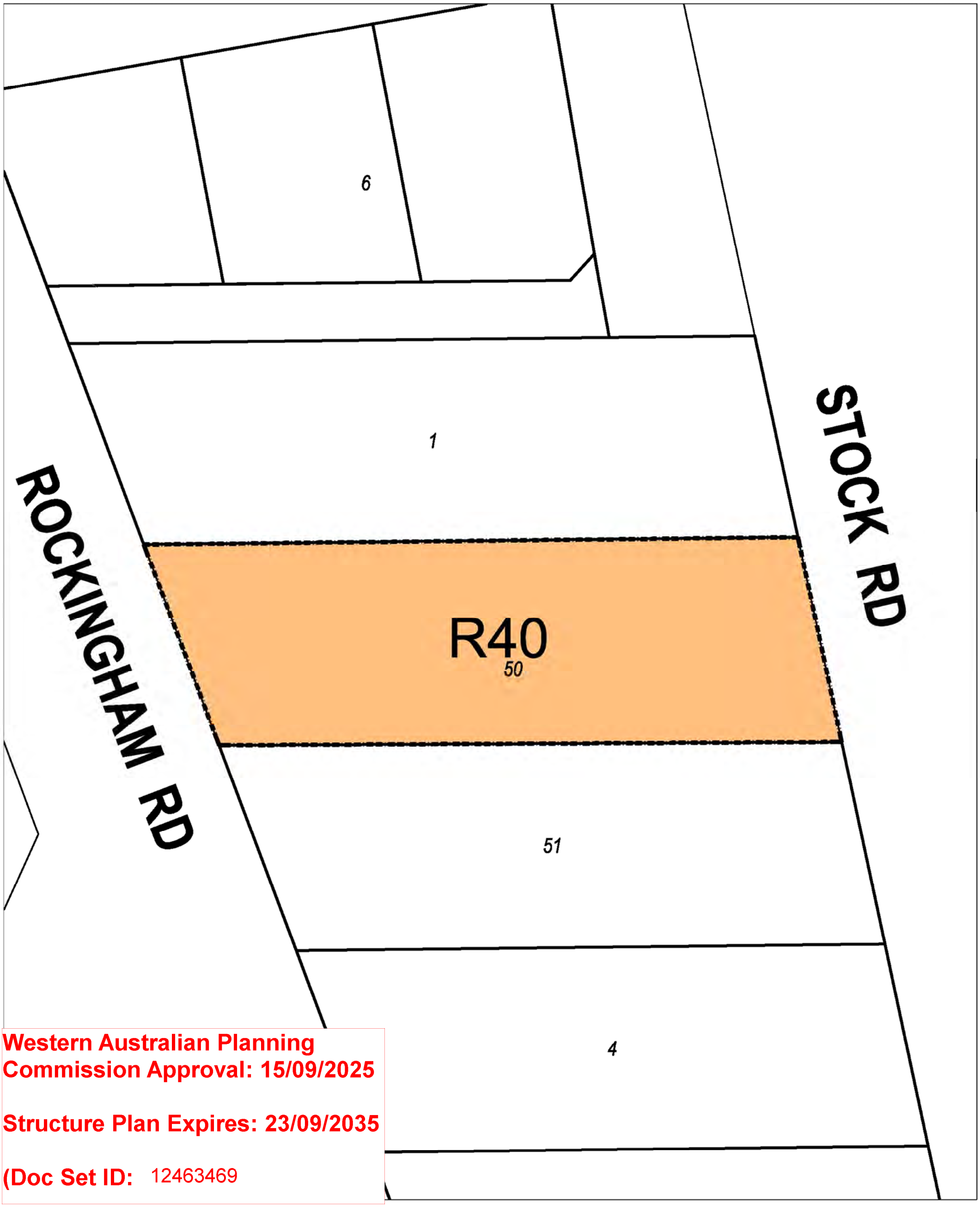

Western Australian Planning Commission Approval: 15/09/2025

Structure Plan Expires: 23/09/2035

(Doc Set ID: 12463469

disclaimers: *base mapping obtained from Water Corporation*
all land areas and lot dimensions are subject to survey

PLAN 1 - LOCAL STRUCTURE PLAN MAP

LOT 50 (No. 634) ROCKINGHAM ROAD,
LAKE COOGEE

LEGEND

LSP BOUNDARY

ZONE AND R CODE
RESIDENTIAL R40

N

P2566-LSPMAP
1:500 @ A4
01.07.2024

Local Structure Plan

CITY OF COCKBURN

LOT 50 (NO. 634) ROCKINGHAM ROAD LAKE COOGEE

Prepared by:

HIDDING URBAN PLANNING

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Consultant: Clare McLean
File Number: C2566
Version/Date: Revised/v.6/16 June 2025

Prepared for:

RESULT DEVELOPMENTS
on behalf of the landowners

ENDORSEMENT PAGE

This structure plan is prepared under the provisions of the City of Cockburn Local Planning Scheme No. 3.

IT IS CERTIFIED THAT THIS STRUCTURE PLAN WAS APPROVED BY RESOLUTION OF THE WESTERN AUSTRALIAN PLANNING COMMISSION ON:

15 SEPTEMBER 2025

Signed for and on behalf of the Western Australian Planning Commission:

An officer of the Commission duly authorised by the Commission pursuant to Section 24 of the *Planning and Development Act 2005* for that purpose, in the presence of:

Anne Woodin

[Witness]

23 September 2025

[Date]

23 September 2035

[Date of Expiry]

TABLE OF AMENDMENTS		
AMENDMENT NO.	**SUMMARY**	**DATE APPROVED BY WAPC**

EXECUTIVE SUMMARY

This Local Structure Plan (**LSP**) has been prepared to facilitate the residential subdivision and development of Lot 50 (No. 634) Rockingham Road, Lake Coogee.

The LSP Area has an approximate land area of 1327m^2, with a primary western frontage of 21.7 metres to Rockingham Road and an eastern rear boundary width of 21.2 metres to Stock Road. The northern and southern side boundaries of the land have lengths of 66.11 metres and 62.92 metres respectively, which common boundaries are shared with similar sized and configured properties.

The existing use of the land is single residential. The properties to the north and south of the land are also occupied by single residential dwellings on similarly configured and sized land areas.

The land is zoned 'Development' pursuant to the City of Cockburn *Town Planning Scheme No. 3.* A structure plan is a requirement of this zone in order to guide the redevelopment of the subject area by assigning the appropriate land use zone and residential density code.

The land the subject of this LSP sits within a perimeter block which is bound by West Churchill Avenue to the north, Stock Road to the east, and Rockingham Road to the south and west. It is an area which is undergoing residential redevelopment at increased densities. The properties which have been subdivided and redeveloped in this defined area were the subject of individual LSPs, Local Development Plans, and Subdivision Application processes. This LSP follows that same planning process and seeks to continue the established pattern of residential redevelopment in this location.

The LSP proposes a land use zone of 'Residential' and a residential density of Residential R40. This is consistent with the properties to the north of the subject land which have been developed and are currently under development in accordance with the respective endorsed LSPs.

The LSP has been prepared in accordance with the requirements of *Schedule 2, Part 4* of the *Planning and Development (Local Planning Scheme) Regulations 2015*.

The following **Executive Summary Table** provides a breakdown of the development outcome for the LSP Area.

TABLE 1: EXECUTIVE SUMMARY

ITEM	DATA	STRUCTURE PLAN REF (Section No.)
TOTAL AREA COVERED BY THE STRUCTURE PLAN	0.1327 ha	Part 2: Section 2.3 (pg. 9)
AREA OF RESIDENTIAL LAND USE	0.1327 ha	Part 2: Section 4.0 (pg. 17)
TOTAL ESTIMATED LOT YIELD	4	Part 2: Section 4.1.2 (pg. 18)
ESTIMATED NUMBER OF DWELLINGS	4	Part 2: Section 4.1.2 (pg. 18)
ESTIMATED RESIDENTIAL SITE DENSITY	35.4 dwellings per site/ha	Part 2: Section 4.1.2 (pg. 18)
ESTIMATED POPULATION *(based on the average of 2.53 persons per dwelling, source: City of Cockburn, community profile, household size, 2021 ABS)*	10.12 people	Part 2: Section 4.1.2 (pg. 18)

PART ONE: IMPLEMENTATION

PART TWO: EXPLANATORY INFORMATION

(cont.) PART TWO: EXPLANATORY INFORMATION

FIGURES AND TABLES

TECHNICAL ANNEXURES

1.0 STRUCTURE PLAN AND OPERATION

This Structure Plan applies to Lot 50 (No. 634) Rockingham Road, Lake Coogee, being the land contained within the inner edge of the line denoting the structure plan boundary on the Structure Plan Map. (Refer to **Plan 1**: Structure Plan Map.)

OPERATION:	This Structure Plan commences operation on the date it is endorsed by the Western Australian Planning Commission pursuant to *cl. 22, Schedule 2, Part 4* of the *Planning and Development (Local Planning Schemes) Regulations 2015.*

2.0 PURPOSE OF THE STRUCTURE PLAN

The purpose of the Structure Plan is to depict the zoning of the land as 'Residential' and to assign a density code of R40, pursuant to the City of Cockburn *Town Planning Scheme No. 3* and the *Residential Design Codes - Volume 1 2024*.

3.0 STAGING OF IMPLEMENTATION

The land is capable of proceeding to subdivision and development in the short term.

4.0 SUBDIVISION AND DEVELOPMENT REQUIREMENTS

4.1 LAND USE ZONE

The land use zone is 'Residential', pursuant to the City of Cockburn *Town Planning Scheme No. 3*.

4.2 RESIDENTIAL DENSITY AND DEVELOPMENT

The Structure Plan Map at **Plan 1** designates the R Code applicable to the subdivision and development on the subject land.

4.2.1 DENSITY AND R CODE

The residential density assigned to the subject land is R40, pursuant to the WAPC *Residential Design Codes - Volume 1 2024*.

4.2.2 LOCAL DEVELOPMENT PLAN

The landowner/applicant will need to prepare a Local Development Plan (LDP) in accordance with the *Planning and Development (Local Planning Schemes) Regulations 2015*, to identify noise mitigation measures that may be needed, together with quiet house design and construction requirements, in accordance with the Transportation Noise Assessment prepared by Lloyd George Acoustics (reference 24059038-01A; dated 12 June 2025), and limit the development of the lot abutting Stock Road to a single storey dwelling.

5.0 OTHER REQUIREMENTS

5.1 NOTIFICATIONS ON TITLE

1. A Notification pursuant to Section 165 of the *Planning and Development Act 2005* is required to be included on the Certificates of Title for the resultant lots. The notification is to advise prospective purchasers that the lot may be affected by transport noise and noting any relevant requirements for quiet housing design of the dwelling on the lot in order to achieve an acceptable level of noise reduction. The notification is to state:

   'This lot is in the vicinity of a transport corridor and is affected, or may in the future be affected, by road and rail transport noise. Road and rail transport noise levels may rise or fall over time depending on the type and volume of traffic.'

2. The following Notification pursuant to Section 165 of the *Planning and Development Act 2005* is required to be included on the Certificates of Title for the lots to inform prospective purchasers that the land may be affected by midge from nearby lakes and/or wetlands.

   'This land may be affected by midge from nearby lakes and/or wetlands. Enquiries can be made with the City of Cockburn Environmental Services.'

5.2 DEVELOPMENT CONTRIBUTIONS

The LSP Area is located in *Development Contribution Area 6* (DCA 6) and *Development Contribution Area 13* (DCA 13). The developer of the land is required to meet the contribution requirements of the respective Development Contribution Plans, as detailed at Table 10 – Development Contribution Plans, Part 5 – Special Control Areas of the City of Cockburn *Town Planning Scheme No. 3*.

5.3 PUBLIC OPEN SPACE

The landowner/applicant may be required to make a financial contribution to public open space, in lieu of the ceding of land, with the value of the contribution equal to the value of 132.7m^2 of land.

5.4 BUSHFIRE RISK

It is the responsibility of the landowner/applicant to demonstrate compliance with *State Planning Policy 3.7: Bushfire* and the associated *Planning for Bushfire Guidelines* at subdivision stage. Additional information may be required where a lot is identified as being significantly affected by high levels of bushfire risk (that is, bushfire attack levels of 40 or flame zone). The required information may include site-specific details to demonstrate that the affected lot can accommodate a dwelling in an area of suitably low bushfire risk.

A Notification will be included on the Certificate of Title of any land affected by a bushfire attack level of 12.5 or more to advise purchasers of the land that the lot is located in a bushfire prone area and may be subject to a bushfire management plan and additional planning and building requirements.

6.0 ADDITIONAL DETAILS

6.1 INFORMATION TO BE SUBMITTED WITH AN APPLICATION

A Noise Management Plan is required to be submitted with any subdivision/development application for a lot affected by increased traffic noise levels from Stock Road, with the dwelling being designed to include noise control measures if required, to accord with the requirements of *State Planning Policy 5.4 – Road and Rail* and City of Cockburn *Local Planning Policy 1.12 – Noise Attenuation.*

PLAN 1

Local Structure Plan Map

disclaimers: base mapping obtained from Water Corporation
all land areas and lot dimensions are subject to survey

PLAN 1 - LOCAL STRUCTURE PLAN MAP

LOT 50 (No. 634) ROCKINGHAM ROAD,
LAKE COOGEE

LEGEND

LSP BOUNDARY

ZONE AND R CODE

RESIDENTIAL R40

P2566-LSPMAP
1:500 @ A4
01.07.2024

1.0 INTRODUCTION AND PURPOSE

This Local Structure Plan (**LSP**) has been prepared for the landowners of Lot 50 (No. 634) Rockingham Road, Lake Coogee to assign the land use zone and residential density code required to facilitate the subdivision of the land (the **LSP Area**).

The LSP provides the framework for the future subdivision and residential development of the LSP Area.

The design of the LSP has been prepared to accord with the requirements of the City of Cockburn (**City**) *Town Planning Scheme No. 3* (**TPS 3**) and the *Planning and Development (Local Planning Schemes) Regulations 2015* (**P&D Regs**).

2.0 SITE AND CONTEXT

2.1 Location

The subject land is located within the municipality of the City of Cockburn and in the locality of Lake Coogee.

The area is situated approximately 28 kilometres (km) southwest of the Perth Central Area and only approximately 10 km south of the Fremantle Central Area. (Refer below to **Figure 1**: Regional Context.)

Figure 1: Regional Context *source: Landgate, 2024*

The LSP Area has excellent connection to the regional road network. Stock Road is accessible by travelling just 200m south on Rockingham Road to reach the existing intersection to Stock Road and the connecting wider regional road network. Stock Road offers ease of movement for residents to key major strategic metropolitan and secondary activity centres, including (but not limited to) Fremantle, Kwinana, and Cockburn. This connection to Stock Road also provides future residents with legible road links to a wider variety of goods and services available in the local area, including those offered at Beeliar Village shopping centre which is located only two (2.0) km to the east of the land.

The area is serviced by public transport, with the nearest bus stop being located approximately 130m to the north of the land on the western side of Rockingham Road. Transperth Bus Route 549 provides the area with a frequent (every 15 to 30 minutes, seven (7) days of the week) service along Rockingham Road which connect residents to the Fremantle Train Station.

The area immediately surrounding the land is well established, providing a range of local goods and services as well as educational facilities. This includes the Stargate Shopping Centre on Rockingham Road, which is located only 2.2km to the north. The land is also situated within the catchment area of Coogee Primary School, which is located approximately 2.11km to the north west on Mayor Road. Other nearby services include Montessori Early Learning Centre which is located within walking distance being only 170km to the north of the land. The recreational needs of residents are also met by nearby open spaces providing opportunities for active and passive recreational pursuits. This includes Albion Park, which is located within 500m walking distance of the land on Coogee Road. (Refer to Figure 2: **Location Plan**.)

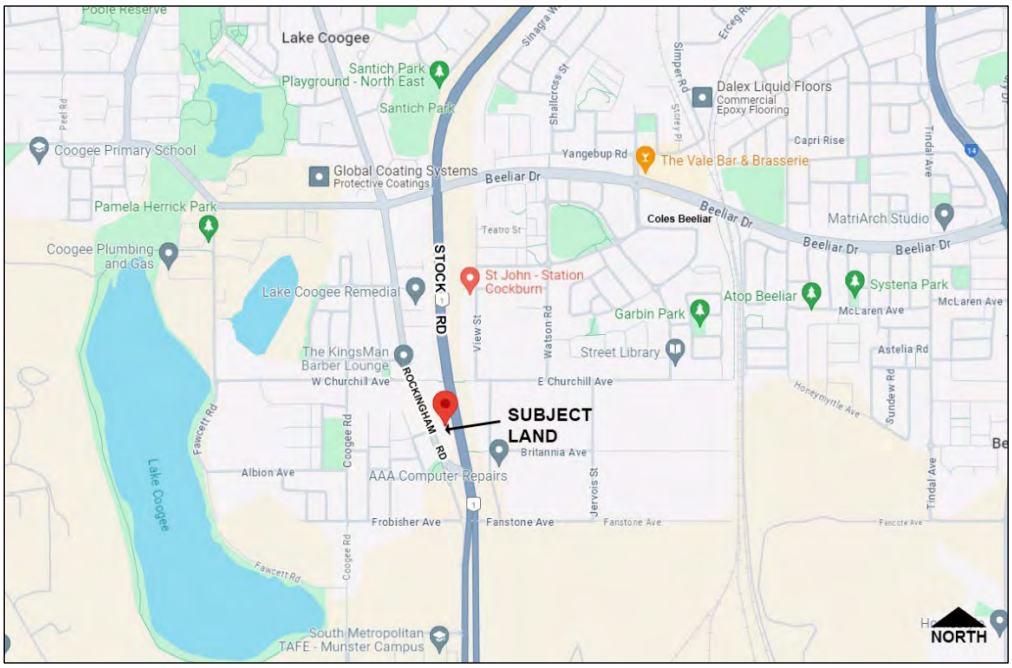


Figure 2: Location Plan *source: Google Maps, 2024*

The subject lot forms part of a collection of landholdings which are bound to the north by West Churchill Avenue, to the east by Stock Road, and to the south and west by Rockingham Road. Five (5) of the former nine (9) landholdings within this perimeter block have been the subject of separate LSP processes and subsequent subdivision approvals for grouped housing style developments at densities of R60 and R40. Photographs of the subject site and the surrounding environs are attached at **Annexure 1**.

