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**North Maclean Lot 7 & 8 Industrial Subdivision
Civil Engineering Report**

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Appendix D – Civil Engineering Preliminary Bulk Earthworks plan set (BE220566-02)





1. Introduction

Roubaix Properties Pty Ltd (Roubaix) has commissioned Burchills Engineering Solutions (Burchills) to prepare this Civil Engineering Report in support of a Development Application (DA) for a Reconfiguring a Lot (RoL) to facilitate a 17-lot industrial subdivision, submitted to Economic Development Queensland (EDQ). The proposed North Maclean Industrial development is located at Lot 7 and 8 on RP137101, encompassing the addresses 4745-4759 and 4761-4773 Mount Lindesay Highway, North Maclean.

This report assesses the suitability of the site for the proposed development with respect to civil engineering design parameters and site constraints. The development can be executed in compliance with the current Logan City Council (LCC) guidelines, South East Queensland (SEQ) Water Supply and Sewerage Design and Construction Code, and best management practices.

1.1 Scope of Report

This report describes the existing physical conditions of the site, and suitability for the proposed development with particular respect to:

- Project Identification;
- Proposed Development;
- Site Earthworks;
- Roadworks, Access and Traffic;
- Stormwater Drainage;
- Water Supply;
- Sewer Reticulation; and
- Electricity and Telecommunications Supply.

This report represents an assessment of the relevant facts and circumstances pertaining to these matters as known at the time of preparation.



2. Project Identification

2.1 Real Property Description

The site, legally described as Lots 7 and 8 RP137101, is located at 4745-4759 and 4761-4773 Mount Lindesay Highway, North Maclean. The combined rectangular site covers approximately 8.20 hectares.

A detailed site survey has been undertaken by Sunrise Surveying and is included within Appendix A of this report. The location of the subject site is shown on Figure 2.1 below.

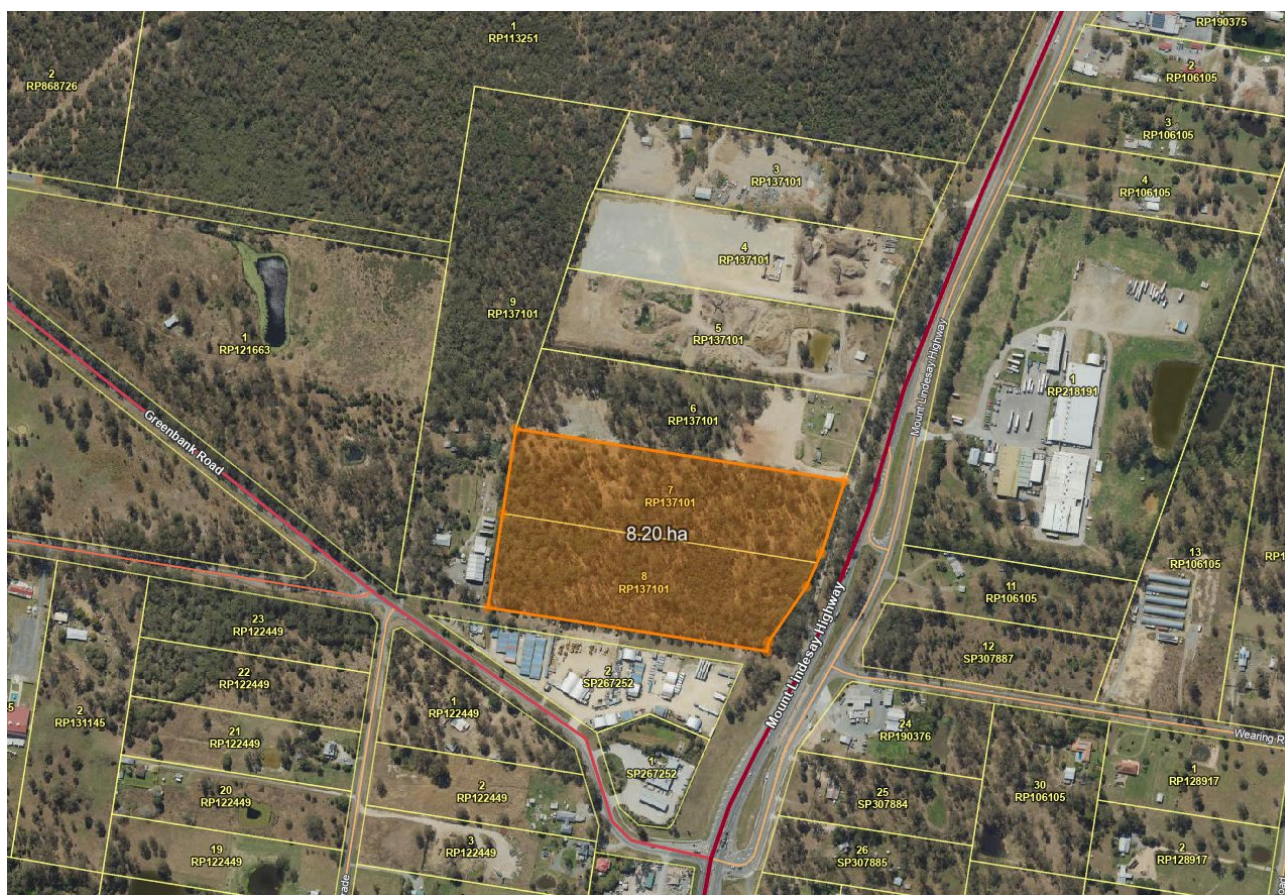


Figure 2.1 Site Locality Plan

2.2 Physical Description

The site is accessed from Mount Lindesay Highway service road, an existing road which fronts the eastern boundary of the subject site.

The subject site is mostly flat, ranging from RL26 mAHD to RL29 mAHD. Current features of the site include:

- Lot 7 is covered with trees and vegetation.
- Lot 8 is covered with trees and vegetation.

The subject site is located within the Great Flagstone Priority Development Area (PDA).

The site is bounded by the following existing land uses:

North: Lot 6 on RP137101 Vacant Land:

East: Mount Lindsay Highway;



South: Lot 2 on SP267252 Industrial business; and
West: Lot 9 on RP137101 Industrial supplier/business.





3. Proposed Development

The subject site falls within the Greater Flagstone PDA, which is controlled by EDQ. The Context Plan indicates that the site is within an industrial and business zone as shown in Figure 3.1.

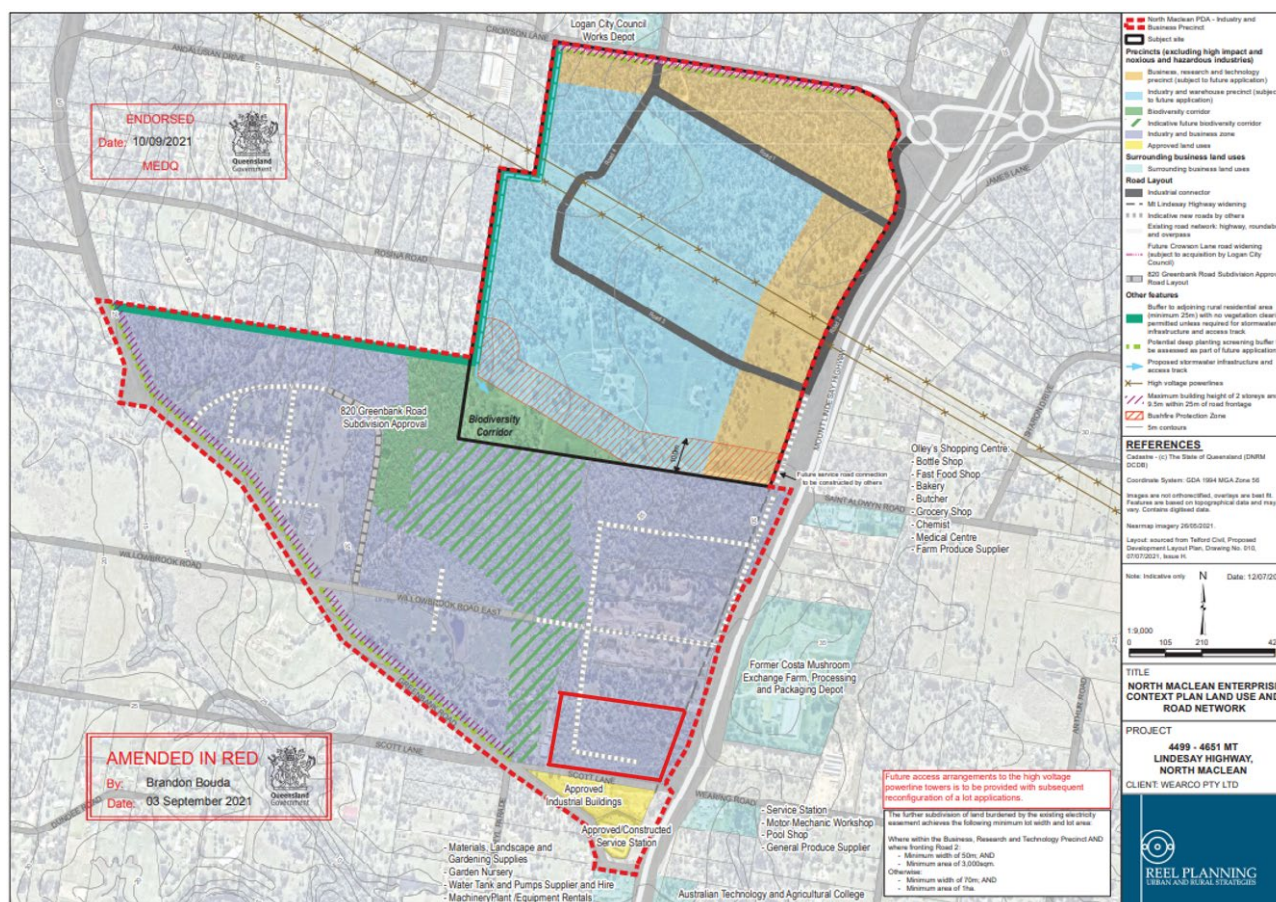


Figure 3.1 Subject Sites within Industrial and Business Zone

Based on the SEQ Water Supply and Sewerage Design & Construction Code (SEQ WS&S D&C Code), the Equivalent Tenements (ET) and Equivalent Population (EP) for the proposed industrial development over Lot 7 and Lot 8 (combined area of 8.2 ha) are summarised in Table 3.1.

The EP has been calculated assuming a maximum Gross Floor Area (GFA) of 50% site coverage per lot. This is a conservative assumption, given that the Logan City Council (LCC) Planning Scheme allows for a maximum total site cover of 80%, including building footprint, car parking, landscaping, and associated hardstands.

Table 3.1 Development Summary

Use	Unit	Total Units (m ²)	EP/Unit	Total EP
Industrial	GFA	41,000	0.97 EP per 100m ² GFA	398

Notes:

- The total GFA equates to 50% of the combined site area (i.e., 8.2 ha × 10,000 m²/ha × 0.5 = 41,000 m²).
- The EP conversion rate of 0.97 EP/100 m² GFA is in accordance with Table F2.1 of the SEQ WS&S D&C Code.

Refer to Drawing BE220566-DA-C1101 in Appendix C for the lot layout and road network.





4. Site Earthworks

Two complementary civil earthworks plan sets have been prepared for the development to facilitate staged delivery and protect overall program timing:

- a) Bulk Earthworks plan set (BE220566-02), which defines a standalone earthworks footprint, sediment and erosion controls, and a self-draining interim earthworks pad capable of being delivered independently of road and service infrastructure; and
- b) Reconfiguring a Lot (ROL) civil plan set (BE220566-DA), which defines the ultimate lot layout, internal road reserves, and servicing corridors required for the final industrial subdivision outcome.

This separation enables bulk earthworks to be staged independently of final road and trunk infrastructure delivery, ensuring the earthworks platform is compliant, stable and self-draining prior to delivery of the ultimate subdivision works.

Earthworks volumes

The Bulk Earthworks plan set (BE220566-02, Drawing C2101 Rev B) identifies approximately 93,669 m³ of imported structural fill to establish a compliant interim earthworks pad and drainage framework suitable for staged construction sequencing.

The Reconfiguring a Lot (ROL) civil plan set (BE220566-DA, Drawing C2101 Rev C) identifies a further 44,198 m³ of imported structural fill associated with refinement of finished surface levels, internal road reserves, and servicing corridors for the ultimate subdivision layout.

Accordingly, the total imported fill volume across the full development program is approximately 137,867 m³.

These volumes are delivered in stages and are not duplicative in construction intent, with the bulk earthworks stage establishing the primary fill platform and the ROL stage refining levels and interfaces required for the final subdivision outcome.

Vegetation clearing (context only)

Vegetation clearing required to facilitate bulk earthworks will be undertaken under a separate Operational Works approval and associated management plans. This Civil Engineering Report does not seek approval for vegetation clearing.

4.1 Sediment and Erosion Control

The best management practices will be implemented according to the IECA Best Practice Erosion and Sediment Control (2008) guidelines.

The following is a procedure of water quality controls to be implemented for the construction stage of the development.

4.1.1 Phase 1 – Pre-Earthworks and Site Preparation (post-access availability)

Construction sequencing and access arrangements for bulk earthworks and any associated external infrastructure will be confirmed through separate Operational Works approvals, having regard to the availability of the surrounding road network at the time of construction.

- Identify and mark all trees to be retained and erect exclusions zones.
- Prior to any demolition, stripping or bulk earthworks on site, sediment fences, inlet traps, gully protection and entry/exit pad shall be put in place.





- A wash-down area and entry/exit pad will be provided at the construction site entrance to minimise the amount of sediment being tracked off the site.
- The wash down area will be drained to a suitable sediment capture device installed downstream of the construction entry.
- Sediment fences are to be installed along the downstream property boundaries prior to stripping and earthworks commencing.
- Construct an appropriately sized sediment basin for the development.
- If refueling of machinery is to occur on site, appropriate absorbent products for cleaning oil spills will be provided.
- Provide bins on site for the disposal of waste and building debris.
- All fresh water upstream of disturbed areas and stockpiles is to be diverted around the disturbed area to minimise the amount of sediment mobilization.
- If it is anticipated that stockpiled material will not be used for a period of two weeks or more, a polythene cover (or equivalent) shall be used to prevent sediment transport by rain during wet periods. Conversely during dry spells a cover shall be used to prevent fine sediments becoming airborne.
- The contractor shall provide on-going maintenance of sediment and erosion control devices around the site.
- The contractor is to stage all works so that disturbed areas remain exposed for a short a period as practicable.

Measures to minimise airborne pollutants during construction in the form of dust during dry and/or windy weather shall include the following:

- Exposed soils shall be kept damp to prevent particulates becoming airborne; and
- Stockpiles exposed for more than two weeks shall be covered to prevent wind erosion.

4.1.2 Phase 2 – Infrastructure, Building and Roadworks

Phase 2 works will be undertaken following completion of bulk earthworks and will include internal road construction and subdivision infrastructure in accordance with the ROL layout.

- The site stormwater pipes and pits shall be installed with drop inlets provided to all pits.
- Provide sediment fences, sandbags or fine mesh cover to all gully pits.
- Monitoring of new stormwater pipes and infrastructure (including the storm water quality improvement devices) to ensure they are free of sediment and debris.
- Maintain shake down and wash down area at entry/exit.
- All disturbed areas are to be surfaced or landscaped/grassed (maintained to minimum 70% ground cover) as soon as practicable after completion of localized works.

4.1.3 Phase 3 – Finishing Works and Defects Liability Period

All erosion and sediment control measures, including sediment fences and inlet traps shall be maintained until completion of surface finishes including landscaping and turfing:

- Maintain sediment fences.
- Tend to landscaped areas to maintain ground cover.





5. Roadworks and Access

Access to the development will be provided via the ultimate service road (Road R047), which forms part of the planned service road network in the North Maclean area. No direct access to Mount Lindesay Highway is proposed.

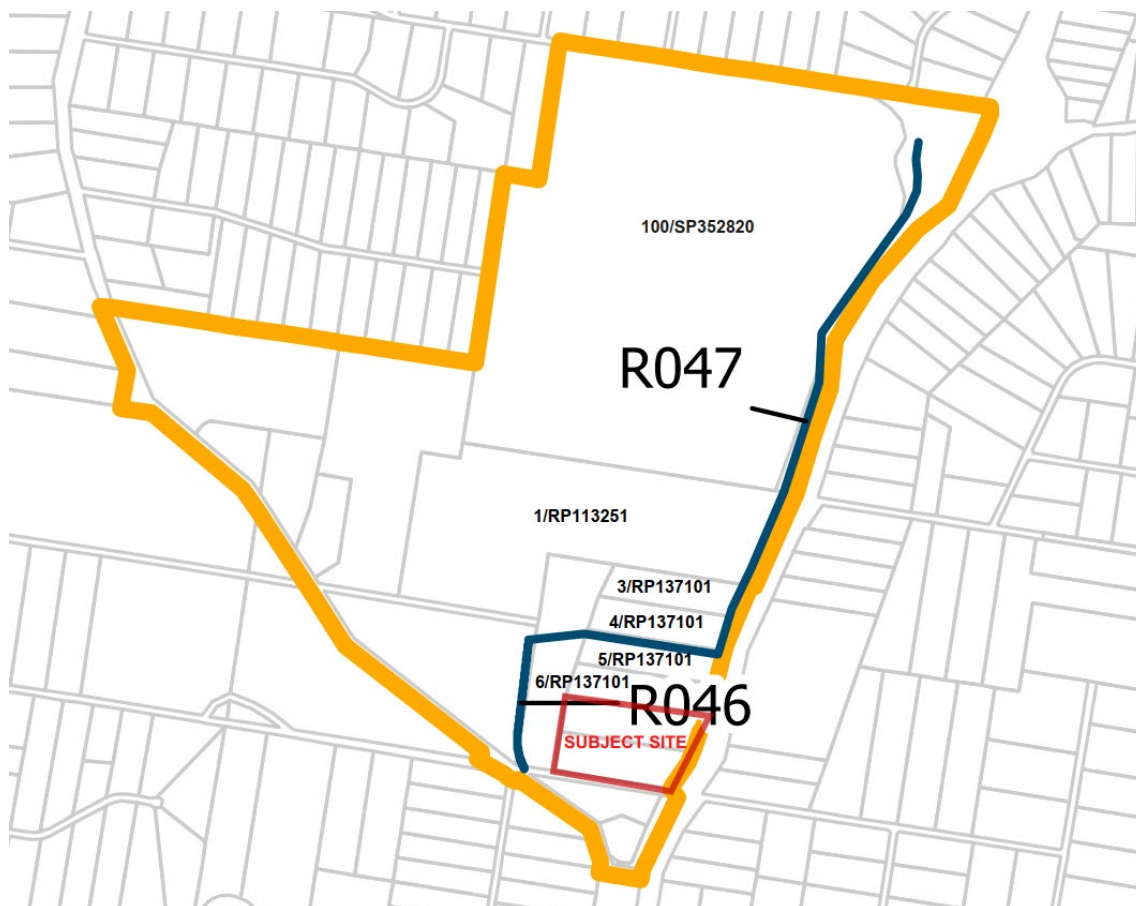


Figure 5.1 North Maclean DCOP Trunk Access (R047 Alignment)

Road R047 and R046 form part of the planned service road network for North Maclean. The alignment and configuration of these roads have been refined through the approved Infrastructure Masterplan under DEV2024/1558, which represents an approved variation to the indicative DCOP layout to achieve cost efficiencies, constructability improvements and coordinated delivery outcomes across adjoining landholdings.

The layout is consistent with the approved North Maclean structure planning framework and reflects the configuration supported under the Preliminary Approval over Lots 3–6 (DEV2024/1558).

The internal road layout will provide access to each of the proposed lots via left-in / left-out lot access arrangements from the internal road network. The internal road design allows for two-way movement and swept paths for heavy vehicles, with pavement widths and verge allocations sized to accommodate future industrial access requirements. Road reserves will accommodate stormwater, electrical and telecommunications infrastructure, including PMT access.

Refer to Drawing C1101 and C3201 in Appendix C for conceptual road layout and longitudinal section.

Any temporary or construction access that may be required to facilitate delivery of Road R047, trunk infrastructure or bulk earthworks would be subject to separate assessment and approval by the relevant





authorities, including Transport and Main Roads and Economic Development Queensland, and would be addressed at the appropriate operational works stage if required.

5.1 Trunk Infrastructure Delivery Framework (DCOP / SIRA / SRIP / ICN)

The proposed subdivision has been planned having regard to the Greater Flagstone PDA Development Contributions and Infrastructure Plan (DCOP) and the approved Infrastructure Master Plan, which together establish the intended sub-regional trunk infrastructure network for the North Maclean precinct.

The DCOP provides the strategic identification of trunk infrastructure, including the service road network (Road R047 / R046), trunk water, and trunk sewer infrastructure. The approved Infrastructure Master Plan (approved under DEV2024/1558) refines the indicative DCOP alignment and configuration of this infrastructure to achieve improved constructability, cost efficiency, and coordinated delivery across adjoining landholdings, while remaining consistent with the DCOP's intent and functional outcomes.

Delivery of sub-regional trunk infrastructure within North Maclean operates within the established SIRA / SRIP framework, whereby infrastructure charges (ICN) are collected from approved development and applied toward the delivery of trunk infrastructure by the relevant delivery authorities, with delivery, reimbursement and sequencing occurring in accordance with the applicable agreements and approvals.

This Civil Engineering Report does not seek to vary infrastructure responsibilities or pre-determine third-party delivery timing. Rather, it records that the subdivision layout, access configuration and servicing strategy have been designed consistently with the approved Infrastructure Master Plan and the broader DCOP / SIRA / SRIP framework, with detailed delivery, timing and construction matters to be addressed through separate operational works and servicing authority approvals as required.





6. Flooding and Stormwater Drainage

6.1 Flooding

A Hydraulic Impact Assessment (HIA-02, BE220566-RP-HIA-02) has been prepared for the proposed development in response to EDQ's Outstanding Matters and assesses flooding impacts against the 1% Annual Exceedance Probability (AEP) Defined Flood Event (DFE) at the 2100 climate change horizon, consistent with the assessment benchmark applied by EDQ at the time of assessment, including reference to Logan City Council Temporary Local Planning Instrument No. 1/2024.

The local hydraulic model indicates only minor increases in flood levels in select locations (up to approximately 50 mm) external to the site, with no increase in flood extent, confirming that flood behaviour remains consistent with existing conditions. Modelling results show that water level increases in the modelled events do not result in increased flood levels on existing dwellings / buildings or areas zoned for redevelopment.

The regional hydraulic assessment identifies substantially lower impacts, with increases in flood levels of up to approximately **12 mm** in the 1% AEP climate change regional event. No increase in flood extent is identified in the regional model.

Based on updated local and regional hydraulic modelling documented in HIA-02, flood depths across the subject site in the 1% AEP climate change event are below 0.5 m, being the threshold used to define the High Flood Risk Area under the flood hazard mapping applied by EDQ at the time of assessment (including TLPI No. 1/2024). Accordingly, the development footprint does not meet the criteria for classification as High Flood Risk.

6.1.1 State-Controlled Road (Mount Lindesay Highway)

The Hydraulic Impact Assessment (HIA-02) identifies a localised increase in water level of up to approximately 40 mm within the Mount Lindesay Highway road verge only under the local 1% AEP climate change event. This increase is confined to the verge area, does not encroach into traffic lanes, and retains low hazard characteristics ($d \cdot v < 0.15 \text{ m}^2/\text{s}$). No increase in flood extent is identified within the State-controlled road corridor, and no increase in water levels is modelled on Mount Lindesay Highway in the regional 1% AEP climate change event.

