

# PROPOSED WORKSHOP AND OFFICE DEVELOPMENT

## ROCKHAMPTON REGIONAL COUNCIL

### APPROVED PLANS

These plans are approved subject to the current conditions of approval associated with

**Development Permit No.:** D/109-2022

**Dated:** 27 February 2023



**LOT 5 - 777 YAAMBA ROAD,  
PARKHURST,  
ROCKHAMPTON**

**FOR APPROVAL**



**Proposed Development**  
Lot 5 - 2 Barton Court, Parkhurst.  
CLIENT:  
**Wideland Group Trucks**

SCALE: **as shown**  
DRAWING: **MN**  
JOB NO.: **707**

TITLE: **Cover Sheet / General Notes**  
STATUS: **SD** DRAWING NO.: **1.00**

DATE: 14/07/2022 17:56  
REV: **A**

REAL PROPERTY DESCRIPTION

LOT 5 ON SP326319  
SITE AREA: 10010m<sup>2</sup>  
ROCKHAMPTON REGIONAL COUNCIL

PRICINCT: PARKHURST  
ZONE: HIGH IMPACT INDUSTRY

2 BARTON COURT  
PARKHURST QLD 4702

SITE AREAS

SITE AREA: 10010m<sup>2</sup>  
BUILDING FOOTPRINT: 1706m<sup>2</sup>  
SITE COVER: 17%

DRIVEWAY AREA (inc TRUCK SALES): 6921m<sup>2</sup>  
LANDSCAPING AND TURF AREA: 1230m<sup>2</sup>  
12.3%

GROSS FLOOR AREA

GROUND FLOOR OFFICE 406.61 m<sup>2</sup>  
WASHBAY 114.83 m<sup>2</sup>  
WORKSHOP 1184.92 m<sup>2</sup>  
GF 1706.36 m<sup>2</sup>

UPPER FLOOR OFFICE 192.13 m<sup>2</sup>  
UF 192.13 m<sup>2</sup>  
TOTAL GROSS FLOOR AREA 1898.49 m<sup>2</sup>

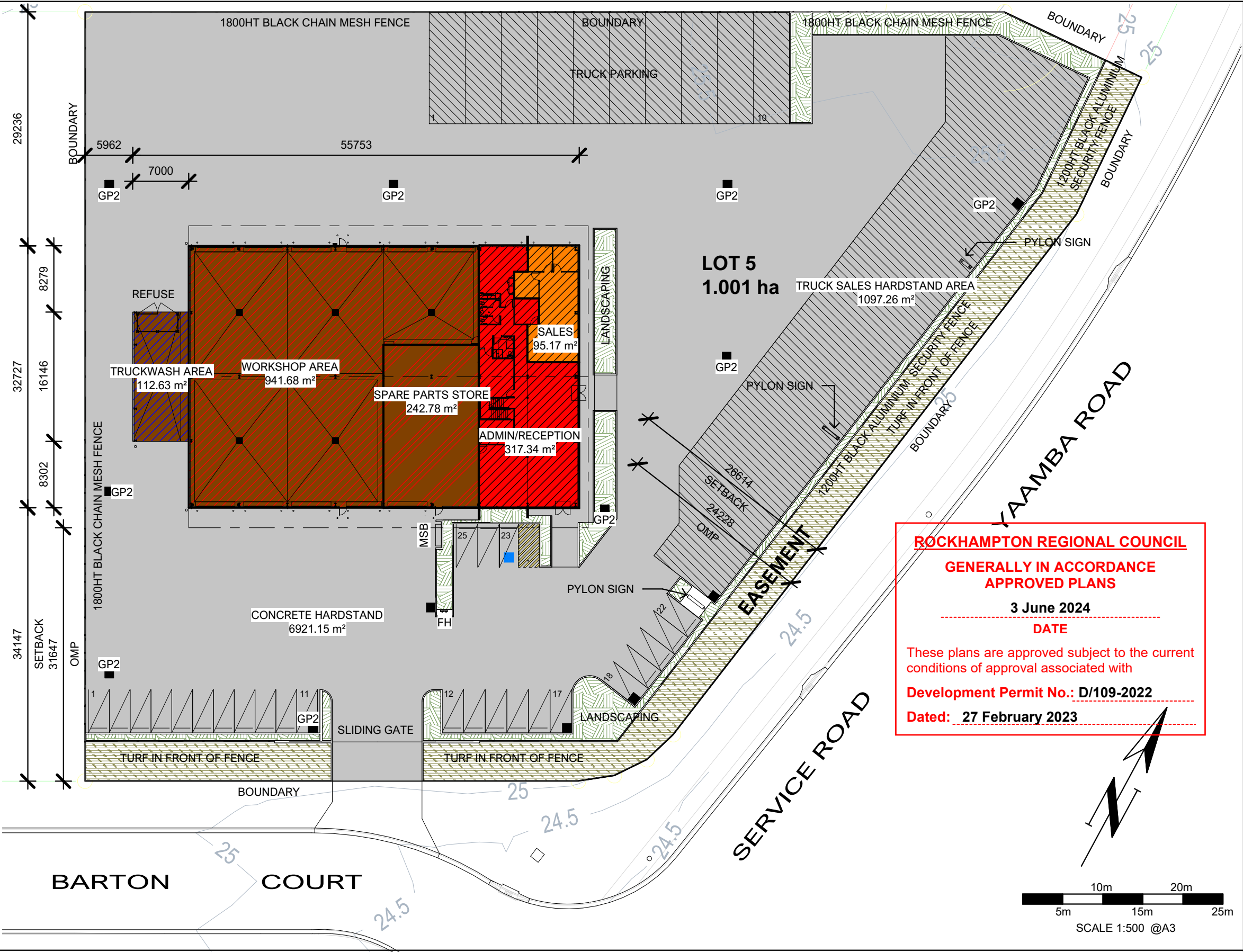
CAR PARKING

HIGH IMPACT INDUSTRY RATE  
1 SPACE / 100m<sup>2</sup>

PARKING SPACES REQUIRED 19  
PARKING SPACES PROVIDED 25  
PLUS 10 TRUCK PARKING BAYS

SITE LEGEND

- SPARE PARTS AREA
- ADMIN OFFICE AND RECEPTION AREA
- WORKSHOP / SERVICE BAYS
- SALES AREA
- TRUCK WASHDOWN
- SPARE PARTS
- DRIVEWAY AND HARDSTAND
- LANDSCAPING
- TURF



ROCKHAMPTON REGIONAL COUNCIL

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3 June 2024

DATE

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Dated: 27 February 2023

GREEN LION  
BUILDING DESIGN

0405 196 652

hello@greenlion.design

Building Design Consultant

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dimensions to be used over scaled dimensions,  
contractor to confirm dimensions on site prior to  
commencement of work.

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No. Description  
A UPDATE TO APPROVAL

Date  
12/05/24

PROPOSED  
DEVELOPMENT

WIDLEAND TRUCK GROUP

2 BARTON COURT  
PARKHURST QLD 4702  
LOT 5 on SP326319  
SITE AREA: 1.001ha  
Site Details

SITE PLAN

Status

FOR APPROVAL

Date 12/05/24

Checked Drawn LCH

2310.DA-1.01 A

Project No. Issue

Scale 1 : 500@A3



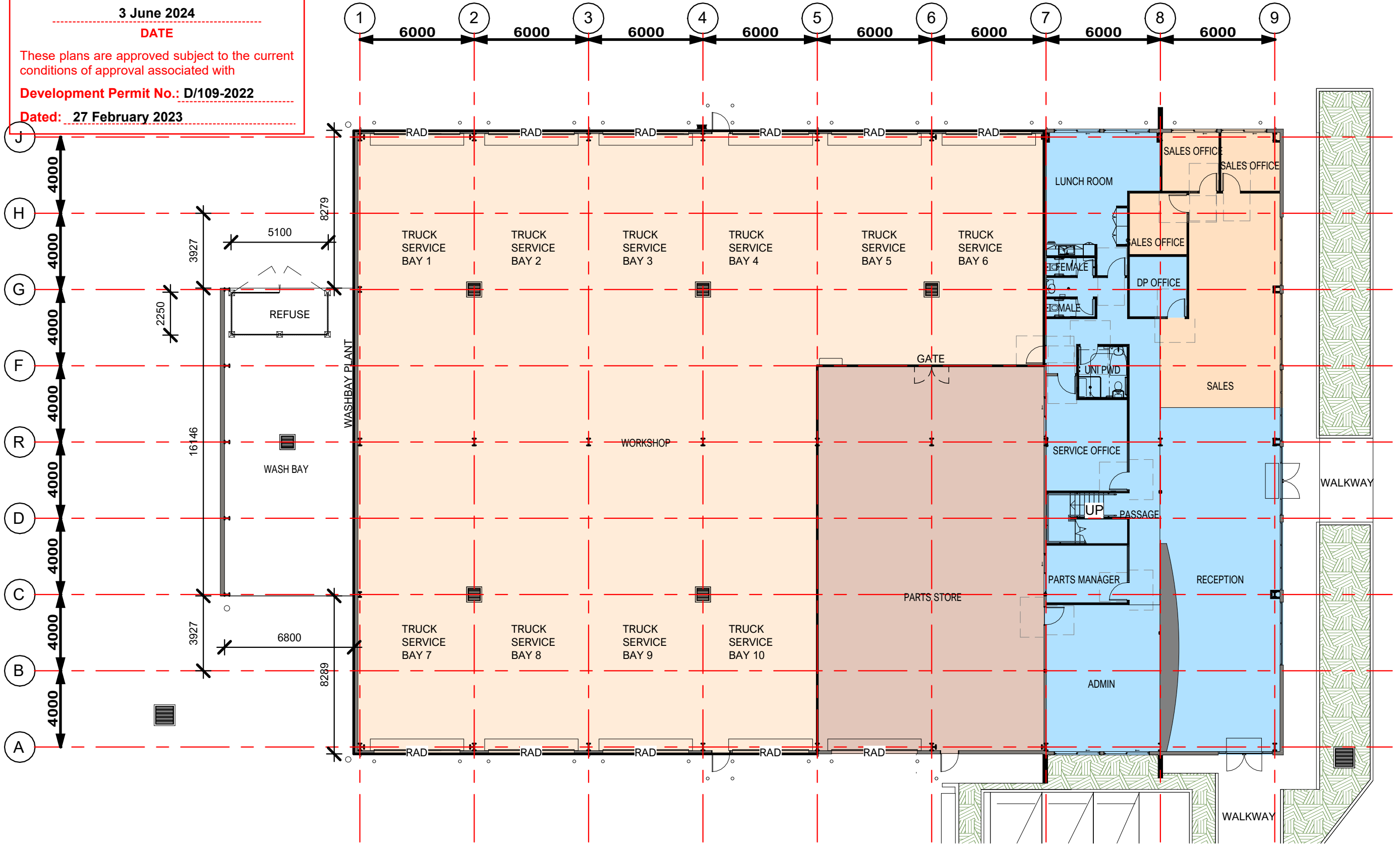
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SITE AREA: 1.001ha  
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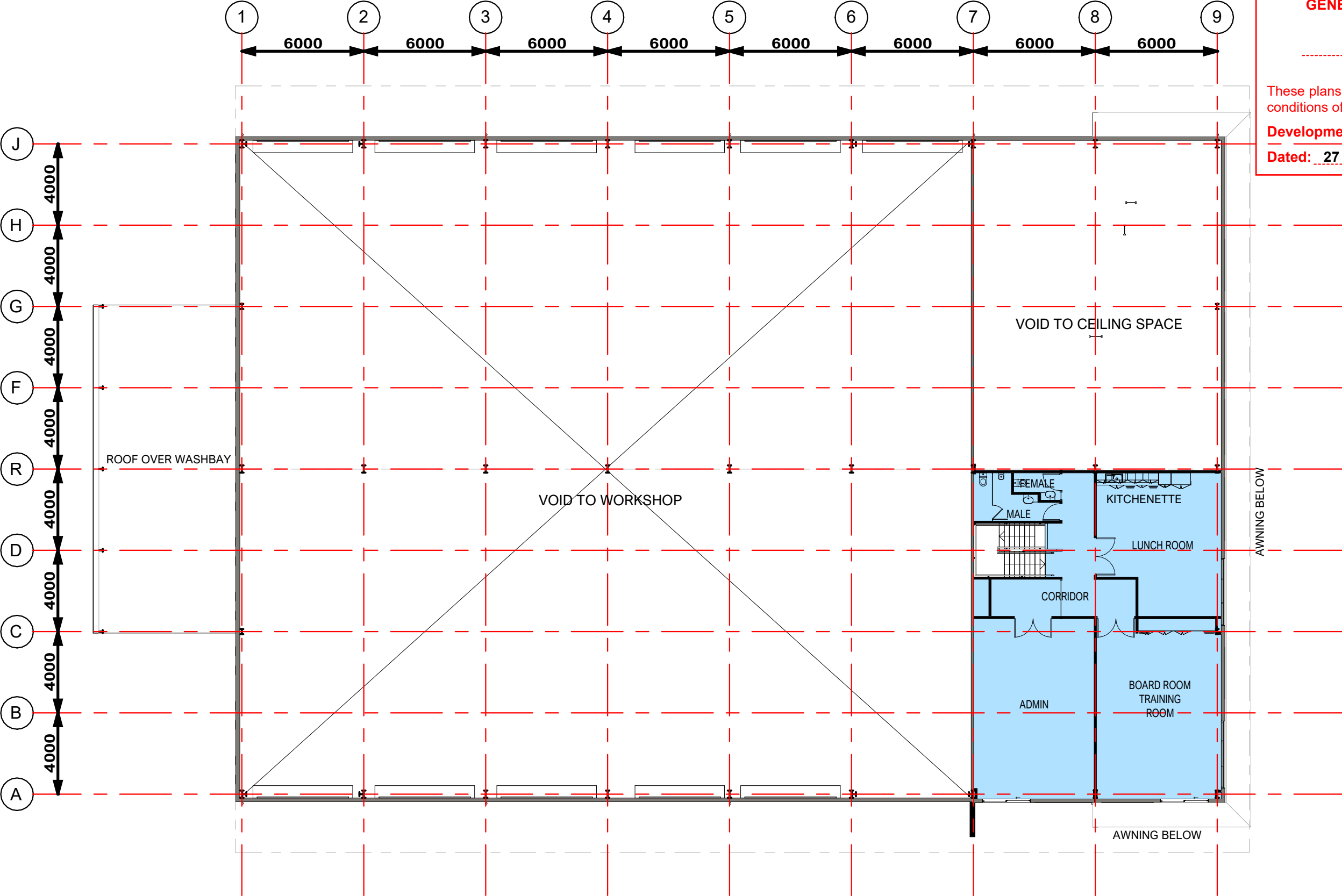
**FLOOR PLAN LOWER  
LEVEL**

Status FOR APPROVAL

Date 12/05/24  
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2310.DA-2.01 A  
Project No. Issue

Scale 1 : 200@ A3



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2 BARTON COURT  
PARKHURST QLD 4702  
LOT 5 on SP326319  
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**FLOOR PLAN UPPER  
LEVEL**

Status FOR APPROVAL

Date 12/05/24  
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2310.DA-2.02 A  
Project No. Issue

Scale 1 : 200@ A3

12/05/2024 2:28:14 PM



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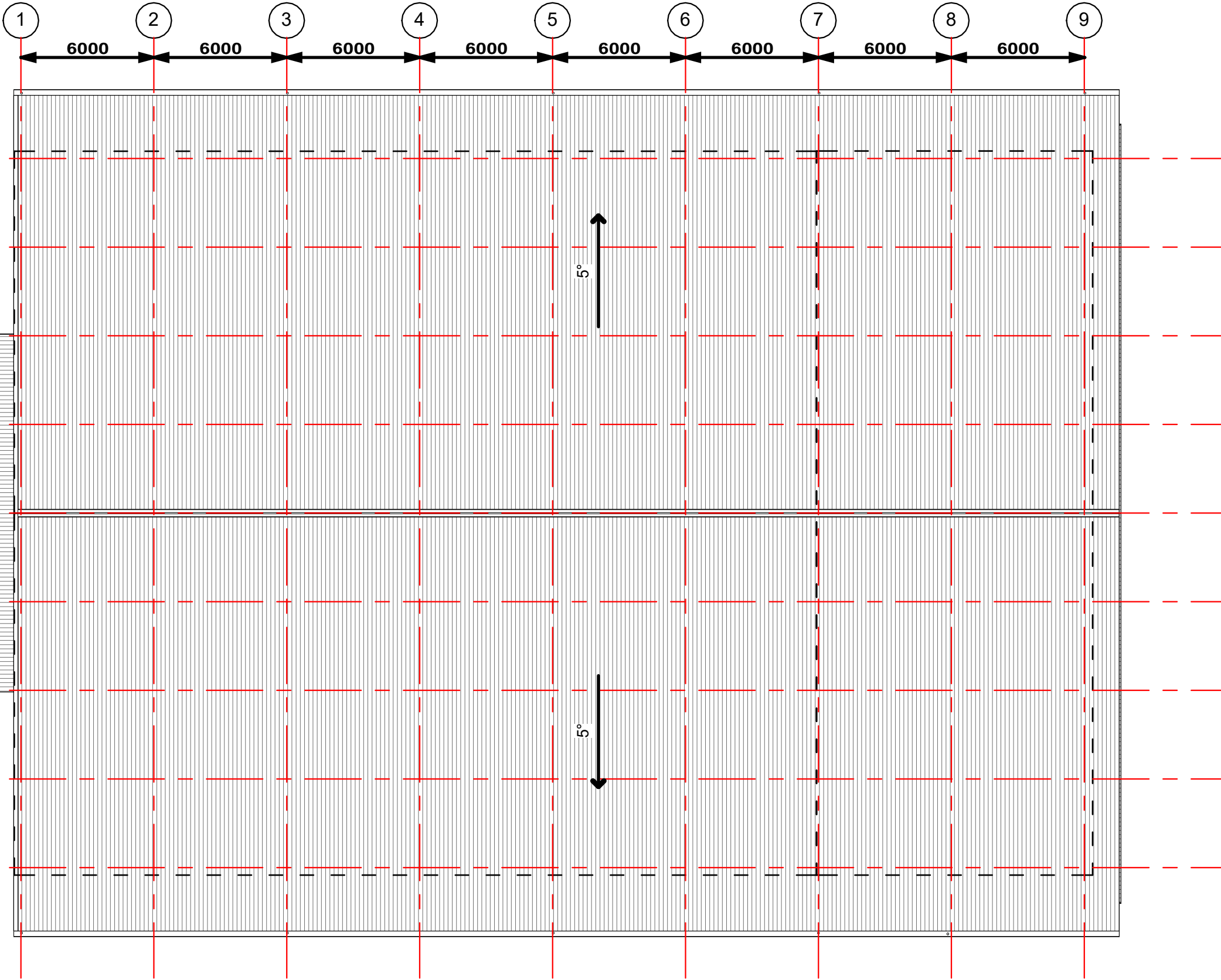
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WIDLEAND TRUCK GROUP

