



37-41 Oxford Street Epping Transport Impact Assessment

Prepared for:
Meriton Group

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The Transport Planning Partnership

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Quality Record


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1 Introduction

1.1 Introduction

The Transport Planning Partnership (TPPP) has been commissioned by Meriton Group to provide traffic, transport and parking advice to support a number of development applications (DAs) to be lodged with City of Parramatta Council at 37-41 Oxford Street, Epping.

The site has a concept plan (DA/314/201730) approved for a 30-storey mixed use tower with four storey basements, including:

- 257 residential units
- 438m² GFA of retail space, and
- 591m² GFA of commercial space.

TPPP has prepared this a traffic and transport impact assessment to address the following planning applications:

- An early works DA seeking consent for demolition and excavation
- A Stage 2 detailed DA to seek consent for the construction of a 30-storey mixed use tower building with a six-level basement
- An amending DA to the approved Concept DA seeking consent for the introduction of a childcare use
- A Section 4.55 (2) modification application to amend the approved building envelope, and any conditions of consent that require modification as a result of significant design changes.

The applications will be submitted to Council concurrently.

1.2 Report Structure

The remainder of this report is set out as follows:

- Chapter 2 discusses the existing conditions including a description of the subject site
- Chapter 3 provides a brief description of the proposed development
- Chapter 4 assesses the proposed on-site parking provisions and internal layout
- Chapter 5 examines the traffic generation and its impact
- Chapter 6 presents the conclusions of the assessment.

2 Existing Conditions

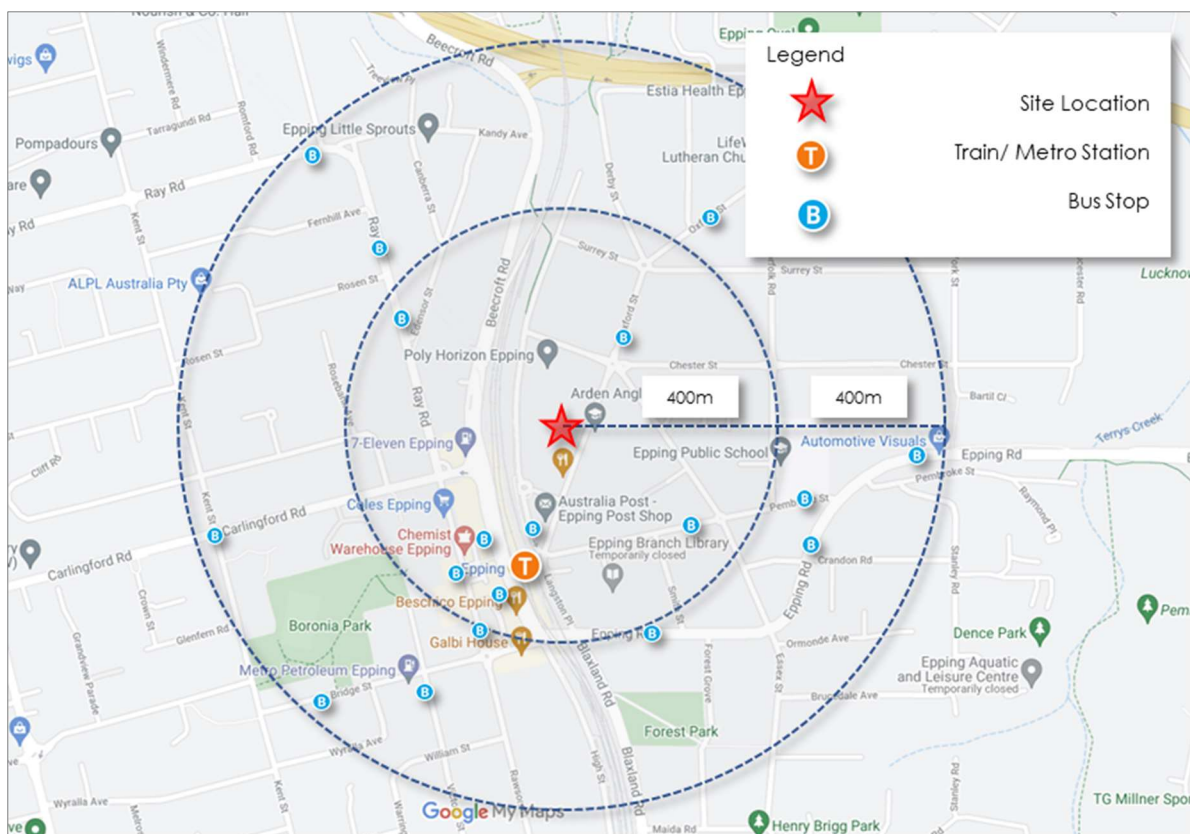
2.1 Site Description

The subject site is located at 37-41 Oxford Street, Epping and falls within the local government area of City of Parramatta Council (Council). The site of 4,969m² has a 37m frontage to Oxford Street to the west and is currently a vacant office space, providing paid public parking and advertised for short-term lease.

Under the Hornsby Local Environmental Plan 2013, the site is zoned as B2 – Local Centre and specifically identified as part of the Epping Town Centre Core (ETCC).

The site location and its surrounds are shown in Figure 2.1.

Figure 2.1: Locality Map



Source: Google Maps, accessed 13 September 2021

Land use surrounding the site primarily comprises commercial, medium-high density residential and mixed-use developments, as well as Arden Anglican School.

2.2 Surrounding Road Network

The local road network is summarized in Table 2.1.

Table 2.1: Road schedule

Street Name	Classification	Description
M2 Motorway (MR6002)	Arterial Road	<ul style="list-style-type: none"> • East-west connection between Lane Cove and Baulkham Hills • Approximately 95,000 vpd near the site • Variable speed limit (default 100km/h) near the site • Six-lane, bidirectional road near the site, with barrier medians.
Beecroft Road (MR139)	Sub-Arterial Road	<ul style="list-style-type: none"> • North-south connection between Pennant Hills Road (at Beecroft) and Epping Road (Epping) • Approximately 50,000 vpd • 60km/h speed limit near the site • Four-lane, bidirectional road near the site, with raised medians.
Epping Road (MR373)	Collector Road	<ul style="list-style-type: none"> • East-west connection between Beecroft Road (at Epping) and the M2 Motorway (at Lane Cove) • Approximately 50,000 vpd • 60km/h speed limit • Five-lane bi-directional road near the site, with raised medians • Parking is not permitted either side of the road
Blaxland Road (MR139)	Collector Road	<ul style="list-style-type: none"> • North-south connection between Epping Road (at Epping) and Lane Cove Road (Ryde). • Approximately 30,00 vpd • 60km/h speed limit • Four-lane, bidirectional road near the site, with raised medians • Parking is not permitted either side of the road
Oxford Street	Collector Road	<ul style="list-style-type: none"> • North-south road connecting Norfolk Road (North Epping) to Pembroke Street (Epping), • 50km/h speed limit • Two-lane, bidirectional road • Free, duration-limited parking is permitted on both sides of the road
Chester Street	Local Road	<ul style="list-style-type: none"> • East-west road connecting Gloucester Road and Cambridge Street • 50km/h speed limit • Two-lane, bidirectional road • Currently parking is unrestricted on both sides of the road, however Council is currently exhibiting proposal to impose time-of-day and duration-limited parking.

2.3 Public Transport

There are well-established public transport facilities available in the vicinity of the site. A summary of the major public transport facilities and respective frequencies are illustrated in Table 2.2.

Table 2.2: Public Transport Facilities

Service	Route	Site Proximity	Frequency	
			AM/ PM Peak	Interpeak
Rail	T9: Gordon – Central	175m	1 per 5 minutes	1 per 15 minutes
	CCN: Gordon - Central		1 per 15 minutes	1 per 30 minutes
Metro	M: Chatswood - Tallawong	175m	1 per 4 minutes	1 per 10 minutes
Bus	288 – Epping to City Erskine St	125m	1 per 30 minutes	1 per 15 minutes
	291 – McMahons Pt to Epping		1 per 30 minutes	1 per 1 hour
	295 – North Epping to Epping	1 per 10 minutes	1 per 1 hour	
	541 – Epping to Eastwood	195m	1 per 30 minutes	1 per 1 hour
	550 – Parramatta to Macquarie Park	225m	1 per 10 minutes	1 per 7-8 minutes

Source: Transport for NSW

The public transport network map for the local area is portrayed in Figure 2.2.

Figure 2.2: Public Transport Network Map



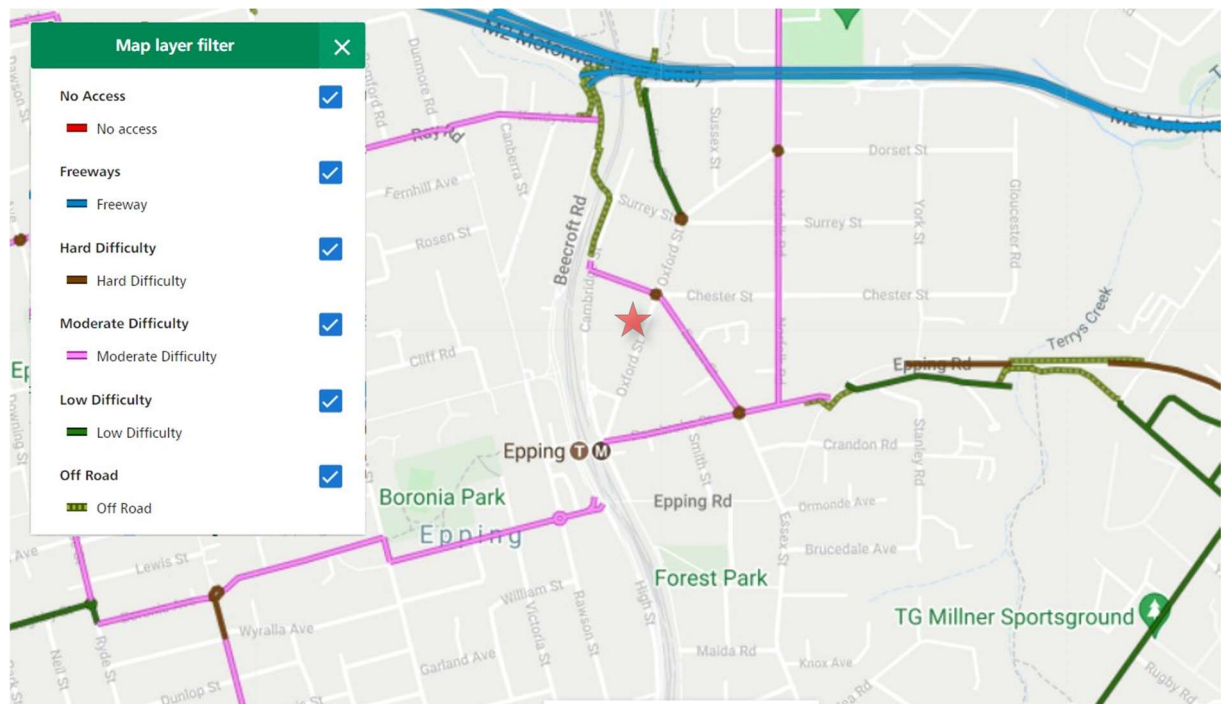
Source: [Transport for NSW](#), accessed 14 September 2021

2.4 Active Transport Infrastructure

Pedestrian footpaths are provided on all streets surrounding the site, with suitable verges and widths. Formal pedestrian crossings are available at key intersections near the site.

Cycling routes surrounding the site include both off-road and on-road environments as shown in the cycleway network map in Figure 2.3.

Figure 2.3: Surrounding Cycleways



Source: [Roads and Maritime Services Cycleway Finder 2018](#), accessed 14 September 2021

3 Proposed Development

3.1 Proposal Description

The proposed development involves the construction of a 30-storey tower comprising:

- 211 residential units, with the following unit mix:
 - 43 one-bedroom units
 - 124 two-bedroom units
 - 42 three/ four-bedroom units
 - 2 four-bedroom units
- 426m² GFA childcare centre with 60 children and 11 staff
- 64m² GFA of retail space
- 750m² GFA of commercial space, comprising 6 offices in total
- 80m² GFA gym for use by tenants.

Parking provisions for the proposed development include six basement levels including:

- 317 car parking spaces
 - 283 spaces for residential use
 - 15 spaces for commercial use
 - 3 spaces for retail use
 - 15 spaces for childcare use
 - 1 carshare space
- 1 car wash bay
- 22 bicycle parking spaces and 4 motorcycle bays.

The adequacy of the proposed parking provisions is further discussed in Section 4.

The architectural layout plans are enclosed in **Appendix A** and a site plan is shown in Figure 3.1.

3.3 Proposed Refuse Collection and Loading Facilities

Consistent with the approved concept plan, a ground level loading dock is proposed within the site to serve the proposed development. This loading dock would be designed to accommodate a vehicle up to and including a 12.5m long Council's waste truck. A minimum vertical clearance of 4.5m would be provided within the loading dock.

