

AMP CAPITAL INVESTORS LTD

TRAFFIC REPORT FOR
WAREHOUSE AND WORKSHOP
NO. 1 IN INDUSTRIAL PRECINCT
A (LOT 204), CROSSROADS
HOMEMAKER CENTRE

MARCH 2017

COLSTON BUDD ROGERS & KAFES PTY LTD
ACN 002 334 296
Level 18 Tower A
Zenith Centre
821 Pacific Highway
CHATSWOOD NSW 2067

Telephone: (02) 9411 2411
Facsimile: (02) 9411 2422
Email: cbrk@cbrk.com.au

REF: 10249/2

TABLE OF CONTENTS

1. INTRODUCTION	1
2. IMPLICATIONS OF PROPOSED DEVELOPMENT	2

I. INTRODUCTION

- I.1 Colston Budd Rogers and Kafes Pty Ltd has been commissioned by AMP Capital Investors Ltd to prepare a report examining the traffic implications of a proposed warehouse and workshop in Precinct A at The Cross Roads. The site of the proposed industrial building forms part of the Crossroads Homemaker Centre. The site location is shown in Figure I.
- I.2 Existing development within the estate comprises some 63,286m² bulky goods uses. Masterplan or development applications have been approved for industrial uses in Precincts A (lot 204, 32,225m²), B and C (lot 21, 28,470m² in Precinct B and 20,648m² in Precinct C). We prepared reports^{1,2,3} in support of these developments.
- I.3 A new application is proposed for one of the lots in Precinct A, to provide warehouse, workshop and office of some 22,910m² in building I. This compares to the approved building on this lot of 19,725m² warehouse and office. The new building will provide amended parking provision, access, internal circulation, loading docks and parking layout. The traffic implications of the proposed new building are assessed in the following chapter.

¹ Traffic Report for Proposed Industrial Development at The Cross Roads, May 2013.

² Traffic Report for Proposed Precinct B Industrial Development, Crossroads Homemaker Centre, December 2015.

³ Traffic Report for Section 96 Amendments to Precinct A Industrial Development, Crossroads Homemaker Centre, August 2016.

2. IMPLICATIONS OF PROPOSED DEVELOPMENT

2.1 The traffic implications of the proposed building I are set down through the following sections:

- site location and road network;
- approved development;
- proposed development;
- parking provision;
- access, servicing and internal layout;
- traffic effects; and
- summary.

Site Location and Road Network

2.2 The site of the approved industrial development in Precinct A forms part of a larger site owned by AMP Capital Funds Management Limited at The Cross Roads. The estate occupies most of the parcel of land bounded by Camden Valley Way to the north, the M5 Motorway to the west and Campbelltown Road to the south-east.

2.3 Existing development within the estate comprises some 63,286m² bulky goods uses. The remainder of the site, comprising two parcels of land (lots 204 and 21), is being developed for industrial purposes. The site location is shown in Figure I.

2.4 Vehicular access to the estate is provided via Beech Road, Parkers Farm Place and Creekside Place. Beech Road has signalised intersections with Camden Valley

Way and Campbelltown Road. Parkers Farm Place has an unsignalised, left in/left out intersection with Campbelltown Road. Creekside Place runs within the estate from Beech Road and is a private road.

- 2.5 The road network in the vicinity of the site includes the M5 Motorway, Camden Valley Way, Campbelltown Road, Beech Road, Parkers Farm Place and Creekside Place. The M5 Motorway adjoins the site to the west, and connects to the M7 Motorway north of the site. The M5 Motorway connects to Camden Valley Way at a major interchange west of the site. The Hume Highway and Glenfield Road are east of the site. They provide connections to Liverpool and Moorebank.
- 2.6 Camden Valley Way is an arterial road running along the northern boundary of the estate. In the vicinity of the estate it provides a four to six lane divided carriageway with additional turning lanes at major intersections. As noted above, the M5 connects to Camden Valley Way at a major interchange west of the site. This interchange provides for north and southbound off ramps from the M5 and a northbound on ramp. The connections from the M5 Motorway to Camden Valley Way are traffic signal controlled. East of Campbelltown Road, Camden Valley Way becomes the Hume Highway.
- 2.7 Campbelltown Road is an arterial road running along the eastern boundary of the Crossroads site. In the vicinity of the site it is a four to six lane divided road with additional turning lanes at major intersections. The intersections of Campbelltown Road with Camden Valley Way/Hume Highway, Glenfield Road and Beech Road/Macquarie Links Drive are traffic signal controlled. RMS is upgrading Campbelltown Road between Casula and Denham Court to accommodate development in the South-West Growth Centre.
-

