



Noise Impact Assessment

Application for Ministerial Designation for Electricity Operating Works, Storage & Works Depots & Administrative Facilities

33 Harold Street, Virginia

Powerlink Queensland

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Executive Summary

ATP Consulting Engineers (ATP) was engaged by Powerlink Queensland to prepare a noise impact assessment (NIA) in support of a Ministerial Infrastructure Designation (MID) application for Ministerial Designation for Electricity Operating Works, Storage & Works Depots & Administrative Facilities at the existing Powerlink Queensland facility at 33 Harold Street in Virginia.

This report presents the results of the noise impact assessment of the operation of the Powerlink Queensland site after completion of the proposed Tesla Building redevelopment, as per the *Noise Impact Assessment Planning Scheme Policy* (NIAPSP) and *Section 9.3.24 Special Purpose Code* of the Brisbane City Plan 2014.

Detailed noise propagation modelling was carried out considering the noise emissions from the proposed redevelopment of Powerlink Queensland, including car parking, heavy vehicle movements, deliveries and refuse collection, mechanical noise and waste collection.

The results of the operational noise assessment indicate that the noise emissions from the proposed development will comply with the noise criteria at the nearest noise sensitive places.

To ensure ongoing protection of the noise amenity at the nearest noise sensitive places the following noise mitigation measures are recommended:

Recommendations

- Deliveries and refuse collection must be carried out from 6:00am to 6:00pm.
- It is noted that the mechanical plant, including AC units, have not been selected yet. Should there be a need to locate the mechanical plant at a location other than the dedicated plant room locations indicated in the development plans, or should the mechanical equipment need to have higher combined sound power level than 81dB(A), then the mechanical plant and equipment must be designed to comply with the noise criteria stated in Section 3.1 of this report.
- In addition, the following general recommendations should be considered for the design and installation of the various mechanical equipment:
 - o Select equipment with low sound power level;
 - o Locate equipment as far away from noise sensitive areas as possible;
 - o Provide acoustic lining to inside of ventilation ducts and/or provide duct silencers;
 - o Where equipment has directional noise characteristics, point equipment away from noise sensitive areas.

Provided that the recommended noise control measures are implemented, compliance with the relevant noise criteria can be achieved and there are no other acoustic constraints on the redevelopment of the Tesla Building of Powerlink Queensland at 33 Harold Street in Virginia.

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1. Introduction

1.1 Project Background

ATP Consulting Engineers (ATP) was engaged by Powerlink Queensland to prepare a noise impact assessment (NIA) in support of a Ministerial Infrastructure Designation (MID) application for Ministerial Designation for Electricity Operating Works, Storage & Works Depots & Administrative Facilities at the existing Powerlink Queensland facility at 33 Harold Street in Virginia.

The redevelopment will be done in eight (8) stages including the partial demolition of the existing tesla building, the relocation of various site assets and the construction of a new Tesla and FDOE building along with additional parking spaces.

This report presents the results of the noise impact assessment of the operation of the Powerlink Queensland site after completion of the proposed Tesla Building redevelopment, as per the *Noise Impact Assessment Planning Scheme Policy* (NIAPSP) and *Section 9.3.24 Special Purpose Code* of the Brisbane City Plan 2014.

1.2 Study Objectives

Study objectives are as follows:

- Identification of nearest noise sensitive places to the proposed establishment.
- Determination of the noise sources associated with the proposed establishment.
- Development of a 3D noise propagation model using SoundPLAN software considering the proposed buildings, nearest noise sensitive places and local topography.
- Noise propagation modelling to calculate the noise levels at the zone boundary of the nearest noise sensitive places as per Brisbane City Plan 2014 zoning overlay.
- Assessment of the calculated operational noise levels against the relevant criteria from the Brisbane City Plan 2014 – *Section 9.3.24 Special Purpose Code*.
- Recommendation of appropriate noise mitigation measures to ensure compliance with the noise criteria at the nearest noise sensitive places.

1.3 Subject Site

The subject site is located at 33 Harold Street, Virginia, on the land described as Lot 8 on SP241022 within the Brisbane City Council (BCC) local government area and is zoned as a *Special purpose (Utility services) zone*. The total area of the site is 54,660m².

The site location is presented in Figure 1.1.



Figure 1.1 Location of subject site and surroundings

The redevelopment of the Tesla building will be carried out in eight (8) stages and will comprise of the following upon completion:

- New FDOE Building;
- Redeveloped Tesla Building;
- New landscaped area (Tesla Building); and
- 311 Carpark spaces (new and redeveloped).

The proposed hours of operation of the development is from 7:00am to 6:00pm. However, the Technical Room within the redeveloped Tesla Building is intended to operate 24 hours a day, 7 days a week. It is anticipated that the Technical Room will be staffed by 4 to 6 personnel at any given time. Powerlink maintenance crews may also attend the site 24/7 for emergency responses, which will require 8 to 10 staff onsite at any given time.

Development plans of the Powerlink Queensland site are presented in Appendix A

2. Existing Noise Amenity

2.1 Noise Measurement Locations

Unattended noise measurements were carried out to obtain information about the background noise levels in the vicinity of the subject site. The noise measurement methodology is summarised in Table 2.1.

Table 2.1 Noise Measurements Methodology

Relevant Legislation, Standards and Guidelines	The noise measurements were carried in accordance with: Australian Standard AS 1055-2018 (<i>Acoustics – Description and measurement of environmental noise</i>).
Measurement Locations	Background noise measurements were carried out on the eastern side of Roy Seng Park as presented in Figure 2.1. Photographs of the monitoring station are presented in Appendix B.
Measurement Periods	Continuous unattended noise measurements were carried out 24 hours a day from 20 July to 28 July 2023.
Measurement Equipment	The following sound measurement equipment was used: - Environmental noise logger – ARL Ngara (Serial No. 87811D); and - Calibration – RION NC-75 Sound Level Calibrator (serial no. 34413140). The noise measurement instruments conform to Australian Standard AS/NZSIEC61672.1-2019. Calibration was performed during set up and download of the data from the noise logger. The calibration drift was <0.1 dB(A).
Meteorological Conditions	The weather conditions during the monitoring period were fine, with no inclement weather encountered. Full meteorological data ¹ for the monitoring period is presented in Appendix C.
Analysis of Data	The noise measurement data was analysed to determine the following operational noise descriptors: L_{A90,T}: Background noise level during daytime (7am to 6pm), evening (6pm to 10pm) and nighttime (10pm to 7am). RBL: Rating Background Level during daytime (7am to 6pm), evening (6pm to 10pm) and night-time (10pm to 7am). The RBL was calculated from the L_{A90,adj,1hr} noise levels using the procedure described in SC6.21.5 of the Brisbane City Council <i>City Plan 2014</i>.

The location of the unattended background noise measurements is presented in Figure 2.1.

¹ Bureau of Meteorology (BoM) daily weather observations as recorded at the Brisbane City meteorological station (040913).

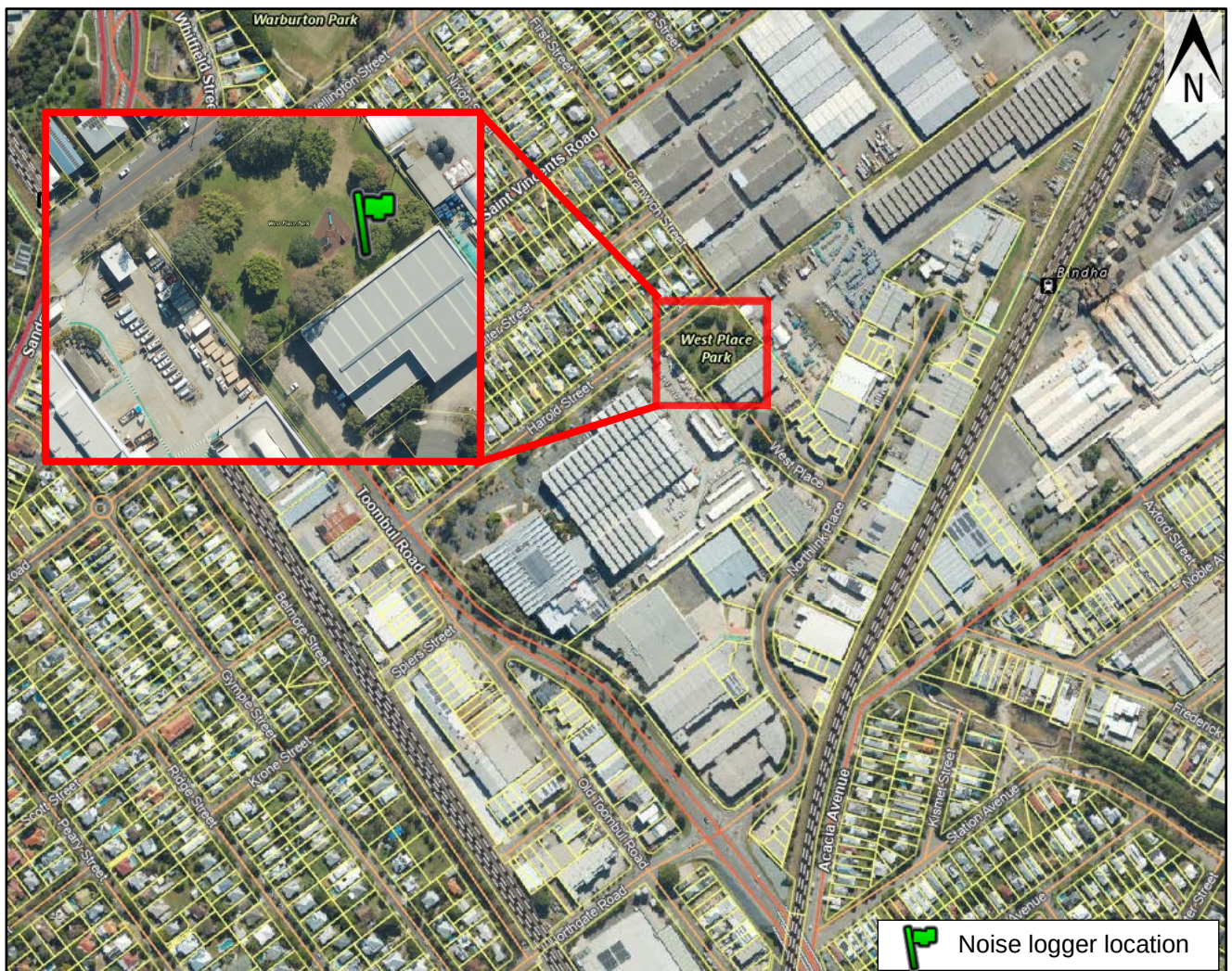


Figure 2.1 Background noise monitoring location

2.2 Noise Measurement Results

The rating background noise levels (RBL) over the measurement period, calculated as per the procedure in the *SC6.21 Noise Impact Assessment Planning Scheme Policy*, are presented in Table 2.2.

Table 2.2 Existing average and background noise level

Date	Average Noise Levels, $L_{Aeq,T}$, dB(A)			Assessment Background Levels, dB(A) (Tenth percentile of $L_{A90,T}$ levels)		
	Day, T = 11hr	Evening, T = 4hr	Night, T = 9hr	Day, T = 11hr	Evening, T = 4hr	Night, T = 9hr
20/07/2023 (Thu)	—	50	47	—	46	39
21/07/2023 (Wed)	51	48	43	42	41	35
22/07/2023 (Fri)	47	42	43	35	36	34
23/07/2023 (Sat)	47	41	41	36	34	32
24/07/2023 (Sun)	51	42	40	43	37	34
25/07/2023 (Mon)	50	42	41	42	37	33
26/07/2023 (Tue)	49	42	42	39	35	32
27/07/2023 (Thu)	49	42	40	40	36	32
Average	49	44	42	—	—	—
Rating Background Levels (RBL)	—	—	—	40	36	33

The results and graphs with daily noise data of the unattended noise measurements, representative of the nearest noise sensitive receivers to the site are presented in Appendix D.

2.3 Nearest Noise Sensitive Places

The nearest noise sensitive receptors to the proposed development are the existing residential dwellings along Harold Street. The nearest noise sensitive receptors are listed in Table 2.3.

Table 2.3 Nearest noise sensitive places

Street address	Current / approved use	Zone
2 Harold Street	Low-set residential dwelling	Low Density Residential
8 Harold Street	Low-set residential dwelling	Low Density Residential
10 Harold Street	Low-set residential dwelling	Low Density Residential
12 Harold Street	Low-set residential dwelling	Low Density Residential
14 Harold Street	Low-set residential dwelling	Low Density Residential
16 Harold Street	Low-set residential dwelling	Low Density Residential
18 Harold Street	Low-set residential dwelling	Low Density Residential
20 Harold Street	High-set residential dwelling	Low Density Residential
24 Harold Street	High-set residential dwelling	Low Density Residential
24B Harold Street	High-set residential dwelling	Low Density Residential
24A Harold Street	High-set residential dwelling	Low Density Residential
26 Harold Street	Low-set residential dwelling	Character Residential
28 Harold Street	High-set residential dwelling	Character Residential
30 Harold Street	High-set residential dwelling	Character Residential
32 Harold Street	High-set residential dwelling	Character Residential
34 Harold Street	High-set residential dwelling	Character Residential
36 Harold Street	High-set residential dwelling	Character Residential
38A Harold Street	High-set residential dwelling	Character Residential
38 Harold Street	High-set residential dwelling	Character Residential
40 Harold Street	Low-set residential dwelling	Character Residential
42 Harold Street	High-set residential dwelling	Character Residential
44 Harold Street	High-set residential dwelling	Low Density Residential
46 Harold Street	High-set residential dwelling	Low Density Residential

The surrounding uses are classified as *Low Impact Industry*, *General Industry A*, *General Industry B*, *Character Residential* and *Low Density Residential*. BCC zoning map is presented in Figure 2.2.



Figure 2.2 BCC zoning

The nearest noise sensitive land uses are the CR1 (Character) and Low Density Residential zoned dwellings to the north of the subject site. In accordance with the Brisbane City Plan 2014, compliance with the noise criteria should be achieved at the boundary of the residential zone.

3. Noise Impact Assessment

3.1 Noise Criteria

The noise assessment was carried out in accordance with *SC6.21 Noise Impact Assessment Planning Scheme Policy* of the Brisbane City Plan 2014 v31.

The Powerlink Queensland site is zoned as SP4 Special Purpose (Utility Services). The noise criteria applicable to the proposed development are specified in *9.3.24 Special Purpose Code* of the Brisbane City Plan 2014.

The relevant Performance Outcome (PO) and Acceptable Outcome (AO) from the *Special Purpose Code* are both presented in Table 3.1.

Table 3.1 Excerpt from Special Purpose Code

Performance Outcome	Acceptable Outcome
PO24 Development does not generate noise that exceeds the noise (planning) criteria in Table 9.3.24.3.B, low frequency noise criteria in Table 9.3.24.3.C and night-time noise criteria in Table 9.3.24.3.D at sensitive zones.	AO24 The development does not generate noise which is clearly audible and creates a disturbance within a sensitive use.

The noise criteria from the Special Purpose Code assessable at the boundary of a Character zone are presented in Table 3.2. The criteria for Low-Density residential zones are less stringent, therefore the Character zone criteria will be used.

Table 3.2 Noise Criteria

Criteria Location CR1 (Character) zone boundary	Day (7am-6pm) T=11hr	Evening (6-10pm) T=4hr	Night (10pm-7am) T=9hr
Table 9.3.24.3.B – Noise (planning) criteria Intrusive noise criteria, $L_{Aeq,adj,T}$	43 (RBL + 3)	39 (RBL + 3)	36 (RBL + 3)
Table 9.3.24.3.B – Noise (planning) criteria Acoustic amenity criteria, $L_{Aeq,adj,T}$	50	45	40
Table 9.3.24.3.C – Low frequency noise criteria Low frequency noise criteria, $L_{Ceq,adj,T}$	65	65	60
Table 9.3.24.3.D – Night-time noise criteria Night-time noise criteria, L_{Amax} (average of the highest 15 single events over a given night period)	–	–	50
Table 9.3.24.3.D – Night-time noise criteria Night-time noise criteria, L_{Amax} (highest single event over a given night period)	–	–	55

The intrusive noise criteria are a function of RBL, a defined term which rates measured background noise levels over a given time period. The noise criteria is not to exceed the RBL + 3dB for the

nominated time period. The other noise criteria which are applicable include the acoustic amenity criteria, low frequency noise criteria and night-time noise criteria.

As per Brisbane City Plan Schedule 6.21 Section 6.3 low frequency noise assessments only applies to certain specified noise sources, which are not present in this case. As such, the criteria in 9.3.24.3C will not be assessed.

4. Noise Propagation Modelling

4.1 Modelling Methodology

The industrial module of the SoundPLAN noise propagation software was used to calculate the noise levels at the nearest noise sensitive places. The calculations were carried out as per the procedures specified in the International Standard *ISO 9613 (Acoustics – Attenuation of sound during propagation outdoors)*. The calculation method for a single frequency is as follows:

$$L_S = [L_W + K_0] - [A_{dl} + A_{div} + A_{gr} + A_{bar} + A_{atm} + d_{Lrefl} + d_{Lw}]$$

Where:	L_S	Sound pressure for a single frequency
	L_W	Sound power of source
	K₀	Correction for propagation in limited spatial angle
	A_{DI}	Mean directivity correction
	A_{div}	Mean attenuation due to geometrical spreading
	A_{gr}	Mean attenuation due to ground effect
	A_{bar}	Mean attenuation due to screening
	A_{atm}	Mean attenuation due to air absorption
	d_{Lrefl}	Level increase due to reflections
	d_{Lw}	Correction due to source operation time

The noise propagation losses are calculated as a combination of distance attenuation (geometrical spreading), screening, ground attenuation and other factors. These values are presented in Appendix E for the three closest residential receivers, as calculated at their facades.

The results of noise modelling as per ISO9613 are in terms of L_{eq} .

The assumptions and data used in development of the noise propagation model are presented in Table 4.1.

Table 4.1 Data and Assumptions

Terrain	- Department of Natural Resources and Mines Airborne Laser Scanning (LiDAR) 1 metre data was used to determine the elevation of the development relative to the surrounds. - Ground surface absorption factor of 0 was applied to all paved surfaces and 1 for all grassed areas.
Buildings	- The proposed development was included in the model along with neighbouring buildings surrounding the site. - Plans are included in Appendix A.
Noise sources	Refer to Section 4.2 of this report.
Receivers	- Receivers were placed along the boundaries of the nearby residential uses at a height of 1.5m above ground level for the ground floor and 4.5m above ground level for the first floor. 1m grid spacing was used for calculation of noise contour maps.
Noise mitigation measures	The recommended noise control measures are discussed in Section 5 of this report.
Distance attenuation	- A 3D model of the subject site and surroundings was developed using cadastral and survey data using SoundPLAN software. The source-receiver distances and geometrical spreading are automatically calculated in SoundPLAN to a high level of accuracy in accordance with the ISO9613 procedure. - Separation distances and distance attenuation values for the closest three (3) noise sensitive receptors are presented in Appendix E.
Barrier attenuation / screening	- Screening by walls and roofs was considered in the model. The screening was calculated in SoundPLAN in accordance with the ISO9613 procedure. - Barrier attenuation / screening values for the closest three (3) noise sensitive receptors are presented in Appendix E.
Ground attenuation	- Sound reflecting surfaces, such as pavement, are modelled with ground absorption coefficient of 0 (no absorption). Grassed and vegetated areas were modelled with ground absorption coefficient of 1 (100% absorption) in accordance with ISO9613. - Ground attenuation values for the closest three (3) noise sensitive receptors are presented in Appendix E.

4.2 Noise Sources

Details of the noise sources at the proposed development with a potential to impact on the adjacent land uses are presented in Table 4.2.

Table 4.2 Operational noise sources

Operational noise source	Location	Sound power level dB(A) (re 10 ⁻¹² W)	Operational scenario	Tonality/ impulsiveness
Carpark	Toombul Road Carpark	SoundPLAN calculates ² noise emissions from parking areas based on the number of parking bays, surface type, and the type of parking lot, and considers the impact noise of a car door closing – ‘slam’. The data input for the car parks is as follows: – No. Parking Bays: 96 – Surface Type: Concrete paving Parking Lot Type: Staff and visitors	<u>Operating Hours (7:00am to 6:00pm)</u> 50 car movements per hour from 7:00am to 8:00am and 4:00pm to 5:00pm 15 car movements all other times	+5dB for impulsiveness
Carpark	Edison Carpark	SoundPLAN calculates ² noise emissions from parking areas based on the number of parking bays, surface type, and the type of parking lot, and considers the impact noise of a car door closing – ‘slam’. The data input for the car parks is as follows: – No. Parking Bays: 78 – Surface Type: Concrete paving Parking Lot Type: Staff and visitors	<u>Operating Hours (7:00am to 6:00pm)</u> 40 car movements per hour from 7:30am to 8:30am and 4:00pm to 5:00pm 10 car movements all other times	+5dB for impulsiveness
Carpark	New Tesla Carpark	SoundPLAN calculates ² noise emissions from parking areas based on the number of parking bays, surface type, and the type of parking lot, and considers the impact noise of a car door closing – ‘slam’. The data input for the car parks is as follows: – No. Parking Bays: 114 – Surface Type: Concrete paving Parking Lot Type: Staff and visitors	<u>Daytime (7:00am to 6:00pm)</u> 50 car movements per hour from 7:30am to 8:30am and 4:00pm to 5:00pm 20 car movements all other times <u>Evening (6:00pm to 10:00pm)</u> 6 car movements per hour <u>Night (10:00pm to 7:00am)</u> 6 car movements per hour	+5dB for impulsiveness

² SoundPLAN uses the methodology of the Bavarian parking lot study (2007) to calculate car park noise emissions. (Bavarian State Agency for the Environment 2007, *Parking Area Noise*, 6th Edition, Bavarian State Ministry for the Environment, Germany).

Operational noise source	Location	Sound power level dB(A) (re 10 ⁻¹² W)	Operational scenario	Tonality/ impulsiveness
Carpark	FDOE Carpark	SoundPLAN calculates ² noise emissions from parking areas based on the number of parking bays, surface type, and the type of parking lot, and considers the impact noise of a car door closing – ‘slam’. The data input for the car parks is as follows: – No. Parking Bays: 23 – Surface Type: Concrete paving Parking Lot Type: Staff and visitors	<u>Operating Hours (7:00am to 6:00pm)</u> 10 car movements per hour from 7:30am to 8:30am and 4:00pm to 5:00pm 5 car movements all other times	+5dB for impulsiveness
Car Movements	Internal Driveways	50.1dB(A), travelling at 10km/h ATP Library: Car slowly accelerating 10-20km/h (line source)	<u>Daytime (7:00am to 6:00pm)</u> 150 total car movements per hour from 7:00am to 8:00am and 4:00pm to 5:00pm 50 total car movements all other times <u>Evening (6:00pm to 10:00pm)</u> 6 car movements per hour <u>Night (10:00pm to 7:00am)</u> 6 car movements per hour	n/a
Heavy Vehicle Movements	Internal Driveways	61.0dB(A), travelling at 10km/h ATP Library: Truck slowly accelerating 10-20km/h (line source)	<u>Daytime (7:00am to 6:00pm)</u> 2 trucks total	n/a
Heavy Vehicle Idling	Loading Bays (FDOE and new Tesla Building)	90.8dB(A) ATP Library: Truck idling (point source)	<u>Deliveries and Refuse (6:00am to 6:00pm)</u> 5 minutes between 6:00am and 6:00pm.	+5dB for tonality
Heavy Vehicle Loading	Loading Bays (FDOE and new Tesla Building)	92.0dB(A) ATP Library: Truck Loading (point source)	<u>Deliveries and Refuse (6:00am to 6:00pm)</u> 1 minute between 6:00am and 6:00pm.	+5dB for impulsiveness
Air compressor (Pressure washer)	Washdown	89.1dB(A) ATP Library: Air compressor	<u>Operating Hours (7:00am to 6:00pm)</u> In use for 15 minutes per hour.	+5dB for tonality

Operational noise source	Location	Sound power level dB(A) (re 10 ⁻¹² W)	Operational scenario	Tonality/ impulsiveness
Outdoor AC Units	FDOE Building Roof	80.8dB(A) Combined noise from all rooftop mechanical plant at the FDOE building ATP Library: Four (4) large size commercial condenser units (area source)	<u>Operating Hours (7:00am to 6:00pm)</u> • Continuous operation.	+5dB for tonality
Refuse Loading	Tesla Building	L _{max} night-time assessment: 92.0 dB(A) ATP Library: Truck Loading (point Source)	<u>Night (10:00pm to 7:00am)</u> - 15 noise events	+5dB for impulsiveness

An excerpt from the 3D noise propagation model developed in SoundPLAN is presented in Figures 4.1 to 4.2.