A swept path assessment has been conducted using a 12.5m long heavy rigid vehicle, which demonstrates appropriate manoeuvrability into and out of the loading dock. All service vehicles would enter and exit the site in a forward direction. This swept path assessment is provided in **Appendix B**.

4 Parking Requirements

4.1 Car Parking Requirements

The site falls under the City of Parramatta local government area. However, the site had previously been under the jurisdiction of Hornsby Shire Council and the Hornsby Development Control Plan (DCP) 2013 continues to be applicable to the area. Moreover, the site is specifically classified as part of the Epping Town Centre Core (ETCC).

The parking requirements for the proposed development have been assessed with reference to the Hornsby DCP 2013, specifically for the ETCC if applicable. If not, rates for the broader Hornsby DCP 2013 have been adopted.

It is noted that the gym is ancillary to residential uses and not intended for public use. Therefore, the gym is not expected to generate any parking demand and excluded in the parking assessment.

Table 4.1 provides a summary of the above parking requirements for the proposed development.

Table 4.1: Car Parking Requirements

Land Use	Detail	Size	DCP Car Parking Rates	Permitted Parking Spaces	Proposed Parking Spaces
High-Density Residential	One-bedroom apartment	43 units	Max. 0.4 spaces per dwelling	17	252
	Two-bedroom apartment	124 units	Max. 0.7 spaces per dwelling	87	
	Three/ four-bedroom apartment	42 units	Max. 1.2 spaces per dwelling	53	
	Total (for visitor parking)	211 units	Min. 1 space per 7 dwellings	31 (Min)	31
Childcare centre		60 children	Min. 1 space per 4 children	15 (Min)	15
Retail		64m ²	Max. 1 space per 30m ² GFA	3	3
Commercial		750m ²	Max. 1 space per 50m ² GFA	15	15
Car Share			1 car share bay for developments with over 50 car spaces	1	1
TOTAL				222	317

It is noted that Meriton seeks to provide surplus provisions to the DCP-permitted rates. However, it is noted that the desired outcomes of the DCP include “car parking and bicycle facilities that meet the requirements of future occupants and their visitors”.

Based on Meriton's experience on numerous residential developments in the Sydney Metropolitan area, the proposed car parking provision is expected to meet the parking demand of the future occupants.

Furthermore, it is noted that the following nearby streets currently have unrestricted on-street parking available:

- Northern side of Chester Street, west of Oxford Street
- Both side of Chester Street, east of Oxford Street
- Both sides of Essex Street, east of Oxford Street
- Both sides of Oxford Street, north of Chester Street.

Hence, it would be a better outcome to accommodate car parking demand generated by the proposed development on-site rather than potentially occupying the nearby public roads.

In addition, the effect of additional car parking provision would have minimal impact on the surrounding network. This is further explained in Section 5.

4.2 Accessible Parking Requirements

The accessible parking rates have also been assessed against Hornsby DCP 2013 rates, shown in Table 4.2.

Table 4.2: Accessible Parking Requirements

Land Use	Car Parking Provision	Other qualifier (if applicable)	Accessible Parking Rates	Required Accessible Spaces	Accessible Parking Provision
High-Density Residential	283 spaces	22 adaptable units	1 for each Adaptable Design unit as per AS2890.6 (2011)	22	22
Childcare centre	15 spaces	N/A	2-3% of spaces	0.45	2
Retail	3 spaces	N/A	1-3% of spaces	0.09	
Commercial	15 spaces	N/A	1-3% of spaces	0.45	
TOTAL				23	24

A total of 23 accessible car parking spaces are required. It is proposed to provide 24 accessible car parking spaces, which exceeds the DCP requirements.

4.3 Bicycle/ Motorcycle Parking Requirements

Hornsby DCP 2012 requires provision of four motorcycle spaces on sites with more than 25 car parking spaces. Plans show allocation for four motorcycle spaces, which satisfies Council's DCP requirements.

Bicycle parking requirements as per the Hornsby DCP 2012 are shown in Table 4.3.

Table 4.3: Bicycle Parking Requirements

Land Use	Description	Size	Bicycle Rates	Bicycle Requirements	Bicycle Provision
High-Density Residential	Residents	211 units	1 space per 5 units for residents	43	Within storage units
	Visitors	211 units	1 space per 10 units for visitors	21	22
Childcare centre		11 staff	1 space per 20 FTE staff (or part thereof)	1	
Retail		64m ²	N/A	-	-
Commercial	< 1200m ²	750m ²	N/A	-	-
TOTAL				65	22 plus storage units

A total of 65 bicycle spaces are required for the development, which includes 43 bicycle spaces for residents and 22 bicycle spaces for visitors and childcare centre staff.

Bicycle spaces for residents will be provided within their storage units. It is proposed to provide 22 bicycle spaces for visitors and childcare centre staff, which satisfies the DCP requirements.

4.4 Car Share Bay

One car share bay has been provided as per the Hornsby DCP 2012 requirements for developments with over 50 car parking spaces.

4.5 Car Parking Layout

The car park layout has been reviewed against the requirements of the Australian Standards for Off-Street Car Parking (AS2890.1:2004). The Australian Standard requires car parking spaces to be provided according to its use.

Residential, domestic and employee parking to be provided as Class 1A parking spaces. Long-term city and town centre parking, sports facilities, entertainment centres, hotels, motels, airport visitors (generally medium-term parking) to be provided as Class 2 parking spaces. The childcare centre is classified as a User Class 3 facility. Examples of Class 3 facilities

include short-term city and town centre parking, parking stations, hospital and medical centres.

Table 4.4 summarises the minimum dimensions required for the parking spaces in the proposed development.

Table 4.4: Car Parking Dimensions

Land Use	Class	Width	Length	Aisle Width
Residential/ office staff	1A	2.4m	5.4m	5.8m
Retail	2/3	2.5m – 2.6m	5.4m	5.8m
Childcare centre	3	2.6m	5.4m	5.8m

The proposed car park layout complies with the above minimum requirements. Hence, the proposed car parking layout is satisfactory.

In addition to the above, a review of the car park has been undertaken and a summary of the key design elements are summarised as follows:

Vehicle access

- An 8.1m wide access driveway at Oxford Street will provide direct vehicle access to the basement car park and loading dock.
- The proposed driveway and ramp comply with the design requirements in AS2890.1.
- Whilst the proposed driveway ramp grades do not strictly comply with AS2890.2 requirements for a 12.5m HRV, a ground clearance test included in **Appendix B** demonstrates that a 12.5m HRV can enter/exit the driveway without scraping.

Parking Modules

- All car parking spaces have been designed to comply with minimum requirements specified in Table 4.4.
- Accessible parking spaces have been designed in accordance with AS2890.6 with a minimum of 2.4m width and 5.4m length, and adjacent shared area of the same dimensions.
- Ten x 3.8m wide car parking spaces are proposed for adaptable units. It is recommended that the design of proposed 3.8m wide adaptable car parking spaces should be reviewed by an access consultant.

Swept path diagrams are included in **Appendix B**.

The car park and associated elements are proposed to comply with design requirements set out in the Australian Standards, namely AS2890.1:2004 and AS2890.6:2009. It is however, envisaged that a condition of consent would be imposed requiring compliance with these standards and as such, any minor amendments can be resolved prior to the issue of a Construction Certificate.

5 Traffic Assessment

5.1 Approved Traffic Generation

As part of the approved concept plan, Ason Group has previously completed a traffic impact assessment for the DA in 2017. The concept plan includes:

- 257 residential units
- 438m² GFA of retail space
- 591m² GFA of commercial space.

Traffic generation of the previously approved concept plan consists of 62 (AM) and 66 (PM) vehicle trips per hour during the peak periods.

5.2 Proposed Traffic Generation

TfNSW provides traffic generation rates for different land uses in the Guide to Traffic Generating Developments (GTGD) and in their technical direction TDT 2013/4a containing revised rates.

For the purpose of estimating traffic generation, the following traffic generation rates have been adopted:

- For high-density residential uses:
 - 0.15 vehicle trips per car space (AM peak)
 - 0.12 vehicle trips per car space (PM peak)

Note: Trips per car space have been considered to assess the impact of the additional car parking provisions outlined in Section 4.1.

- For childcare centre:
 - 0.8 trips per child (AM peak)
 - 0.7 trips per child (PM peak)
- For secondary retail:
 - 2.3 vehicle trips per 100m² gross leasable floor area (GLFA)* (AM Peak)
 - 4.6 vehicle trips per 100m² GLFA (Thursday PM peak) (PM Peak)
- For commercial uses:
 - 1.6 trips per 100m² GFA (AM Peak)
 - 1.2 trips per 100m² GFA (PM Peak)

A summary of the proposed development traffic generate estimates is provided in Table 5.1.

Table 5.1: Proposed Development Traffic Generation Estimates

Land Use	Size	Trip Rate		Trip Generation Estimate	
		AM Peak	PM Peak	AM Peak	PM Peak
High-Density Residential	283 spaces	0.15 trips per unit	0.12 trips per unit	42.5	34.0
Childcare centre	60 children	0.8 trips per child	0.7 trips per child	48.0	42.0
Retail	64m ²	2.3* trips per 100m ² GFA	4.6 trips per 100m ² GFA	1.5	2.9
Commercial	750m ²	1.6 trips per 100m ² GFA	1.2 trips per 100m ² GFA	12.0	9.0
TOTAL				104 trips	88 trips

NOTE: *for land uses where only a PM peak is recorded/ applicable, it has been assumed that the site will generate half the trips in the AM peak

Table 5.1 indicates that the proposed development is expected to generate 104 vehicle trips in the AM peak hour and 88 vehicle trips in the PM peak hour.

In comparison with the previously approved DA, the net increase in traffic is expected to be 42 additional trips in the AM peak, and 22 additional trips in the PM peak hour. This equates to one additional vehicle movement every one to three minutes, which is considered negligible.

Hence, in comparison to the approved DA, the proposed development traffic is considered minimal and could not be expected to result in any noticeable traffic impacts on the surrounding road network.

6 Conclusion

This traffic impact assessment report relates to a proposed mixed-use development at 37-41 Oxford Street, Epping. The key findings of the report are presented below.

- The site was previously approved for a 30-storey mixed-use tower (DA314/201730).
- The proposed development includes 30-storey tower comprising 211-unit apartment with lower-level childcare, retail and commercial tenancies.
- An 8.1m wide access driveway at Oxford Street will provide a direct vehicle access to the basement car park and loading dock.
- It is proposed to provide a loading dock to facilitate all loading and unloading activities associated with the proposed development, including waste collection using Council's 12.5m long waste truck.
- The Hornsby ETCC DCP 2013 outlines a provision of 222 car parking spaces. However, based on Meriton's experience on numerous residential developments in the Sydney Metropolitan area, the proposed car parking provision, that is, 317 spaces are expected to meet the parking demand of the future occupants. Furthermore, it would be a better outcome to accommodate car parking demand generated by the proposed development on-site rather than potentially occupying the nearby public roads.
- It is proposed to provide 24 accessible car parking spaces, four motorcycle spaces, 22 bicycle spaces and one car share bay which complies with the DCP requirements.
- The proposed development is expected to generate 104 vehicle trips per hour in the AM peak and 88 vehicle trips per hour in the PM peak period. In comparison with the approved DA, the net increase in traffic is expected to be 42 additional trips in the AM peak, and 22 additional trips in the PM peak hour. This equates to one additional vehicle movement every one to three minutes, which is considered negligible.

Overall, the traffic and parking aspects of the proposed development is considered to be satisfactory.