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PARKHURST QLD 4702  
LOT 5 on SP326319  
SITE AREA: 1.001ha  
Site Details

**ROOF PLAN**

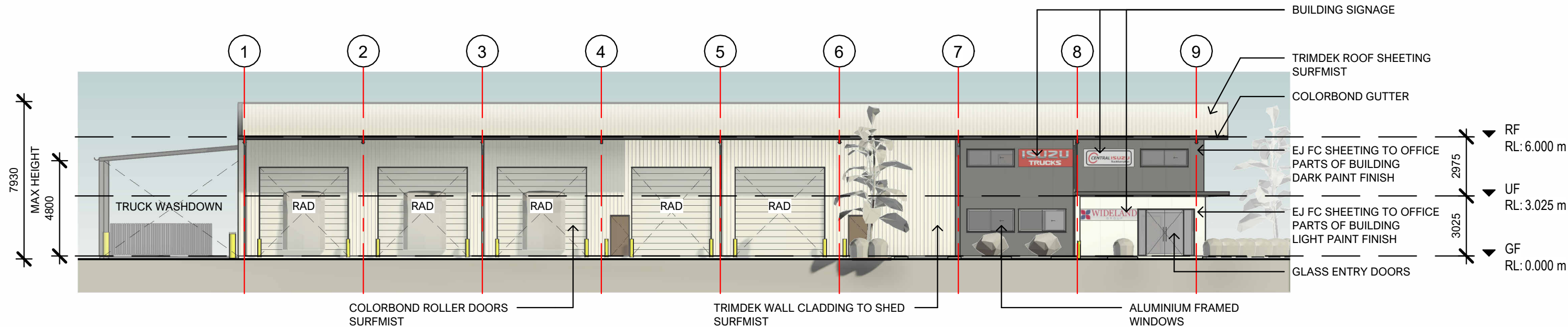
Status

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Date 12/05/24  
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2310.DA-2.03 A  
Project No. Issue

Scale 1 : 200@ A3



## SOUTHERN ELEVATION

1 : 200

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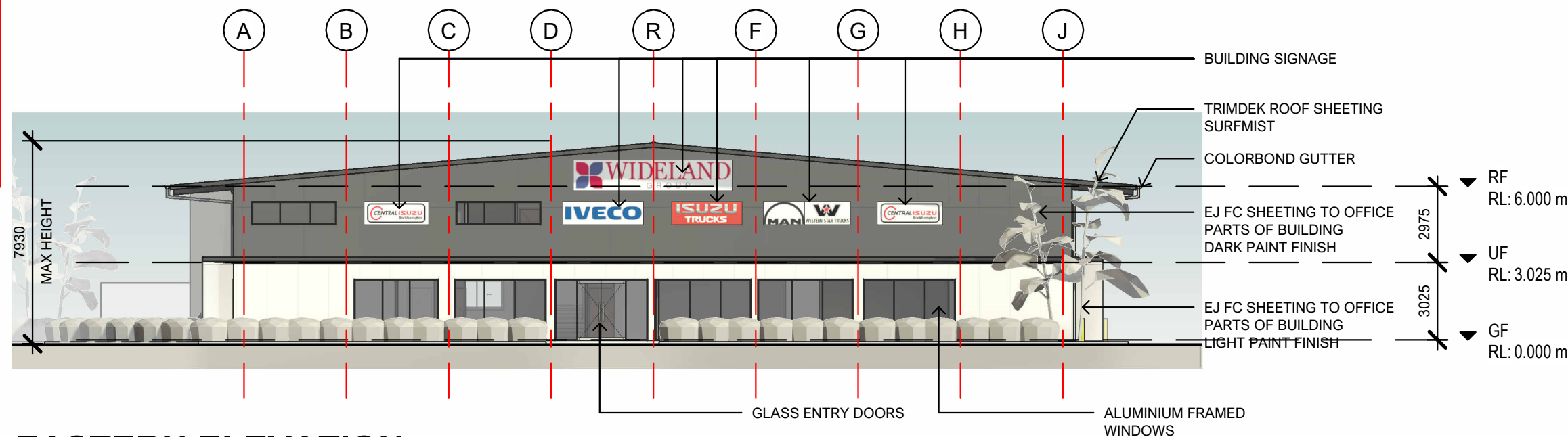
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## EASTERN ELEVATION

1 : 200

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WIDLEAND TRUCK GROUP

2 BARTON COURT  
PARKHURST QLD 4702  
LOT 5 on SP326319  
SITE AREA: 1.001ha  
Site Details

**ELEVATIONS 1**

Status

FOR APPROVAL

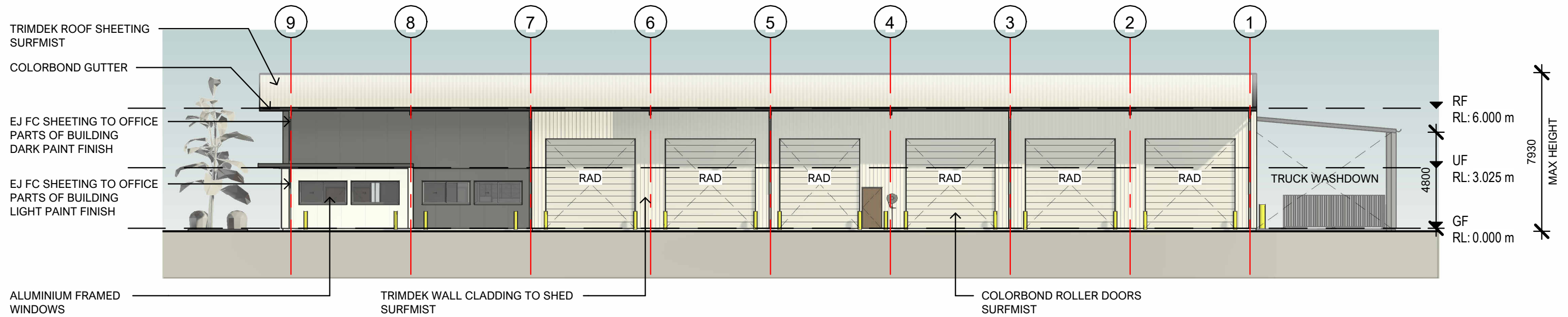
Date 12/05/24

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2310.DA-2.04 A  
Project No. Issue

Scale 1 : 200@ A3

12/05/2024 2:28:19 PM



## NORTHERN ELEVATION

1 : 200

### ROCKHAMPTON REGIONAL COUNCIL

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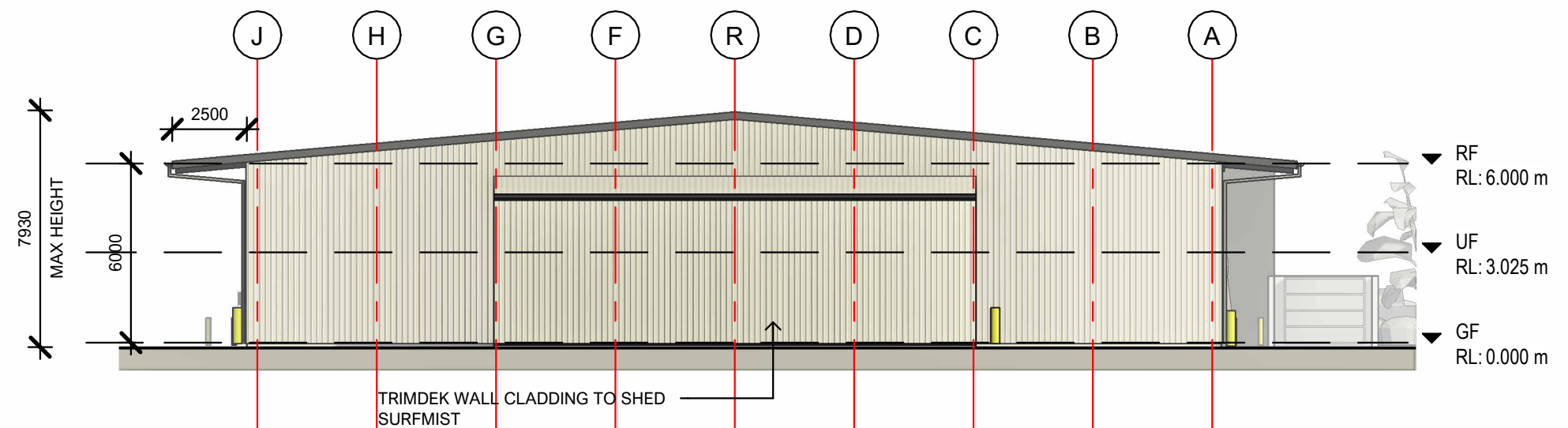
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## WESTERN ELEVATION

1 : 200

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LOT 5 on SP326319  
SITE AREA: 1.001ha  
Site Details

**ELEVATIONS 2**

Status

FOR APPROVAL

Date 12/05/24

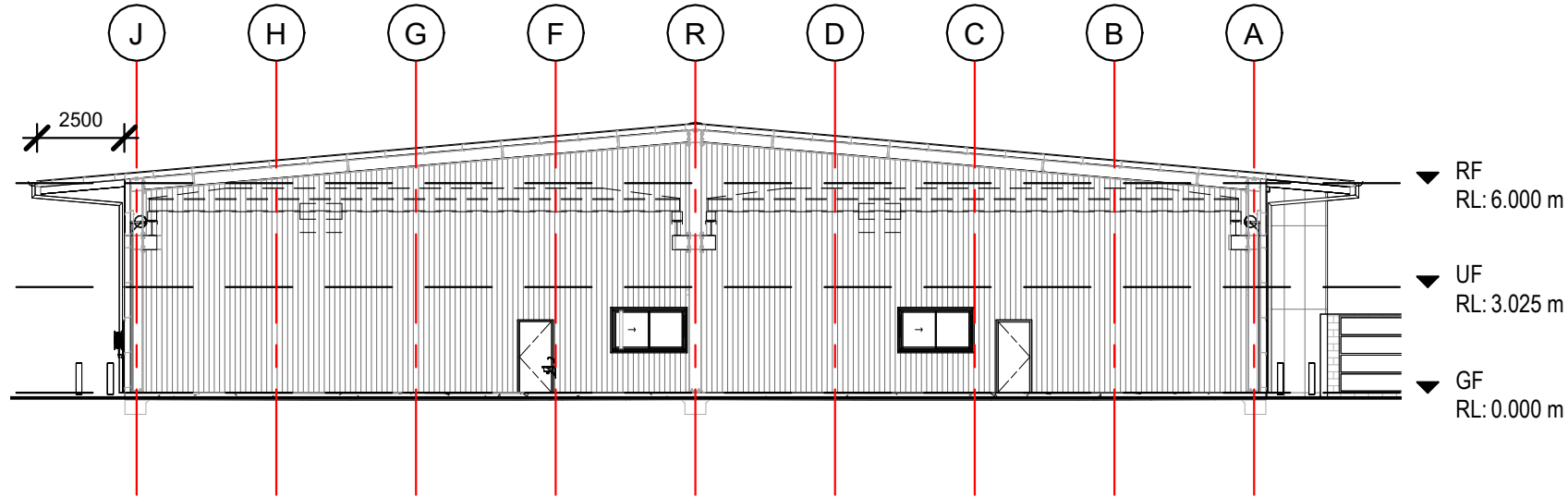
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2310.DA-2.05 A  
Project No. Issue

Scale 1 : 200@ A3

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**SECTION**

1 : 200

**ROCKHAMPTON REGIONAL COUNCIL**

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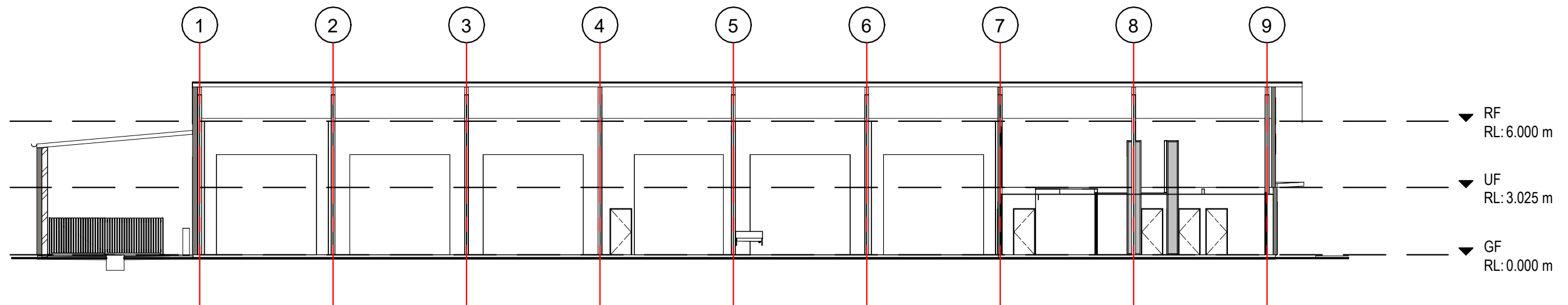
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**SECTION**

1 : 200

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SITE AREA: 1.001ha  
Site Details

**SECTIONS**

Status

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**2310.DA-2.06 A**  
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Scale 1 : 200@ A3

12/05/2024 2:26:25 PM

LEGEND

- EXISTING TURFED AREAS  
If new turf is required, Refer Specification Notes
- SEWER EASEMENT  
As taken from Survey drawings
- PROPOSED HARDSTAND  
Refer Architectural drawings
- BUILDING / ROOF OVER  
Refer Architectural drawings
- PROPERTY BOUNDARY  
As taken from Survey drawings
- F1 PROPOSED FENCE  
1800mm high black chainwire fence  
Refer Architectural drawings
- F2 PROPOSED FENCE  
1200mm high aluminum security fence  
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- EXISTING CONTOURS  
As taken from Survey drawings
- CE PROPOSED CONCRETE GARDEN EDGE  
Refer Specification Notes and Detail
- S EXISTING SEWER  
As taken from Survey drawings
- + PROPOSED SHADE / SCREEN TREES  
Refer Planting Schedule
- PROPOSED SHRUBS / GROUNDCOVERS  
Refer Planting Schedule
- IRRIGATION CONDUITS  
PVC pipe 80mm dia.

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ISSUE DATE REASON

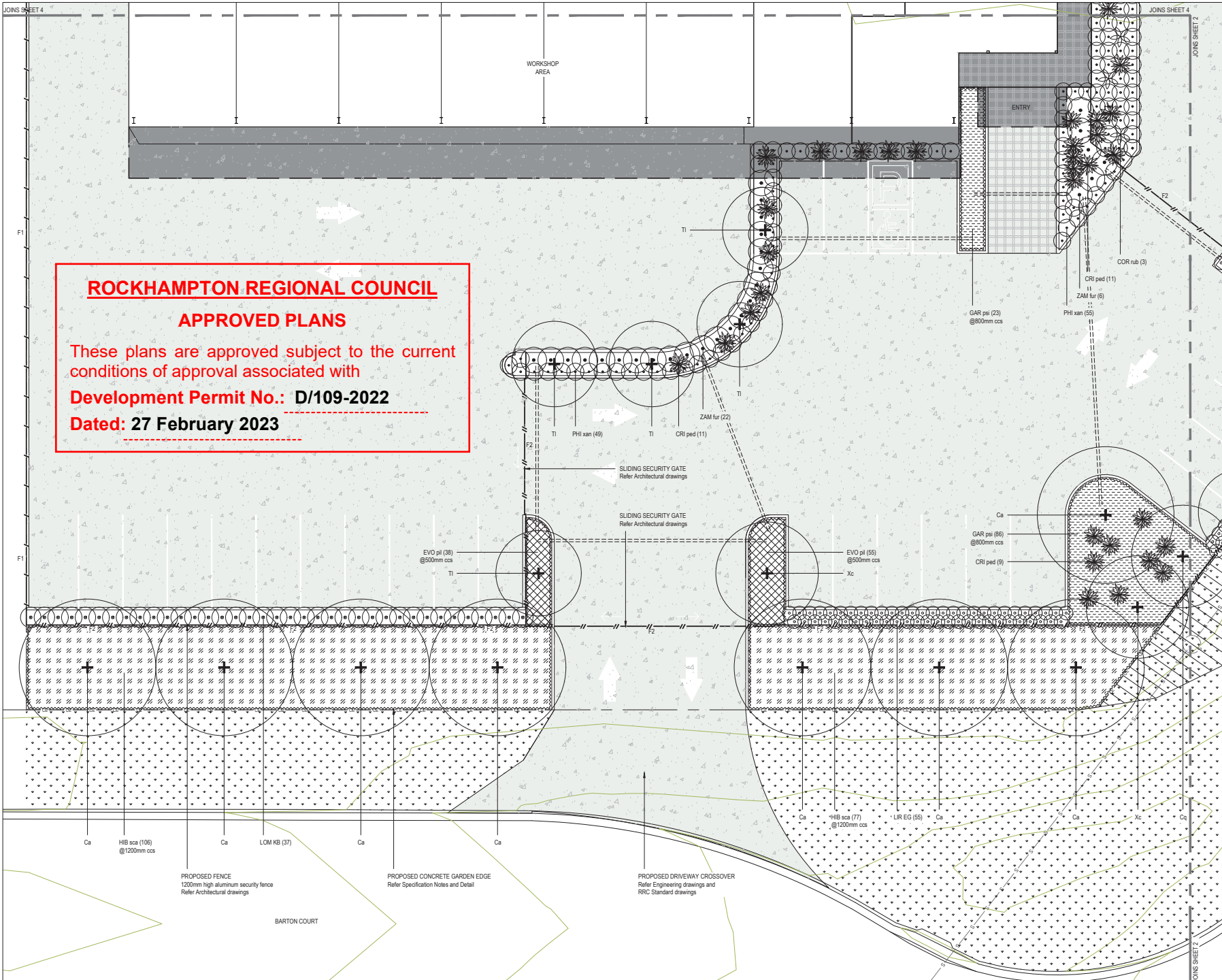
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GRAPHIC SCALE (m) 1:100 @ A1  
0 1 5

PROPOSED INDUSTRIAL DEVELOPMENT  
LOT 5 BARTON COURT,  
PARKHURST  
LANDSCAPE PLAN

JOB No. 22.188 DWG No. 1 ISSUE A DRAWN BY HF CHECKED BY AG

**NOT FOR CONSTRUCTION**



LEGEND

- EXISTING TURFED AREAS  
If new turf is required, Refer Specification Notes
- SEWER EASEMENT  
As taken from Survey drawings
- PROPOSED HARDSTAND  
Refer Architectural drawings
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Refer Architectural drawings
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Refer Planting Schedule
- PROPOSED SHRUBS / GROUNDCOVERS  
Refer Planting Schedule
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PVC pipe 80mm dia.

