

# Traffic Report

Stage 1: Large Format Retail Development  
Dalton Drive, Maroochydore

QTT17006

Stage 1: Large Format Retail Development



24 November 2017

Prepared for  
Blueprint Australia

**PLANS AND DOCUMENTS  
referred to in the PDA  
DEVELOPMENT APPROVAL**

**Approval no:** DEV2017/893

**Date:** 26 February 2018



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|----------------|--------------------------------------------------------------------------|
| Prepared for   | Blueprint Australia                                                      |
| Project Name   | Stage 1:Large Format Retail<br>Development Dalton Drive,<br>Maroochydore |
| File Reference | QTT17006-03-TIA- 21 11 14                                                |
| Job Reference  | QTT17006                                                                 |
| Date           | 24 November 2017                                                         |
| Version Number | DA Stage 01                                                              |

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Effective Date 21/11/2017

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Date Approved 24/11/2017

## Document History

| Version | Effective Date | Description of Revision | Prepared by  | Reviewed by  |
|---------|----------------|-------------------------|--------------|--------------|
| 01      | 15/11/2017     | Draft for Review        | Jai Patel    | Dianne Hayes |
| 02      | 24/11/2017     | Client Issue            | Dianne Hayes | Alice Shi    |
|         |                |                         |              |              |
|         |                |                         |              |              |

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## Table of Contents

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|     |                                       |    |
|-----|---------------------------------------|----|
| 1   | Introduction                          | 1  |
| 1.1 | Overview                              | 1  |
| 1.2 | Background                            | 1  |
| 1.3 | Scopes of Work                        | 1  |
| 1.4 | References                            | 1  |
| 1.5 | Limitations                           | 1  |
| 2   | Existing Conditions                   | 2  |
| 2.1 | Site Location                         | 2  |
| 2.2 | Local Road Network                    | 3  |
| 2.3 | Public and Active Transport Provision | 3  |
| 2.4 | Future Road Network                   | 3  |
| 3   | Proposed Development                  | 6  |
| 3.1 | Land Uses                             | 6  |
| 3.2 | Access                                | 6  |
| 3.3 | Car Parking Arrangement               | 7  |
| 4   | Traffic Impacts                       | 8  |
| 4.1 | Strategic Traffic Generation          | 8  |
| 4.2 | Development Traffic Generation        | 8  |
| 4.3 | Comparative Traffic Impacts           | 9  |
| 5   | Parking Provision                     | 10 |
| 5.1 | Planning Scheme Acceptable Solution   | 10 |
| 5.2 | Adequacy of Car Parking               | 10 |
| 5.3 | Parking for People with Disabilities  | 10 |
| 5.4 | Bicycle Parking                       | 10 |
| 5.5 | Service Vehicle Bays                  | 11 |
| 6   | Design Considerations                 | 12 |
| 6.1 | Overview                              | 12 |
| 6.2 | Car Park Access Driveway Design       | 12 |
| 6.3 | Car Park Design                       | 13 |
| 6.4 | Servicing                             | 14 |
| 7   | Summary and Conclusions               | 15 |

## Appendices

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**Appendix A Proposed Development Plans**

**Appendix B Service Vehicle Swept Paths**

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## Tables

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|           |                                                                        |    |
|-----------|------------------------------------------------------------------------|----|
| Table 2-1 | Local Road Network                                                     | 3  |
| Table 3-1 | Development Yield                                                      | 6  |
| Table 4-1 | Strategic Model Estimated Traffic Generation from Precinct 8           | 8  |
| Table 4-2 | Saturday Morning Peak                                                  | 8  |
| Table 4-3 | Afternoon Peak                                                         | 8  |
| Table 4-4 | Proposed Traffic Generation from Stage 1 of Development                | 9  |
| Table 5-1 | Maroochydore City Centre PDA Acceptable Solution Car Parking Provision | 10 |
| Table 5-2 | Minimum Bicycle Parking Requirement                                    | 10 |
| Table 6-1 | Parking Design Compliance                                              | 13 |

## Figures

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|            |                                            |    |
|------------|--------------------------------------------|----|
| Figure 2-1 | Site Location                              | 2  |
| Figure 2-2 | Existing Road Network                      | 3  |
| Figure 2-3 | Road Hierarchy Plan                        | 4  |
| Figure 2-4 | Precinct 8 – Subject Site Access Locations | 5  |
| Figure 3-1 | Site Plans and Access Locations            | 6  |
| Figure 3-2 | Proposed Car Parking Layout for Stage 1    | 7  |
| Figure 6-1 | Standard Driveway Crossover Drawings       | 12 |
| Figure 6-2 | Sight Lines at Driveway Accesses           | 13 |

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# 1 Introduction

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## 1.1 Overview

Cardno Qld Pty Ltd (Cardno) has been engaged by Blueprint Australia to provide traffic and transport engineering advice in relation to the proposed large format development, located at Dalton Drive, Maroochydore City Centre.

The purpose of this report is to assess the traffic and transport components of the first stage of the sites proposed development against the requirements of the Maroochydore City Centre Priority Development Area Development Scheme and the Sunshine Coast Planning Scheme 2014.

## 1.2 Background

The proposed development site falls within the Maroochydore City Centre Priority Development Area. Ongoing discussions have been held with Economic Development Queensland, Sunshine Coast Council and SunCentral Maroochydore Pty Ltd regarding the potential development of the site. The integration of planning with the MCC PDA is important to ensure consistency in the application of assumptions for base models and for the configuration of intersections and active transport connections.

## 1.3 Scopes of Work

Cardno has undertaken the following tasks to complete this traffic report:

- > External traffic impacts
- > Internal traffic arrangements, including:
  - Car park design compliance
  - Parking provisions
  - Access driveway design
  - Servicing provisions
- > Active and public transport connections

## 1.4 References

The following resources were referred to in the preparation of the report:

- > Maroochydore City Centre Priority Development Area Development Scheme, 2016
- > Sunshine Coast Planning Scheme, 2014
- > Australian Standards, *AS2890.1:2004 Parking Facilities Part 1: Off-street Car Parking*, 2004
- > Queensland Department of Transport and Main Roads (TMR), *Guide to Traffic Impact Assessments (GTIA)*, 2017

## 1.5 Limitations

Cardno has completed this traffic report in accordance with the usual care and thoroughness of the consulting profession. The assessment is based on accepted traffic engineering practises and standards applicable at the time of undertaking the assessment. The assessment was completed in late 2017, and is based upon the conditions encountered and project information available at the time. Cardno disclaims responsibility for any changes to project planning or road conditions that may occur after completion of the assessment.

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## 2 Existing Conditions

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### 2.1 Site Location

The development site is located at 53-91 Dalton Drive, Maroochydore. The site is bound to the west and south by Dalton Drive. This link is constructed as a high standard two-lane, two-way median divided road with on-street cycle lanes and parking lanes either side. Shared pathways are provided to accommodate pedestrian and bicycle movements. To the immediate north of the site is the Maroochydore City Centre, which is currently under construction. The site is also referred to as Precinct 8 within the MCC PDA. The location is illustrated on Figure 2-1.

Figure 2-1 Site Location

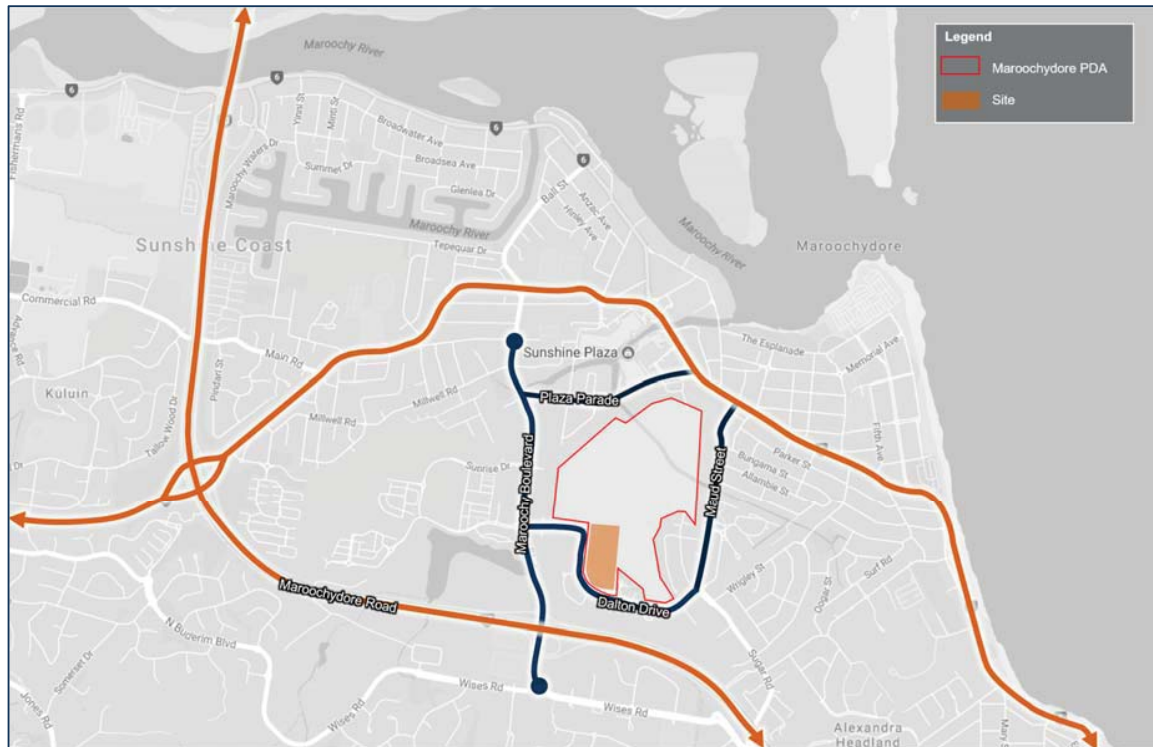


Source: NearMap

## 2.2 Local Road Network

The site has frontage along Dalton Drive to the south and west. The key roads related to the development are illustrated on Figure 2-2 with the key characteristics of these roads summarised in Table 2-1.

