



NOISE IMPACT ASSESSMENT

PROPOSED MERIVALE HOTEL DEVELOPMENT

70 MERIVALE STREET

SOUTH BRISBANE

Prepared for:
Merivale No 1 Unit Trust

Prepared by:
MWA Environmental

22 July 2026

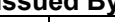
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1.0 INTRODUCTION

1.1 STUDY BRIEF

MWA Environmental has been engaged to prepare a Noise Impact Assessment for the proposed Merivale Hotel development that comprises food and drink, restaurant, gym, wellness and residential uses at 70 Merivale Street, South Brisbane.

This report considers potential noise amenity impacts at on-site and surrounding sensitive land uses from plant and equipment noise, service vehicle and loading noise, amplified music noise, patron noise and car parking noise emissions from the proposed development.

The assessment is based on ambient noise monitoring conducted at the site, noise measurements previously conducted on typical sources associated with the proposed uses and detailed noise propagation modelling.

1.2 SITE DESCRIPTION

The subject site is located at 70 Merivale Street, South Brisbane and has a real property description of Lot 97 on B3137.

The site and surrounding land are zoned MU1 Mixed use (Inner city) under CityPlan 2014.

The site is bounded by Merivale Street to the northeast. The nearest residential uses to the proposed development are located adjacent the site to the southeast, south and west. Commercial uses are located to the northwest and northeast (across Merivale Street).

The site location and surrounding land uses are shown on the aerial photo included as **Figure 1** with land use zoning shown on **Figure 2**.

1.3 PROPOSED DEVELOPMENT

The proposed Merivale Hotel development includes food and drink, restaurant, gym, wellness and residential uses in an 18 storey building. The Merivale Hotel will link to the existing Novotel Hotel located to the west.

The proposed development consists of the following floor level particulars:

Basement

- Car parking within the existing Novotel carpark and a proposed basement level carpark extension to provide an additional 12 spaces.
- Basement access via the existing Novotel Hotel basement carpark which is accessed via a driveway from Cordelia Street.

Ground Floor

- Laneway access to Merivale Street and the existing Novotel Hotel
- All day dining tenancy with a capacity of 104 PAX inside and 20 PAX outdoor at the laneway.
- Reception, office and storage rooms.

Mezzanine Level

- Service rooms and 20 PAX meeting room.

Level 02

- Staff offices, meeting room and dining area and service rooms.

Level 03 to Level 14

- Hotel rooms

Level 15

- Wellness floor that includes plunge pools, lounge, gym, sauna and steam rooms and pool area.

Level 16

- Restaurant including kitchen and bar areas, indoor dining and covered outdoor dining areas. The restaurant capacity is 60 PAX indoor dining, 10 PAX private dining and 55 PAX covered outdoor dining.

Mechanical Plant

- Mechanical plant rooms located at the sub floor level and roof level.

The proposed development plans are included as **Attachment 1**.

It is noted that the development will utilise existing Novotel Hotel basement car parking spaces and the existing Novotel Hotel loading areas. An additional 12 carparking spaces are proposed for the development within a basement level and thus will be acoustically screened to on-site and surrounding residential uses.

The proposed operating hours for relevant development uses are as follows:

- Level 15 guest-only gym and wellness area – 24 hour access.
- Ground Floor all day dining tenancies – 6am to 11pm.
- Level 16 restaurant – 11am to 12midnight.

2.0 EXISTING NOISE ENVIRONMENT

MWA Environmental conducted noise measurements to obtain information about the existing acoustic environment at the site and surrounding land uses. Site inspections and noise measurements demonstrate that the dominant existing noise influence on the site and immediate surrounds is traffic noise on surrounding roadways and noise influence from surrounding commercial land uses including mechanical plant.

Noise measurements were conducted using a noise datalogger which was placed on the north eastern part of the site as indicated on **Figure 3**. The noise datalogger used was a Norsonic NOR-139 noise datalogger, programmed to provide statistical analysis results based on 15-minute sampling periods from 29 July to 5 August 2024. The datalogger was pre-calibrated to 94 dB at 1kHz using a Bruel & Kjaer Sound Level Calibrator, Type 4231, and displayed a deviation of less than ± 0.5 dB from this level at post-calibration.

The recorded noise levels are presented as statistical components, which are described as:

- $L_{\max}$: Maximum noise level recorded during the measurement period, referred to as the maximum sound pressure level.
- L_{10} : Noise level exceeded for 10 percent of the measurement period, referred to as the averaged maximum sound pressure level.
- L_{90} : Noise level exceeded for 90 percent of the measurement period. AS1055-2018 ¹ notes that the L_{90} is described as the background sound pressure level.
- L_{eq} : An “average” measurement, and as per AS1055-2018 defined as the value of the sound pressure level of a continuous steady sound state, that within a measurement period, has the same mean square sound pressure as a sound under consideration whose level varies with time.

Table 1 below provides the minimum, maximum and average statistical noise levels recorded by the noise datalogger.

¹ Australian Standard AS 1055-2018 *Acoustics – Description and measurement of environmental noise, Part 1: General procedures*

**Table 1: Ranges of Site Recorded Noise Levels
29 July to 5 August 2024**

PARAMETER	PERIOD	RECORDED NOISE LEVELS - dB(A)		
		MINIMUM	MAXIMUM	AVERAGE
L_{max}	Daytime (7am-6pm)	73.9	110.4	80.5
	Evening (6pm-10pm)	74.0	96.3	80.8
	Nighttime (10pm-7am)	70.7	105.2	79.3
L₁₀	Daytime (7am-6pm)	67.9	76.6	71.7
	Evening (6pm-10pm)	67.7	73.8	71.2
	Nighttime (10pm-7am)	50.9	75.7	67.9
L₉₀	Daytime (7am-6pm)	54.4	64.7	57.7
	Evening (6pm-10pm)	45.3	60.2	52.7
	Nighttime (10pm-7am)	41.8	59.3	46.4
L_{eq}	Daytime (7am-6pm)	63.6	81.0	66.9
	Evening (6pm-10pm)	62.3	70.4	65.6
	Nighttime (10pm-7am)	51.0	78.1	61.4

The datalogger recorded noise levels are included as graphical traces of noise level versus time for the statistical noise level descriptors L_{max}, L₁₀, L₉₀ and L_{eq} as **Attachment 2**.

Key statistical noise level parameters included:

Rating Background Level – Daytime	=	56 dB(A)
Rating Background Level – Evening	=	49 dB(A)
Rating Background Level – Night	=	43 dB(A)

3.0 NOISE CRITERIA

3.1 CENTRE OR MIXED USE CODE

The relevant CityPlan 2014 noise criteria for assessment of potential amenity impacts at on-site and surrounding sensitive land uses are referenced in Performance Outcome PO1 and Acceptable Outcomes AO1.1 and AO1.2 of the Centre or Mixed Use Code, as follows:

PO1 Development: a. has hours of operation which are controlled so that the use does not detrimentally impact on the <u>amenity</u> of adjoining residents; b. does not result in noise emissions that exceed the noise (planning) criteria in <u>Table 9.3.3.3.F</u>, low frequency noise criteria in <u>Table 9.3.3.3.G</u> and night-time noise criteria in <u>Table 9.3.3.3.H</u> in a <u>sensitive zone</u> or a nearby <u>sensitive use</u>, except music noise where located in a Special entertainment precinct identified in a neighbourhood plan. Note—A noise impact assessment report prepared in accordance with the <u>Noise impact assessment planning scheme policy</u> can assist in demonstrating achievement of this performance outcome.	AO1.1 Development: a. for <u>accommodation activities</u>, dwelling unit or <u>emergency services</u> has unlimited hours of operation; b. for a <u>club</u>, if licensed, <u>bar</u>, <u>function facility</u>, <u>hotel</u> or <u>nightclub entertainment facility</u> does not generate noise which is clearly audible and detectable, or impacts on the <u>amenity</u> of a resident, in a dwelling or other <u>sensitive use</u>; Note—Development for a <u>club</u>, if licensed, <u>bar</u>, <u>function facility</u>, <u>hotel</u> or <u>nightclub entertainment facility</u> is not expected to achieve this outcome. c. for any other use: i. where in the Principal centre zone or Major centre zone has unlimited hours of operation; ii. where in the District centre zone, Neighbourhood centre zone or Mixed use zone: A. has hours of operation, including for deliveries, which are limited to 6am to 10pm; or B. does not generate noise which is clearly audible and disturbing in a dwelling or other <u>sensitive use</u>; iii. where in any other zone: A. has hours of operation, including for deliveries, which are limited to 6am to 8pm; or B. does not generate noise which is clearly audible and disturbing in a dwelling or other <u>sensitive use</u>. AO1.2 Development ensures mechanical plant or equipment is <u>acoustically screened</u> from an adjoining <u>sensitive use</u>. Note—Mechanical plant includes generators, motors, compressors and pumps e.g. air-conditioning, refrigeration or cold room motors
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The following Acceptable Outcomes are applicable:

AO1.1c(ii): Given the zoning of the development site as Mixed Use, the Acceptable Outcome hours for the development proposed other uses are 6am to 10pm. Given the proposed hours of operation for the ground level food and drink tenancies, restaurant and gym uses are outside the Acceptable Outcome hours, noise emissions will be assessed against the relevant noise criteria as determined via PO1 (refer **Section 4.0**).

AO1.2: Proposed plant and equipment including air-conditioning plant will be acoustically screened to an existing adjoining residential use.

Section 4.0 provides assessment of noise emissions from the proposed restaurant, ground level food and drink tenancies and gym uses against the noise criteria specified in PO1 of the Centre or Mixed Use Code. It is considered that the noise of carparking will be contained by the enclosed basement structure and that deliveries will be undertaken within the 6am to 10pm Acceptable Outcome hours.

The relevant noise (planning) criteria are as follows:

Table 9.3.3.3.F—Noise (planning) criteria

Criteria location	Intrusive noise criteria	Acoustic amenity criteria		
	Day, evening and night $L_{Aeq,adj,T}$ are not greater than the RBL plus the value in this column for the relevant criteria location, where T equals: - day – 11hr - evening – 4hr - night – 9hr	Day, evening and night $L_{Aeq,adj,T}$ are not greater than the values in the columns below for the relevant criteria location, where T equals: - day – 11hr - evening – 4hr - night – 9hr		
At a sensitive use in the Mixed use zone	5dB(A)	60dB(A)	55dB(A)	50dB(A)

The relevant low frequency noise criteria for the assessment of amplified music associated with the proposed restaurant and café are as follows:

Table 9.3.3.3.G— Low frequency noise criteria

Criteria location	Day (7am-6pm) $L_{Ceq,adj,11hr}$ is not greater than the following values at the relevant criteria location	Evening (6pm-10pm) $L_{Ceq,adj,11hr}$ is not greater than the following values at the relevant criteria location	Night (10pm-7am) $L_{Ceq,adj,11hr}$ is not greater than the following values at the relevant criteria location
At a sensitive use in the Mixed use zone	75dB(C)	75dB(C)	70dB(C)

The relevant night-time noise criteria are as follows:

Table 9.3.3.3.H— Night-time noise criteria

Criteria location	Where the existing $L_{Aeq,9hr}$ night at the criteria location is:	Average of the highest 15 single L_{Amax} events over a given night (10pm–7am) period is not greater than the following values at the relevant criteria location	The absolute highest single L_{Amax} event over a given night (10pm–7am) period is not greater than the following values at the relevant criteria location
External to a sensitive use located in a: Mixed use zone	Not applicable	65 dB(A)	70 dB(A)

A noise assessment of the development noise emissions to on-site and surrounding sensitive land uses has been conducted (refer **Section 4.0**) to achieve the following relevant noise criteria as outlined in PO1 of the Centre or Mixed Use Code:

Table 2: Centre or Mixed Use Code Noise Criteria – At On-site And Surrounding Sensitive Uses

CODE CRITERIA	Day L _{Aeq} 11 hr	Evening L _{Aeq} 4hr	Night L _{Aeq} 9hr	Night L _{Amax}
Intrusive Noise Criteria (Measured L₉₀ + 5dB(A))	61 dB(A)	54 dB(A)	48 dB(A)	-
Acoustic Amenity Criteria	60 dB(A)	55 dB(A)	50 dB(A)	-
Low Frequency Noise Criteria	75 dB(C)	75 dB(C)	70 dB(C)	-
Night-time Noise Criteria	-	-	-	65 / 70 dB(A)

The lower of either the Intrusive Noise Criteria or the Acoustic Amenity Criteria for each period will be adopted as the applicable noise (planning) criteria.

3.2 INDOOR SPORT AND RECREATION CODE

AO2.1 – AO2.3 of the BCC CityPlan 2014 *Indoor sport and recreation code* are relevant for the proposed gym tenancy located within Tower B:

PO2 Development ensures that noise generated by indoor sport and recreation does not exceed the noise (planning) criteria in Table 9.3.11.3.B and the night-time noise criteria in Table 9.3.11.3.C at a sensitive zone or sensitive use. Note—A noise impact assessment report prepared in accordance with the Noise impact assessment planning scheme policy can assist in demonstrating compliance with this performance outcome.	AO2.1 Development is conducted wholly within an enclosed building and does not involve external activity.
	AO2.2 Development ensures car parking areas used at night are acoustically screened from adjoining residential dwellings.
	AO2.3 Development does not generate noise that is clearly audible and creates a disturbance within a dwelling or an associated balcony or patio.

AO2.1 is satisfied given that the gym is proposed wholly within an enclosed building and does not involve any external gym activities.

AO2.2 is satisfied given that development car parking spaces are located within basement levels and therefore will be acoustically screened to on-site and surrounding residential uses.

AO2.3 is satisfied if the relevant noise criteria as per PO2 are achieved at on-site and surrounding residential uses. The Indoor Sport and Recreation Code noise criteria are the same as is the Centre or Mixed Use Code criteria (refer **Table 2**).

4.0 NOISE IMPACT ASSESSMENT

4.1 NEAREST NOISE SENSITIVE RECEPTORS

The three (3) nearest surrounding sensitive uses that have been identified and considered as noise sensitive uses for the purposes of this assessment are the following properties:

- R1: 72 Merivale Street – Existing 5 storey residential building to the southeast
- R2: 42 Cordelia Street – Existing 5 storey residential building to the south
- R3: 40 Cordelia Street – Existing 10 storey Novotel Hotel to the west

Receptor locations for the proposed development residential levels have also been considered as noise sensitive uses for the purposes of this assessment.

4.2 NOISE MODELLING

Noise modelling using the SoundPLAN 9.0 software has been undertaken to assess the noise impact of the proposed development at the identified on-site and surrounding residential receptors. The SoundPLAN model was established to represent the noise from operations of the ground floor food and drink tenancy, gym at Level 15, pool area at Level 15 and restaurant at Level 16.

It is considered that the noise of basement carparking will be contained by the basement structures with no significant potential to impact upon on-site or surrounding residential amenity. Deliveries to the development will utilise existing Novotel Hotel loading zones and are expected to be relatively infrequent and should be conducted within the 6am to 10pm Acceptable Outcome hours as per the site Mixed use zoning.

The development includes a guest-only gym tenancy use located at the wellness level. The internal gym layout will likely include areas for cardio and strength / weight training. The gym will be typically used by individuals and small groups of hotel guests only. The gym tenancy is separated to on-site residential uses by services sub-floor level located below and rooftop restaurant above and thus has minimal potential to impact on amenity within the residential units.

It is proposed that the gym would be accessible during all hours by Hotel guests.

MWA Environmental has conducted recent noise measurements of an existing retail gym in Brisbane via noise monitoring within the gym over a 2 day period to determine relevant internal noise source levels. The peak noise source level recorded, including the cumulative noise of typical gym noise sources such as background amplified music, noise from patrons, exercise machines and free-weight handling/drops, was during the day period and was recorded to be 72 dB(A) $L_{Aeq,11hr}$ as the overall reverberant level within the building space, which has conservatively been adopted as the period average source noise level within the building for the evening and night periods also. Additionally, the L_{Amax} was recorded to be 98 dB(A) indoors during the night period. The internal noise source levels have been modelled internally to the proposed gym tenancy as an industrial building source using the SoundPLAN 9.0 noise modelling software. It is noted that the noise source levels are adopted from noise measurements taken within a retail gym and given the much smaller scale and likely lesser typical patronage in this instance, it is expected that typical noise levels within the proposed guest-only gym will be significantly less than considered in the noise modelling.

As is typical to gyms, the weights area of the commercial gym where source noise levels were recorded included rubber impact absorbing flooring systems for all weight equipment areas. **It is suggested that all weight equipment areas of the proposed gym include suitable specification impact absorbing flooring systems to minimise noise impacts from dropping of weights.**

The Sound Transmission Loss (STL) through the walls and glazing of the source buildings have been adopted as per **Table 3** below.

**Table 3: Modelled Building Component Sound Transmission Loss
For Proposed Food and Drink, Gym and Restaurant Tenancies**

CONSTRUCTION ELEMENT	SOUND TRANSMISSION LOSS - dB(A)								Rw
	FREQUENCY BAND (Hz)								
	63	125	250	500	1	2	4	8	
	Hz	Hz	Hz	Hz	kHz	kHz	kHz	kHz	
Commercial Glazing	11	17	24	29	33	34	22	19	32
Blockwork Wall	23	37	37	42	52	60	66	66	48
Access Doors (Open)	0	0	0	0	0	0	0	0	0

The proposed development also includes a food and drink tenancy, a restaurant tenancy and wellness level including pool area. The proposed operating hours for the ground floor all day dining tenancy is 6am to 11pm with a capacity of 104 PAX indoor and 20 PAX outdoor. The proposed operating hours for the level 16 restaurant are 11am to 12midnight with a capacity of 60 PAX indoor dining, 10 PAX private dining and 55 PAX covered outdoor dining.