It is noted that the HIA-02 identifies that swale drainage works originally intended to be constructed as part of prior Transport and Main Roads (TMR) safety improvement works along Mount Lindesay Highway were not fully implemented, and that this incomplete drainage connectivity contributes to minor localised verge-level ponding currently observed and represented in the hydraulic model. The identified increases in verge water levels therefore reflect existing drainage limitations, rather than any material change to flood behaviour caused by the proposed development.

The proposed service road (Road R047) has been designed with finished levels above the 1% AEP climate change flood level, providing flood-free access to and from the site in the design event. The service road alignment and levels also enable improved verge drainage connectivity as part of its construction, including opportunities to tie into existing and future drainage infrastructure within the TMR corridor.

Under future service road construction and any Mount Lindesay Highway upgrade works, localised ponding within the verge will be alleviated through standard construction methodologies, including swale continuity, verge grading refinement, and connection of drainage features to downstream structures. Given the very small magnitude of the predicted impacts ($\leq 40 \text{ mm}$), these changes are considered to fall within typical survey accuracy, hydraulic modelling tolerance, and construction variability, and do not represent a material or adverse impact.





On this basis, the minor, localised verge-level changes identified in the HIA-02 do not compromise the safety, function, or future upgrade capacity of the State-controlled road, and are considered non-adverse.

6.1.2 Stormwater Drainage

The stormwater drainage strategy for the site is based on capturing and conveying both minor and major flows to lawful points of discharge in accordance with the Queensland Urban Drainage Manual (QUDM) and EDQ Guideline 13.

Road drainage will be captured via kerb inlets and conveyed through an underground pit and pipe network to verge-located tree biofilter pods, consistent with Brisbane City Council Standard Drawings BSD-8339 and BSD-8340. These elements provide integrated conveyance and water quality treatment outcomes within the road reserve.

Overland flow associated with larger storm events will be accommodated within the internal road reserves and the western drainage reserve, which also functions as a major overland flow path for upstream catchments. This arrangement ensures flood conveyance is maintained and avoids adverse impacts to adjoining land and infrastructure.

Stormwater runoff from roof areas and hardstand surfaces will be managed in accordance with a consolidated, site-wide stormwater management strategy to be confirmed in the updated Conceptual Stormwater Management Plan (CSMP). The CSMP will demonstrate compliance with EDQ Guideline 13 for both quantity and quality treatment across the fully developed site and will confirm how treatment outcomes are achieved in an integrated manner.

Detailed stormwater treatment and detention requirements for individual buildings will be addressed at the Material Change of Use and building approval stage, where site-specific design solutions can be appropriately conditioned and optimised having regard to the final built form, tenancy layout and impervious areas, while remaining consistent with the overarching CSMP and approved drainage framework.

All future stormwater discharge points will be designed in accordance with QUDM Table 9.4.1, with no direct discharge to Mount Lindesay Highway. Flows from the internal road network will be directed to perimeter swales along the eastern and southern boundaries and ultimately discharged to the western drainage reserve at the rear of the site.

Refer to Drawing C5101 in Appendix C for the conceptual stormwater drainage layout and indicative location of tree biofilter pods.

The bulk earthworks stage is designed to be self-draining, with temporary grades, swales, and level spreaders directing runoff to lawful discharge points independently of the ultimate internal road drainage network, thereby enabling staged earthworks delivery without reliance on service infrastructure timing.





7. Water Supply

The subject site is proposed to be serviced by a new 300mm trunk water main along the eastern site boundary. This proposed trunk infrastructure forms part of EDQ's planned water supply for Greater Flagstone as shown in Figure 7.1. The water supply connection is proposed to be made from the approved network within Maclean Estate (Lot 1 on RP113251), located to the north of the subject site, under approval DEV2022/1315/2. The proposed trunk water main will extend only to the western boundary of Lots 4 and 5, as the adjoining land is privately owned. A future extension beyond Lot 5 will be necessary to service the remainder of the site. Each lot will receive a service connection as a registered freehold industrial lot. Internal site water distribution will be addressed in future material change of use, reconfiguration of a lot (ROL), and/or building use applications.

The proposed 300 mm trunk water main is part of EDQ's endorsed water network for the Greater Flagstone PDA and is shown in the approved Infrastructure Masterplan (refer Appendix B).

The ultimate trunk water infrastructure extension to service the subject site is planned within the DCOP network and is subject to sub-regional sequencing and delivery arrangements, funded through infrastructure charge collection in accordance with the SIRA. Final connection arrangements will be confirmed through operational works and servicing authority requirements.

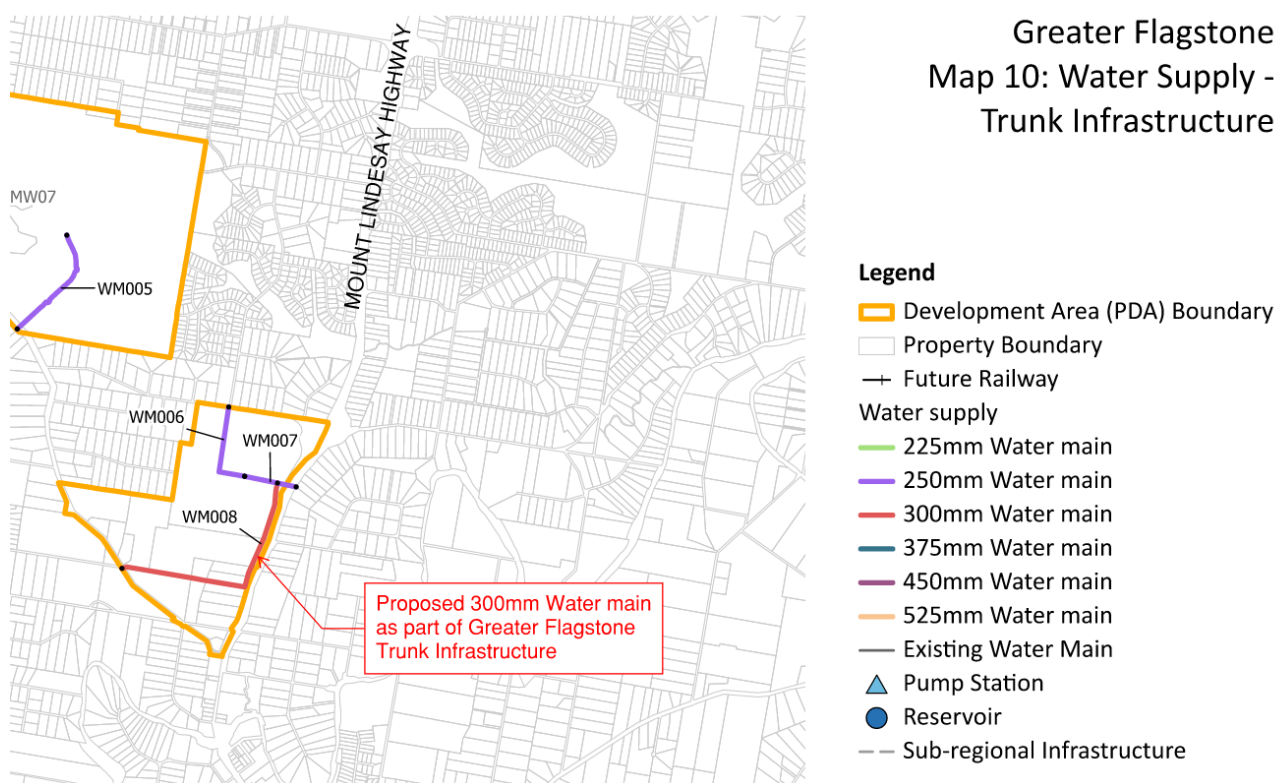


Figure 7.1 EDQ Greater Flagstone Proposed Trunk Water Infrastructure Network

7.1 Water Demand Calculation

To determine suitable pipe sizing for the proposed development, water demands are calculated according to the intended new development. The water criteria and design parameters are based on the following references:

- SEQ Water Supply and Sewerage Design & Construction Code (SEQ WS&S D&C Code); and
- Water Services Association of Australia – WSA 03-2013 Water Supply Code of Australia, Part 1: Planning and Design.





The service mains internal of each building will be designed and constructed in accordance with AS/NZS 3500.1:2003 Plumbing and Drainage – Water services (Standards Australia, 2003).

The water flow parameters shown in Table 7.1, Table 7.2 and Table 7.3 required to meet Council's Standards of Service and have been based on Single Supply (Drinking Water Only) Network parameters shown in SEQ Design Criteria Table 4.1.

Table 7.1 Potable Water Supply Demand and Peaking Factors

Property Type	Average Day (AD) Demand L/EP/day	Non-Revenue L/EP/day	Peaking Factors		
			Mean Day Maximum Month (MDMM)	Peak Day (PD)	Peak Hour (PH)
Industrial	230	30	1.5	2.0	2.8

Table 7.2 Potable Water Pressure Parameters

Item	Pressure Parameter
Minimum Service Pressure	22 metres (adjoining the property boundary)
Maximum Service Pressure	55 metres

Table 7.3 Fire Fighting Parameters

Item	Pressure Parameter
Minimum Residential Mains Pressure (Emergency Fire operating conditions)	12 metres at the main at the property boundary 6 metres elsewhere
Fire Flow Commercial	30 L/s for a duration of 4 hrs
Background Demand	2/3 x Peak Hour demand (not less than Average Day demand)

The calculated water supply demand for the proposed development is shown in Table 7.4.

Table 7.4 Water Supply Demand Calculations

Use	EP	AD Flow (L/day)	Non-Revenue (L/day)	AD (L/s)	PH (L/s)
Industrial	398	91,540	11,940	1.06	2.75

Calculation Details:

- Average Day Demand: 398 EP x 230 L = 91,540 L/day
- Non-Revenue: 398 EP x 30 L = 11,940 L/day
- Peak Hour Flow: 398 EP x (230 x 2.8 + 30) = 237,430 L/day $\approx$ 2.75 L/s

The internal watermain network will be designed in accordance with SEQ WS&S D&C Code requirements during Operational Works detailed design.

Refer to Drawing C5101 in Appendix C for conceptual portable water service alignments.





8. Sewer Reticulation

The subject site is proposed to be serviced by a gravity sewer main located within the Mount Lindesay Highway service road corridor, connecting to downstream sewer infrastructure in accordance with the approved Infrastructure Masterplan. Detailed downstream delivery mechanisms and timing are outside the scope of this Civil Engineering Report and will be addressed through separate servicing authority and operational works approvals as required (refer to Figure 8.1).

Individual sewer connections will be provided to each lot as part of the future servicing of registered freehold industrial lots. The proposed gravity main and downstream connections are consistent with the alignment and delivery responsibilities outlined in the Infrastructure Masterplan (Ref: P0045017-IM-01 Rev 3), included in Appendix B.

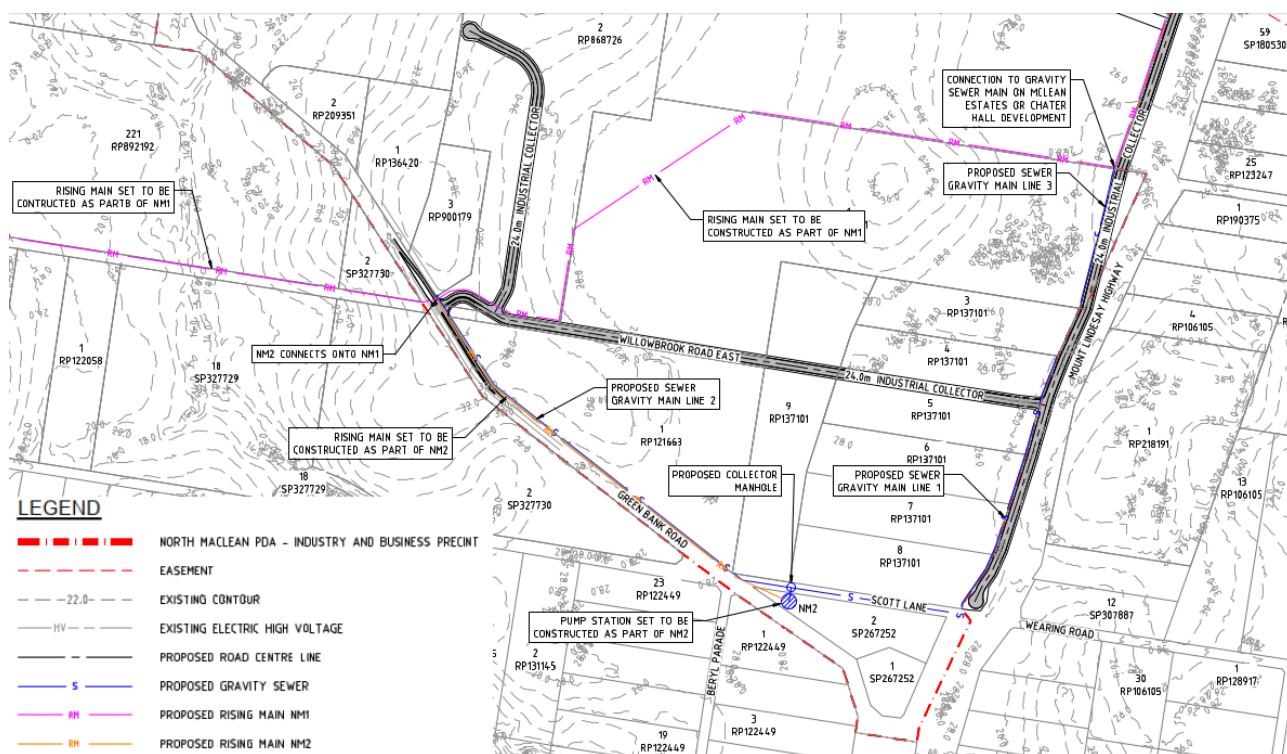


Figure 8.1 Proposed Sewer Network Plan

8.1 Sewer Demand Calculation

The sewer criteria and design parameters are based on the following references:

- SEQ Water Supply and Sewerage Design & Construction Code (SEQ WS&S D&C Code); and
- Water Services Association of Australia – WSA 02-2014 Sewerage Code of Australia, Part 1: Planning and Design.

The proposed development comprises 17 industrial lots with an estimated Equivalent Population (EP) of 398.

The sewer flow generation, pipe design parameters, minimum sewer pipe grades and maximum capacity are shown below in Table 8.1, Table 8.2 and Table 8.3. The following parameters are based on a RIGGS system:

Table 8.1 Sewer Flow Generation Parameters





Flow	Parameter
Average Dry Weather Flow (ADWF)	200 L/EP/d
Peak Dry Weather Flow (PDWF)	PDWF = $C_2 \times \text{ADWF}$, Where $C_2 = 4.7 \times (\text{EP})^{-0.105} = 2.56$
Peak Wet Weather Flow (PWWF)	PWWF = $5 \times \text{ADWF}$

Table 8.2 Pipe Design Parameters

Flow	Parameter
Mannings 'n'	0.013
Minimum velocity @ PDWF	0.7 m/s
Depth of Flow @ PWWF – Existing system	Up to 1.0 m below MH cover level and no spillage through overflow structures
Depth of Flow @ PWWF – Proposed sewers	Max flow depth shall not exceed $\frac{3}{4}$ pipe full (75% d/D).

Table 8.3 Minimum Pipe Capacity – New Sewers Flowing $\frac{3}{4}$ Full

Pipe Size (mm)	Min Pipe Grade (1 in x)	Capacity (L/s)
150	180	10.4
225	300	23.6
300	400	44.1

The calculated sewer demand generation for the proposed development is shown in Table 8.4.

Table 8.4 Sewer Demand Calculations

Use	EP	ADWF (L/day)	PDWF Factor	PWWF (L/d)	PWWF (L/s)
Industrial	398	79,600	2.56	398,000	4.61

$$\text{PWWF (L/s)} = 398 \text{ EP} \times 200 \text{ L} \times 5 \div 86,400 = 4.61 \text{ L/s}$$

The peak wet weather flow (PWWF) for the development is estimated at 4.61 L/s, which can be conveyed by a 150 mm diameter sewer pipe laid at a minimum grade of 1 in 180 (as per SEQ WS&S D&C Code Table F2.2).

Future sewer reticulation design will connect to the downstream network shown on Drawing C5101 and will be subject to detailed hydraulic review during operational works. All new sewers will be designed to meet Logan Water and SEQ Code capacity, velocity and access requirements.

Refer to Drawing C5101 in Appendix C for conceptual gravity sewer service alignments.





9. Electrical and Telecommunications

Electrical and telecommunications servicing will be provided via existing infrastructure along the Mount Lindesay Highway service road. The updated electrical and comms design has been prepared and includes provision for pad-mounted transformers (PMTs) within designated easements on each lot.

Refer to Appendix E for Electrical and Communications Servicing Plans prepared by Peter Eustace Consulting Engineers.

Final connections will be confirmed during operational works.





10. Conclusion

The findings of this Civil Engineering Report support the proposed industrial subdivision of Lots 7 and 8 on RP137101, as submitted under this Development Application to Economic Development Queensland (EDQ).

Bulk earthworks are proposed as part of the staged development of Lots 7 and 8 on RP137101 to establish a flood-immune, serviceable platform suitable for industrial subdivision. Across the full development program, the earthworks comprise approximately 137,867 m³ of imported structural fill, delivered through a combination of a standalone bulk earthworks stage and subsequent refinement associated with the ROL layout.

The proposed finished surface levels generally range from approximately RL 27.0 m AHD to RL 29.78 m AHD and have been assessed under the Hydraulic Impact Assessment (HIA-02), demonstrating compliance with the 2100 1% AEP Defined Flood Event benchmark applied by EDQ.

Stormwater drainage will be managed through kerb inlets, underground pipe networks, verge-mounted tree biofilter pods, and perimeter swales that convey flows to the western drainage reserve. This strategy ensures that no stormwater discharges directly to Mount Lindesay Highway and that all outflows comply with the lawful point of discharge requirements under QUDM Table 9.4.1. A separate Conceptual Stormwater Management Plan (CSMP) has been prepared to provide further detail regarding quantity mitigation and water quality treatment in accordance with EDQ Guideline 13.

Water supply will be provided via a proposed 300 mm trunk water main connecting to the approved Logan Water network to be delivered by Maclean Estate (Lot 1 on RP113251), approved under DEV2022/1315/2. This future extension will facilitate supply to the subject site, with individual lot connections to be provided at the freehold industrial subdivision stage.

Sewerage will be managed via a gravity sewer main located within the Mount Lindesay Highway service road corridor, connecting to downstream sewer infrastructure in accordance with the approved Infrastructure Masterplan (Ref: P0045017-IM-01 Rev 3), attached in Appendix B.

Electrical and telecommunications infrastructure is available along the Mount Lindesay Highway service road frontage. Existing Energex overhead power and telecommunications assets are sufficient capacity, with detailed internal reticulation confirmed by Electrical and Communications Servicing Plans prepared by Peter Eustace Consulting Engineers.

In conclusion, this report confirms that the subject site can be appropriately serviced in principle, in accordance with EDQ requirements, the SEQ WS&S D&C Code, and the established DCOP / SIRA / SRIP infrastructure delivery framework, subject to finalisation of operational works and third-party infrastructure delivery.

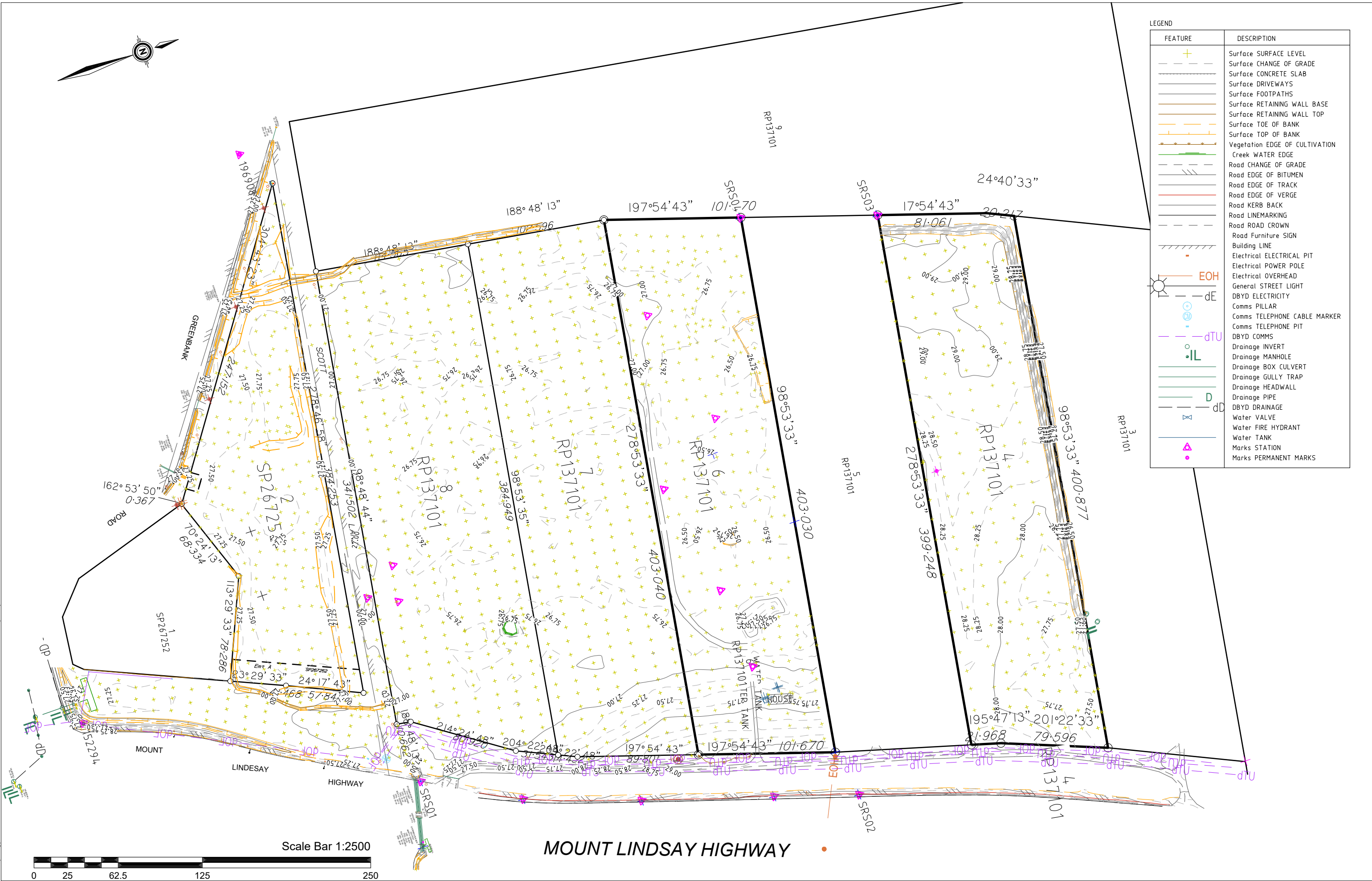




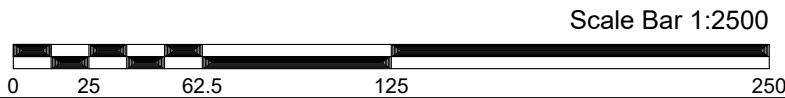
Appendix A – Site Survey



Project Location: Synergy/24/01/22095 - ADHOC - Mount Lindsay Hwy North Maclean/01. 12d Data/4. Detail/22095 4001 MTC Detail 240927.12dmodel



