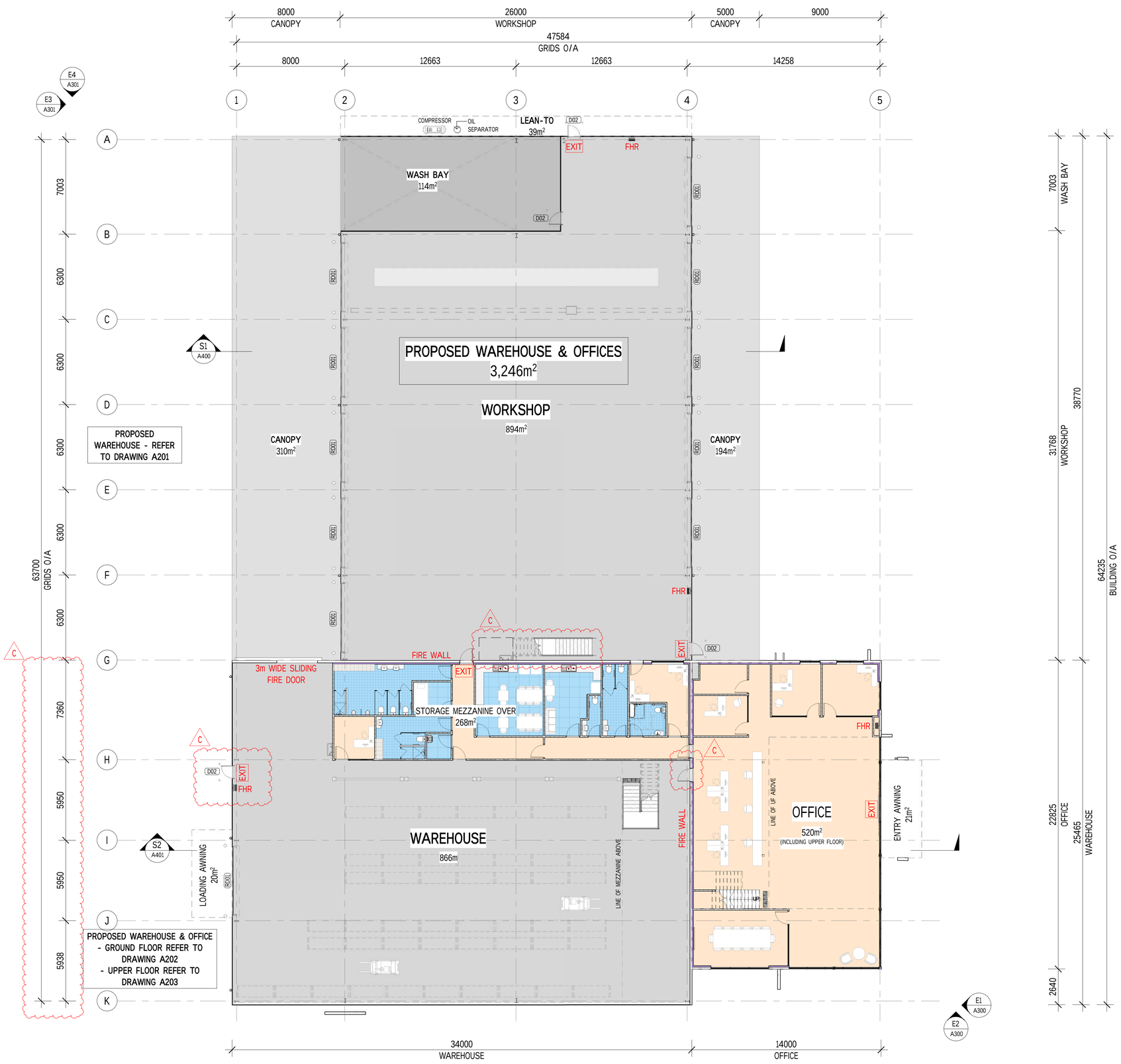
Perth, 5 Martin Place, Canningvale, WA 6155
Albany, 169 Chesterpass Road, Milpara, WA 6330
Gnowangerup, 15 Corbett Street, Gnowangerup, WA 6335
Phone: 1300 271 220

CLIENT: CJD EQUIPMENT
SITE ADDRESS: CNR CHESTER PASS RD & RICHARD ST, ALBANY, WA 6330
ARCHITECTURAL DRAWINGS
PROJECT: PROPOSED WORKSHOP, WAREHOUSE & OFFICE
DRAWING TITLE: SITE - PLAN

SCALE:	1 : 250
SHEET SIZE:	A1
DATE:	20/12/2024
DESIGNED:	ER
DRAWN:	ER
CHECKED:	DD
PROJECT NUMBER:	TK3026
STAGE:	DA
REVISION:	D
DRAWING NUMBER:	A101

DOOR SCHEDULE

D01	DOUBLE AUTO SLIDING DOORS 2 x 920 WIDE x 2400h. COLOUR FINISH - BLACK. PROVIDE DECAL STRIPS IN ACCORDANCE WITH NCC CLAUSE D4D13
D02	920 x 2040 EXTERNAL SOLID CORE DOOR METAL CLAD. COLOUR FINISH - SHALE GREY
RD01	5000h x 5000w ROLLER DOOR COLOUR FINISH - SHALE GREY



FLOOR PLAN - OVERALL

1 : 150

INSULATION

OFFICE	
ROOF	60mm ANTICON
CEILING	R3.5 (MIN) BULK CEILING BATTS
EXT. WALLS	R2.0 (MIN) BULK WALL BATTS & FOIL WRAP
INT. WALLS	R2.0 90mm BULK WALL BATTS ACCOUSTIC BATTS WHERE REQUIRED
WAREHOUSE & WORKSHOP	
ROOF	60mm ANTICON

DATE	REV	AMENDMENT	BY
16/01/2025	C	CHANGES TO SUIT ENGINEERS COMMENTS	ER
16/12/2024	B	DUCTS ADDED, MINOR LAYOUT MODIFICATIONS TO OFFICES. DOOR & WINDOW CONFIGURATION TO WORKSHOP OFFICE REVISED. WASH TROUGHS ADDED.	ER
05/12/2024	A	ISSUED FOR DA	ER

DESIGNER:
AUSPAN
Perth
5 Martin Place
Canningvale, WA 6155
Albany
169 Chesterpass Road
Milpara, WA 6330
Gnowangerup
15 Corbett Street
Gnowangerup, WA 6335
Phone: 1300 271 220

CLIENT: CJD EQUIPMENT

SITE ADDRESS: CNR CHESTER PASS RD & RICHARD ST ALBANY, WA 6330

ARCHITECTURAL DRAWINGS

PROJECT: PROPOSED WORKSHOP, WAREHOUSE & OFFICE

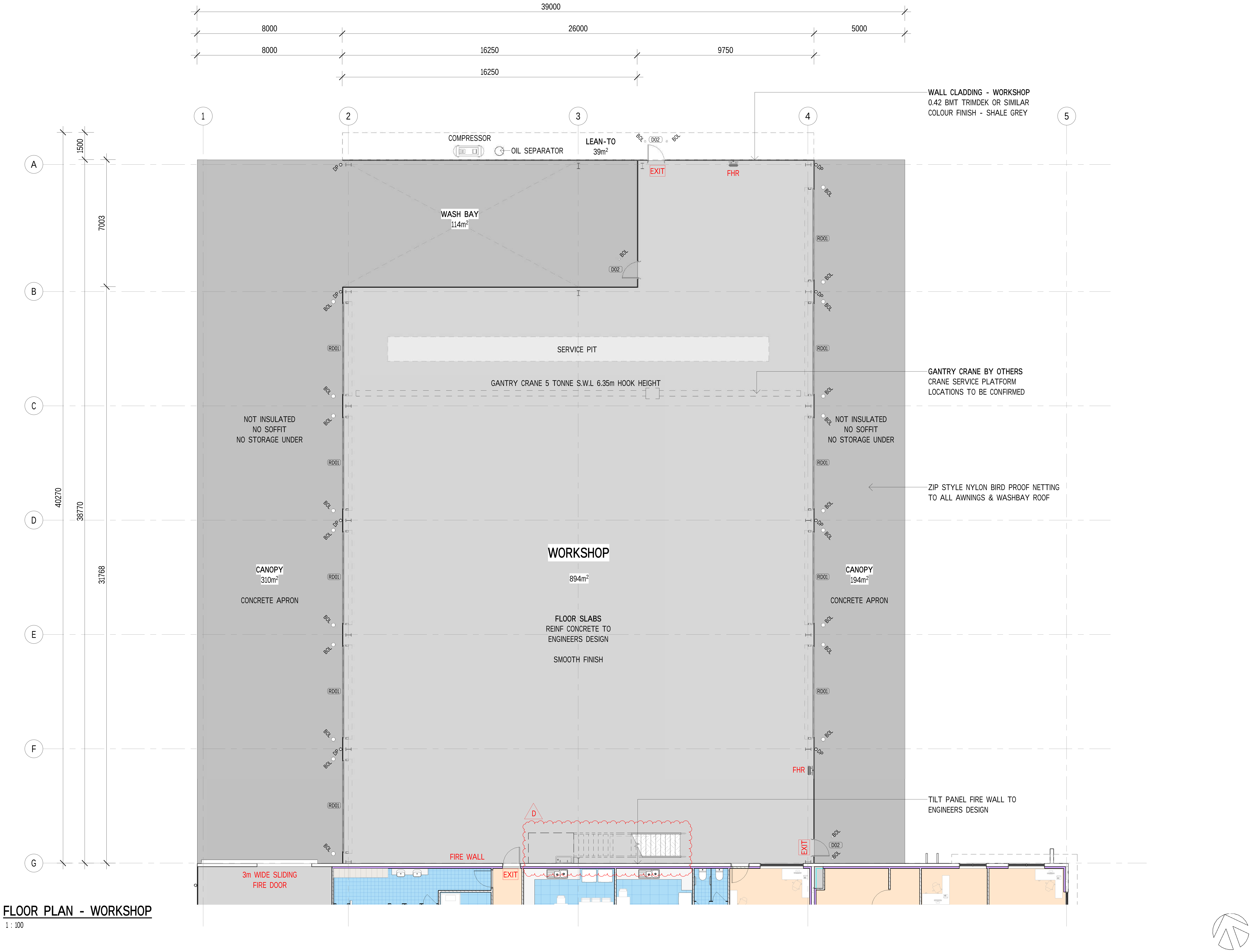
DRAWING TITLE: FLOOR PLAN - OVERALL

SCALE:	1 : 150
SHEET SIZE:	A1
DATE:	05/12/2024
DESIGNED:	ER
DRAWN:	ER
CHECKED:	DD
PROJECT NUMBER:	TK3026
STAGE:	DA
REVISION:	C
DRAWING NUMBER:	A200

C:\Users\EmmaReynolds\AuspanGr\odrive\Procore\Auspanltd\projects\TK3026 - CJD Albany Workshop & Offices\06 DWGS & DESIGN\S1 Architectural\03 REVIT\04 Models\TK3026 - CJD ALBANY_DA_PLAN_23225205.rvt

DOOR SCHEDULE

D01	DOUBLE AUTO SLIDING DOORS 2 x 920 WIDE x 2400h. COLOUR FINISH - BLACK. PROVIDE DECAL STRIPS IN ACCORDANCE WITH NCC CLAUSE D4D13
D02	920 x 2040 EXTERNAL SOLID CORE DOOR METAL CLAD. COLOUR FINISH - SHALE GREY
RD01	5000h x 5000w ROLLER DOOR COLOUR FINISH - SHALE GREY



FLOOR PLAN - WORKSHOP

1 : 100

DATE	REV	AMENDMENT	BY
16/01/2025	D	CHANGES TO SUIT ENGINEERS COMMENTS	ER
20/12/2024	C	DOWNPIPE NOTE ADDED	ER
16/12/2024	B	DUCTS ADDED, MINOR LAYOUT MODIFICATIONS TO OFFICES. DOOR & WINDOW CONFIGURATION TO WORKSHOP OFFICE REVISED. WASH TROUGHS ADDED.	ER
05/12/2024	A	ISSUED FOR DA	ER

DESIGNER: AUSPAN

Perth
5 Martin Place
Canningvale, WA 6155

Albany
169 Chesterpass Road
Milpara, WA 6330

Gnowangerup
15 Corbett Street
Gnowangerup, WA 6335

Phone: 1300 271 220

CLIENT: CJD EQUIPMENT

SITE ADDRESS: CNR CHESTER PASS RD & RICHARD ST ALBANY, WA 6330

ARCHITECTURAL DRAWINGS

PROJECT: PROPOSED WORKSHOP, WAREHOUSE & OFFICE

DRAWING TITLE: FLOOR PLAN - WORKSHOP

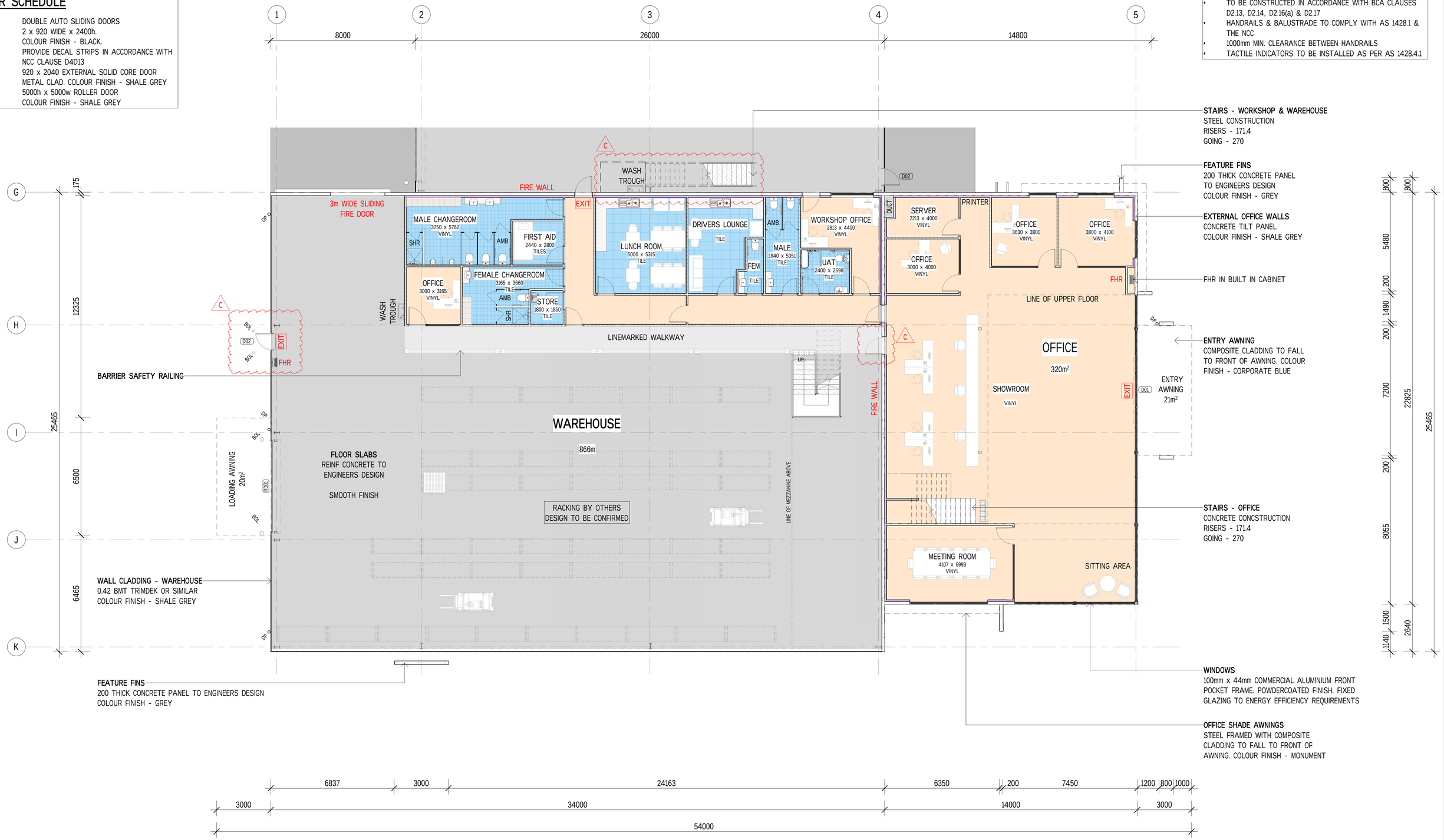
SCALE:	1 : 100
SHEET SIZE:	A1
DATE:	05/12/2024
DESIGNED:	ER
DRAWN:	ER
CHECKED:	DD
PROJECT NUMBER:	TK3026
STAGE:	DA
REVISION:	D
DRAWING NUMBER:	A201

C:\Users\EmmaReynoldsAuspanGr\odrive\Procore\AuspanBu\projects\TK3026 - CJD Albany Workshop & Offices\06 DWGS & DESIGN\01 Architectural\03 REVIT\04 Models\TK3026 - CJD ALBANY_DA_PLAN_21022025.rvt

DOOR SCHEDULE

D01	DOUBLE AUTO SLIDING DOORS 2 x 920 WIDE x 2400h. COLOUR FINISH - BLACK. PROVIDE DECAL STRIPS IN ACCORDANCE WITH NCC CLAUSE D4D13
D02	920 x 2040 EXTERNAL SOLID CORE DOOR METAL CLAD. COLOUR FINISH - SHALE GREY
RD01	5000h x 5000w ROLLER DOOR COLOUR FINISH - SHALE GREY

STAIRS
- TO BE CONSTRUCTED IN ACCORDANCE WITH BCA CLAUSES D2.13, D2.14, D2.16(a) & D2.17
- HANDRAILS & BALUSTRADE TO COMPLY WITH AS 1428.1 & THE NCC
- 1000mm MIN. CLEARANCE BETWEEN HANDRAILS
- TACTILE INDICATORS TO BE INSTALLED AS PER AS 1428.4.1



STAIRS - WORKSHOP & WAREHOUSE
STEEL CONSTRUCTION
RISERS - 171.4
GOING - 270

FEATURE FINS
200 THICK CONCRETE PANEL
TO ENGINEERS DESIGN
COLOUR FINISH - GREY

EXTERNAL OFFICE WALLS
CONCRETE TILT PANEL
COLOUR FINISH - SHALE GREY

FHR IN BUILT IN CABINET

ENTRY AWNING
COMPOSITE CLADDING TO FALL TO FRONT OF AWNING. COLOUR FINISH - CORPORATE BLUE

STAIRS - OFFICE
CONCRETE CONCSTRUCTION
RISERS - 171.4
GOING - 270

WINDOWS
100mm x 44mm COMMERCIAL ALUMINIUM FRONT POCKET FRAME. POWDERCOATED FINISH. FIXED GLAZING TO ENERGY EFFICIENCY REQUIREMENTS

OFFICE SHADE AWNINGS
STEEL FRAMED WITH COMPOSITE CLADDING TO FALL TO FRONT OF AWNING. COLOUR FINISH - MONUMENT

FLOOR PLAN - WAREHOUSE & OFFICES GROUND FLOOR

1 : 100

DATE	REV	AMENDMENT	BY
16/01/2025	C	CHANGES TO SUIT ENGINEERS COMMENTS	ER
16/12/2024	B	DUCTS ADDED, MINOR LAYOUT MODIFICATIONS TO OFFICES. DOOR & WINDOW CONFIGURATION TO WORKSHOP OFFICE REVISED. WASH TROUGHS ADDED.	ER
05/12/2024	A	ISSUED FOR DA	ER

DESIGNER: AUSPAN

Perth
5 Martin Place
Canningvale, WA 6155

Albany
169 Chesterpass Road
Milpara, WA 6330

Gnowangerup
15 Corbett Street
Gnowangerup, WA 6335

Phone: 1300 271 220

CLIENT: CJD EQUIPMENT

SITE ADDRESS: CNR CHESTER PASS RD & RICHARD ST ALBANY, WA 6330

ARCHITECTURAL DRAWINGS

PROJECT: PROPOSED WORKSHOP, WAREHOUSE & OFFICE

DRAWING TITLE: FLOOR PLAN - WAREHOUSE & OFFICES GROUND FLOOR

SCALE:	1 : 100
SHEET SIZE:	A1
DATE:	05/12/2024
DESIGNED:	ER
DRAWN:	ER
CHECKED:	DD

PROJECT NUMBER: TK3026

STAGE: DA

REVISION: C

DRAWING NUMBER: A202

C:\Users\EmmaReynolds\AuspanGr\Admin\Process\Auspan\Bur\projects\TK0026 - CJD Albany Workshop & Office\06 DWGS & DESIGN\S Architectural\03 REVIT\04 Models\TK0026 - CJD ALBANY_DA_FUNL_23220225.rvt

DOOR SCHEDULE

D01	DOUBLE AUTO SLIDING DOORS 2 x 920 WIDE x 2400h. COLOUR FINISH - BLACK. PROVIDE DECAL STRIPS IN ACCORDANCE WITH NCC CLAUSE D4D13
D02	920 x 2040 EXTERNAL SOLID CORE DOOR METAL CLAD. COLOUR FINISH - SHALE GREY
D01	5000h x 5000w ROLLER DOOR COLOUR FINISH - SHALE GREY

MEZZANINE FLOOR
DELTA PANELS WITH TOPPER

TILT PANEL FIRE WALL
TO ENGINEERS DESIGN

EXTERNAL OFFICE WALLS
CONCRETE TILT PANEL
COLOUR FINISH - SHALE GREY

FEATURE FINS
200 THICK CONCRETE PANEL TO ENGINEERS DESIGN
COLOUR FINISH - GREY

ENTRY AWNING
COMPOSITE CLADDING TO FALL TO FRONT OF AWNING. COLOUR FINISH - CORPORATE BLUE

WINDOWS
100mm x 44mm COMMERCIAL ALUMINIUM FRONT POCKET FRAME. POWDERCOATED FINISH. FIXED GLAZING TO ENERGY EFFICIENCY REQUIREMENTS

FLOOR PLAN - WAREHOUSE & OFFICES UPPER FLOOR

1 : 100

DATE	REV	AMENDMENT	BY
16/01/2025	C	CHANGES TO SUIT ENGINEERS COMMENTS	ER
16/12/2024	B	DUCTS ADDED, MINOR LAYOUT MODIFICATIONS TO OFFICES. DOOR & WINDOW CONFIGURATION TO WORKSHOP OFFICE REVISED. WASH TROUGHS ADDED.	ER
05/12/2024	A	ISSUED FOR DA	ER

DESIGNER: AUSPAN

Perth
5 Martin Place
Canningvale, WA 6155

Albany
169 Chesterpass Road
Milpara, WA 6330

Gnowangerup
15 Corbett Street
Gnowangerup, WA 6335

Phone: 1300 271 220

CLIENT: CJD EQUIPMENT

ARCHITECTURAL DRAWINGS

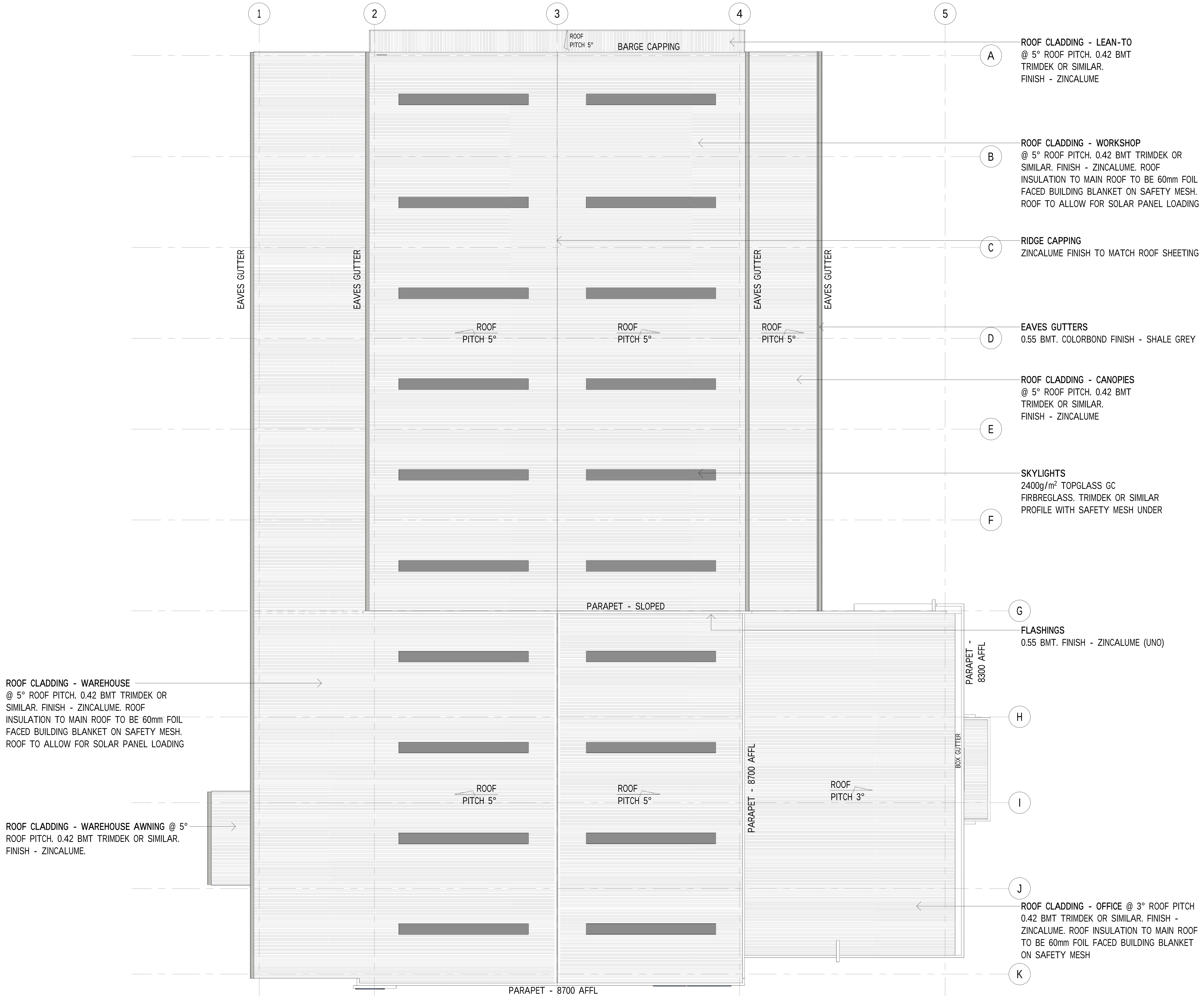
SITE ADDRESS: CNR CHESTER PASS RD & RICHARD ST ALBANY, WA 6330

PROJECT: PROPOSED WORKSHOP, WAREHOUSE & OFFICE

DRAWING TITLE: FLOOR PLAN - WAREHOUSE & OFFICES UPPER FLOOR

SCALE:	1 : 100
SHEET SIZE:	A1
DATE:	05/12/2024
DESIGNED:	ER
DRAWN:	ER
CHECKED:	DD
PROJECT NUMBER:	TK3026
STAGE:	DA
REVISION:	C
DRAWING NUMBER:	A203

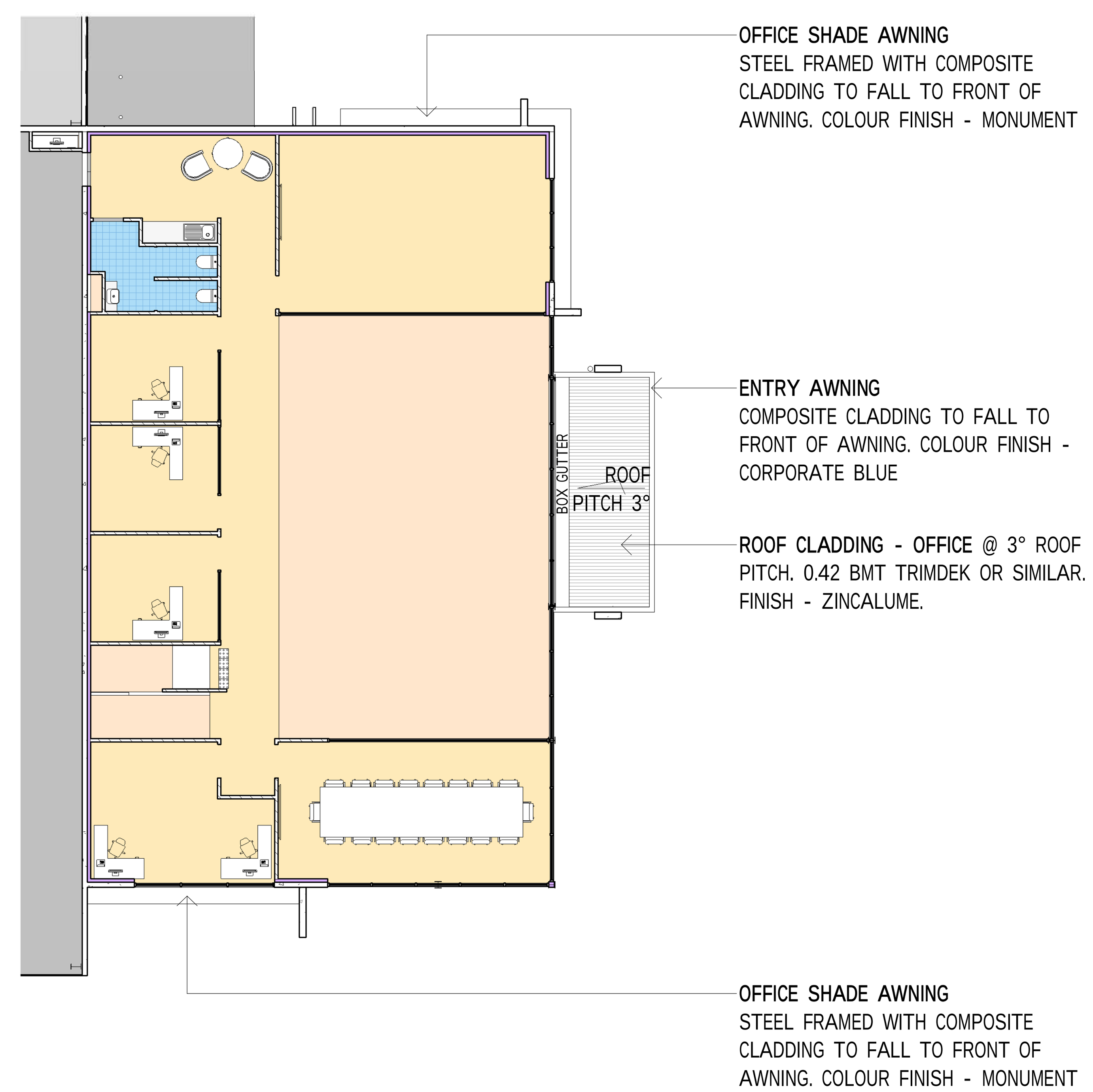
C:\Users\EmmaReynoldsAuspanGr\odrive\Procore\AuspanBu\projects\TK3026 - CJD Albany Workshop & Offices\06 DWGS & DESIGN\01 Architectural\03 REVIT\04 Models\TK3026 - CJD ALBANY_DA_PLAN_21022025.rvt



1
2
3
4
5
A
B
C
D
E
F
G
H
I
J
K
ROOF PITCH 5°
BARGE CAPPING
EAVES GUTTER
EAVES GUTTER
EAVES GUTTER
EAVES GUTTER
ROOF PITCH 5°
ROOF PITCH 5°
ROOF PITCH 5°
PARAPET - SLOPED
PARAPET - 8300 AFFL
BOX GUTTER
PARAPET - 8700 AFFL
ROOF PITCH 5°
ROOF PITCH 5°
ROOF PITCH 3°
PARAPET - 8700 AFFL
ROOF CLADDING - LEAN-TO @ 5° ROOF PITCH. 0.42 BMT TRIMDEK OR SIMILAR. FINISH - ZINCALUME
ROOF CLADDING - WORKSHOP @ 5° ROOF PITCH. 0.42 BMT TRIMDEK OR SIMILAR. FINISH - ZINCALUME. ROOF INSULATION TO MAIN ROOF TO BE 60mm FOIL FACED BUILDING BLANKET ON SAFETY MESH. ROOF TO ALLOW FOR SOLAR PANEL LOADING
RIDGE CAPPING ZINCALUME FINISH TO MATCH ROOF SHEETING
EAVES GUTTERS 0.55 BMT. COLORBOND FINISH - SHALE GREY
ROOF CLADDING - CANOPIES @ 5° ROOF PITCH. 0.42 BMT TRIMDEK OR SIMILAR. FINISH - ZINCALUME
SKYLIGHTS 2400g/m² TOPGLASS GC FIRBREGLASS. TRIMDEK OR SIMILAR PROFILE WITH SAFETY MESH UNDER
FLASHINGS 0.55 BMT. FINISH - ZINCALUME (UNO)
ROOF CLADDING - WAREHOUSE @ 5° ROOF PITCH. 0.42 BMT TRIMDEK OR SIMILAR. FINISH - ZINCALUME. ROOF INSULATION TO MAIN ROOF TO BE 60mm FOIL FACED BUILDING BLANKET ON SAFETY MESH. ROOF TO ALLOW FOR SOLAR PANEL LOADING
ROOF CLADDING - WAREHOUSE AWNING @ 5° ROOF PITCH. 0.42 BMT TRIMDEK OR SIMILAR. FINISH - ZINCALUME.
ROOF CLADDING - OFFICE @ 3° ROOF PITCH 0.42 BMT TRIMDEK OR SIMILAR. FINISH - ZINCALUME. ROOF INSULATION TO MAIN ROOF TO BE 60mm FOIL FACED BUILDING BLANKET ON SAFETY MESH

ROOF PLAN - OVERALL

1 : 150



OFFICE SHADE AWNING STEEL FRAMED WITH COMPOSITE CLADDING TO FALL TO FRONT OF AWNING. COLOUR FINISH - MONUMENT
ENTRY AWNING COMPOSITE CLADDING TO FALL TO FRONT OF AWNING. COLOUR FINISH - CORPORATE BLUE
BOX GUTTER
ROOF PITCH 3°
ROOF CLADDING - OFFICE @ 3° ROOF PITCH. 0.42 BMT TRIMDEK OR SIMILAR. FINISH - ZINCALUME.
OFFICE SHADE AWNING STEEL FRAMED WITH COMPOSITE CLADDING TO FALL TO FRONT OF AWNING. COLOUR FINISH - MONUMENT

ROOF PLAN - OFFICE AWNINGS

1 : 150

DATE	REV	AMENDMENT	BY
05/12/2024	A	ISSUED FOR DA	ER

DESIGNER: AUSPAN

Perth
5 Martin Place
Canningvale, WA 6155

Albany
169 Chesterpass Road
Milpara, WA 6330

Gnowangerup
15 Corbett Street
Gnowangerup, WA 6335

Phone: 1300 271 220

CLIENT: CJD EQUIPMENT

SITE ADDRESS: CNR CHESTER PASS RD & RICHARD ST ALBANY, WA 6330

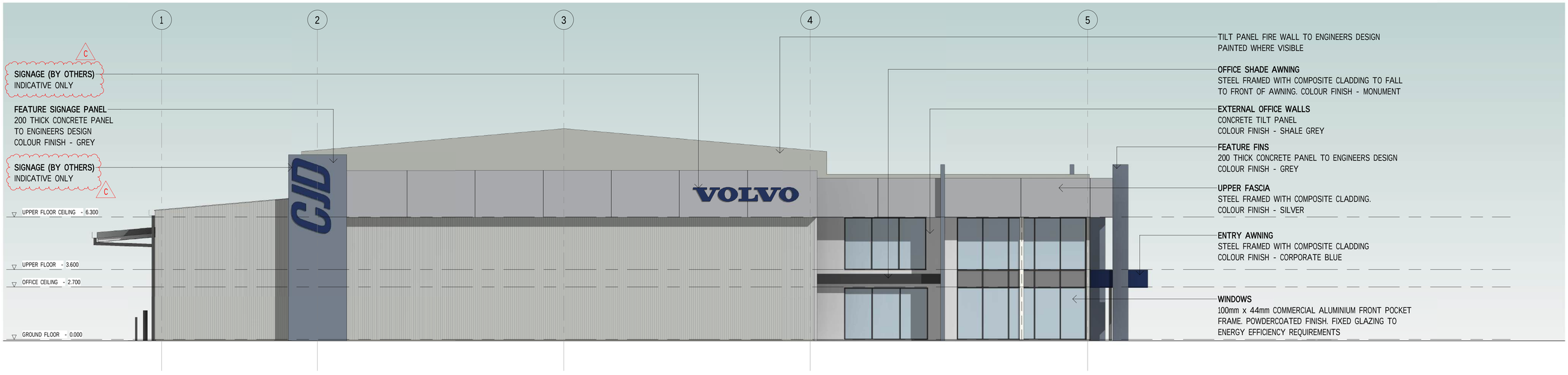
ARCHITECTURAL DRAWINGS

PROJECT: PROPOSED WORKSHOP, WAREHOUSE & OFFICE

DRAWING TITLE: ROOF PLAN

SCALE:	1 : 150	PROJECT NUMBER:	TK3026
SHEET SIZE:	A1		
DATE:	05/12/2024	STAGE: DA	REVISION: A
DESIGNED:	ER		
DRAWN:	ER	DRAWING NUMBER:	A204
CHECKED:	DD		

ELEVATION E1
1 : 100
A200



ELEVATION E2
1 : 100
A200

DATE	REV	AMENDMENT	BY
22/01/2025	C	SIGNAGE DETAILS REMOVED FOR SEPARATE DA CONSIDERATION	ER
16/01/2025	B	SIGNAGE DETAILS ADDED FOR CLARITY	ER
05/12/2024	A	ISSUED FOR DA	ER

DESIGNER:
AUSPAN

Perth
5 Martin Place
Canningvale, WA 6155

Albany
169 Chesterpass Road
Milpara, WA 6330

Gnowangerup
15 Corbett Street
Gnowangerup, WA 6335

Phone: 1300 271 220

CLIENT: CJD EQUIPMENT

SITE ADDRESS: CNR CHESTER PASS RD & RICHARD ST ALBANY, WA 6330

ARCHITECTURAL DRAWINGS

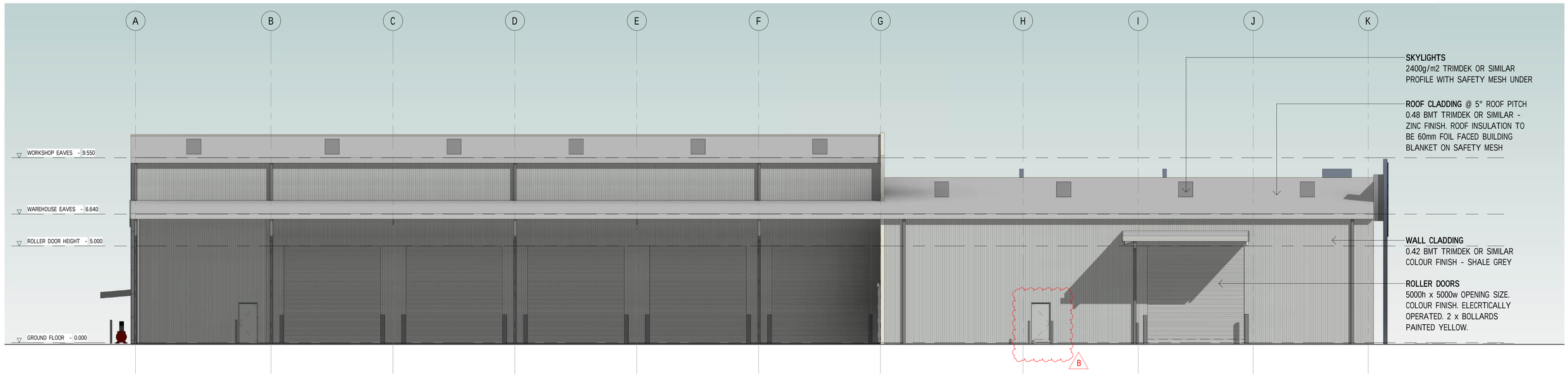
PROJECT: PROPOSED WORKSHOP, WAREHOUSE & OFFICE

DRAWING TITLE: ELEVATIONS 1

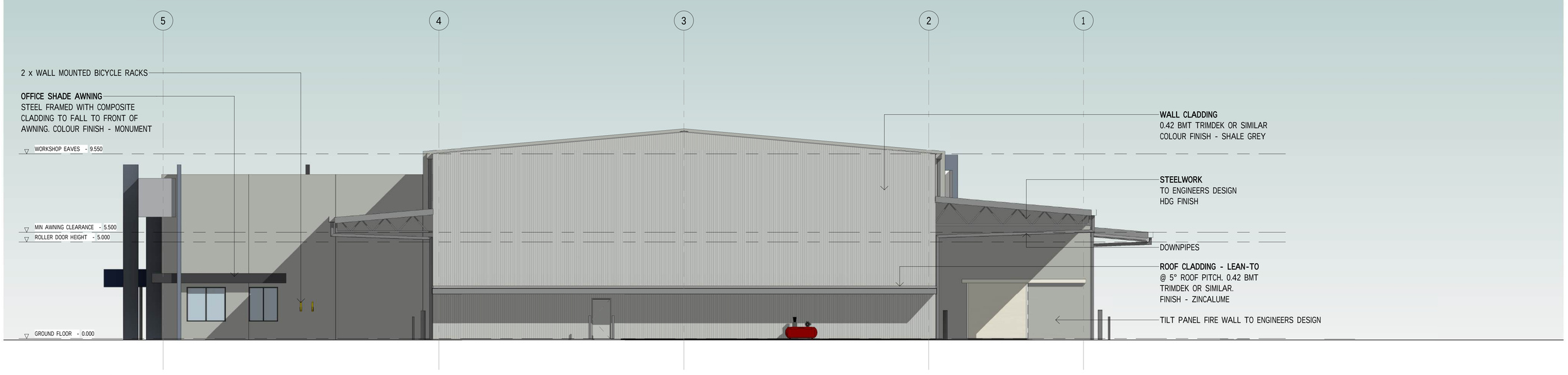
SCALE:	1 : 100
SHEET SIZE:	A1
DATE:	05/12/2024
DESIGNED:	ER
DRAWN:	ER
CHECKED:	DD

PROJECT NUMBER: TK3026
STAGE: DA
REVISION: C
DRAWING NUMBER: A300

C:\Users\EmmaReynolds\Auspan\Gnadrive\Process\Auspan\Projects\TK3026 - CJD Albany Workshop & Offices\06 DWGS & DESIGN\S Architectural\03 REVIT\04 Models\TK3026 - CJD ALBANY_DA_PLAN_20220105.rvt



ELEVATION E3
1 : 100
A200



ELEVATION E4
1 : 100
A200

DATE	REV	AMENDMENT	BY
16/01/2025	B	CHANGES TO SUIT ENGINEERS COMMENTS	ER
05/12/2024	A	ISSUED FOR DA	ER

DESIGNER:

AUSPAN

Perth
5 Martin Place
Canningvale, WA 6155

Albany
169 Chesterpass Road
Milpara, WA 6330

Gnowangerup
15 Corbett Street
Gnowangerup, WA 6335

Phone: 1300 271 220

CLIENT: CJD EQUIPMENT

SITE ADDRESS: CNR CHESTER PASS RD & RICHARD ST ALBANY, WA 6330

ARCHITECTURAL DRAWINGS

PROJECT: PROPOSED WORKSHOP, WAREHOUSE & OFFICE

DRAWING TITLE: ELEVATIONS 2

SCALE:	1 : 100
SHEET SIZE:	A1
DATE:	05/12/2024
DESIGNED:	ER
DRAWN:	ER
CHECKED:	DD

PROJECT NUMBER: TK3026

STAGE: DA

REVISION: B

DRAWING NUMBER: A301

C:\Users\EmmaReynolds\Auspan\Gnadrive\Process\Auspan\projects\TK3026 - CJD Albany Workshop & Office\06 DWGS & DESIGN\S Architectural\03 REVIT\04 Models\TK3026 - CJD ALBANY_SA_PLAN_20230526.rvt

DATE	REV	AMENDMENT	BY
22/01/2025	C	CHESTER PASS RD CROSSOVER RELOCATED TO SUIT EXISTING. MACHINERY DISPLAY AREA EXPANDED.	ER
16/01/2025	B	SIGNAGE DETAILS ADDED FOR CLARITY	ER
05/12/2024	A	ISSUED FOR DA	ER

DESIGNER: AUSPAN

Perth
5 Martin Place
Canningvale, WA 6155

Albany
169 Chesterpass Road
Milpara, WA 6330

Gnowangerup
15 Corbett Street
Gnowangerup, WA 6335

Phone: 1300 271 220

CLIENT: CJD EQUIPMENT

SITE ADDRESS: CNR CHESTER PASS RD & RICHARD ST ALBANY, WA 6330

ARCHITECTURAL DRAWINGS

PROJECT: PROPOSED WORKSHOP, WAREHOUSE & OFFICE

DRAWING TITLE: 3D ELEVATIONS

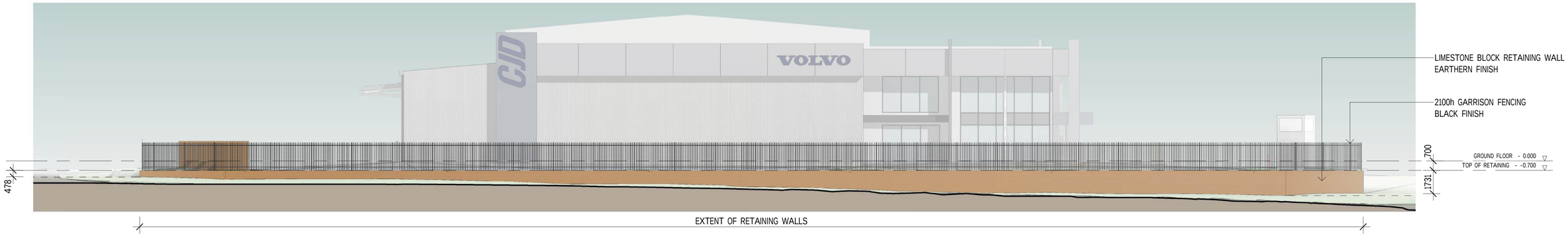
SCALE:
SHEET SIZE: A1
DATE: 05/12/2024
DESIGNED: ER
DRAWN: ER
CHECKED: DD

PROJECT NUMBER: TK3026
STAGE: DA
REVISION: C
DRAWING NUMBER: A302

C:\Users\EmmaReynoldsAuspanGr\odrive\Procore\AuspanBu\projects\TK3026 - CJD Albany Workshop & Offices\06 DWGS & DESIGN\01 Architectural\03 REVIT\04 Models\TK3026 - CJD ALBANY_DA_PLAN_21022025.rvt