Figure 2-2 Existing Road Network



Source: Google Maps

Table 2-1 Local Road Network

| Road               | Authority | Classification         | Posted Speed Limit | Typical Form       |
|--------------------|-----------|------------------------|--------------------|--------------------|
| Dalton Drive       | SCC       | Major Boulevard Road   | 60km/h             | Two lane divided   |
| Maroochy Boulevard | SCC       | Arterial Road          | 60km/h             | Four lane divided  |
| Sunshine Motorway  | TMR       | Motorway               | 100km/h            | Four lane divided  |
| Plaza Parade       | SCC       | Controlled Distributor | 50km/h             | Two lane undivided |

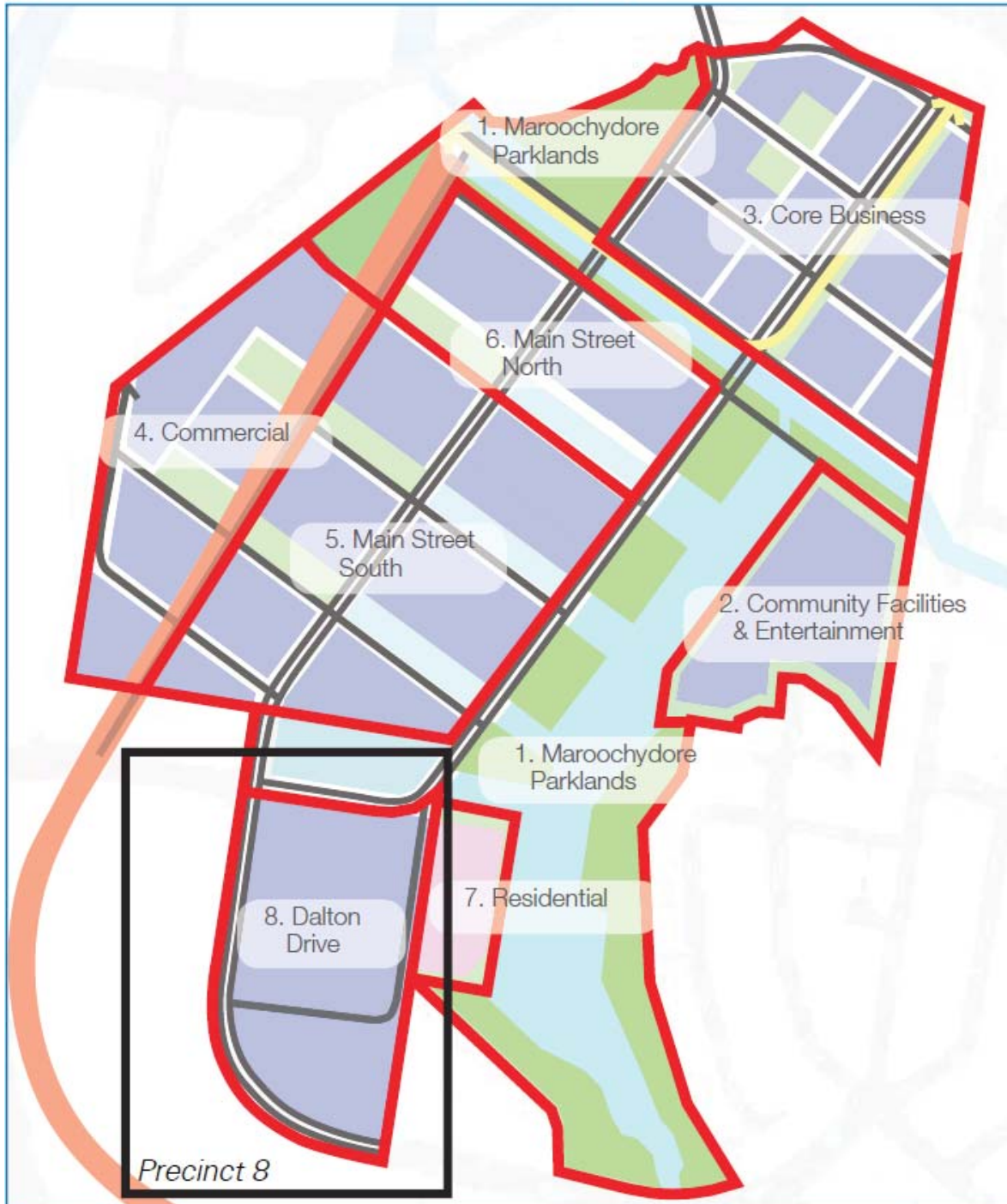
## 2.3 Public and Active Transport Provision

The proposed development is well located within close proximity to public and active transport facilities, offering alternative transport choice for employees and customers. The proposed development site is located within close proximity to the City Centre and Sunshine Plaza. Pedestrian paths are provided on all adjacent road frontages. Public transport services are provided on Maroochy Boulevard and Maud Street with bus stops available within 800m of the site.

## 2.4 Future Road Network

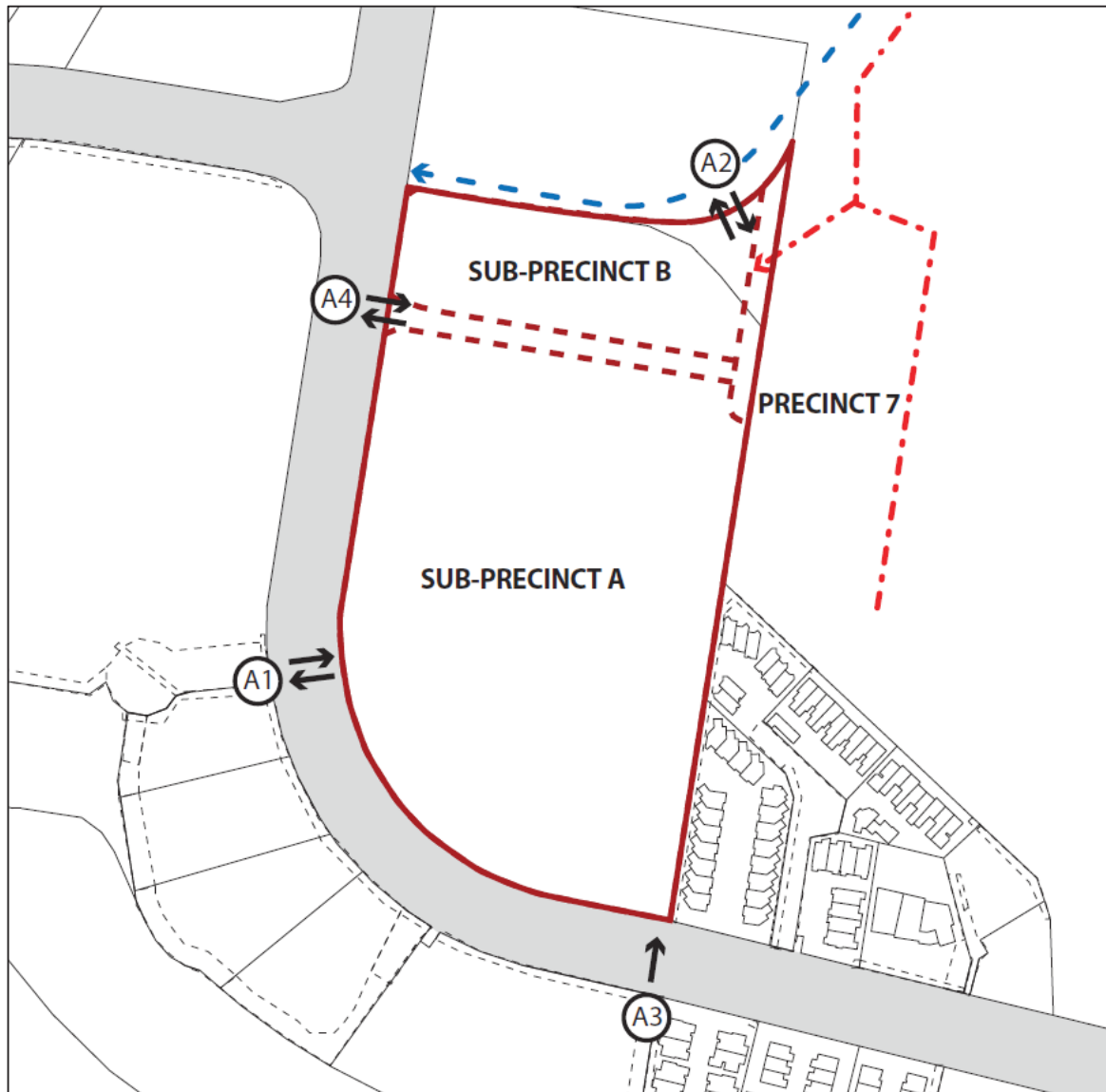
The future road network as shown in the MCC PDA Development Scheme is illustrated in Figure 2-3. Dalton Drive will eventually form a four-way signalised intersection with Park Esplanade and Main Street Boulevard.

**Figure 3 - Zones and Precinct Plan (PDS DS, Map 4) EXTRACT**



Source: MCC PDA

Figure 2-4 Precinct 8 – Subject Site Access Locations



Source: MCC PDA

## 3 Proposed Development

### 3.1 Land Uses

The proposed development consists of showroom uses with three tenancies at ground floor and one large format retail at level 1. The proposed development layout has been provided by The Buchan Group and shown in Appendix A. The development proposes stage 1 only, with the vacant lots to the north and south proposal as future stages of the site as illustrated in Figure 3-1. A summary of the development yield is provided in Table 3-1

Table 3-1 Development Yield (Excluding loading areas and back of house)

| Land Use           | Yield (m <sup>2</sup> ) |
|--------------------|-------------------------|
| Showroom (ground)  | 4,490                   |
| Showroom (level 1) | 4,764                   |
| TOTAL              | 9,254                   |

### 3.2 Access

#### 3.2.1 Pedestrian Access

Pedestrian access to the site is provided from a footpath along the Dalton Drive frontage. A proposed new pedestrian refuge is included across Dalton Drive and will align with the existing pedestrian network to Bunnings and other commercial premises on the western side of the road.