LEGEND	
FEATURE	DESCRIPTION
	Surface SURFACE LEVEL
	Surface CHANGE OF GRADE
	Surface CONCRETE SLAB
	Surface DRIVEWAYS
	Surface FOOTPATHS
	Surface RETAINING WALL BASE
	Surface RETAINING WALL TOP
	Surface TOE OF BANK
	Surface TOP OF BANK
	Vegetation EDGE OF CULTIVATION
	Creek WATER EDGE
	Road CHANGE OF GRADE
	Road EDGE OF BITUMEN
	Road EDGE OF TRACK
	Road EDGE OF VERGE
	Road KERB BACK
	Road LINEMARKING
	Road ROAD CROWN
	Road FURNITURE SIGN
	Building LINE
	Electrical ELECTRICAL PIT
	Electrical POWER POLE
	Electrical OVERHEAD
	General STREET LIGHT
	DBYD ELECTRICITY
	Comms PILLAR
	Comms TELEPHONE CABLE MARKER
	Comms TELEPHONE PIT
	DBYD COMMS
	Drainage INVERT
	Drainage MANHOLE
	Drainage BOX CULVERT
	Drainage GULLY TRAP
	Drainage HEADWALL
	Drainage PIPE
	DBYD DRAINAGE
	Water VALVE
	Water FIRE HYDRANT
	Water TANK
	Marks STATION
	Marks PERMANENT MARKS

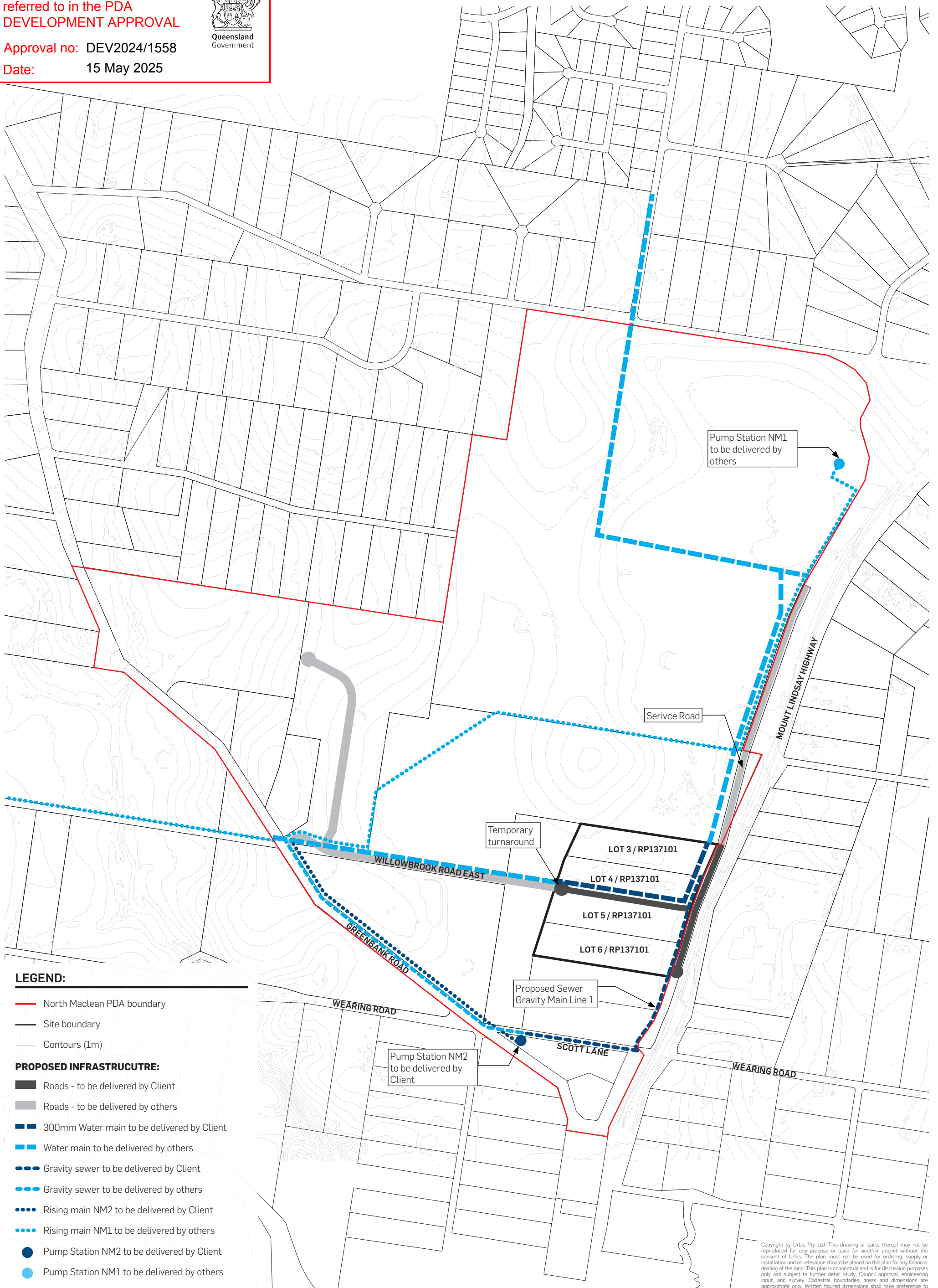


REV.	DATE	DESCRIPTION	DRAWN	SURV	CHKD	 SUNRISE SURVEYING	Brisbane (Head Office) Ground Floor, 18 Finchley St, Milton admin@sunrisesurveying.com.au Toowoomba Tenancy 1, 4 Laurel St, Toowoomba toowoomba@sunrisesurveying.com.au Rockhampton Level 1, 150 Denison St, Rockhampton rockhampton@sunrisesurveying.com.au Yeppoon 47 Normanby St, Yeppoon yeppoon@sunrisesurveying.com.au	CLIENT.	PROJECT. Mt Lindsay Highway Maclean	DRAWING DESCRIPTION. Detail Survey Combined Data over Various Lots	DRAWING NAME: 22095 4001 001-A	SITE ADDRESS.	SURVEY DATE	
A	11/10/24	Issue to Client	11/10/24	MAB	MC								-	
													CONTOUR INTERVAL Minor: 0.25 Major: 1	
													REV	
													A	
												SCALE. 1: 2500 @ A3	LOCAL AUTHORITY Logan City Council	



Appendix B – Infrastructure Masterplan (Approved under DEV2024/1558)





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Appendix C – Civil Engineering Preliminary Reconfiguring a Lot (ROL) civil plan set (BE220566-DA)



PROPOSED DEVELOPMENT AT

4733-4743 MOUNT LINDESAY HIGHWAY

NORTH MACLEAN, QUEENSLAND

PROJECT No. BE220566-DA

DA APPLICATION

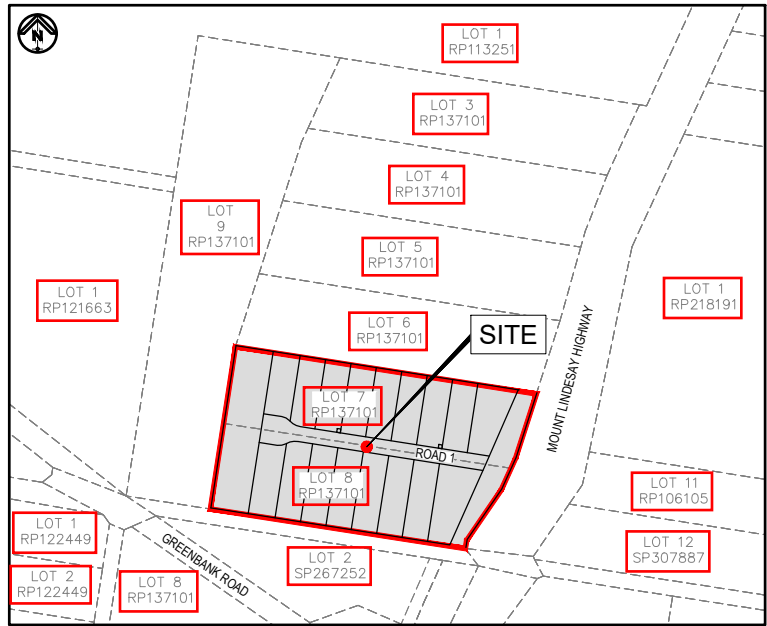


LOCALITY PLAN

N.T.S.

DRAWING INDEX		
DRG. No.	DRAWING TITLE	REVISION
C1000	COVER SHEET, LOCALITY PLAN & DRAWING INDEX	C
C1101	OVERALL LAYOUT PLAN	C
C2000	GENERAL NOTES AND TYPICAL DETAILS	C
C2101	EARTHWORKS LAYOUT PLAN	C
C2301	EARTHWORKS SECTIONS	B
C3201	20m INDUSTRIAL ACCESS ROAD - LONGITUDINAL SECTION	B
C5101	COMBINED SERVICES LAYOUT PLAN	C
C9000	HAZARD RISK REGISTER - DESIGN RISKS	B

SURVEY
PROVIDED BY: SUNRISE SURVEY
REPORT No: 22095 4001 001-A
DATE: 11-10-2024
SYSTEM: MGA2020 ZONE 56



NEIGHBOURHOOD PLAN

N.T.S.

PREPARED FOR



ROUBAIX PROPERTIES PTY LTD

PREPARED BY



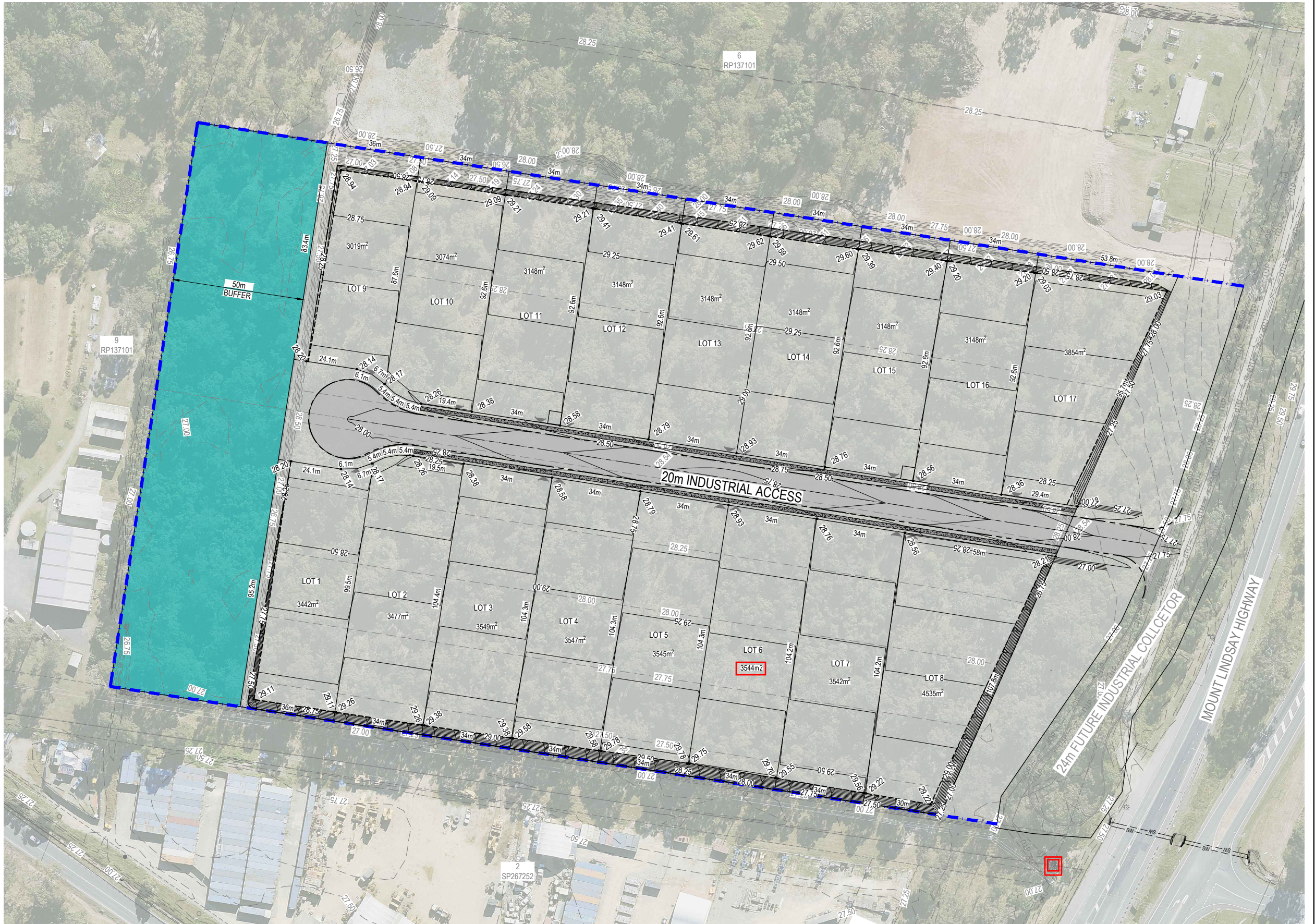
GOLD COAST | BRISBANE | TOOWOOMBA
IPSWICH | MORETON BAY
PHONE: +61 7 5509 6400
FAX: +61 7 5509 6411
EMAIL: ADMIN@BURCHILLS.COM.AU
COOTE BURCHILLS ENGINEERING PTY LTD
ABN 76 166 942 365

PROJECT No.:	DRAWING No.:	VERSION:	DATE:
BE220566-DA	C1000	C	21-10-25



LEGEND

- 27.25 — DESIGN SURFACE CONTOURS
- - - 27.0 - - - EXISTING SURFACE CONTOURS
- - - - - EXISTING LOT BOUNDARY
— SW — SW — EXISTING STORMWATER
— S — S — EXISTING SEWER
— OH — OH — EXISTING OVERHEAD ELECTRIC
— C — C — EXISTING COMMS
- - - - - EXISTING ROAD CONTROL LINE
- - - - - EXISTING KERB
- - - - - EXISTING EDGE OF BITUMEN
- - - - - DEVELOPMENT SITE BOUNDARY
- - - - - PROPOSED LOT BOUNDARY
50m BUFFER AREA
DEVELOPMENT SITE AREA



WARNING: UNDERGROUND SERVICES:
UNDERGROUND SERVICES EXIST IN THIS VICINITY. THE CONTRACTOR IS TO CONTACT THE RELEVANT AUTHORITIES TO CONFIRM EXACT LOCATION OF SERVICES ON SITE PRIOR TO ANY EXCAVATION OR CONSTRUCTION COMMENCING.

OVERALL LAYOUT PLAN

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C	AMENDED KERB RETURN	21-10-25
B	CHANGE TO LAYOUT	24-06-25
A	ISSUE FOR APPROVAL	24-02-25
VER.	DESCRIPTION	DATE

BURCHILLS
ENGINEERING SOLUTIONS

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COOTE BURCHILLS ENGINEERING PTY LTD
ABN 76 166 942 365

CLIENT :
**ROUBAIX PROPERTIES
PTY LTD**

DRAWING TITLE :
OVERALL LAYOUT PLAN

PROJECT :
DEVELOPMENT APPROVAL

4733-4743 MT LINDSAY HWY

PRELIMINARY
NOT FOR CONSTRUCTION OR TENDER

SCALE AT FULL SIZE (A1) :
10 0 5 10 15 20 25 30 35m
1 : 750 (FULL SIZE)

DEVEL. APPLIC. No. :		DATE : 21-10-25	
PROJECT LEADER : JACK SHAO		DESIGNER : CARL KRUGER	
DRAFTSPERSON : CARL KRUGER		CHECKED : JACK SHAO	
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365			
PROJECT No. : BE220566-DA		DRAWING No. : C1101	
		VERSION: C	

GENERAL NOTES:

CONTRACT DOCUMENTATION

ALL DRAWINGS UNDER THIS CONTRACT ARE TO BE READ IN CONJUNCTION WITH THE PROJECT SPECIFICATION.

SURVEY INFORMATION

CONTROL SURVEY INFORMATION WILL BE ESTABLISHED ON SITE BY THE PRINCIPAL'S SURVEYOR. SETOUT OF THE WORKS IS TO BE CARRIED OUT BY THE CONTRACTOR FROM THE CONTROL SURVEY PROVIDED.
SETOUT INFORMATION SHALL NOT BE OBTAINED BY SCALING FROM THESE DRAWINGS.

DATUM

ALL LEVELS SHOWN ON DRAWINGS ARE A.H.D. (DERIVED).

EXISTING SURVEY CONTROL STATIONS

THE CONTRACTOR IS TO ENSURE THAT SURVEY CONTROL STATIONS ARE NOT DAMAGED OR DISTURBED IN ANY WAY BY CONSTRUCTION ACTIVITIES.

EXISTING SERVICES

EXISTING SERVICES LOCATIONS WHERE SHOWN ON THE DRAWINGS ARE INDICATIVE ONLY. THE CONTRACTOR SHALL CONTACT THE RELEVANT AUTHORITIES IN ORDER TO VERIFY THE EXACT LOCATION OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORK ON SITE AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO EXISTING SERVICES.

SITE ACCESS

THE CONTRACTOR SHALL GAIN ACCESS TO THE SITE AT LOCATIONS APPROVED BY THE SUPERINTENDENT AND IS TO ALLOW FREEDOM OF ACCESS TO OTHER WORK AREAS ON THE SITE AT ALL TIMES.

PROVISION FOR TRAFFIC

PROVISION FOR TRAFFIC ON LOCAL ROADS IS TO BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND LOCAL AUTHORITY REQUIREMENTS.

WORK BOUNDARIES

THE CONTRACTOR IS TO RESTRICT ACTIVITIES TO THOSE AREAS DESIGNATED AS CONTRACT WORK AREAS. AT NO TIME SHALL THE CONTRACTOR ENTER OR CROSS ADJOINING AREAS WITHOUT WRITTEN AUTHORISATION FROM THE SUPERINTENDENT. SITE OFFICE FACILITIES MAY ONLY BE LOCATED WHERE AUTHORISED.

MAINTENANCE OF SITE CONDITION

AREAS BEYOND THE IMMEDIATE WORKS ARE TO BE PROTECTED AND NOT DAMAGED OR DISTURBED IN ANY WAY. EXISTING TREES ARE NOT TO BE REMOVED WITHOUT THE APPROVAL OF THE SUPERINTENDENT. AT COMPLETION OF WORKS THE SITE IS TO BE LEFT IN A CLEAN AND TIDY CONDITION TO THE SATISFACTION OF THE SUPERINTENDENT AND LOGAN CITY COUNCIL.

SITE CLEARING

CLEARING AND GRUBBING SHALL BE CARRIED OUT TO ALL WORK AREAS AS SPECIFIED AND SHALL INCLUDE THE REMOVAL OF ALL EXISTING TREES (UNLESS NOMINATED TO BE PRESERVED), EXISTING VEGETATION, TIMBER, FENCES AND ANY OTHER DEBRIS.

TOPSOIL STRIPPING

ALL TOPSOIL STRIPPED FROM WORK AREAS SHALL BE STOCKPILED FOR LATER RE-SPREADING TO ALL FOOTPATHS, BATTERS AND FILL AREAS.

EARTHWORKS (GENERAL)

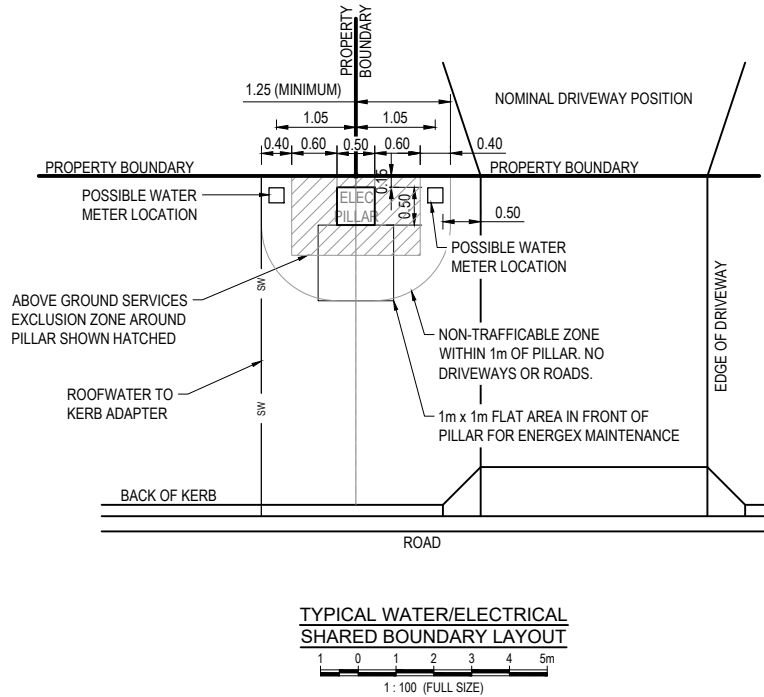
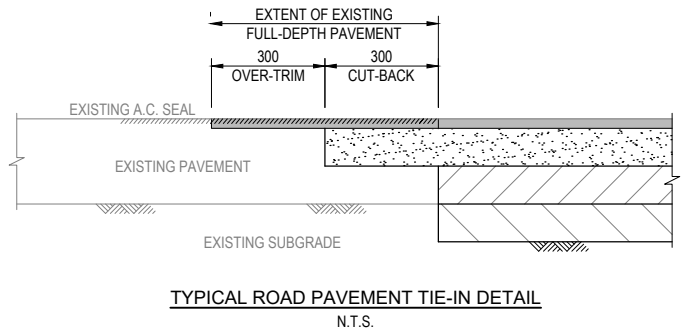
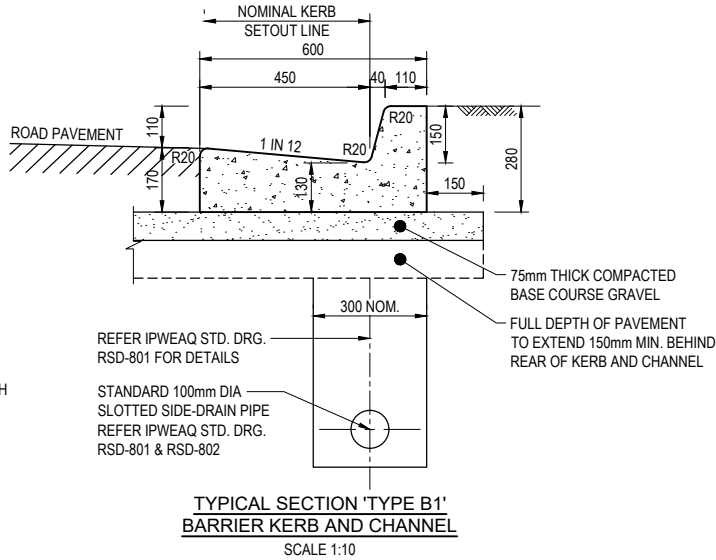
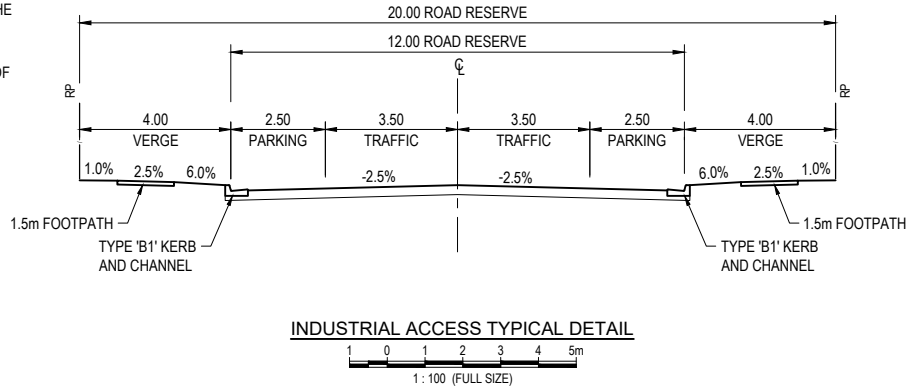
ALL FILL MATERIAL PLACED SHALL BE COMPACTED AND TRIMMED TO FINAL EARTHWORKS LEVELS AND PROFILES SHOWN ON THE CONTRACT DRAWINGS AND TESTED IN ACCORDANCE WITH THE PROJECT SPECIFICATION. ALL COMPACTION TESTING UNDER THIS CONTRACT IS TO BE CARRIED OUT TO AS3798 LEVEL 1 STANDARD BY A NATA-ACCREDITED TESTING AUTHORITY. CERTIFICATION FOR ALL EARTHWORKS CONSTRUCTION AND TESTING IS TO BE PROVIDED BY A REGISTERED PROFESSIONAL ENGINEER QUEENSLAND (RPEQ) ENGAGED BY THE CONTRACTOR.