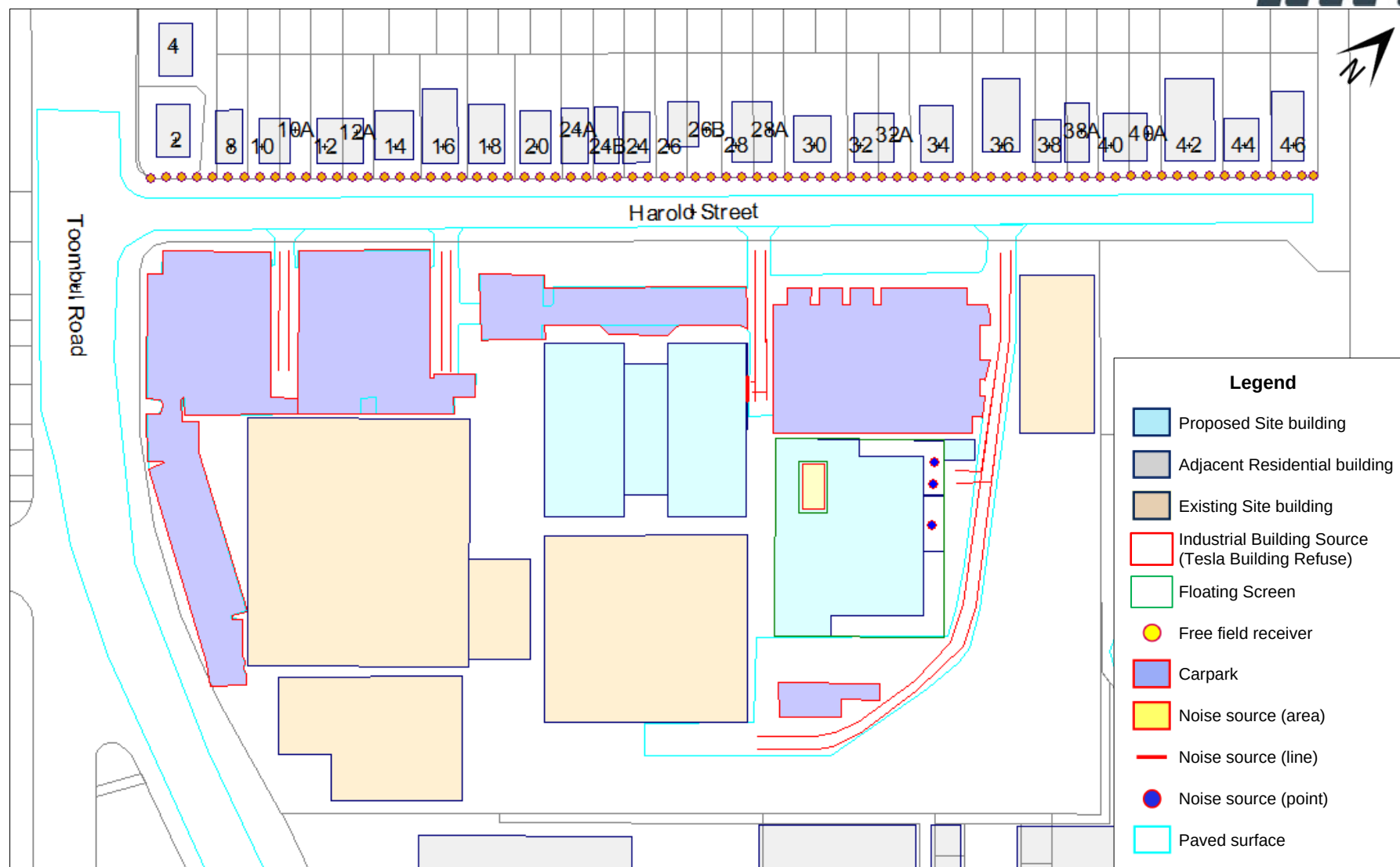


Figure 4.1 3D Operational noise model - SoundPLAN excerpt

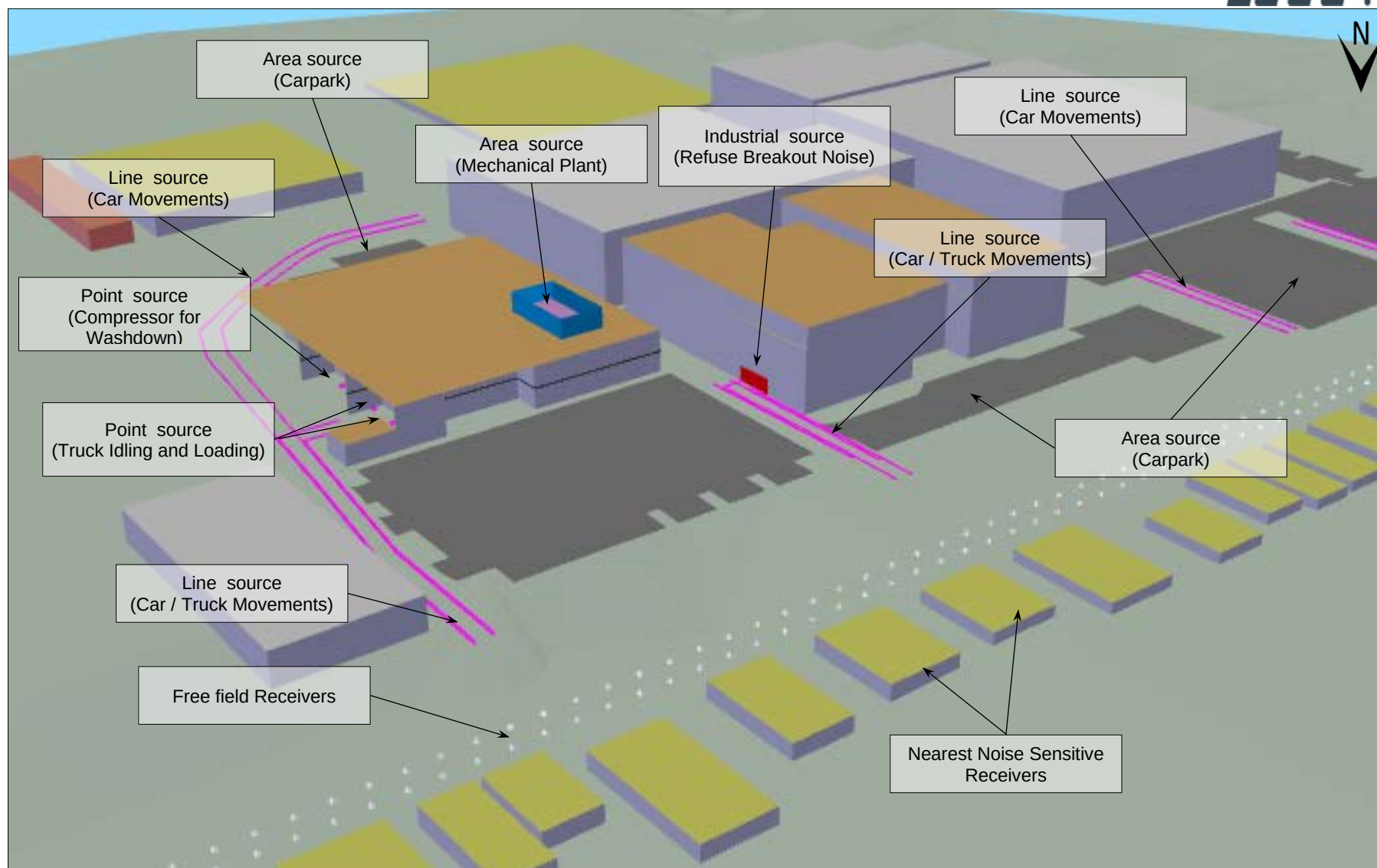


Figure 4.2 3D Operational noise model - SoundPLAN excerpt

4.3 Operational Noise Calculation Results

The highest L_{eq} noise levels at the nearest residential boundaries assessed against the intrusiveness noise criteria and acoustic amenity criteria, are presented in Table 4.3 and 4.4 respectively.

Table 4.3 Operational noise levels – Brisbane City Plan intrusiveness noise criteria

Receiver	Calculated noise levels $L_{Aeq,adj,T}$			Compliance with noise criteria
	D	E	N	
Brisbane City Planning Scheme: Intrusive Noise Criteria (Boundary Assessment)	43	39	36	
2 Harold Street	41	20	20	Yes
6-8 Harold Street	42	21	21	Yes
10 Harold Street	43	22	23	Yes
12 Harold Street	43	24	24	Yes
14 Harold Street	42	25	25	Yes
16 Harold Street	42	26	27	Yes
18 Harold Street	41	27	28	Yes
20 Harold Street	40	28	30	Yes
24 Harold Street	40	31	32	Yes
24B Harold Street	40	30	31	Yes
24A Harold Street	40	29	30	Yes
26 Harold Street	40	32	33	Yes
28 Harold Street	42	35	36	Yes
30 Harold Street	42	35	35	Yes
32 Harold Street	42	35	35	Yes
34 Harold Street	42	34	34	Yes
36 Harold Street	41	33	33	Yes
38A Harold Street	39	32	32	Yes
38 Harold Street	40	32	33	Yes
40 Harold Street	37	31	31	Yes
42 Harold Street	35	28	29	Yes
44 Harold Street	33	26	27	Yes
46 Harold Street	32	24	25	Yes

Note: D: Day (7:00am to 6:00pm), E: Evening (6:00pm to 10:00pm), N: Night (10:00pm to 7:00am)

Table 4.4 Operational noise levels – Brisbane City Plan acoustic amenity criteria

Receiver	Calculated noise levels $L_{Aeq,adj,T}$			Compliance with noise criteria
	D	E	N	
Brisbane City Planning Scheme: Acoustic Amenity Criteria (Boundary Assessment)	50	45	40	
2 Harold Street	41	20	20	Yes
6-8 Harold Street	42	21	21	Yes
10 Harold Street	43	22	23	Yes
12 Harold Street	43	24	24	Yes
14 Harold Street	42	25	25	Yes
16 Harold Street	42	26	27	Yes
18 Harold Street	41	27	28	Yes
20 Harold Street	40	28	30	Yes
24 Harold Street	40	31	32	Yes
24B Harold Street	40	30	31	Yes
24A Harold Street	40	29	30	Yes
26 Harold Street	40	32	33	Yes
28 Harold Street	42	35	36	Yes
30 Harold Street	42	35	35	Yes
32 Harold Street	42	35	35	Yes
34 Harold Street	42	34	34	Yes
36 Harold Street	41	33	33	Yes
38A Harold Street	39	32	32	Yes
38 Harold Street	40	32	33	Yes
40 Harold Street	37	31	31	Yes
42 Harold Street	35	28	29	Yes
44 Harold Street	33	26	27	Yes
46 Harold Street	32	24	25	Yes

Note: D: Day (7:00am to 6:00pm), E: Evening (6:00pm to 10:00pm), N: Night (10:00pm to 7:00am)

The highest $L_{\max}$ noise levels at the nearest residential boundaries assessed against the night-time noise criteria, are presented in Table 4.5.

Table 4.5 Operational noise levels – Brisbane City Plan night-time criteria

Receiver	Calculated noise levels $L_{A\max}$	Compliance with noise criteria
Brisbane City Planning Scheme: Night-time noise criteria (Boundary Assessment)	50	
2 Harold Street	13	Yes
6-8 Harold Street	14	Yes
10 Harold Street	15	Yes
12 Harold Street	16	Yes
14 Harold Street	30	Yes
16 Harold Street	31	Yes
18 Harold Street	32	Yes
20 Harold Street	34	Yes
24 Harold Street	37	Yes
24B Harold Street	37	Yes
24A Harold Street	35	Yes
26 Harold Street	38	Yes
28 Harold Street	50	Yes
30 Harold Street	49	Yes
32 Harold Street	48	Yes
34 Harold Street	48	Yes
36 Harold Street	47	Yes
38A Harold Street	46	Yes
38 Harold Street	46	Yes
40 Harold Street	46	Yes
42 Harold Street	44	Yes
44 Harold Street	42	Yes
46 Harold Street	39	Yes

Full tabulated results of the operational noise assessment and ISO9613 attenuation values are presented in Appendix E, and noise contour maps, showing the propagation of the noise emissions from the proposed development are presented in Appendix F.

5. Discussions and Recommendations

Detailed noise propagation modelling was carried out considering the noise emissions from the proposed redevelopment of Powerlink Queensland, including car parking, heavy vehicle movements, deliveries and refuse collection, mechanical noise and waste collection.

The noise levels were assessed against the relevant noise criteria at the nearest noise sensitive places from the *Intrusive Noise and Acoustic Amenity Criteria* from the *Brisbane City Planning Scheme 2014 V31*.

The results of the operational noise assessment indicate that the noise emissions from the proposed development will comply with the noise criteria at the nearest noise sensitive places.

To ensure ongoing protection of the noise amenity at the nearest noise sensitive places the following noise mitigation measures are recommended:

- Deliveries and refuse collection must be carried out from 6:00am to 6:00pm.
- It is noted that the mechanical plant, including AC units, have not been selected yet. Should there be a need to locate the mechanical plant at a location other than the dedicated plant room locations indicated in the development plans, or should the mechanical equipment need to have higher combined sound power level than 81dB(A), then the mechanical plant and equipment must be designed to comply with the noise criteria stated in Section 3.1 of this report.
- In addition, the following general recommendations should be considered for the design and installation of the various mechanical equipment:
 - o Select equipment with low sound power level;
 - o Locate equipment as far away from noise sensitive areas as possible;
 - o Provide acoustic lining to inside of ventilation ducts and/or provide duct silencers;
 - o Where equipment has directional noise characteristics, point equipment away from noise sensitive areas.

Provided that the recommended noise control measures are implemented, compliance with the relevant noise criteria can be achieved and there are no other acoustic constraints on the redevelopment of Powerlink Queensland at 33 Harold Street in Virginia.

6. References

- Australian Standard AS 1055.1-1997 (*Acoustics - Description and Measurement of Environmental Noise Part 1: General Procedures*)
- Australian Standard AS 1055.2-1997 (*Acoustics - Description and Measurement of Environmental Noise Part 2: Application to Specific Situations*)
- Australian Standard AS/NZS 2107-2016 (*Acoustics – Recommended design sound levels and reverberation times for building interiors*)
- Australian Standard AS/IEC 61672.1-2004 (*Electroacoustics - Sound level meters – Specifications*)
- Noise Impact Assessment Planning Scheme Policy, Brisbane City Plan 2014
- Special Purpose Code, Brisbane City Plan 2014

7. Appendices

Appendix A – Development Plans

Appendix B – Site Photos

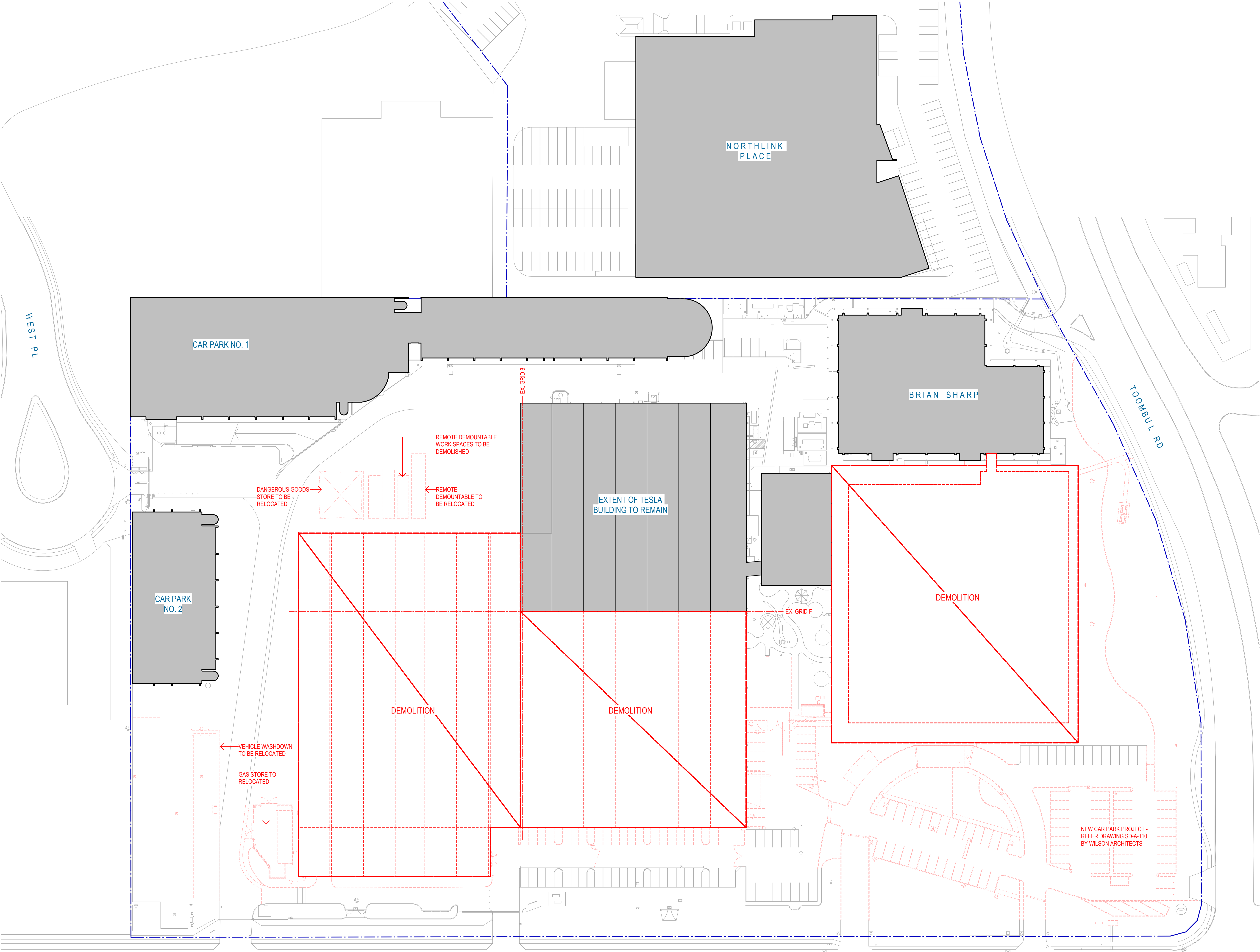
Appendix C – Meteorological Data

Appendix D – Noise Monitoring Results

Appendix E – SoundPLAN Result Tables

Appendix F – SoundPLAN Noise Contour Maps

Appendix A – Development Plans



Recent revision history			
#	Status	Description	Date
1	Preliminary	For Information	18/07/24
2	For Information	For Information	19/10/24
3	For Information	For Information	29/11/24
4	For Information	For Information	06/12/24
5	For Information	For Information	05/03/25
6	For Information	For Information	27/03/25

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POWERLINK

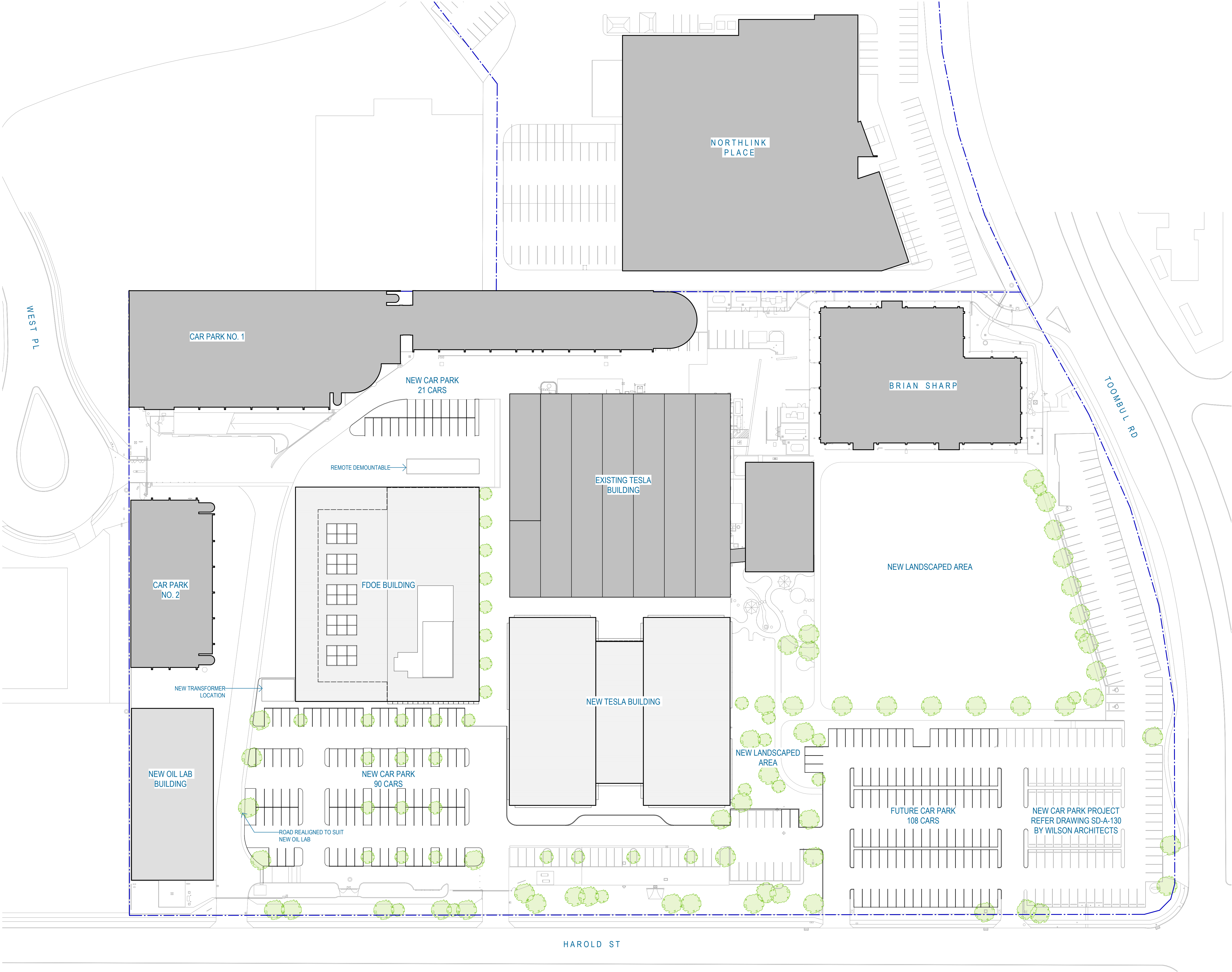
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SITE PLAN - DEMOLTION