#### 3.2.2 Vehicular Access

Vehicle access to the site is proposed via three locations from Dalton Drive as part of Stage 1 of the development.

1. A northern access is proposed providing left-in and left-out movements into the main car park.
2. A new approach to the existing signalised intersection is proposed and will also facilitate service vehicle movements.
3. An access will also be provided at the south eastern boundary of the site allowing left-in and left-out movements to and from the site via Dalton Drive.

Figure 3-1 Site Plans and Access Locations



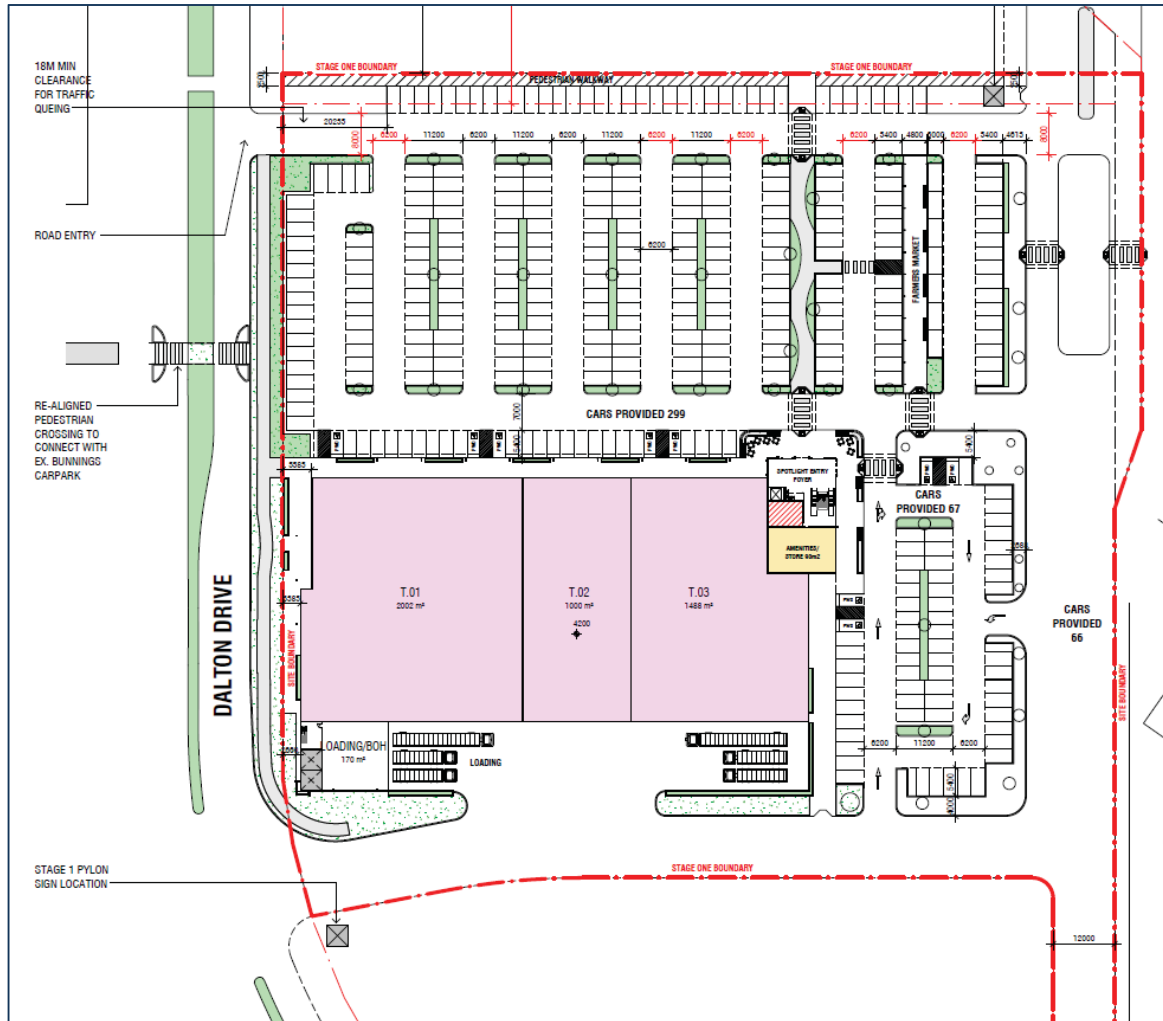
Source: Nearmap

### 3.3 Car Parking Arrangement

A total of 366 car parking spaces are proposed to be provided on-site. The suitability of the proposed car parking provision is discussed in greater detail at Section 5.

Service bay facilities are proposed on the eastern approach to the existing signalised intersection with Dalton Drive.

Figure 3-2 Proposed Car Parking Layout for Stage 1



## 4 Traffic Impacts

The proposed development of Stage 1 is located within Precinct 8 of the MCC PDA. As part of the planning for the MCC development, detailed traffic modelling was undertaken by Council to provide guidance on the yields and the implications of traffic flows. A comparison of projected Precinct 8 traffic generation and the proposed Stage 1 development traffic generation has been undertaken to determine if any further traffic analysis is required.

### 4.1 Strategic Traffic Generation

As part of the original MCC PDA documentation the maximum development yields for this precinct (Precinct 8) included the following:

- > Retail – 10,000m<sup>2</sup> GFA with a trip rate of 8 per hour per (vph) /100m<sup>2</sup> GFA
- > Commercial – 15,000m<sup>2</sup> GFA with a trip rate of 2vph/100m<sup>2</sup> GFA
- > 50 medium density residential dwellings with a trip rate of 0.5 vph per dwelling

The estimated traffic generation from the strategic traffic model prepared from the PDA for the subject site (including Lots 1 and 2), was based on the envisaged land use at the time. The traffic model generation used is outlined in Table 4-1 below along with the traffic generation from the assumed yields as indicated in the PDA.

Table 4-1 Strategic Model Estimated Traffic Generation from Precinct 8

| Peak Period | Peak Hour Trip Generation from model in Masters TIA Report | Maximum Yield for Precinct 8 as indicated in PDA |
|-------------|------------------------------------------------------------|--------------------------------------------------|
| Weekday AM  | 1,307 vehicles per hour                                    | 1,125 vehicles per hour                          |
| Weekday PM  | 1,450 vehicles per hour                                    | 1,125 vehicles per hour                          |

It should be noted that the traffic model and the proposed land uses for the PDA are constantly being reviewed as part of the City Centre development.

### 4.2 Development Traffic Generation

#### 4.2.1 Traffic Generation

As part of the assessment, traffic generation rates were based on current MCC PDA guidelines and included the following rates for various uses:

- > Showroom (Proposed GFA 9,399m<sup>2</sup>)
  - 3.9 trips per hour per 100m<sup>2</sup> GFA during Saturday peak; and
  - 2.7 trips per hour per 100m<sup>2</sup> GFA during the afternoon weekday peak

The estimated traffic generation for the subject site based on this land use (GFA excluding service and loading areas) is outlined in Table 4-2 and Table 4-3 below.

Table 4-2 Saturday Morning Peak

| Land Use           | GFA (m <sup>2</sup> ) | Trip Rate /100m <sup>2</sup> GFA | Peak Hour Trip Generation (vehicle per hour) |
|--------------------|-----------------------|----------------------------------|----------------------------------------------|
| Showroom (ground)  | 4,490m <sup>2</sup>   | 3.9                              | 175 vph                                      |
| Showroom (level 1) | 4,764m <sup>2</sup>   | 3.9                              | 186 vph                                      |
| <b>Total</b>       |                       |                                  | <b>361 vph</b>                               |

Table 4-3 Afternoon Peak

| Land Use           | GFA (m <sup>2</sup> ) | Trip Rate /100m <sup>2</sup> GFA | Peak Hour Trip Generation (vehicle per hour) |
|--------------------|-----------------------|----------------------------------|----------------------------------------------|
| Showroom (ground)  | 4,490m <sup>2</sup>   | 2.7                              | 121 vph                                      |
| Showroom (level 1) | 4,764m <sup>2</sup>   | 2.7                              | 129 vph                                      |
| <b>Total</b>       |                       |                                  | <b>250 vph</b>                               |

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The resultant traffic generation for the Stage 1 Development is summarised in Table 4-4.

Table 4-4 Proposed Traffic Generation from Stage 1 of Development

| Peak Period | Peak Hour trip Generation |
|-------------|---------------------------|
| Saturday    | 361 vehicles per hour     |
| Weekday PM  | 250 vehicles per hour     |

As shown in Table 4-4, the proposed development is anticipated to generate in the order of 361vph during the Saturday peak period and 250vpd during the weekday afternoon peak period.

It should be noted that the peak hour trip generation for the site is based on a conservative GFA area for each land use as shown in the conceptual plans. As the proposal progresses toward detailed design, the GFA of specific tenancies will be more accurately defined and as a result it is anticipated the trip generation will be less than originally estimated.

In addition to the above, further reductions to trip generation will apply for multi-purpose trips. Not all trips generated from the proposed development will be new trips on the network with a large percentage being diverted and undiverted trips.

### 4.3 Comparative Traffic Impacts

The traffic generated from Stage 1 of the proposal is significantly less than the traffic estimated as part of Precinct 8 of the strategic model. The configurations for the external intersections and access arrangements will be analysed and confirmed with the ultimate yield for the site.