The noise model has represented the following noise sources based upon monitoring previously conducted by MWA Environmental and others for similar developments:

Patron Noise² at all day dining tenancy: L_{Aeq} 94 dB(A) SWL indoors

L_{Amax} 103 dB(A) SWL indoors

L_{Aeq} 84 dB(A) SWL outdoors

L_{Amax} 95 dB(A) SWL outdoors

Patron Noise³ at Level 16 restaurant: L_{Aeq} 92 dB(A) SWL indoors

L_{Amax} 101 dB(A) SWL indoors

L_{Aeq} 90 dB(A) SWL outdoors

L_{Amax} 100 dB(A) SWL outdoors

Amplified Music at Food and drink tenancy and Level 16 restaurant:

Nominally 85 dB(C) at 3m per speaker⁴

Patron Noise⁵ at wellness pool area: L_{Aeq} 84 dB(A) SWL each

L_{Amax} 95 dB(A) SWL each

² Based upon 104 patrons indoors and 20 patrons outdoors at the ground floor all day dining tenancy using the noise emission relationship derived in Prediction of Noise from Small to Medium Sized Crowds (Hayne, MJ et. al., Paper Number 133, Proceedings of ACOUSTICS 2011). Conservatively, the maximum capacity patrons have been modelled at the all day dining tenancy for the full proposed operating period 6am to 11pm.

³ Based upon a total 70 patrons indoor dining and 55 patrons at the covered outdoor dining area using the noise emission relationship derived in (Hayne, MJ et. al., 2011). Conservatively, the maximum capacity patrons have been modelled at the restaurant for the full proposed operating period 11am to 12midnight.

⁴ The noise model considered 2 speakers at each of the all day dining tenancy, internal restaurant area and at the covered outdoor dining area of the restaurant.

⁵ Based upon a conservative 20 patrons at the wellness floor pool area using the noise emission relationship derived in (Hayne, MJ et. al., 2011). Use of the wellness pool area has been considered between 6am to 10pm.

No detailed specification for external mechanical plant associated with the development is available at this stage. However, mechanical plant is likely to include package air-conditioning units, minor refrigeration units, exhaust fans and pool pumps. Plant and equipment will be located in dedicated screened / enclosed plant areas located throughout the development to not cause an adverse noise impact upon on-site or surrounding sensitive uses. Review of mechanical plant selections and locations should be undertaken at the detailed design stage of the project to ensure compliance with the relevant noise criteria in accordance with standard development approval conditions.

Noise emissions from amplified music have been represented as point sources and patrons/people represented as area sources in the SoundPLAN model.

Industrial building sources have been used to represent internal noise emissions from the gym, all day dining and restaurant tenancies. The noise model has considered commercial grade construction elements as per **Table 3** above.

4.3 NOISE PREDICTION RESULTS

The CityPlan 2014 noise (planning) criteria relate to average L_{Aeq} noise levels across each period of the day e.g. L_{Aeq} 11 hour for the 7am to 6pm period. The noise predictions are considered a worst-case scenario for the development in that peak noise from all identified sources have been adopted as occurring for the full proposed hours of use for the gym tenancy, all day dining tenancy and restaurant tenancy. In reality, actual patronage at these proposed uses will often be significantly less than the indicative peak patronage considered in assessing sound power levels and, as such, noise emissions will be substantially lower than those predicted by the noise model at on-site and surrounding sensitive land uses.

The predicted overall noise levels from the proposed development for assessment against the noise (planning) criteria and the predicted low-frequency noise levels from amplified music noise (only) at the nearest on-site and surrounding sensitive land uses are presented in **Table 4** below.

For each assessed receiver, the highest noise prediction at the most exposed floor level is displayed. For receiver R1, four separate receiver point locations have been assessed at representative locations along the northwestern building façade that faces towards the development site. A table of results for all assessed residential floor levels of the nearest on-site and surrounding residential buildings is included as **Attachment 3**.

Table 4: Predicted Resultant Noise Levels at Sensitive Uses

RECEPTOR	PREDICTED NOISE LEVEL – L _{Aeq,11hr} dB(A) Day	PREDICTED NOISE LEVEL – L _{Aeq,4hr} dB(A) Evening	PREDICTED NOISE LEVEL – L _{Aeq,9hr} dB(A) Night	HIGHEST PREDICTED MAXIMUM NOISE LEVEL – L _{Amax} dB(A)	HIGHEST PREDICTED AMPLIFIED MUSIC NOISE LEVEL – L _{Ceq} dB(C) ⁶
R1 (72 Merivale St)	35	36	29	45	35
R2 (42 Cordelia St)	29	31	24	40	34
R3 (40 Cordelia St)	32	33	26	43	37
R4 (Proposed Hotel)	37	38	31	51	43
Noise Criteria	60 dB(A)	54 dB(A)	48 dB(A)	65/70 dB(A)	75/75/70 dB(C)
Compliance	Yes	Yes	Yes	Yes	Yes

The predicted resultant noise levels, based upon conservative operating scenarios, satisfy the relevant noise (planning) criteria at nearby on-site and surrounding sensitive uses during all periods of the day. Given that the noise model considered maximum capacity for the proposed all day dining and restaurant tenancies for all proposed operating hours, it is considered that resultant noise levels from the proposed uses would typically be well below the noise level predictions as presented in **Table 4**.

In addition, the predicted resultant noise levels from amplified music at the development comfortably satisfy the relevant low frequency noise criteria at on-site and surrounding sensitive uses during all periods of the day conservatively assuming amplified music is in operation continuously for the full proposed operating hours. Thus, there is the potential for amplified music to be operated at higher than the indicative levels adopted for the modelling assessment subject to further assessment.

It should also be noted that, given that the site is in an inner urban location and adjacent busy roadways and existing commercial uses, it is considered that noise emissions from the proposed development will generally fall within the level of existing noise at the precinct.

⁶ Evening L_{Ceq} noise predictions are displayed being that the highest predictions were during this period at all assessed receivers.

5.0 CONCLUSIONS

MWA Environmental has been engaged to prepare a Noise Impact Assessment for the proposed Merivale Hotel development that comprises food and drink, restaurant, gym, wellness and residential uses at 70 Merivale Street, South Brisbane.

This report considers potential noise amenity impacts at on-site and surrounding sensitive land uses from plant and equipment noise, service vehicle and loading noise, amplified music noise, patron noise and car parking noise emissions from the proposed development.

The assessment is based on ambient noise monitoring conducted at the site, noise measurements previously conducted on typical sources associated with the proposed uses and detailed noise propagation modelling.

The noise assessment demonstrates that the proposed development can comply with the relevant CityPlan 2014 noise criteria at the nearest on-site and surrounding sensitive land uses, considering the following proposed operating hours for relevant development uses:

- Level 15 guest-only gym and wellness area – 24 hour access.
- Ground Floor all day dining tenancies – 6am to 11pm.
- Level 16 restaurant – 11am to 12midnight.

Given that the site is in an inner urban location and adjacent busy roadways and existing commercial uses, it is considered that noise emissions from the proposed development will generally fall within the level of existing noise at the locality.

Mechanical plant should be acoustically screened to adjoining on-site and sensitive uses. Review of mechanical plant selections and locations should be undertaken at the detailed design stage of the project to ensure compliance with the relevant noise criteria in accordance with standard development approval conditions.

It is recommended that the gym, all day dining and restaurant tenancies be constructed to the following acoustic building construction standards:

- Glazing Rw 32 or higher
- Walls Rw 48 or higher

It is also suggested that all weight equipment areas of the proposed gym use include suitable specification impact absorbing flooring systems to minimise noise impacts from dropping of weights.

It is recommended that the proposed minor changes to the approved development be approved with reasonable and relevant conditions.

MWA Environmental
22 July 2026

FIGURES



LEGEND

SITE LOCATION

DRAWING REFERENCE

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(DEPARTMENT OF NATURAL RESOURCES
AND MINES, MANUFACTURING AND
REGIONAL AND RURAL DEVELOPMENT)
QLDGLOBE.

N

0255075m

CLIENT

MERIVALE NO 1 UNIT TRUST

PROJECT

NOISE IMPACT
ASSESSMENT

PROPOSED MERIVALE
HOTEL DEVELOPMENT
70 MERIVALE ROAD
SOUTH BRISBANE QLD

TITLE

SITE LOCATION
AND SURROUNDING
LAND USES

JOB

SOUTH
BRISBANE

FIGURE 1

JOB NO.

24111

DWG NUMBER

DATE

24/03/26

24111-1

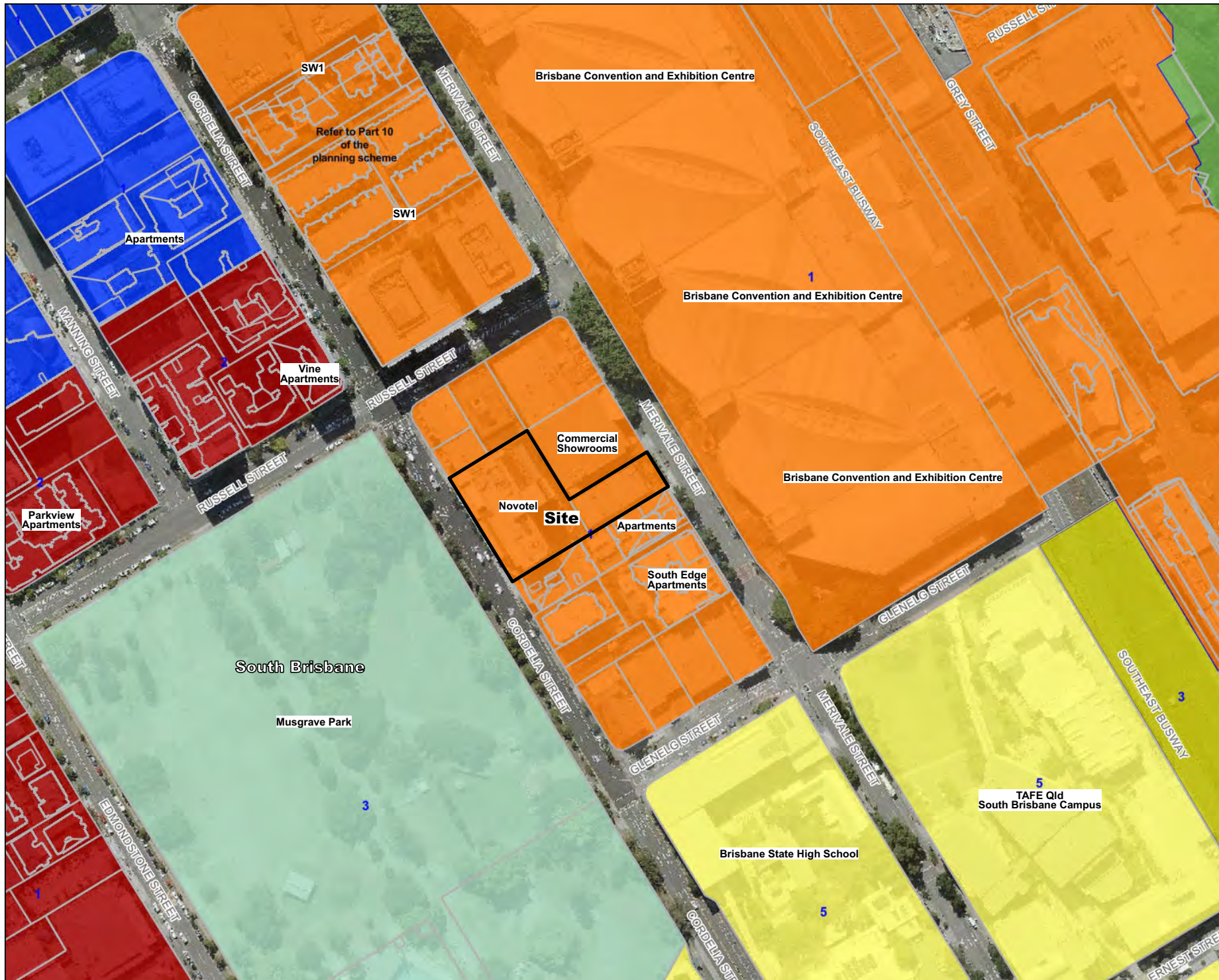
SCALE

1:2500 (A4)

mwa

ENVIRONMENTAL

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LEGEND

— SITE LOCATION

BCC CITY PLAN 2014 ZONING

- MU1 MIXED USE (INNER CITY)
- HDR2 HIGH DENSITY RESIDENTIAL (UP TO 15 STOREYS)
- PC1 PRINCIPAL CENTRE (CITY CENTRE)
- SR3 SPORT AND RECREATION (METROPOLITAN)
- CF5 COMMUNITY FACILITIES (EDUCATION PURPOSES)
- SP3 SPECIAL PURPOSE (TRANSPORT INFRASTRUCTURE)

DRAWING REFERENCE
BCC CITY PLAN 2014, INTERACTIVE
MAPPING, ZONING MAP.

0 25 50 75m

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PROJECT
**NOISE IMPACT
ASSESSMENT
PROPOSED MERIVALE
HOTEL DEVELOPMENT
70 MERIVALE ROAD
SOUTH BRISBANE QLD**

TITLE
**BCC CITY PLAN 2014
ZONING MAP**

JOB	SOUTH BRISBANE	FIGURE 2
JOB NO.	24111	DWG NUMBER
DATE	24/03/26	24111-2
SCALE	1:2500 (A4)	

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LEGEND

— SITE LOCATION

● NOISE DATALOGGER LOCATION

DRAWING REFERENCE

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QLDGLOBE.

CLIENT

MERIVALE NO 1 UNIT TRUST

PROJECT

NOISE IMPACT ASSESSMENT
PROPOSED MERIVALE HOTEL DEVELOPMENT
70 MERIVALE ROAD
SOUTH BRISBANE QLD

TITLE

NOISE MONITORING LOCATION

JOB	SOUTH BRISBANE	FIGURE 3
JOB NO.	24111	DWG NUMBER
DATE	24/03/26	24111-3
SCALE	1:1500 (A4)	

mwa
ENVIRONMENTAL

Max Winders & Associates Pty Ltd t/as MWA Environmental
Level 8, 241 Adelaide St, Brisbane, QLD 4001
P 07 3002 5500 E mail@mwaenviro.com.au
W www.mwaenviro.com.au
ABN 94 010 833 064

