Traffic Engineering Report

To	The Trustee For Kelnic Property Trust & The Trustee For Nictay Property Trust c/ - Murray Bell Planning Co	Date	2 June 2026
Prepared by	Luke Huang, Modus Graduate Traffic Engineer	Approved by	Harj Singh, Modus Executive Director (RPEQ 22364)
Location	215 Lancaster Road, Ascot		
Subject	S82 Other Change To Town Planning Consent Permit 253/31/1-2189/94		
Status	Final	Attachments	**Appendix A:** Development Plans **Appendix B**: Swept Paths Assessment

1 Introduction

1.1 Overview

Modus has been commissioned by The Trustee For Kelnic Property Trust & The Trustee For Nictay Property Trust, care of Murray Bell Planning Co to provide traffic and transport advice in relation to the changes proposed to an existing mixed use development.

This Traffic Engineering Report has been produced by Modus to assess the traffic and transport engineering items in support of the proposed development. A copy of the proposed development plans are provided at **Appendix A**.

Modus has completed this Traffic Engineering Report in accordance with the usual care and thoroughness of the consulting profession. The assessment is based on accepted traffic engineering practices and standards applicable at the time of undertaking the assessment. Modus disclaims responsibility for any changes to project planning or road conditions that may occur after completion of the assessment.

2 Existing Conditions

2.1 Site Location

The development site is located at 215 Lancaster Road, Ascot and is bounded by Lancaster Road to the north, Charlton Street to the east, Residential uses to the south and west.

Furthermore, the development site is currently zoned CR2 Character (Infill housing) within the Brisbane City Council (BCC) Local Government Area.

Additionally, the development site currently achieves access from Charlton Street.

Figure 2-1 on the subsequent report page illustrates the development site location.

Figure 2-1 Development Site Location

2.2 Existing Road Network

Table 2-1 outlines characteristics of the existing road network in proximity to the development site.

Table 2-1 Key Road Characteristics

Road	Authority	Hierarchy	Speed Limit	Typical Form
Lancaster Road	Council	District Road	60 km/hr	Two lanes, undivided
Charlton Street	Council	Neighbourhood Road	50 km/hr	Two lanes, undivided

2.3 Active and Public Transport Facilities

A dedicated pedestrian footpath is provided along the frontage of the site to connect to the wider pedestrian network. Additionally, there are dedicated bicycle lanes provided along the frontage of the site (Lancaster Road).

Furthermore, there are ten (10) bus stops and Ascot Train Station within a 400m radius (a comfortable 5-minute walk) of the development site. The nearest bus stop is located along Lancaster Road approximately 50.0m west of the site and Ascot Train Station is located 200m north of the site.

3 Proposed Development

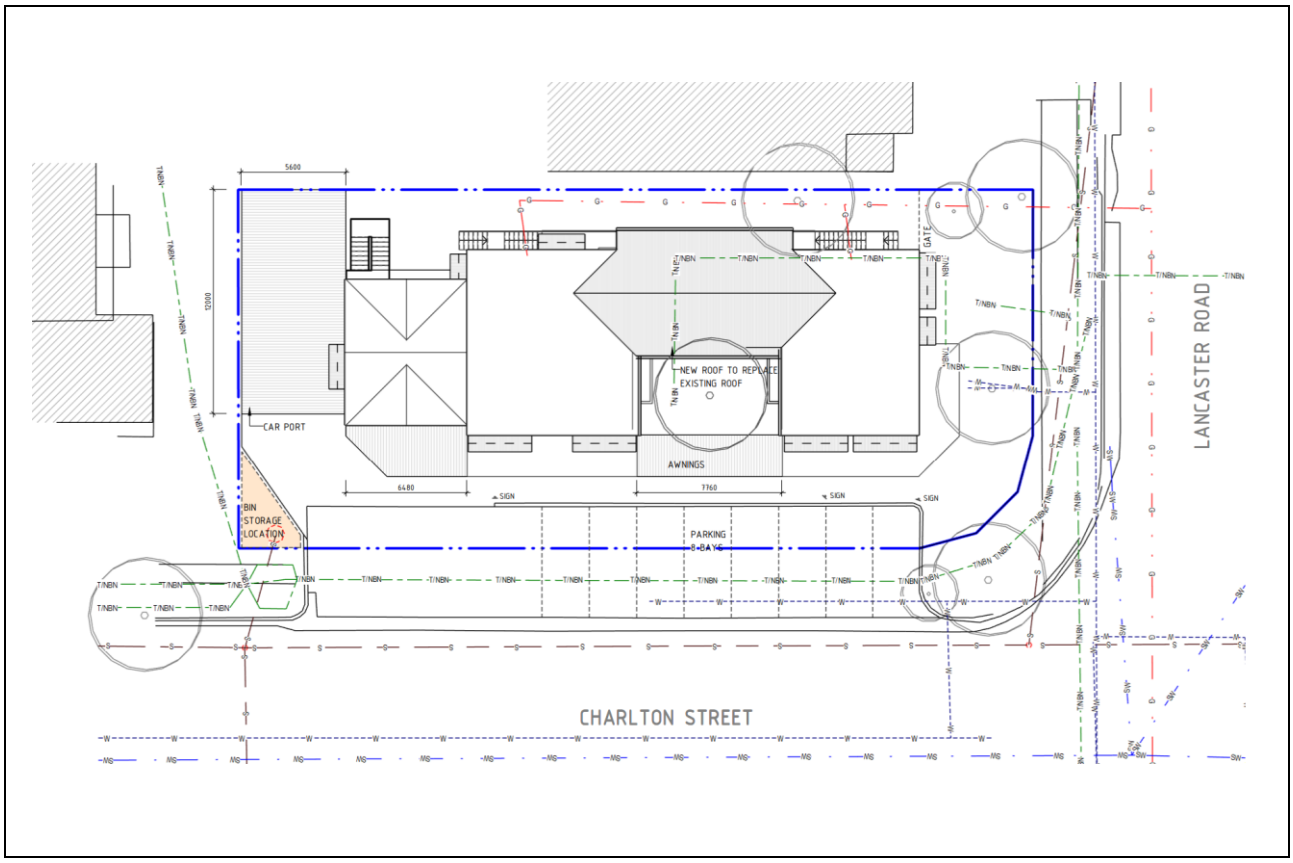
3.1 Overview

Changes are proposed to an existing mixed use building at the corner of Lancaster Road and Charlton Street. The proposal includes 79 sq.m of additional commercial GFA (Food and Drink Outlet, Shop and Office), new car parking and building aesthetic improvements.

A total of 4 new on-site car parking spaces are proposed.

Figure 3-1 illustrates the proposed development layout. A copy of the development plans are provided at **Appendix A**.

Figure 3-1 Proposed Development Layout



4 Traffic and Transport Review

4.1 Access Design

Provided that the proposed development does not propose any alterations to the existing access and driveway components, no further consideration of the access and driveway components has been made, as the existing design arrangements can accommodate the proposed development.

4.2 Car Parking Provisions

As per the BCC TAPS PSP, the minimum car parking requirements are outlined in Table 4-1.

Table 4-1 Minimum Car Parking Requirements

Land Use	Car Parking Rate	Yield	Car Parking Required	Car Parking Provided
Food and Drink Outlet*	12 spaces per 100 sq.m GFA	79 sq.m	9.48 (10) Spaces	4 Spaces

*Assumed as a conservative worst-case scenario compared to other land uses

While the proposed development does not accommodate the minimum car parking requirements, Modus notes that the car parking rates used in Table 4-1 may not reflect the practical car parking demand.

4.2.1 Practical Car Parking Demand

Modus has undertaken a first principles assessment to evaluate the practical car parking demand associated with the proposed Commercial use. This assessment has been conducted in recognition that the car parking rates outlined in **Table 4-1** may not accurately reflect the practical car parking demands of the proposed development. This first principles assessment is detailed below:

- The subject site is within 200 m radius of Ascot train station (a comfortable 3-minute walk). This proximity supports the use of public transport by a substantial proportion of visitors, thereby reducing reliance on private vehicles.
- There are ten (10) Translink bus stops within 400 m (a comfortable 5-minute walk) of the proposed site, encouraging more visitors to use public transport.
- On-street car parking capability along Charlton Street, providing additional flexibility for short-term visitor parking.
- The subject site is situated within a predominantly residential area with strong pedestrian connectivity along Lancaster Road and Charlton Street. It is anticipated that a reasonable proportion of visitors residing nearby will walk to the site, further reducing car parking demand.

Therefore, the proposed increase in commercial GFA can be accommodated as the development will deliver 4 additional on site car parking spaces.

It is also noted that there is 8 existing on street car parking spaces in front of the building and a multitude of public transport and active transport options available.

4.3 Car Parking Design

4.3.1 Car Parking Layout

Modus has conducted a design review of the car parking layout against the design guidelines within Australian Standards 2890.1, of which is summarised below in Table 4-2.

Table 4-2 Car Parking Layout Design Review

Design Criteria	AS2890 Requirement	Proposed Design	Compliant
Parking Spaces			
Garage Internal Length – Tandem Vehicles (Carport)	Min 10.8m	12.0m	✓
Garage Internal Width – Double Vehicle (Carport)	Min 5.4m	5.6m	✓
Car Parking Door Opening Clearances	Min 0.3m	Min 0.3m	✓
General Parking Space – Minimum Height Clearance	Min 2.2m	Min 2.2m	✓

Therefore, the proposed car parking layout is designed in accordance with Australian Standards 2890.1. Furthermore, a swept path assessment is provided in **Appendix B**, confirming that a B99 vehicle can maneuver with a 300 mm clearance when entering and exiting the carport. Additionally, the rear car parking spaces are allocated for staff members.

As such, the proposed car parking layout is considered acceptable.