Sheet number
A - 1140
Status
PRELIMINARY

Revision
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Client
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Project number
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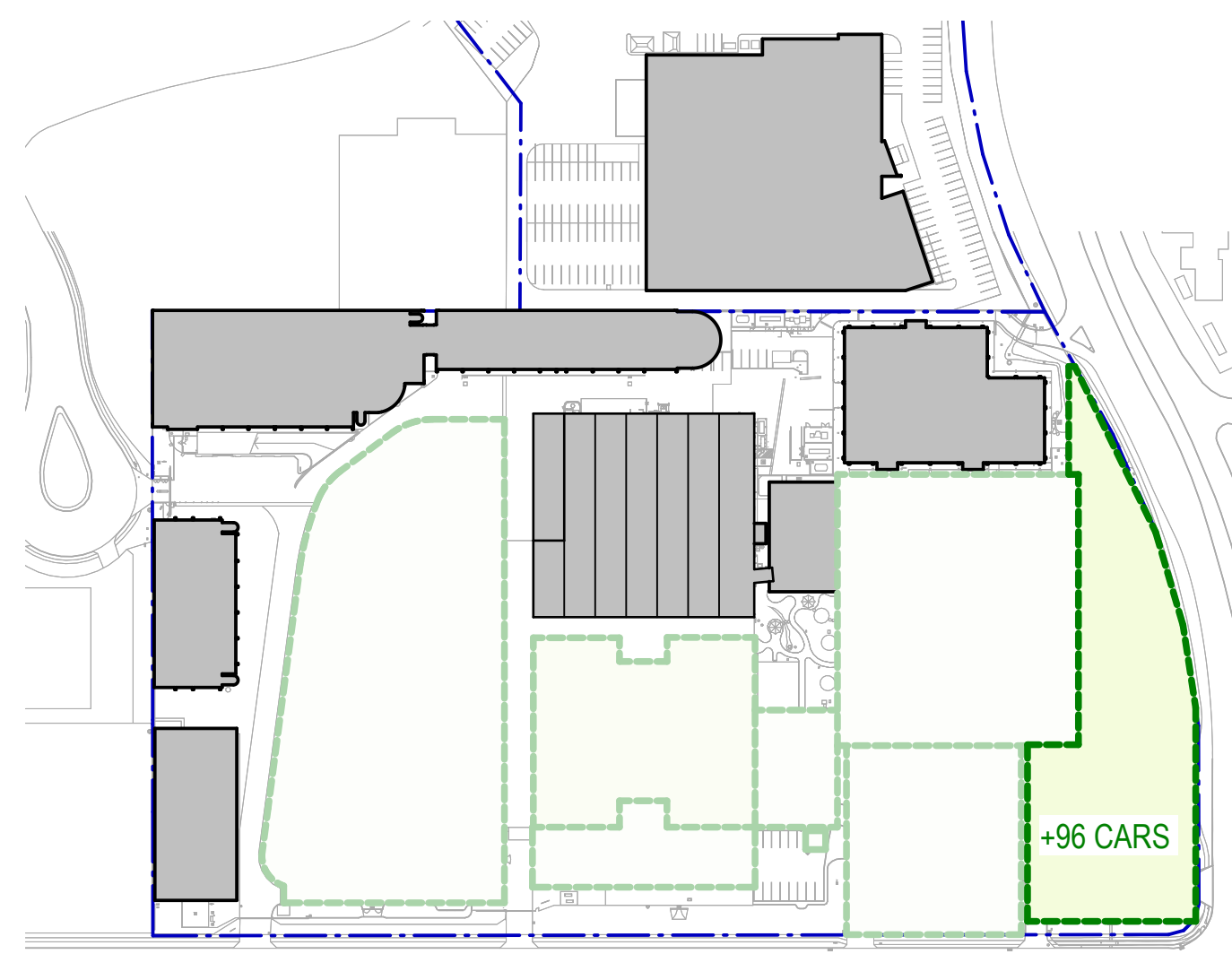
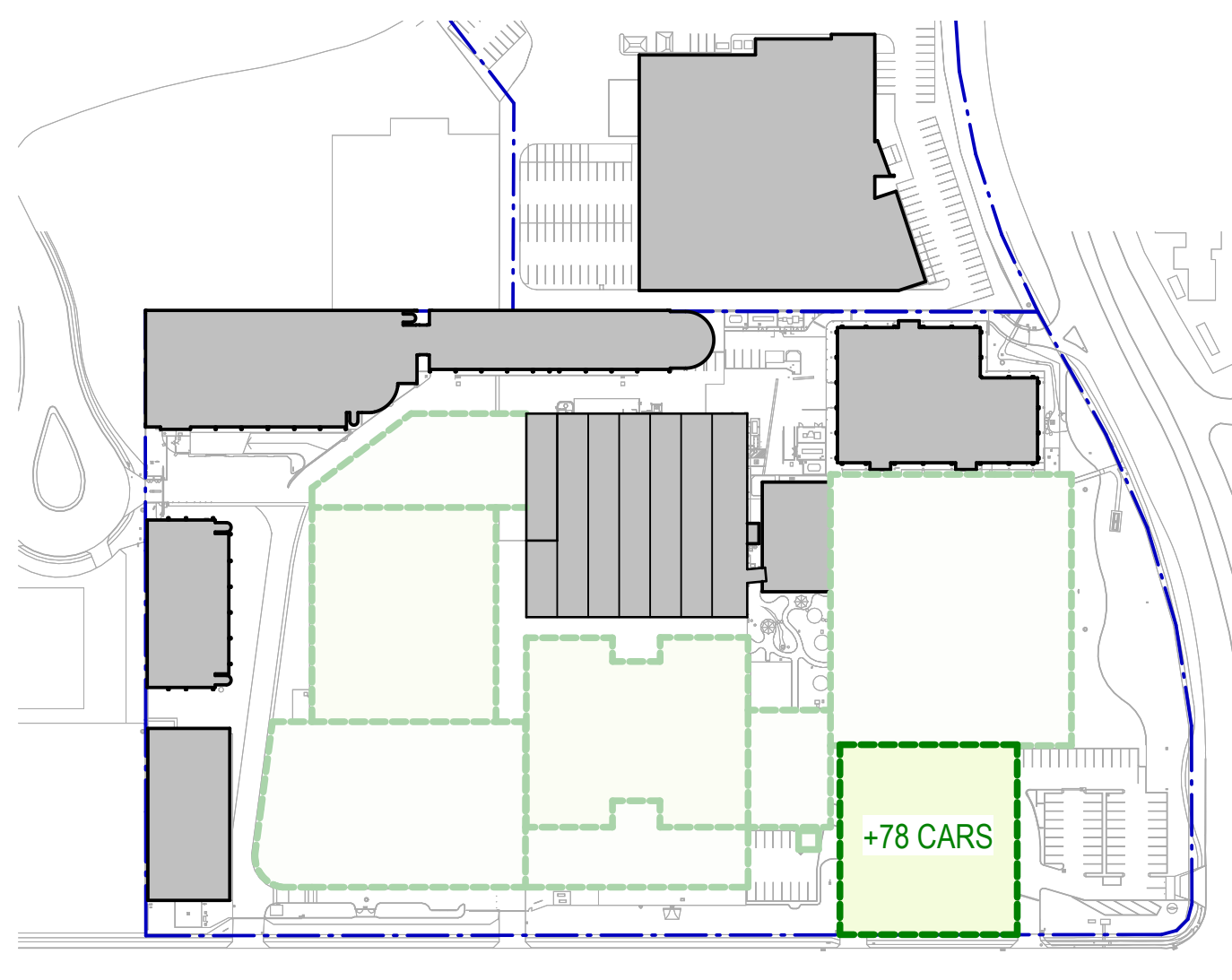
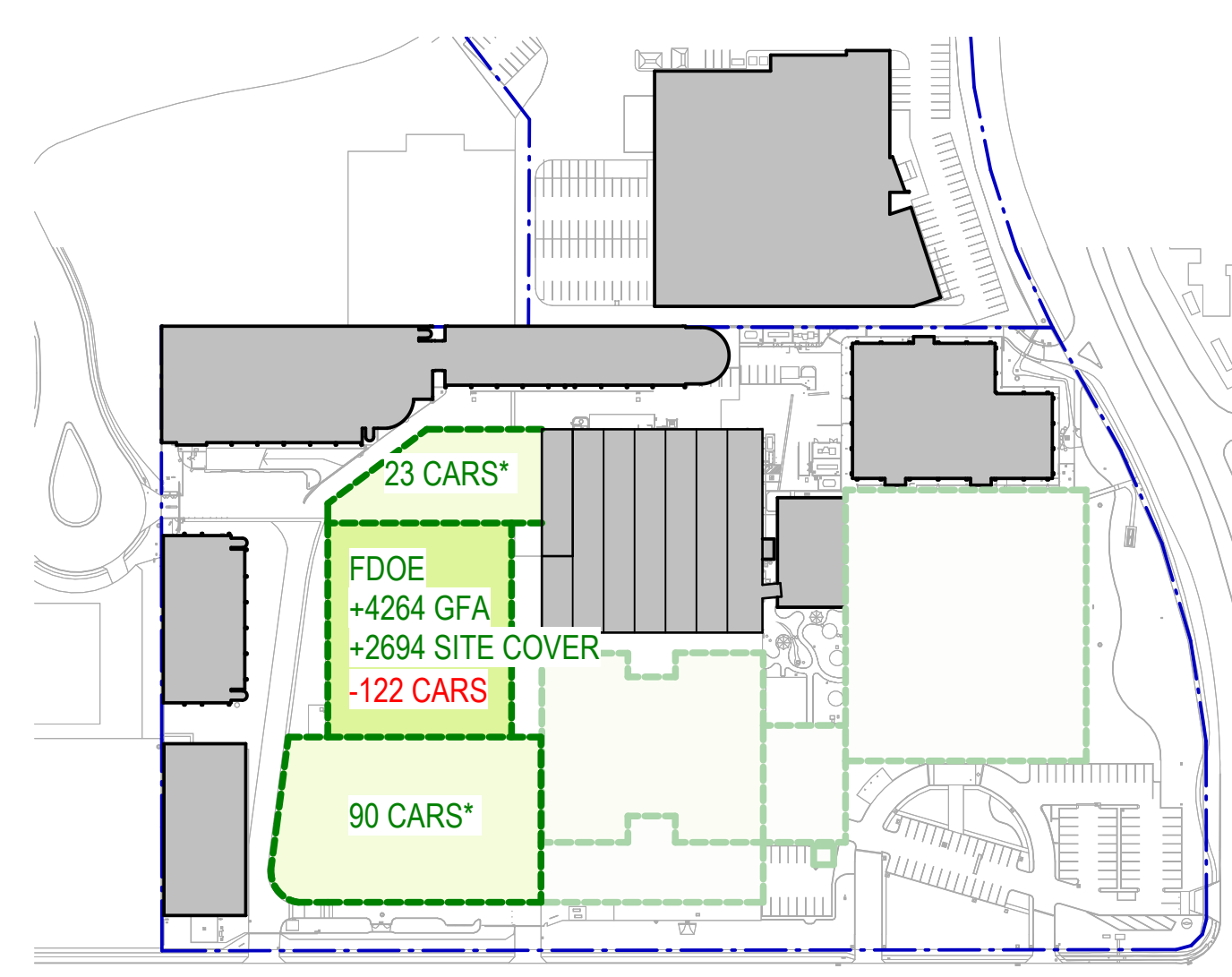
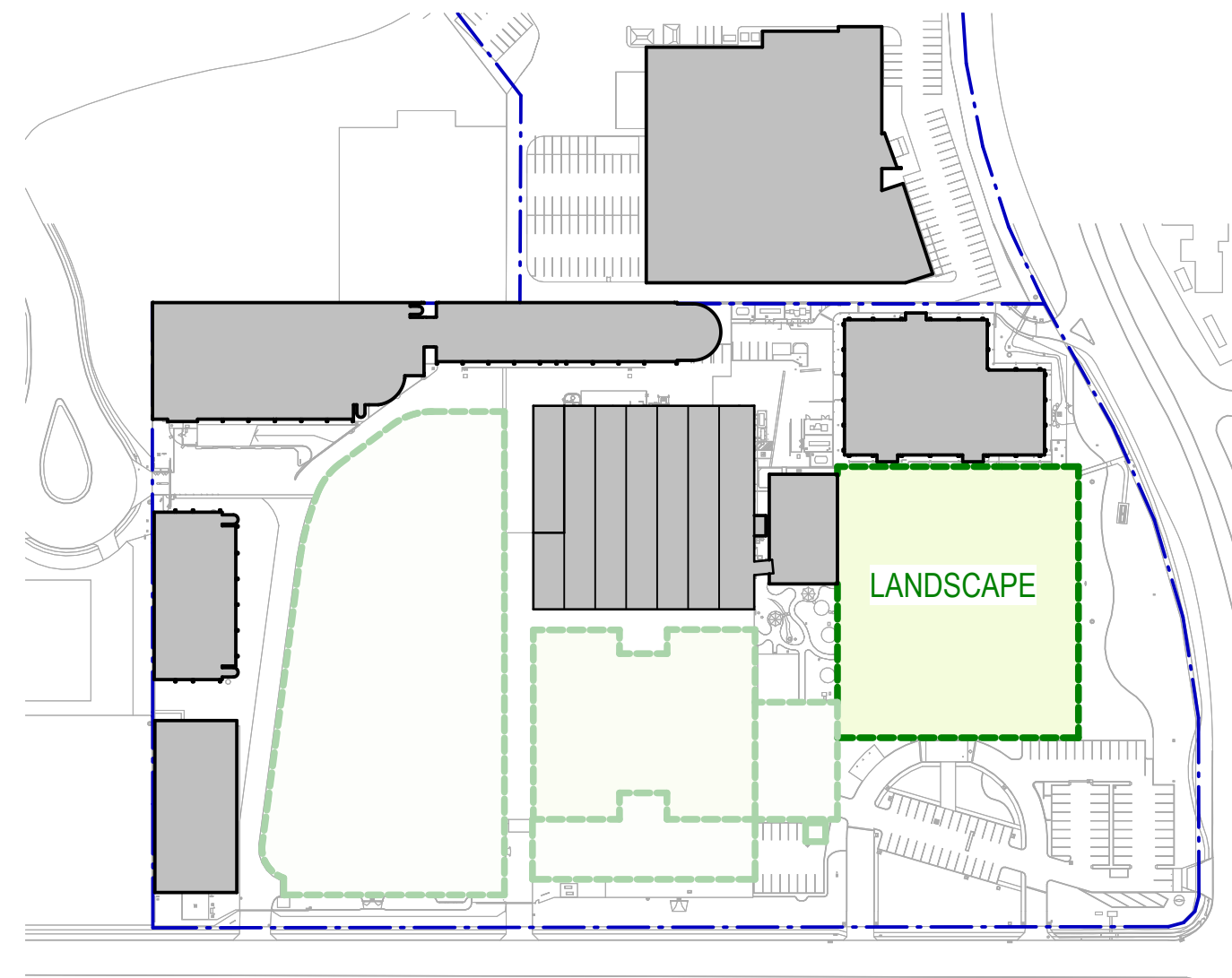
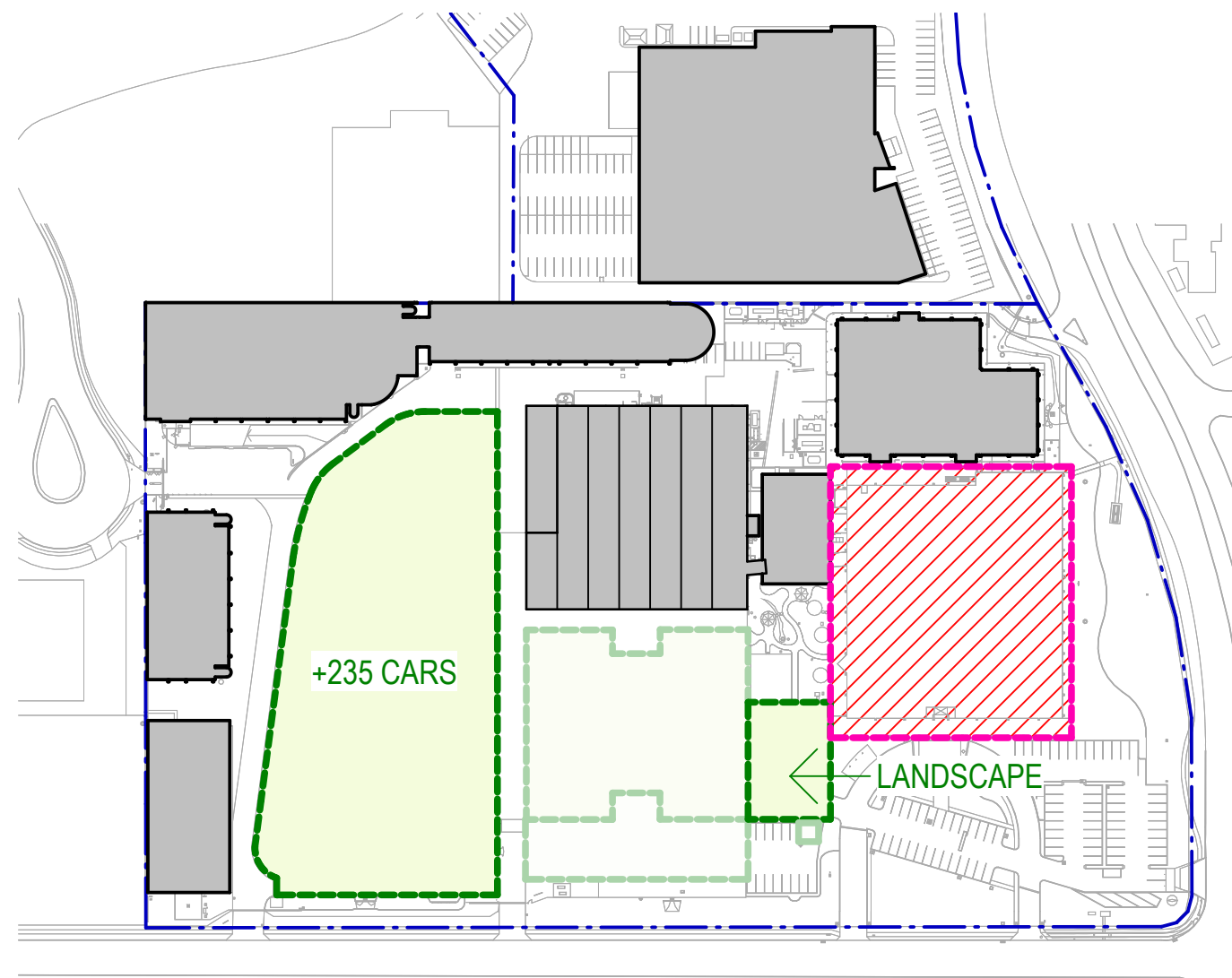
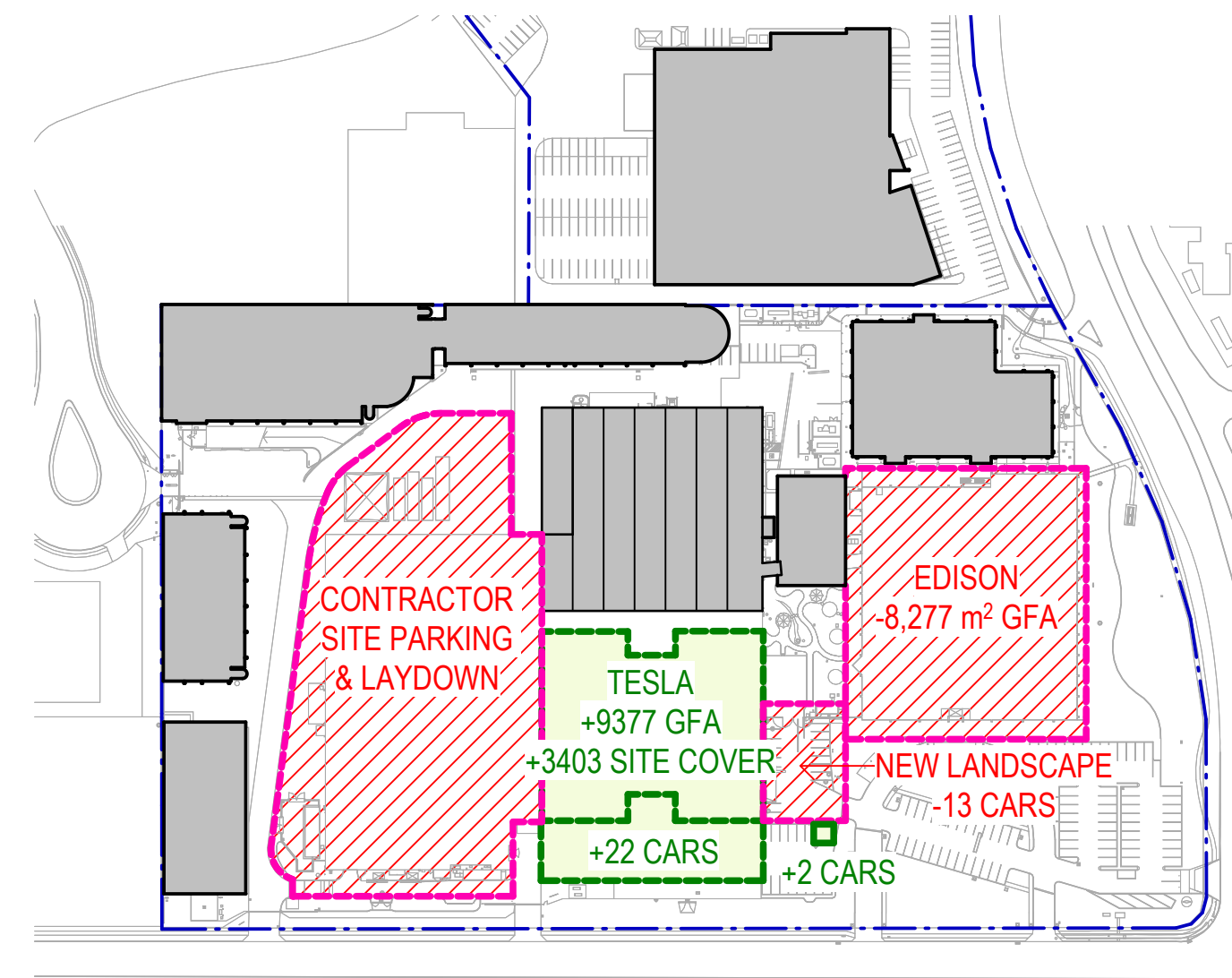
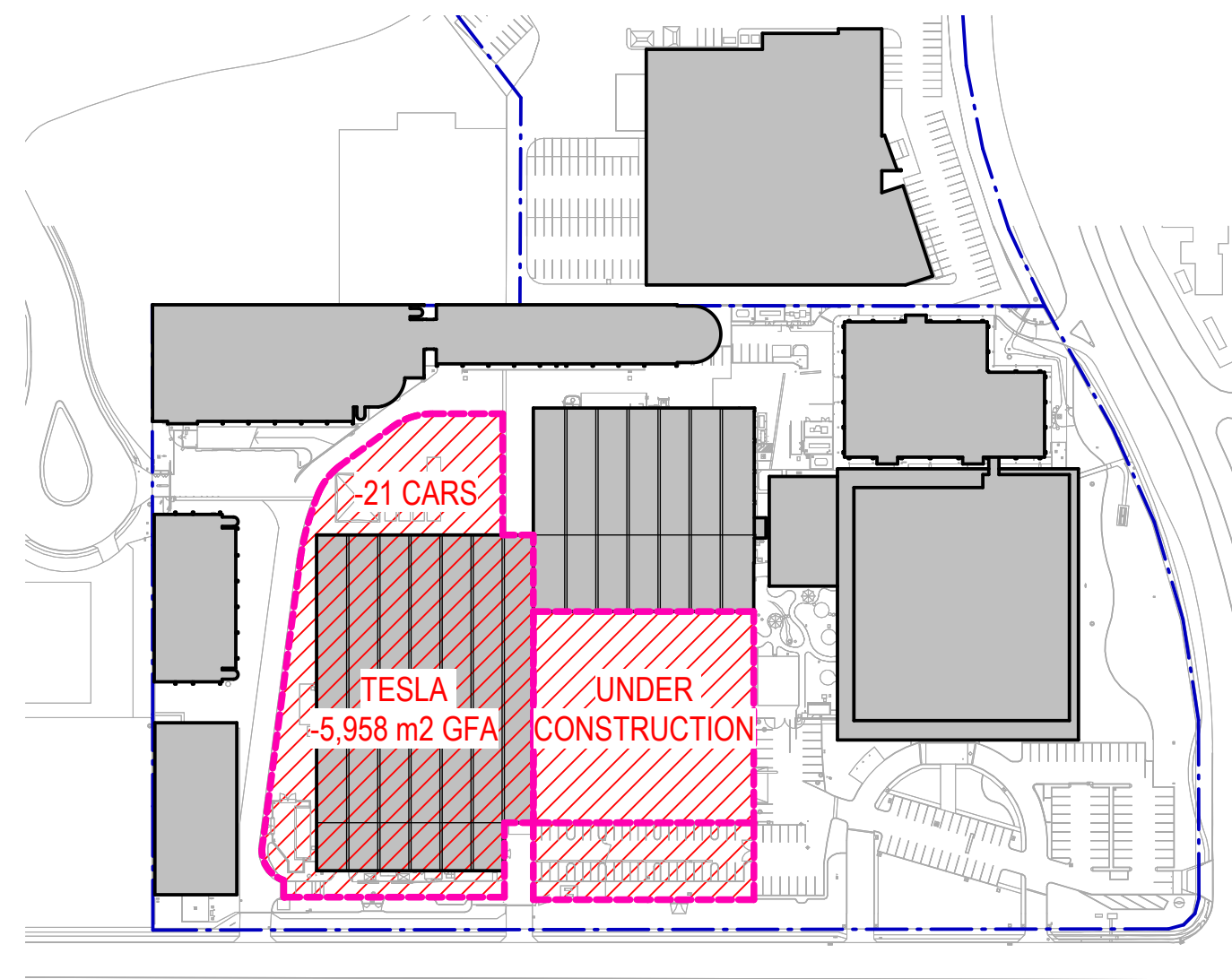
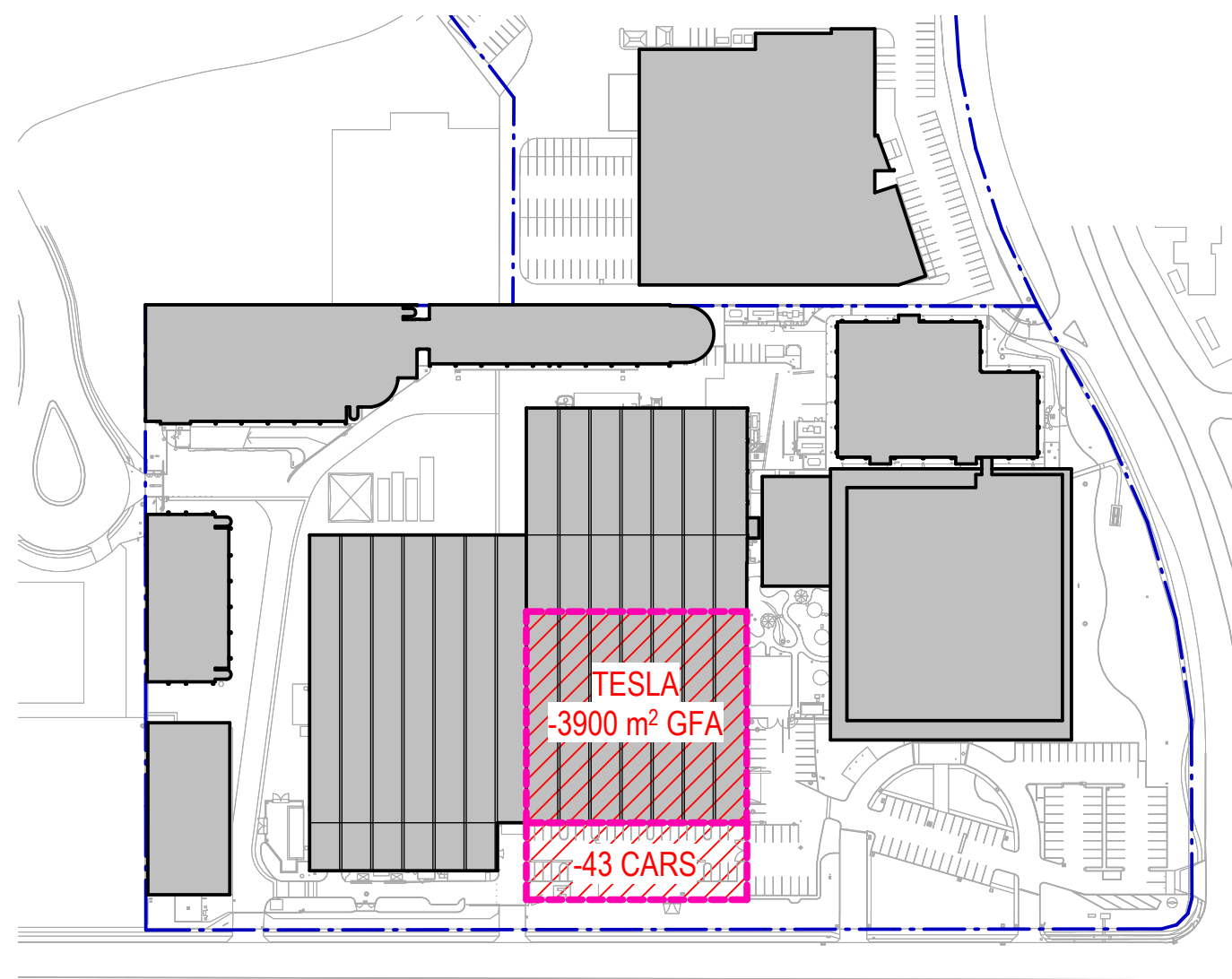
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Revision
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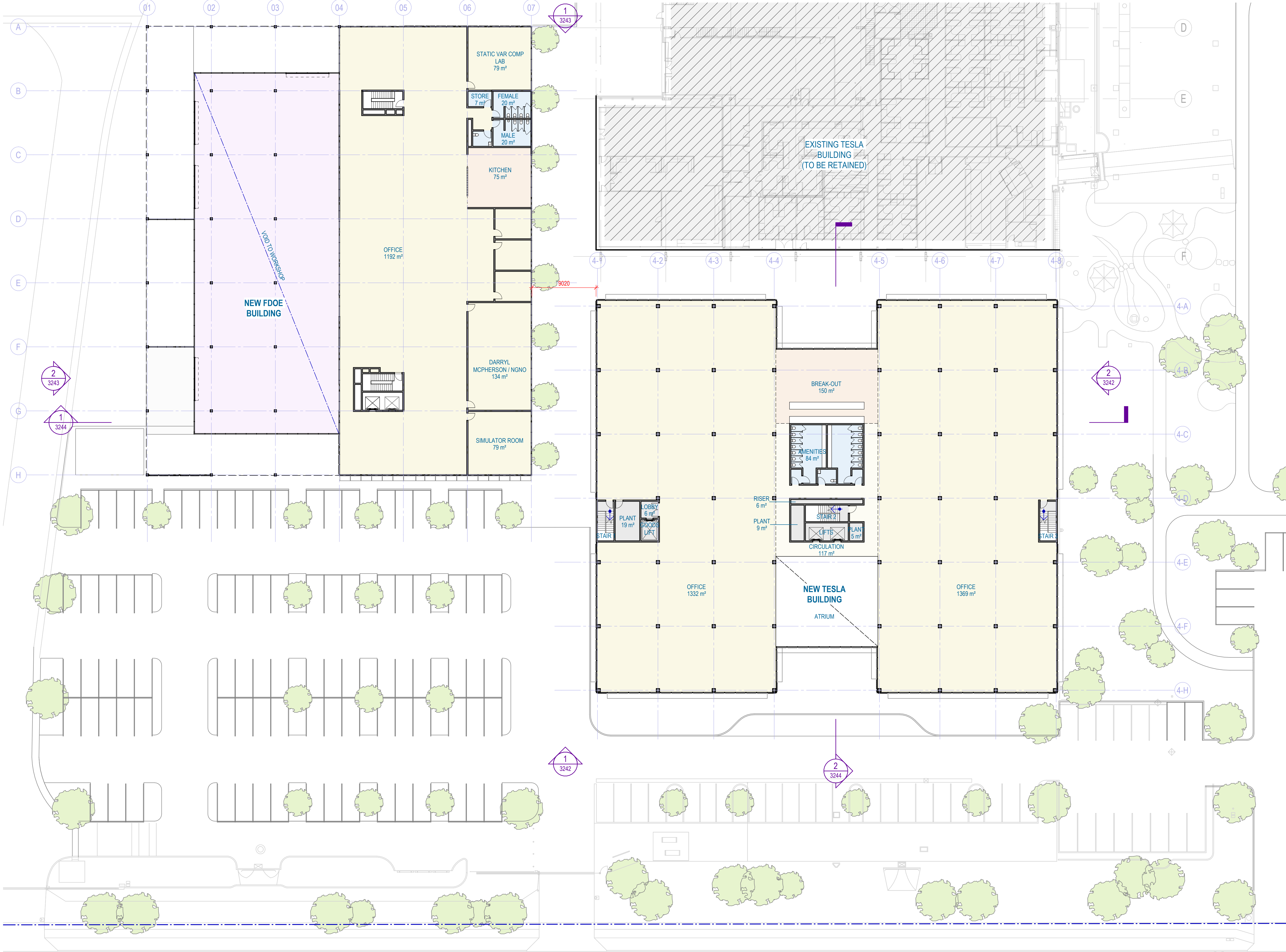
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Approved	AA	Scale	1 : 250

