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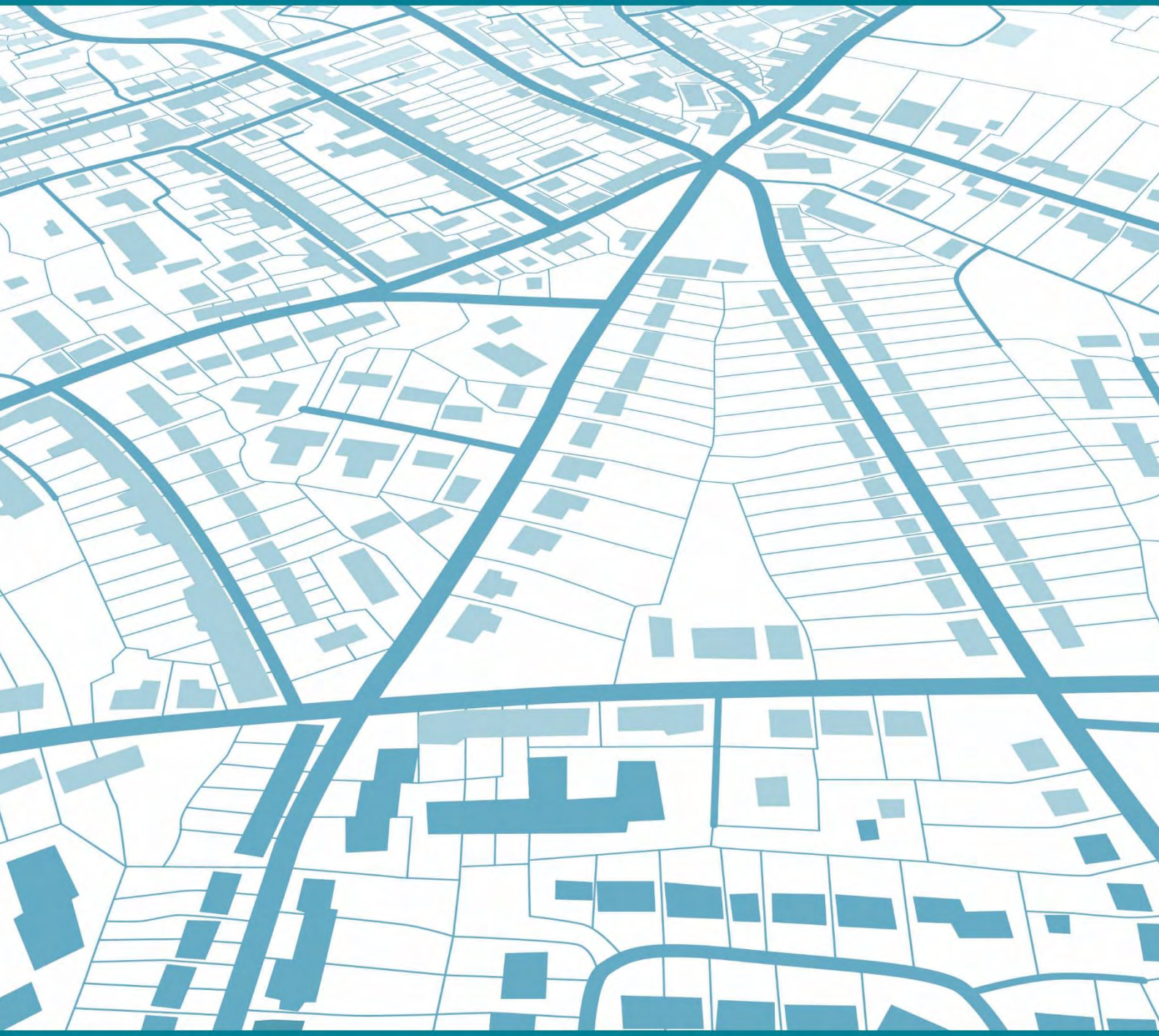

Proposed New Broken Hill Police Station
51 Bromide Street, Broken Hill
Traffic and Parking Assessment

Ref: 287/2019
Date: August 2020
Issue: A

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1.0 Introduction

This report has been prepared to accompany a Development Application to Broken Hill Council for a proposed new Police Station on a site with frontages to Blende Street, Beryl Street and Kaolin Street at Broken Hill (Figure 1).

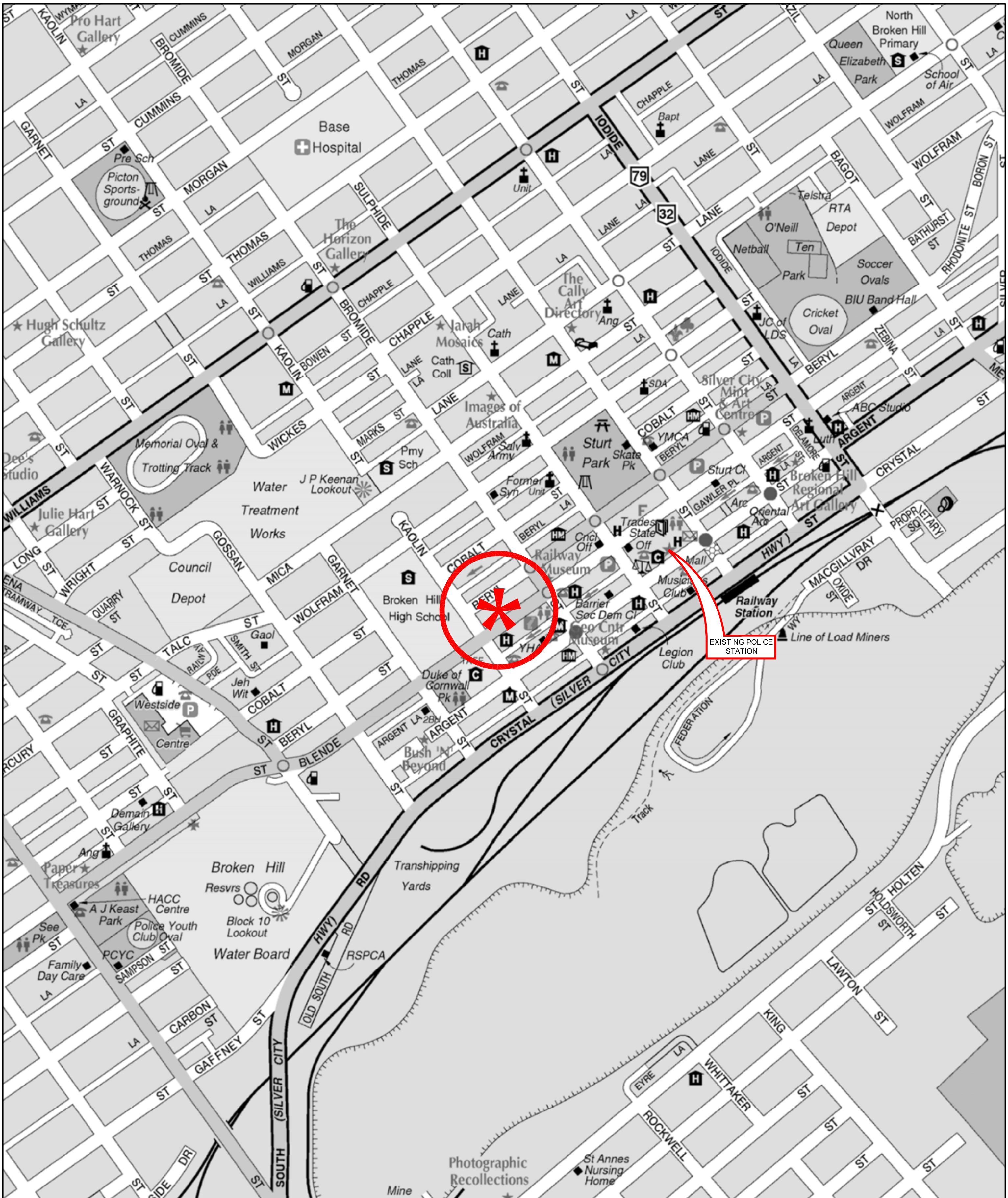
The Broken Hill commercial centre comprises a mixture of retail, commercial and services uses situated along the northern side of Silver City Highway. The existing Broken Hill Police Station comprises an older style building (circa 1890) which is located on Argent street in the central part of the centre. This existing building is outdated and inadequate to serve the contemporary police needs particularly as it is a “major hub station” supporting 10 remote stations and providing the major custody holding facility for the district.

The proposed new station will be a multi purpose Regional Police Station which will accommodate:

- Public Area
- Local Area Command
- General Duties
- Crime Management Unit
- Other Groups
- Detectives Office
- Custody Area

The purpose of this report is to:

- describe the site, its context and the proposed development scheme
- describe the road network serving the site and prevailing traffic conditions
- assess the adequacy of the proposed parking provisions
- assess the potential traffic implications
- assess the suitability of the proposed vehicle access, internal circulation and servicing arrangements



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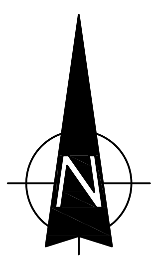


LOCATION

FIG 1

2.0 Proposed Development Scheme

2.1 Site, Context and Existing Circumstances

The site (Figure 2) is Lot 5893 of DP241855 being a rectangular shaped area of some 6,000m^2 with frontages to Blende Street, Kaolin Street and Beryl Street.