4.4 Servicing Requirements

In accordance with the BCC TAPS PSP, the largest service vehicle requirement for the proposed development is a Refuse Collection Vehicle (RCV).

Modus notes that the proposed increase in commercial GFA would not trigger any alterations to the existing servicing arrangements, where the existing bin storage area in the south eastern corner of the subject site will be maintained. Therefore, the proposed development servicing arrangements are considered acceptable.

4.5 Development Traffic Generation

In accordance with the NSW GTIA (2024), the peak hour traffic generating potential is outlined in Table 4-3.

Table 4-3 Proposed Development Traffic Generation Volumes

Scenario	Land Use	Yield	Peak Hour Traffic Generation Rates	Peak Hour Traffic Generation Volumes
Proposed	Restaurant*	79 sq.m	5 vehicles per 100 sq.m per hour	3.95 (4) vehicles per hour

*Assumed as a conservative worst-case scenario compared to other land uses

Therefore, the proposed development will generate up to 3.5 (4) vehicles per hour. On average across the peak hour period, this corresponds to one (1) new vehicle on the external road network every 15 minutes.

On this basis, the proposed development traffic generation associated with the increase in commercial GFA will not compromise the safety nor efficiency of the external road network.

5 Summary

Therefore, Modus is of the opinion that the proposed development is acceptable from a traffic engineering perspective and will not have a substantial impact on the safety or efficiency of the external road network.

Should there be any issue with the above, please contact the undersigned.

Yours sincerely,

HSingh

MODUS TRANSPORT AND TRAFFIC ENGINEERING

Harj Singh
Executive Director (RPEQ 22364)

APPENDIX A

Development Plans

COMMERCIAL ALTERATIONS

ARCHITECTURAL PLANS	
A.00.00	COVER SHEET
A.01.00	LOCATION PLAN
A.01.01	LOCATION PLAN
A.01.10	EXISTING SITE PLAN
A.01.11	PROPOSED SITE PLAN
A.02.00	EXISTING GROUND FLOOR PLAN
A.02.01	EXISTING FIRST FLOOR PLAN
A.02.02	EXISTING ROOF PLAN
A.02.10	EXISTING ELEVATIONS
A.02.11	EXISTING ELEVATIONS
A.03.00	GROUND FLOOR PLAN
A.03.01	FIRST FLOOR PLAN
A.03.10	ROOF PLAN
A.04.00	ELEVATIONS
A.04.01	ELEVATIONS
A.99.00	PERSPECTIVES
A.99.01	PERSPECTIVES
A.99.90	GFA CALCULATIONS

DEVELOPMENT DATA:

Address: 215 LANCASTER RD & 86 CHARLTON ST ASCOT 4007
Council: BRISBANE CITY COUNCIL
Lot/RP: Lot 1, RP 130513
Area: 814SQM
Ward: HAMILTON
Zoning: CR2 CHARACTER (INFILL HOUSING)
Overlays: TRADITIONAL BUILDING CHARACTER

DEVELOPMENT DATA

EXISTING
GROUND FLOOR GFA 174SQM
EXTERNAL DINING 42SQM

PROPOSED
GROUND FLOOR GFA 212SQM
EXTERNAL DINING 42SQM

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George Kouparitsas Architects

86 CHARLTON ST ASCOT
COMMERCIAL ALTERATIONS
COVER SHEET
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A.00.00

PROPOSED PROJECT
215 LANCASTER RD, ASCOT

PROPOSED PROJECT
215 LANCASTER RD, ASCOT

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86 CHARLTON ST ASCOT

COMMERCIAL ALTERATIONS

LOCATION PLAN

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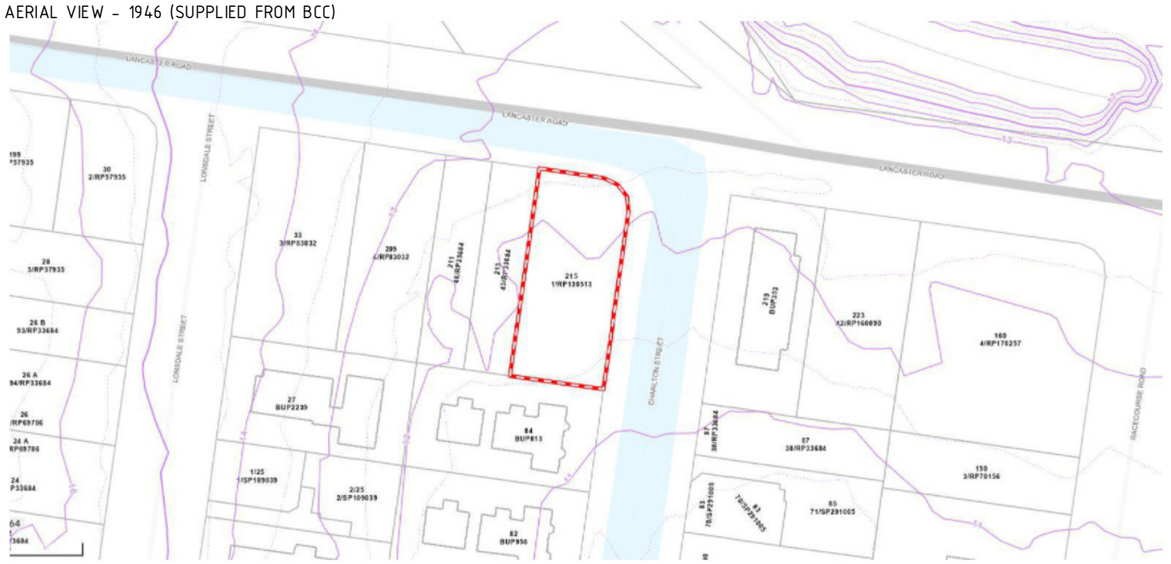
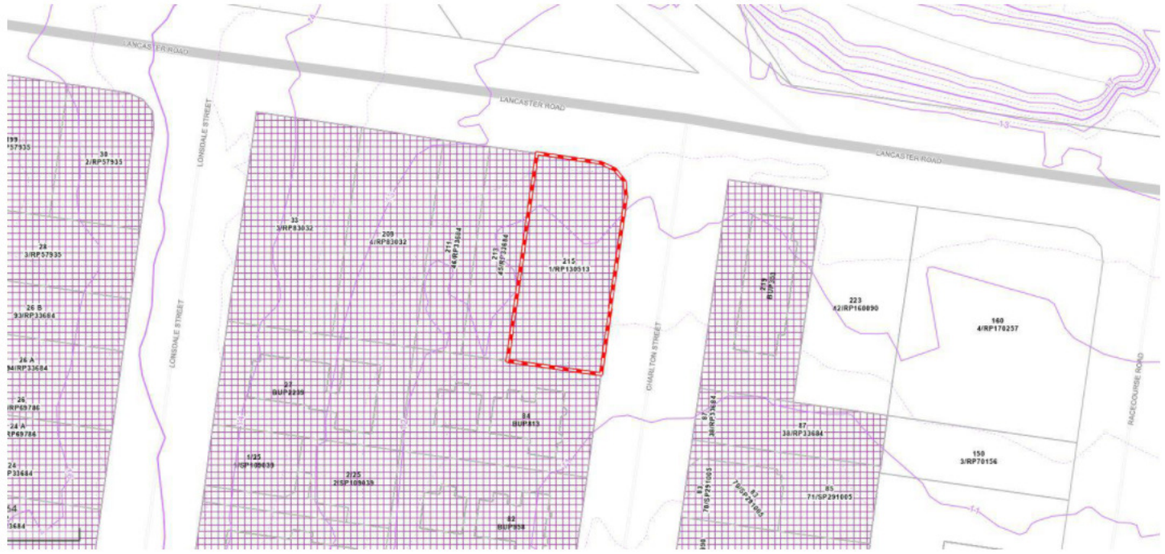
AERIAL VIEW - 2021 (SUPPLIED FROM BCC)

AERIAL VIEW - 1946 (SUPPLIED FROM BCC)

AERIAL VIEW - ZONES (SUPPLIED FROM BCC)



AERIAL VIEW - CONTOURS AND FLOODING (SUPPLIED FROM BCC)



AERIAL VIEW - TBC ZONES (SUPPLIED FROM BCC)