It is not considered necessary to undertake the external traffic modelling for Stage 1 as the road network will continue to operate at an acceptable level of service.

## 5 Parking Provision

### 5.1 Planning Scheme Acceptable Solution

A summary of Council's acceptable solution for development car parking has been calculated in accordance with the Maroochydore City Centre Priority Development Area Development Scheme (2016). A summary of the recommended rates is provided in Table 5-1.

Table 5-1 Maroochydore City Centre PDA Acceptable Solution Car Parking Provision

| Land Use                | Yield (m <sup>2</sup> ) | Acceptable Solution Rate         | Acceptable Solution (spaces) |
|-------------------------|-------------------------|----------------------------------|------------------------------|
| Showroom (ground floor) | 4,490                   | 1 space per 50m <sup>2</sup> GFA | 90                           |
| Showroom (level 1)      | 4,764                   | 1 space per 50m <sup>2</sup> GFA | 96                           |
| <b>Total</b>            |                         |                                  | <b>186</b>                   |

As outlined in Table 5-1, the development is required to provide a total of 186 car parking spaces to accord with the acceptable outcome of the Maroochydore City Centre Priority Development Area Development Scheme.

### 5.2 Adequacy of Car Parking

Development plans indicate that a total of 366 car parking spaces are to be provided on-site. This provision is considered to be appropriate and provides a surplus of 180 spaces. This allows for the successful operation of stage 1 and provides potential for repurposing parking spaces dependent on the tenancy mix for future development of stages within the site.

### 5.3 Parking for People with Disabilities

The development plan indicates that 9 spaces are provided for people with disabilities (PWD). Australian Standards AS2890.6 provides guidance on the number of PWD spaces required per parking space for developments with retail uses. The number of PWD spaces is considered appropriate for the development and are conveniently located close to building entrances and pathways.

### 5.4 Bicycle Parking

#### 5.4.1 Bicycle Parking Requirement

The Sunshine Coast Council Planning Scheme Part 9.4.8 Transport and Parking Code, identifies the following bicycle parking rates for the proposed land uses:

- Showroom – 1 employee space per 100m<sup>2</sup> GFA, 1 customer space per 100m<sup>2</sup> GFA
- Shop - 1 employee space per 100m<sup>2</sup> GFA, 1 customer space per 100m<sup>2</sup> GFA

Based on the proposed yield, the minimum parking requirements are outlined in Table 5-2.

Table 5-2 Minimum Bicycle Parking Requirement

| Land Use           | Yield (m <sup>2</sup> ) | Acceptable Solution Rate (Employee) | Acceptable Solution Rate (Customer) | Acceptable Solution (spaces) |
|--------------------|-------------------------|-------------------------------------|-------------------------------------|------------------------------|
| Showroom (ground)  | 4,490                   | 1 per 100m <sup>2</sup>             | 1 per 100m <sup>2</sup>             | 90                           |
| Showroom (level 1) | 4,764                   | 1 per 100m <sup>2</sup>             | 1 per 100m <sup>2</sup>             | 96                           |
| <b>Total</b>       |                         |                                     |                                     | <b>186</b>                   |

#### 5.4.2 Bicycle Parking Provision

Part 9 of the Sunshine Coast Planning Scheme requires 186 bicycle spaces (split evenly employee and visitor). However, parking surveys of a similar sites on the Sunshine Coast indicates that demand for motorcycle and bicycle parking is lower than the requirements imposed by Council.

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The Australian Bureau of Statistics' 2016 Motor Vehicle Census found that registered motorcycles composed 3.9% of all registered vehicles. Additionally, the 2012 Southeast Queensland Household Travel Survey found that bicycles account for approximately 1% of trips on the Sunshine Coast. It is likely that motorcycles and bicycles make up an even smaller proportion of trips to shopping centres as they offer very little storage space to carry goods purchased from the site, in particular large format retail goods.

Due to the lack of demand for motorcycle and bicycle parking at the site, as observed during site investigations of similar sites, and the small proportion of total trips for which motorcycles and bicycles are used, it is not considered necessary to provide the number of dedicated motorcycle and bicycle parking suggested in the planning scheme in addition to the car parking facilities.

However, in order to promote active transport and align with Council's Sustainable Transport Policy and Active Transport Plan, it is recommended that some bicycle facilities be installed in the site to encourage alternative modes of transport into the site. There is an existing pathway network surrounding the site, connecting to the residential catchment to the south and east providing a safe and suitable alternative to access the site.

## **5.5 Service Vehicle Bays**

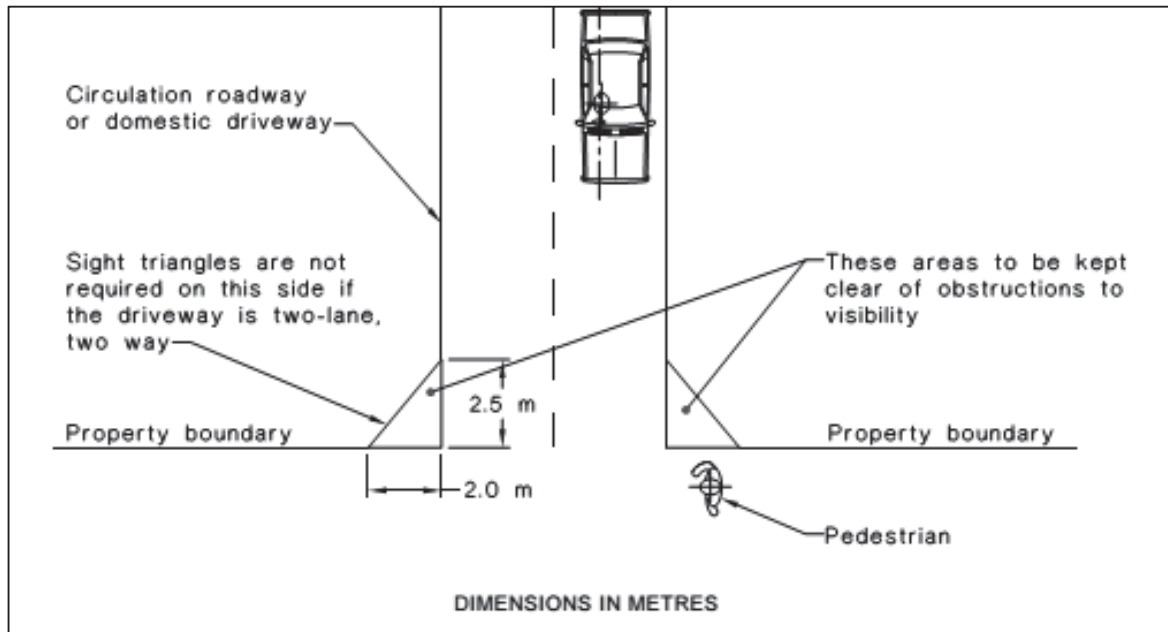
In accordance with the provision for service vehicle access outlined in Table 9.4.8.3.4 of the Transport and Parking Code, for a showroom of total area of 9,509m<sup>2</sup> the required service vehicles are:

- 4 Van
- 3 SRV
- 2 MRV
- 1 HRV
- 1 AV
- 1 WCV

Provision for servicing the site has been consolidated to an area adjacent to the southern wall of the building to allow access to all four tenancies. Swept path analysis for the development site has been provided in Appendix B.



Figure 6-2 Sight Lines at Driveway Accesses



Source: Extract from Australian Standard AS2890.1

### 6.2.3 Queueing Provision

In accordance with Table SC6.17M of the Sunshine Coast Planning Scheme, Transport and Parking Code, queues at driveways for car parks with 350-400 spaces, requires provision for queueing of seven vehicles between the property boundary and the first car park.

The proposal has provided three access locations into the site from Dalton Drive and therefore the queueing requirement is split to provide for 3 cars or 18m clear queue space per access. Provision for queueing for 18m is to be clear of parking manoeuvres measured from the inside the frontage property boundary into the site. The proposal complies with this requirement.

## 6.3 Car Park Design

The proposed development car park design has been reviewed against the requirements of Council's Traffic and Access Code and AS2890.1:2004. Table 6-1 outlined suitability of the proposed car park design.

Table 6-1 Parking Design Compliance

| Design Criteria     |                                      | AS2890.1                        | Proposed Design                                          | Design Compliant |
|---------------------|--------------------------------------|---------------------------------|----------------------------------------------------------|------------------|
| <b>Parking Bays</b> | Bay length                           | 5.4m                            | 5.4m                                                     | ✓                |
|                     | Bay width – customer                 | 2.7m                            | 2.7                                                      | ✓                |
|                     | Bay width – people with disabilities | 2.4m wide with 2.4m shared zone | 2.4m wide with 2.4m shared zone                          | ✓                |
|                     | Parallel Bays                        | Min 2.1m                        | 2.5m (with allowance for additional 0.5m width in aisle) | ✓                |
| <b>Aisles</b>       | Aisle – length                       | Max. 80m                        | TBC                                                      | ✓                |
|                     | Aisle – width                        | 6.2m                            | 6.2m to 7.0m                                             | ✓                |
|                     | Terminated Aisle                     | NA                              | NA                                                       | ✓                |
| <b>Access</b>       | Driveway Design                      | Type D crossover                | At Detailed Design                                       |                  |

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## 6.4 Servicing

Servicing will occur within the site from the designated service area, with access gained from the signalised intersection with Dalton Drive. Swept paths have been analysed and are provided in Appendix B.

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## 7 Summary and Conclusions

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Cardno was commissioned by Blueprint Australia to provide traffic and transport engineering related advice for a development application for a proposed showroom development located in Maroochydore.

The purpose of this report was to assess the traffic and transport components of the proposed development against the requirements of the Sunshine Coast Planning Scheme, Maroochydore PDA and the Transport and Parking Code.