The surrounding uses include:

- the residual of Penrose Park and parking area which adjoins to the east
- the High School on the opposite side of Kaolin Street
- the Council Offices and Railway Museum just to the east
- the residential dwellings extending along Blende Street and Beryl Street

The site was part of Penrose Park which was previously occupied by the Penrose Picnic Railway Track and Train Station that have now been relocated.

2.2 Proposed Development

It is proposed to clear the site and prepare level platforms for the new building and hardstand areas. The new police station building will be located on the central and southern parts of the site with an open carpark on the northern part with access driveways on the Blende Street and Beryl Street frontages.

The new two level building of 2,402m^2 GFA will have the main entry, public foyer and enquiry counter located on the corner of Blende Street and Keolin Street.

The new building will accommodate a total of 99 staff on a rotational basis with a maximum daytime shift of 72 persons, although it is unlikely that all duty personnel will be on-site at one time. The proposed parking provision will comprise:

- 24 parking spaces on-site for various operational vehicles
- 1 dock space (prisoner transport)
- 6 on-street First Response car spaces on Blende Street
- 4 on-street Operational car spaces on Kaolin Street

Vehicle access will comprise an ingress driveway on Blende Street located towards the eastern site boundary and an egress driveway on Beryl Street also located towards the eastern site boundary.

Details of the proposed development are shown on the plans prepared by the Gardener Wetherall Architects which accompany the Development Application and are reproduced in part in Appendix A.

LEGEND

N

SITE

FIG 2

3.0 Road Network and Traffic Conditions

3.1 Road Network

The road network serving the site (Figure 3) comprises:

- *Barrier Highway* – a State Road and arterial route which connects between the Mitchell Highway and Nyngan through Broken Hill and into SA.
- *Silvery City Highway* – a State Road and sub-arterial route connecting between Mildura and Tibooburra
- *Bromide Street* – a north-south collector road connecting between Barrier *Highway and Silver City Highway*
- *Blende Street/Beryl Street – an east-west collector road connecting through the town centre*
- *Kaolin Street* – a local access road

Blende Street, Kaolin Street and Beryl Street are straight and relatively level. Kaolin Street and Beryl Street have 1 lane in each direction with kerbside parking while Blende Street has a wide roadway also with 1 lane in each direction.

3.2 Traffic Controls

The existing traffic controls on the roads in the vicinity of the site (Figure 4) comprise:

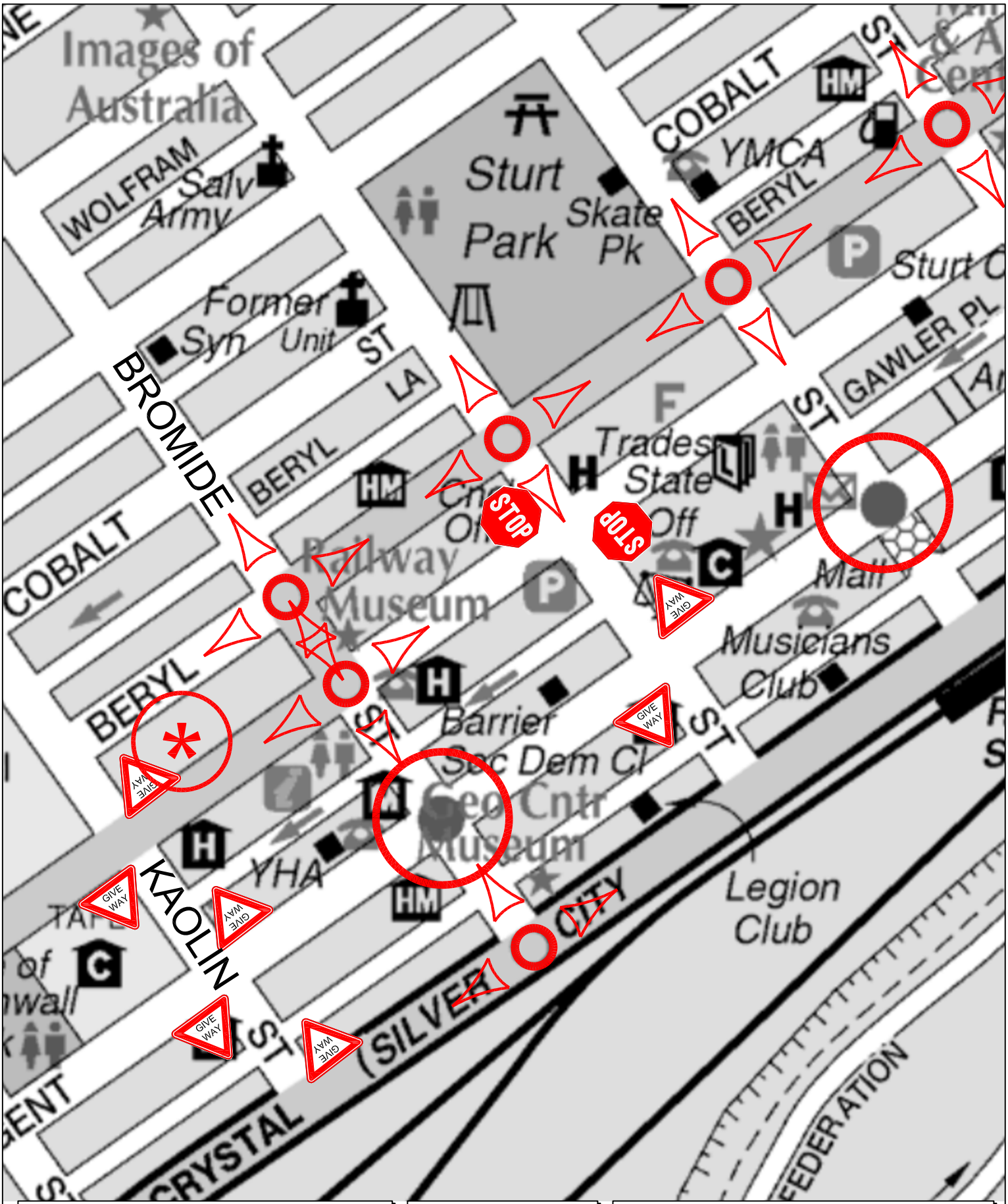
- the traffic signals at intersections along Argent Street including the Bromide Street intersection
- the 50 kmph on the local and collector road systems with sections of 40 kmph School Speed restriction in the vicinity of the High School on Kaolin Street and Beryl Street

LEGEND

- ARTERIAL
- SUB-ARTERIAL
- COLLECTOR

ROAD NETWORK

FIG 3



LEGEND

- TRAFFIC SIGNAL CONTROL
- ROUNDABOUT
- RESTRICTED TURNING MOVEMENT
- SITE

N

TRAFFIC CONTROLS

FIG 4

- the roundabouts along Bromide Street including the Blende Street, Beryl Street and Silver City Highway intersections
- the GIVE WAY sign control on Kaolin Street at the Blende Street intersection

3.3 Traffic Conditions

An indication of the prevailing traffic conditions on the road system serving the site is provided by data published by TfNSW. The data published by the TfNSW is expressed in terms of Annual Average Daily Traffic (AADT) and the estimated volumes in the vicinity of the site are as follows:

	AADT
Silver City Highway	6,500
Barrier Highway	8,500

The traffic movements along Blende Street, Kaolin Street and Beryl Street are relatively light even during the AM and PM peak periods.

The traffic conditions in the area are quite satisfactory with access onto and across the Barrier and Silver City Highways as well as the collector roads being facilitated at the roundabout and traffic signal controls.

3.4 Transport Services

There are few public transport services in Broken Hill and these are limited to a bus service which connects to the Railway Station and numerous coach services. Details of the bus and rail services are provided overleaf.

It is apparent that the Broken Hill centre is reasonably well served in relation to rail and bus transport.

592 Broken Hill CBD to Thomas via Broken Hill Base Hospital (Loop Service)

View In Website Mode

The 592 bus line Broken Hill CBD to Thomas via Broken Hill Base Hospital (Loop Service) has one route. For regular weekdays, their operation hours are:
(1) Broken Hill Cbd To Thomas via Broken Hill Base Hospital (Loop Service): 8:00 AM - 8:30 AM
Use the Moovit App to find the closest 592 bus station near you and find out when is the next 592 bus arriving.