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GROUND

Sheet number	A - 2240	Revision	6
Status	PRELIMINARY		



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3	For Information	For Information
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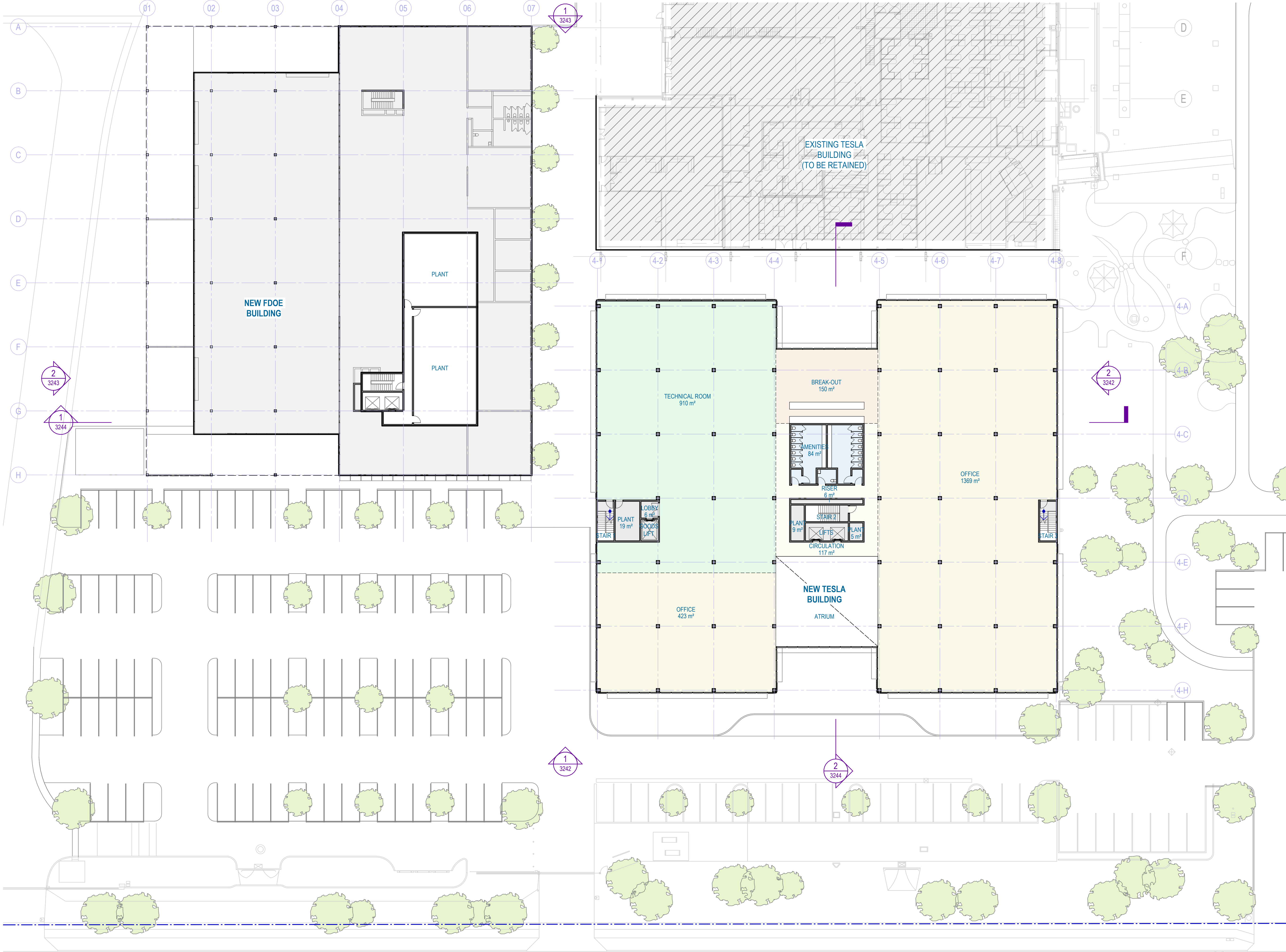
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LEVEL 1

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Revision
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Status
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2	For Information	For Information
3	For Information	For Information
4	For Information	For Information
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6	For Information	For Information

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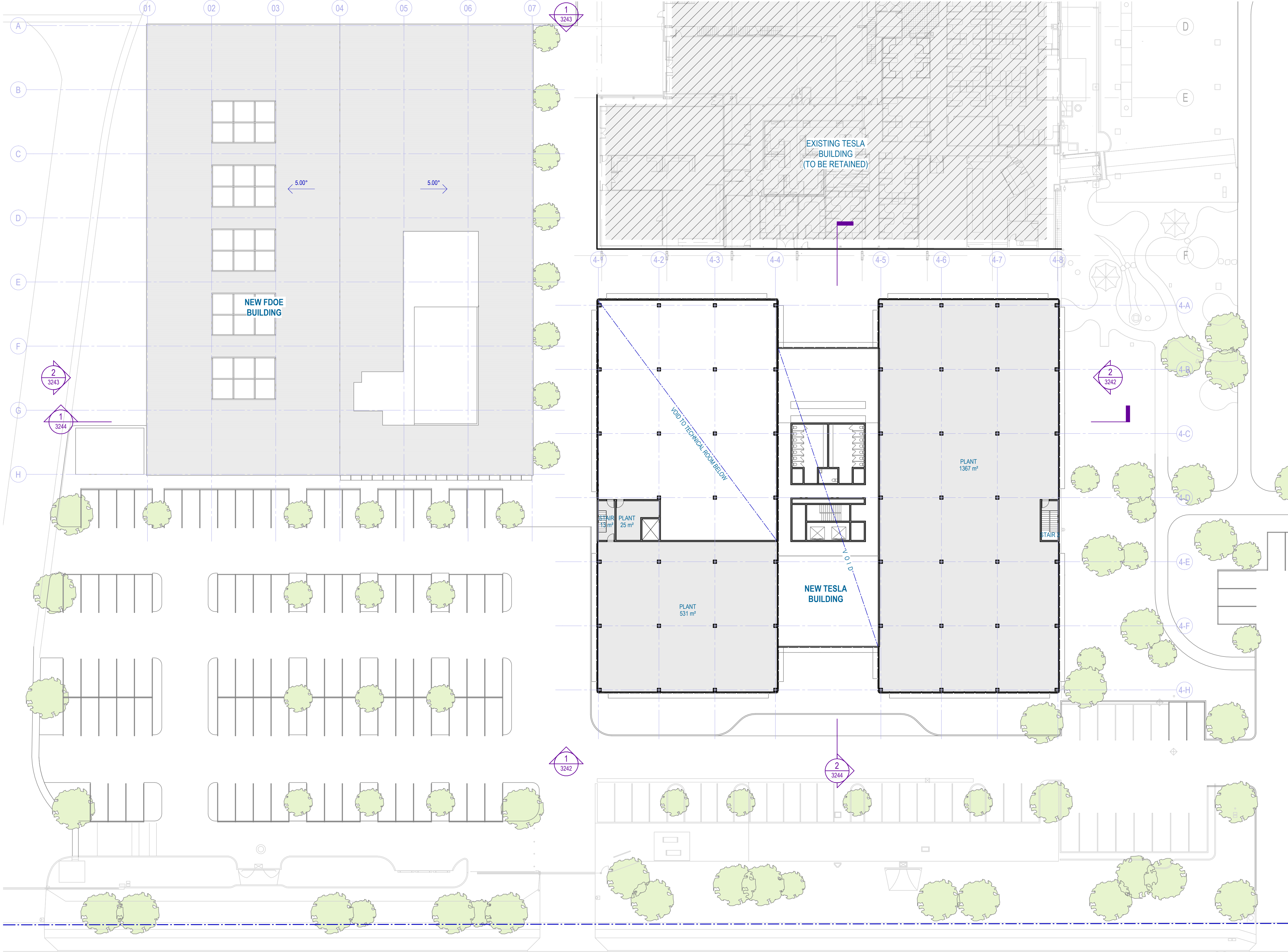
Client
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Sheet number	Revision
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Status	PRELIMINARY



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2	For Information	For Information	19/10/24
3	For Information	For Information	29/11/24
4	For Information	For Information	06/12/24
5	For Information	For Information	05/03/25
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7	For Information	For Information	08/04/25

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REDEVELOPMENT

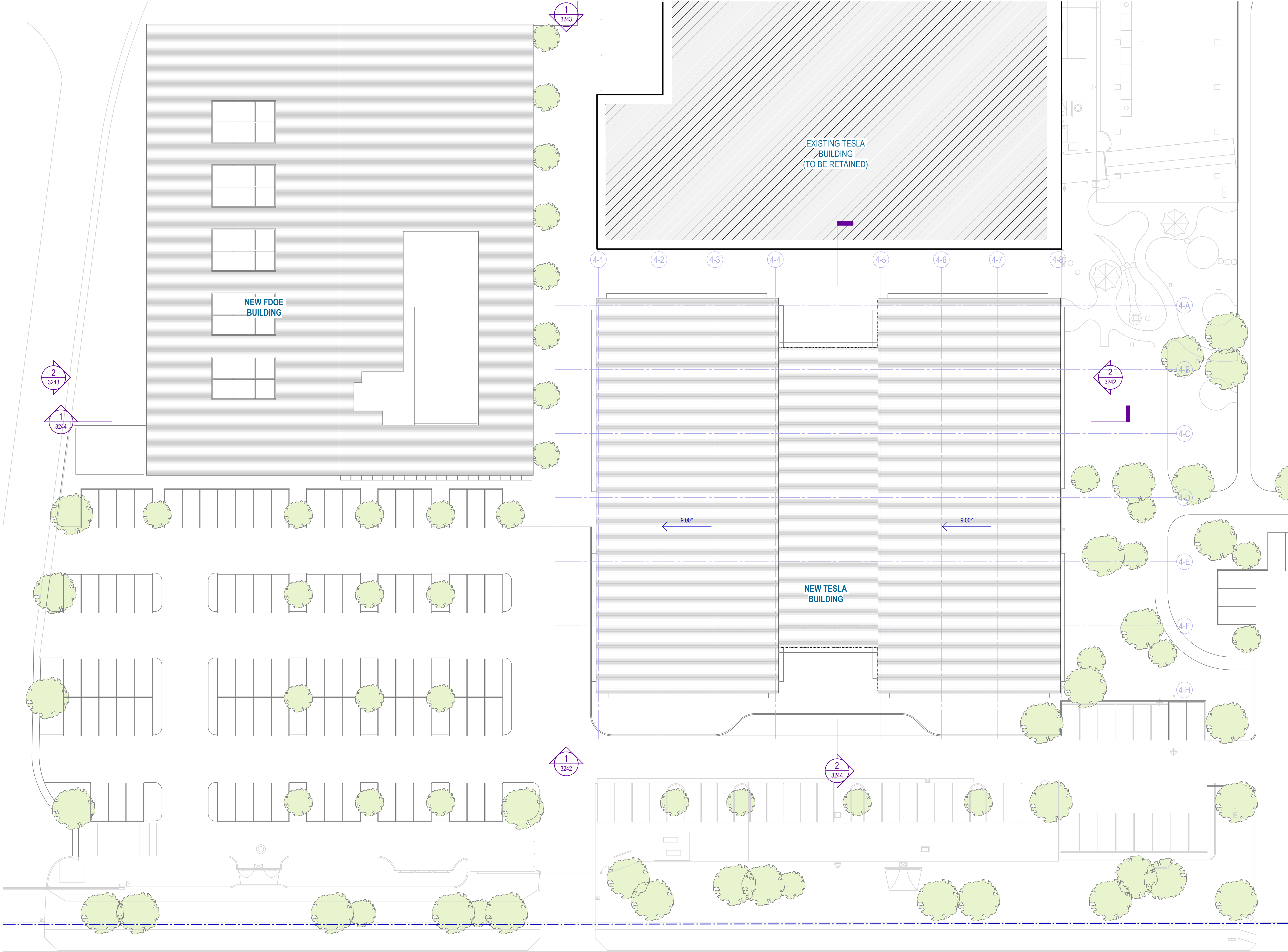
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Sheet number	Revision
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Status	PRELIMINARY



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LEVEL 4 (ROOF)

Sheet number	Revision
A - 2244	6
Status	PRELIMINARY

Appendix B – Site Photos



Photo 1: Noise monitoring location – view towards Harold Street



Photo 2: Noise monitoring location – view from Harold Street

Appendix C – Meteorological Data

Brisbane Airport, Queensland

July 2023 Daily Weather Observations



Australian Government
Bureau of Meteorology

Date	Day	Temps		Rain	Evap	Sun	Max wind gust			9am						3pm					
		Min	Max				Dirn	Spd	Time	Temp	RH	Cld	Dirn	Spd	MSLP	Temp	RH	Cld	Dirn	Spd	MSLP
		°C	°C					km/h	local	°C	%	eighths		km/h	hPa	°C	%	eighths		km/h	hPa
1	Sa	3.9	19.5	0	5.0	4.7	WSW	30	14:53	12.0	58	7	SSW	7	1022.2	18.3	37	7	WSW	22	1018.5
2	Su	10.0	20.6	0	3.0	5.9	SE	33	11:47	14.9	60	7	SSW	19	1027.5	20.0	50	7	SE	13	1025.5
3	Mo	14.8	19.5	0	3.4	0.2	SSE	31	15:53	16.9	75	8	SSW	13	1028.4	18.4	71	7	SSE	13	1024.1
4	Tu	15.2	20.0	4.6	2.2	0.2	SW	22	16:43	17.6	93	8	SE	7	1021.1	18.3	94	8	SSW	9	1017.1
5	We	16.4	24.8	24.4	2.6	8.2	WSW	39	16:00	20.0	87	5	WNW	4	1016.2	23.9	53	3	WSW	24	1012.8
6	Th	11.2	21.3	0	4.4	7.7	WNW	26	23:38	16.7	67	6	WSW	9	1017.1	19.6	61	7	NE	13	1012.9
7	Fr	9.8	22.8	0	4.0	10.0	WNW	56	13:07	17.1	47	1	NNE	9	1017.8	22.1	28	1	W	33	1014.0
8	Sa	6.1	22.1	0	7.4	10.0	WSW	31	05:14	15.2	48	0	WSW	13	1021.1	19.7	40	0	NNE	17	1017.6
9	Su	7.7	20.1	0	4.0	5.5	WSW	35	13:22	14.8	51	7	W	11	1022.2	19.2	40	7	WSW	19	1018.6
10	Mo	6.0	22.4	0	3.0	9.1	SW	20	09:48	14.2	62	7	SW	13	1023.7	21.7	48	1	NE	9	1021.3
11	Tu	8.9	23.5	0	2.2	10.0	NNW	26	12:05	15.5	65	0	SSW	9	1025.7	21.6	49	1	ENE	13	1022.4
12	We	9.4	20.2	0	3.8	1.1	SW	28	09:16	14.5	69	7	SW	20	1028.4	19.7	65	7	SE	13	1025.7
13	Th	13.5	21.8	0.4	1.4	6.2	SE	31	13:01	16.3	71	7	SSW	9	1029.0	20.6	57	3	ESE	15	1026.2
14	Fr	10.9	21.5	0	3.4	7.7	SSW	22	02:51	15.2	81	7	SW	6	1028.9	20.8	60	3	ENE	11	1024.9
15	Sa	9.1	21.3	0	2.8	0.0	SW	24	05:03	15.0	81	8	SSW	15	1026.4	21.0	48	8	SW	2	1023.6
16	Su	9.4	23.9	0	1.8	7.8	SSW	30	12:03	16.8	66	1	SSW	17	1026.7	22.0	41	7	SE	13	1023.8
17	Mo	13.9	18.2	0	2.8	0.0	ESE	28	10:42	16.9	80	7	SE	13	1027.5	17.5	79	8	SE	6	1025.3
18	Tu	14.3	21.1	8.0	1.2	5.2	ESE	28	13:12	15.7	90	7	SSW	11	1024.3	19.9	63	7	SE	9	1019.6
19	We	9.8	23.2	0	2.2	9.9	SW	28	09:34	17.1	80	1	SW	17	1020.2	21.3	55	1	E	13	1017.7
20	Th	8.6	20.3	0	5.0	9.9	NE	24	13:29	15.2	64	0	SW	17	1022.8	19.7	50	0	NE	15	1018.3
21	Fr	6.7	24.0	0	3.8	8.7	N	26	15:03	13.6	75	0	SSW	9	1019.9	23.0	41	2	NE	13	1014.8
22	Sa	8.0	21.3	0	2.2	9.8	S	28	11:22	16.4	48	0	SSW	17	1019.6	19.3	40	1	SE	15	1016.8
23	Su	8.3	21.2	0	3.8	9.9	SE	35	19:34	14.4	58	1	SW	22	1020.2	19.6	48	2	ESE	13	1017.3
24	Mo	12.2	19.2	0	5.6	1.1	S	41	10:17	16.2	63	7	SSW	17	1022.4	18.6	50	7	SSE	13	1022.8
25	Tu	10.6	21.6	0	3.6	8.6	SE	41	13:41	16.8	59	2	SSW	13	1031.9	20.2	47	1	SE	20	1031.0
26	We	10.5	21.9	0	5.2	8.2	SE	33	13:28	16.2	71	6	SW	19	1034.1	20.6	56	1	ESE	17	1030.7
27	Th	10.9	21.8	0	4.0	6.9	SSE	30	11:38	15.6	72	7	SW	15	1031.3	20.9	44	3	SE	15	1028.0
28	Fr	14.9	23.3	0	4.0	9.3	NNE	33	15:02	19.1	50	1	SW	11	1028.4	20.9	44	1	NNE	24	1022.6
29	Sa	9.6	23.9	0	4.2	10.0	N	28	17:46	16.1	71	1	SW	11	1025.3	22.0	50	1	NE	17	1021.2
30	Su	10.0	23.5	0	3.8	10.0	N	30	19:28	17.2	68	0	W	7	1024.5	21.7	48	0	NNE	22	1020.0
31	Mo	10.7		0	4.0					17.7	71	7		Calm	1023.6	22.6	53	1	NNE	15	1020.4
Statistics for the first 31 days of July 2023																					
Mean		10.4	21.7		3.5	6.7				16.0	67	4		12	1024.5	20.5	51	3		15	1021.1
Lowest		3.9	18.2		1.2	0.0				12.0	47	0		Calm	1016.2	17.5	28	0	SW	2	1012.8
Highest		16.4	24.8	24.4	7.4	10.0	WNW	56		20.0	93	8	SW	22	1034.1	23.9	94	8	W	33	1031.0
Total				37.4	109.8	201.8															

Observations were drawn from Brisbane Aero (station 040842)

IDCJDW4020.202307 Prepared at 06:26 UTC on 31 Jul 2023

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Users of this product are deemed to have read the information and accepted the conditions described in the notes at

<http://www.bom.gov.au/climate/dwo/IDCJDW0000.pdf>

Appendix D – Noise Monitoring Results



Unattended Noise Measurements
Powerlink Oil Lab

Environmental Noise Levels Day, Evening and Night

Logger Location - Eastern Section of
Roy Seng Park

ARL Environmental Noise Logger
Logger Serial Number 87811D
Measurement Title 20230720_110725
Measurement started at 20/07/2023 11:07
Measurement stopped at 28/07/2023 9:02
Frequency Weighting A
Time Averaging Fast
Statistical Interval 15 min
Pre-measurement Ref. 94.0 dB
Post-measurement Ref. 93.9 dB
Engineering Units dB SPL

		L _{Aeq,T} dB(A)			L _{A01,T} dB(A)			L _{A10,T} dB(A)			L _{A90,T} dB(A)			Assessmend Background Level (ABL) dBA		
Date	Day	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N
20/07/2023	Thursday	—	50	47	—	55	54	—	51	48	—	47	44	—	46	39
21/07/2023	Friday	51	48	43	60	55	50	52	49	45	45	43	39	42	41	35
22/07/2023	Saturday	47	42	43	58	48	51	48	42	45	38	38	37	35	36	34
23/07/2023	Sunday	47	41	41	58	49	47	48	44	43	38	36	36	36	34	32
24/07/2023	Monday	51	42	40	60	50	47	53	44	42	44	38	37	43	37	34
25/07/2023	Tuesday	50	42	41	60	51	48	52	43	43	43	37	37	42	37	33
26/07/2023	Wednesday	49	42	42	59	51	49	51	42	42	42	36	36	39	35	32
27/07/2023	Thursday	49	42	40	59	50	48	50	43	42	42	37	36	40	36	32
Average		49	44	42	59	51	49	51	45	44	42	39	38	—	—	—
											Rating Background Level (RBL) dBA			40	36	33

Note

— No noise data available

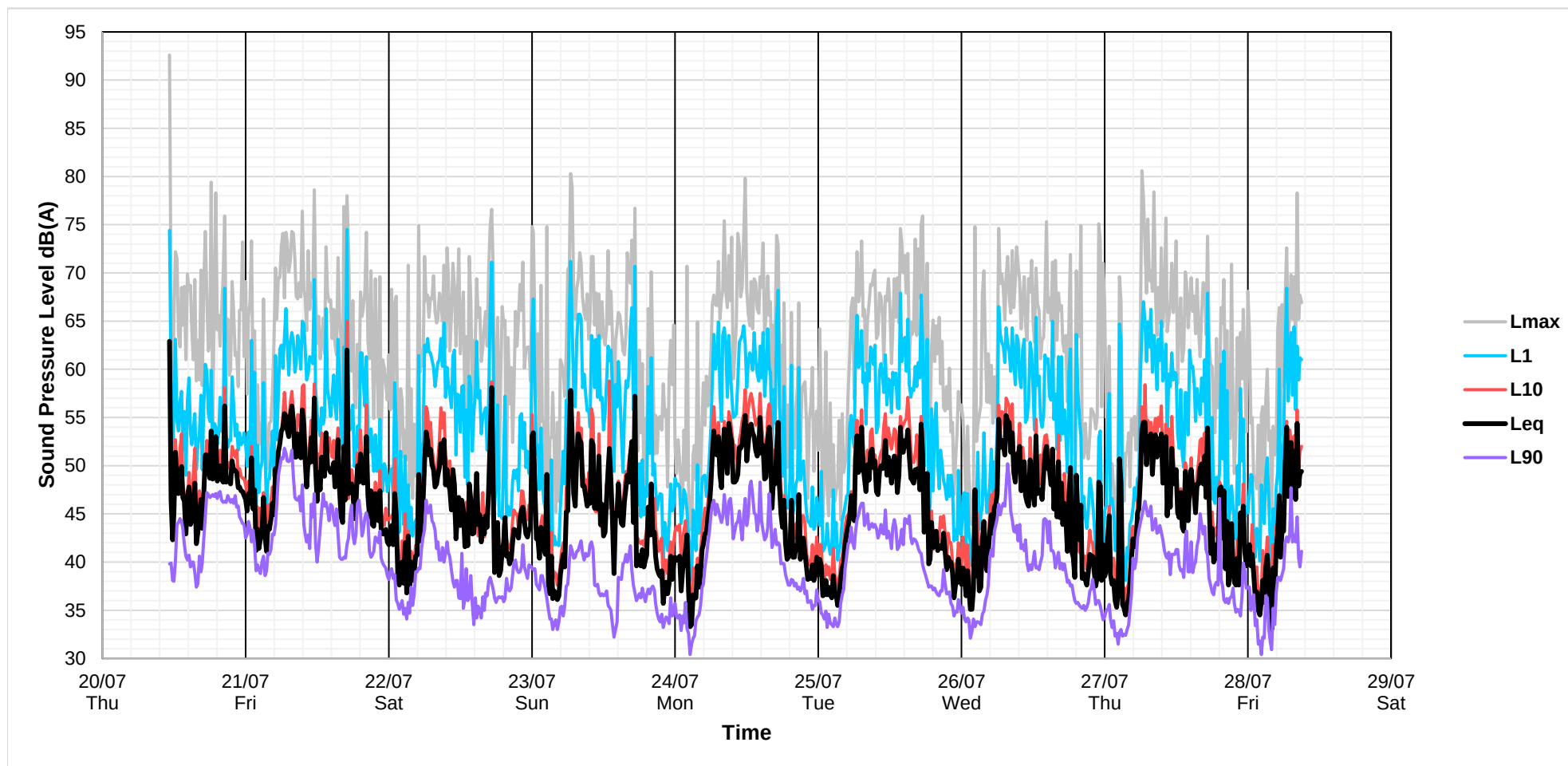
Day (D): 7:00am to 6:00pm

Evening (E): 6:00pm to 10:00pm

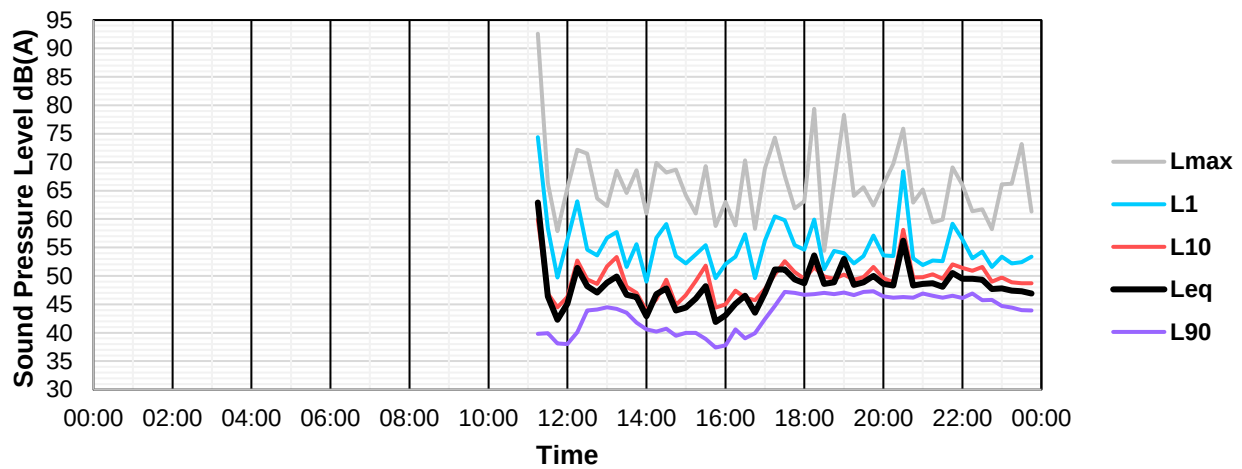
Night (N): 10:00pm to 7:00am

■ Rainfall recorded on this day

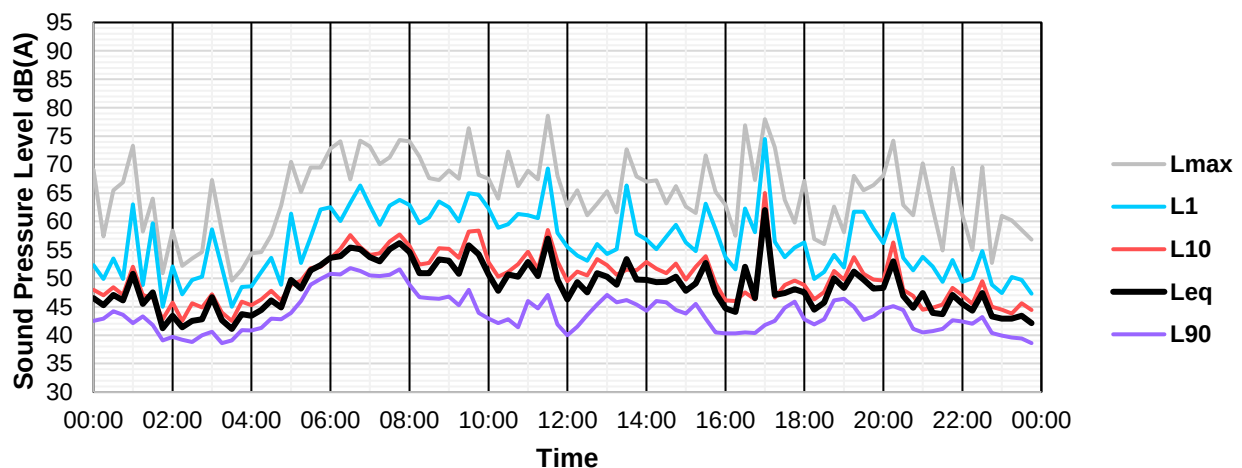
Unattended Noise Measurements 20 to 28 July 2023