The LSP Area proposes to follow this established pattern of housing density and built form outcome. (Refer to **Figure 3**: Aerial Photograph.)

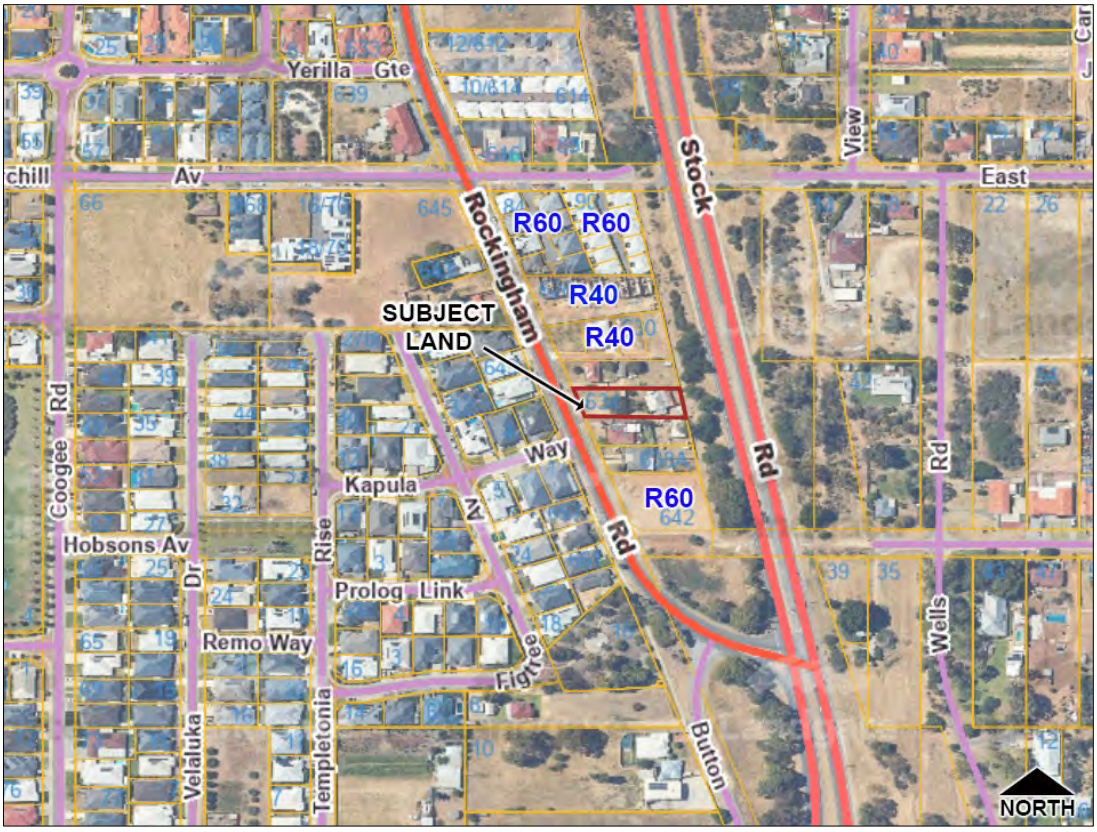


Figure 3: Aerial Photograph *source: Landgate, 2024*

2.2 Area and Land Use

The LSP Area has an approximate land area of 1327m^2 with a frontage to Rockingham Road of 21.7 metres, side boundaries of 66.11m (northern) and 62.92m (southern) and a rear boundary width of 21.2m. (Refer to **Figure 4**: Site Plan.)

Figure 4: Site Plan *source: Landgate, 2024*

Existing improvements on the land include a single residential dwelling and associated outbuildings.

A review of historic aerial photographs establishes that the LSP Area has been used for residential purposes since the 1970s.

The land has a gradual rise in ground level from 5.0m AHD at the south western corner of the property at the primary frontage to Rockingham Road to 7.5m AHD in the north easter corner of the rear boundary of the land to Stock Road. (Refer to **Annexure 2**: Contour and Features Survey.)

2.3 Legal Description and Ownership

The LSP Area comprises of a single landholding. A copy of the Certificate of Title is attached at **Annexure 3**.

The legal description of the land is provided below at **Table 2**.

TABLE 2: LEGAL DESCRIPTION	
LOT DETAILS:	Lot 50 Rockingham Road, Lake Coogee
OWNERSHIP:	Joel Alexander And Sandra Jane Cooper
DIAGRAM NO:	69872
CERTIFICATE OF TITLE:	Volume 1733, Folio 254
LAND AREA:	1327m^2

3.0 PLANNING FRAMEWORK

PLANNING AND DEVELOPMENT (LOCAL PLANNING SCHEMES) REGULATIONS 2015

The LSP has been prepared in accordance with the requirements set out in the deemed provisions at *cl. 16, Part 4, Schedule 2*, of the *Planning and Development (Local Planning Scheme) Regulations 2015*.

3.1 ZONING AND RESERVATIONS

METROPOLITAN REGION SCHEME

The LSP Area is zoned 'Urban', pursuant to the Metropolitan Region Scheme (**MRS**). (Refer to **Figure 5:** MRS Zoning.)

Figure 5: MRS Zoning *source: DPLH Mapping, 2024*

CITY OF COCKBURN TOWN PLANNING SCHEME NO. 3

The LSP Area is zoned 'Development' and is subject to the provisions of 'Development Area 5 – Munster (DA 5)', pursuant to the City's TPS 3. (Refer to **Figure 6**: City of Cockburn Zoning Map.)

The LSP is submitted as TPS 3 identifies the land as being within the 'Development' zone.

The objective of the 'Development' zone is described at clause 3.2 of TPS 3 as being,

> '*to provide for future residential, industrial or commercial development to be guided by a comprehensive Structure Plan prepared under the Scheme.'*

A land use zone and density code is therefore required to be assigned to the land by a Local Structure Plan prior to any new development and associated land use commencing on the land.

At *cl. 5.2* and *Table 9 – Development Areas* of *Part 5 – Special Control Areas* of TPS 3, the specific purpose and provisions applicable to the LSP Area are described.

The LSP Area is identified in the TPS 3 Zoning Map as being subject to the provisions of 'Development Area (DA 5) – Munster'. (Refer to **Figure 6**: Zoning Map.)

The specific provisions relating to DA 5 are described in *Table 9 – Development Areas* of TPS 3 as being:

'1. An approved Structure Plan together with all approved amendments shall be given due regard in the assessment of applications for subdivision and development in accordance with clause 27(1) of the Deemed Provisions.

2. To provide for residential development except within the buffers to the Woodman Point WWTP, Munster Pump Station and Cockburn Cement.

3. The local government will not recommend subdivision approval or approve land use and development for residential purposes contrary to Western Australian Planning Commission and Environmental Protection Authority Policy on land within the Cockburn Cement buffer zone.'

The LSP accords with the above described provisions, noting the proposal seeks to assign the required residential land use zone and applicable density code to enable its development for residential purposes. Further, the land is not located within the Woodman Point WWTP, Munster Pump Station, or the Cockburn Cement buffer zones and is therefore capable of being considered for residential subdivision approval and development.

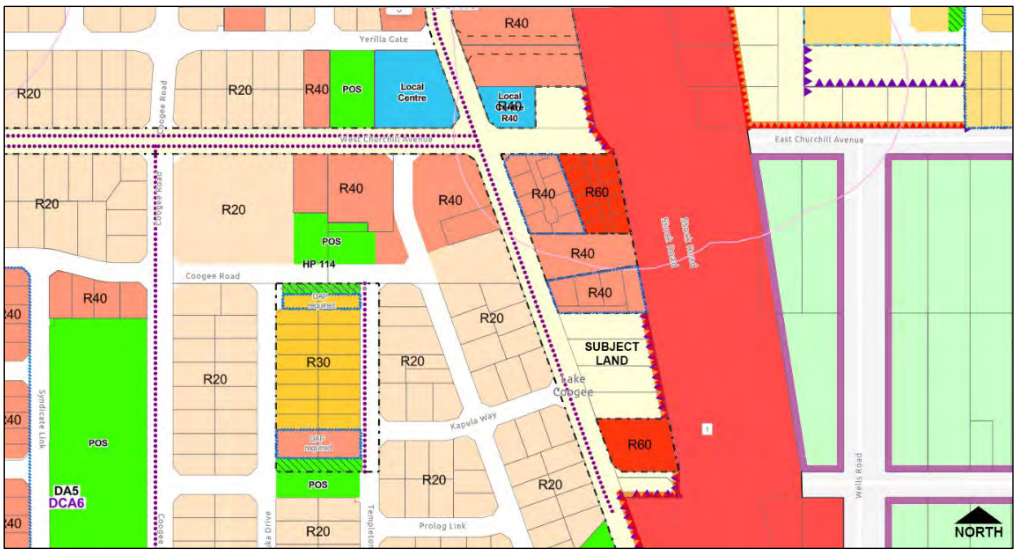


Figure 6: City of Cockburn TPS 3 Zoning Map *source: City of Cockburn Mapping, 2024*

3.2 STRATEGIC PLANNING FRAMEWORK

PERTH AND PEEL @ 3.5 MILLION AND SOUTH METROPOLITAN SUB-REGIONAL PLANNING FRAMEWORK

Perth and Peel@3.5million outlines the Planning framework for the future growth of the Perth and the Peel Regions of Western Australia to accommodate a population of 3.5 million by 2050.

The proposed LSP Area is identified in the *Perth and Peel@3.5million* as forming part of the *South Metropolitan Peel Sub-regional Planning Framework.*

The LSP Area is identified in the *Sub-regional Planning Framework* as 'Urban' land, which is consistent with the MRS zoning of the location.

The Sub-region is identified as being expected to have strong population growth. The specific attracting features of the area are highlighted as including affordable housing options, as well as employment and lifestyle opportunities. The Framework predicts a growth in this South Metropolitan Peel Sub-region to 1,264,450 people by 2050.

This LSP is consistent with this strategic direction as will provide additional housing opportunities to accommodate the anticipated population expected to be residing in this location in the short term.

CITY OF COCKBURN LOCAL PLANNING STRATEGY (Existing and Draft)

The City's existing *Local Planning Strategy* (1999) is soon to be replaced. The WAPC has considered the new Local Planning Strategy and recently resolved at its SPC meeting held on 13 February 2024 to endorse the updated framework, subject to modifications.

Until such time that the new framework is endorsed by the WAPC, the current *Local Planning Strategy* remains operative. This framework identifies the land as being part of the Munster development area which is suitable for urban redevelopment. The urbanisation of the area is mostly now realised, having been the subject of extensive structure planning and subdivision over the last two (2) decades. The subject land is one (1) of the remaining larger landholdings which forms the small perimeter block bound by Rockingham Road to the west and Stock Road to the east. This lot is yet to be assigned a land use zone and residential density, as intended by the existing longstanding planning strategy.

The soon to be finalised Strategy identifies the land as part the 'Structure Planning area for future rationalisation'. The rationalisation process will be undertaken once the subdivision and development of the area has been completed in accordance with the requirements of the structure plans. At this stage, the zonings and reservations assigned through the various local structure plans will be transferred to operative Local Planning Scheme.

This proposed LSP seeks to assign the appropriate land use zone and density code, as intended through the existing and soon to be endorsed Local Planning Strategies of the City.

STATE PLANNING POLICIES (SPP)

SPP 3.7: Bushfire

There is a need to demonstrate compliance with *State Planning Policy 3.7: Bushfire* and the associated Bushfire Planning Guidelines at the subdivision and/or development stage.

The updated version of *SPP 3.7 – Bushfire* became operational on 18 November 2024, which occurred subsequent to the lodgement of this Local Structure Plan and it being formally received and progressed by the City. The land was not identified in the *Department of Fire and Emergency Services* (DFES) Map of Bushfire Prone Areas at the time of lodgement of the LSP.

The revised version of the DFES Map of Bushfire Prone Area now identifies a small portion of the north western corner of the primary frontage of the land as being within a bushfire prone area. Refer to **Figure 7** below which illustrates the extent of the bushfire prone area under the operational SPP 3.7 with reference to the earlier version, which mapping was current at the time of lodgement of the LSP.

Figure 7: Bushfire Prone Area Mapping extent *source: SLIP, 2025*

In the circumstances of this LSP, noting that the assessment commenced prior to the current version of the SPP 3.7 becoming operational and that the updated mapping encroaches only marginally into the subject land resulting in an assessment being required for only the dwelling with a frontage to Rockingham Road, it is reasonable to defer further assessment to the later subdivision or grouped housing development application stage.

SPP 5.4: Road and Rail Noise

The LSP Area shares its rear boundary with Stock Road, which is identified as a 'strategic freight/traffic route' in *SPP 5.4 – Road and Rail Noise*. The mapping attached to SPP 5.4 identifies the land as being located within the 200m traffic noise trigger distance. (Refer to **Figure 8**.)

Figure 8: 200m trigger distance, SPP 5.4 *source: DPLH Mapping, 2024*

As the land is located within the 200m traffic noise trigger distance of Stock Road, the requirements of SPP 5.4 are required to be considered in this proposal to redevelop the property for a noise-sensitive land use, i.e., residential.

A *Transport Noise Assessment* has been prepared by Lloyd George Acoustics which establishes that the noise targets are exceeded for each of the lots and therefore, it is likely that noise mitigation through building design will be necessary. The recommendations provided in the Traffic Noise Assessment will be further reviewed and addressed through the Noise Management Plans, once the dwelling designs for each lot are known. A copy of the Traffic Noise Assessment is attached at **Annexure 4**.

LOCAL PLANNING POLICIES (LPP)

LPP 1.12: Noise Attenuation

LPP 1.12 – *Noise Attenuation* recognises the need to ensure noise sensitive developments are protected from excessive noise levels from traffic on nearby major roads. The requirements of LPP 1.12 apply to the subject land as it is within close proximity to Stock Road, which is a Primary Regional Road Reservation in the MRS. Of relevance to the LSP is the requirement for an Acoustic

Assessment/Transportation Noise Assessment to be prepared to confirm that any increased traffic noise levels emanating from Stock Road can be mitigated to ensure that the lifestyle of future residents residing in the residential dwellings on this land are protected.

This Assessment advises that the outdoor noise target is exceeded for each lot and therefore it is recommended that design measures be implemented at development stage to assist in mitigating the impact of traffic noise on the amenity of each of the residential lots. The recommendations included in the Assessment are to be further considered and reviewed once the dwelling design for each lot is known.

A copy of the Transportation Noise Assessment is attached at **Annexure 4**.

The other relevant requirements of LPP 1.12 include:

- A Local Development Plan to implement the requirements of the Transport Noise Assessment when Quiet House Design packages are recommended, as a condition of the subdivision approval.
- A Noise Management Plan/further Acoustic Report being prepared as a condition of the subdivision approval to identify the design solutions proposed to protect the noise sensitive premises from excessive noise, to meet the requirement of the LPP.
- An Acoustic Report being submitted prior to a Building Permit Application for any noise sensitive development on the lots identified as being impacted by increased traffic noise levels emitted from vehicles travelling along Stock Road, in accordance with the requirements of SPP 5.4. This report is to detail the final design specifications and construction methods for the proposed dwelling to ensure compliance with the noise criteria.

LPP 1.11: Residential Rezoning&Subdivision, Adjoining Midge Infested Lakes & Wetlands

LPP 1.11 - *Residential Rezoning & Subdivision – Adjoining Midge Infested Lakes & Wetlands* requires properties within 500m and 800m of a lake or wetland edge to impose a Notification on the Certificates of Title of each new residential lot to alter prospective purchasers to the land possibly being affected by midge infestations.

The requirements of LPP 1.11 apply to the subject land as it is located within 800m of Bindjar Lake and Lake Coogee.

The wording of the Notification to be included on the Certificates of Title is stated in LPP 1.11 as follows:

> *'This land may be affected by midge from nearby lakes and/or wetlands. Enquiries can be made with the City of Cockburn Environmental Services.'*

LPP 5.5: Local Development Plans

LPP 5.5 – *Local Development Plans* refers to a requirement for a plan to be prepared for developments which require the implementation of specific design elements to ensure a high quality liveability outcome for the future residents. These design elements can include such considerations as: site planning, dwelling orientation, open space, safe and engaging street and public space frontages, parking and access sustainability and noise from road and rail transport.

The requirements of LPP 5.5 apply to the subject land as the property is located within the 200m trigger distance of Stock Road, pursuant to *SPP 5.4 – Road and Rail Noise*.

The Transport Noise Assessment includes recommendations for the future dwellings on the land to ensure that the traffic noise emanating from Stock Road does not unduly impact on the quiet enjoyment of residents at their place of residence. As the dwelling designs for the individual lots are not yet known, further review of the recommendations based on the built form outcome is to be refined at subdivision and development stage.

An LDP is stated in **Part 1** of the Structure Plan as being required to be prepared as a condition of the subdivision approval.

LPP 5.19: Structure Plans and Telecommunications Infrastructure

LPP 5.19 – Structure Plans and Telecommunications Infrastructure refers to the need for all structure plans submitted to the City to include 'written evidence' of existing mobile telecommunications infrastructure within one (1) kilometre radius of the LSP Area and consideration of the demand for new or upgraded mobile telecommunications infrastructure as a result of the forecast residential population within the LSP Area.