Attachment 1

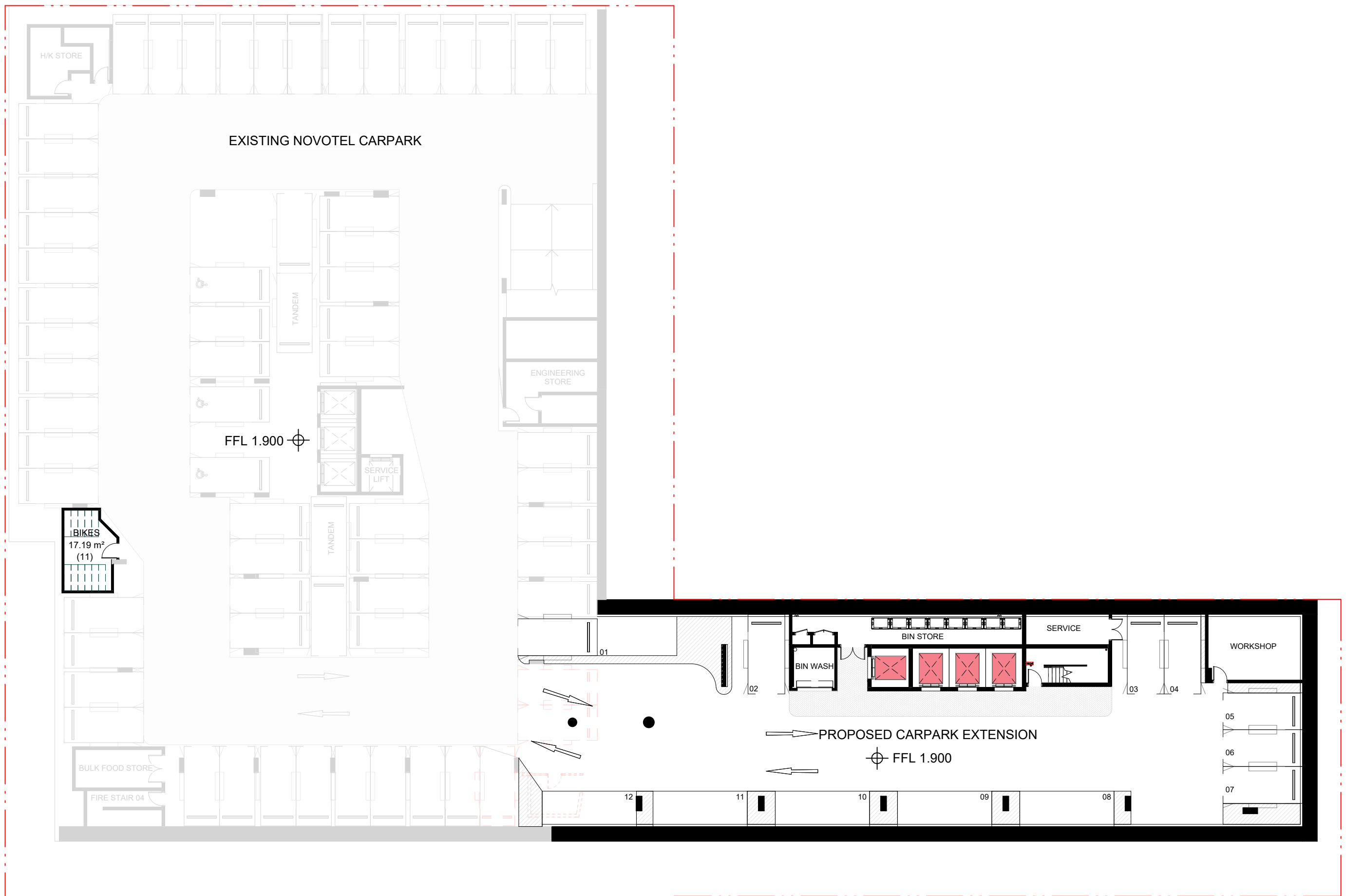
Proposed Development Drawings

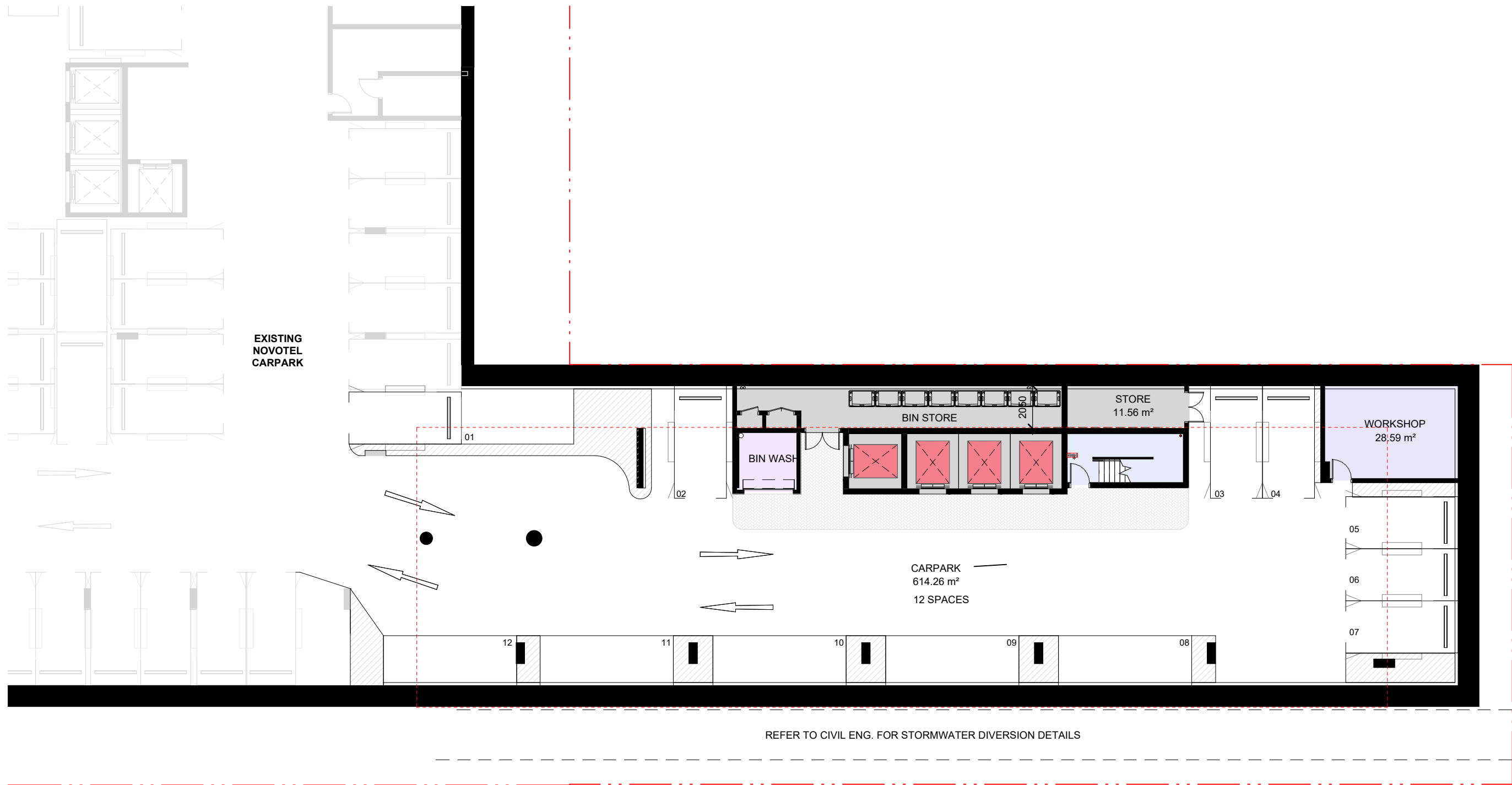
DEVELOPMENT APPLICATION

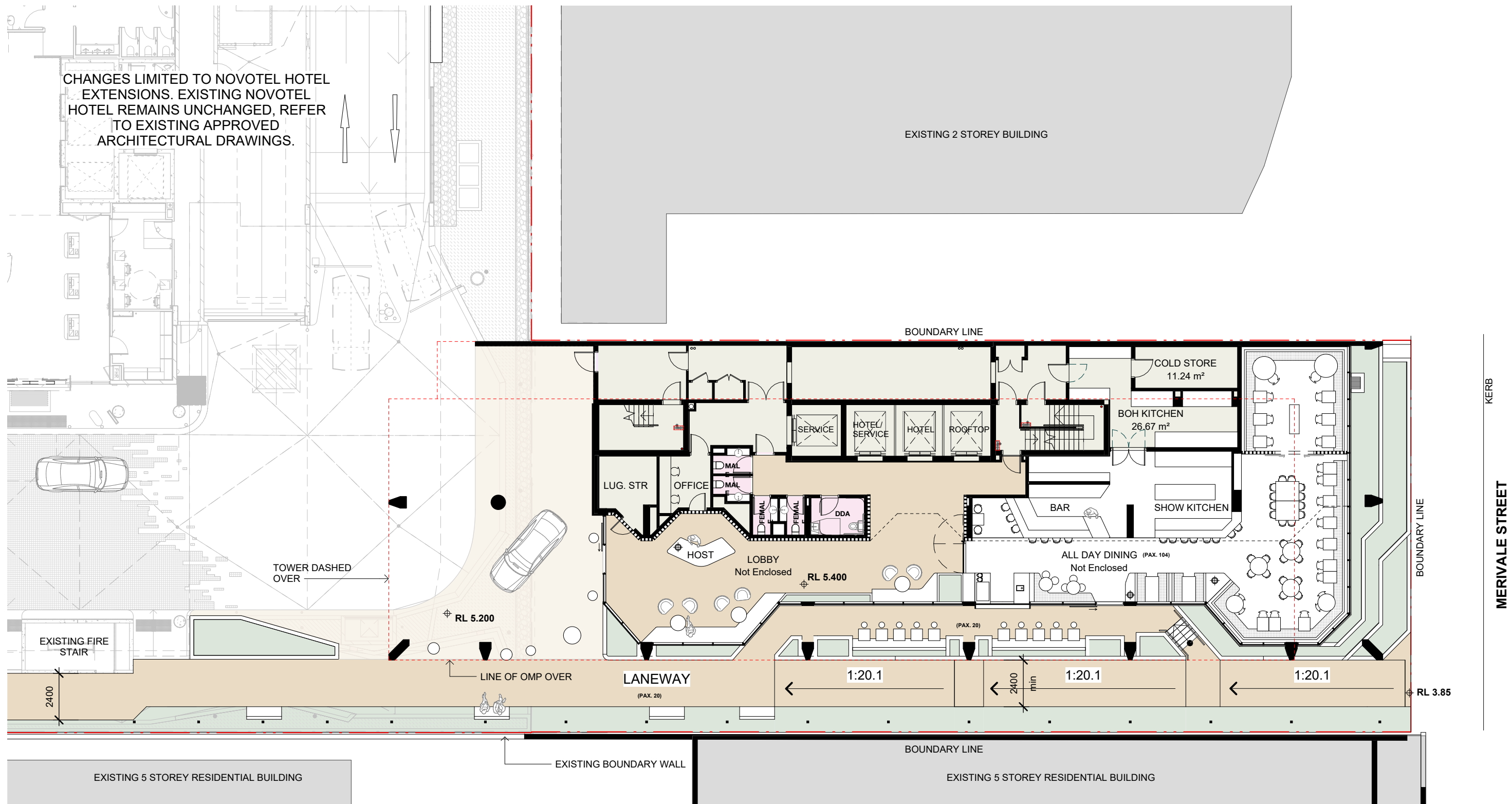
DA Drawing list		
DRAWING NUMBER	DRAWING NAME	REVISION
DA00.001	COVER SHEET & DRAWING LIST	G
DA01.001	SITE PLAN - ROOF	G
DA01.002	SITE PLAN - GROUND	J
DA03.200	GROUND FLOOR PLAN	J
DA03.201	MEZZANINE PLAN	I
DA03.202	LEVEL 02 PLAN	G
DA03.204	LEVEL 03 PLAN	I
DA03.205	LEVEL 04-10 TYPICAL HOTEL PLAN	I
DA03.206	LEVEL 11-13 TYPICAL HOTEL PLAN	I
DA03.207	LEVEL 14 - HOTEL SUITES	I
DA03.208	SUB-FLOOR	H
DA03.209	LEVEL 15 - WELLNESS	H
DA03.210	LEVEL 16 - RESTAURANT	H
DA03.211	ROOF PLAN	G
DA09.001	ELEVATION - MERIVALE ST	F
DA09.002	ELEVATION - NORTH	F
DA09.003	ELEVATION - SOUTH	F
DA09.004	ELEVATION - WEST	F
DA10.001	SECTION	F
DA10.002	SECTION	F
DA10.101	Merivale Boundary	F
DA10.102	Laneway Section	E
DA10.201	Hotel Room Boundary	D
DA11.001	Laneway Art Plan	F
DA22.001	GFA PLANS	E
DA.B1.001	SITE PLAN - BASEMENT	I
DA.B.001	BASEMENT PLAN	J



NOT FOR CONSTRUCTION

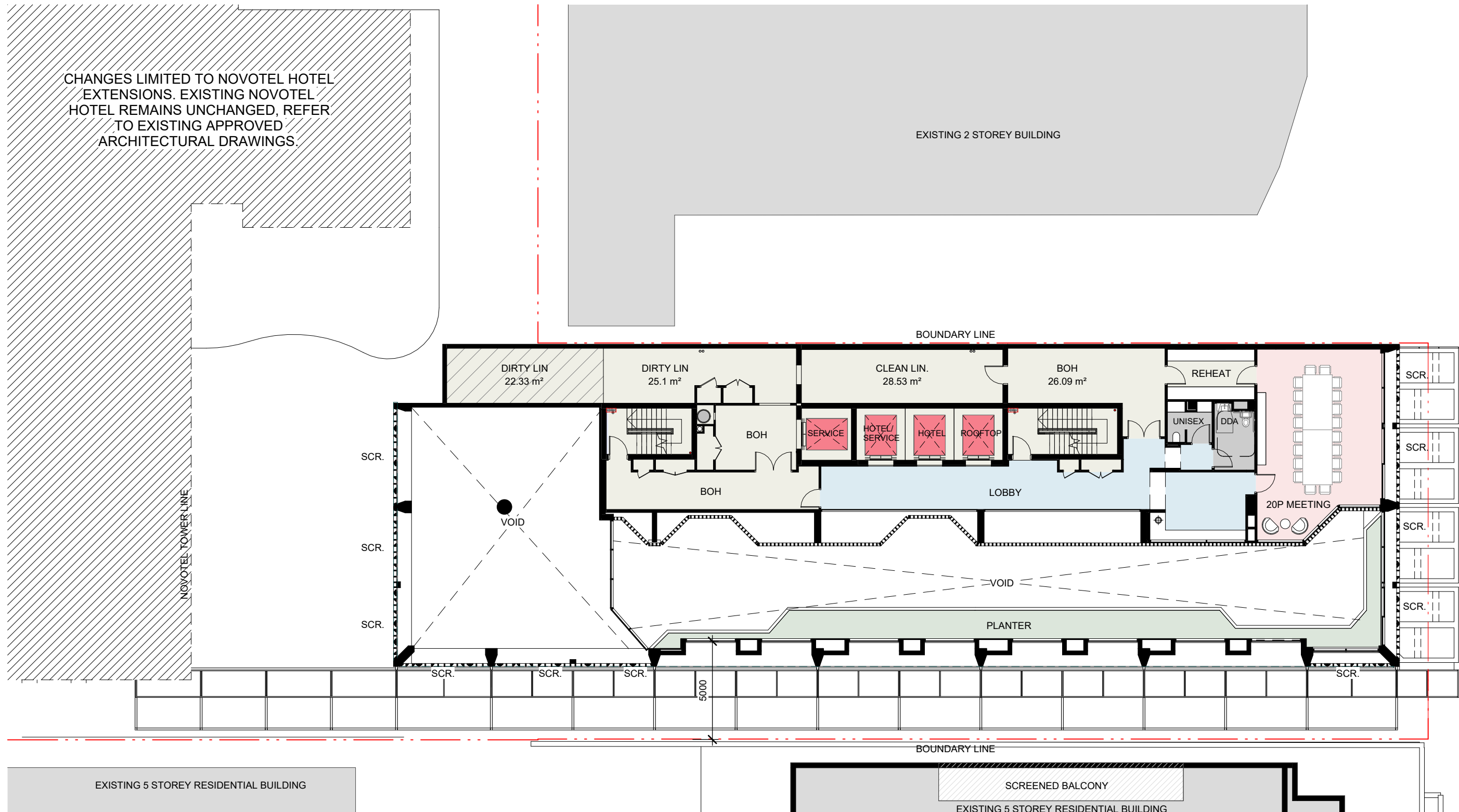






PRELIMINARY



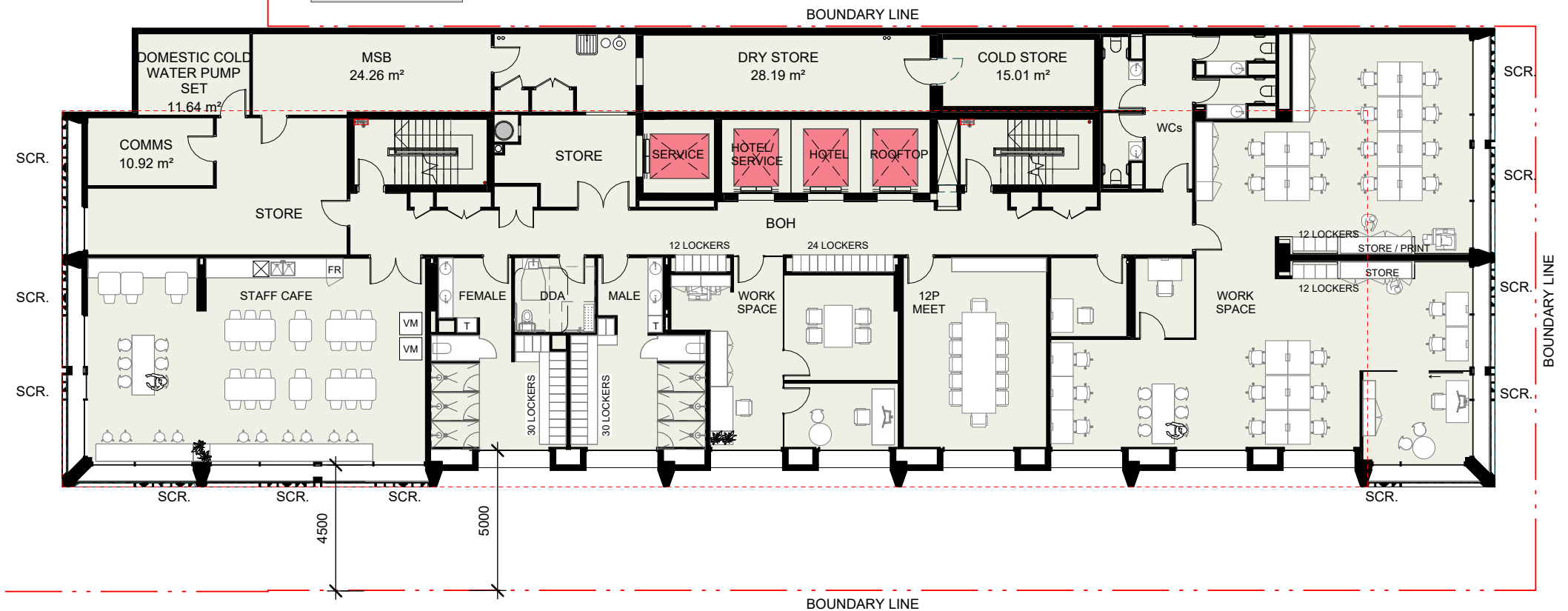


PRELIMINARY



CHANGES LIMITED TO NOVOTEL HOTEL
EXTENSIONS. EXISTING NOVOTEL
HOTEL REMAINS UNCHANGED, REFER
TO EXISTING APPROVED
ARCHITECTURAL DRAWINGS.