Appendix A

Development Plans

History

[Rev#]	[Description]	[Date]
1	FOR REVIEW	15.10.2021
2	FOR REVIEW	19.10.2021
3	FOR REVIEW	22.10.2021
4	DEVELOPMENT APPLICATION	26.10.2021

NOTES:

TOTAL CAR PARKING REQUIREMENT:
 RESIDENTIAL CAR PARKING UNITS (MAXIMUM) = 157
 VISITORS (MINIMUM) = 31
RESIDENTIAL TOTAL = 188

GROUND FLOOR CHILDCARE = 15
 GROUND FLOOR RETAIL = 3
 L1 OFFICES = 15
 1 x CARSHARE = 1

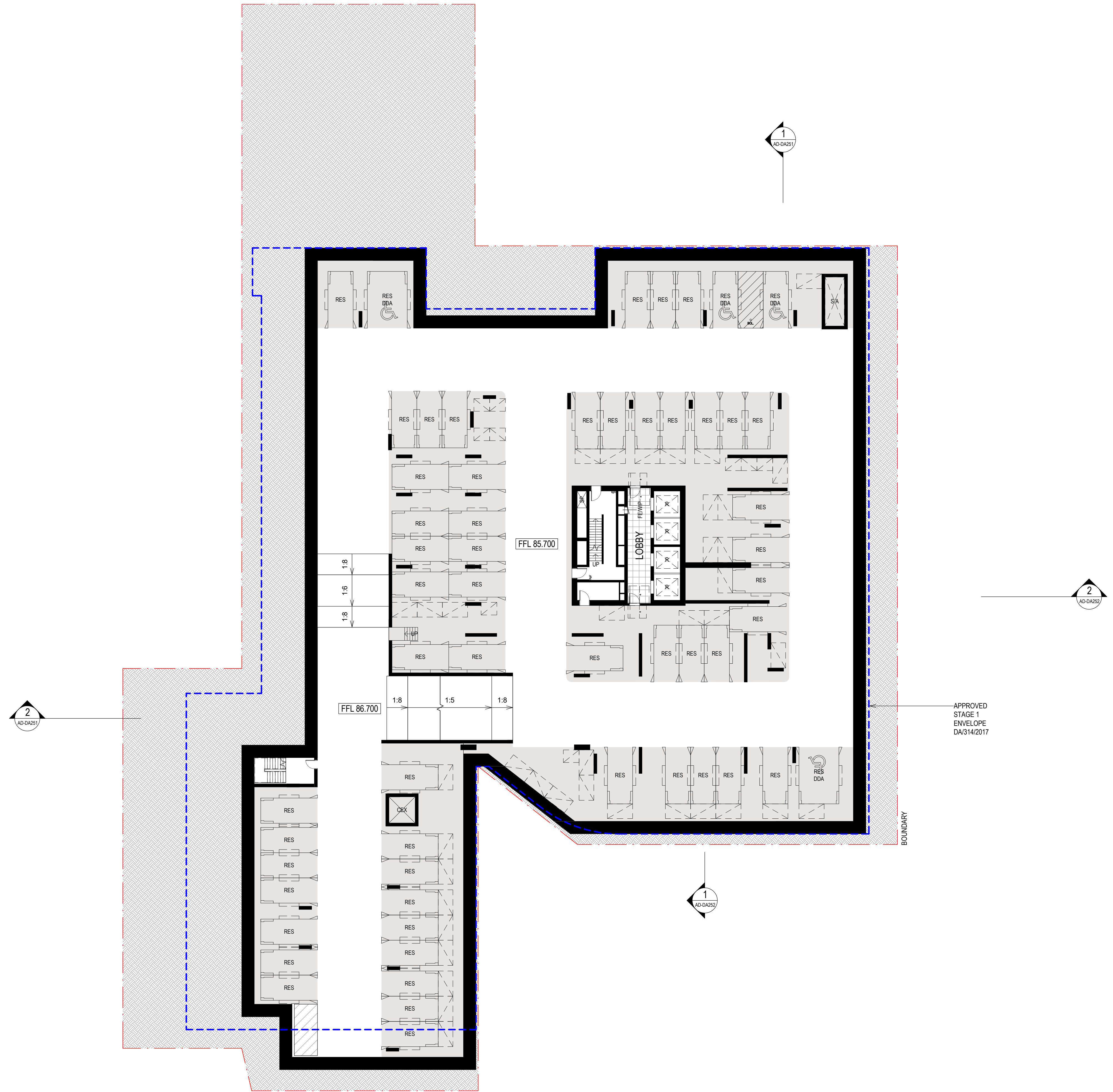
REQUIRED PARKING SPACES = 222

BIKE PARKING (HORNSBY DCP)
 RESIDENT (1 PER 5 UNITS) = 43
 VISITOR (1 PER 10 UNITS) = 22
TOTAL BIKES = 65

BASEMENT 1 (WITH BOH) = 34
 BASEMENT 2 = 55
 BASEMENT 3 = 57
 BASEMENT 4 = 57
 BASEMENT 5 = 57
 BASEMENT 6 = 57

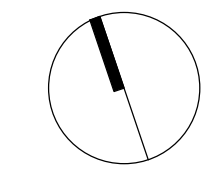
TOTAL CARPARK SPACES = 317

DEEP SOIL ZONE REQUIREMENTS
 7% OF SITE AREA (4970m²) = 348m²
AVAILABLE DEEP SOIL ZONE = 1,314m²



APPROVED STAGE 1 ENVELOPE DA/314/2017

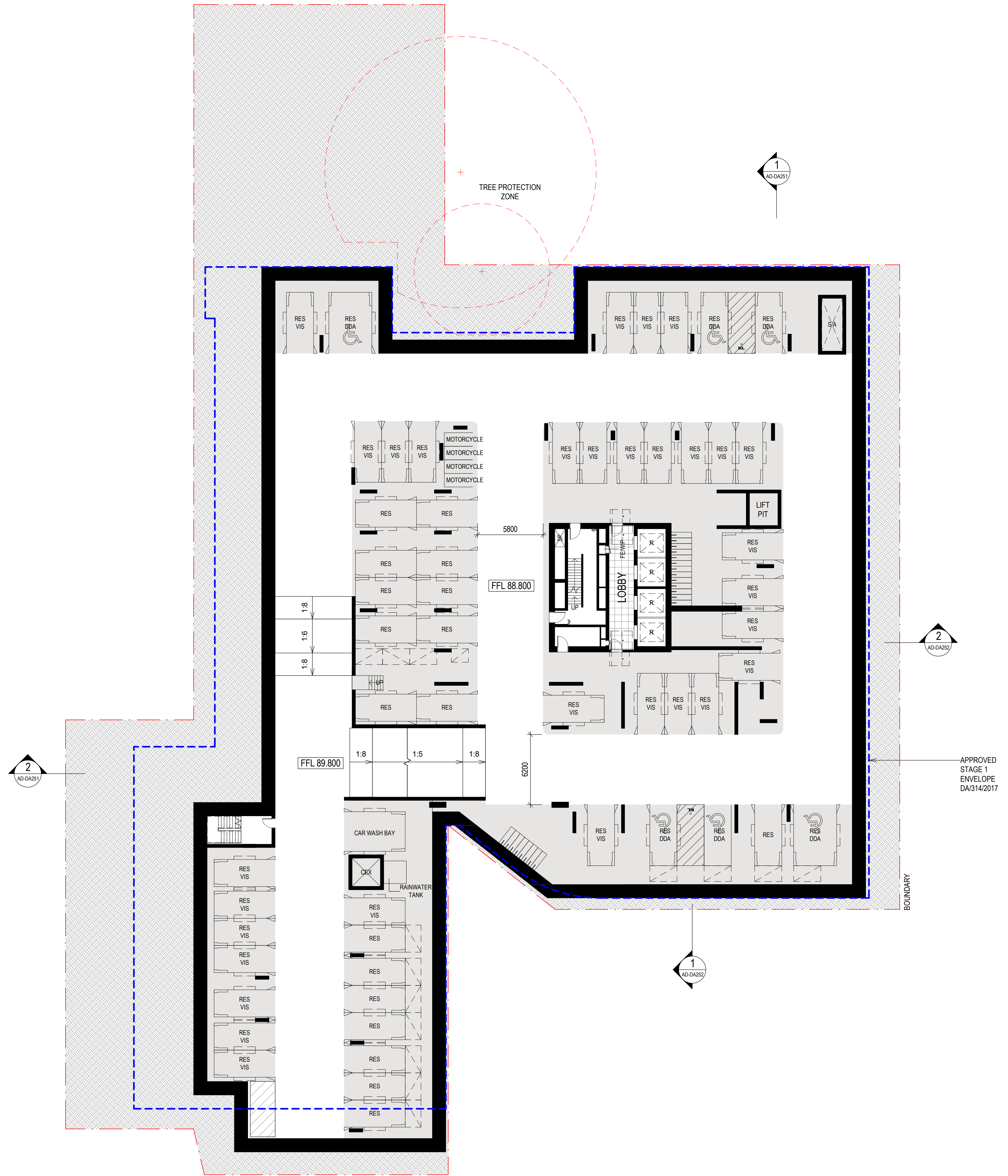
BOUNDARY



NOTES:
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AVAILABLE DEEP SOIL ZONE = 1,314m²

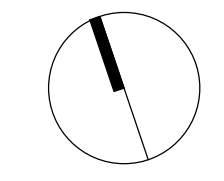
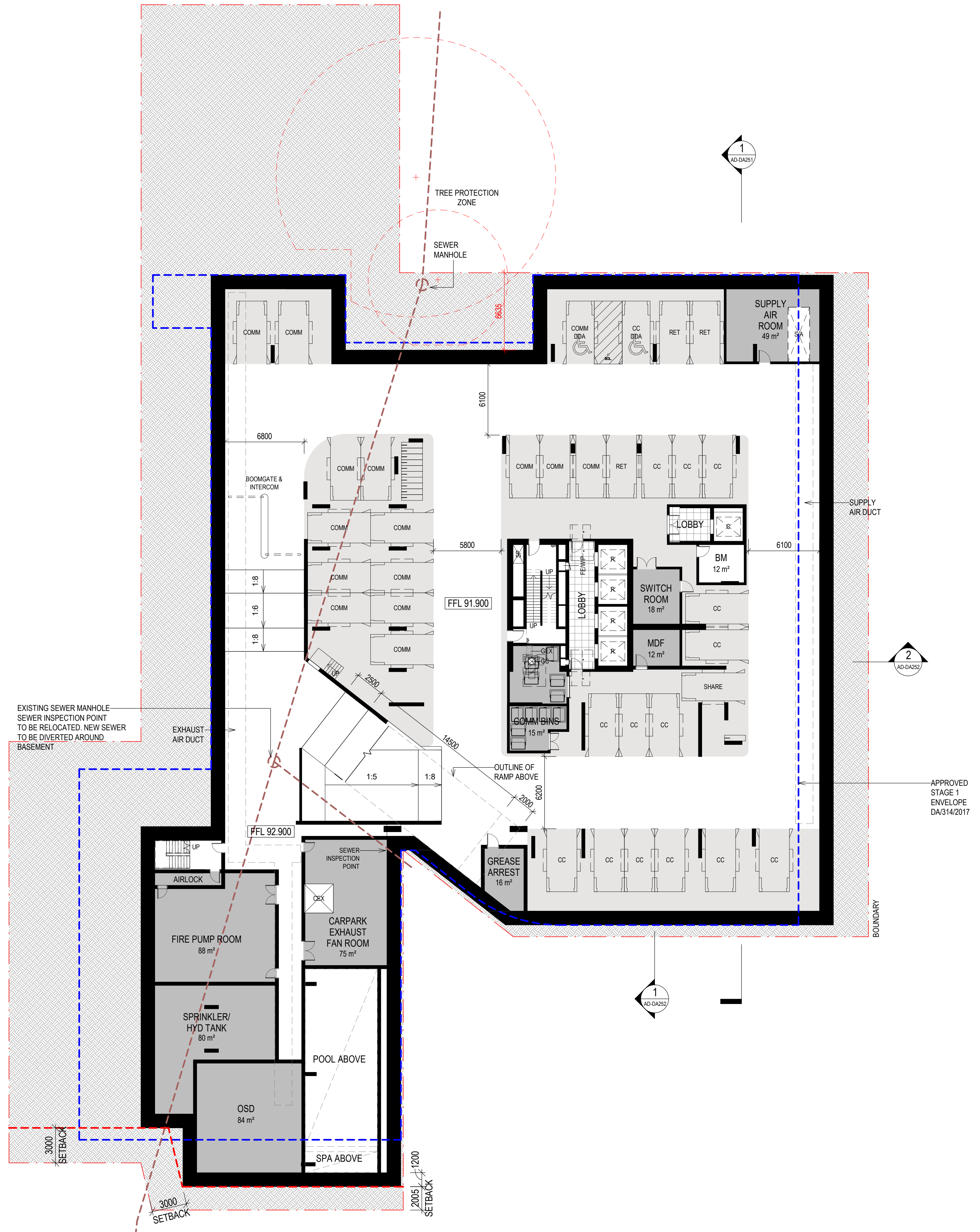


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 VISITORS (MINIMUM) = 31
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 GROUND FLOOR RETAIL = 3
 L1 OFFICES = 15
 1 x CARSHARE = 1