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86 CHARLTON ST ASCOT

COMMERCIAL ALTERATIONS

LOCATION PLAN

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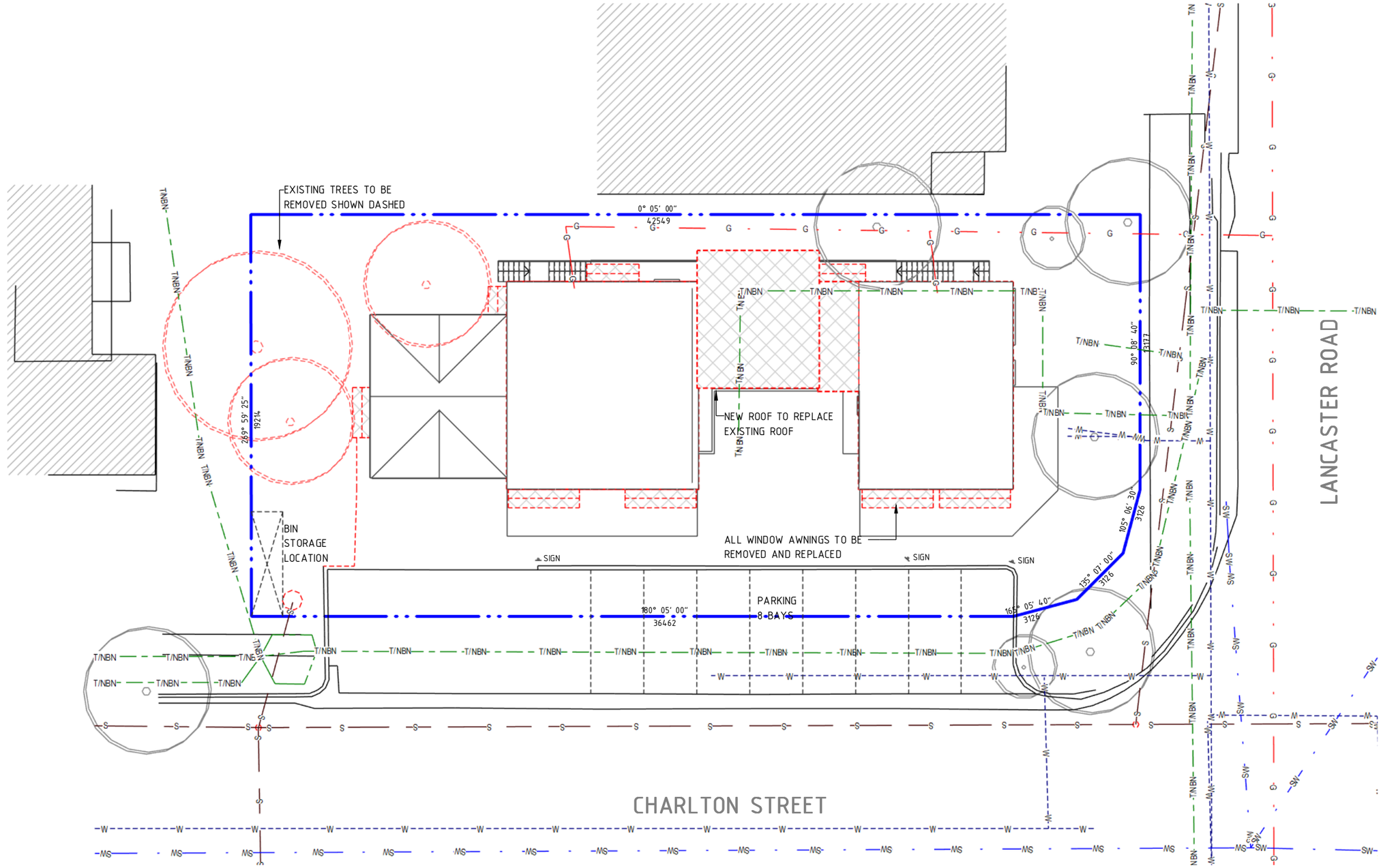

EXISTING SITE PLAN

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COMMERCIAL ALTERATIONS

EXISTING SITE PLAN

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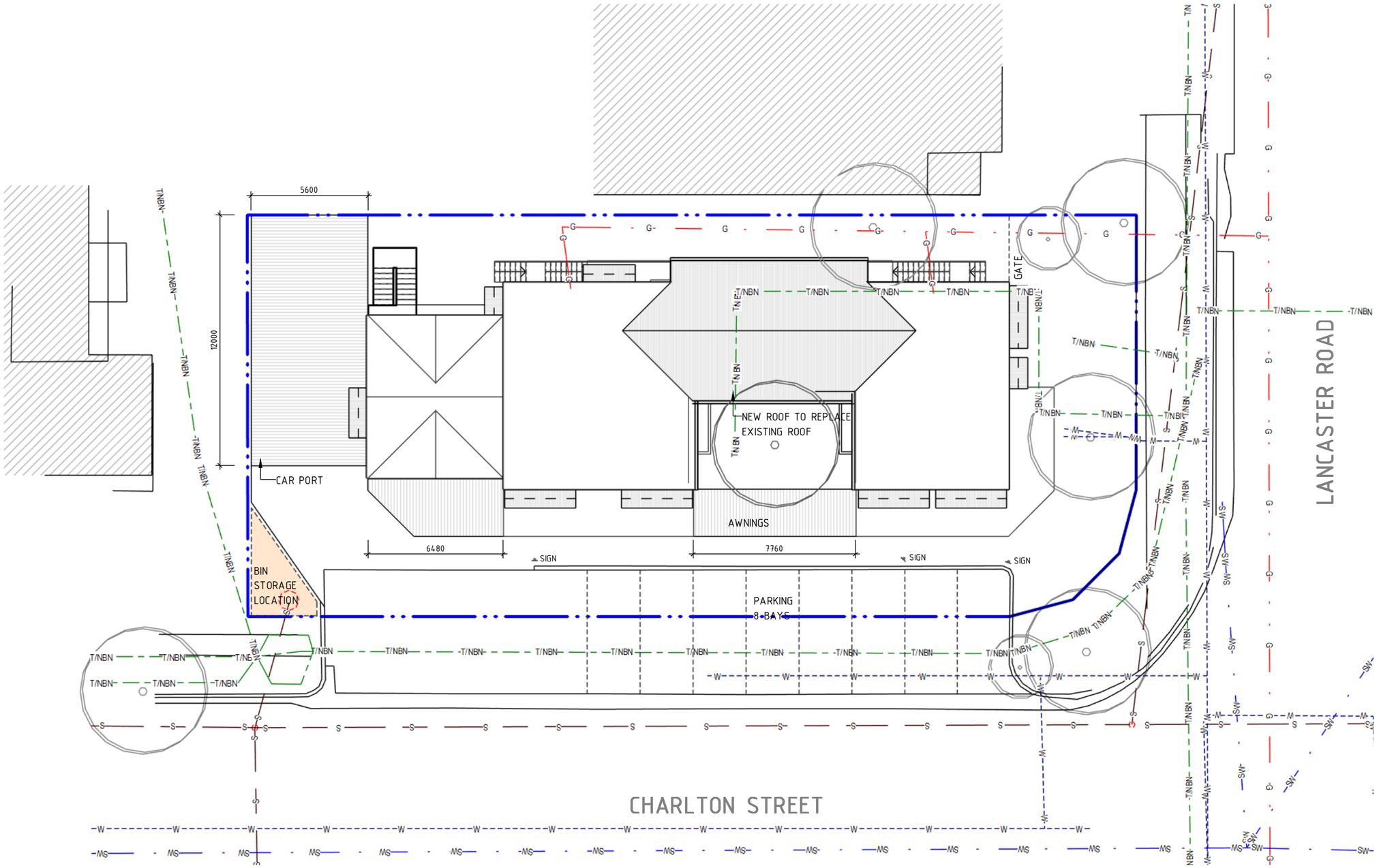

PROPOSED SITE PLAN

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COMMERCIAL ALTERATIONS

PROPOSED SITE PLAN

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EXISTING TREES TO BE REMOVED SHOWN DASHED AND HATCHED

UP

UP

WALL TO BE REMOVED SHOWN DASHED AND HATCHED

GARAGE DOORS TO BE REMOVED SHOWN DASHED AND HATCHED

EXISTING TREES TO BE REMOVED SHOWN DASHED AND HATCHED

PARKING
8 BAYS

EXISTING GROUND FLOOR PLAN

0 1000 2000 3000mm

SCALE 1:100 AT ORIGINAL SIZE

CONCEPT

REV	ISSUED DETAILS	ISSUED BY	DATE

george kouparitsas **architect**

DO NOT SCALE

General Note:
Builder to check and verify all dimensions, levels, etc as noted on this/these drawings and be fully aware of any additional notes on approved copy of same drawing before commencing any setting out of works, ordering of materials, and/or construction work. All work must comply with the Building code of Australia, Australian Standards and all other relevant authorities. All work must be carried out in the best of tradesman like manner and to the full satisfaction of the owner.

DRAWN	Author
CHECKED	Checker
APPROVED	George Kouparitsas (QLD 5162)
SCALE:	1 : 100 @A3

CLIENT	COMMERCIAL ALTERATIONS
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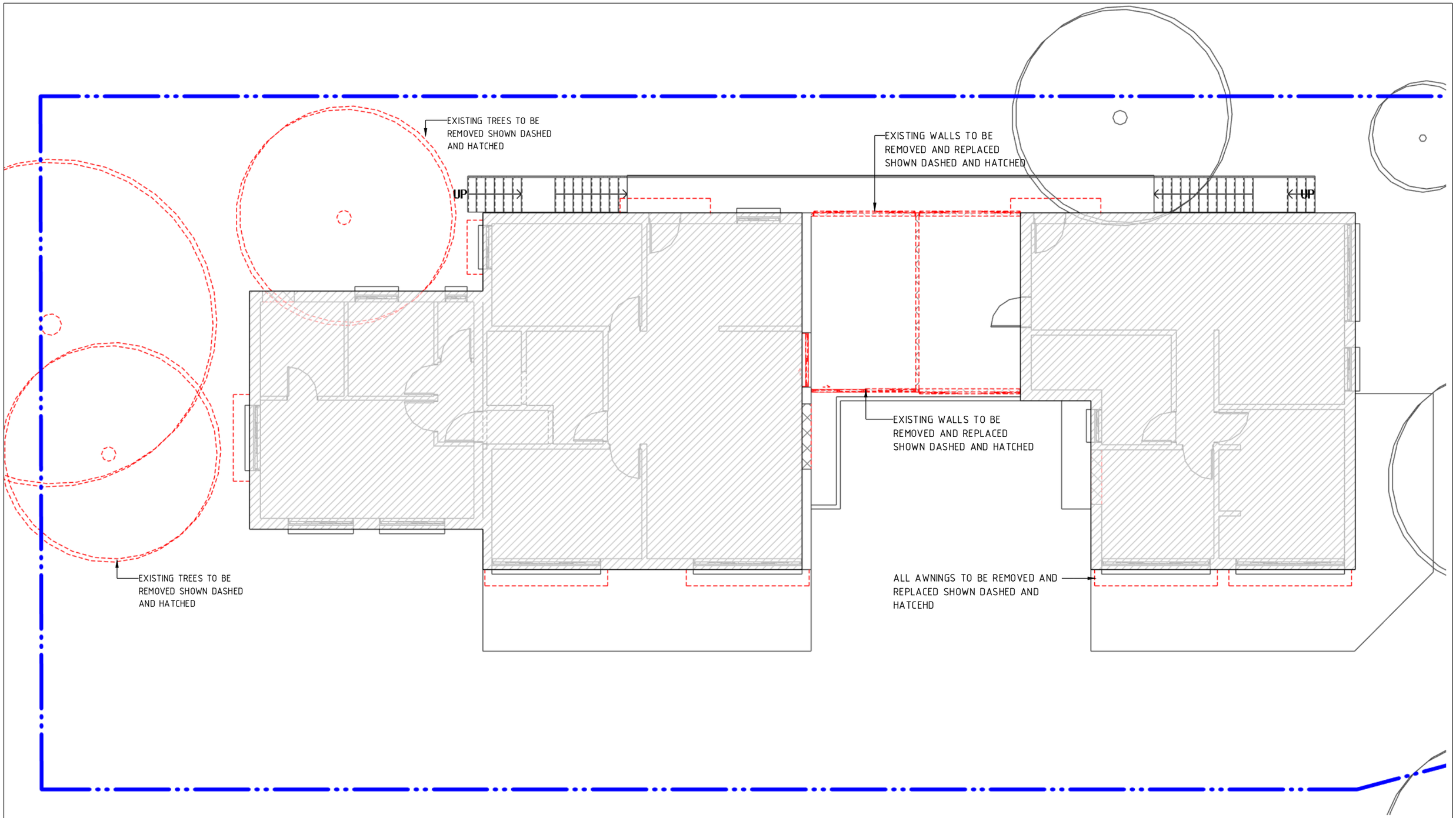