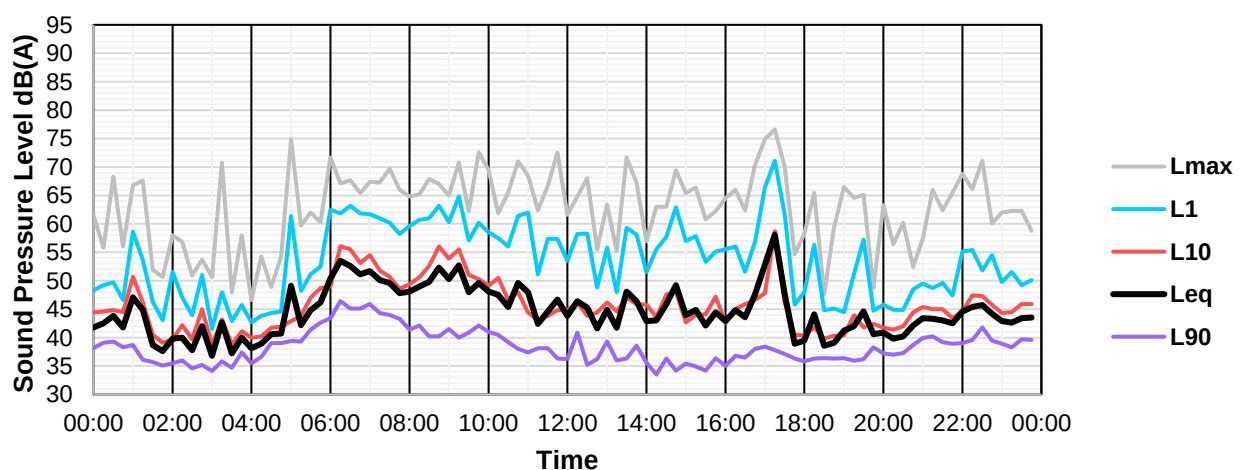
Unattended Noise Measurements Thursday 20 July 2023



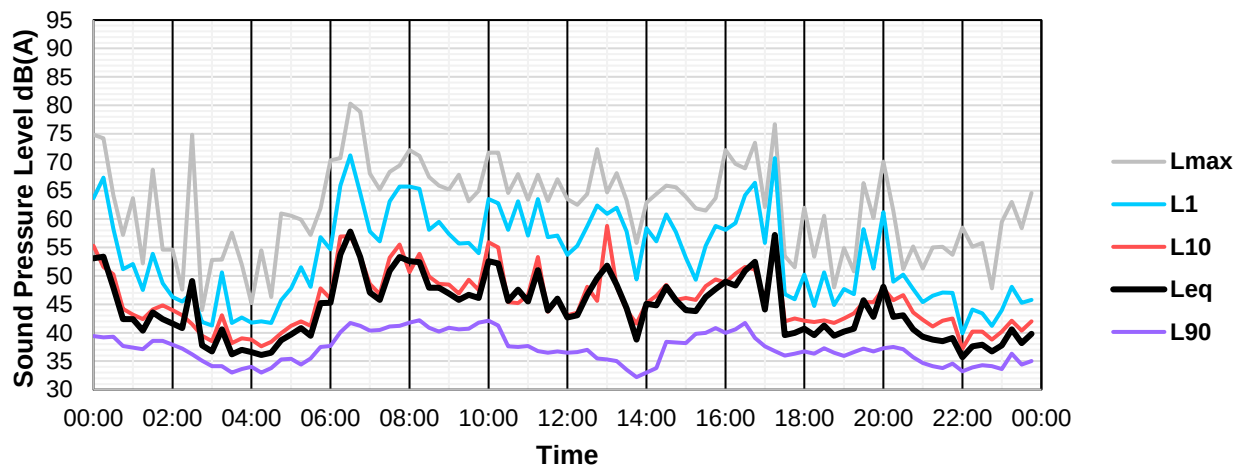
Unattended Noise Measurements Friday 21 July 2023



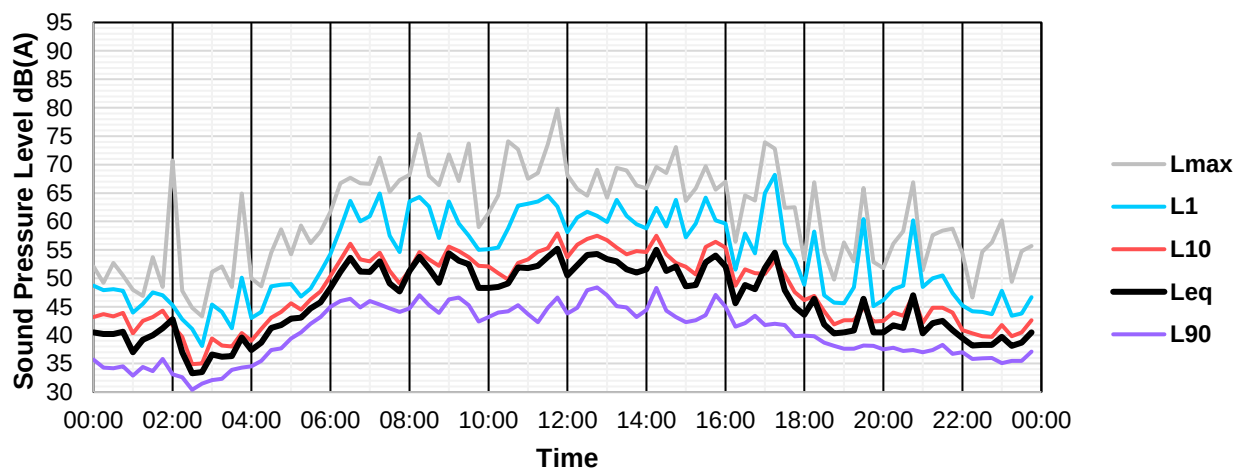
Unattended Noise Measurements Saturday 22 July 2023



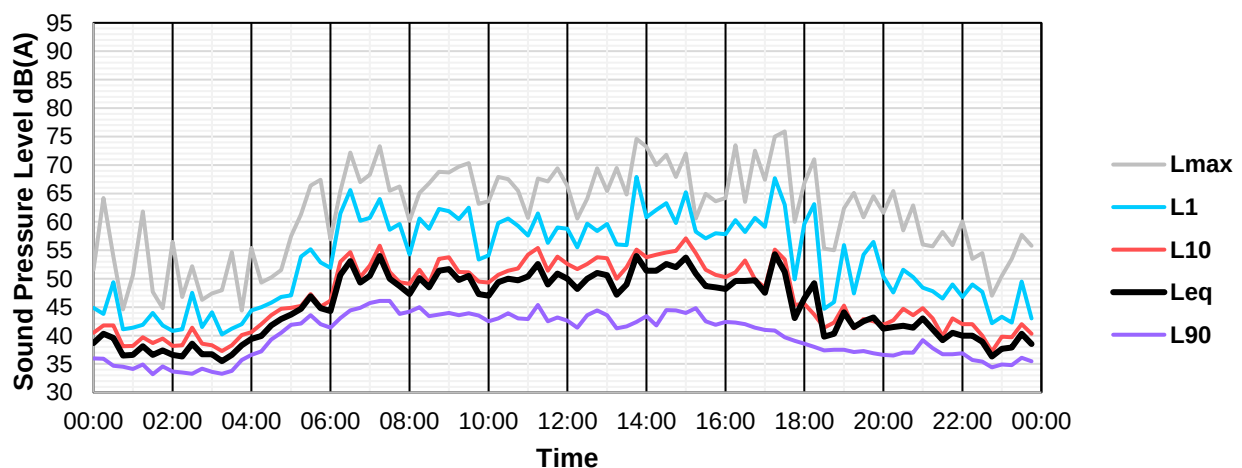
Unattended Noise Measurements Sunday 23 July 2023



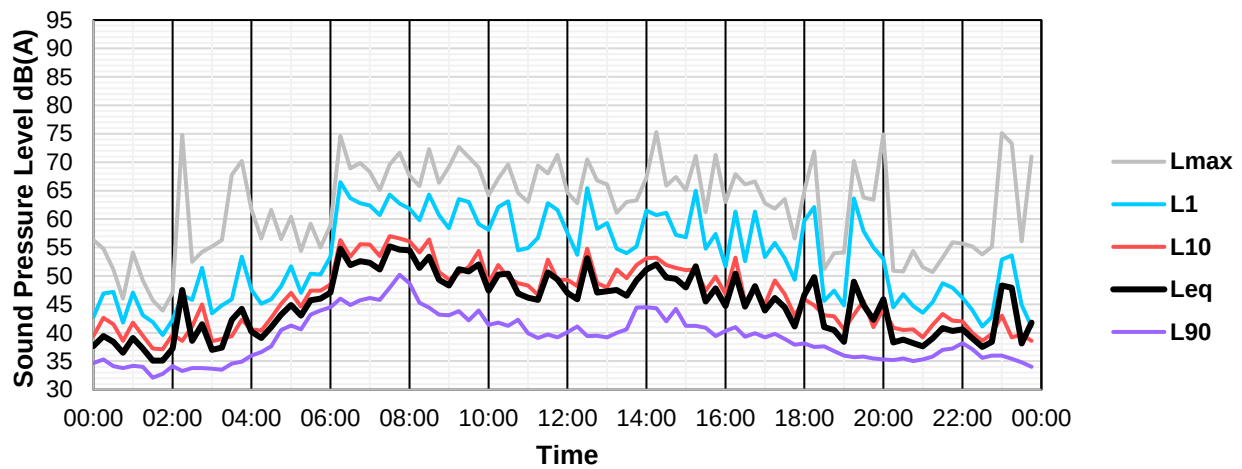
Unattended Noise Measurements Monday 24 July 2023



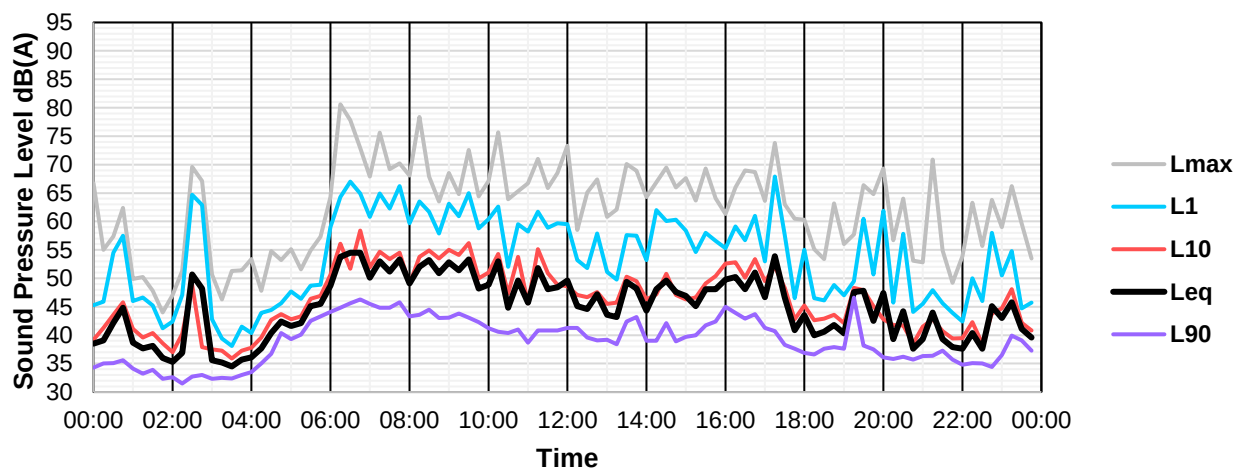
Unattended Noise Measurements Tuesday 25 July 2023



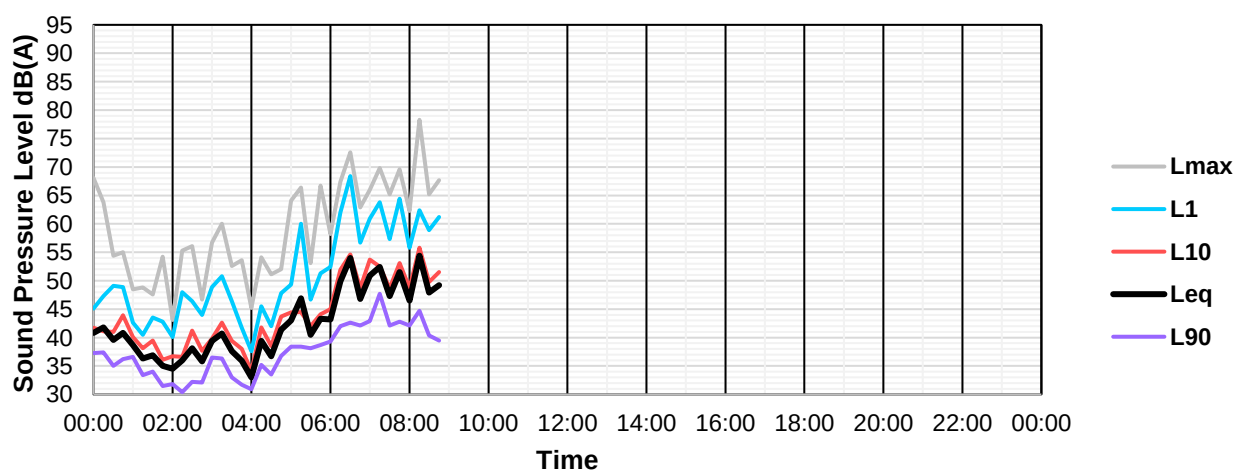
Unattended Noise Measurements Wednesday 26 July 2023



Unattended Noise Measurements Thursday 27 July 2023



Unattended Noise Measurements Friday 28 July 2023



Appendix E – SoundPLAN Result Tables

Powerlink Queensland - Tesla Redevelopment
Predicted Operational Noise Levels at the Boundary
From Activities at Proposed Development

Receiver Name	Floor	Leq,adj,11 dB(A)	Leq,adj,4h dB(A)	Leq,adj,9h dB(A)	
10 Harold Street	GF	42	21	21	
10 Harold Street	GF	43	22	22	
10 Harold Street	GF	42	22	22	
10 Harold Street	GF	42	21	21	
10 Harold Street	GF	42	22	23	
10 Harold Street	F 1	41	21	21	
10 Harold Street	F 1	42	21	21	
10 Harold Street	F 1	42	22	22	
10 Harold Street	F 1	41	21	21	
10 Harold Street	F 1	42	22	22	
12 Harold Street	GF	42	23	23	
12 Harold Street	GF	42	23	23	
12 Harold Street	GF	43	23	23	
12 Harold Street	GF	42	24	24	
12 Harold Street	F 1	42	22	22	
12 Harold Street	F 1	41	23	23	
12 Harold Street	F 1	42	22	22	
12 Harold Street	F 1	41	23	23	
14 Harold Street	GF	42	24	24	
14 Harold Street	GF	42	25	25	
14 Harold Street	GF	42	25	25	
14 Harold Street	F 1	41	23	23	
14 Harold Street	F 1	41	24	24	
14 Harold Street	F 1	41	24	24	
16 Harold Street	GF	42	25	25	
16 Harold Street	GF	42	26	26	
16 Harold Street	GF	42	26	27	
16 Harold Street	F 1	41	25	25	
16 Harold Street	F 1	41	25	25	
16 Harold Street	F 1	41	25	26	
18 Harold Street	GF	41	26	27	
18 Harold Street	GF	41	27	28	
18 Harold Street	GF	41	26	27	
18 Harold Street	F 1	40	26	27	
18 Harold Street	F 1	40	26	27	
18 Harold Street	F 1	41	26	26	
2 Harold Street	GF	40	20	20	
2 Harold Street	GF	40	20	20	
2 Harold Street	GF	41	20	20	
2 Harold Street	F 1	40	20	20	
2 Harold Street	F 1	40	20	20	
2 Harold Street	F 1	40	20	20	
20 Harold Street	GF	40	28	30	
20 Harold Street	GF	40	28	29	
20 Harold Street	GF	40	27	29	
20 Harold Street	F 1	39	28	29	
20 Harold Street	F 1	40	27	28	
20 Harold Street	F 1	40	27	28	
24 Harold Street	GF	40	31	32	
24 Harold Street	GF	40	31	32	
24 Harold Street	F 1	39	31	32	
24 Harold Street	F 1	39	30	31	

Powerlink Queensland - Tesla Redevelopment
Predicted Operational Noise Levels at the Boundary
From Activities at Proposed Development

Receiver Name	Floor	Leq,adj,11 dB(A)	Leq,adj,4h dB(A)	Leq,adj,9h dB(A)	
24A Harold Street	GF	40	29	30	
24A Harold Street	GF	40	29	30	
24A Harold Street	F 1	39	29	30	
24A Harold Street	F 1	39	28	29	
24B Harold Street	GF	40	30	31	
24B Harold Street	GF	40	30	31	
24B Harold Street	F 1	39	29	31	
24B Harold Street	F 1	39	29	30	
26 Harold Street	GF	40	31	32	
26 Harold Street	GF	40	32	33	
26 Harold Street	F 1	40	31	32	
26 Harold Street	F 1	40	32	32	
26B Harold Street	GF	40	32	32	
26B Harold Street	GF	40	32	33	
26B Harold Street	F 1	40	32	33	
26B Harold Street	F 1	40	33	33	
28 Harold Street	GF	41	34	34	
28 Harold Street	GF	42	34	35	
28 Harold Street	GF	42	35	35	
28 Harold Street	GF	42	35	36	
28 Harold Street	F 1	41	33	34	
28 Harold Street	F 1	41	34	35	
28 Harold Street	F 1	41	34	34	
28 Harold Street	F 1	41	34	35	
30 Harold Street	GF	42	34	35	
30 Harold Street	GF	42	35	35	
30 Harold Street	GF	42	34	34	
30 Harold Street	GF	42	35	35	
30 Harold Street	F 1	41	34	34	
30 Harold Street	F 1	41	34	34	
30 Harold Street	F 1	41	34	34	
30 Harold Street	F 1	41	34	34	
32 Harold Street	GF	42	34	34	
32 Harold Street	GF	42	35	35	
32 Harold Street	GF	41	34	34	
32 Harold Street	GF	42	35	35	
32 Harold Street	F 1	41	34	34	
32 Harold Street	F 1	41	34	34	
32 Harold Street	F 1	41	34	34	
32 Harold Street	F 1	41	34	34	
34 Harold Street	GF	41	33	34	
34 Harold Street	GF	42	34	34	
34 Harold Street	GF	41	33	34	
34 Harold Street	GF	42	34	34	
34 Harold Street	F 1	41	34	34	
34 Harold Street	F 1	41	33	33	
34 Harold Street	F 1	41	33	33	
34 Harold Street	F 1	41	33	33	
36 Harold Street	GF	41	32	32	
36 Harold Street	GF	40	32	33	
36 Harold Street	GF	40	33	33	
36 Harold Street	GF	40	33	33	

Powerlink Queensland - Tesla Redevelopment
Predicted Operational Noise Levels at the Boundary
From Activities at Proposed Development

Receiver Name	Floor	Leq,adj,11 dB(A)	Leq,adj,4h dB(A)	Leq,adj,9h dB(A)	
36 Harold Street	F 1	40	32	32	
36 Harold Street	F 1	40	32	33	
36 Harold Street	F 1	40	32	32	
36 Harold Street	F 1	40	32	32	
38 Harold Street	GF	40	32	32	
38 Harold Street	GF	39	32	33	
38 Harold Street	F 1	39	31	32	
38 Harold Street	F 1	38	31	31	
38A Harold Street	GF	38	31	32	
38A Harold Street	GF	39	32	32	
38A Harold Street	F 1	37	30	31	
38A Harold Street	F 1	38	30	31	
4 Harold Street	GF	41	20	20	
4 Harold Street	F 1	41	20	20	
40 Harold Street	GF	36	29	30	
40 Harold Street	GF	36	29	30	
40 Harold Street	GF	37	31	31	
40 Harold Street	GF	36	29	30	
40 Harold Street	F 1	35	28	29	
40 Harold Street	F 1	36	29	29	
40 Harold Street	F 1	36	29	30	
40 Harold Street	F 1	35	27	28	
42 Harold Street	GF	34	26	27	
42 Harold Street	GF	34	27	28	
42 Harold Street	GF	34	26	27	
42 Harold Street	GF	35	28	29	
42 Harold Street	F 1	33	25	26	
42 Harold Street	F 1	34	26	27	
42 Harold Street	F 1	33	25	26	
42 Harold Street	F 1	34	26	28	
44 Harold Street	GF	33	25	27	
44 Harold Street	GF	32	24	25	
44 Harold Street	GF	33	26	27	
44 Harold Street	F 1	32	24	25	
44 Harold Street	F 1	32	23	24	
44 Harold Street	F 1	33	24	25	
46 Harold Street	GF	32	24	24	
46 Harold Street	GF	31	22	22	
46 Harold Street	GF	32	24	25	
46 Harold Street	GF	31	22	23	
46 Harold Street	F 1	31	22	23	
46 Harold Street	F 1	31	22	22	
46 Harold Street	F 1	32	23	24	
46 Harold Street	F 1	31	21	22	
6-8 Harold Street	GF	42	21	21	
6-8 Harold Street	GF	42	21	21	
6-8 Harold Street	F 1	41	21	21	
6-8 Harold Street	F 1	41	21	21	

Powerlink Queensland - Tesla Redevelopment
ISO9613 Calculation Method
Predicted Operational Noise Levels at Adjacent Uses
From Activities at Proposed Development

Legend

Source		Source name
Source type		Type of source (point, line, area)
time slice		Name of time slice
Li	dB(A)	Level inside
R'w	dB	Rated transmission loss
L'w	dB(A)	Sound power per m, m ²
Lw	dB(A)	Sound power per unit
I or A	m,m ²	Size of source (Length or area)
KI	dB	Correction for source impulsiveness
KT	dB	Correction for source tonality
Ko	dB	Correction for propagation in limited spacial angle
S	m	Distance source - receiver
Adiv	dB	Mean attenuation due to geometrical spreading
Agr	dB	Mean attenuation due to ground effect
Abar	dB	Mean attenuation due to screening
Aatm	dB	Mean attenuation due to air absorption
Amisc	dB	Mean attenuation due to foliage, industrial areas and building areas
ADI	dB	Mean directivity correction
dLrefl	dB(A)	Level increase due to reflections
Ls	dB(A)	Unassessed sound pressure level at receiver $L_s = L_w + K_o + ADI + A_{div} + A_{gr} + A_{bar} + A_{atm} + A_{fol_site_house} + A_{wind} + dL_{refl}$
dLw	dB	Correction due to source operation time
Cmet	dB	Meteorological correction
ZR	dB	Correction for rest periods
Lr	dB(A)	Assessed level of time slice