History

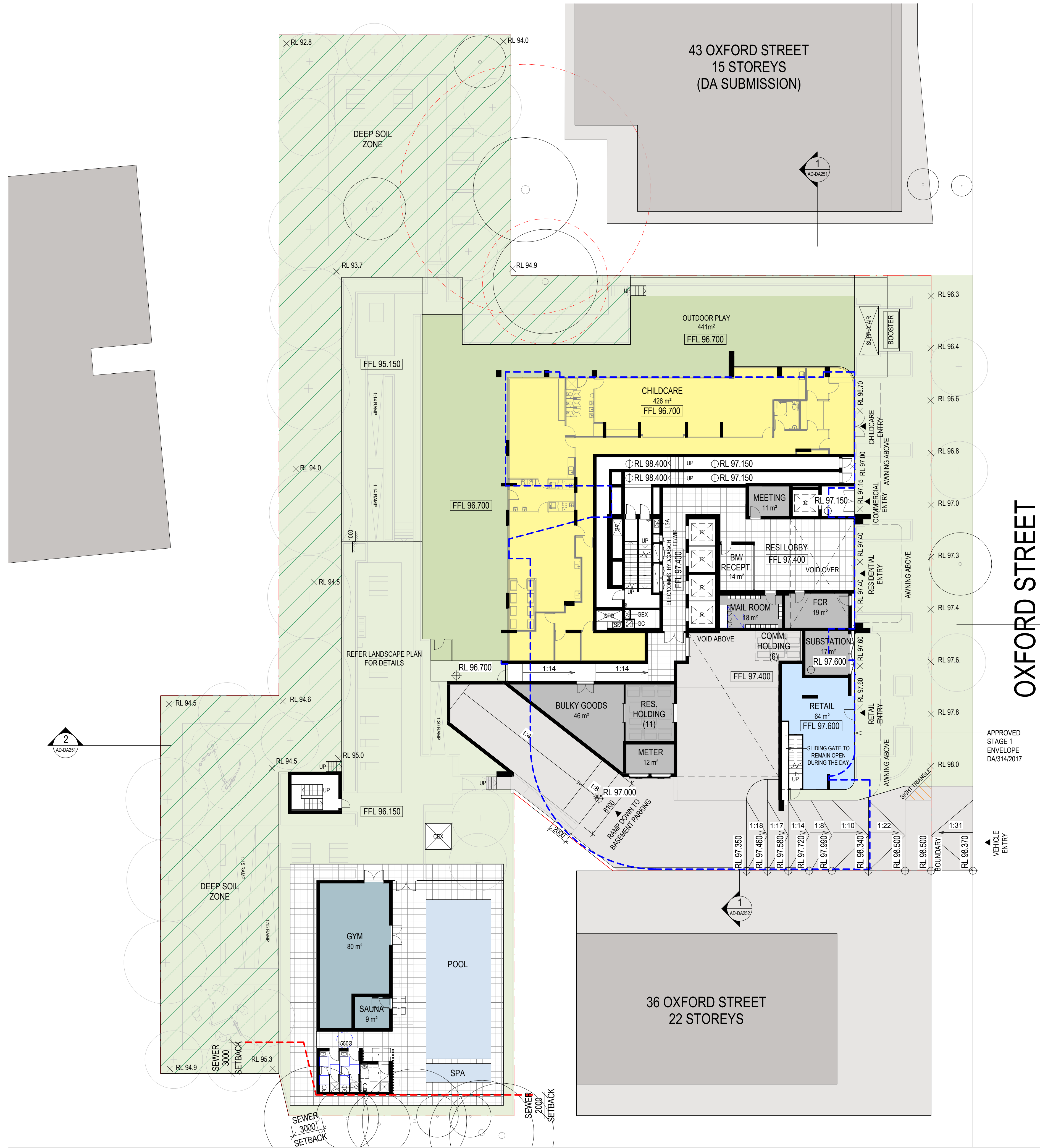
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 DEEP SOIL ZONE REQUIREMENTS
 7% OF SITE AREA (4970m²) = 348m²
AVAILABLE DEEP SOIL ZONE = 1,314m²



History

[Rev#]	[Description]	[Date]
2	FOR REVIEW	19.10.2021
3	DEVELOPMENT APPLICATION	26.10.2021
4	DEVELOPMENT APPLICATION	02.11.2021
5	DEVELOPMENT APPLICATION	04.11.2021



OXFORD STREET

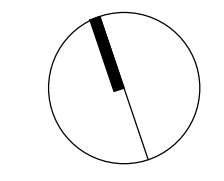
APPROVED STAGE 1 ENVELOPE DA/314/2017

COLOUR LEGEND

[Green]	OUTDOOR AREA
[Hatched Green]	DEEP SOIL ZONE
[Blue]	AMENITIES
[Yellow]	CHILDCARE
[Light Blue]	RETAIL
[Grey]	SERVICES

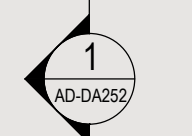
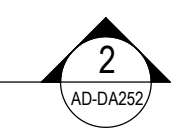
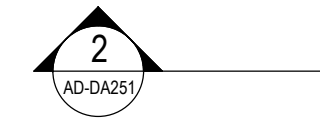
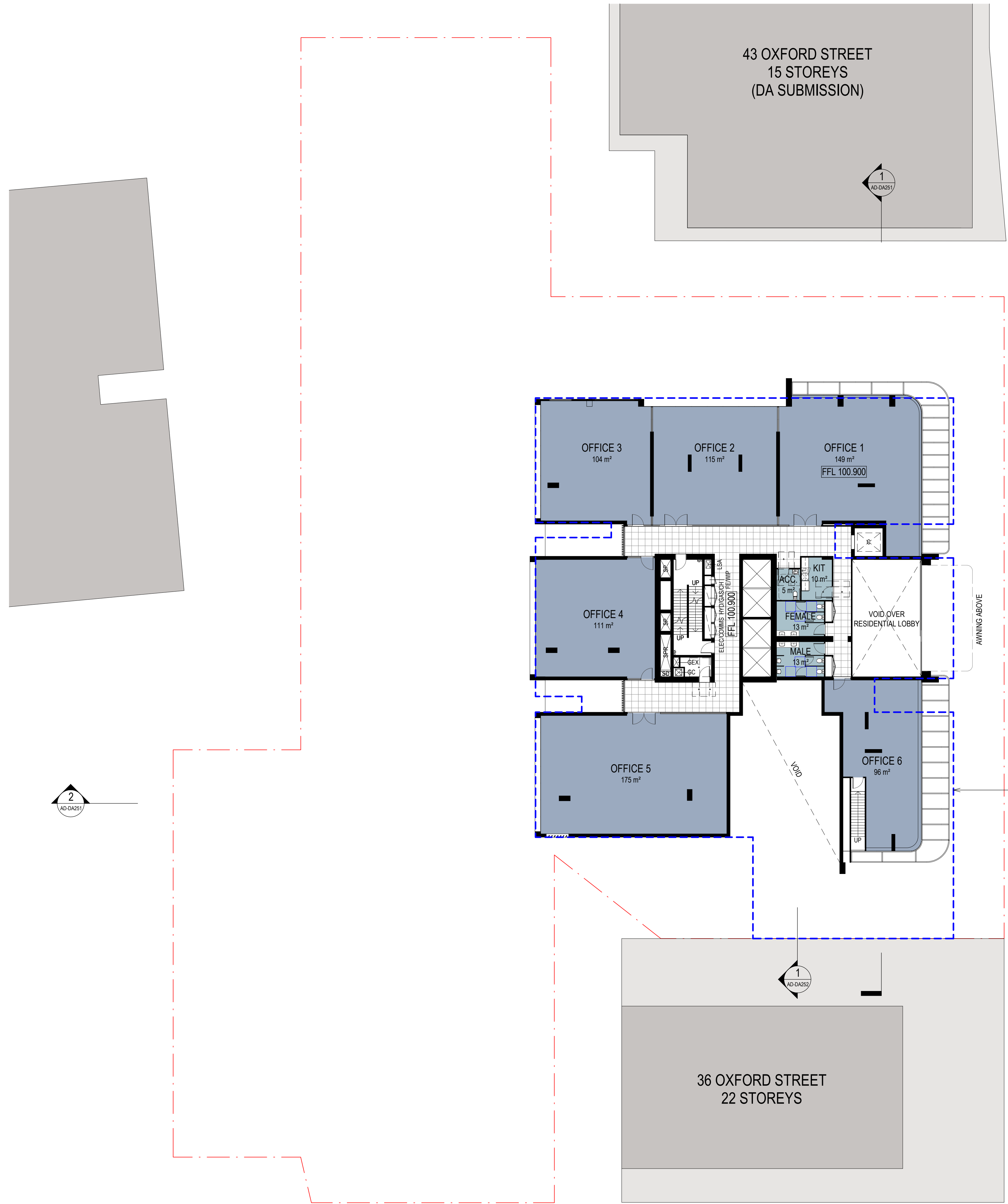
UNIT MIX

TYPE	NO. OF BATH	COUNT	MIX
1B+ST	1	43	20.4%
2B	1	24	11.4%
2B	2	100	47.4%
3B	2	42	19.9%
4B	2	2	0.9%
TOTAL:		211	100.0%



History

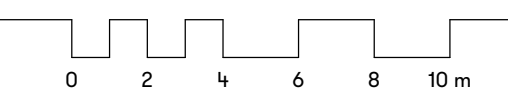
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L	FOR REVIEW	07.10.2021
1	FOR REVIEW	15.10.2021
2	FOR REVIEW	19.10.2021
3	DEVELOPMENT APPLICATION	26.10.2021



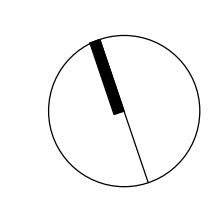
COLOUR LEGEND

- AMENITIES
- OFFICES

UNIT MIX			
TYPE	NO. OF BATH	COUNT	MIX
1B+ST	1	43	20.4%
2B	1	24	11.4%
2B	2	100	47.4%
3B	2	42	19.9%
4B	2	2	0.9%
TOTAL:		211	100.0%



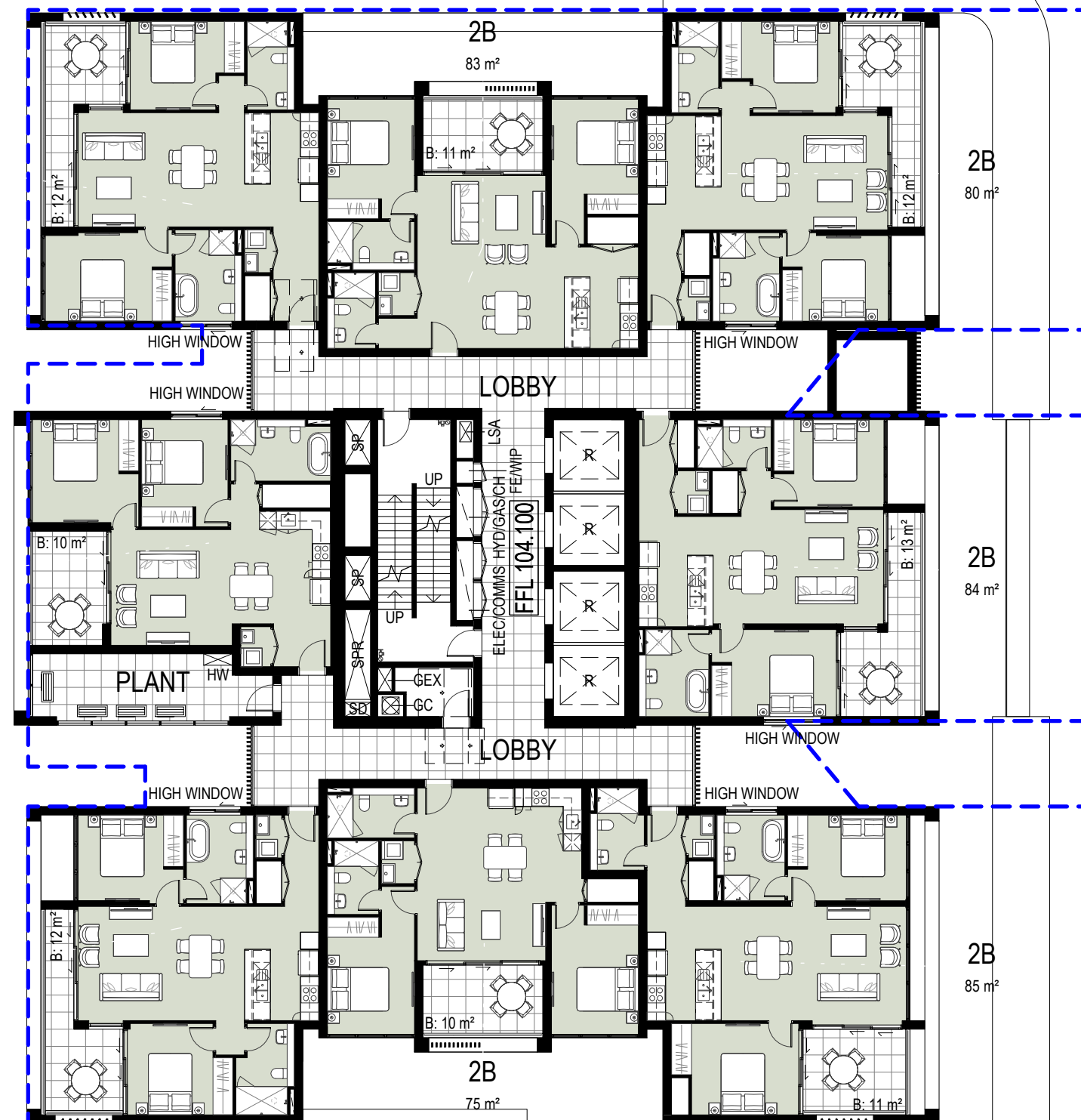
[Scale] 1 : 200 @ A1



History

[Rev#]	[Description]	[Date]
C	FOR REVIEW	07.10.2021
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43 OXFORD STREET
 15 STOREYS
 (DA SUBMISSION)