EARTHWORKS MATERIALS

ANY EXCAVATED SILTS OR UNCOMPACTED FILLS ARE TO BE INCORPORATED IN STRUCTURAL FILLING BY SELECTIVELY MIXING WITH OTHER MATERIALS TO CONTROL THE MOISTURE CONTENT AND TO ACHIEVE THE REQUIRED COMPACTION STANDARDS.

"AS CONSTRUCTED" SURVEY

"AS CONSTRUCTED" SURVEY SHALL BE CARRIED OUT BY THE PRINCIPAL'S SURVEYOR AS WORK PROCEEDS.



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FAX: +61 7 5509 6411
EMAIL: ADMIN@BURCHILLS.COM.AU
COOTE BURCHILLS ENGINEERING PTY LTD
ABN 76 166 942 365

CLIENT :

ROUBAIX PROPERTIES
PTY LTD

DRAWING TITLE :

GENERAL NOTES AND TYPICAL DETAILS

PROJECT :

DEVELOPMENT APPROVAL

4733-4743 MT LINDESA HWY

PRELIMINARY
NOT FOR CONSTRUCTION OR TENDER

SCALE AT FULL SIZE (A1) :

DEVEL. APPLIC. No. :

DATE : 21-10-25

PROJECT LEADER : JACK SHAO

DESIGNER : CARL KRUGER

DRAFTSPERSON : CARL KRUGER

CHECKED : JACK SHAO

APPROVED FOR AND ON BEHALF OF
BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365

PROJECT No.:

BE220566-DA

DRAWING No. :

C2000

VERSION:

C



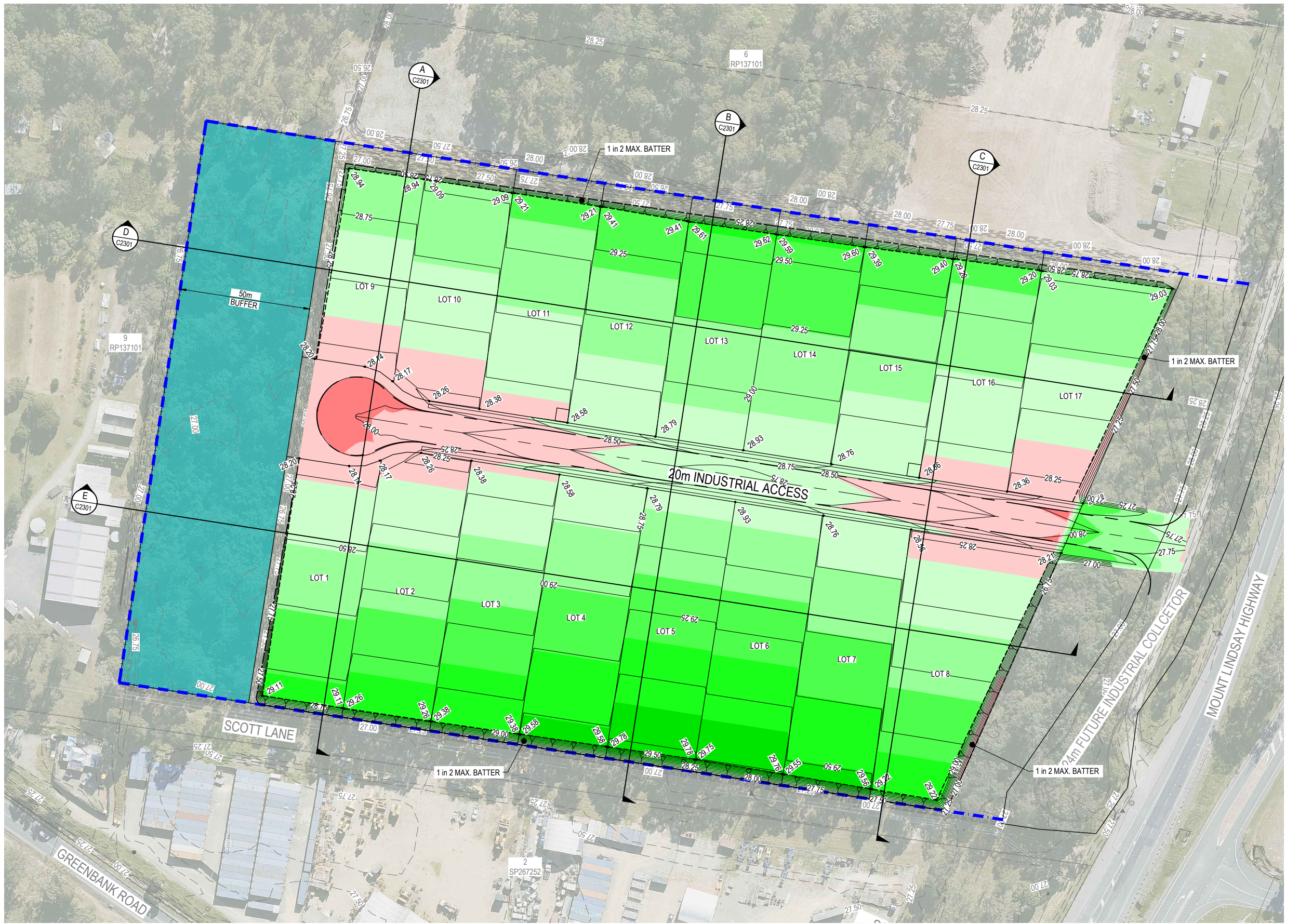
LEGEND

- 27.25 — DESIGN SURFACE CONTOURS
- - - 27.0 - - - EXISTING SURFACE CONTOURS
- - - - - EXISTING LOT BOUNDARY
— SW — SW — EXISTING STORMWATER
— — — EXISTING EDGE OF BITUMEN
[Blue dashed line] DEVELOPMENT SITE BOUNDARY
[Red dashed line] PROPOSED LOT BOUNDARY
[Light blue shaded area] 50m BUFFER AREA

CONCEPT BULK EARTHWORKS SUMMARY	
STRUCTURAL FILLING	
AREA	NETT SOLID FILL
OVERALL FILLING	45,871 cu.m.
EXCAVATION	
AREA	NETT CUT
OVERALL EXCAVATION	1,673 cu.m.
SUMMARY: 45,871 cu.m - 1,673 cu.m = 44,198 cu.m IMPORTED MATERIAL NO ALLOWANCE FOR BOXING HAS BEEN CONSIDERED NO ALLOWANCE HAS BEEN MADE FOR TOPSOIL STRIP / REPLACEMENT. NO ALLOWANCE FOR COMPACTION HAS BEEN CONSIDERED	

EARTHWORKS DEPTH ANALYSIS LEGEND			
LOWER		UPPER	COLOUR
-4.0m	TO	-3.5m	[Dark red]
-3.5m	TO	-3.0m	
-3.0m	TO	-2.5m	
-2.5m	TO	-2.0m	
-2.0m	TO	-1.5m	
-1.5m	TO	-1.0m	[Red]
-1.0m	TO	-0.5m	
-0.5m	TO	0.0m	[Light red]
0.0m	TO	0.5m	
0.5m	TO	1.0m	[Light green]
1.0m	TO	1.5m	
1.5m	TO	2.0m	[Green]
2.0m	TO	2.5m	
2.5m	TO	3.0m	[Dark green]
3.0m	TO	3.5m	
3.5m	TO	4.0m	[Very dark green]
	TO		

WARNING: UNDERGROUND SERVICES:
UNDERGROUND SERVICES EXIST IN THIS VICINITY. THE CONTRACTOR IS TO CONTACT THE RELEVANT AUTHORITIES TO CONFIRM EXACT LOCATION OF SERVICES ON SITE PRIOR TO ANY EXCAVATION OR CONSTRUCTION COMMENCING.



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VER.	DESCRIPTION	DATE
C	AMENDED KERB RETURN	21-10-25
B	CHANGE TO LAYOUT	24-08-25
A	ISSUE FOR APPROVAL	24-02-25

BURCHILLS ENGINEERING SOLUTIONS

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COOTE BURGILLS ENGINEERING PTY LTD
ABN 76 166 942 365

CLIENT :

ROUBAIX PROPERTIES PTY LTD

DRAWING TITLE :

EARTHWORKS LAYOUT PLAN

PROJECT :

DEVELOPMENT APPROVAL

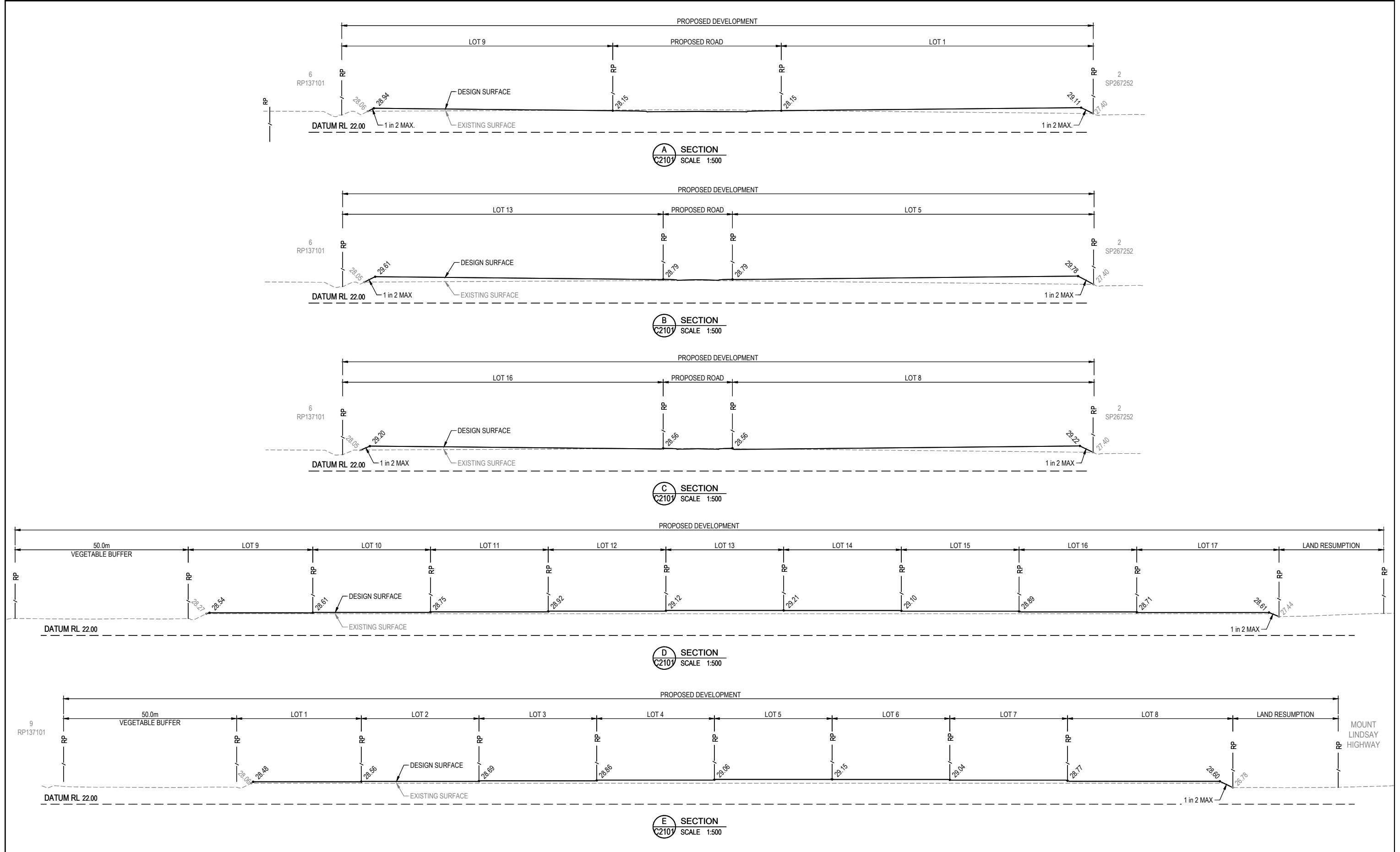
4733-4743 MT LINDSAY HWY

PRELIMINARY
NOT FOR CONSTRUCTION OR TENDER

SCALE AT FULL SIZE (A1) :

10 0 5 10 15 20 25 30 35m
1 : 750 (FULL SIZE)

DEVEL. APPLIC. No. :		DATE : 21-10-25
PROJECT LEADER : JACK SHAO		DESIGNER : CARL KRUGER
DRAFTSPERSON : CARL KRUGER		CHECKED : JACK SHAO
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365		
PROJECT No. : BE220566-DA	DRAWING No. : C2101	VERSION : C



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B	CHANGE TO LAYOUT	24-06-25
A	ISSUE FOR APPROVAL	24-02-25
VER.	DESCRIPTION	DATE



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COOTE BURCHILLS ENGINEERING PTY LTD
ABN 76 166 942 365

CLIENT :

**ROUBAIX PROPERTIES
PTY LTD**

DRAWING TITLE :

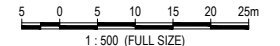
EARTHWORKS SECTIONS

PROJECT :

DEVELOPMENT APPROVAL

4733-4743 MT LINDSAY HWY

PRELIMINARY
NOT FOR CONSTRUCTION OR TENDER

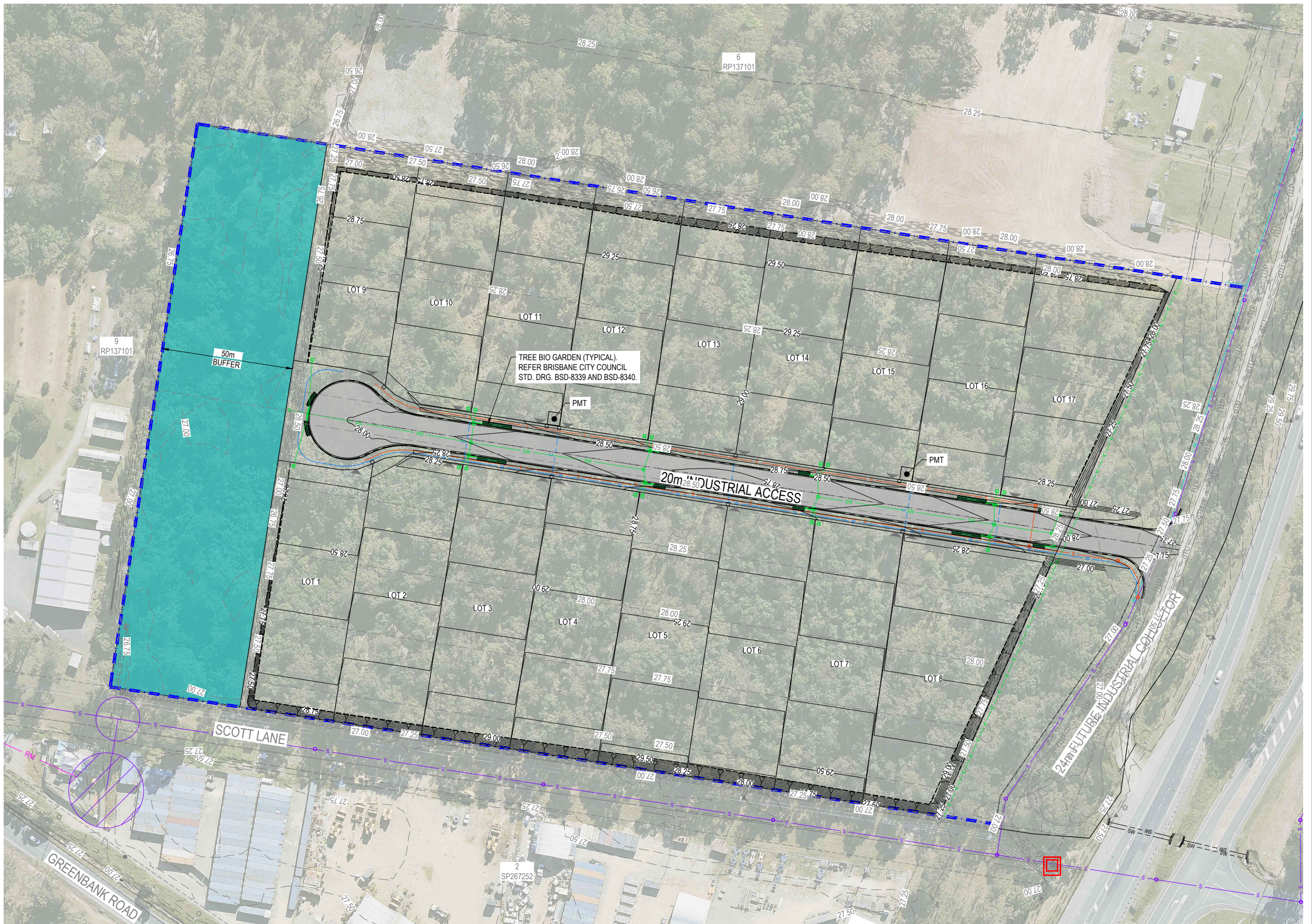
SCALE AT FULL SIZE (A1) :

1 : 500 (FULL SIZE)

DEVEL. APPLIC. No. :		DATE : 24-06-25	
PROJECT LEADER : JACK SHAO		DESIGNER : CARL KRUGER	
DRAFTSPERSON : CARL KRUGER		CHECKED : JACK SHAO	
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365			
PROJECT No. : BE220566-DA		DRAWING No. : C2301	VERSION : B



LEGEND

- 28.00 --- EXISTING SURFACE CONTOURS
- 29.50 --- DESIGN SURFACE CONTOURS
- EXISTING LOT BOUNDARY
- SW --- SW --- EXISTING STORMWATER
- EXISTING KERB
- EXISTING EDGE OF BITUMEN
- PROPOSED LOT BOUNDARY
- INDICATIVE FUTURE DRIVEWAY LOCATION
- SW --- PROPOSED STORMWATER
- W --- PROPOSED WATER
- C --- PROPOSED CONDUIT
- S --- PROPOSED SEWER
- RM --- EXTERNAL SEWER RISING MAIN (BY OTHERS)
- S --- EXTERNAL SEWER (BY OTHERS)
- W --- EXTERNAL WATER (BY OTHERS)
- PROPOSED ROAD CONTROL LINE
- PROPOSED MOUNTABLE
- PROPOSED KERB (TYPE B1)
- DEVELOPMENT SITE BOUNDARY
- 50m BUFFER AREA



WARNING: UNDERGROUND SERVICES:
UNDERGROUND SERVICES EXIST IN THIS VICINITY. THE CONTRACTOR IS TO CONTACT THE RELEVANT AUTHORITIES TO CONFIRM EXACT LOCATION OF SERVICES ON SITE PRIOR TO ANY EXCAVATION OR CONSTRUCTION COMMENCING.

COMBINED SERVICES LAYOUT PLAN

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VER.	DESCRIPTION	DATE
C	AMENDED KERB RETURN & SERVICES	21-10-25
B	CHANGE TO LAYOUT	24-06-25
A	ISSUE FOR APPROVAL	24-02-25

BURCHILLS
ENGINEERING SOLUTIONS

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COOTE BURCHILLS ENGINEERING PTY LTD
ABN 76 166 942 365

CLIENT :
**ROUBAIX PROPERTIES
PTY LTD**

DRAWING TITLE :
COMBINED SERVICES LAYOUT PLAN

PROJECT :
DEVELOPMENT APPROVAL
4733-4743 MT LINDSAY HWY

PRELIMINARY
NOT FOR CONSTRUCTION OR TENDER

SCALE AT FULL SIZE (A1) :
1 : 750 (FULL SIZE)

DEVEL. APPLIC. No. :	DATE : 21-10-25
PROJECT LEADER : JACK SHAO	DESIGNER : CARL KRUGER
DRAFTSPERSON : CARL KRUGER	CHECKED : JACK SHAO
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365	
PROJECT No. : BE220566-DA	DRAWING No. : C5101
VERSION: C	

QMS RISK & OPPORTUNITIES REGISTER							
SAFETY IN DESIGN – NORMAL DESIGN RISKS - CIVIL							
Design Element	Associated risks & opportunities	Raw risk assessment		Raw risk rating	Treatment Measures to avoid, minimize or treat the risk.	Responsibility	Residual risk rating
		Likelihood	Consequence				
CONSTRUCTION PHASE							
SITE ACCESS	Unsafe site access and egress point, restricted access, flooding, unauthorised access from persons or animals	L	M	L-M	Prepare site specific Construction Traffic Management Plan and Workplace Health and Safety Management Plan	Principal Contractor	L
CLEARING & DEMOLITION	Removal of existing structures, decommission of services, vegetation clearing and fauna management	M	H	M-H	Contractor to obtain Demolition Permit, arrange all service disconnections with asset ownerand carry out vegetation works in accordance with Vegetation and Fauna Management Plan	Principal Contractor	L
EXISTING SERVICES	Disturb or damage existing services and infrastructure, overhead powerlines, work adjacent to existing services, existing service relocations	M	H	M-H	Client to commission detailed site survey and service potholing at critical locations. Contractor to undertake Dial Before You Dig and service verification with service authority providers and undertake additional potholing prior to construction	Client and Principal Contractor	L-M
EXCAVATION & TRENCHING	Unstable existing slopes and landslip, steep cut profiles, deep trench excavations, working at heights, intercept water table, dispersive soils, acid sulphate soils	M	H	M-H	Client to commission a geotechnical investigation and contractors to undertake own investigations. Temporary and final earthworks profiles confirmed by client's geotechnical consultant. Tempory earthworks profile to be confirmed by Contractor's geotechnical consultant. Contractor to provide temporary benching, fencing, stabilisation and shoring.	Client and Principal Contractor	L
MATERIALS HANDLING	Manual handling, handling and disposal of sharps, repetitive work processes, hazardous substances	H	M	M-H	Contractor or provide a site specific Workplace Health and Safety Management Plan including Material Safety Data Sheets	Principal Contractor	L
PLANT & EQUIPMENT	Operation of plant and machinery, site access by visitors, material deliveries and waste removal	M	H	M-H	Contractor or provide a site specific Workplace Health and Safety Management Plan including register of operator machinery tickets. Contractor to maintain a site visitor register and provide site specific induction to all visitors	Principal Contractor	L
OPERATIONAL PHASE							
ROADS & PATHWAYS	General road safety, flood free access, pedestrian and cyclist injuries, inadequate signage	L	H	M	Design, approvals and construction undertaken in accordance with Australian, State Government and Local Authority standards, codes, guidelines and best practice	Asset Owner	L
STORWATER / FLOODING	Hazard from storm and flood water depths and velocities, ponding and access to inlets, outlets and basins	M	H	M-H	Design, approvals and construction undertaken in accordance with Australian, State Government and Local Authority standards, codes, guidelines and best practice	Asset Owner	L
WATER & SEWER	Blockages, contamination, interruption to service, access to fittings, confined space access	L	M	L-M	Design, approvals and construction undertaken in accordance with Australian, State Government and Local Authority standards, codes, guidelines and best practice	Asset Owner	L
WALLS & FENCING	Risk of falls, unauthorised access from persons and animals, structural failure	M	M	M	Design, approvals and construction undertaken in accordance with Australian, State Government and Local Authority standards, codes, guidelines and best practice	Asset Owner	L
MAINTENANCE PHASE							
ROADS & PATHWAYS	All as for construction and operation phases					Asset Owner	
STORWATER / FLOODING	All as for construction and operation phases					Asset Owner	
WATER & SEWER	All as for construction and operation phases					Asset Owner	
WALLS & FENCING	All as for construction and operation phases					Asset Owner	
REFURBISHMENT PHASE							
ROADS & PATHWAYS	All as for construction and operation phases					Asset Owner	
STORWATER / FLOODING	All as for construction and operation phases					Asset Owner	
WATER & SEWER	All as for construction and operation phases					Asset Owner	
WALLS & FENCING	All as for construction and operation phases					Asset Owner	
DEMOLITION PHASE							
ROADS & PATHWAYS	All as for construction and operation phases					Asset Owner	
STORWATER / FLOODING	All as for construction and operation phases					Asset Owner	
WATER & SEWER	All as for construction and operation phases					Asset Owner	
WALLS & FENCING	All as for construction and operation phases					Asset Owner	