EXISTING FIRST FLOOR PLAN

CONCEPT

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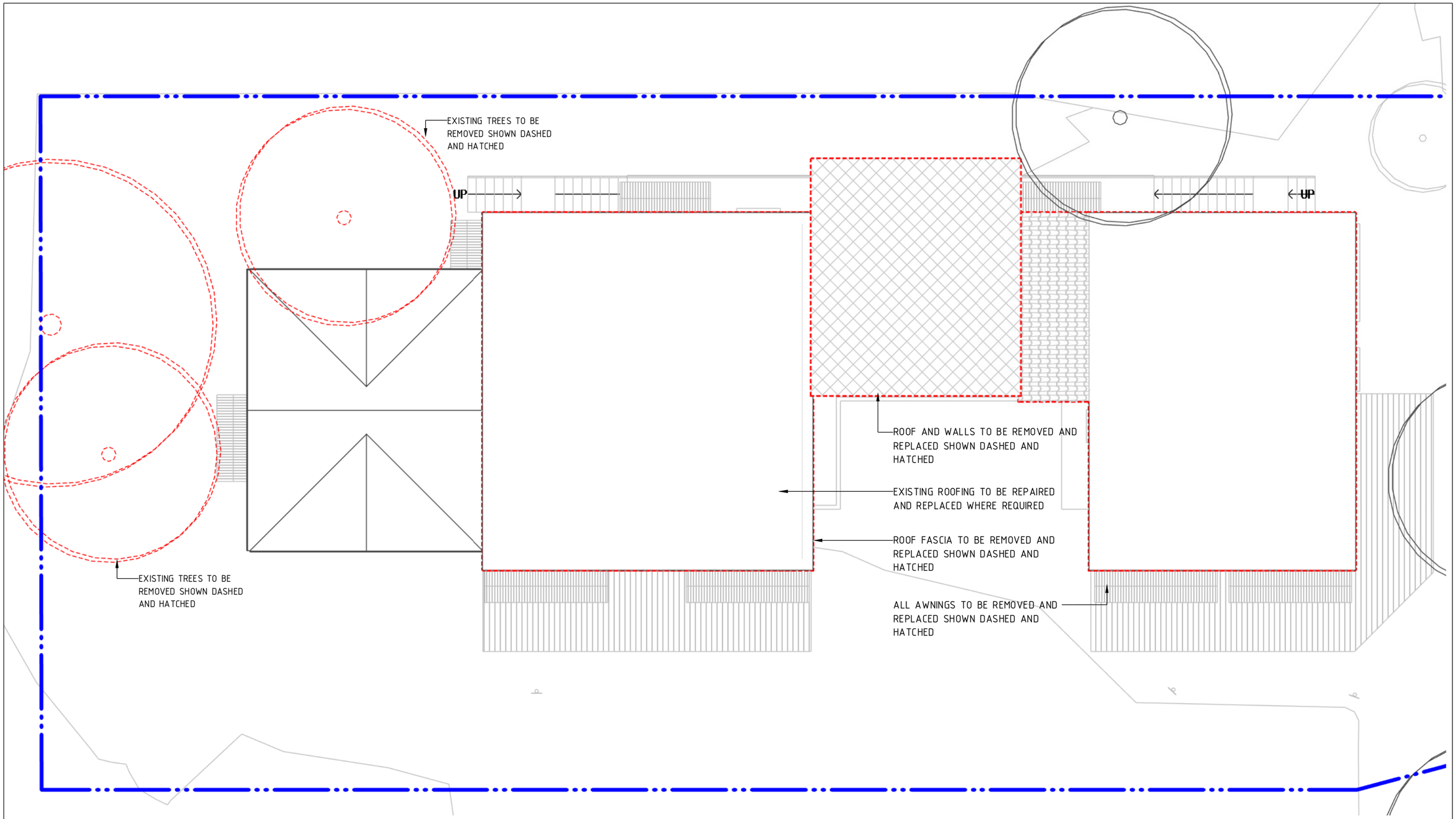

EXISTING ROOF PLAN

CONCEPT

REV	ISSUED DETAILS	ISSUED BY	DATE

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DO NOT SCALE

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APPROVED	George Kouparitsas (QLD 5162)
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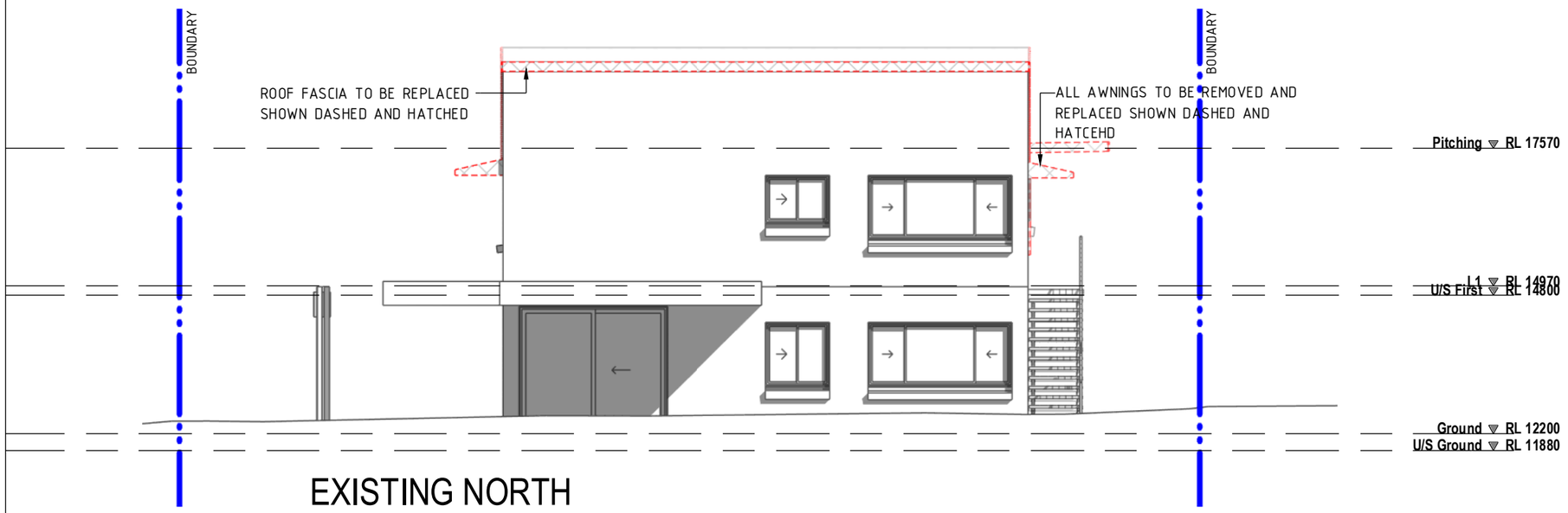

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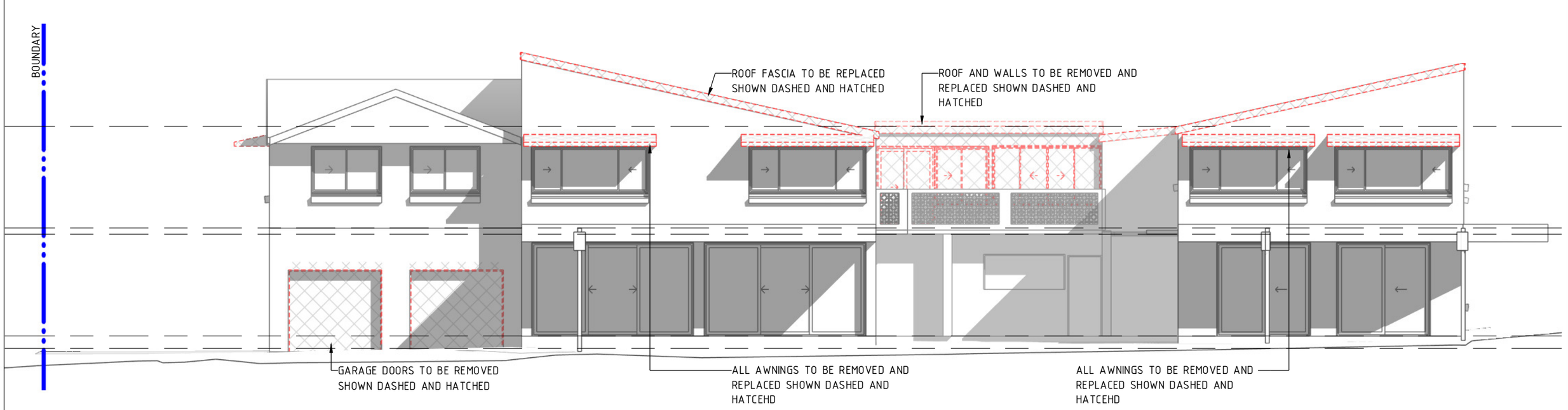