OXFORD STREET

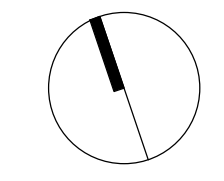
APPROVED STAGE 1 ENVELOPE DA/314/2017

36 OXFORD STREET
 22 STOREYS

LEGEND - UNIT COLOURS

- 1B+ST
- 2B
- 3B
- 4B

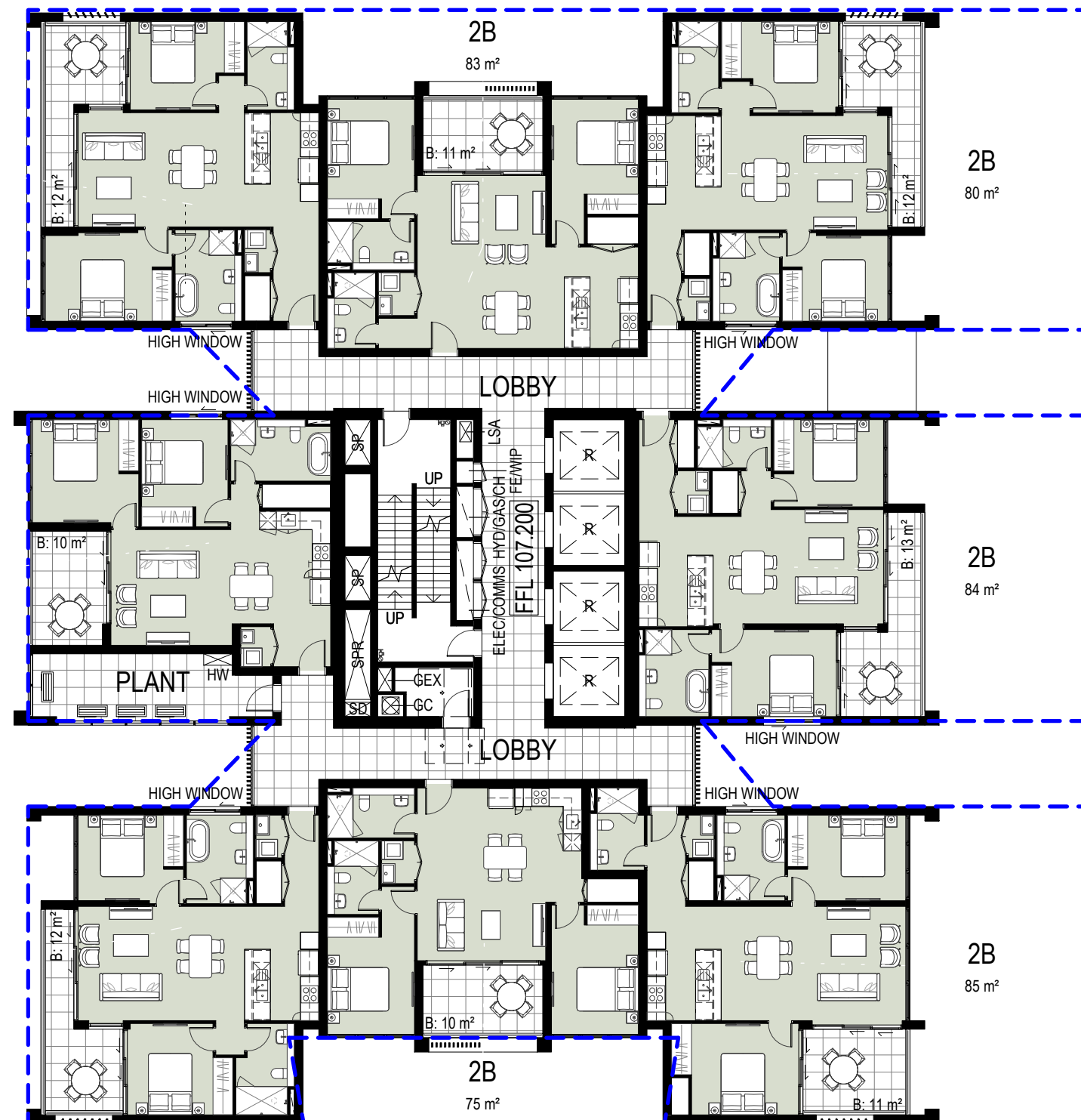
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2B	1	24	11.4%
2B	2	100	47.4%
3B	2	42	19.9%
4B	2	2	0.9%
TOTAL:		211	100.0%



History

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43 OXFORD STREET
 15 STOREYS
 (DA SUBMISSION)



OXFORD STREET

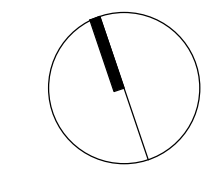
APPROVED STAGE 1 ENVELOPE DA/314/2017

36 OXFORD STREET
 22 STOREYS

LEGEND - UNIT COLOURS

- 1B+ST
- 2B
- 3B
- 4B

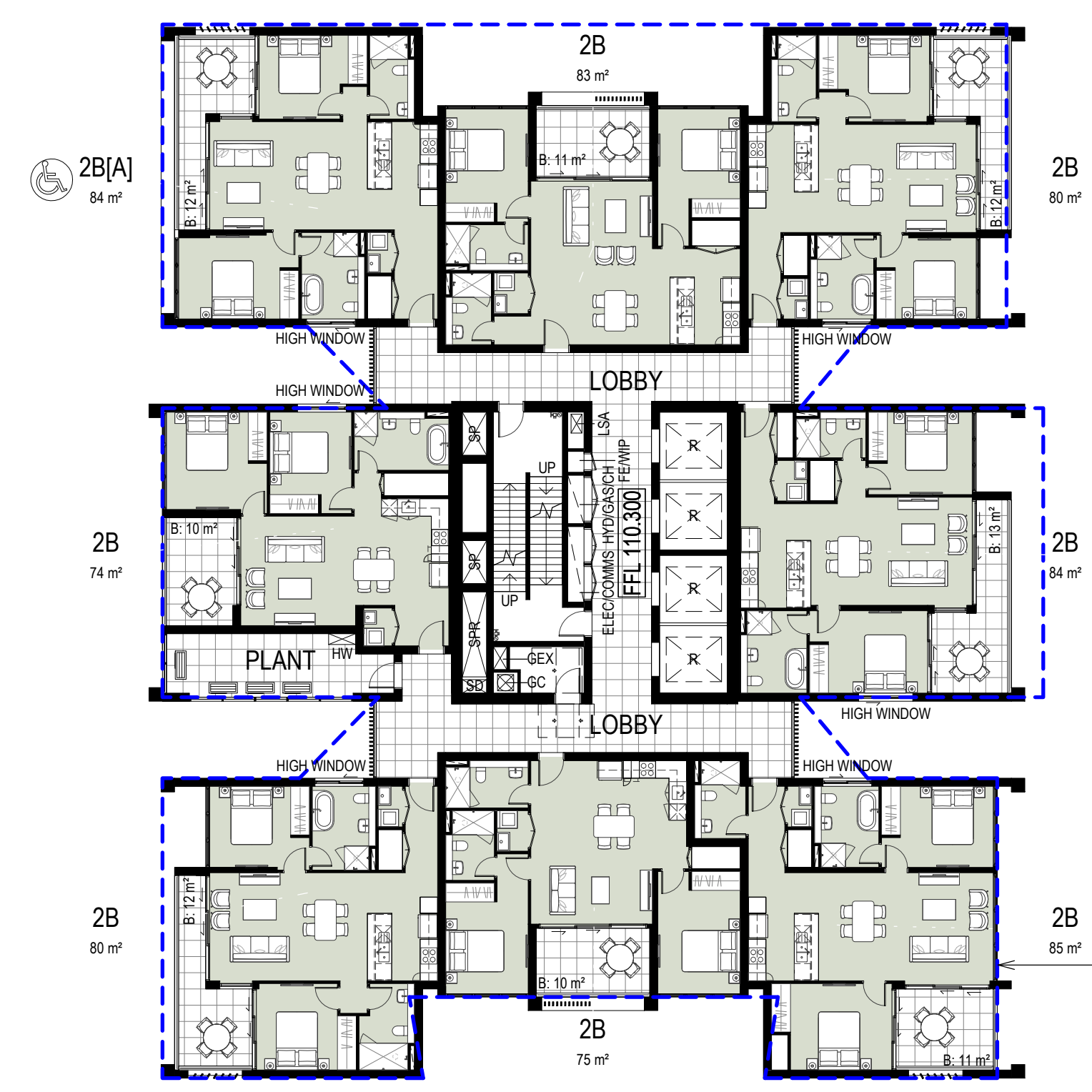
UNIT MIX			
TYPE	NO. OF BATH	COUNT	MIX
1B+ST	1	43	20.4%
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2B	2	100	47.4%
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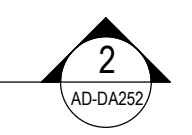
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43 OXFORD STREET
 15 STOREYS
 (DA SUBMISSION)



OXFORD STREET



APPROVED ENVELOPE AS PER DA/314/2017

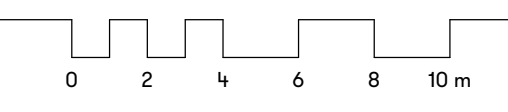
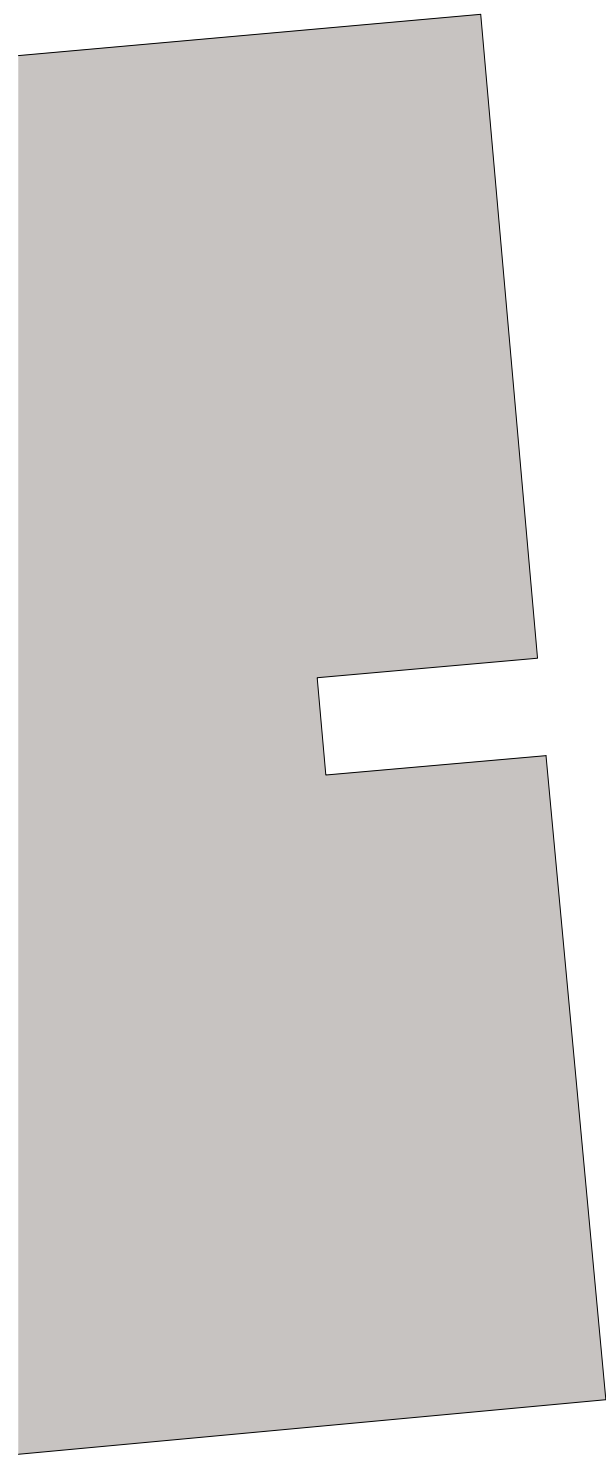
36 OXFORD STREET
 22 STOREYS



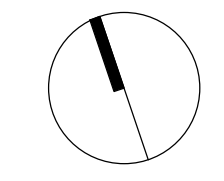
LEGEND - UNIT COLOURS

- 1B+ST
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TOTAL:		211	100.0%



[Scale] 1 : 200 @ A1



History

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43 OXFORD STREET
 15 STOREYS
 (DA SUBMISSION)

36 OXFORD STREET
 22 STOREYS

OXFORD STREET

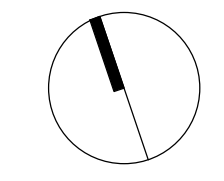
APPROVED
 STAGE 1
 ENVELOPE
 DA/314/2017



LEGEND - UNIT COLOURS

- 1B+ST
- 2B
- 3B
- 4B

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TOTAL:		211	100.0%



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43 OXFORD STREET
 15 STOREYS
 (DA SUBMISSION)