- 2.8 Beech Road runs through the estate from Campbelltown Road in the south to Camden Valley Way in the north. It then extends north to provide access to residential development on the northern side of Camden Valley Way. The intersection of Beech Road with Camden Valley Way is controlled by traffic signals. Through the Cross Roads site, Beech Road is a four lane road with access to development along its frontage. The intersection of Beech Road and Parkers Farm Place is controlled by a two lane roundabout.
- 2.9 Parkers Farm Place travels in an east west direction through the estate. It is a two lane road that connects to Campbelltown Road. Turns at the intersection are left in/left out due to the median in Campbelltown Road. West of Beech Road, Parkers Farm Place is a no through road with a turning head at its western end.
- 2.10 Creekside Place is a four lane industrial road which connects to Beech Road at a roundabout within the estate. It has been constructed to provide future access to Precincts B and C within the estate.

Approved Development

- 2.11 Masterplan or development applications have been approved for industrial uses in Precincts A (lot 204, 32,225m²), B and C (lot 21, 28,470m² in Precinct B and 20,648m² in Precinct C).
- 2.12 Road and intersection works have previously been implemented (under Section 94 plans) to provide appropriate access to the site, including the above developments.
- 2.13 The approved development in Precinct A includes two buildings:
-

- building 1: 19,725m² (including office); and
- building 2: 12,500m² (including office).

Proposed Development

- 2.14 Building 1 is proposed to be 22,910m², including office space of 2,740m². Amended access, internal circulation, service vehicle arrangements and parking layouts are proposed.

Parking Provision

- 2.15 Part 20 of the Liverpool DCP 2008 indicates that warehouses should provide one parking space per 250m².
- 2.16 On this basis, the development would require 92 parking spaces. The proposed parking provision is 176 spaces, which satisfies this requirement. The proposed parking provision is therefore appropriate.
- 2.17 DCP 2008 requires that one space in every 100 spaces be provided for disabled use. Two disabled space will be provided in accordance with this requirement.

Access, Servicing and Internal Layout

- 2.18 Access will be provided from Beech Road, via separate driveways for the car park (combined entry /exit and service vehicle access (separate entry/exit driveways). The driveways will be designed to accommodate the swept paths of the various sized vehicles which will use them, including cars, rigid trucks, semi-trailers and b-doubles.
-

- 2.19 Inside the site, service vehicle manoeuvring areas will be provided to accommodate the swept paths of service vehicles, which will range in size up to 19 metre semi-trailers and 26 metre b-doubles. Swept paths are shown in Figures 2 to 5.
- 2.20 Car parking will be provided at grade, as well as in a basement level. Within the car park, spaces will be a minimum of 5.4 metres long by 2.4 metres wide, with 5.8 metre wide circulation aisles. Spaces with adjacent obstructions will be 0.3 metres wider to appropriately provide for doors to open. Disabled spaces will be 2.4 metres wide, with a 2.4 metre wide adjacent area for wheelchairs. These dimensions are considered appropriate, being in accordance with the Australian Standard for Parking Facilities (Part 1: Off-street car parking), AS 2890.1:2004.