The existing mobile coverage in this area is provided from utility towers located in Beeliar, Munster and Yangebup. This infrastructure provides coverage for Telstra, Optus and Vodafone, for 4G, 4G+ and 5G services. The nearest towers are approximately 1.6km (east) and 1.8km (south west) which provide coverage for Optus and Vodafone. The nearest Telstra mobile infrastructure is located approximately 2.1km (north east) and 2.4km (south east). The coverage provided by the existing infrastructure in the surrounding suburbs is considered sufficient to support the minor increase in residential population proposed by the LSP.

The LSP Area is well serviced, with the subdivided land being able to connect to existing telecommunication servicing infrastructure which extends to the land, as identified in the Telstra and NBN Mapping included at **Annexure 6**.

4.0 THE STRUCTURE PLAN

The Structure Plan Map (**Plan 1**) identifies the land use zone as 'Residential' with the density code of R40.

This zone and density code is sought to facilitate the subdivision of the land to provide additional housing in this location, in accordance with the City's longstanding strategic plan for Development Area 5 (DA 5) – Munster (Lake Coogee).

This structure plan provides for a continuation of the residential density pattern established through the endorsed structuring planning for the nearby landholdings to the north and south of the land and takes into consideration the established and emerging subdivision layouts of development approved in this immediate area.

4.1 STRUCTURE PLAN CONCEPT DESIGN

The concept for the subdivision of the land is to adopt a layout which allows for seamless integration with the established housing density and pattern of subdivision in this location.

The concept design for the subdivision included at **Annexure 5** takes into consideration the following main design elements.

1. **Surrounding road network**: The need for development to address and activate the frontage of the land to Rockingham Road and appropriately consider the restraints of the land in terms of its rear boundary to Stock Road.
2. **Existing undeveloped land uses in area**: The single residential dwellings on adjacent lots have been considered and the subdivision layout designed to respond accordingly. Noting in particular that, the subdivision layout and common driveway is designed to reduce any perceived impact on the existing surrounding uses of land and ensures the adjacent lots can be similarly redeveloped independently as grouped housing developments, in the future.
3. **Residential density pattern**: The residential densities assigned to the lots to the north and south through similar local structure planning processes have been considered. Noting: the R60 density developments to the north and south, which are concentrated at the intersections of Rockingham Road with Stock Road and West Churchill Road; and the R40 density codes assigned to the landholdings between these R60 densities; and the R20 density coded area on the western side of Rockingham Road.
4. **Existing subdivision pattern**: The subdivision layouts of the landholdings assigned density codes of R40 and R60.
5. **Built form characteristics**: The built form characteristics of the redeveloped sites to the north and south consist of grouped housing developments with shared vehicle access (common property lot), which is the most suitable development outcome for the properties

within this perimeter lot area, noting that these properties provide for higher densities whilst providing an appropriate interface to the R20 coded lots on the opposite western side of Rockingham Road.

4.1.1 ROAD AND PEDESTRIAN NETWORK

The land has a primary frontage to Rockingham Road which is a local distributor road with a 20 metre wide reservation width and 10 metre wide single carriageway width.

The land has an existing crossover to Rockingham Road at its southern boundary, which is to be maintained and sealed to urban standard as part of the subdivision works.

The land does not have direct vehicle access to Stock Road. The proposed subdivision of the land is designed to ensure that vehicle access continues to be restricted, with vehicles being provided with access via a common driveway connection to Rockingham Road.

A dual use path is proposed to extend along the frontages of the properties on the eastern side of Rockingham Road. The requirement for the section of the dual use path extending along the frontage of the land will be addressed as a condition of subdivision approval.

4.1.2 RESIDENTIAL LAND USE/DWELLING YIELD

The land is to be developed for residential use.

The land area is 1327m^2.

At the residential density code of R40, the land is capable of being subdivided with lots comprising an average lot size of 220m^2, with a minimum lot area of 180m^2.

The conceptual subdivision layout proposes a total yield is four (4) lots. (Refer to **Annexure 4**.)

It is estimated that the addition of four (4) dwellings in this location will provide housing accommodation for approximately 10.12 people, based on the average of 2.53 persons per dwelling, source: City of Cockburn, community profile, household size, 2021 ABS.

4.1.3 PUBLIC OPEN SPACE (POS)

In accordance with WAPC Policy *Liveable Neighbourhoods* and *Development Control Policy 2.3: Public open space in residential areas*, a minimum 10 per cent of the gross subdivisible area may be required as creditable public open space. Based on the standard minimum requirement, this would result in a public open space area of 132.7m^2 being provided, which is unlikely to be of practical use and, therefore, it may be appropriate for any public open space contribution to be satisfied through a financial contribution, rather than the ceding of land.

Any such financial contribution may be used to fund future improvements to existing public open space areas in Lake Coogee or to fund the acquisition and embellishment of additional public open space, in accordance with statutory requirements and WAPC policy and practice.

4.1.4 INFRASTRUCTURE SERVICING

All essential infrastructure is readily available and capable of providing services for each of the future lots of the subdivision.

The availability of the infrastructure and capacity to service the land without upgrading being required is illustrated on the attached mapping supplied by the relevant agencies including Water Corporation, Western Power, ATCO Gas and the various telecommunications companies. Refer to **Annexure 6**.

In regard to Western Power, the survey of the land identifies that the land is connected to electricity by an overhead power line. The existing line will need to be removed and the future lots connected to underground power as a condition of subdivision approval.

4.1.5 ACTIVITY CENTRES AND EMPLOYMENT

The structure plan area is well serviced by a range of easily accessible activity centres including Stargate Shopping Centre (2.2km) and Beeliar Village (2.0km). Both of these centres, together with convenient accessibility to the strategic metropolitan activity centres of Fremantle, Cockburn, Kwinana and Perth, ensures the full range of essential goods and services as well as employment opportunities are provided for the future residents of the LSP Area.

4.1.6 WAPC OPERATIONAL POLICY 2.4: PLANNING FOR SCHOOL SITES

The WAPC *Operational Policy 2.4 – Planning for school sites* (**OP 2.4**) requires land to be ceded and/or pro-rata contributions to be made by developers towards meeting the existing and future community need for government primary schools to be provided for the purpose of satisfying a child's entitlement to be enrolled in a government school for each ear of the compulsory education period, in accordance with the *School Education Act 1999.*

At sub-clause 3.9.5 (i) of OP 2.4, it is stated that subdivision applications which propose less than an additional five (5) lots is exempt from the pro-rata contribution requirement.

It is noted that the land is located within close proximity to a wide range of educational facilities to cater for different age groups. This includes the Early Learning Centres of Montessori (170m) and Wildflowers Early Learning (1.47km); Coogee Primary School (2.17km); and South Metropolitan TAFE (approx. 800m).

4.1.7 DEVELOPMENT CONTRIBUTION REQUIREMENTS

The land is located within the Development Area 5 for Munster (Lake Coogee) and is subject to the Development Contribution Plan 13 (DCP 13) – Community Infrastructure and Development Contribution Area 6 (DCA 6) – Munster (Lake Coogee) for the proportional contribution (23.4 percent) towards the widening and upgrading of Beeliar Drive (Mayor Road), between Stock and Cockburn Roads, Munster.

ANNEXURES

ANNEXURE 1

Photographs of the subject site and surrounding environs

Photograph 1: Standing on the western side of Rockingham Road and looking in an eastern direction towards the subject site.

Photograph 2: Standing on the western side of Rockingham Road, looking south east towards the subject site and subdivision works for the R60 residential development underway nearby the site.

Photograph 3: Looking south east towards R60 residential development site.

Photograph 4: Looking north west along Rockingham Road towards R40 development sites under construction nearby the subject site.

Photograph 5: Standing on the eastern side of Rockingham Road, looking south west towards the existing residential development nearby the subject site.

Photograph 6: Standing on western side of Rockingham Road, looking towards R40 density dwelling lots.

Photograph 7: Standing on Rockingham Road looking north towards R40 density development site under construction adjacent to the existing R60 survey strata development sites with frontages to West Churchill Avenue.

Photograph 8: Standing on western side of Rockingham Road, looking south east towards construction works underway of R40 development site.

Photograph 9: Standing on eastern side of Rockingham Road, looking north west towards existing residential homes opposite the R40 development site under construction, refer to Photograph 7.

Photograph 10: Standing at the north eastern corner of the intersection of Rockingham Road and West Churchill Avenue, looking south east towards the existing R60 survey strata developments nearby the subject site.

Photograph 11: Standing on the north western corner of the intersection of Rockingham Road with West Churchill Avenue in front of the Local Centre (refer to Photograph 12), looking east towards the Montessori Early Years Learning and Care Centre on the north eastern corner of same intersection (this site is similarly zoned Local Centre).

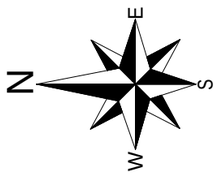
Photograph 12: Standing at north western corner of intersection of Rockingham Road and West Churchill Avenue looking north towards Local Centre.

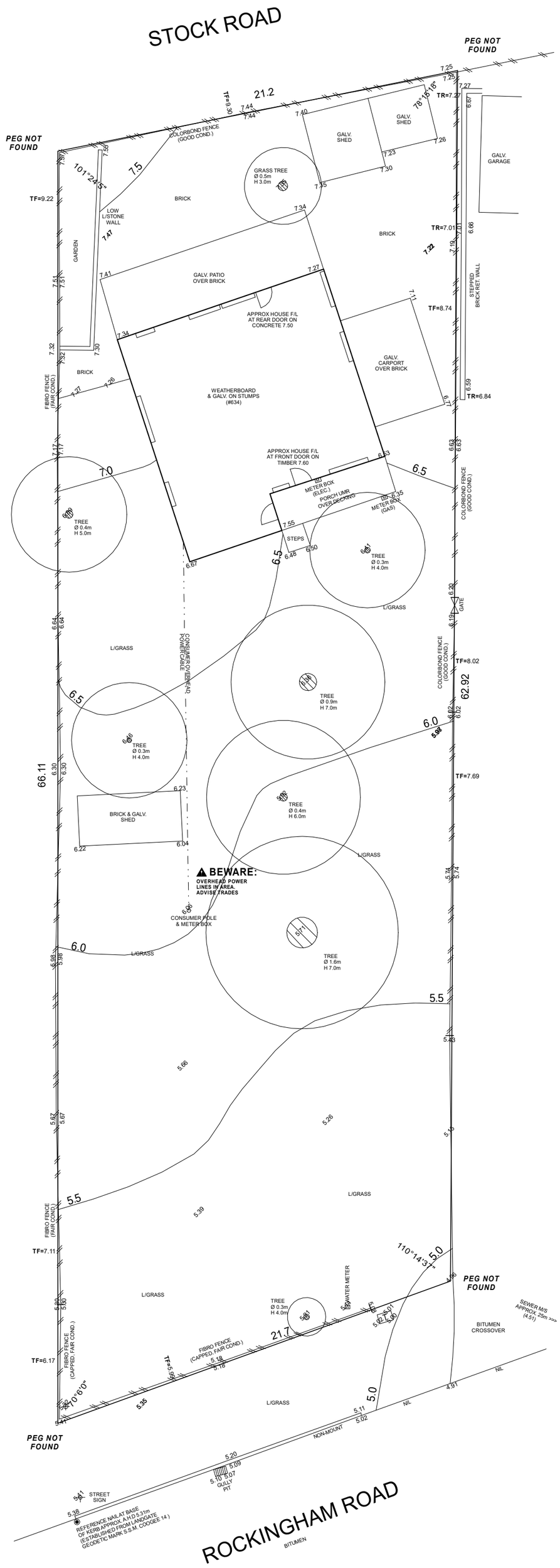
Photograph 13: Standing on the eastern side of Rockingham Road looking south west towards the intersection with West Churchill Avenue and the vacant land which is zoned Residential with a R40 density code.

ANNEXURE 2

Contour and Features Survey

LEGEND		
		POWER DOME
		POWER POLE
	T / C	PHONE PITS
	W	WATER CONN.
TP=	10.00	TOP PILLAR/POST
TW=	10.00	TOP WALL
TR=	10.00	TOP RETAINING
TF=	10.00	TOP FENCE





Scale 1:200

0 2 4 6 8

LOT MISCLOSE
0.004 m

⚠ DISCLAIMER:
Due to lack of survey marks/pegs, all building offset dimensions & features are approximate only and positioned from existing pegs/fences and walls which may not be on the correct alignment. Any design that involves additions to any structures shown or portion of structures remaining after any demolition has taken place requires boundaries **to be repegged and exact offsets provided to your designer/architect before any plans are produced and before any work is started on site.**

⚠ DISCLAIMER:
Lot boundaries drawn on survey are based on landgate plan only. Survey does not include title search and as such may not show easements or other interests not shown on plan. Title should be checked to verify all lot details and for any easements or other interests which may affect building on the property.

⚠ DISCLAIMER:
Survey does not include verification of cadastral boundaries. All features and levels shown are based on orientation to existing pegs and fences only which may not be on correct cadastral alignment. Any designs based or dependent on the location of existing features should have those features' location verified in relation to the true boundary.

⚠ DISCLAIMER:
Survey shows visible features only and will not show locations of underground pipes or conduits for internal or mains services. Verification of the location of all internal and mains services should be confirmed prior to finalisation of any design work.

⚠ DISCLAIMER:
Cottage & Engineering surveys accept no responsibility for any physical on site changes to the parcel or portion of the parcel of land shown on this survey including any adjoining neighbours levels and features that have occurred after the date on this survey. All Sewer details plotted from information supplied by Water Corporation.

COTTAGE SURVEYS
LICENSED SURVEYORS

87-89 Guthrie Street
Osborne Park, WA 6017

PO Box 1611
Osborne Park
Business Centre WA 6917

P: (08) 9446 7361
E: perth@cottage.com.au
W: www.cottage.com.au

JOB #	567072	GPS	Lat: -32.135468 Long: 115.788429	ROADS	Bitumen	ELEC.	U/Ground
				KERBS	Non-Mount / Nil	COMMS.	Yes
ADDRESS	#634 Rockingham Road	LOT	Lot 50 (Diag. 69872)	FOOTPATH	Nil	WATER	Yes
SUBURB	Coogee			SOIL	Sand	GAS	Check Alinta
LGA	CITY OF COCKBURN	AREA	1327m² VOL. 1733 FOL. 254	DRAINAGE	Good	SEWER	Nil
DRAWN	B. Saliba	DATE	22 Feb 24 SSA No	VEGETATION	Refer to Survey	COASTAL	No (Approximate Only Confirm With Shire)

ANNEXURE 3

Certificate of Title

WESTERN AUSTRALIA

TITLE NUMBER	
Volume	Folio
1733	**254**

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

BGRoberts

REGISTRAR OF TITLES

REGISTRAR OF TITLES WESTERN AUSTRALIA

LAND DESCRIPTION:

LOT 50 ON DIAGRAM 69872

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

JOEL ALEXANDER COOPER
SANDRA JANE COOPER
BOTH OF 634 ROCKINGHAM ROAD LAKE COOGEE WA 6166
AS JOINT TENANTS

(T P857952) REGISTERED 17/1/2024

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. P857953 MORTGAGE TO ING BANK (AUSTRALIA) LTD REGISTERED 17/1/2024.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required. Lot as described in the land description may be a lot or location.

----------END OF CERTIFICATE OF TITLE----------

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND:	1733-254 (50/D69872)
PREVIOUS TITLE:	29-308A
PROPERTY STREET ADDRESS:	634 ROCKINGHAM RD, LAKE COOGEE.
LOCAL GOVERNMENT AUTHORITY:	CITY OF COCKBURN

ANNEXURE 4

Transportation Noise Assessment
Lloyd George Acoustics

Lloyd George Acoustics
PO Box 717
Hillarys WA 6923
T: 9401 7770
www.lgacoustics.com.au

Transportation Noise Assessment

Lot 50 (#634) Rockingham Road, Lake Coogee

Reference: 24059038-01A

Prepared for:
Result Developments

Reference: 24059038-01A

Lloyd George Acoustics Pty Ltd
ABN: 79 125 812 544

PO Box 717
Hillarys WA 6923
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P:	9401 7770	0439 032 844	0400 414 197	0412 611 330
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E:	rob@lgacoustics.com.au	daryl@lgacoustics.com.au	hao@lgacoustics.com.au	matt.nolan@lgacoustics.com.au
P:	0410 107 440	0420 364 650	0438 481 207	0448 912 604

Date	Rev	Description	Author	Verified
10-Jun-24	0	Issued to Client	Matt Nolan	Terry George
12-Jun-25	A	Updated report and model	Matt Nolan	-

CONTENTS

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Appendices

1. INTRODUCTION

It is proposed to subdivide land at Lot 50 (#634) Rockingham Road, Lake Coogee (refer *Figure 1-1)* with the proposed subdivision plan shown in *Figure 1-2*. The site adjoins Stock Road, which is considered a 'Strategic Freight/Major Traffic Route' as shown on PlanWA Maps, such that a noise assessment is required in accordance with *State Planning Policy No. 5.4 Road and Rail Noise*, being the subject of this report.

Figure 1-1: Subdivision Location (Source: DPLH PlanWA)

Appendix B contains a description of some of the terminology used throughout this report.