EXISTING 2 STOREY BUILDING



EXISTING 5 STOREY RESIDENTIAL BUILDING

SCREENED BALCONY

EXISTING 5 STOREY RESIDENTIAL BUILDING

PRELIMINARY

BATESSMART

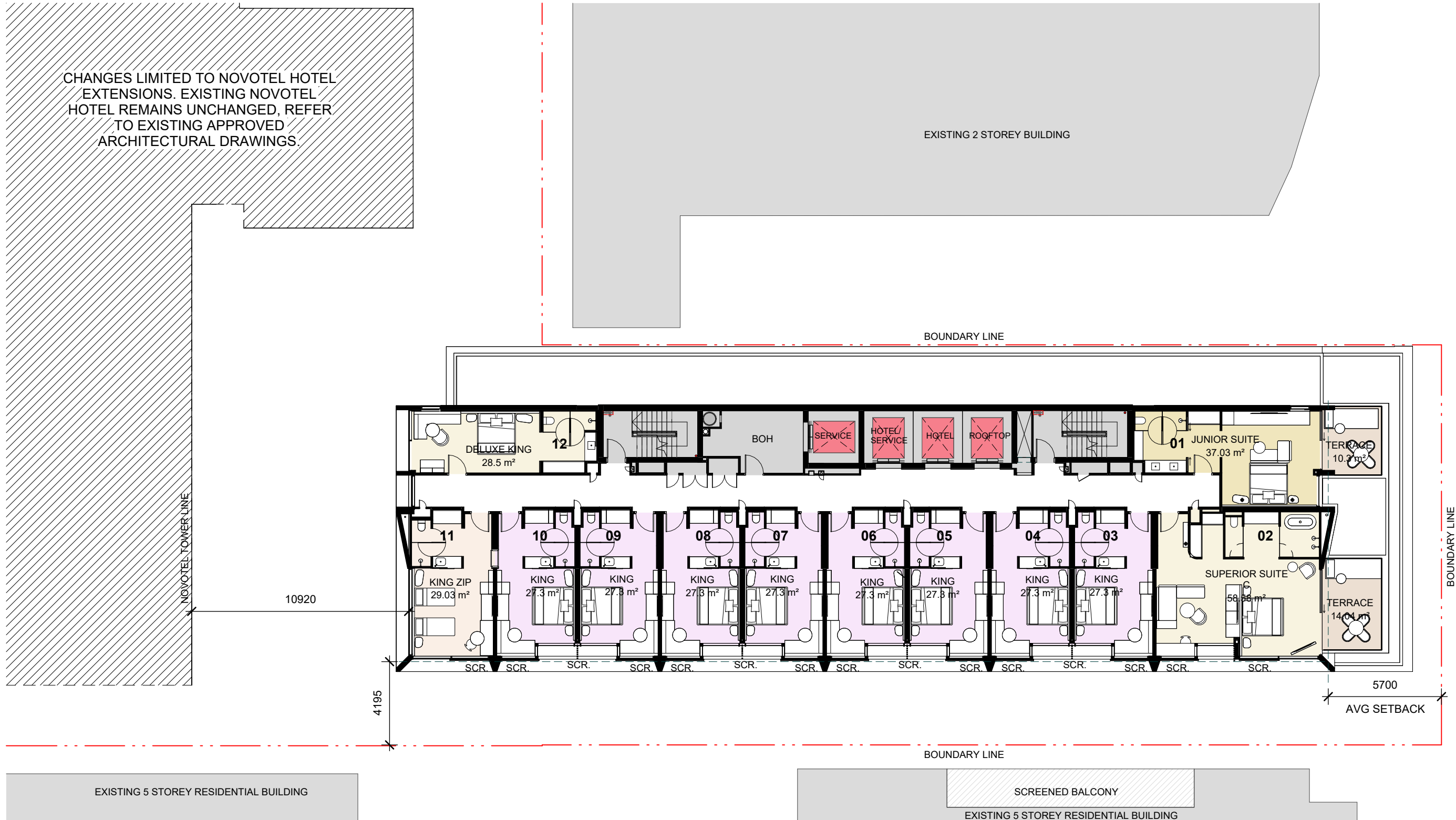
Bates Smart Architects Pty Ltd ABN 68 094 740 986



Merivale Hotel
70 Merivale Street

LEVEL 02 PLAN
B12810
1 : 200 @ A3

Drawing no. DA03.202 G Rev.



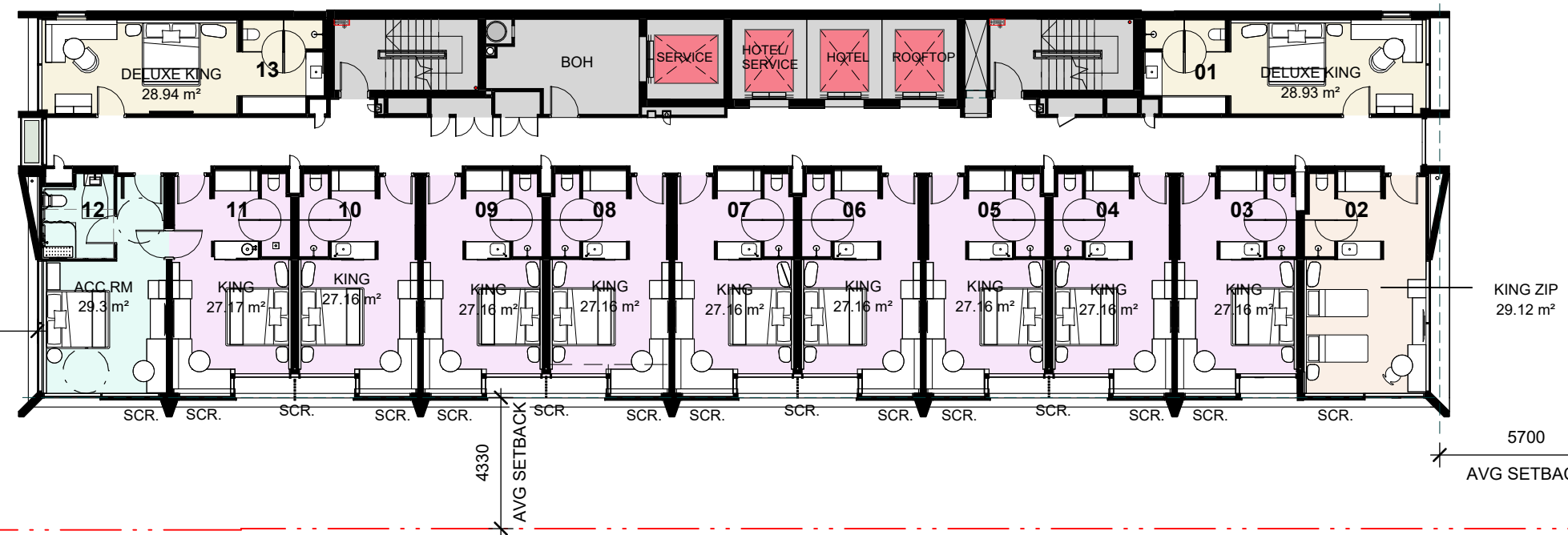
PRELIMINARY



CHANGES LIMITED TO NOVOTEL HOTEL
EXTENSIONS. EXISTING NOVOTEL
HOTEL REMAINS UNCHANGED, REFER
TO EXISTING APPROVED
ARCHITECTURAL DRAWINGS.

EXISTING 2 STOREY BUILDING

BOUNDARY LINE



EXISTING 5 STOREY RESIDENTIAL BUILDING

SCREENED BALCONY

EXISTING 5 STOREY RESIDENTIAL BUILDING

PRELIMINARY

BATESSMART

Bates Smart Architects Pty Ltd ABN 68 094 740 986



Merivale Hotel
70 Merivale Street

LEVEL 04-10 TYPICAL HOTEL PLAN
B12810
1 : 200 @ A3

Drawing no. **DA03.205 I** Rev.

CHANGES LIMITED TO NOVOTEL HOTEL
EXTENSIONS. EXISTING NOVOTEL
HOTEL REMAINS UNCHANGED, REFER
TO EXISTING APPROVED
ARCHITECTURAL DRAWINGS.

EXISTING 2 STOREY BUILDING

BOUNDARY LINE



BOUNDARY LINE

EXISTING 5 STOREY RESIDENTIAL BUILDING

SCREENED BALCONY

EXISTING 5 STOREY RESIDENTIAL BUILDING

BOUNDARY LINE

PRELIMINARY

BATESSMART

Bates Smart Architects Pty Ltd ABN 68 094 740 986



Merivale Hotel
70 Merivale Street

LEVEL 11-13 TYPICAL HOTEL PLAN
B12810
1 : 200 @ A3

Drawing no. **DA03.206 I** Rev.

CHANGES LIMITED TO NOVOTEL HOTEL
EXTENSIONS. EXISTING NOVOTEL
HOTEL REMAINS UNCHANGED, REFER
TO EXISTING APPROVED
ARCHITECTURAL DRAWINGS.

EXISTING 2 STOREY BUILDING

BOUNDARY LINE

BOUNDARY LINE

10920

5000
AVG SETBACK

PREMIUM SUITE
81.12 m²

SUPERIOR SUITE
B
49.3 m²

SUPERIOR SUITE
B
49.3 m²

SUPERIOR SUITE
D
54.87 m²

PRESIDENTIAL
SUITE
89.95 m²

5700
AVG SETBACK

BOUNDARY LINE

EXISTING 5 STOREY RESIDENTIAL BUILDING

EXISTING 5 STOREY RESIDENTIAL BUILDING

NOVOTEL TOWER LINE



PRELIMINARY

BATESSMART

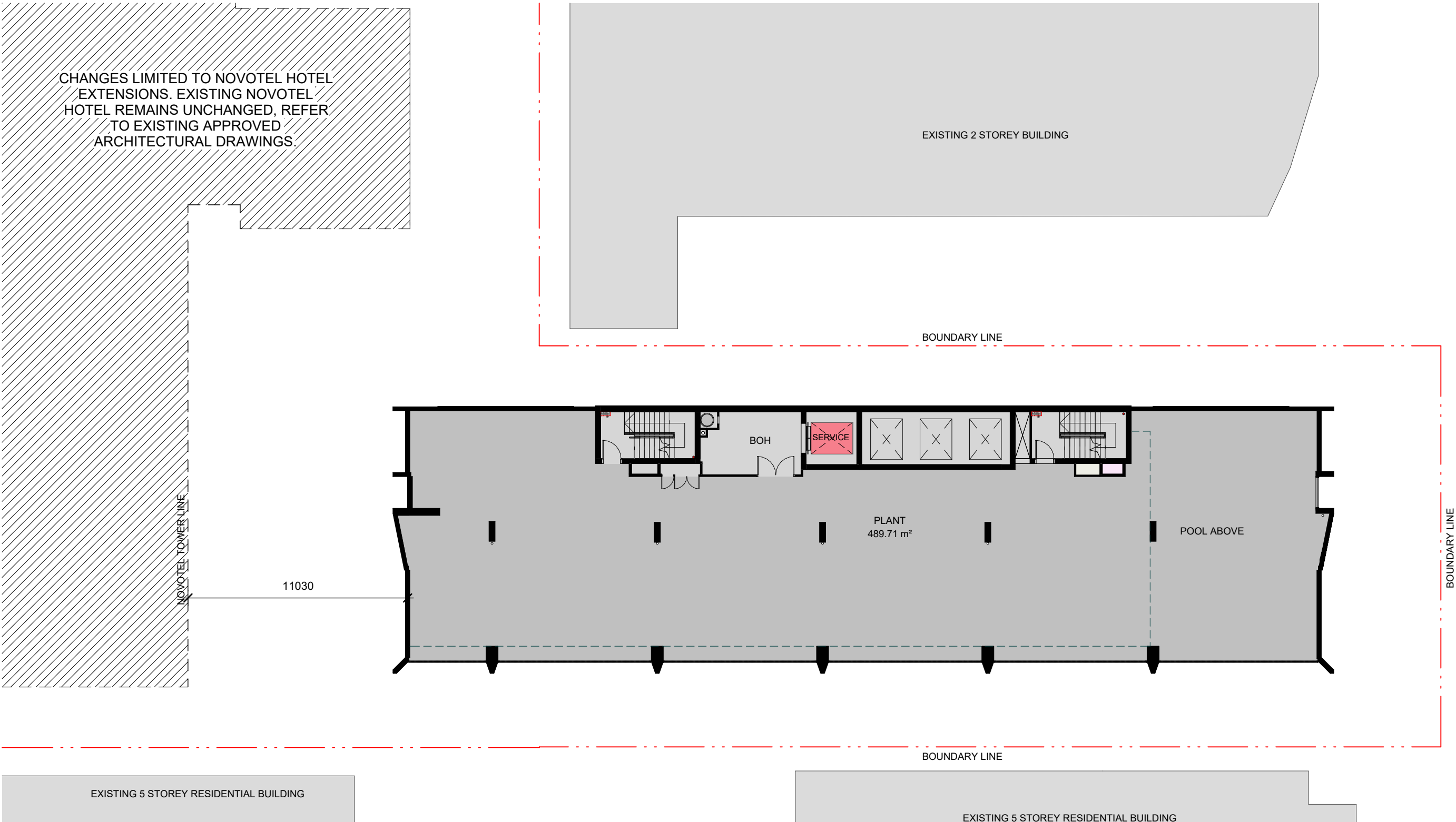
Bates Smart Architects Pty Ltd ABN 68 094 740 986



Merivale Hotel
70 Merivale Street

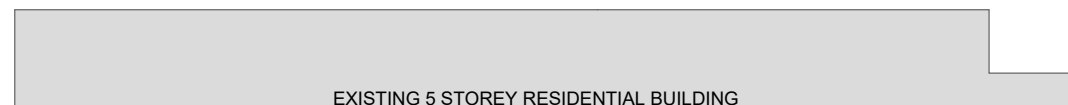
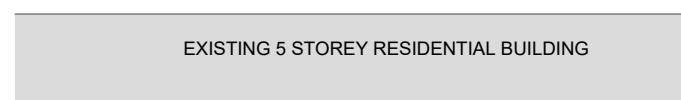
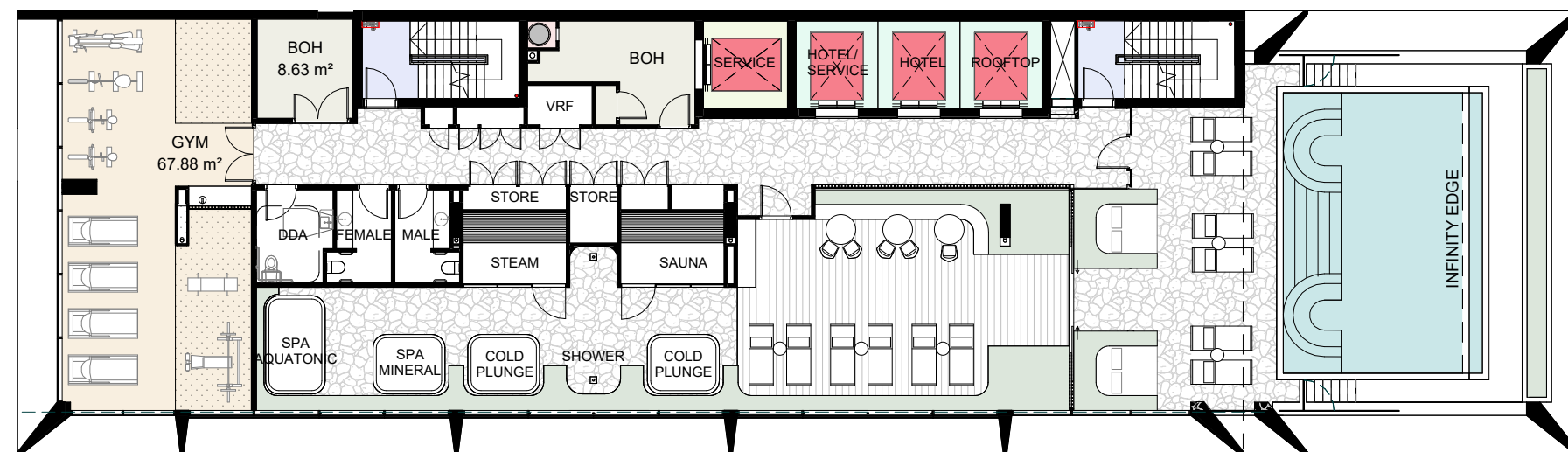
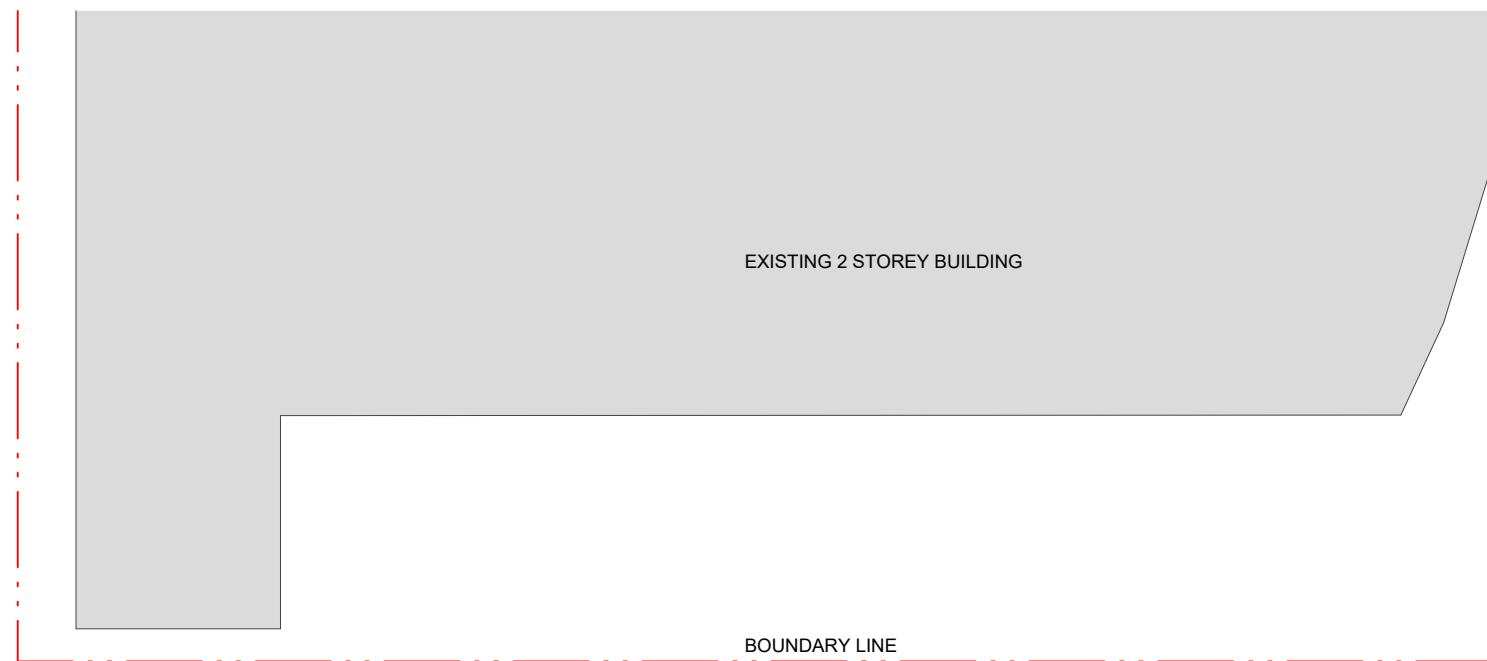
LEVEL 14 - HOTEL SUITES
B12810
1 : 200 @ A3