A 22/08/22 SUBMISSION TO RRC

ISSUE DATE REASON

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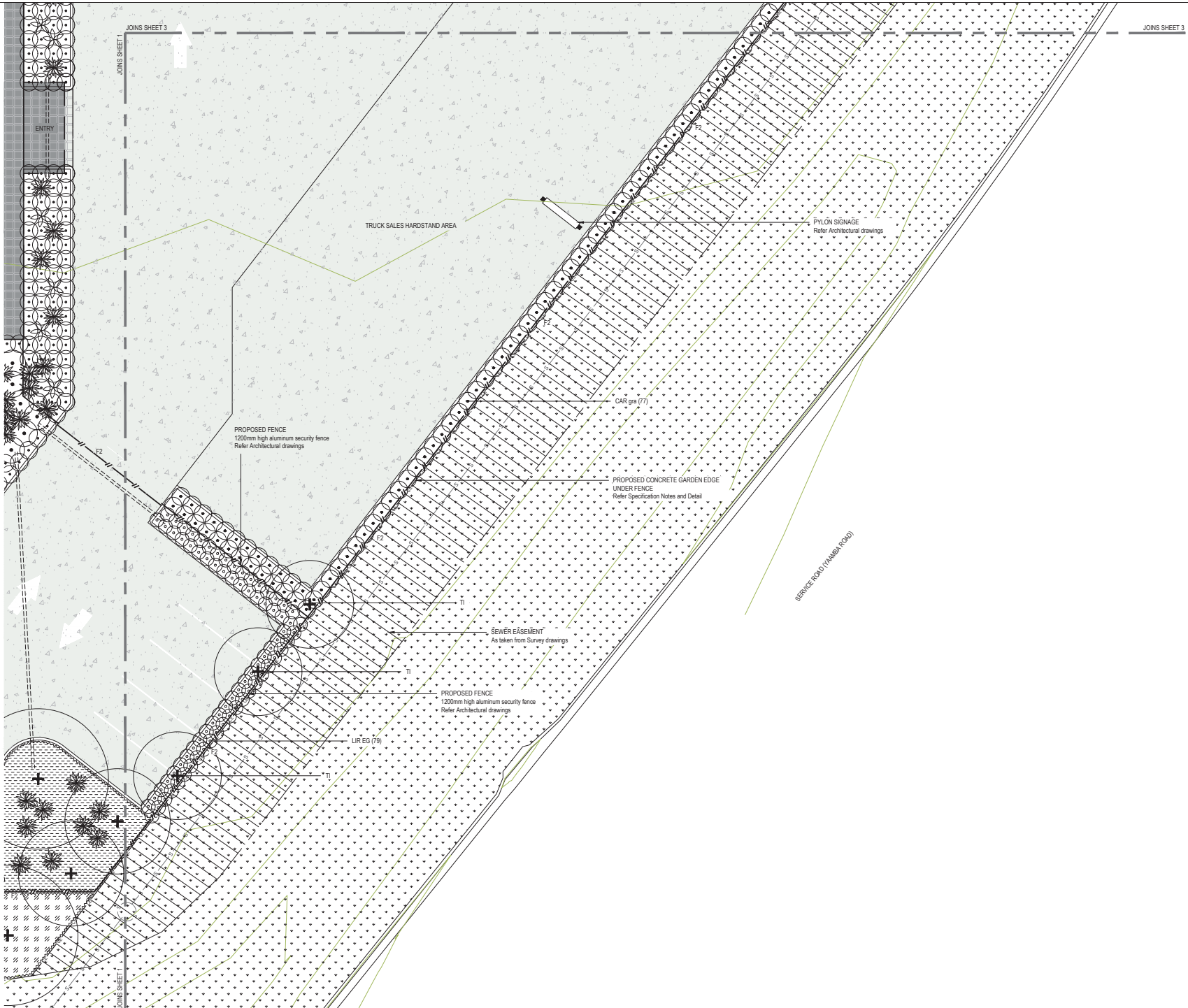
GRAPHIC SCALE (m) 1:100 @ A1



PROPOSED INDUSTRIAL DEVELOPMENT  
LOT 5 BARTON COURT,  
PARKHURST  
LANDSCAPE PLAN

JOB No. DWG No. ISSUE DRAWN BY CHECKED BY  
22.188 2 A HF AG

NOT FOR CONSTRUCTION





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As taken from Survey drawings
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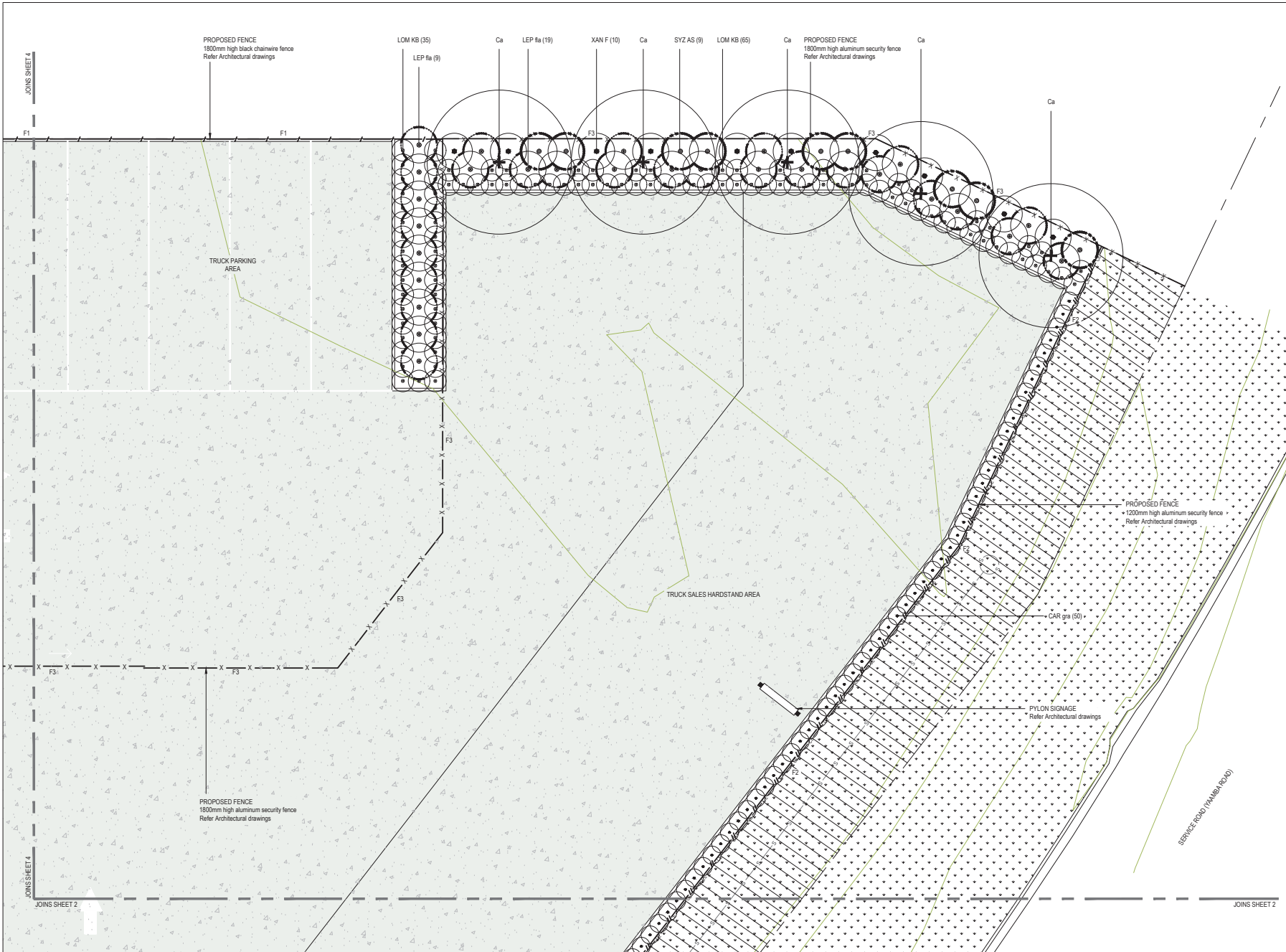
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



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Refer Architectural drawings
-  BUILDING / ROOF OVER  
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PVC pipe 80mm dia.

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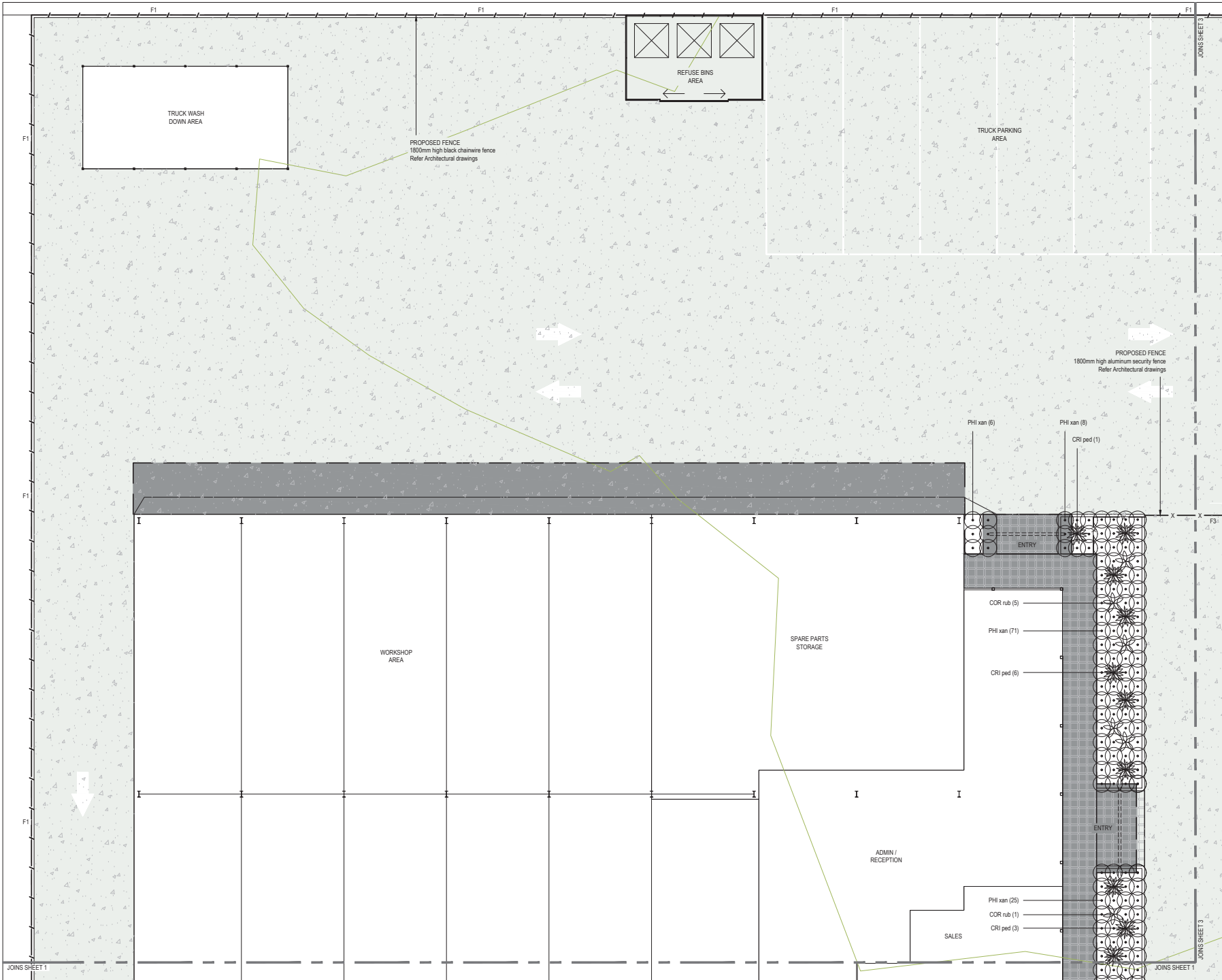
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PROPOSED INDUSTRIAL DEVELOPMENT  
LOT 5 BARTON COURT,  
PARKHURST  
LANDSCAPE PLAN

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# PLANTING SCHEDULE

The spacing of plants shown on plan have been derived as a compromise between growth rate, anticipated size, and the ability to provide a good vegetative cover within a reasonable space of time. Quantities indicated have been based on the spacing of individual plants appropriate to the available area for the particular species used, where this available area increases (or decreases) through the course of construction, quantities may also need to increase (or decrease) to maintain the plant spacing indicated on plan.

AGLA recommends early plant procurement to ensure species availability and minimum plant sizes.

CODE	BOTANICAL NAME	COMMON NAME	SIZE**	QUANTITY	SPACING	HEIGHT*	WIDTH*
TREES							
Cq	Cassia queenlandica	Golden Shower Tree	45L	1	as shown	12	5
Ca	Cupanopsis anacardioides	Tuckeroo	100L	13	as shown	15	8
Tl	Tritanopsis laurina Luscious	Water Gum	45L	8	as shown	12	5
Xc	Xanthostemon chrysanthus	Golden Penda	45L	2	as shown	8	6

## SCREENING SHRUBS

LEP fla	Leptospermum flavescens Cardwell	Tea Tree Cardwell	300mm	28	1.5	2	2
SYZ AS	Syzygium australe Aussie Southern	Lillypil	300mm	9	1.5	5	2
XAN F	Xanthostemon chrysanthus Fairhill Gold	Golden Penda	300mm	10	1.5	3	2

## SHRUBS AND GROUNDCOVERS

CAR gra	Carissa grandiflora	Desert Star	200mm	127	0.8	1	1
COR rub	Cordyline fruticosa Rubra	Palm Lily	200mm	9	0.8	1-2	1
CRI ped	Critum pedunculatum	Swamp Lily	200mm	41	1	2	2
EVO pil	Evolutus pilosus Blue Sapphire	Blue Sapphire	200mm	93	0.5	0.3	1
GAR ps	Gardenia psidioides Glennie River var White Star	Native Gardenia	200mm	109	0.8	0.75	2
HB sca	Hibbertia scandens	Golden Guinea Vine	200mm	183	1.2	0.5	3
LIR EG	Liriope muscari Evergreen Giant	Liriope	140mm	134	0.6	0.8	0.8
LOM KB	Lomandra Katie Belles	Mat Rush	140mm	137	0.8	1.8	1.5
PHI xan	Philodendron Xanadu	Xanadu	200mm	214	0.8	1	1
ZAM tur	Zamia furfuracea	Cardboard Palm	200mm	28	1	1	2

## \*HEIGHT AND WIDTH:

Heights and widths as shown are at full maturation, indicative only and dependent on environmental and microclimatic factors

## \*\* PLANT CONTAINER SIZE:

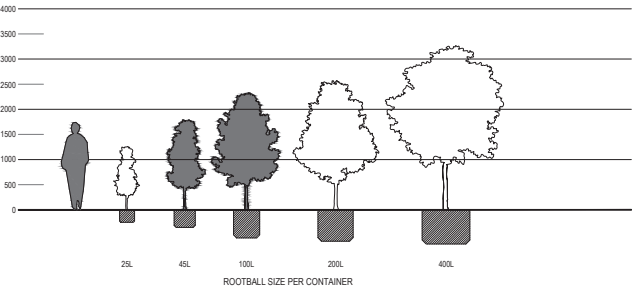
100L	100 Litre container stock min
45L	45 Litre container stock min
300mm	300mm dia minimum pot size
200mm	200mm dia minimum pot size
140mm	140mm dia minimum pot size

## MINIMUM STOCK SIZES

The recommended minimum plant size relative to the container size is as follows. Should the stem caliper of height of the tree relative to the container size be less than the figures shown, the tree should be rejected. Ensure minimum plant height at time of planting for the specified container stock unless otherwise agreed to by the landscape architect due to availability, species type and/or time of season.

Root ball volume	Height (above container)	Caliper (at 300mm)	Clean trunk height
100 litre	2.4 metres	50mm	1500mm
45 litre	1.9 - 2.3 metres	30mm - 35mm	1200mm

The following is a guide, final plant sizes due to availability, species, type, and/or time of season.