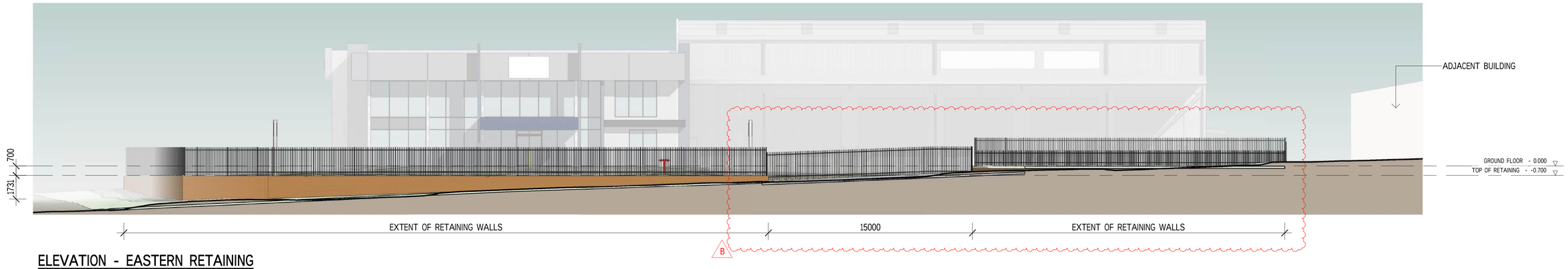
ELEVATION - WESTERN RETAINING

1 : 150



ELEVATION - SOUTHERN RETAINING

1 : 150



ELEVATION - EASTERN RETAINING

1 : 150

DATE	REV	AMENDMENT	BY
22/01/2025	B	CHESTER PASS RD CROSSOVER RELOCATED TO SUIT EXISTING. MACHINERY DISPLAY AREA EXPANDED.	ER
05/12/2024	A	ISSUED FOR DA	ER

DESIGNER:
AUSPAN
Perth
5 Martin Place
Canningvale, WA 6155
Albany
169 Chesterpass Road
Milpara, WA 6330
Gnowangerup
15 Corbett Street
Gnowangerup, WA 6335
Phone: 1300 271 220

CLIENT: CJD EQUIPMENT

SITE ADDRESS: CNR CHESTER PASS RD & RICHARD ST ALBANY, WA 6330

ARCHITECTURAL DRAWINGS

PROJECT: PROPOSED WORKSHOP, WAREHOUSE & OFFICE

DRAWING TITLE: ELEVATIONS - RETAINING

SCALE:	1 : 150
SHEET SIZE:	A1
DATE:	05/12/2024
DESIGNED:	ER
DRAWN:	ER
CHECKED:	DD

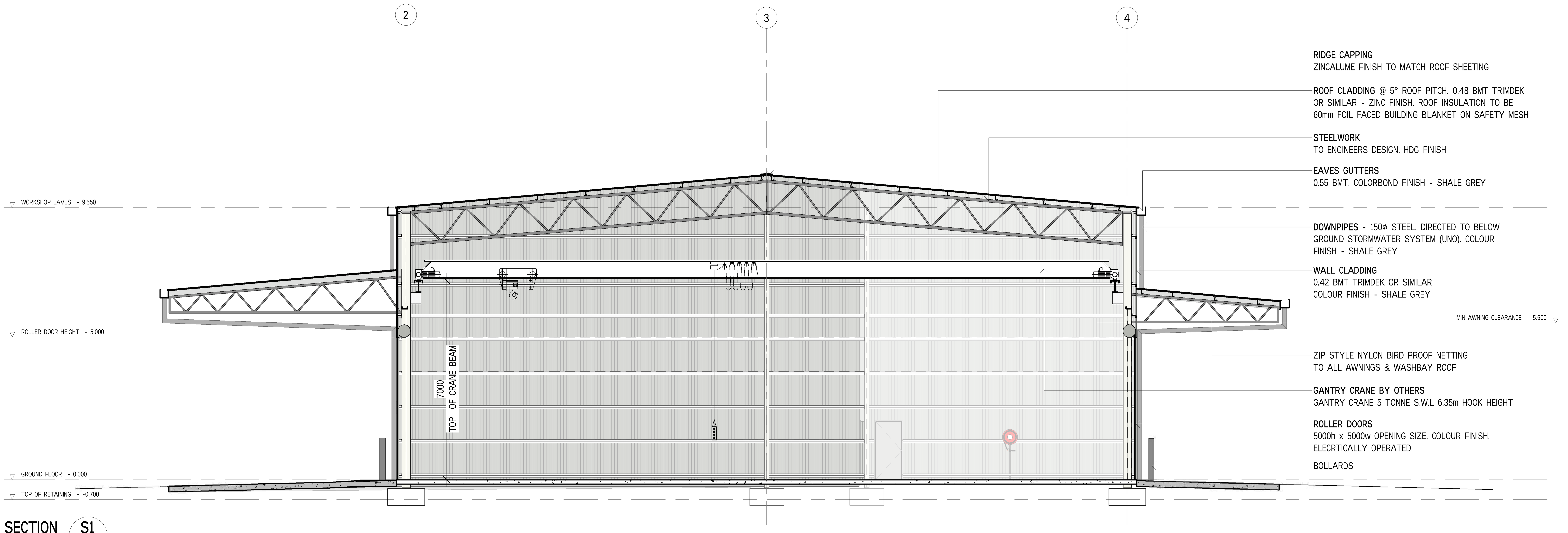
PROJECT NUMBER: TK3026

STAGE: DA

REVISION: B

DRAWING NUMBER: A303

C:\Users\EmmaReynolds\AuspanGr\Admin\Process\Auspan\Projects\TK3026 - CJD Albany Workshop & Office\06 DWGS & DESIGN\03. Architectural\03 REVIT\04 Models\TK3026 - CJD ALBANY_DA_PLAN_20220325.rvt



SECTION S1
1 : 75
A200

DATE	REV	AMENDMENT	BY
05/12/2024	A	ISSUED FOR DA	ER

DESIGNER:

AUSPAN

Perth
5 Martin Place
Canningvale, WA 6155

Albany
169 Chesterpass Road
Milpara, WA 6330

Gnowangerup
15 Corbett Street
Gnowangerup, WA 6335

Phone: 1300 271 220

CLIENT: CJD EQUIPMENT

SITE ADDRESS: CNR CHESTER PASS RD & RICHARD ST ALBANY, WA 6330

ARCHITECTURAL DRAWINGS

PROJECT: PROPOSED WORKSHOP, WAREHOUSE & OFFICE

DRAWING TITLE: SECTIONS 1

SCALE:	1 : 75
SHEET SIZE:	A1
DATE:	05/12/2024
DESIGNED:	ER
DRAWN:	ER
CHECKED:	DD
PROJECT NUMBER:	TK3026
STAGE:	DA
REVISION:	A
DRAWING NUMBER:	A400

SECTION S2
1 : 100
A200

DATE	REV	AMENDMENT	BY
05/12/2024	A	ISSUED FOR DA	ER

DESIGNER: AUSPAN

Perth
5 Martin Place
Canningvale, WA 6155

Albany
169 Chesterpass Road
Milpara, WA 6330

Gnowangerup
15 Corbett Street
Gnowangerup, WA 6335

Phone: 1300 271 220

CLIENT: CJD EQUIPMENT

SITE ADDRESS: CNR CHESTER PASS RD & RICHARD ST ALBANY, WA 6330

ARCHITECTURAL DRAWINGS

PROJECT: PROPOSED WORKSHOP, WAREHOUSE & OFFICE

DRAWING TITLE: SECTIONS 2

SCALE:	1 : 100
SHEET SIZE:	A1
DATE:	05/12/2024
DESIGNED:	ER
DRAWN:	ER
CHECKED:	DD
PROJECT NUMBER:	TK3026
STAGE:	DA
REVISION:	A
DRAWING NUMBER:	A401

\projects\TK3026 - CJD Albany Workshop & Offices\06 DWGS & DESIGN\01 Architectural\03 REVIT\04 Models\TK3026 - CJD ALBANY_DA_PLAN_21022025.rvt

ALL DIMENSIONS ARE IN MILLIMETRES & INCLUDE APPLIED FINISHES

NOTES:
THESE DETAILS ARE STANDARD DETAILS ONLY AND ARE MEANT TO BE READ IN CONJUNCTION WITH THE ARCHITECTURAL DRAWINGS FOR THE PROJECT.

ARCHITECTURAL DRAWINGS TAKE PRECEDENCE OVER STANDARD DRAWINGS.

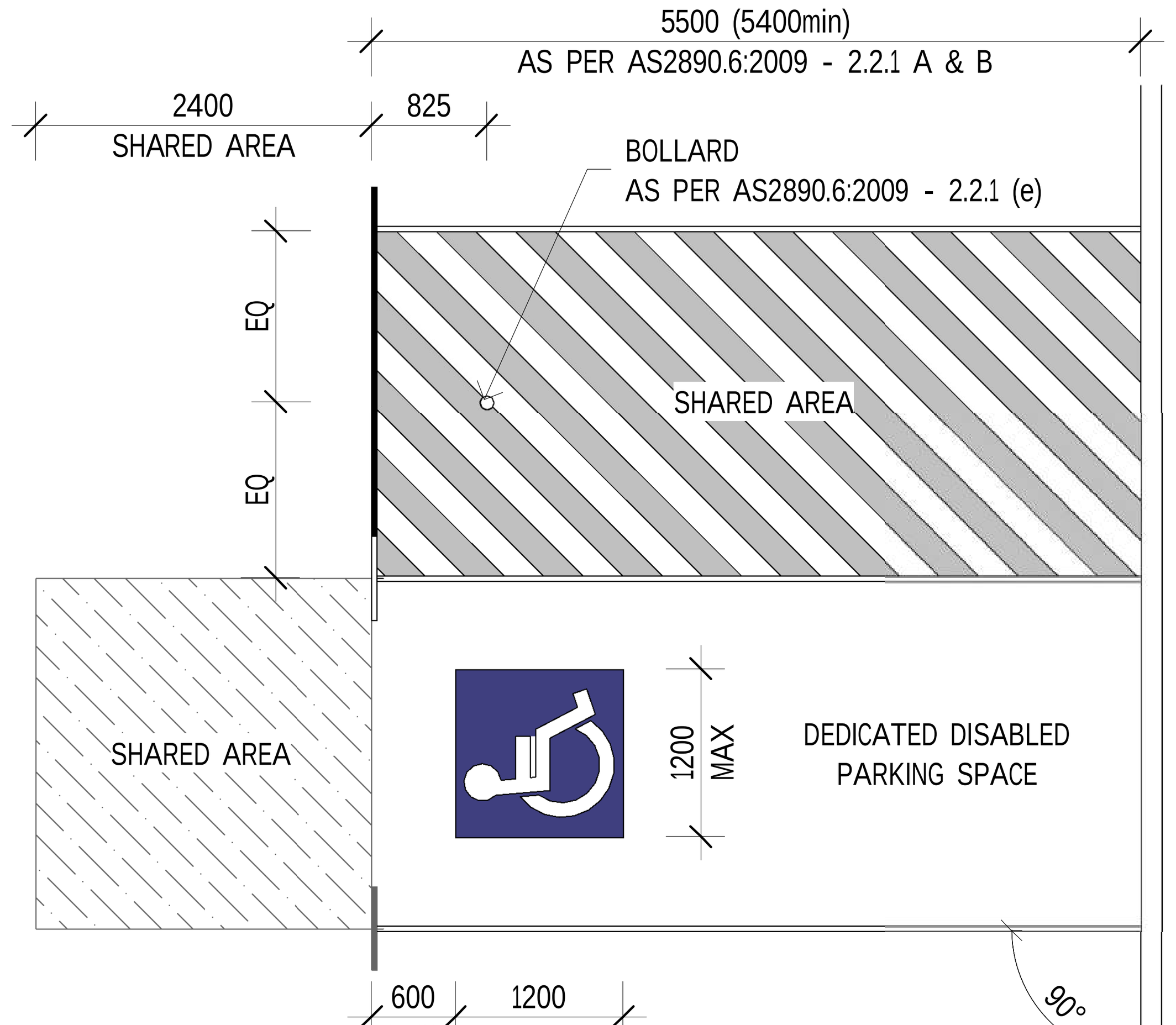
CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE. SHOULD ANY DISCREPANCIES OCCUR, CONTACT THE DESIGNER.

SOME ITEMS SHOWN ON THIS DRAWING MAY NOT BE RELEVANT TO THIS PARTICULAR PROJECT.

DISABLED & AMBULANT FIXTURES
INSTALLATION SHALL COMPLY WITH:
AS 1428.1 (DESIGN FOR ACCESS AND MOBILITY)

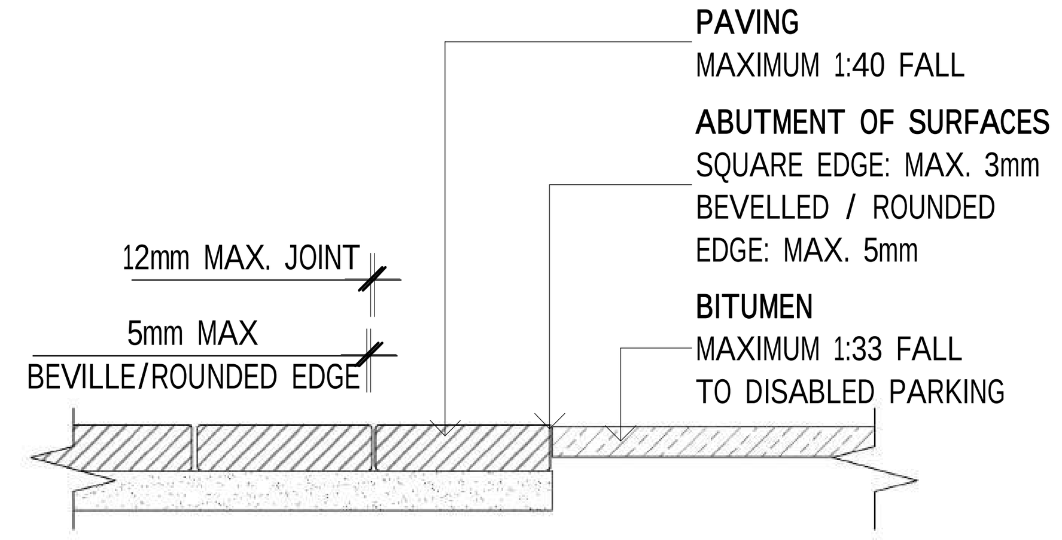
FIXTURES, FITTINGS, ACCESSORIES & SIGNAGE TO COMPLY WITH BCA PART D3.6 AND AS 1428.1 REQUIREMENTS. REFER TO SCHEDULE OF FINISHES FOR DETAILS.

REFER TO DOOR SCHEDULE, DWG A601, FOR DOOR DETAILS.

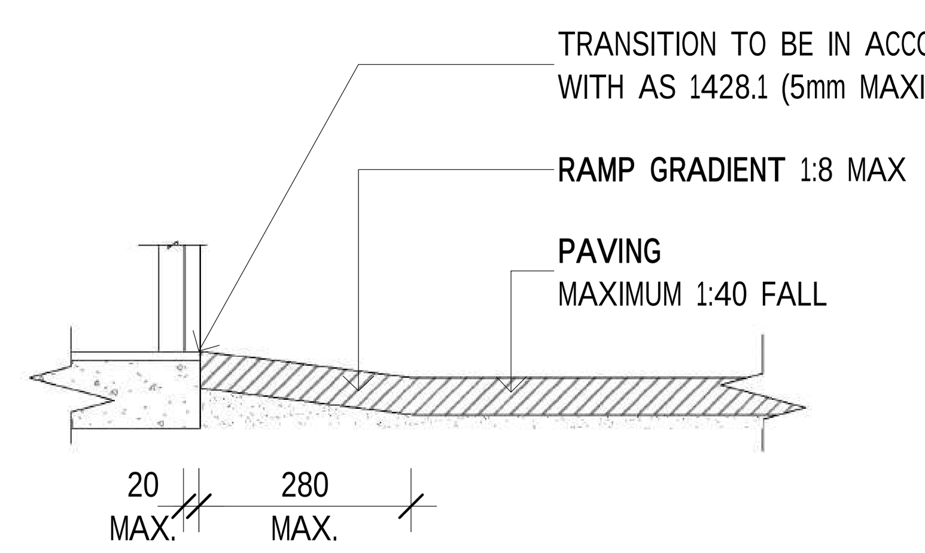


NOTES
- FOR ALL PAINT IDENTIFICATION COLOURS ETC PLEASE REFER TO AS 2890.6:2009 - SECTION 3
- SHARED BAY SHALL BE MARKED WITH DIAGONAL STRIPES. PLEASE REFER TO AS 2890.6:2009 - SECTION 3

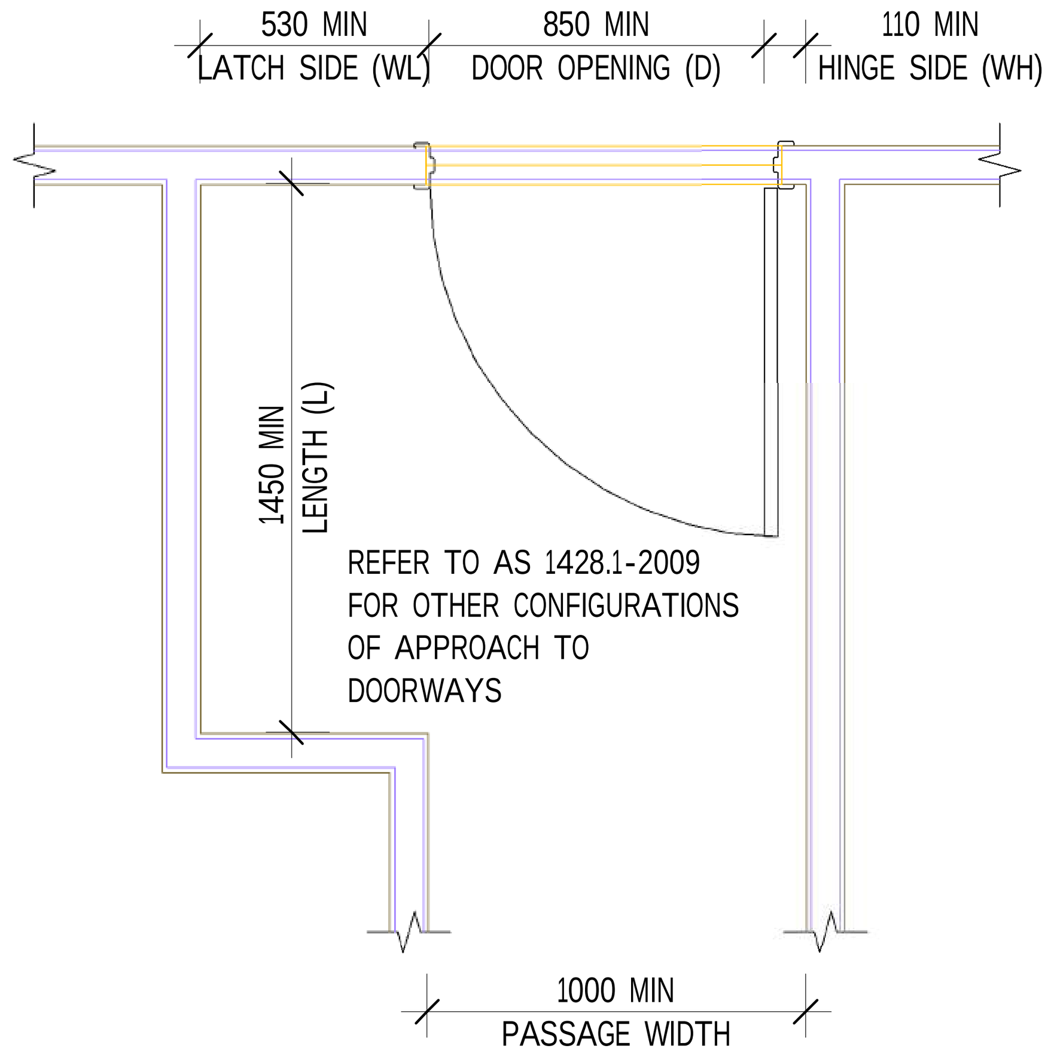
TYPICAL DISABLED BAY
SCALE 1:50



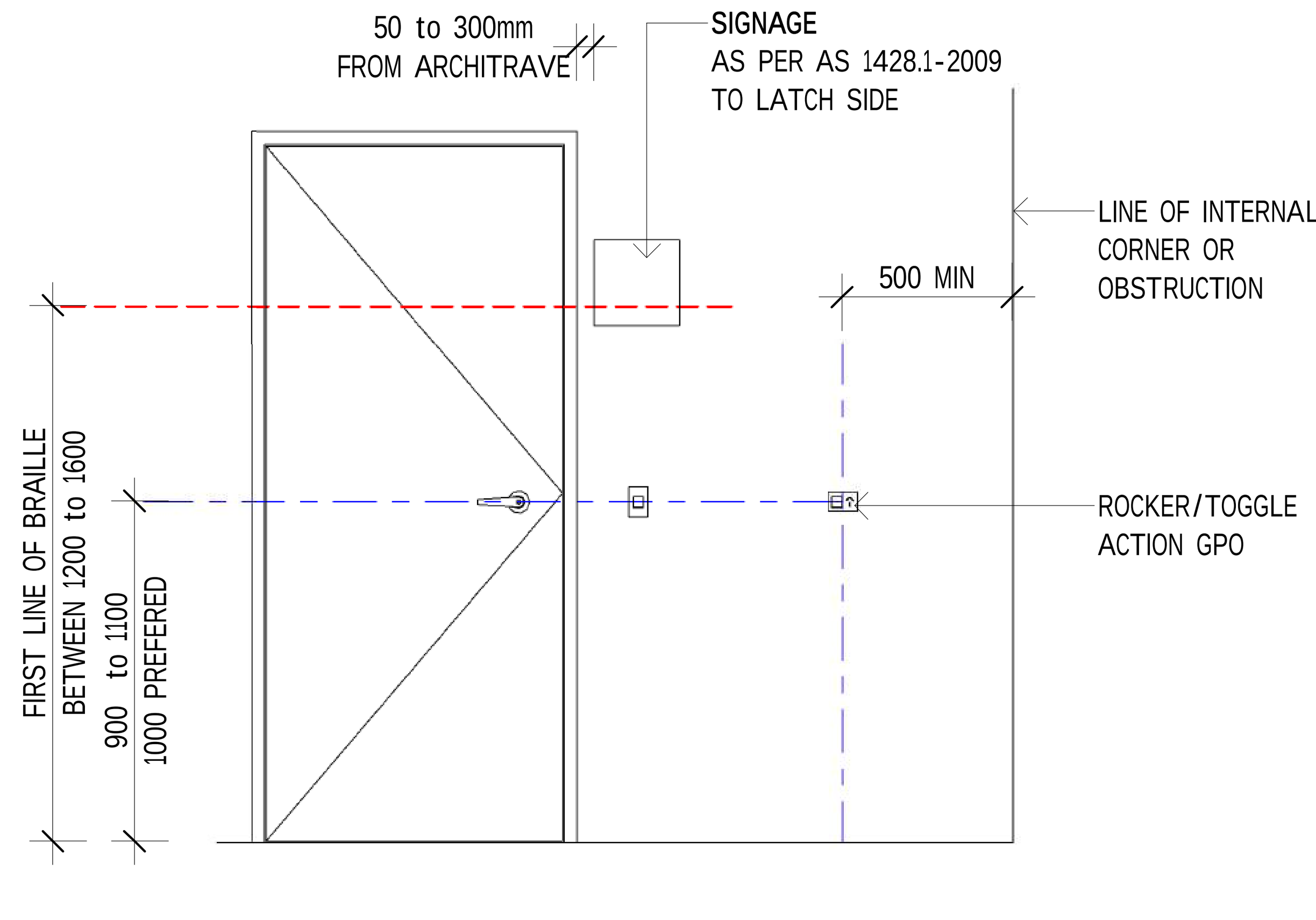
PAVEMENT SECTION
SCALE 1:10



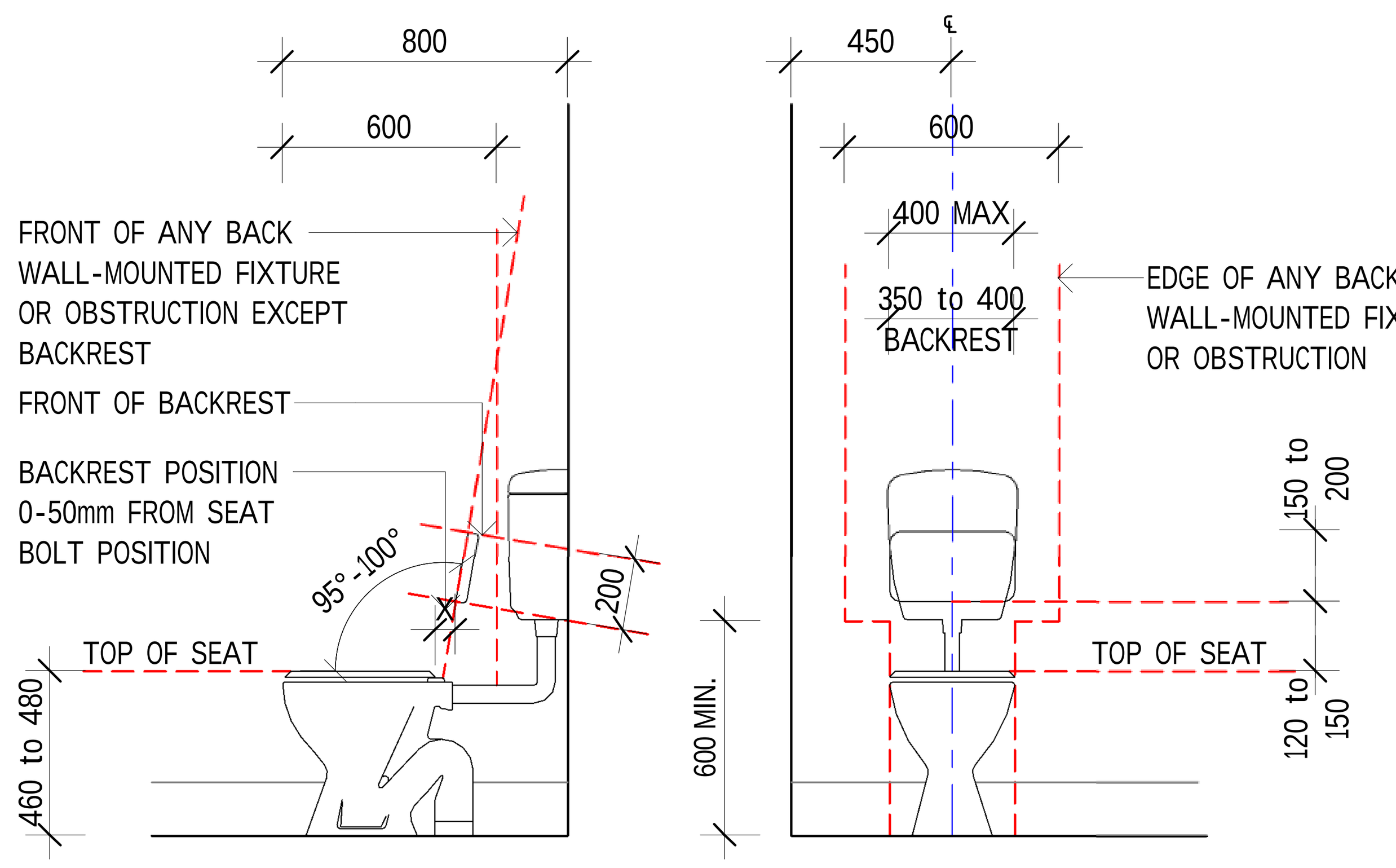
THRESHOLD RAMP DETAIL
SCALE 1:10



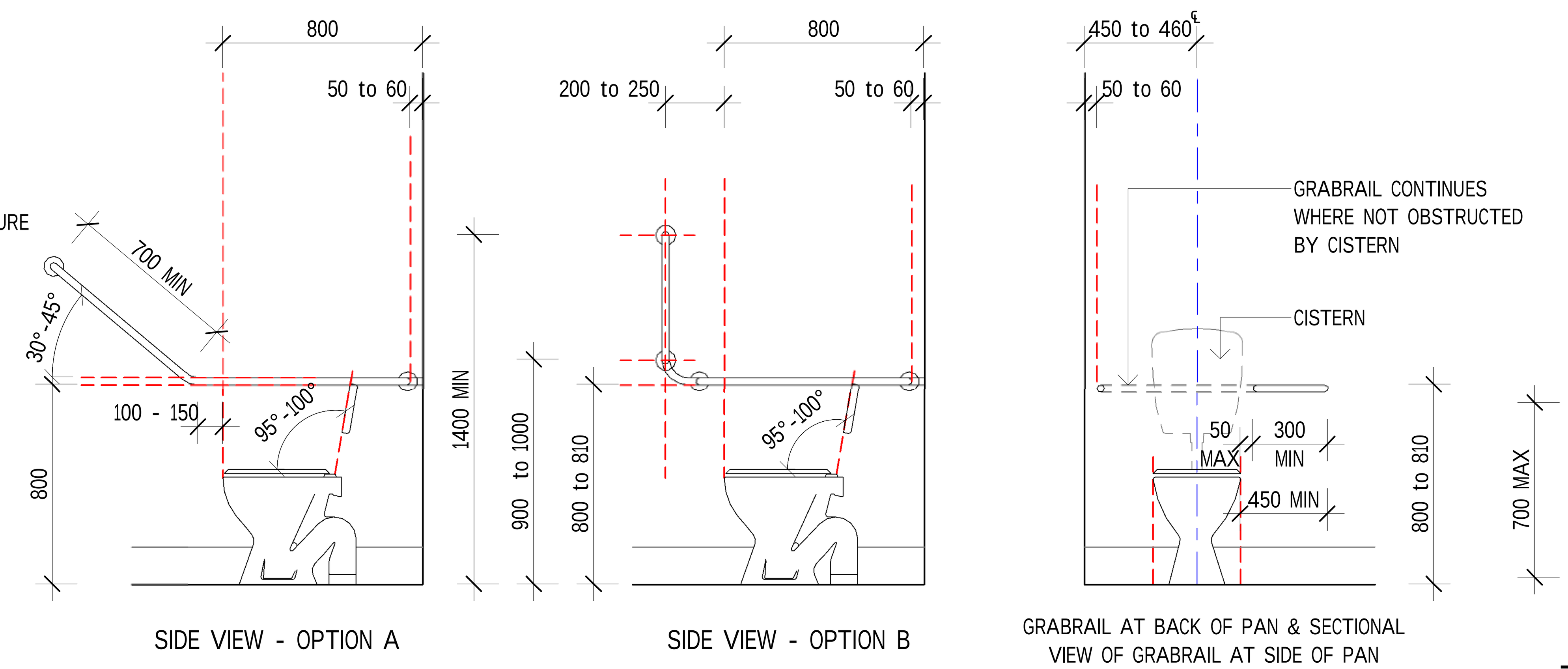
CIRCULATION SPACE AT DOORS
SCALE 1:20



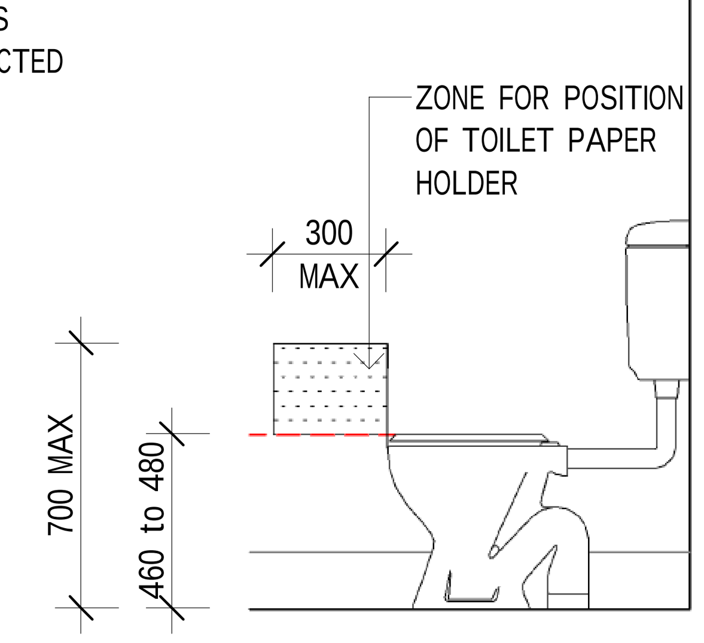
SETOUT FOR SIGNAGE, SWITCHES, GENERAL PURPOSE OUTLETS & DOOR HANDLES
SCALE 1:20



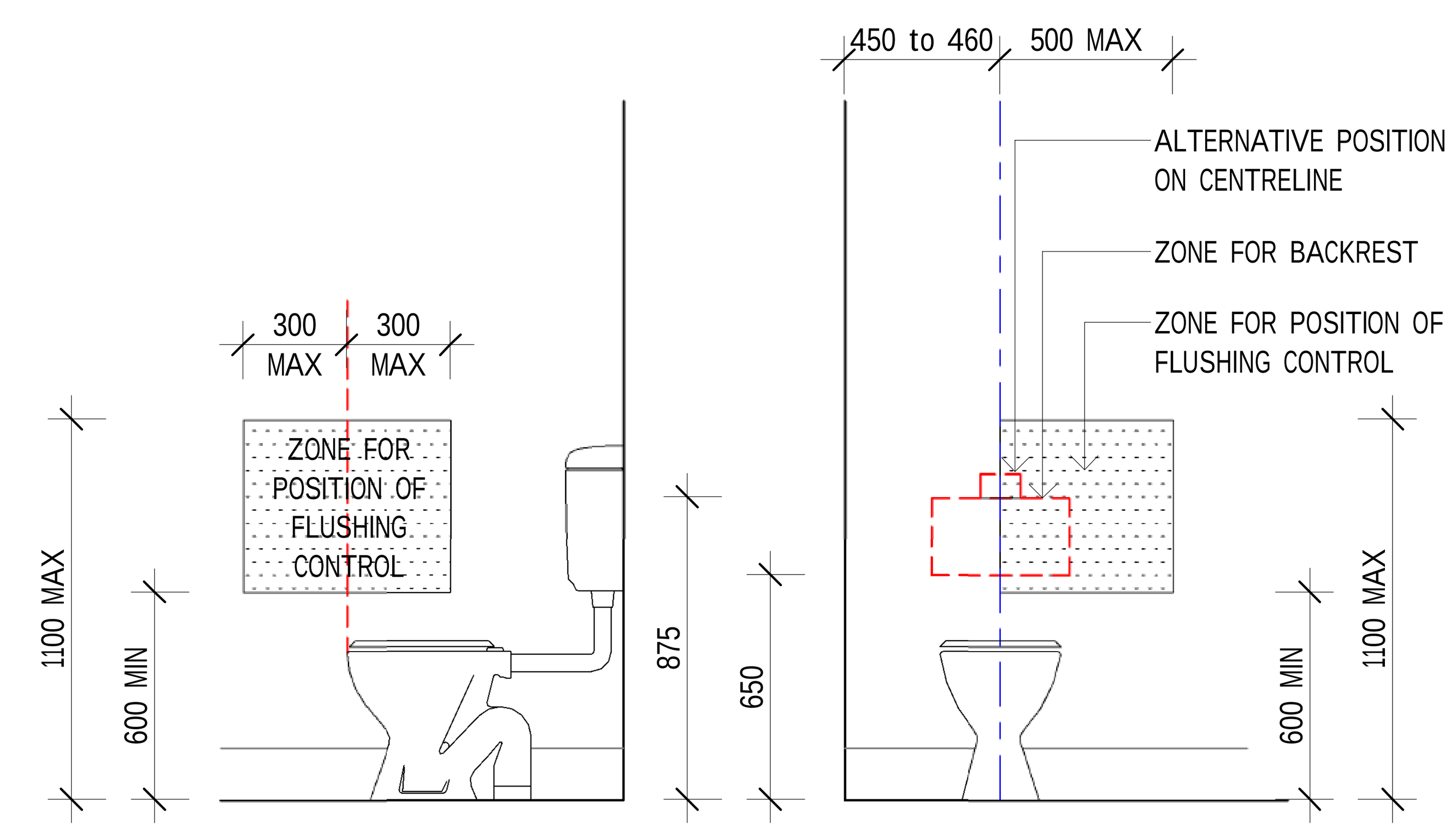
WATER CLOSET PAN CLEARANCES, SEAT HEIGHT & WIDTH



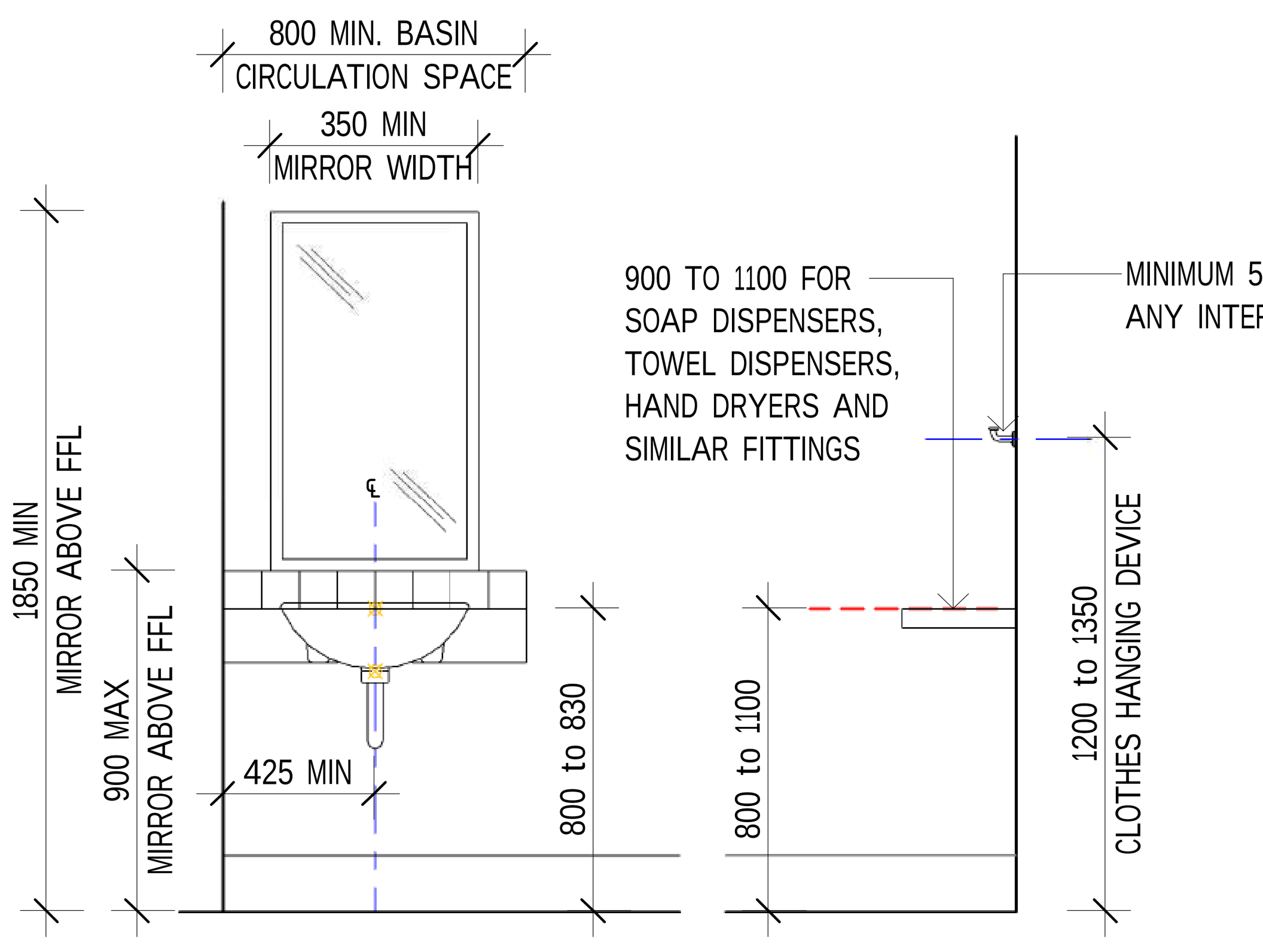
POSITIONS OF GRABRAILS IN WATER CLOSET



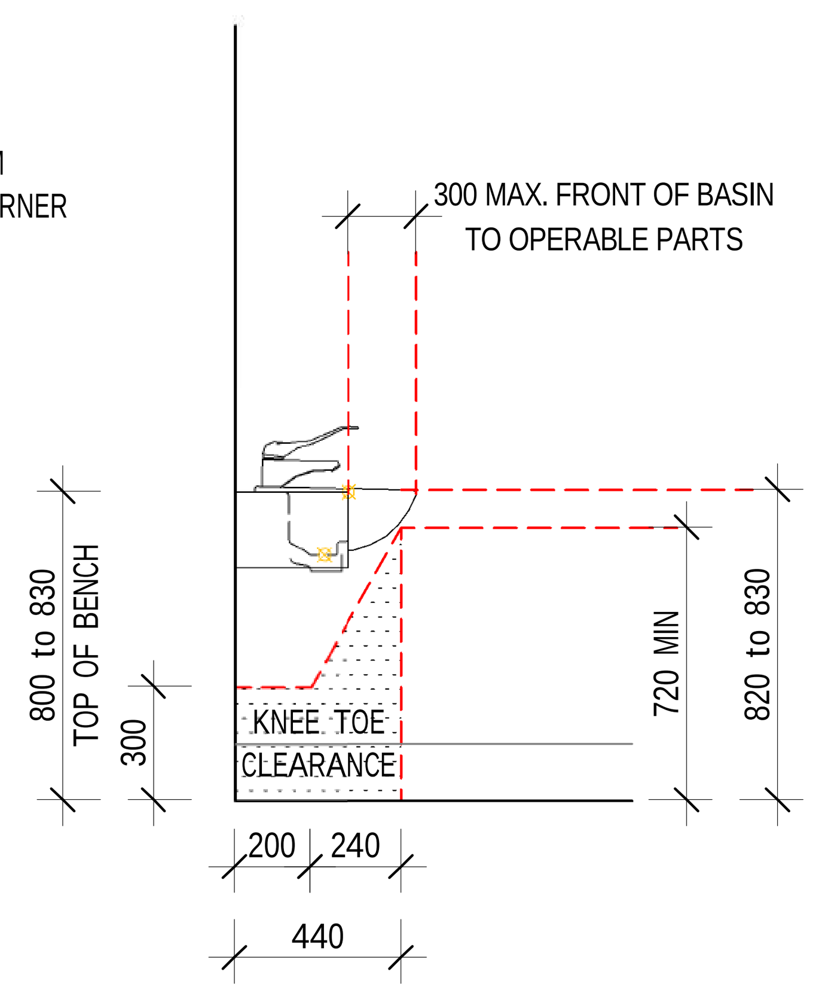
ZONE FOR POSITION OF TOILET PAPAER HOLDER



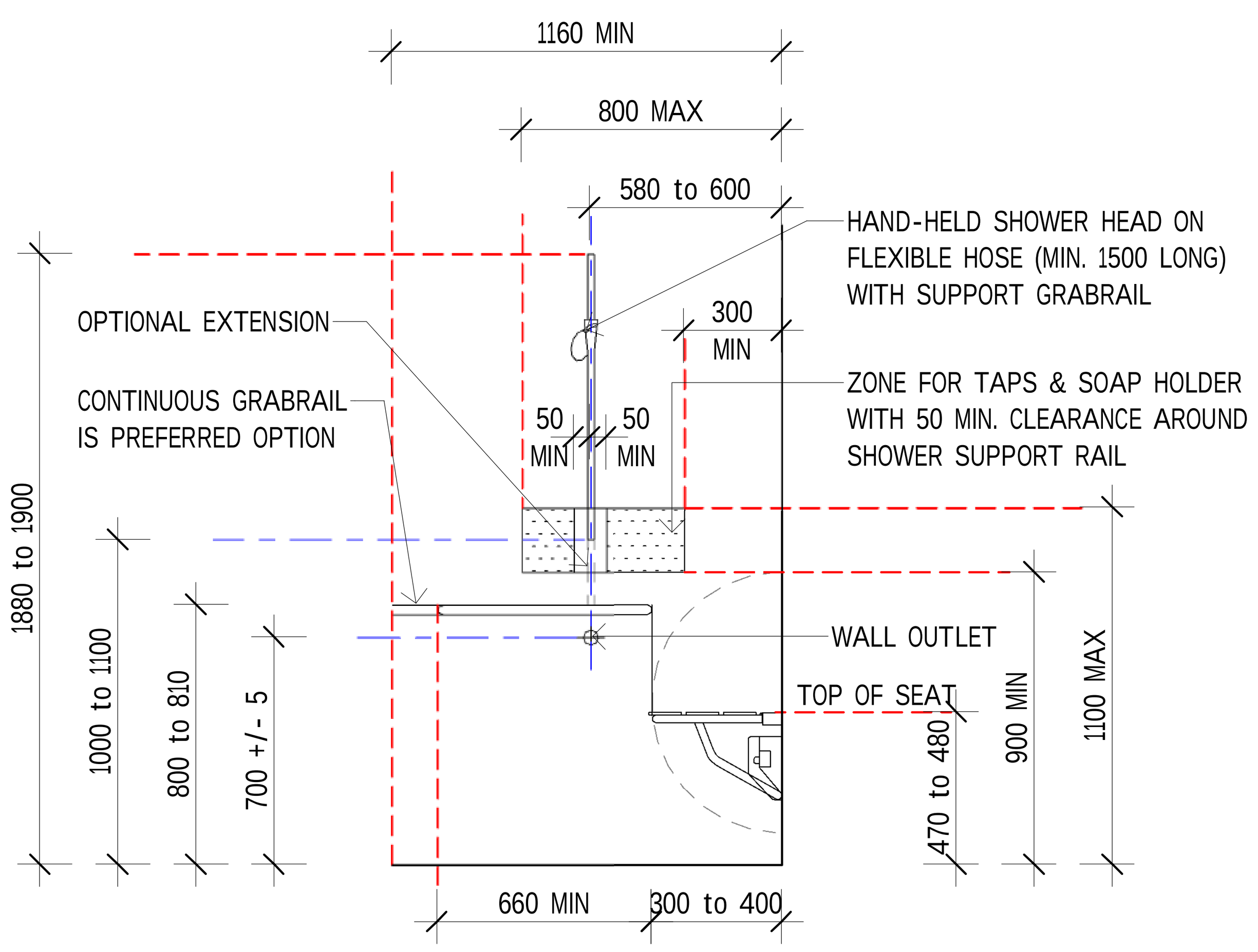
ZONE FOR POSITION OF FLUSHING CONTROL



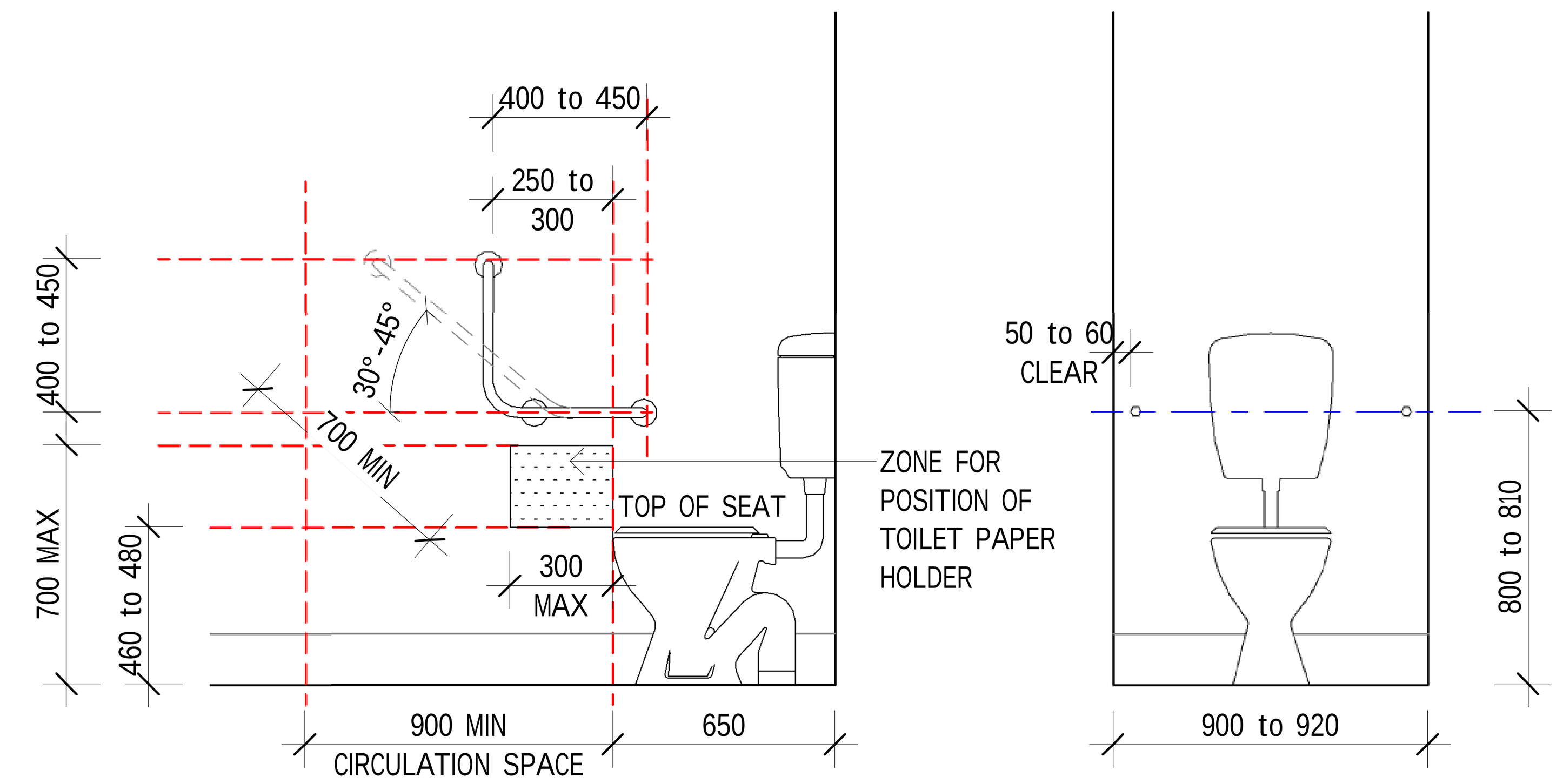
POSITION OF MIRRORS, SHELVES & HANGING DEVICES