Drawing no. DA03.207 I Rev.



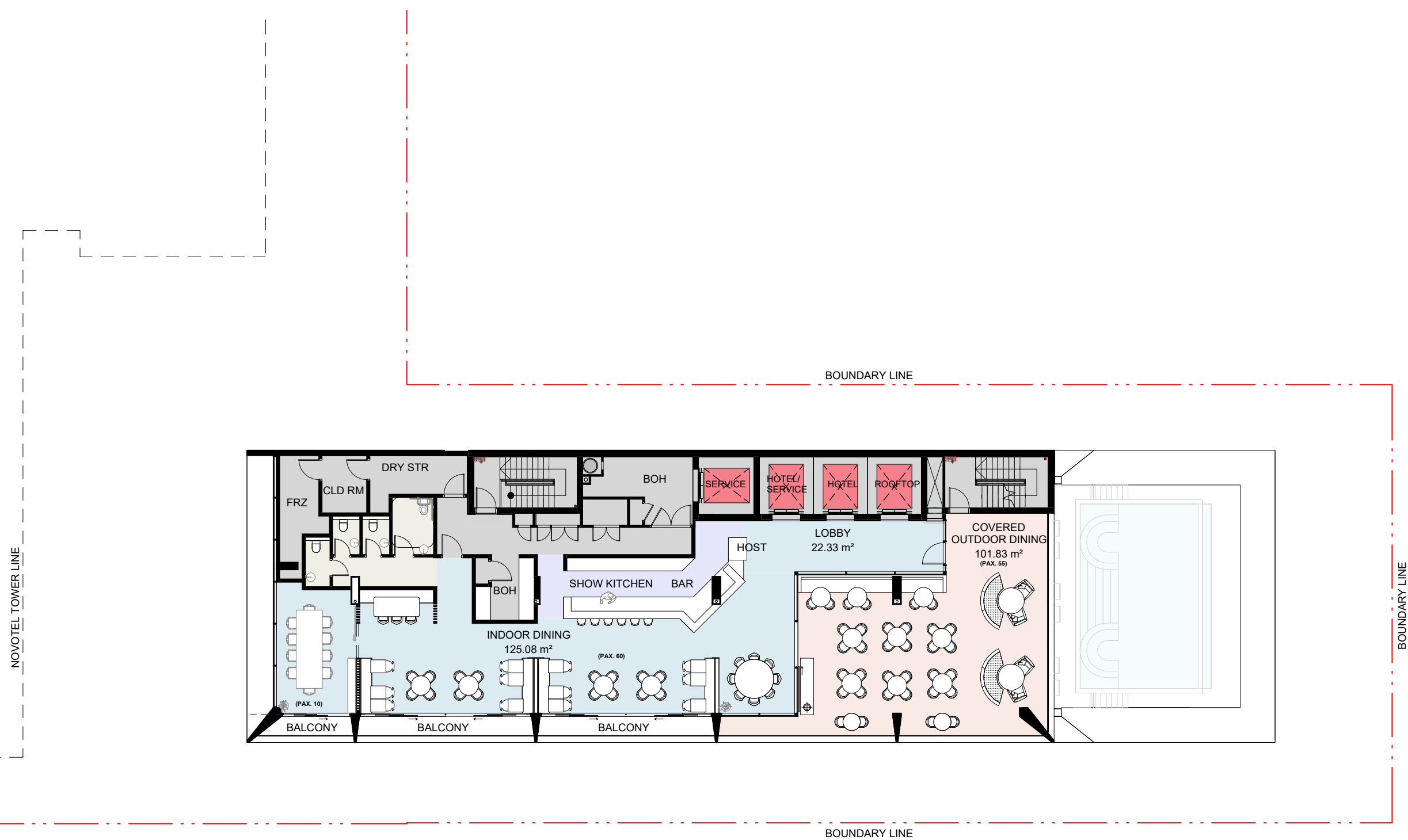
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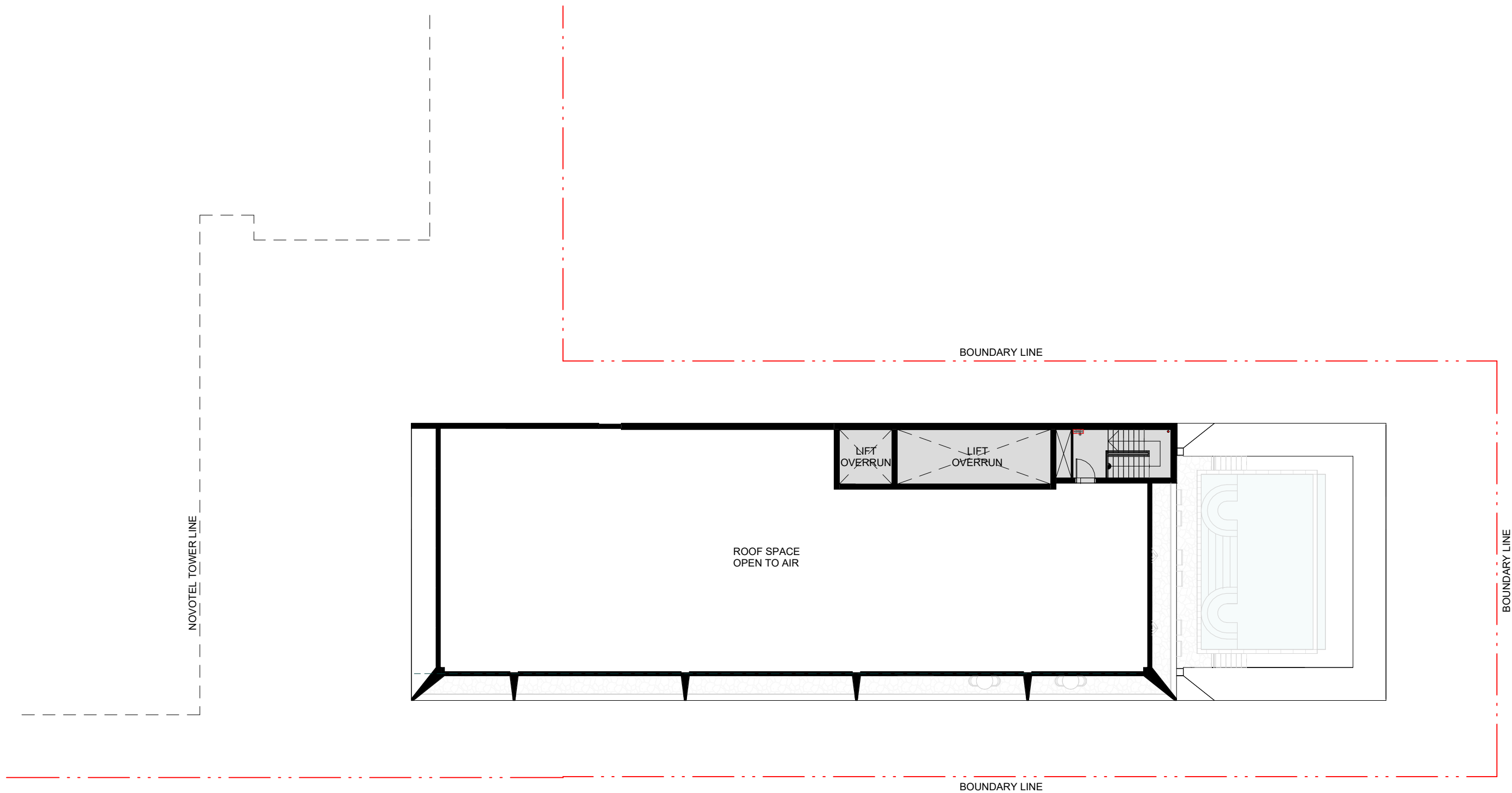




PRELIMINARY







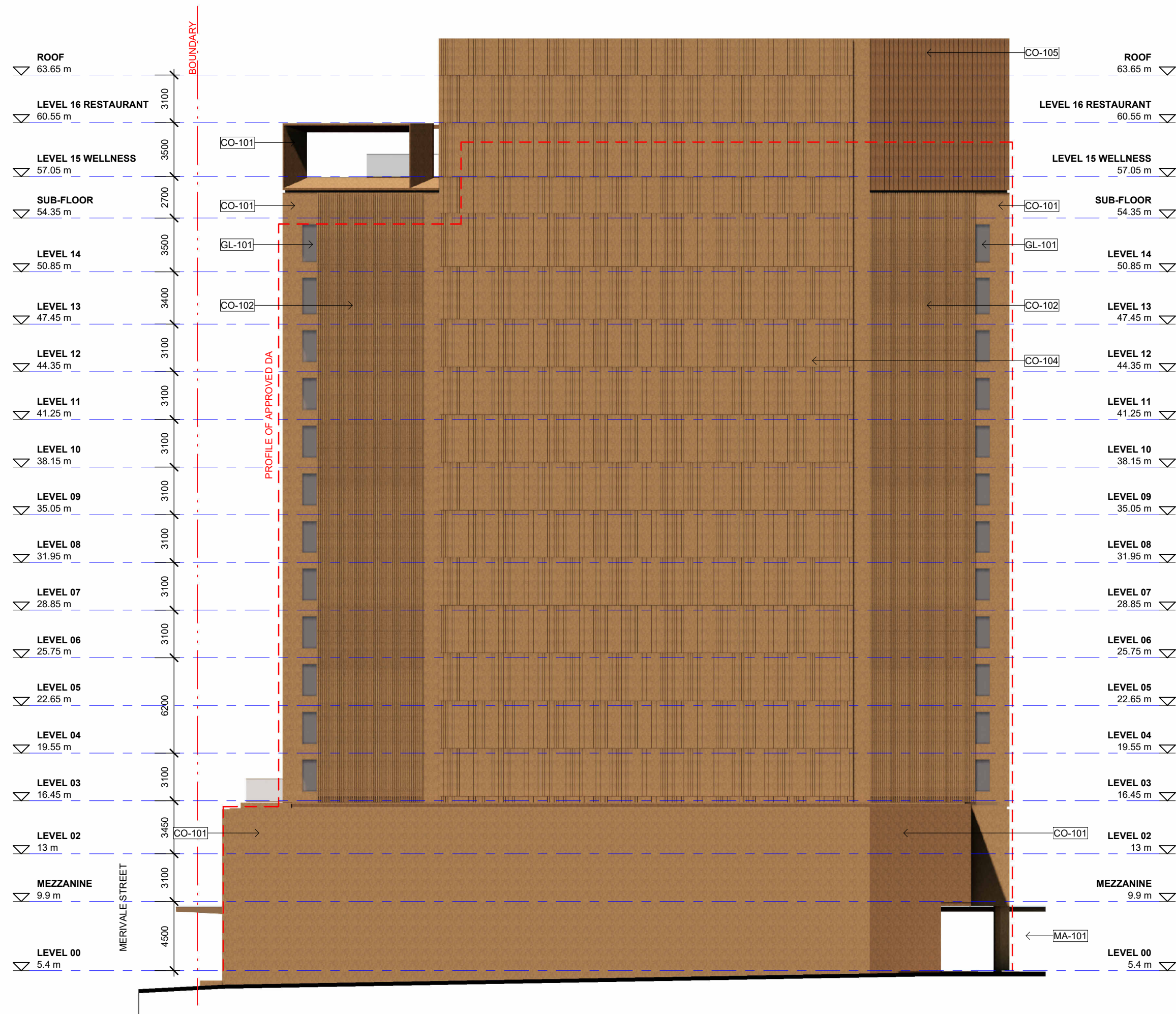
PRELIMINARY





CODE	ITEM
AM-101	Steel
AM-102	Steel Frame Awning
CO-101	Precast Concrete Panels
CO-102	Ribbed Precast Concrete Panels
CO-104	Patterned Precast
CO-105	Patterned Precast
EL-101	Aluminium Cladding Sheet
GL-101	Performance Vision Glazing
GL-102	Performance Spandrel Glazing
MA-101	Feature Blockwork
SC-101	Terracotta Screen
SC-102	Screen - Metal Batten