Direction: Broken Hill Cbd To Thomas via Broken Hill Base Hospital (Loop Service)

18 stops

VIEW LINE SCHEDULE

- Argent St before Oxide St
  378 Argent Street, Broken Hill
- Oxide St before Chapple St
  205 Oxide Street, Broken Hill
- Thomas St opp Broken Hill Base Hospital
  231 Thomas Street, Broken Hill
- Thomas St at Bromide St
  312 Bromide Street, Broken Hill
- Thomas St at Kaolin St
  304-306 Kaolin Street, Broken Hill
- Morgan St at Garnet St
  91 Morgan Street, Broken Hill
- Morgan St at Jones St
  49 Morgan Street, Broken Hill
- Brookfield Av at Morgan St
- Cummins St at Gossan St
  46 Cummins Street, Broken Hill
- Cummins St at Kaolin St
  372 Kaolin Street, Broken Hill
- Cummins St at Chloride St
  371 Chloride Street, Broken Hill
- Cummins St at Oxide St
  369 Oxide Street, Broken Hill
- Oxide St at Wyman St
  389 Oxide Street, Broken Hill

592 bus Time Schedule

Broken Hill Cbd To Thomas via Broken Hill Base Hospital (Loop Service) Route Timetable:

Sunday	Not Operational
Monday	8:00 AM - 8:30 AM
Tuesday	8:00 AM - 8:30 AM
Wednesday	8:00 AM - 8:30 AM
Thursday	8:00 AM - 8:30 AM
Friday	8:00 AM - 8:30 AM
Saturday	Not Operational

592 bus Info

Direction: Broken Hill Cbd To Thomas via Broken Hill Base Hospital (Loop Service)
Stops: 18
Trip Duration: 30 min
Line Summary: Argent St before Oxide St, Oxide St before Chapple St, Thomas St opp Broken Hill Base Hospital, Thomas St at Bromide St, Thomas St at Kaolin St, Morgan St at Garnet St, Morgan St at Jones St, Brookfield Av at Morgan St, Cummins St at Gossan St, Cummins St at Kaolin St, Cummins St at Chloride St, Cummins St at Oxide St, Oxide St at Wyman St, Wyman St at Iodide St, Zebina St at Fisher St, Thomas St at Oxide St, Oxide St after Chapple St, Argent St at Oxide St

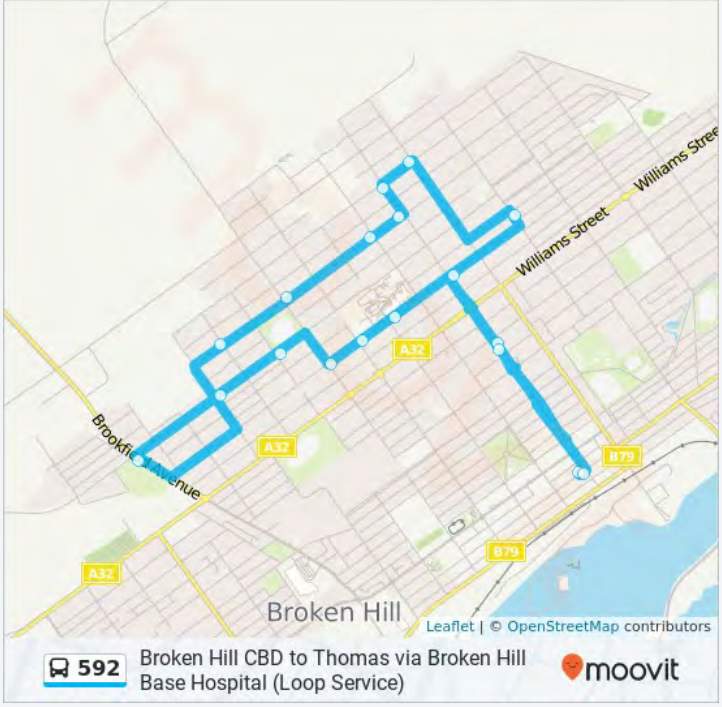
Wyman St at Iodide St
420 Wyman Street, Broken Hill

Zebina St at Fisher St
Zebina Street, Broken Hill

Thomas St at Oxide St
304 Oxide Street, Broken Hill

Oxide St after Chapple St
216 Oxide Street, Broken Hill

Argent St at Oxide St
393C Argent Street, Broken Hill



Western NSW

Go directly to the timetable

QUEENSLAND

NEW SOUTH WALES

1908TMR-E-MTB-WE-2DL

NSW GOVERNMENT | Transport

Effective from 7 September 2019

4.0 Parking

One of the attributes of the location of the proposed new Police facility is its accessibility and convenient proximity to the commercial centre. Data from similarly located Police facilities confirms that a significant percentage of the staff will:

- live within walking distance
- travel by bicycle or motorbike
- travel as car passenger (i.e. share or set-down/pick-up)

In accordance with Police policy, visitor parking will not be provided on-site. At the same time however, there is a significant amount of on-street parking available in the area.

The 'Police Station' use is a special circumstance and there is no parking provision criteria contained in either the Council or TfNSW development guidelines. There will be significant areas of the building which do not 'fall into' a normal office use (ie Public Zone, Secure Zone) and if these areas are 'factored' into account then the proposed provision reflects a normal and appropriate provision for an office type use (ie approximately 1 space per 40m^2 as per Council's DCP criteria).

The proposed parking provision will comprise:

On-Site

- Marked General Duty (GD) vehicles:	2 spaces
- Unmarked Police vehicles:	7 spaces
- Highway Patrol (HWP) vehicles:	2 spaces
- Forensic Science Group (FSG) vehicles:	2 spaces
- Other Operational vehicles:	8 spaces
- Mobile Post Command vehicles (PCV):	1 space
- Trailers (Bike and General Purpose Box Trailers):	2 spaces
- OSG Trailer Bay Garage (Operations Support Group)	1 space
- SPSU Trailer Bay Garage (State Protection Support Unit)	1 space

- Police Motorbikes: 2 spaces
- Van Dock for Corrective Services vehicle 1 space
- Secure Vehicle Examination Bay for Forensic Science Group 1 space

Off-Site

- "First Response" spaces on Blende Street 6 spaces
- "Operational" spaces on Kaolin Street 4 spaces

It is noted that there will be an accessible parking space provided on Blende Street adjacent to the front entry of the building.

It is apparent that the proposed parking provision will be quite adequate and appropriate to the needs of the new Police Station.

5.0 Traffic

The normal operational activity of the police station only results in a relatively minor level of traffic activity on the road system in the area and in the case of the subject proposed development this will be offset (discounted) by the traffic movements associated with the nearby existing Police Station. The peak vehicle activity will occur at shift change times and on the basis of observations at comparable Police facilities this traffic generation will comprise:

	Vehicle Movements	
	Major Shift	**Minor Shift**
Police cars	5	2
Other	25	15

* *includes cars parked nearby and set-down/pick-up movements*

The "additional" peak movements on the road network around the site as a consequence of the development will be relatively minor and traffic generation of this small magnitude will not have any adverse traffic implications particularly in view of:

- the multiple arrival and departure routes
- the time of occurrence (i.e. not generally in the on-street peak traffic periods)
- the satisfactory existing traffic conditions

The Police Station will have emergency response vehicles (standing in Blende Street) which will be required to depart urgently at times. However, the traffic flows on Blende Street are relatively minor and the roadway is straight and relatively level providing excellent sight distances. Similarly, the sight distance provisions at the intersections in the area and the circumstances for emergency response will be quite safe and appropriate.

6.0 Access, Internal Circulation & Servicing

Access

Vehicle access for the site will comprise separate 5.0 metre wide ingress and egress driveways respectively on the Blende Street and Beryl Street frontages located towards the eastern site boundary.

These accesses will be located well away from the Kaolin Street intersection on a straight sections of roadways where excellent sight distances are available. The design of the driveways complies with AS2890.1&2 and will accommodate all vehicles requiring to access the site.

The provision of the access driveway on Beryl Street will require the minor relocation of a traffic island which contains an existing 40 kmph School Speed sign, however this relocation will not have any adverse implications (see details overleaf).

Internal Circulation and Servicing

The generous large hardstand “yard” area and the one-way ingress/egress arrangement will quite adequately provide for the access, turning and manoeuvring of the various operational vehicle and service vehicles. The provisions have been designed to meet the specific requirements and function experience with many similar police facilities.

Details of turning path assessment are provided in Appendix C confirming satisfactory provision for the larger vehicles.