EXISTING EAST

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DO NOT SCALE

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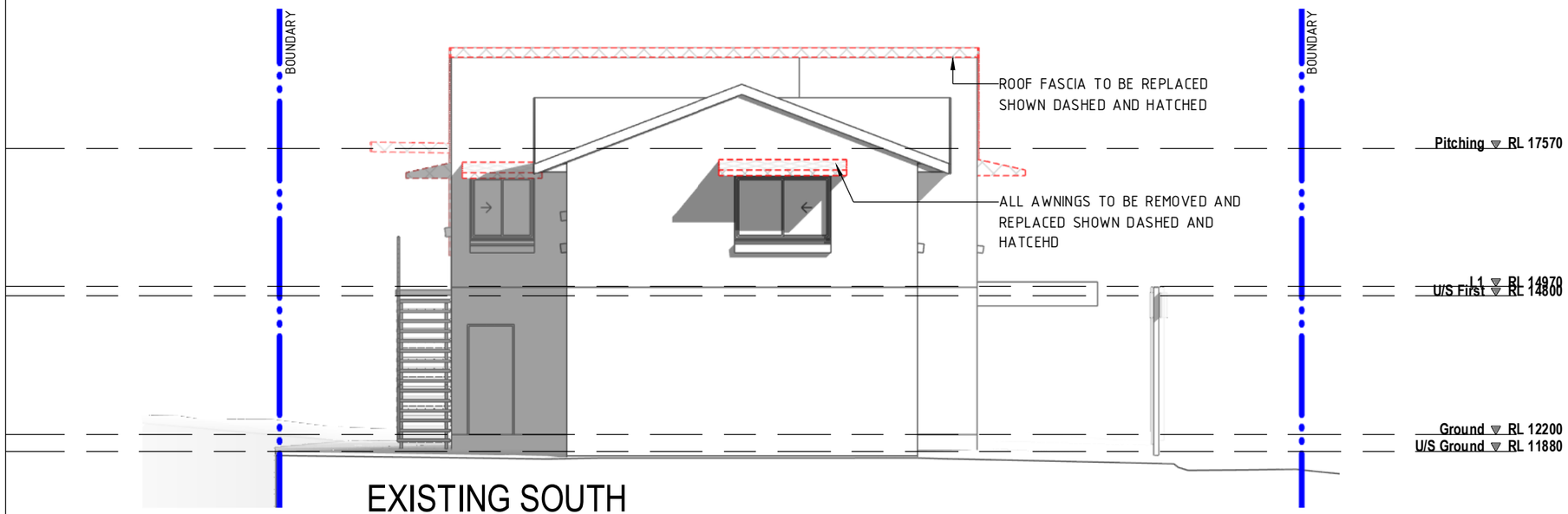

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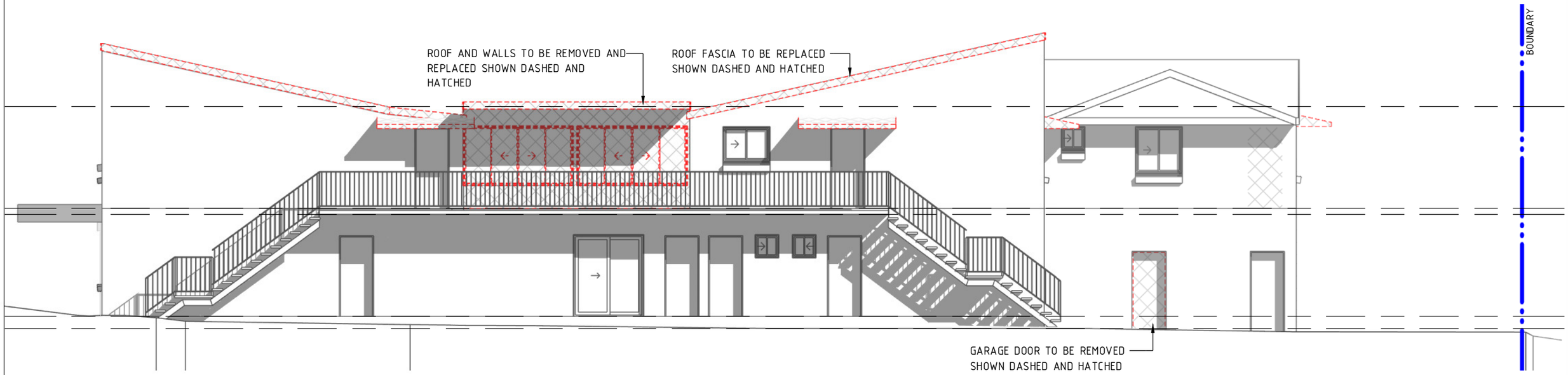

EXISTING WEST

CONCEPT

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APPROVED	George Kouparitsas (QLD 5162)
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CLIENT	COMMERCIAL ALTERATIONS
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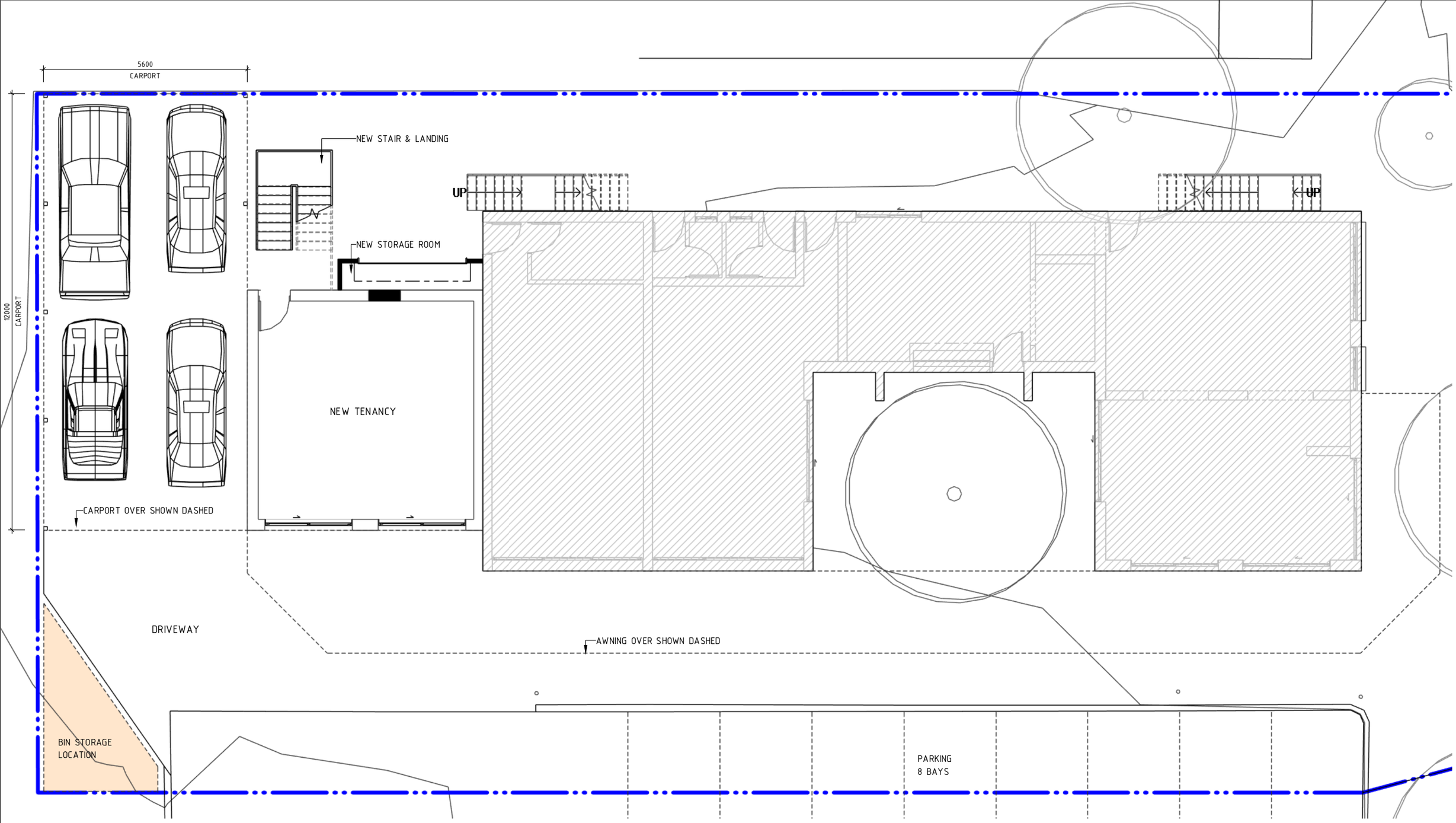