POSITION OF SEMI-RECESSED WASHBASINS & FIXTURES



SHOWER RECESS FITTINGS



SANITARY COMPARTMENT FOR PEOPLE WITH AMBULANT DISABILITIES

DATE	REV	AMENDMENT	BY
05/12/2024	A	ISSUED FOR DA	ER

DESIGNER: AUSPAN

Perth
5 Martin Place
Canningvale, WA 6155

Albany
169 Chesterpass Road
Milpara, WA 6330

Gnowangerup
15 Corbett Street
Gnowangerup, WA 6335

Phone: 1300 271 220

CLIENT: CJD EQUIPMENT

SITE ADDRESS: CNR CHESTER PASS RD & RICHARD ST ALBANY, WA 6330

ARCHITECTURAL DRAWINGS

PROJECT: PROPOSED WORKSHOP, WAREHOUSE & OFFICE

DRAWING TITLE: ACCESS & MOBILITY LAYOUTS

SCALE:	As indicated	PROJECT NUMBER:	TK3026
SHEET SIZE:	A1		
DATE:	05/12/2024	STAGE: DA	REVISION: A
DESIGNED:	ER		
DRAWN:	ER	DRAWING NUMBER:	A500
CHECKED:	DD		

LANDSCAPING NOTES

1. ALL LANDSCAPING PROVISIONS & VEGETATION MUST BE IN ACCORDANCE WITH THE CITY OF ALBANY LOCAL PLANNING SCHEME No. 2.
2. MINIMUM 3m WIDE LANDSCAPING STRIP TO ALL STREET FRONTAGES.
3. MINIMUM 10% OF SITE AREA TO BE LANDSCAPED. SITE ARE 7,638m^2 = 763.8m^2 MINIMUM LANDSCAPING AREA.
4. 1 TREE EVERY 6 PARKING BAYS REQUIRED.
5. PLANTING SPECIES HAVE PRIMARILY BEEN SELECTED TO SUIT THE LOCAL CONDITIONS. PLANT TYPES MAY BE SUBSTITUTED FOR THE BEST AVAILABLE MATCH AT TIME OF PLANTING.
6. SOIL PREPARATION FOR PLANTING TO HAVE SLOW RELEASE FERTILISER.
7. ALL WEEDS TO BE SPRAYED & REMOVED PRIOR TO MULCHING.
8. ALL GARDEN BEDS TO BE MULCHED. MULCH TO BE ORGANIC & WELL COMPOSTED. MULCH DEPTH TO BE NO LESS THAT 100mm.
9. RETICULATION
   a. FULLY AUTOMATIC TRICKLE SYSTEM TO MULCHED AREAS & WITH A BUBBLER FOR EACH TREE. TRICKLE SYSTEM TO BE 75mm BELOW SOIL LEVEL.
   b. FULLY AUTOMATIC 3" POP UP SPRINKLERS WITH SPRAY TYPE NOZZLES TO TURFED AREAS.
   c. RETICULATION TO BE CONNECTED TO MAINS WATER SUPPLY.
   d. MASTER-VALVE SHUT-OFF TO BE INSTALLED AFTER THE CONTROLLER & BEFORE OTHER VALVES.
   e. CONTROLLER TO BE HARD-WIRED TO THE ELECTRICAL FEED WITH A BATTERY BACK-UP.
   f. MOISTURE SENSOR SHUT-OFF TO BE INSTALLED TO CONTROL IRRIGATION.
   g. CONDUITS TO BE INSTALLED UNDER HARDSCAPES AS REQUIRED & TO BE A MINIMUM OF TWICE THE DIAMETER OF THE IRRIGATION PIPE WITH DRAW-WIRES.
10. MAINTENANCE PLAN
   a. LANDSCAPING TO BE MAINTAINED BY THE OWNER TO THE SATISFACTION OF THE CITY OF ALBANY.
   b. WEEDING - PREVENT REPRODUCTION OF WEEDS BY REMOVAL OF SEEDLINGS & ESTABLISHED WEEDS BEFORE SEED SET. THIS WORK SHOULD BE CARRIED OUT REGULARLY SO THAT THE PLANTED & MULCHED GARDEN BED AREAS ARE WEED FREE WHEN OBSERVED AT MONTHLY INTERVALS.
   c. FERTILISING - SOIL TESTING TO BE UNDERTAKEN AT THE COMMENCEMENT OF THE MAINTENANCE CONTRACT. SLOW RELEASE FERTILISER SELECTED TO TAKE INTO ACCOUNT THE SOIL TESTING RESULTS.
   d. PEST & DISEASE CONTROL - AVOID USE OF CHEMICAL SPRAYS. IF CHEMICAL CONTROL IS CONSIDERED NECESSARY, THEY SHOULD BE MIXED & APPLIED IN STRICT ACCORDANCE WITH MANUFACTURES SPECIFICATIONS.
   e. PRUNING & TRIMMING - PRUNING SHOULD REFLECT THE NATURAL GROWTH, FLOWERING & RE-GROWTH HABIT OF THE INDIVIDUAL SPECIES.
   f. PLANT REPLACEMENT - ALL PLANTS THAT HAVE DIED OR FAILED SHALL BE REPLACED WITH THE SAME SPECIES & SIZE PLANT.

MULCHED AREA - 680m^2
100mm THICK WITH BREATHING SPACE AROUND STEMS & TRUNKS OF PLANTS

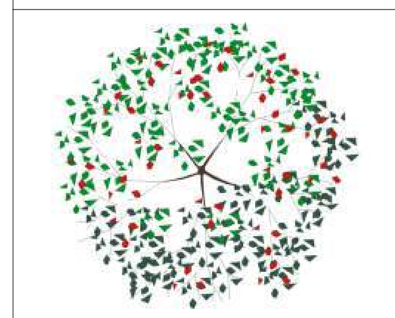
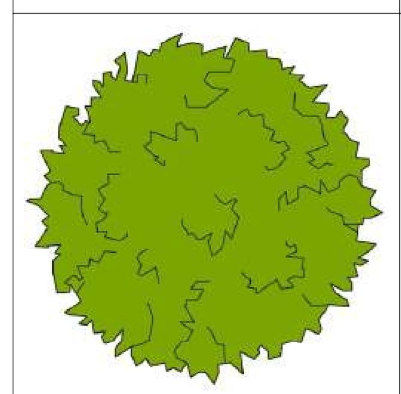
EXISTING GRASSED VERGE
MAKE GOOD AS REQUIRED

CONCRETE HARDSTAND - 2,003m^2
NOT INCLUDING CROSSOVERS & CANOPY AREAS

PAVED HARDSTAND- 1,805m^2
INTERPAVE 80 - AUTUMN BLEND OR SIMILAR

PAVING - FEATURE - 314m^2
200 x 200 x 60 MIDLAND BRICK MASTERPAVE - STONEWASH SILVER OR SIMILAR

PLANT LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	DENSITY
	PYRUS CALLERYANA CHANTICLEER	ORNAMENTAL PEAR	1 TREE PER 6 PARKING BAYS MINIMUM
	EUCALYPTUS ANGULOSA	RIDGE-FRUITED MALLEE	1 TREE PER 6 PARKING BAYS MINIMUM
	MIXED PLANTING - ANIGOXANTHOS FLAVIDUS, BAKSIA FORMOSA, EREMOPHILA NIVEA, HEMIANDRA PUNGENS,	TALL KANGAROOM PAW, SHOWY DRYANDRA, SILKY EREMOPHILA, SNAKE BUSH	2 PLANT PER 1sqm
	ADENANTHOS SERICEUS	WOOLLY BUSH	1 PLANT PER sqm

LANDSCAPING PLAN
1 : 250

DATE	REV	AMENDMENT	BY
21/02/2025	C	CHESTER PASS RD CROSSOVER MODIFIED TO SUIT VEHICLE TURNING REQUIREMENTS	ER
22/01/2025	B	CHESTER PASS RD CROSSOVER RELOCATED TO SUIT EXISTING. MACHINERY DISPLAY AREA EXPANDED.	ER
05/12/2024	A	ISSUED FOR DA	ER

DESIGNER: AUSPAN
Perth
5 Martin Place
Canningvale, WA 6155
Albany
169 Chesterpass Road
Milpara, WA 6330
Gnowangerup
15 Corbett Street
Gnowangerup, WA 6335
Phone: 1300 271 220

CLIENT: CJD EQUIPMENT
SITE ADDRESS: CNR CHESTER PASS RD & RICHARD ST ALBANY, WA 6330

ARCHITECTURAL DRAWINGS
PROJECT: PROPOSED WORKSHOP, WAREHOUSE & OFFICE
DRAWING TITLE: LANDSCAPING PLAN

SCALE:	As indicated	PROJECT NUMBER:	TK3026
SHEET SIZE:	A1		
DATE:	05/12/2024	STAGE: DA	REVISION: C
DESIGNED:	ER		
DRAWN:	ER	DRAWING NUMBER:	A700
CHECKED:	DD		

C:\Users\EmmaReynoldsAuspanGr\odrive\Procore\AuspanBu\projects\TK3026 - CJD Albany Workshop & Offices\06 DWGS & DESIGN\01 Architectural\03 REVIT\04 Models\TK3026 - CJD ALBANY_DA_PLAN_21022025.rvt

PARKING NOTES

CAR PARKING
PARKING AREA TO AS 2890.1 - OFF STREET PARKING
DISABLED PARKING TO AS2890.6 c/w BOLLARD

AS PER LPS NO.2
4 BAYS PER WORKING BAY PLUS 1 PER EMPLOYEE
1 BAY PER 100m² OF WAREHOUSE NLA
1 BAY PER 30m² OF OFFICE

WORKSHOP - 4 WORKING BAYS	= 16
EMPLOYEES	= 8
WAREHOUSE - 1136m²/100	= 12
SHOWROOM/OFFICES - 493m²/30	= 17
TOTAL REQUIRED	**= 53**

TOTAL PROVIDED BAYS = 48

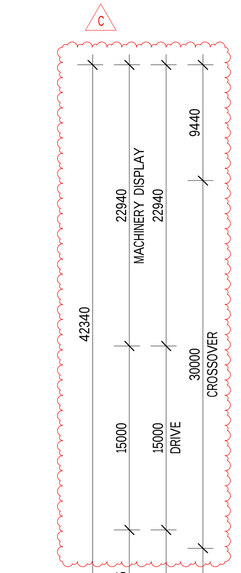
BIKE PARKING
1 BAY PER 10 CAR BAYS OF FOR OFFICES

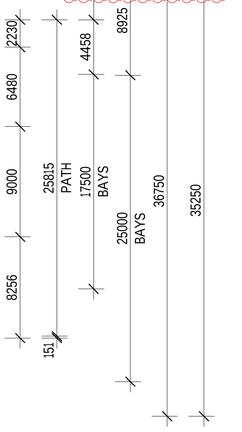
ASSUME 20 BAYS FOR OFFICE USE

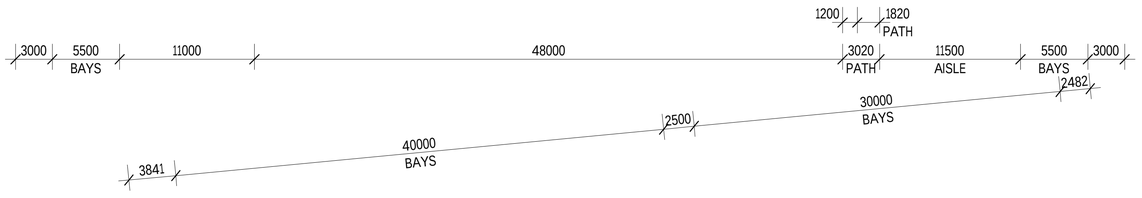
PROVIDED - 2 BAYS VIA 2 WALL MOUNTED RACKS

TRAFFIC MANAGEMENT NOTES

- VEHICLE ACCESS CONSISTS OF:
  - CARS (PRIMARILY STAFF)
  - SMALL RIGID TRUCKS TO 5m LENGTH
  - LARGE RIGID TRUCKS TO 8m LENGHT
  - B-DOUBLES TO 25m LENGTH
- PRIMARY B-DOUBLE ACCESS WILL BE VIA NORTHERN CROSSOVERS
- PRIMARY LV & SMALL TRUCK ACCESS WILL BE VIA CHESTER PASS RD CROSSOVER
- ALL VEHICLES ARE CAPABLE OF EXITING & ENTERING SITE IN FORWARD GEAR







TRAFFIC FLOW PLAN
1 : 250

DATE	REV	AMENDMENT	BY
21/02/2025	C	CHESTER PASS RD CROSSOVER MODIFIED TO SUIT VEHICLE TURNING REQUIREMENTS	ER
22/01/2025	B	CHESTER PASS RD CROSSOVER RELOCATED TO SUIT EXISTING. MACHINERY DISPLAY AREA EXPANDED.	ER
05/12/2024	A	ISSUED FOR DA	ER

DESIGNER: AUSPAN

Perth
5 Martin Place
Canningvale, WA 6155

Albany
169 Chesterpass Road
Milpara, WA 6330

Gnowangerup
15 Corbett Skeet
Gnowangerup, WA 6335

Phone: 1300 271 220

CLIENT: CJD EQUIPMENT

SITE ADDRESS: CNR CHESTER PASS RD & RICHARD ST ALBANY, WA 6330

ARCHITECTURAL DRAWINGS

PROJECT: PROPOSED WORKSHOP, WAREHOUSE & OFFICE

DRAWING TITLE: TRAFFIC FLOW & PARKING PLAN

SCALE:	As indicated
SHEET SIZE:	A1
DATE:	05/12/2024
DESIGNED:	ER
DRAWN:	ER
CHECKED:	DD

PROJECT NUMBER: TK3026
STAGE: DA
REVISION: C
DRAWING NUMBER: A701

C:\Users\EmmaReynolds\AuspanGr\Admin\Process\Auspanbu\projects\TK3026 - CJD Albany Workshop & Office\06 DWGS & DESIGN\S Architectural\03 REVIT\04 Models\TK3026 - CJD ALBANY_DA_PLAN_20220525.rvt

NOTES

BUILDING CODE OF AUSTRALIA

CLASSIFICATION	CLASS 7b & 5
TYPE OF CONSTRUCTION	TYPE C

EMERGENCY LIGHTING

TO BE INSTALLED TO AS/NZ 2293.1 & NCC SECTION E - PART E4

LEGEND

FIRE HYDRANTS

HYD — 1 REQUIRED
TO BE INSTALLED IN ACCORDANCE WITH AS 2419.1

EMERGENCY EXIT SIGNAGE

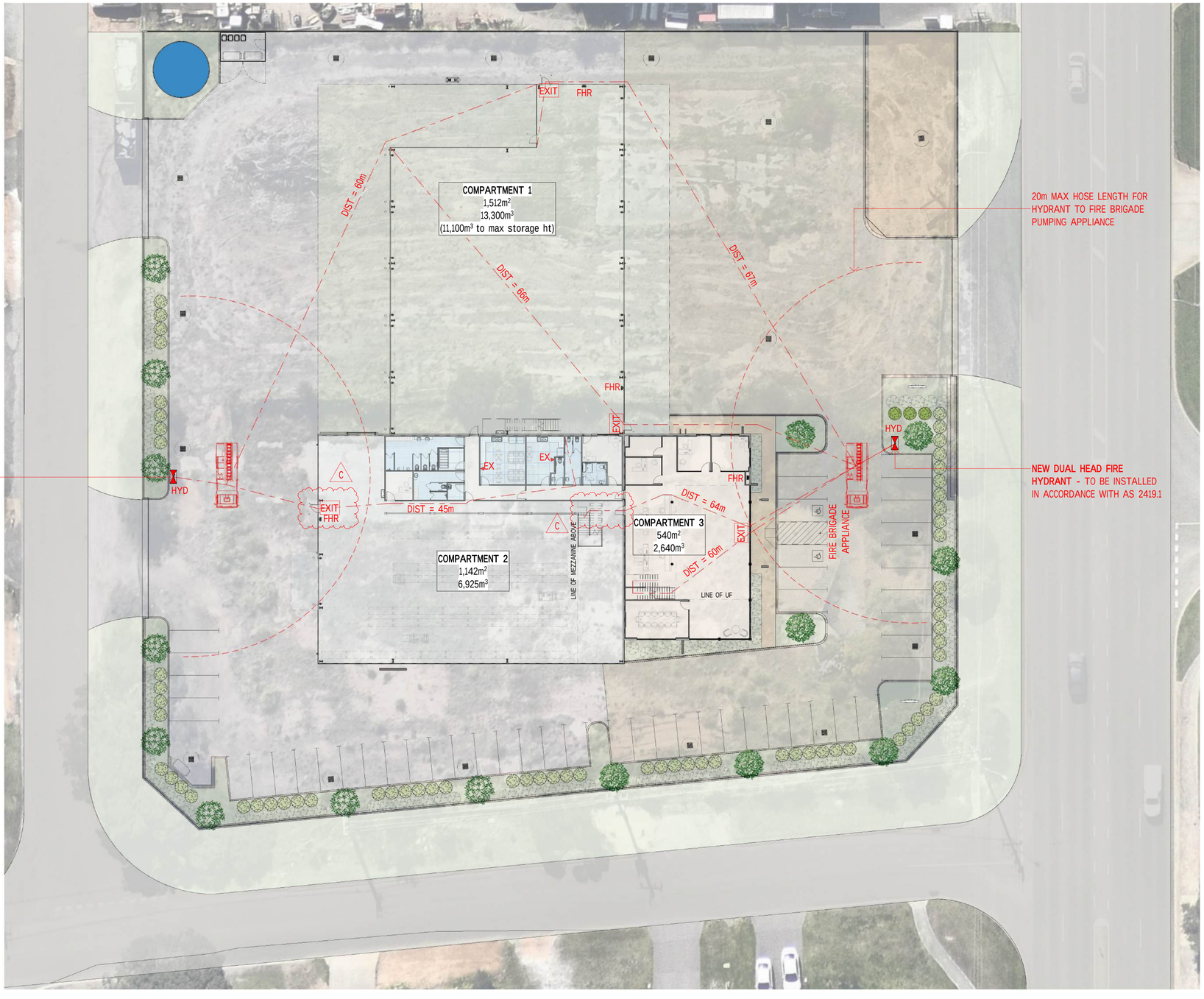
EXIT — TO BE LOCATED & INSTALLED IN ACCORDANCE WITH AS2293.1 - 2018 & NCC SECTION E - PART E4

FIRE HOSE REELS

FHR — 1 REQUIRED
TO BE INSTALLED IN ACCORDANCE WITH NCC & AS 2441 REQUIREMENTS

FIRE EXTINGUISHERS

EX — PORTABLE FIRE EXTINGUISHERS TO OFFICE AREA TO BE INSTALLED IN ACCORDANCE WITH NCC CLAUSE E1.6 BY BUILDING OCCUPIER AFTER ALL EQUIPMENT IS INSTALLED



FIRE SERVICES PLAN

1 : 250

DATE	REV	AMENDMENT	BY
22/01/2025	D	CHESTER PASS RD CROSSOVER RELOCATED TO SUIT EXISTING. MACHINERY DISPLAY AREA EXPANDED.	ER
16/01/2025	C	CHANGES TO SUIT ENGINEERS COMMENTS	ER
09/12/2024	B	FIRE COMPARTMENT SIZES ADDED	ER
05/12/2024	A	ISSUED FOR DA	ER

DESIGNER: AUSPAN

Perth
5 Martin Place
Canningvale, WA 6155

Albany
169 Chesterpass Road
Milpara, WA 6330

Gnowangerup
15 Corbett Street
Gnowangerup, WA 6335

Phone: 1300 271 220

CLIENT: CJD EQUIPMENT

SITE ADDRESS: CNR CHESTER PASS RD & RICHARD ST ALBANY, WA 6330

ARCHITECTURAL DRAWINGS

PROJECT: PROPOSED WORKSHOP, WAREHOUSE & OFFICE

DRAWING TITLE: FIRE SERVICES PLAN

SCALE:	As indicated
SHEET SIZE:	A1
DATE:	05/12/2024
DESIGNED:	ER
DRAWN:	ER
CHECKED:	DD

PROJECT NUMBER: TK3026

STAGE: DA

REVISION: D

DRAWING NUMBER: A702

C:\Users\EmmaReynolds\Auspan\Gnowangerup Projects\Projects\TK3026 - CJD Albany Workshop & Office\06 DWGS & DESIGN\01 Architectural\03 REVIT\04 Models\TK3026 - CJD ALBANY_DA_FUHL_20230526.rvt

APPENDIX B | CERTIFICATE OF TITLE

WESTERN AUSTRALIA

TITLE NUMBER	
Volume	Folio
1283	**289**

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

BGRoberts

REGISTRAR OF TITLES

REGISTRAR OF TITLES WESTERN AUSTRALIA

LAND DESCRIPTION:

LOT 1 ON DIAGRAM 22830

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

C J D EQUIPMENT PTY LTD OF 54 GREAT EASTERN HIGHWAY SOUTH GUILDFORD WA 6055
(T P972151) REGISTERED 30/4/2024

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. P909615 MEMORIAL. CONTAMINATED SITES ACT 2003 REGISTERED 7/3/2024.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required. Lot as described in the land description may be a lot or location.

----------END OF CERTIFICATE OF TITLE----------

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND:	1283-289 (1/D22830)
PREVIOUS TITLE:	1251-440
PROPERTY STREET ADDRESS:	107 CHESTER PASS RD, MILPARA.
LOCAL GOVERNMENT AUTHORITY:	CITY OF ALBANY

WESTERN AUSTRALIA

TITLE NUMBER	
Volume	Folio
1360	**617**

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

BGRoberts

REGISTRAR OF TITLES

REGISTRAR OF TITLES WESTERN AUSTRALIA

LAND DESCRIPTION:

LOT 174 ON PLAN 9216

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

C J D EQUIPMENT PTY LTD OF 54 GREAT EASTERN HIGHWAY SOUTH GUILDFORD WA 6055
(T P972151) REGISTERED 30/4/2024

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. P909617 MEMORIAL. CONTAMINATED SITES ACT 2003 REGISTERED 7/3/2024.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required. Lot as described in the land description may be a lot or location.

----------END OF CERTIFICATE OF TITLE----------

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND:	1360-617 (174/P9216)
PREVIOUS TITLE:	214-189A
PROPERTY STREET ADDRESS:	8 LANCE ST, MILPARA.
LOCAL GOVERNMENT AUTHORITY:	CITY OF ALBANY

NOTE 1: A000001A PENDING SURVEY - DIAGRAM 55243.

WESTERN AUSTRALIA

TITLE NUMBER	
Volume	Folio
1360	**618**

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

BGRoberts

REGISTRAR OF TITLES

REGISTRAR OF TITLES WESTERN AUSTRALIA

LAND DESCRIPTION:

LOT 175 ON PLAN 9216

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

C J D EQUIPMENT PTY LTD OF 54 GREAT EASTERN HIGHWAY SOUTH GUILDFORD WA 6055
(T P972151) REGISTERED 30/4/2024

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. P909617 MEMORIAL. CONTAMINATED SITES ACT 2003 REGISTERED 7/3/2024.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required. Lot as described in the land description may be a lot or location.

----------END OF CERTIFICATE OF TITLE----------

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND:	1360-618 (175/P9216)
PREVIOUS TITLE:	214-189A
PROPERTY STREET ADDRESS:	6 LANCE ST, MILPARA.
LOCAL GOVERNMENT AUTHORITY:	CITY OF ALBANY

NOTE 1: A000001A PENDING SURVEY - DIAGRAM 55243.

WESTERN AUSTRALIA

TITLE NUMBER	
Volume	Folio
1750	**501**

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

BGRoberts

REGISTRAR OF TITLES

REGISTRAR OF TITLES WESTERN AUSTRALIA

LAND DESCRIPTION:

LOT 29 ON DIAGRAM 23804

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

C J D EQUIPMENT PTY LTD OF 54 GREAT EASTERN HIGHWAY SOUTH GUILDFORD WA 6055
(T P972151) REGISTERED 30/4/2024

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. P909615 MEMORIAL. CONTAMINATED SITES ACT 2003 REGISTERED 7/3/2024.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required. Lot as described in the land description may be a lot or location.

----------END OF CERTIFICATE OF TITLE----------

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND:	1750-501 (29/D23804)
PREVIOUS TITLE:	151-18A
PROPERTY STREET ADDRESS:	107 CHESTER PASS RD, MILPARA.
LOCAL GOVERNMENT AUTHORITY:	CITY OF ALBANY

WESTERN AUSTRALIA

TITLE NUMBER	
Volume	Folio
1784	**276**

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

BGRoberts

REGISTRAR OF TITLES

REGISTRAR OF TITLES WESTERN AUSTRALIA

LAND DESCRIPTION:

LOT 2 ON DIAGRAM 22830

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

C J D EQUIPMENT PTY LTD OF 54 GREAT EASTERN HIGHWAY SOUTH GUILDFORD WA 6055
(T P972151) REGISTERED 30/4/2024

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. P909617 MEMORIAL. CONTAMINATED SITES ACT 2003 REGISTERED 7/3/2024.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required. Lot as described in the land description may be a lot or location.

----------END OF CERTIFICATE OF TITLE----------

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND:	1784-276 (2/D22830)
PREVIOUS TITLE:	1281-488
PROPERTY STREET ADDRESS:	111 CHESTER PASS RD, MILPARA.
LOCAL GOVERNMENT AUTHORITY:	CITY OF ALBANY

APPENDIX C | BASIC SUMMARIES OF RECORDS

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:29:05PM, 07/01/2025

Receipt No:	
ID No:	*18767*

Search Results

This response relates to a search request received for:

107 Chester Pass Rd
Milpara, WA, 6330

This parcel belongs to a site that contains 2 parcel(s).

According to Department of Water and Environmental Regulation records, this land has been reported as a known or suspected contaminated site.

Address	107 Chester Pass Rd Milpara, WA, 6330
Lot on Plan Address	Lot 1 On Diagram 22830
Parcel Status	**Classification:** 21/02/2024 - *Remediated for restricted use* **Nature and Extent of Contamination:** Hydrocarbon-impacted soils (such as from petrol and diesel) remain in-situ in localised subsurface soils at depths greater than 4 metres below ground level in the eastern portion of the site. Hydrocarbons in the form of dissolved phase and light non-aqueous phase liquid (LNAPL) are present in groundwater beneath the site and extends southeast off-site. **Restrictions on Use:** The land use of the site is restricted to commercial/industrial use, which excludes sensitive uses such as childcare centres, kindergartens, pre-schools and primary schools. The site should not be developed for a more sensitive use such as residential use, childcare centres or recreational open space, without further contamination assessment and/or remediation. Development of habitable basement structures is prohibited without further contamination assessment and/or remediation. Due to the presence of soil and groundwater contamination beneath the site, the ongoing Site Management Plan (dated April 2023) must be implemented for any intrusive works that may intercept contaminated soil or groundwater. The ongoing Site Management Plan also includes requirements for ongoing groundwater monitoring and for contingency scenarios (such changes to the risk profile, increases in plume size or concentrations of hydrocarbons). Due to the nature and extent of groundwater contamination, the abstraction of groundwater for any purpose is not recommended. **Reason for Classification:** The site was reported to the Department of Water and Environmental Regulation (the department) as per reporting obligations under section 11 of the 'Contaminated Sites Act 2003' (the Act), which

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:29:06PM, 07/01/2025

commenced on 1 December 2006.

The site was first classified under section 13 of the Act based on information submitted to the department by March 2013. The site has been classified again under section 13 of the Act to reflect additional technical information submitted to the department by October 2023.

The site was reported because it has been used as a bulk fuel depot for approximately 31 years, from 1973 to 2004, and a series of contamination assessments carried out between 1995 and 2007 found hydrocarbons (such as from petrol and diesel) present in soil and groundwater at the site. Fuel storage facilities and depots are a land use that has the potential to cause contamination, as specified in the guideline 'Assessment and management of contaminated sites' (Department of Water and Environmental Regulation, 2021).

A contamination assessment was initially carried out in 1995 which first identified impacts associated with fuel storage. Detailed site investigations were undertaken in 2006 following the cessation of fuel storage in 2004. Numerous investigation reports have been prepared since the depot was decommissioned in 2004 to address remaining infrastructure and ongoing impacts.

Detailed soil investigations, undertaken progressively since 2006, identified hydrocarbons in soil at numerous locations exceeding ecological and human health-based screening criteria available at the time. Minor soil remediation was undertaken in 2006 comprising the excavation and eventual off-site disposal of hydrocarbon-impacted soils from the location of the former gantry and wash-pad drains.

Several rounds of groundwater investigations have been undertaken since 2006 with monitoring wells being progressively installed off-site to delineate the lateral extent of groundwater contamination. These investigations identified a plume of hydrocarbon-impacted groundwater extending approximately 150 metres off-site to the south-east at concentrations exceeding relevant assessment levels for non-potable use of groundwater available and for vapour intrusion on commercial and industrial land. Light non-aqueous phase liquid (LNAPL) (pure petrol or diesel) has been identified in groundwater beneath the south-eastern portion of the site and extending off-site to the south-east and the north.

Soil vapour assessments were undertaken in 2013 which found low concentrations of hydrocarbons in soil vapour samples collected at a depth of approximately 1.5 metre below ground level (mbgl). The concentrations detected were below the relevant Health Screening Levels for vapour intrusion on commercial and industrial land as specified in the 'National Environment Protection (Assessment of Site Contamination) Measure 1999' (the NEPM). Additional sub-slab vapour assessments were undertaken in 2015 which also reported vapour concentrations below relevant screening levels. These investigations indicated that hydrocarbon vapours within the subsurface were attenuating through biodegradation processes, and that risks associated with vapour intrusion on-site are negligible. These conclusions were further supported through an assessment using the 'separation distances' published in 'Petroleum hydrocarbon vapour intrusion assessment: Australian guidance' (Co-operative Research Centre for Contamination Assessment and Remediation of the Environment (CRC CARE), 2013).

However, further assessment was deemed necessary to assess potential risks to occupants of any proposed below-ground structures such as basements or cellars.

Remedial works were facilitated through the removal of all fuel-related infrastructure and above ground structures between 2012 and 2016. Hydrocarbon-impacted soils identified during these works were excavated and placed into specially engineered and constructed bioremediation pads. Remedial

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:29:06PM, 07/01/2025

excavation extended to a maximum depth of 4 metres below ground level. Approximately 740 cubic metres of impacted soils were bio-remediated on-site between April 2016 and March 2017. Subsequent soil validation demonstrated that, following remediation, the soils were suitable for reuse on-site and were used to backfill excavation voids, along with approximately 600 cubic metres of validated fill material imported to the site in 2015.

Active groundwater remediation through multi-phase vapour extraction (MPVE) was trialled in May 2016 and passive groundwater remediation through monitored natural attenuation - natural source zone depletion (MNA-NSZD) was trialled in 2020 and 2022.

A remedial options assessment was undertaken following completion of passive remediation trials and NSZD was determined as the preferrable remedial option for the site based on mass removal rates, sustainability, and geological feasibility. NSZD rates indicate a natural attenuation at a rate of between 19.8 litres and 69.3 litres of LNAPL annually over a timescale of 5 to 18 years. Plume stability, delineation and risk assessment works (including assessing vapour intrusion pathways) have been ongoing at this site since 2007.

The most recent report held on the department's records is dated September 2023. Based on this information and historical soil assessments, isolated soil impacts remain at depths greater than 4 mbgl at the eastern boundary at the site at concentrations exceeding Management Limits for commercial and industrial land, as published in the NEPM.

Hydrocarbons remain present in groundwater at concentrations exceeding assessment levels for non-potable use of groundwater, as published in the guideline 'Assessment and management of contaminated sites' (Department of Water and Environmental Regulation, 2021) derived from Australian Drinking Water Guideline (Aesthetic) levels.

These are relevant criteria given the potential use of groundwater in the area for garden irrigation.

LNAPL remains present in groundwater beneath the south-eastern portion of the site and extending off-site to the south-east and the north.

Additional vapour sampling was carried out in 2020 and 2022 to support NSZD assessment which also provided for a post-remediation assessment of vapour intrusion risk to on and off-site receptors. In both assessments, vapour concentrations were below Health Screening Levels for all land uses, including basement scenarios, and did not exceed vertical separation distances as defined in Petroleum hydrocarbon vapour intrusion assessment: Australian guidance (CRC Contamination Assessment and Remediation of the Environment, Technical Report no. 23, 2018). Therefore, soil vapour risk is considered to not pose an unacceptable risk to human health on or off-site under current land uses.

An ongoing Site Management Plan (dated April 2023) outlines management measures for any activity (such as monitoring or site redevelopment) that may disturb the hydrocarbon-impacted soil or groundwater. A tier 3 risk assessment has indicated that the contamination present on the site does not pose an unacceptable risk to human health, the environment or environmental values under current land uses, provided that the ongoing Site Management Plan (SMP) is implemented.

An accredited contaminated sites auditor (the auditor) reviewed the investigations and risk assessment for the site. The auditor's findings are documented in mandatory auditor's reports dated 10 April 2019, 21 October 2021 and 18 May 2023. The department accepts the auditor's recommendation that all identified soil and groundwater contamination at the site has been actively

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:29:06PM, 07/01/2025

	remediated to the extent that ongoing passive remediation through the process of NSZD and MNA is sufficient to manage the site. The department agrees with the conclusions of the MAR that the site and affected sites are suitable for current land uses, subject to respective site restrictions and the adherence to the SMP. Based on the information provided and provided groundwater is not abstracted and habitable basement structures are not developed, the site is suitable for the current/proposed commercial/industrial land use if the ongoing SMP for the site is implemented. However, further assessment of potential contamination should be undertaken before any change to a more sensitive land use (e.g. residential housing, childcare centres). The site is contaminated and has been remediated such that it is suitable for the current/proposed commercial/industrial land use, subject to implementation of the Ongoing Site Management Plan. Therefore, the site is classified as 'remediated for restricted use'. A memorial stating the site's classification has been placed on the certificate of title and will trigger the need for further investigations and risk assessment should the site be proposed for a more sensitive land use. The department, in consultation with the Department of Health, has classified this site based on the information available to the department at the time of classification. It is acknowledged that the contamination status of the site may have changed since the information was collated and/or submitted to the department, and as such, the usefulness of this information may be limited. **Other Relevant Information:** Additional information included herein is relevant to the contamination status of the site and includes the department's expectations for action that should be taken to address potential or actual contamination described in the Reasons for Classification. Based on the available information, contamination present beneath this site has also been identified beyond the site boundary beneath the adjacent land, consistent with the definition of a "source site" specified in Part 1, Section 3 of the Act. In accordance with Regulation 31(1)(b) of the 'Contaminated Sites Regulations 2006', reports or information submitted to the department that are relevant to the investigation, assessment, monitoring or remediation of a source site are required to be accompanied by a mandatory auditor's report (MAR) prepared by an accredited contaminated sites auditor. Where the land is part of a transaction - sale, mortgagee or lease agreement, the landowners MUST PROVIDE WRITTEN DISCLOSURE (on the prescribed Form 6) of the site's status to any potential owner, mortgagee (e.g financial institutions) or lessee at least 14 days before the completion of the transaction. A copy of the disclosure must also be forwarded to the department. **Action Required:** Please refer to the Restrictions on Use applicable to the site.
Certificate of Title Memorial	Under the Contaminated Sites Act 2003, this site has been classified as "remediated for restricted use". For further information on the contamination status of this site, please contact Contaminated Sites at the Department of Water and Environmental Regulation.

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:29:06PM, 07/01/2025

Current Regulatory Notice Issued	**Type of Regulatory Notice:** *Nil* **Date Issued:** *Nil*
General	No other information relating to this parcel.

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:30:50PM, 07/01/2025

Receipt No:	
ID No:	*18768*

Search Results

This response relates to a search request received for:

107 Chester Pass Rd
Milpara, WA, 6330

This parcel belongs to a site that contains 2 parcel(s).

According to Department of Water and Environmental Regulation records, this land has been reported as a known or suspected contaminated site.

Address	107 Chester Pass Rd Milpara, WA, 6330
Lot on Plan Address	Lot 29 On Diagram 23804
Parcel Status	**Classification:** 21/02/2024 - *Remediated for restricted use* **Nature and Extent of Contamination:** Hydrocarbons (such as from petrol and diesel) are present in groundwater beneath the site and extends southeast off-site. **Restrictions on Use:** The land use of the site is restricted to commercial/industrial use, which excludes sensitive uses such as childcare centres, kindergartens, pre-schools and primary schools. The site should not be developed for a more sensitive use such as residential use, childcare centres or recreational open space, without further contamination assessment and/or remediation. Development of habitable basement structures is prohibited without further contamination assessment and/or remediation. Due to the presence of soil and groundwater contamination beneath the site, the ongoing Site Management Plan (dated April 2023) must be implemented for any intrusive works that may intercept contaminated soil or groundwater. The ongoing Site Management Plan also includes requirements for ongoing groundwater monitoring and for contingency scenarios (such changes to the risk profile, increases in plume size or concentrations of hydrocarbons). Due to the nature and extent of groundwater contamination, the abstraction of groundwater for any purpose is not recommended. **Reason for Classification:** The site was reported to the Department of Water and Environmental Regulation (the department) as per reporting obligations under section 11 of the 'Contaminated Sites Act 2003' (the Act), which commenced on 1 December 2006. The site was first classified under section 13 of the Act based on information submitted to the

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:30:50PM, 07/01/2025

department by March 2013. The site has been classified again under section 13 of the Act to reflect additional technical information submitted to the department by October 2023.

The site was reported because it has been used as a bulk fuel depot for approximately 31 years, from 1973 to 2004, and a series of contamination assessments carried out between 1995 and 2007 found hydrocarbons (such as from petrol and diesel) present in soil and groundwater at the site. Fuel storage facilities and depots are a land use that has the potential to cause contamination, as specified in the guideline 'Assessment and management of contaminated sites' (Department of Water and Environmental Regulation, 2021).

A contamination assessment was initially carried out in 1995 which first identified impacts associated with fuel storage. Detailed site investigations were undertaken in 2006 following the cessation of fuel storage in 2004. Numerous investigation reports have been prepared since the depot was decommissioned in 2004 to address remaining infrastructure and ongoing impacts.

Detailed soil investigations, undertaken progressively since 2006, identified hydrocarbons in soil at numerous locations exceeding ecological and human health-based screening criteria available at the time. Minor soil remediation was undertaken in 2006 comprising the excavation and eventual off-site disposal of hydrocarbon-impacted soils from the location of the former gantry and wash-pad drains.

Several rounds of groundwater investigations have been undertaken since 2006 with monitoring wells being progressively installed off-site to delineate the lateral extent of groundwater contamination. These investigations identified a plume of hydrocarbon-impacted groundwater extending approximately 150 metres off-site to the south-east at concentrations exceeding relevant assessment levels for non-potable use of groundwater available and for vapour intrusion on commercial and industrial land. Light non-aqueous phase liquid (LNAPL) (pure petrol or diesel) has been identified in groundwater beneath the south-eastern portion of the site and extending off-site to the south-east and the north.

Soil vapour assessments were undertaken in 2013 which found low concentrations of hydrocarbons in soil vapour samples collected at a depth of approximately 1.5 metre below ground level (mbgl). The concentrations detected were below the relevant Health Screening Levels for vapour intrusion on commercial and industrial land as specified in the 'National Environment Protection (Assessment of Site Contamination) Measure 1999' (the NEPM). Additional sub-slab vapour assessments were undertaken in 2015 which also reported vapour concentrations below relevant screening levels. These investigations indicated that hydrocarbon vapours within the subsurface were attenuating through biodegradation processes, and that risks associated with vapour intrusion on-site are negligible. These conclusions were further supported through an assessment using the 'separation distances' published in 'Petroleum hydrocarbon vapour intrusion assessment: Australian guidance' (Co-operative Research Centre for Contamination Assessment and Remediation of the Environment (CRC CARE), 2013).

However, further assessment was deemed necessary to assess potential risks to occupants of any proposed below-ground structures such as basements or cellars.

Remedial works were facilitated through the removal of all fuel-related infrastructure and above ground structures between 2012 and 2016. Hydrocarbon-impacted soils identified during these works were excavated and placed into specially engineered and constructed bioremediation pads. Remedial excavation extended to a maximum depth of 4 metres below ground level. Approximately 740 cubic metres of impacted soils were bio-remediated on-site between April 2016 and March 2017. Subsequent soil validation demonstrated that, following remediation, the soils were suitable for reuse

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:30:50PM, 07/01/2025

on-site and were used to backfill excavation voids, along with approximately 600 cubic metres of validated fill material imported to the site in 2015.

Active groundwater remediation through multi-phase vapour extraction (MPVE) was trialled in May 2016 and passive groundwater remediation through monitored natural attenuation - natural source zone depletion (MNA-NSZD) was trialled in 2020 and 2022.

A remedial options assessment was undertaken following completion of passive remediation trials and NSZD was determined as the preferrable remedial option for the site based on mass removal rates, sustainability, and geological feasibility. NSZD rates indicate a natural attenuation at a rate of between 19.8 litres and 69.3 litres of LNAPL annually over a timescale of 5 to 18 years. Plume stability, delineation and risk assessment works (including assessing vapour intrusion pathways) have been ongoing at this site since 2007.

The most recent report held on the department's records is dated September 2023. Based on this information and historical soil assessments, isolated soil impacts remain at depths greater than 4 mbgl at the eastern boundary at the site at concentrations exceeding Management Limits for commercial and industrial land, as published in the NEPM.

Hydrocarbons remain present in groundwater at concentrations exceeding assessment levels for non-potable use of groundwater, as published in the guideline 'Assessment and management of contaminated sites' (Department of Water and Environmental Regulation, 2021) derived from Australian Drinking Water Guideline (Aesthetic) levels.

These are relevant criteria given the potential use of groundwater in the area for garden irrigation.

LNAPL remains present in groundwater beneath the south-eastern portion of the site and extending off-site to the south-east and the north.

Additional vapour sampling was carried out in 2020 and 2022 to support NSZD assessment which also provided for a post-remediation assessment of vapour intrusion risk to on and off-site receptors. In both assessments, vapour concentrations were below Health Screening Levels for all land uses, including basement scenarios, and did not exceed vertical separation distances as defined in Petroleum hydrocarbon vapour intrusion assessment: Australian guidance (CRC Contamination Assessment and Remediation of the Environment, Technical Report no. 23, 2018). Therefore, soil vapour risk is considered to not pose an unacceptable risk to human health on or off-site under current land uses.

An ongoing Site Management Plan (dated April 2023) outlines management measures for any activity (such as monitoring or site redevelopment) that may disturb the hydrocarbon-impacted soil or groundwater. A tier 3 risk assessment has indicated that the contamination present on the site does not pose an unacceptable risk to human health, the environment or environmental values under current land uses, provided that the ongoing Site Management Plan (SMP) is implemented.