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BCHANGE TO LAYOUT24-06-25 AISSUE FOR APPROVAL24-02-25 VER.DESCRIPTIONDATE												PROJECT No. : BE220566-DA DRAWING No. : C9000 VERSION: B					



Appendix D – Civil Engineering Preliminary Bulk Earthworks plan set (BE220566-02)



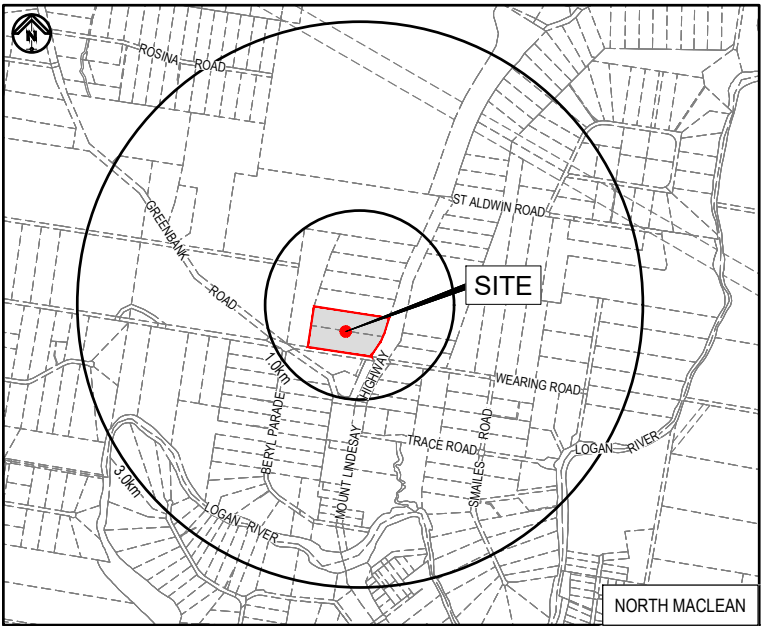
PROPOSED DEVELOPMENT AT

4733-4743 MOUNT LINDESAY HIGHWAY

NORTH MACLEAN, QUEENSLAND

PROJECT No. BE220566-02

BULK EARTHWORKS

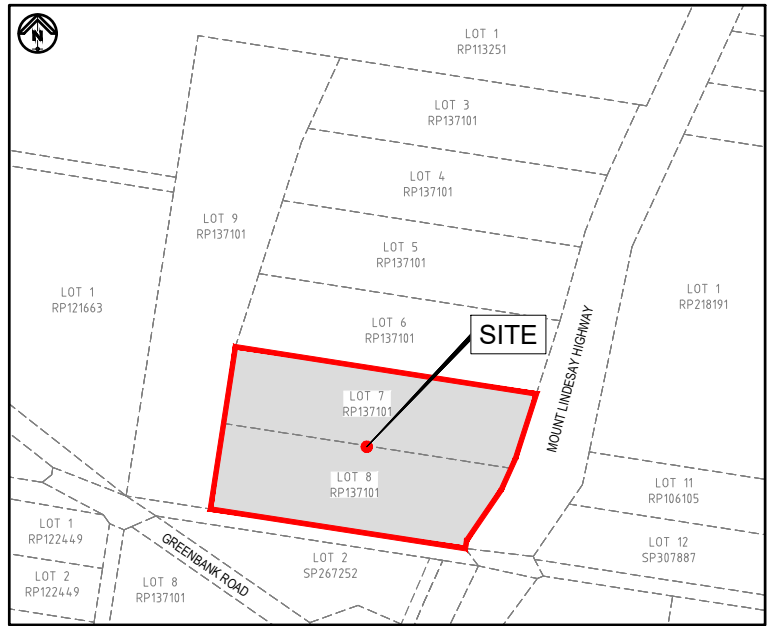


LOCALITY PLAN

N.T.S.

DRAWING INDEX		
DRG. No.	DRAWING TITLE	REVISION
C1000	COVER SHEET, LOCALITY PLAN & DRAWING INDEX	D
C1101	OVERALL LAYOUT PLAN	D
C2000	GENERAL NOTES AND TYPICAL DETAILS	D
C2101	EARTHWORKS LAYOUT PLAN	D
C2301	EARTHWORKS SECTIONS - SHEET 1 OF 2	D
C2302	EARTHWORKS SECTIONS - SHEET 2 OF 2	D
C2601	EROSION & SEDIMENT CONTROL PLAN	D

SURVEY
PROVIDED BY: SUNRISE SURV
REPORT No: 22095 4001 001-A
DATE: 11-10-2024
SYSTEM: MGA2020 ZONE 56



NEIGHBOURHOOD PLAN

N.T.S.

PREPARED FOR



ROUBAIX PROPERTIES NO 4705 PTY LTD

PREPARED BY



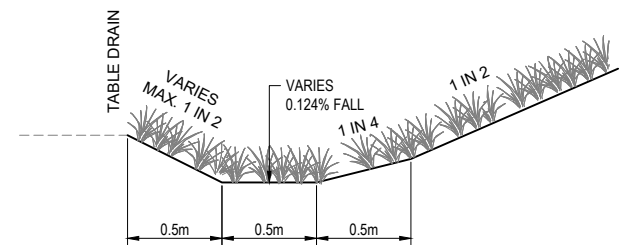
GOLD COAST | BRISBANE | TOOWOOMBA
IPSWICH | MORETON BAY
PHONE: +61 7 5509 6400
FAX: +61 7 5509 6411
EMAIL: ADMIN@BURCHILLS.COM.AU
COOTE BURCHILLS ENGINEERING PTY LTD
ABN 76 166 942 365

PROJECT No.:	DRAWING No.:	VERSION:	DATE:
BE220566-02	C1000	D	12-05-25

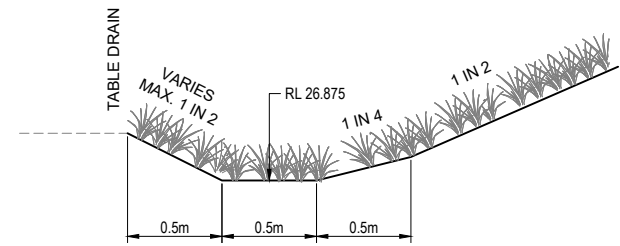
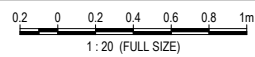


LEGEND

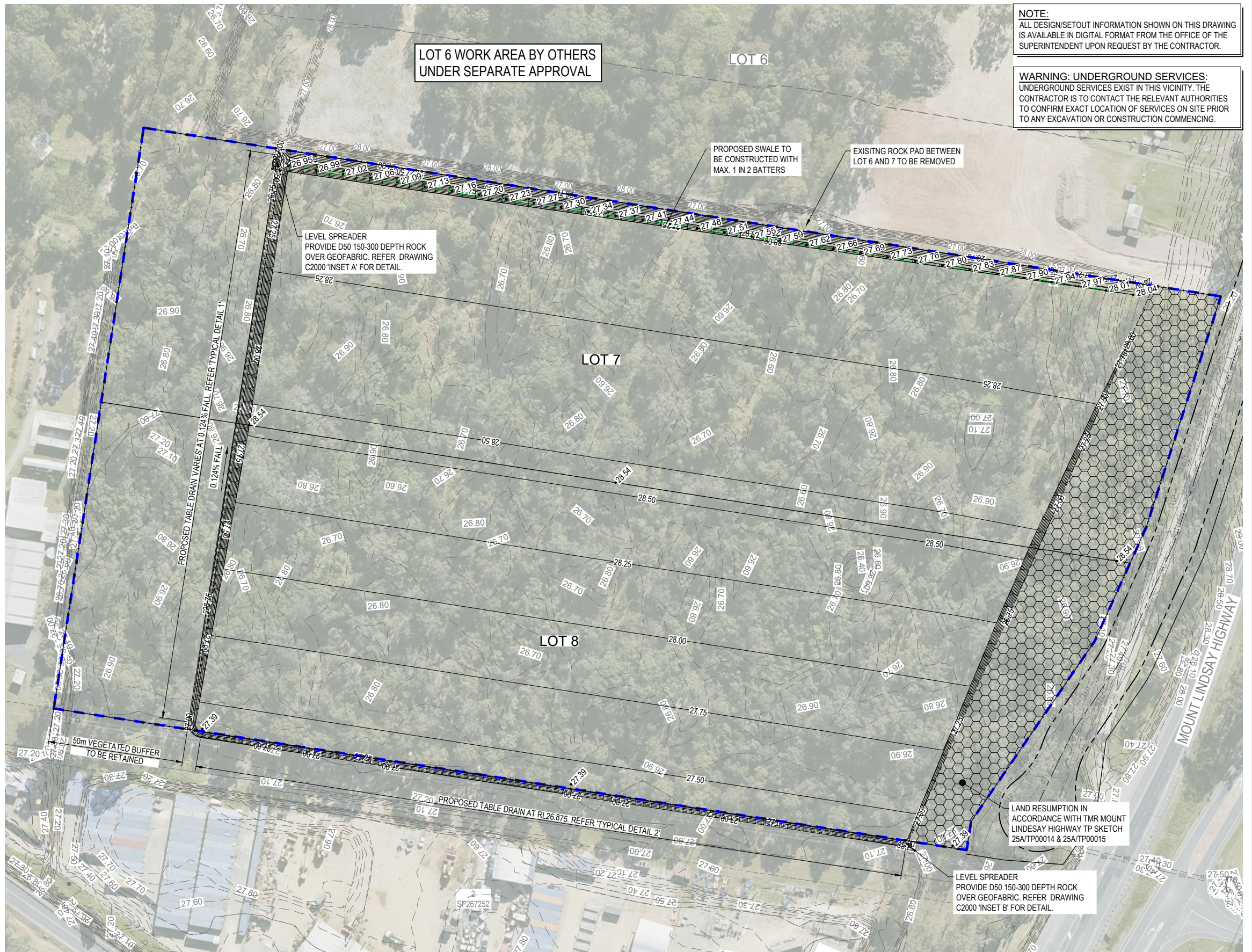
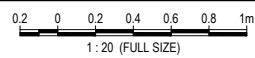
- 27.25 — DESIGN SURFACE CONTOURS
- - - 27.0 - - - EXISTING SURFACE CONTOURS
- - - - - EXISTING LOT BOUNDARY
- - - - - EXISTING EASEMENT
— SW — — SW — — EXISTING STORMWATER
— S — — S — — EXISTING SEWER
— OH — — OH — — EXISTING OVERHEAD ELECTRIC
— C — — C — — EXISTING COMMS
- - - - - EXISTING ROAD CONTROL LINE
- - - - - EXISTING KERB
- - - - - EXISTING EDGE OF BITUMEN
▲ SURVEY BENCHMARK
[Blue dashed line] DEVELOPMENT SITE BOUNDARY
[Red dashed line] PROPOSED LOT BOUNDARY
[Green dashed line] PROPOSED SWALE
[Patterned box] LEVEL SPREADER
[Patterned box] FUTURE ROAD KERB INVERT
[Patterned box] TMR LAND RESUMPTION



TYPICAL DETAIL 1 - TABLE DRAIN VARIES AT 0.124% FALL



TYPICAL DETAIL 2 - TABLE DRAIN AT RL 26.875



OVERALL LAYOUT PLAN

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D	ADDED TMR LAND RESUMPTION	12-05-25
C	AMENDED DETAILS	07-05-25
B	EARTHWORKS AMENDMENT	11-04-25
A	ISSUE FOR APPROVAL	28-11-24
VER.	DESCRIPTION	DATE



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EMAIL: ADMIN@BURCHILLS.COM.AU
COOTE Burchills Engineering Pty Ltd
ABN 76 166 942 365

CLEINT : ROUBAIX PROPERTIES NO 4705 PTY LTD	
---	--

DRAWING TITLE : OVERALL LAYOUT PLAN	
PROJECT : PROPOSED BULK EARTHWORKS 4733-4743 MT LINDESAY HWY	

THIS PLAN WAS PLOTTED FOR APPROVAL PURPOSES ONLY	
SCALE AT FULL SIZE (A1) : 10 0 5 10 15 20 25 30 35m 1 : 750 (FULL SIZE)	

DEVEL. APPLIC. No. : PROJECT LEADER : JACK SHAO DRAFTSPERSON : CARL KRUGER		DATE : 12-05-25 DESIGNER : CARL KRUGER CHECKED : JACK SHAO	
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365 [Signature] DATE: 13-05-25 LUCAS FAULKNER RPEQ: 8093		PROJECT No.: BE220566-02	
DRAWING No. : C1101		VERSION: D	

GENERAL NOTES:

CONTRACT DOCUMENTATION

ALL DRAWINGS UNDER THIS CONTRACT ARE TO BE READ IN CONJUNCTION WITH THE PROJECT SPECIFICATION.

SURVEY INFORMATION

CONTROL SURVEY INFORMATION WILL BE ESTABLISHED ON SITE BY THE PRINCIPAL'S SURVEYOR. SETOUT OF THE WORKS IS TO BE CARRIED OUT BY THE CONTRACTOR FROM THE CONTROL SURVEY PROVIDED.
SETOUT INFORMATION SHALL NOT BE OBTAINED BY SCALING FROM THESE DRAWINGS.

DATUM

ALL LEVELS SHOWN ON DRAWINGS ARE A.H.D. (DERIVED).

EXISTING SURVEY CONTROL STATIONS

THE CONTRACTOR IS TO ENSURE THAT SURVEY CONTROL STATIONS ARE NOT DAMAGED OR DISTURBED IN ANY WAY BY CONSTRUCTION ACTIVITIES.

EXISTING SERVICES

EXISTING SERVICES LOCATIONS WHERE SHOWN ON THE DRAWINGS ARE INDICATIVE ONLY. THE CONTRACTOR SHALL CONTACT THE RELEVANT AUTHORITIES IN ORDER TO VERIFY THE EXACT LOCATION OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORK ON SITE AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO EXISTING SERVICES.

SITE ACCESS

THE CONTRACTOR SHALL GAIN ACCESS TO THE SITE AT LOCATIONS APPROVED BY THE SUPERINTENDENT AND IS TO ALLOW FREEDOM OF ACCESS TO OTHER WORK AREAS ON THE SITE AT ALL TIMES.

PROVISION FOR TRAFFIC

PROVISION FOR TRAFFIC ON LOCAL ROADS IS TO BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND LOCAL AUTHORITY REQUIREMENTS.

WORK BOUNDARIES

THE CONTRACTOR IS TO RESTRICT ACTIVITIES TO THOSE AREAS DESIGNATED AS CONTRACT WORK AREAS. AT NO TIME SHALL THE CONTRACTOR ENTER OR CROSS ADJOINING AREAS WITHOUT WRITTEN AUTHORISATION FROM THE SUPERINTENDENT. SITE OFFICE FACILITIES MAY ONLY BE LOCATED WHERE AUTHORISED.

MAINTENANCE OF SITE CONDITION

AREAS BEYOND THE IMMEDIATE WORKS ARE TO BE PROTECTED AND NOT DAMAGED OR DISTURBED IN ANY WAY. EXISTING TREES ARE NOT TO BE REMOVED WITHOUT THE APPROVAL OF THE SUPERINTENDENT. AT COMPLETION OF WORKS THE SITE IS TO BE LEFT IN A CLEAN AND TIDY CONDITION TO THE SATISFACTION OF THE SUPERINTENDENT AND LOGAN CITY COUNCIL.

SITE CLEARING

CLEARING AND GRUBBING SHALL BE CARRIED OUT TO ALL WORK AREAS AS SPECIFIED AND SHALL INCLUDE THE REMOVAL OF ALL EXISTING TREES (UNLESS NOMINATED TO BE PRESERVED), EXISTING VEGETATION, TIMBER, FENCES AND ANY OTHER DEBRIS.

TOPSOIL STRIPPING

ALL TOPSOIL STRIPPED FROM WORK AREAS SHALL BE STOCKPILED FOR LATER RE-SPREADING TO ALL FOOTPATHS, BATTERS AND FILL AREAS.

EARTHWORKS (GENERAL)

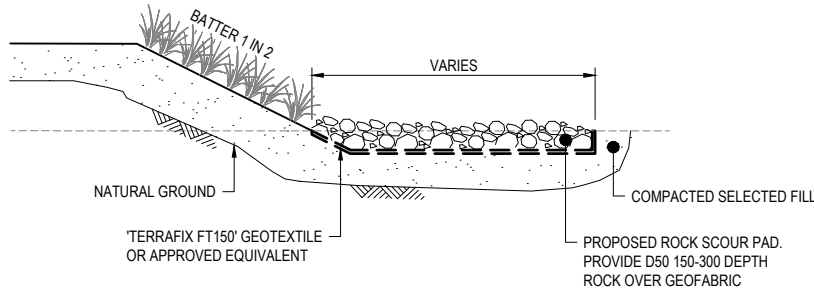
ALL FILL MATERIAL PLACED SHALL BE COMPACTED AND TRIMMED TO FINAL EARTHWORKS LEVELS AND PROFILES SHOWN ON THE CONTRACT DRAWINGS AND TESTED IN ACCORDANCE WITH THE PROJECT SPECIFICATION. ALL COMPACTION TESTING UNDER THIS CONTRACT IS TO BE CARRIED OUT TO AS3798 LEVEL 1 STANDARD BY A NATA-ACCREDITED TESTING AUTHORITY. CERTIFICATION FOR ALL EARTHWORKS CONSTRUCTION AND TESTING IS TO BE PROVIDED BY A REGISTERED PROFESSIONAL ENGINEER QUEENSLAND (RPEQ) ENGAGED BY THE CONTRACTOR.

EARTHWORKS MATERIALS

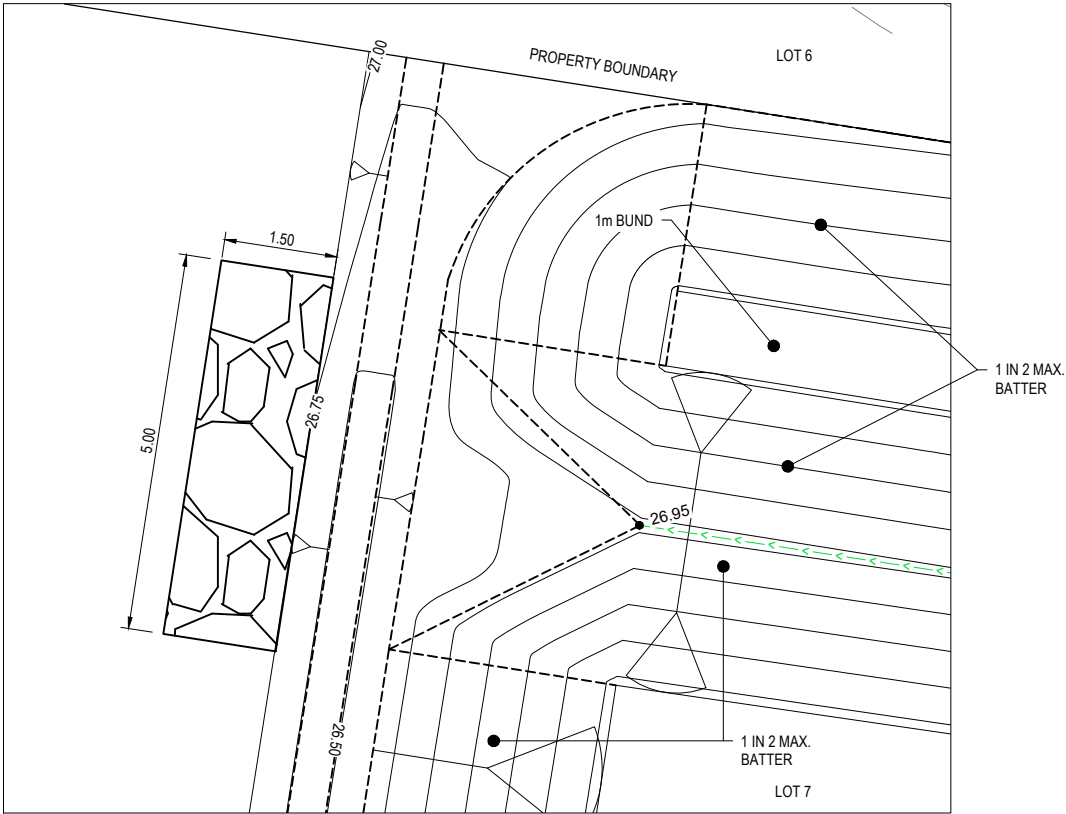
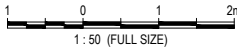
ANY EXCAVATED SILTS OR UNCOMPACTED FILLS ARE TO BE INCORPORATED IN STRUCTURAL FILLING BY SELECTIVELY MIXING WITH OTHER MATERIALS TO CONTROL THE MOISTURE CONTENT AND TO ACHIEVE THE REQUIRED COMPACTION STANDARDS.

"AS CONSTRUCTED" SURVEY

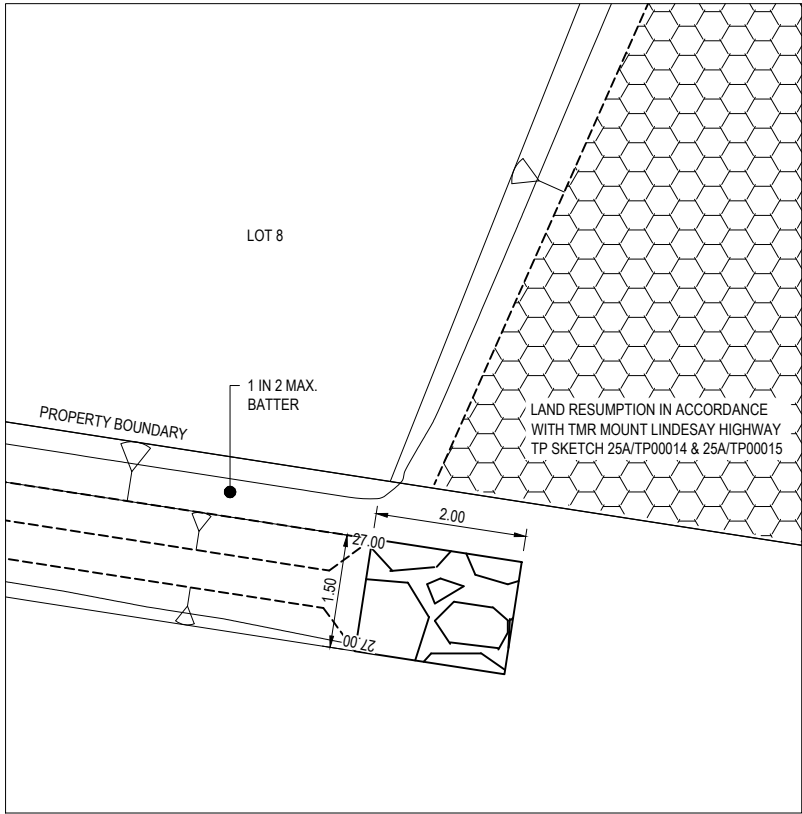
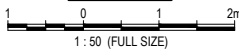
"AS CONSTRUCTED" SURVEY SHALL BE CARRIED OUT BY THE PRINCIPAL'S SURVEYOR AS WORK PROCEEDS.