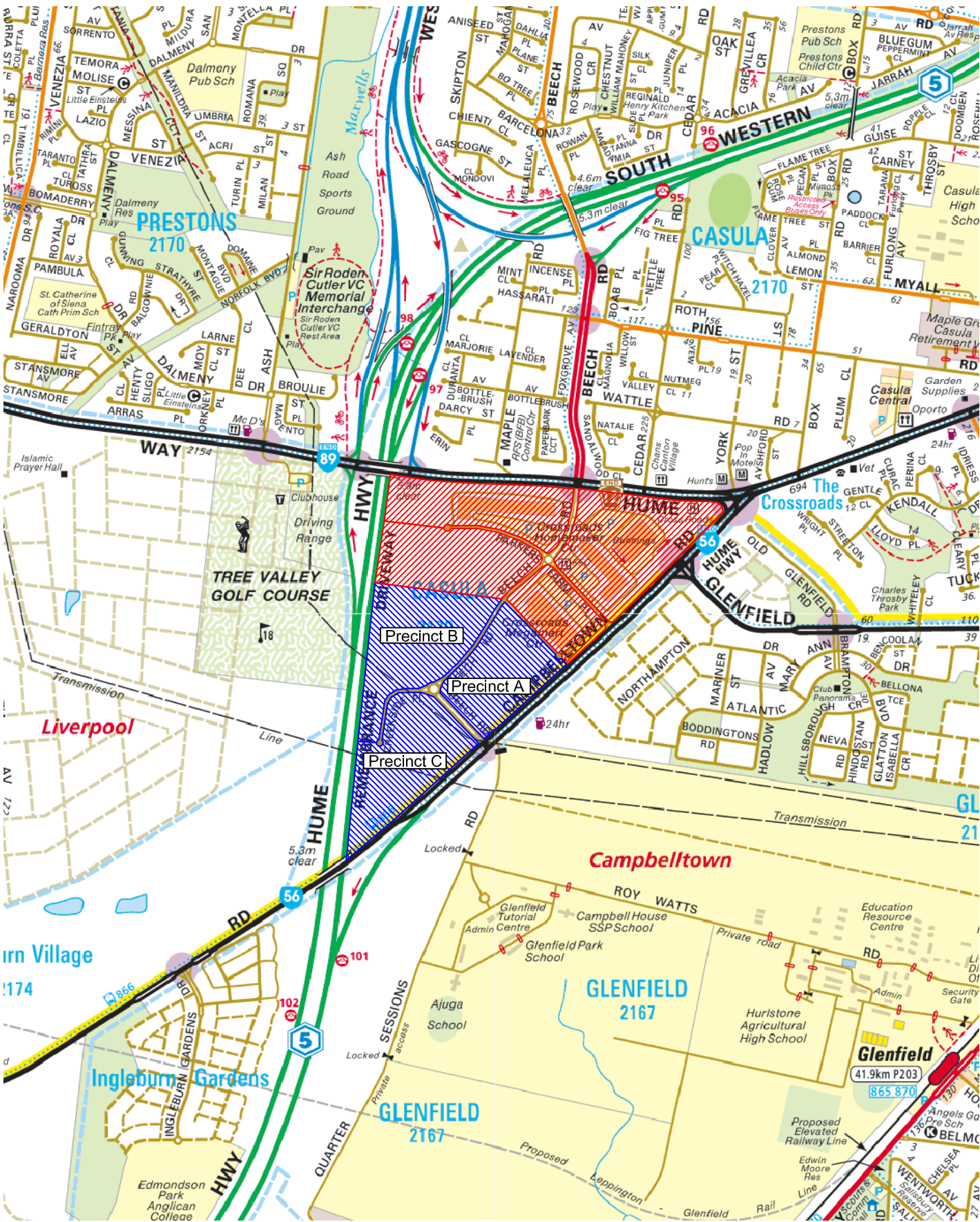
Traffic Effects

- 2.21 Traffic generated by the proposed industrial development will have its greatest effects during weekday morning and afternoon peak periods.
- 2.22 Our previous reports assessed traffic generations of 0.35 vehicles per hour per 100m². On this basis, the relatively minor increase in floor area would result in an increase of some 10 vehicles per hour two-way at peak times, compared to the approved development. This is a low increase, equivalent to only one vehicle every six minutes at peak times.
- 2.23 Such a low increase would not have noticeable effects on the operation of the surrounding road network. The road works previously provided to accommodate the overall development of the site therefore remain appropriate to cater for the proposed building 1 in Precinct A.
-