36 OXFORD STREET
 22 STOREYS

OXFORD STREET



APPROVED STAGE 1 ENVELOPE DA/314/2017

LEGEND - UNIT COLOURS

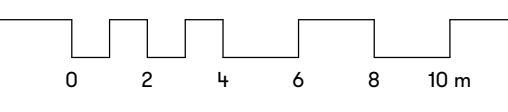
- 1B+ST
- 2B
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TOTAL:		211	100.0%

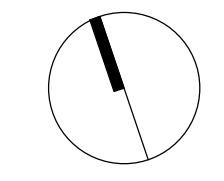


Level One, One Chifley Square Sydney NSW 2000 Australia
 www.scottcarver.com.au +61 2 9957 3988

[Project] 37-41 OXFORD STREET, EPPING
 [Client] MERITON



[Scale] 1 : 200 @ A1



FLOOR PLAN LEVEL 19-24 (TYPICAL)

[Ref] 20200100 [Dwg No] AD-DA119 [Rev] 3

History

[Rev#]	[Description]	[Date]
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43 OXFORD STREET
 15 STOREYS
 (DA SUBMISSION)



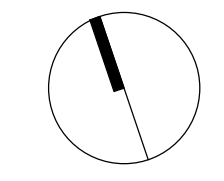
OXFORD STREET

APPROVED STAGE 1 ENVELOPE DA/314/2017

LEGEND - UNIT COLOURS

- 1B+ST
- 2B
- 3B
- 4B

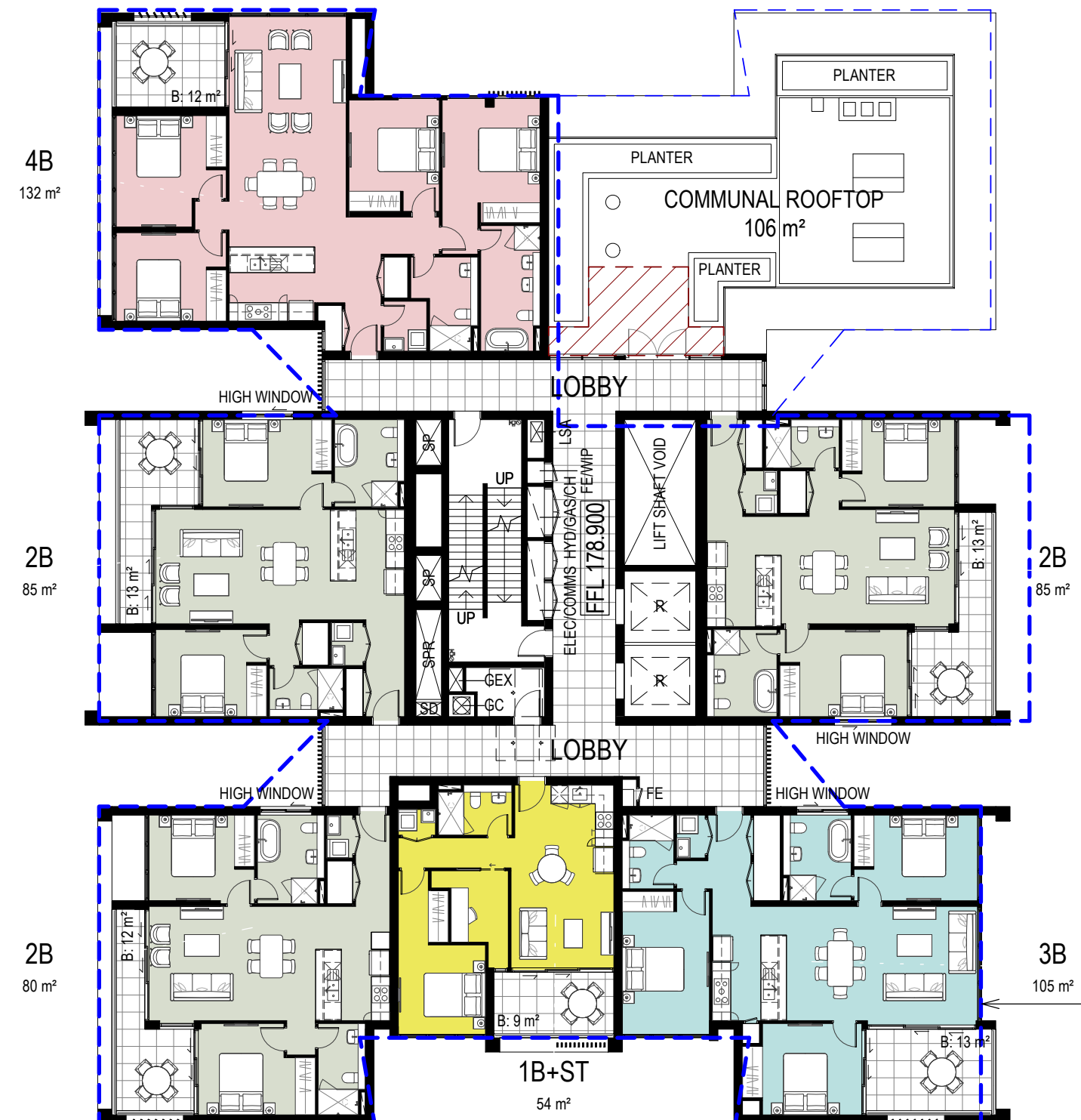
UNIT MIX			
TYPE	NO. OF BATH	COUNT	MIX
1B+ST	1	43	20.4%
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TOTAL:		211	100.0%



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43 OXFORD STREET
 15 STOREYS
 (DA SUBMISSION)



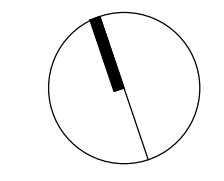
OXFORD STREET

APPROVED STAGE 1 ENVELOPE DA/314/2017

LEGEND - UNIT COLOURS

- 1B+ST
- 2B
- 3B
- 4B

UNIT MIX			
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TOTAL:		211	100.0%



History

[Rev#]	[Description]	[Date]
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3	DEVELOPMENT APPLICATION	26.10.2021

43 OXFORD STREET
 15 STOREYS
 (DA SUBMISSION)



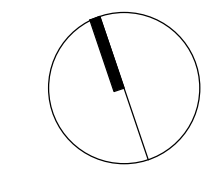
OXFORD STREET

36 OXFORD STREET
 22 STOREYS

LEGEND - UNIT COLOURS

- 1B+ST
- 2B
- 3B
- 4B

UNIT MIX			
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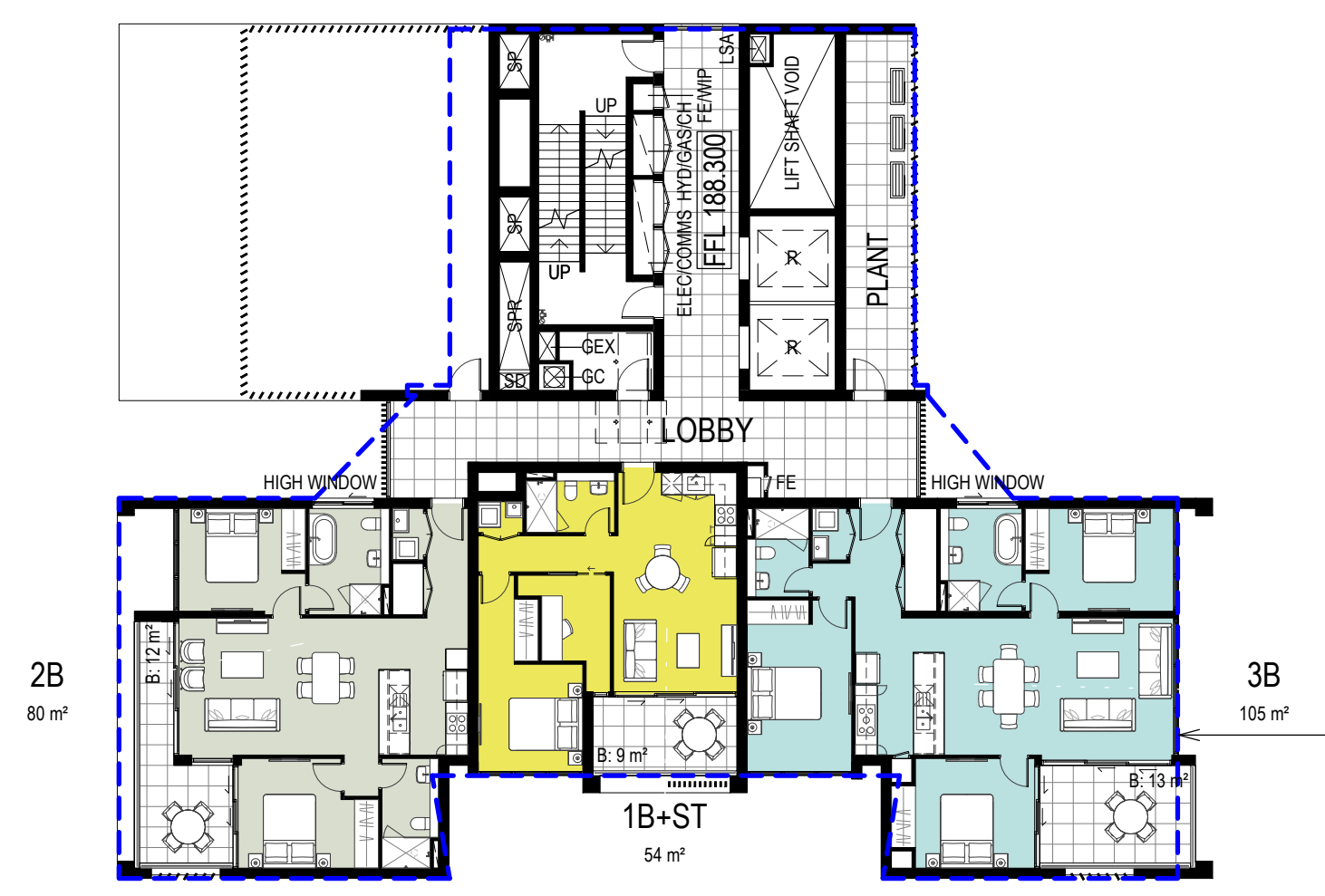
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43 OXFORD STREET
 15 STOREYS
 (DA SUBMISSION)

36 OXFORD STREET
 22 STOREYS

OXFORD STREET



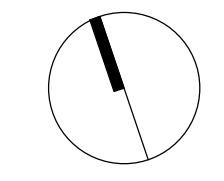
BOUNDARY

APPROVED STAGE 1 ENVELOPE DA/314/2017

LEGEND - UNIT COLOURS

- 1B+ST
- 2B
- 3B
- 4B

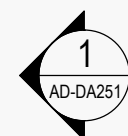
UNIT MIX			
TYPE	NO. OF BATH	COUNT	MIX
1B+ST	1	43	20.4%
2B	1	24	11.4%
2B	2	100	47.4%
3B	2	42	19.9%
4B	2	2	0.9%
TOTAL:		211	100.0%



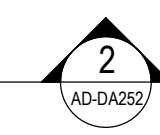
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1	FOR REVIEW	15.10.2021
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43 OXFORD STREET
 15 STOREYS
 (DA SUBMISSION)



OXFORD STREET



LIFT OVERRUN AS PER APPROVED STAGE 1 ENVELOPE DA/314/2017

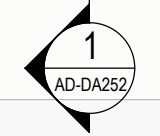
APPROVED STAGE 1 ENVELOPE DA/314/2017

RL 191.550

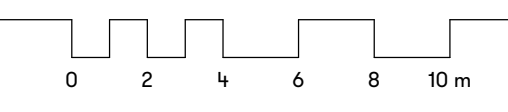
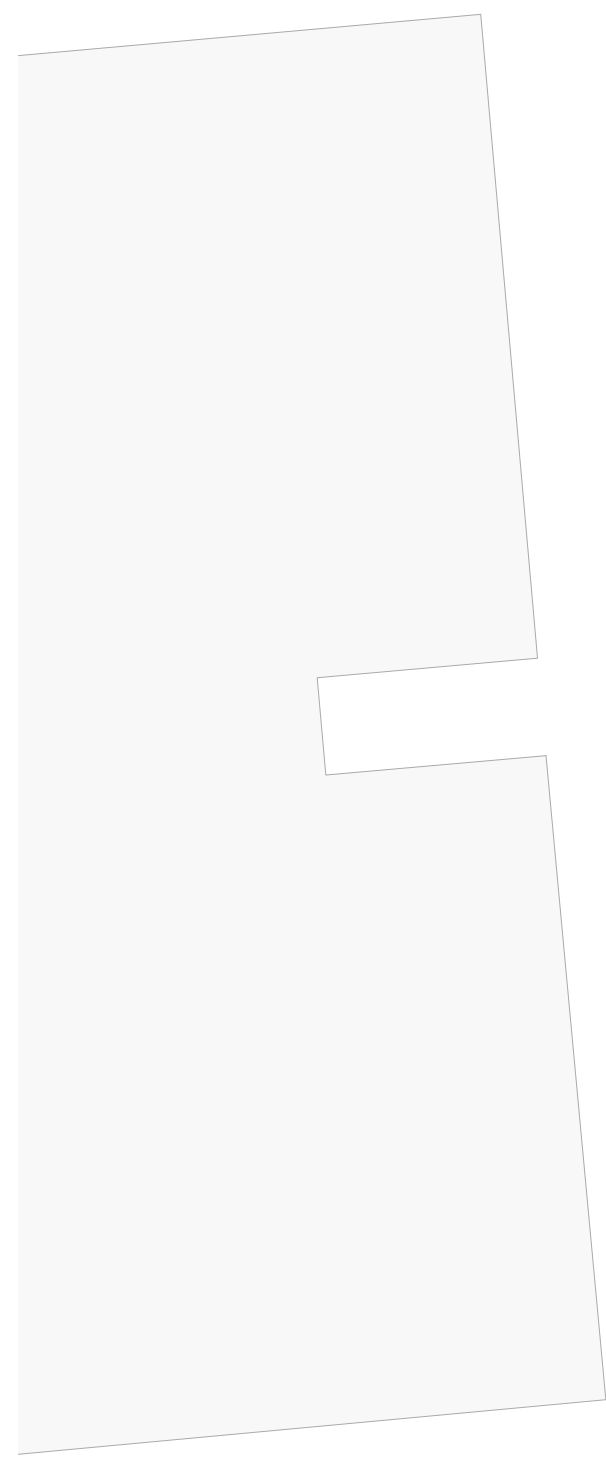
ACCESS HATCH