The following points summarise the key findings from the assessment undertaken herein:

- > The site is reasonably connected with pedestrian and cycling facilities that enable safe and efficient walking trips to nearby residential and retail catchments and public transport facilities.
- > The car park design accords with the requirements of the Transport and Parking Code and AS2890.1 and is considered to be satisfactory.
- > The access driveways from Dalton Drive have been designed for left-in / left-out only movements, in accordance with a R-051 Type D crossover.
- > The proposed development is estimated to generate 250vpd during the afternoon weekday peak period and 361vph during the Saturday peak period, which is not anticipated to have a significant traffic impact on the surrounding road network and is lower than the anticipated traffic generation from Council's Strategic Model for this precinct.

Overall, the proposed development is not anticipated to have significant traffic impacts on the external road network, while the internal design satisfies relevant design standards. As such, the development is considered to be satisfactory from a traffic engineering perspective.

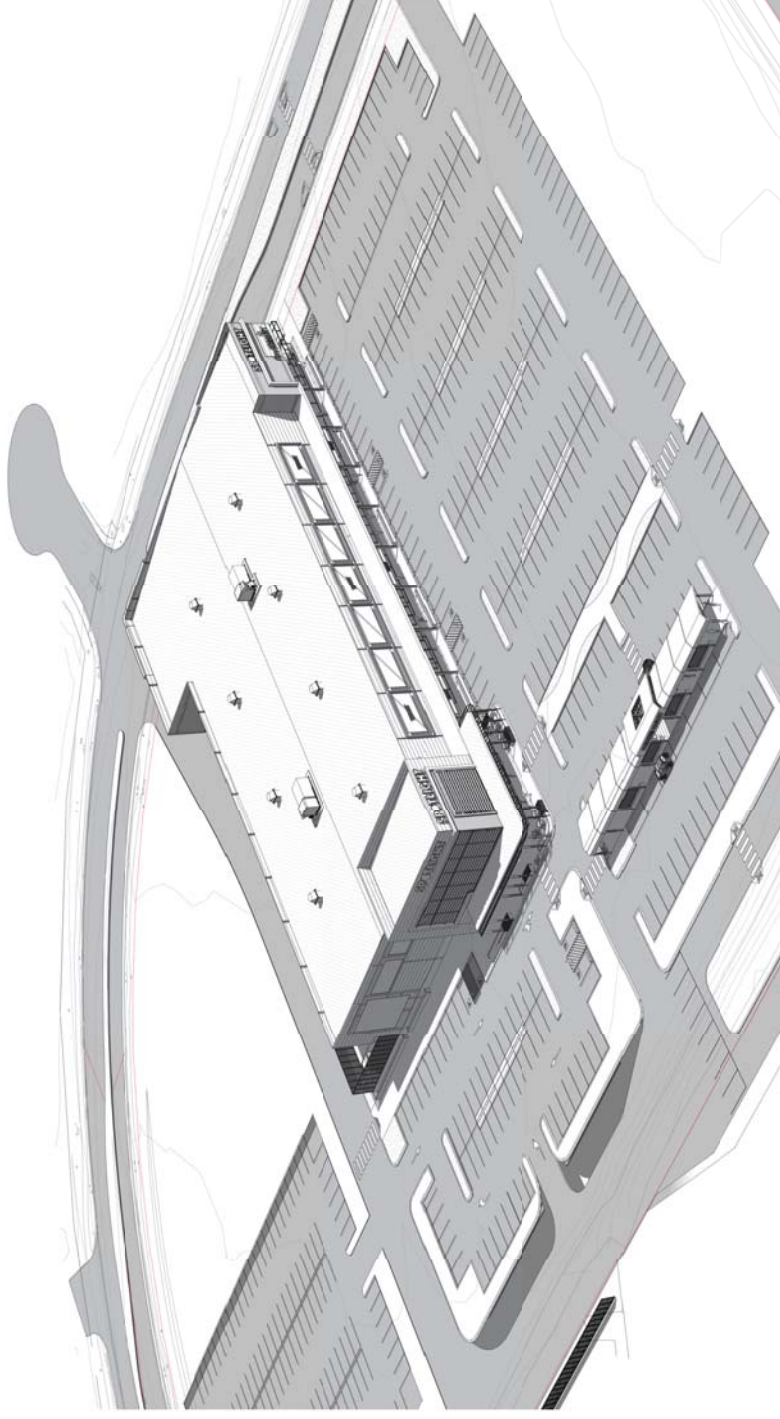
# APPENDIX A

## PROPOSED DEVELOPMENT PLANS

# DEVELOPMENT APPLICATION

**DALTON DRIVE, MAROCHYDRE 4558**

| DRAWING LIST |    |    |   |       |                                   |   |          |
|--------------|----|----|---|-------|-----------------------------------|---|----------|
| A            | -  | DA | - | 0101  | EXISTING SITE CONDITION           | D | 23.11.17 |
| A            | -  | DA | - | 0102  | PROPOSED MASTERPLAN -<br>STAGE 01 | K | 23.11.17 |
| A            | DA |    |   | 0102A | FARMERS MARKET CALL OUT<br>PLAN   | B | 23.11.17 |
| A            | -  | DA | - | 0104  | GROUND FLOOR RETAIL PLAN          | J | 23.11.17 |
| A            | -  | DA | - | 0104A | SPOTLIGHT TOWER FOYER             | I | 23.11.17 |
| A            | -  | DA | - | 0105  | LEVEL 1 RETAIL - FLOOR PLAN       | J | 23.11.17 |
| A            | -  | DA | - | 0106  | ROOF PLAN                         | D | 23.11.17 |
| A            | -  | DA | - | 0107  | BUILDING ELEVATIONS               | E | 23.11.17 |
| A            | -  | DA | - | 0108  | SECTIONS                          | C | 23.11.17 |
| A            | -  | DA | - | 0109  | 3D STUDY MODEL - VIEW 01          | D | 23.11.17 |
| A            | -  | DA | - | 0110  | 3D STUDY MODEL - VIEW 02          | D | 23.11.17 |
| A            | -  | DA | - | 0111  | 3D STUDY MODEL - VIEW 03          | D | 23.11.17 |
| A            | -  | DA | - | 0112  | 3D STUDY MODEL - VIEW 04          | B | 23.11.17 |
| A            | -  | DA | - | 0113  | 3D STUDY MODEL - VIEW 05          | B | 23.11.17 |



**MAROOCHYDRE LARGE FORMAT RETAIL - STAGE 01**  
DALTON DRIVE, MAROOCHYDRE

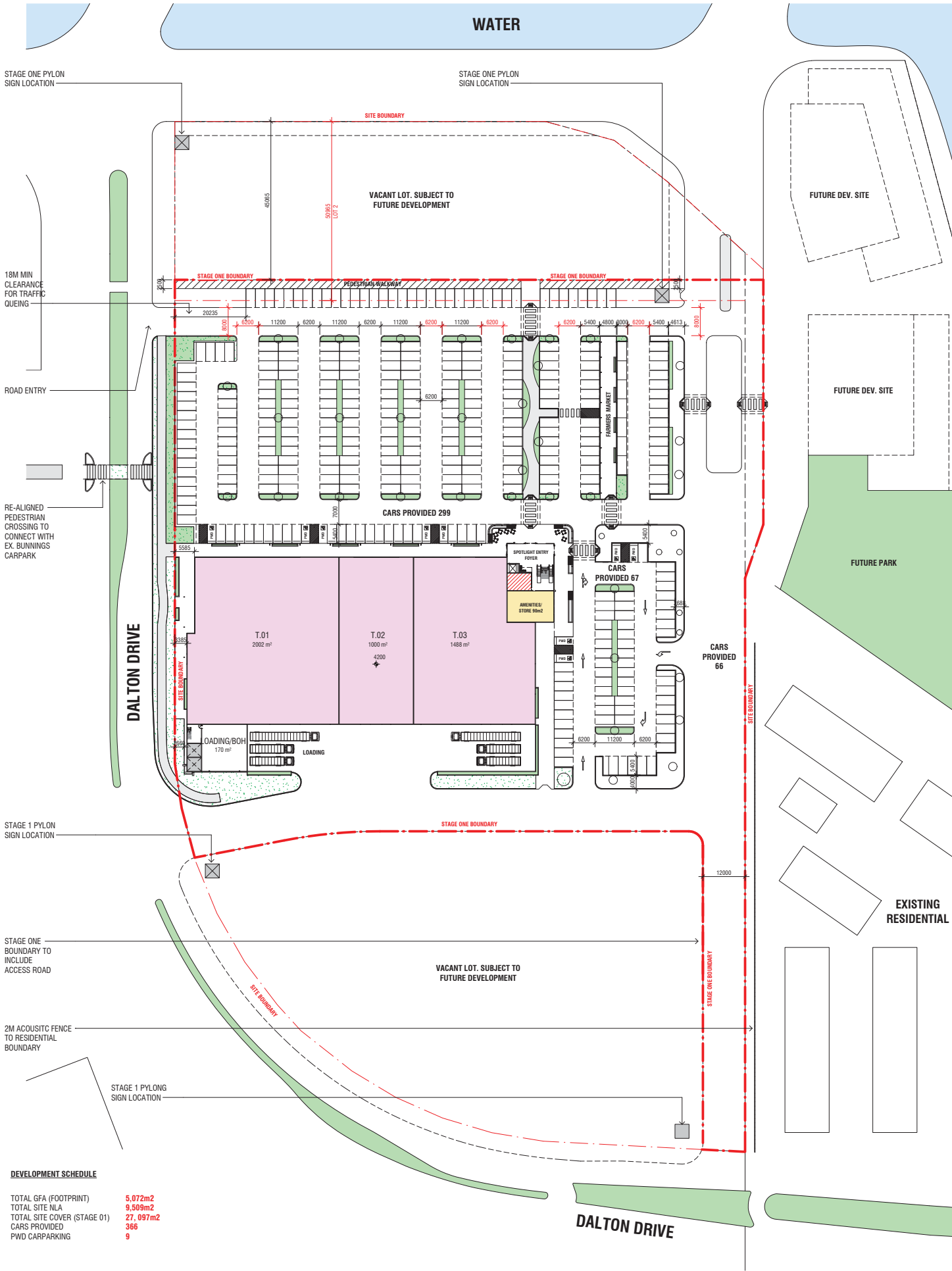
**TITLE SHEET A0**

|                         |                    |                                                                                     |
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| purpose FOR INFORMATION |                    |  |
| proj no                 | 717005             |                                                                                     |
| scale                   | @A1                |                                                                                     |
| created                 | TBC                |                                                                                     |
| plotted                 |                    |                                                                                     |
| file                    | X:\717005\BEMT.DWG |                                                                                     |

|       |           |       |
|-------|-----------|-------|
| drawn | dwg no    | issue |
| DF    | A-DA-0000 | D     |