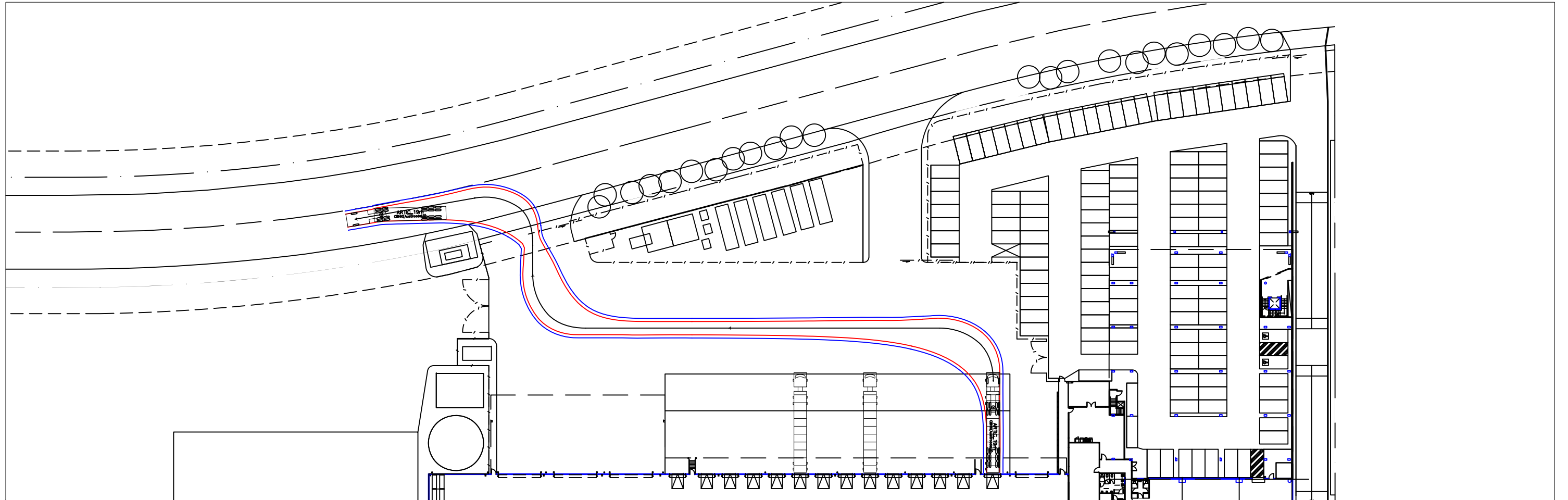
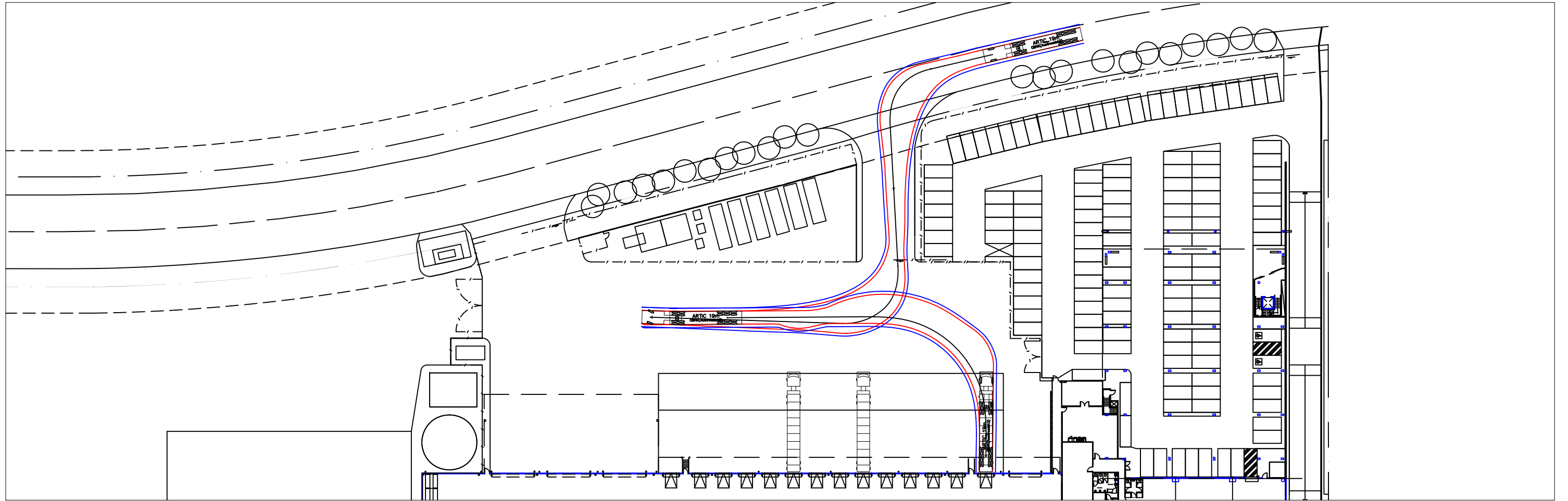
Summary

2.24 In summary, the main points relating to the traffic implications of the proposed industrial development are as follows:

- i) the Cross Roads industrial estate has approvals for industrial, bulky goods and other uses;
 - ii) the approved building I in Precinct A is proposed to have a small increase of some 3,185m², from 19,725m² to 22,910m²;
 - iii) the road and intersection works required by previous approvals to cater for this scale of development have been constructed;
 - iv) the proposed parking provision is appropriate;
 - v) access, internal circulation and layout will be provided in accordance with AS 2890.1:2004 and AS 2890.2 - 2002;
 - vi) the proposed building I in Precinct A would result in a minor increase in traffic generation, compared to the approved development;
 - vii) such a low increase would not have noticeable effects on the operation of the surrounding road network; and
 - viii) the road works previously provided to accommodate the overall development of the site are appropriate to cater for the proposed building I in Precinct A.
-