An accredited contaminated sites auditor (the auditor) reviewed the investigations and risk assessment for the site. The auditor's findings are documented in mandatory auditor's reports dated 10 April 2019, 21 October 2021 and 18 May 2023. The department accepts the auditor's recommendation that all identified soil and groundwater contamination at the site has been actively remediated to the extent that ongoing passive remediation through the process of NSZD and MNA is sufficient to manage the site. The department agrees with the conclusions of the MAR that the site and affected sites are suitable for current land uses, subject to respective site restrictions and the

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:30:50PM, 07/01/2025

	adherence to the SMP. Based on the information provided and provided groundwater is not abstracted and habitable basement structures are not developed, the site is suitable for the current/proposed commercial/industrial land use if the ongoing SMP for the site is implemented. However, further assessment of potential contamination should be undertaken before any change to a more sensitive land use (e.g. residential housing, childcare centres). The site is contaminated and has been remediated such that it is suitable for the current/proposed commercial/industrial land use, subject to implementation of the Ongoing Site Management Plan. Therefore, the site is classified as 'remediated for restricted use'. A memorial stating the site's classification has been placed on the certificate of title and will trigger the need for further investigations and risk assessment should the site be proposed for a more sensitive land use. The department, in consultation with the Department of Health, has classified this site based on the information available to the department at the time of classification. It is acknowledged that the contamination status of the site may have changed since the information was collated and/or submitted to the department, and as such, the usefulness of this information may be limited. **Other Relevant Information:** Additional information included herein is relevant to the contamination status of the site and includes the department's expectations for action that should be taken to address potential or actual contamination described in the Reasons for Classification. Based on the available information, contamination present beneath this site has also been identified beyond the site boundary beneath the adjacent land, consistent with the definition of a "source site" specified in Part 1, Section 3 of the Act. In accordance with Regulation 31(1)(b) of the 'Contaminated Sites Regulations 2006', reports or information submitted to the department that are relevant to the investigation, assessment, monitoring or remediation of a source site are required to be accompanied by a mandatory auditor's report (MAR) prepared by an accredited contaminated sites auditor. Where the land is part of a transaction - sale, mortgagee or lease agreement, the landowners MUST PROVIDE WRITTEN DISCLOSURE (on the prescribed Form 6) of the site's status to any potential owner, mortgagee (e.g financial institutions) or lessee at least 14 days before the completion of the transaction. A copy of the disclosure must also be forwarded to the department. **Action Required:** Please refer to the Restrictions on Use applicable to the site.
Certificate of Title Memorial	Under the Contaminated Sites Act 2003, this site has been classified as "remediated for restricted use". For further information on the contamination status of this site, please contact Contaminated Sites at the Department of Water and Environmental Regulation.
Current Regulatory Notice Issued	**Type of Regulatory Notice:** *Nil* **Date Issued:** *Nil*

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:30:50PM, 07/01/2025

General	No other information relating to this parcel.

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:28:52PM, 07/01/2025

Receipt No:	
ID No:	*18839*

Search Results

This response relates to a search request received for:

8 Lance St
Milpara, WA, 6330

This parcel belongs to a site that contains 3 parcel(s).

According to Department of Water and Environmental Regulation records, this land has been reported as a known or suspected contaminated site.

Address	8 Lance St Milpara, WA, 6330
Lot on Plan Address	Lot 174 On Plan 9216
Parcel Status	**Classification:** 22/02/2024 - *Remediated for restricted use* **Nature and Extent of Contamination:** Hydrocarbons in the form of dissolved phase and light non-aqueous phase liquid (LNAPL) are present in groundwater beneath the southern boundary of the site and extends southeast off-site. **Restrictions on Use:** The land use of the site is restricted to commercial/industrial use, which excludes sensitive uses such as childcare centres, kindergartens, pre-schools and primary schools. The site should not be developed for a more sensitive use such as residential use, childcare centres or recreational open space, without further contamination assessment and/or remediation. Development of habitable basement structures is prohibited without further contamination assessment and/or remediation. Due to the presence of soil and groundwater contamination beneath the site, the ongoing Site Management Plan (dated April 2023) must be implemented for any intrusive works that may intercept contaminated soil or groundwater. The ongoing Site Management Plan also includes requirements for ongoing groundwater monitoring, and for contingency scenarios (such changes to the risk profile, increases in plume size or concentrations of hydrocarbons). Due to the nature and extent of groundwater contamination, the abstraction of groundwater for any purpose is not recommended. **Reason for Classification:** The site was reported to the Department of Water and Environmental Regulation (the department) as per reporting obligations under section 11 of the 'Contaminated Sites Act 2003' (the Act), which commenced on 1 December 2006. The site was first classified under section 13 of the Act based on information submitted to the department by June 2007. The site has been classified again under section 13 of the Act to reflect additional technical information submitted to the department by October 2023.

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:28:53PM, 07/01/2025

The site was reported because it has been used as a service station for approximately 13 years, from 1991 to 2004, and a series of contamination assessments carried out between 1995 and 2007 found petroleum hydrocarbons (such as from petrol and diesel) present in soil and groundwater at the site. Service stations have the potential to cause contamination, as specified in the guideline 'Assessment and management of contaminated sites' (Department of Water and Environmental Regulation, 2021).

Detailed site investigations were undertaken across the site, and the adjacent Fuel Depot, in 2006 following the cessation of fuel storage in 2004. Numerous investigation reports have been prepared since the depot was decommissioned in 2004 to address remaining infrastructure and ongoing impacts.

Detailed soil investigations, undertaken progressively since 2006, identified hydrocarbons in soil at numerous locations exceeding ecological and human health-based screening criteria available at the time. Minor soil remediation was undertaken in 2006 comprising the excavation and eventual off-site disposal of hydrocarbon-impacted soils but was limited due to remaining underground infrastructure at the site.

Several rounds of groundwater investigations have been undertaken since 2006 with monitoring wells being progressively installed off-site to delineate the lateral extent of groundwater contamination. These investigations identified a plume of hydrocarbon-impacted groundwater at the site's southeastern boundary attributed to historical on-site sources and sources from the adjacent Fuel Depot and extending approximately 150 metres off-site to the south-east. The concentrations of hydrocarbons and lead detected in groundwater on-site exceeded freshwater guideline values available at the time. The concentration of hydrocarbons in groundwater also exceeded relevant groundwater for vapour intrusion on commercial and industrial land.

Soil vapour assessments were undertaken in 2013 which found low concentrations of hydrocarbons in soil vapour samples collected at a depth of approximately 1.5 mbgl.

The concentrations detected were below the relevant Health Screening Levels for vapour intrusion on commercial and industrial land as specified in the NEPM. Additional sub-slab vapour assessments were undertaken in 2015 which also reported vapour concentrations below relevant screening levels. These investigations indicated that hydrocarbon vapours within the subsurface were attenuating through biodegradation processes, and that risks associated with vapour intrusion on-site are negligible. These conclusions were further supported through an assessment using the 'separation distances' published in 'Petroleum hydrocarbon vapour intrusion assessment: Australian guidance' (Co-operative Research Centre for Contamination Assessment and Remediation of the Environment (CRC CARE), 2013).

Remedial works were facilitated through the removal of all fuel-related infrastructure and above ground structures at this site and the adjacent Fuel Depot between 2012 and 2016. Hydrocarbon-impacted soils identified during these works were excavated and placed into specially engineered and constructed bioremediation pads. Remedial excavation extended to a maximum depth of 4 metres below ground level.

Approximately 740 cubic metres of impacted soils were bio-remediated on-site between April 2016 and March 2017. Subsequent soil validation demonstrated that, following remediation, the soils were suitable for reuse on-site and were used to backfill excavation voids, along with approximately 600 cubic metres of validated fill material imported to the site in 2015.

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:28:53PM, 07/01/2025

Active groundwater remediation through multi-phase vapour extraction (MPVE) was trialled in May 2016 and passive groundwater remediation through monitored natural attenuation - natural source zone depletion (MNA-NSZD) was trialled in 2020 and 2022.

A remedial options assessment was undertaken following completion of passive remediation trials and NSZD was determined as the preferrable remedial option for the site based on mass removal rates, sustainability, and geological feasibility. NSZD rates indicate a natural attenuation at a rate of between 19.8 litres and 69.3 litres of LNAPL annually over a timescale of 5 to 18 years. Plume stability, delineation and risk assessment works (including assessing vapour intrusion pathways) have been ongoing at this site since 2007.

The most recent report held on the department's records is dated September 2023.

Based on this information light non-aqueous phase liquid (LNAPL) is present in groundwater beneath the south-eastern portion of the site, originating from the adjacent Fuel Depot and extending off-site to the south-east, and a plume of dissolved phase hydrocarbons in groundwater extending approximately 150 metres off-site to the south-east.

Hydrocarbons remain present in groundwater at concentrations exceeding assessment levels for non-potable use of groundwater, as published in the guideline 'Assessment and management of contaminated sites' (Department of Water and Environmental Regulation, 2021) derived from Australian Drinking Water Guideline (Aesthetic) levels. These are relevant criteria given the potential use of groundwater in the area for garden irrigation.

Additional vapour risk assessments were carried out in 2020 and 2022 to support NSZD assessment which also provided for a post-remediation assessment of vapour intrusion risk to on- and off-site receptors. In both assessments, vapour concentrations were below Health Screening Levels for all land uses, including basement scenarios, and did not exceed vertical separation distances as defined in Petroleum hydrocarbon vapour intrusion assessment: Australian guidance (CRC Contamination Assessment and Remediation of the Environment, Technical Report no. 23, 2018). Therefore, soil vapour risk is considered to not pose an unacceptable risk to human health on or off-site under current land uses.

An ongoing Site Management Plan (dated April 2023) outlines management measures for any activity (such as monitoring or site redevelopment) that may disturb the hydrocarbon-impacted groundwater. A tier 3 risk assessment has indicated that the contamination present on the site does not pose an unacceptable risk to human health, the environment or environmental values under current land uses, provided that the ongoing Site Management Plan (SMP) is implemented.

An accredited contaminated sites auditor (the auditor) reviewed the investigations and risk assessment for the site. The auditor's findings are documented in a mandatory auditor's reports dated 10 April 2019, 21 October 2021 and 18 May 2023. The department accepts the auditor's recommendation that all identified soil and groundwater contamination at the site has been actively remediated to the extent that ongoing passive remediation through the process of NSZD and MNA is sufficient to manage the site. The department agrees with the conclusions of the MAR that the site and affected sites are suitable for current land uses, subject to respective site restrictions and the adherence to the SMP.

Based on the information provided and provided groundwater is not abstracted, the site is suitable for the current/proposed commercial/industrial land use if the ongoing SMP for the site is implemented.

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:28:53PM, 07/01/2025

	However, further assessment of potential contamination should be undertaken before any change to a more sensitive land use (e.g. residential housing, childcare centres). The site is contaminated and has been remediated such that it is suitable for the current/proposed commercial/industrial land use, subject to implementation of the Ongoing Site Management Plan. Therefore, the site is classified as 'remediated for restricted use'. A memorial stating the site's classification has been placed on the certificate of title and will trigger the need for further investigations and risk assessment should the site be proposed for a more sensitive land use. The department, in consultation with the Department of Health, has classified this site based on the information available to the department at the time of classification. It is acknowledged that the contamination status of the site may have changed since the information was collated and/or submitted to the department, and as such, the usefulness of this information may be limited. **Other Relevant Information:** Additional information included herein is relevant to the contamination status of the site and includes the department's expectations for action that should be taken to address potential or actual contamination described in the Reasons for Classification. Based on the available information, contamination present on this site has originated from the adjacent land at Lot 1 on Diagram 22830 and Lot 29 on Diagram 23804, which has been classified separately under the Act. Therefore, this site is consistent with the definition of an "affected site" as specified in Part 1, Section 3 of the Act. Under the Act, the person responsible for the remediation of a source site is also responsible for remediation of any related affected sites. **Action Required:** Please refer to the Restrictions on Use applicable to the site.
Certificate of Title Memorial	Under the Contaminated Sites Act 2003, this site has been classified as "remediated for restricted use". For further information on the contamination status of this site, please contact Contaminated Sites at the Department of Water and Environmental Regulation.
Current Regulatory Notice Issued	**Type of Regulatory Notice:** *Nil* **Date Issued:** *Nil*
General	No other information relating to this parcel.

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:28:35PM, 07/01/2025

Receipt No:	
ID No:	*18840*

Search Results

This response relates to a search request received for:

6 Lance St
Milpara, WA, 6330

This parcel belongs to a site that contains 3 parcel(s).

According to Department of Water and Environmental Regulation records, this land has been reported as a known or suspected contaminated site.

Address	6 Lance St Milpara, WA, 6330
Lot on Plan Address	Lot 175 On Plan 9216
Parcel Status	**Classification:** 22/02/2024 - *Remediated for restricted use* **Nature and Extent of Contamination:** Hydrocarbons in the form of dissolved phase and light non-aqueous phase liquid (LNAPL) are present in groundwater beneath the southern boundary of the site and extends southeast off-site. **Restrictions on Use:** The land use of the site is restricted to commercial/industrial use, which excludes sensitive uses such as childcare centres, kindergartens, pre-schools and primary schools. The site should not be developed for a more sensitive use such as residential use, childcare centres or recreational open space, without further contamination assessment and/or remediation. Development of habitable basement structures is prohibited without further contamination assessment and/or remediation. Due to the presence of soil and groundwater contamination beneath the site, the ongoing Site Management Plan (dated April 2023) must be implemented for any intrusive works that may intercept contaminated soil or groundwater. The ongoing Site Management Plan also includes requirements for ongoing groundwater monitoring, and for contingency scenarios (such changes to the risk profile, increases in plume size or concentrations of hydrocarbons). Due to the nature and extent of groundwater contamination, the abstraction of groundwater for any purpose is not recommended. **Reason for Classification:** The site was reported to the Department of Water and Environmental Regulation (the department) as per reporting obligations under section 11 of the 'Contaminated Sites Act 2003' (the Act), which commenced on 1 December 2006. The site was first classified under section 13 of the Act based on information submitted to the department by June 2007. The site has been classified again under section 13 of the Act to reflect additional technical information submitted to the department by October 2023.

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:28:35PM, 07/01/2025

The site was reported because it has been used as a service station for approximately 13 years, from 1991 to 2004, and a series of contamination assessments carried out between 1995 and 2007 found petroleum hydrocarbons (such as from petrol and diesel) present in soil and groundwater at the site. Service stations have the potential to cause contamination, as specified in the guideline 'Assessment and management of contaminated sites' (Department of Water and Environmental Regulation, 2021).

Detailed site investigations were undertaken across the site, and the adjacent Fuel Depot, in 2006 following the cessation of fuel storage in 2004. Numerous investigation reports have been prepared since the depot was decommissioned in 2004 to address remaining infrastructure and ongoing impacts.

Detailed soil investigations, undertaken progressively since 2006, identified hydrocarbons in soil at numerous locations exceeding ecological and human health-based screening criteria available at the time. Minor soil remediation was undertaken in 2006 comprising the excavation and eventual off-site disposal of hydrocarbon-impacted soils but was limited due to remaining underground infrastructure at the site.

Several rounds of groundwater investigations have been undertaken since 2006 with monitoring wells being progressively installed off-site to delineate the lateral extent of groundwater contamination. These investigations identified a plume of hydrocarbon-impacted groundwater at the site's southeastern boundary attributed to historical on-site sources and sources from the adjacent Fuel Depot and extending approximately 150 metres off-site to the south-east. The concentrations of hydrocarbons and lead detected in groundwater on-site exceeded freshwater guideline values available at the time. The concentration of hydrocarbons in groundwater also exceeded relevant groundwater for vapour intrusion on commercial and industrial land.

Soil vapour assessments were undertaken in 2013 which found low concentrations of hydrocarbons in soil vapour samples collected at a depth of approximately 1.5 mbgl.

The concentrations detected were below the relevant Health Screening Levels for vapour intrusion on commercial and industrial land as specified in the NEPM. Additional sub-slab vapour assessments were undertaken in 2015 which also reported vapour concentrations below relevant screening levels. These investigations indicated that hydrocarbon vapours within the subsurface were attenuating through biodegradation processes, and that risks associated with vapour intrusion on-site are negligible. These conclusions were further supported through an assessment using the 'separation distances' published in 'Petroleum hydrocarbon vapour intrusion assessment: Australian guidance' (Co-operative Research Centre for Contamination Assessment and Remediation of the Environment (CRC CARE), 2013).

Remedial works were facilitated through the removal of all fuel-related infrastructure and above ground structures at this site and the adjacent Fuel Depot between 2012 and 2016. Hydrocarbon-impacted soils identified during these works were excavated and placed into specially engineered and constructed bioremediation pads. Remedial excavation extended to a maximum depth of 4 metres below ground level.

Approximately 740 cubic metres of impacted soils were bio-remediated on-site between April 2016 and March 2017. Subsequent soil validation demonstrated that, following remediation, the soils were suitable for reuse on-site and were used to backfill excavation voids, along with approximately 600 cubic metres of validated fill material imported to the site in 2015.

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:28:35PM, 07/01/2025

Active groundwater remediation through multi-phase vapour extraction (MPVE) was trialled in May 2016 and passive groundwater remediation through monitored natural attenuation - natural source zone depletion (MNA-NSZD) was trialled in 2020 and 2022.

A remedial options assessment was undertaken following completion of passive remediation trials and NSZD was determined as the preferrable remedial option for the site based on mass removal rates, sustainability, and geological feasibility. NSZD rates indicate a natural attenuation at a rate of between 19.8 litres and 69.3 litres of LNAPL annually over a timescale of 5 to 18 years. Plume stability, delineation and risk assessment works (including assessing vapour intrusion pathways) have been ongoing at this site since 2007.

The most recent report held on the department's records is dated September 2023.

Based on this information light non-aqueous phase liquid (LNAPL) is present in groundwater beneath the south-eastern portion of the site, originating from the adjacent Fuel Depot and extending off-site to the south-east, and a plume of dissolved phase hydrocarbons in groundwater extending approximately 150 metres off-site to the south-east.

Hydrocarbons remain present in groundwater at concentrations exceeding assessment levels for non-potable use of groundwater, as published in the guideline 'Assessment and management of contaminated sites' (Department of Water and Environmental Regulation, 2021) derived from Australian Drinking Water Guideline (Aesthetic) levels. These are relevant criteria given the potential use of groundwater in the area for garden irrigation.

Additional vapour risk assessments were carried out in 2020 and 2022 to support NSZD assessment which also provided for a post-remediation assessment of vapour intrusion risk to on- and off-site receptors. In both assessments, vapour concentrations were below Health Screening Levels for all land uses, including basement scenarios, and did not exceed vertical separation distances as defined in Petroleum hydrocarbon vapour intrusion assessment: Australian guidance (CRC Contamination Assessment and Remediation of the Environment, Technical Report no. 23, 2018). Therefore, soil vapour risk is considered to not pose an unacceptable risk to human health on or off-site under current land uses.

An ongoing Site Management Plan (dated April 2023) outlines management measures for any activity (such as monitoring or site redevelopment) that may disturb the hydrocarbon-impacted groundwater. A tier 3 risk assessment has indicated that the contamination present on the site does not pose an unacceptable risk to human health, the environment or environmental values under current land uses, provided that the ongoing Site Management Plan (SMP) is implemented.

An accredited contaminated sites auditor (the auditor) reviewed the investigations and risk assessment for the site. The auditor's findings are documented in a mandatory auditor's reports dated 10 April 2019, 21 October 2021 and 18 May 2023. The department accepts the auditor's recommendation that all identified soil and groundwater contamination at the site has been actively remediated to the extent that ongoing passive remediation through the process of NSZD and MNA is sufficient to manage the site. The department agrees with the conclusions of the MAR that the site and affected sites are suitable for current land uses, subject to respective site restrictions and the adherence to the SMP.

Based on the information provided and provided groundwater is not abstracted, the site is suitable for the current/proposed commercial/industrial land use if the ongoing SMP for the site is implemented.

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:28:36PM, 07/01/2025

	However, further assessment of potential contamination should be undertaken before any change to a more sensitive land use (e.g. residential housing, childcare centres). The site is contaminated and has been remediated such that it is suitable for the current/proposed commercial/industrial land use, subject to implementation of the Ongoing Site Management Plan. Therefore, the site is classified as 'remediated for restricted use'. A memorial stating the site's classification has been placed on the certificate of title and will trigger the need for further investigations and risk assessment should the site be proposed for a more sensitive land use. The department, in consultation with the Department of Health, has classified this site based on the information available to the department at the time of classification. It is acknowledged that the contamination status of the site may have changed since the information was collated and/or submitted to the department, and as such, the usefulness of this information may be limited. **Other Relevant Information:** Additional information included herein is relevant to the contamination status of the site and includes the department's expectations for action that should be taken to address potential or actual contamination described in the Reasons for Classification. Based on the available information, contamination present on this site has originated from the adjacent land at Lot 1 on Diagram 22830 and Lot 29 on Diagram 23804, which has been classified separately under the Act. Therefore, this site is consistent with the definition of an "affected site" as specified in Part 1, Section 3 of the Act. Under the Act, the person responsible for the remediation of a source site is also responsible for remediation of any related affected sites. **Action Required:** Please refer to the Restrictions on Use applicable to the site.
Certificate of Title Memorial	Under the Contaminated Sites Act 2003, this site has been classified as "remediated for restricted use". For further information on the contamination status of this site, please contact Contaminated Sites at the Department of Water and Environmental Regulation.
Current Regulatory Notice Issued	**Type of Regulatory Notice:** *Nil* **Date Issued:** *Nil*
General	No other information relating to this parcel.

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:29:00PM, 07/01/2025

Receipt No:	
ID No:	*18841*

Search Results

This response relates to a search request received for:

111 Chester Pass Rd
Milpara, WA, 6330

This parcel belongs to a site that contains 3 parcel(s).

According to Department of Water and Environmental Regulation records, this land has been reported as a known or suspected contaminated site.

Address	111 Chester Pass Rd Milpara, WA, 6330
Lot on Plan Address	Lot 2 On Diagram 22830
Parcel Status	**Classification:** 22/02/2024 - *Remediated for restricted use* **Nature and Extent of Contamination:** Hydrocarbons in the form of dissolved phase and light non-aqueous phase liquid (LNAPL) are present in groundwater beneath the southern boundary of the site and extends southeast off-site. **Restrictions on Use:** The land use of the site is restricted to commercial/industrial use, which excludes sensitive uses such as childcare centres, kindergartens, pre-schools and primary schools. The site should not be developed for a more sensitive use such as residential use, childcare centres or recreational open space, without further contamination assessment and/or remediation. Development of habitable basement structures is prohibited without further contamination assessment and/or remediation. Due to the presence of soil and groundwater contamination beneath the site, the ongoing Site Management Plan (dated April 2023) must be implemented for any intrusive works that may intercept contaminated soil or groundwater. The ongoing Site Management Plan also includes requirements for ongoing groundwater monitoring, and for contingency scenarios (such changes to the risk profile, increases in plume size or concentrations of hydrocarbons). Due to the nature and extent of groundwater contamination, the abstraction of groundwater for any purpose is not recommended. **Reason for Classification:** The site was reported to the Department of Water and Environmental Regulation (the department) as per reporting obligations under section 11 of the 'Contaminated Sites Act 2003' (the Act), which commenced on 1 December 2006. The site was first classified under section 13 of the Act based on information submitted to the department by June 2007. The site has been classified again under section 13 of the Act to reflect additional technical information submitted to the department by October 2023.

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:29:00PM, 07/01/2025

The site was reported because it has been used as a service station for approximately 13 years, from 1991 to 2004, and a series of contamination assessments carried out between 1995 and 2007 found petroleum hydrocarbons (such as from petrol and diesel) present in soil and groundwater at the site. Service stations have the potential to cause contamination, as specified in the guideline 'Assessment and management of contaminated sites' (Department of Water and Environmental Regulation, 2021).

Detailed site investigations were undertaken across the site, and the adjacent Fuel Depot, in 2006 following the cessation of fuel storage in 2004. Numerous investigation reports have been prepared since the depot was decommissioned in 2004 to address remaining infrastructure and ongoing impacts.

Detailed soil investigations, undertaken progressively since 2006, identified hydrocarbons in soil at numerous locations exceeding ecological and human health-based screening criteria available at the time. Minor soil remediation was undertaken in 2006 comprising the excavation and eventual off-site disposal of hydrocarbon-impacted soils but was limited due to remaining underground infrastructure at the site.

Several rounds of groundwater investigations have been undertaken since 2006 with monitoring wells being progressively installed off-site to delineate the lateral extent of groundwater contamination. These investigations identified a plume of hydrocarbon-impacted groundwater at the site's southeastern boundary attributed to historical on-site sources and sources from the adjacent Fuel Depot and extending approximately 150 metres off-site to the south-east. The concentrations of hydrocarbons and lead detected in groundwater on-site exceeded freshwater guideline values available at the time. The concentration of hydrocarbons in groundwater also exceeded relevant groundwater for vapour intrusion on commercial and industrial land.

Soil vapour assessments were undertaken in 2013 which found low concentrations of hydrocarbons in soil vapour samples collected at a depth of approximately 1.5 mbgl.

The concentrations detected were below the relevant Health Screening Levels for vapour intrusion on commercial and industrial land as specified in the NEPM. Additional sub-slab vapour assessments were undertaken in 2015 which also reported vapour concentrations below relevant screening levels. These investigations indicated that hydrocarbon vapours within the subsurface were attenuating through biodegradation processes, and that risks associated with vapour intrusion on-site are negligible. These conclusions were further supported through an assessment using the 'separation distances' published in 'Petroleum hydrocarbon vapour intrusion assessment: Australian guidance' (Co-operative Research Centre for Contamination Assessment and Remediation of the Environment (CRC CARE), 2013).

Remedial works were facilitated through the removal of all fuel-related infrastructure and above ground structures at this site and the adjacent Fuel Depot between 2012 and 2016. Hydrocarbon-impacted soils identified during these works were excavated and placed into specially engineered and constructed bioremediation pads. Remedial excavation extended to a maximum depth of 4 metres below ground level.

Approximately 740 cubic metres of impacted soils were bio-remediated on-site between April 2016 and March 2017. Subsequent soil validation demonstrated that, following remediation, the soils were suitable for reuse on-site and were used to backfill excavation voids, along with approximately 600 cubic metres of validated fill material imported to the site in 2015.

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:29:00PM, 07/01/2025

Active groundwater remediation through multi-phase vapour extraction (MPVE) was trialled in May 2016 and passive groundwater remediation through monitored natural attenuation - natural source zone depletion (MNA-NSZD) was trialled in 2020 and 2022.

A remedial options assessment was undertaken following completion of passive remediation trials and NSZD was determined as the preferrable remedial option for the site based on mass removal rates, sustainability, and geological feasibility. NSZD rates indicate a natural attenuation at a rate of between 19.8 litres and 69.3 litres of LNAPL annually over a timescale of 5 to 18 years. Plume stability, delineation and risk assessment works (including assessing vapour intrusion pathways) have been ongoing at this site since 2007.

The most recent report held on the department's records is dated September 2023.

Based on this information light non-aqueous phase liquid (LNAPL) is present in groundwater beneath the south-eastern portion of the site, originating from the adjacent Fuel Depot and extending off-site to the south-east, and a plume of dissolved phase hydrocarbons in groundwater extending approximately 150 metres off-site to the south-east.

Hydrocarbons remain present in groundwater at concentrations exceeding assessment levels for non-potable use of groundwater, as published in the guideline 'Assessment and management of contaminated sites' (Department of Water and Environmental Regulation, 2021) derived from Australian Drinking Water Guideline (Aesthetic) levels. These are relevant criteria given the potential use of groundwater in the area for garden irrigation.

Additional vapour risk assessments were carried out in 2020 and 2022 to support NSZD assessment which also provided for a post-remediation assessment of vapour intrusion risk to on- and off-site receptors. In both assessments, vapour concentrations were below Health Screening Levels for all land uses, including basement scenarios, and did not exceed vertical separation distances as defined in Petroleum hydrocarbon vapour intrusion assessment: Australian guidance (CRC Contamination Assessment and Remediation of the Environment, Technical Report no. 23, 2018). Therefore, soil vapour risk is considered to not pose an unacceptable risk to human health on or off-site under current land uses.

An ongoing Site Management Plan (dated April 2023) outlines management measures for any activity (such as monitoring or site redevelopment) that may disturb the hydrocarbon-impacted groundwater. A tier 3 risk assessment has indicated that the contamination present on the site does not pose an unacceptable risk to human health, the environment or environmental values under current land uses, provided that the ongoing Site Management Plan (SMP) is implemented.

An accredited contaminated sites auditor (the auditor) reviewed the investigations and risk assessment for the site. The auditor's findings are documented in a mandatory auditor's reports dated 10 April 2019, 21 October 2021 and 18 May 2023. The department accepts the auditor's recommendation that all identified soil and groundwater contamination at the site has been actively remediated to the extent that ongoing passive remediation through the process of NSZD and MNA is sufficient to manage the site. The department agrees with the conclusions of the MAR that the site and affected sites are suitable for current land uses, subject to respective site restrictions and the adherence to the SMP.

Based on the information provided and provided groundwater is not abstracted, the site is suitable for the current/proposed commercial/industrial land use if the ongoing SMP for the site is implemented.

Contaminated Sites Act 2003
Basic Summary of Records Search Response

Report generated at 02:29:00PM, 07/01/2025

	However, further assessment of potential contamination should be undertaken before any change to a more sensitive land use (e.g. residential housing, childcare centres). The site is contaminated and has been remediated such that it is suitable for the current/proposed commercial/industrial land use, subject to implementation of the Ongoing Site Management Plan. Therefore, the site is classified as 'remediated for restricted use'. A memorial stating the site's classification has been placed on the certificate of title and will trigger the need for further investigations and risk assessment should the site be proposed for a more sensitive land use. The department, in consultation with the Department of Health, has classified this site based on the information available to the department at the time of classification. It is acknowledged that the contamination status of the site may have changed since the information was collated and/or submitted to the department, and as such, the usefulness of this information may be limited. **Other Relevant Information:** Additional information included herein is relevant to the contamination status of the site and includes the department's expectations for action that should be taken to address potential or actual contamination described in the Reasons for Classification. Based on the available information, contamination present on this site has originated from the adjacent land at Lot 1 on Diagram 22830 and Lot 29 on Diagram 23804, which has been classified separately under the Act. Therefore, this site is consistent with the definition of an "affected site" as specified in Part 1, Section 3 of the Act. Under the Act, the person responsible for the remediation of a source site is also responsible for remediation of any related affected sites. **Action Required:** Please refer to the Restrictions on Use applicable to the site.
Certificate of Title Memorial	Under the Contaminated Sites Act 2003, this site has been classified as "remediated for restricted use". For further information on the contamination status of this site, please contact Contaminated Sites at the Department of Water and Environmental Regulation.
Current Regulatory Notice Issued	**Type of Regulatory Notice:** *Nil* **Date Issued:** *Nil*
General	No other information relating to this parcel.

APPENDIX D | MACHINERY SPECIFICATIONS

VOLVO

Volvo Excavators 54.0 - 56.4 t 462 hp

EC530E, EC550E

Volvo Construction Equipment

Welcome to our world

Welcome to a world of industry leading machinery. A world where imagination, hard work and technological innovation will lead the way towards developing a future which is cleaner, smarter, and more connected. A world supported by the enduring values of the Volvo Group. A world of stability, sustainability and innovation. A world which we put our customers at the heart of.

Welcome to the world of Volvo Construction Equipment – we think you're going to like it here.

Working harder, working smarter

For over 180 years Volvo has been a pioneer in the design and manufacture of machines which set the standard for efficiency, performance and uptime. Across our range of excavators, wheel loaders and haulers, our reputation for engineering excellence is unrivalled, which means whatever your operation or application, we can provide a total fleet solution to help you succeed.

Building on our proud history, the Volvo Concept Lab continues to create cutting-edge ideas and innovative concepts, to ensure we offer customers machines which work harder and smarter long into the future.

Solutions for you

Our industry leading machines are just the start of your relationship with Volvo. As your partner, we have developed an extensive range of additional solutions to help you improve uptime, boost productivity and reduce costs.

Designed for your business

Structured across nine blocks, our portfolio of products and services are designed to complement your machine's performance and boost your profitability. Simply put, we offer some of the best guarantees, warranties and technological solutions in the industry today.

There when you need us

Whether you're buying new or used, our global network of dealers and technicians offer around-the-clock support, including machine monitoring and world-class parts availability. It's the basis of everything offered by Volvo Services, so you can be confident we've got you covered right from the start.

BUILDING TOMORROW

A purpose-built 50-tonner

Introducing the EC530E and EC550E, true 50-tonne machines and new size class excavators for Volvo. Outstanding levels of power and productivity make these crawler excavators the perfect partner for heavy-duty digging, mass excavation and large site preparation.

Big performance

The 50-tonne EC530E and EC550E truly punch above their weight, delivering the digging forces and lifting capacity more commonly found in a 60-tonne machine. Featuring the highest engine power in their class, these machines deliver superior swing torque and tractive force.

The undercarriage for the job

The perfect choice for the toughest applications, the robust EC550E undercarriage features a longer and wider lower frame compared to the EC530E, providing enhanced stability when handling heavier loads.

Less passes, more work

Optimize fleet use by up to 20%. These 50-tonne excavators are the perfect partner to 30-40t class Volvo articulated haulers, reducing the number of required passes – dramatically improving cycle times. With the additional support of Volvo Site Simulation, your Volvo dealer can work with you to advise on the optimum fleet configuration and site set-up for your operation.

A weight off your mind

Take control of your productivity with the optional On-Board Weighing – part of the Dig Assist set of apps and powered by the 10" Volvo Co-Pilot display. The intelligent tool provides real-time information on bucket weight ensuring the optimum amount of material is moved with every pass. The system also records total tonnage, per shift or per day, to provide powerful long-term productivity data.

SET NEW STANDARDS

These true 50-tonne crawler excavators, equipped with large buckets, boost productivity by up to 20% – setting new standards for the industry.

Less cost, more profit

Reduce costs and boost profits in the EC530E and EC550E. Features including new electro-hydraulic system, Volvo attachments and operator training all contribute towards the unrivalled levels of efficiency delivered by these 50-tonne crawler excavators.

Unique Independent Metering Valve Technology

The latest pioneering innovation from Volvo, the next generation electro-hydraulic system with Independent Metering Valve Technology is the most advanced hydraulic system in the industry. The system provides intelligent electronic control with more control variable, compared to a conventional mechanically coupled hydraulic system. The result is maximum controllability and efficiency according to the specific application at hand.

Get the most from your machine

While reliable and efficient machines of course play a vital role in reducing costs, enhancing safety and maximizing productivity, it is ultimately the performance of the operator that really makes the difference. We offer a wide range of training initiatives to help operators unlock the full capability of their Volvo excavator.

The right tool for the job

Take on a variety of tasks with our range of factory-delivered attachments, including quick couplers and buckets. Perfectly matched to your machine, Volvo attachments are designed to create a single solid and reliable unit, delivering faster and more fuel-efficient cycle times. What's more, the machine is prepared with the necessary auxiliary piping to power hydraulic attachments such as breakers, thumbs, shears, grapples and more.

Even more efficiency

Fuel is the industry's number one operational cost and Fuel Efficiency Reports help to identify areas where efficiency improvements can be made, providing clear insights into the fuel performance of a fleet, site or individual machine. If you need further support putting insight into action, your Volvo dealer is on hand to help you develop a plan to deliver long-term efficiency gains.

25% MORE FUEL EFFICIENCY

Take fuel efficiency to new levels in the EC530E and EC550E. The next generation electro-hydraulic system with Independent Metering Valve Technology produces up to a 25% improvement in fuel efficiency. Engine pump optimization, which lowers engine rpm while optimizing power, and optimized hydraulic piping and size routings, further contribute towards the incredible levels of fuel efficiency.

Ultimate control

Welcome to the ultimate in operator control and convenience. The revolutionary new generation electro-hydraulics with Independent Metering Valve Technology enable a range of intelligent functions which take the operator experience to new levels, including creep mode, motion priority functions, reduced bouncing and Comfort Drive Control.

Carry with care

The perfect solution for lift and carry operations, creep mode utilizes an independent pump flow during travel to maintain a constant and slower travel speed.

Comfortable travel

For easy operation and reduced operator fatigue, Comfort Drive Control gives operators the opportunity to steer the machine using the advanced joystick rollers with index finger grip, instead of using the pedals.

A smoother shift

Boom and arm bouncing reduction technology dramatically reduces machine shock, resulting in a more comfortable and productive operator performance.

ADAPT TO THE JOB

Operators can easily select and adjust a number of functions depending on personal preferences and the task at hand, including Boom/Swing and Boom/Travel priority which enables prioritization of one function over another. Operators can also easily adjust the boom down speed, ideal for precision tasks which require optimum control.

For your comfort and safety

Whether working inside or on the machine, features such as unrivalled visibility and 3-point right-hand side access mean you can be sure that the highest levels of safety have been considered in every design detail of the EC530E and EC550E.

See it all

Operators benefit from outstanding visibility thanks to rear and side-view cameras. Furthermore, the optional Volvo Smart View uses front, rear and side cameras to provide a real-time, overhead view of the machine, resulting in safer machine rotation while working, especially in confined spaces.

Industry-renowned cab

Step inside the best cab on the market. The ROPS cab exceeds industry standards for this class of machine, and with low noise and low vibration, operators will experience the ultimate in comfort. Already boasting best-in-class visibility, the optional high visibility cab and one-piece front window enhance visibility even more.

Get around safely

Industry renowned features such as bolted anti-slip plates, high visibility guardrails and handrails ensure the highest levels of safety when negotiating the machine. For further convenience, the optional foldable cab entrance step and side walkways fold away to enable easier transportation.

EASY AS 1, 2, 3

Reach the upper structure with safety and confidence thanks to 3-point right-hand side access, also providing access to the handily located UREA/DEF tank. A splash guard on the UREA tank makes filling quicker and easier, reducing the risk of spillage and subsequent corrosion.

Work harder for longer

Reduced maintenance requirements, durable design and outstanding reliability means you can count on the EC530E and EC550E to deliver optimum results – shift after shift, day after day.

For the toughest tasks

The 50-tonne EC530E and EC550E are designed to deliver performance which lasts, with an ultra-durable and reinforced undercarriage providing the durability and strength you would expect from a 60-tonne machine. Combine this with a super-strong upper and lower frame, and boom and arm with larger pin size, and these machines are ready to take on the toughest of applications.

Machine monitoring made easy

Maximize machine uptime and reduce repair costs with the CareTrack telematic system. Choose to keep track of your machine yourself or let us take care of it with Active Care. Our Volvo Uptime Center will provide 24/7 machine monitoring, supplying weekly reports and notifying you should preventive maintenance action be required.

Keeping you moving

Maintain productivity and machine uptime with our range of widely available, tested and approved Genuine Volvo Parts – all backed by Volvo warranty. Your Volvo dealer can help you stay on track, offering flexible maintenance and repair options, as well as planned servicing, to extend the life of your excavator.

UPTIME YOU CAN COUNT ON

Hydraulic pilot lines have been removed in the EC530E and EC550E, reducing the number of couplings required, for increased machine reliability. Electric connectors which exceed Ingress Protection 69K water-proofed standards also contribute to long component life. Spend more time working without interruption thanks to 1 000-hour engine oil and engine oil filter change intervals; grouped filters accessible from the ground level make servicing quick and easy.

Move more for less

Big on efficiency

• Electro-hydraulic system with Independent Metering Valve Technology: +25% fuel efficiency
• Engine pump optimization
• Optimized hydraulic piping & size routing

Ultimate control

• Boom/Swing and Boom/Travel priority
• Adjustable boom down speed
• Boom and arm bouncing reduction
• Creep mode: carry with care
• Comfort Drive Control: joystick steering

True 50-tonne performance

- Big buckets, 20% more productivity
- Highest engine power of its class
- Superior swing torque and tractive force
- Digging forces/lifting capacity commonly found in a 60-tonne machine
- Handle heavier loads with the longer/wider EC550E undercarriage
- Perfect match to 30-40t Volvo Articulated Haulers

Volvo Services: boost your profits

- On-Board Weighing, powered by Volvo Co-Pilot (Dig Assist)
- Range of matched Volvo Attachments
- Volvo Site Simulation
- Fuel Efficiency Report
- Operator training
- ActiveCare: 24/7 machine monitoring

Quick and easy servicing

- 3-point right-hand side access to the upper structure
- Removed hydraulic pilot lines: reduced need for oil couplings
- Splash guard on the UREA/DEF tank
- Grouped filters, accessed from ground-level or side walkway

Get around safely

- ROPS cab: spacious, ergonomic and low-noise
- Rear and side cameras, Volvo Smart View
- High-visibility cab, One-piece front window
- Bolted anti-slip plates
- Foldable walkways
- High visibility handrails/guardrails

Work harder for longer

- Ultra-durable and reinforced undercarriage, upper and lower frame
- Reinforced digging equipment, including larger pin size
- Electric connectors exceeding Ingress Protection 69K water-proofed standards
- 1 000hr engine oil and engine oil filter change intervals

Volvo EC530E, EC550E in detail

Engine

Volvo diesel engine uses Volvo Advanced Combustion Technology (V-ACT) to deliver lower emissions, superior performance and fuel efficiency.
The engine uses precise, high pressure fuel injectors, turbo charger and intercooler, and electronic engine controls to optimize machine performance.
Air Filter: 3-stage and precleaner.
Automatic Idling System: Reduces engine speed to idle when the levers and pedals are not activated resulting in less fuel consumption and low cab noise levels.

Engine	Volvo	D13J
Max power at	r/min	1 600
Net, ISO 9249/SAE J1349	kW	339
	hp	461
Gross, ISO 14396/SAE J1995	kW	340
	hp	462
Max torque	Nm	2 200
at engine speed	r/min	1 300
No. of cylinders		6
Displacement	l	12.8
Bore	mm	131
Stroke	mm	158

Electrical System

High-capacity electrical system that is well protected. Waterproof double-lock harness plugs are used to secure corrosion-free connections. The main relays and solenoid valves are shielded to prevent damage. The master switch is standard.

Voltage	V	24
Batteries	V	2 x 12
Battery capacity	Ah	200
Alternator	V/A	28/80

Undercarriage

The undercarriage has a robust X-shaped frame. Greased and sealed track chains are standard.

EC530E		
Track shoes		2 x 50
Link pitch	mm	229
Shoe width, triple grouser	mm	600 / 750 / 900
Shoe width, double grouser	mm	600
Bottom rollers		2 x 9
Top rollers (retractable)		2 x 3
EC550E		
Track shoes		2 x 51
Link pitch	mm	229
Shoe width, triple grouser	mm	600 / 750 / 900
Shoe width, double grouser	mm	600
Bottom rollers		2 x 9
Top rollers (retractable)		2 x 3

Cab

The operator's cab has easy access via a wide door opening. The cab is supported on hydraulic dampening mounts to reduce shock and vibration levels. These along with sound absorbing lining provide low noise levels. The cab has excellent all-round visibility. The front windshield can easily slide up into the ceiling, and the lower front glass can be removed and stored in the side door.
Integrated air-conditioning and heating system: The pressurized and filtered cab air is supplied by an automatically-controlled fan. The air is distributed throughout the cab from 14 vents.
Ergonomic operator's seat: The adjustable seat and joystick console move independently to accommodate the operator. The seat has nine different adjustments plus a seat belt for the operator's comfort and safety.
Refrigerant of the type R134a is used when this machine is equipped with air conditioning. Contains fluorinated greenhouse gas R134a, Global Warming Potential 1.430 t CO_2-eq.

Hydraulic System

Main pump, Type 2 x Variable displacement axial piston pumps		
Maximum flow	l/min	2 x 416
Pilot pump, Type Gear pump		
Maximum flow	l/min	16
Max. pressure		
Implement	MPa	33.8/36.3
Travel circuit	MPa	33.8
Slew circuit	MPa	27.9
Pilot circuit	MPa	3.9

Hydraulic Motors

Travel: Variable displacement axial piston motor with mechanical brake.
Slew: Fixed displacement piston motor with mechanical brake.

Hydraulic Cylinders

Mono boom		2
Bore x Stroke	ø x mm	175 x 1 590
Arm		1
Bore x Stroke	ø x mm	190 x 1 942
Bucket		1
Bore x Stroke	ø x mm	170 x 1 330
ME Bucket		1
Bore x Stroke	ø x mm	180 x 1 335

Travel System

Each track is powered by an automatic two-speed shift travel motor. The track brakes are multi-disc, spring-applied and hydraulic released. The travel motor, brake and planetary gears are well protected within the track frame.

Max. drawbar pull	kN	350
Max. travel speed (low)	km/h	3.5
Max. travel speed (high)	km/h	5.4
Gradeability	°	35

Swing System

The swing system uses an axial piston motors, driving a planetary gearbox for maximum torque. An automatic holding brake and anti-rebound valve are standard.