## 1 TYPICAL PLANT SIZE (ALONG WITH TYPICAL ROOTBALL SIZES) DIAGRAM

SECTION 1:50 @ A1

# TREES



Cassia queenlandica  
Golden Shower Tree



Cupanopsis anacardioides  
Tuckeroo



Tritanopsis laurina Luscious  
Water Gum



Xanthostemon chrysanthus  
Golden Penda

# SCREENING SHRUBS



Leptospermum flavescens Cardwell  
Tea Tree Cardwell



Syzygium australe Aussie Southern  
Lillypil

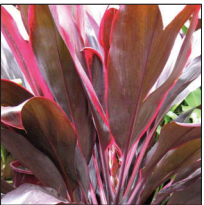


Xanthostemon chrysanthus Fairhill Gold  
Golden Penda

# SHRUBS AND GROUNDCOVERS



Carissa grandiflora  
Desert Star



Cordyline fruticosa Rubra  
Palm Lily



Critum pedunculatum  
Swamp Lily



Evolutus pilosus Blue Sapphire  
Blue Sapphire



Gardenia psidioides Glennie River var White Star  
Native Gardenia



Hibbertia scandens  
Golden Guinea Vine



Liriope muscari Evergreen Giant  
Liriope



Lomandra Katie Belles  
Mat Rush



Philodendron Xanadu  
Xanadu



Zamia furfuracea  
Cardboard Palm



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A	22/08/22	SUBMISSION TO RRC
ISSUE	DATE	REASON

THIS DRAWING HAS BEEN PREPARED WITH ALL CARE FROM BASE INFORMATION AVAILABLE AT THE TIME OF PREPARATION. ALL EXISTING AND RETAINED ELEMENTS ARE SHOWN INDICATIVELY ONLY. THE LOCATION OF THESE ELEMENTS ARE BASED FROM SURVEY INFORMATION. ALL PLANS AND DETAILS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT CONSULTANTS DOCUMENTATION PACKAGES INCLUDING (BUT NOT LIMITED TO) ARCHITECTURAL, CIVIL, STRUCTURAL, HYDRAULIC, ELECTRICAL, LIGHTING AND SOILS. DOCUMENTATION, ALL ABOVE AND BELOW GROUND SERVICE LOCATIONS ARE SHOWN INDICATIVELY. REFER TO THE RELEVANT ENGINEERS DRAWINGS AS REQUIRED. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE.

PROPOSED INDUSTRIAL DEVELOPMENT  
LOT 5 BARTON COURT,  
PARKHURST  
PLANTING SCHEDULE & IMAGES

JOB No.	DWG No.	ISSUE	DRAWN BY	CHECKED BY
22.188	5	A	HF	AG

NOT FOR CONSTRUCTION



GENERAL NOTES

A. ARCHITECTURAL WORKS INFORMATION

Refer to Architect's drawings for all information contained within these documents related to and nominated as Architectural Works. This includes all hardscape items such as paving, outdoor structures / shelters, walls and fencing. Architectural Works information contained within these documents are indicative only and not for construction or certification purposes.

B. CIVIL WORKS INFORMATION

Refer to Civil Engineer's drawings for all information contained within these documents related to and nominated as Civil Works. Civil Works information contained within these documents are indicative only and not for construction or certification purposes.

C. STRUCTURAL WORKS INFORMATION

Refer to Structural Engineer's drawings for all information contained within these documents related to and nominated as Structural Works. This includes retaining walls. Structural Works information contained within these documents are indicative only and not for construction or certification purposes.

D. ELECTRICAL WORKS INFORMATION

Refer to Electrical Engineer's drawings for all information contained within these documents related to and nominated as Electrical Works. Electrical Works information contained within these documents are indicative only and not for construction or certification purposes.

E. HYDRAULIC WORKS INFORMATION

Refer to Hydraulic Engineer's drawings for all information contained within these documents related to and nominated as Hydraulic Works. Hydraulic Works information contained within these documents are indicative only and not for construction or certification purposes.

LANDSCAPE SPECIFICATION NOTES

LEVELS - GENERAL NOTES

When setting out lines and levels ensure the accurate formation of grades and crossfalls leading to drains to enable surplus water to reach the drainage system and to prevent potential erosion channels. Ponding is unacceptable.

Minimum crossfalls are as follows:

- Paving and artificial grass 1:75
- Grassed and mulched garden areas 1:50

Maximum crossfalls are as follows:

- Paving 1:40
- Grassed areas 1:5
- Mulched garden areas 1:3

Finish organic mulch surfaces adjacent paving surfaces and / or edging. Finish bare surfaces flush with adjacent paving surfaces and / or edging. Ensure adequate falls in finished surface levels away from buildings to drainage collection points (ie. field inlets, etc).

SUBSOIL DRAINAGE - GENERAL NOTES

Ensure adequate subsoil drainage elsewhere by installing suitable agricultural drainage systems where necessary, and especially in areas subjected to site excavation works including retaining walls.

Lay subsoil drains in -

- Garden beds that are adjacent to buildings surrounded on all sides by pavements or in any garden beds where water is likely to pond;
- In any grassed areas where water is likely to sit and be unable to disperse quickly
- Behind retaining walls and raised kerbs
- In locations as shown on the drawings

Unless otherwise specified, all subsoil drains shall be constructed, 90mm slotted PVC contour pipe, wrapped in Bidon V14 filter cloth or equal equivalent. Filter gravel to be 10mm clean washed aggregate. Lay drainage in continuous lengths where possible with minimum 1:100 falls. Discharge pipes into stormwater system.

Where grades are not sufficient to carry water out of the landscape area adequately and safely, supply and install drainage sumps to catch excess water.

Sumps are to be fitted with a hinged non-slip grate and connected to the stormwater system. Refer to Hydraulic and Civil Engineer's drawings for drainage pit specifications and connections.

PLANTS

- NATSPEC shall apply to trees where Council requires this certification.
- Plants must meet AS 2300:2018 Tree Stock for Landscape Use
- Plants are to be good quality nursery stock from a NATA Accredited nursery
- They shall be fundamentally free of pest and diseases, vigorous, well established, hardened off, of good form consistent with species or variety, not soft or furred with large healthy root systems with no evidence of having been restricted or damaged. Trees shall have a single leading shoot.
- Provide plants of a height and spread appropriate to the specified plot size and species.
- Mature tree stock shall be properly prepared for transport with adequate measures taken to protect against shock and wind damage.
- Ensure sequencing with site foreman to avoid delays planting mature tree stock.
- After installation they shall be thoroughly watered.
- Trees to be single-trunked canopy shade tree species able to attain a clear trunk height of 1800mm on maturity.

TURF

SUBGRADE PREPARATION:

Turfed areas shall be prepared initially by removing all deleterious material. Cultivate subgrade surface by thoroughly ripping to a minimum depth of 150mm before spreading topsoil unless otherwise directed (ie. no cultivation under turf to be retained).

SOIL:

Spread turf underlay topsoil to a minimum depth of 100mm unless otherwise directed. Proposed topsoil must comply with Australian Standards AS4119:2003 and described as 'Soil blend'.

TURF:

To be fundamentally free from weeds and disease or other deleterious substances.

- Use "Wintergreen"

INSTALLATION:

Turf shall be close tuffed with staggered cross-joints and laid in straight lines, running perpendicular to the direction of slope (and/or parallel to contours).

Proposed topdressing soil to comply with Australian Standards AS4119:2003 and as described as 'Topdressing'.

All joints shall be filled with an approved topdress light soil or sand and the turf shall be lightly rolled. Finished levels shall be 3mm below surrounding surface levels to allow for future top dressing. Allowance should be made for shrinkage and settling.

Turf shall be adequately watered once installed, refer Management Plans.

Ensure protection from trampling.

Lay turf within 30 hours of being cut.

FERTILISER:

Fertiliser to be applied to the turf at the rates and period of time from installation as recommended by the supplier. If no Starter Fertiliser supplied by the supplier, we recommend:

Dynamic Lifter Turf Starter:

<https://www.waters.com.au/products/fertilising/organic-based/dynamic-lifter-turf-starter/#?COXOZF-2018-18-97>

Lawn Builder™ Seed & Turf Starter Slow Release Lawn Fertiliser:

<https://www.waters.com.au/products/fertilising/organic-based/lawn-builder-bulldozer-slow-release-lawn-fertiliser>

<https://www.waters.com.au/products/fertilising/organic-based/lawn-builder-bulldozer-slow-release-lawn-fertiliser>

SOIL WETTING AGENT:

We recommend the application of a soil wetting agent wetting agent (ie. non biodegradable detergent not crystals) to stop hydrophobia if not already in the starter fertiliser supplied with the turf, at the rates recommended by the manufacturer:

- Scotts Hydroflow Wetts Soil
- Scotts Penetrade
- Plant of Health Soils Soaker

WEEDS, PESTS DISEASE MANAGEMENT:

Weeds are required to be removed by physical or chemical (non-residual Glyphosate or other herbicides) means. If chemical means, as per the manufacturer recommendations. Refer to the following reference for guidelines on weeds, pest and disease management.

REFERENCE:

<http://the.watguide.com.au>

PLANTING BEDS

SUBGRADE PREPARATION:

Cultivate subgrade surface by thoroughly ripping to a minimum depth of 150mm before spreading topsoil.

TOPSOIL:

Spread topsoil to a minimum depth of 300mm unless otherwise directed. Proposed topsoil must comply with Australian Standards AS4119:2003 and described as 'Soil blend'.

Provide certification of soil types delivered to site, as per AS4119:2003.

PLANTS:

Mature tree stock shall be properly prepared for transport with adequate measures taken to protect against shock and wind damage.

Ensure sequencing with site foreman to avoid delays planting mature tree stock.

FERTILISER:

Ensure soil nutrient and PH levels are suitable for specific plant species (ie. native or exotic species). Apply slow release fertiliser to each plant as per manufacturer's recommended rates.

A slow or controlled release fertiliser organic or inorganic to be incorporated generally into the imported (or excavated / site topsoil). We recommend the following:

Inorganic Slow or Controlled Release fertilisers:

- Omicote
- Nutricote
- Macroco
- E-Scape PRO by eCo-Environment

Organic slow release:

- Dynamic Lifter
- Organic Link by Plant of Health

WETTING AGENT:

A wetting agent and / or soil amendment including a wetting agent is required to all mass planting beds:

- Scotts Hydroflow Wetts Soil
- Scotts Penetrade
- Plant of Health Soils Soaker

- Mulgro by eCo-Environment

PLANTING:

To locations as shown on the plan and to the sizes and numbers as shown on the schedule.

ORGANIC MULCHING:

Proposed mulch must comply with Australian Standards AS4454:2003. Composts, soil conditioners and mulches. Spread an even cover of (1" Hoop Bark) to a minimum depth of 100mm entirely over planting bed areas where organic mulch is specified.

Rake smooth to finish flush with surround levels. Do not place in contact with stems of plants. Any mulch used must be free of peanut shell or other infant material.

CONCRETE EDGE

Supply and install concrete edging in the locations and extents as shown on the drawings and as detailed.

Ensure construction joints at max 1800mm centres and / or at changes of curvature direction.

Flush concrete edge - 100 x 100mm concrete edge with pencil round profile. Concrete edge is to finish flush with adjoining surfaces.

IRRIGATION

- Planting plan has been designed to survive without an automatic irrigation system. Water additives and water retention elements, along with hardy water-wise plants will ensure an irrigation system is not imperative to the long-term maturation and survival of the proposed plants. If approved, install an automatic, fixed position, low pressure sprinkler irrigation system to all landscaped areas shown on the drawings internal to the site only, to Richmond Regional Council approval. The irrigation shall meet the following performance requirements as per the manufacturer's and/or installers specifications:
  - Summer target application of 30mm
  - Fully automatic and retimed
  - Recycled water use (from rainwater tanks)
  - Commercial quality fittings and fixtures
  - Mainsline
  - Drip line system under mulch
  - RPZ backflow prevention device

All design and documentation, materials supplied and work carried out should be in accordance with the current relevant Australian Standards and best practice.

GENERAL NOTES:

- All materials and workmanship shall be to the relevant Australian Standards.
- Where pipe work shown running parallel under paved surfaces, has been done so for clarity purposes only.
- All pipe work is to be installed within soil landscaped areas only where possible.
- Pipe tops over mainsline not shown. All connections to mainsline only to lateral valve locations.
- Contractor shall undertake the radius adjustment of all rotor sprinklers as required.
- For all sprinkler heads to back of road kerbs, water supply lateral to be installed minimum of 500mm off back of kerb.
- All pipe work under concrete paving to be installed in sleeves.
- All pipe work under removable paving may be pre-laid prior to paving works.
- All pipe work under retained areas to be pre-laid prior to retaining wall construction.
- Irrigation mainsline alignments in verges to be in standard alignment zone for trees i.e. 2.5m to 3m from property boundary unless otherwise noted.
- Cross-stacking of pipe fittings is not allowed.
- Lateral pipe work routed parallel to mainsline shall not be installed directly above mainsline. Laterals must be horizontally offset by a minimum of 300mm from mainsline.
- All pipe work shall be routed around any existing trees and no closer than tree canopy drip line. All tree roots smaller than 50mm diameter which are damaged during excavation shall be clearly cut with a saw or secateurs. Any tree roots 50mm or greater encircled are not to be damaged and pipe trench shall be hand-excavated, thrust bored (planned) or air drilled (other pressure and/or suction).
- A minimum length of 200mm of pipe shall be provided between fittings in lateral pipe work.
- Please note that this drawing is to be read in conjunction with the detail drawing and the specifications.

WATER BUDGET AND CONSUMPTION NOTES

- Irrigation area is for current project works stage only and is approximate. The area has been calculated from the value data site as a function of low rate and nominal precipitation rate.
- Operator to be aware of any water usage restrictions which may be applicable, such as total exclusion periods (ie. June to August inclusive) and/or restrictions on the number of cycles per week (e.g. groundwater - 3 cycles per week, potable scheme water - 2 cycles per week).

PLANT ESTABLISHMENT / CONTINUING MAINTENANCE

Allow a 12 WEEK for Plant Establishment Period from Practical Completion to the satisfaction of the Landscape Architect.

- Maintain adequate watering regime
- Remove weed growth from all mass planting beds and turfed areas
- Keep landscape areas tidy and free of litter and debris
- Fertilise (see per the notes above)
- Weed control (see per the notes above)

- Prune planting, control pest and disease management (see per the notes above) to maintain healthy growth
- Replenish mulch material where necessary
- Replace dead / dying plant material
- Reinstate stakes, ties and marker stakes where necessary
- Reinstate erosion control matting and other erosion control measures as necessary
- Make good any disturbance to surfaces and mulch

Continue maintenance works beyond Plant Establishment Period as required.

MANAGEMENT PLANS:

The turfed areas shall be thoroughly watered on the day of turf installation and then as follows at the equivalent of 30mm<sup>2</sup>, including natural rainfall, or as required to maintain active healthy growth.

Weeks 1-3: Twice a week

Weeks 3-12: Once a week or as necessary

If no irrigation, apply the above rates to the mass planting beds. Watering to use rainwater tanks if possible.

SPECIAL NOTE

Accord particular diligence to the following prime items:

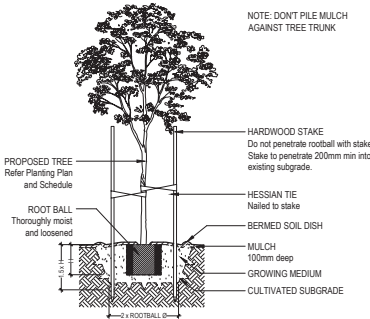
TOPSOIL QUALITY AND SUBGRADE PREPARATION as specified.

PLANT QUANTITY: Use only consistently well nurtured nursery stock from an approved supplier. Check with Landscape Architect where species substitutions may be made.

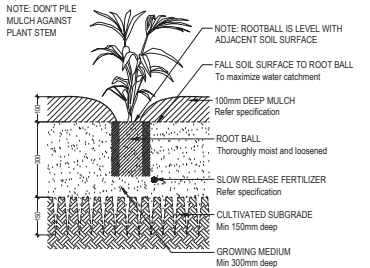
MAINTENANCE: Ensure a continuing maintenance program, including weed/disease, fertilising, watering (but beware of over-watering) and replacement of aging plant material.

GUARANTEE

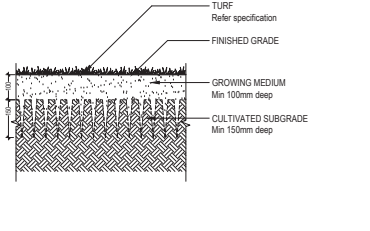
Failure to adequately address these items, best practice and relevant Australian Standards WILL result in a sub-standard landscape outcome.