Location Plan



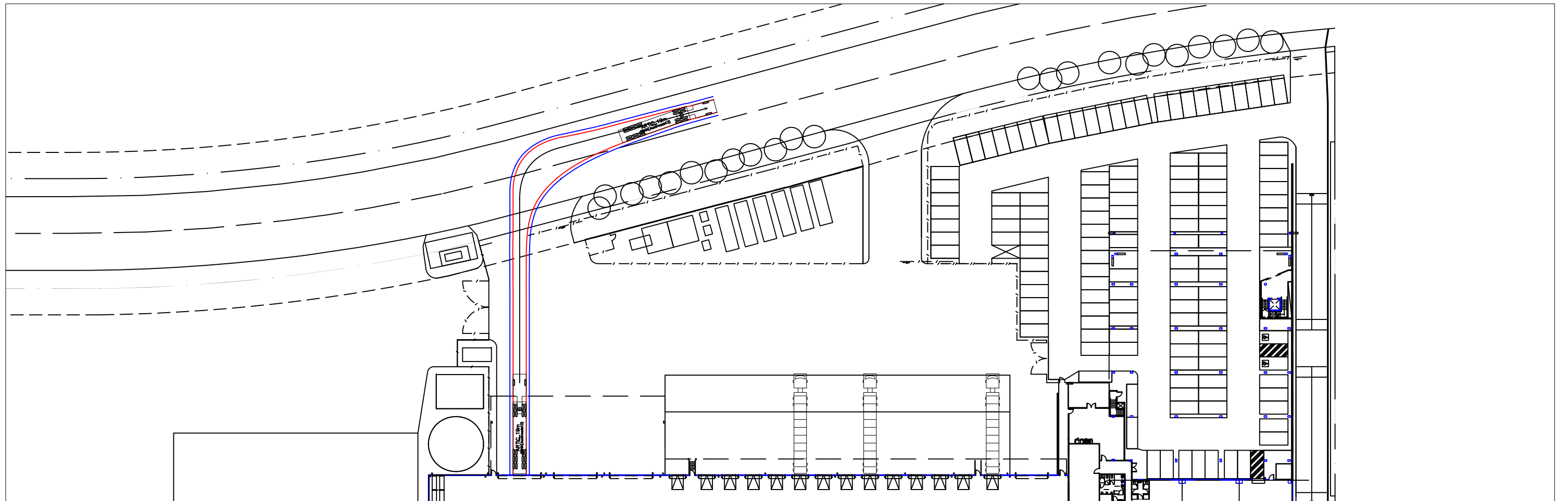
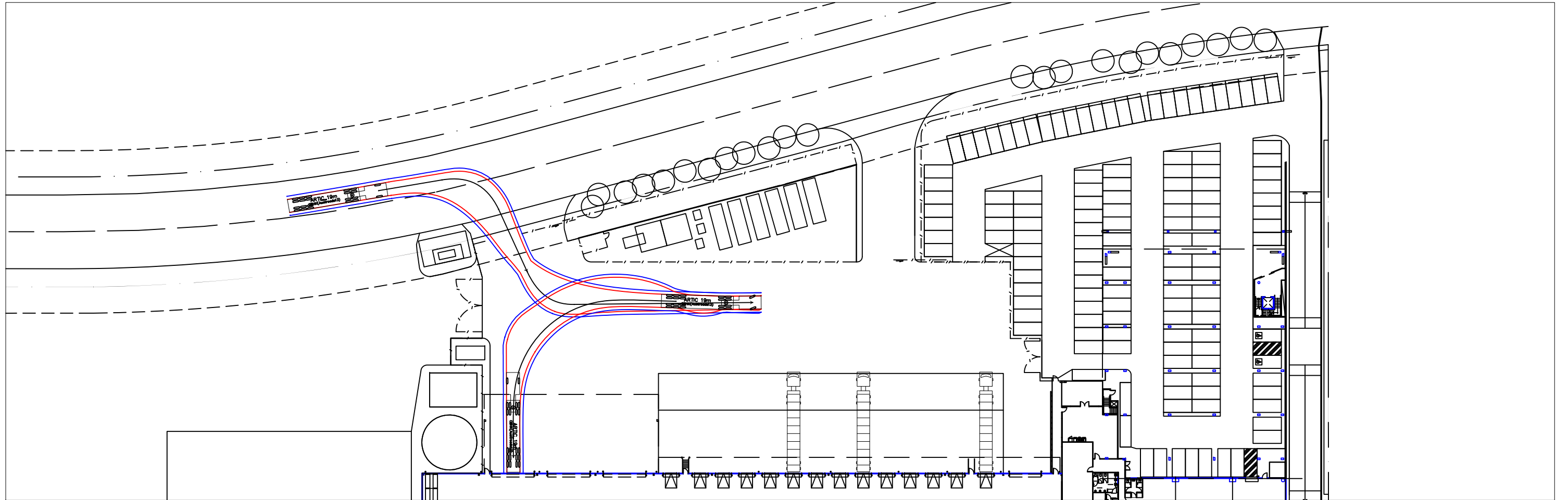
NOTE:
 SKETCH PLAN ONLY. PROPERTY BOUNDARIES,
 UTILITIES, KERBLINES & DIMENSIONS ARE SUBJECT TO
 SURVEY AND FINAL DESIGN. TRAFFIC MEASURES
 PROPOSED IN THIS PLAN ARE CONCEPT ONLY AND
 ARE SUBJECT TO FINAL DESIGN BY CIVIL ENGINEERS.