SCHOOL ZONE
8-9 30 AM
2 30 -4 PM
SCHOOL DAYS
40

7.0 Conclusion

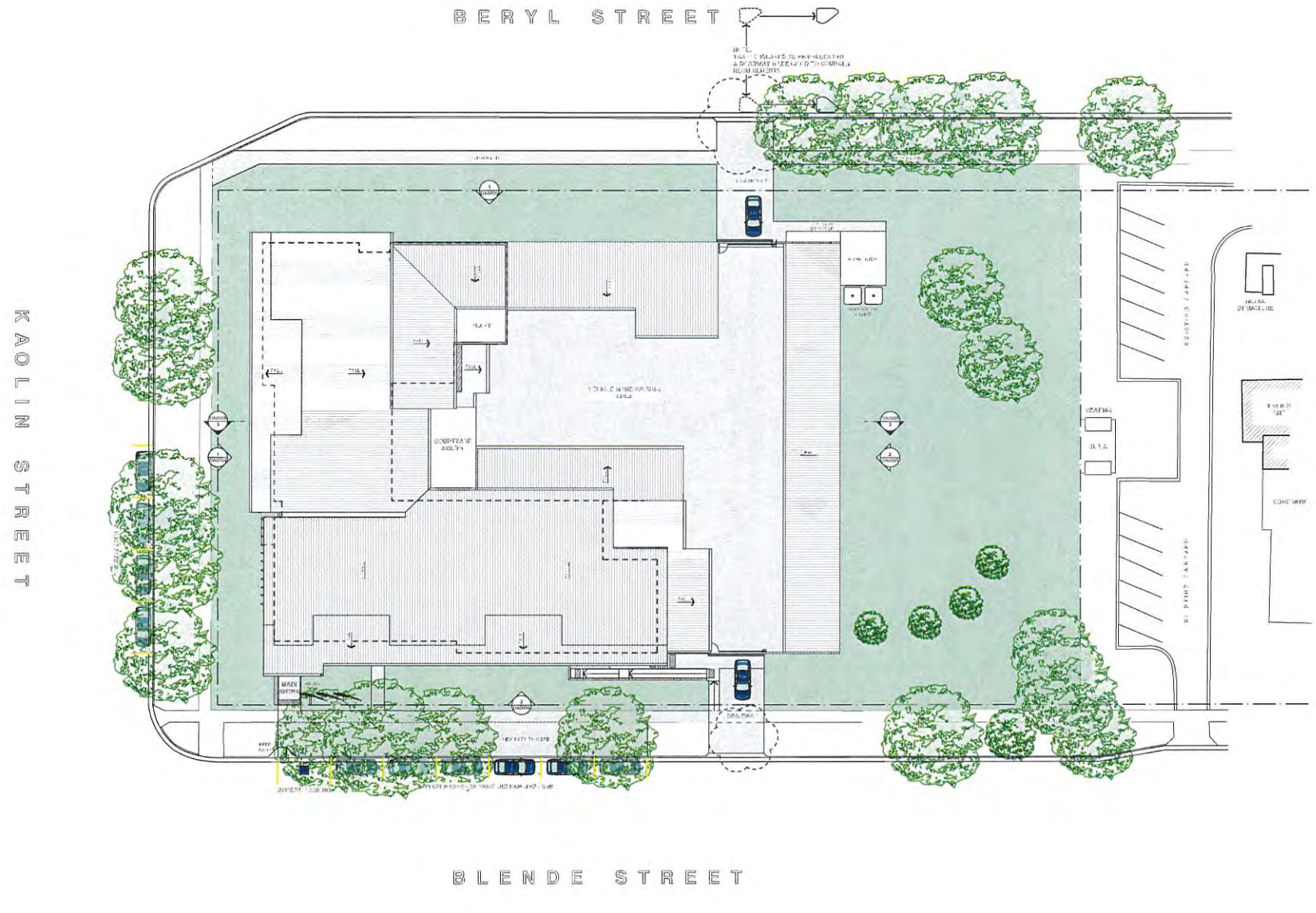
The proposed new Police Station at Broken Hill will provide a Multipurpose Regional Facility for the essential service staff and a major benefit for the community.

This assessment has concluded that:

- the proposed parking provision will be suitable and appropriate
- there will not be any adverse traffic implications
- the proposed vehicle access and circulation arrangements will be satisfactory

Appendix A

Development Plans



PRELIMINARY
14/08/2020

1:100 @ ORIGINAL SIZE

BGIS
Level 36 World Square
680 George Street
SYDNEY NSW 2000

BROKEN HILL POLICE STATION
51 Blende Street, Broken Hill NSW 2880

Development Application
Site Plan

Project No.	Drawing No.	Revision
20001	DA0001	

Drawing Scale	Sheet Size	Drawn	Checked	Date
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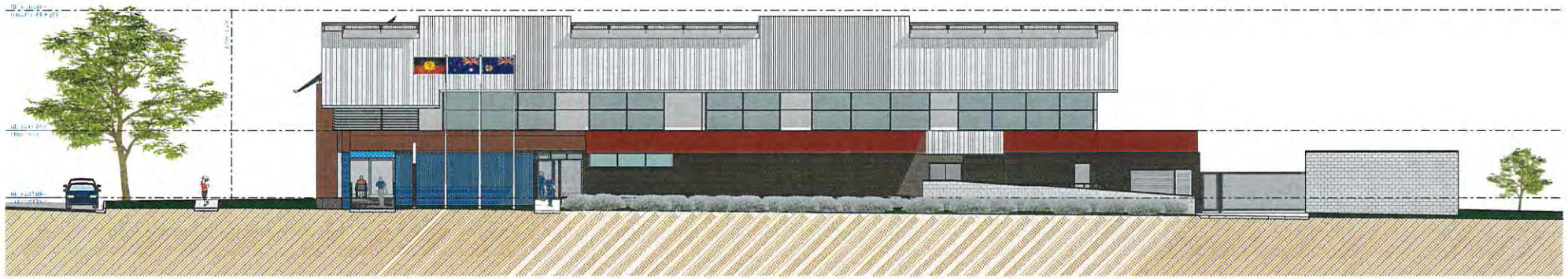
Development Application



SOUTH EAST ELEVATION

SOUTH WEST ELEVATION

Development Application

BROKEN HILL POLICE STATION

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Development Application
Elevations - Sheet 1 of 2

PROJECT No.	DRAWING No.	REVISION
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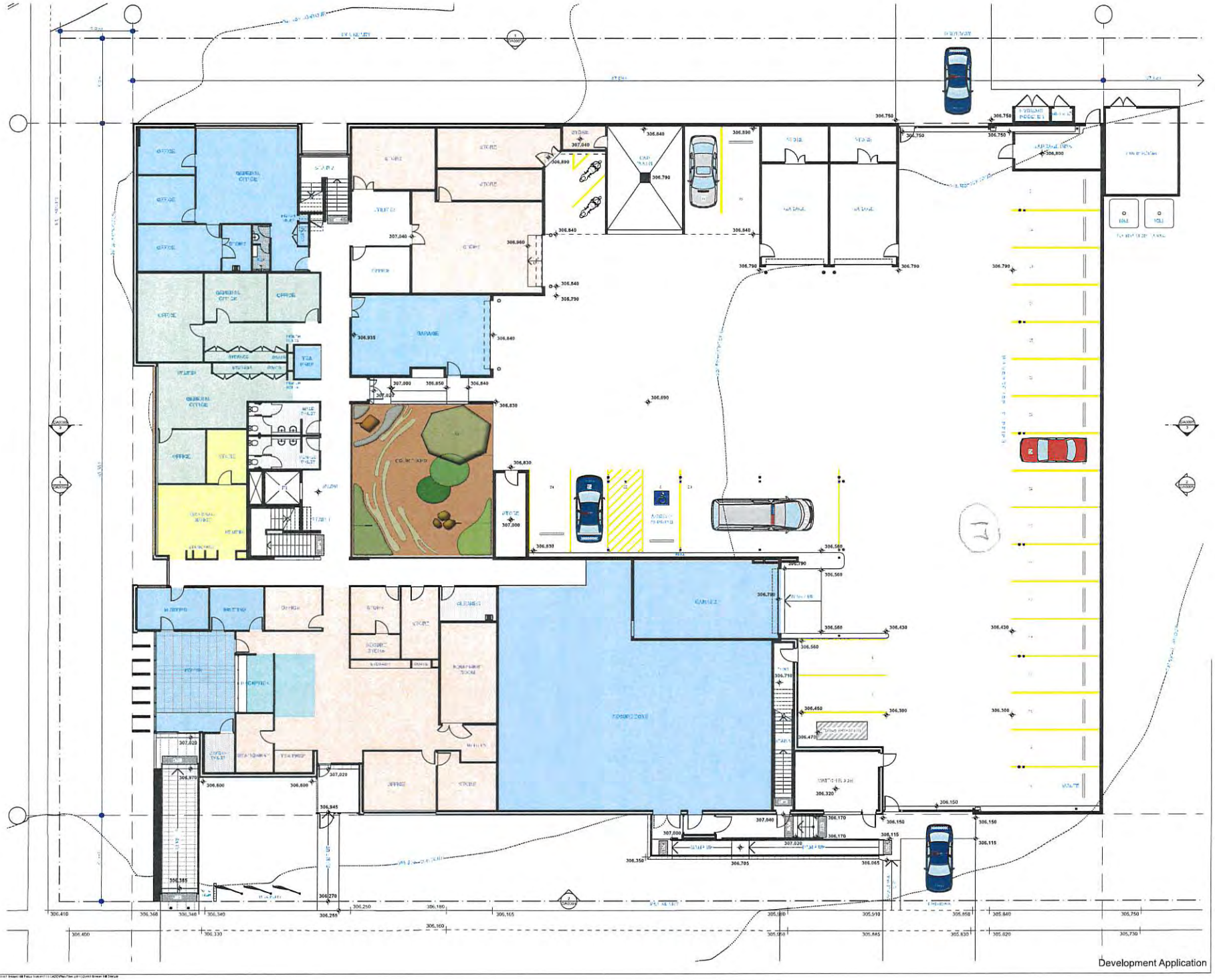
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BROKEN HILL POLICE STATION
51 Blende Street, Broken Hill NSW 2880
Development Application
Ground Floor Plan - RL.+307.040
20001
DA0002
P2
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Development Application

BROKEN HILL POLICE STATION

PRELIMINARY
14/08/2020

REVISION	DESCRIPTION	DATE

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CLIENT
BGIS
Level 36 World Square
680 George Street
SYDNEY NSW 2000