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**DEVELOPMENT SCHEDULE**

|                             |                      |
|-----------------------------|----------------------|
| TOTAL GFA (FOOTPRINT)       | 5,072m <sup>2</sup>  |
| TOTAL SITE NLA              | 9,509m <sup>2</sup>  |
| TOTAL SITE COVER (STAGE 01) | 27,097m <sup>2</sup> |
| CARS PROVIDED               | 366                  |
| PWD CARPARKING              | 9                    |

**Malone Buchan Laird & Bowden Pty Ltd**  
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Architecture + Master Planning + Interiors + Graphics  
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| REV | DATE     | REVISION               | INTS | NOTES |
|-----|----------|------------------------|------|-------|
| 1   | 23/11/17 | FINAL ISSUE AMENDMENTS | DP   | PS    |
| 2   | 23/11/17 | FINAL ISSUE            | DP   | PS    |
| 3   | 23/11/17 | TRAFFIC AMENDMENTS     | AJ   | PS    |
| 4   | 16/11/17 | DRAFT ISSUE            | DP   | PS    |
| 5   | 16/11/17 | DRAFT ISSUE            | DP   | PS    |
| 6   | 16/11/17 | DRAFT ISSUE            | DP   | PS    |
| 7   | 16/11/17 | PRELIMINARY            | DP   | PS    |
| 8   | 16/11/17 | PRELIMINARY            | DP   | PS    |
| 9   | 16/11/17 | PRELIMINARY            | DP   | PS    |

**MAROOCHYDORE LARGE  
FORMAT RETAIL - STAGE  
01**  
DALTON DRIVE, MAROOCHYDORE

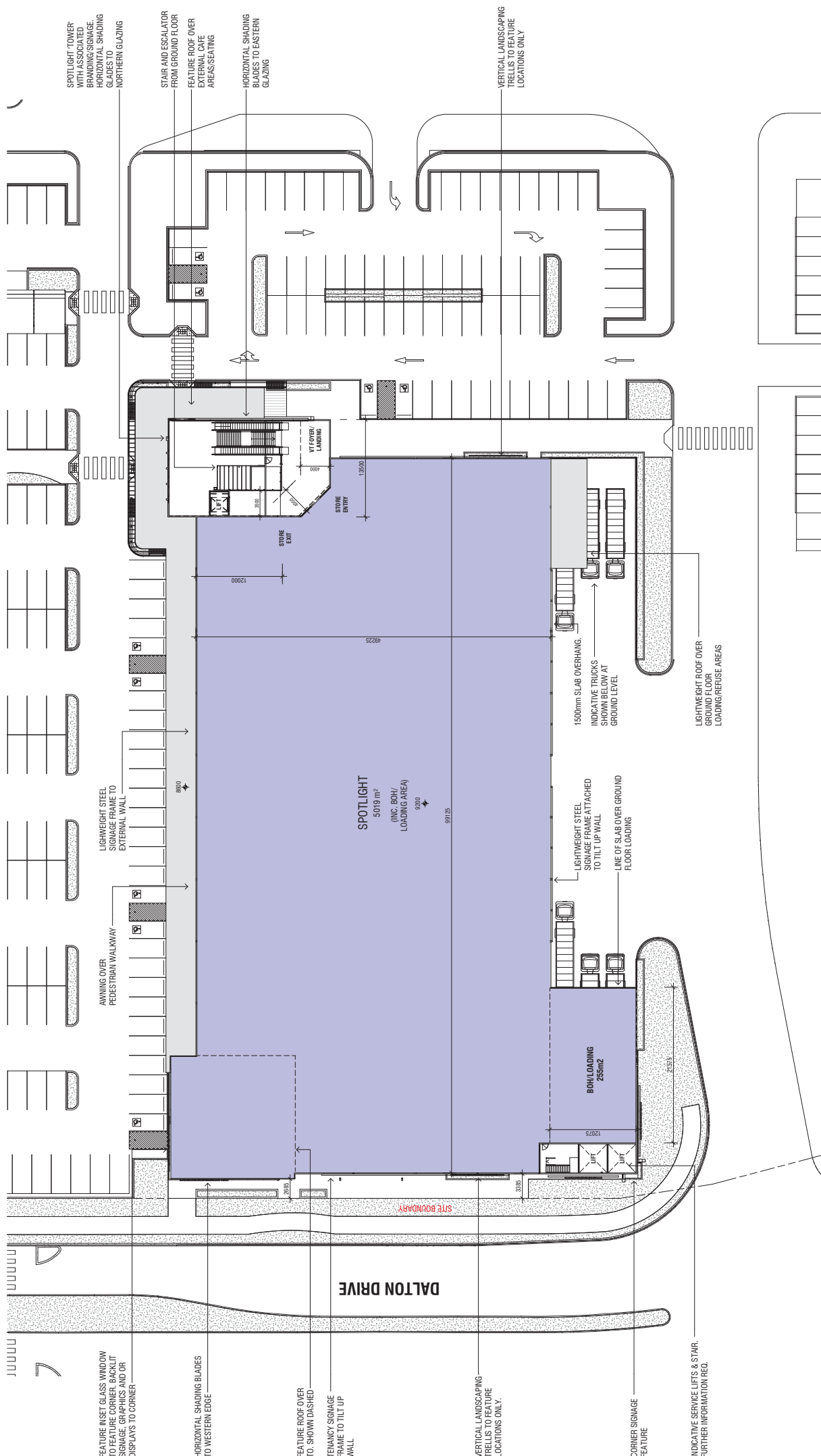
**PROPOSED  
MASTERPLAN - STAGE  
01**

**purpose** FOR INFORMATION  
**proj no** 717006  
**scale** 1:500 @A1  
**created** TBC  
**plotted** 23/11/2017 4:49:18 PM  
**file** C:\Users\dominic\Documents\Maroochydore\_STAGE 01\_DA\_dominic.rvt

**dwn** **dwg no** **issue**  
**Author** A-DA-0102 **K**  
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SPOTLIGHT TOWER  
WITH ASSOCIATED  
BRANDING/SIGNAGE  
HORIZONTAL SHADING  
BLADES TO  
NORTHERN GLAZING

STAIR AND ESCALATOR  
FROM GROUND FLOOR  
FEATURE ROOF OVER  
EXTERNAL CAFE  
AREAS/SEATING

HORIZONTAL SHADING  
BLADES TO EASTERN  
GLAZING

VERTICAL LANDSCAPING  
TRELLIS TO FEATURE  
LOCATIONS ONLY

FEATURE INSET GLASS WINDOW  
TO FEATURE CORNER, BACKLIT  
SIGNAGE, GRAPHICS AND OR  
DISPLAYS TO CORNER

HORIZONTAL SHADING BLADES  
TO WESTERN EDGE

FEATURE ROOF OVER  
TO SHOWN DASHED  
TENANCY SIGNAGE  
FRAME TO TILT UP  
WALL

VERTICAL LANDSCAPING  
TRELLIS TO FEATURE  
LOCATIONS ONLY

CORNER SIGNAGE  
FEATURE

INDICATIVE SERVICE LIFTS & STAIR  
FURTHER INFORMATION REQ.

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| DATE     | BY                       | REVISION |
|----------|--------------------------|----------|
| 20.11.17 | ANNA LUCAS/AMBER KENNEDY | 01 - PS  |
| 20.11.17 | FRANK LUSH               | 02 - PS  |
| 20.11.17 | DOUGIE FERGUSON          | 03 - PS  |
| 20.11.17 | FRANK LUSH               | 04 - PS  |
| 20.11.17 | DOUGIE FERGUSON          | 05 - PS  |
| 20.11.17 | FRANK LUSH               | 06 - PS  |
| 20.11.17 | DOUGIE FERGUSON          | 07 - PS  |
| 20.11.17 | FRANK LUSH               | 08 - PS  |

## MAROCHYDORE LARGE FORMAT RETAIL - STAGE 01

DALTON DRIVE, MAROCHYDORE

## LEVEL 1 RETAIL - FLOOR PLAN

| PURPOSE | FOR INFORMATION      |
|---------|----------------------|
| DATE    | 27/10/2018           |
| SCALE   | 1:250 @A1            |
| CREATED | 10/10/17             |
| FILE    | X:\717008\REV 01.DWG |



3D STUDY MODEL - VIEW 01  
NORTH WEST CORNER. FROM DALTON DRIVE

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MAROOCHYDORE LARGE FORMAT RETAIL - STAGE 01  
DALTON DRIVE, MAROOCHYDORE