--- PROFILE OF APPROVED DA

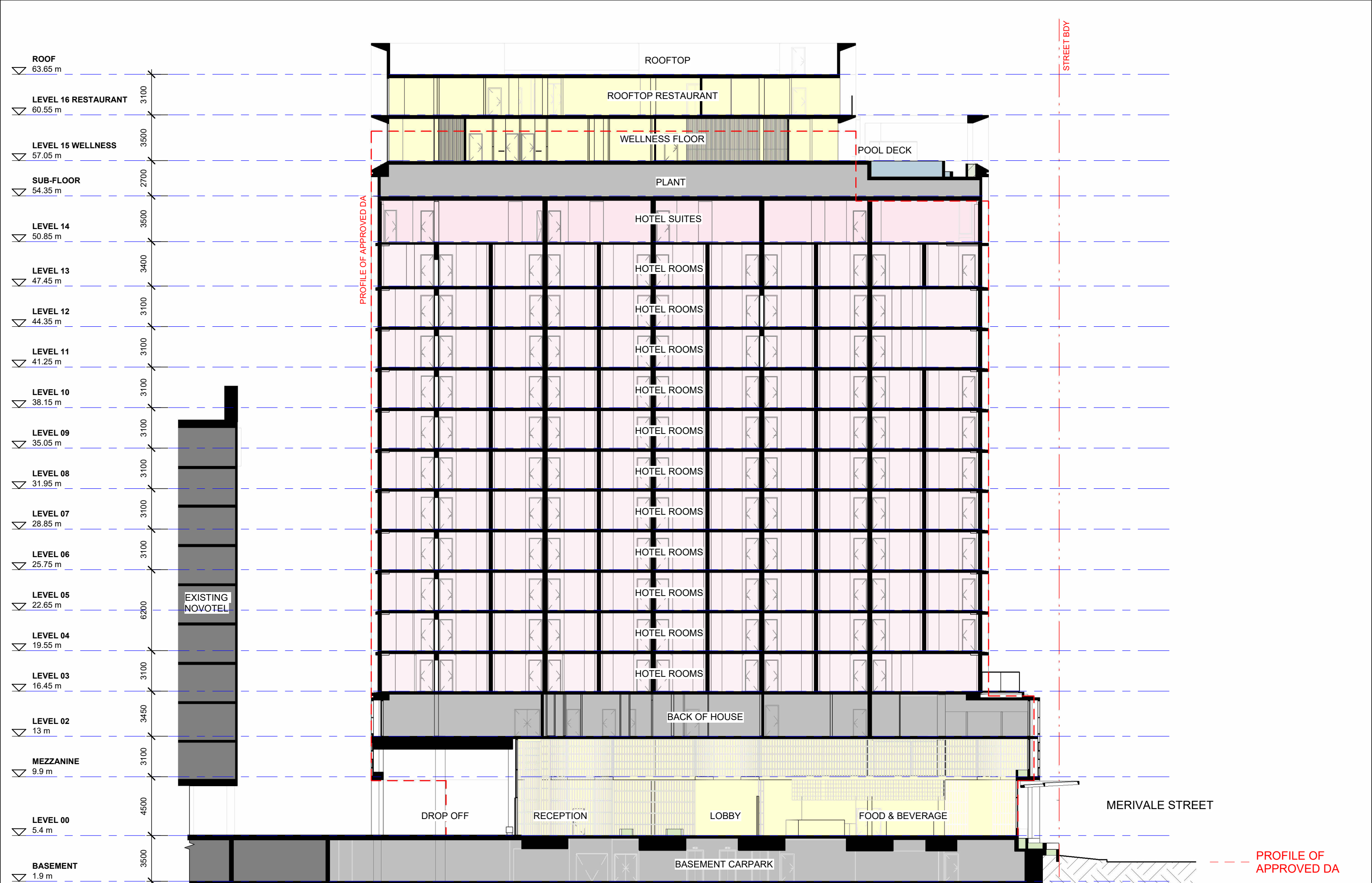


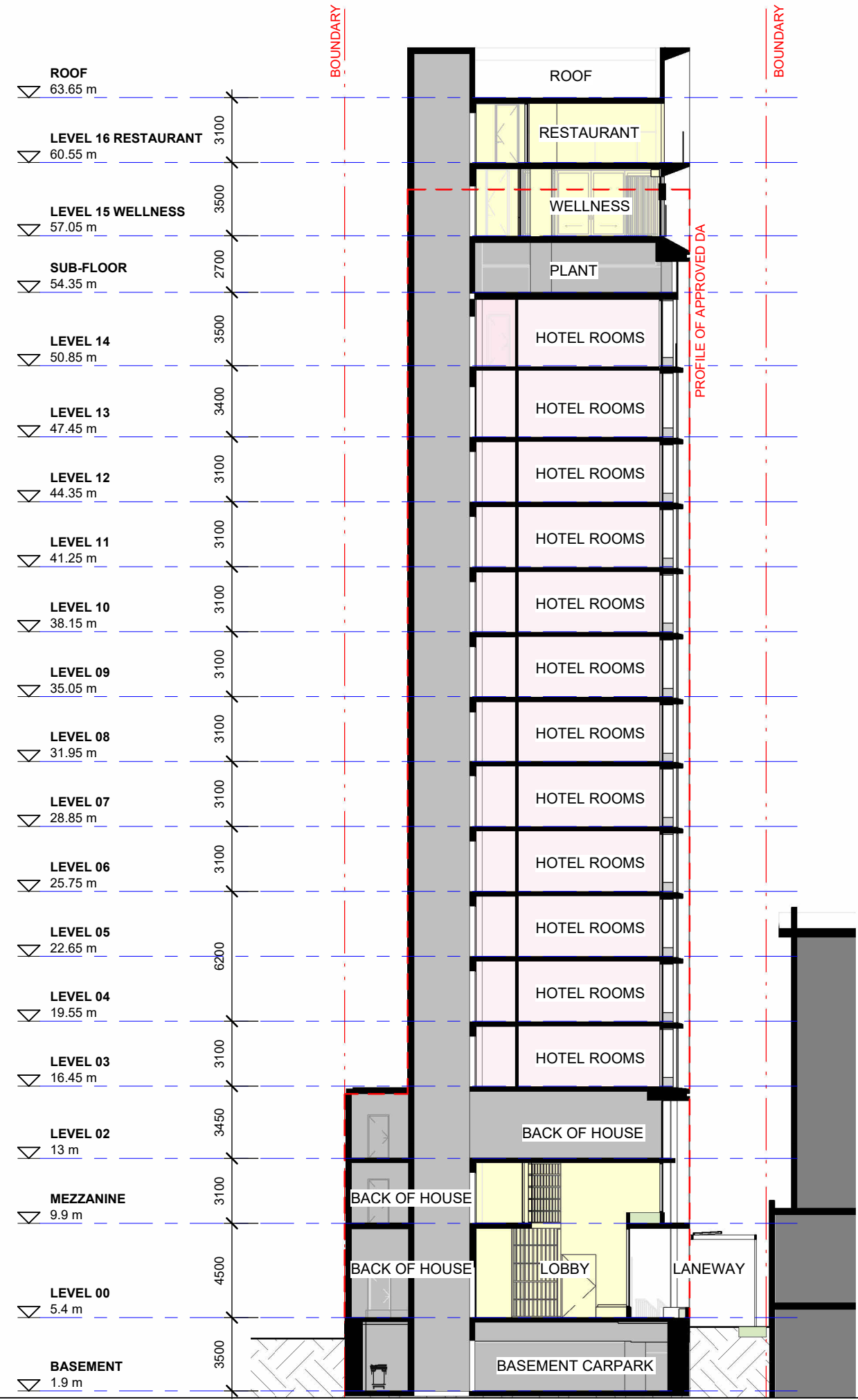
CODE	ITEM
AM-101	Steel
AM-102	Steel Frame Awning
CO-101	Precast Concrete Panels
CO-102	Ribbed Precast Concrete Panels
CO-104	Patterned Precast
CO-105	Patterned Precast
EL-101	Aluminium Cladding Sheet
GL-101	Performance Vision Glazing
GL-102	Performance Spandrel Glazing
MA-101	Feature Blockwork
SC-101	Terracotta Screen
SC-102	Screen - Metal Batten

--- PROFILE OF APPROVED DA

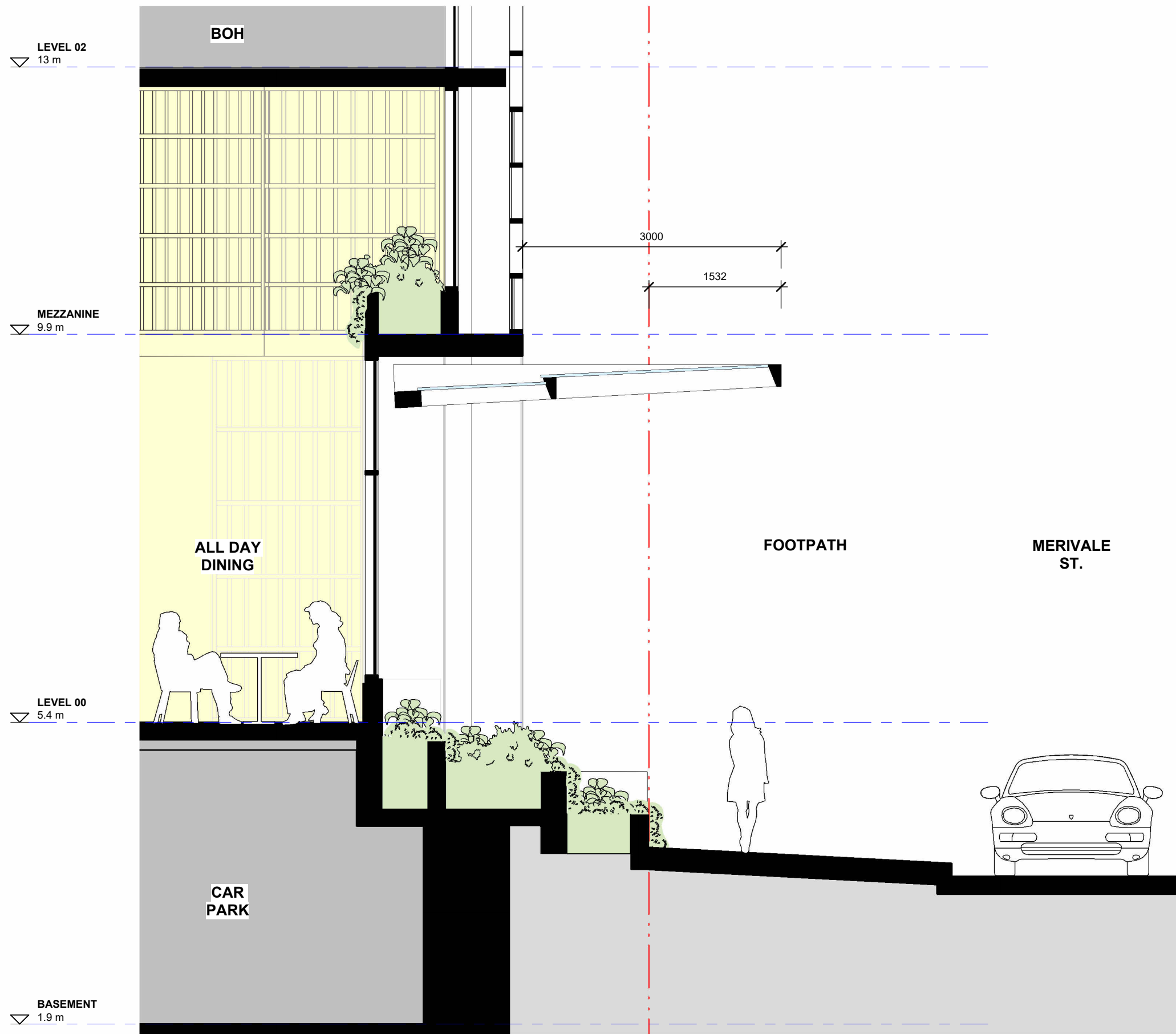


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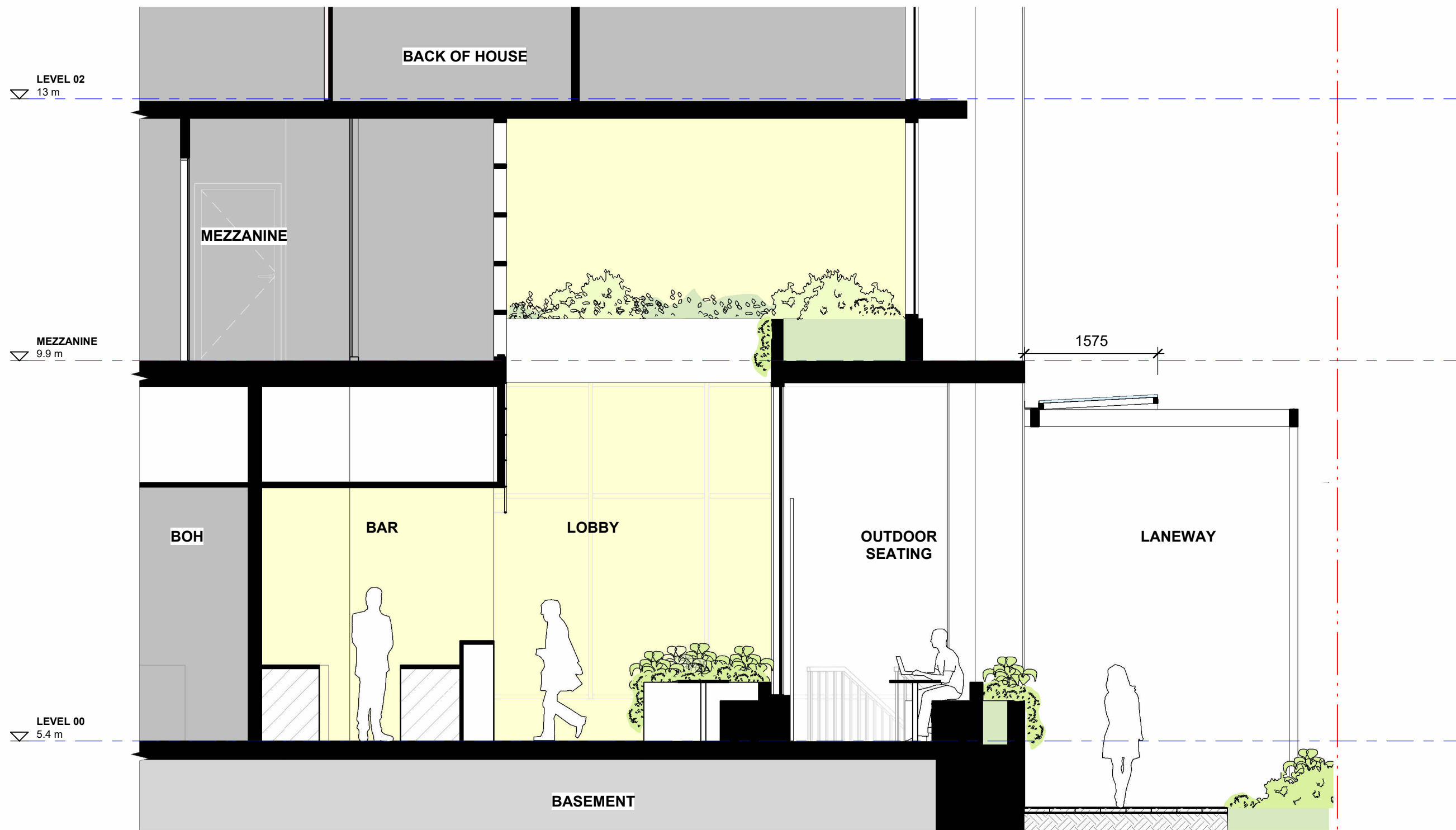