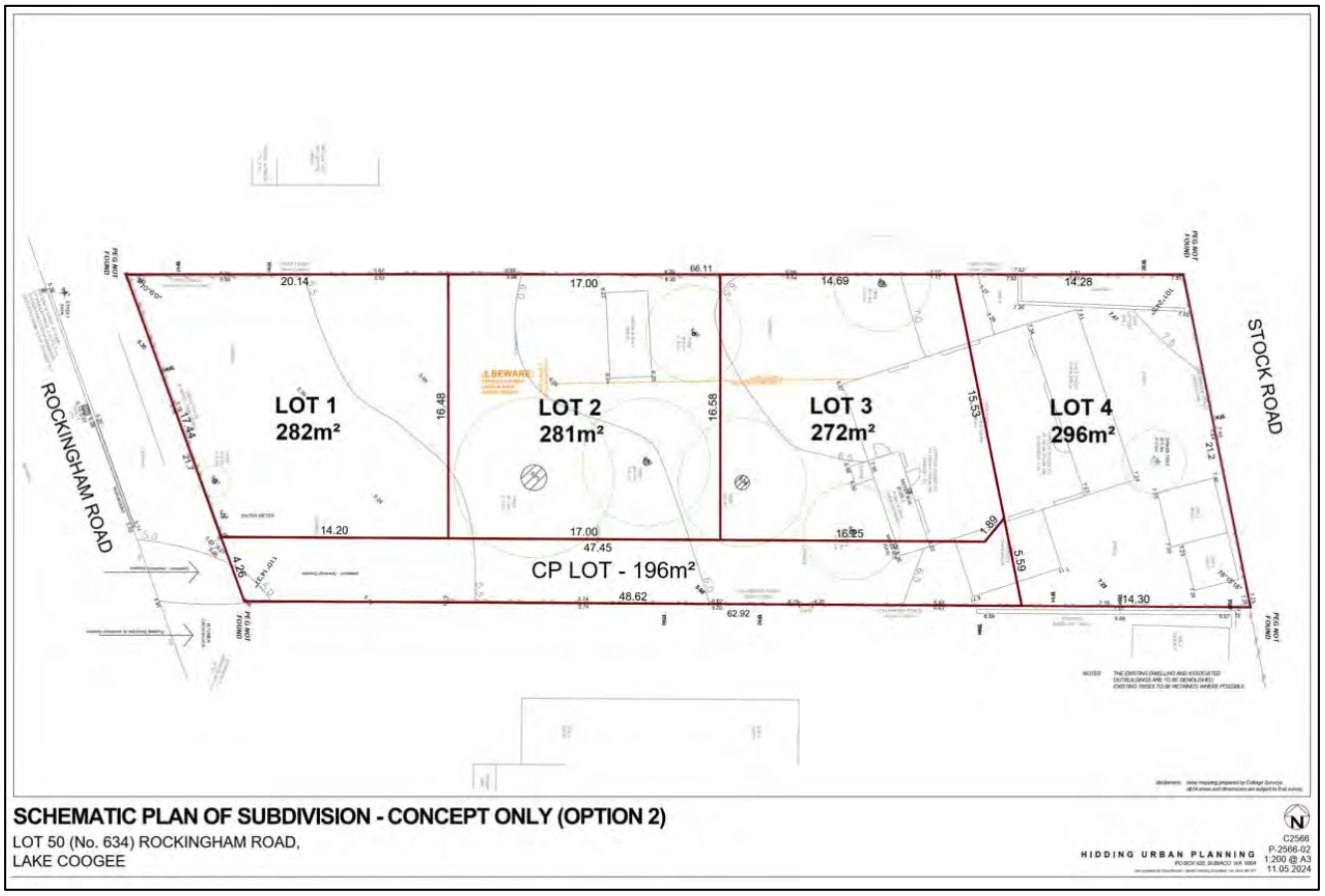


Figure 1-2: Subdivision Layout

2. CRITERIA

The criteria relevant to this project is provided in *State Planning Policy No. 5.4 Road and Rail Noise* (hereafter referred to as SPP 5.4) produced by the Western Australian Planning Commission (WAPC). SPP 5.4 is supported by the *Road and Rail Noise Guidelines* (the Guidelines) and the Department of Planning, Lands and Heritage mapping. The objectives of SPP 5.4 are to:

- Protect the community from unreasonable levels of transport noise;
- Protect strategic and other significant freight transport corridors from incompatible urban encroachment;
- Ensure transport infrastructure and land-use can mutually exist within urban corridors;
- Ensure that noise impacts are addressed as early as possible in the planning process; and
- Encourage best practice noise mitigation design and construction standards.

Table 2-1 sets out noise targets that are to be achieved by proposals under which SPP 5.4 applies. Where the targets are exceeded, an assessment is required to determine the likely level of transport noise and management/mitigation required.

Table 2-1: Noise Targets for Noise Sensitive Land-Use

Scenario	Outdoor Noise Target		Indoor Noise Target	
Noise-sensitive land-use and/or development	55 dB $L_{Aeq(Day)}$	50 dB $L_{Aeq(Night)}$	40 dB $L_{Aeq(Day)}$ (Living and Work Areas)	35 dB $L_{Aeq(Night)}$ (Bedrooms)

Notes:

- Day period is from 6am to 10pm and night period from 10pm to 6am.
- The outdoor noise target is to be measured at 1-metre from the most exposed, habitable[1] facade of a noise sensitive building.
- For all noise-sensitive land-use and/or development, indoor noise targets for other room usages may be reasonably drawn from Table 1 of Australian Standard/New Zealand Standard AS/NZS 2107:2016 *Acoustics – Recommended Design Sound Levels and Reverberation Times for Building Interiors* (as amended) for each relevant time period.
- Outdoor targets are to be met at all outdoor areas as far as is reasonable and practicable to do so using the various noise mitigation measures outlined in the Guidelines.

The application of SPP 5.4 is to consider anticipated traffic volumes for the next 20 years from when the noise assessment has been undertaken.

[1] *A habitable room is defined in State Planning Policy 3.1 as a room used for normal domestic activities that includes a bedroom, living room, lounge room, music room, sitting room, television room, kitchen, dining room, sewing room, study, playroom, sunroom, gymnasium, fully enclosed swimming pool or patio.*

3. METHODOLOGY

Noise measurements and modelling have been undertaken in accordance with the requirements of SPP 5.4 and associated Guidelines, as described in *Section 3.1* and *Section 3.2.*

3.1. Site Measurements

Noise monitoring was undertaken on site using a Brüel & Kjær 2250 (S/N: 2809187) sound level meter (refer *Figure 3-1*). This meter complies with the instrumentation requirements of *Australian Standard 2702-1984 Acoustics – Methods for the Measurement of Road Traffic Noise*. The meter was field calibrated before and after the measurement session and found to be accurate to within ± 1 dB. Lloyd George Acoustics holds a current laboratory calibration certificate for the meter.

The microphone was approximately 1.4 metres above existing ground level and approximately 26 metres from the edge of Stock Road main carriageway. The measurements were recorded on 4 June 2024, between 10.00am and 11.00am.

Figure 3-1: Photograph of Sound Level Meter on Site

3.2. Noise Modelling

The computer program *SoundPLAN 9.0* was utilised incorporating the *Calculation of Road Traffic Noise* (CoRTN) algorithms, modified to reflect Australian conditions. The modifications included the following:

- Vehicles were separated into heavy (Austroads Class 3 upwards) and non-heavy (Austroads Class 1 and 2) with non-heavy vehicles having a source height of 0.5 metres above road level and heavy vehicles having two source heights at 1.5 metres and 3.6 metres above road level;
- A -0.8 dB correction has been applied to the lower level heavy vehicle noise source and -8.0 dB to the higher level noise source based on the *Transportation Noise Reference Book*; Paul Nelson (1987), so as to provide consistent results with the CoRTN algorithms.

Predictions are made at heights of 1.4 metres above ground floor level for single storey buildings and 4.2 metres above ground floor level for possible first floors of double storey buildings. The noise is predicted at 1-metre from an assumed building façade, resulting in a + 2.5 dB correction due to reflected noise.

Various input data are included in the modelling and these are discussed in *Section 3.2.1* to *Section 3.2.5*.

3.2.1. Ground Topography

Topographical data was adapted from Landgate data in the form of elevation contours. As the finished lot levels were unknown, these contours were also used to predict the finished lot levels.

Indicative building outlines have been included as these can provide barrier attenuation when located between a source and a receiver, in much the same way as a hill or wall. These have also been obtained using Landgate data. Future buildings on each lot are assumed to be single storey with heights of 3.5 metres. This means where modelling is undertaken to a possible upper floor, the noise is predicting above these building outlines.

A 2.4-metre high noise wall has been included on the eastern boundary for the future scenarios. This is to be a solid material, free of gaps and of minimum 15kg/m^2 surface mass.

3.2.2. Road Surface

The corrections applied for different road surface finishes are provided in *Table 3-1*.

Table 3-1: Noise Relationship Between Different Road Surfaces

Chip Seal				Asphalt			
14mm	10mm	5mm	Slurry	Dense Graded	Novachip	Stone Mastic	Open Graded
+3.5 dB	+2.5 dB	+1.5 dB	+1.0 dB	0.0 dB	-0.2 dB	-1.5 dB	-2.5 dB

The existing road surface is dense graded asphalt and assumed to remain unchanged into the future.

3.2.3. Vehicle Speed

The existing posted speed is 80 km/hr and assumed to remain unchanged into the future.

3.2.4. Traffic Volumes

Existing traffic volumes were obtained from Main Roads WA Traffic Map. A modelled Validation Plot and Forecast 2041 traffic volumes were obtained from Main Roads WA (Scott Hazebroek, Traffic Modelling Analyst, Reference: #42927, dated 27 May 2024). The validation plot allows the forecast volumes to be calibrated with *Table 3-2* providing the traffic volumes used in the noise modelling. Note that the percentage heavy vehicles are assumed to be the same in the future as existing.

Table 3-2: Traffic Information Used in Noise Modelling

Parameter	Scenario			
	Existing – 2021/22		Future – 2046	
	Northbound	Southbound	Northbound	Southbound
24-hour Volume	13,044	14,365	37,200	36,000
% Heavy	13	11	13	11

3.2.5. Ground Absorption

The ground absorption has been assumed to be 0.1 (10%) for the roads and 0.5 (50%) outside of the roads, noting that 0.0 represents hard reflective surfaces such as water and 1.0 represents absorptive surfaces such as grass.

4. RESULTS

4.1. Noise Monitoring

The results of the hourly noise level measurements, in free-field conditions, were:

- 4 June 2024: 10.00am and 11.00am – 59.5 dB $L_{Aeq,1hour}$.

Combining the measured noise level with the corresponding hourly traffic volume, as shown in *Figure 4-1*, results in 59.8 $L_{Aeq(Day)}$ and 52.1 $L_{Aeq(Night)}$. Based on these results, the $L_{Aeq(Day)}$ is more critical than the $L_{Aeq(Night)}$ since their difference is greater than 5 dB (refer *Section 2*).

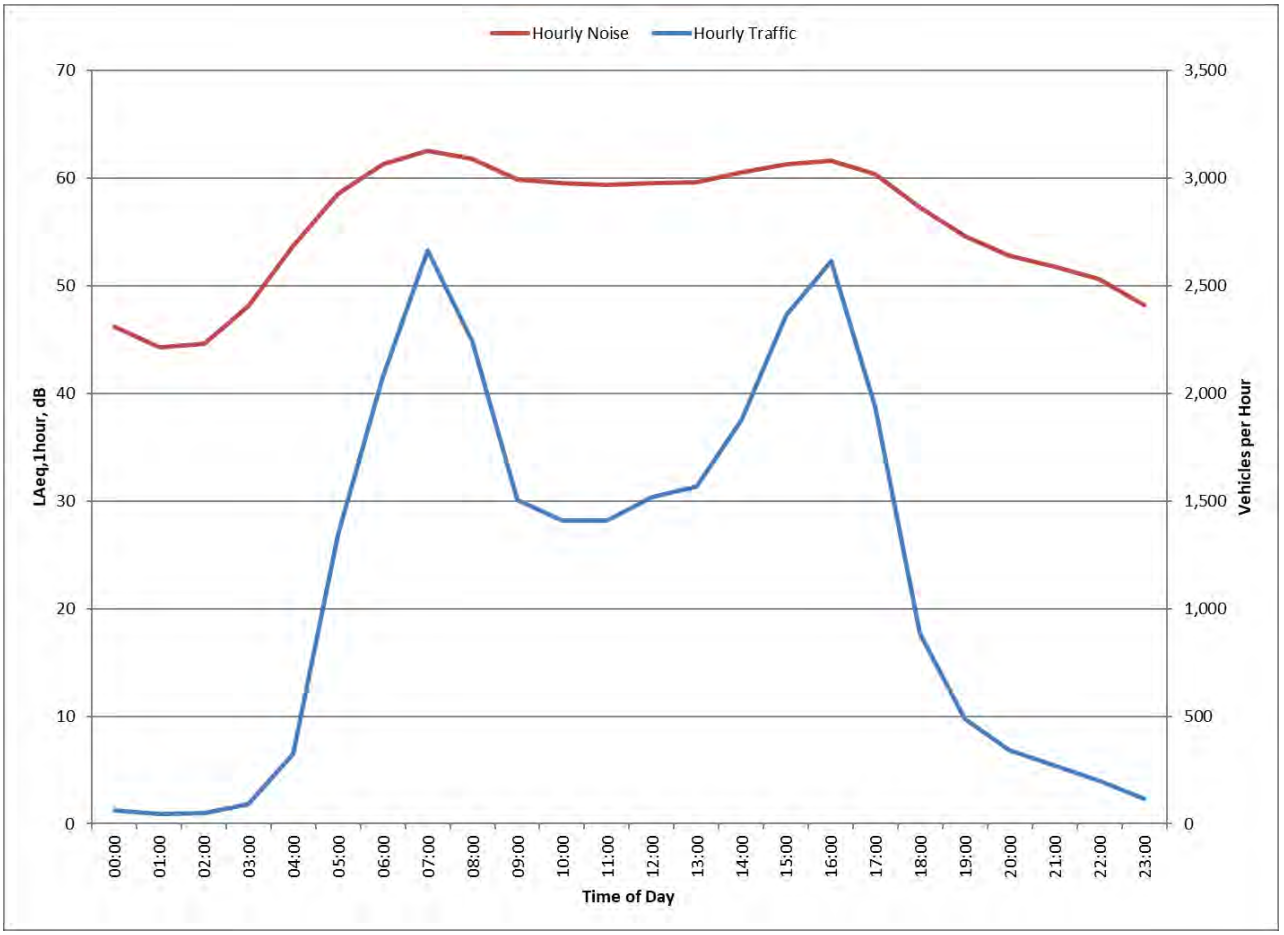
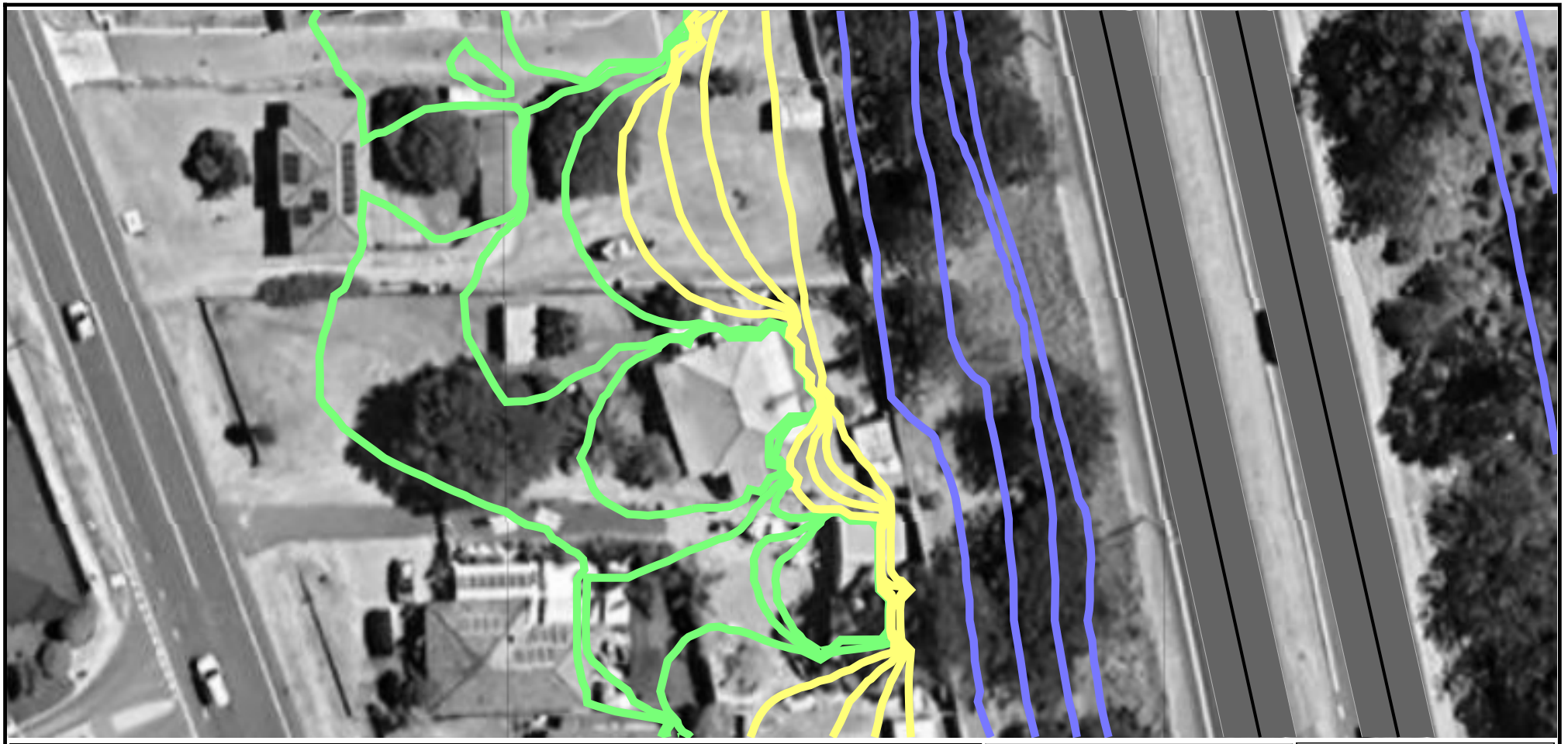


Figure 4-1: Noise Level Relationship to Hourly Traffic Volumes

4.2. Noise Modelling

The noise model was initially set-up for existing conditions and calibrated to the noise measurement location. The model is then updated to include the proposed subdivision, indicative buildings and future traffic volumes, maintaining the same model calibration. The results of the noise modelling are provided as noise contour plots in *Figure 4-2* being for the existing traffic condition, and *Figure 4-3* and *Figure 4-4* representing future 2046 levels at ground floor and first floor respectively.