Powerlink Queensland - Tesla Redevelopment
ISO9613 Calculation Method
Predicted Operational Noise Levels at Adjacent Uses
From Activities at Proposed Development

Source	Source type	time slice	Li dB(A)	R'w dB	L'w dB(A)	Lw dB(A)	l or A m,m²	Kl dB	KT dB	Ko dB	S m	Adiv dB	Agr dB	Abar dB	Aatm dB	Amisc dB	ADI dB	dLrefl dB(A)	Ls dB(A)	dLw dB	Cmet dB	ZR dB	Lr dB(A)
Receiver 28 Harold Street FI GF Leq,adj,11 42 dB(A) Leq,adj,4h 35 dB(A) Leq,adj,9h 36 dB(A)																							
Edison Carpark	PLot	Leq,adj,11			53.1	86.9	2383.7	0.0	0.0	0	133.87	-53.5	2.3	0.0	-0.9	0.00	0.0	1.0	35.9	-7.0	0.0	0.0	28.8
Edison Carpark	PLot	Leq,adj,4h			53.1	86.9	2383.7	0.0	0.0	0	133.87	-53.5	2.3	0.0	-0.9	0.00	0.0	1.0	35.9		0.0		
Edison Carpark	PLot	Leq,adj,9h			53.1	86.9	2383.7	0.0	0.0	0	133.87	-53.5	2.3	0.0	-0.9	0.00	0.0	1.0	35.9		0.0		
FDOE Carpark	PLot	Leq,adj,11			56.7	81.2	281.8	0.0	0.0	0	168.71	-55.5	3.2	-12.7	-0.3	0.00	0.0	1.4	17.3	-5.6	0.0	0.0	11.7
FDOE Carpark	PLot	Leq,adj,4h			56.7	81.2	281.8	0.0	0.0	0	168.71	-55.5	3.2	-12.7	-0.3	0.00	0.0	1.4	17.3		0.0		
FDOE Carpark	PLot	Leq,adj,9h			56.7	81.2	281.8	0.0	0.0	0	168.71	-55.5	3.2	-12.7	-0.3	0.00	0.0	1.4	17.3		0.0		
Tesla Carpark	PLot	Leq,adj,11			52.7	87.5	3037.3	0.0	0.0	0	68.02	-47.6	1.9	0.0	-0.5	0.00	0.0	1.9	43.3	-6.6	0.0	0.0	36.6
Tesla Carpark	PLot	Leq,adj,4h			52.7	87.5	3037.3	0.0	0.0	0	68.02	-47.6	1.9	0.0	-0.5	0.00	0.0	1.9	43.3	-11.8	0.0	0.0	31.5
Tesla Carpark	PLot	Leq,adj,9h			52.7	87.5	3037.3	0.0	0.0	0	68.02	-47.6	1.9	0.0	-0.5	0.00	0.0	1.9	43.3	-11.8	0.0	0.0	31.5
Tesla Carpark	PLot	Leq,adj,11			50.7	81.8	1289.7	0.0	0.0	0	60.49	-46.6	0.5	0.0	-0.5	0.00	0.0	2.2	37.3	-6.1	0.0	0.0	31.3
Tesla Carpark	PLot	Leq,adj,4h			50.7	81.8	1289.7	0.0	0.0	0	60.49	-46.6	0.5	0.0	-0.5	0.00	0.0	2.2	37.3		0.0		
Tesla Carpark	PLot	Leq,adj,9h			50.7	81.8	1289.7	0.0	0.0	0	60.49	-46.6	0.5	0.0	-0.5	0.00	0.0	2.2	37.3		0.0		
Toombul Road Carpark	PLot	Leq,adj,11			52.4	87.8	3493.8	0.0	0.0	0	193.81	-56.7	2.3	-0.9	-1.1	0.00	0.0	1.9	33.2	-6.5	0.0	0.0	26.7
Toombul Road Carpark	PLot	Leq,adj,4h			52.4	87.8	3493.8	0.0	0.0	0	193.81	-56.7	2.3	-0.9	-1.1	0.00	0.0	1.9	33.2		0.0		
Toombul Road Carpark	PLot	Leq,adj,9h			52.4	87.8	3493.8	0.0	0.0	0	193.81	-56.7	2.3	-0.9	-1.1	0.00	0.0	1.9	33.2		0.0		
Car Movements	Line	Leq,adj,11			47.1	63.0	38.4	0.0	0.0	0	110.60	-51.9	0.5	0.0	-0.7	0.00	0.0	0.5	11.3	8.9	0.0	0.0	20.2
Car Movements	Line	Leq,adj,4h			47.1	63.0	38.4	0.0	0.0	0	110.60	-51.9	0.5	0.0	-0.7	0.00	0.0	0.5	11.3		0.0		
Car Movements	Line	Leq,adj,9h			47.1	63.0	38.4	0.0	0.0	0	110.60	-51.9	0.5	0.0	-0.7	0.00	0.0	0.5	11.3		0.0		
Car Movements	Line	Leq,adj,11			47.1	63.2	40.8	0.0	0.0	0	47.11	-44.5	2.5	0.0	-0.3	0.00	0.0	1.1	22.1	11.2	0.0	0.0	33.4
Car Movements	Line	Leq,adj,4h			47.1	63.2	40.8	0.0	0.0	0	47.11	-44.5	2.5	0.0	-0.3	0.00	0.0	1.1	22.1	7.8	0.0	0.0	29.9
Car Movements	Line	Leq,adj,9h			47.1	63.2	40.8	0.0	0.0	0	47.11	-44.5	2.5	0.0	-0.3	0.00	0.0	1.1	22.1	7.8	0.0	0.0	29.9
Car Movements	Line	Leq,adj,11			47.1	63.0	39.0	0.0	0.0	0	156.95	-54.9	2.0	0.0	-0.9	0.00	0.0	1.5	10.8	10.2	0.0	0.0	20.9
Car Movements	Line	Leq,adj,4h			47.1	63.0	39.0	0.0	0.0	0	156.95	-54.9	2.0	0.0	-0.9	0.00	0.0	1.5	10.8		0.0		
Car Movements	Line	Leq,adj,9h			47.1	63.0	39.0	0.0	0.0	0	156.95	-54.9	2.0	0.0	-0.9	0.00	0.0	1.5	10.8		0.0		
Car Movements	Line	Leq,adj,11			47.1	63.0	38.4	0.0	0.0	0	159.82	-55.1	2.2	0.0	-0.9	0.00	0.0	1.6	10.8	10.1	0.0	0.0	20.9
Car Movements	Line	Leq,adj,4h			47.1	63.0	38.4	0.0	0.0	0	159.82	-55.1	2.2	0.0	-0.9	0.00	0.0	1.6	10.8		0.0		
Car Movements	Line	Leq,adj,9h			47.1	63.0	38.4	0.0	0.0	0	159.82	-55.1	2.2	0.0	-0.9	0.00	0.0	1.6	10.8		0.0		
Car Movements	Line	Leq,adj,11			47.1	63.0	39.0	0.0	0.0	0	107.82	-51.6	0.4	0.0	-0.7	0.00	0.0	0.7	11.7	8.6	0.0	0.0	20.3
Car Movements	Line	Leq,adj,4h			47.1	63.0	39.0	0.0	0.0	0	107.82	-51.6	0.4	0.0	-0.7	0.00	0.0	0.7	11.7		0.0		
Car Movements	Line	Leq,adj,9h			47.1	63.0	39.0	0.0	0.0	0	107.82	-51.6	0.4	0.0	-0.7	0.00	0.0	0.7	11.7		0.0		
Car Movements	Line	Leq,adj,11			47.1	70.3	206.1	0.0	0.0	0	127.55	-53.1	1.2	-2.0	-0.6	0.00	0.0	2.8	18.5	4.9	0.0	0.0	23.4

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ISO9613 Calculation Method
Predicted Operational Noise Levels at Adjacent Uses
From Activities at Proposed Development

Source	Source type	time slice	Li	R'w	L'w	Lw	l or A	Kl	KT	Ko	S	Adiv	Agr	Abar	Aatm	Amisc	ADI	dLrefl	Ls	dLw	Cmet	ZR	Lr	
			dB(A)	dB	dB(A)	dB(A)	m,m ²	dB	dB	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB	dB	dB(A)	
Car Movements	Line	Leq,adj,4h			47.1	70.3	206.1	0.0	0.0	0	127.55	-53.1	1.2	-2.0	-0.6	0.00	0.0	2.8	18.5		0.0			
Car Movements	Line	Leq,adj,9h			47.1	70.3	206.1	0.0	0.0	0	127.55	-53.1	1.2	-2.0	-0.6	0.00	0.0	2.8	18.5		0.0			
Car Movements	Line	Leq,adj,11			47.1	70.1	199.4	0.0	0.0	0	123.93	-52.9	1.0	-2.1	-0.6	0.00	0.0	3.1	18.6	3.7	0.0	0.0	22.3	
Car Movements	Line	Leq,adj,4h			47.1	70.1	199.4	0.0	0.0	0	123.93	-52.9	1.0	-2.1	-0.6	0.00	0.0	3.1	18.6		0.0			
Car Movements	Line	Leq,adj,9h			47.1	70.1	199.4	0.0	0.0	0	123.93	-52.9	1.0	-2.1	-0.6	0.00	0.0	3.1	18.6		0.0			
Car Movements	Line	Leq,adj,11			47.1	62.9	37.7	0.0	0.0	0	49.71	-44.9	2.6	0.0	-0.3	0.00	0.0	1.1	21.4	11.1	0.0	0.0	32.5	
Car Movements	Line	Leq,adj,4h			47.1	62.9	37.7	0.0	0.0	0	49.71	-44.9	2.6	0.0	-0.3	0.00	0.0	1.1	21.4	7.8	0.0	0.0	29.2	
Car Movements	Line	Leq,adj,9h			47.1	62.9	37.7	0.0	0.0	0	49.71	-44.9	2.6	0.0	-0.3	0.00	0.0	1.1	21.4	7.8	0.0	0.0	29.2	
Mechanical Plant	Area	Leq,adj,11			60.7	80.8	101.9	0.0	5.0	0	101.13	-51.1	1.3	-14.8	-0.3	0.00	0.0	3.3	19.3	0.0	0.0	0.0	24.3	
Mechanical Plant	Area	Leq,adj,4h			60.7	80.8	101.9	0.0	5.0	0	101.13	-51.1	1.3	-14.8	-0.3	0.00	0.0	3.3	19.3		0.0			
Mechanical Plant	Area	Leq,adj,9h			60.7	80.8	101.9	0.0	5.0	0	101.13	-51.1	1.3	-14.8	-0.3	0.00	0.0	3.3	19.3		0.0			
New Tesla Building -Refuse Loading	Area	Leq,adj,11			74.5	87.1	18.0	5.0	0.0	3	67.85	-47.6	1.7	0.0	-1.6	0.00	0.0	2.1	44.6	-28.2	0.0	0.0	21.4	
New Tesla Building -Refuse Loading	Area	Leq,adj,4h			74.5	87.1	18.0	5.0	0.0	3	67.85	-47.6	1.7	0.0	-1.6	0.00	0.0	2.1	44.6		0.0			
New Tesla Building -Refuse Loading	Area	Leq,adj,9h			74.5	87.1	18.0	5.0	0.0	3	67.85	-47.6	1.7	0.0	-1.6	0.00	0.0	2.1	44.6	-27.3	0.0	0.0	22.3	
Truck Idling	Point	Leq,adj,11			90.8	90.8		0.0	5.0	0	107.67	-51.6	1.3	-10.9	-0.4	0.00	0.0	9.8	38.9	-21.2	0.0	0.0	22.7	
Truck Idling	Point	Leq,adj,4h			90.8	90.8		0.0	5.0	0	107.67	-51.6	1.3	-10.9	-0.4	0.00	0.0	9.8	38.9		0.0			
Truck Idling	Point	Leq,adj,9h			90.8	90.8		0.0	5.0	0	107.67	-51.6	1.3	-10.9	-0.4	0.00	0.0	9.8	38.9	-20.3	0.0	0.0	23.6	
Truck Loading	Point	Leq,adj,11			92.0	92.0		5.0	0.0	0	113.54	-52.1	1.7	-12.3	-1.2	0.00	0.0	1.1	29.2	-28.2	0.0	0.0	6.0	
Truck Loading	Point	Leq,adj,4h			92.0	92.0		5.0	0.0	0	113.54	-52.1	1.7	-12.3	-1.2	0.00	0.0	1.1	29.2		0.0			
Truck Loading	Point	Leq,adj,9h			92.0	92.0		5.0	0.0	0	113.54	-52.1	1.7	-12.3	-1.2	0.00	0.0	1.1	29.2	-27.3	0.0	0.0	6.9	
Truck Movements	Line	Leq,adj,11			60.7	77.0	43.4	0.0	0.0	0	39.38	-42.9	2.3	0.0	-0.2	0.00	0.0	1.2	37.3	-7.4	0.0	0.0	29.9	
Truck Movements	Line	Leq,adj,4h			60.7	77.0	43.4	0.0	0.0	0	39.38	-42.9	2.3	0.0	-0.2	0.00	0.0	1.2	37.3		0.0			
Truck Movements	Line	Leq,adj,9h			60.7	77.0	43.4	0.0	0.0	0	39.38	-42.9	2.3	0.0	-0.2	0.00	0.0	1.2	37.3		0.0			
Truck Movements	Line	Leq,adj,11			60.7	80.0	86.5	0.0	0.0	0	101.70	-51.1	1.0	-0.6	-0.7	0.00	0.0	3.2	31.8	-7.4	0.0	0.0	24.4	
Truck Movements	Line	Leq,adj,4h			60.7	80.0	86.5	0.0	0.0	0	101.70	-51.1	1.0	-0.6	-0.7	0.00	0.0	3.2	31.8		0.0			
Truck Movements	Line	Leq,adj,9h			60.7	80.0	86.5	0.0	0.0	0	101.70	-51.1	1.0	-0.6	-0.7	0.00	0.0	3.2	31.8		0.0			
Truck Movements	Line	Leq,adj,11			60.7	79.7	79.3	0.0	0.0	0	97.78	-50.8	0.9	-0.6	-0.6	0.00	0.0	3.6	32.0	-7.4	0.0	0.0	24.6	
Truck Movements	Line	Leq,adj,4h			60.7	79.7	79.3	0.0	0.0	0	97.78	-50.8	0.9	-0.6	-0.6	0.00	0.0	3.6	32.0		0.0			
Truck Movements	Line	Leq,adj,9h			60.7	79.7	79.3	0.0	0.0	0	97.78	-50.8	0.9	-0.6	-0.6	0.00	0.0	3.6	32.0		0.0			
Truck Movements	Line	Leq,adj,11			60.7	77.7	50.1	0.0	0.0	0	41.43	-43.3	2.3	0.0	-0.3	0.00	0.0	1.2	37.6	-7.4	0.0	0.0	30.2	

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Source	Source type	time slice	Li	R'w	L'w	Lw	I or A	KI	KT	Ko	S	Adiv	Agr	Abar	Aatm	Amisc	ADI	dLrefl	Ls	dLw	Cmet	ZR	Lr	
			dB(A)	dB	dB(A)	dB(A)	m,m ²	dB	dB	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB	dB	dB(A)	
Truck Movements	Line	Leq,adj,4h			60.7	77.7	50.1	0.0	0.0	0	41.43	-43.3	2.3	0.0	-0.3	0.00	0.0	1.2	37.6		0.0			
Truck Movements	Line	Leq,adj,9h			60.7	77.7	50.1	0.0	0.0	0	41.43	-43.3	2.3	0.0	-0.3	0.00	0.0	1.2	37.6		0.0			
Washdown (compressor)	Point	Leq,adj,11			89.1	89.1		0.0	5.0	0	124.97	-52.9	-0.5	-22.4	-0.8	0.00	0.0	19.7	32.1	-6.0	0.0	0.0	31.1	
Washdown (compressor)	Point	Leq,adj,4h			89.1	89.1		0.0	5.0	0	124.97	-52.9	-0.5	-22.4	-0.8	0.00	0.0	19.7	32.1		0.0			
Washdown (compressor)	Point	Leq,adj,9h			89.1	89.1		0.0	5.0	0	124.97	-52.9	-0.5	-22.4	-0.8	0.00	0.0	19.7	32.1		0.0			



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Source	Source type	time slice	Li dB(A)	R'w dB	L'w dB(A)	Lw dB(A)	l or A m,m ²	Kl dB	KT dB	Ko dB	S m	Adiv dB	Agr dB	Abar dB	Aatm dB	Amisc dB	ADI dB	dLrefl dB(A)	Ls dB(A)	dLw dB	Cmet dB	ZR dB	Lr dB(A)
Receiver 12 Harold Street	FI GF	Leq,adj,11 43 dB(A)	Leq,adj,4h 23 dB(A)	Leq,adj,9h 23 dB(A)																			
Edison Carpark	PLot	Leq,adj,11			53.1	86.9	2383.7	0.0	0.0	0	46.01	-44.2	1.7	0.0	-0.3	0.00	0.0	1.7	45.7	-7.0	0.0	0.0	38.7
Edison Carpark	PLot	Leq,adj,4h			53.1	86.9	2383.7	0.0	0.0	0	46.01	-44.2	1.7	0.0	-0.3	0.00	0.0	1.7	45.7		0.0		
Edison Carpark	PLot	Leq,adj,9h			53.1	86.9	2383.7	0.0	0.0	0	46.01	-44.2	1.7	0.0	-0.3	0.00	0.0	1.7	45.7		0.0		
FDOE Carpark	PLot	Leq,adj,11			56.7	81.2	281.8	0.0	0.0	0	228.01	-58.2	2.2	-20.6	-0.5	0.00	0.0	0.1	4.3	-5.6	0.0	0.0	-1.3
FDOE Carpark	PLot	Leq,adj,4h			56.7	81.2	281.8	0.0	0.0	0	228.01	-58.2	2.2	-20.6	-0.5	0.00	0.0	0.1	4.3		0.0		
FDOE Carpark	PLot	Leq,adj,9h			56.7	81.2	281.8	0.0	0.0	0	228.01	-58.2	2.2	-20.6	-0.5	0.00	0.0	0.1	4.3		0.0		
Tesla Carpark	PLot	Leq,adj,11			52.7	87.5	3037.3	0.0	0.0	0	181.08	-56.1	2.6	-1.3	-1.0	0.00	0.0	0.8	32.4	-6.6	0.0	0.0	25.8
Tesla Carpark	PLot	Leq,adj,4h			52.7	87.5	3037.3	0.0	0.0	0	181.08	-56.1	2.6	-1.3	-1.0	0.00	0.0	0.8	32.4	-11.8	0.0	0.0	20.6
Tesla Carpark	PLot	Leq,adj,9h			52.7	87.5	3037.3	0.0	0.0	0	181.08	-56.1	2.6	-1.3	-1.0	0.00	0.0	0.8	32.4	-11.8	0.0	0.0	20.6
Tesla Carpark	PLot	Leq,adj,11			50.7	81.8	1289.7	0.0	0.0	0	87.18	-49.8	1.4	0.0	-0.6	0.00	0.0	1.7	34.5	-6.1	0.0	0.0	28.4
Tesla Carpark	PLot	Leq,adj,4h			50.7	81.8	1289.7	0.0	0.0	0	87.18	-49.8	1.4	0.0	-0.6	0.00	0.0	1.7	34.5		0.0		
Tesla Carpark	PLot	Leq,adj,9h			50.7	81.8	1289.7	0.0	0.0	0	87.18	-49.8	1.4	0.0	-0.6	0.00	0.0	1.7	34.5		0.0		
Toombul Road Carpark	PLot	Leq,adj,11			52.4	87.8	3493.8	0.0	0.0	0	73.23	-48.3	2.2	-0.2	-0.5	0.00	0.0	1.4	42.5	-6.5	0.0	0.0	36.0
Toombul Road Carpark	PLot	Leq,adj,4h			52.4	87.8	3493.8	0.0	0.0	0	73.23	-48.3	2.2	-0.2	-0.5	0.00	0.0	1.4	42.5		0.0		
Toombul Road Carpark	PLot	Leq,adj,9h			52.4	87.8	3493.8	0.0	0.0	0	73.23	-48.3	2.2	-0.2	-0.5	0.00	0.0	1.4	42.5		0.0		
Car Movements	Line	Leq,adj,11			47.1	63.0	38.4	0.0	0.0	0	52.61	-45.4	1.2	0.0	-0.4	0.00	0.0	2.1	20.5	8.9	0.0	0.0	29.4
Car Movements	Line	Leq,adj,4h			47.1	63.0	38.4	0.0	0.0	0	52.61	-45.4	1.2	0.0	-0.4	0.00	0.0	2.1	20.5		0.0		
Car Movements	Line	Leq,adj,9h			47.1	63.0	38.4	0.0	0.0	0	52.61	-45.4	1.2	0.0	-0.4	0.00	0.0	2.1	20.5		0.0		
Car Movements	Line	Leq,adj,11			47.1	63.2	40.8	0.0	0.0	0	143.77	-54.1	0.3	-1.7	-0.9	0.00	0.0	1.4	8.2	11.2	0.0	0.0	19.4
Car Movements	Line	Leq,adj,4h			47.1	63.2	40.8	0.0	0.0	0	143.77	-54.1	0.3	-1.7	-0.9	0.00	0.0	1.4	8.2	7.8	0.0	0.0	16.0
Car Movements	Line	Leq,adj,9h			47.1	63.2	40.8	0.0	0.0	0	143.77	-54.1	0.3	-1.7	-0.9	0.00	0.0	1.4	8.2	7.8	0.0	0.0	16.0
Car Movements	Line	Leq,adj,11			47.1	63.0	39.0	0.0	0.0	0	42.04	-43.5	1.2	0.0	-0.3	0.00	0.0	1.8	22.3	10.2	0.0	0.0	32.5
Car Movements	Line	Leq,adj,4h			47.1	63.0	39.0	0.0	0.0	0	42.04	-43.5	1.2	0.0	-0.3	0.00	0.0	1.8	22.3		0.0		
Car Movements	Line	Leq,adj,9h			47.1	63.0	39.0	0.0	0.0	0	42.04	-43.5	1.2	0.0	-0.3	0.00	0.0	1.8	22.3		0.0		
Car Movements	Line	Leq,adj,11			47.1	63.0	38.4	0.0	0.0	0	43.50	-43.8	1.5	0.0	-0.3	0.00	0.0	1.8	22.2	10.1	0.0	0.0	32.4
Car Movements	Line	Leq,adj,4h			47.1	63.0	38.4	0.0	0.0	0	43.50	-43.8	1.5	0.0	-0.3	0.00	0.0	1.8	22.2		0.0		
Car Movements	Line	Leq,adj,9h			47.1	63.0	38.4	0.0	0.0	0	43.50	-43.8	1.5	0.0	-0.3	0.00	0.0	1.8	22.2		0.0		
Car Movements	Line	Leq,adj,11			47.1	63.0	39.0	0.0	0.0	0	54.86	-45.8	1.3	0.0	-0.4	0.00	0.0	2.2	20.4	8.6	0.0	0.0	29.0
Car Movements	Line	Leq,adj,4h			47.1	63.0	39.0	0.0	0.0	0	54.86	-45.8	1.3	0.0	-0.4	0.00	0.0	2.2	20.4		0.0		
Car Movements	Line	Leq,adj,9h			47.1	63.0	39.0	0.0	0.0	0	54.86	-45.8	1.3	0.0	-0.4	0.00	0.0	2.2	20.4		0.0		
Car Movements	Line	Leq,adj,11			47.1	70.3	206.1	0.0	0.0	0	234.87	-58.4	1.2	-3.7	-1.2	0.00	0.0	1.9	10.1	4.9	0.0	0.0	15.0