— Swept Path of Vehicle Body
 — Swept Path of Clearance to Vehicle Body

19m ARTICULATED VEHICLE
 SWEEP PATHS

DRAWN BY CBRK Pty Ltd_hs Ref: 10249

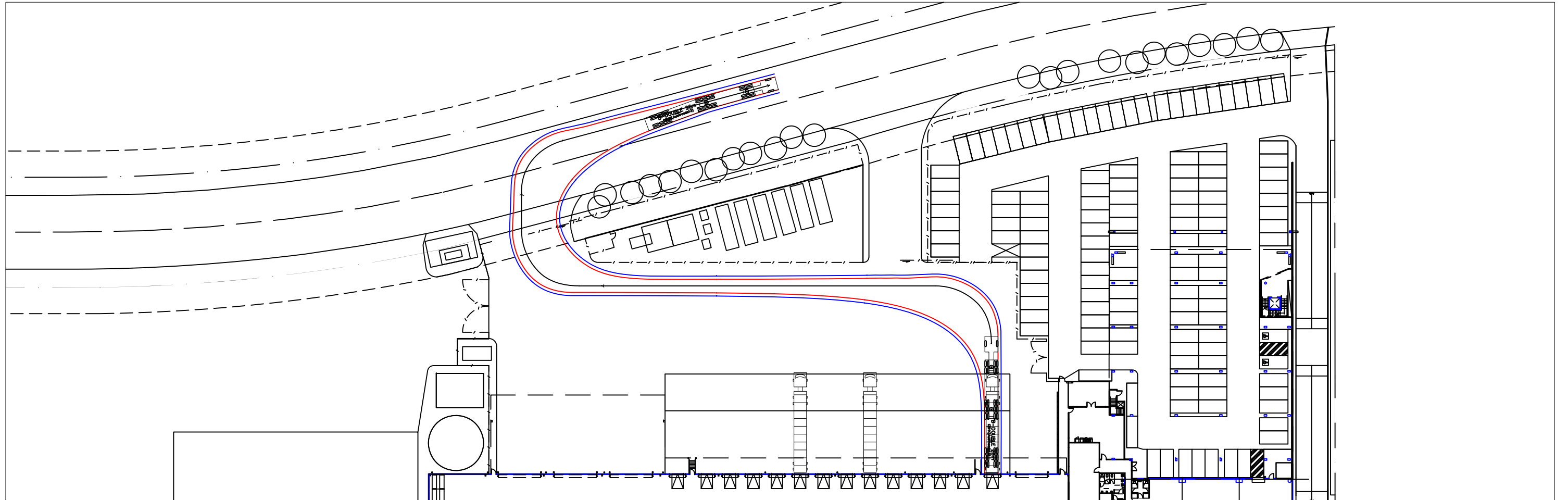
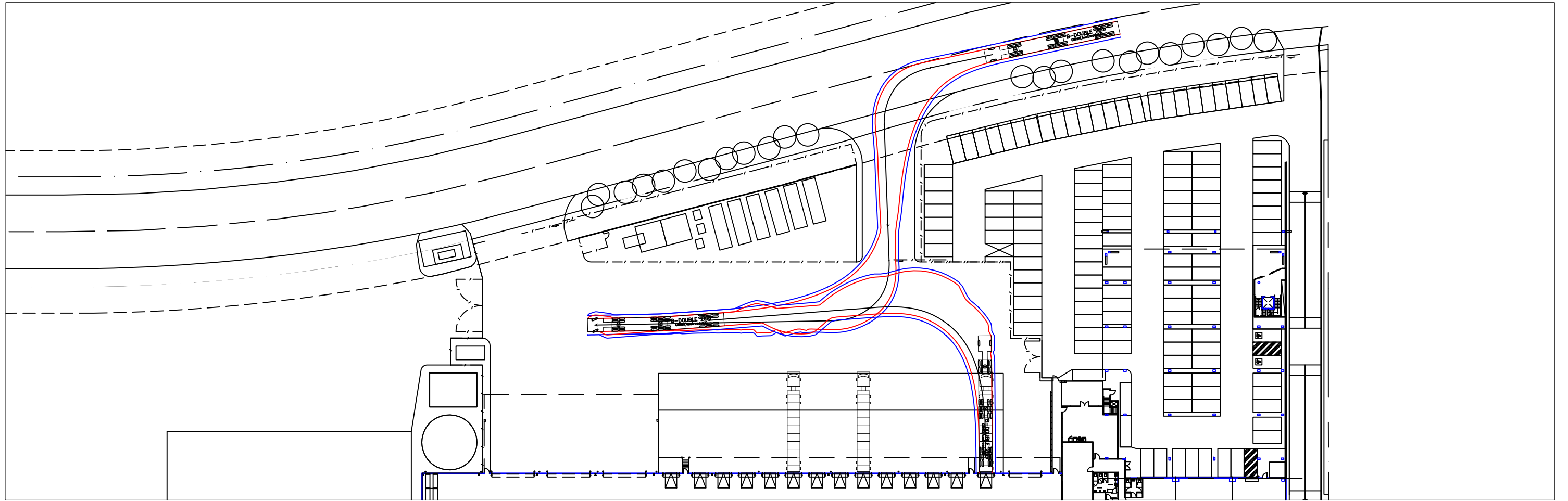
16.03.2017