Max. slew speed	r/min	9.4
Max. slew torque	kNm	197

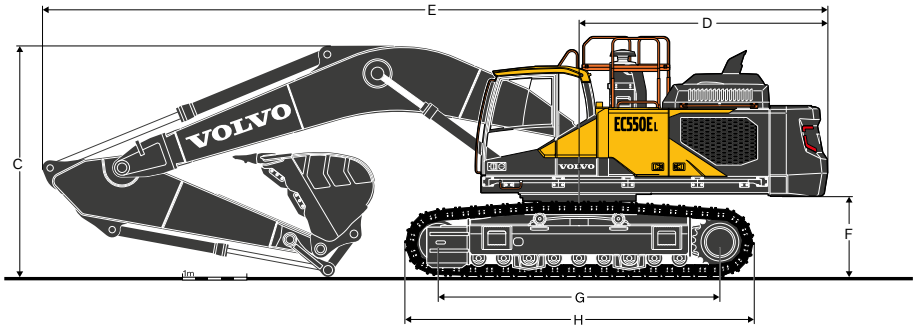
Service Refill

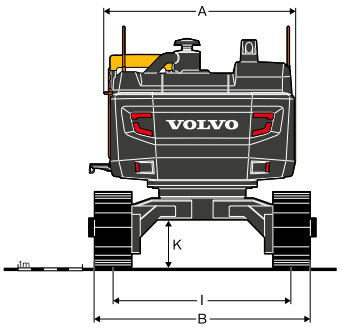
Fuel tank	l	680
DEF/AdBlue® tank	l	62.5
Hydraulic system, total	l	590
Hydraulic tank	l	270
Engine oil	l	55
Engine coolant	l	66
Slew reduction unit	l	2 x 6.4
Travel reduction unit	l	2 x 8.0

Sound Level

Sound pressure level in cab according to ISO 6396		
L_{pA}	dB	71
External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC		
L_{WA}	dB	107

Specifications



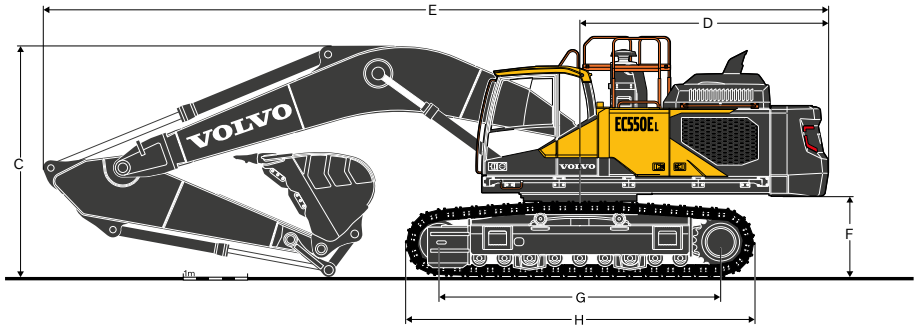


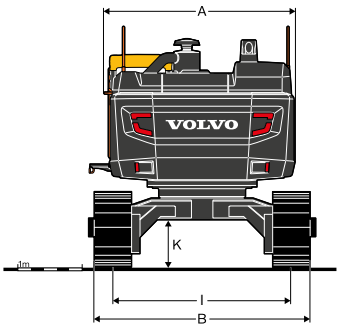
DIMENSIONS

Description	Unit	EC530E retractable undercarriage					
Boom	**m**	**6.5**		**7.0**			
Arm	**m**	**2.55**	**3.0**	**2.55**	**3.0**	**3.35**	**3.9**
A. Overall width of upper structure **	mm	2 990	2 990	2 990	2 990	2 990	2 990
B. Overall width ***							
Retracted							
600mm shoes	mm	2 990	2 990	2 990	2 990	2 990	2 990
750mm shoes	mm	3 140	3 140	3 140	3 140	3 140	3 140
900mm shoes	mm	3 290	3 290	3 290	3 290	3 290	3 290
Extended							
600mm shoes	mm	3 490	3 490	3 490	3 490	3 490	3 490
750mm shoes	mm	3 640	3 640	3 640	3 640	3 640	3 640
900mm shoes	mm	3 790	3 790	3 790	3 790	3 790	3 790
C. Overall height *							
Cab	mm	3 415	3 415	3 415	3 415	3 415	3 415
FOG	mm	3 520	3 520	3 520	3 520	3 520	3 520
Engine hood	mm	3 290	3 290	3 290	3 290	3 290	3 290
Diffuser	mm	3 645	3 645	3 645	3 645	3 645	3 645
Handrail, unfolded	mm	3 670	3 670	3 670	3 670	3 670	3 670
Handrail, folded	mm	3 385	3 385	3 385	3 385	3 385	3 385
Guardrail, unfolded	mm	3 870	3 870	3 870	3 870	3 870	3 870
Guardrail, folded	mm	3 385	3 385	3 385	3 385	3 385	3 385
With Boom/Arm/Bucket (with hydraulic hoses)	mm	4 400	4 340	4 200	4 010	3 910	3 930
With Boom/Arm (with hydraulic hoses)	mm	4 170	4 145	4 020	3 910	3 870	3 905
With Boom (with hydraulic hoses)	mm	3 390	3 390	3 180	3 180	3 180	3 180
D. Tail swing radius	mm	3 880	3 880	3 880	3 880	3 880	3 880
E. Overall lenght							
With Boom/Arm/Bucket	mm	11 770	11 760	12 270	12 260	12 240	12 235
With Boom/Arm	mm	11 750	11 750	12 255	12 245	12 230	12 230
With Boom	mm	10 290	10 290	10 810	10 810	10 810	10 810
F. Counterweight clearance *	mm	1 370	1 370	1 370	1 370	1 370	1 370
G. Tumbler length	mm	4 400	4 400	4 400	4 400	4 400	4 400
H. Track length	mm	5 460	5 460	5 460	5 460	5 460	5 460
I. Track gauge							
Retracted	mm	2 390	2 390	2 390	2 390	2 390	2 390
Extended	mm	2 890	2 890	2 890	2 890	2 890	2 890
K. Min. ground clearance *	mm	735	735	735	735	735	735

* Without shoe grouser
** Exclude walkway, handrail
*** Shoe end to end

Specifications

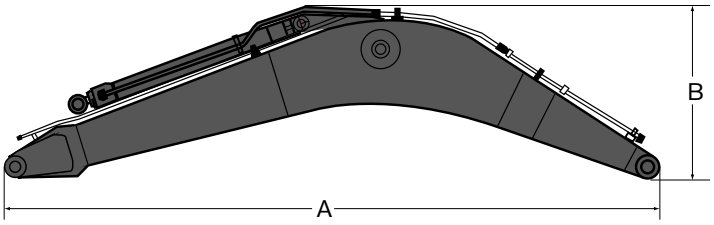




DIMENSIONS

Description	Unit	EC550E wide retractable undercarriage					
Boom	m	6.5		7.0			
Arm	m	2.55	3.0	2.55	3.0	3.35	3.9
A. Overall width of upper structure **	mm	2 990	2 990	2 990	2 990	2 990	2 990
B. Overall width ***							
Retracted							
600mm shoes	mm	3 400	3 400	3 400	3 400	3 400	3 400
750mm shoes	mm	3 550	3 550	3 550	3 550	3 550	3 550
900mm shoes	mm	3 700	3 700	3 700	3 700	3 700	3 700
Extended							
600mm shoes	mm	3 900	3 900	3 900	3 900	3 900	3 900
750mm shoes	mm	4 050	4 050	4 050	4 050	4 050	4 050
900mm shoes	mm	4 200	4 200	4 200	4 200	4 200	4 200
C. Overall height *							
Cab	mm	3 415	3 415	3 415	3 415	3 415	3 415
FOG	mm	3 520	3 520	3 520	3 520	3 520	3 520
Engine hood	mm	3 290	3 290	3 290	3 290	3 290	3 290
Diffuser	mm	3 645	3 645	3 645	3 645	3 645	3 645
Handrail, unfolded	mm	3 670	3 670	3 670	3 670	3 670	3 670
Handrail, folded	mm	3 385	3 385	3 385	3 385	3 385	3 385
Guardrail, unfolded	mm	3 870	3 870	3 870	3 870	3 870	3 870
Guardrail, folded	mm	3 385	3 385	3 385	3 385	3 385	3 385
With Boom/Arm/Bucket (with hydraulic hoses)	mm	4 400	4 340	4 200	4 010	3 910	3 930
With Boom/Arm (with hydraulic hoses)	mm	4 170	4 145	4 020	3 910	3 870	3 905
With Boom (with hydraulic hoses)	mm	3 390	3 390	3 180	3 180	3 180	3 180
D. Tail swing radius	mm	3 880	3 880	3 880	3 880	3 880	3 880
E. Overall lenght							
With Boom/Arm/Bucket	mm	11 770	11 760	12 270	12 260	12 240	12 235
With Boom/Arm	mm	11 750	11 750	12 255	12 245	12 230	12 230
With Boom	mm	10 290	10 290	10 810	10 810	10 810	10 810
F. Counterweight clearance *	mm	1 370	1 370	1 370	1 370	1 370	1 370
G. Tumbler length	mm	4 515	4 515	4 515	4 515	4 515	4 515
H. Track length	mm	5 580	5 580	5 580	5 580	5 580	5 580
I. Track gauge							
Retracted	mm	2 800	2 800	2 800	2 800	2 800	2 800
Extended	mm	3 300	3 300	3 300	3 300	3 300	3 300
K. Min. ground clearance *	mm	735	735	735	735	735	735

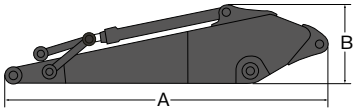
* Without shoe grouser
** Exclude walkway, handrail
*** Shoe end to end



DIMENSIONS

Boom	m	6.5 ME	7.0 HD
A. Length	mm	6 780	7 280
B. Height	mm	1 910	1 785
Width	mm	906	906
Weight*	kg	5 140	5 025

* Includes arm cylinder, piping and pin



DIMENSIONS

Arm	m	2.55	3.0	3.35	3.9
A. Length	mm	3 805	4 270	4 620	5 170
B. Height	mm	1 260	1 260	1 260	1 260
Width	mm	605	605	605	605
Weight*	kg	2 710	2 920	2 875	3 030

* Includes bucket cylinder, linkage and pin

MACHINE WEIGHTS AND GROUND PRESSURE

		EC530E with RETRACTABLE undercarriage, 7.0 m boom, 3.35 m arm, 2 800 kg bucket, 10 600 kg counterweight		EC550E with WIDE RETRACTABLE undercarriage, 7.0 m boom, 3.35 m arm, 2 800 kg bucket, 10 600 kg counterweight	
Description	Shoe width	Operating weight	Ground pressure	Operating weight	Ground pressure
	mm	kg	kPa	kg	kPa
Triple grouser	600	54 140	92.7	54 820	91.7
	750	54 920	75.3	55 620	74.4
	900	55 700	63.6	56 420	62.9
Double grouser	600	54 010	92.5	54 690	91.4

Specifications

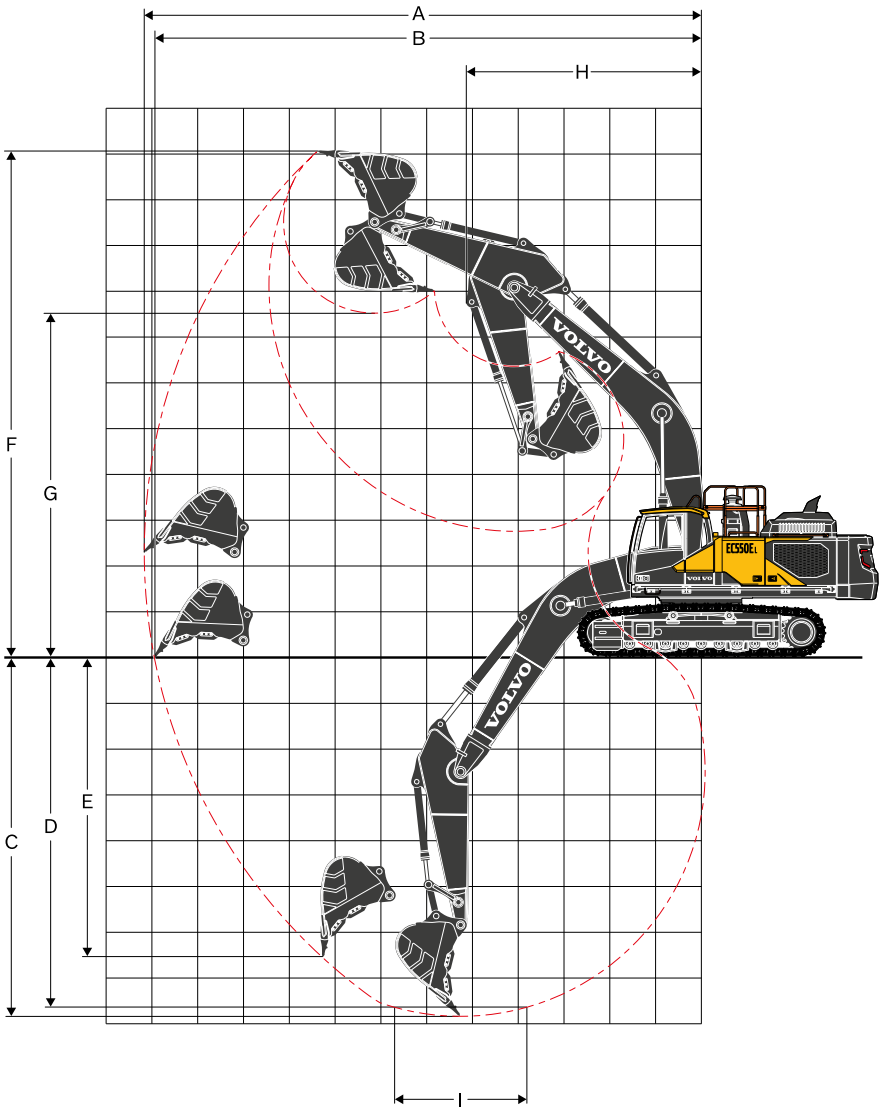
BUCKET SELECTION GUIDE

Bucket type		Capacity	Cutting width	Weight	Teeth	EC530EL retractable undercarriage					
						600 mm shoe, 10 600 kg counterweight					
						6.5 m ME boom		7.0 m HD boom			
		L	mm	kg	EA	2.55 m	3.0 m	2.55 m	3.0 m	3.35 m	3.9 m
Direct fit Buckets	General purpose	2 840	1 940	2 554	5	C	C	C	C	C	C
		3 310	2 190	2 841	6	C	C	C	C	B	B
		3 600	1 930	2 887	6	C	C	C	B	B	A
		4 000	2 120	3 100	5	C	B	B	A	A	X
	Heavy duty	2 400	1 710	2 499	5	D	D	D	D	D	D
		2 660	1 840	2 587	5	D	D	D	D	D	C
		2 840	1 940	2 682	5	D	D	D	D	C	C
		3 310	2 190	2 985	6	D	C	C	C	B	B
		3 600	1 930	2 895	5	C	C	C	B	B	A
		3 820	2 020	2 990	5	C	B	B	B	A	A
Buckets with UQC	General purpose	2 840	1 940	2 554	5	C	C	C	C	C	B
		3 310	2 190	2 841	6	C	C	B	B	A	A
		3 600	1 930	2 887	6	C	B	B	A	A	X
		4 000	2 120	3 100	5	B	A	A	X	X	X
	Heavy duty	2 400	1 710	2 499	5	D	D	D	D	D	C
		2 660	1 840	2 587	5	D	D	D	C	C	B
		2 840	1 940	2 682	5	D	D	D	C	B	B
		3 310	2 190	2 985	6	C	C	B	B	A	X
		3 600	1 930	2 895	5	C	B	B	A	A	X
		3 820	2 020	2 990	5	B	B	B	A	X	X

Bucket type		Capacity	Cutting width	Weight	Teeth	EC550EL wide retractable undercarriage					
						600 mm shoe, 10 600kg counterweight					
						6.5m ME boom		7.0 m HD boom			
		L	mm	kg	EA	2.55 m	3.0 m	2.55 m	3.0 m	3.35 m	3.9 m
Direct fit Buckets	General purpose	2 840	1 940	2 554	5	C	C	C	C	C	C
		3 310	2 190	2 841	6	C	C	C	C	C	C
		3 600	1 930	2 887	6	C	C	C	C	C	B
		4 000	2 120	3 100	5	C	C	C	C	B	B
		4 200	2 180	3 144	5	C	C	C	B	B	A
	Heavy duty	2 400	1 710	2 499	5	D	D	D	D	D	D
		2 660	1 840	2 587	5	D	D	D	D	D	D
		2 840	1 940	2 682	5	D	D	D	D	D	D
		3 310	2 190	2 985	6	D	D	D	D	D	C
		3 600	1 930	2 895	5	D	D	D	C	C	B
		3 820	2 020	2 990	5	D	D	D	C	C	B
Buckets with UQC	General purpose	2 840	1 940	2 554	5	C	C	C	C	C	C
		3 310	2 190	2 841	6	C	C	C	C	C	B
		3 600	1 930	2 887	6	C	C	C	C	B	B
		4 000	2 120	3 100	5	C	C	C	B	B	A
		4 200	2 180	3 144	5	C	B	B	B	A	x
	Heavy duty	2 400	1 710	2 499	5	D	D	D	D	D	D
		2 660	1 840	2 587	5	D	D	D	D	D	D
		2 840	1 940	2 682	5	D	D	D	D	D	C
		3 310	2 190	2 985	6	D	D	C	C	B	B
		3 600	1 930	2 895	5	D	D	C	C	B	B
		3 820	2 020	2 990	5	D	C	C	B	B	A

Please consult with your Volvo dealer for the proper match of buckets and attachments to suit the application. The recommendations are given as a guide only, based on typical operation conditions.
Bucket capacity based on ISO 7451, heaped material with a 1:1 angle of repose.

X : Not recommended
Maximum materal density
D: 2 100 kg/m³
C: 1 800 kg/m³
B: 1 500 kg/m³
A: 1 200 kg/m³



WORKING RANGE									
Description			**Unit**	**EC530E and EC550E**					
Boom			**m**	**6.5**		**7.0**			
Arm			**m**	**2.55**	**3.0**	**2.55**	**3.0**	**3.35**	**3.9**
A. Max. digging reach			mm	10 970	11 330	11 490	11 850	12 180	12 680
B. Max. digging reach on ground			mm	10 690	11 060	11 220	11 590	11 930	12 430
C . Max. digging depth			mm	6 450	6 900	6 890	7 340	7 690	8 240
D. Max. digging depth (2.44 m level)			mm	6 280	6 750	6 720	7 190	7 550	8 110
E. Max. vertical wall digging depth			mm	5 680	5 850	5 980	6 090	6 410	6 840
F. Max. cutting height			mm	10 740	10 740	11 060	11 060	11 210	11 380
G. Max. dumping height			mm	7 100	7 160	7 450	7 510	7760	7 850
H. Min. front slew radius			mm	4 810	4 780	5 210	5 170	5 140	5 050
DIGGING FORCES WITH DIRECT FIT BUCKET									
Bucket radius			mm	1 965	1 965	1 840	1 840	1 840	1 840
Breakout force - bucket	Normal	SAE J1179	kN	267	267	251	251	251	251
	Power boost	SAE J1179	kN	287	287	269	269	269	269
	Normal	ISO 6015	kN	307	307	287	287	287	287
	Power boost	ISO 6015	kN	329	329	308	308	308	308
Tearout force - dipper arm	Normal	SAE J1179	kN	247	227	258	236	220	196
	Power boost	SAE J1179	kN	265	243	277	253	235	210
	Normal	ISO 6015	kN	256	233	264	241	223	199
	Power boost	ISO 6015	kN	274	250	284	258	240	213
Rotation angle, bucket			°	168	168	178	178	178	178

Specifications

LIFTING CAPACITY EC530E

Lifting capacity at the arm end without bucket.

For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick coupler from the following values.

	Lifting Point	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		Max. reach		
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	m
Boom: 6.5 m ME Arm: 2.55 m Shoe: 600 mm CWT: 10 600 kg	9.0 m kg															*13 710	*13 710	6.1
	7.5 m kg															*12 460	*12 460	7.4
	6.0 m kg							*15 460	*15 460	*14 090	12 440					*12 040	10 660	8.2
	4.5 m kg					*23 390	*23 390	*17 640	16 900	*15 010	12 090					*12 100	9 520	8.7
	3.0 m kg							*19 980	16 060	*16 180	11 680					*12 560	8 990	9.0
	1.5 m kg					*18 660	*18 660	*21 670	15 450	*17 140	11 330					*13 500	8 890	8.9
	0 m kg					*28 330	23 320	*22 260	15 160	17 370	11 140					14 190	9 250	8.6
	-1.5 m kg			*21 630	*21 630	*28 310	23 460	*21 610	15 150	*16 880	11 150					*15 260	10 210	8.0
	-3.0 m kg			*32 180	*32 180	*25 040	23 850	*19 280	15 410							*15 320	12 330	7.1
Boom: 6.5 m ME Arm: 3.0 m Shoe: 600 mm CWT: 10 600 kg	9.0 m kg															*11 410	*11 410	6.6
	7.5 m kg									*12 870	12 700					*10 570	*10 570	7.8
	6.0 m kg									*13 210	12 510					*10 290	9 900	8.6
	4.5 m kg					*21 510	*21 510	*16 610	*16 610	*14 260	12 110	*11 970	9 070			*10 400	8 890	9.1
	3.0 m kg					*26 640	24 540	*19 080	16 100	*15 540	11 650	13 530	8 870			*10 850	8 400	9.3
	1.5 m kg					*25 960	23 390	*21 030	15 400	*16 660	11 250	13 320	8 680			*11 670	8 290	9.3
	0 m kg					*30 000	23 040	*21 960	15 010	17 230	10 990	13 210	8 580			*13 090	8 570	9.0
	-1.5 m kg			*21 810	*21 810	*28 870	23 080	*21 720	14 910	*17 020	10 930					14 490	9 370	8.4
	-3.0 m kg			*35 110	*35 110	*26 170	23 410	*19 990	15 090	*15 060	11 150					*14 890	11 070	7.5
	-4.5 m kg					*20 920	*20 920	*15 290	*15 290							*14 610	*14 610	6.2
Boom: 7.0 m HD Arm: 2.55 m Shoe: 600 mm CWT: 10 600 kg	7.5 m kg									*13 100	12 640					*12 630	11 270	8.0
	6.0 m kg									*13 640	12 390					*12 280	9 560	8.8
	4.5 m kg							*17 810	16 580	*14 760	11 960	*13 250	9 070			*12 350	8 640	9.3
	3.0 m kg							*20 160	15 710	*16 000	11 510	13 490	8 860			12 460	8 190	9.5
	1.5 m kg							*21 670	15 150	*16 970	11 160	13 290	8 680			12 390	8 110	9.4
	0 m kg					*16 090	*16 090	*22 070	14 910	17 150	10 960	13 200	8 600			12 870	8 400	9.2
	-1.5 m kg					*27 490	23 190	*21 410	14 910	*16 940	10 940					14 090	9 160	8.6
	-3.0 m kg			*30 460	*30 460	*24 710	23 550	*19 500	15 140	*15 020	11 170					*14 180	10 760	7.7
	-4.5 m kg			*24 240	*24 240	*19 790	*19 790	*15 120	*15 120							*13 550	*13 550	6.4
Boom: 7.0 m HD Arm: 3.0 m Shoe: 600 mm CWT: 10 600 kg	7.5 m kg															*10 710	10 380	8.4
	6.0 m kg									*12 850	12 440	*12 170	9 230			*10 510	8 900	9.2
	4.5 m kg					*22 740	*22 740	*16 800	16 690	*14 050	11 970	*12 600	9 050			*10 630	8 080	9.6
	3.0 m kg							*19 280	15 740	*15 390	11 470	*13 260	8 790			*11 050	7 660	9.8
	1.5 m kg							*21 070	15 070	*16 510	11 060	13 190	8 570			11 610	7 570	9.8
	0 m kg					*19 930	*19 930	*21 810	14 730	17 000	10 810	13 040	8 430			12 000	7 800	9.5
	-1.5 m kg			*15 900	*15 900	*28 200	22 770	*21 490	14 660	16 920	10 740	13 060	8 450			13 020	8 430	9.0
	-3.0 m kg			*28 620	*28 620	*25 770	23 090	*20 020	14 820	*15 680	10 870					*13 730	9 740	8.2
	-4.5 m kg			*27 510	*27 510	*21 530	*21 530	*16 670	15 270							*13 570	12 580	6.9
Boom: 7.0 m HD Arm: 3.35 m Shoe: 600 mm CWT: 10 600 kg	7.5 m kg															*9 400	*9 400	8.8
	6.0 m kg											*11 710	9 370			*9 230	8 470	9.5
	4.5 m kg							*16 180	*16 180	*13 650	12 120	*12 270	9 150			*9 320	7 730	10.0
	3.0 m kg					*22 850	*22 850	*18 780	15 980	*15 070	11 610	*13 020	8 880			*9 670	7 350	10.2
	1.5 m kg					*16 420	*16 420	*20 780	15 250	*16 310	11 170	13 250	8 630			*10 320	7 260	10.1
	0 m kg					*20 970	*20 970	*21 780	14 840	*17 060	10 880	13 070	8 470			*11 370	7 450	9.9
	-1.5 m kg			*15 720	*15 720	*28 880	22 800	*21 730	14 720	16 950	10 770	13 030	8 430			12 320	8 000	9.4
	-3.0 m kg	*20 300	*20 300	*26 320	*26 320	*26 750	23 060	*20 560	14 820	*16 160	10 840					*13 360	9 120	8.6
	-4.5 m kg			*30 200	*30 200	*22 960	*22 960	*17 760	15 170							*13 390	11 440	7.4
	-6.0 m kg					*15 870	*15 870									*12 290	*12 290	5.6
Boom: 7.0 m HD Arm: 3.9 m Shoe: 600 mm CWT: 10 600 kg	9.0 m kg															*7 930	*7 930	8.4
	7.5 m kg											*9 860	9 600			*7 530	*7 530	9.4
	6.0 m kg											*10 910	9 480			*7 410	*7 410	10.1
	4.5 m kg									*12 820	12 250	*11 590	9 220			*7 490	7 140	10.5
	3.0 m kg					*24 690	*24 690	*17 710	16 200	*14 350	11 690	*12 450	8 910	*9 520	6 990	*7 750	6 810	10.7
	1.5 m kg					*21 740	*21 740	*20 000	15 350	*15 740	11 200	13 250	8 620	*9 960	6 850	*8 250	6 710	10.6
	0 m kg					*22 680	*22 680	*21 370	14 830	*16 710	10 850	13 010	8 410			*9 030	6 860	10.4
	-1.5 m kg	*11 000	*11 000	*15 430	*15 430	*28 930	22 570	*21 720	14 600	16 850	10 660	12 900	8 300			*10 270	7 300	9.9
	-3.0 m kg	*18 010	*18 010	*23 640	*23 640	*27 750	22 740	*21 000	14 620	*16 520	10 660	12 980	8 370			*12 390	8 190	9.2
	-4.5 m kg	*26 130	*26 130	*33 650	*33 650	*24 650	23 170	*18 910	14 870	*14 560	10 900					*12 890	9 940	8.1
	-6.0 m kg			*25 190	*25 190	*19 020	*19 020	*14 120	*14 120							*12 560	*12 560	6.4

Notes:

1. Machine in “Fine Mode-F” (Power Boost) for lifting capacities.
2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards.
3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

LIFTING CAPACITY EC530E

Lifting capacity at the arm end without bucket.

For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick coupler from the following values.

	Lifting Point	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		Max. reach		
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	m
Boom: 6.5 m ME Arm: 2.55 m Shoe: 750 mm CWT: 10 600 kg	9.0 m kg															*13710	*13710	6.1
	7.5 m kg															*12460	*12460	7.4
	6.0 m kg							*15460	*15460	*14090	12600					*12040	10790	8.2
	4.5 m kg					*23390	*23390	*17640	17100	*15010	12240					*12100	9650	8.7
	3.0 m kg							*19980	16260	*16180	11830					*12560	9110	9.0
	1.5 m kg					*18660	*18660	*21670	15660	*17140	11490					*13500	9020	8.9
	0 m kg					*28330	23620	*22260	15370	*17520	11290					14390	9370	8.6
	-1.5 m kg			*21630	*21630	*28310	23760	*21610	15350	*16880	11300					*15260	10350	8.0
	-3.0 m kg			*32180	*32180	*25040	24160	*19280	15610							*15320	12490	7.1
Boom: 6.5 m ME Arm: 3.0 m Shoe: 750 mm CWT: 10 600 kg	9.0 m kg															*11410	*11410	6.6
	7.5 m kg									*12870	12850					*10570	*10570	7.8
	6.0 m kg									*13210	12670					*10290	10030	8.6
	4.5 m kg					*21510	*21510	*16610	*16610	*14260	12260	*11970	9200			*10400	9010	9.1
	3.0 m kg					*26640	24850	*19080	16310	*15540	11800	*13620	9000			*10850	8520	9.3
	1.5 m kg					*25960	23700	*21030	15600	*16660	11400	13510	8800			*11670	8410	9.3
	0 m kg					*30000	23350	*21960	15210	*17270	11150	*13240	8700			*13090	8700	9.0
	-1.5 m kg			*21810	*21810	*28870	23390	*21720	15120	*17020	11090					*14580	9500	8.4
	-3.0 m kg			*35110	*35110	*26170	23720	*19990	15300	*15060	11300					*14890	11220	7.5
	-4.5 m kg					*20920	*20920	*15290	*15290							*14610	*14610	6.2
Boom: 7.0 m HD Arm: 2.55 m Shoe: 750 mm CWT: 10 600 kg	7.5 m kg									*13100	12790					*12630	11410	8.0
	6.0 m kg									*13640	12540					*12280	9680	8.8
	4.5 m kg							*17810	16780	*14760	12120	*13250	9190			*12350	8760	9.3
	3.0 m kg							*20160	15920	*16000	11660	13680	8980			12630	8310	9.5
	1.5 m kg							*21670	15350	*16970	11310	13480	8800			12560	8230	9.4
	0 m kg					*16090	*16090	*22070	15110	*17370	11110	13390	8720			13050	8510	9.2
	-1.5 m kg					*27490	23500	*21410	15120	*16940	11100					*14120	9290	8.6
	-3.0 m kg			*30460	*30460	*24710	23860	*19500	15340	*15020	11320					*14180	10900	7.7
	-4.5 m kg			*24240	*24240	*19790	*19790	*15120	*15120							*13550	*13550	6.4
Boom: 7.0 m HD Arm: 3.0 m Shoe: 750 mm CWT: 10 600 kg	7.5 m kg															*10710	10510	8.4
	6.0 m kg									*12850	12590	*12170	9360			*10510	9020	9.2
	4.5 m kg					*22740	*22740	*16800	*16800	*14050	12120	*12600	9170			*10630	8190	9.6
	3.0 m kg							*19280	15950	*15390	11630	*13260	8920			*11050	7770	9.8
	1.5 m kg							*21070	15270	*16510	11220	13380	8690			11780	7680	9.8
	0 m kg					*19930	*19930	*21810	14930	*17100	10960	13230	8560			12180	7910	9.5
	-1.5 m kg			*15900	*15900	*28200	23080	*21490	14870	*16960	10890	13250	8580			13210	8550	9.0
	-3.0 m kg			*28620	*28620	*25770	23400	*20020	15030	*15680	11030					*13730	9870	8.2
	-4.5 m kg			*27510	*27510	*21530	*21530	*16670	15480							*13570	12750	6.9
Boom: 7.0 m HD Arm: 3.35 m Shoe: 750 mm CWT: 10 600 kg	7.5 m kg															*9400	*9400	8.8
	6.0 m kg											*11710	9490			*9230	8580	9.5
	4.5 m kg							*16180	*16180	*13650	12270	*12270	9280			*9320	7840	10.0
	3.0 m kg					*22850	*22850	*18780	16190	*15070	11760	*13020	9000			*9670	7460	10.2
	1.5 m kg					*16420	*16420	*20780	15450	*16310	11320	13440	8760			*10320	7370	10.1
	0 m kg					*20970	*20970	*21780	15050	*17060	11040	13260	8590			*11370	7560	9.9
	-1.5 m kg			*15720	*15720	*28880	23100	*21730	14920	*17110	10920	13220	8550			12500	8120	9.4
	-3.0 m kg	*20300	*20300	*26320	*26320	*26750	23370	*20560	15020	*16160	11000					*13360	9250	8.6
	-4.5 m kg			*30200	*30200	*22960	*22960	*17760	15380							*13390	11600	7.4
	-6.0 m kg					*15870	*15870									*12290	*12290	5.6
Boom: 7.0 m HD Arm: 3.9 m Shoe: 750 mm CWT: 10 600 kg	9.0 m kg															*7930	*7930	8.4
	7.5 m kg											*9860	9730			*7530	*7530	9.4
	6.0 m kg											*10910	9600			*7410	*7410	10.1
	4.5 m kg									*12820	12400	*11590	9340			*7490	7250	10.5
	3.0 m kg					*24690	*24690	*17710	16400	*14350	11850	*12450	9030	*9520	7100	*7750	6910	10.7
	1.5 m kg					*21740	*21740	*20000	15560	*15740	11350	*13270	8740	*9960	6960	*8250	6810	10.6
	0 m kg					*22680	*22680	*21370	15030	*16710	11000	13200	8530			*9030	6960	10.4
	-1.5 m kg	*11000	*11000	*15430	*15430	*28930	22880	*21720	14800	*17040	10820	13090	8430			*10270	7410	9.9
	-3.0 m kg	*18010	*18010	*23640	*23640	*27750	23050	*21000	14820	*16520	10820	*13060	8500			*12390	8310	9.2
	-4.5 m kg	*26130	*26130	*33650	*33650	*24650	23480	*18910	15080	*14560	11050					*12890	10080	8.1
	-6.0 m kg			*25190	*25190	*19020	*19020	*14120	*14120							*12560	*12560	6.4

Notes:

1. Machine in “Fine Mode-F” (Power Boost) for lifting capacities.
2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards.
3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

Specifications

LIFTING CAPACITY EC550E

Lifting capacity at the arm end without bucket.

For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick coupler from the following values.

	Lifting Point	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		Max. reach		
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	m
Boom: 6.5 m ME Arm: 2.55 m Shoe: 600 mm CWT: 10 600 kg	9.0 m kg															*13 710	*13 710	6.1
	7.5 m kg															*12 460	*12 460	7.4
	6.0 m kg							*15 460	*15 460	*14 090	*14 090					*12 040	*12 040	8.2
	4.5 m kg					*23 390	*23 390	*17 640	*17 640	*15 010	14 040					*12 100	11 050	8.7
	3.0 m kg							*19 980	18 890	*16 180	13 610					*12 560	10 450	9.0
	1.5 m kg					*18 660	*18 660	*21 670	18 260	*17 140	13 250					*13 500	10 360	8.9
	0 m kg					*28 330	28 240	*22 260	17 950	*17 520	13 050					14 860	10 790	8.6
	-1.5 m kg			*21 630	*21 630	*28 310	*28 310	*21 610	17 940	*16 880	13 060					*15 260	11 930	8.0
	-3.0 m kg			*32 180	*32 180	*25 040	*25 040	*19 280	18 210							*15 320	14 430	7.1
Boom: 6.5 m ME Arm: 3.0 m Shoe: 600 mm CWT: 10 600 kg	9.0 m kg															*11 410	*11 410	6.6
	7.5 m kg									*12 870	*12 870					*10 570	*10 570	7.8
	6.0 m kg									*13 210	*13 210					*10 290	*10 290	8.6
	4.5 m kg					*21 510	*21 510	*16 610	*16 610	*14 260	14 070	*11 970	10 540			*10 400	10 330	9.1
	3.0 m kg					*26 640	*26 640	*19 080	18 940	*15 540	13 590	*13 620	10 330			*10 850	9 790	9.3
	1.5 m kg					*25 960	*25 960	*21 030	18 200	*16 660	13 170	13 950	10 130			*11 670	9 680	9.3
	0 m kg					*30 000	27 950	*21 960	17 800	*17 270	12 910	*13 240	10 030			*13 090	10 020	9.0
	-1.5 m kg			*21 810	*21 810	*28 870	28 000	*21 720	17 700	*17 020	12 850					*14 580	10 960	8.4
	-3.0 m kg			*35 110	*35 110	*26 170	*26 170	*19 990	17 880	*15 060	13 070					*14 890	12 970	7.5
	-4.5 m kg					*20 920	*20 920	*15 290	*15 290							*14 610	*14 610	6.2
Boom: 7.0 m HD Arm: 2.55 m Shoe: 600 mm CWT: 10 600 kg	7.5 m kg									*13 100	*13 100					*12 630	*12 630	8.0
	6.0 m kg									*13 640	*13 640					*12 280	11 070	8.8
	4.5 m kg							*17 810	*17 810	*14 760	13 900	*13 250	10 520			*12 350	10 030	9.3
	3.0 m kg							*20 160	18 520	*16 000	13 440	*13 770	10 310			*12 790	9 540	9.5
	1.5 m kg							*21 670	17 930	*16 970	13 070	13 910	10 120			12 970	9 460	9.4
	0 m kg					*16 090	*16 090	*22 070	17 680	*17 370	12 860	13 820	10 040			13 470	9 800	9.2
	-1.5 m kg					*27 490	*27 490	*21 410	17 680	*16 940	12 850					*14 120	10 700	8.6
	-3.0 m kg			*30 460	*30 460	*24 710	*24 710	*19 500	17 920	*15 020	13 080					*14 180	12 580	7.7
	-4.5 m kg			*24 240	*24 240	*19 790	*19 790	*15 120	*15 120							*13 550	*13 550	6.4
Boom: 7.0 m HD Arm: 3.0 m Shoe: 600 mm CWT: 10 600 kg	7.5 m kg															*10 710	*10 710	8.4
	6.0 m kg									*12 850	*12 850	*12 170	10 700			*10 510	10 320	9.2
	4.5 m kg					*22 740	*22 740	*16 800	*16 800	*14 050	13 920	*12 600	10 510			*10 630	9 390	9.6
	3.0 m kg							*19 280	18 560	*15 390	13 400	*13 260	10 250			*11 050	8 940	9.8
	1.5 m kg							*21 070	17 850	*16 510	12 980	13 810	10 020			*11 830	8 850	9.8
	0 m kg					*19 930	*19 930	*21 810	17 500	*17 100	12 710	13 660	9 880			12 570	9 120	9.5
	-1.5 m kg			*15 900	*15 900	*28 200	27 650	*21 490	17 430	*16 960	12 640	*13 550	9 900			*13 490	9 870	9.0
	-3.0 m kg			*28 620	*28 620	*25 770	*25 770	*20 020	17 600	*15 680	12 780					*13 730	11 400	8.2
	-4.5 m kg			*27 510	*27 510	*21 530	*21 530	*16 670	*16 670							*13 570	*13 570	6.9
Boom: 7.0 m HD Arm: 3.35 m Shoe: 600 mm CWT: 10 600 kg	7.5 m kg															*9 400	*9 400	8.8
	6.0 m kg											*11 710	10 840			*9 230	*9 230	9.5
	4.5 m kg							*16 180	*16 180	*13 650	*13 650	*12 270	10 620			*9 320	8 980	10.0
	3.0 m kg					*22 850	*22 850	*18 780	*18 780	*15 070	13 540	*13 020	10 340			*9 670	8 570	10.2
	1.5 m kg					*16 420	*16 420	*20 780	18 040	*16 310	13 090	*13 700	10 080			*10 320	8 480	10.1
	0 m kg					*20 970	*20 970	*21 780	17 620	*17 060	12 790	13 700	9 910			*11 370	8 710	9.9
	-1.5 m kg			*15 720	*15 720	*28 880	27 680	*21 730	17 480	*17 110	12 670	13 660	9 870			12 910	9 360	9.4
	-3.0 m kg	*20 300	*20 300	*26 320	*26 320	*26 750	*26 750	*20 560	17 590	*16 160	12 750					*13 360	10 670	8.6
	-4.5 m kg			*30 200	*30 200	*22 960	*22 960	*17 760	*17 760							*13 390	*13 390	7.4
	-6.0 m kg					*15 870	*15 870									*12 290	*12 290	5.6
Boom: 7.0 m HD Arm: 3.9 m Shoe: 600 mm CWT: 10 600 kg	9.0 m kg															*7 930	*7 930	8.4
	7.5 m kg											*9 860	*9 860			*7 530	*7 530	9.4
	6.0 m kg											*10 910	*10 910			*7 410	*7 410	10.1
	4.5 m kg									*12 820	*12 820	*11 590	10 680			*7 490	*7 490	10.5
	3.0 m kg					*24 690	*24 690	*17 710	*17 710	*14 350	13 630	*12 450	10 370	*9 520	8 160	*7 750	*7 750	10.7
	1.5 m kg					*21 740	*21 740	*20 000	18 160	*15 740	13 120	*13 270	10 070	*9 960	8 020	*8 250	7 850	10.6
	0 m kg					*22 680	*22 680	*21 370	17 600	*16 710	12 760	13 640	9 850			*9 030	8 040	10.4
	-1.5 m kg	*11 000	*11 000	*15 430	*15 430	*28 930	27 450	*21 720	17 370	*17 040	12 570	13 530	9 750			*10 270	8 560	9.9
	-3.0 m kg	*18 010	*18 010	*23 640	*23 640	*27 750	27 630	*21 000	17 390	*16 520	12 570	*13 060	9 820			*12 390	9 600	9.2
	-4.5 m kg	*26 130	*26 130	*33 650	*33 650	*24 650	*24 650	*18 910	17 650	*14 560	12 810					*12 890	11 650	8.1
	-6.0 m kg			*25 190	*25 190	*19 020	*19 020	*14 120	*14 120							*12 560	*12 560	6.4

Notes:

1. Machine in “Fine Mode-F” (Power Boost) for lifting capacities.
2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards.
3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

LIFTING CAPACITY EC550E

Lifting capacity at the arm end without bucket.

For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick coupler from the following values.

	Lifting Point	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		Max. reach		
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	m
Boom: 6.5 m ME Arm: 2.55 m Shoe: 750 mm CWT: 10 600 kg	9.0 m kg															*13 710	*13 710	6.1
	7.5 m kg															*12 460	*12 460	7.4
	6.0 m kg							*15 460	*15 460	*14 090	*14 090					*12 040	*12 040	8.2
	4.5 m kg					*23 390	*23 390	*17 640	*17 640	*15 010	14 220					*12 100	11 200	8.7
	3.0 m kg							*19 980	19 140	*16 180	13 790					*12 560	10 600	9.0
	1.5 m kg					*18 660	*18 660	*21 670	18 500	*17 140	13 440					*13 500	10 510	8.9
	0 m kg					*28 330	*28 330	*22 260	18 200	*17 520	13 240					*14 930	10 940	8.6
	-1.5 m kg			*21 630	*21 630	*28 310	*28 310	*21 610	18 180	*16 880	13 250					*15 260	12 090	8.0
	-3.0 m kg			*32 180	*32 180	*25 040	*25 040	*19 280	18 450							*15 320	14 630	7.1
Boom: 6.5 m ME Arm: 3.0 m Shoe: 750 mm CWT: 10 600 kg	9.0 m kg															*11 410	*11 410	6.6
	7.5 m kg									*12 870	*12 870					*10 570	*10 570	7.8
	6.0 m kg									*13 210	*13 210					*10 290	*10 290	8.6
	4.5 m kg					*21 510	*21 510	*16 610	*16 610	*14 260	14 250	*11 970	10 680			*10 400	*10 400	9.1
	3.0 m kg					*26 640	*26 640	*19 080	*19 080	*15 540	13 770	*13 620	10 480			*10 850	9 920	9.3
	1.5 m kg					*25 960	*25 960	*21 030	18 450	*16 660	13 360	*14 110	10 280			*11 670	9 820	9.3
	0 m kg					*30 000	28 340	*21 960	18 040	*17 270	13 090	*13 240	10 180			*13 090	10 170	9.0
	-1.5 m kg			*21 810	*21 810	*28 870	28 380	*21 720	17 950	*17 020	13 030					*14 580	11 120	8.4
	-3.0 m kg			*35 110	*35 110	*26 170	*26 170	*19 990	18 130	*15 060	13 260					*14 890	13 150	7.5
	-4.5 m kg					*20 920	*20 920	*15 290	*15 290							*14 610	*14 610	6.2
Boom: 7.0 m HD Arm: 2.55 m Shoe: 750 mm CWT: 10 600 kg	7.5 m kg									*13 100	*13 100					*12 630	*12 630	8.0
	6.0 m kg									*13 640	*13 640					*12 280	11 220	8.8
	4.5 m kg							*17 810	*17 810	*14 760	14 090	*13 250	10 670			*12 350	10 170	9.3
	3.0 m kg							*20 160	18 770	*16 000	13 620	*13 770	10 460			*12 790	9 670	9.5
	1.5 m kg							*21 670	18 170	*16 970	13 250	14 110	10 270			13 150	9 600	9.4
	0 m kg					*16 090	*16 090	*22 070	17 920	*17 370	13 050	14 020	10 180			13 670	9 940	9.2
	-1.5 m kg					*27 490	*27 490	*21 410	17 930	*16 940	13 030					*14 120	10 850	8.6
	-3.0 m kg			*30 460	*30 460	*24 710	*24 710	*19 500	18 160	*15 020	13 270					*14 180	12 750	7.7
	-4.5 m kg			*24 240	*24 240	*19 790	*19 790	*15 120	*15 120							*13 550	*13 550	6.4
Boom: 7.0 m HD Arm: 3.0 m Shoe: 750 mm CWT: 10 600 kg	7.5 m kg															*10 710	*10 710	8.4
	6.0 m kg									*12 850	*12 850	*12 170	10 850			*10 510	10 460	9.2
	4.5 m kg					*22 740	*22 740	*16 800	*16 800	*14 050	*14 050	*12 600	10 650			*10 630	9 530	9.6
	3.0 m kg							*19 280	18 810	*15 390	13 590	*13 260	10 390			*11 050	9 070	9.8
	1.5 m kg							*21 070	18 100	*16 510	13 160	*13 850	10 160			*11 830	8 980	9.8
	0 m kg					*19 930	*19 930	*21 810	17 740	*17 100	12 900	13 860	10 020			12 760	9 260	9.5
	-1.5 m kg			*15 900	*15 900	*28 200	28 040	*21 490	17 680	*16 960	12 820	*13 550	10 040			*13 490	10 010	9.0
	-3.0 m kg			*28 620	*28 620	*25 770	*25 770	*20 020	17 850	*15 680	12 970					*13 730	11 570	8.2
	-4.5 m kg			*27 510	*27 510	*21 530	*21 530	*16 670	*16 670							*13 570	*13 570	6.9
Boom: 7.0 m HD Arm: 3.35 m Shoe: 750 mm CWT: 10 600 kg	7.5 m kg															*9 400	*9 400	8.8
	6.0 m kg											*11 710	10 990			*9 230	*9 230	9.5
	4.5 m kg							*16 180	*16 180	*13 650	*13 650	*12 270	10 760			*9 320	9 110	10.0
	3.0 m kg					*22 850	*22 850	*18 780	*18 780	*15 070	13 730	*13 020	10 480			*9 670	8 690	10.2
	1.5 m kg					*16 420	*16 420	*20 780	18 290	*16 310	13 270	*13 700	10 230			*10 320	8 600	10.1
	0 m kg					*20 970	*20 970	*21 780	17 860	*17 060	12 970	13 900	10 060			*11 370	8 840	9.9
	-1.5 m kg			*15 720	*15 720	*28 880	28 060	*21 730	17 730	*17 110	12 850	*13 850	10 020			*13 060	9 500	9.4
	-3.0 m kg	*20 300	*20 300	*26 320	*26 320	*26 750	*26 750	*20 560	17 840	*16 160	12 930					*13 360	10 830	8.6
	-4.5 m kg			*30 200	*30 200	*22 960	*22 960	*17 760	*17 760							*13 390	*13 390	7.4
	-6.0 m kg					*15 870	*15 870									*12 290	*12 290	5.6
Boom: 7.0 m HD Arm: 3.9 m Shoe: 750 mm CWT: 10 600 kg	9.0 m kg															*7 930	*7 930	8.4
	7.5 m kg											*9 860	*9 860			*7 530	*7 530	9.4
	6.0 m kg											*10 910	*10 910			*7 410	*7 410	10.1
	4.5 m kg									*12 820	*12 820	*11 590	10 830			*7 490	*7 490	10.5
	3.0 m kg					*24 690	*24 690	*17 710	*17 710	*14 350	13 820	*12 450	10 510	*9 520	8 280	*7 750	*7 750	10.7
	1.5 m kg					*21 740	*21 740	*20 000	18 400	*15 740	13 310	*13 270	10 220	*9 960	8 140	*8 250	7 970	10.6
	0 m kg					*22 680	*22 680	*21 370	17 850	*16 710	12 940	*13 830	10 000			*9 030	8 160	10.4
	-1.5 m kg	*11 000	*11 000	*15 430	*15 430	*28 930	27 830	*21 720	17 610	*17 040	12 750	13 730	9 890			*10 270	8 690	9.9
	-3.0 m kg	*18 010	*18 010	*23 640	*23 640	*27 750	*27 750	*21 000	17 630	*16 520	12 750	*13 060	9 960			*12 390	9 740	9.2
	-4.5 m kg	*26 130	*26 130	*33 650	*33 650	*24 650	*24 650	*18 910	17 900	*14 560	12 990					*12 890	11 810	8.1
	-6.0 m kg			*25 190	*25 190	*19 020	*19 020	*14 120	*14 120							*12 560	*12 560	6.4

Notes:

1. Machine in “Fine Mode-F” (Power Boost) for lifting capacities.
2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards.
3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

Equipment

STANDARD EQUIPMENT

	EC530E	EC550E
Engine		
Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets EU Stage V requirements	•	•
Air filter with indicator	•	•
Air intake heater	•	•
Cyclone pre-cleaner	•	•
Electric engine shut-off	•	•
Fuel filter and water separator	•	•
Fuel filler pump: 50 l/min, with automatic shut-off	•	•
Alternator, 80 A	•	•
Electric / Electronic control system		
Advanced mode control system	•	•
Self-diagnostic system	•	•
Machine status indication	•	•
Engine speed sensing power control	•	•
Automatic idling system	•	•
One-touch power boost	•	•
Safety stop/start function	•	•
Adjustable LCD color monitor	•	•
Master electrical disconnect switch	•	•
Engine restart prevention circuit	•	•
High-capacity halogen lights:	•	•
Frame-mounted 2	•	•
Boom-mounted 2	•	•
Batteries, 2 x 12 V / 200 Ah	•	•
Start motor, 24 V / 7 kW	•	•
Frame		
3-point right-hand side access	•	•
Full height, foldable handrail and guard rail	•	•
Tool storage area	•	•
Punched metal anti-slip plates	•	•
Undercover (heavy-duty)	•	•
Undercarriage		
Mechanically retractable wide width track gauge	–	•
Mechanically retractable width track gauge	•	–
Undercover (heavy-duty)	•	•
Hydraulic track adjusters	•	•
Greased and sealed track link	•	•
Track Guard	•	•
Hydraulic system		
New electro-hydraulic system with IMVT	•	•
Hose rupture valve: boom, Arm	•	•
Overload warning device	•	•
2-pump flow bucket circuit	•	•
Swing anti-rebound valves	•	•
Multi-stage filtering system	•	•
Cylinder cushioning	•	•
Cylinder contamination seals	•	•
Auxiliary hydraulic valve	•	•
Automatic two-speed travel motors	•	•
Hydraulic oil, ISO VG 46	•	•
Automatic hydraulic oil warm-up	•	•

STANDARD EQUIPMENT

	EC530E	EC550E
Cab and interior		
ROPS (ISO12117-2) certified cab	•	•
Silicon oil and rubber mounts with spring	•	•
Travel pedals and hand levers	•	•
Adjustable operator seat and joystick control console	•	•
Control joysticks with 4 switches each	•	•
Heater & air-conditioner, automatic	•	•
Flexible antenna	•	•
Radio with MP3 & USB Jack with bluetooth	•	•
Hydraulic safety lock lever	•	•
Cab, all-weather sound suppressed, includes:	•	•
- Cup holders	•	•
- Door locks	•	•
- Tinted glass	•	•
- Floor mat	•	•
- Horn	•	•
- Large storage area	•	•
- Pull-up type front window	•	•
- Removable lower windshield	•	•
- Seat belt	•	•
- Safety glass	•	•
- Sun screens, front, roof, rear	•	•
- Rain shield	•	•
- Windshield wiper with intermittent feature	•	•
- Rear and side view camera	•	•
- Master key	•	•
Track shoes		
600 mm with double grousers	•	•
Digging equipment		
Boom: 7.0 m HD	•	•
Arm: 3.35 m	•	•
Manual centralized lubrication	•	•

OPTIONAL EQUIPMENT

	EC530E	EC550E
Engine		
Block heater: 120 V, 240 V	•	•
Oil bath pre-cleaner	•	•
Diesel coolant heater, 10 kW	•	•
Water separator with heater	•	•
Auto engine shutdown	•	•
Delayed engine Shutdown	•	•
Reversible fan drive	•	•
Fuel tank-fast fuel fill preparation	•	•
Electric		
Extra work lights: Halogen or LED :	•	•
- Cab-mounted 3	•	•
- Boom-mounted 2	•	•
- Counterweight-mounted 1	•	•
Travel alarm	•	•
Anti-theft system	•	•
Flashing beacon, LED	•	•
Green light beacon	•	•
Jump start connector, NATO	•	•
Dig Assist : 2D, In-Field Design and 3D	•	•
On-Board Weighing	•	•
Volvo Smart View	•	•
Frame		
Hydraulic removable counterweight	•	•
Service walk way, foldable	•	•
Cab entrance, foldable	•	•

OPTIONAL EQUIPMENT	EC530E	EC550E
Undercarriage		
Full track guard	•	•
Hydraulic system		
Boom float function	•	•
Hydraulic piping:	•	•
- Work tool management system (up to 32 programmable memories)	•	•
Hammer & shear:	•	•
- 1 and 2 pump flow	•	•
- Variable flow and pressure pre-setting	•	•
- Additional return filter	•	•
Slope & rotator	•	•
Grapple	•	•
Oil leak (drain) line	•	•
Quick coupler piping	•	•
Volvo hydraulic quick coupler S3	•	•
Volvo hydraulic quick coupler VQC-HU	•	•
Hydraulic oil, ISO VG 32	•	•
Hydraulic oil, ISO VG 46	•	•
Hydraulic oil, ISO VG 68	•	•
Hydraulic oil, biodegradable 46	•	•
Hydraulic oil, longlife oil 32	•	•
Hydraulic oil, longlife oil 46	•	•
Hydraulic oil, longlife oil 68	•	•

OPTIONAL EQUIPMENT	EC530E	EC550E
Cab and interior		
Fabric seat with heater	•	•
Fabric seat with heater and air suspension	•	•
Delux seat with multiple adjusting arm rest	•	•
Joystick pattern change	•	•
Comfort Driving Control	•	•
Creep travel speed	•	•
Opening top hatch	•	•
Falling object guard (FOG) :	•	•
- Frame-mounted	•	•
- Cab-mounted	•	•
Cab-mounted falling object protective structure (FOPS)	•	•
Smoker kit (ashtray and lighter)	•	•
Safety net for front window	•	•
Safety net for lower front window	•	•
Lower wiper with intermittent control	•	•
Anti-vandalism kit	•	•
Specific key	•	•
One piece front window	•	•
High visibility cab	•	•
Track shoes		
Track shoes 600/750/900 mm with triple grousers	•	•
Track shoes 600 mm with double grousers	•	•
Digging equipment		
Boom: 6.5 m ME	•	•
Arm: 2.55 m, 3.0 m, 3.9 m	•	•
Linkage with lifting eye	•	•
Service		
Tool kit, daily maintenance	•	•
Tool kit, full scale	•	•
Automatic lubrication system	•	•
Cleaning air gun	•	•
Caretrack	•	•

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Deluxe seat

Climate control with HEPA filter

Reversible cooling fan

Foldable walkway

Fast fuel filling preparation

Dig Assist apps, powered by Volvo Co-Pilot

Not all products are available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.