--- PROFILE OF APPROVED DA



1 MERIVALE ST SECTION
1 : 50

NOT FOR CONSTRUCTION



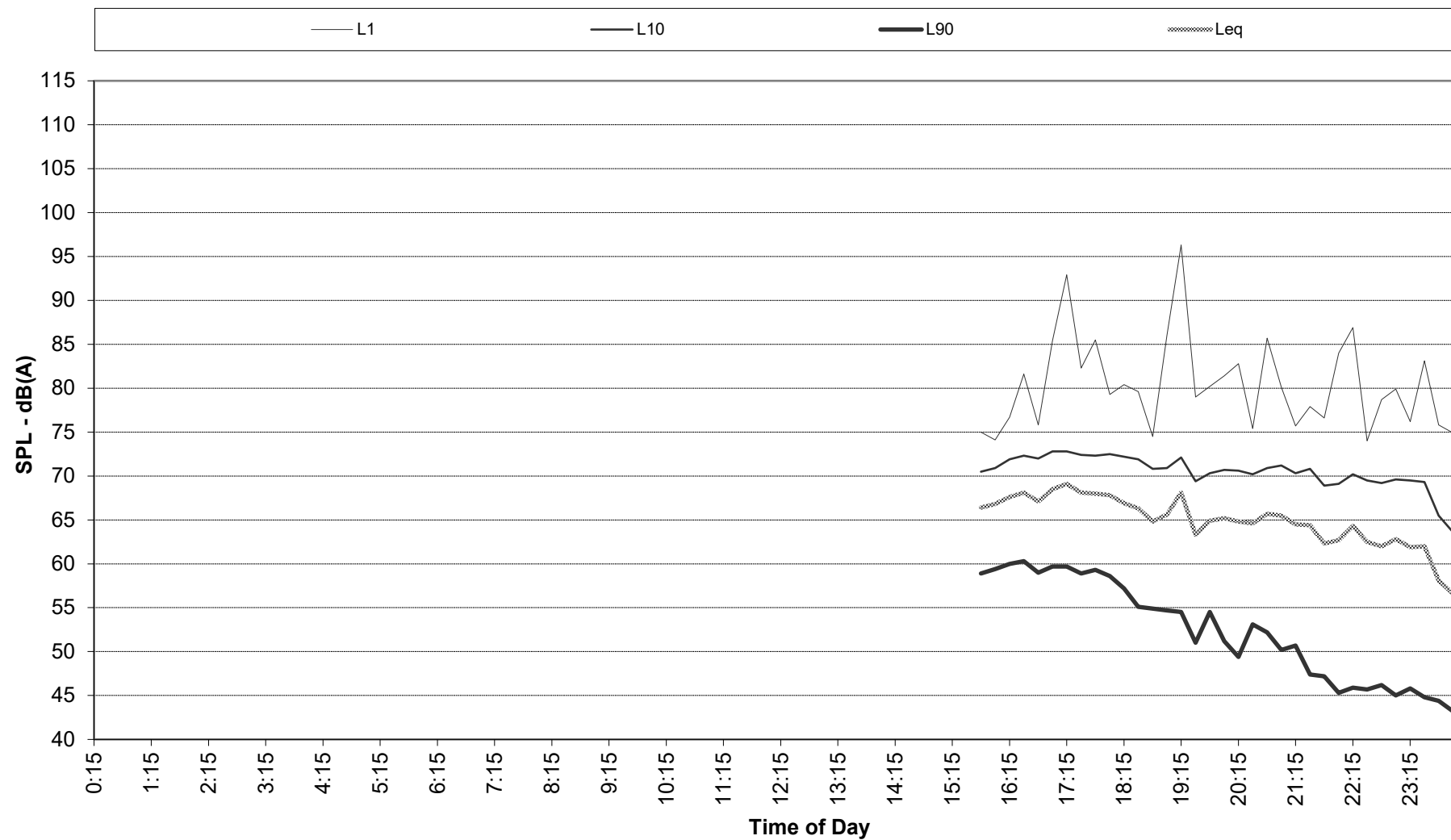
1 LANEWAY SECTION
1 : 50

NOT FOR CONSTRUCTION

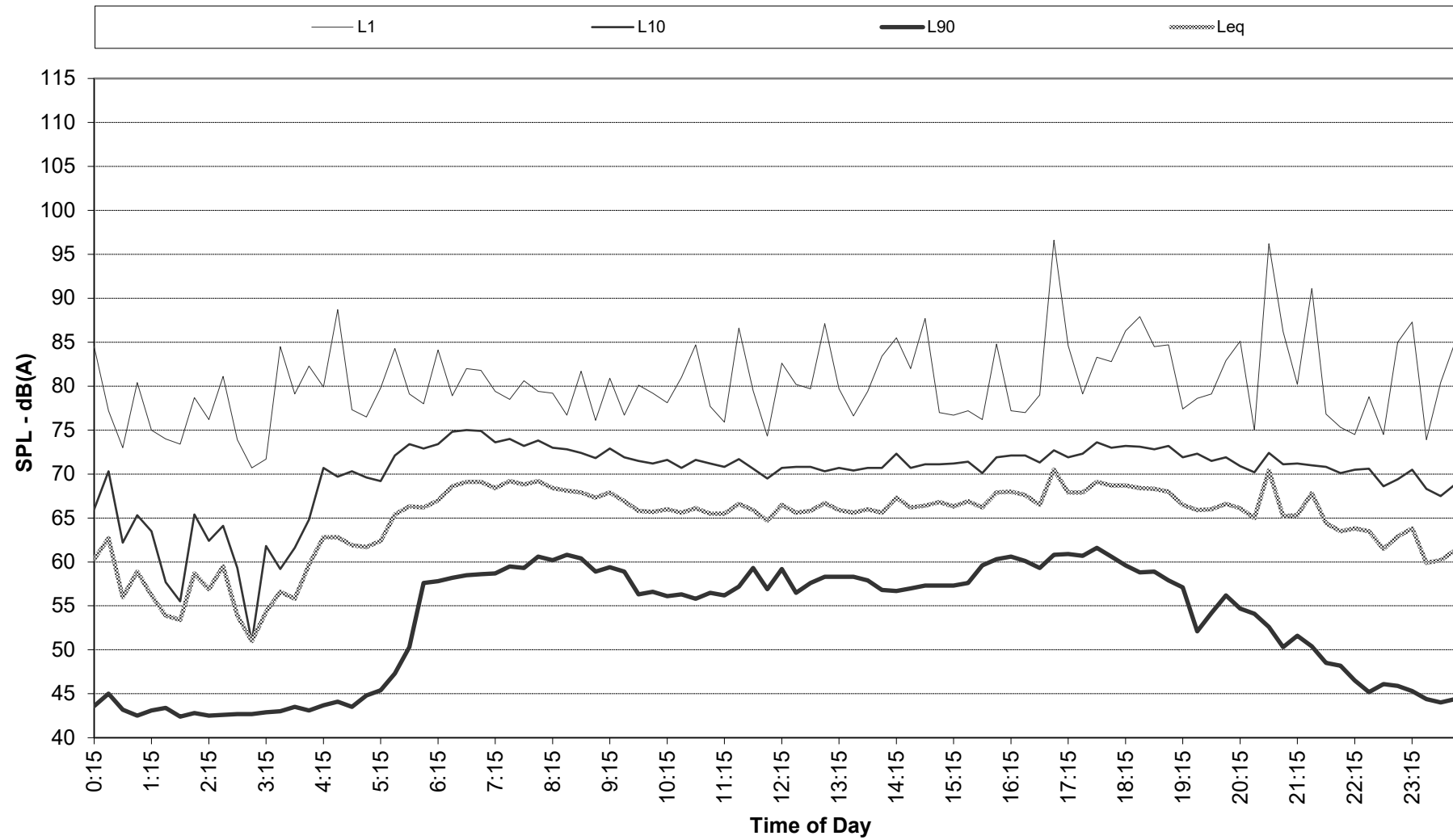
Attachment 2

Noise Datalogger Traces

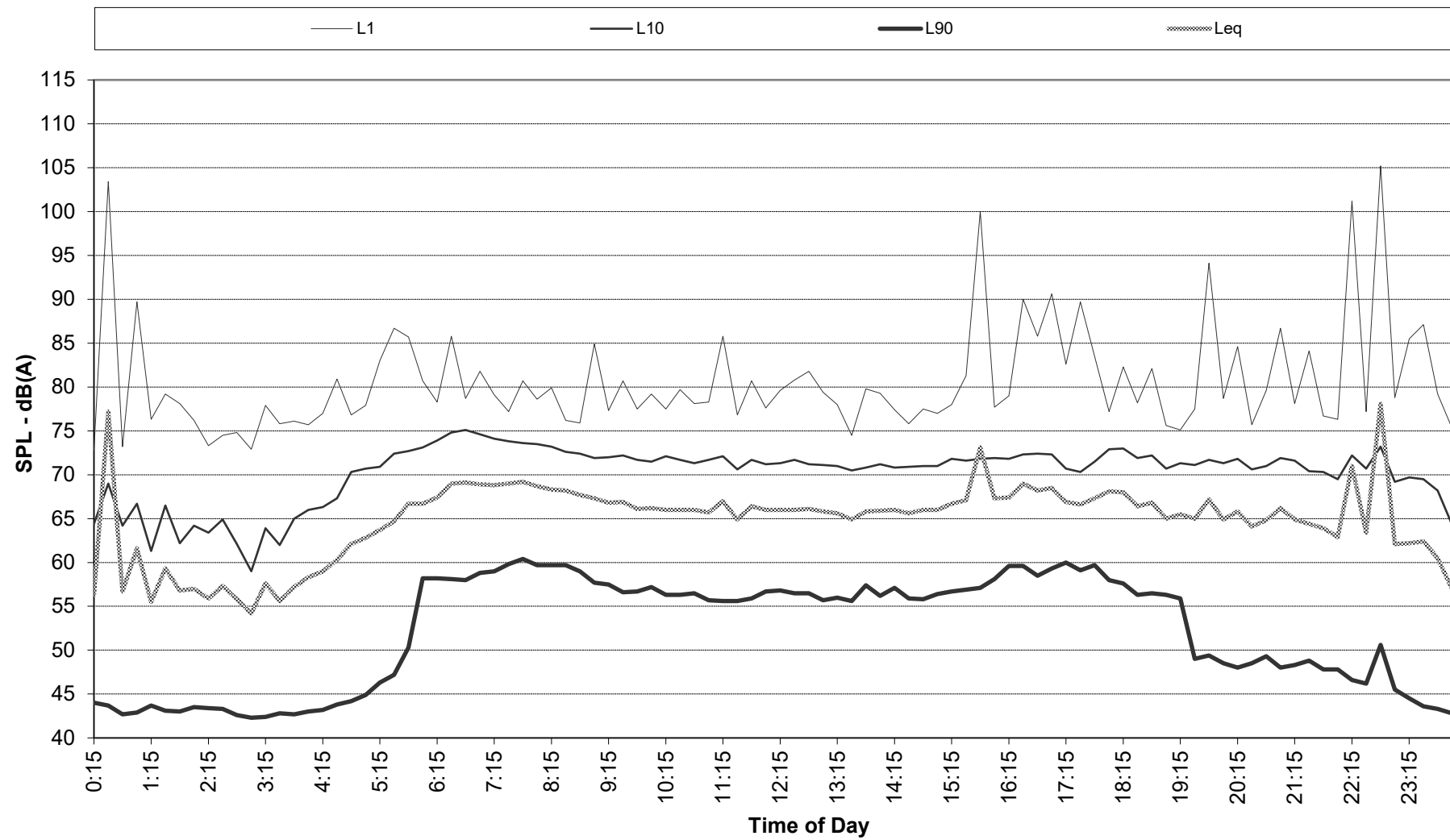
Recorded Statistical Noise Levels for South Brisbane 24111 - - 29-Jul-2024 - Monday



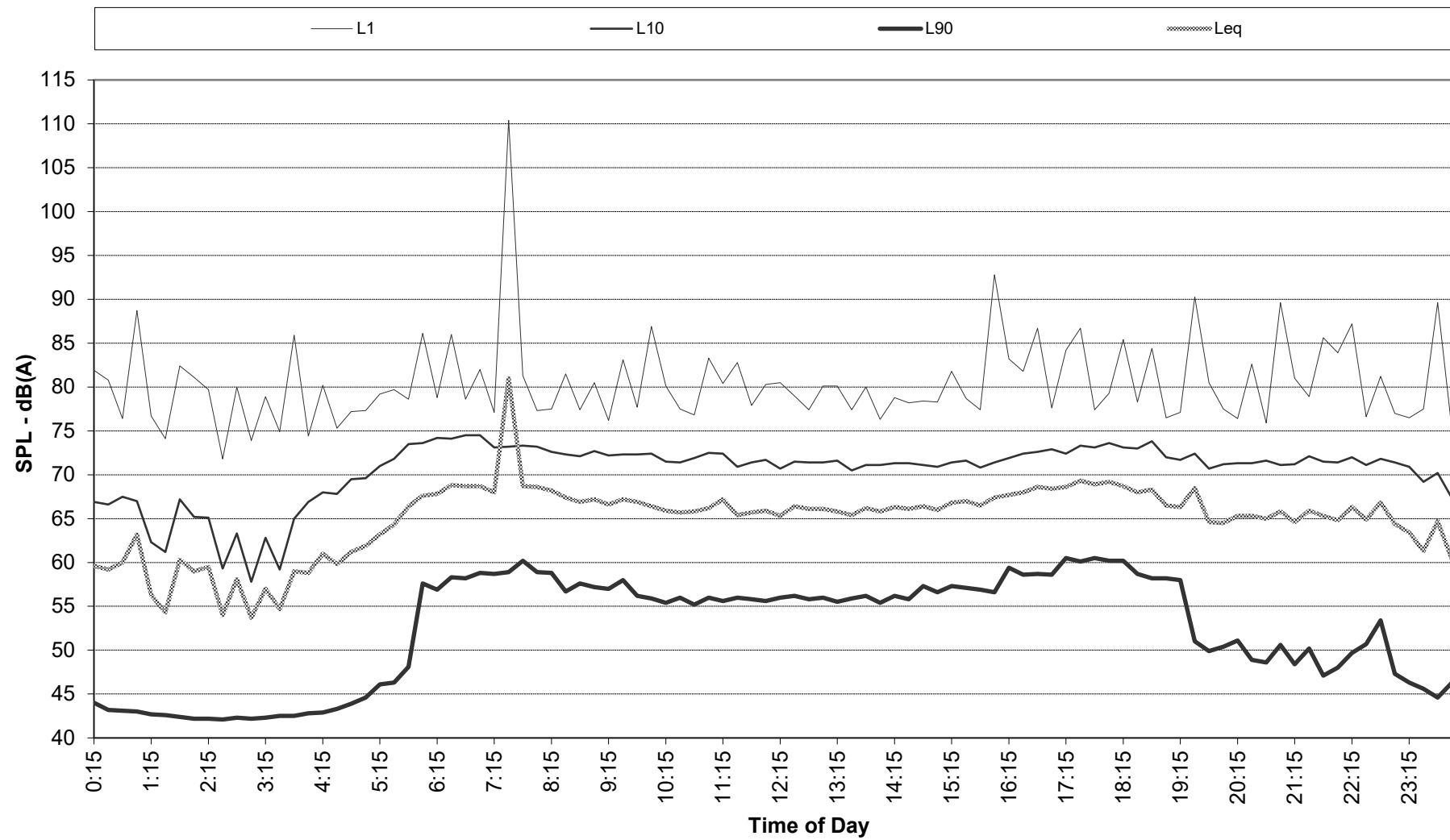
Recorded Statistical Noise Levels for South Brisbane 24111 - - 30-Jul-2024 - Tuesday



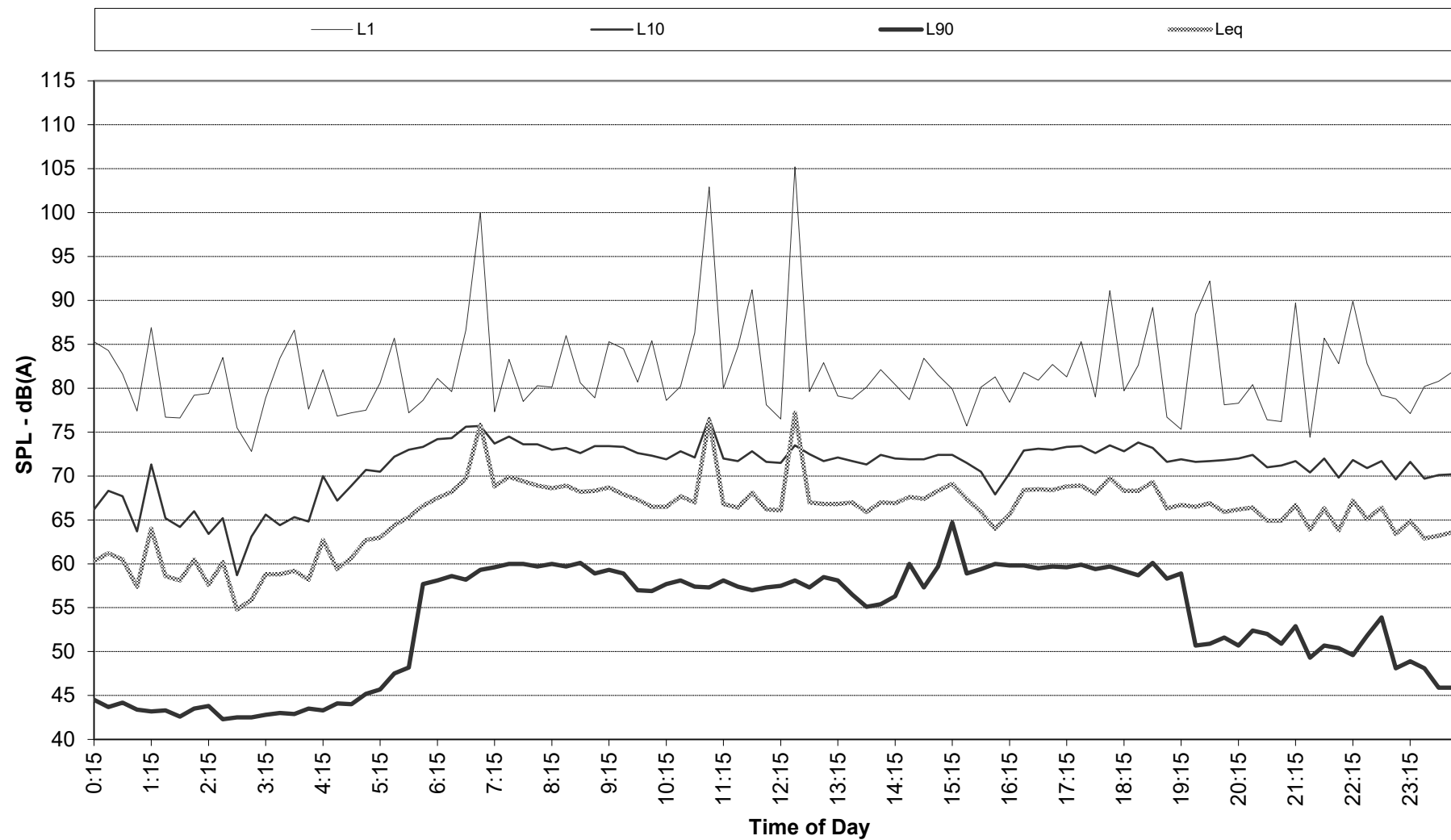
Recorded Statistical Noise Levels for South Brisbane 24111 - - 31-Jul-2024 - Wednesday