PROPOSED GROUND FLOOR PLAN

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86 CHARLTON ST ASCOT

COMMERCIAL ALTERATIONS

GROUND FLOOR PLAN

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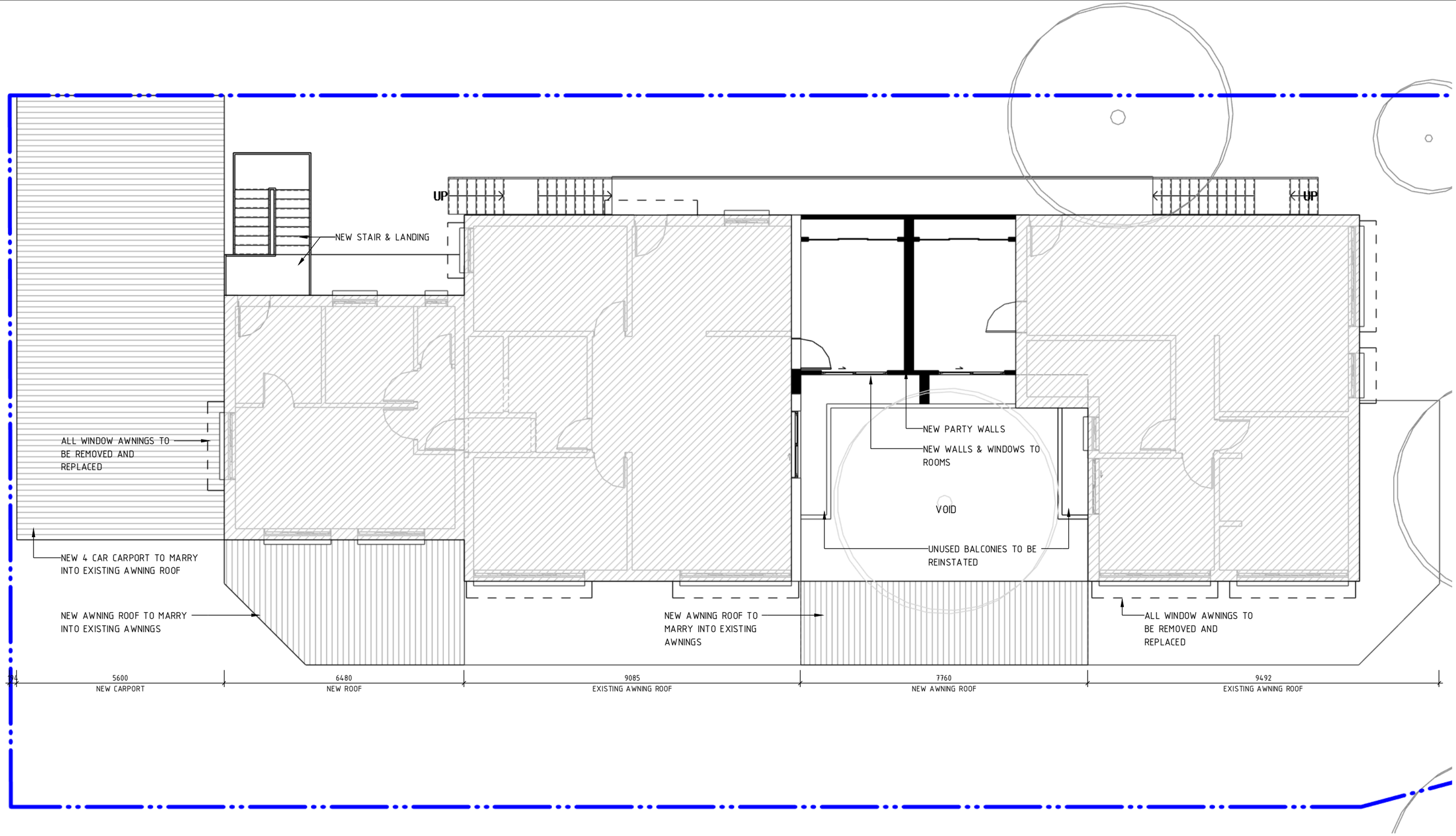

PROPOSED FIRST FLOOR PLAN

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86 CHARLTON ST ASCOT

COMMERCIAL ALTERATIONS

FIRST FLOOR PLAN

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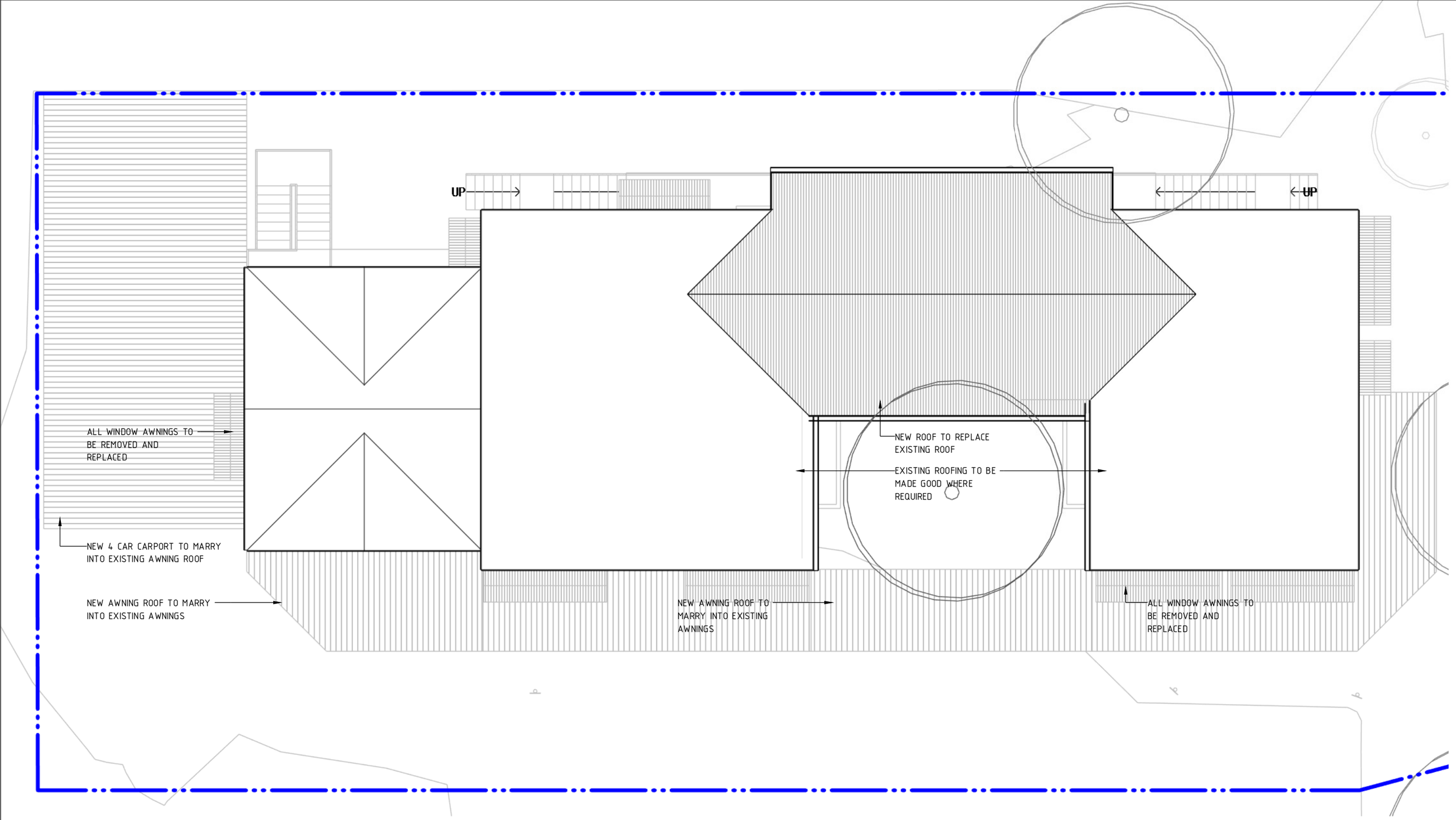

PROPOSED ROOF PLAN

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86 CHARLTON ST ASCOT

COMMERCIAL ALTERATIONS

ROOF PLAN

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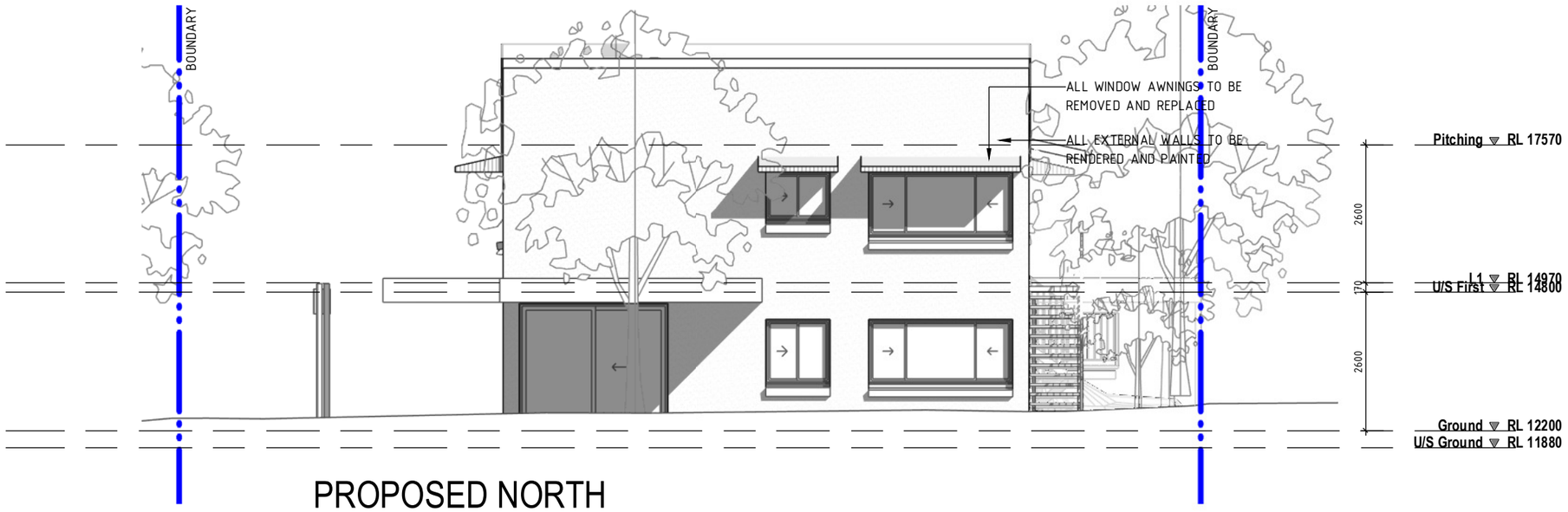