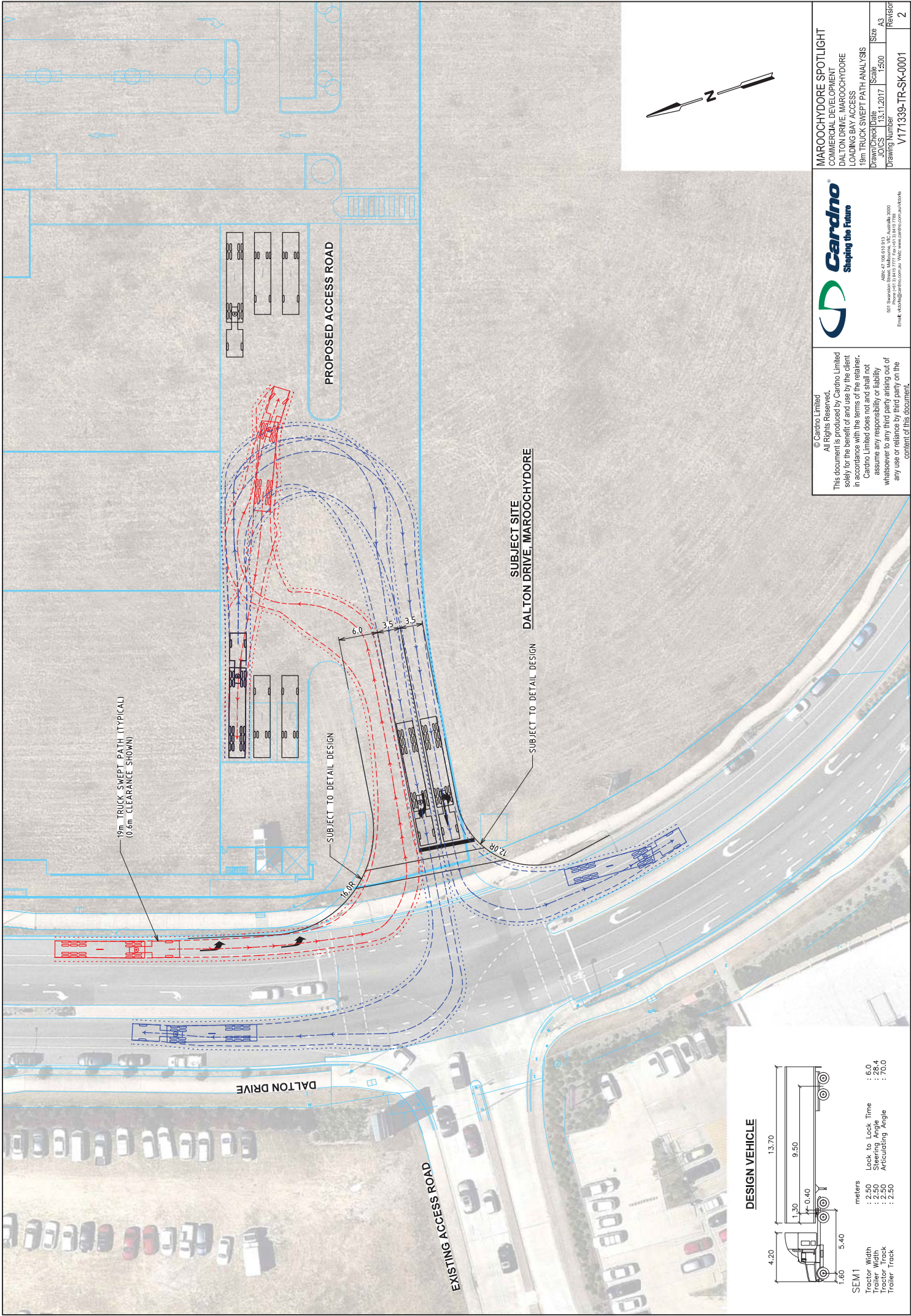
3D STUDY MODEL - VIEW 01

| Purpose FOR INFORMATION |                    |         |          |
|-------------------------|--------------------|---------|----------|
| Project                 | 27/03/20           | Scale   | 1:100    |
| Created                 | 11/03/17           | Revised | 11/03/17 |
| Drawn                   | 11/03/17           | Checked | 11/03/17 |
| File                    | X:\77008\95-VT-01A |         |          |

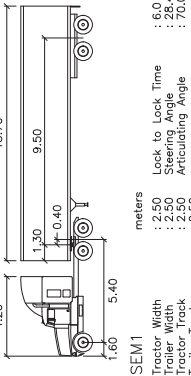
| Rev | Rev no    | Issue |
|-----|-----------|-------|
| 01  | A-DA-0109 | D     |

# APPENDIX B

## SERVICE VEHICLE SWEEP PATHS



DESIGN VEHICLE

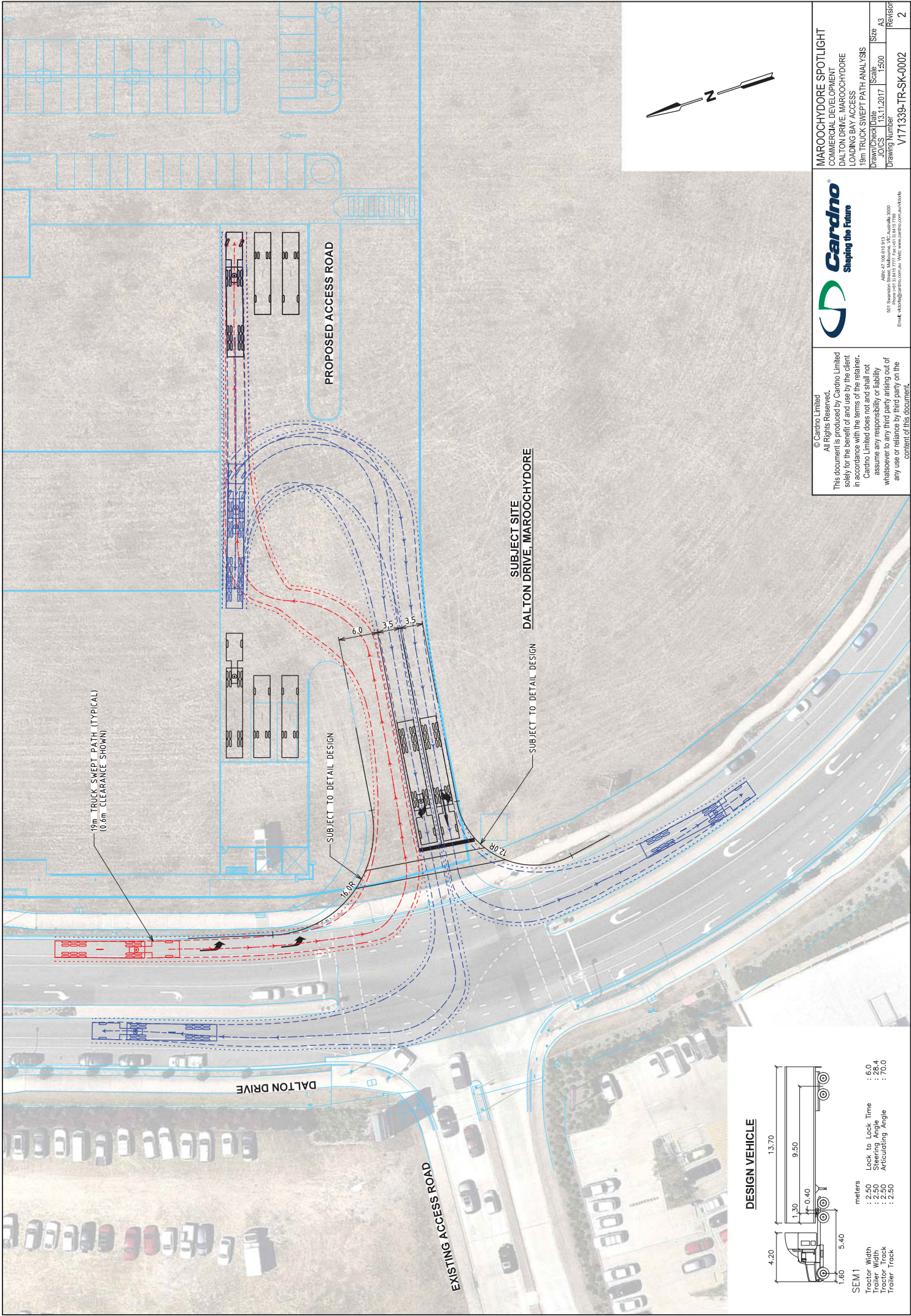


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|                                                                                                                                       |                    |      |         |
|---------------------------------------------------------------------------------------------------------------------------------------|--------------------|------|---------|
| MAROOCHYDORE SPOTLIGHT<br>COMMERCIAL DEVELOPMENT<br>DALTON DRIVE, MAROOCHYDORE<br>LOADING BAY ACCESS<br>19m TRUCK SWEEP PATH ANALYSIS |                    |      |         |
| Drawn/Check Date                                                                                                                      | Scale              | Size | Revised |
| JO/CS                                                                                                                                 | 1:500              | A3   |         |
| 13.11.2017                                                                                                                            |                    |      |         |
| Drawing Number                                                                                                                        | V171339-TR-SK-0001 |      |         |
|                                                                                                                                       | 2                  |      |         |



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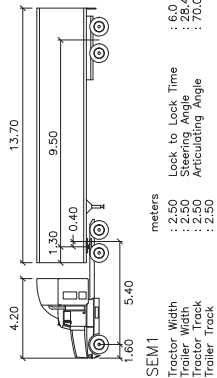
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Email: [info@cardno.com.au](mailto:info@cardno.com.au) Web: [www.cardno.com.au](http://www.cardno.com.au)