NOTE:
 SKETCH PLAN ONLY. PROPERTY BOUNDARIES,
 UTILITIES, KERBLINES & DIMENSIONS ARE SUBJECT TO
 SURVEY AND FINAL DESIGN. TRAFFIC MEASURES
 PROPOSED IN THIS PLAN ARE CONCEPT ONLY AND
 ARE SUBJECT TO FINAL DESIGN BY CIVIL ENGINEERS.

— Swept Path of Vehicle Body
 — Swept Path of Clearance to Vehicle Body

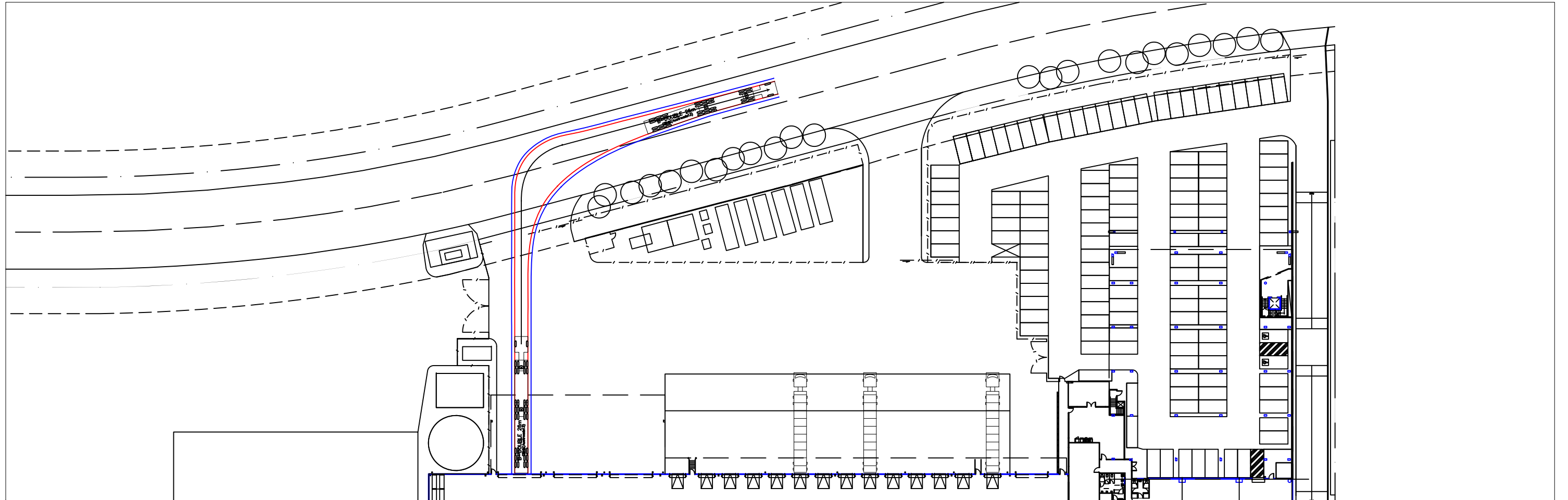
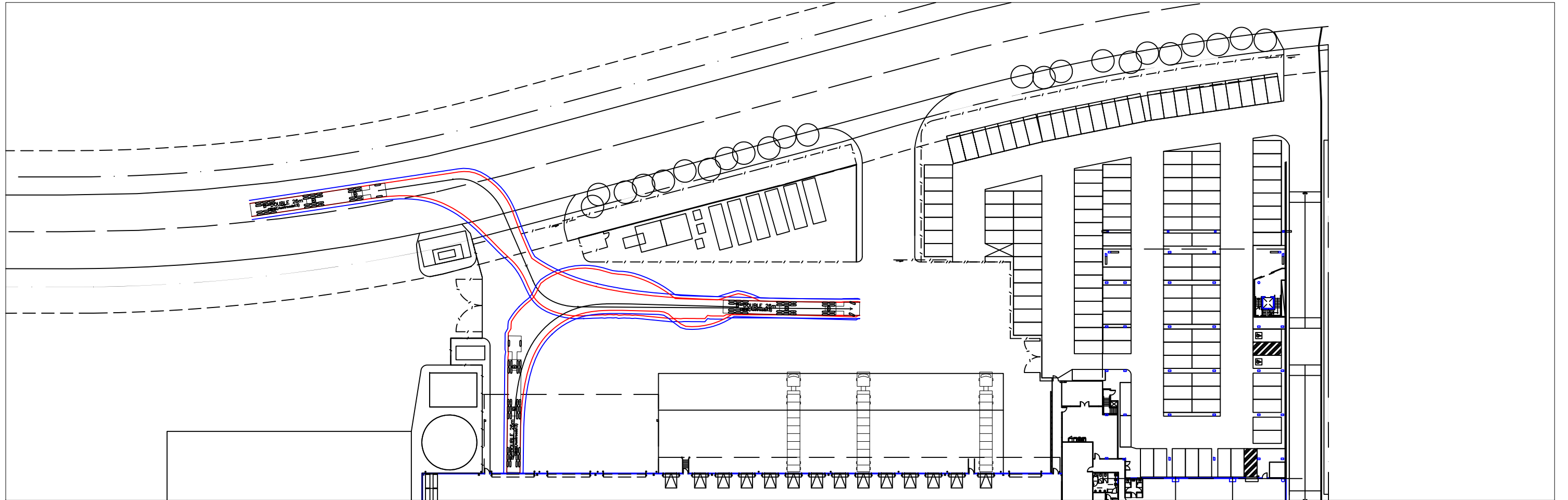
19m ARTICULATED VEHICLE
 SWEEP PATHS



NOTE:
 SKETCH PLAN ONLY. PROPERTY BOUNDARIES,
 UTILITIES, KERBLINES & DIMENSIONS ARE SUBJECT TO
 SURVEY AND FINAL DESIGN. TRAFFIC MEASURES
 PROPOSED IN THIS PLAN ARE CONCEPT ONLY AND
 ARE SUBJECT TO FINAL DESIGN BY CIVIL ENGINEERS.

— Swept Path of Vehicle Body
 — Swept Path of Clearance to Vehicle Body

26m B-DOUBLE VEHICLE
 SWEEP PATHS



NOTE:
 SKETCH PLAN ONLY. PROPERTY BOUNDARIES,
 UTILITIES, KERBLINES & DIMENSIONS ARE SUBJECT TO
 SURVEY AND FINAL DESIGN. TRAFFIC MEASURES
 PROPOSED IN THIS PLAN ARE CONCEPT ONLY AND
 ARE SUBJECT TO FINAL DESIGN BY CIVIL ENGINEERS.

— Swept Path of Vehicle Body
 — Swept Path of Clearance to Vehicle Body

26m B-DOUBLE VEHICLE
 SWEEP PATHS