Lot 50 (#634) Rockingham Road, Lake Coogee -
Existing Noise Level Contours

$L_{Aeq(Day)}$ Noise Level Contours Based on Existing Conditions
Ground Floor Level

SoundPlan v9.0
CoRTN Algorithms

10 Jun 2024

Lloyd George Acoustics
PO Box 717
HILLARYS WA 6923
(08) 9401 7770

Length Scale 1:600

0 3.5 7 14 21 2

Figure 4-2

Signs and symbols

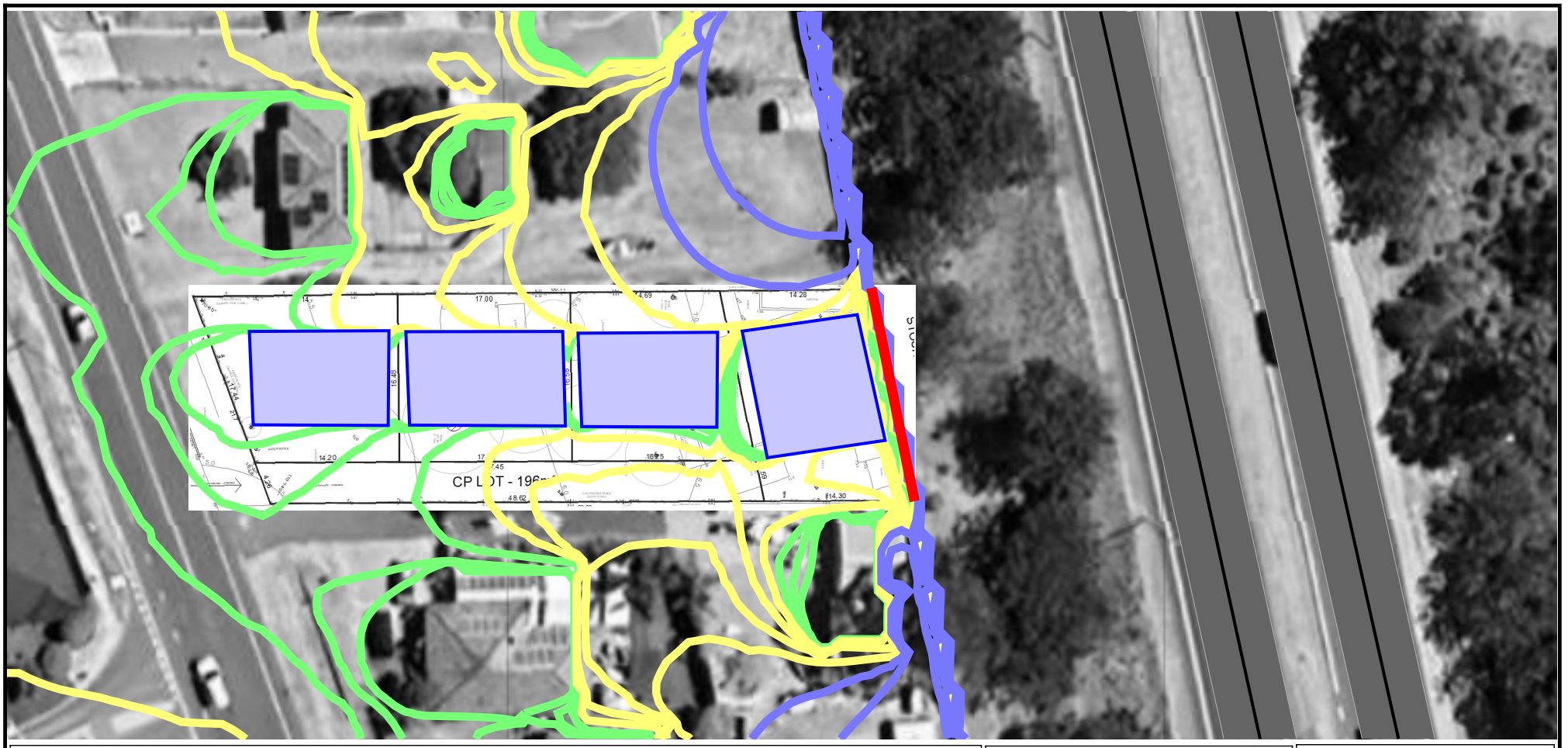
Road

N

Noise levels
$L_{Aeq,Day}$ dB

<= 56	Exposure A
<= 57	
<= 58	
<= 59	Exposure B
<= 60	
<= 61	
<= 62	
<= 63	Exposure C
<= 64	
<= 65	
<= 66	
> 66	Exposure D

SPP 5.4 (Sep 2019)



Lot 50 (#634) Rockingham Road, Lake Coogee - Future (2046) Noise Level Contours with Noise Wall

$L_{Aeq(Day)}$ Noise Level Contours Based on 2046 Conditions
Ground Floor Level

SoundPlan v9.0
CoRTN Algorithms

12 Jun 2025

Lloyd George Acoustics
PO Box 717
HILLARYS WA 6923
(08) 9401 7770

Length Scale 1:600

0 3.5 7 14 21 2

Figure 4-3

Signs and symbols

- Road
- Indicative Building
- 2.4m High Wall

N

Noise levels
$L_{Aeq,Day}$ dB

<= 56	Exposure A
<= 57	
<= 58	
<= 59	Exposure B
<= 60	
<= 61	
<= 62	
<= 63	Exposure C
<= 64	
<= 65	
<= 66	
> 66	Exposure D

SPP 5.4 (Sep 2019)

Lot 50 (#634) Rockingham Road, Lake Coogee - Future (2046) Noise Level Contours with Noise Wall

$L_{Aeq(Day)}$ Noise Level Contours Based on 2046 Conditions
Upper Floor Level

SoundPlan v9.0
CoRTN Algorithms

12 Jun 2025

Lloyd George Acoustics
PO Box 717
HILLARYS WA 6923
(08) 9401 7770

Length Scale 1:600

0 3.5 7 14 21 2

Figure 4-4

Signs and symbols

- Road
- Indicative Building
- 2.4m High Wall

N

Noise levels
$L_{Aeq,Day}$ dB

<= 56	Exposure A
<= 57	
<= 58	
<= 59	Exposure B
<= 60	
<= 61	
<= 62	
<= 63	Exposure C
<= 64	
<= 65	
<= 66	
> 66	Exposure D

SPP 5.4 (Sep 2019)

5. ASSESSMENT

The objectives of SPP 5.4 are to achieve:

- Indoor noise levels specified in *Table 2-1* in noise-sensitive areas (e.g. bedrooms and living rooms of houses); and
- A reasonable degree of acoustic amenity for outdoor living areas on each residential lot.

Where the outdoor noise targets of *Table 2-1* are achieved, no further noise controls are necessary. With reference to *Section 4.2*, it is evident the outdoor noise target will be exceeded at each lot. As such, the following is recommended:

- Construct a 2.4-metre high noise wall on the eastern boundary. This is to be a solid material, free of gaps and of minimum 15kg/m^2 surface mass;
- Dwelling on Lot 4 must be single storey only;
- Ground levels to incorporate the following packages (refer *Appendix A*):
  - Lots 1, 2 and 3 Package B; and
  - Lot 4 Package C.
- Where double storey residence constructed, upper floor to incorporate the following packages (refer *Appendix A*):
  - Lots 1, 2 and 3 Package C.

Alternatives to the provided Packages can be accepted if supported by a report from a suitably qualified acoustical consultant (member firm of the Association of Australasian Acoustical Consultants (AAAC)) once the specific house plans for the lot are available. In addition, each of these lots will require a notification on title in accordance with SPP 5.4.

Lot 50 (#634) Rockingham Road, Lake Coogee -
Noise Mitigation to Ground Floor

SoundPlan v9.0
CoRTN Algorithms

12 Jun 2025

Signs and symbols
- Road
- Package B
- Package C

N

Lloyd George Acoustics
PO Box 717
HILLARYS WA 6923
(08) 9401 7770

Length Scale 1:600
0 3.5 7 14 21 2

Figure 5-1

Lot 50 (#634) Rockingham Road, Lake Coogee -
Noise Mitigation to Upper Floor

SoundPlan v9.0
CoRTN Algorithms

12 Jun 2025

Lloyd George Acoustics
PO Box 717
HILLARYS WA 6923
(08) 9401 7770

Length Scale 1:600
0 3.5 7 14 21 2

Figure 5-2

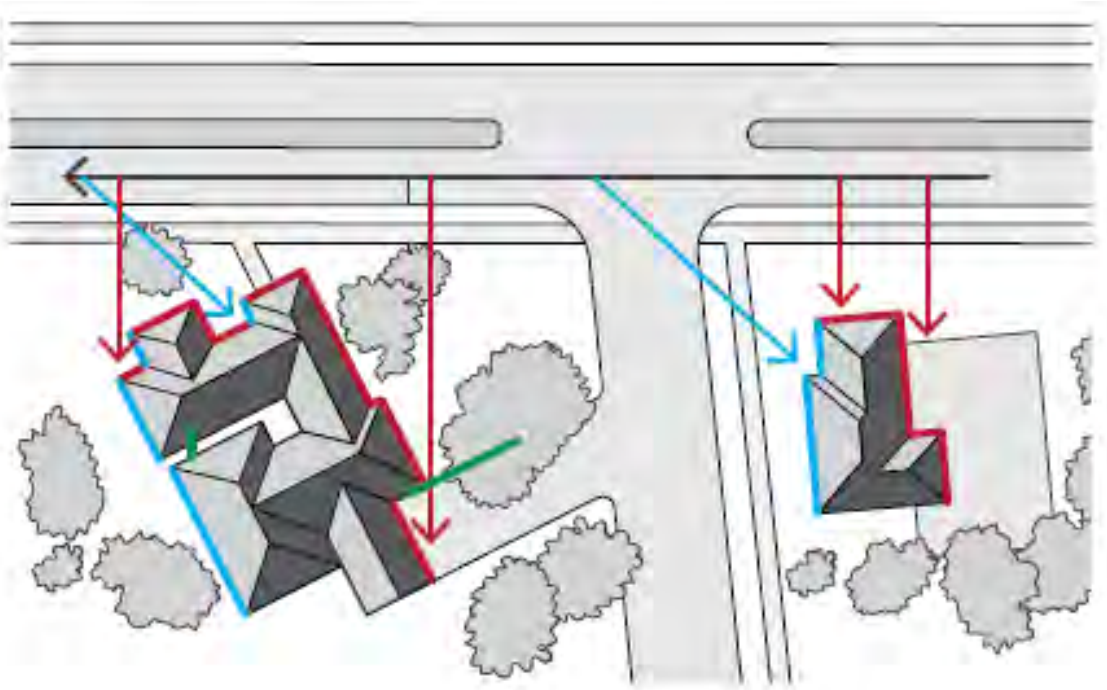
Appendix A – Quiet House Packages

The packages and information provided on the following pages are taken from *Road and Rail Noise Guidelines* (September 2019).

Where outdoor and indoor noise levels received by a noise-sensitive land-use and/or development exceed the policy's noise target, implementation of quiet house requirements is an acceptable solution.

With regards to the packages, the following definitions are provided:

- **Facing** the transport corridor (red): Any part of a building façade is 'facing' the transport corridor if any straight line drawn perpendicular (at a 90 degree angle) to its nearest road lane or railway line intersects that part of the façade without obstruction (ignoring any fence).
- **Side-on** to transport corridor (blue): Any part of a building façade that is not 'facing' is 'side-on' to the transport corridor if any straight line, at any angle, can be drawn from it to intersect the nearest road lane or railway line without obstruction (ignoring any fence).
- **Opposite** to transport corridor (green): Neither 'side on' nor 'facing', as defined above.



Quiet House Package B

59-62 dB $L_{Aeq(Day)}$ & 54-57 dB $L_{Aeq(Night)}$

Element	Orientation	Room	
		Bedroom	Indoor Living and Work Areas
External Glazing	Facing	• Up to 40% floor area ($R_w + C_{tr} \geq 31$): – Fixed sash, awning or casement with minimum 6mm glass or 6mm-12mm-6mm double insulated glazing. • Up to 60% floor area ($R_w + C_{tr} \geq 34$): – Fixed sash, awning or casement with minimum 10mm glass or 6mm-12mm-10mm double insulated glazing.	• Up to 40% floor area ($R_w + C_{tr} \geq 28$): – Sliding or double hung with 6mm-12mm-10mm double insulated glazing; – Sealed awning or casement windows with minimum 6mm glass. • Up to 60% floor area ($R_w + C_{tr} \geq 31$); • Up to 80% floor area ($R_w + C_{tr} \geq 34$).
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	As above, except $R_w + C_{tr}$ values may be 6 dB less or max % area increased by 20%.	
External Doors	Facing	• Fully glazed hinged door with certified $R_w + C_{tr} \geq 31$ rated door and frame including seals and 10mm glass.	• Doors to achieve $R_w + C_{tr} \geq 28$: – 40mm Solid timber core hinged door and frame system certified to R_w 32 including seals; – Fully glazed hinged door with certified $R_w + C_{tr} \geq 28$ rated door and frame including seals and 6mm glass.
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	As above, except $R_w + C_{tr}$ values may be 6 dB less or max % area increased by 20%.	
External Walls	All	• $R_w + C_{tr} \geq 50$: – Two leaves of 90mm thick clay brick masonry with minimum 50mm cavity between leaves and 25mm glasswool or polyester (24kg/m^3). Resilient ties used where required to connect leaves. – Two leaves of 110mm clay brick masonry with minimum 50mm cavity between leaves and 25mm glasswool or polyester insulation (24kg/m^3). – Single leaf of 220mm brick masonry with 13mm cement render on each face. – 150mm thick unlined concrete panel or 200mm thick concrete panel with one layer of 13mm plasterboard or 13mm cement render on each face. – Single leaf of 90mm clay brick masonry with: ▪ A row of 70mm x 35mm timber studs or 64mm steel studs at 600mm centres; ▪ A cavity of 25mm between leaves; ▪ 50mm glasswool or polyester insulation (11kg/m^3) between studs; and ▪ One layer of 10mm plasterboard fixed to the inside face.	
Roofs and Ceilings	All	• $R_w + C_{tr} \geq 35$: – Concrete or terracotta tile or metal sheet roof with sarking and at least 10mm plasterboard ceiling with R3.0+ fibrous insulation.	
Outdoor Living Areas		At least one outdoor living area located on the opposite side of the building from the transport corridor or at least one ground level outdoor living area screened using a solid continuous fence or other structure of minimum 2.4 metres height above ground level.	

Quiet House Package C

63-66 dB $L_{Aeq(Day)}$ & 58-61 dB $L_{Aeq(Night)}$

Element	Orientation	Room	
		Bedroom	Indoor Living and Work Areas
External Glazing	Facing	• Up to 20% floor area ($R_w + C_{tr} \geq 31$): – Fixed sash, awning or casement with minimum 6mm glass or 6mm-12mm-6mm double insulated glazing. • Up to 40% floor area ($R_w + C_{tr} \geq 34$): – Fixed sash, awning or casement with minimum 10mm glass or 6mm-12mm-10mm double insulated glazing.	• Up to 40% floor area ($R_w + C_{tr} \geq 31$): – Fixed sash, awning or casement with minimum 6mm glass or 6mm-12mm-6mm double insulated glazing. • Up to 60% floor area ($R_w + C_{tr} \geq 34$): – Fixed sash, awning or casement with minimum 10mm glass or 6mm-12mm-10mm double insulated glazing.
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	As above, except $R_w + C_{tr}$ values may be 6 dB less or max % area increased by 20%.	
External Doors	Facing	• Not recommended.	• Doors to achieve $R_w + C_{tr} \geq 30$: – Fully glazed hinged door with certified $R_w + C_{tr} \geq 31$ rated door and frame including seals and 10mm glass; – 40mm Solid timber core side hinged door, frame and seal system certified to R_w 32 including seals. Any glass inserts to be minimum 6mm.
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	As above, except $R_w + C_{tr}$ values may be 6 dB less or max % area increased by 20%.	
External Walls	All	• $R_w + C_{tr} \geq 50$: – Two leaves of 90mm thick clay brick masonry with minimum 50mm cavity between leaves and 25mm glasswool or polyester insulation (24kg/m^3). Resilient ties used where required to connect leaves. – Two leaves of 110mm clay brick masonry with minimum 50mm cavity between leaves and 25mm glasswool or polyester insulation (24kg/m^3). – Single leaf of 220mm brick masonry with 13mm cement render on each face. – 150mm thick unlined concrete panel or 200mm thick concrete panel with one layer of 13mm plasterboard or 13mm cement render on each face. – Single leaf of 90mm clay brick masonry with: ▪ A row of 70mm x 35mm timber studs or 64mm steel studs at 600mm centres; ▪ A cavity of 25mm between leaves; ▪ 50mm glasswool or polyester insulation (11kg/m^3) between studs; and ▪ One layer of 10mm plasterboard fixed to the inside face.	
Roofs and Ceilings	All	• $R_w + C_{tr} \geq 40$: – Concrete or terracotta tile roof with sarking, or metal sheet roof with foil backed R2.0+ fibrous insulation between steel sheeting and roof battens; – R3.0+ insulation batts above ceiling; – 2 x 10mm plasterboard ceiling or 1 x 13mm sound-rated plasterboard affixed using steel furring channel to ceiling rafters.	
Outdoor Living Areas		At least one outdoor living area located on the opposite side of the building from the transport corridor or at least one ground level outdoor living area screened using a solid continuous fence or other structure of minimum 2.4 metres height above ground level.	