Ref. No 20059913_B / English-21 / 2022.08 / EXC / Volvo, Global Marketing

VOLVO

VOLVO

Volvo Wheel Loaders 50.0-56.3 t 532 hp

L350H

Volvo Construction Equipment

Evolution of excellence

With a proud history dating back to the L320 in 1985, Volvo has been developing and refining our wheel loader technology for decades. The new L350H continues this evolution, building on the success of its predecessor with a host of upgrades. The result is a heavy-duty wheel loader which delivers a lower total cost of ownership and more profitable performance.

▲

See the upgraded heavy-duty L350H in action.

1985 L320

1997 L330C

2000 L330D

10% faster, more productivity

Get ready for faster cycle times with a more responsive hydraulics system, featuring new lift and tilt cylinders, and an increased hydraulic working pressure.

Up to 15% more fuel efficient

The well-matched driveline features new Volvo axles, while the all-new Volvo transmission enables third-generation OptiShift – which boosts fuel efficiency by up to 15%* – to be equipped as standard. Tractive force is also increased by up to 22% depending on machine speed and engaged gear.

*depending on application, machine specification, bucket and operator behaviour

Even tougher

The tougher and stronger L350H features a more robust upper center hinge bearing and updated frames to accommodate the new axles and transmission.

Doubled service intervals

The axle oil interval has been doubled to 4 000-hours, reducing the corresponding service time, as well as cutting oil and filter requirements by half.

2002	2007	2014	2018	2022
L330E	L350F	L350F Upgrade	L350H	L350H Upgrade

Built for demanding jobs

Whatever application you are working in, the heavy-duty L350H is ready for action. The proven Z-bar lifting arm with double sealing on each of the pins, and strong frame structure, is joined by a reinforced upper center hinge and new Volvo axles. Combined with a wide range of purpose-built Volvo Attachments, the result is a machine built to take on the toughest of jobs.

Rock loader

The L350H is prepared for tire chains and is the perfect match with a 65t truck due to the long boom configuration. With a long floor and optimized radius, the Volvo Rock Bucket makes for easy filling, and a Side Dump variant is available for tunneling applications.

Rehandler

With an impressive 10.7m^3 capacity, the Volvo Rehandling Bucket is easy to fill and minimizes spillage. Choose the Boom Suspension System, which automatically engages depending on the prevailing gear and speed, to enhance productivity and absorb shocks.

Block handler

For high lifting force and maximum stability in block handling applications, choose from the standard or heavy-duty kit variants and a range of robust Volvo Attachments, including block forks, breaker tine and clearing rakes. The optional Volvo Engine Brake provides a smoother operation when travelling downhill with heavy marble blocks.

Slag handler

Dealing with extremely high temperatures takes a special kind of engineering. From unique guarding to heat-resistant components, the slag handling package enables our Volvo Wheel Loaders to meet the unique challenges of this application.

LOG LOADER

With high lifting force and tilt out force, the L350H log loader is designed to withstand the long shifts and demanding environments common in the forestry industry.

Your profitability partner

Enhance the profitability of your operation in the upgraded L350H, featuring an all-new Volvo transmission. Established features and complementary services, such as the Load Assist suite of apps accessed from the in-cab 10” Volvo Co-Pilot display, further improve efficiency.

Optimize fuel use

Optimize fuel use with rimpull control, which adapts the tractive force to prevent wheel spin and facilitate bucket filling. Volvo Attachments are perfectly matched to your machine to deliver optimum productivity and efficiency. For even more efficiency gains, the Fuel Efficiency Report can help to identify areas for improvement.

Take control of your productivity

Make overloading, underloading, reweighing and waiting times a thing of the past with the On-Board Weighing app, providing real-time insight into the load of the bucket or grapple. The Productivity Report can help with taking the necessary steps to lower your cost per tonne. With support from Volvo Site Simulation, your Volvo dealer can recommend the best fleet configuration and site set-up.

Coach your performance

The Operator Coaching app helps operators understand how their actions influence machine productivity, fuel efficiency and wear. Features include interactive guidance, on-screen prompts and visualization of performance. With a range of available training initiatives, we are ready to support with operator development, helping them to unlock the full capability of their Volvo machine.

Faster cycle times

Benefit from faster cycle times and more productivity thanks to the new hydraulic system with increased hydraulic pressure and new lift/tilt cylinders, combined with new driveline.

UP TO 15% MORE FUEL EFFICIENT

Thanks to the new driveline, third generation OptiShift is now enabled on the L350H. The technology integrates the Reverse By Braking function and lock up function in transmission. Fuel efficiency is also enhanced by an optimized gear shifting ratio and the new converter, which delivers higher outputs resulting in up to 22% more tractive force depending on gear and speed.

For your comfort and safety

Step inside the best cab on the market, providing an unrivalled operator experience. The levels of comfort, convenience and safety in the L350H will help operators achieve optimum results – shift after shift.

Superb visibility

Outstanding visibility helps operators to work in comfort and confidence, aided by the optional electrically adjusted heated rearview mirrors. When installed, the rearview camera and radar detect system are fully integrated into the Volvo Co-Pilot and provide a visual and audible alert to the operator if any unseen objects are approaching.

Take control

Configure the machine according to the job and operator's preferred responsiveness, with a choice of three hydraulic modes. Customizable lockup further helps to adapt the machine to the task at hand, along with rimpull control which modifies tractive force to prevent wheel spin.

Bucket leveling function

The bucket leveling function automatically returns the bucket to level, from both dump and curl positions, helping to reduce operator fatigue.

OPERATOR IN FOCUS

Every element of operator comfort and convenience is considered in the L350H, with a remote controlled door opening, air-conditioning and secondary steering system all as standard. Choose from a range of seats, including the fully adjustable premium seat, available with a 3-point seatbelt. Count on a steering wheel to always be fitted, taking priority over the Comfort Drive Control lever steering.

More uptime, less service costs

Keep working for longer with reduced maintenance requirements and easy service access. Proactive tire monitoring and telematics connectivity keeps downtime to a minimum, getting you back to work without delay.

Extended service intervals

Maintenance is kept to a minimum with a 4 000-hour axle oil change interval – made possible by the external axle oil cooler with filtration. The subsequent 50% reduction in related service time ensures your machine stays on site, working and earning, for longer – while also reducing oil and filters requirements.

Built to last

Minimize machine downtime and increase component life with features including heavy-duty axles with fully floating shafts, planetary hub reduction and maintenance-free rear axle trunnion bearings. Breather filters further help to increase component life and the reinforced upper bearing of the center hinge boasts a heavy-duty design to accommodate the new transmission and axles.

Tire Pressure Monitoring System

Extend tire life and save fuel with the support of the Tire Pressure Monitoring System, part of the Load Assist suite of apps accessed from the Volvo Co-Pilot display. The system enables the pressure and temperature of tires to be monitored from the comfort of the cab.

Get connected, boost uptime

Maximize machine uptime and reduce repair costs with CareTrack telematic system. Choose to keep track of your machine yourself or let us take care of it with ActiveCare, providing 24/7 monitoring and weekly reports. ActiveCare is part of a portfolio of Uptime Services, including maintenance and repair agreements, extended warranties, and more.

DESIGNED FOR EASY SERVICING

Keep uptime to a maximum with improved serviceability. Daily routine checks are made easy as a result of the engine side hood panels and easily accessed cooling package, while all other essential maintenance points can be safely accessed using the surrounding walkway.

Better, faster, stronger

Operator in focus

- Remote-controlled door opening
- Choice of seats available with a 3-point seatbelt
- Secondary steering system
- Comfort Drive Control lever steering
- Choice of three hydraulic modes
- Bucket leveling function
- Electrically adjusted heated rearview mirrors (Option)
- Rearview camera, radar detect system (Option)

Load Assist

Suite of apps accessed from the 10” Volvo Co-Pilot display

- On-Board Weighing
- Operator Coaching
- Tire Pressure Monitoring System

More uptime

- 4 000-hour (or 18 months) axle oil change intervals, made possible by the external axle oil cooler with filtration
- Engine side hood panels, easily accessed cooling package
- Breather filters
- Maintenance-free rear axle trunnion bearings
- Automatic lubrication system (Option)

Volvo Services: boost your profits

- Productivity and Fuel Efficiency Reports
- ActiveCare
- Operator Training Program
- Volvo Site Simulation
- Maintenance and Repair agreements
- Genuine Volvo Parts

Faster and more fuel efficient

- Up to 10% more productive with new lift/tilt cylinders and increased hydraulic working pressure
- Up to 15% greater fuel efficiency thanks to 3rd generation OptiShift
- Increased tractive force up to 22%, depending on machine gear and engaged speed
- Optimized gear shifting ratio
- Rimpull control
- Compatible with HVO alternative fuel

Built for demanding jobs

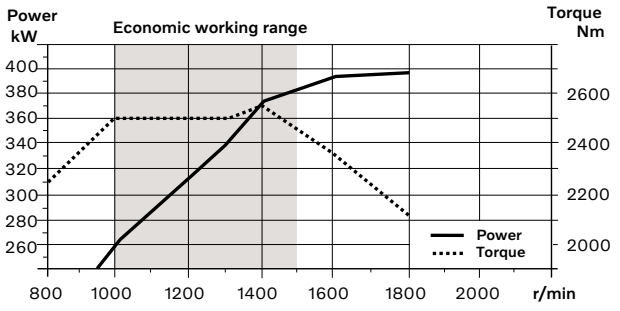
- Reinforced upper center hinge bearing
- Updated frames to accommodate new Volvo transmission and axles
- Heavy-duty axles with fully floating shafts planetary hub reduction
- Proven Z-bar lifting arm with double sealing on each of the pins
- Range of Volvo Attachments

Volvo L350H in detail

Engine

Engine: V-ACT Stage III A/Tier 3, 16 liter, 6-cylinder in-line turbocharged, air-to-air intercooler diesel engine with double rockers and Internal Exhaust Gas Recirculation (I-EGR). One-piece cylinder head with four valves per cylinder and one overhead camshaft. The engine has wet replaceable cylinder liners and replaceable valve guides and valve seats. Mechanically actuated electronically controlled unit injectors. The throttle application is transmitted electrically from the throttle pedal.
Air cleaning: Three stage cyclone pre-cleaner - primary filter - secondary filter.
Cooling system: Hydrostatic, electronically controlled fan and intercooler of the air-to-air type.

Engine	Volvo	D16E
Max. power at	r/min	1700 -1800
ECE R120 net	kW	397
	hp	532
ISO 9249, SAE J1349 net	kW	395
	hp	530
Max. torque at	r/min	1 400
ECE R120 net	Nm	2 550
ISO 9249, SAE J1349 net	Nm	2 547
Economic working range	r/min	1 000 - 1 500
Displacement	l	16.1



Electrical System

Central warning system:
Contronic electrical system with central warning light and buzzer for following functions: - Serious engine malfunction - Low steering system pressure - Overspeed warning engine - Interruption in communication (computer error)
Central warning light and buzzer with gear engaged for the following functions: - Low engine oil pressure - High engine oil temperature - High charge-air temperature - Low coolant level - High coolant temperature - High crankcase pressure - Low transmission oil pressure - High transmission oil temperature - Low brake pressure - Engaged parking brake - Brake charging failure - Low hydraulic oil level - High hydraulic oil temperature - Overspeeding in engaged gear - High brake cooling oil temperature front and rear axles.

Voltage	V	24
Batteries	V	2 x 12
Battery capacity	Ah	2 x 170
Cold cranking capacity, approx	A	1 000
Alternator rating	W/A	2 280/80
Starter motor output	kW	7

Drivetrain

Torque converter: 3-element ,1-stage, 2-phase torque converter with Lock-Up function.
Transmission: Volvo countershaft transmission with Electronic Controlled Modulation (ECM) for fast and smooth shifting of 4 gears forward and reverse. Volvo Automatic Power Shift (APS) gear shifting system with fully automatic shifting 1-4 and mode selector with 4 different gear shifting programs, including AUTO mode. Also equipped with Rimpull control to avoid wheel spin and optimize bucket filling.
Axles: Fully floating axle shafts with double planetary-type heavy duty hub reductions. Fixed front axle and oscillating rear axle.
Optional: Limited-slip differentials in front and rear axle.

Transmission	Volvo	HTL 500
Torque multiplication, stall ratio		2.45
Maximum speed, forward/reverse		
1st gear	km/h	6.9
2nd gear	km/h	12.2
3rd gear	km/h	21.9
4th gear	km/h	37.7
Measured with tires		35/65 R33 L4
Front axle/rear axle		Volvo AHW 91/AHW 91
Rear axle oscillation	± °	12
Ground clearance	mm	550
at oscillation	°	12

Steering System

Steering system: Load-sensing hydrostatic articulated steering with an accumulator system and a non-pressurized tank.
System supply: The steering system has priority feed from a load-sensing axial piston pump with variable displacement.
CDC: Speed dependent electro-hydraulic power steering system with closed center hydrostatic back-up and end-stroke damping.

Steering cylinders		2
Cylinder bore	mm	110
Rod diameter	mm	70
Stroke	mm	595
Working pressure	MPa	27
Maximum flow	l/min	370
Maximum articulation	± °	37

Service Refill

Service accessibility: Large, easy-to-open service doors with gas struts. Swing-out radiator grill. Fluid filters and component breather filters promote long service intervals. A quick-fit adapter on the hydraulic tank provides faster hydraulic oil fill. Possibility to monitor, log, and analyze data to facilitate troubleshooting.

Fuel tank	l	540
Engine coolant	l	73
Hydraulic oil tank	l	365
Transmission oil	l	134
Engine oil	l	55
Axle oil front	l	140
Axle oil rear	l	146

Hydraulic system

System supply: Two load-sensing axial piston pumps with variable displacement. The steering function always has priority from one of the pumps.
Valves: Double-acting 2-spool valve. The main valve is controlled by an electric pilot.
Lift function: The valve has three positions; raise, hold and lower. Inductive/ magnetic automatic boom kickout can be switched on and off and is adjustable to any position between maximum reach and full liftning height.
Tilt function: The valve has three functions; rollback, hold, and dump. Inductive/ magnetic automatic bucket positioner can be switched on and off.
Cylinders: Doubleacting cylinders for all functions.
Filter: Full-flow filtration through 10 micron (absolute) filter cartridge.
Hydraulic oil cooler: Air cooled oil cooler mounted on radiator.

Working pressure maximum, pump 1 for working hydraulic system	MPa	27
Flow	l/min	343
at	MPa	10
engine speed	r/min	1 800
Working pressure maximum, pump 2 for steering-, brake-, pilot- and working hydraulic system	MPa	29
Flow	l/min	400
at	MPa	10
engine speed	r/min	1 800
Working pressure maximum, pump 3 for brake- and cooling fan system	MPa	26
Flow	l/min	84
at	MPa	10
engine speed	r/min	1 800
Cycle times		
Lift	s	7.1
Tilt	s	1.9
Lower, empty	s	4.3
Total cycle time	s	13.3
Raise and tilt cycle times with load according to ISO 14397 and SAE J818		

Lift Arm System

Z-bar linkage system with high breakout forces. The lift arms are single plate construction with a high-strength steel cast cross tube. The single bell crank and bucket link are nodular iron castings.

Lift cylinders		2
Cylinder bore	mm	190
Piston rod diameter	mm	110
Stroke	mm	1 264
Tilt cylinder		1
Cylinder bore	mm	250
Piston rod diameter	mm	120
Stroke	mm	728

Brake system

Service brake: Service brakes are dual circuit all-hydraulic multidisc brakes with nitrogen-charged accumulators and automatic slack adjusters. Outboard-mounted oil-cooled, wet disc brakes at each wheel. Transmission disengagement during braking can be preselected in Contronic.
Parking brake: 3 calliper (dry) spring applied, electro hydraulically released via a swich on dash board. Applies automatically when the key is turned off.
Secondary brake: Dual circuit axle-by-axle system. Actuated by service brake pedal. Low pressure alarm. Dead engine braking capability provided by three nitrogen charged accumulators.
Standard: The brake system complies with the requirements of ISO 3450:1996.

Number of brake discs per wheel front/rear		10/10
Accumulators	l	9 x 1.0
Accumulators for parking brake	l	1 x 1.0

Cab

Instrumentation: All important information is centrally located in the operator's field of vision. Display for Contronic monitoring system.
Heater and defroster: Heater coil with filtered fresh air and fan with auto and manual settings (11 speeds). Defroster vents for all window areas.
Operator' seat: Operator's seat with adjustable air suspension and retractable seatbelt. The seat is mounted on a bracket on the rear cab wall and floor. The forces from the retractable seatbelt are absorbed by the seat rails.
Standards: The cab is tested and approved according to ROPS (ISO 3471, SAE J1040), FOPS (ISO 3449). The cab meets with requirements according to SAE J386 ("Operator Restraint System").
Refrigerant of the type R134a is used when this machine is equipped with air conditioning. Contains fluorinated greenhouse gas R134a, Global Warming Potential 1.430 t CO_2-eq.

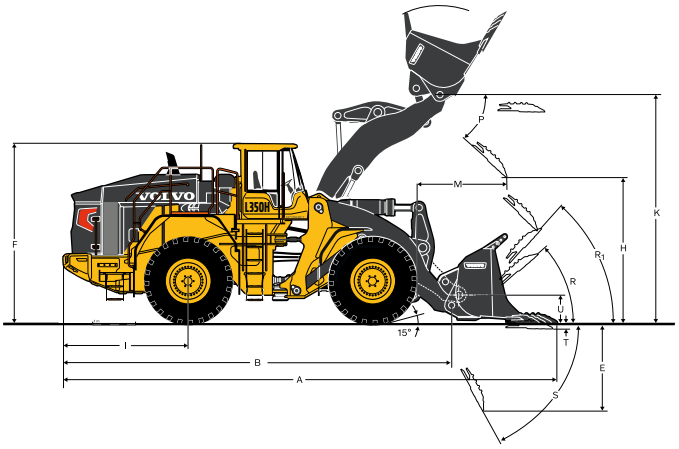
Emergency exit: Use emergency hammer to break window

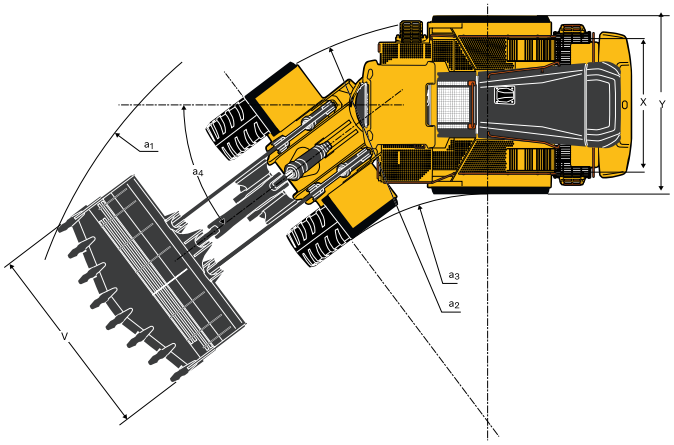
Ventilation	m³/min	9
Heating capacity	kW	16
Air conditioning	kW	8

Sound Level

Sound pressure level in cab according to ISO 6396		
L_{pA}	dB	72
External sound level according to ISO 6395		
L_{WA}	dB	111

Specifications

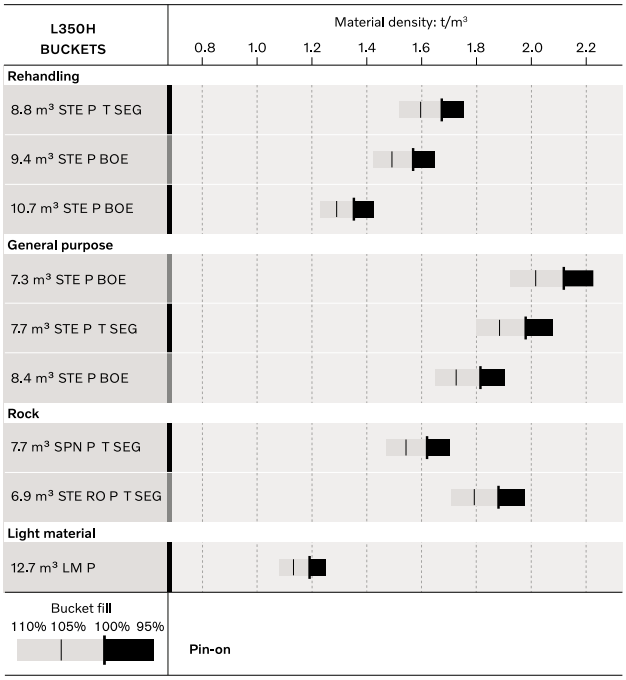




Tires: 875/65 R33 Goodyear RL-5K* L5**

		Standard boom	Long boom
B	mm	9 130	9 560
C	mm	4 300	4 300
D	mm	550	550
F	mm	4 180	4 180
F_1	mm	4 000	4 000
F_2	mm	3 460	3 460
G	mm	2 135	2 134
I	mm	2 910	3 110
J	mm	4 920	5 390
K	mm	5 340	5 810
O	°	60	58
P_{max}	°	46	45
R	°	44	45
R_1*	°	48	50
S	°	66	72
T	mm	130	130
U	mm	620	750
X	mm	2 720	2 720
Y	mm	3 630	3 630
Z	mm	4 470	4 890
a_2	mm	8 480	8 480
a_3	mm	4 610	4 610
a_4	±°	37	37

*Carry position SAE
Where applicable, specifications and dimensions are according to ISO 7131, SAE J732, ISO 7546, SAE J742, ISO 14397, SAE J818.



How to read bucket fill factor

Bucket Selection Chart

The volume handled varies with the bucket fill and is often greater than indicated by the bucket's ISO/SAE volume. The table shows optimum bucket choice with regard to the material density.

Material	Bucket fill, %	Material density, t/m³
Earth	110-115	1.4-1.6
Clay	110-120	1.4-1.6
Sand	100-110	1.6-1.9
Gravel	100-110	1.7-1.9
Rock	75-100	1.5-1.9

The size of rock buckets is optimized for optimal penetration and filling capability rather than the density of the material.

Supplemental Operating Data

	Width over tires	Ground clearance	Operating weight	Static tipping load, full turn	
				Standard boom	Long boom
	mm	mm	kg	kg	kg
35/65 R33 Michelin XMine D2** L5	+20	-20	-220	-220	-200
35/65 R33 Bridgestone VSDL IDU** L5	-20	-10	-240	-220	-200
35/65 R33 Bridgestone VSNT** L4	0	-20	-800	-520	-470
36/65 R33 Michelin XTXL*** L4	0	-40	-1 350	-880	-790

Specifications

L350H

Standard boom			REHANDLING [1]			GENERAL PURPOSE [2]			ROCK [2]		LIGHT MATERIAL [3]
											
			WLA86884	WLA86885	WLA86896	WLA87151	WLA87152	WLA87153	WLA87493	WLA87491	WLA83019
			8.8 m³ STE P BOE	**9.4 m³ STE P BOE**	**10.7 m³ STE P BOE**	**7.3 m³ STE P BOE**	**7.7 m³ STE P T SEG**	**8.4 m³ STE P BOE**	**6.9 m³ STE P T SEG**	**7.7 m³ SPN P T SEG**	**12.7 m³ LM P BOE**
Volume, heaped ISO/SAE		m³	8.8	9.4	10.7	7.3	7.7	8.4	6.9	7.7	12.7
Volume at 110% fill factor		m³	9.7	10.3	11.8	8.0	8.5	9.2	7.6	8.5	14.0
Static tipping load, straight		kg	43 190	42 840	42 250	39 720	39 290	39 170	39 530	38 160	37 570
at 35° turn		kg	38 350	38 000	37 440	35 420	35 000	34 890	35 240	33 910	33 360
at full turn		kg	37 790	37 450	36 890	34 930	34 510	34 410	34 750	33 420	32 890
Breakout force		kN	404	391	363	464	439	429	454	347	388
A	Overall length	mm	11 100	11 170	11 330	10 840	11 220	10 980	11 150	11 690	11 170
E	Digging depth, max dump (S)	mm	1 710	1 760	1 910	1 470	1 800	1 590	1 740	2 210	1 780
H [4]	Dump clearance	mm	3 690	3 650	3 530	3 880	3 620	3 780	3 660	3 310	3 630
L	Overall operating height	mm	7 300	7 390	7 540	7 120	7 180	7 290	7 310	7 410	7 670
M [4]	Dump reach	mm	1 830	1 880	1 980	1 650	1 890	1 750	1 850	2 250	1 890
N [4]	Reach at 45° discharge, pos. G	mm	2 700	2 740	2 810	2 580	2 750	2 650	2 720	2 990	2 700
V	Bucket width	mm	3 970	3 970	3 970	3 970	3 970	3 970	3 970	4 110	4 500
a_1	Outer clearance circle (diameter)	mm	18 350	18 390	18 480	18 210	18 420	18 290	18 380	18 800	18 860
Operating weight without load		kg	53 320	53 470	53 790	51 160	51 420	51 450	51 350	52 120	51 520

(1) Calculated with 35/65 R33 Bridgestone VSNT L4 tires and Rehandling counterweight.

(2) Calculated with 875/65 R33 Goodyear RL-5K*** L5 tires.

(3) Calculated with 35/65 R33 Bridgestone VSNT L4 tires.

(4) Measured to the tip of the bucket teeth or bolt-on edge. Dump height to bucket edge measured at 45° dump angle.

Note: This only applies to genuine Volvo attachments.

L350H

Long boom			REHANDLING [1]			GENERAL PURPOSE [2]			ROCK [2]		LIGHT MATERIAL [3]
											
			WLA86884	WLA86885	WLA86896	WLA87151	WLA87152	WLA87153	WLA87493	WLA87491	WLA83019
			8.8 m³ STE P BOE	**9.4 m³ STE P BOE**	**10.7 m³ STE P BOE**	**7.3 m³ STE P BOE**	**7.7 m³ STE P T SEG**	**8.4 m³ STE P BOE**	**6.9 m³ STE P T SEG**	**7.7 m³ SPN P T SEG**	**12.7 m³ LM P BOE**
Volume, heaped ISO/SAE		m³	8.8	9.4	10.7	7.3	7.7	8.4	6.9	7.7	12.7
Volume at 110% fill factor		m³	9.7	10.3	11.8	8.0	8.5	9.2	7.6	8.5	14.0
Static tipping load, straight		kg	37 640	37 370	36 800	37 360	36 960	36 860	37 180	35 900	35 360
at 35° turn		kg	33 300	33 040	32 490	33 190	32 790	32 700	33 010	31 760	31 260
at full turn		kg	32 810	32 550	32 000	32 720	32 320	32 230	32 540	31 280	30 800
Breakout force		kN	367	354	330	421	399	390	413	316	352
A	Overall length	mm	11 520	11 590	11 750	11 250	11 630	11 400	11 570	12 110	11 590
E	Digging depth, max dump (S)	mm	1 770	1 840	1 980	1 530	1 870	1 650	1 810	2 300	1 850
H [4]	Dump clearance	mm	4 160	4 110	4 000	4 350	4 090	4 250	4 130	3 780	4 120
L	Overall operating height	mm	7 770	7 850	8 010	7 590	7 650	7 760	7 780	7 880	8 140
M [4]	Dump reach	mm	1 830	1 880	1 990	1 660	1 900	1 760	1 860	2 260	1 920
N [4]	Reach at 45° discharge, pos. G	mm	3 060	3 090	3 160	2 930	3 110	3 000	3 070	3 360	3 050
V	Bucket width	mm	3 970	3 970	3 970	3 970	3 970	3 970	3 970	4 110	4 500
a_1	Outer clearance circle (diameter)	mm	18 690	18 740	18 830	18 550	18 770	18 630	18 720	19 160	19 200
Operating weight without load		kg	53 560	53 720	54 040	52 790	53 060	53 080	52 980	53 750	53 160

(1) Calculated with 35/65 R33 Bridgestone VSNT L4 tires and Rehandling counterweight.

(2) Calculated with 875/65 R33 Goodyear RL-5K*** L5 tires and Long Boom counterweight.

(3) Calculated with 35/65 R33 Bridgestone VSNT L4 tires, and Long Boom counterweight,

(4) Measured to the tip of the bucket teeth or bolt-on edge. Dump height to bucket edge measured at 45° dump angle.

Note: This only applies to genuine Volvo attachments.

Equipment

STANDARD EQUIPMENT
Engine
Three stage air cleaner, pre-cleaner, primary and secondary filter
Indicator glass for coolant level
Preheating of induction air
Fuel pre-filter with water trap
Fuel filter
Crankcase breather oil trap
Drivetrain
Automatic Power Shift (APS) with operator controlled transmission disengagement when braking and mode selector with AUTO mode
Fully automatic gear shifting, 1-4
Pulse Width Modulation (PWM) controlled gear shifting
Torque converter with Lock-Up
Automatic Lock-Up shifting, 2-4 (gear selector in 4), 2 (gear selector in 2) and 1 (gear selector in 1)
Forward and reverse switch by hydraulic lever console
Rimpull control
Axle oil cooler
Indicator glass for transmission oil level
Electrical System
24 V, pre-wired for optional accessories
Alternator 24V/ 80A
Battery disconnect switch with removable key
Fuel gauge
Hour meter
Electric horn
Instrument cluster:
Fuel level
Transmission temperature
Coolant temperature
Instrument lighting
Lighting:
- Twin halogen front headlights with high and low beams
- Parking lights
- Double brake and tail lights
- Turn signals with flashing hazard light function
- Work lamp, front on cab, 2 Halogen lamps, std
- Work lamp, rear in grille, 4 Halogen lamps, std

STANDARD EQUIPMENT
Contronic monitoring system
Monitoring and logging of machine data
Contronic display
Fuel consumption
Ambient temperature
Clock
Brake test
Test function for warning and indicator lights
Warning and indicator lights:
Battery charging
Parking brake
Warning and display message:
- Engine coolant temperature
- Charge-air temperature
- Engine oil temperature
- Engine oil pressure
- Transmission oil temperature
- Transmission oil pressure
- Hydraulic oil temperature
- Brake pressure
- Parking brake applied
- Parking brake NOT applied
- Brake charging
- Overspeed at direction change
- Axle oil temperature
- Steering pressure
- Crankcase pressure
Level warnings:
- Low fuel level
- Engine oil level
- Engine coolant level
- Transmission oil level
- Hydraulic oil level
- Washer fluid level
Engine torque reduction in case of malfunction indication:
- High engine coolant temperature
- High engine oil temperature
- Low engine oil pressure
- High crankcase pressure
- High charge-air temperature
Engine shutdown to idle in case of malfunction indication:
- High transmission oil temperature
- Slip in transmission clutches
Keypad, background lit
Start interlock when gear is engaged

STANDARD EQUIPMENT
Hydraulic system
Main valve, double-acting 2-spool with electric pilots
Variable displacement axial piston pumps (3) for:
Steering system, working hydraulics
Secondary steering with automatic test function
Working hydraulics, brakes
Cooling fan, brakes
Electric-hydraulic servo control
Electric level lock
Boom kick-out, automatic, adjustable from cab
Return-to-dig, automatic, adjustable from cab
Bucket positioner, automatic, adjustable from cab
Double-acting hydraulic cylinders with end-damping
Indicator glass for hydraulic oil level
Hydraulic oil cooler
Brake system
Wet oil circulation-cooled disc brakes on all four wheels
Dual brake circuits
Dual brake pedals
Secondary brake system
Parking brake, electric-hydraulic
Brake wear indicators
Cab
ROPS (ISO 3471), FOPS (ISO 3449)
Acoustic inner lining
Cigarette lighter, 24 V power outlet
Lockable door
Cab heating with fresh air inlet and defroster
Fresh air inlet with two filters
Automatic climate control (ACC)
Floor mat
Interior light
Rear view mirror, interior
Dual exterior rear-view mirrors
Sliding window, right side
Tinted safety glass
Seat-mounted adjustable lever console, working hydraulics
Adjustable steering wheel
Storage compartment
Document pocket
Sun visor
Beverage holder
Windshield washer front and rear
Windshield wipers front and rear
Interval function for front and rear wipers
Service platforms with slip protected surfaces on front and rear fenders
Comfort Drive Control (CDC)
Remote door opener

STANDARD EQUIPMENT
Service and maintenance
Engine oil remote drain and fill
Transmission oil remote drain and fill
Grouped lubrication points, ground accessible
Pressure check connections: transmission and hydraulic, quick-connect, grouped on console for easy access
Quick-fit hydraulic oil fill
Tool box, lockable
Wheel nut wrench kit
External equipment
Fenders, front with rubber extensions
Viscous cab mounts
Rubber engine and transmission mounts
Lifting eyes
Easy-to-open side panels with gas struts
Frame, joint lock
Vandalism lock prepared for:
- Batteries
- Engine compartment
- Radiator
Tie-down eyes
Recovery eyes
Tow hitch

Equipment

OPTIONAL EQUIPMENT
Engine
Air pre-cleaner, oil-bath type
Air pre-cleaner, cyclone type
Cooling package: Radiator and charge air cooler, corrosion-protected
Engine block heater, 230 V
Engine block heater, 120V, USA
Engine auto shutdown
Volvo Engine Brake system - VEB
Hand throttle control
Fuel fill strainer
Fast fill fuel system
Fuel heater
Reversible cooling fan
Max. fan speed, hot climate
Drivetrain
Limited Slip, front and rear axle
Limited Slip, rear axle
Transmission oil heater
Speed limiter, 20 km/h
Speed limiter, 30 km/h
Electrical System
Travel lights:
Cab heater, power outlet 240V
Warning beacon LED
Warning beacon LED automatic
LED Economy package
LED Feature Package
LED Power Package
LED working lights, attachments
Halogen Economy package
Halogen Feature package
Halogen working lights, attachments
Warning beacon(flasher), LED
Reverse warning light, Strobe
Reverse alarm, audible, multi-frequency (white noise)
Reverse alarm, audible
Seatbelt indicator, external
Jump start connector, ISO type
Emergency stop
Electrical distribution unit 24 volt
Alternator 120 amp, heavy-duty
Anti-theft device
Max Boom height
Can Bus Interface
Delayed Engine Shutdown
Co Pilot available
Rearview camera in Co pilot
OnBoard Weighing
Tire Pressure Monitoring System
Connected Map

OPTIONAL EQUIPMENT
Hydraulic system
Boom suspension system with single-acting lift function
Arctic kit, pilot hoses, brake accumulators and hydraulic oil
Hydraulic 2 functions, Single lever control
Hydraulic 3 functions, Single lever control
3rd electro-hydraulic function
3rd electro-hydraulic function for long boom
Attachment bracket
Separate attachment locking
Biodegradable hydraulic fluid
Fire-resistant hydraulic fluid
Hot climate hydraulic fluid
Mineral oil for cold climate
Cab
Radio with Bluetooth/USB/AUX
DAB Radio
Radio installation kit incl. 11 A, 12 V outlet, left side
Radio installation kit incl. 11 A, 12 V outlet, right side
Rear-view camera incl. monitor, colour
Forward camera, colour
Rear-view mirrors, electrically adjustable and heated
Asbestos dust protection filter
Carbon filter
Automatic climate control panel, with Fahrenheit scale
Lunchbox holder
Universal key EU
Universal key US
Steering wheel knob
Sun blind, rear window
Sun blind, side windows
Timer cab heating
Window sliding, door
Operator’s seat, Volvo air susp, heavy-duty, high back, heat, for CDC
Parking brake alarm, audible for air susp seats
Operator’s seat, Premium Comfort
Operator’s seat, Premium Comfort ISRI 3-point seat belt
Operator's seat, (air seat std) 3-point seat belt and CDC
Ashtray
Anchorage for Operator’s manual
Forward view mirror
Service and maintenance
Tool kit
Automatic lubrication system
Automatic lubrication system for long boom
Refill pump for automatic lubrication system
Oil sampling valve

OPTIONAL EQUIPMENT
Protective equipment
Guards for front headlights
Tail light guards, heavy-duty
Guards for tail lights, heavy-duty
Guards for rear work lights
Radiator grille guard
Cab roof, heavy duty
Windows, side and rear guards
Windshield guard
Belly guard, front
Belly guard, rear
Fire extinguisher
Bracket for fire extinguisher
External equipment
Long boom
Fire suppression system
Other equipment
Counterweight, re-handling
Counterweight, signal painted, chevrons
Logger version
Block handler kit
Block handler kit, heavy-duty
CE-marking
Decals, USA
Sound decal, EU
Cleaner kit, with air blow gun (Stage V)
Reflecting stickers (stripes), machine contour Cab
Option for machines without dinitrol
CareTrack

OPTIONAL EQUIPMENT
Tires and Rims
35/65 R33 (875/65 R33):
- L4
- L5
Rims, 33-28.00/3,5:
- Five piece, heavy-duty
Attachments
Buckets (pin-on):
- Rock, straight edge
- Rock, spade nose
- Rock, side-dump, spade nose
- General purpose, straight edge
- Rehandling bucket, straight edge
- Light material, straight edge
Wear parts:
- Adapters for teeth, weld-on
- Teeth
- Segments, bolt-on
- Edge savers, bolt-on (reversible)
Block handling equipment (hook-on):
- Rock bucket, spade nose
- Stone fork
- Breaker tine
- Rake

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Boom Suspension System, gear or speed selected

Limited slip differentials

Long boom

Fire Suppression System

Fast fill fueling system

Radar Detect System

Not all products are available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice.
The illustrations do not necessarily show the standard version of the machine.

Ref. No 20061013_C / English-30 / 2024.10 / EXC / Volvo, Global Marketing

VOLVO

APPENDIX E | CORRESPONDENCE RELATING TO CHESTER PASS ROAD ACCESS

City of Albany

ATT: Planning Department

RE: Development Application EF25332279 - A65228

To whom it may concern,

I am writing to formally reference the discussions held between Brooke Mills, Planning Officer at the City of Albany, and Russell Miller, Commercial Building Manager at Auspan, regarding the crossovers associated with our CJD Albany project. For clarification, the project is located at the corner of Chester Pass Road and Richard Street in Milpara, encompassing Lots 1, 2, 29, 175, and 174. A Development Application has been submitted for this project, with City of Albany references EF25332279 - A65228.

CJD Equipment via Auspan and Harley Dykstra have previously applied to the WAPC for an amalgamation to the above lots to support this development. Advice note 2 in the amalgamation approval letter stated that 'Main Roads have advised that no access will be permitted from the site to Chester Pass Road'.

As per our DA submission drawings, we propose a crossover to be installed from the site to Chester Pass Road. A crossover in this location is required by the client to support light traffic flow to and from the business, and to allow a minimal number of heavy vehicles (semi-trailers) to enter and exit the site in forward gear. Without this crossover, the client has advised the proposed development will most likely not proceed as, in their (and our) opinion it is unreasonable to expect all access to and from the site to be via Lance Street. The development has been designed with traffic flow around the site in mind, including separation of light vehicles/pedestrians from heavy vehicles at the forefront of this design. Without this crossover, this traffic flow will not work and as such would present operational difficulties to our client such that they will not proceed with the project.

During an informal pre-lodgement meeting with the City of Albany (COA) Planning Department, attended by Russell Miller, it was indicated that the COA would support, in principle, crossovers to Chester Pass Road but would not support access to or from Richard Street to the south, as it is a residential street. Even if the City were to reconsider this position, installing a crossover to Richard Street would be impractical due to the site levels, as shown in the survey plan included in the Development Application drawing set. The current development design incorporates a retaining wall approximately 1.8 meters high at its highest point at the corner of Chester Pass

Road and Richard Street. As such, constructing a crossover to Richard Street is not feasible, even if permitted by the City.

During further discussions between Brooke and Russell, it was noted that eerial imagery from December 2013 (shown below) identifies three existing crossovers from the site to Chester Pass Road: one from Lot 1 and two from Lot 2. These crossovers are also depicted on the Survey Drawing included in the architectural set. We propose upgrading the middle crossover (the southernmost crossover on Lot 2) to meet current City engineering standards and replacing the asphalt with concrete to enhance durability and longevity.