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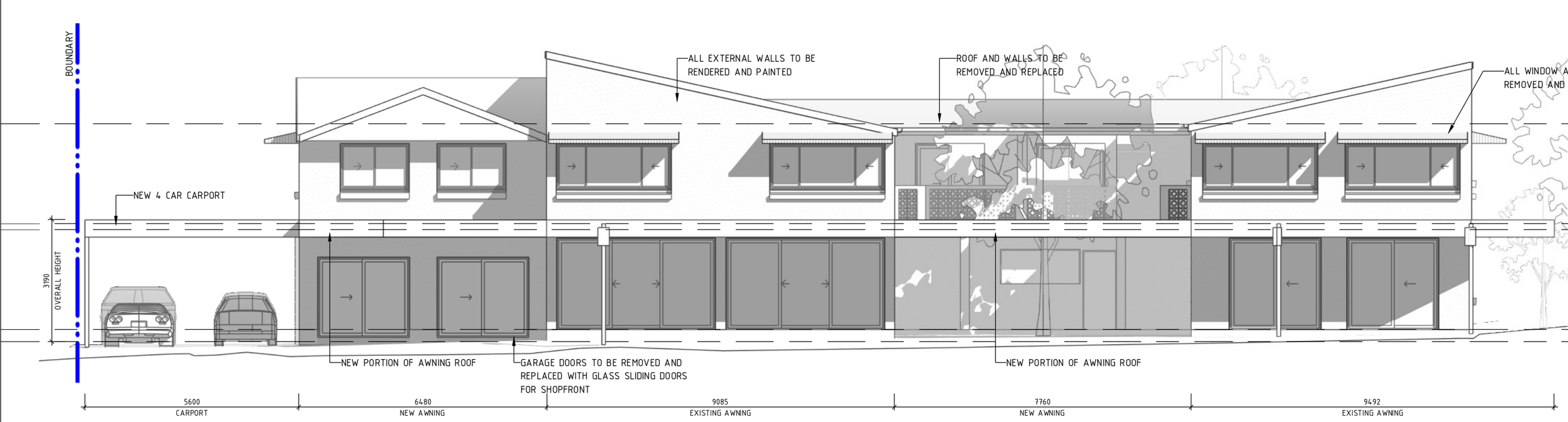

PROPOSED EAST

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86 CHARLTON ST ASCOT

COMMERCIAL ALTERATIONS

ELEVATIONS

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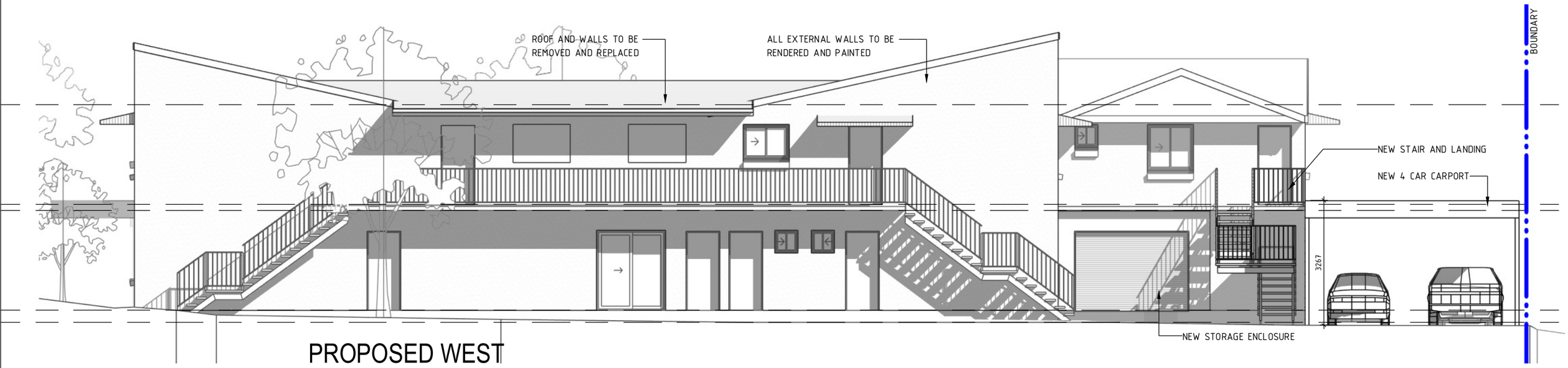
PROPOSED SOUTH



PROPOSED WEST

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86 CHARLTON ST ASCOT

COMMERCIAL ALTERATIONS

ELEVATIONS

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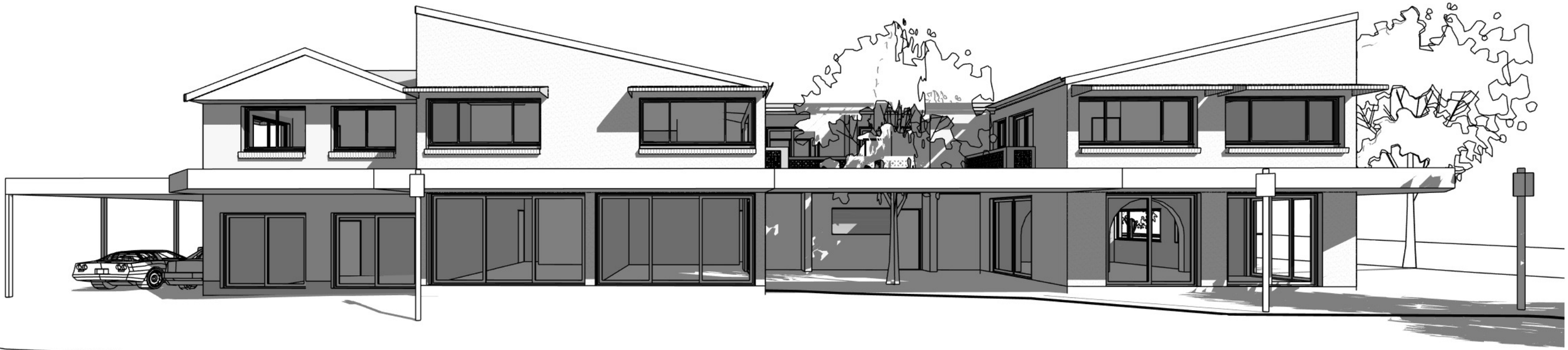

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86 CHARLTON ST ASCOT

COMMERCIAL ALTERATIONS

PERSPECTIVES

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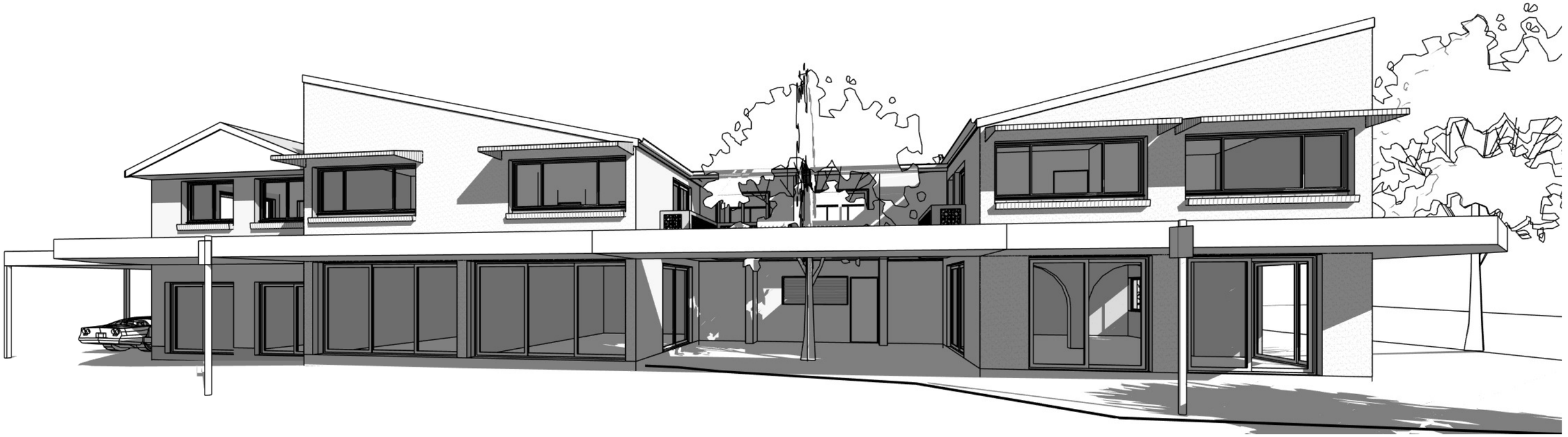