Mechanical Ventilation requirements

In implementing the acceptable treatment packages, fresh air requirements of the National Construction Code must be satisfied on the basis of windows closed. Whilst not the only solution, the most common is mechanical ventilation / air-conditioning is installed with the following considerations:

- Acoustically rated openings and ductwork to provide a minimum sound reduction performance of R_w 40 dB into sensitive spaces;
- Evaporative systems require attenuated ceiling air vents to allow closed windows;
- Refrigerant based systems need to be designed to achieve National Construction Code fresh air ventilation requirements;
- Openings such as eaves, vents and air inlets must be acoustically treated, closed or relocated to building sides facing away from the corridor where practicable.

Notification

Notifications on title advise prospective purchasers of the potential for noise impacts from major transport corridors and help with managing expectations.

The Notification is to state as follows:

This lot is in the vicinity of a transport corridor and is affected, or may in the future be affected, by road and rail transport noise. Road and rail transport noise levels may rise or fall over time depending on the type and volume of traffic.

Appendix B – Terminology

The following is an explanation of the terminology used throughout this report:

- **Decibel (dB)**

The decibel is the unit that describes the sound pressure levels of a noise source. It is a logarithmic scale referenced to the threshold of hearing.

- **A-Weighting**

An A-weighted noise level has been filtered in such a way as to represent the way in which the human ear perceives sound. This weighting reflects the fact that the human ear is not as sensitive to lower frequencies as it is to higher frequencies. An A-weighted sound level is described as L_A, dB.

- **L_{eq}**

The L_{eq} level represents the average noise energy during a measurement period.

- **L_1**

The L_1 level represents the noise level exceeded for 1 percent of the measurement period and is considered to represent the average of the maximum noise levels measured.

- **L_{10}**

The L_{10} level represents the noise level exceeded for 10 percent of the measurement period and is considered to represent the "intrusive" noise level.

- **L_{90}**

The L_{90} level represents the noise level exceeded for 90 percent of the measurement period and is considered to represent the "background" noise level.

- **$L_{Aeq(Day)}$**

The $L_{Aeq(Day)}$ level is the logarithmic average of the L_{Aeq} levels from 6.00am to 10.00pm.

- **$L_{Aeq(Night)}$**

The $L_{Aeq(Night)}$ level is the logarithmic average of the L_{Aeq} levels from 10.00pm to 6.00am.

- **$L_{A10,18hour}$**

The $L_{A10,18hour}$ level is the arithmetic average of the hourly L_{A10} levels between 6.00am and midnight.

- **$L_{Aeq,24hour}$**

The $L_{Aeq,24hour}$ level is the logarithmic average of the L_{Aeq} levels from over an entire day.

- **Noise-sensitive land use and/or development**

Land-uses or development occupied or designed for occupation or use for residential purposes (including dwellings, residential buildings or short-stay accommodation), caravan park, camping ground, educational establishment, child care premises, hospital, nursing home, corrective institution or place of worship.

- **R_w**

This is the weighted sound reduction index. It is a single number rating determined by moving a grading curve in integral steps against the laboratory measured transmission loss until the sum of the deficiencies at each one-third-octave band, between 100 Hz and 3.15 kHz, does not exceed 32 dB. The higher the R_w value, the better the acoustic performance.

- **C_{tr}**

This is a spectrum adaptation term for airborne noise and provides a correction to the R_w value to suit source sounds with significant low frequency content such as road traffic or home theatre systems. A wall that provides a relatively high level of low frequency attenuation (i.e. masonry) may have a value in the order of – 4 dB, whilst a wall with relatively poor attenuation at low frequencies (i.e. stud wall) may have a value in the order of -12 dB.

- **About the Term 'Reasonable'**

An assessment of reasonableness should demonstrate that efforts have been made to resolve conflicts without comprising on the need to protect noise-sensitive land-use activities. For example, have reasonable efforts been made to design, relocate or vegetate a proposed noise barrier to address community concerns about the noise barrier height? Whether a noise mitigation measure is reasonable might include consideration of:

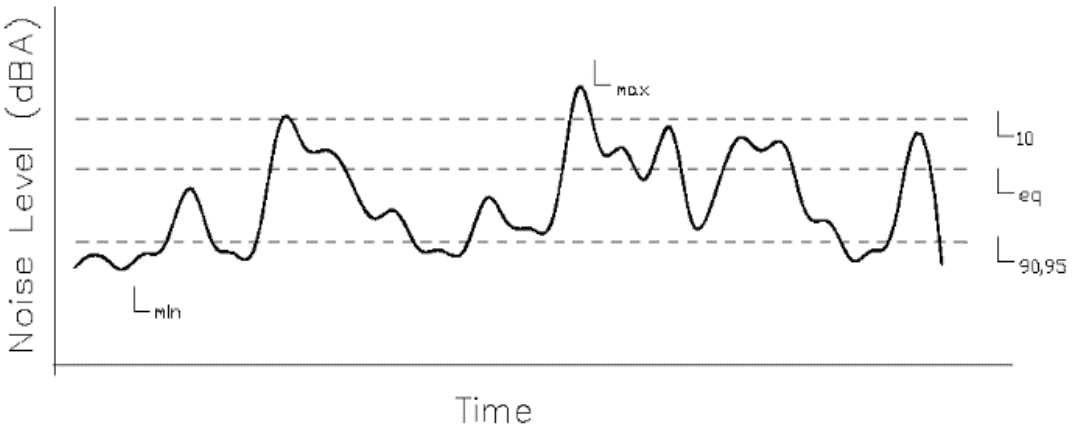
- The noise reduction benefit provided;
- The number of people protected;
- The relative cost vs benefit of mitigation;
- Road conditions (speed and road surface) significantly differ from noise forecast table assumptions;
- Existing and future noise levels, including changes in noise levels;
- Aesthetic amenity and visual impacts;
- Compatibility with other planning policies;
- Differences between metropolitan and regional situations and whether noise modelling requirements reflect the true nature of transport movements;
- Ability and cost for mobilisation and retrieval of noise monitoring equipment in regional areas;
- Differences between Greenfield and infill development;
- Differences between freight routes and public transport routes and urban corridors;
- The impact on the operational capacity of freight routes;
- The benefits arising from the proposed development;
- Existing or planned strategies to mitigate the noise at source.

- **About the Term 'Practicable'**

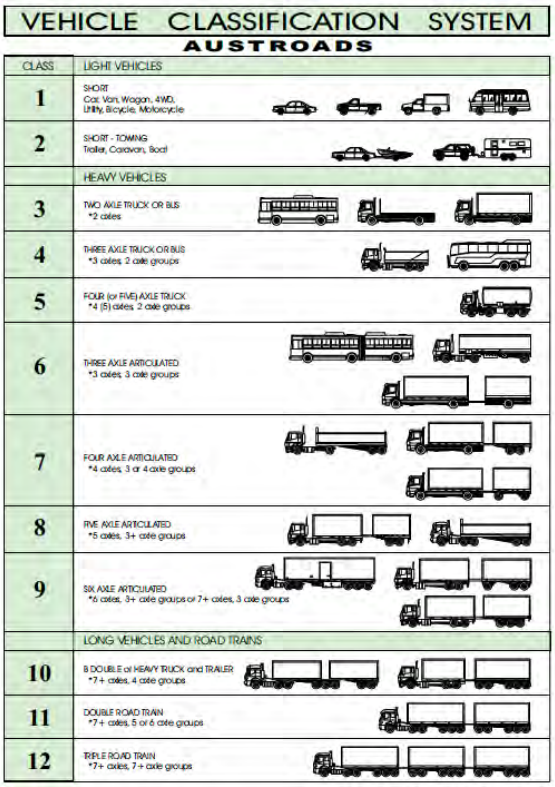
'Practicable' considerations for the purposes of the policy normally relate to the engineering aspects of the noise mitigation measures under evaluation. It is defined as "reasonably practicable having regard to, among other things, local conditions and circumstances (including costs) and to the current state of technical knowledge" (*Environmental Protection Act 1986*). These may include:

- Limitations of the different mitigation measures to reduce transport noise;
- Competing planning policies and strategies;
- Safety issues (such as impact on crash zones or restrictions on road vision);
- Topography and site constraints (such as space limitations);
- Engineering and drainage requirements;
- Access requirements (for driveways, pedestrian access and the like);
- Maintenance requirements;
- Bushfire resistance or BAL ratings;
- Suitability of the building for acoustic treatments.

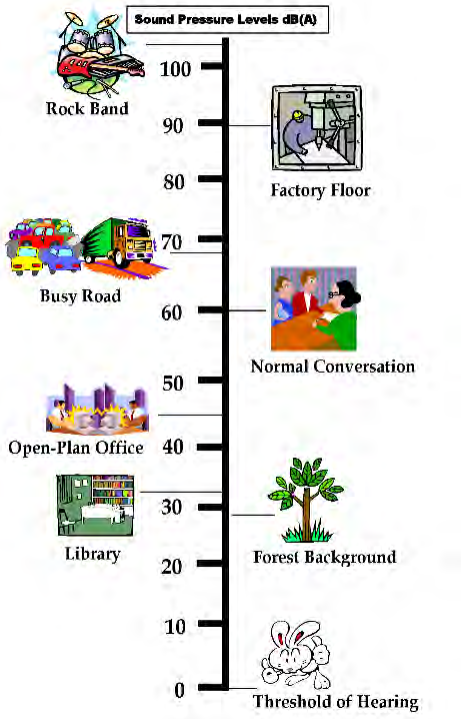
- **Chart of Noise Level Descriptors**



- **Austroads Vehicle Class**



- **Typical Noise Levels**

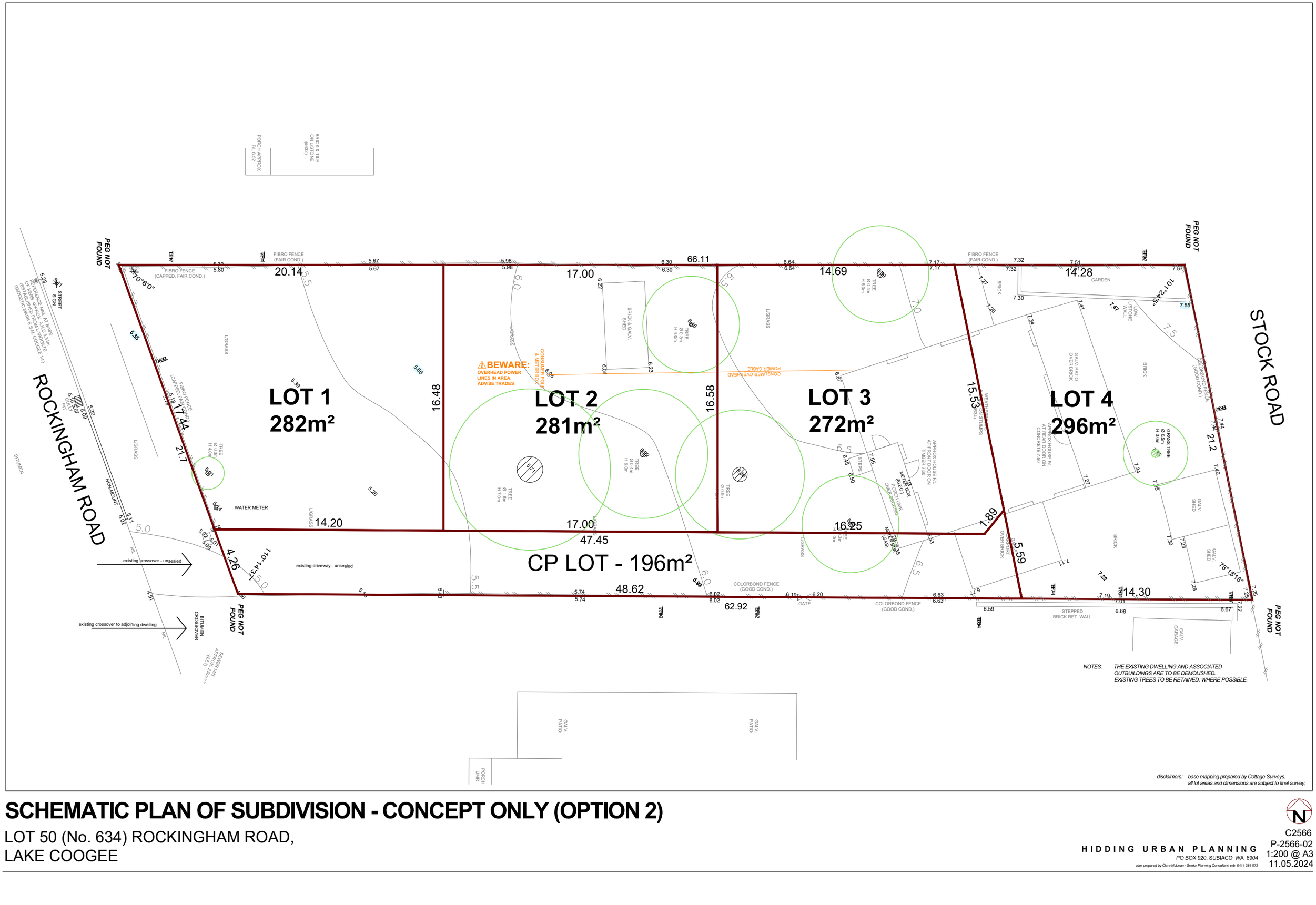


ANNEXURE 5

Conceptual Subdivision Layout

SCHEMATIC PLAN OF SUBDIVISION - CONCEPT ONLY (OPTION 2)

LOT 50 (No. 634) ROCKINGHAM ROAD,
LAKE COOGEE



HIDDING URBAN PLANNING
PO BOX 920, SUBIACO WA 6904
plan prepared by Clare McLean – Senior Planning Consultant, mb: 0414 384 972