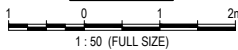
TYPICAL ROCK SCOUR PAD DETAIL



INSET A



INSET B



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D	ADDED TMR LAND RESUMPTION	12-05-25
C	AMENDED DETAILS	07-05-25
B	EARTHWORKS AMENDMENT	11-04-25
A	ISSUE FOR APPROVAL	28-11-24
VER.	DESCRIPTION	DATE



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EMAIL: ADMIN@BURCHILLS.COM.AU
COOTE BURCHILLS ENGINEERING PTY LTD
ABN 76 166 942 365

CLEINT :

ROUBAIX PROPERTIES
NO 4705 PTY LTD

DRAWING TITLE :

GENERAL NOTES AND TYPICAL DETAILS

PROJECT :

PROPOSED BULK EARTHWORKS

4733-4743 MT LINDESAY HWY

THIS PLAN WAS PLOTTED FOR
APPROVAL PURPOSES ONLY

SCALE AT FULL SIZE (A1) :

DATE: 13-05-25
LUCAS FAULKNER
RPEQ: 8093

DEVEL APPLIC. No. :	DATE : 12-05-25
PROJECT LEADER : JACK SHAO	DESIGNER : CARL KRUGER
DRAFTSPERSON : CARL KRUGER	CHECKED : JACK SHAO
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365 <i>Lucas Faulkner</i>	DATE: 13-05-25 LUCAS FAULKNER RPEQ: 8093
PROJECT No.: BE220566-02	DRAWING No. : C2000
	VERSION: D



LEGEND

- 27.25 — DESIGN SURFACE CONTOURS
- - - 27.0 - - - EXISTING SURFACE CONTOURS
- - - - - EXISTING LOT BOUNDARY
- - - - - EXISTING EASEMENT
— SW — SW — EXISTING STORMWATER
— S — S — EXISTING SEWER
— OH — OH — EXISTING OVERHEAD ELECTRIC
— C — C — EXISTING COMMS
- - - - - EXISTING EDGE OF BITUMEN
- - - - - EXISTING KERB
[Blue dashed line] DEVELOPMENT SITE BOUNDARY
[Red dashed line] PROPOSED LOT BOUNDARY
[Green dashed line] PROPOSED SWALE
[Pattern] LEVEL SPREADER
[Pattern] TMR LAND RESUMPTION

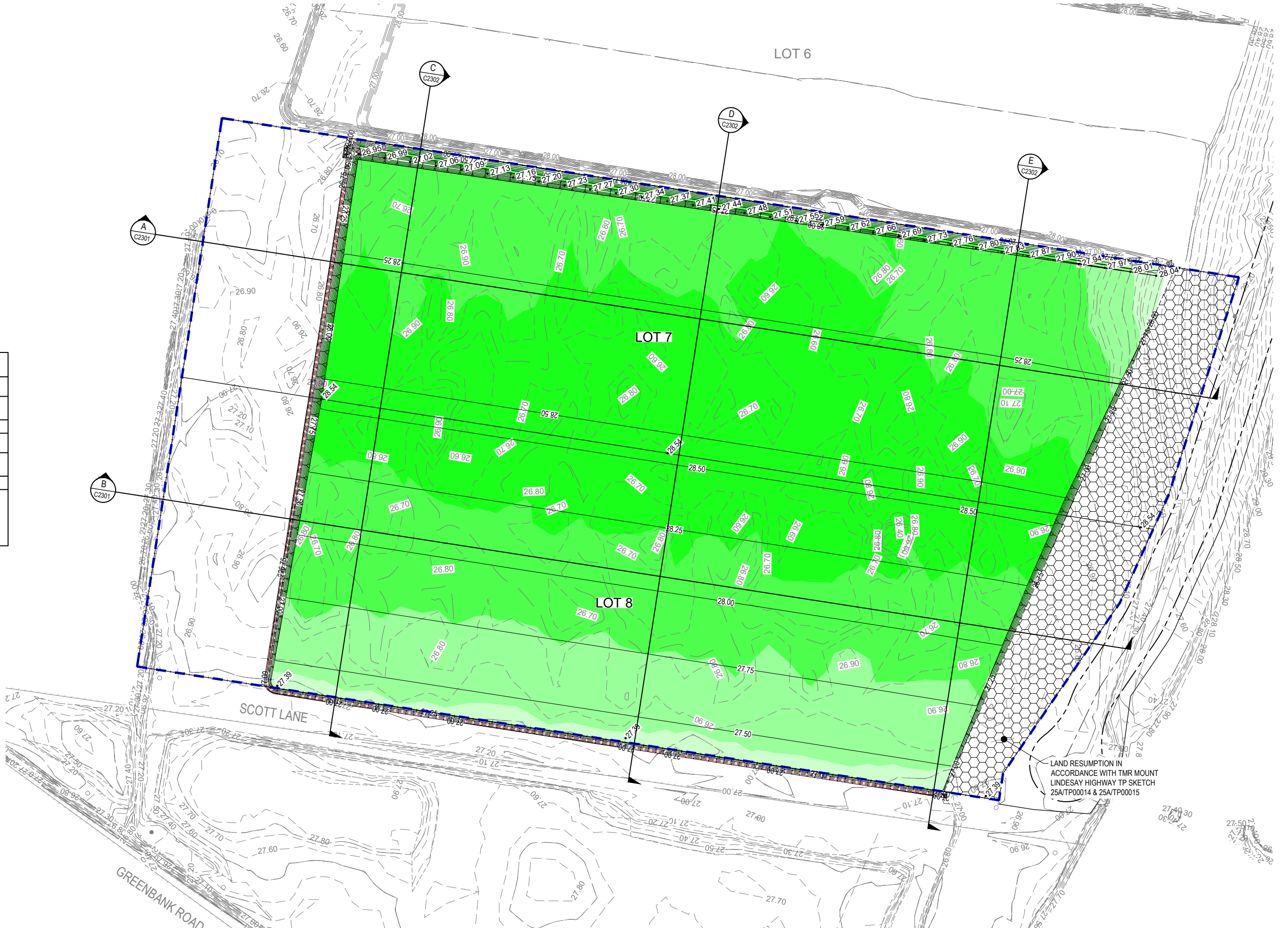
CONCEPT BULK EARTHWORKS SUMMARY	
STRUCTURAL FILLING	
AREA	NETT SOLID FILL
OVERALL FILLING	85,272 cu.m.
EXCAVATION	
AREA	NETT CUT
OVERALL EXCAVATION	89 cu.m.
SUMMARY: 85,272 cu.m - 89 cu.m = 85,183 cu.m IMPORTED MATERIAL NO ALLOWANCE FOR BOXING HAS BEEN CONSIDERED NO ALLOWANCE HAS BEEN MADE FOR TOPSOIL STRIP / REPLACEMENT. NO ALLOWANCE FOR COMPACTION HAS BEEN CONSIDERED	

EARTHWORKS DEPTH ANALYSIS LEGEND			
LOWER	TO	UPPER	COLOUR
-0.5m	TO	0.0m	[Lightest Green]
0.0m	TO	0.5m	[Light Green]
0.5m	TO	1.0m	[Medium Green]
1.0m	TO	1.5m	[Dark Green]
1.5m	TO	2.0m	[Darkest Green]
2.0m	TO	2.5m	[Darkest Green]
2.5m	TO	3.0m	[Darkest Green]
3.0m	TO	3.5m	[Darkest Green]
3.5m	TO	4.0m	[Darkest Green]

NOTE:
FOR EROSION & SEDIMENT CONTROL NOTES
& TYPICAL DETAILS REFER DRG. C2601.

NOTE:
ALL DESIGN/SETOUT INFORMATION SHOWN ON THIS DRAWING
IS AVAILABLE IN DIGITAL FORMAT FROM THE OFFICE OF THE
SUPERINTENDENT UPON REQUEST BY THE CONTRACTOR.

WARNING: UNDERGROUND SERVICES:
UNDERGROUND SERVICES EXIST IN THIS VICINITY. THE
CONTRACTOR IS TO CONTACT THE RELEVANT AUTHORITIES
TO CONFIRM EXACT LOCATION OF SERVICES ON SITE PRIOR
TO ANY EXCAVATION OR CONSTRUCTION COMMENCING.



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C	AMENDED DETAILS	07-05-25
B	EARTHWORKS AMENDMENT	11-04-25
A	ISSUE FOR APPROVAL	28-11-24
VER.	DESCRIPTION	DATE



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ENGINEERING SOLUTIONS

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EMAIL: ADMIN@BURCHILLS.COM.AU
COOTE BURCHILLS ENGINEERING PTY LTD
ABN 76 166 942 365

CLEINT :

ROUBAIX PROPERTIES
NO 4705 PTY LTD

DRAWING TITLE :

EARTHWORKS LAYOUT PLAN

PROJECT :

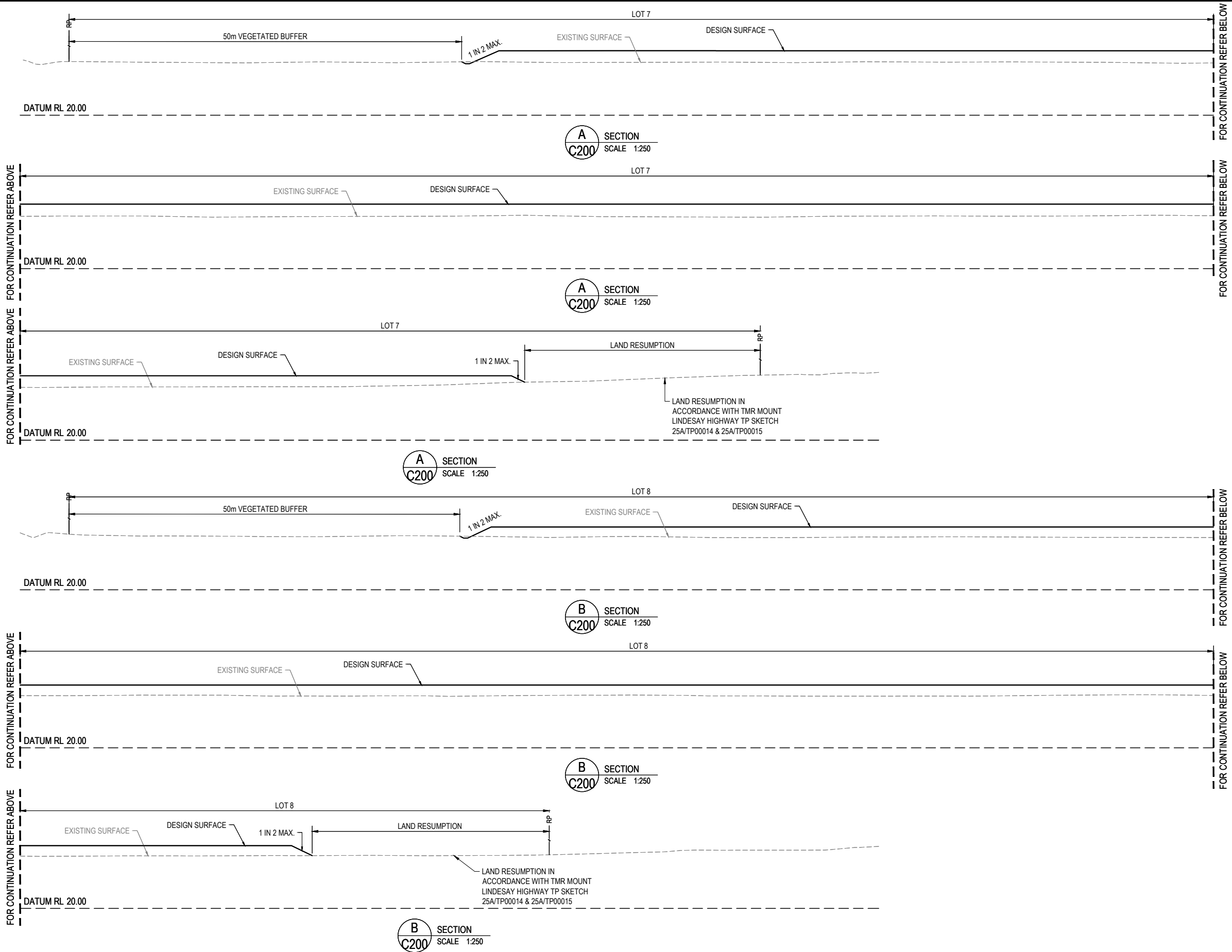
PROPOSED BULK EARTHWORKS

4733-4743 MT LINDESAY HWY

THIS PLAN WAS PLOTTED FOR
APPROVAL PURPOSES ONLY

SCALE AT FULL SIZE (A1) :
10 0 5 10 15 20 25 30 35m
1 : 750 (FULL SIZE)

DEVEL. APPLIC. No. :		DATE : 12-05-25	
PROJECT LEADER : JACK SHAO		DESIGNER : CARL KRUGER	
DRAFTSPERSON : CARL KRUGER		CHECKED : JACK SHAO	
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365  DATE: 13-05-25 LUCAS FAULKNER RPEQ: 8093			
PROJECT No. : BE220566-02		DRAWING No. : C2101	
		VERSION: D	



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C	AMENDED DETAILS	07-05-25
B	EARTHWORKS AMENDMENT	11-04-25
A	ISSUE FOR APPROVAL	28-11-24
VER.	DESCRIPTION	DATE



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EMAIL: ADMIN@BURCHILLS.COM.AU
COOTE BURCHILLS ENGINEERING PTY LTD
ABN 76 166 942 365

CLEINT :

**ROUBAIX PROPERTIES
NO 4705 PTY LTD**

DRAWING TITLE :

**EARTHWORKS SECTIONS
SHEET 1 OF 2**

PROJECT :

**PROPOSED BULK EARTHWORKS
4733-4743 MT LINDESAY HWY**

**THIS PLAN WAS PLOTTED FOR
APPROVAL PURPOSES ONLY**

SCALE AT FULL SIZE (A1) :



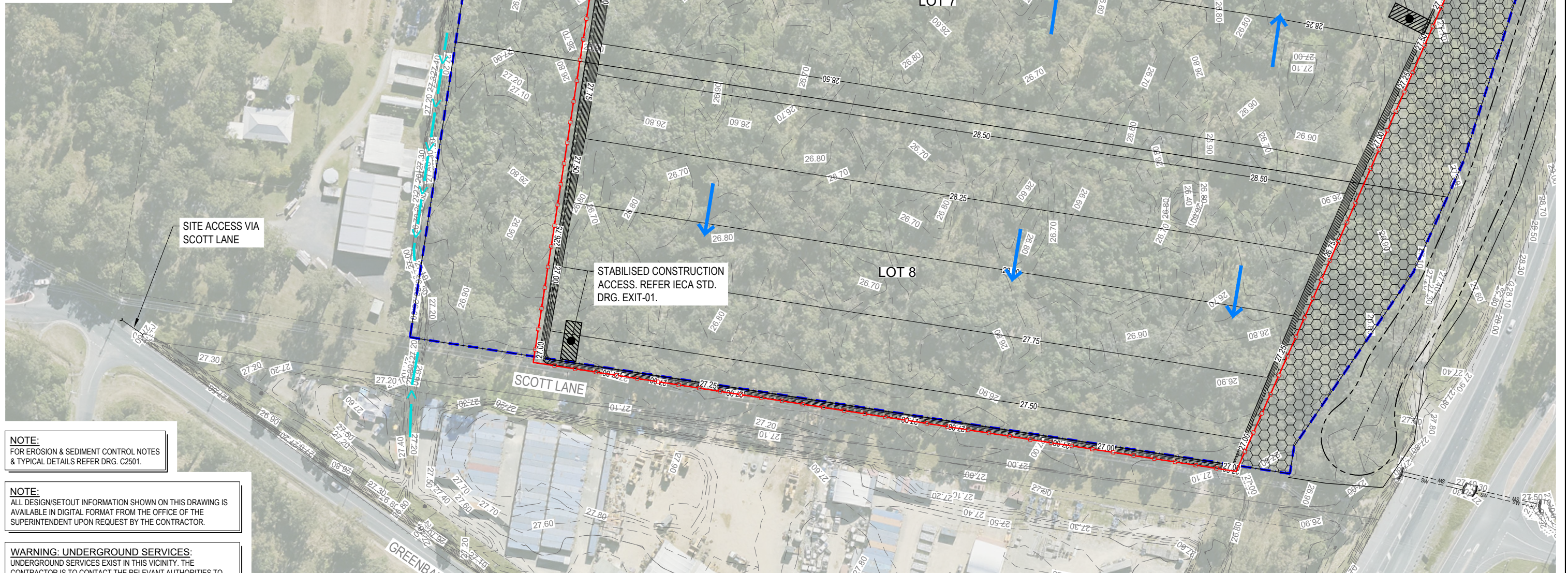
1 : 250 (FULL SIZE)

DEVEL. APPLIC. No.		DATE: 12-05-25
PROJECT LEADER : JACK SHAO	DESIGNER : CARL KRUGER	
DRAFTSPERSON : CARL KRUGER	CHECKED : JACK SHAO	
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365  DATE: 13-05-25 LUCAS FAULKNER RPEQ: 8093		
PROJECT No.: BE220566-02	DRAWING No. : C2301	VERSION: D



LEGEND

- 27.25 — DESIGN SURFACE CONTOURS
- - - 27.0 - - - EXISTING SURFACE CONTOURS
- - - - - EXISTING LOT BOUNDARY
- - - - - EXISTING EASEMENT
- SW - - - SW - - - EXISTING STORMWATER
- S - - - S - - - EXISTING SEWER
- OH - - - OH - - - EXISTING OVERHEAD ELECTRIC
- C - - - C - - - EXISTING COMMS
- - - - - EXISTING ROAD CONTROL LINE
- - - - - EXISTING KERB
- - - - - EXISTING EDGE OF BITUMEN
- - - - - PROPOSED SEDIMENT FENCE
- - - - - CLEAN WATER DIVERSION
- - - - - CATCHMENT BOUNDARY
- - - - - FLOW ARROW
- - - - - TMR LAND RESUMPTION



NOTE:
FOR EROSION & SEDIMENT CONTROL NOTES
& TYPICAL DETAILS REFER DRG. C2501.

NOTE:
ALL DESIGN/SETOUT INFORMATION SHOWN ON THIS DRAWING IS
AVAILABLE IN DIGITAL FORMAT FROM THE OFFICE OF THE
SUPERINTENDENT UPON REQUEST BY THE CONTRACTOR.

WARNING: UNDERGROUND SERVICES:
UNDERGROUND SERVICES EXIST IN THIS VICINITY. THE
CONTRACTOR IS TO CONTACT THE RELEVANT AUTHORITIES TO
CONFIRM EXACT LOCATION OF SERVICES ON SITE PRIOR TO ANY
EXCAVATION OR CONSTRUCTION COMMENCING.

EROSION & SEDIMENT CONTROL PLAN

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NOTE
This is an uncontrolled document issued for information purposes only, unless the checked sections are signed or completed. Figured dimensions take precedence over scale. Do not scale reduced size drawings. Verify dimensions prior to commencing any on-site or off-site works or fabrication.

VER.	DESCRIPTION	DATE
D	ADDED TMR LAND RESUMPTION	12-05-25
C	AMENDED DETAILS	07-05-25
B	EARTHWORKS AMENDMENT	11-04-25
A	ISSUE FOR APPROVAL	28-11-24

BURCHILLS
ENGINEERING SOLUTIONS

GOLD COAST | BRISBANE | TOOWOOMBA
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PHONE: +61 7 5509 6400
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COOTE Burchills Engineering Pty Ltd
ABN 76 166 942 365

CLEINT :

ROUBAIX PROPERTIES
NO 4705 PTY LTD

DRAWING TITLE :

EROSION & SEDIMENT CONTROL PLAN

PROJECT :

PROPOSED BULK EARTHWORKS
4733-4743 MT LINDSAY HWY

THIS PLAN WAS PLOTTED FOR
APPROVAL PURPOSES ONLY

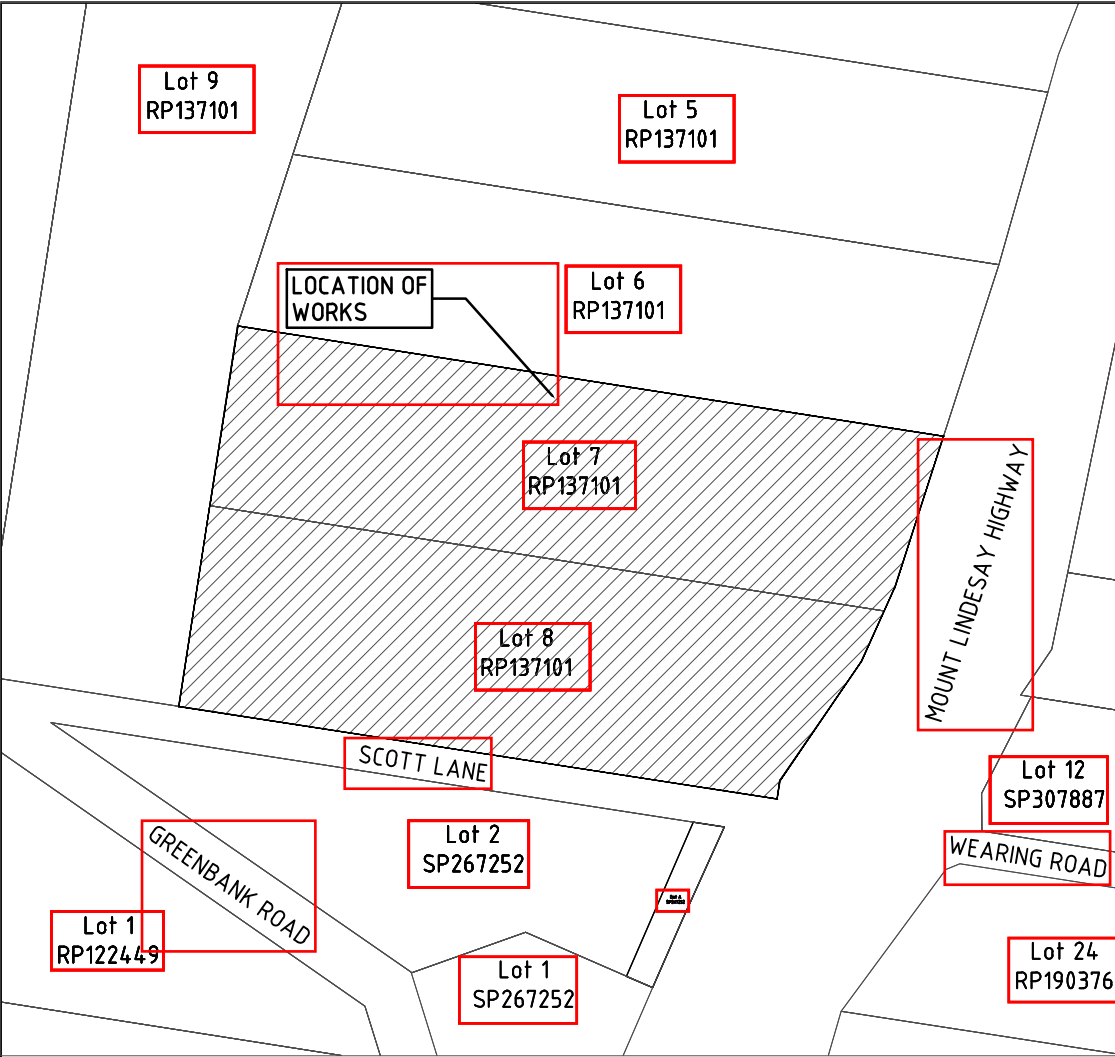
SCALE AT FULL SIZE (A1):
10 0 5 10 15 20 25 30 35m
1:750 (FULL SIZE)