PROJECT
BROKEN HILL POLICE STATION
51 Blende Street, Broken Hill NSW 2880

DRAWING TITLE
Development Application
First Floor Plan - RL.+311.040

PROJECT No	DRAWING No	REVISION
20001	DA0003	P2

DRAWING SCALE	SHEET SIZE	DRAWN	CHECKED	DATE
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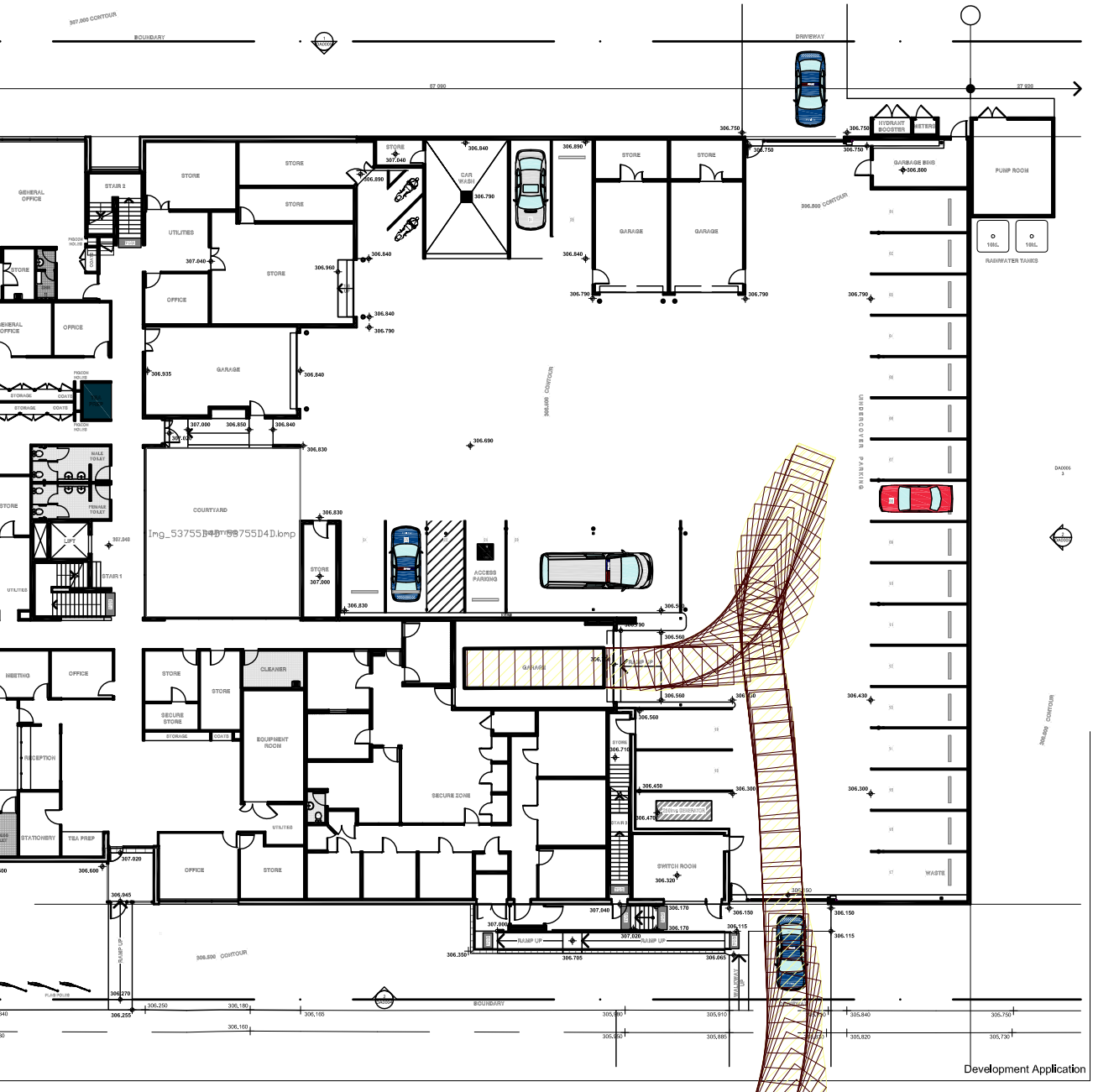
Development Application

Appendix B

Turning Path Assessment



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51 Blende Street, Broken Hill N

Development Applic
Ground Floor Plan

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GWA B&W logo

LEGEND

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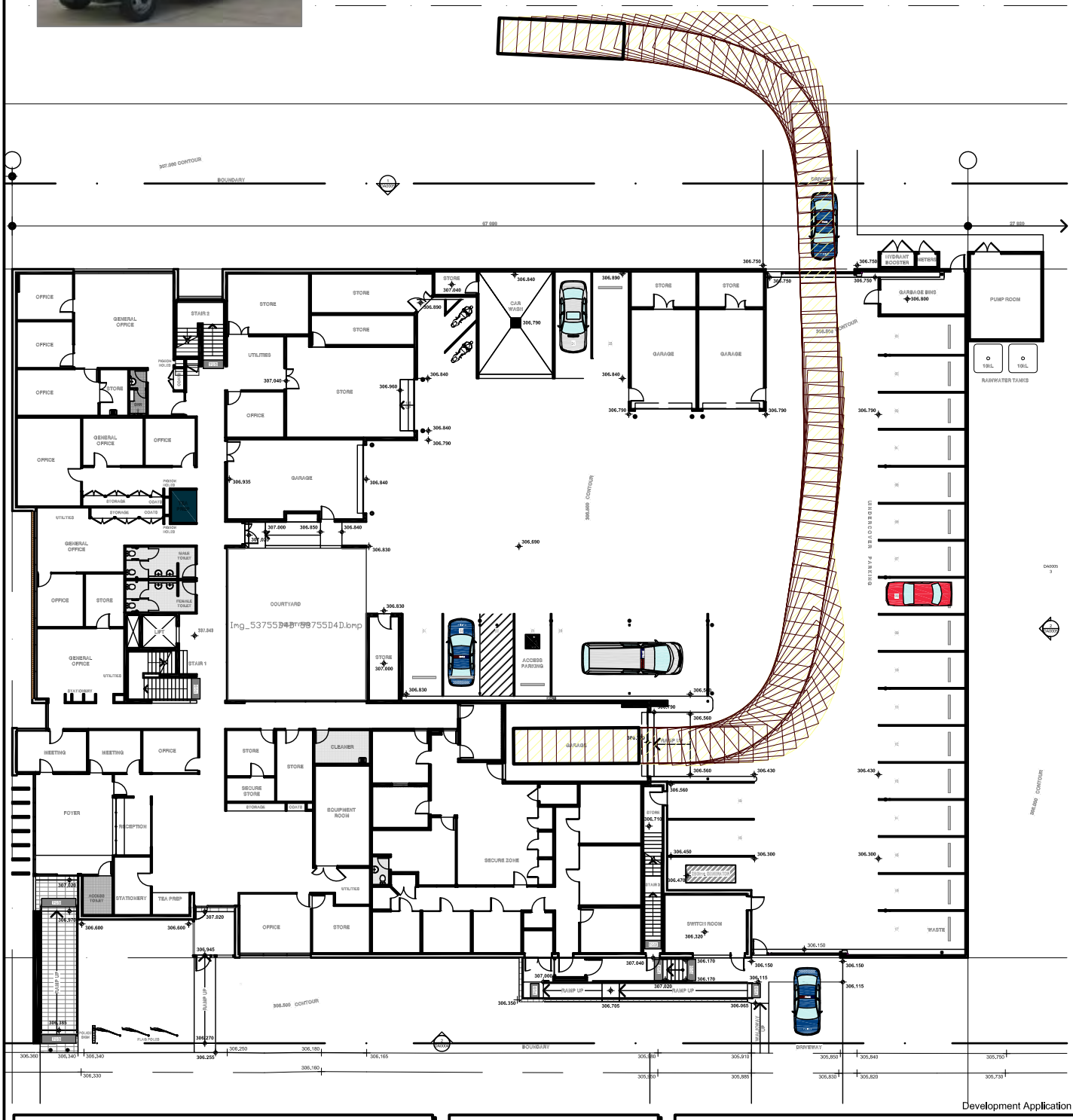
SWEPT PATH ANALYSIS OF AN 8.8m RIGID VEHICLE ENTERING THE SITE