LIFT OVERRUN RL 194.150

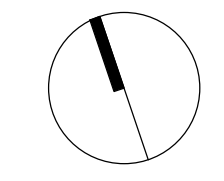
36 OXFORD STREET
 22 STOREYS



UNIT MIX			
TYPE	NO. OF BATH	COUNT	MIX
1B+ST	1	43	20.4%
2B	1	24	11.4%
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TOTAL:		211	100.0%



[Scale] 1 : 200 @ A1

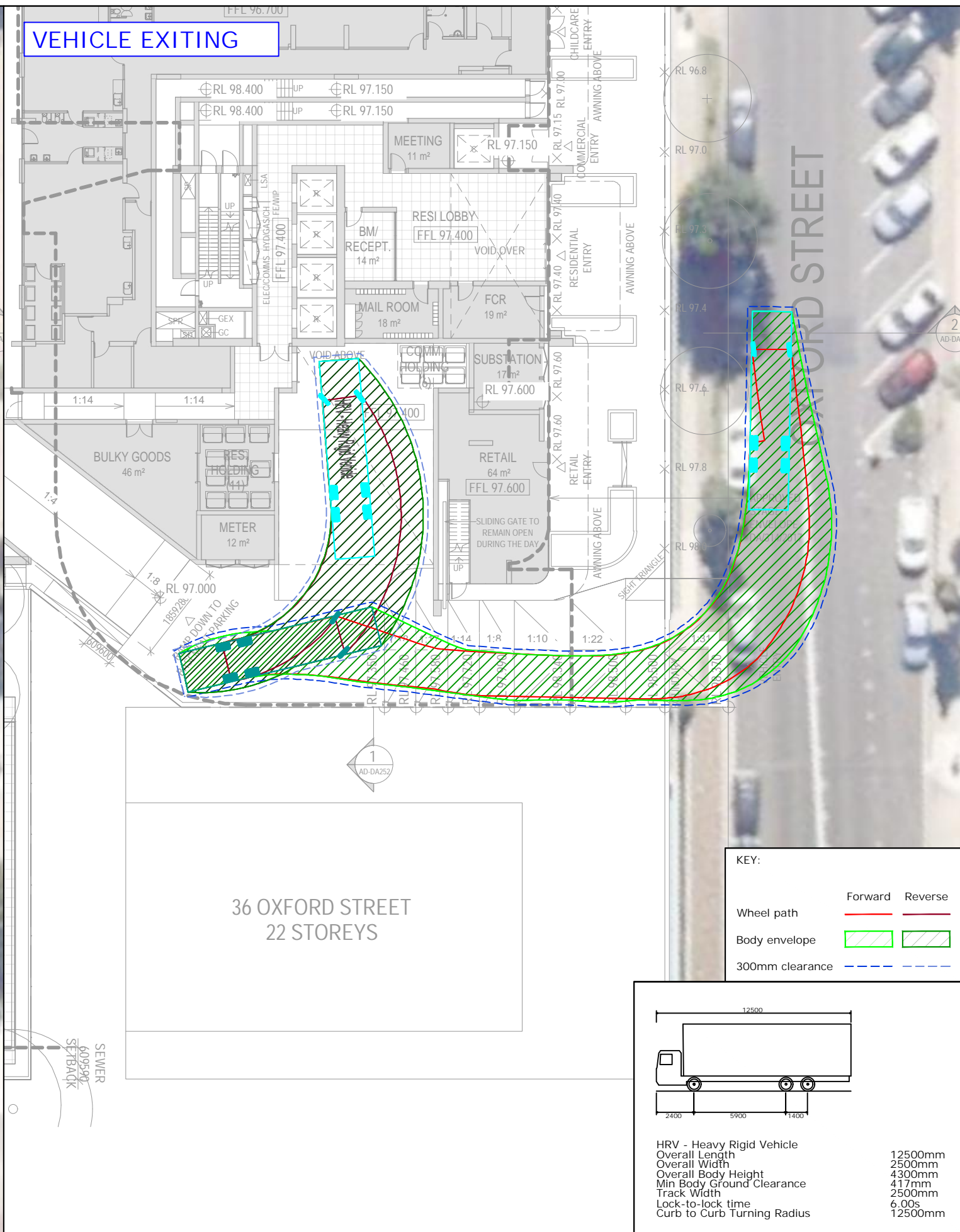
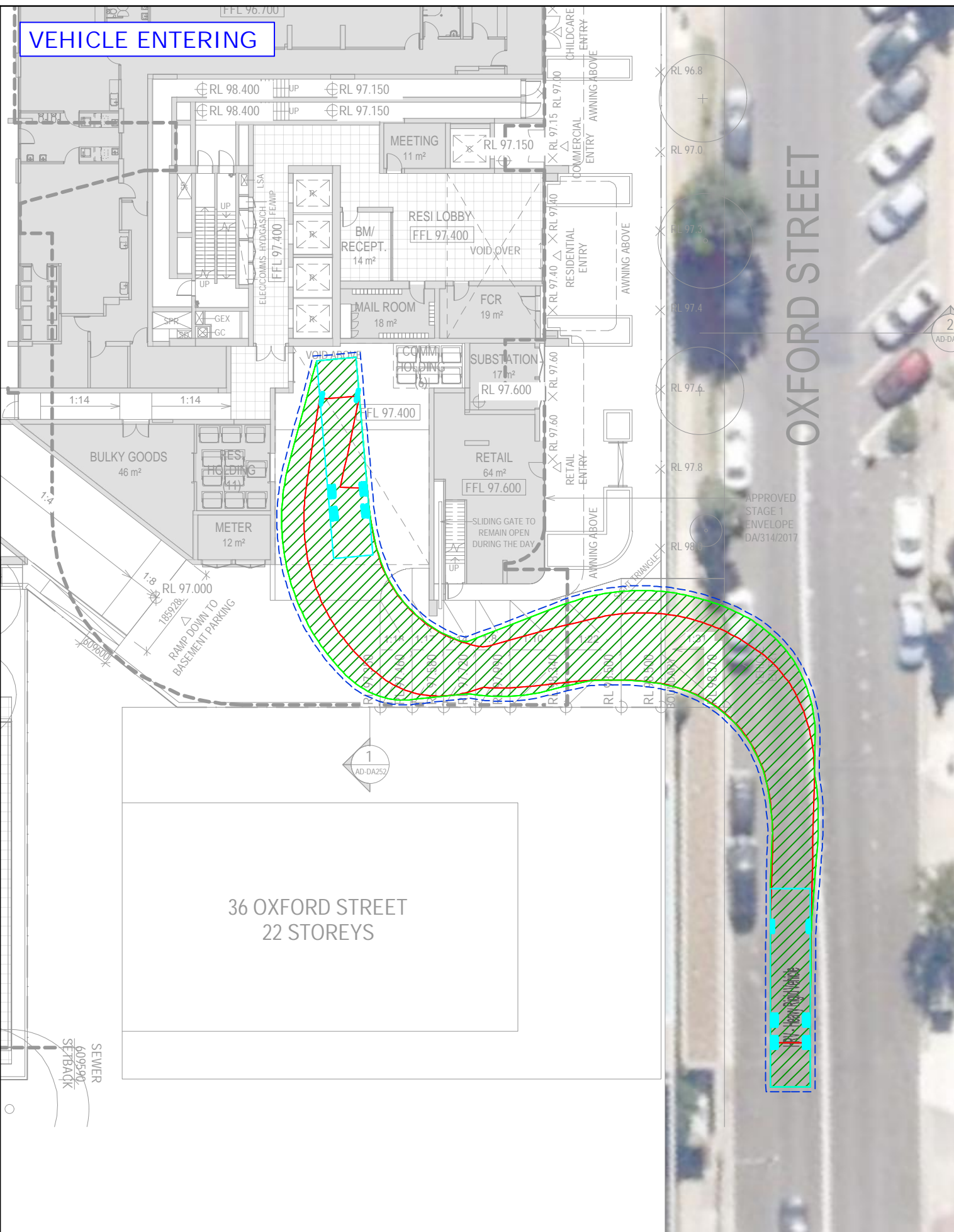


Appendix B

Swept Path Diagrams

VEHICLE ENTERING

VEHICLE EXITING

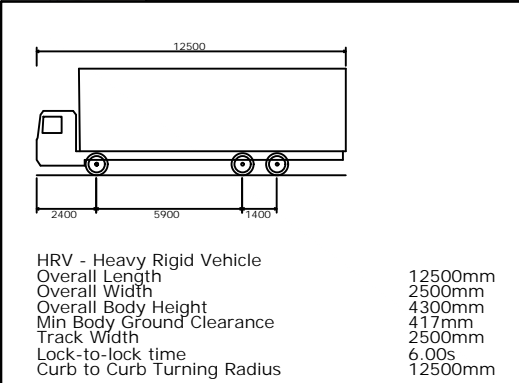


36 OXFORD STREET
22 STOREYS

36 OXFORD STREET
22 STOREYS

KEY:

Wheel path	Forward	Reverse
Body envelope		
300mm clearance		



Date: 31 October 2021
By: LHM
6095900
SEWER
SEFBACK

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	KM	KY	KH	31/10/21



PROJECT: 37-41 OXFORD STREET, EPPING

TITLE: SWEPT PATH ANALYSIS - FORWARD IN, REVERSE OUT
AS2890.2 12.5m HEAVY RIGID VEHICLE

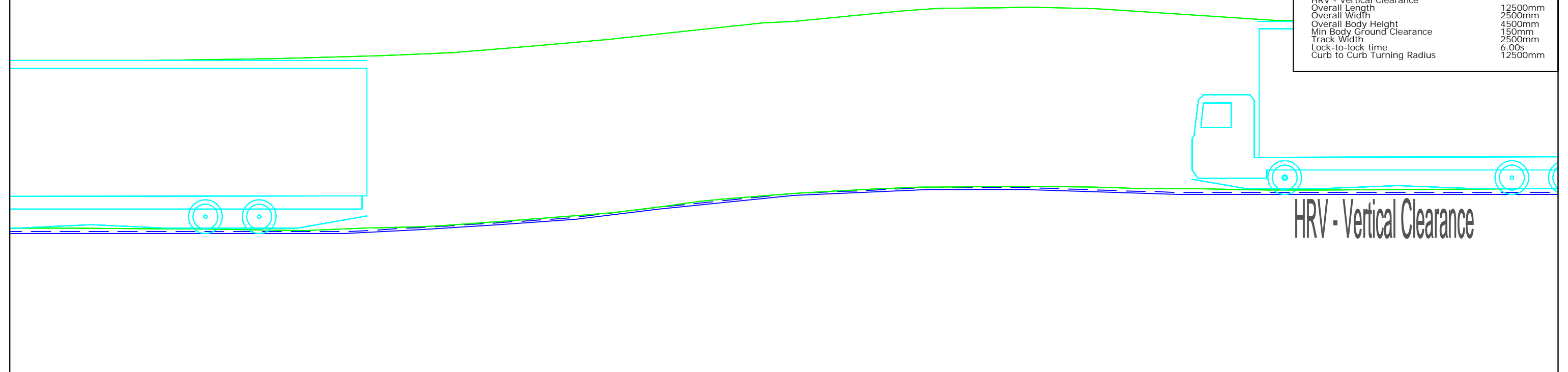
DWG No.	21111CAD006	
	FIGURE 1	
DATE STAMP	31 OCTOBER 2021	
PROJECT No.	SCALE	REV.
21111	1:300 @A3	A