DEVEL APPLIC. No. :	DATE : 12-05-25
PROJECT LEADER : JACK SHAO	DESIGNER : CARL KRUGER
DRAFTSPERSON : CARL KRUGER	CHECKED : JACK SHAO
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365 <i>l m j</i> LUCAS FAULKNER RPEQ: 8093	
PROJECT No.: BE220566-02	DRAWING No. : C2601
VERSION: D	



Appendix E - Electrical and Telecommunication Concept Plans

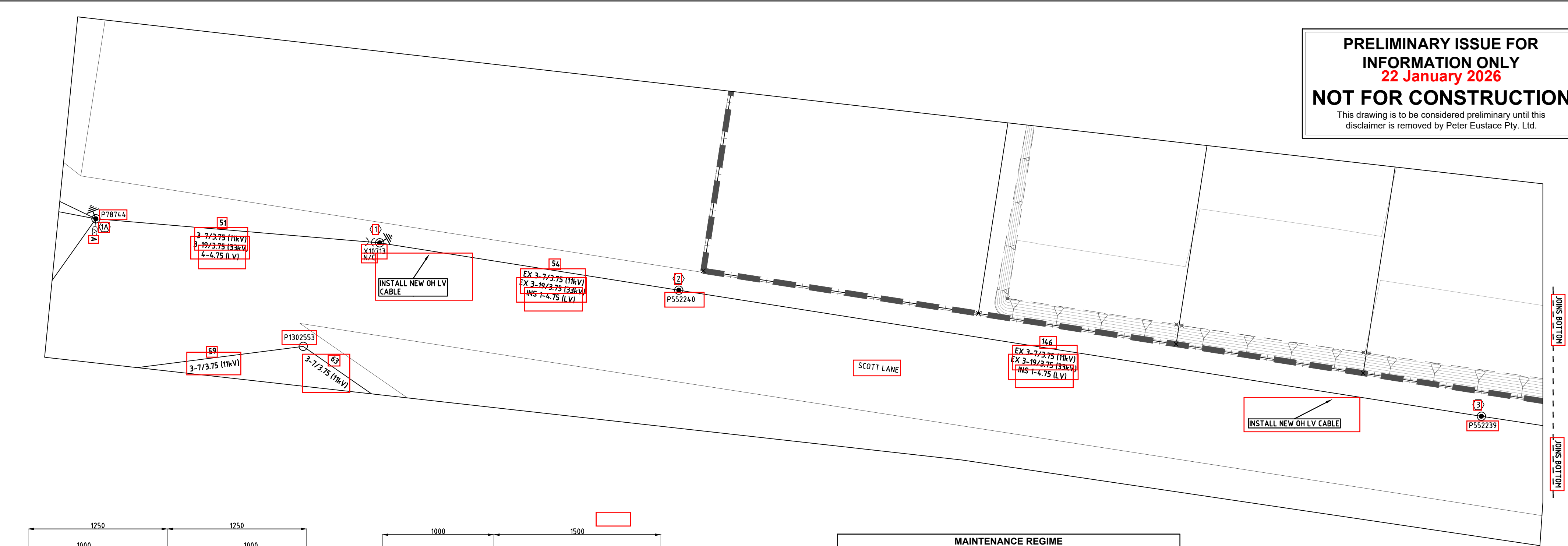




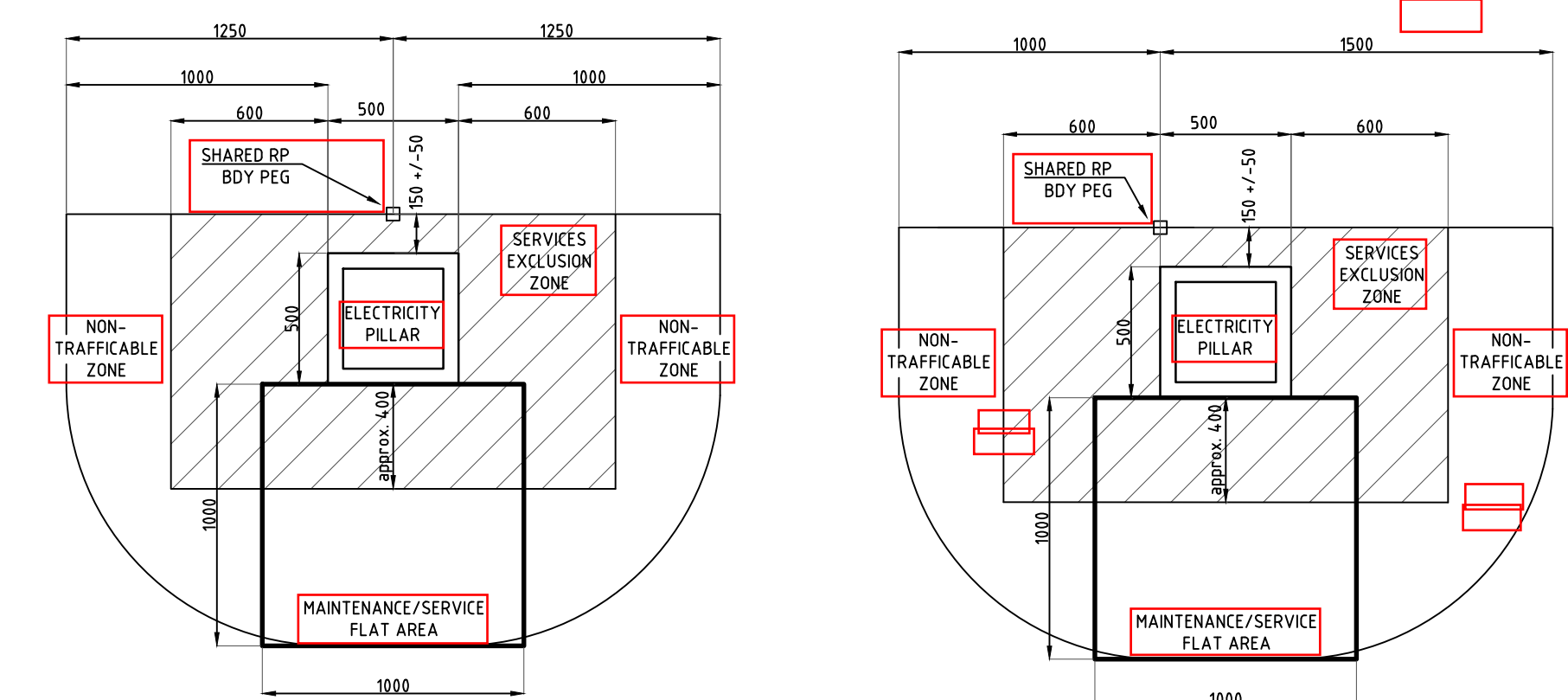
SITE LOCALITY
(SCALE: N.T.S.)

ELECTRICAL / STREET LIGHT CERTIFICATION	
THIS IS TO CERTIFY THAT THE DESIGN OF ENERGEX RETICULATION IS IN ACCORDANCE WITH ENERGEX DESIGN MANUALS AND WORK CATEGORY SPECIFICATION 47.1 & 47.3 WHERE APPLICABLE.	
ROAD LIGHTING CERTIFIED TO COMPLY WITH AS/NZS 1158.1:2022 FOR 'V' CATEGORY & AS/NZS 1158.3:2020 FOR 'P' CATEGORY LIGHTING FOR ROADS & PUBLIC SPACES SUPPLIED UNDER ENERGEX CONTRACT. THE LIGHTING DESIGN IS BASED UPON THE FOLLOWING MAINTENANCE SCHEDULE:	
* LED LAMP REPLACEMENT AT 5 YEAR INTERVALS INC. CLEANING & INSPECTION OF LUMINAIRE EVERY 48 MONTHS.	
* LAMP REPLACEMENT AT 36 MONTH INTERVALS INC. CLEANING & INSPECTION OF LUMINAIRE.	
* VEGETATION TO BE KEPT CLEAR OF LUMINAIRES.	
* INSPECTION PATROLS & SPOT LAMP REPLACEMENT TO MAINTAIN SERVICE AVAILABILITY AT MIN. 95%.	
* LUMINAIRES & LAMPS TO BE REPLACED WITH EXACT EQUIVALENTS.	
STREET NAME	LIGHTING CATEGORY
KRIS BOVEINIS (RPEQ 22272)	PR3
DATE	

CERTIFICATE OF COMPLIANCE	
DESIGN DOCUMENTATION IN ACCORDANCE WITH THE REQUIREMENTS OF COMPLIANCE OF AS/NZS 1158	
* Refer AS1158.1:2022 Appendix D for information regarding V category	
* Refer AS1158.3:2020 Appendix C for information regarding P category	
* PerfEclite 5.06 computer software used	
* AGI32 computer software used	
ITEM	PROJECT SPECIFICATION
LIGHTING CATEGORY	
Road Name	ROAD NAME
Nominated Lighting Category	PR3
Road Surface Reflection Characteristic	R3
INSTALLATION GEOMETRY	
Road Reserve Lighting Design Width	20
Mounting Height	9
Overhang	2
Lighting Arrangement	ARR1
Pole Setback	0.8m
Upcast Angle	5°
LUMINAIRE/LAMP 1 DETAILS	
Lamp Type / Wattage	L37A
Luminaire Identification	Philips RoadFlair
Lamp Flux (Lumens)	6053
I-Table Number (.cie)	BRP392 LED600W 37W 220-240V DWV
Lighting Tariff	2
Power Factor	HPF (> 0.95)
Start/Run Currents (Amps)	0.16
IP Rating	IP66
CATEGORY PR3 LUMINAIRE/LAMP 1 MAXIMUM SPACING CALCS	
Average Horizontal Illuminance (E_h)	≥1.75 lx
Minimum Point Horizontal Illuminance (E_{min})	≥0.30 lx
Illuminance Uniformity (U_{min})	≥8
Upward wasted light ratio (UWLR) %	≤5xxx%
Road Reserve Lighting Design Width (m)	Maximum Spacing (m)
20	50



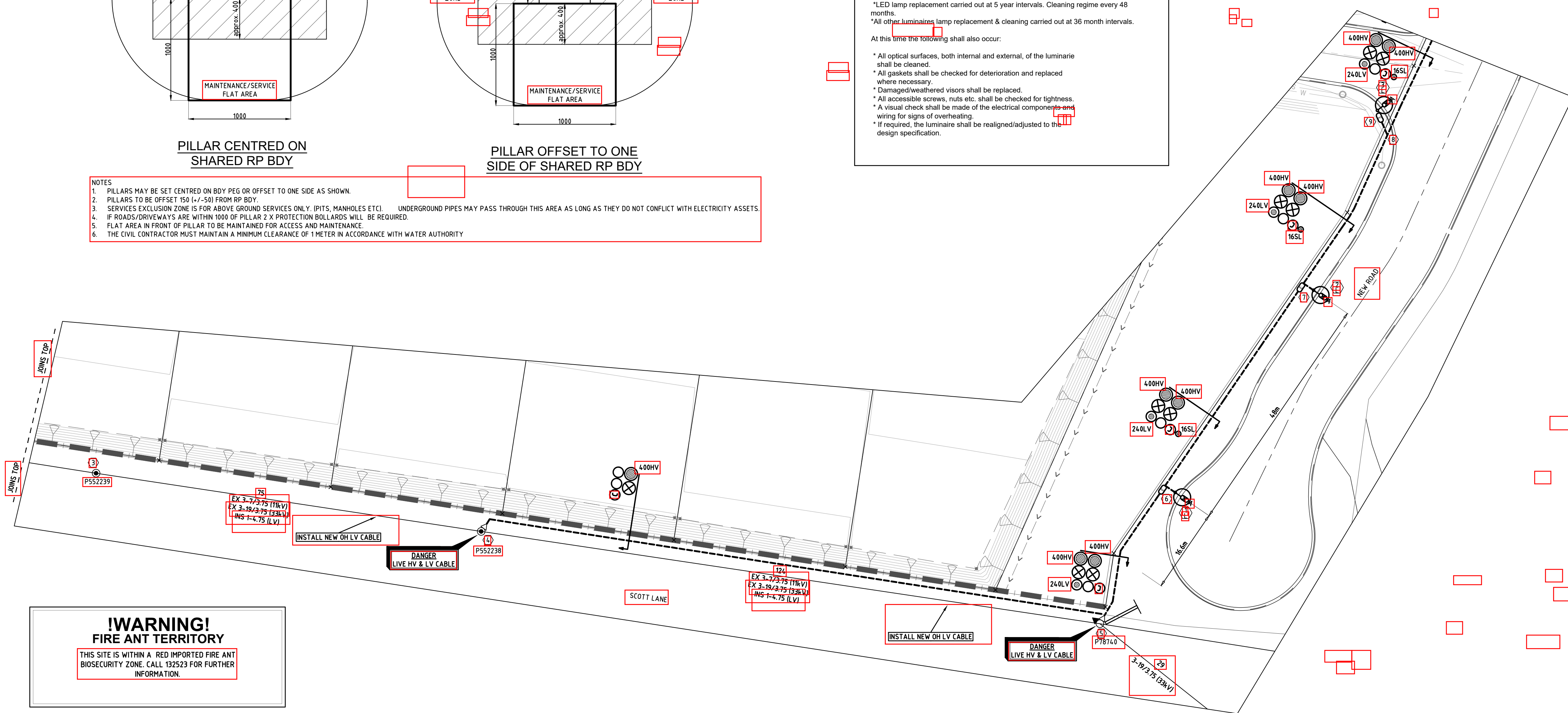
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NOTES

- PILLARS MAY BE SET CENTRED ON BDY PEG OR OFFSET TO ONE SIDE AS SHOWN.
- PILLARS TO BE OFFSET 150 (+/-50) FROM RP BDY.
- SERVICES EXCLUSION ZONE IS FOR ABOVE GROUND SERVICES ONLY. (PITS, MANHOLES ETC). UNDERGROUND PIPES MAY PASS THROUGH THIS AREA AS LONG AS THEY DO NOT CONFLICT WITH ELECTRICITY ASSETS
- IF ROADS/DRIVEWAYS ARE WITHIN 1000 OF PILLAR 2 X PROTECTION BOLLARDS WILL BE REQUIRED.
- FLAT AREA IN FRONT OF PILLAR TO BE MAINTAINED FOR ACCESS AND MAINTENANCE.
- THE CIVIL CONTRACTOR MUST MAINTAIN A MINIMUM CLEARANCE OF 1 METER IN ACCORDANCE WITH WATER AUTHORITY

MAINTENANCE REGIME	
Maintenance Factor Assumed: The maintenance factor assumed in the calculations is as follows:	
* Luminaire Maintenance Factor (refer AS 1158.1:2022 APPENDIX E).	
* Lamp Lumen Depreciation Factor (Refer Lamp Manufacturer's "Lamp Lumen Depreciation Curves").	
Maintenance Factor Calculated	0.75
Schedule of Maintenance: This road lighting design is based on the following maintenance schedule:	
*LED lamp replacement carried out at 5 year intervals. Cleaning regime every 48 months.	
* All other luminaires lamp replacement & cleaning carried out at 36 month intervals.	
At this time the following shall also occur:	
* All optical surfaces, both internal and external, of the luminaire shall be cleaned.	
* All gaskets shall be checked for deterioration and replaced where necessary.	
* Damaged/weathered visors shall be replaced.	
* All accessible screws, nuts etc. shall be checked for tightness.	
* A visual check shall be made of the electrical components and wiring for signs of overheating.	
* If required, the luminaire shall be realigned/adjusted to the design specification.	



!WARNING!
FIRE ANT TERRITORY
THIS SITE IS WITHIN A RED IMPORTED FIRE ANT BIOSECURITY ZONE. CALL 132523 FOR FURTHER INFORMATION.

SYMBOL LEGEND

- PROPOSED 50mm S/L
- PROPOSED 50mm S/L (RATE 3)
- PROPOSED ENERGEX 100mm COMMS
- PROPOSED 100mm
- PROPOSED 125mm
- EXISTING 40mm S/L
- EXISTING ENERGEX 100mm COMMS
- EXISTING 100mm
- EXISTING 125mm
- PROPOSED CABLE (AS MARKED)
- EXISTING CABLE (AS MARKED)
- PROPOSED UNDERGROUND HV/LV ROUTE
- EXISTING UNDERGROUND HV/LV ROUTE
- PROPOSED OVERHEAD HV/LV ROUTE
- EXISTING OVERHEAD HV/LV ROUTE
- PROPOSED S/L CABLE
- EXISTING S/L CABLE
- PADMOUNT TRANSFORMER
- PMT LV GEOGRAPHIC
- PMT HV GEOGRAPHIC
- RING MAIN UNIT
- RMU HV SCHEMATIC
- PROPOSED SUPPLY PILLAR
- EXISTING SUPPLY PILLAR
- PROPOSED LINK PILLAR
- EXISTING LINK PILLAR
- COMMERCIAL PILLAR
- EARTH
- PROPOSED TYPE 4 PIT
- EXISTING TYPE 4 PIT
- RECOVER EQUIPMENT
- 1kV STRAIGHT JOINT
- OVERHEAD POLE TRANSFORMER
- OVERHEAD POLE (HV ONLY)
- OVERHEAD POLE (LV ONLY)
- OVERHEAD POLE (HV & LV)
- OVERHEAD HV TERMINATION
- OVERHEAD LV TERMINATION
- AIR BREAK SWITCH (OPEN)
- AIR BREAK SWITCH (CLOSED)
- DISCONNECT LINKS (OPEN)
- DISCONNECT LINKS (CLOSED)
- WATER METER
- SURVEY PEG
- STATION NUMBER

STREET LIGHT SYMBOL LEGEND

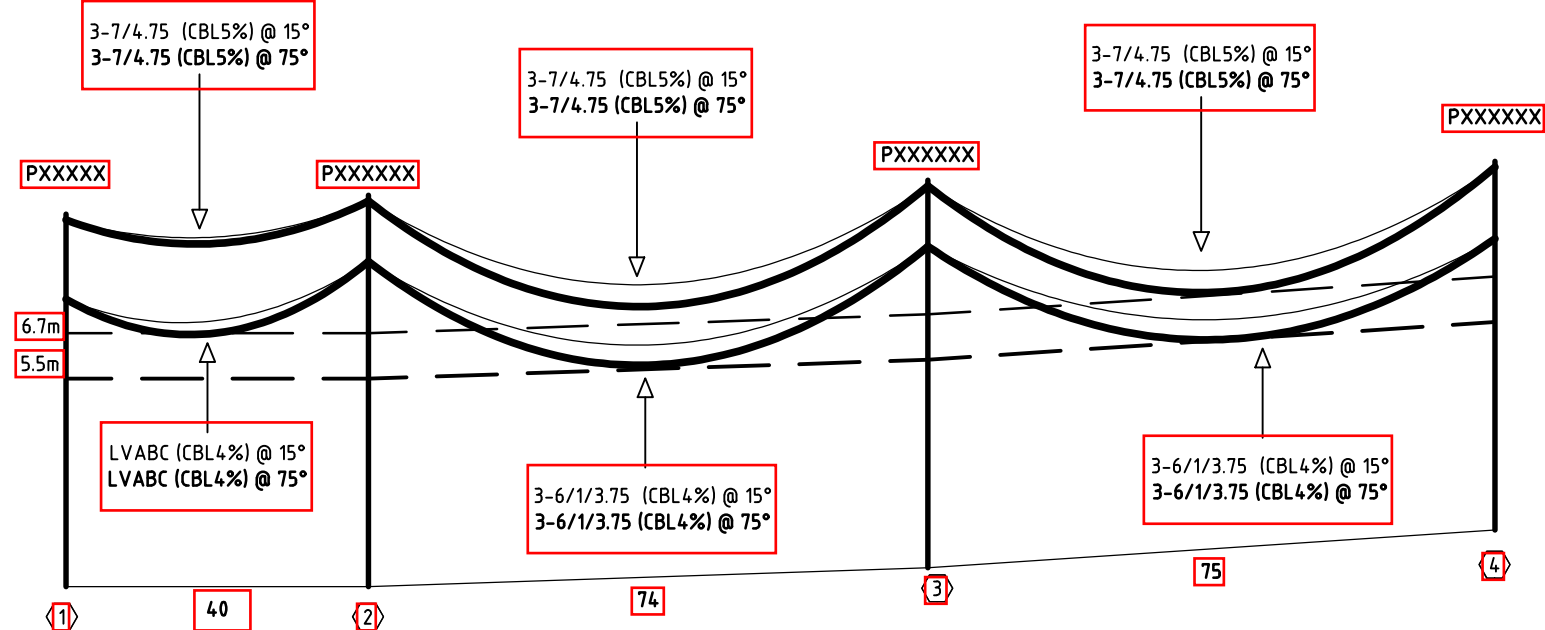
- PROPOSED L37A (RATE 2)
- EXISTING L50A (RATE 2)

ENERGEX NON-STANDARD TRENCH DETAILS (INTS)

DETAIL SP1 & SP1-SL

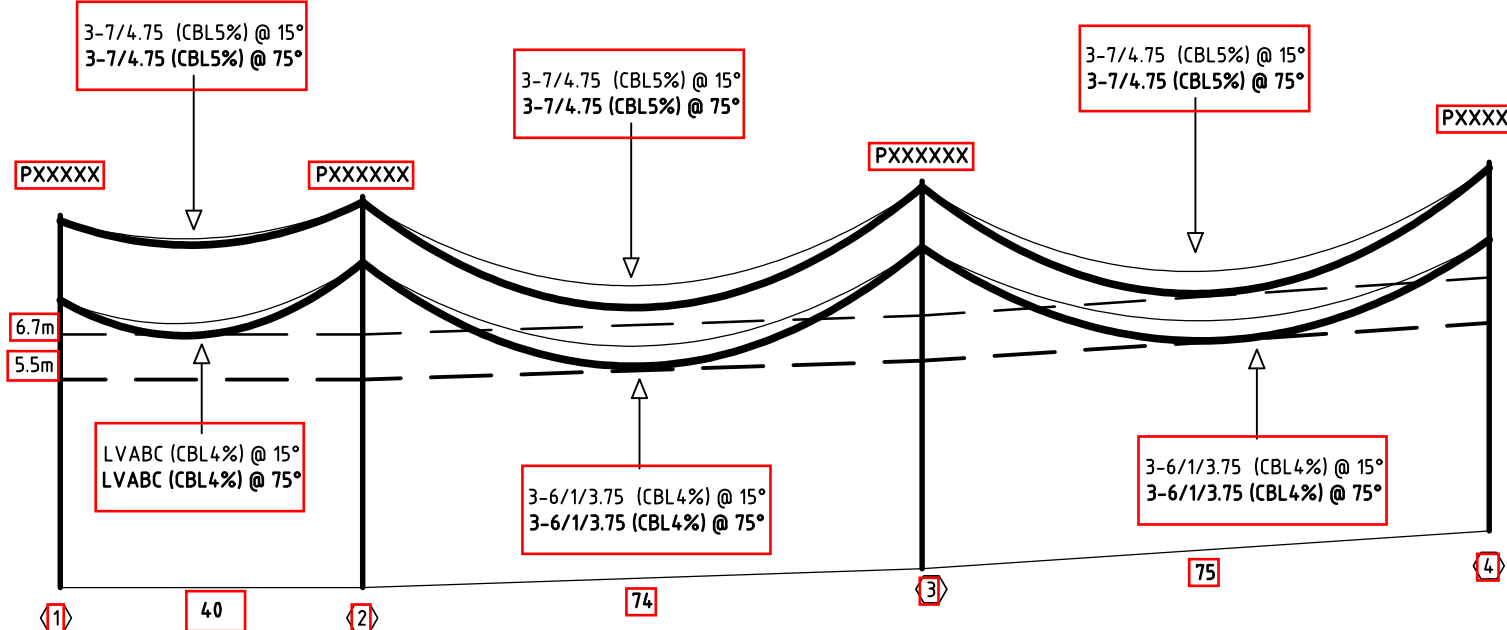
DETAIL SP2 & SP2-SL

RATE 2 STREETLIGHT SCHEDULE																								
LOCATION	STN No	SITE ID (POLE No)	POLE or COMPONENTS					LANTERN							OUTREACH BRACKET					MOUNT HEIGHT (m)	REMARKS			
			COMP ID	EXIST (m)	REC (m)	ERECT (m)	S/LM or IIN	ALIGN (m)	COMP ID	EX	RECOVER LUMIN	CUST	DATE DE-ENERG	ERECT LUMIN	CUST	DATE ENERG	S/LM or IIN	EXIST (m)	REC (m)			ERECT (m)	S/LM or IIN	UPIC (*)
NEW ROAD 2	1L	P12757071	PO 1			7BPM	SB90130UC1I		SL 1				L37A	LGAN	SLEDPH0395A		3		ASSY808-2	5"	9			
	2L	P12757072	PO 1			7BPM	SB90130UC1I		SL 1				L37A	LGAN	SLEDPH0395A		3		ASSY808-2	5"	9			
	3L	P12757073	PO 1			7BPM	SB90130UC1I		SL 1				L37A	LGAN	SLEDPH0395A		3		ASSY808-2	5"	9			
NEW ROAD	4L	P12757074	PO 1			7BPM	SB90130UC1I		SL 1				L37A	LGAN	SLEDPH0395A		3		ASSY808-2	5"	9			
	5L	P12757075	PO 1			7BPM	SB90130UC1I		SL 1				L37A	LGAN	SLEDPH0395A		3		ASSY808-2	5"	9			
	6L	P12757076	PO 1			7BPM	SB90130UC1I		SL 1				L37A	LGAN	SLEDPH0395A		3		ASSY808-2	5"	9			
	7L	P12757077	PO 1			7BPM	SB90130UC1I		SL 1				L37A	LGAN	SLEDPH0395A		3		ASSY808-2	5"	9			
	8L	P12757078	PO 1			7BPM	SB90130UC1I		SL 1				L37A	LGAN	SLEDPH0395A		3		ASSY808-2	5"	9			
	9L	P12757079	PO 1			7BPM	SB90130UC1I		SL 1				L37A	LGAN	SLEDPH0395A		3		ASSY808-2	5"	9			
	10L	P12757080	PO 1			7BPM	SB90130UC1I		SL 1				L37A	LGAN	SLEDPH0395A		3		ASSY808-2	5"	9			
	11L	P12757081	PO 1			7BPM	SB90130UC1I		SL 1				L37A	LGAN	SLEDPH0395A		3		ASSY808-2	5"	9			
	12L	P12757082	PO 1			7BPM	SB90130UC1I		SL 1				L37A	LGAN	SLEDPH0395A		3		ASSY808-2	5"	9			