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86 CHARLTON ST ASCOT

COMMERCIAL ALTERATIONS

PERSPECTIVES

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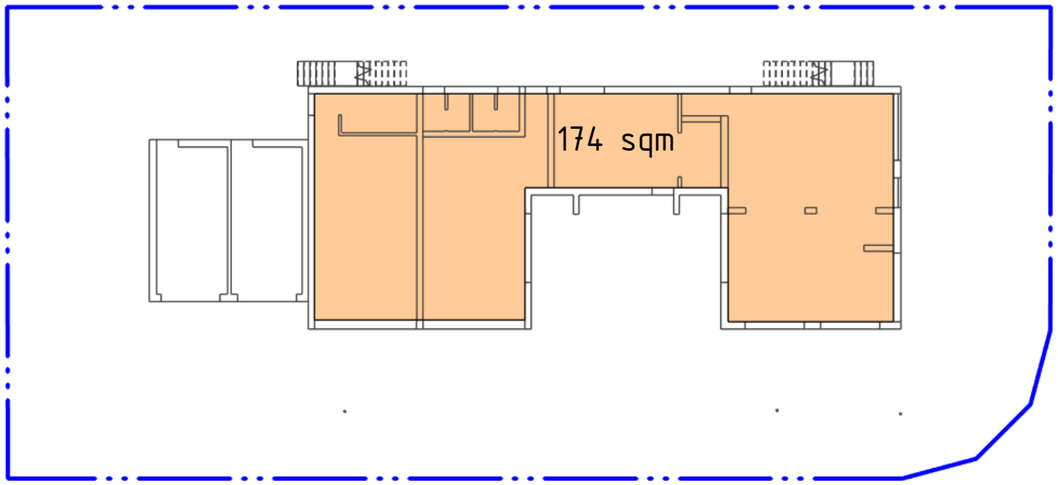

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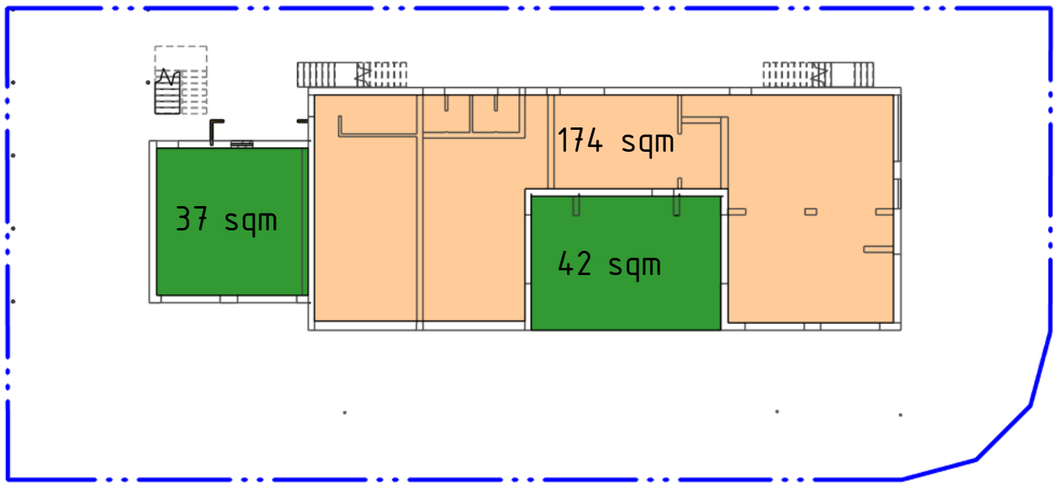

GFA - PROPOSED GROUND

DEVELOPMENT DATA

EXISTING
GROUND FLOOR GFA 174SQM

PROPOSED
GROUND FLOOR GFA 212SQM
EXTERNAL DINING 42SQM

George Kouparitsas Architects

86 CHARLTON ST ASCOT
COMMERCIAL ALTERATIONS
GFA CALCULATIONS
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APPENDIX B

Swept Path Assessment

VEHICLE USED IN SIMULATION

B99 - AS2890.1

5.20 | 0.95 | 3.05

	Meters
Width	: 1.94
Track	: 1.84
Lock to Lock Time	: 6.0
Steering Angle	: 40.0

SWEPT PATH LEGEND

- VEHICLE BODY
- FRONT TIRES
- VEHICLE PATH
- VEHICLE CLEARANCE (300mm)
- VEHICLE
- 5KM/H DESIGN SPEED
- 10KM/H DESIGN SPEED

N

4 3 2 1 0 2 4 6 8 10 12 14 16 18 20m

SCALE 1:400

PROJECT
215 LANCASTER ROAD, ASCOT

CLIENT
MURRAY BELL PLANNING CO

DRAWING TITLE
B99 SWEPT PATH ASSESSMENT

DRAWING NUMBER
MOD25456QLD - SK02

DATE	REVISION
02 06 2026	C

REV	DRAWN BY	APPROVED	DATE	AMENDMENT DETAILS

PRELIMINARY ADVICE ONLY
NOT TO BE USED FOR CONSTRUCTION

GENERAL NOTES:
1.PRELIMINARY DESIGN ISSUED FOR COMMENT ONLY.
2.ALL DIMENSIONS ARE PROVIDED IN METERS UNLESS NOTED OTHERWISE.

RPEQ Certified

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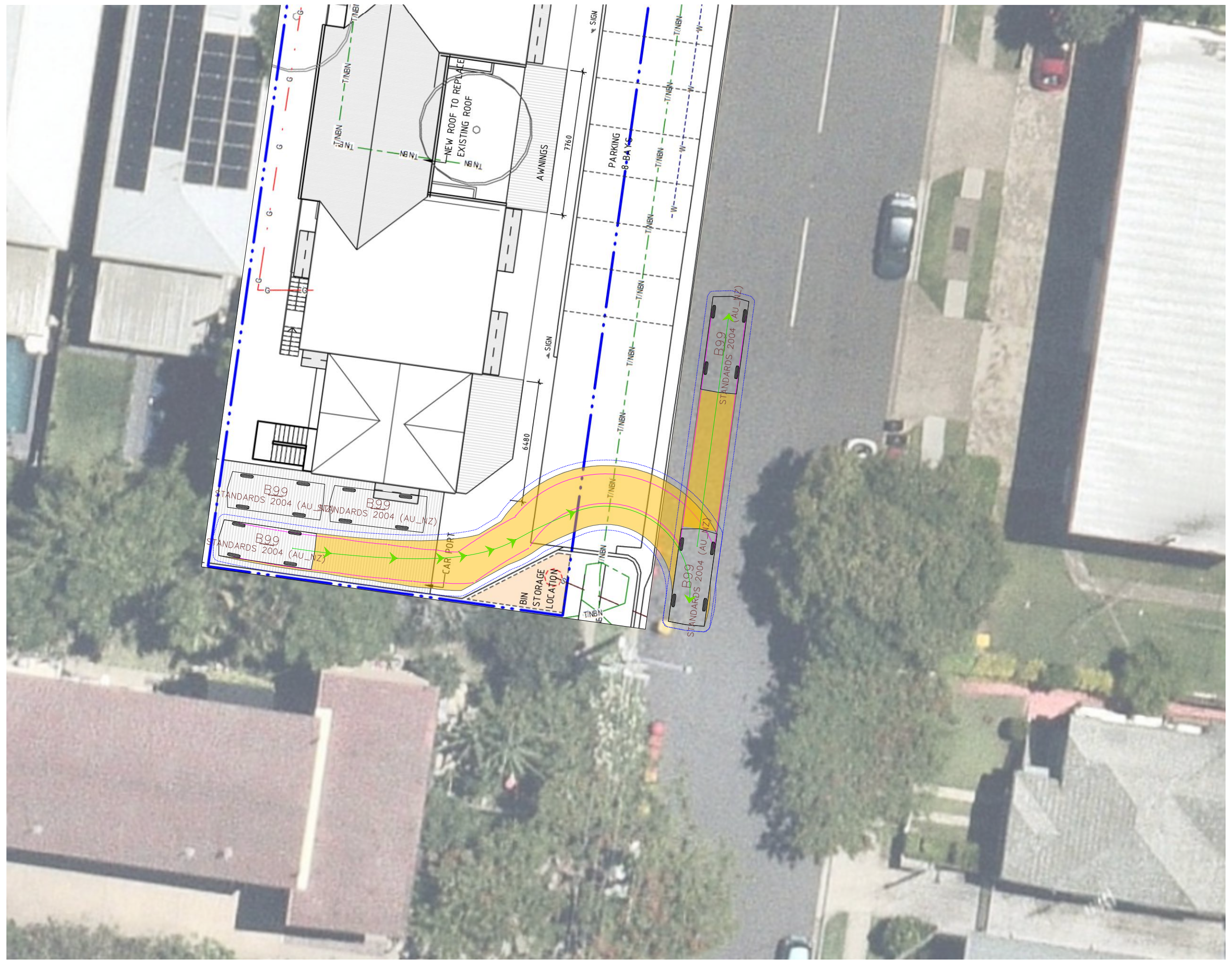
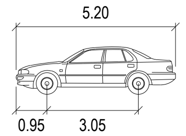


VEHICLE USED IN SIMULATION



B99 - AS2890.1

	Meters
Width	: 1.94
Track	: 1.84
Lock to Lock Time	: 6.0
Steering Angle	: 40.0

SWEPT PATH LEGEND

- VEHICLE BODY
- FRONT TIRES
- VEHICLE PATH
- VEHICLE CLEARANCE (300mm)
- VEHICLE
- 5KM/H DESIGN SPEED
- 10KM/H DESIGN SPEED

N

4 3 2 1 0 2 4 6 8 10 12 14 16 18 20m

SCALE 1:400

PROJECT
215 LANCASTER ROAD, ASCOT

CLIENT
MURRAY BELL PLANNING CO

DRAWING TITLE
B99 SWEPT PATH ASSESSMENT

DRAWING NUMBER
MOD25456QLD - SK03

DATE	REVISION
02 06 2026	C

REV	DRAWN BY	APPROVED	DATE	AMENDMENT DETAILS

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