VEHICLE ENTERING

KEY:

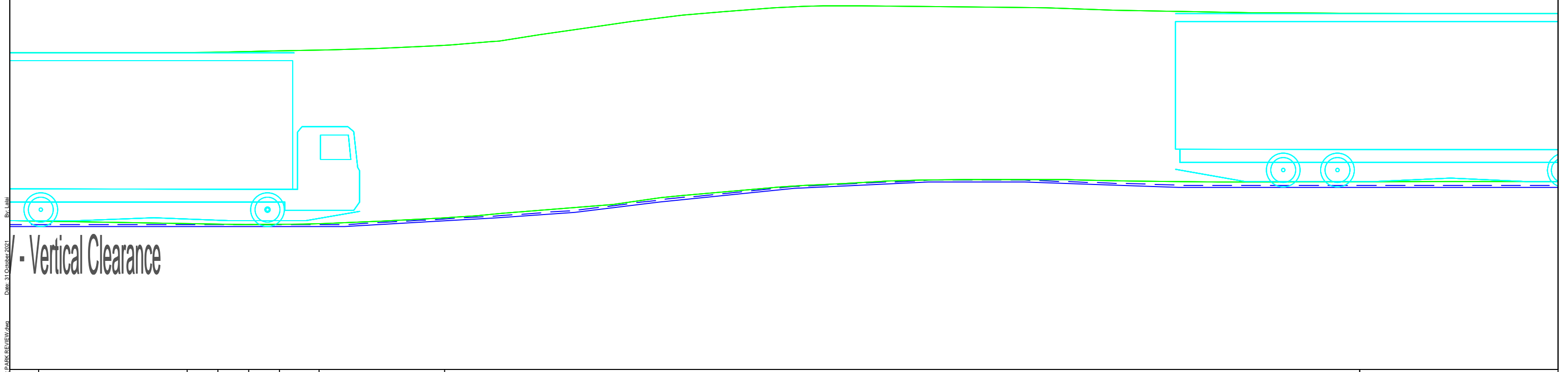
- Vertical Clearance
- Driveway / Ramp Profile
- 50mm Clearance from Surface

HRV - Vertical Clearance
 Overall Length 12500mm
 Overall Width 2500mm
 Overall Body Height 4500mm
 Min Body Ground Clearance 150mm
 Track Width 2500mm
 Lock-to-lock time 6.00s
 Curb to Curb Turning Radius 12500mm



HRV - Vertical Clearance

VEHICLE EXITING



HRV - Vertical Clearance

Date: 31 October 2021
By: Lahl
Filename: 21111CAD006-21031-CARE PARK REVIEW.dwg

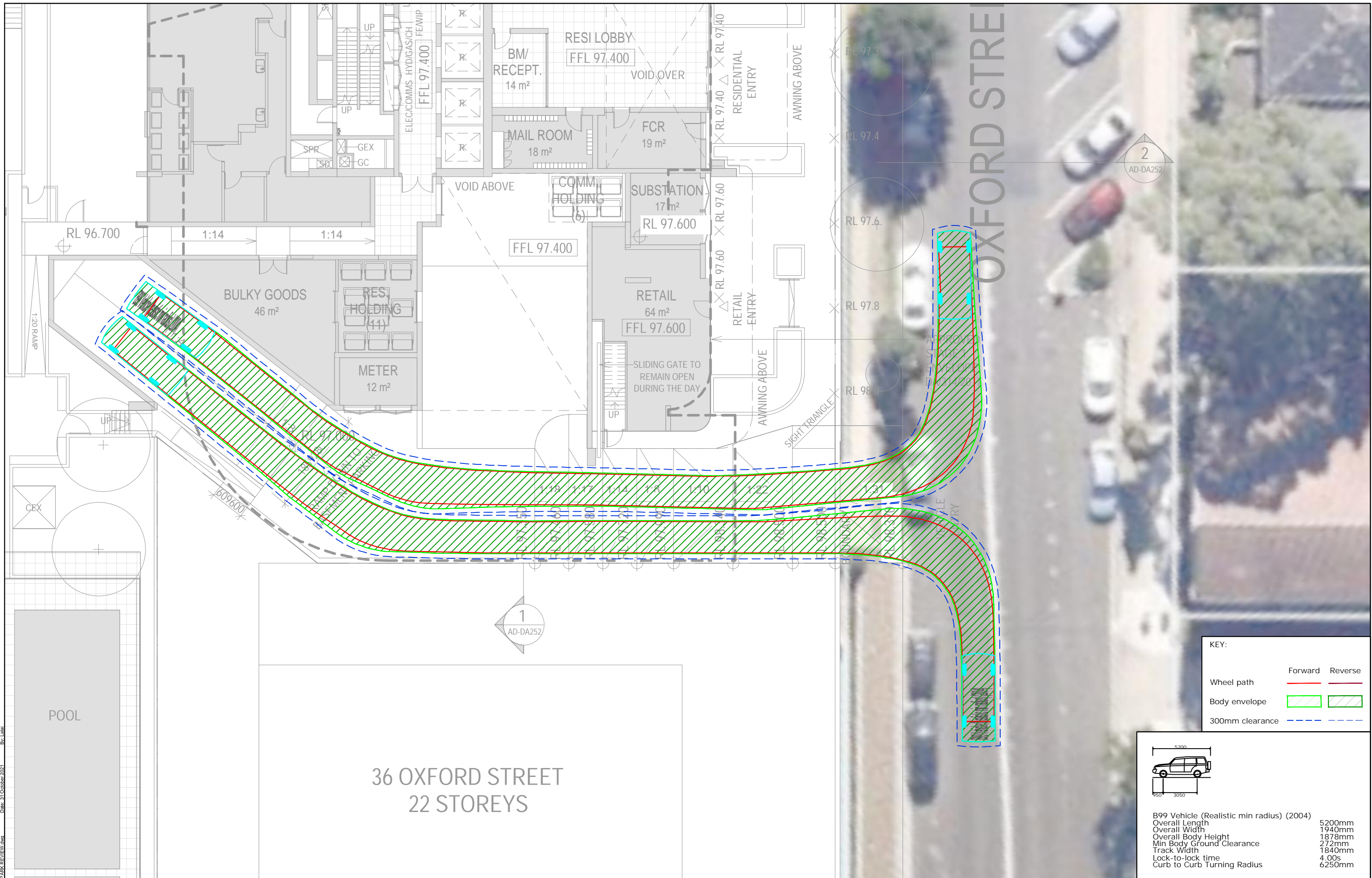
REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	KM	KY	KH	31/10/21



PROJECT
 37-41 OXFORD STREET, EPPING

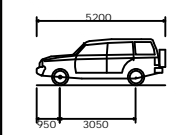
TITLE
 GROUND CLEARANCE ASSESSMENT - ACCESS RAMP TO LOADING DOCK
 AS2890.2 12.5m HEAVY RIGID VEHICLE

DWG No. 21111CAD006		REV. A
FIGURE 2		
DATE STAMP 31 OCTOBER 2021		
PROJECT No. 21111	SCALE 1:100 @A3	



KEY:

Wheel path	Forward	Reverse
Body envelope		
300mm clearance		



B99 Vehicle (Realistic min radius) (2004)

Overall Length	5200mm
Overall Width	1940mm
Overall Body Height	1878mm
Min Body Ground Clearance	272mm
Track Width	1840mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6250mm

36 OXFORD STREET
22 STOREYS

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	KM	KY	KH	31/10/21

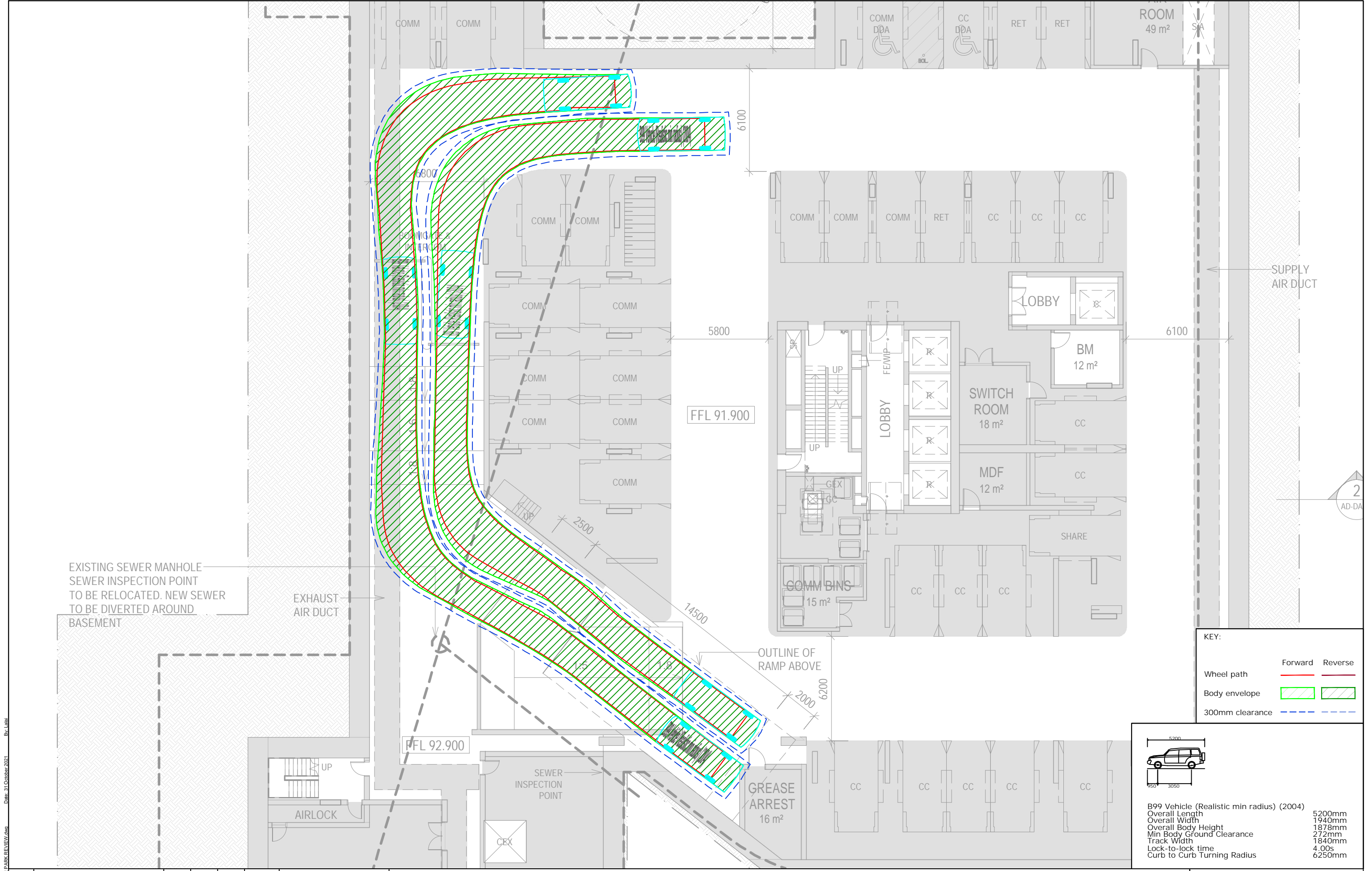


PROJECT: 37-41 OXFORD STREET, EPPING

TITLE: SWEPT PATH ANALYSIS - GROUND LEVEL
AS2890.1 5.2m B99 VEHICLE

DWG No.	21111CAD006		
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DATE STAMP	31 OCTOBER 2021		
PROJECT No.	SCALE	REV.	
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Date: 31 October 2021
File: 21111CAD006-21031-CARE PARK REVIEW.dwg

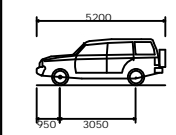


EXISTING SEWER MANHOLE
SEWER INSPECTION POINT
TO BE RELOCATED. NEW SEWER
TO BE DIVERTED AROUND
BASEMENT

EXHAUST
AIR DUCT

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		



B99 Vehicle (Realistic min radius) (2004)
 Overall Length 5200mm
 Overall Width 1940mm
 Overall Body Height 1878mm
 Min Body Ground Clearance 272mm
 Track Width 1840mm
 Lock-to-lock time 4.00s
 Curb to Curb Turning Radius 6250mm

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	KM	KY	KH	31/10/21



PROJECT
37-41 OXFORD STREET, EPPING

TITLE
**SWEPT PATH ANALYSIS - BASEMENT 1
 AS2890.1 5.2m B99 VEHICLE**

DWG No. 21111CAD006		REV. A
FIGURE 4		
DATE STAMP 31 OCTOBER 2021		
PROJECT No. 21111	SCALE 1:200 @A3	

Date: 31 October 2021
 File: 21111CAD006-21031-CARE PARK REVIEW.dwg

The Transport Planning Partnership
Suite 402 Level 4, 22 Atchison Street
St Leonards NSW 2065

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St Leonards NSW 1590

02 8437 7800

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