C2566
P-2566-02
1:200 @ A3
11.05.2024

ANNEXURE 6

Existing Servicing Infrastructure

WATER CORPORATION

Scale: 1:750 Centre Point: 115.788°, -32.135°

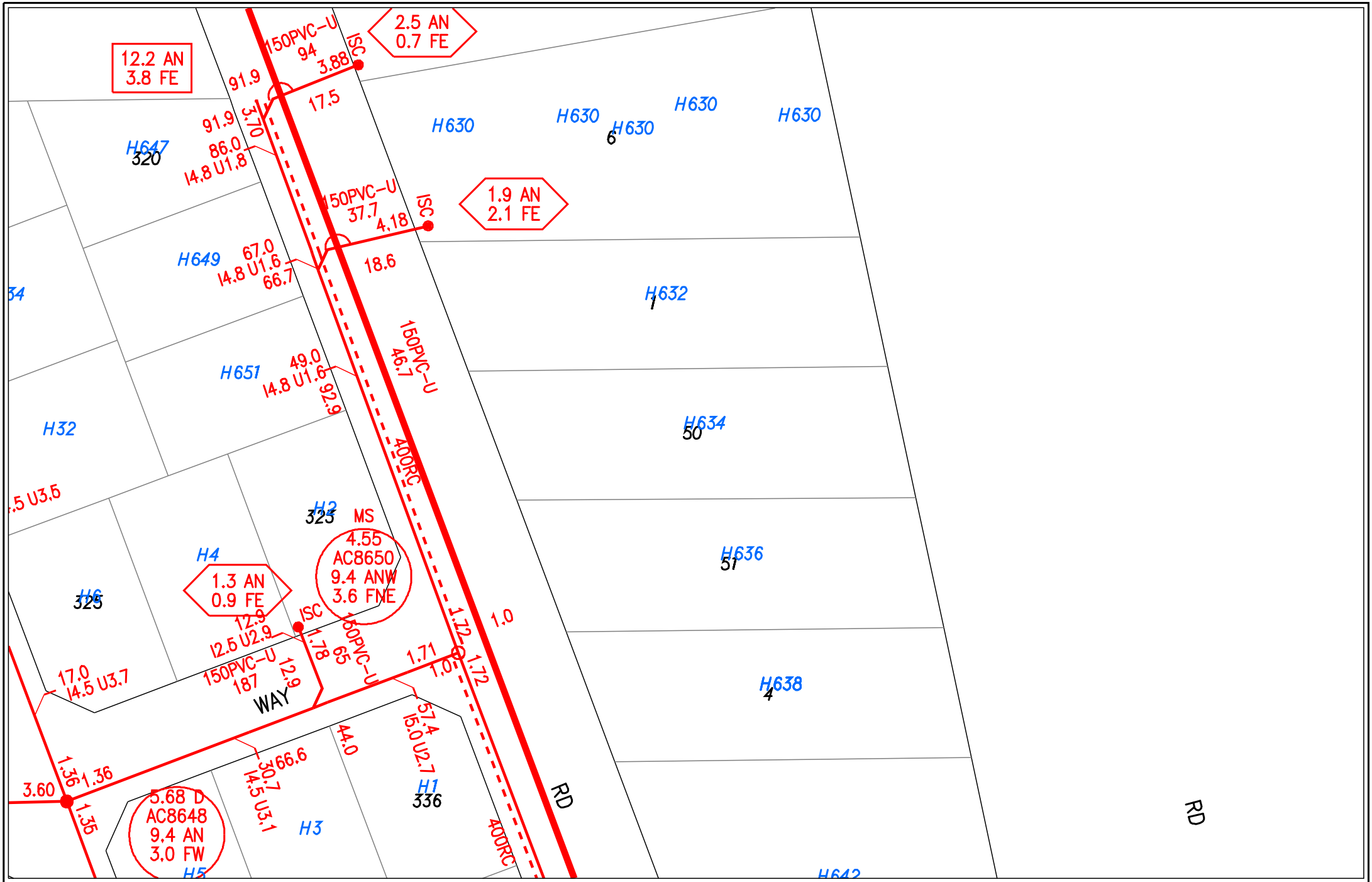
Sequence No: 238653780

Print Date: 01/05/2024 Page: 1 of 1

Water

WARNING - CRITICAL PIPELINE

Refer to *Information Brochure Damage Prevention* and *Legend* for details



WATER CORPORATION

Scale: 1:750 Centre Point: 115.788°, -32.135°

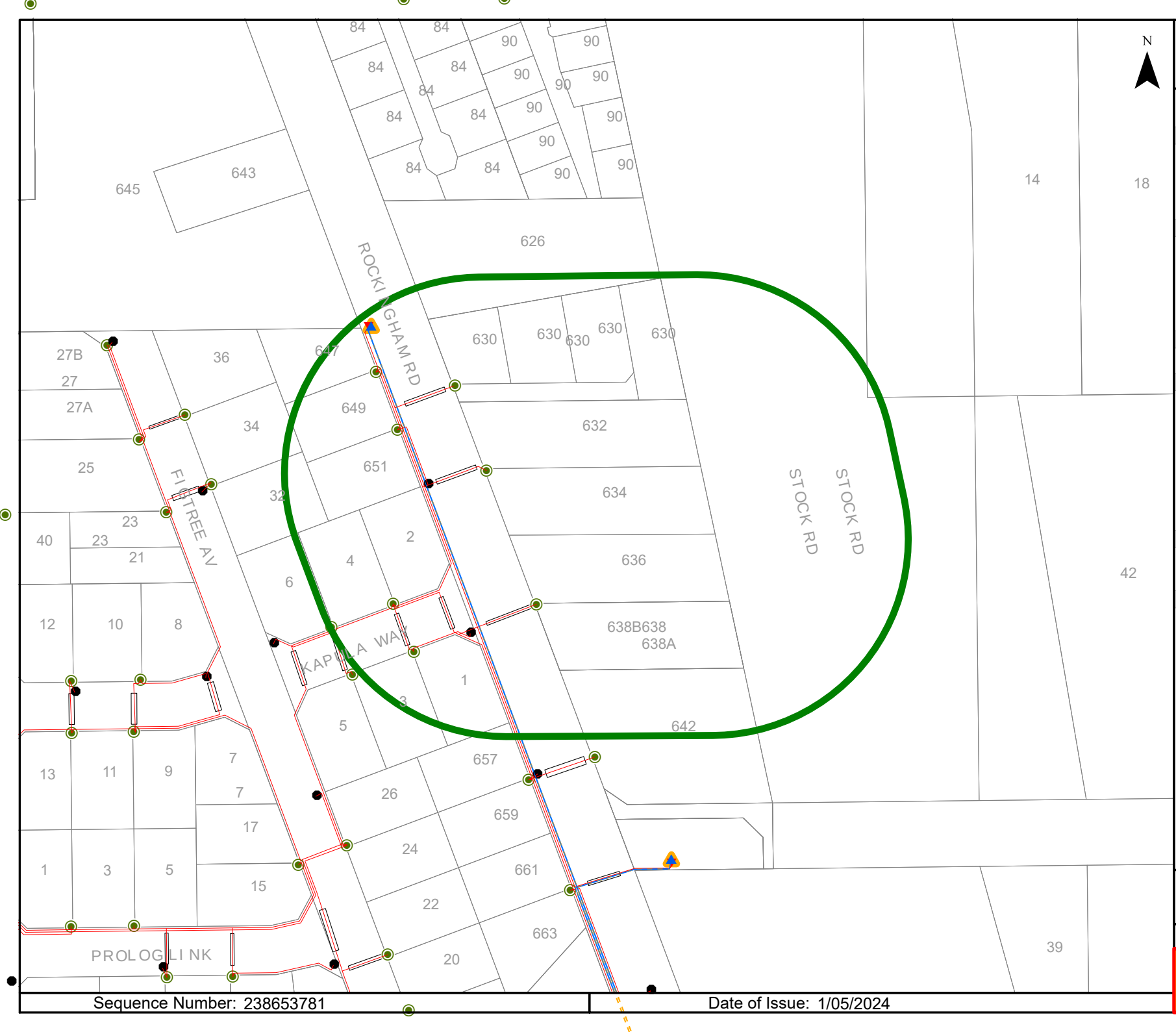
Sequence No: 238653780

Print Date: 01/05/2024 Page: 1 of 1

Sewer

WARNING - CRITICAL PIPELINE

Refer to *Information Brochure Damage Prevention* and *Legend* for details



westernpower

UNDERGROUND LEGEND

Structures

- Pillar
- Metal Pole
- Transformer Site
- UG Crossing *
- Ring Main Unit
- LV Distribution Frame

Distribution Cables

- High Voltage Cable (1kV - 33kV)
- Low Voltage Cable (< 1kV)
- Street Light Circuit (< 1kV)
- Street Light Pilot (< 1kV)
- Earth Wire

Cable Pole Terminations

- HV Termination
- LV Termination

Proposed Construction Assets

- Design Area *
- High Voltage Underground Cable
- Low Voltage Underground Cable
- Metal Pole
- Pillar
- Transformer site
- HV Termination
- LV Termination

State Underground Power Project

- CURRENT Work Area *
- COMPLETED Area *

Feature

- Area of Interest

*** Please refer to coversheet**

Privately owned cables NOT SHOWN (including house services)

This map is INDICATIVE ONLY. Hand exposure via pothole method is MANDATORY.

Telephone Support: 1300 769 345
Mon to Fri - 08:00 to 16:30

Information valid for 30 days from date of issue

A4	Scale : 1:1500

WARNING! Look out for overhead power lines

Sequence Number: 238653781

Date of Issue: 1/05/2024

westernpower

OVERHEAD LEGEND

Structures

- Power Pole
- Transmission Poles

Transmission Overhead Powerline

- Transmission (33kV - 330kV)

Distribution Overhead Powerline

- High Voltage (1kV - 33kV)
- Low Voltage (< 1kV)

Proposed Construction Assets

- Design Area *
- High Voltage Overhead Powerline
- Low Voltage Overhead Powerline
- Power Pole

Communications Assets

- Overhead Pilot Cable

Feature

- Area of Interest

*** Please refer to coversheet**

Privately owned cables NOT SHOWN (including house services)

This map is INDICATIVE ONLY. Check that you have enough clearance from the DANGER ZONES near overhead powerlines.

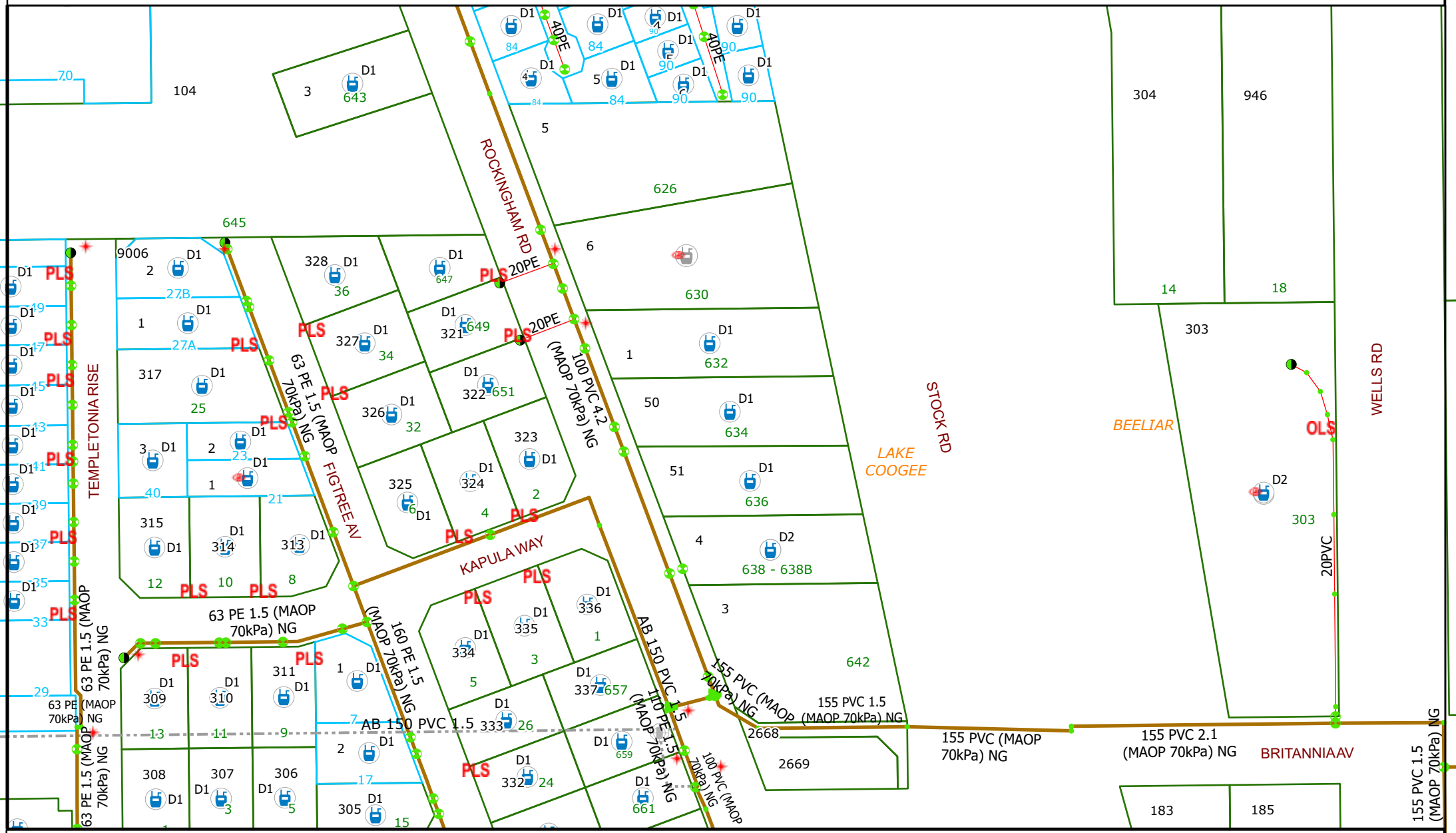
Telephone Support: 1300 769 345
Mon to Fri - 08:00 to 16:30

Information valid for 30 days from date of issue

A4 | Scale : 1:1500

WARNING! Look out for overhead power lines

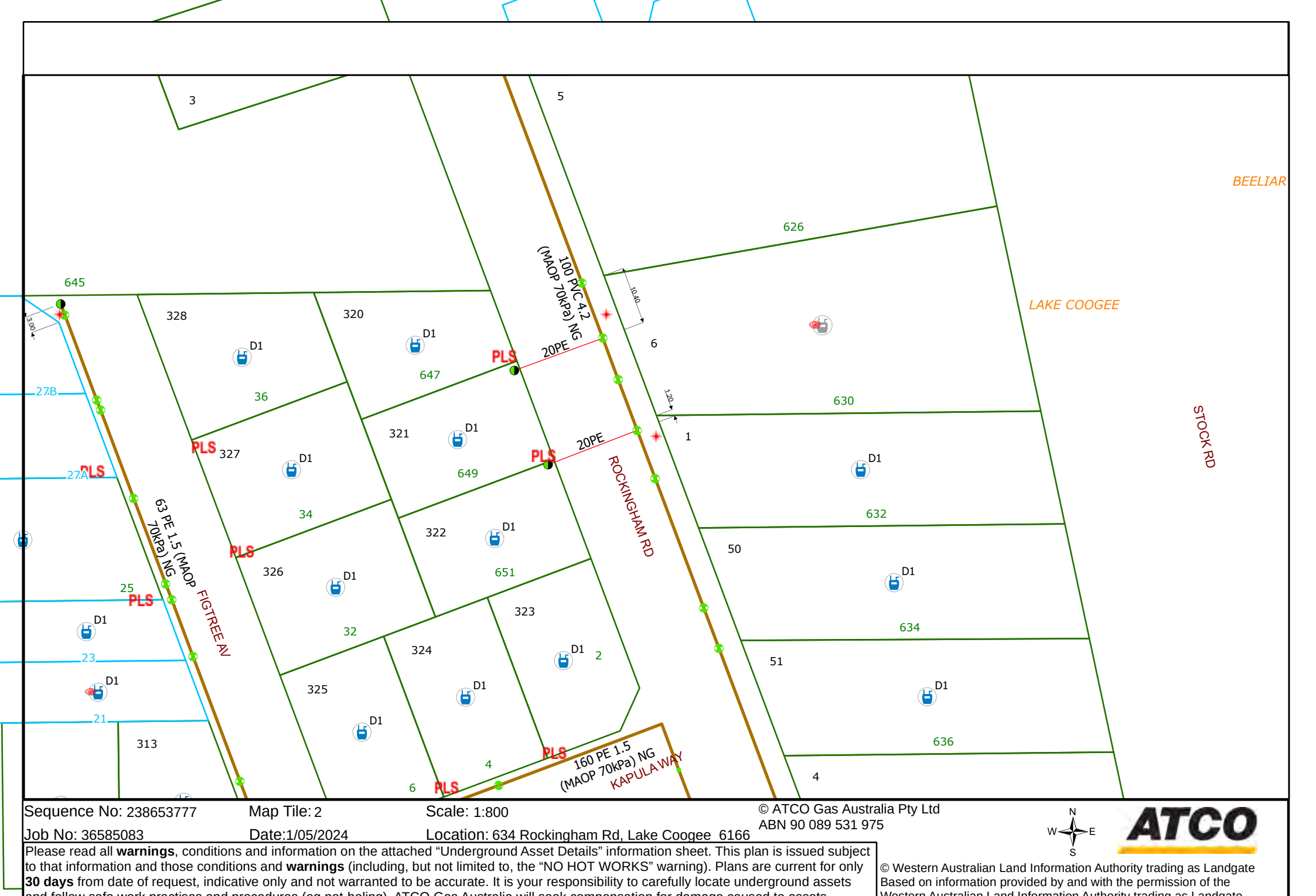
Sequence Number: 238653781 | Date of Issue: 1/05/2024



Sequence No: 238653777 Map Tile: 1 Scale: 1:1500

Job No: 36585083 Date:1/05/2024 Location: 634 Rockingham Rd, Lake Coogee 6166

Please read all **warnings**, conditions and information on the attached "Underground Asset Details" information sheet. This plan is issued subject to that information and those conditions and **warnings** (including, but not limited to, the "NO HOT WORKS" warning). Plans are current for only **30 days** from date of request, indicative only and not warranted to be accurate. It is your responsibility to carefully locate underground assets and follow safe work practises and procedures (eg pot-holing). ATCO Gas Australia will seek compensation for damage caused to assets.



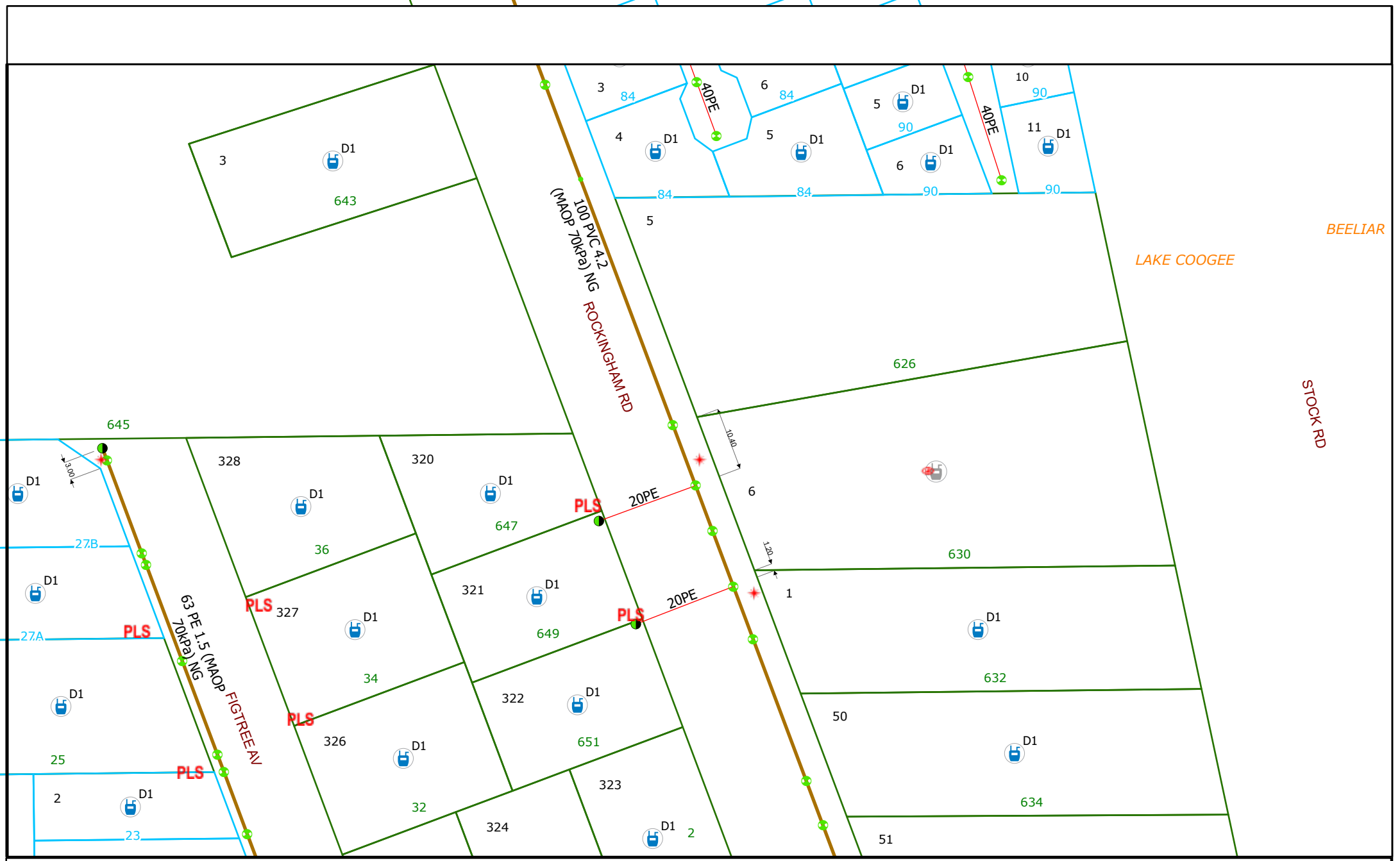
Sequence No: 238653777 Map Tile: 2 Scale: 1:800

Job No: 36585083 Date: 1/05/2024 Location: 634 Rockingham Rd, Lake Coogee 6166

N W E S

ATCO

Please read all **warnings**, conditions and information on the attached "Underground Asset Details" information sheet. This plan is issued subject to that information and those conditions and **warnings** (including, but not limited to, the "NO HOT WORKS" warning). Plans are current for only **30 days** from date of request, indicative only and not warranted to be accurate. It is your responsibility to carefully locate underground assets and follow safe work practises and procedures (eg pot-holing). ATCO Gas Australia will seek compensation for damage caused to assets.