SP 1



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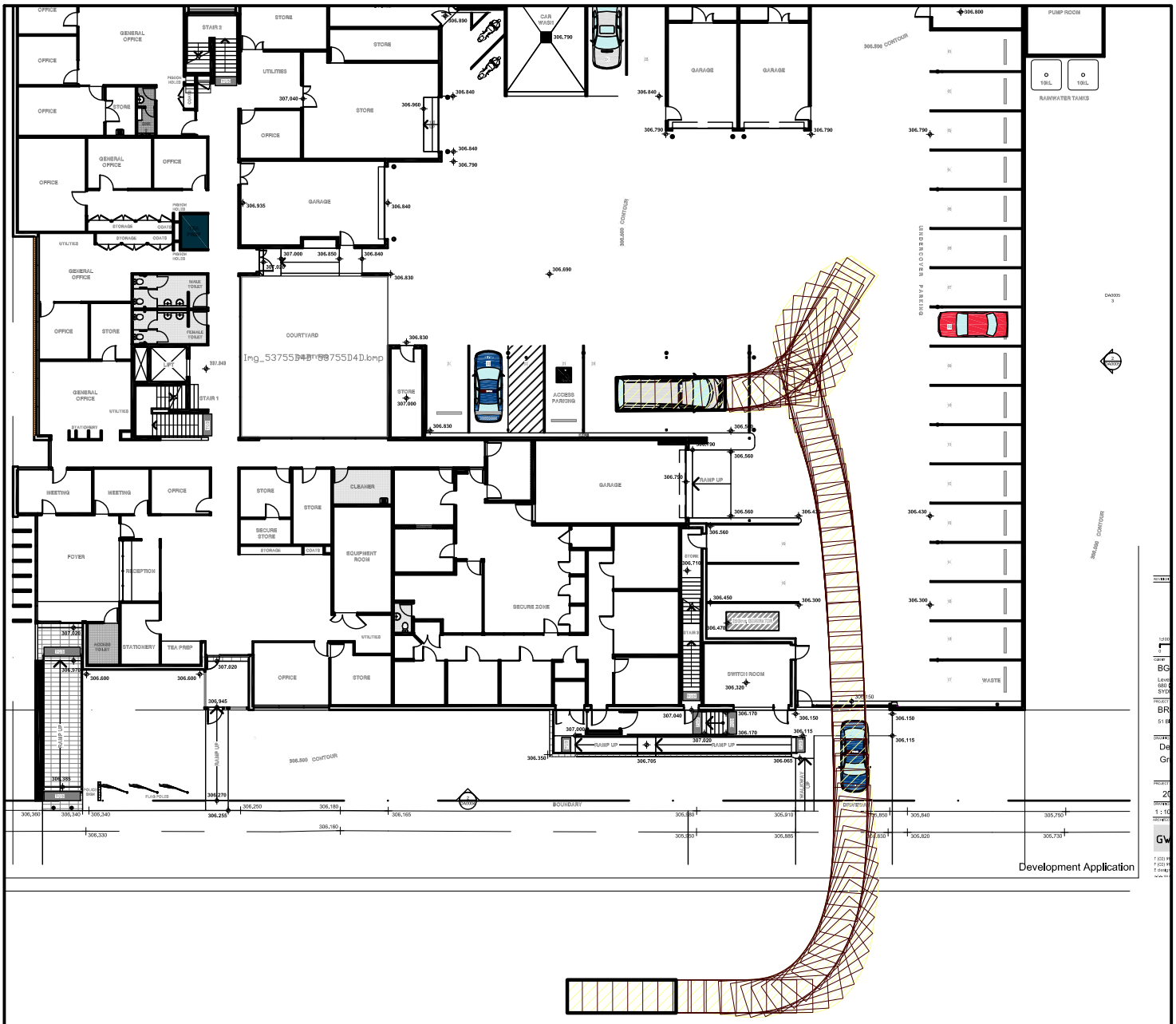
SWEPT PATH ANALYSIS OF AN 8.8m RIGID VEHICLE EXITING THE SITE

SP 2



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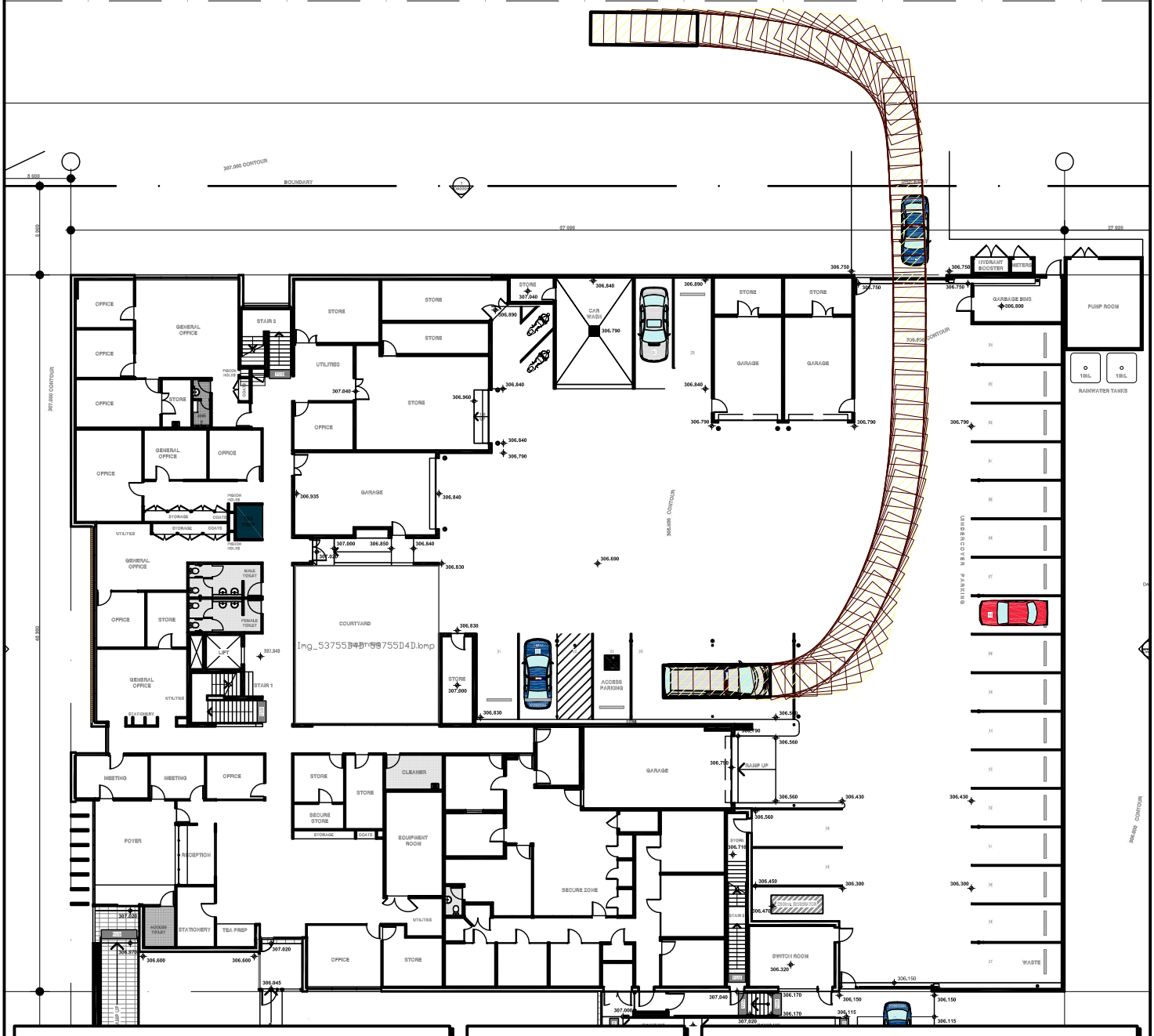
SWEPT PATH ANALYSIS OF A 7.2m MOBILE POST COMMAND VEHICLE ENTERING THE SITE

SP 3



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SWEPT PATH ANALYSIS OF A 7.2m MOBILE POST COMMAND VEHICLE EXITING THE SITE