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Source	Source type	time slice	Li	R'w	L'w	Lw	l or A	Kl	KT	Ko	S	Adiv	Agr	Abar	Aatm	Amisc	ADI	dLrefl	Ls	dLw	Cmet	ZR	Lr
			dB(A)	dB	dB(A)	dB(A)	m,m ²	dB	dB	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB	dB	dB(A)
Car Movements	Line	Leq,adj,4h			47.1	70.3	206.1	0.0	0.0	0	234.87	-58.4	1.2	-3.7	-1.2	0.00	0.0	1.9	10.1		0.0		
Car Movements	Line	Leq,adj,9h			47.1	70.3	206.1	0.0	0.0	0	234.87	-58.4	1.2	-3.7	-1.2	0.00	0.0	1.9	10.1		0.0		
Car Movements	Line	Leq,adj,11			47.1	70.1	199.4	0.0	0.0	0	231.38	-58.3	1.1	-3.6	-1.2	0.00	0.0	1.8	9.9	3.7	0.0	0.0	13.6
Car Movements	Line	Leq,adj,4h			47.1	70.1	199.4	0.0	0.0	0	231.38	-58.3	1.1	-3.6	-1.2	0.00	0.0	1.8	9.9		0.0		
Car Movements	Line	Leq,adj,9h			47.1	70.1	199.4	0.0	0.0	0	231.38	-58.3	1.1	-3.6	-1.2	0.00	0.0	1.8	9.9		0.0		
Car Movements	Line	Leq,adj,11			47.1	62.9	37.7	0.0	0.0	0	147.45	-54.4	0.7	-1.7	-0.9	0.00	0.0	1.3	7.9	11.1	0.0	0.0	19.1
Car Movements	Line	Leq,adj,4h			47.1	62.9	37.7	0.0	0.0	0	147.45	-54.4	0.7	-1.7	-0.9	0.00	0.0	1.3	7.9	7.8	0.0	0.0	15.7
Car Movements	Line	Leq,adj,9h			47.1	62.9	37.7	0.0	0.0	0	147.45	-54.4	0.7	-1.7	-0.9	0.00	0.0	1.3	7.9	7.8	0.0	0.0	15.7
Mechanical Plant	Area	Leq,adj,11			60.7	80.8	101.9	0.0	5.0	0	182.22	-56.2	0.5	-21.7	-0.5	0.00	0.0	3.6	6.4	0.0	0.0	0.0	11.4
Mechanical Plant	Area	Leq,adj,4h			60.7	80.8	101.9	0.0	5.0	0	182.22	-56.2	0.5	-21.7	-0.5	0.00	0.0	3.6	6.4		0.0		
Mechanical Plant	Area	Leq,adj,9h			60.7	80.8	101.9	0.0	5.0	0	182.22	-56.2	0.5	-21.7	-0.5	0.00	0.0	3.6	6.4		0.0		
New Tesla Building -Refuse Loading	Area	Leq,adj,11			74.5	87.1	18.0	5.0	0.0	3	147.90	-54.4	1.0	-23.4	-2.2	0.00	0.0	0.0	11.0	-28.2	0.0	0.0	-12.2
New Tesla Building -Refuse Loading	Area	Leq,adj,4h			74.5	87.1	18.0	5.0	0.0	3	147.90	-54.4	1.0	-23.4	-2.2	0.00	0.0	0.0	11.0		0.0		
New Tesla Building -Refuse Loading	Area	Leq,adj,9h			74.5	87.1	18.0	5.0	0.0	3	147.90	-54.4	1.0	-23.4	-2.2	0.00	0.0	0.0	11.0	-27.3	0.0	0.0	-11.3
Truck Idling	Point	Leq,adj,11			90.8	90.8		0.0	5.0	0	212.37	-57.5	1.3	-14.6	-0.6	0.00	0.0	1.3	20.7	-21.2	0.0	0.0	4.5
Truck Idling	Point	Leq,adj,4h			90.8	90.8		0.0	5.0	0	212.37	-57.5	1.3	-14.6	-0.6	0.00	0.0	1.3	20.7		0.0		
Truck Idling	Point	Leq,adj,9h			90.8	90.8		0.0	5.0	0	212.37	-57.5	1.3	-14.6	-0.6	0.00	0.0	1.3	20.7	-20.3	0.0	0.0	5.4
Truck Loading	Point	Leq,adj,11			92.0	92.0		5.0	0.0	0	215.23	-57.7	1.5	-23.6	-2.9	0.00	0.0	0.0	9.4	-28.2	0.0	0.0	-13.8
Truck Loading	Point	Leq,adj,4h			92.0	92.0		5.0	0.0	0	215.23	-57.7	1.5	-23.6	-2.9	0.00	0.0	0.0	9.4		0.0		
Truck Loading	Point	Leq,adj,9h			92.0	92.0		5.0	0.0	0	215.23	-57.7	1.5	-23.6	-2.9	0.00	0.0	0.0	9.4	-27.3	0.0	0.0	-13.0
Truck Movements	Line	Leq,adj,11			60.7	77.0	43.4	0.0	0.0	0	141.67	-54.0	0.5	-1.3	-0.9	0.00	0.0	1.8	23.2	-7.4	0.0	0.0	15.8
Truck Movements	Line	Leq,adj,4h			60.7	77.0	43.4	0.0	0.0	0	141.67	-54.0	0.5	-1.3	-0.9	0.00	0.0	1.8	23.2		0.0		
Truck Movements	Line	Leq,adj,9h			60.7	77.0	43.4	0.0	0.0	0	141.67	-54.0	0.5	-1.3	-0.9	0.00	0.0	1.8	23.2		0.0		
Truck Movements	Line	Leq,adj,11			60.7	80.0	86.5	0.0	0.0	0	223.92	-58.0	1.8	-1.1	-1.3	0.00	0.0	2.1	23.6	-7.4	0.0	0.0	16.2
Truck Movements	Line	Leq,adj,4h			60.7	80.0	86.5	0.0	0.0	0	223.92	-58.0	1.8	-1.1	-1.3	0.00	0.0	2.1	23.6		0.0		
Truck Movements	Line	Leq,adj,9h			60.7	80.0	86.5	0.0	0.0	0	223.92	-58.0	1.8	-1.1	-1.3	0.00	0.0	2.1	23.6		0.0		
Truck Movements	Line	Leq,adj,11			60.7	79.7	79.3	0.0	0.0	0	220.40	-57.9	1.9	-1.0	-1.3	0.00	0.0	2.1	23.5	-7.4	0.0	0.0	16.1
Truck Movements	Line	Leq,adj,4h			60.7	79.7	79.3	0.0	0.0	0	220.40	-57.9	1.9	-1.0	-1.3	0.00	0.0	2.1	23.5		0.0		
Truck Movements	Line	Leq,adj,9h			60.7	79.7	79.3	0.0	0.0	0	220.40	-57.9	1.9	-1.0	-1.3	0.00	0.0	2.1	23.5		0.0		
Truck Movements	Line	Leq,adj,11			60.7	77.7	50.1	0.0	0.0	0	145.69	-54.3	0.6	-1.6	-0.9	0.00	0.0	1.6	23.1	-7.4	0.0	0.0	15.7

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Source	Source type	time slice	Li	R'w	L'w	Lw	l or A	Kl	KT	Ko	S	Adiv	Agr	Abar	Aatm	Amisc	ADI	dLrefl	Ls	dLw	Cmet	ZR	Lr	
			dB(A)	dB	dB(A)	dB(A)	m,m ²	dB	dB	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB	dB	dB(A)	
Truck Movements	Line	Leq,adj,4h			60.7	77.7	50.1	0.0	0.0	0	145.69	-54.3	0.6	-1.6	-0.9	0.00	0.0	1.6	23.1		0.0			
Truck Movements	Line	Leq,adj,9h			60.7	77.7	50.1	0.0	0.0	0	145.69	-54.3	0.6	-1.6	-0.9	0.00	0.0	1.6	23.1		0.0			
Washdown (compressor)	Point	Leq,adj,11			89.1	89.1		0.0	5.0	0	221.14	-57.9	-0.9	-23.1	-1.4	0.00	0.0	0.1	5.9	-6.0	0.0	0.0	4.9	
Washdown (compressor)	Point	Leq,adj,4h			89.1	89.1		0.0	5.0	0	221.14	-57.9	-0.9	-23.1	-1.4	0.00	0.0	0.1	5.9		0.0			
Washdown (compressor)	Point	Leq,adj,9h			89.1	89.1		0.0	5.0	0	221.14	-57.9	-0.9	-23.1	-1.4	0.00	0.0	0.1	5.9		0.0			



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Source	Source type	time slice	Li dB(A)	R'w dB	L'w dB(A)	Lw dB(A)	l or A m,m ²	Kl dB	KT dB	Ko dB	S m	Adiv dB	Agr dB	Abar dB	Aatm dB	Amisc dB	ADI dB	dLrefl dB(A)	Ls dB(A)	dLw dB	Cmet dB	ZR dB	Lr dB(A)
Receiver 10 Harold Street FI GF Leq,adj,11 43 dB(A) Leq,adj,4h 22 dB(A) Leq,adj,9h 22 dB(A)																							
Edison Carpark	PLot	Leq,adj,11			53.1	86.9	2383.7	0.0	0.0	0	53.65	-45.6	1.9	0.0	-0.4	0.00	0.0	1.9	44.8	-7.0	0.0	0.0	37.7
Edison Carpark	PLot	Leq,adj,4h			53.1	86.9	2383.7	0.0	0.0	0	53.65	-45.6	1.9	0.0	-0.4	0.00	0.0	1.9	44.8		0.0		
Edison Carpark	PLot	Leq,adj,9h			53.1	86.9	2383.7	0.0	0.0	0	53.65	-45.6	1.9	0.0	-0.4	0.00	0.0	1.9	44.8		0.0		
FDOE Carpark	PLot	Leq,adj,11			56.7	81.2	281.8	0.0	0.0	0	242.18	-58.7	2.3	-20.5	-0.5	0.00	0.0	0.2	4.1	-5.6	0.0	0.0	-1.5
FDOE Carpark	PLot	Leq,adj,4h			56.7	81.2	281.8	0.0	0.0	0	242.18	-58.7	2.3	-20.5	-0.5	0.00	0.0	0.2	4.1		0.0		
FDOE Carpark	PLot	Leq,adj,9h			56.7	81.2	281.8	0.0	0.0	0	242.18	-58.7	2.3	-20.5	-0.5	0.00	0.0	0.2	4.1		0.0		
Tesla Carpark	PLot	Leq,adj,11			52.7	87.5	3037.3	0.0	0.0	0	200.23	-57.0	2.6	-1.5	-1.1	0.00	0.0	0.8	31.3	-6.6	0.0	0.0	24.7
Tesla Carpark	PLot	Leq,adj,4h			52.7	87.5	3037.3	0.0	0.0	0	200.23	-57.0	2.6	-1.5	-1.1	0.00	0.0	0.8	31.3	-11.8	0.0	0.0	19.5
Tesla Carpark	PLot	Leq,adj,9h			52.7	87.5	3037.3	0.0	0.0	0	200.23	-57.0	2.6	-1.5	-1.1	0.00	0.0	0.8	31.3	-11.8	0.0	0.0	19.5
Tesla Carpark	PLot	Leq,adj,11			50.7	81.8	1289.7	0.0	0.0	0	105.89	-51.5	1.7	0.0	-0.7	0.00	0.0	1.4	32.7	-6.1	0.0	0.0	26.6
Tesla Carpark	PLot	Leq,adj,4h			50.7	81.8	1289.7	0.0	0.0	0	105.89	-51.5	1.7	0.0	-0.7	0.00	0.0	1.4	32.7		0.0		
Tesla Carpark	PLot	Leq,adj,9h			50.7	81.8	1289.7	0.0	0.0	0	105.89	-51.5	1.7	0.0	-0.7	0.00	0.0	1.4	32.7		0.0		
Toombul Road Carpark	PLot	Leq,adj,11			52.4	87.8	3493.8	0.0	0.0	0	60.07	-46.6	1.9	0.0	-0.4	0.00	0.0	1.2	43.9	-6.5	0.0	0.0	37.4
Toombul Road Carpark	PLot	Leq,adj,4h			52.4	87.8	3493.8	0.0	0.0	0	60.07	-46.6	1.9	0.0	-0.4	0.00	0.0	1.2	43.9		0.0		
Toombul Road Carpark	PLot	Leq,adj,9h			52.4	87.8	3493.8	0.0	0.0	0	60.07	-46.6	1.9	0.0	-0.4	0.00	0.0	1.2	43.9		0.0		
Car Movements	Line	Leq,adj,11			47.1	63.0	38.4	0.0	0.0	0	67.84	-47.6	1.1	0.0	-0.5	0.00	0.0	2.1	18.1	8.9	0.0	0.0	27.0
Car Movements	Line	Leq,adj,4h			47.1	63.0	38.4	0.0	0.0	0	67.84	-47.6	1.1	0.0	-0.5	0.00	0.0	2.1	18.1		0.0		
Car Movements	Line	Leq,adj,9h			47.1	63.0	38.4	0.0	0.0	0	67.84	-47.6	1.1	0.0	-0.5	0.00	0.0	2.1	18.1		0.0		
Car Movements	Line	Leq,adj,11			47.1	63.2	40.8	0.0	0.0	0	162.63	-55.2	0.4	-1.8	-1.0	0.00	0.0	1.3	7.0	11.2	0.0	0.0	18.2
Car Movements	Line	Leq,adj,4h			47.1	63.2	40.8	0.0	0.0	0	162.63	-55.2	0.4	-1.8	-1.0	0.00	0.0	1.3	7.0	7.8	0.0	0.0	14.8
Car Movements	Line	Leq,adj,9h			47.1	63.2	40.8	0.0	0.0	0	162.63	-55.2	0.4	-1.8	-1.0	0.00	0.0	1.3	7.0	7.8	0.0	0.0	14.8
Car Movements	Line	Leq,adj,11			47.1	63.0	39.0	0.0	0.0	0	38.36	-42.7	2.2	0.0	-0.2	0.00	0.0	1.5	23.9	10.2	0.0	0.0	34.0
Car Movements	Line	Leq,adj,4h			47.1	63.0	39.0	0.0	0.0	0	38.36	-42.7	2.2	0.0	-0.2	0.00	0.0	1.5	23.9		0.0		
Car Movements	Line	Leq,adj,9h			47.1	63.0	39.0	0.0	0.0	0	38.36	-42.7	2.2	0.0	-0.2	0.00	0.0	1.5	23.9		0.0		
Car Movements	Line	Leq,adj,11			47.1	63.0	38.4	0.0	0.0	0	38.05	-42.6	2.2	0.0	-0.2	0.00	0.0	1.5	23.9	10.1	0.0	0.0	34.0
Car Movements	Line	Leq,adj,4h			47.1	63.0	38.4	0.0	0.0	0	38.05	-42.6	2.2	0.0	-0.2	0.00	0.0	1.5	23.9		0.0		
Car Movements	Line	Leq,adj,9h			47.1	63.0	38.4	0.0	0.0	0	38.05	-42.6	2.2	0.0	-0.2	0.00	0.0	1.5	23.9		0.0		
Car Movements	Line	Leq,adj,11			47.1	63.0	39.0	0.0	0.0	0	70.45	-47.9	1.1	0.0	-0.5	0.00	0.0	2.1	17.8	8.6	0.0	0.0	26.4
Car Movements	Line	Leq,adj,4h			47.1	63.0	39.0	0.0	0.0	0	70.45	-47.9	1.1	0.0	-0.5	0.00	0.0	2.1	17.8		0.0		
Car Movements	Line	Leq,adj,9h			47.1	63.0	39.0	0.0	0.0	0	70.45	-47.9	1.1	0.0	-0.5	0.00	0.0	2.1	17.8		0.0		
Car Movements	Line	Leq,adj,11			47.1	70.3	206.1	0.0	0.0	0	251.99	-59.0	1.2	-4.2	-1.3	0.00	0.0	2.0	9.0	4.9	0.0	0.0	13.9

Powerlink Queensland - Tesla Redevelopment
ISO9613 Calculation Method
Predicted Operational Noise Levels at Adjacent Uses
From Activities at Proposed Development

Source	Source type	time slice	Li	R'w	L'w	Lw	l or A	Kl	KT	Ko	S	Adiv	Agr	Abar	Aatm	Amisc	ADI	dLrefl	Ls	dLw	Cmet	ZR	Lr
			dB(A)	dB	dB(A)	dB(A)	m,m ²	dB	dB	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB	dB	dB(A)
Car Movements	Line	Leq,adj,4h			47.1	70.3	206.1	0.0	0.0	0	251.99	-59.0	1.2	-4.2	-1.3	0.00	0.0	2.0	9.0		0.0		
Car Movements	Line	Leq,adj,9h			47.1	70.3	206.1	0.0	0.0	0	251.99	-59.0	1.2	-4.2	-1.3	0.00	0.0	2.0	9.0		0.0		
Car Movements	Line	Leq,adj,11			47.1	70.1	199.4	0.0	0.0	0	248.61	-58.9	1.1	-4.1	-1.3	0.00	0.0	1.9	8.8	3.7	0.0	0.0	12.6
Car Movements	Line	Leq,adj,4h			47.1	70.1	199.4	0.0	0.0	0	248.61	-58.9	1.1	-4.1	-1.3	0.00	0.0	1.9	8.8		0.0		
Car Movements	Line	Leq,adj,9h			47.1	70.1	199.4	0.0	0.0	0	248.61	-58.9	1.1	-4.1	-1.3	0.00	0.0	1.9	8.8		0.0		
Car Movements	Line	Leq,adj,11			47.1	62.9	37.7	0.0	0.0	0	166.29	-55.4	0.7	-1.8	-1.0	0.00	0.0	1.1	6.5	11.1	0.0	0.0	17.6
Car Movements	Line	Leq,adj,4h			47.1	62.9	37.7	0.0	0.0	0	166.29	-55.4	0.7	-1.8	-1.0	0.00	0.0	1.1	6.5	7.8	0.0	0.0	14.3
Car Movements	Line	Leq,adj,9h			47.1	62.9	37.7	0.0	0.0	0	166.29	-55.4	0.7	-1.8	-1.0	0.00	0.0	1.1	6.5	7.8	0.0	0.0	14.3
Mechanical Plant	Area	Leq,adj,11			60.7	80.8	101.9	0.0	5.0	0	199.23	-57.0	0.0	-21.3	-0.6	0.00	0.0	3.8	5.7	0.0	0.0	0.0	10.7
Mechanical Plant	Area	Leq,adj,4h			60.7	80.8	101.9	0.0	5.0	0	199.23	-57.0	0.0	-21.3	-0.6	0.00	0.0	3.8	5.7		0.0		
Mechanical Plant	Area	Leq,adj,9h			60.7	80.8	101.9	0.0	5.0	0	199.23	-57.0	0.0	-21.3	-0.6	0.00	0.0	3.8	5.7		0.0		
New Tesla Building -Refuse Loading	Area	Leq,adj,11			74.5	87.1	18.0	5.0	0.0	3	166.08	-55.4	0.9	-23.5	-2.5	0.00	0.0	0.2	9.8	-28.2	0.0	0.0	-13.4
New Tesla Building -Refuse Loading	Area	Leq,adj,4h			74.5	87.1	18.0	5.0	0.0	3	166.08	-55.4	0.9	-23.5	-2.5	0.00	0.0	0.2	9.8		0.0		
New Tesla Building -Refuse Loading	Area	Leq,adj,9h			74.5	87.1	18.0	5.0	0.0	3	166.08	-55.4	0.9	-23.5	-2.5	0.00	0.0	0.2	9.8	-27.3	0.0	0.0	-12.6
Truck Idling	Point	Leq,adj,11			90.8	90.8		0.0	5.0	0	230.57	-58.2	1.2	-16.7	-0.7	0.00	0.0	1.8	18.1	-21.2	0.0	0.0	1.9
Truck Idling	Point	Leq,adj,4h			90.8	90.8		0.0	5.0	0	230.57	-58.2	1.2	-16.7	-0.7	0.00	0.0	1.8	18.1		0.0		
Truck Idling	Point	Leq,adj,9h			90.8	90.8		0.0	5.0	0	230.57	-58.2	1.2	-16.7	-0.7	0.00	0.0	1.8	18.1	-20.3	0.0	0.0	2.8
Truck Loading	Point	Leq,adj,11			92.0	92.0		5.0	0.0	0	233.19	-58.3	1.2	-23.8	-3.1	0.00	0.0	0.0	8.0	-28.2	0.0	0.0	-15.2
Truck Loading	Point	Leq,adj,4h			92.0	92.0		5.0	0.0	0	233.19	-58.3	1.2	-23.8	-3.1	0.00	0.0	0.0	8.0		0.0		
Truck Loading	Point	Leq,adj,9h			92.0	92.0		5.0	0.0	0	233.19	-58.3	1.2	-23.8	-3.1	0.00	0.0	0.0	8.0	-27.3	0.0	0.0	-14.3
Truck Movements	Line	Leq,adj,11			60.7	77.0	43.4	0.0	0.0	0	160.78	-55.1	0.7	-1.3	-1.0	0.00	0.0	1.9	22.1	-7.4	0.0	0.0	14.7
Truck Movements	Line	Leq,adj,4h			60.7	77.0	43.4	0.0	0.0	0	160.78	-55.1	0.7	-1.3	-1.0	0.00	0.0	1.9	22.1		0.0		
Truck Movements	Line	Leq,adj,9h			60.7	77.0	43.4	0.0	0.0	0	160.78	-55.1	0.7	-1.3	-1.0	0.00	0.0	1.9	22.1		0.0		
Truck Movements	Line	Leq,adj,11			60.7	80.0	86.5	0.0	0.0	0	242.85	-58.7	1.8	-1.4	-1.4	0.00	0.0	2.2	22.5	-7.4	0.0	0.0	15.1
Truck Movements	Line	Leq,adj,4h			60.7	80.0	86.5	0.0	0.0	0	242.85	-58.7	1.8	-1.4	-1.4	0.00	0.0	2.2	22.5		0.0		
Truck Movements	Line	Leq,adj,9h			60.7	80.0	86.5	0.0	0.0	0	242.85	-58.7	1.8	-1.4	-1.4	0.00	0.0	2.2	22.5		0.0		
Truck Movements	Line	Leq,adj,11			60.7	79.7	79.3	0.0	0.0	0	239.40	-58.6	1.9	-1.3	-1.4	0.00	0.0	2.2	22.5	-7.4	0.0	0.0	15.1
Truck Movements	Line	Leq,adj,4h			60.7	79.7	79.3	0.0	0.0	0	239.40	-58.6	1.9	-1.3	-1.4	0.00	0.0	2.2	22.5		0.0		
Truck Movements	Line	Leq,adj,9h			60.7	79.7	79.3	0.0	0.0	0	239.40	-58.6	1.9	-1.3	-1.4	0.00	0.0	2.2	22.5		0.0		
Truck Movements	Line	Leq,adj,11			60.7	77.7	50.1	0.0	0.0	0	164.73	-55.3	0.7	-1.7	-1.0	0.00	0.0	1.8	22.1	-7.4	0.0	0.0	14.7

Powerlink Queensland - Tesla Redevelopment
ISO9613 Calculation Method
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From Activities at Proposed Development

Source	Source type	time slice	Li	R'w	L'w	Lw	l or A	Kl	KT	Ko	S	Adiv	Agr	Abar	Aatm	Amisc	ADI	dLrefl	Ls	dLw	Cmet	ZR	Lr	
			dB(A)	dB	dB(A)	dB(A)	m,m ²	dB	dB	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB	dB	dB(A)	
Truck Movements	Line	Leq,adj,4h			60.7	77.7	50.1	0.0	0.0	0	164.73	-55.3	0.7	-1.7	-1.0	0.00	0.0	1.8	22.1		0.0			
Truck Movements	Line	Leq,adj,9h			60.7	77.7	50.1	0.0	0.0	0	164.73	-55.3	0.7	-1.7	-1.0	0.00	0.0	1.8	22.1		0.0			
Washdown (compressor)	Point	Leq,adj,11			89.1	89.1		0.0	5.0	0	238.61	-58.5	-1.1	-23.0	-1.5	0.00	0.0	0.0	5.0	-6.0	0.0	0.0	4.0	
Washdown (compressor)	Point	Leq,adj,4h			89.1	89.1		0.0	5.0	0	238.61	-58.5	-1.1	-23.0	-1.5	0.00	0.0	0.0	5.0		0.0			
Washdown (compressor)	Point	Leq,adj,9h			89.1	89.1		0.0	5.0	0	238.61	-58.5	-1.1	-23.0	-1.5	0.00	0.0	0.0	5.0		0.0			



Powerlink Queensland - Tesla Redevelopment
Predicted Maximum Noise Levels at Adjacent Uses
From Activities at Proposed Development

Receiver Name	Floor	Lmax Night dB(A)	
10 Harold Street	GF	15	
10 Harold Street	GF	15	
10 Harold Street	GF	15	
10 Harold Street	GF	15	
10 Harold Street	GF	15	
10 Harold Street	F 1	14	
10 Harold Street	F 1	14	
10 Harold Street	F 1	14	
10 Harold Street	F 1	15	
10 Harold Street	F 1	15	
12 Harold Street	GF	16	
12 Harold Street	GF	16	
12 Harold Street	GF	16	
12 Harold Street	GF	16	
12 Harold Street	F 1	16	
12 Harold Street	F 1	16	
12 Harold Street	F 1	15	
12 Harold Street	F 1	16	
14 Harold Street	GF	17	
14 Harold Street	GF	17	
14 Harold Street	GF	30	
14 Harold Street	F 1	17	
14 Harold Street	F 1	16	
14 Harold Street	F 1	29	
16 Harold Street	GF	30	
16 Harold Street	GF	31	
16 Harold Street	GF	30	
16 Harold Street	F 1	30	
16 Harold Street	F 1	30	
16 Harold Street	F 1	30	
18 Harold Street	GF	32	
18 Harold Street	GF	32	
18 Harold Street	GF	31	
18 Harold Street	F 1	31	
18 Harold Street	F 1	31	
18 Harold Street	F 1	30	
2 Harold Street	GF	13	
2 Harold Street	GF	13	
2 Harold Street	GF	13	
2 Harold Street	F 1	12	
2 Harold Street	F 1	13	
2 Harold Street	F 1	12	
20 Harold Street	GF	32	
20 Harold Street	GF	34	
20 Harold Street	GF	33	
20 Harold Street	F 1	31	
20 Harold Street	F 1	32	
20 Harold Street	F 1	32	
24 Harold Street	GF	37	
24 Harold Street	GF	37	
24 Harold Street	F 1	36	
24 Harold Street	F 1	36	

Powerlink Queensland - Tesla Redevelopment
Predicted Maximum Noise Levels at Adjacent Uses
From Activities at Proposed Development

Receiver Name	Floor	Lmax Night dB(A)	
24A Harold Street	GF	35	
24A Harold Street	GF	34	
24A Harold Street	F 1	33	
24A Harold Street	F 1	33	
24B Harold Street	GF	37	
24B Harold Street	GF	37	
24B Harold Street	F 1	36	
24B Harold Street	F 1	35	
26 Harold Street	GF	37	
26 Harold Street	GF	38	
26 Harold Street	F 1	37	
26 Harold Street	F 1	37	
26B Harold Street	GF	40	
26B Harold Street	GF	38	
26B Harold Street	F 1	39	
26B Harold Street	F 1	38	
28 Harold Street	GF	43	
28 Harold Street	GF	41	
28 Harold Street	GF	50	
28 Harold Street	GF	50	
28 Harold Street	F 1	43	
28 Harold Street	F 1	40	
28 Harold Street	F 1	49	
28 Harold Street	F 1	48	
30 Harold Street	GF	49	
30 Harold Street	GF	49	
30 Harold Street	GF	49	
30 Harold Street	GF	48	
30 Harold Street	F 1	48	
30 Harold Street	F 1	48	
30 Harold Street	F 1	48	
30 Harold Street	F 1	48	
32 Harold Street	GF	48	
32 Harold Street	GF	48	
32 Harold Street	GF	48	
32 Harold Street	GF	47	
32 Harold Street	F 1	47	
32 Harold Street	F 1	47	
32 Harold Street	F 1	46	
32 Harold Street	F 1	47	
34 Harold Street	GF	48	
34 Harold Street	GF	46	
34 Harold Street	GF	46	
34 Harold Street	GF	48	
34 Harold Street	F 1	46	
34 Harold Street	F 1	46	
34 Harold Street	F 1	46	
34 Harold Street	F 1	46	
36 Harold Street	GF	46	
36 Harold Street	GF	45	
36 Harold Street	GF	47	
36 Harold Street	GF	45	

Powerlink Queensland - Tesla Redevelopment
Predicted Maximum Noise Levels at Adjacent Uses
From Activities at Proposed Development