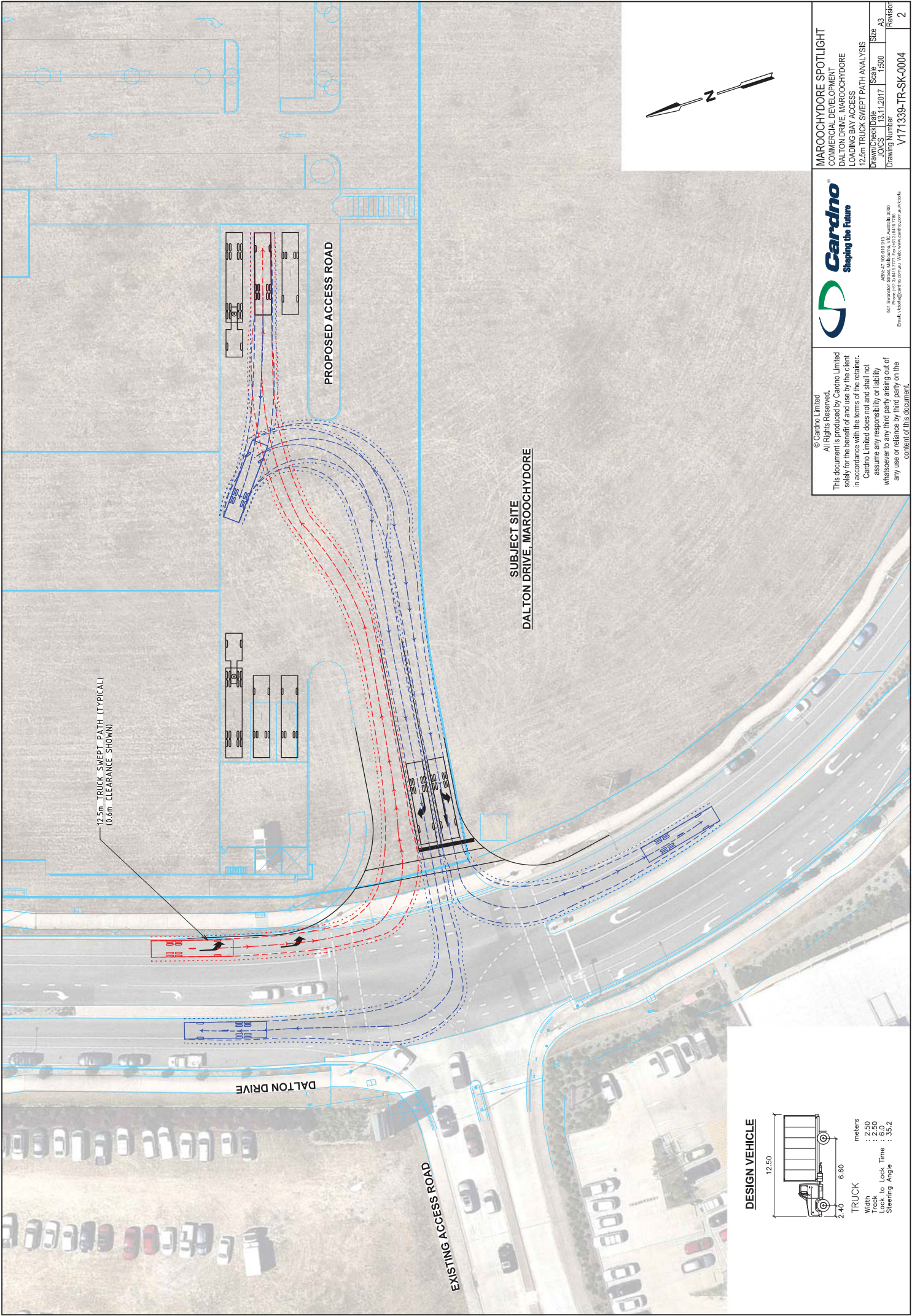
MAROOCHYDORE SPOTLIGHT  
COMMERCIAL DEVELOPMENT  
DALTON DRIVE - MAROOCHYDORE  
LOADING BAY ACCESS  
19m TRUCK SWEEP PATH ANALYSIS

|                    |       |         |
|--------------------|-------|---------|
| Drawn/Check Date   | Scale | Size    |
| JO/CS              | 1:500 | A3      |
| 13.11.2017         |       |         |
| Drawing Number     |       | Revison |
| V171339-TR-SK-0002 |       | 2       |

DESIGN VEHICLE





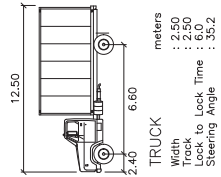


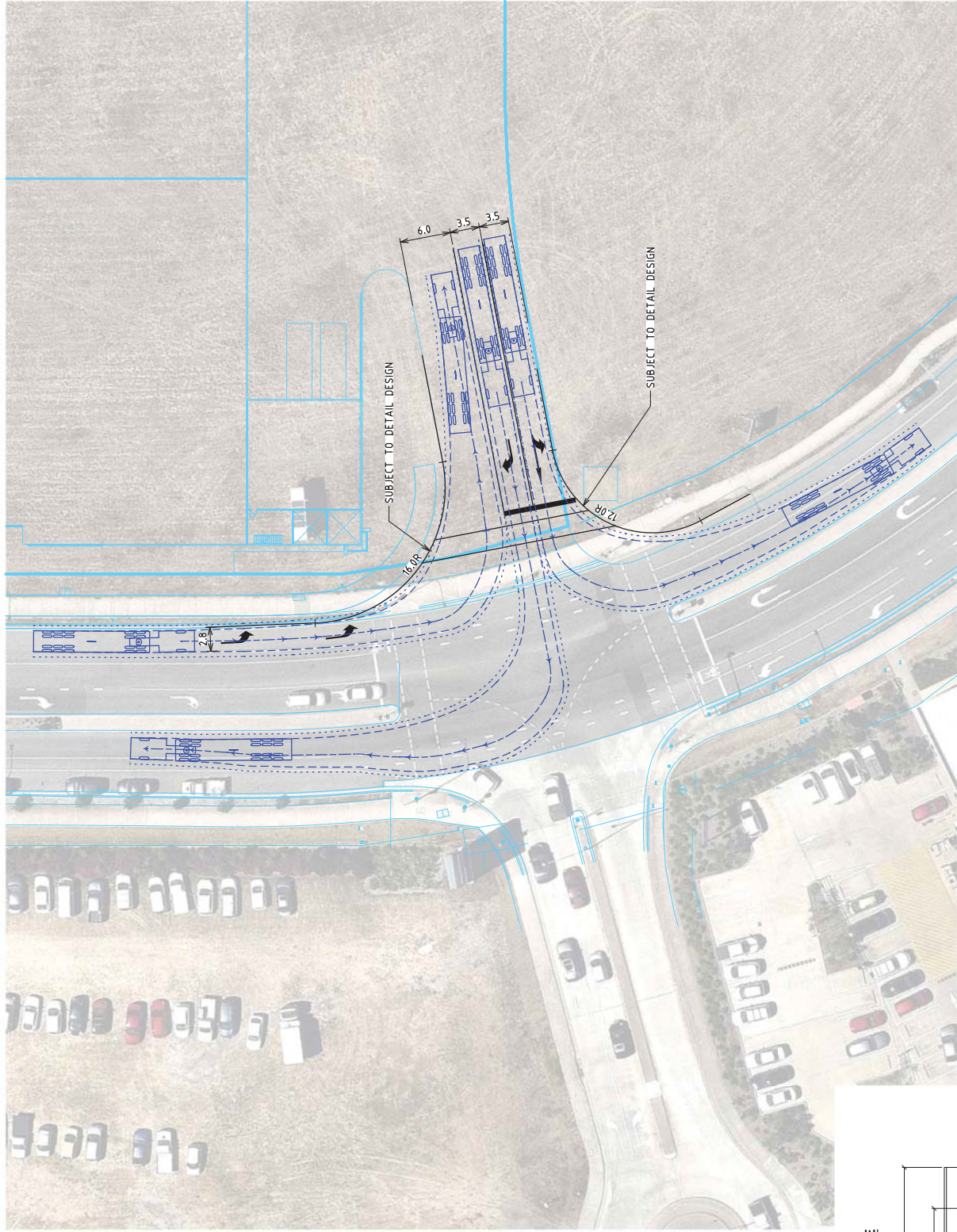
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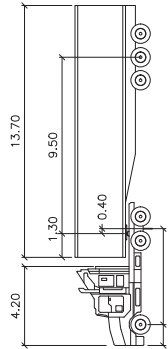
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|-----------------------------------------------------------------------------------------------------------------------------------------|-------|------|---------|
| MAROOCHYDORE SPOTLIGHT<br>COMMERCIAL DEVELOPMENT<br>DALTON DRIVE, MAROOCHYDORE<br>LOADING BAY ACCESS<br>12.5m TRUCK SWEEP PATH ANALYSIS |       |      |         |
| Drawn/Check/Date                                                                                                                        | Scale | Size | Revised |
| JO/CS                                                                                                                                   | 1:500 | A3   |         |
| Drawing Number                                                                                                                          |       |      |         |
| V171339-TR-SK-0004                                                                                                                      |       |      |         |

#### DESIGN VEHICLE





DESIGN VEHICLE



|               |      |                    |      |
|---------------|------|--------------------|------|
| Tractor Width | 4.20 | Lock to Lock Time  | 6.0  |
| Trailer Width | 1.30 | Steering Angle     | 28.3 |
| Tractor Track | 1.60 | Articulating Angle | 70.0 |
| Trailer Track | 5.40 |                    |      |

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|                                                                                                                                  |                           |                |            |
|----------------------------------------------------------------------------------------------------------------------------------|---------------------------|----------------|------------|
| MAROOCHYDORE SPOTLIGHT<br>COMMERCIAL DEVELOPMENT<br>DALTON DRIVE, MAROOCHYDORE<br>SITE ACCESS<br>12.5m TRUCK SWEEP PATH ANALYSIS | Drawn/Check Date<br>JO/KS | Scale<br>1:500 | Size<br>A3 |
|                                                                                                                                  | Revision Number           |                |            |
|                                                                                                                                  | V171339-TR-SK-0005        |                | 2          |