SP 4

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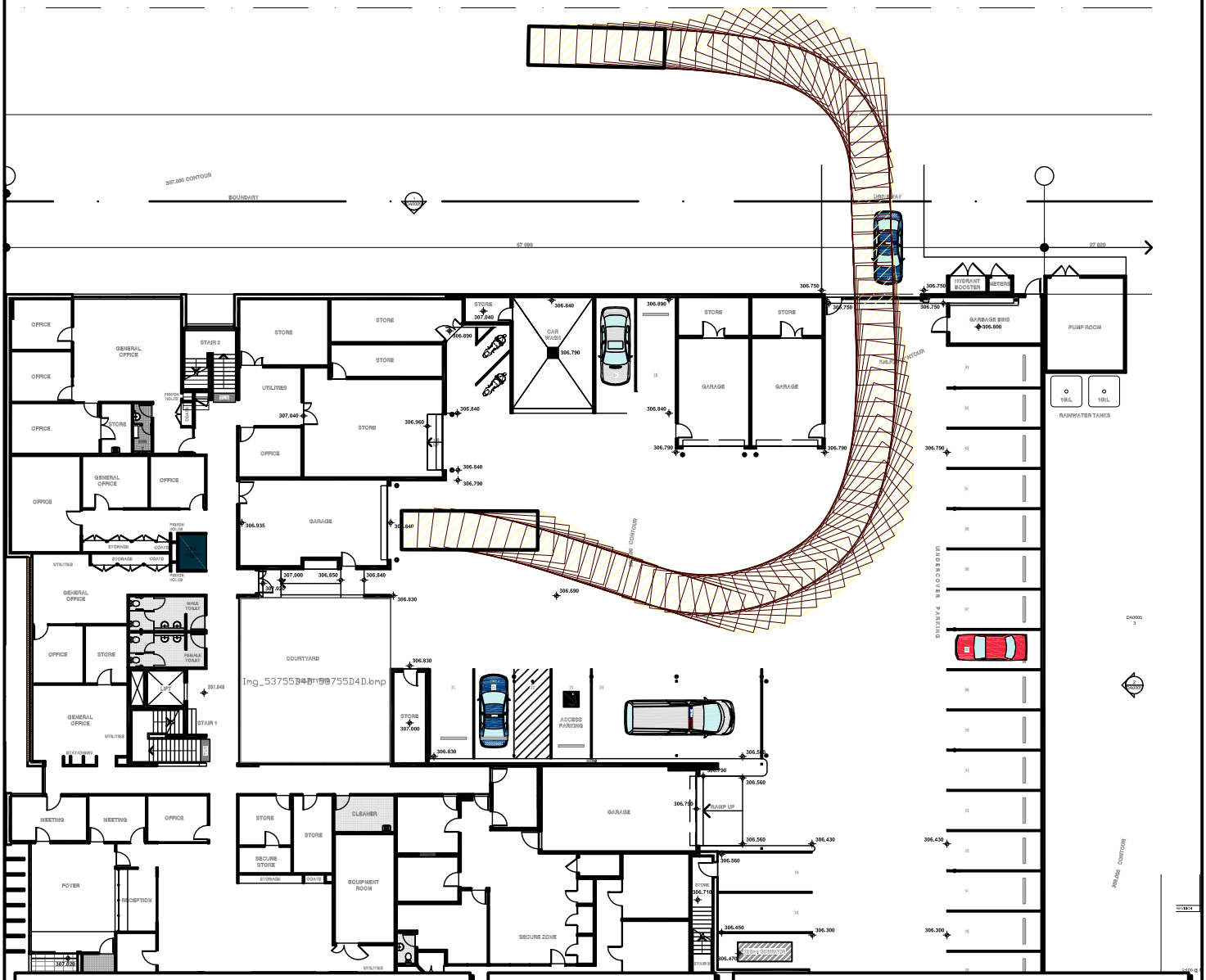
SWEPT PATH ANALYSIS OF AN 8.8m FLATBED TRUCK ENTERING THE SITE

SP 5



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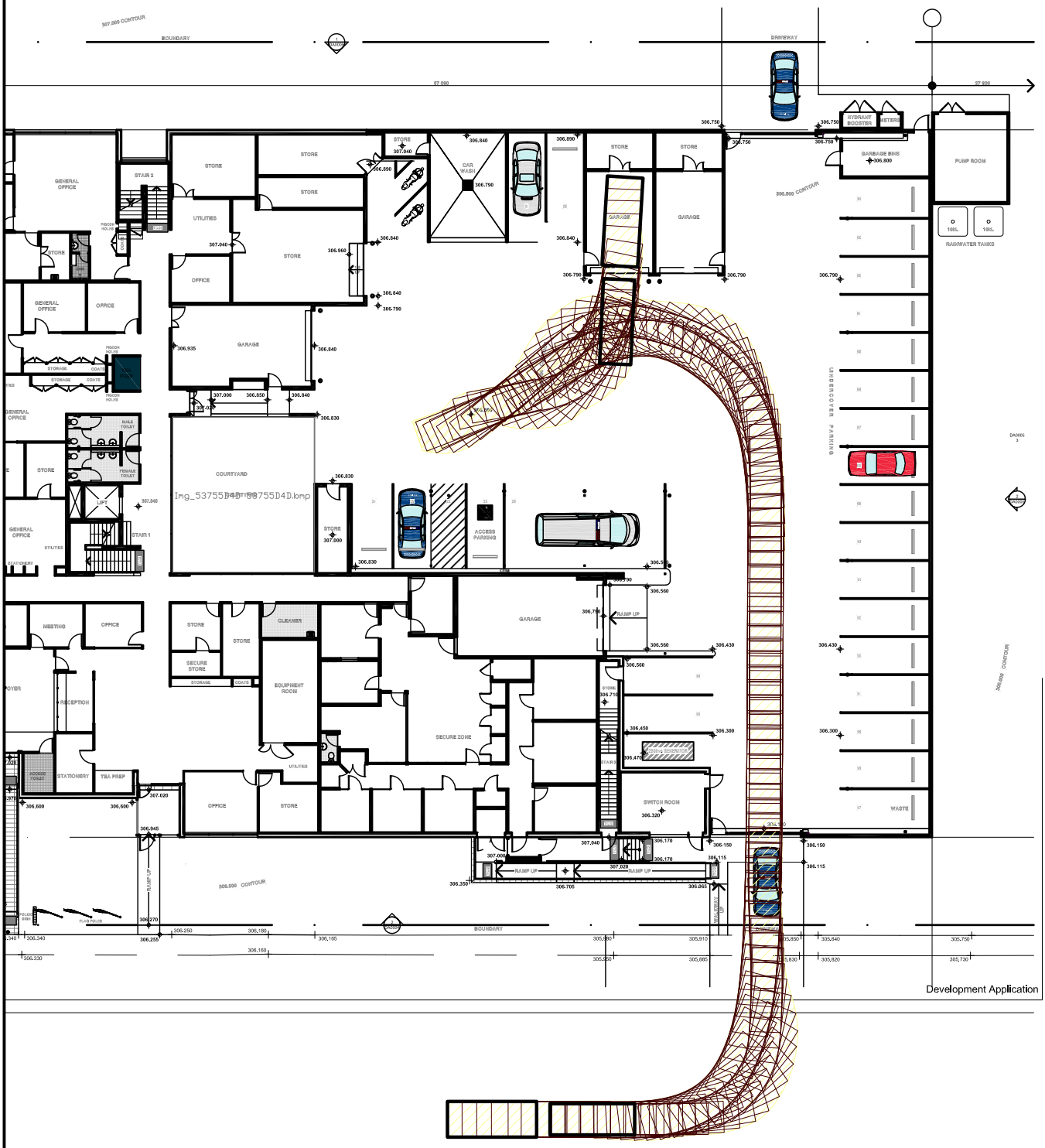
SWEPT PATH ANALYSIS OF AN 8.8m FLATBED TRUCK EXITING THE SITE

SP 6



Development Application

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BROKEN HILL POL
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Development Applic
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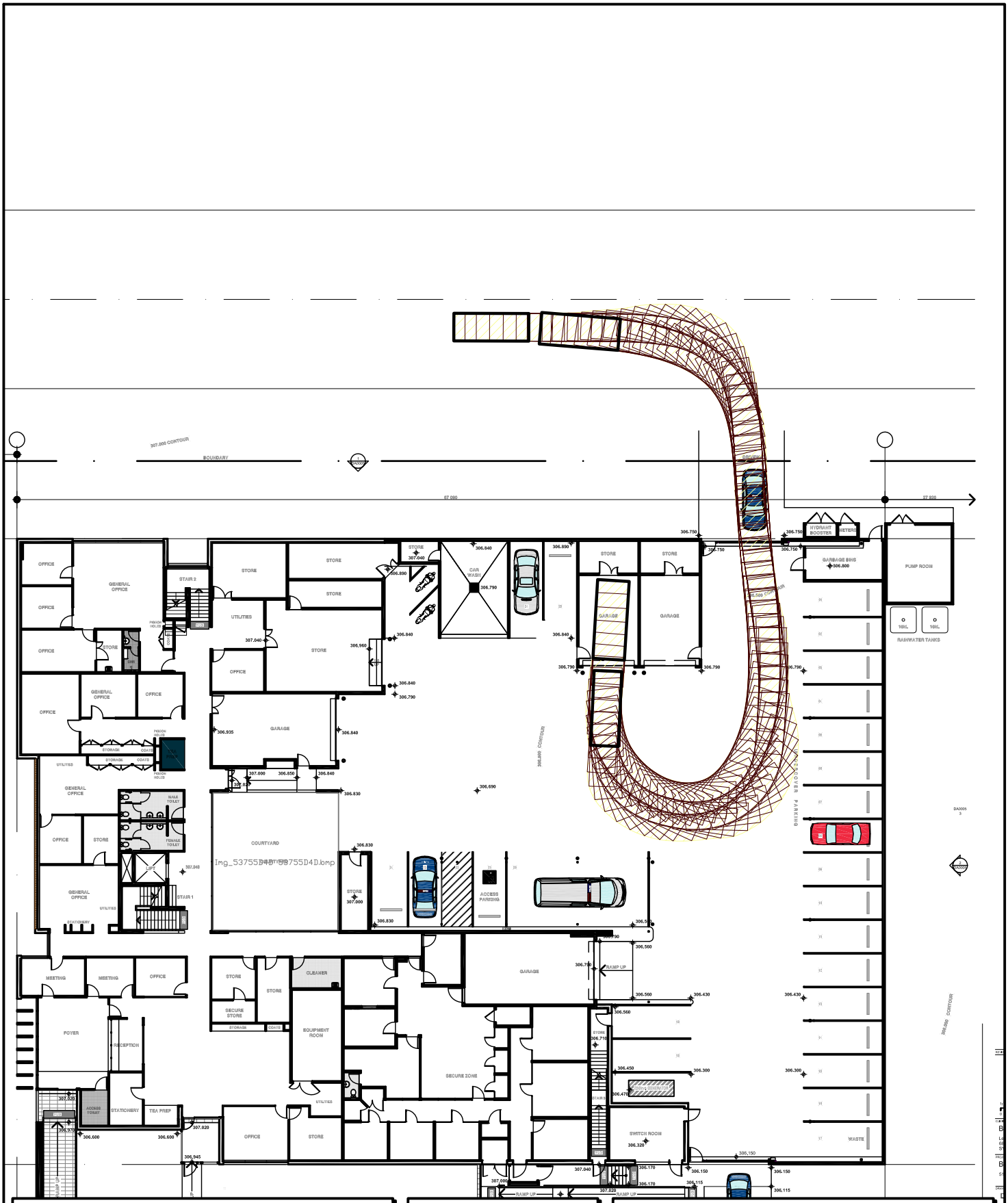
SWEPT PATH ANALYSIS OF A CAR AND TRAILER ENTERING THE SITE