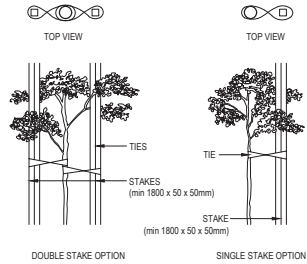
1 TYPICAL TREE PLANTING DETAIL SECTION 1:100 @ A1



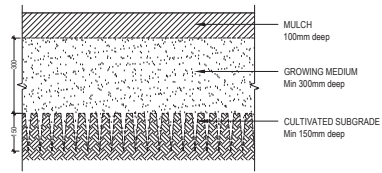
3 TYPICAL SHRUB / GROUNDCOVER PLANTING DETAIL SECTION 1:10 @ A1



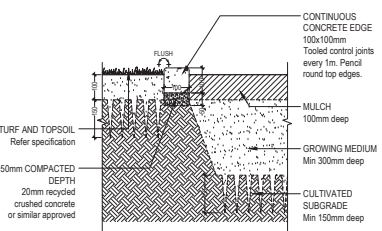
5 TYPICAL TURF PLANTING DETAIL SECTION 1:10 @ A1



2 TYPICAL TREE STAKING DETAIL SECTION NTS



4 TYPICAL GARDEN BED DETAIL SECTION 1:10 @ A1



6 CONCRETE EDGE DETAIL SECTION 1:10 @ A1



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PROPOSED INDUSTRIAL DEVELOPMENT  
LOT 5 BARTON COURT,  
PARKHURST  
LANDSCAPE NOTES & DETAILS

JOB No. DWG No. ISSUE DRAWN BY CHECKED BY  
22.188 6 A HF AG

NOT FOR CONSTRUCTION



Premise

**ROCKHAMPTON REGIONAL COUNCIL**

**APPROVED PLANS**

These plans are approved subject to the current conditions of approval associated with

**Development Permit No.: D/109-2022**

**Dated: 27 February 2023**

WIDELAND TRUCKS AND EQUIPMENT PTY  
LTD

**2 Barton Court, Parkhurst**

ENGINEERING INFRASTRUCTURE REPORT


Report No: MIS-1045/R01

Rev: D

1 February 2023

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DOCUMENT AUTHORISATION					
Revision	Revision Date	Report Details			
A	26/07/22	For DA Submission			
B	10/10/22	Stormwater Amendments - For DA Submission			
C	14/12/22	Stormwater Amendments - For DA Submission			
D	01/02/23	Stormwater Amendments - For DA & Op Works Submission			
Prepared By		Reviewed By		Authorised By	
Lawrence Mills	LM	Chris Shields	CS	Chris Shields	



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## 1. INTRODUCTION

Premise Australia Pty Ltd (here within referred to as "Premise") has been commissioned by Wideland Trucks and Equipment Pty Ltd C/- Nielsen Project Management to prepare an Engineering Infrastructure Report (EIR) in support of a DA and Operational Works Application to implement a truck sales and workshop business at 2 Barton Court, Parkhurst (Lot 5 on SP326319). The site is approx. 1ha in size, is located within the recently developed Lily Place Industrial Estate and is currently vacant. A two-way access / egress driveway crossover is currently proposed for the site from Barton Court.

This report intends to address the Civil Engineering Infrastructure for the proposed development including earthworks, sewer reticulation, water reticulation, stormwater management, electrical, and telecommunications for the project.

With respect to stormwater management, specific details are provided in Section 2.4 noting that should be considered in conjunction with the separate *Stormwater Management Plan (Including Hydraulic Impact Assessment)* that has previously been prepared by Knobel Engineers for the Lily Place Industrial Estate DA (D/52-2019).

Note that all traffic and transport matters pertaining to the site, including proposed access and egress, parking, sight distance and service vehicle access, are being addressed by a separate third party Consultant.

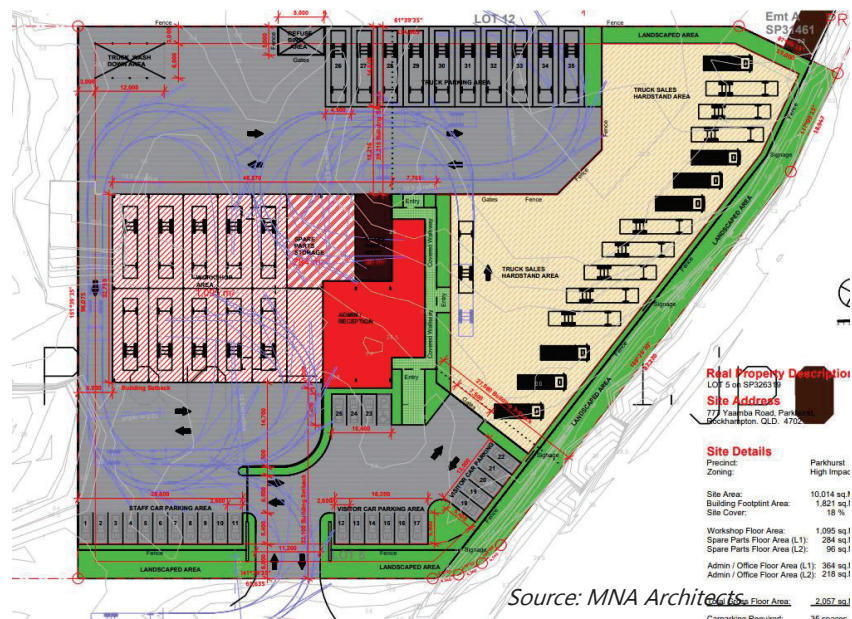
Refer to **Figure 1** below:



**Figure 1 - Subject Site**

### 1.1 Proposed Development

The proposed development will be classified as High Impact Industry as per the Rockhampton Regional Council (RRC) Planning Scheme. The site layout illustrated in **Figure 2** consists of an Administration / Reception building, Workshop area and Truck Sales and Hardstand area, combining to generate a Gross Leasable Floor Area (GLFA) of 2,057 square metres.



**Figure 2 – Indicative Proposed Site Layout**

The proposed order of construction works is planned to generally following this summary below:

- Minor clearing and grubbing;
- Earthworks;
- Underground services installation;
- Construction of new buildings, parking and hardstand areas as per the Development Proposal;
- Final detailed works; and
- Landscaping establishment.

Refer to attached drawing C001 (Rev 5) for the generally proposed Civil Works Layout.

## 2. EXISTING SERVICES & CONDITIONS

### 2.1 Terrain & Earthworks

All sites within the recently constructed Lily Place Industrial Precinct are currently vacant and have been cleared of vegetation. The site is bordered by a neighbouring lot to the west, whilst a fully developed heavy industry precinct is located to the north. Access to the site is provided from Barton Court via the southern entrance.

Based on the survey provided by Capricorn Survey Group (CSG), the gradient across the site is relatively flat with an approximate slope of 0%-0.5%. Elevations reach a maximum of 25.5 m AHD on the north-eastern corner of the site, however are otherwise consistent at an elevation of 25.25 m AHD. Refer to **Figure 3** below for a photo of the existing terrain taken from Barton Court:





**Figure 3 – General Site Terrain towards the northern site boundary**



**Figure 4 – General Site Terrain towards the western site boundary**

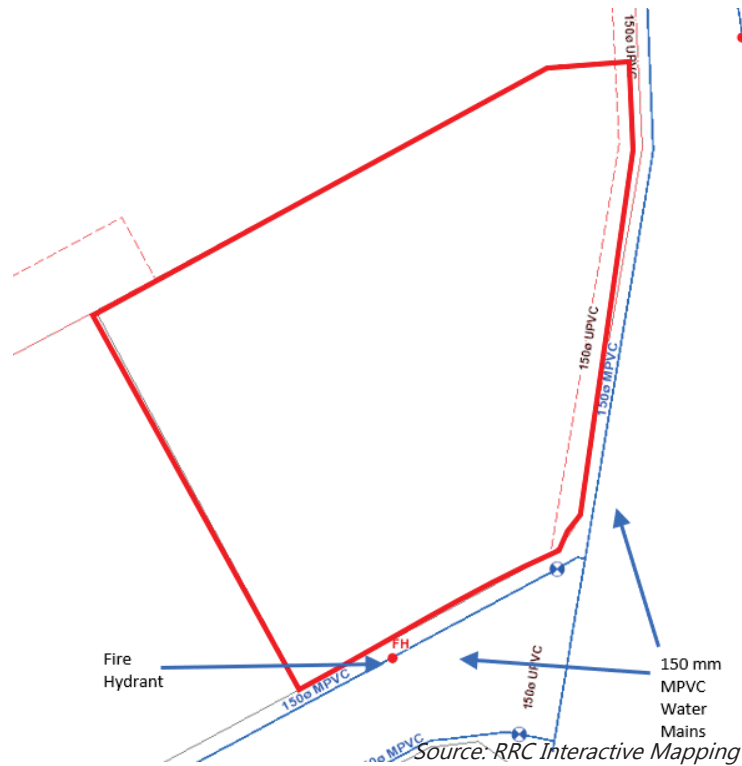
In terms of the proposed earthworks for the site, it is expected that cut and fill would be minimal with the depth of cut or fill not exceeding 0.5m for “slab on ground” type structures and pavement areas. It is likely that the majority of earthworks required for this site would be to get to a subgrade level for pavement and structural elements such as footings and slabs. The proposed finished floor level for the main building is RL25.500m AHD.

It is recommended that a geotechnical investigation is undertaken on this to confirm the in-situ conditions, which will inform pavement, slab, driveway crossover and structural footings designs.

## 2.2 Water Reticulation

Council's Geographical Information System (GIS) illustrates that the site has sufficient access to existing water mains. There are existing 150mm diameter mPVC water main which run adjacent to the southern and eastern boundaries. There is also a fire hydrant located on this main, located approx. 17 metres from the south-west site corner, as shown by the site photo in **Figure 6**.

Given that the water mains have likely been sized to meet the industrial demands of Lily Place, no external upgrades are anticipated to meet flow and pressure requirements.



**Figure 5 – Existing Water Infrastructure**

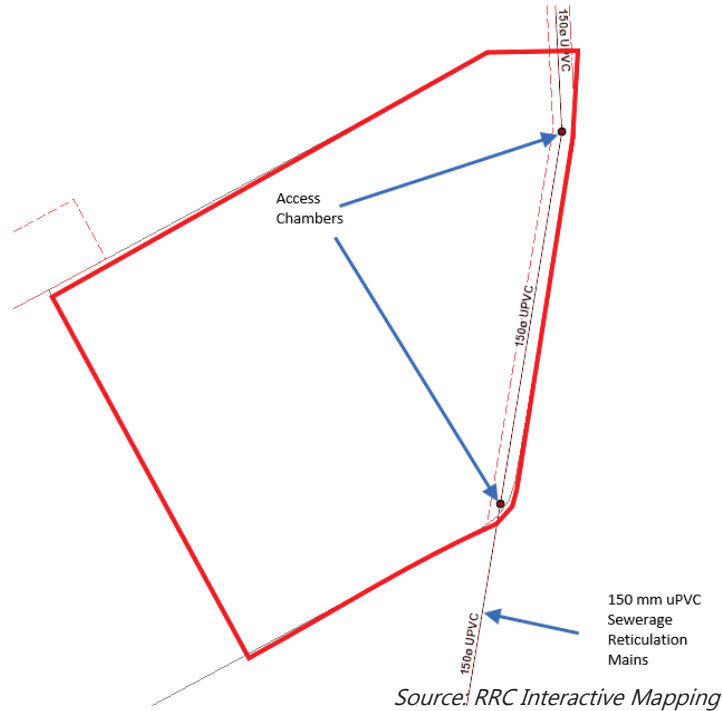


**Figure 6 – Existing Fire Hydrant near southwest site corner**

The internal water supply for the proposed development, including any necessary booster and metering arrangements if required, will be detailed by a suitably qualified person (Hydraulic Engineer) during the detailed design phase, and all appropriate approvals sought from Council.

## 2.3 Sewer Reticulation

Council's Geographical Information System (GIS) shows that there are currently two (2) access chambers along a 150mm diameter uPVC sewer main located within an easement that runs along the eastern site boundary. Refer to **Figure 7** below. Site inspection photographs showing the north-east access chamber and the southeast access chamber are illustrated in **Figure 8** and **Figure 9** respectively.



**Figure 7 – Existing Sewer Infrastructure**



**Figure 8 – Existing Sewer Access Chamber – North-east Corner**





**Figure 9 – Existing Sewer Access Chamber – South-east Corner**

All proposed internal sanitary drainage will be documented during the detailed design phase by a suitably qualified person (Hydraulic Engineer) during the detailed design phase, and all appropriate approvals sought from Council. This includes any first-flush diverters or grease/oil separators that are intended to discharge to the sewer network via a trade waste approval.

## 2.4 Stormwater

Knobel Engineers have previously prepared a *Stormwater Management Plan (Including Hydraulic Impact Assessment)* that was approved by Council as part of the DA for the Lily Place Industrial Estate ('D/52-2019' RRC Reference and '1907-12044 SRA' SARA Reference). The SMP / HIA quantified the peak stormwater discharge up to a 1% AEP flood event in a post-development scenario and provided measures for water quantity and quality management for the whole precinct. The post-development scenario in this case considered a fully developed industrial site with all building pads levelled to be above adjacent major flow channels, to maintain adequate freeboard. The adoption of conveyance channels and a basin located near the south-western corner of the site, was adopted to maintain a 'no worsening' case from pre- to post-development states. Furthermore, a bioretention basin was also integrated within this basin to treat stormwater and meet reduction targets for Gross Pollutants (GP), Total Suspended Solids (TSS), Total Phosphorus (TP) and Total Nitrogen (TN) as per RRC requirements and the State Planning Policy (2017).

As both hydraulic modelling and water quality modelling were undertaken to account for the entire Lily place Industrial Estate being fully developed up to 90% impervious, Premise previously considered that any stormwater issues relevant to the site in question have already been resolved through measures outlined by Knobel Engineers. Therefore, no further investigation into stormwater management was considered necessary for the proposed development in the first iteration of this report.

This approach was further confirmed by Jamie McCaul from RRC at the time via email correspondence on 14 July 2022, whereby he stated:

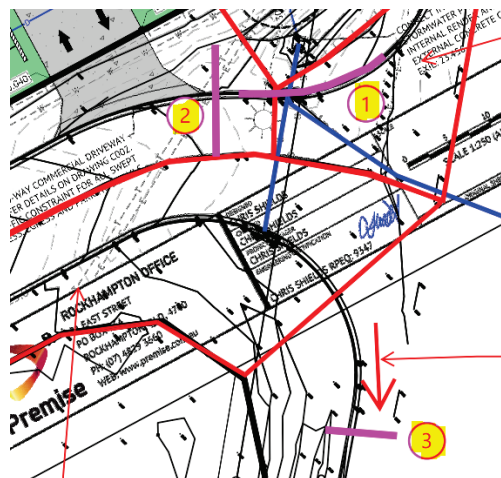
*I can confirm that the basin and water quality device that has been constructed/ designed is considering a fully developed (90% impervious) site. Hence no site-specific detention or water quality improvements are needed.*

Following further email correspondence with Jamie McCaul and Mohit Paudyal from Council between 6 September 2022 and 14 September 2022, we understand that there may be some inconsistencies between what was documented by Knobel Engineers in the DA phase of the Lily Place development, and what was subsequently documented by Siris Consulting Engineers in the detailed design / Operational Works phase,

approved by Council, and ultimately built and accepted On Maintenance by Council. In summary, it appears that some form of supplementary stormwater detention and quality improvement is now required within the site, and Council Officers were willing to agree a practical compromise that meets both parties' interests.

With reference to the attached amended drawings C001 (now Rev 5) and C002 (Rev 3), the following approach for internal stormwater management has now been taken:

- The proposed interconnectivity of the internal piped stormwater system has been changed to send runoff from over half the site out to the existing grassed swale to the east, to assist with stormwater quality improvement. This approach also lengthens the Time of Concentration for these eastern sub-catchments to assist in peak flow attenuation at the existing pit and pipe system immediately to the south of the site;
- SPEL Stormsacks (or approved equivalents) are now included within the six (6) pits noted with an asterisk, as part of the proposed piped system that connects to the existing stormwater pit at the bottom end of the grassed swale immediately to the south of the site, to further assist with stormwater quality improvement;
- Along with the change in proposed interconnectivity of the internal piped stormwater system, this system has been reassessed and sized in line with Table 7.13.4 from QUDM, being 'Level IV' drainage with a design storm of 5% AEP (Q20 ARI) and we have applied a 5min Time of Concentration to all internal catchments due to the high fraction impervious and desire to err on the conservative side. This has led to a number of proposed pipe sizes being amended from the previous iterations, to ensure runoff from the design storm is appropriately conveyed to the Legal Point(s) of Discharge in line with QUDM;
- 2 x 5,000L slimline tanks plumbed for detention (ie. not to hold water for re-use) have been nominated on the western end of the building to command approximately half of the proposed roof area via gutters and downpipes. This will provide peak flow attenuation (throttling) before that portion of the runoff enters the proposed piped system on the western side of the main building and ultimately discharges into existing downstream piped infrastructure;
- We have introduced a Class D grated strip drain across the access to reduce surface runoff to Barton Court itself to a practical minimum. It is only the minimum area of the proposed concrete driveway crossover (which is 'as of right') that is grading towards Barton Court, and cannot practically be reduced any further;
- We have assessed the gap flow and therefore depth-velocity (dV) product at 3 critical sections at the Barton Crt / Southern Service Rd intersection. The dV products at these 3 locations (see snips below) are within acceptable limits:



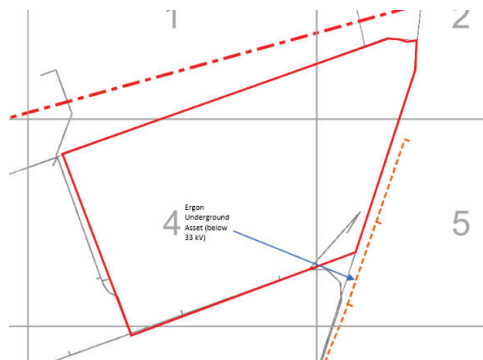
Section Location	Description	Depth (mm)	Velocity (m/s)	d*V
1	Weir equation over top of kerb	80	0.53	0.04
2	Izzard equation gutter flow	84	1.21	0.10
3	Izzard equation gutter flow	172	1.21	0.21

- As part of the gap flow and dV calculations, we identified that the existing stormwater pit and pipe system at the Barton Crt / Southern Service Rd intersection is not adequate to convey the minor flows from the existing road catchments plus the developed site, without unacceptable freeboard or surcharge. This appears to be the product of the aforementioned disconnect between the stormwater approach during the DA, Operational Works and construction phases of the subdivision itself. Following further recent consultation with Patricia Farrow and Jamie McCaul at RRC, Drawing C001 (now Rev 5) has therefore been updated to include direct piped connections from a portion of the site to the two (2) existing gully pits along the western side of the Southern Service Rd, with high flow dome grates within the existing grassed swale, to maximise flow capture and conveyance through existing pipes beneath this road to the open drainage reserve on the eastern side. These pits will also allow surcharge and bypass as required in larger rain events, if the capacity of the existing pipes beneath the Southern Service Rd is exceeded. A proposed piped connection to the existing high flow inlet pit near the corner of Barton Crt and the Southern Service Rd has been maintained to command a portion of the site, and the two (2) remaining portions of the site discharge into the existing grassed channel surface; and
- Proposed pit invert levels, pit surface levels, pipe sizes, pipe grades, pit sizes and site hardstand perimeter surface levels are all now documented on Drawing C001 (now Rev 5) for completeness to demonstrate that the site can effectively capture and manage all roofwater water and surface water to the agreed Legal Points of Discharge being the existing grassed swale and pipe infrastructure along the eastern side of the site.