AUSPAN
COMMERCIAL

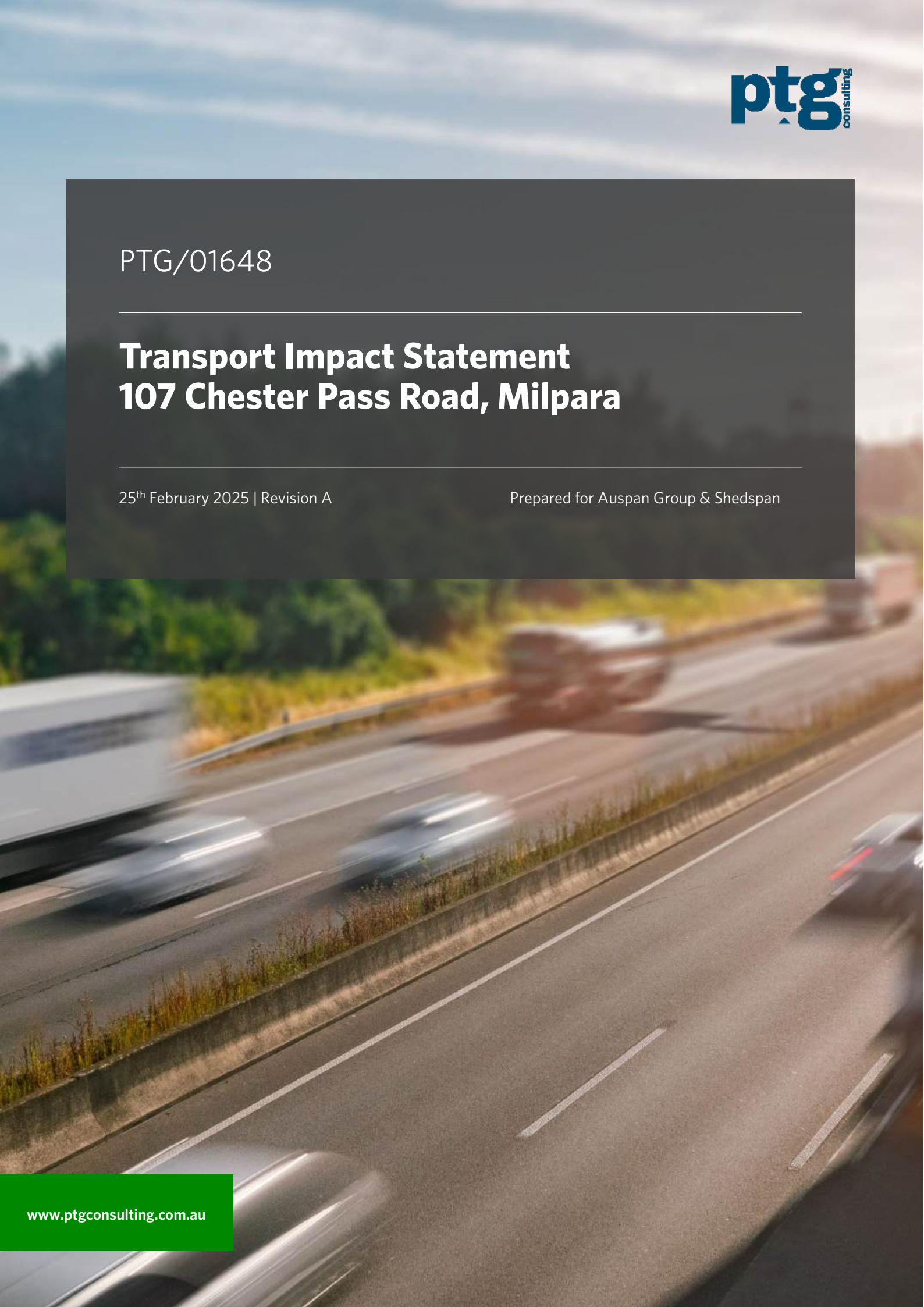
As part of the Development Application (DA) review process, we understand that the City will refer the application to Main Roads for comment. We respectfully request the opportunity to engage with Main Roads during the DA review process rather than addressing any issues through appeals or amendments after the DA has been approved. Ideally, we would like to collaborate with Main Roads earlier in the process. As noted, our client has indicated that the project may be discontinued if Main Roads maintain their position of refusing access to Chester Pass Road. Addressing this matter proactively will help avoid unnecessary delays or the potential for the development to be cancelled after significant effort has been invested.

Kind regards,

Daniel Dekker
Project Manager

AUSPAN

APPENDIX F | CONSULTANT REPORTS



PTG/01648

Transport Impact Statement
107 Chester Pass Road, Milpara

25th February 2025 | Revision A

Prepared for Auspan Group & Shedspan

www.ptgconsulting.com.au

CONTENTS

REPORT DETAILS

Unique Document Identification

Document Title	Transport Impact Statement – 107 Chester Pass Road, Milpara
Project Number	PTG/01648
Document ID	Rev A
Client	Auspan Group & Shedspan

PTG Consulting Office Details

Location	Perth, WA
Address	Level 4, 167 St Georges Terrace, Perth WA 6000
Telephone	+61 8 6188 4500
Email	andreas.wang@ptgconsulting.com.au
Web	www.ptgconsulting.com.au

Revision Details

Revision No.	Date	Comments	Prepared By	Approved By
A	25/02/2025	For issue	NC/LL	RC

1 INTRODUCTION

1.1 Background

PTG Consulting Pty Ltd (PTG) has been commissioned by Auspan Group & Shedspan ('the Client') to prepare a Traffic Impact Statement (TIS) for a proposed development located at 107 Chester Pass Road, Milpara, WA ('the Site').

This report has been prepared in accordance with the Western Australian Planning Commission (WAPC) Transport Assessment Guidelines for Developments: Volume 4 – Individual Developments (2016) and the Transport Impact Statement (TIS) Checklist is included at Appendix A.

Specifically, this report aims to assess the operations of the proposed development internally and its connections to the adjacent road network, with a focus on traffic volumes, access and accessibility.

This report also outlines the requirements and opportunities associated with traffic and transport within the development, referencing relevant Council and WAPC policies and guidelines as well as best-practice planning within Western Australia.

2 INDIVIDUAL DEVELOPMENT

2.1 Existing Land Uses

The Site, shown in **Figure 1,** is located in a commercial area in the suburb of Milpara, within the City of Albany. It is currently a vacant lot with crossovers on both Chester Pass Road and Lance Street.

The Site currently does not generate and traffic or parking demand.

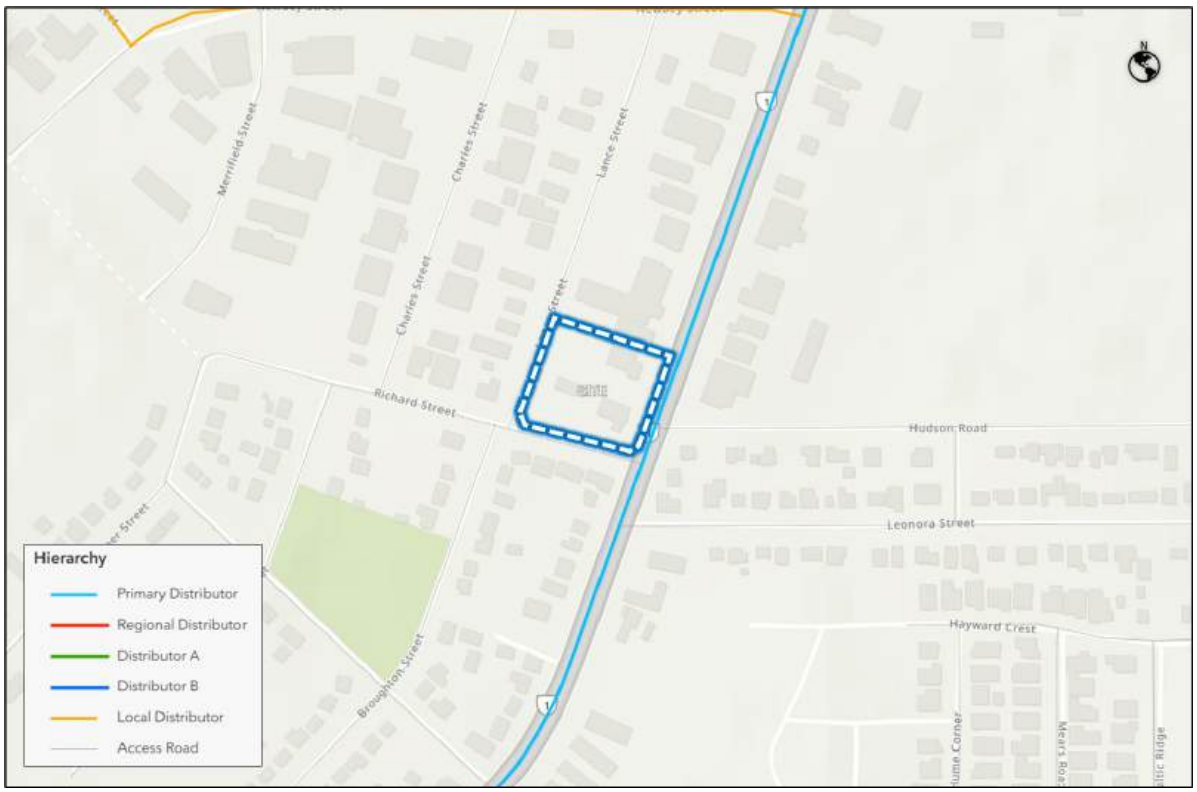
Figure 1 Existing Site Location

Source: Google Maps

2.2 Existing Road Network

Figure 2 illustrates the surrounding area's road hierarchy, while Table 1 provides a summary of the characteristics of the surrounding road network.

Figure 2 Road Hierarchy



Source: Main Roads WA Road Information Mapping

Table 1 Road Network Classification

Road Name	Hierarchy	Lanes	Footpaths	Width (m)	Speed Limit (km/h)
Chester Pass Road	Primary Distributor	4	2	3.5	60
Richard Street	Access Road	2	-	3.5	50
Lance Street	Access Road	2	-	3.7	50

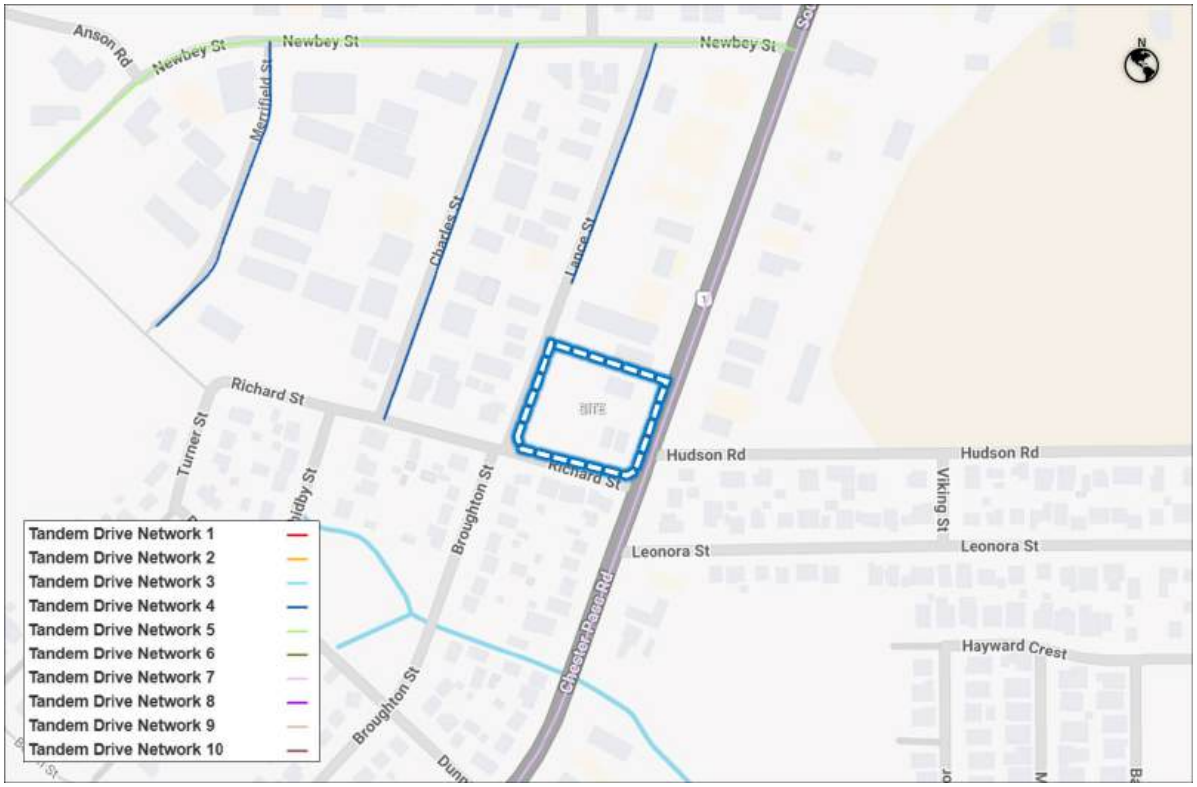
Source: Main Roads WA Road Information Mapping

2.3 Existing Restricted Access Vehicle (RAV) Network

The existing Restricted Access Vehicle (RAV) network is shown in **Figure 3**.

As described in Section 4.1, the Client will seek an extension of the existing RAV4 network on Lance Street, to extend to the proposed northern crossover on Lance Street. This will involve consultation with the City and the Main Roads WA Heavy Vehicle Services (HVS), as well as completion of a RAV Route Assessment for the proposed extension.

Figure 3 Existing RAV Network



Source: Main Roads WA HVS Network Map

2.4 Proposed Land Uses

The total lot covers approximately 7,638 m², with the proposed development—including a workshop, warehouse, office, and other facilities—having a total floor area of 3,246 m². The specific area allocation for each land use is detailed in **Table 2** and illustrated in **Figure 4**.

A high-resolution site plan is included in Appendix B.

Figure 4 Proposed Site Plan

Source: AUSPAN

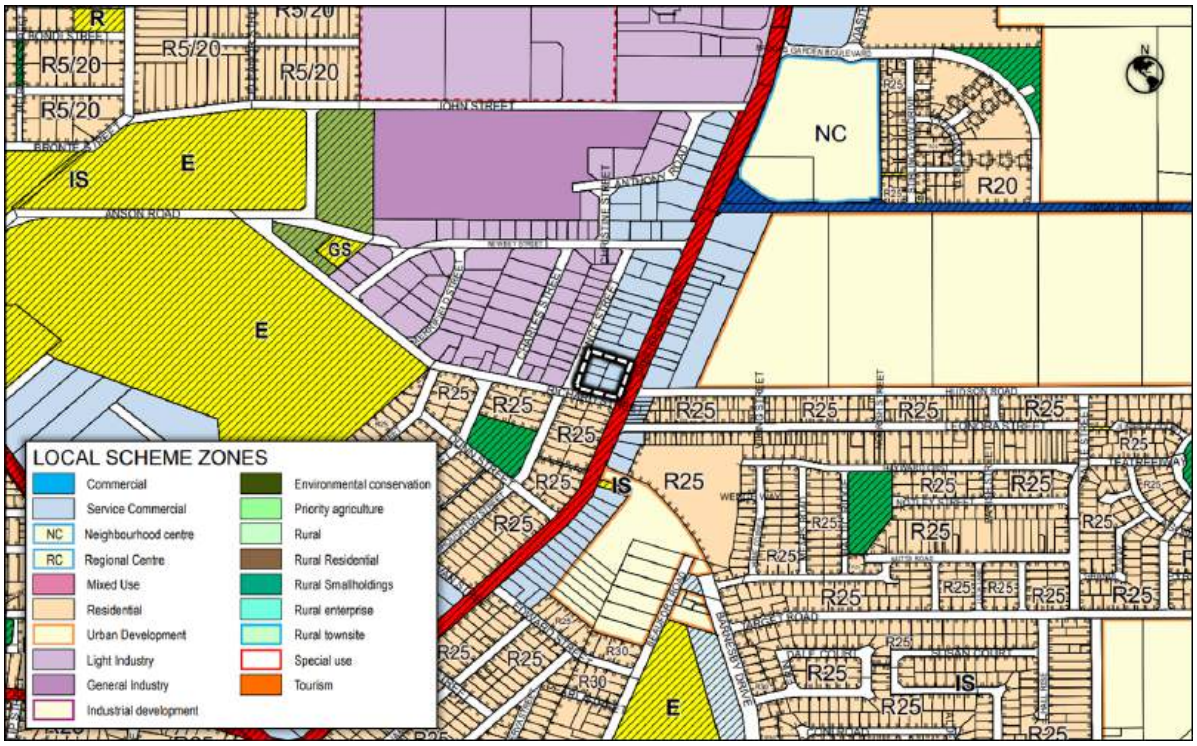
Table 2 Proposed Land Uses

Land Use	Yield
Workshop	1,512 m² (894 m² GFA)
Warehouse	1,134 m² (866 m² GFA)
Office	520 m²
Awning/Lean-to	80 m²
TOTAL	**3,246 m²**

2.5 Context with Surrounds

As shown in **Figure 5**, the Site and its immediate surroundings are classified under the 'Service Commercial' zoning designation. The area to the east is zoned for 'Urban Development' and 'Residential' uses, while the area to the west includes land reserved for 'Education' and a mix of 'Light Industry,' 'General Industry,' and 'Residential' zoning.

Figure 5 Surrounding Land Uses



Source: City of Albany Local Planning Scheme No.2

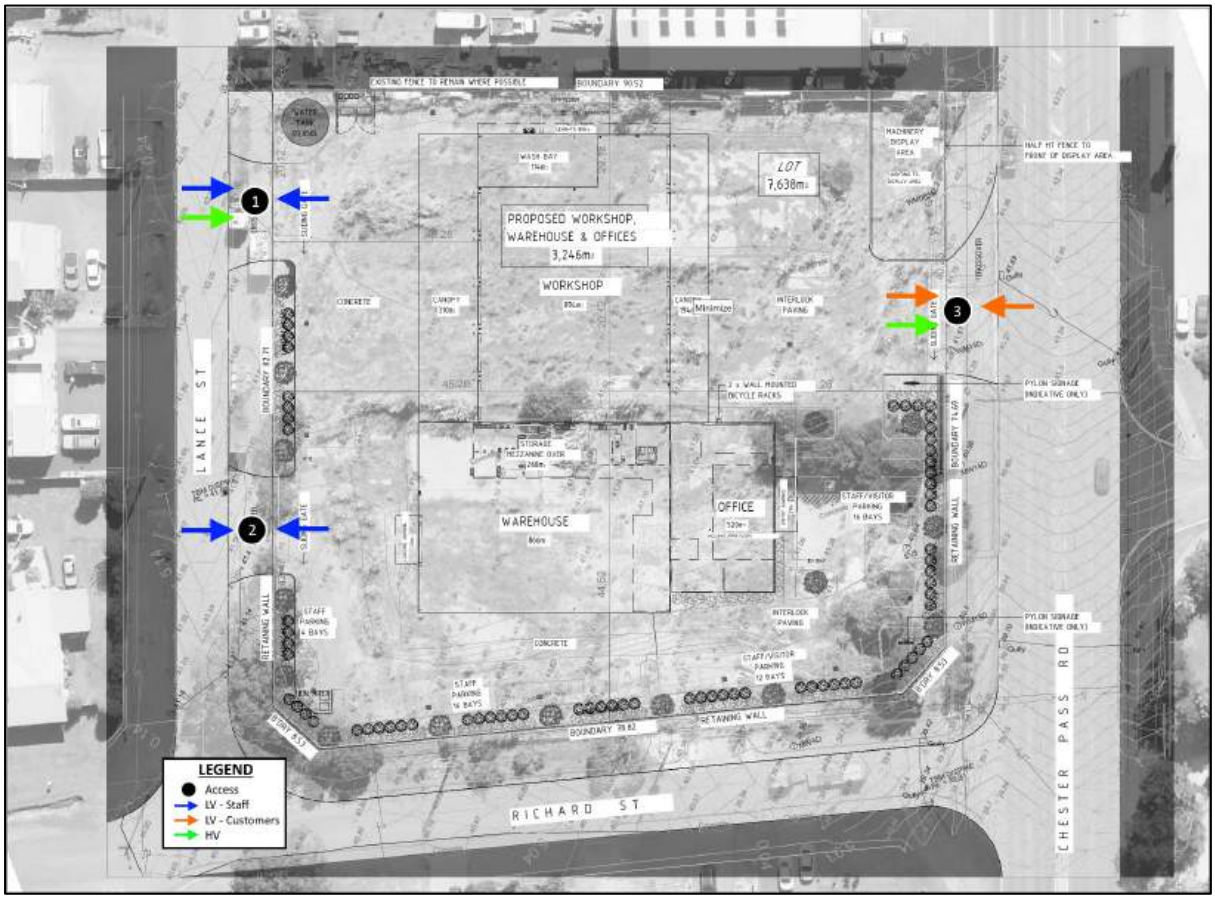
3 VEHICULAR ACCESS AND PARKING

3.1 Access Arrangements

The Site currently has two crossovers onto Chester Pass Road and one crossover onto Lance Street. The access arrangement proposed for this development includes relocating one crossover on Chester Pass Road further north (away from the intersection with Richard Street), and introducing a second crossover onto Lance Street, resulting in two access points along Lance Street, as shown in **Figure 6**.

All staff vehicles and heavy trucks, whether combination or rigid, will enter the site via Lance Street. Staff vehicles will also exit via the Lance Street crossovers. The Chester Pass Road crossover will be designated solely for heavy vehicle exit movements and customer vehicles entering and exiting the Site.

Figure 6 Proposed Access Arrangements



Source: AUSPAN

3.2 Public, Private, Disabled Parking Set Down/Pick Up

Table 3 summarises the statutory car parking requirements according to City of Albany Local Planning Scheme No. 2.

Table 3 Car Parking Requirements

Land Use	Statutory Car Parking Requirements		Car Parking Provided
Light Industrial	1 bay per 50 m² net lettable area	894m² / 50m² = 18	49 bays
Warehouse/storage	1 bay per 100 m² net lettable area	1,134m² / 100m² = 12	
Office	1 bay per 30 m² net lettable area	520m² / 30m² = 18	
TOTAL		48 bays	

A requirement of 1 bicycle parking space per 10 office car bays applies to the development.

A total of 49 car parking bays and 2 mounted bicycle racks are provided, with the following breakdown:

- 46 – Standard Parking Bays
- 2 – Accessible Parking Bays
- 1 – Electric Vehicle Parking Bay
- 2 – Mounted Bicycle Racks

4 SERVICE VEHICLES

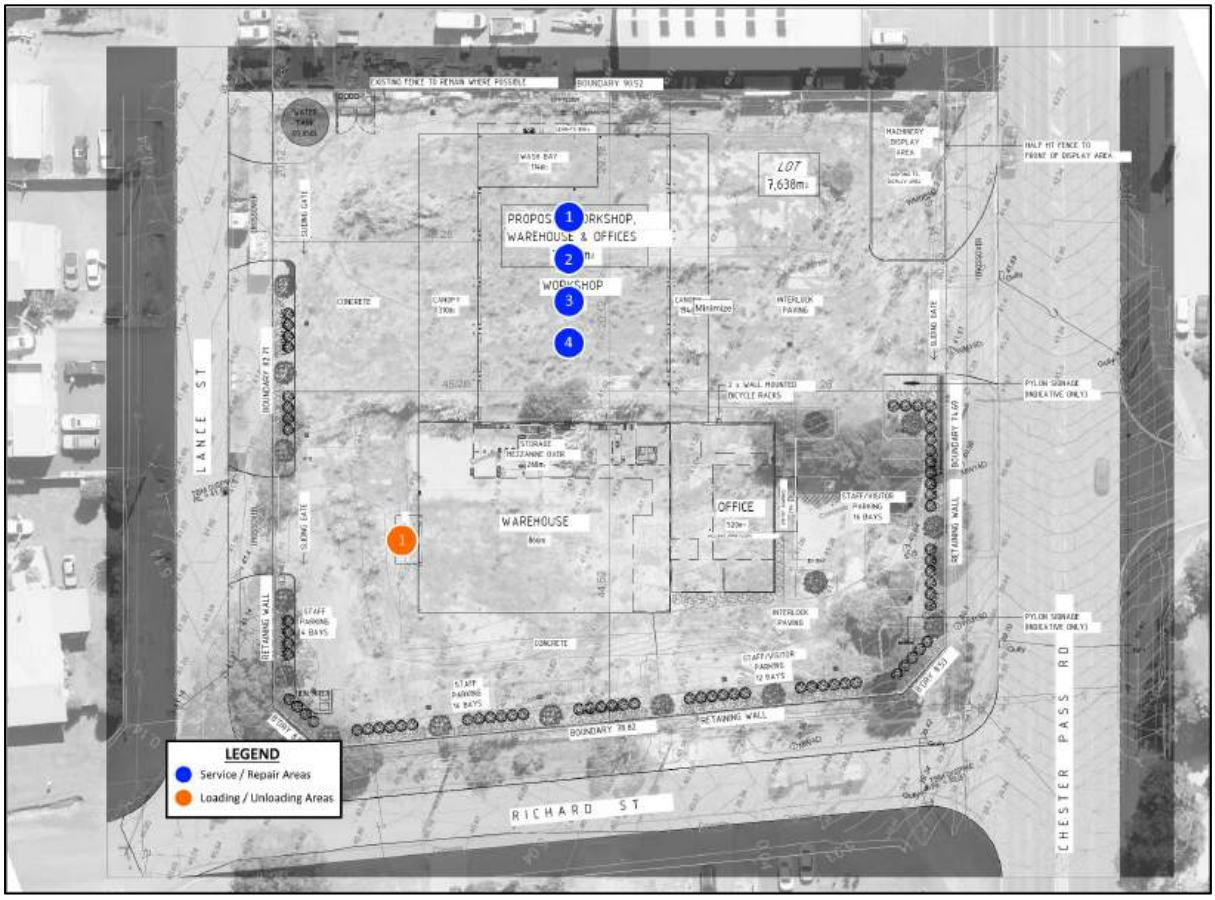
4.1 Access Arrangements

Access arrangement for service and delivery vehicles is discussed in **Section 3.1**.

4.2 Loading Facilities

Combination trucks (RAV4) will be serviced inside the workshop (blue locations 1-4 in **Figure 7**), while rigid trucks delivering will unload at the roller door of the warehouse (orange location 1 in **Figure 7**).

Figure 7 Loading Facilities



Source: AUSPAN

4.3 Swept Path Assessment

Swept path assessment was conducted to confirm the ability of the service vehicles to manoeuvre through the site and access the service areas and loading dock. The swept path analysis considers the following design vehicles:

- Combination Truck – RAV4 (MRWA design vehicle RAV2)
- Rigid Truck - 8.8m Medium Rigid Vehicle (MRV)

Refer to **Figure 8** for an illustration of the combination truck servicing inside the workshop, and to **Figure 9** for illustration of rigid truck loading/unloading at the warehouse roller door.

Figure 8 Swept Path – RAV2 Crossover 1 IN Crossover 3 OUT

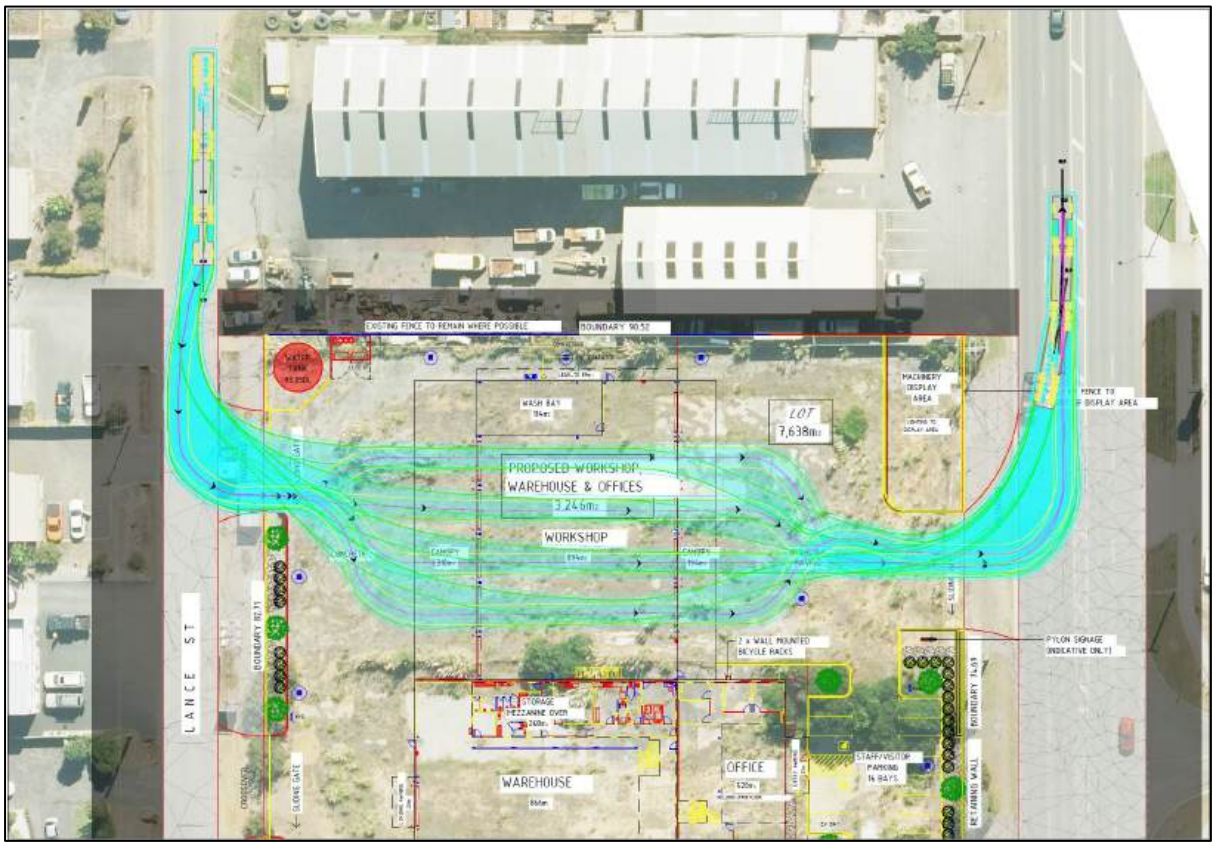


Figure 9 Swept Path – MRV Crossover 1 IN Crossover 3 OUT

The findings of the swept path analysis are as follows:

- A MRV can manoeuvre through the site and access the loading dock without issue.
- A RAV2 will slightly encroach into the opposite lane on Lance Street when turning left-in at the northern crossover. This is considered acceptable under the AS2890.2 given the local nature and low traffic volumes on the access road.

5 SERVICE VEHICLES (RESIDENTIAL)

5.1 Rubbish Collection and Emergency Vehicle Access

Not applicable, as the Site is not a residential development.

A separate Waste Management Plan (WMP) has been prepared to detail the waste collection arrangements for this Site.

6 HOURS OF OPERATION (NON-RESIDENTIAL ONLY)

The site will employ 14 staff members.

Staff working hours are 7:00 AM to 5:00 PM, Monday to Friday, and 7:00 AM to 12:00 PM on Saturdays. There is no regular work on Sundays, except in cases of urgent breakdowns.

7 TRAFFIC VOLUMES AND VEHICLE TYPES

7.1 Daily/Peak Traffic Volumes

The trip generation rates for the development were calculated based on first-principle basis with the information provided by the Client:

- Staff: 14
- Delivery: 4–8 deliveries per day
- Visitors: 2–3 visitors on-site at any time

Table 4 shows the estimated trip generation, while **Table 5** shows the directional distribution and **Table 6** shows the total traffic generated by the proposed development.

Table 4 Trip Generation Rates

Vehicle Type	AM Peak	PM Peak	Daily Trips
Employee Vehicles	14	14	28
Delivery Vehicles	8	8	16
Visitor Vehicles	8	8	40

Table 5 Trip Distribution

	AM Peak		PM Peak		Daily	
	IN	OUT	IN	OUT	IN	OUT
Employee	100%	0%	0%	100%	50%	50%
Delivery	50%	50%	50%	50%	50%	50%
Visitor	50%	50%	50%	50%	50%	50%

Table 6 Total Trip Generation

	AM Peak		PM Peak		Daily	
	IN	OUT	IN	OUT	IN	OUT
Employee	17	0	0	17	17	17
Delivery	4	4	4	4	8	8
Visitor	4	4	4	4	20	20
TOTAL	33		33		90	

8 TRAFFIC MANAGEMENT ON FRONTAGE STREETS

Vehicle entry and exit movements will only occur at the proposed crossovers to the Site (refer to **section 3.1**).

9 PUBLIC TRANSPORT ACCESS

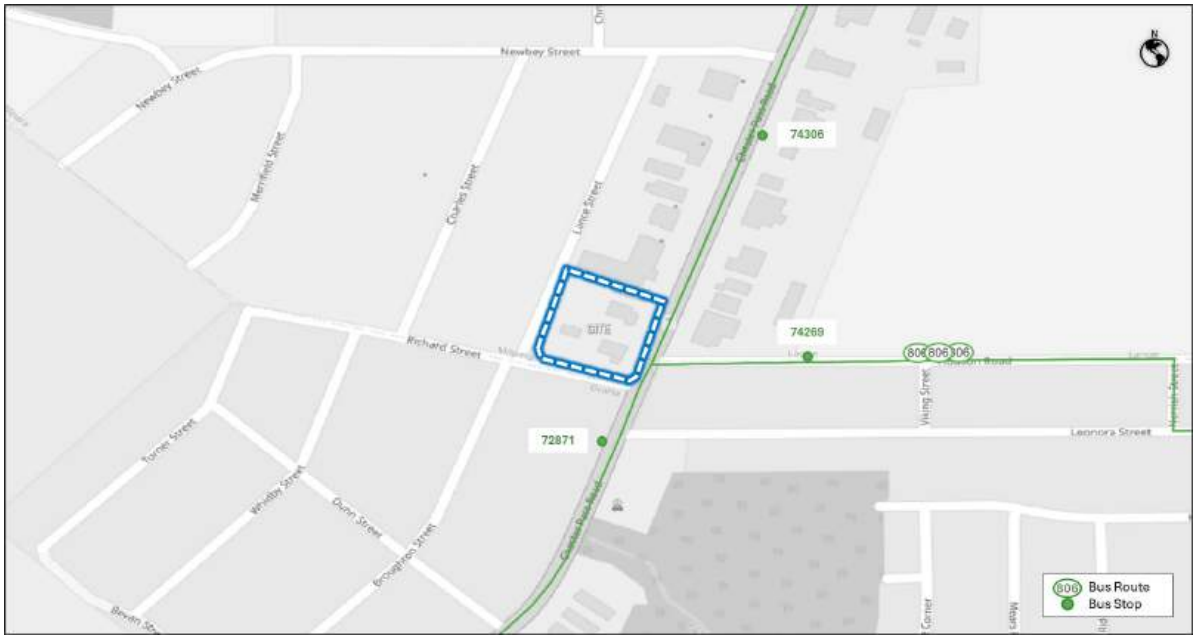
9.1 Nearest Bus/Train Routes

The service frequency is summarised in **Table 7,** while **Figure 10** illustrates Bus Route 806, which services the Site with a circular route to Albany, passing through Yakamia and Milpara.

Table 7 Bus Route Description and Frequency

Bus Route	Route Description	Weekday Frequency	Saturday Frequency	Sunday and Public Holiday Frequency
806	Circular Service to Albany (via Yakamia and Milpara)	Every 1 hour	Every 2-3 hours	-

Figure 10 Bus Routes and Bus Stops



Source: Transperth

9.2 Nearest Bus Stops/Train Stations

The nearest bus stops to the Site are shown in **Figure 10** and are described as follows:

- Stop ID: 72871 – Chester Pass Rd Before Leonora St
- Stop ID: 74269 - Hudson Rd After Chester Pass Rd
- Stop ID: 74306 – Chester Pass Rd Before Hudson Road

9.3 Pedestrian/Cycle Links to Bus Stops/Train Stations

Currently, there is a lack of official pedestrian/cycle network in the area surrounding the Site as shown in **Figure 11**. As a result, connectivity to bus stops and public transportation in general is considered poor. However, there is 1.5m – 2m wide pedestrian path along the eastern side of Chester Pass Road that can be used to access bus stops 72871 and 74306.

10 CYCLE/PEDESTRIAN ACCESS/FACILITIES

10.1 Existing Cycle/Pedestrian Facilities within the Development and Surroundings

As shown in **Figure 11**, there are pedestrian paths on the eastern side of Chester Pass Road, as well as one the western side, south of Richard Street.

There are no dedicated cycling facilities.

Figure 11 Existing Pedestrian Paths along Chester Pass Road

Source: OpenStreetMap

10.2 Proposed Cycle/Pedestrian Facilities within the Development and Surroundings

According to the City of Albany, the cycling and walking network is managed by the City and spans approximately 180 km, with continuous annual expansion. In the 2023/24 financial year, new paths will be constructed in:

- Maley Place & Bardley Road (Spencer Park)
- Brunswick Road to Apex Drive link (Mount Clarence)

Work is currently underway to develop a new City of Albany Bike Plan, which will address both current and future cycling needs.

11 SITE SPECIFIC ISSUES

No site-specific issues have been identified.

12 SAFETY ISSUES

12.1 Issues/Remedial Measures

Crash data was extracted from Main Roads Crash Map application for the period between 1st January 2019 to 31st December 2023. The search covered the following roads:

- H008 Chester Pass Road/South Coast Highway (SLK 1.05 to SLK 1.45)
- 3020134 Lance Street (SLK 0 to SLK 0.36)
- 3021090 Richard Street (SLK 0 to SLK 0.11)

The crash locations and severities are shown visually in **Figure 12**, while detailed summaries are provided in **Table 8** to **Table 10**.

Table 8 H008 Chester Pass Road/South Coast Highway Midblock Crashes

Type of Crash (RUM Code)	Fatal	Hospital	Medical	Major Property Damage	Minor Property Damage	Total Crashes
Rear End	-	-	-	1	-	1
Right Angle	-	-	-	2	1	3
Sideswipe Same Direction	-	-	-	1	-	1
Total	-	-	-	4	1	5

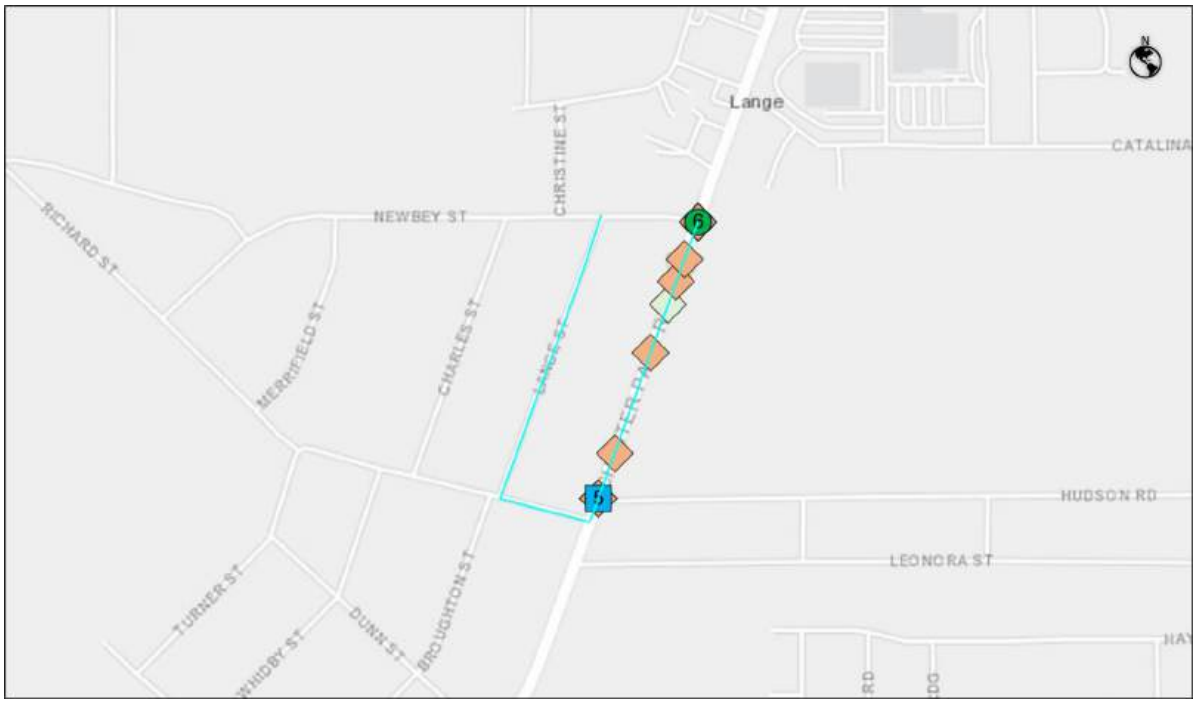
Table 9 Chester Pass Road/Newbey Street Intersection Crashes

Type of Crash (RUM Code)	Fatal	Hospital	Medical	Major Property Damage	Minor Property Damage	Total Crashes
Right Angle		1	2	1	1	5
Total		1	2	1	1	5

Table 10 Chester Pass Road/Richard Street Intersection Crashes

Type of Crash (RUM Code)	Fatal	Hospital	Medical	Major Property Damage	Minor Property Damage	Total Crashes
Right Angle			1	1		2
Right Turn Thru			1			1
Rear End				3		3
Total			2	4		6

Figure 12 Crash Locations



Overall, the number of crashes that occurred within the surrounding area appears to be low for the last five years.

13 CONCLUSION

This report has been prepared in accordance with the Western Australian Planning Commission (WAPC) Transport Assessment Guidelines for Developments: Volume 4 – Individual Developments (2016); the checklist is included in Appendix A.

The following conclusions can be drawn from this TIS:

- The proposed development at 107 Chester Pass Road, Milpara, WA includes the construction of a workshop, warehouse, office, and other facilities, totaling 3,246 m² of floor space.
- The site is currently vacant and located in a commercial area within the City of Albany, classified under the 'Service Commercial' zoning designation.
- The development will generate manageable traffic volumes, with a total of 33 vehicles during the AM peak, 33 vehicles during the PM peak, and 90 vehicles daily.
- All staff vehicles and trucks, whether combination or rigid, will enter the site via Lance Street. Staff vehicles will also exit through the Lance Street crossovers. The Chester Pass Road crossover will be designated solely for truck exits and customer light vehicles (LVs) entering and exiting the premises.
- The proposed Parking provisions of 49 car parking bays, including accessible parking and an electric vehicle parking bay, as well as 2 bicycle racks, meet the statutory requirements in accordance with the City's Local Planning Scheme No. 2.
- Public transport options in the area are limited, and there is a lack of official pedestrian and cycle infrastructure surrounding the site, which impacts connectivity to bus stops and other public transport links.
- The safety record in the surrounding area shows a low number of crashes in the last five years, indicating a negligible impact on road safety.

Appendix A

WAPC CHECKLIST INDIVIDUAL DEVELOPMENTS - TRANSPORT IMPACT STATEMENT

APPENDIX A

Item	Status	Comments/Proposal
Proposed development	**Section 2**	
existing land uses	Section 2.1	
proposed land use	Section 2.2	
context with surrounds	Section 2.3	
Vehicular access and parking	**Section 3**	
access arrangements	Section 3.1	
public, private, disabled parking set down/pick up	Section 3.2	
Service vehicles (non-residential only)	**Section 4**	
access arrangements	Section 4.1	
on/off-site loading facilities	Section 4.2	
Service vehicles (residential)	**Section 5**	
rubbish collection and emergency vehicle access	Section 5.1	
Hours of operation (non-residential only)	**Section 6**	
Traffic volumes	**Section 7**	
daily or peak traffic volumes	Section 7.1	
type of vehicles (eg cars, trucks)	Section 7.2	
Traffic management on frontage streets	**Section 8**	
Public transport access	**Section 9**	
nearest bus/train routes	Section 9.1	
nearest bus stops/train stations	Section 9.2	
pedestrian/cycle links to bus stops/ train station	Section 9.3	
Pedestrian access/facilities	**Section 10**	
existing pedestrian facilities within the development (if any)	Section 10.1	
proposed pedestrian facilities within development	Section 10.2	
existing pedestrian facilities on surrounding roads	Section 10.1	
proposals to improve pedestrian access	Section 10.2	
Cycle access/facilities	**Section 10**	
existing cycle facilities within the development (if any)	Section 10.1	
proposed cycle facilities within development	Section 10.2	
existing cycle facilities on surrounding roads	Section 10.1	
proposals to improve cycle access	Section 10.2	
Site specific issues	**Section 11**	
Safety issues	**Section 12**	
identify issues	Section 12.1	
remedial measures	Section 12.1	

Appendix B

Site Plans


EXISTING FENCE TO REMAIN WHERE POSSIBLE
BOUNDARY 90.52
WATER TANK 93,850L
COMPRESSOR
OIL SEPARATOR
LEAN-TO 39m2
WASH BAY 114m2
LOT 7,638m2
MACHINERY DISPLAY AREA
LIGHTING TO DISPLAY AREA
HALF HT FENCE TO FRONT OF DISPLAY AREA
PROPOSED WORKSHOP, WAREHOUSE & OFFICES 3,246m2
WORKSHOP 894m2
CANOPY 310m2
CANOPY 194m2
CONCRETE
INTERLOCK PAVING
SLIDING GATE
CROSSOVER
BOUNDARY 82.71
LANCE ST
2 x WALL MOUNTED BICYCLE RACKS
PYLON SIGNAGE (INDICATIVE ONLY)
BOUNDARY 74.69
STORAGE MEZZANINE OVER 268m2
WAREHOUSE 866m
LOADING AWNING
OFFICE 520m2
STAFF/VISITOR PARKING 16 BAYS
EV BAY
RETAINING WALL
STAFF PARKING 4 BAYS
TBM D/SPIKE RL = 41.69
INTERLOCK PAVING
STAFF/VISITOR PARKING 12 BAYS
STAFF PARKING 16 BAYS
BIN AREA
B'DRY 8.53
BOUNDARY 78.82
RETAINING WALL
B'DRY 8.53
TBM D/SPIKE RL = 39.37
RICHARD ST
CHESTER PASS RD

www.ptgconsulting.com.au

AUSPAN GROUP
CNR CHESTER PASS ROAD & RICHARD STREET, ALBANY

ENVIRONMENTAL ACOUSTIC ASSESSMENT

FEBRUARY 2025

OUR REFERENCE: 34217-1-25080

Rochdale Holdings Pty Ltd A.B.N. 85 009 049 067 trading as:
HERRING STORER ACOUSTICS
P.O. Box 219, Como, W.A. 6952
(08) 9367 6200
hsa@hsacoustics.com.au

DOCUMENT CONTROL PAGE

ENVIRONMENTAL ACOUSTIC ASSESSMENT

ALBANY

Job No: 25080

Document Reference : 34217-1-25080

FOR

AUSPAN GROUP

DOCUMENT INFORMATION			
Author:	George Watts	**Checked By:**	Paul Daly
Date of Issue:	27 February 2025		

REVISION HISTORY

Revision	Description	Date	Author	Checked

DOCUMENT DISTRIBUTION

Copy No.	Version No.	Destination	Hard Copy	Electronic Copy
1	1	Auspan Group Attn : Daniel Dekker Email : daniel.d@auspangroup.com.au		✓

CONTENTS

APPENDICIES

1. INTRODUCTION

Herring Storer Acoustics were commissioned by Auspan Group to undertake an acoustic assessment of noise emissions associated with the proposed industrial facility proposed to be developed at the corner of Chester Pass Road and Richard Street, Albany.