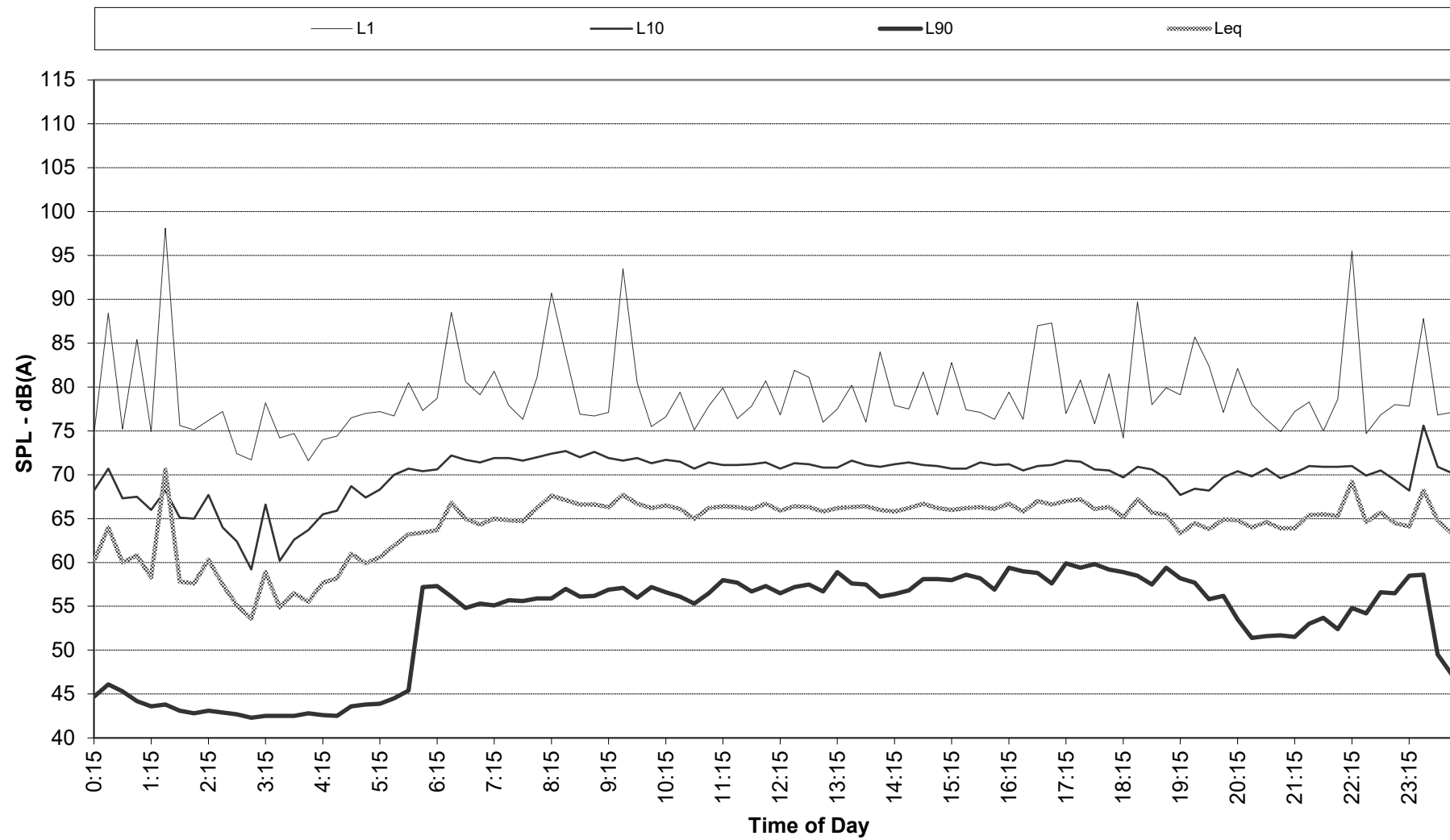
Recorded Statistical Noise Levels for South Brisbane 24111 - - 01-Aug-2024 - Thursday



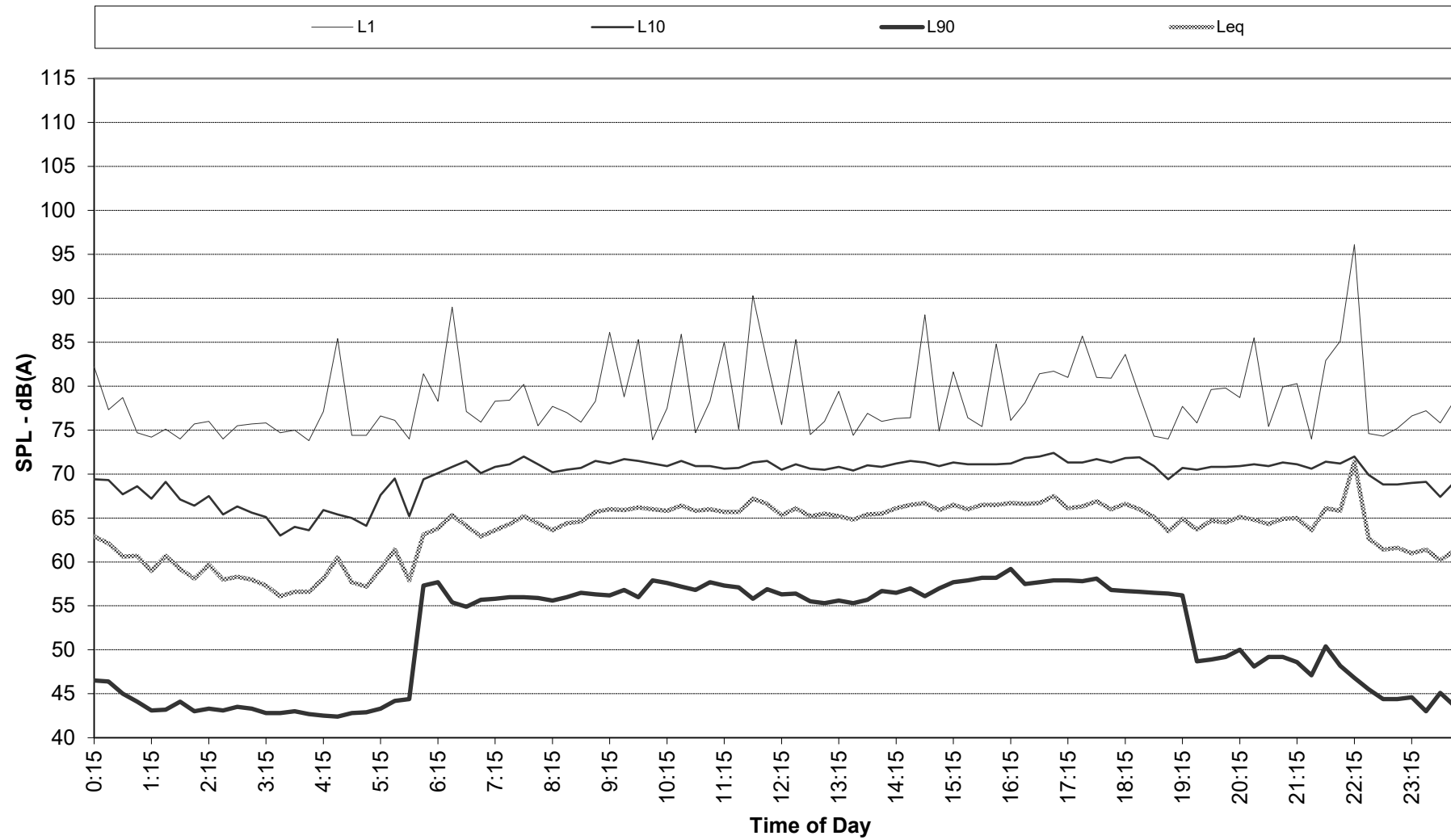
Recorded Statistical Noise Levels for South Brisbane 24111 - - 02-Aug-2024 - Friday



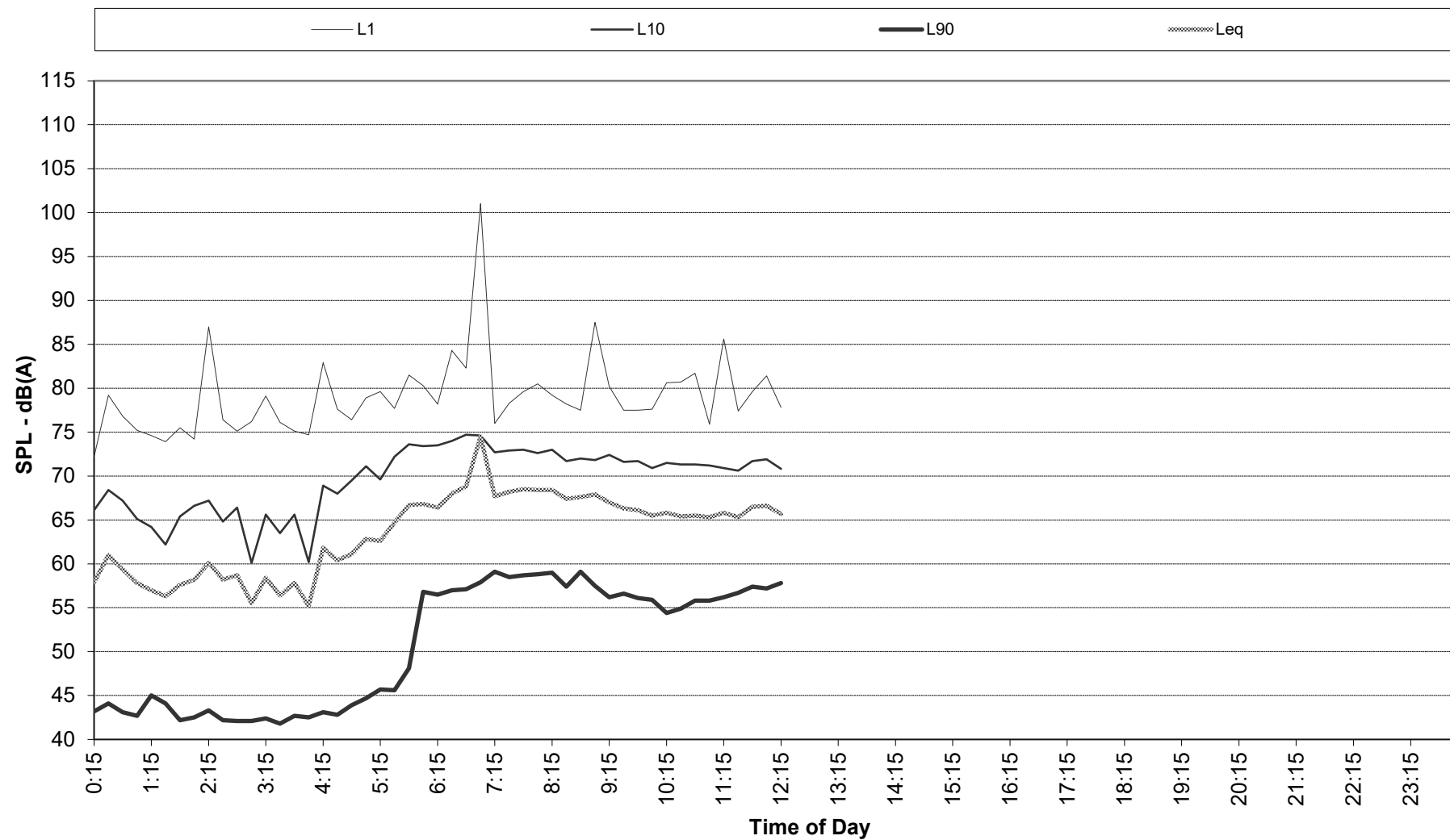
Recorded Statistical Noise Levels for South Brisbane 24111 - - 03-Aug-2024 - Saturday



Recorded Statistical Noise Levels for South Brisbane 24111 - - 04-Aug-2024 - Sunday



Recorded Statistical Noise Levels for South Brisbane 24111 - - 05-Aug-2024 - Monday



Attachment 3

SoundPLAN Noise Model Result Tables



Legend

-  Point source
-  Industrial building; Room
-  Facade as source
-  Transmissive area
-  Indoor point source
-  Indoor area source
-  Area source
-  Main building
-  Floating screen
-  Roof area
-  Point receiver

South Brisbane 24111
Proposed Merivale Hotel
Development

Model Layout and
Receptor Locations

July 2026



Length scale 1:1000

0 5 10 20 30 40
m

South Brisbane 24111

Assessed receiver levels

JULY26 Noise Predictions

2

Receiver	Fl	Dir	Ld dB(A)	Le dB(A)	Ln dB(A)	Lmax dB(A)	
1a	1.FL		35.2	35.6	29.0	40.8	
	2.FL		33.4	34.0	27.4	41.3	
	3.FL		32.1	33.1	26.4	41.8	
	4.FL		31.7	32.9	26.2	42.5	
	5.FL		31.6	33.0	26.3	43.1	
1b	1.FL		33.8	34.5	27.9	42.4	
	2.FL		32.1	33.3	26.6	42.9	
	3.FL		31.8	33.2	26.5	43.5	
	4.FL		31.9	33.4	26.8	44.1	
	5.FL		32.3	33.9	27.2	44.8	
1c	1.FL		30.6	31.7	25.1	39.4	
	2.FL		30.0	31.3	24.7	39.9	
	3.FL		29.8	31.4	24.7	40.4	
	4.FL		30.1	31.8	25.2	41.1	
	5.FL		30.6	32.4	25.7	41.7	
1d	1.FL		29.1	30.4	23.8	39.1	
	2.FL		28.9	30.3	23.7	39.6	
	3.FL		28.9	30.5	23.9	40.1	
	4.FL		29.3	31.0	24.4	41.3	
	5.FL		29.9	31.6	25.0	42.1	
2	1.FL		27.6	29.0	22.5	37.2	
	2.FL		27.9	29.4	22.9	37.7	
	3.FL		28.2	29.8	23.3	38.3	
	4.FL		28.6	30.3	23.8	39.0	
	5.FL		29.2	30.9	24.3	39.7	
3	1.FL		32.3	32.5	26.0	43.2	
	2.FL		27.6	28.1	21.7	37.0	
	3.FL		26.1	26.9	20.6	34.5	
	4.FL		25.9	26.9	20.5	33.8	
	5.FL		26.1	27.1	20.8	33.1	
	6.FL		26.3	27.4	21.2	32.4	
	7.FL		26.6	27.7	21.5	32.2	
	8.FL		26.9	28.1	22.0	31.9	
	9.FL		27.3	28.6	22.6	31.8	
Hotel East Facade	3.FL	NE	25.0	26.0	19.2	32.6	
	4.FL		25.2	26.4	19.6	33.1	
	5.FL		25.6	26.8	19.9	33.7	
	6.FL		25.9	27.1	20.3	34.3	
	7.FL		26.4	27.7	20.8	35.7	
	8.FL		27.0	28.3	21.3	36.5	
	9.FL		27.8	29.1	22.0	37.3	
	10.FL		28.7	30.0	22.9	38.1	
	11.FL		29.8	31.0	23.8	40.0	

MWA Environmental

1

South Brisbane 24111

Assessed receiver levels

JULY26 Noise Predictions

2

Receiver	Fl	Dir	Ld dB(A)	Le dB(A)	Ln dB(A)	Lmax dB(A)	
	12.FL		31.0	32.2	24.9	42.1	
	13.FL		32.5	33.6	26.2	44.6	
	14.FL		34.3	35.2	27.6	47.9	
Hotel North Facade 1	3.FL	NW	24.2	25.4	18.7	32.1	
	4.FL		24.5	25.8	19.1	32.8	
	5.FL		25.0	26.4	19.6	33.5	
	6.FL		25.6	27.0	20.2	35.4	
	7.FL		26.1	27.6	20.7	36.2	
	8.FL		26.7	28.2	21.4	36.6	
	9.FL		27.4	28.9	22.1	36.9	
	10.FL		28.3	29.9	23.1	38.1	
	11.FL		29.2	30.9	24.1	38.6	
	12.FL		30.0	31.7	25.0	39.7	
	13.FL		30.9	32.6	26.1	40.7	
	14.FL		31.9	33.5	27.2	44.4	
Hotel North Facade 2	3.FL	NW	22.7	24.0	17.2	33.2	
	4.FL		23.1	24.4	17.6	33.8	
	5.FL		23.5	24.9	18.0	34.4	
	6.FL		24.1	25.5	18.6	35.1	
	7.FL		24.8	26.2	19.5	35.8	
	8.FL		25.5	27.0	20.3	36.5	
	9.FL		26.4	27.8	21.1	37.3	
	10.FL		27.3	28.7	21.9	38.2	
	11.FL		28.4	29.9	23.0	39.9	
	12.FL		29.7	31.1	24.2	40.9	
	13.FL		31.2	32.5	25.5	43.3	
	14.FL		32.9	34.1	27.0	47.0	
Hotel South Facade 1	3.FL	SE	25.8	27.0	20.3	37.5	
	4.FL		26.1	27.4	20.7	37.3	
	5.FL		26.7	28.0	21.2	36.7	
	6.FL		27.2	28.6	21.8	36.3	
	7.FL		27.7	29.1	22.4	36.5	
	8.FL		28.3	29.8	23.1	37.6	
	9.FL		29.0	30.6	23.8	38.7	
	10.FL		30.0	31.6	24.9	40.5	
	11.FL		30.8	32.5	25.8	44.0	
	12.FL		32.2	33.8	27.2	44.7	
	13.FL		33.5	35.2	28.7	45.4	
	14.FL		35.1	36.9	30.4	46.2	
Hotel South Facade 2	3.FL	SE	31.5	31.9	25.3	43.3	
	4.FL		30.4	31.0	24.3	41.7	
	5.FL		30.0	30.9	24.2	39.0	
	6.FL		30.2	31.2	24.5	37.7	

MWA Environmental

2

South Brisbane 24111

Assessed receiver levels

JULY26 Noise Predictions

2

Receiver	Fl	Dir	Ld dB(A)	Le dB(A)	Ln dB(A)	Lmax dB(A)	
	7.FL		30.2	31.4	24.7	40.9	
	8.FL		30.5	31.8	25.1	41.6	
	9.FL		31.1	32.5	25.7	42.3	
	10.FL		31.9	33.3	26.5	43.1	
	11.FL		32.8	34.3	27.4	44.0	
	12.FL		33.9	35.4	28.4	47.0	
	13.FL		35.3	36.7	29.7	47.9	
	14.FL		37.1	38.4	31.2	51.1	
Hotel West Facade	3.FL	SW	24.6	25.7	19.2	32.7	
	4.FL		24.8	26.0	19.5	32.4	
	5.FL		25.3	26.6	20.1	32.3	
	6.FL		25.7	27.1	20.6	32.8	
	7.FL		26.1	27.6	21.1	33.4	
	8.FL		26.6	28.1	21.7	33.9	
	9.FL		27.2	28.8	22.4	34.5	
	10.FL		27.8	29.4	23.1	35.0	
	11.FL		28.5	30.2	23.9	35.5	
	12.FL		29.2	30.9	24.7	36.0	
	13.FL		30.1	31.8	25.7	36.4	
	14.FL		31.0	32.7	26.9	37.7	

MWA Environmental

3