All proposed internal roofwater management (downpipes, minor grated inlets and minor pipes) will be documented during by a suitably qualified person (Hydraulic Engineer) during the detailed design phase, and all appropriate approvals sought from Council.

## 2.5 Electrical and Telecommunications

There does not appear to be any existing overhead electrical infrastructure within the vicinity of the site. Ergon Energy maintains an underground asset (below 33 kV) which runs along the Southern Service Road adjacent the eastern boundary (Refer **Figure 10**), and underground LV electrical reticulation is evident through the existence of an electrical turret near the south-east corner of the site, and a nearby street light.



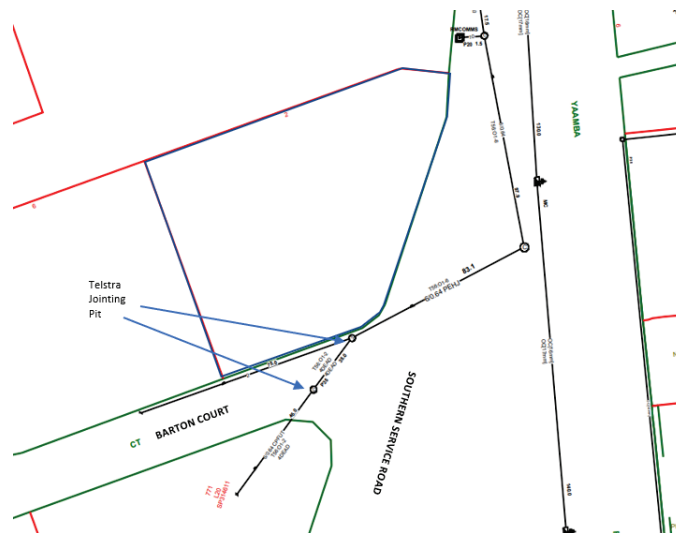
**Figure 10 – Ergon DBYD Extract**



**Figure 11 – Existing Street Light on Barton Court**

Any electrical reticulation design for the proposed internal works will be completed by a qualified Electrical Engineer during the detailed design phase, and all appropriate approvals sought from the relevant authority.

Existing telecommunications infrastructure is also located within the vicinity of the subject site in the road reserves of Barton Court and the Southern Service Road. There are also a number of pits located close to the site including one adjacent the south-east site corner. Refer to **Figure 12 below:**



**Figure 12 – Telstra DBYD Extract**

Any telecommunications reticulation design for the proposed internal works will be completed by a qualified Telecommunications Engineer during the detailed design phase, and all appropriate approvals sought from the relevant authority.

## 2.6 Gas

There does not appear to be any existing gas services immediately adjacent to the subject site.

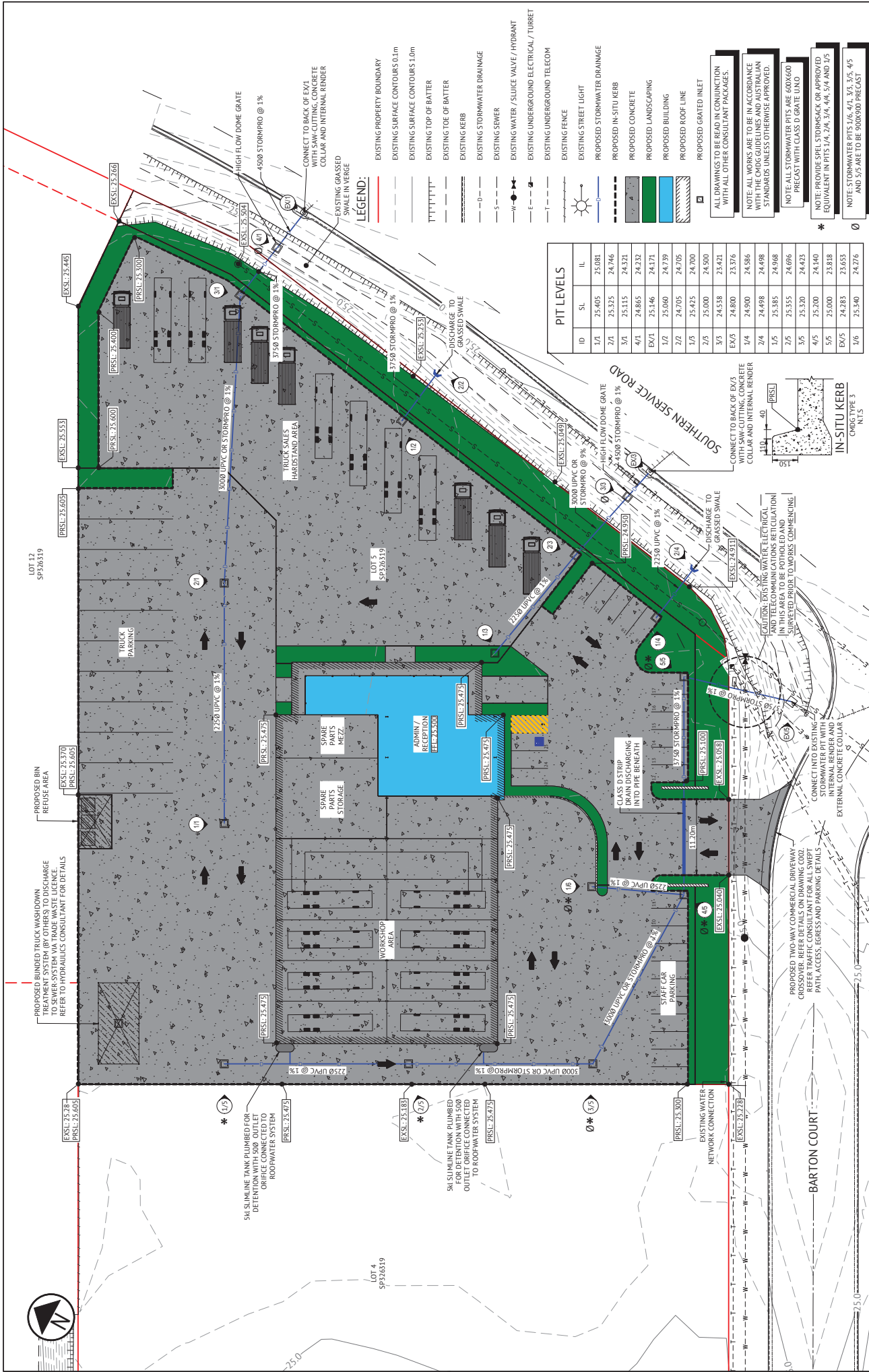


### **3. CONCLUSION**

There appears to be no insurmountable engineering infrastructure difficulties with the proposed development on the subject site at 2 Barton Court, Parkhurst (Lot 5 on SP326319). A review of the services proposed for this development and their impact on surrounding services, indicates that there is no impediment to development. The development can be adequately serviced by the existing water and sewer networks and electrical and telecommunications services are also available immediately adjacent to the site. The management of stormwater quantity and quality for a fully developed site has also been addressed in Section 2.4, to be read in conjunction with the previous modelling and reporting tied into the DA Approval for the Lily Place Industrial Estate itself (D/52-2019).

Minor alterations in the design may eventuate from future applications, however the fundamentals of the design strategy ensure that service provisions will not pose a serious constraint to development.

If you should have any questions regarding this report, please do not hesitate to contact the Premise Office in Rockhampton.



LEGEND:

- EXISTING PROPERTY BOUNDARY
- EXISTING SURFACE CONTOURS 0.1m
- EXISTING SURFACE CONTOURS 1.0m
- EXISTING TOP OF BATTER
- EXISTING TOE OF BATTER
- EXISTING KERB
- EXISTING STORMWATER DRAINAGE
- EXISTING SEWER
- EXISTING WATER / SUICIDE VALVE / HYDRANT
- EXISTING UNDERGROUND ELECTRICAL / TURRET
- EXISTING UNDERGROUND TELECOM
- EXISTING FENCE
- EXISTING STREET LIGHT
- PROPOSED STORMWATER DRAINAGE
- PROPOSED IN-SITU KERB
- PROPOSED CONCRETE
- PROPOSED LANDSCAPING
- PROPOSED BUILDING
- PROPOSED ROOF LINE
- PROPOSED GRATED INLET

PIT LEVELS		
ID	SL	IL
1/1	25.405	25.081
2/1	25.325	24.746
3/1	25.115	24.321
4/1	24.865	24.232
EX/1	25.146	24.171
1/2	25.060	24.739
2/2	24.705	24.705
1/3	25.425	24.700
2/3	25.000	24.500
3/3	24.538	23.421
EX/3	24.800	23.376
1/4	24.900	24.586
2/4	24.498	24.498
1/5	25.385	24.968
2/5	25.355	24.696
3/5	25.320	24.423
4/5	25.200	23.818
5/5	25.000	23.818
EX/5	24.283	23.653
1/6	25.340	24.276

ALL DRAWINGS TO BE READ IN CONJUNCTION WITH ALL OTHER CONSULTANT PACKAGES.

NOTE: ALL WORKS ARE TO BE IN ACCORDANCE WITH THE CHDG GUIDELINES AND AUSTRALIAN STANDARDS UNLESS OTHERWISE APPROVED.

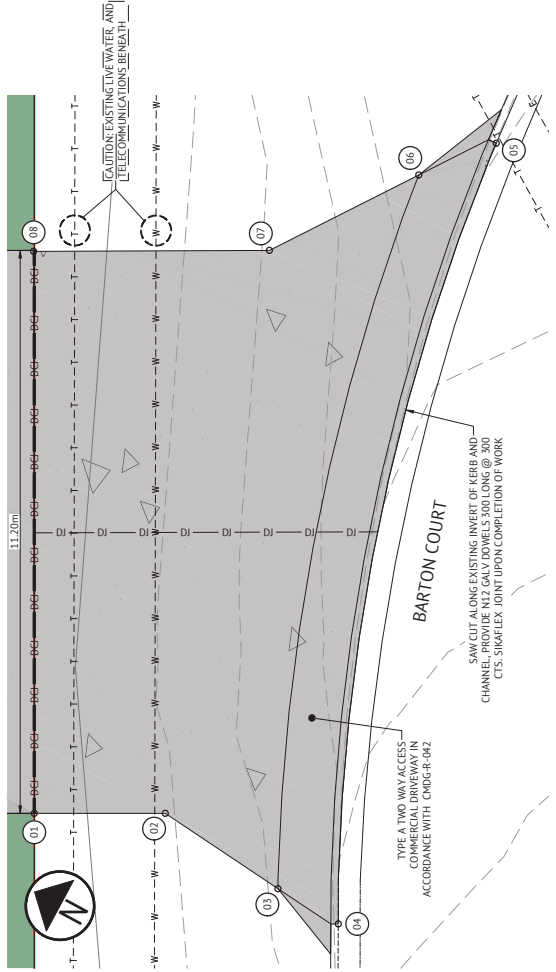
NOTE: ALL STORMWATER PITS ARE 600x600 PRECAST WITH CLASS D GRATE UNO

\* NOTE: PROVIDE SPEL STORMSACK OR APPROVED EQUIVALENT IN PITS 1/4, 2/4, 3/4, 4/4, 5/4 AND 1/5

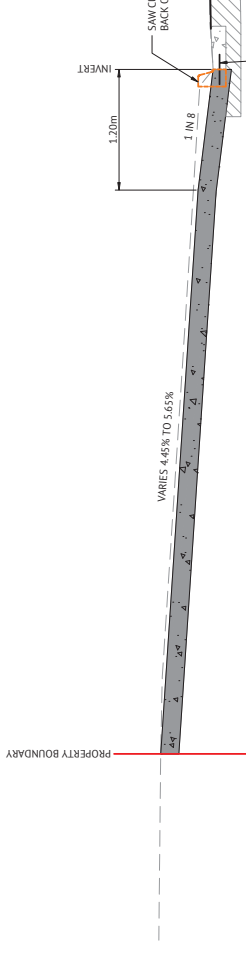
NOTE: STORMWATER PITS 1/6, 4/1, 3/1, 5/1, 4/5 AND 5/5 ARE TO BE 900x900 PRECAST

FOR APPROVAL

DATE	REV	DESCRIPTION	REV
15/06/23	1	FOR APPROVAL	AB
09/07/23	2	FOR APPROVAL	AB
22/07/23	3	FOR APPROVAL	AB
15/08/23	4	FOR APPROVAL	AB
22/08/23	5	FOR APPROVAL	AB
15/09/23	6	FOR APPROVAL	AB
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DRIVEWAY SETOUT  
SCALE 1:50



DRIVEWAY TYPICAL SECTION  
SCALE 1:25

DRIVEWAY CROSSOVER DETAILS

SCALE 1:25

SCALE 1:25

SCALE 1:25

SCALE 1:25

SCALE 1:25

SCALE 1:25

SCALE 1:25

SCALE 1:25

SCALE 1:25

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SCALE 1:25

SCALE 1:25

GENERAL:

- G.1. CONSTRUCTION METHODS ARE THE RESPONSIBILITY OF THE BUILDER. DETAILS SHOWN ARE A GUIDE AND ALTERNATE DETAILS MAY BE SUBMITTED FOR ENGINEERING APPROVAL. PRIOR TO WORKS COMMENCING PROPRIETARY ITEMS ARE TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION AND DESIGN DETAILS.
- G.2. IT IS THE RESPONSIBILITY OF THE BUILDER TO MAKE GOOD ANY DAMAGE CAUSED TO ADJOINING STRUCTURES OR ELEMENTS CREATED DURING CONSTRUCTION.
- G.3. SITE PREPARATION AND FOUNDATIONS:

- P.1. EARTHWORKS SHALL BE IN ACCORDANCE WITH AS 3788 INCLUDING THE FOLLOWING:
  - P.2. THE BUILDING SITE SHALL BE STRIPPED OF ALL VEGETABLE MATTER AND THE ASSOCIATED LAYER OF TOPSOIL.
  - P.3. THE SUBGRADE (UNDER SLABS) SHALL BE COMPACTED TO A DENSITY OF NOT LESS THAN 95% OF THE MAXIMUM DENSITY AS DETERMINED IN ACCORDANCE WITH METHOD 5.1.1 OF AS 1289 (STANDARD COMPACTION).
  - P.4. A MOISTURE BARRIER OF 0.2mm POLYETHYLENE FILM LAPPED 200mm AND TAPED AT JOINTS SHALL BE PROVIDED UNDER THE SLAB. REFER PAVEMENT DETAILS FOR ADDITIONAL REQUIREMENTS.
  - P.5. PAVEMENTS HAVE BEEN DESIGNED BASED ON MIN. CBR 3 INSTU MATERIAL.

CONCRETE:

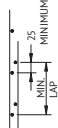
- C.1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3780 AND AS 3600.
- C.2. CONCRETE SHALL HAVE THE FOLLOWING PROPERTIES SEE TABLE BELOW:

CONCRETE TABLE				
ELMENT	EXP. CLASS (CONCRETE)	CLASS & GRADE (CONCRETE)	REIN'T (mm)	MAX AGG. SIZE (mm)
CONCRETE PAVEMENTS	B1	N32	50	20
				80

- C.3. CURING OF ALL CONCRETE MUST BE ACHIEVED BY KEEPING SURFACES CONTINUOUSLY WET FOR A PERIOD OF 7 DAYS UNDO. IN ACCORDANCE WITH AS 3600. APPROVED SPRAY-ON CURING COMPOUNDS THAT COMPLY WITH THE REQUIREMENTS OF AS 3600 MAY BE USED. CONCRETE MUST BE PROTECTED FROM THE WIND AND TRAFFIC. CURING MUST COMMENCE IMMEDIATELY AFTER CONCRETE PLACEMENT.

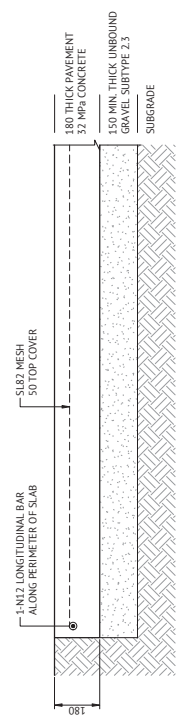
REINFORCEMENT:

- R.1. SYMBOLS ON DRAWINGS FOR GRADE AND TYPE OF REINFORCEMENT ARE AS FOLLOWS:
  - R.1.1. R: DENOTES STRUCTURAL GRADE 250 PLAIN ROUND BAR TO AS 4671.
  - R.1.2. R: DENOTES STRUCTURAL GRADE 250 PLAIN ROUND BAR TO AS 4671.
  - R.1.3. S: DENOTES HARD DRAWN WIRE GRADE 500 SQUARE REINFORCING MESH DUCTILITY CLASS L TO AS 4671.
  - R.1.4. R: DENOTES HARD DRAWN WIRE GRADE 500 RECTANGULAR REINFORCING MESH DUCTILITY CLASS L TO AS 4671.
  - R.2. ALL N BARS TO BE CLASS 50.
  - R.3. TIES AS REQUIRED TO PROVIDE ADEQUATE SUPPORT AS FOLLOWS:
    - R.3.1. BARS 16mm AND LESS: AND FABRIC: 100mm CENTERS.
    - R.3.2. BARS 16mm AND LESS: AND FABRIC: 100mm CENTERS.
    - R.4. USE MESH SUPPLIED IN FLAT SHEETS UNLESS APPROVED OTHERWISE.
    - R.5. WELDING AND BENDING OF REINFORCEMENT IS NOT PERMITTED UNLESS SHOWN ON THE DRAWINGS OR APPROVED BY ENGINEER.
    - R.6. PROVIDE MINIMUM MESH LAPS TO CROSS WIRES OF REINFORCING MESH, SO THAT TWO ADJACENT SHEETS OVERLAP TWO OUTERMOST WIRES OF ADJACENT SHEET BY AT LEAST 25mm. THIS:

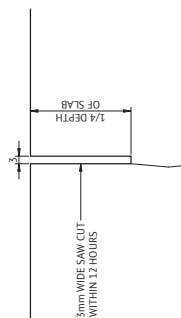


ALL DRAWINGS TO BE READ IN CONJUNCTION WITH ALL OTHER CONSULTANT PACKAGES.