Receiver Name	Floor	Lmax Night dB(A)	
36 Harold Street	F 1	45	
36 Harold Street	F 1	46	
36 Harold Street	F 1	45	
36 Harold Street	F 1	46	
38 Harold Street	GF	46	
38 Harold Street	GF	46	
38 Harold Street	F 1	45	
38 Harold Street	F 1	45	
38A Harold Street	GF	46	
38A Harold Street	GF	45	
38A Harold Street	F 1	44	
38A Harold Street	F 1	44	
4 Harold Street	GF	14	
4 Harold Street	F 1	13	
40 Harold Street	GF	45	
40 Harold Street	GF	46	
40 Harold Street	GF	44	
40 Harold Street	GF	44	
40 Harold Street	F 1	43	
40 Harold Street	F 1	44	
40 Harold Street	F 1	44	
40 Harold Street	F 1	42	
42 Harold Street	GF	41	
42 Harold Street	GF	40	
42 Harold Street	GF	44	
42 Harold Street	GF	42	
42 Harold Street	F 1	40	
42 Harold Street	F 1	41	
42 Harold Street	F 1	41	
42 Harold Street	F 1	40	
44 Harold Street	GF	42	
44 Harold Street	GF	38	
44 Harold Street	GF	41	
44 Harold Street	F 1	40	
44 Harold Street	F 1	38	
44 Harold Street	F 1	39	
46 Harold Street	GF	37	
46 Harold Street	GF	31	
46 Harold Street	GF	36	
46 Harold Street	GF	39	
46 Harold Street	F 1	34	
46 Harold Street	F 1	33	
46 Harold Street	F 1	32	
46 Harold Street	F 1	36	
6-8 Harold Street	GF	14	
6-8 Harold Street	GF	14	
6-8 Harold Street	F 1	14	
6-8 Harold Street	F 1	14	

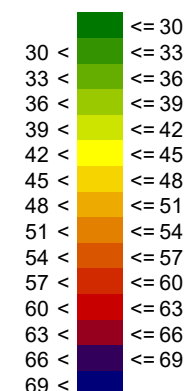
Appendix F – SoundPLAN Noise Contour Maps

Proposed Development Powerlink Queensland Redevelopment

Noise Levels Associated with Proposed Development

Brisbane City Plan
Ground Floor
(1.5m AGL)

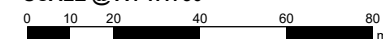
Operational noise level
Leq,adj,11hr Day dB(A)



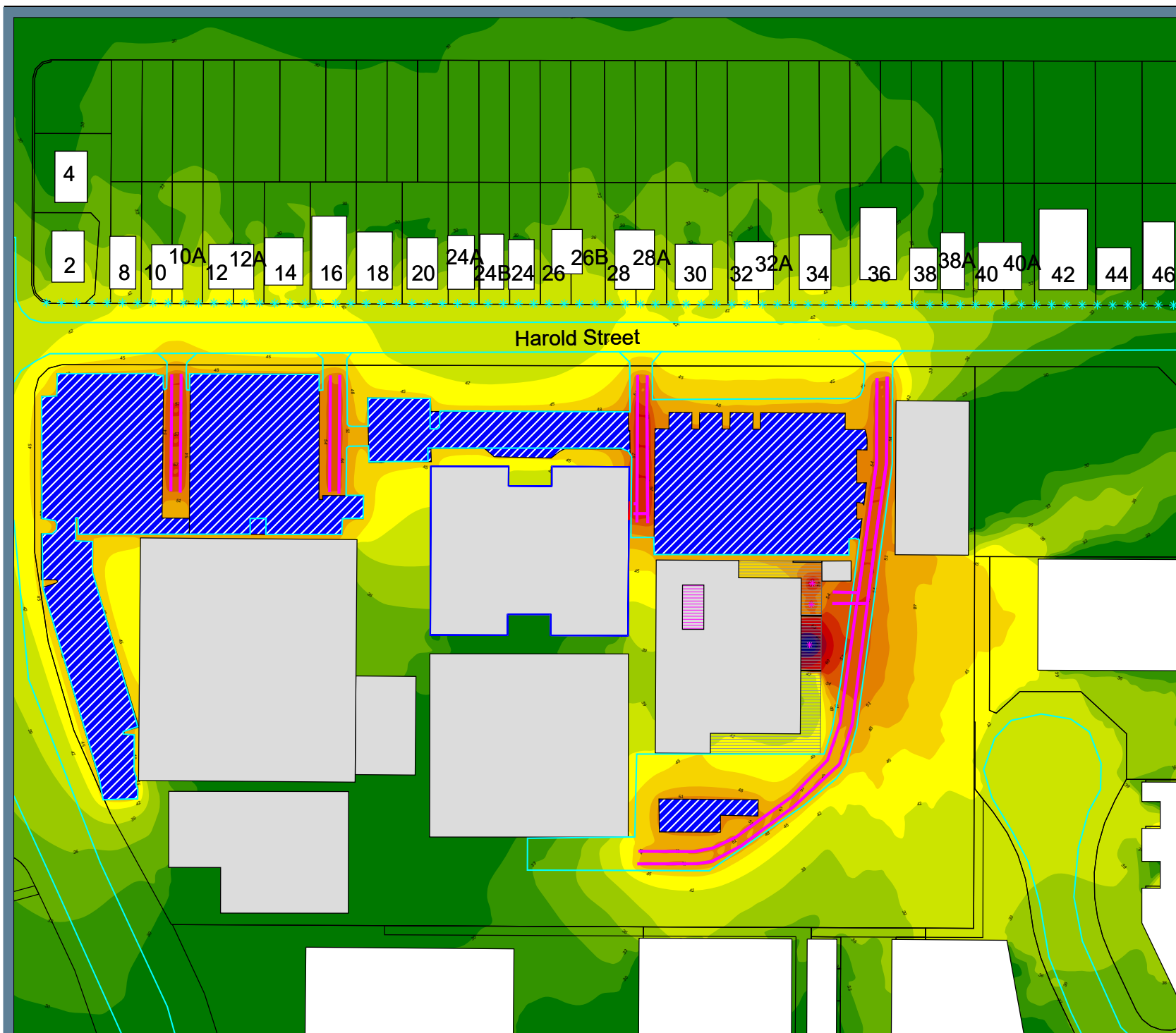
Legend

- * Point source
- Area source
- Line Source
- Breakout Noise
- Parking lot
- Site Buildings
- Existing Buildings
- Receiver
- Road surface

SCALE @ A4 1:1750



Grid Spacing: 0.5m
Project Engineer: Aldrich Ang
Created: 16/04/2025
Processed with SoundPLAN 9.1



Proposed Development Powerlink Queensland Redevelopment

Noise Levels Associated with Proposed Development

Brisbane City Plan
First Floor
(4.5m AGL)

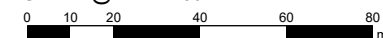
Operational noise level
Leq,adj,11hr Day dB(A)

	<= 30
30 <	<= 33
33 <	<= 36
36 <	<= 39
39 <	<= 42
42 <	<= 45
45 <	<= 48
48 <	<= 51
51 <	<= 54
54 <	<= 57
57 <	<= 60
60 <	<= 63
63 <	<= 66
66 <	<= 69

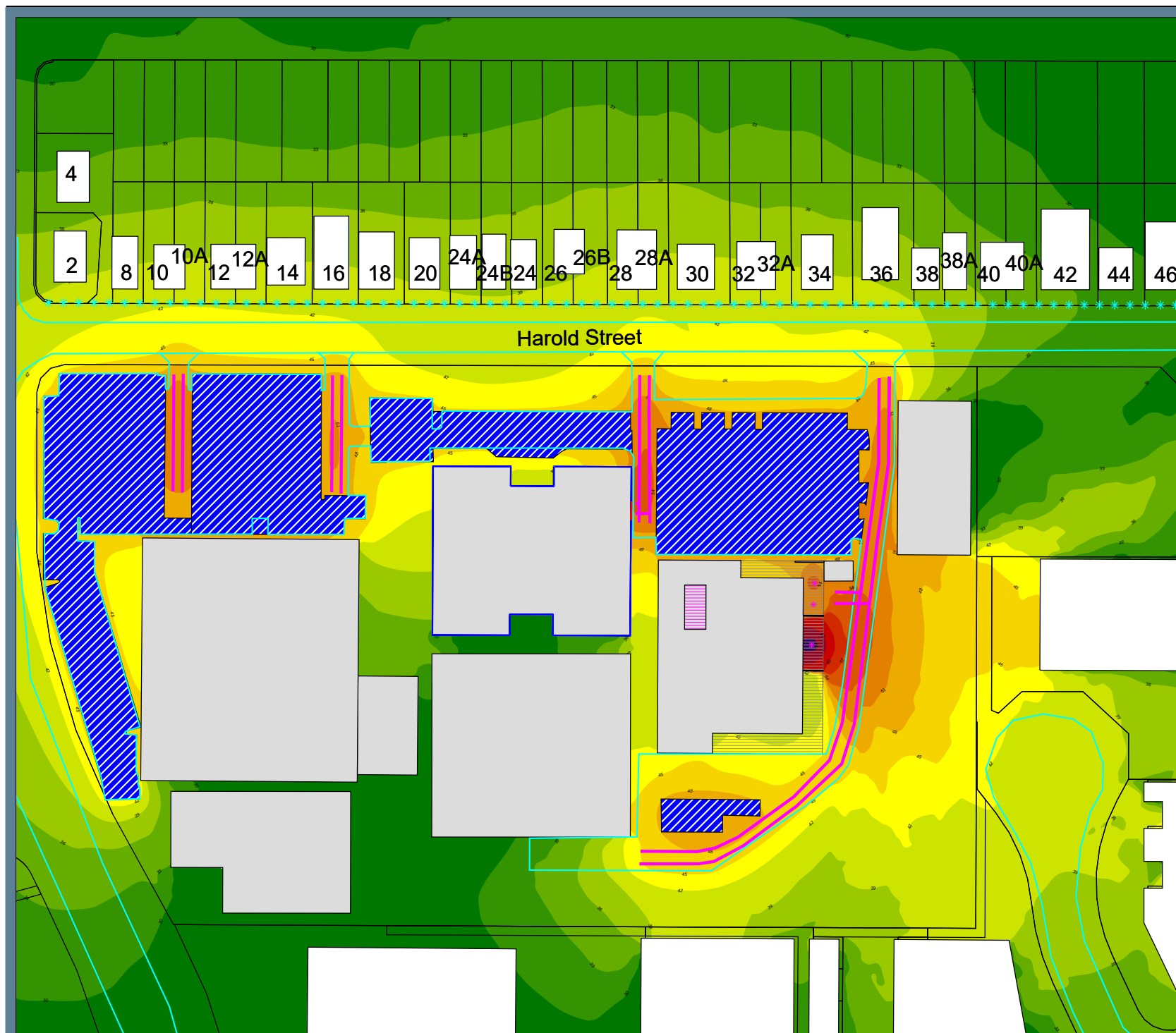
Legend

- * Point source
-  Area source
-  Line Source
-  Breakout Noise
-  Parking lot
-  Site Buildings
-  Existing Buildings
-  Receiver
-  Road surface

SCALE @ A4 1:1750



Grid Spacing: 0.5m
Project Engineer: Aldrich Ang
Created: 16/04/2025
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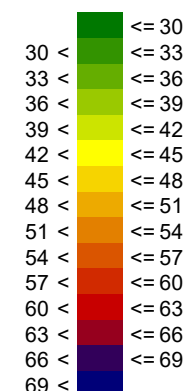


Proposed Development Powerlink Queensland Redevelopment

Noise Levels Associated with Proposed Development

Brisbane City Plan
Ground Floor
(1.5m AGL)

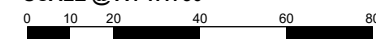
Operational noise level
Leq,adj,4hr Evening dB(A)



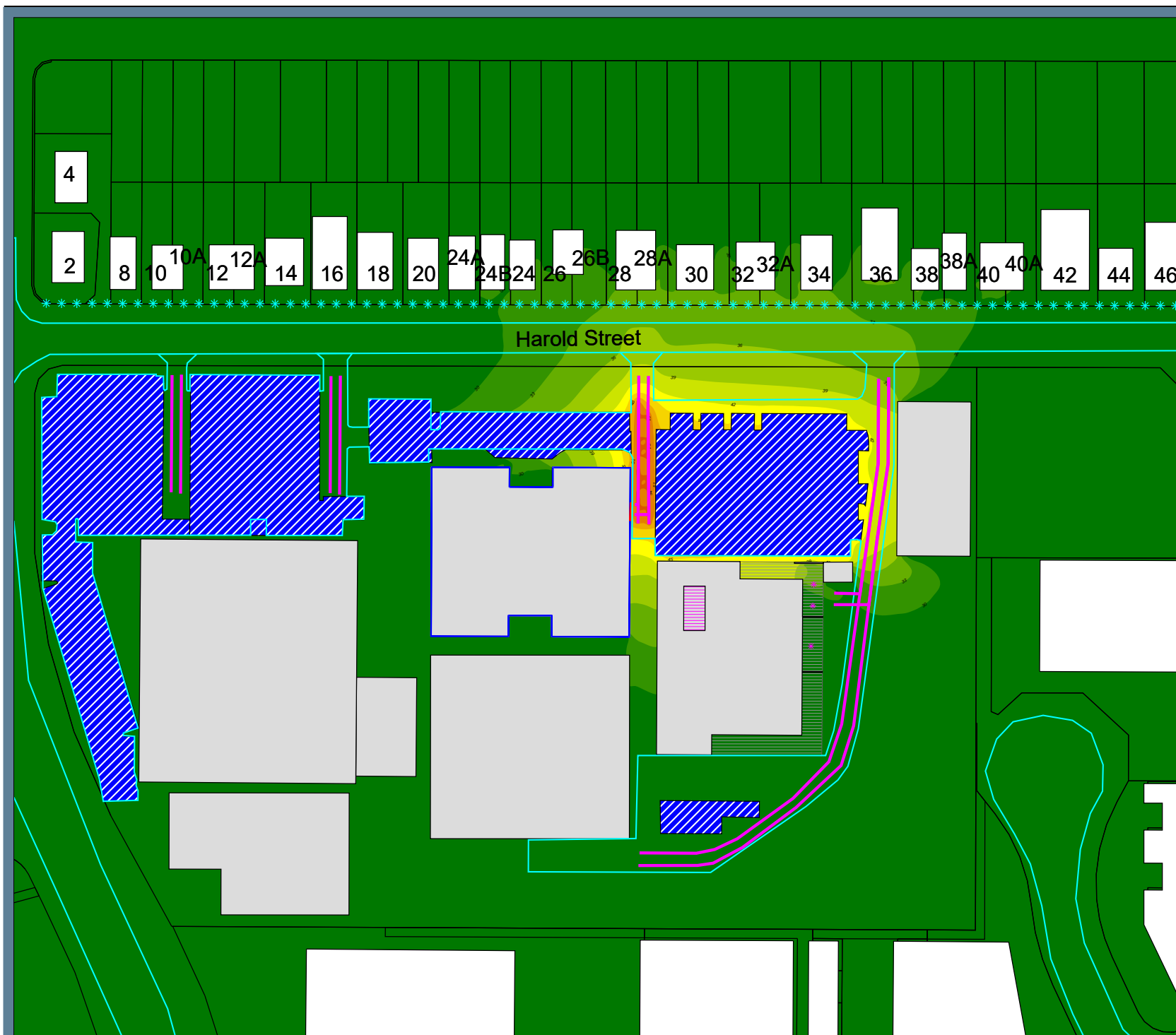
Legend

- * Point source
- Area source
- Line Source
- Breakout Noise
- Parking lot
- Site Buildings
- Existing Buildings
- Receiver
- Road surface

SCALE @ A4 1:1750



Grid Spacing: 0.5m
Project Engineer: Aldrich Ang
Created: 16/04/2025
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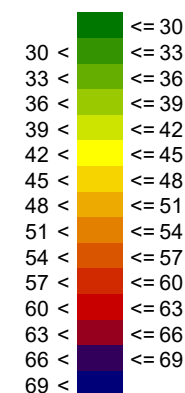


Proposed Development Powerlink Queensland Redevelopment

Noise Levels Associated with Proposed Development

Brisbane City Plan
First Floor
(4.5m AGL)

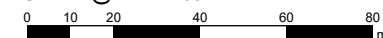
Operational noise level
Leq,adj,4hr Evening dB(A)



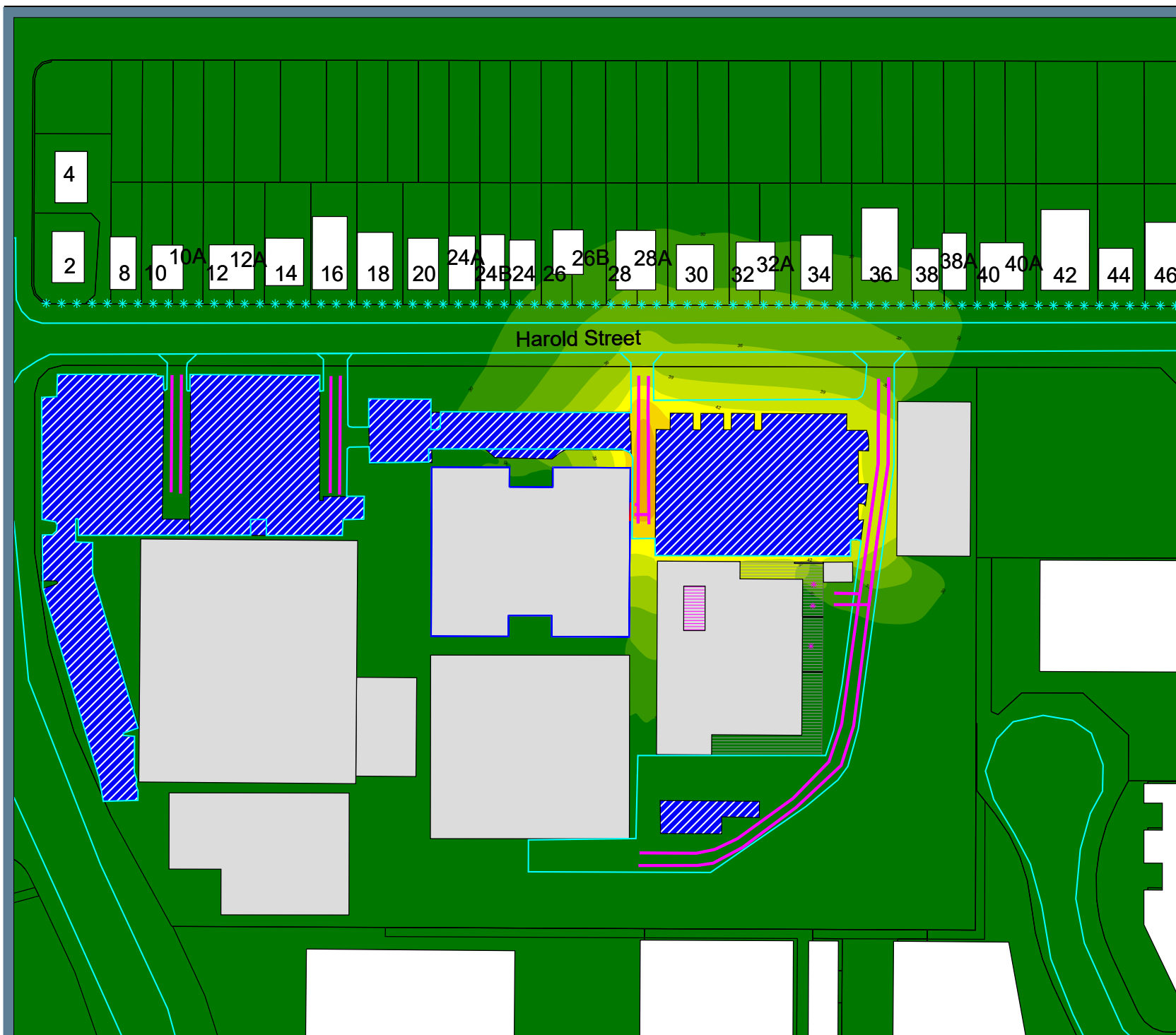
Legend

- * Point source
- Area source
- Line Source
- Breakout Noise
- Parking lot
- Site Buildings
- Existing Buildings
- Receiver
- Road surface

SCALE @ A4 1:1750



Grid Spacing: 0.5m
Project Engineer: Aldrich Ang
Created: 16/04/2025
Processed with SoundPLAN 9.1

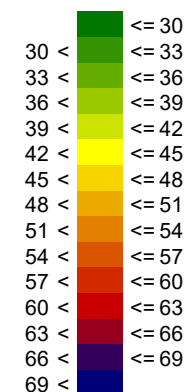


Proposed Development Powerlink Queensland Redevelopment

Noise Levels Associated with Proposed Development

Brisbane City Plan
Ground Floor
(1.5m AGL)

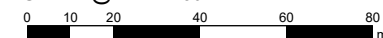
Operational noise level
Leq,adj,9hr Night dB(A)



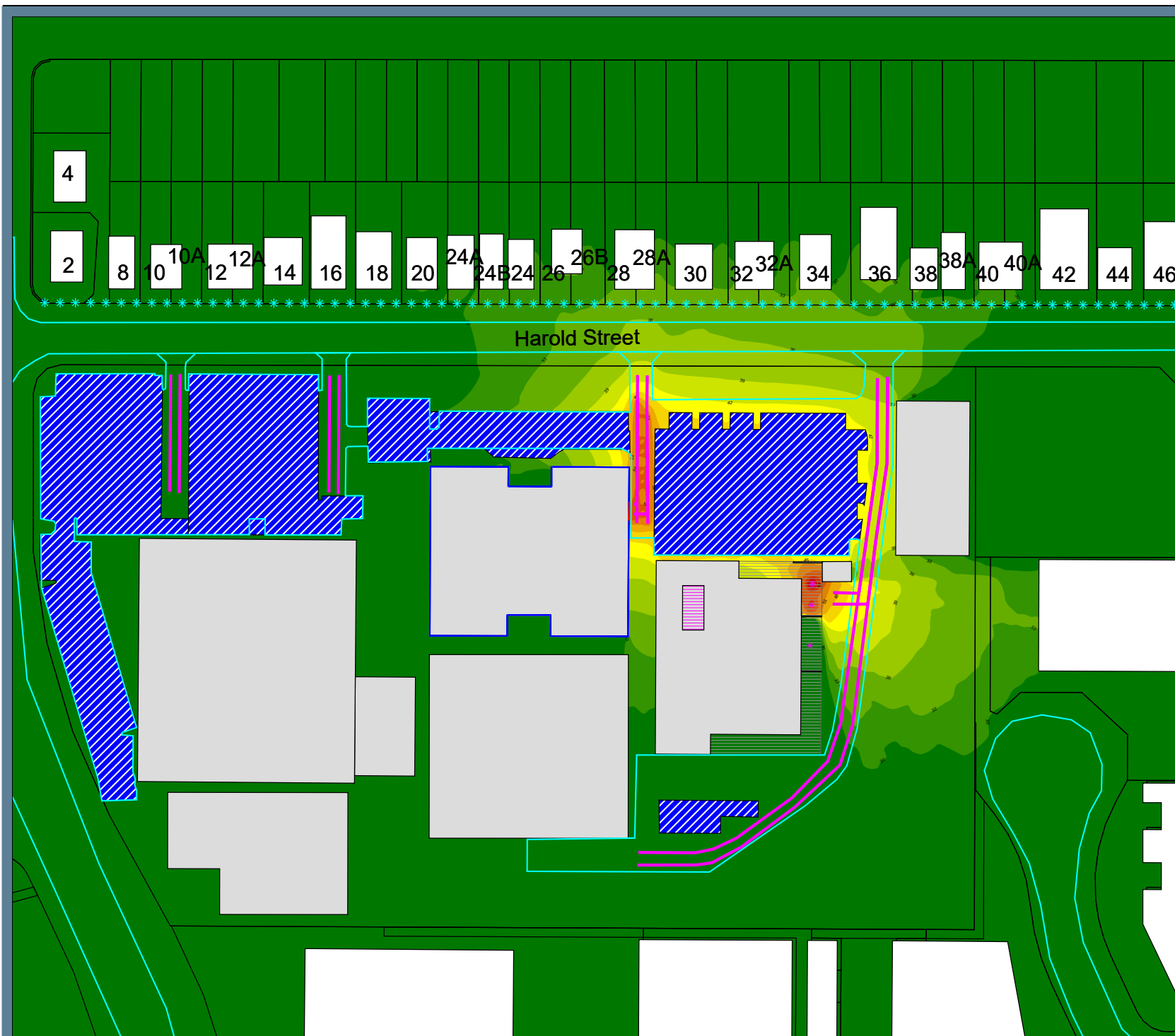
Legend

- * Point source
- Area source
- Line Source
- Breakout Noise
- Parking lot
- Site Buildings
- Existing Buildings
- Receiver
- Road surface

SCALE @ A4 1:1750



Grid Spacing: 0.5m
Project Engineer: Aldrich Ang
Created: 16/04/2025
Processed with SoundPLAN 9.1

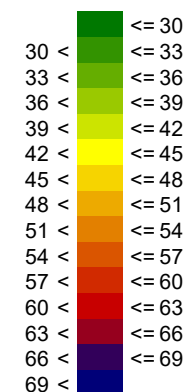


Proposed Development Powerlink Queensland Redevelopment

Noise Levels Associated with Proposed Development

Brisbane City Plan
First Floor
(4.5m AGL)

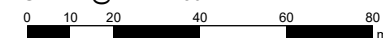
Operational noise level
Leq,adj,9hr Night dB(A)



Legend

- * Point source
- Area source
- Line Source
- Breakout Noise
- Parking lot
- Site Buildings
- Existing Buildings
- Receiver
- Road surface

SCALE @ A4 1:1750



Grid Spacing: 0.5m
Project Engineer: Aldrich Ang
Created: 16/04/2025
Processed with SoundPLAN 9.1





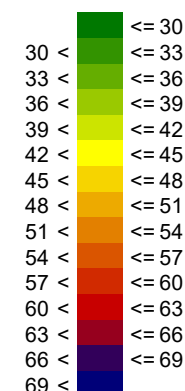
ATP240217

Proposed Development
Powerlink Queensland Redevelopment

Noise Levels Associated with
Proposed Development

Brisbane City Plan
First Floor
(1.5m AGL)

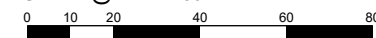
Operational noise level
L_{Amax,adj} Night dB(A)



Legend

- * Point source
- Site Buildings
- Existing Buildings
- * Receiver
- Road surface

SCALE @ A4 1:1750



Grid Spacing: 0.5m
Project Engineer: Aldrich Ang
Created: 16/04/2025
Processed with SoundPLAN 9.1