SP 7



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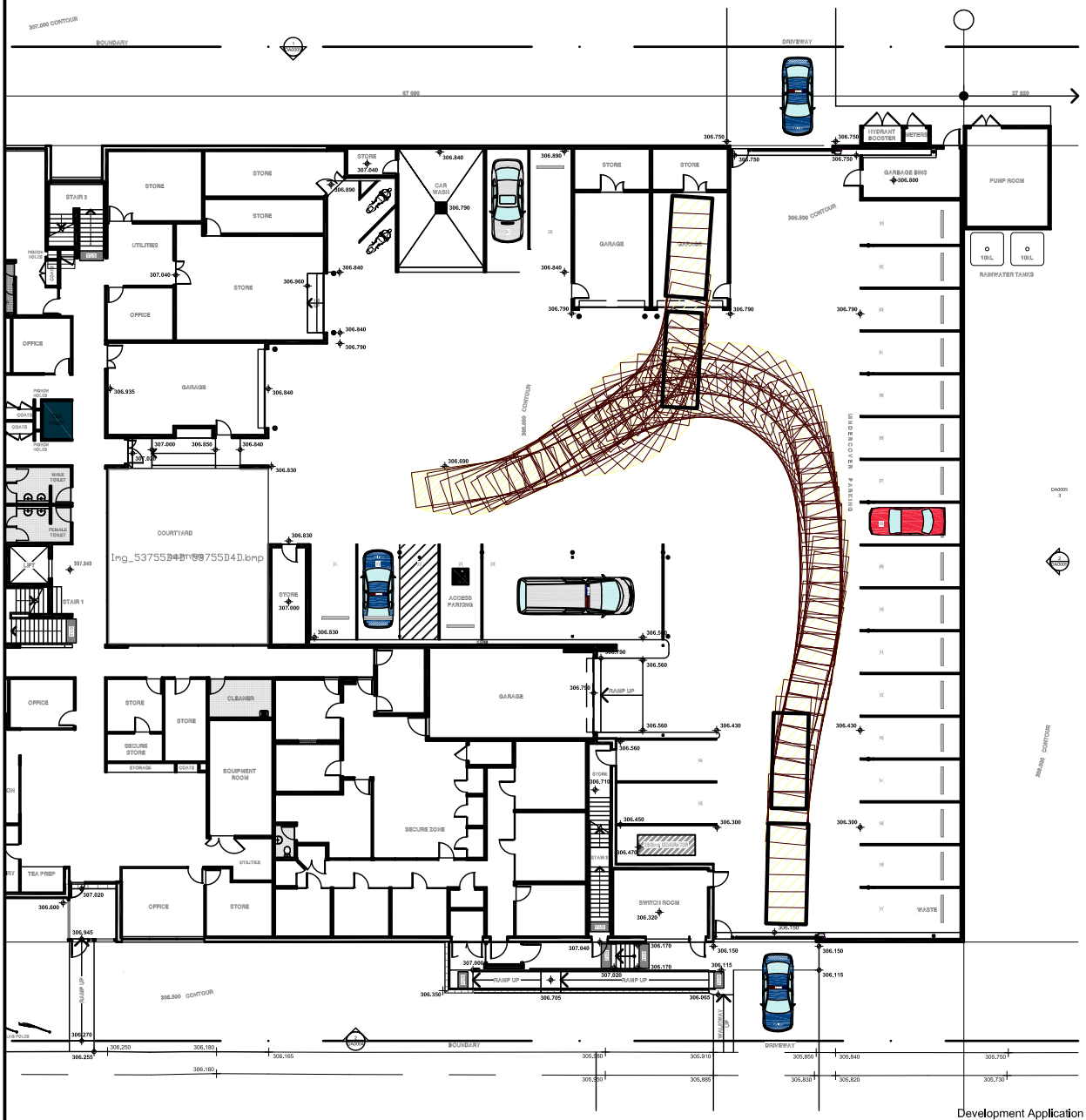
SWEPT PATH ANALYSIS OF A CAR AND TRAILER EXITING THE SITE

SP 8



PRELIMINARY
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BROKEN HILL POLICE STATION

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Development Application

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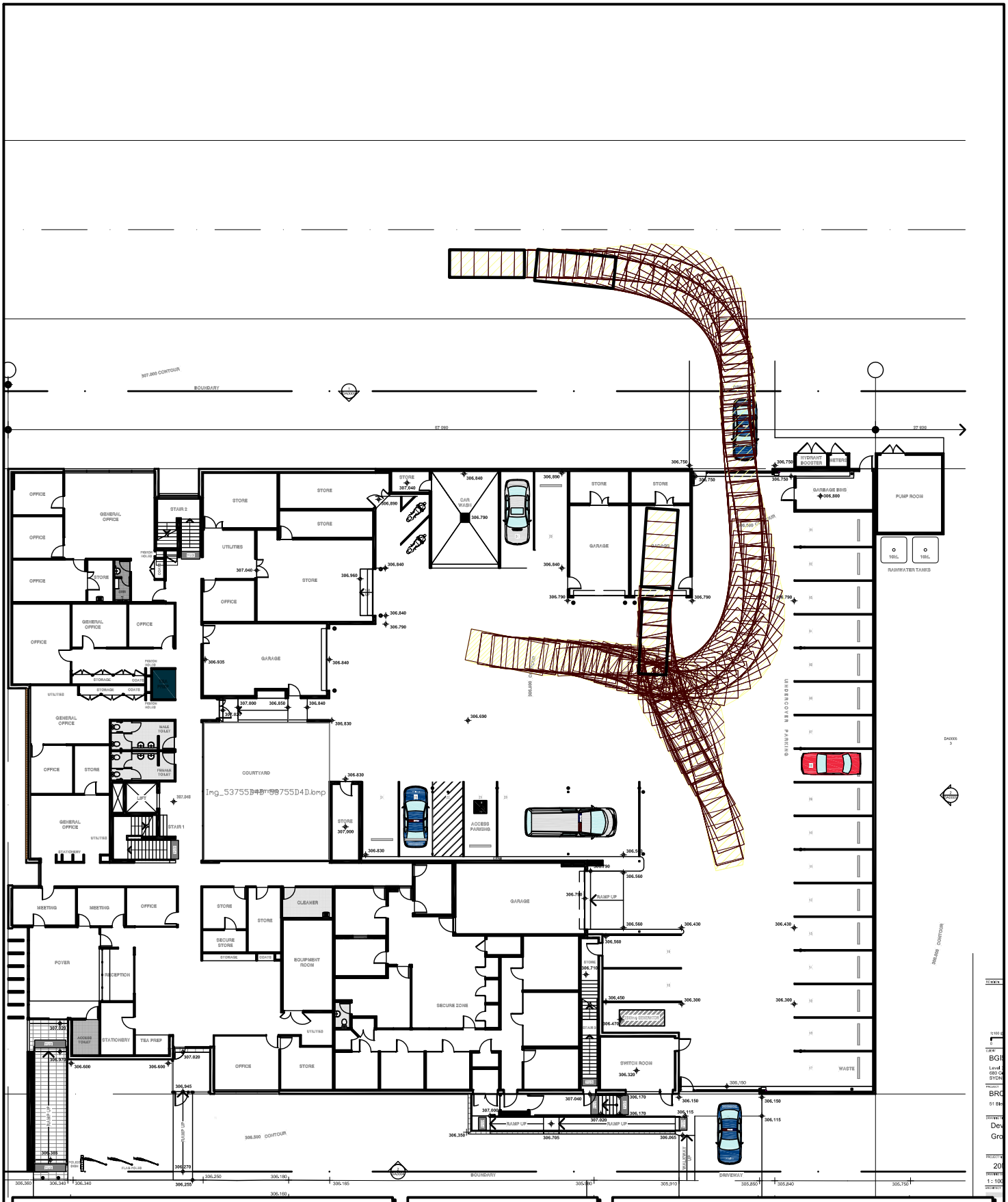
SWEPT PATH ANALYSIS OF A CAR AND TRAILER ENTERING THE SITE

SP 9



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SWEPT PATH ANALYSIS OF A CAR AND TRAILER EXITING THE SITE

SP 10