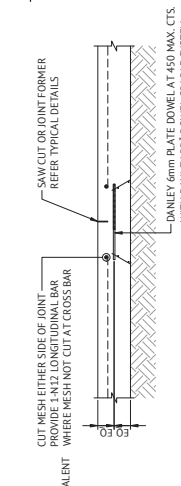
NOTE: ALL WORKS ARE TO BE IN ACCORDANCE WITH THE CHDC GUIDELINES AND AUSTRALIAN STANDARDS UNLESS OTHERWISE APPROVED.



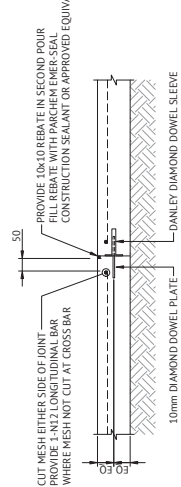
HEAVY VEHICLE PAVEMENT DETAIL  
SCALE 1:30



TYPICAL SAW CUT DETAIL  
SCALE 1:1



DOWEL JOINT - DJ  
SCALE 1:10



DOWEL CONSTRUCTION JOINT - DCJ  
SCALE 1:10

FOR APPROVAL

DATE	REV	DESCRIPTION
15/05/23	1	FOR APPROVAL
22/07/23	2	FOR APPROVAL
15/07/23	1	PRELIMINARY - NOT FOR CONSTRUCTION

REV: 0000

PREMISE

ROCKHAMPTON OFFICE  
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ROCKHAMPTON, QLD, 4700  
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DESIGNED  
CHECKED  
CRIS SHIELDS  
CRIS SHIELDS  
CRIS SHIELDS  
ENGINEERING CERTIFICATION  
CHRIS SHIELDS RPEQ 9347

AS SHOWN

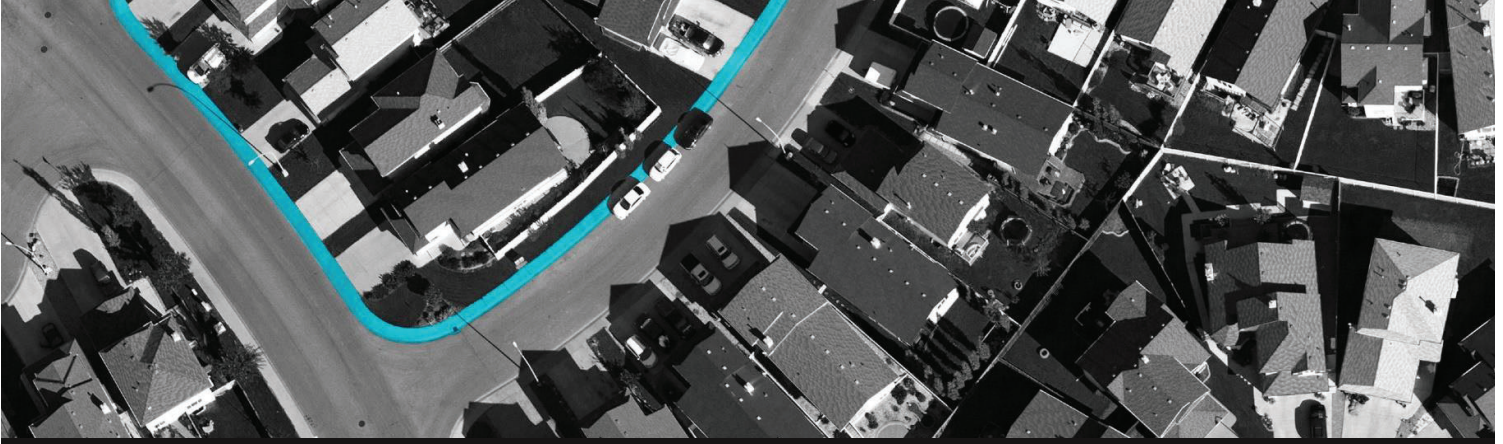
ORIGINAL SHEET 1 OF 1

CLIENT  
PROJECT  
LOCATION  
SHEET TITLE

WIDELAND TRUCKS AND EQUIPMENT PTY LTD  
PROPOSED COMMERCIAL DEVELOPMENT  
2 BARTON COURT, PARKHURST  
DRIVEWAY CROSSOVER DETAILS

JOB CODE  
SHEET NUMBER  
REV

MIS-1045  
C002  
3



# **PROPOSED INDUSTRIAL DEVELOPMENT 777 YAAMBA ROAD, PARKHURST TRAFFIC ENGINEERING ASSESSMENT**

**3 AUGUST 2022**

PREPARED FOR  
WIDELAND GROUP TRUCKS



## **ROCKHAMPTON REGIONAL COUNCIL**

### **APPROVED PLANS**

These plans are approved subject to the current conditions of approval associated with


**Development Permit No.: D/109-2022**

**Dated: 27 February 2023**





## DOCUMENT CONTROL RECORD

DOCUMENT						
Report Title:		777 Yaamba Road, Parkhurst - Traffic Engineering Assessment				
Client:		Wideland Group Trucks				
Project Number:		22-701				
REV	PURPOSE	DATE	AUTHOR	REVIEWER	APPROVED	SIGNED
A	FINAL	AUG-22	BH	JPG	JPG (RPEQ 22233)	

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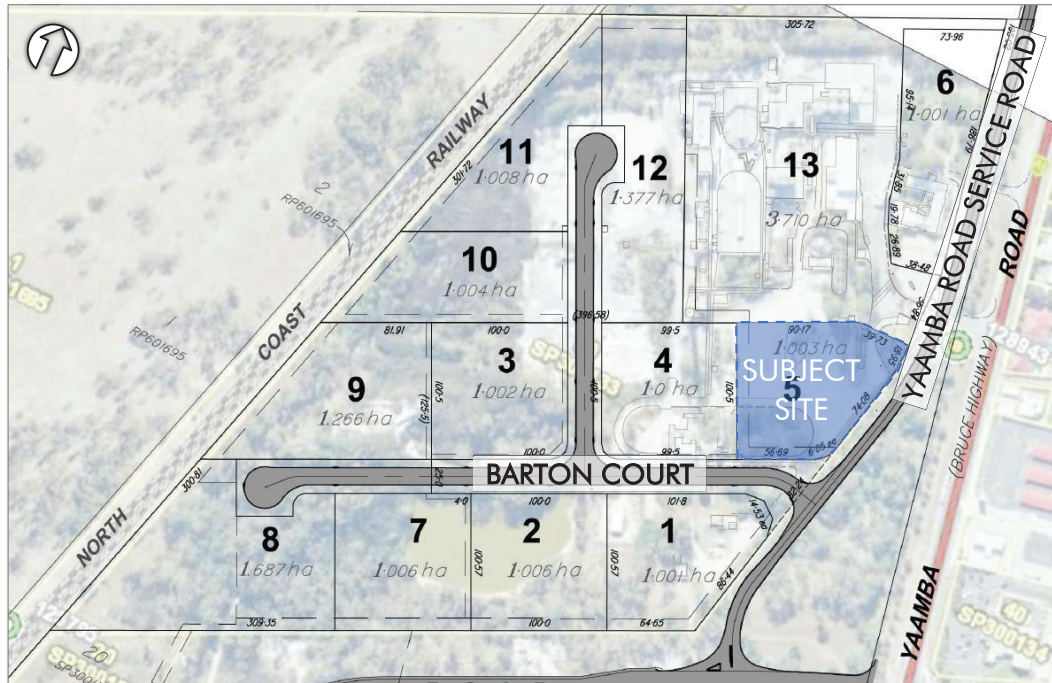
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## 1.0 INTRODUCTION

### 1.1 BACKGROUND

In July 2022, Pekol Traffic and Transport (PTT) was commissioned by Nielsen Project Management on behalf of Wideland Group Trucks to undertake a traffic engineering assessment for a proposed industrial development at 777 Yaamba Road, Parkhurst. The location of the subject site is shown in Figure 1.1.

Figure 1.1: SITE LOCALITY



### 1.2 AIM

The aim of this assessment is to evaluate the proposed development in terms of its access, parking and servicing arrangements, pedestrian / cyclist facilities, peak hour traffic generation and impact on the surrounding road network.

### 1.3 SCOPE OF REPORT

This report begins by summarising the characteristics of the existing road network (Chapter 2), followed by a description of the scope and scale of the development, including a consideration of the site access, parking provision and design, servicing arrangements and pedestrian / cyclist facilities (Chapter 3). The report concludes with a summary of key findings (Chapter 4).

## 2.0 EXISTING CONDITIONS

### 2.1 SUBJECT SITE

The subject site is located at 777 Yaamba Road, Parkhurst and is formally identified as Lot 5 SP326319. According to the Rockhampton Regional Council (Council) Planning Scheme, the site is zoned as high impact industry. The subject site is currently vacant with a total site area of 10,015m<sup>2</sup>, as shown in Figure 2.1.

Figure 2.1: SUBJECT SITE



The subject site is bounded as follows:

- an industrial property to the north
- Yaamba Road service road to the east
- Barton Court to the South
- Vacant land to the west

The surrounding area consists primarily of commercial / industrial uses.

### 2.2 ACCESS

No formal access is currently provided to the subject site.



## 2.3 ROAD NETWORK

Key attributes of the surrounding road network are summarised in Table 2.1.

Table 2.1: ROAD NETWORK ATTRIBUTES

ATTRIBUTE	YAAMBA ROAD	YAAMBA ROAD (SERVICE ROAD)	BOUNDARY ROAD	BARTON COURT
Road Hierarchy	Highway	-	Urban Arterial	Industrial Access
Jurisdiction	TMR	TMR	Council	Council
Speed Limit (km/h)	60	-	60	50
Predominant Land Uses	Industrial	Industrial	Industrial	Industrial
On-Street Parking	No	No	No	No
Footpaths	Yes	No	No	No
Bicycle Lanes	Yes	No	Yes	No
Bus Route	Yes	No	No	No

Yaamba Road and the Yaamba Road service road form part of the state-controlled road network.

## 2.4 ACTIVE AND PUBLIC TRANSPORT

### 2.6.1 Pedestrians and Cyclists

There is a pedestrian footpath on the eastern side of Yaamba Road and parts of the western side. No pedestrian footpaths are provided on the Yaamba Road service road, Boundary Road or Barton Court in the vicinity of the site.

Bicycle lanes are provided on parts of Yaamba Road and Boundary Road in the vicinity of the site.

### 2.6.2 Public Transport

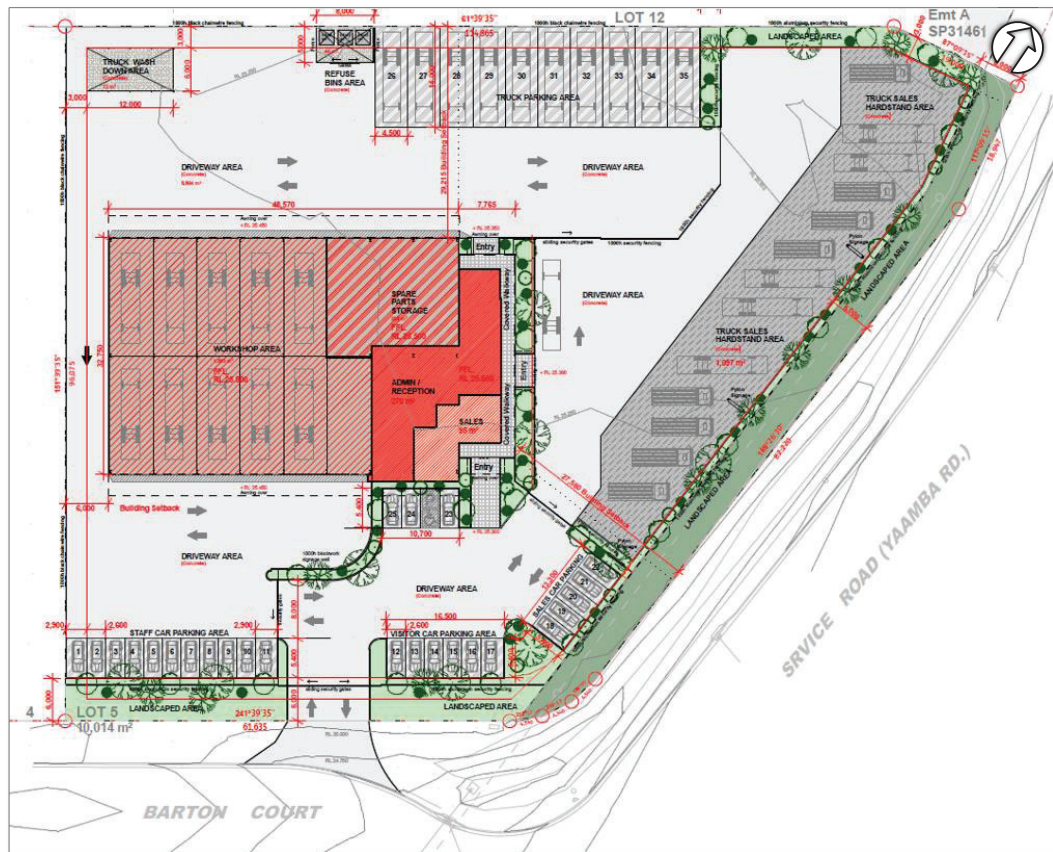
A public bus stop is located on the western side of Yaamba Road approximately 340m east of the site. The stop is served by SunBus route 410, which provides access to the Rockhampton CBD. Accordingly, the site is served by public transport.

### 3.0 PROPOSED DEVELOPMENT

#### 3.1 SITE LAYOUT

The proposed development comprises a 1,460m<sup>2</sup> GFA workshop and an associated 585m<sup>2</sup> GFA administration / office area, supported by 25 car parking spaces and 10 Heavy Rigid Vehicle (HRV) parking bays. The proposed layout is attached in Appendix A and shown in Figure 3.1.

Figure 3.1: PROPOSED SITE LAYOUT



#### 3.2 ACCESS

##### 3.2.1 Location

As shown in Figure 3.1, vehicular access to the development is proposed via an 11.2m wide all-movements crossover on Barton Court.

The Capricorn Municipal Development Guidelines (CMDG) requires that crossovers be located a minimum of 20m from the centre point of any adjacent intersection or roundabout and 2m from the property boundary. The proposed crossover is located greater than 20m from the adjacent Yaamba Road service road / Barton Court intersection (measured centre to centre) or 2m from the property boundary. Therefore, the proposed driveway crossover complies with CMDG requirements for location.

Additionally, Australian Standard AS2890.1:2004 Parking Facilities Part 1: Off-Street Car Parking (AS2890.1) requires access driveways to be located a minimum 6.0m from the tangent point of adjacent intersections. The proposed crossover is located approximately 7.2m from the tangent point of the adjacent intersection, as shown in Figure 3.2 and complies with AS2890.1 requirements for location.

Also, as shown in Figure 3.2, the proposed crossover is located such that a 20.0m long Articulated Vehicle (AV) would not impact traffic at the Yaamba Road service road / Barton Court intersection while turning into the site.

### 3.2.2 Design

The crossover has been designed to accommodate the largest vehicle anticipated to visit the site, which is a 20.0m AV. The crossover splays have been designed generally in accordance with the Institute of Public Works Engineering Australia's (IPWEA) Standard Drawing RS-051 and Australian Standard AS2890.2:2018 Parking Facilities Part 2: Off-Street Commercial Vehicle Facilities (AS2890.2), as shown in Figure 3.2.

### 3.2.3 Sight Distance

On a 50km/h road (ie Barton Court), AS2890.1 requires an absolute minimum sight distance of 45m, with a desirable sight distance of 69m. The proposed crossover on Barton Court achieves approximately 22m sight distance to the east (ie to the Yaamba Road service road / Barton Court priority-controlled intersection) and in excess of 100m sight distance to the west. The reduced sight distance to the east is considered acceptable, as vehicles exiting the adjacent intersection are expected to be travelling at significantly slower speeds to perform turn movements. Therefore, the available sight distance at the proposed crossover complies with AS2890.1 requirements.

## 3.3 PARKING

### 3.3.1 Council Requirement

The car parking requirement for the site has been determined based on the parking provision rates outlined in Council's Planning Scheme. As shown in Table 3.1, 21 car parking spaces are required to support the proposed development.

**Table 3.1: COUNCIL PARKING REQUIREMENT**

USE	SCALE	PARKING RATE	REQUIREMENT
High Impact Industry	2,045m <sup>2</sup>	1 space per 100m <sup>2</sup> GFA	21 spaces

### 3.3.2 Provision

The proposed layout provides 25 car parking spaces on-site, including a Persons with Disability (PWD) bay. Therefore, the proposed parking provision complies with Council's Planning Scheme requirements.

### 3.3.3 Design

The proposed on-site parking facilities have been designed consistent with the requirements of AS2890.1 and Australian Standards AS2890.6 Parking Facilities Part 6: Off-Street Parking for People with Disabilities (AS2890.6), in terms of minimum parking space and aisle dimensions, and are typified by:

- parking spaces dimensioned 2.6m wide by 5.4m long
- PWD space dimensioned 2.6m wide by 5.4m long, with an adjacent 2.6m wide shared area
- 0.3m additional width provided for parking spaces located adjacent to a wall or structure greater than 0.15m in height
- parking aisles dimensioned a minimum 6.5m wide

## 3.4 QUEUING

AS2890.1 identifies a minimum queuing length of two cars for a car parking area with 25 spaces. The proposed access arrangement provides clear queuing space for at least two cars. Therefore, the proposed site layout provides sufficient on-site queuing.