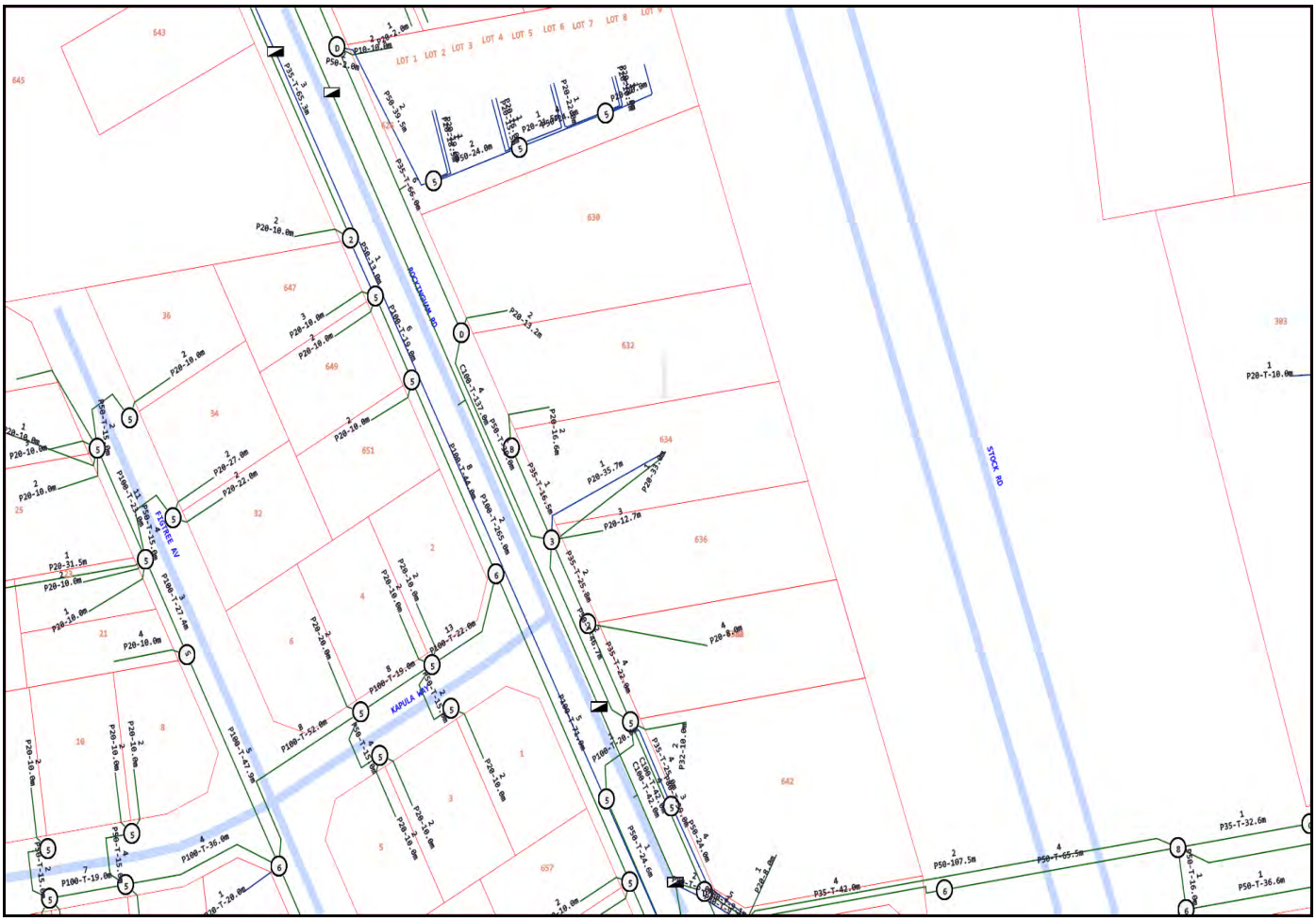
Sequence No: 238653777 Map Tile: 3 Scale: 1:800

Job No: 36585083 Date:1/05/2024 Location: 634 Rockingham Rd, Lake Coogee 6166

Please read all **warnings**, conditions and information on the attached "Underground Asset Details" information sheet. This plan is issued subject to that information and those conditions and **warnings** (including, but not limited to, the "NO HOT WORKS" warning). Plans are current for only **30 days** from date of request, indicative only and not warranted to be accurate. It is your responsibility to carefully locate underground assets and follow safe work practises and procedures (eg pot-holing). ATCO Gas Australia will seek compensation for damage caused to assets.

LEGEND

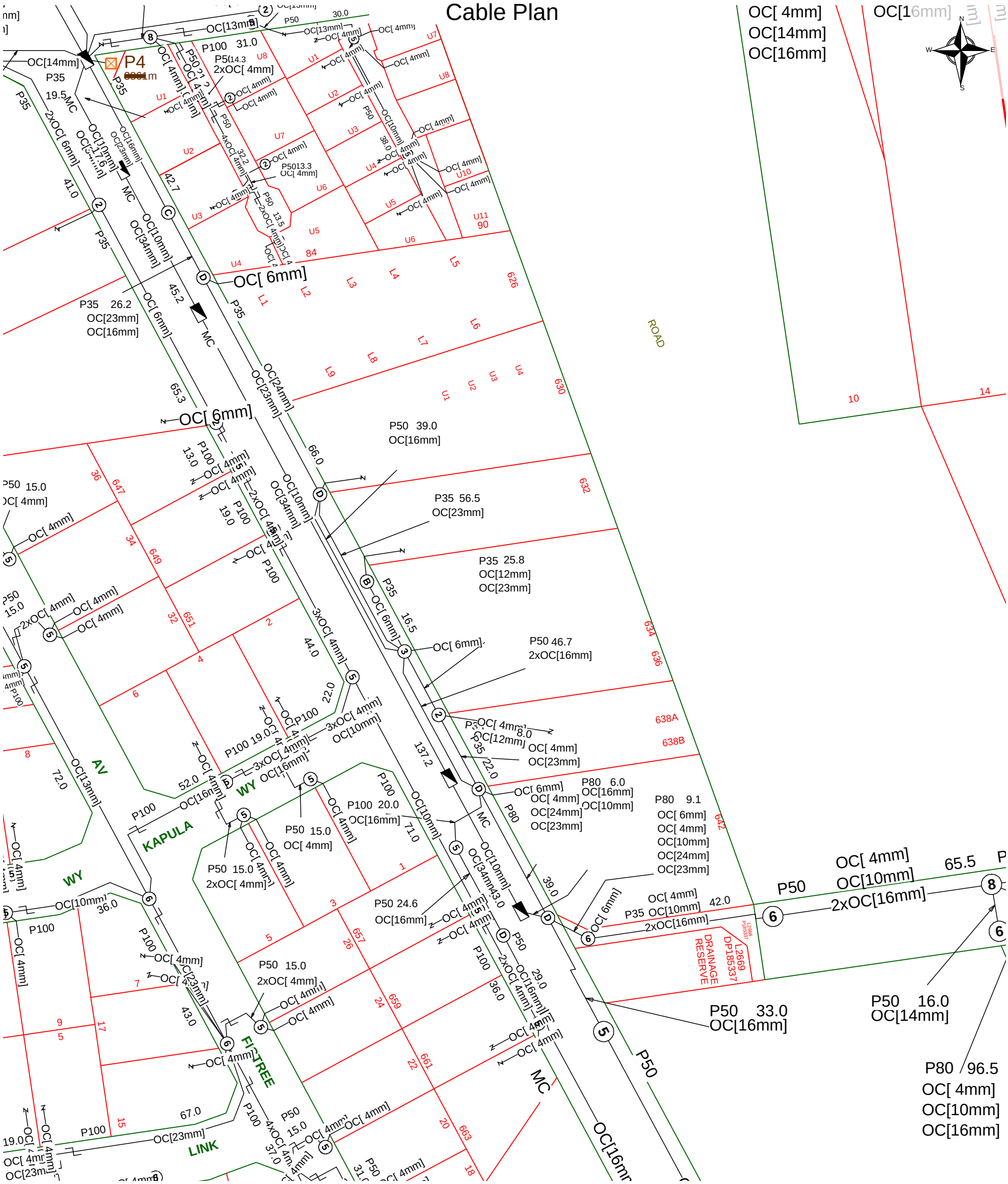
44	Parcel and the location
5	Pit with size "5"
2E	Power Pit with size "2E". Valid PIT Size: e.g. 2E, 5E, 6E, 8E, 9E, E, null.
	Manhole
	Pillar
2 PO – T- 25.0m P40 – 20.0m 5 9	Cable count of trench is 2. One "Other size" PVC conduit (PO) owned by Telstra (-T-), between pits of sizes, "5" and "9" are 25.0m apart. One 40mm PVC conduit (P40) owned by NBN, between pits of sizes, "5" and "9" are 20.0m apart.
2 10.0m 5 9	2 Direct buried cables between pits of sizes ,"5" and "9" are 10.0m apart.
5 9	Trench containing any INSERVICE/CONSTRUCTED (Copper/RF/Fibre) cables.
5 9	Trench containing only DESIGNED/PLANNED (Copper/RF/Fibre/Power) cables.
5 9	Trench containing any INSERVICE/CONSTRUCTED (Power) cables.
BROADWAY ST	Road and the street name "Broadway ST"
Scale	0 20 40 60 Meters 1:2000 1 cm equals 20 m



Emergency Contacts

You must immediately report any damage to the **nbn™** network that you are/become aware of. Notification may be by telephone - 1800 626 329.

Cable Plan



Report Damage: https://service.telstra.com.au/customer/general/forms/report-damage-to-telstra-equipment
Ph - 13 22 03
Email - Telstra.Plans@team.telstra.com
Planned Services - ph 1800 653 935 (AEST bus hrs only) General Enquiries

TELSTRA LIMITED A.C.N. 086 174 781

Generated On 01/05/2024 15:37:25

Sequence Number: 238653782

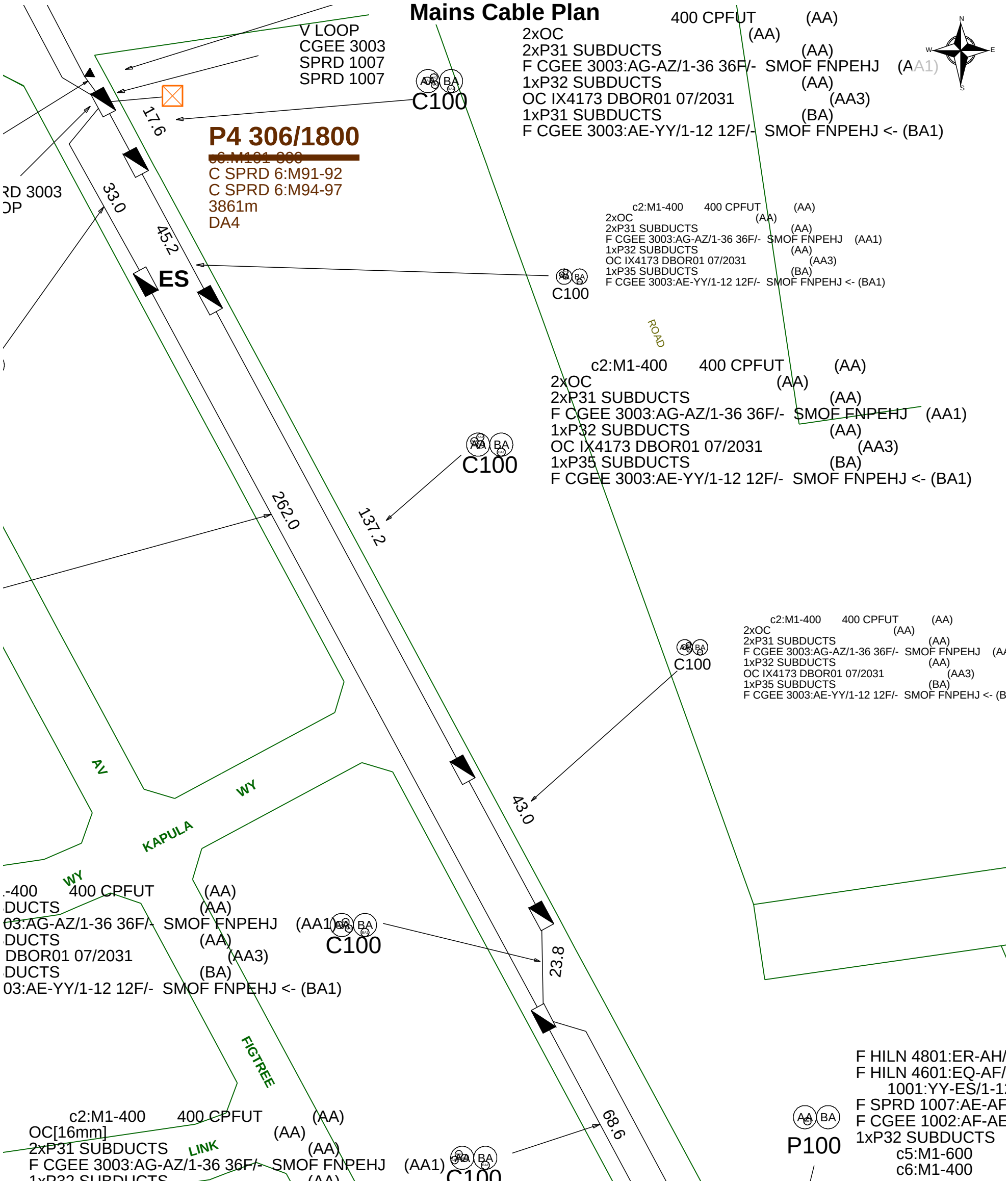
CAUTION: Fibre optic and/ or major network present in plot area. Please read the Duty of Care and contact Telstra Plan Services should you require any assistance.

The above plan must be viewed in conjunction with the Mains Cable Plan on the following page

WARNING
Telstra plans and location information conform to Quality Level "D" of the Australian Standard AS 5488-Classification of Subsurface Utility Information.
As such,Telstra supplied location information is indicative only.Spatial accuracy is not applicable to Quality Level D.
Refer to AS 5488 for further details. The exact position of Telstra assets can only be validated by physically exposing it.
Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy.
Further on site investigation is required to validate the exact location of Telstra plant prior to commencing construction work.
A Certified Locating Organisation is an essential part of the process to validate the exact location of Telstra assets and to ensure the asset is protected during construction works.

See the Steps- Telstra Duty of Care that was provided in the email response.

Mains Cable Plan



Report Damage: https://service.telstra.com.au/customer/general/forms/report-damage-to-telstra-equipment
Ph - 13 22 03
Email - Telstra.Plans@team.telstra.com
Planned Services - ph 1800 653 935 (AEST bus hrs only) General Enquiries

TELSTRA LIMITED A.C.N. 086 174 781

Generated On 01/05/2024 15:37:27

Sequence Number: 238653782

CAUTION: Fibre optic and/ or major network present in plot area. Please read the Duty of Care and contact Telstra Plan Services should you require any assistance.

WARNING
Telstra plans and location information conform to Quality Level "D" of the Australian Standard AS 5488-Classification of Subsurface Utility Information.
As such,Telstra supplied location information is indicative only.Spatial accuracy is not applicable to Quality Level D.
Refer to AS 5488 for further details. The exact position of Telstra assets can only be validated by physically exposing it.
Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy.
Further on site investigation is required to validate the exact location of Telstra plant prior to commencing construction work.
A Certified Locating Organisation is an essential part of the process to validate the exact location of Telstra assets and to ensure the asset is protected during construction works.

See the Steps- Telstra Duty of Care that was provided in the email response.

Sequence Number: 238653776

Date Generated: 01 May 2024

For all Optus DBYD plan enquiries –
Email: Fibre.Locations@optus.net.au
For urgent onsite assistance contact 1800 505 777
Optus Limited ACN 052 833 208