This report assesses noise emissions from the premises with regards to compliance with the requirements of the *Environmental Protection (Noise) Regulations 1997*. It is understood that the development consists of a mobile equipment facility, with a workshop for the maintenance of the equipment and an area for washing of plant.

For reference, the plans for the proposed development are attached in Appendix A.

2. SUMMARY

The closest neighbouring residences to this development have been identified to the west, south and south-east of the proposed development.

Noise levels associated with the noisiest activities on site has been assessed against the criteria specified by the Environmental Protection (Noise) Regulations 1997 for all times of day/night.

Restricting the proposed development to operating during the day/evening period only (and Sunday / Public Holiday day period), ensures compliance with the relevant Assigned Noise Levels at all times.

It is noted that mechanical services associated with the proposed building(s) have not been included in this assessment, as they have not been designed at this early stage of the development. It is considered appropriate that they be the subject of an approval condition, however, it is noted that given the distance between the proposed development and the large influencing factor at the nearest noise sensitive premises, compliance with the Regulations is not considered to be onerous at all.

3. CRITERIA

The allowable noise level for noise sensitive premises in the vicinity of the proposed Facility site is prescribed by the *Environmental Protection (Noise) Regulations 1997*. Regulations 7 and 8 stipulate maximum allowable external noise levels or assigned noise levels that can be received at a premise from another premises. For residential premises, this noise level is determined by the calculation of an influencing factor, which is then added to the base levels shown below. The influencing factor is calculated for the usage of land within two circles, having radii of 100m and 450m from the premises of concern. The base noise levels for residential premises and the assigned noise levels for industrial premises are listed in Table 3.1.

TABLE 3.1 - BASELINE ASSIGNED OUTDOOR NOISE LEVEL

Premises Receiving Noise	Time of Day	Assigned Level (dB)		
		L_{A10}	L_{A1}	L_{Amax}
Noise sensitive premises: highly sensitive area	0700 - 1900 hours Monday to Saturday (Day)	45 + IF	55 + IF	65 + IF
	0900 - 1900 hours Sunday and Public Holidays (Sunday / Public Holiday Day)	40 + IF	50 + IF	65 + IF
	1900 - 2200 hours all days (Evening)	40 + IF	50 + IF	55 + IF
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays (Night)	35 + IF	45 + IF	55 + IF
Industrial Premises	All Hours	65	80	90

Note: L_{A10} is the noise level exceeded for 10% of the time.
L_{A1} is the noise level exceeded for 1% of the time.
L_{Amax} is the maximum noise level.
IF is the influencing factor.

It is a requirement that received noise be free of annoying characteristics (tonality, modulation and impulsiveness), defined below as per Regulation 9.

"impulsiveness" means a variation in the emission of a noise where the difference between L_{Apeak} and $L_{Amax(Slow)}$ is more than 15 dB when determined for a single representative event;

"modulation" means a variation in the emission of noise that –

(a) is more than 3 dB L_{AFast} or is more than 3 dB L_{AFast} in any one-third octave band;

(b) is present for more at least 10% of the representative assessment period; and

(c) is regular, cyclic and audible;

"tonality" means the presence in the noise emission of tonal characteristics where the difference between –

(a) the A-weighted sound pressure level in any one-third octave band; and

(b) the arithmetic average of the A-weighted sound pressure levels in the 2 adjacent one-third octave bands,

is greater than 3 dB when the sound pressure levels are determined as $L_{Aeq,T}$ levels where the time period T is greater than 10% of the representative assessment period, or greater than 8 dB at any time when the sound pressure levels are determined as L_{ASlow} levels.

Where the noise emission is not music, if the above characteristics exist and cannot be practicably removed, then any measured level is adjusted according to Table 3.2 below.

TABLE 3.2 - ADJUSTMENTS TO MEASURED LEVELS

Where **tonality** is present	Where **modulation** is present	Where **impulsiveness** is present
+5 dB(A)	+5 dB(A)	+10 dB(A)

Note: These adjustments are cumulative to a maximum of 15 dB.

For this development, the closest residential premises of concern are located, as shown on Figure 3.1 below.

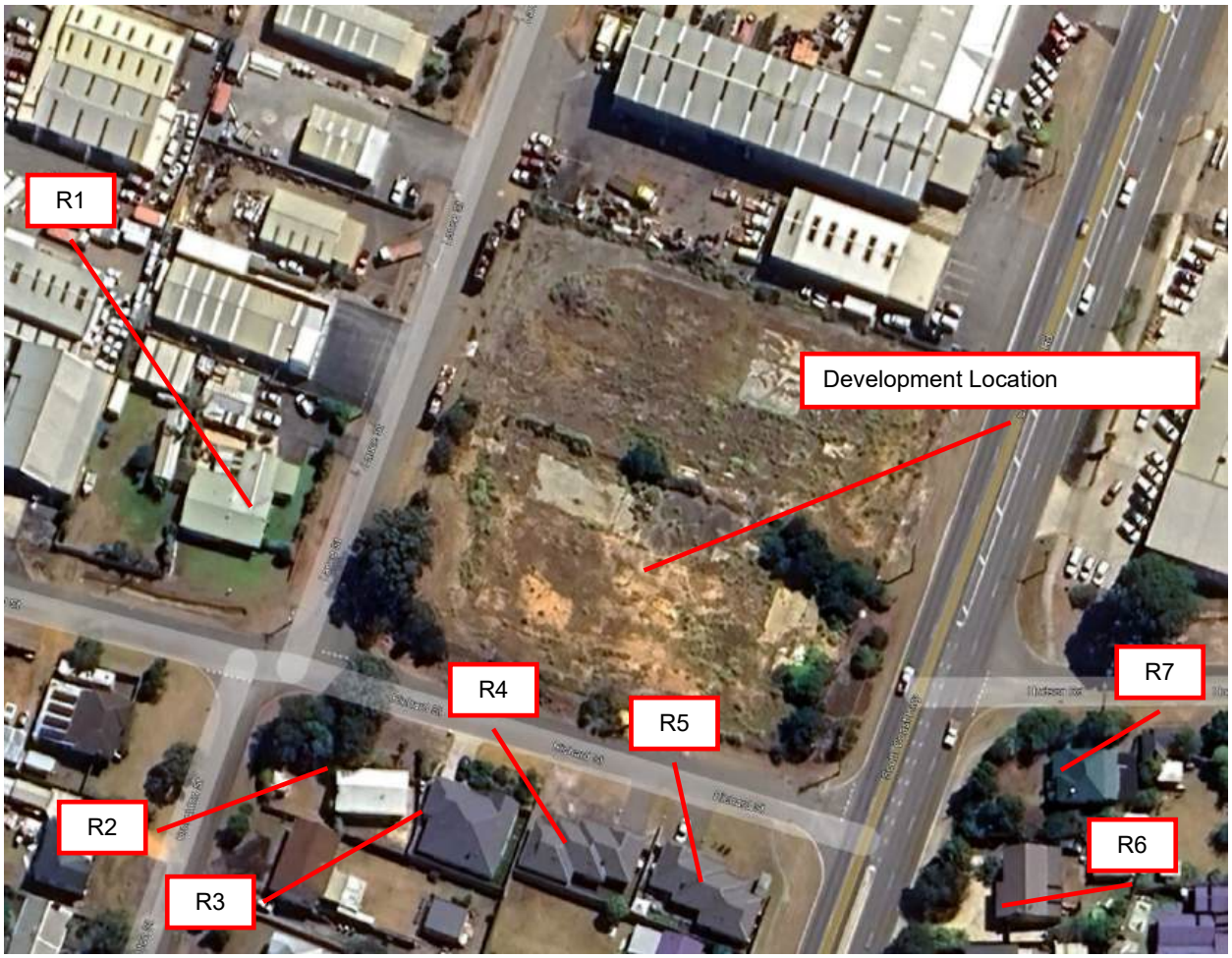


FIGURE 3.1 – AREA AROUND PROPOSED DEVELOPMENT

The influencing factor at the nearest residential locations to the south are summarised in Table 3.3.

TABLE 3.3 – INFLUENCING FACTORS

Influencing Factor Parameter	Influencing Factor (dB)
	Southern Premises
Secondary Road within inner circle	+ 2
Industrial Premises within the inner circle	+ 4
Industrial Premises within the outer circle	+ 4
TOTAL IF	+ 12

Based on the above, the assigned noise levels are as listed in Tables 3.4

TABLE 3.4 - ASSIGNED OUTDOOR NOISE LEVEL

Premises Receiving Noise	Time of Day	Assigned Level (dB)		
		$L_{A\ 10}$	$L_{A\ 1}$	$L_{A\ max}$
Noise sensitive premises : Highly sensitive area	0700 - 1900 hours Monday to Saturday	57	67	77
	0900 - 1900 hours Sunday and Public Holidays	52	62	77
	1900 - 2200 hours all days	52	62	67
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays	47	57	67

Note: L_{A10} is the noise level exceeded for 10% of the time.
L_{A1} is the noise level exceeded for 1% of the time.
L_{Amax} is the maximum noise level.

4. MODELLING

Modelling of the noise propagation from the proposed development was carried out using an environmental noise modelling computer program, "SoundPlan". Calculations were carried out using the EPA weather conditions as stated in the Environmental Protection Authority's *"Draft Guidance for Assessment of Environmental Factors No.8 - Environmental Noise"*.

Noise emissions from the development, include:

- Wash Bay;
- Workshop Noise Levels
- Truck Movements

Noise level emissions associated with the proposed workshop on the site have included rattle gun noises as being representative of the noisiest activity within the workshop, and all roller doors have been assumed to be open.

High pressure washing hoses has been utilised as the noise source within the wash bay area.

Truck movements, following the swept path provided, has been utilised within the noise model for trucks traversing on site.

The calculations were based in the sound power levels listed in Table 4.1.

TABLE 4.1 – GENERAL SOUND POWER LEVELS

Item of Equipment	Sound Power Level, (dB(A))
Rattle Gun	101
High Pressure Water Hoses	94
Trucks moving	102

The above noise sources need to comply with the following assigned noise levels :

L_{A10} - Rattle Guns and High Pressure Water Cleaners.
L_{A1} - Truck Movements.

5. RESULTS

Calculations were undertaken to all the residences noted on Figure 3.1. The resultant noise levels are listed in Tables 5.1, 5.2 and 5.3. Noise contour plots are contained in Appendix B for information purposes.

TABLE 5.1 – WASH BAY CALCULATED NOISE LEVELS

Location	Calculated Noise Levels (L_{A10}, dB)
R1	36
R2	<25
R3	<25
R4	<25
R5	<25
R6	<25
R7	<25

TABLE 5.2 – WORKSHOP CALCULATED NOISE LEVELS

Location	Calculated Noise Levels (L_{A10}, dB)
R1	44
R2	35
R3	26
R4	24
R5	37
R6	40
R7	44

TABLE 5.3 – TRUCK MOVEMENTS CALCULATED NOISE LEVELS

Location	Calculated Noise Levels (L_{A1}, dB)
R1	56
R2	58
R3	58
R4	58
R5	58
R6	53
R7	54

6. ASSESSMENT

The duration that noises are present dictates which parameter is the appropriate Assigned Noise Level for comparison purposes. Additionally, the duration a noise is present also impacts the applicable adjustments to the calculated noise levels.

Truck washing and workshop noise levels, whilst unlikely at the noise levels calculated, may exhibit tonal characteristics, hence a + 5 dB adjustment is applicable to the calculated noise levels.

The duration of the truck movements throughout the proposed facility is unlikely to be present for sufficient duration to be considered tonal, hence, no adjustment is applicable.

Therefore Tables 6.1 to 6.3 summarises the noise levels and compares them against the relevant Assigned Noise Level.

TABLE 6.1 – WASH BAY NOISE

Receiver Location	Assessable Noise Level, dB(A)	Assigned Noise Level, L_{A10} dB		Exceedance to Assigned Noise Level
		Time of Day	L_{A10} dB	
R1	41	Day	57	Complies
		Sundays	52	Complies
		Evening	52	Complies
		Night	47	Complies
R2	-	Day	57	Complies
		Sundays	52	Complies
		Evening	52	Complies
		Night	47	Complies
R3	-	Day	57	Complies
		Sundays	52	Complies
		Evening	52	Complies
		Night	47	Complies
R4	-	Day	57	Complies
		Sundays	52	Complies
		Evening	52	Complies
		Night	47	Complies
R5	-	Day	57	Complies
		Sundays	52	Complies
		Evening	52	Complies
		Night	47	Complies
R6	-	Day	57	Complies
		Sundays	52	Complies
		Evening	52	Complies
		Night	47	Complies
R7	-	Day	57	Complies
		Sundays	52	Complies
		Evening	52	Complies
		Night	47	Complies

TABLE 6.2 – WORKSHOP NOISE

Receiver Location	Assessable Noise Level, dB(A)	Assigned Noise Level, L_{A10} dB		Exceedance to Assigned Noise Level
		Time of Day	L_{A10} dB	
R1	49	Day	57	Complies
		Sundays	52	Complies
		Evening	52	Complies
		Night	47	+ 2 dB
R2	39	Day	57	Complies
		Sundays	52	Complies
		Evening	52	Complies
		Night	47	Complies
R3	31	Day	57	Complies
		Sundays	52	Complies
		Evening	52	Complies
		Night	47	Complies
R4	29	Day	57	Complies
		Sundays	52	Complies
		Evening	52	Complies
		Night	47	Complies
R5	42	Day	57	Complies
		Sundays	52	Complies
		Evening	52	Complies
		Night	47	Complies
R6	45	Day	57	Complies
		Sundays	52	Complies
		Evening	52	Complies
		Night	47	Complies
R7	49	Day	57	Complies
		Sundays	52	Complies
		Evening	52	Complies
		Night	47	+ 2 dB

TABLE 6.2 –TRUCK MOVEMENTS

Receiver Location	Assessable Noise Level, dB(A)	Assigned Noise Level, L_{A1} dB		Exceedance to Assigned Noise Level
		Time of Day	L_{A1} dB	
R1	56	Day	67	Complies
		Sundays	62	Complies
		Evening	62	Complies
		Night	57	Complies
R2	58	Day	67	Complies
		Sundays	62	Complies
		Evening	62	Complies
		Night	57	+ 1 dB
R3	58	Day	67	Complies
		Sundays	62	Complies
		Evening	62	Complies
		Night	57	+ 1 dB
R4	58	Day	67	Complies
		Sundays	62	Complies
		Evening	62	Complies
		Night	57	+ 1 dB
R5	58	Day	67	Complies
		Sundays	62	Complies
		Evening	62	Complies
		Night	57	+ 1 dB
R6	53	Day	67	Complies
		Sundays	62	Complies
		Evening	62	Complies
		Night	57	Complies
R7	54	Day	67	Complies
		Sundays	62	Complies
		Evening	62	Complies
		Night	57	Complies

The above results indicate that noise emissions associated with the proposed development have been found to be compliant with the relevant Assigned Noise Levels at all times with the exception of the night period.

Hence, if the workshop is restricted to the day/evening (and Sunday day/ public holiday) time periods, the proposed development is compliant with the Assigned Noise Levels stipulated by the Environmental Protection (Noise) Regulations 1997.

APPENDIX A

PLANS

DEVELOPMENT SUMMARY

CITY OF ALBANY
LOCAL PLANNING SCHEME No. 2

ADDRESS	CNR OF CHESTER PASS RD & RICHARD ST ALBANY, WA
ZONING	HIGHWAY COMMERCIAL
SITE AREA	7,638m² (AMALGAMATED)
LAND USE	WORKSHOP, WAREHOUSE & OFFICES

BUSHFIRE ZONE
BUILDING IS NOT WITHIN A BUSHFIRE PRONE AREA

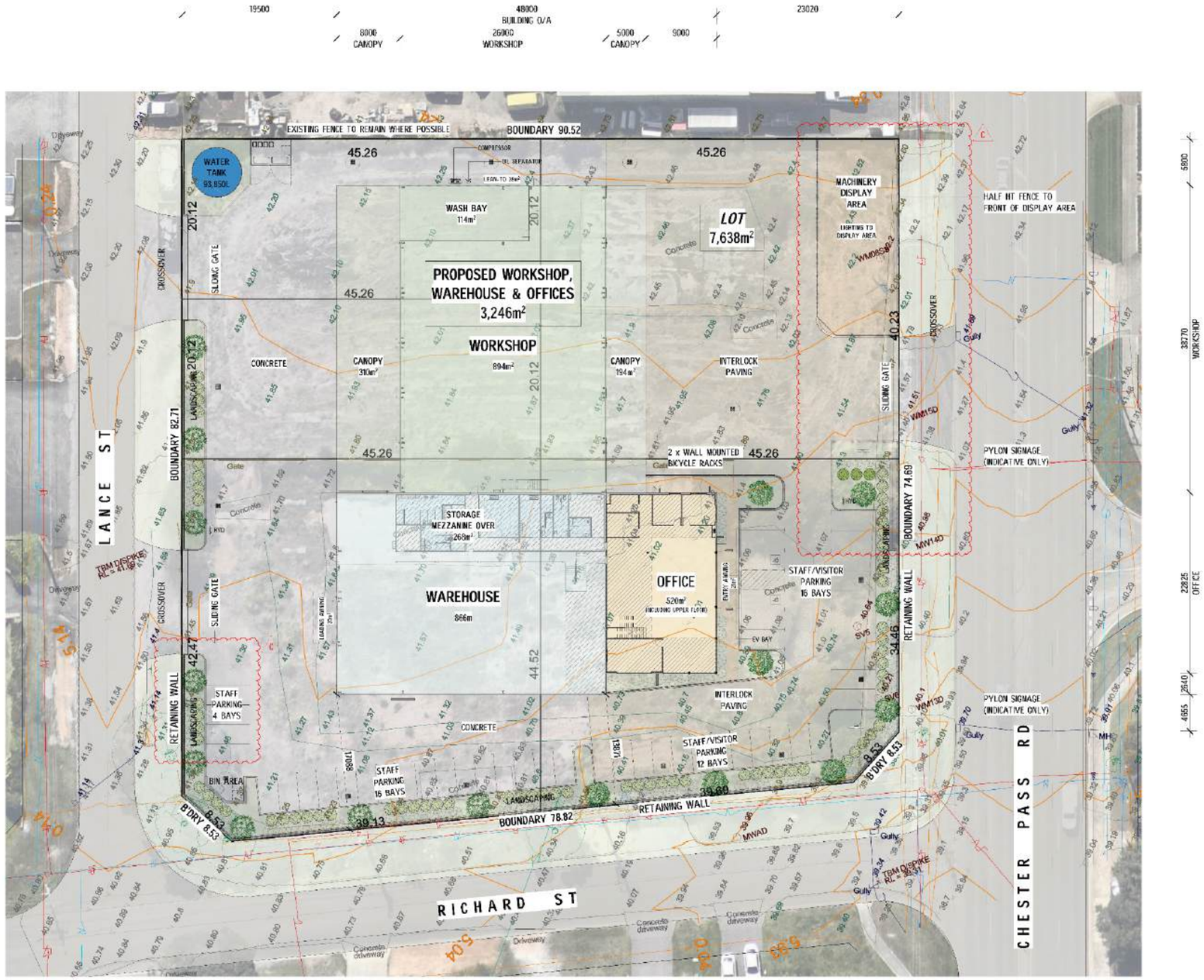
FLOOR AREAS

WORKSHOP	894m²
WASH BAY	114m²
WAREHOUSE	866m²
MEZZANINE	268m²
OFFICE GROUND FLOOR	320m²
OFFICE UPPER FLOOR	200m²
CANOPIES	504m²
LOADING AWNING	20m²
ENTRY AWNING	21m²
LEAN-TO	39m²
TOTAL	3,246m²

SETBACKS

PRIMARY STREET	7.5m
REAR & SIDE	NIL

EXISTING SERVICES
CONNECTIONS TO BE CONFIRMED:
- WATER SUPPLY
- FIRE SERVIUCE
- SEWER
- POWER
- NBN & COMMS



SITE PLAN

1 : 250

3000 AWN / 34000 WAREHOUSE / 14000 OFFICE / 3000 AWN
19500 / 48000 BUILDING O/A / 23020

REV	AMENDMENT	BY
22/05/2025	C CHESTER PASS RD CROSSOVER RELOCATED TO SUIT EXISTING MACHINERY DISPLAY AREA EXPANDED	ER
26/12/2024	B 50kLWELL RELOCATED TO SUIT UPDATED CONSULTANT STORMWATER DESIGN. SURVEY ADDED FOR CLARITY	ER
06/12/2024	A ISSUED FOR DA	ER

AUSPAN

CLIENT: CJD EQUIPMENT
SITE ADDRESS: CNR CHESTER PASS RD & RICHARD ST ALBANY, WA 6330

ARCHITECTURAL DRAWINGS
PROJECT: PROPOSED WORKSHOP, WAREHOUSE & OFFICE
DRAWING TITLE: SITE - PLAN

SCALE: 1 : 250
SHEET SIZE: A1
DATE: 29/12/2024
DRAWN: ER
ISSUE: ER
CHECK: DO

PROJECT NUMBER: TK3026
STAGE: DA
REVISION: C
DRAWING NUMBER: A101

APPENDIX B

NOISE CONTOUR PLOTS

Customer:
Auspan
Project: CJD Equipment Albany Workshop
Project-No. 25080

Map
1

Workshop Noises - GNM
Result number 6
Calculation in 2 m above ground

Project engineer: George Watts
Created: 26/02/2025
Processed with SoundPLAN 9.1, Update 25/02/2025

Levels LA10
in dB(A)

- = 25
- = 30
- = 35
- = 40
- = 45
- = 50
- = 55
- = 60
- = 65

N

0 5 10 20 30 40 m

HERRING STORER ACOUSTICS

SoundPLANnoise 9.1 C:\DATA\ActiveProjectsGW\25080 - CJD AUspan Albany\CJD Albany\Washpad Contour Plot.sgs

Customer:
Auspan
Project: CJD Equipment Albany Workshop
Project-No. 25080

AUSPAN

Map
2

Wash Pad - GNNM
Result number 5
Calculation in 2 m above ground

Project engineer: George Watts
Created:
Processed with SoundPLAN 9.1, Update 25/02/2025

Levels LA10
in dB(A)

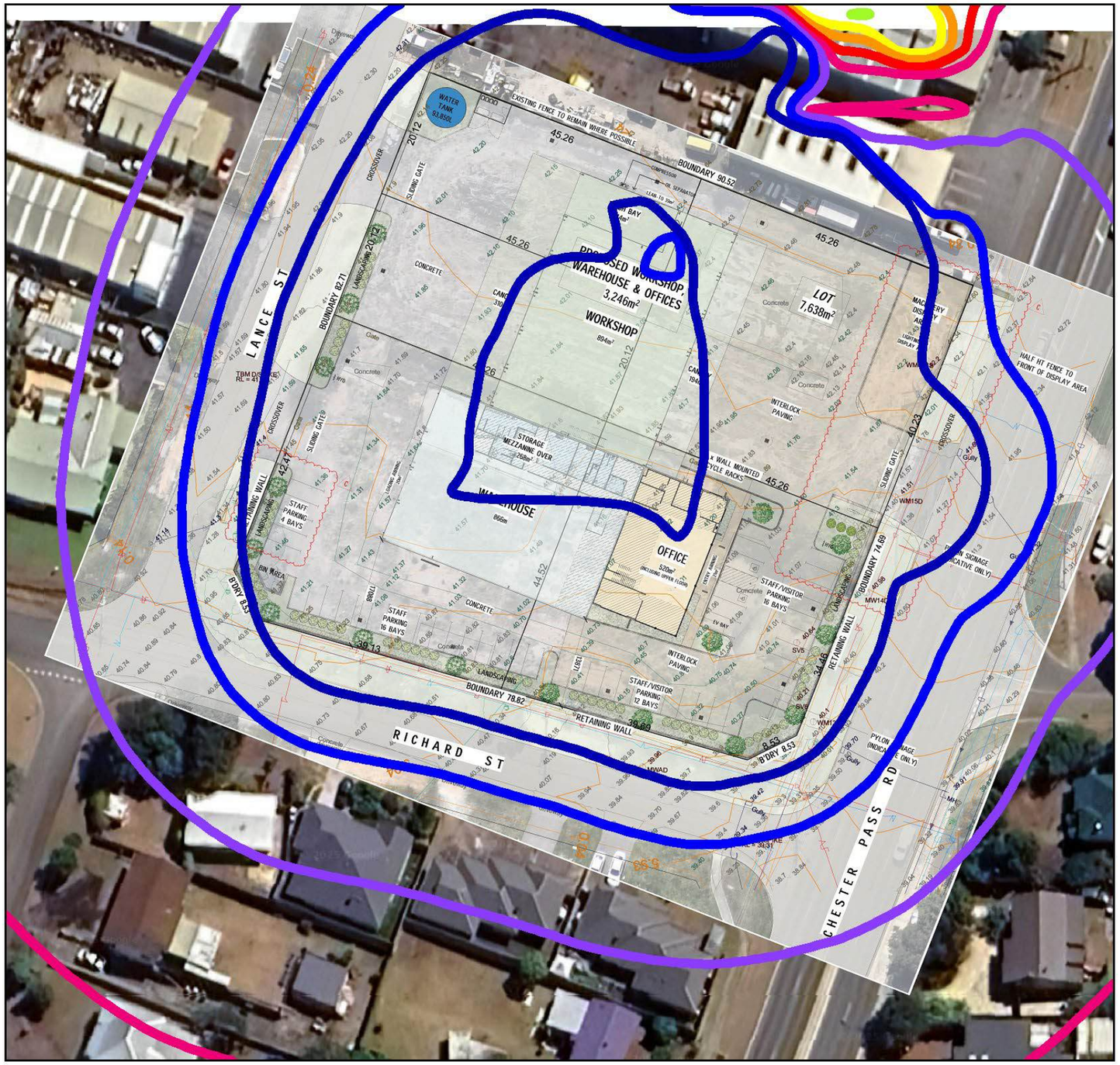
- = 25
- = 30
- = 35
- = 40
- = 45
- = 50
- = 55
- = 60
- = 65

N

0 5 10 20 30 40 m

HERRING STORER ACOUSTICS

SoundPLANnoise 9.1 C:\DATA\ActiveProjectsGW\25080 - CJD AUspan Albany\CJD Albany\Sheet1.sgs



Customer:
Auspan
Project: CJD Equipment Albany Workshop
Project-No. 25080

AUSPAN

Map
3

Truck Moving - GNM
Result number 7
Calculation in 2 m above ground

Project engineer: George Watts
Created: 26/02/2025
Processed with SoundPLAN 9.1, Update 25/02/2025

Levels LA1
in dB(A)

- = 25
- = 30
- = 35
- = 40
- = 45
- = 50
- = 55
- = 60
- = 65

N

0 5 10 20 30 40 m

HERRING STORER ACOUSTICS

SoundPLANnoise 9.1 C:\DATA\ActiveProjectsGW\25080 - CJD AUspan Albany\CJD Albany\Workshop Contour Plot.sgs

PTG/01648

Waste Management Plan
107 Chester Pass Road, Milpara

25th February 2025 | Revision A

Prepared for Auspan Group & Shedspan

www.ptgconsulting.com.au

CONTENTS

LIST OF TABLES

LIST OF FIGURES

REPORT DETAILS

Unique Document Identification

Document Title	Waste Management Plan – 107 Chester Pass Road, Milpara
Project Number	PTG/01648
Document ID	Rev A
Client	Auspan Group & Shedspan

PTG Consulting Office Details

Location	Perth, WA
Address	Level 4, 167 St Georges Terrace, Perth WA 6000
Telephone	+61 8 6188 4500
Email	andreas.wang@ptgconsulting.com.au
Web	www.ptgconsulting.com.au

Revision Details

Revision No.	Date	Comments	Prepared By	Approved By
A	25/02/2025	For issue	NC/LL	C

1 INTRODUCTION

1.1 Background

PTG Consulting Pty Ltd (PTG) has been commissioned by Auspan Group & Shedspan ('the Client') to prepare a Waste Management Plan (WMP) in support of a proposed development comprising a workshop, warehouse, and office at 107 Chester Pass Road, Milpara, WA ('the Site').

The scope of this WMP is focused to the estimation of general and recyclable waste generated by the proposed development. It also includes recommendations for the appropriate collection, storage, handling, and transportation of waste and recycling, in accordance with the requirements outlined by Western Australia Local Government Association (WALGA) Commercial and Industrial Waste Management Plan Guidelines.

1.2 Existing Land Uses

The Site, shown in **Figure 1**, is located in a commercial area in the suburb of Milpara, within the City of Albany. It is currently a vacant lot with crossovers on both Chester Pass Road and Lance Street.

Figure 1 Site Location

Source: Google Map

1.3 Proposed Land Uses

The total lot covers approximately 7,638 m², with the proposed development—including a workshop, warehouse, office, and other facilities—having a total floor area of 3,246 m². The specific area allocation for each land use is detailed in **Table 1** and illustrated in **Figure 2**.

Figure 2 Proposed Site Plan

Source: AUSPAN

Table 1 Land Uses

Land Use	Yield
Workshop	1,512 m^2 (894 m^2 GFA)
Warehouse	1,134 m^2 (866 m^2 GFA)
Office	520 m^2
Awning/Lean-to	80 m^2
TOTAL	**3,246 m^2**

2 WASTE SERVICES AND SPECIFICATIONS

2.1 Bin Specifications

In accordance with AS 4123 and WALGA's Commercial and Industrial Waste Management Plan Guidelines, the recommended bin specifications are as follows:

- General Waste Bin:
  - Colour: red lid; dark green or black body
  - Size: 1100L & 240L
- Recycling Bin:
  - Colour: yellow lid; dark green or black body
  - Size: 1100L & 240L

2.2 Waste and Recycling Collection Services

The Development will use the waste collection services provided by a private contractor for general and co-mingled recycling. The following waste collection frequency is proposed to be undertaken for the tenancies.

- Warehouse and Workshop: General waste and co-mingled recycling to be collected 2 times a week.
- Office: General waste and co-mingled recycling to be collected weekly.

Waste collections will be undertaken on-site and arranged to occur during off-peak hours to minimise disruption to traffic operations as well as minimise any impacts to staff and visitors. The proposed schedule of waste collection is summarised in **Table 2**.

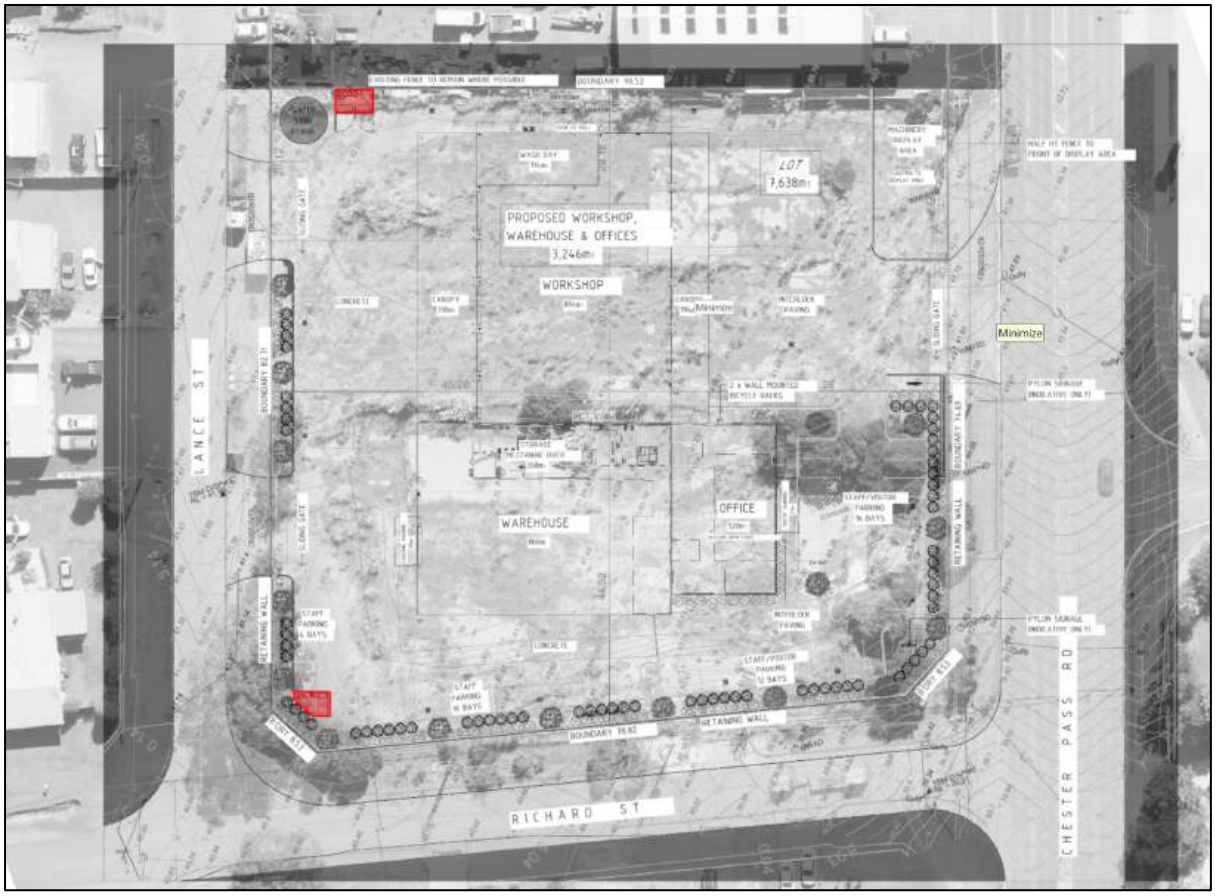
Table 2 Waste Collection Schedule

	Frequency
General Waste (1100L Bins)	Twice a week
Recyclables (1100L Bins)	Twice a week
General Waste (240L)	Weekly
Recyclables (240L Bins)	Weekly

2.3 Bin Enclosure

The Mobile Garbage Bin (MGB) storage for the development will be in a bin enclosure located on the ground floor at two different locations. The bin storage area will allow easy access for collection trucks as illustrated in **Figure 3**.

Figure 3 Bin Storage Areas



Source: AUSPAN

2.3.1 Construction Considerations

The bin enclosures for the Development will be designed with the following considerations:

- The bin store area will have concrete slab floor with a graded floor to a waste drain that is connected to sewer. Floors to be even and flat for safe storage of bins;
- Access doors will be self-closing to prevent access to vermin;
- It is recommended that double doors to the bin storage area be provided which should be wide enough for bins to fit through;
- Adequate aisle width for easy manoeuvring of bins;
- No double stacking of rows of bins;
- All wall joins will be sealed to a height of 150 mm for ease of washing;
- Washing facilities with taps located at a minimum height of 1.5 m (and no higher than 1.7 m) for washing of bins, equipment and refuse room floors;
- Drainage of wastewater from washing facilities will drain to main sewers;

- Appropriate signage to be provided;
- Bins not to be visible from the property boundary or areas trafficable by the public; and
- Bins are reasonably secured from theft and vandalism.

3 WASTE GENERATION AND MANAGEMENT

In order to ensure that the waste from the Development is properly managed, it was necessary to estimate the volume of waste that is likely to be generated on the premises. The City has advised that FOGO isn't available for commercial waste collections and therefore a waste management plan for a two-bin collection system (i.e. general waste and recyclables) is required. The City of Albany advised that the waste generation rates outlined in WALGA's Commercial and Industrial Waste Management Plan Guidelines would be applicable for the proposed commercial development.

Using these general and recycling waste generation rates, a broad estimation of the daily waste to be generated by the proposed development has been calculated.

3.1 General and Recycling Streams

Types of waste likely to be generated by commercial and industrial operations are:

- General Waste – General waste includes non-recyclable plastics, food waste, recyclable packaging which is contaminated with food waste and other non-recyclable materials, as well as recyclables which have not been placed in the correct bin.
- Recyclables – Co-mingled Recycling, which includes clean aluminium foil and trays, glass bottles and jars, long-life milk and juice cartons, cardboard, plastic containers, tins and cans Workers frequently consume beverages packaged in recyclable containers, such as aluminium cans and polyethylene terephthalate (PET) bottles and milk is often provided by organisations in liquid paperboard or high-density polyethylene (HDPE) containers.

3.2 Other Streams

Storage, handling, and collection of liquid wastes are not covered in this WMP. Adequate space may be allocated for placement of cabinets/containers for collection and storage of speciality wastes that are unable to be disposed of within the bins in the Bin Storage Area such as Batteries, cooking oil, cleaning chemicals and commercial light globes. These materials will be removed from the site once sufficient volumes have been accumulated to warrant disposal.

3.3 Waste Streams Estimates

The waste generation and bin requirements have been calculated using the waste generation rates detailed in **Table 3**.

Table 3 Weekly Waste Generation Rates

Type of Premises	General Waste (L)	Co-mingled Recycling (L)
Warehouse (Greater Than 100m2 Floor Area)	50 L/100sqm/day	50 L/100sqm/day
Workshop (Greater Than 100m2 Floor Area)	50 L/100sqm/day	50 L/100sqm/day
Office	10 L/100sqm/day	10 L/100sqm/day

A summary of the estimated weekly waste generated for each waste stream is provided in **Table 4**. Waste estimates were obtained by way of calculations outlined in **Appendix B**.

Table 4 Weekly Waste

Type of Premises	General Waste (L)	Co-mingled Recycling (L)
Warehouse (Greater Than 100m2 Floor Area)	3,031	3,031
Workshop (Greater Than 100m2 Floor Area)	3,129	3,129
Office	364	364
Total	**6,524**	**6,524**

The waste volumes presented are estimates only and are representative of the design drawings of the Development dated 21 February 2025.

3.4 Bin Requirements

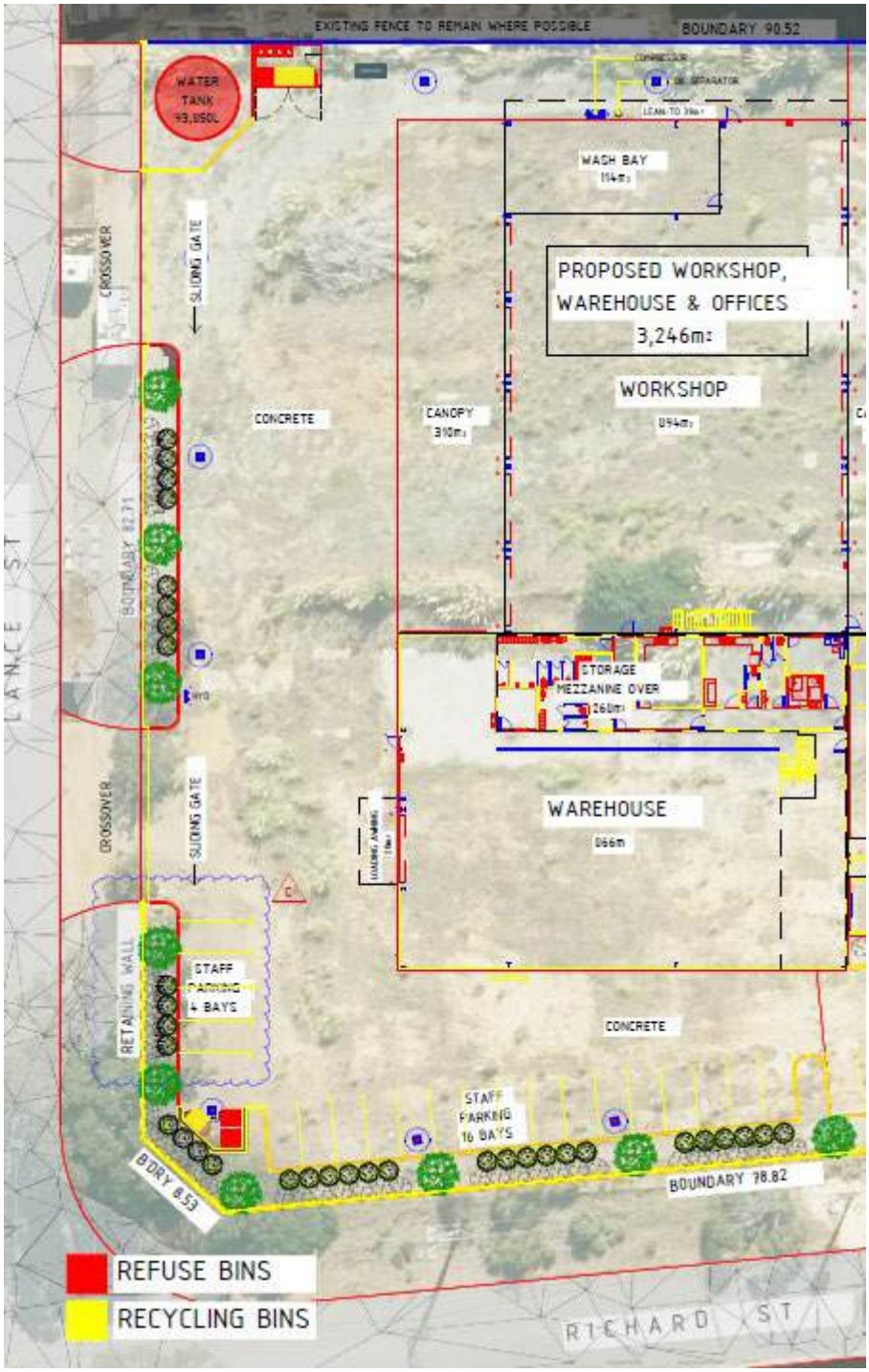
A summary of the breakdown of the anticipated MGB requirements for the proposed development, the proposed bin sizes, and the proposed collection frequencies are provided in **Table 5.**

Table 5 Bin Requirements for Proposed Site

Type of Waste	Type of Waste	Size	Collection	Number of Bins
Warehouse / Workshop	General Waste	1100L	Twice every week	3
	Recyclables	1100 L	Twice every week	3
Office	General Waste	240L	Once every week	2
	Recyclables	240L	Once every week	2
Total				**6 x 1100L and 4 x 240L**

A layout of the anticipated bin arrangement is illustrated in **Figure 4.**

Figure 4 Proposed Bin Layouts



4 TRANSFER OF WASTE AND RECYCLING

Tenants and staff will be responsible for placing waste into the designated bin enclosures on the site as required. The waste will then be transferred into the appropriate bins within these enclosures for proper disposal and recycling.

4.1 Collection of Waste and Recycling

4.1.1 Waste Collection

The collection of waste and recycling will be managed by a licensed waste collection service. The collection schedule frequency is indicated in **Table 5** ensuring that bins are emptied on time to maintain cleanliness and prevent overflows. Waste collection is proposed to be undertaken on-site near the bin enclosure as illustrated in **Figure 5**.

Figure 5 Waste Collection Areas

4.1.2 Provision of Service Vehicle

Swept path analysis for a 10.1 m waste collection vehicle was undertaken as illustrated in **Figure 6.** The analysis indicates that a waste vehicle appears to be able to adequately enter the site, manoeuvre and park near the bin enclosure to collect the waste and exit in a forward direction.

Waste collection will be undertaken on-site by a private waste contractor and to be arranged to occur during off-peak hours or after normal business hours to minimise disruption to traffic operations as well as minimise any impacts to staff and visitors.

Figure 6 Swept Path – Waste Vehicle

5 WASTE REDUCTION AND MANAGEMENT STRATEGY

The waste reduction and management has been developed with a strategic approach to reducing waste. The waste hierarchy is a widely accepted framework used to guide waste reduction and management strategies. According to WALGA, the waste hierarchy is described as:

- Reduce/avoid: double-sided printing, electronic filing, provision of reusable cups, provision of electronic hand-driers
- Reuse: reuse one-sided prints for internal printouts, reuse manila folders and ring-binders, donate unwanted items to local schools or charities, return packaging to suppliers for reuse
- Recycling: providing locked bins for shredding and recycling of sensitive documents, having specific bins for materials that require separate recycling
- Recovery: composting of organic material and waste to energy options
- Disposal: for some materials, disposal at a suitably licensed landfill is the only option (e.g. asbestos).

5.1 Provision of Information

The dissemination of guidelines, best practices, and educational materials highlights the importance of providing clear and accessible information to ensure effective waste reduction and management. Clear signage is essential, as it guides users on the proper use of the waste management system. According to WALGA, the key aspects of signage to consider are:

- Waste recycling and organics bins must be clearly and correct labelled at all times
- Waste storage areas must have clear signage instructing cleaners and tenants how to correctly separate waste, recycling and organic materials. Pictorial guides and community languages should be used if appropriate
- The location of, and directions to, waste storage areas must be well signposted, with directional signs, arrows or lines on the floor indicating the most direct routes for cleaners and tenants
- All hazards or potential dangers associated with the waste facilities should be clearly identified, especially those linked to compaction or other waste handling equipment
- Emergency contact information should be displayed in case there are any issues with the waste and recycling systems/services in the building.

5.2 Engagement

A regular and on-going engagement between all the stakeholders of the development should take place in order to remind the residents the proper and best practices of waste reduction and management. The engagement should include:

- Demonstration of waste management systems pertinent to an individual's role; and
- An explanation of the benefits of practicing waste hierarchy.

6 CONCLUSION

This Waste Management Plan demonstrates that the proposed Development provides sufficient provision for general waste and recyclable waste based on the estimated waste generation.

The above is achieved using:

- Three 1,100L refuse bins collected two times a week;
- Three 1,100L recycling bins, collected two times a week
- Two 240L refuse bins collected once weekly: and
- Two 240L recycling bins collected once weekly.

Waste collections will be undertaken on-site by a licensed waste collection service and residents will be required to sort and prepare their waste weekly following the guidelines of WALGA.

01

Appendix A

Site Plan

ptg consulting

www.ptgconsulting.com.au

EXISTING FENCE TO REMAIN WHERE POSSIBLE
BOUNDARY 90.52
WATER TANK 93,850L
COMPRESSOR
OIL SEPARATOR
LEAN-TO 39m2
WASH BAY 114m2
LOT 7,638m2
MACHINERY DISPLAY AREA
LIGHTING TO DISPLAY AREA
HALF HT FENCE TO FRONT OF DISPLAY AREA
PROPOSED WORKSHOP, WAREHOUSE & OFFICES 3,246m2
WORKSHOP 894m2
CANOPY 310m2
CANOPY 194m2
CONCRETE
INTERLOCK PAVING
SLIDING GATE
CROSSOVER
BOUNDARY 82.71
LANCE ST
2 x WALL MOUNTED BICYCLE RACKS
PYLON SIGNAGE (INDICATIVE ONLY)
BOUNDARY 74.69
STORAGE MEZZANINE OVER 268m2
WAREHOUSE 866m
OFFICE 520m2
STAFF/VISITOR PARKING 16 BAYS
RETAINING WALL
STAFF PARKING 4 BAYS
STAFF PARKING 16 BAYS
STAFF/VISITOR PARKING 12 BAYS
BIN AREA
B'DRY 8.53
BOUNDARY 78.82
RICHARD ST
CHESTER PASS RD
TBM D/SPIKE RL = 39.37