## 3.5 SERVICING

The largest vehicle expected to access the site would be a 20.0m long AV. A total of 21 HRV parking / workshop bays dimensioned a minimum of 14.0m long by 4.5m wide are proposed on-site, as shown in Figure 3.1. A Refuse Collection Vehicle (RCV) will also require access to the site. A swept path drawing of a 20.0m long AV accessing and egressing the subject site is shown in Figure 3.2 and attached in Appendix B.

Swept path drawings showing a HRV accessing the parking bays and workshop bays are shown in Figure 3.3 and attached in Appendix B.



Figure 3.2: AV MANOEUVRING

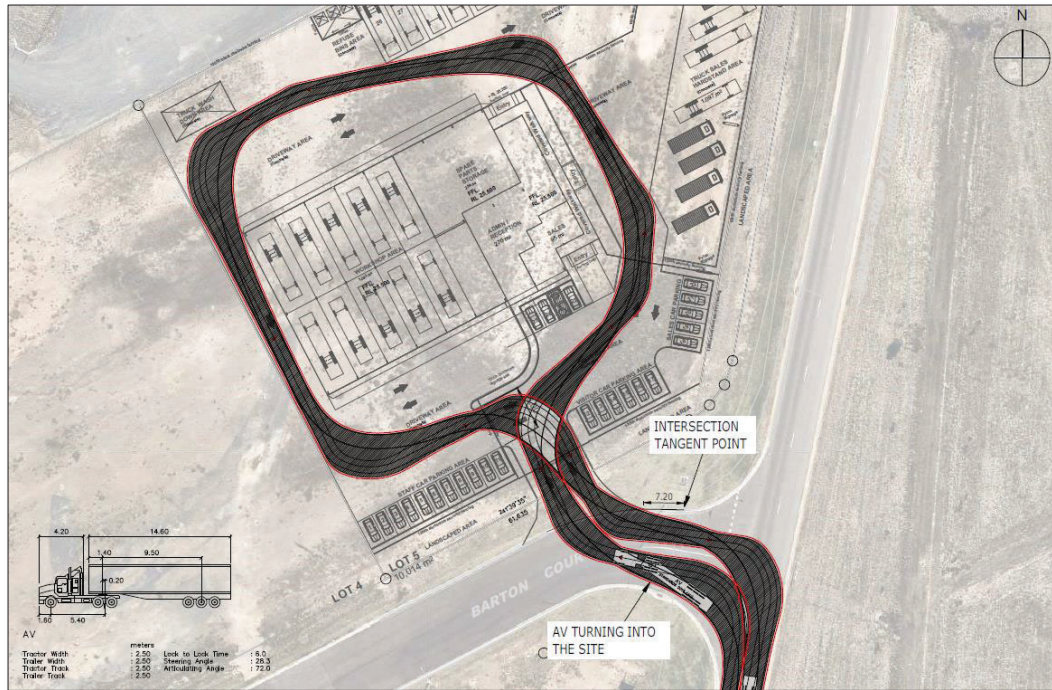
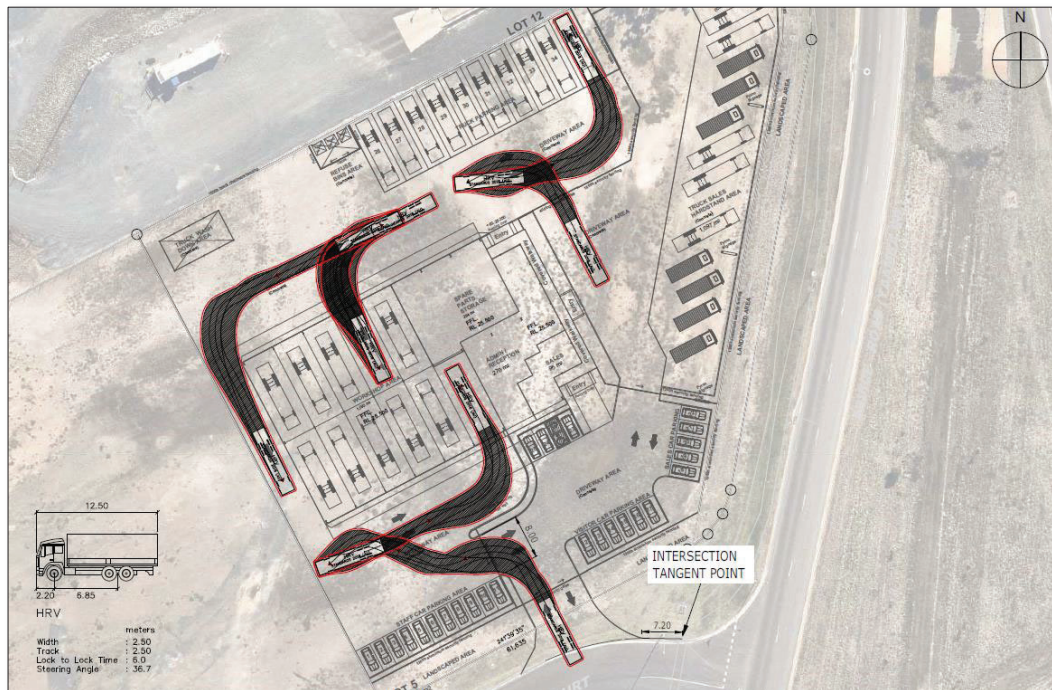


Figure 3.3: HRV MANOEUVRING







## 4.0 CONCLUSIONS

The proposed development has been evaluated in terms of the site access arrangements, parking provision and design, servicing arrangements, pedestrian / cyclist facilities and likely traffic impact. The main points to note are:

- the proposal involves a 1,460m<sup>2</sup> GFA workshop and an associated 585m<sup>2</sup> GFA administration / office area
- access is proposed via an 11.2m wide all-movements crossover on Barton Court designed generally in accordance with the Institute of Public Works Engineering Australia's (IPWEA) Standard Drawing RS-051 and AS2890.2
- sight distance and queuing at the proposed crossover is consistent with AS2890.1 requirements
- the parking provision of 25 spaces is consistent with Council's minimum parking requirements
- the development can accommodate on-site servicing of a 20.0m long AV and HRV
- the internal pedestrian facilities are expected to facilitate safe and convenient movement for pedestrians throughout the site

## **APPENDIX A PLANS OF DEVELOPMENT**





**Real Property Description**

**Site Address**  
Lot 5 on SP32319  
Lot 5 - 2 Barton Court, Parkhurst,  
Rockhampton, QLD 4702

**Site Details**

Parkhurst  
High Impact Industry

**Site Areas**

Site Area:  
10,014 sq. M  
Building Footprint Area:  
1,821 sq. M  
Site Cover:  
18 %

Driveway Area (blumen):  
5,500 sq. M  
Sales Hardstand Area (paved):  
1,097 sq. M  
Landscaped Area :  
1,379 sq. M  
Truck Wash Area (concrete) :  
55 sq. M  
Refuse Bins Area (concrete) :  
44 sq. M

**Gross Floor Areas**


Workshop Floor Area:  
1,083 sq. M  
Spare Parts Floor Area (L1):  
284 sq. M  
Admin / Service Floor Area (L1):  
270 sq. M  
Total Floor Area (L1):  
1,742 sq. M  
Spare Parts Floor Area (L2):  
82 sq. M  
Admin / Service Floor Area (L2):  
220 sq. M  
Total Floor Area (L2):  
302 sq. M  
**Total Gross Floor Area:**  
**2,044 sq. M**

Carparking Required:  
21 spaces  
Carparking Provided:  
35 spaces  
**(1 space / 100 sq. M GFA)**

**LEGEND - SITE**

- Spare Parts Warehouse Area
- Administration Office and Service Reception Area
- Workshop / Service Bay Area
- Sales Area
- Truck Wash Down and Refuse Areas
- Driveway / Vehicular Circulation Areas
- Truck Sales Hardstand Area
- Pathway Access Areas
- Landscaped Areas

**1 SITE PLAN**  
1:500@A3 sheet



**mark nicholls architects**  
ARCHITECTS  
REGISTERED ARCHITECT (AUSTRALIA)  
MEMBER OF THE AUSTRALIAN INSTITUTE OF ARCHITECTS

**Proposed Development**  
Lot 5 - 2 Barton Court, Parkhurst.

**CLIENT**  
Wideland Group Trucks

**PROJECT NO.**  
130722

**ISSUED FOR DEVELOPMENT APPROVAL**

**SCALE**  
as shown

**DATE**  
28/07/2022

**TITLE**  
SITE PLAN

**DATE**  
28/07/2022

**STATUS**  
SD 1.01

**JOB NO.**  
707

**FOR APPROVAL**

**DATE**  
28/07/2022

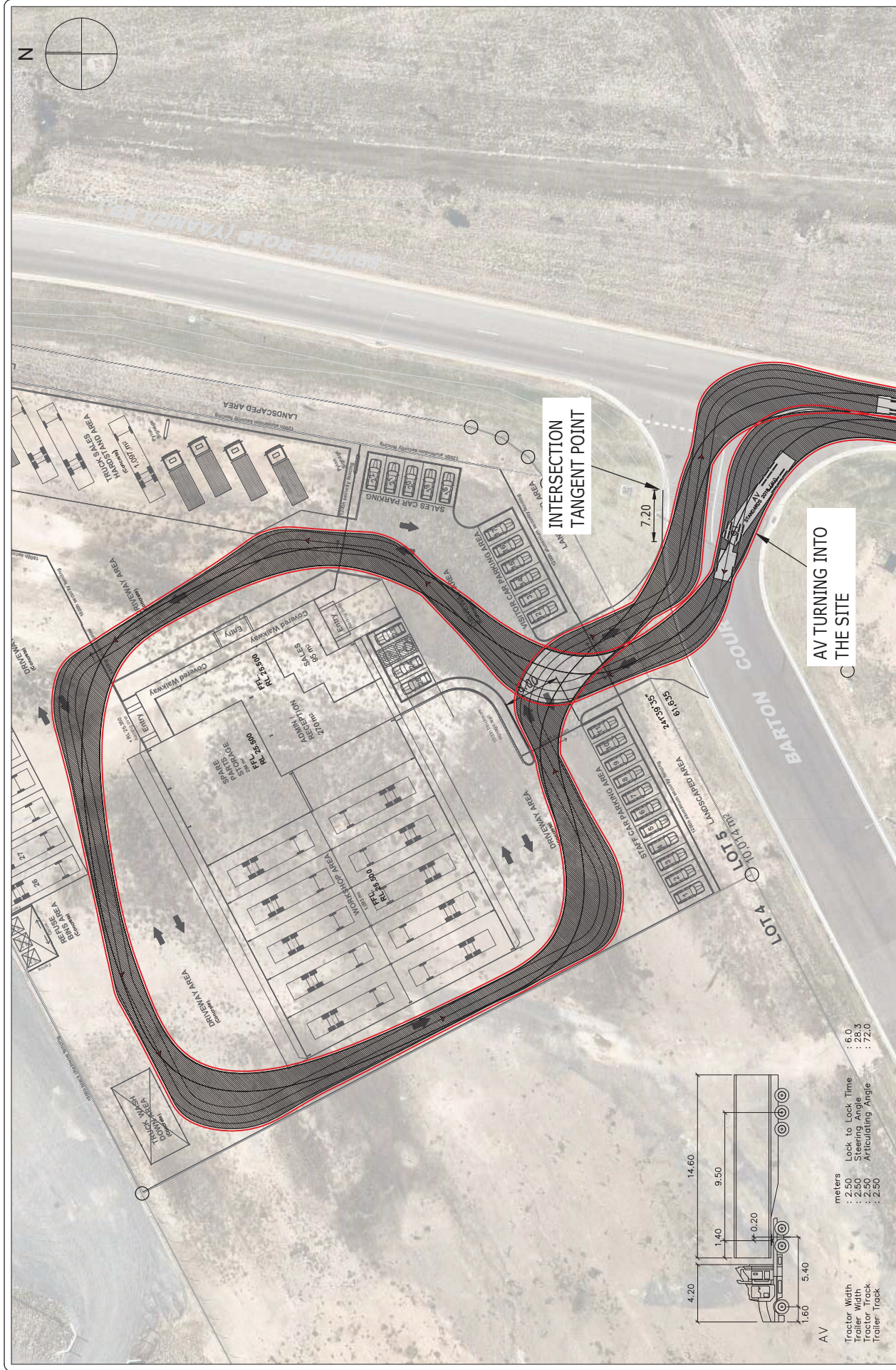
**REV.**  
A

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C:\Users\61422OneDrive\My Documents\Projects\707 - Wideland Trucks Rockhampton\01 DRAWINGS\Current Drawings\707 DD Design Development\707 DD Wideland Trucks ph

## **APPENDIX B SWEPT PATH DRAWINGS**





CLIENT: WIDELAND GROUP TRUCKS			
DATE: 20/07/2022	SCALE: 1:500	DRAWING: BH	APPROVED: JPG
DRAWING NO. 22-701-001	REV -	JOB NO. 22-701	

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DRAWING TITLE: AV MANOEUVRING	

REV.	AMENDMENTS	DATE

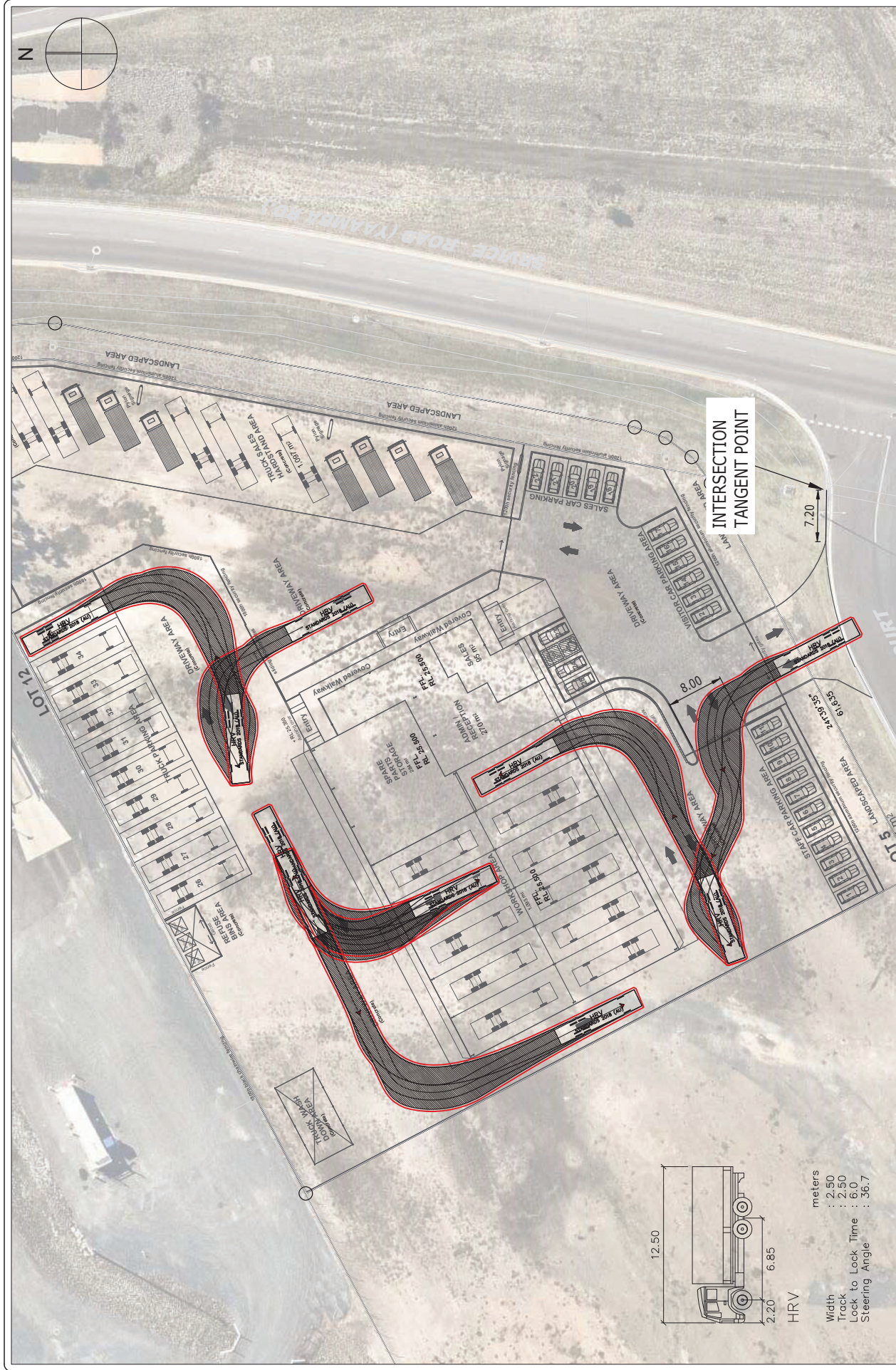


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Document Set ID: 37718900  
 Version: 1, Version Date: 09/08/2022





CLIENT: WIDELAND GROUP TRUCKS			
DATE: 20/07/2022	SCALE: 1:500	DRAWING: BH	APPROVED: JPG
DRAWING NO. 22-701-002	REV -	JOB NO. 22-701	

PROJECT TITLE: 777 YAAMBA ROAD, PARKHURST	
DRAWING TITLE: HRV MANOEUVURING	

REV.	AMENDMENTS	DATE



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 Document Set ID: 37718900  
 Version: 1, Version Date: 09/08/2022





CLIENT: WIDELAND GROUP TRUCKS			
DATE: 20/07/2022	SCALE: 1:200	DRAWING NO. 22-701-003	REV -
DRAWING NO. 22-701-003	REV -	DRAWING NO. 22-701-003	REV -
DRAWING NO. 22-701-003	REV -	DRAWING NO. 22-701-003	REV -

PROJECT TITLE: 777 YAAMBA ROAD, PARKHURST	
RCV MANOEUVRING	

REV. AMENDMENTS	
REV.	DATE



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