EXISTING OVERHEAD PROFILE

STANDARD 15°C & HOT 75°C
V. SCALE 1:200 @A1
H. SCALE 1:1000 @A1



EXISTING OVERHEAD PROFILE

STANDARD 15°C & HOT 75°C
V. SCALE 1:200 @A1
H. SCALE 1:1000 @A1

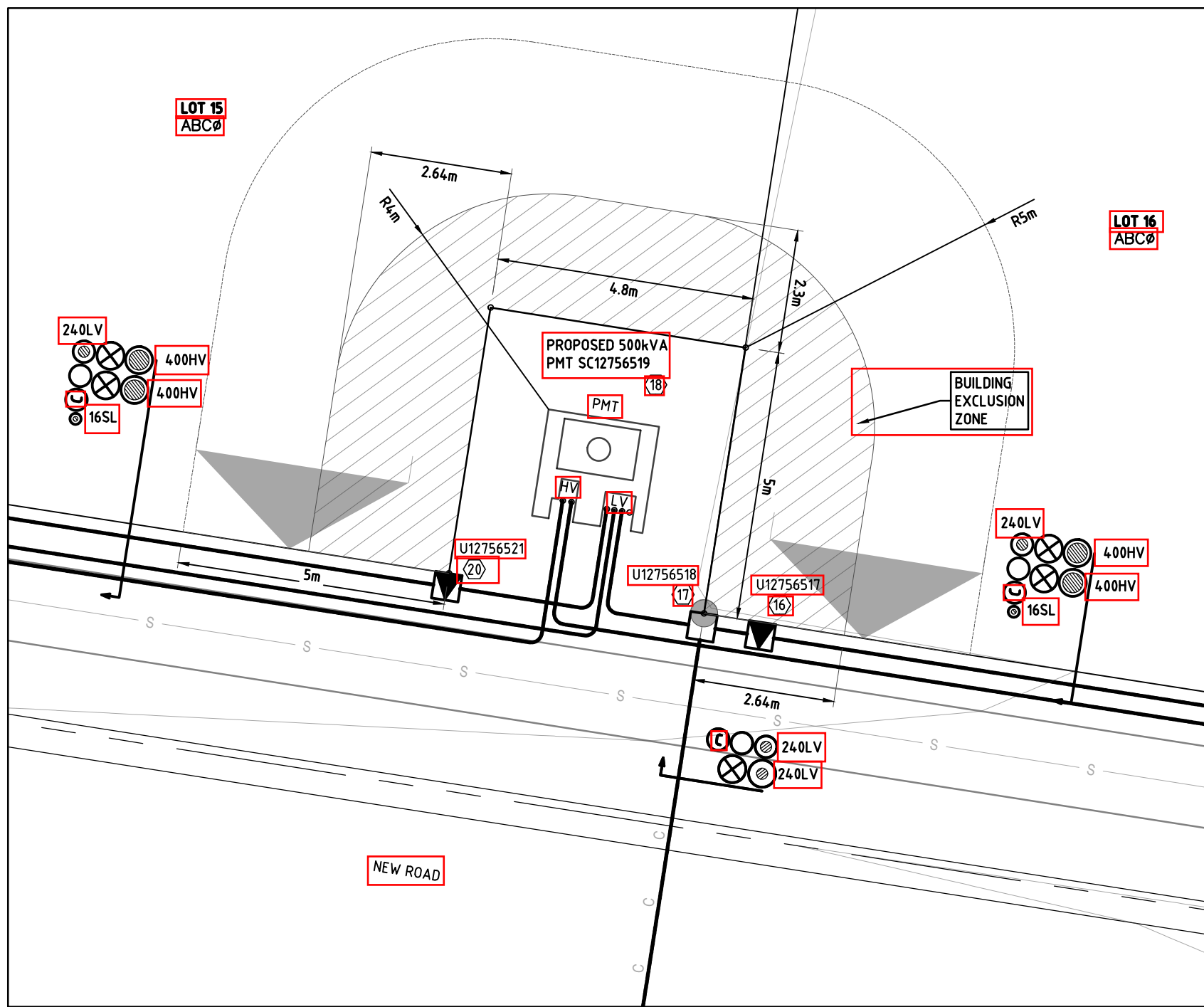
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URD CIVIL WORKS SCHEDULE (ROAD CROSSINGS BY CIVIL CONTRACTOR)																										
LOCATION	STATIONS FROM-TO	CONDUIT LENGTH (m)												BENDS (<°/No)												REMARKS
		50	No	100C	No	100	No	125	No	150	No	200	No	50	No	100C	No	100	No	125	No	150	No	200	No	
NEW ROAD	8 - 10			30	1	30	2	30	4																	
	17 - 19			20	1	20	2	20	2																	
	22 - 24			20	1	20	2	20	2																	
	28 - 30			20	1	20	2	20	2																	
	33 - 34			30	1	30	2	30	2																	
TOTALS				120		240		300																		

URD CIVIL WORKS SCHEDULE (ALONG FOOTPATHS BY ELECTRICAL CONTRACTOR)																										
LOCATION	STATIONS FROM-TO	CONDUIT LENGTH (m)												BENDS (<°/No)												REMARKS
		50	No	100C	No	100	No	125	No	150	No	200	No	40	No	100C	No	100	No	125	No	150	No	200	No	
SCOTT LANE	4 - 5			125	1	125	2	125	2																	
	5 - 6			30	1	30	2	30	4																	
	6 - 8	85	1	85	1	85	2	85	4																	
	7 - 1L	5	1																							
	7 - 2L	5	1																							
	8 - 9	5	1																							
	9 - 3L	5	1																							
	10 - 13	100	1	100	1	100	2	100	4																	
	10 - 31	245	1	245	1	245	2	245	4																	
	11 - 4L	5	1																							
	12 - 5L	5	1																							
	14 - 6L	5	1																							
	15 - 7L	5	1																							
	21 - 8L	5	1																							
	25 - 9L	5	1																							
	28 - 10L	5	1																							
	31 - 36	80	1	80	1	80	2	80	2																	
	32 - 11L	5	1																							
	36 - 12L	5	1																							
TOTALS				575		665		1330		2250																

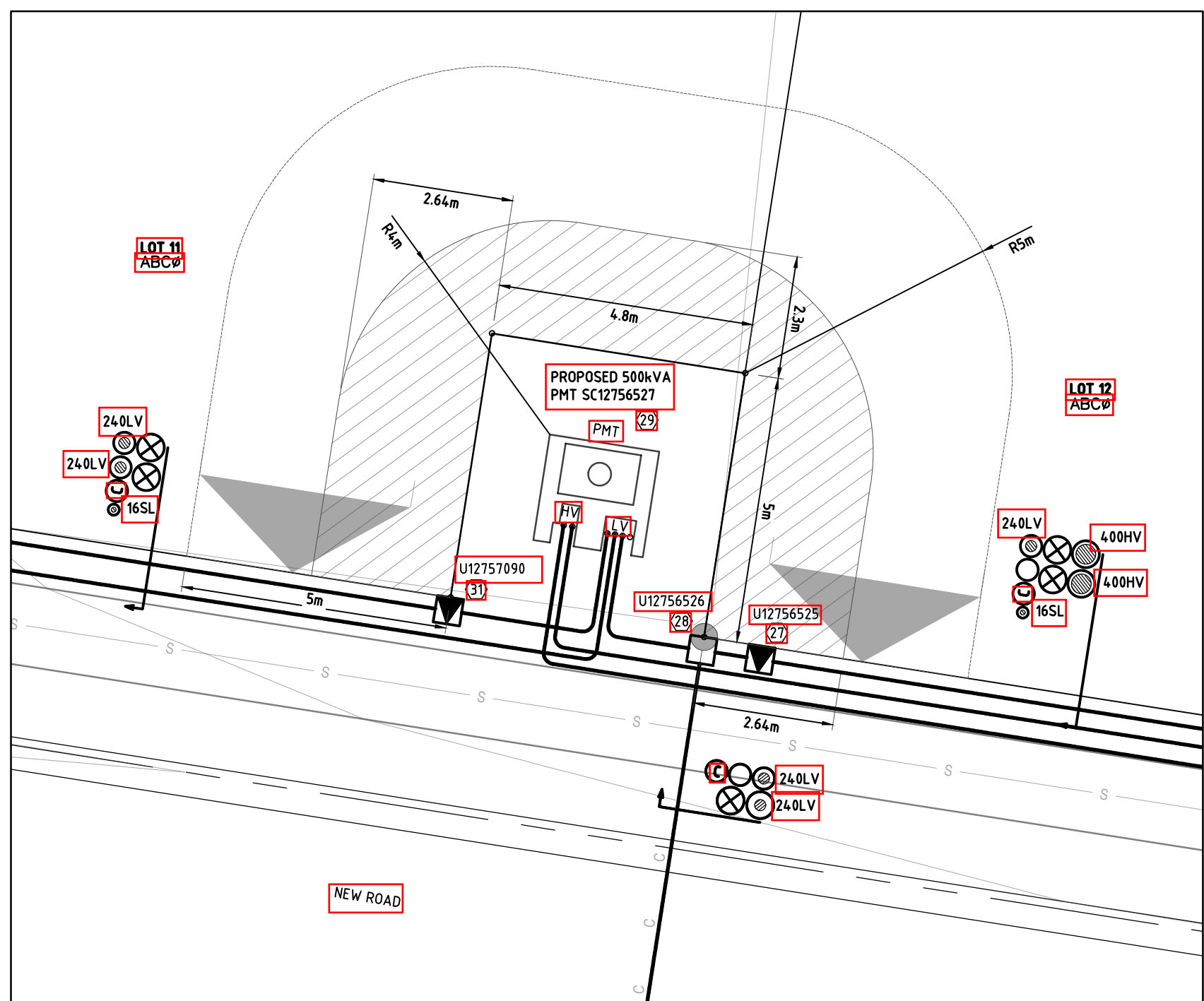
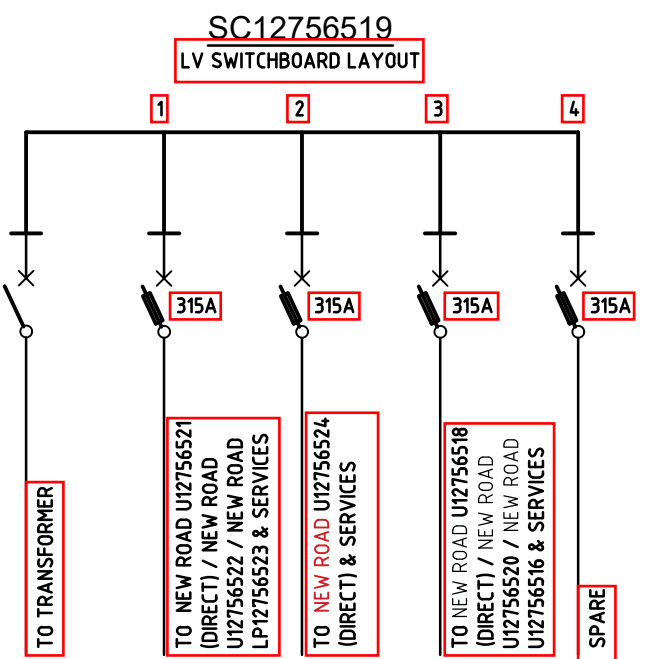
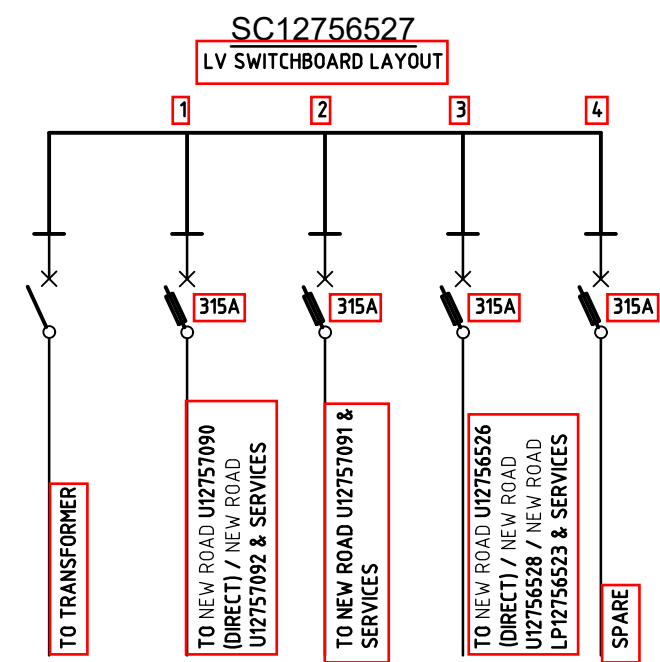
UNDERGROUND CABLE SCHEDULE																
LOCATION	STATIONS FROM-TO	VOLTS	EXIST	TRF	REC	INSTALL	CABLE SIZE/TYPE	MODEL ID	ROUTE LENGTH (m)	CABLE LENGTH (m) NEW	REC	LCC	REMARKS			
SCOTT LANE	4 - 29	11kV				*	400mm² 3 x 1C AL XLPE TRIPLEX	11AT400XSH	512	515						
	5 - 18	11kV				*	400mm² 3 x 1C AL XLPE TRIPLEX	11AT400XSH	242	245						
	5 - 14	LV				*	240mm² 4C AL XLP	LVA4240XPV	177	180						
NEW ROAD	18 - 29	11kV				*	400mm² 3 x 1C AL XLPE TRIPLEX	11AT400XSH	147	150						
	14 - 16	LV				*	240mm² 4C AL XLP	LVA4240XPV	67	70						
	16 - 17	LV				*	240mm² 4C AL XLP	LVA4240XPV	2	5						
	17 - 18	LV				*	240mm² 4C AL XLP	LVA4240XPV	7	10						
	17 - 19	LV				*	240mm² 4C AL XLP	LVA4240XPV	22	25						
	18 - 20	LV				*	240mm² 4C AL XLP	LVA4240XPV	7	10						
	18 - 24	LV				*	240mm² 4C AL XLP	LVA4240XPV	92	95						
	20 - 22	LV				*	240mm² 4C AL XLP	LVA4240XPV	67	70						
	22 - 23	LV				*	240mm² 4C AL XLP	LVA4240XPV	2	5						
	23 - 27	LV				*	240mm² 4C AL XLP	LVA4240XPV	67	70						
	27 - 28	LV				*	240mm² 4C AL XLP	LVA4240XPV	2	5						
	28 - 29	LV				*	240mm² 4C AL XLP	LVA4240XPV	7	10						
	28 - 30	LV				*	240mm² 4C AL XLP	LVA4240XPV	27	30						
	29 - 31	LV				*	240mm² 4C AL XLP	LVA4240XPV	2	5						
	29 - 34	LV				*	240mm² 4C AL XLP	LVA4240XPV	87	90						
	31 - 35	LV				*	240mm² 4C AL XLP	LVA4240XPV	67	70						
	6 - 1L	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	7	10						
	6 - 7	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	52	55						
	7 - 2L	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	7	10						
	7 - 9	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	37	40						
	9 - 3L	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	7	10						
	9 - 10	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	32	35						
	10 - 11	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	27	30						
	11 - 4L	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	7	10						
	11 - 12	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	52	55						
	12 - 5L	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	7	10						
10 - 14	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	37	40							
14 - 6L	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	7	10							
15 - 7L	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	7	10							
15 - 17	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	17	20							
17 - 8L	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	37	40							
22 - 9L	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	22	25							
28 - 10L	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	17	20							
28 - 11L	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	37	40							
35 - 12L	SL				*	16mm² 2C Cu PVC/PVC	LVC216PVPV	17	20							
TOTALS	11kV						400mm² 3 x 1C AL XLPE TRIPLEX	11AT400XSH		910						
	LV						240mm² 4C AL XLP	LVA4240XPV		680						
	SL						16mm² 2C Cu PVC/PVC	LVC216PVPV		490						



PROPOSED 500kVA PMT SC12756519 DETAIL
SCALE 1:100@A1

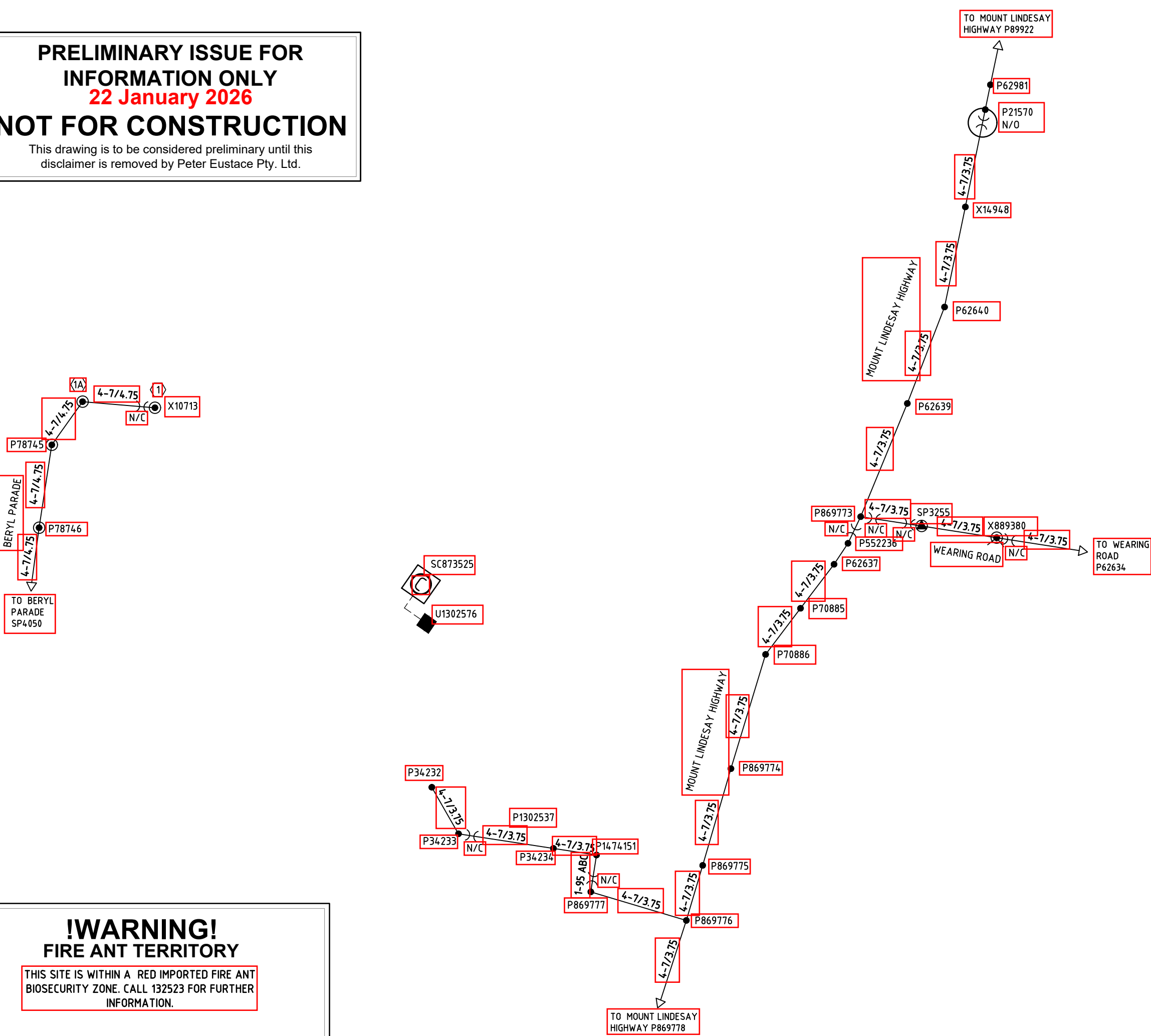
PMT LV SWBD - SWITCH FUSE CIRCUITS				
LOCATION: NEW ROAD		STATION: SC12756527		
CIRCUIT No.	LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION
TFMR ISOLATOR	80 x 35	WB	6	TO TRANSFORMER
1	80 x 35	WB	5	TO NEW ROAD U12757090 (DIRECT) / NEW ROAD U12757092 & SERVICES
2	80 x 35	WB	5	TO NEW ROAD U12757091 & SERVICES
3	80 x 35	WB	5	TO NEW ROAD U12756526 (DIRECT) / NEW ROAD U12756528 / NEW ROAD LP12756523 & SERVICES
4	80 x 35	WB	5	SPARE

PMT LV SWBD - SWITCH FUSE CIRCUITS				
LOCATION: NEW ROAD		STATION: SC12756519		
CIRCUIT No.	LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION
TFMR ISOLATOR	80 x 35	WB	6	TO TRANSFORMER
1	80 x 35	WB	5	TO NEW ROAD U12756521 (DIRECT) / NEW ROAD U12756522 / NEW ROAD LP12756523 & SERVICES
2	80 x 35	WB	5	TO NEW ROAD U12756524 (DIRECT) & SERVICES
3	80 x 35	WB	5	TO NEW ROAD U12756518 (DIRECT) / NEW ROAD U12756520 / NEW ROAD U12756516 & SERVICES
4	80 x 35	WB	5	SPARE



PROPOSED 500kVA PMT SC12756527 DETAIL
SCALE 1:100@A1

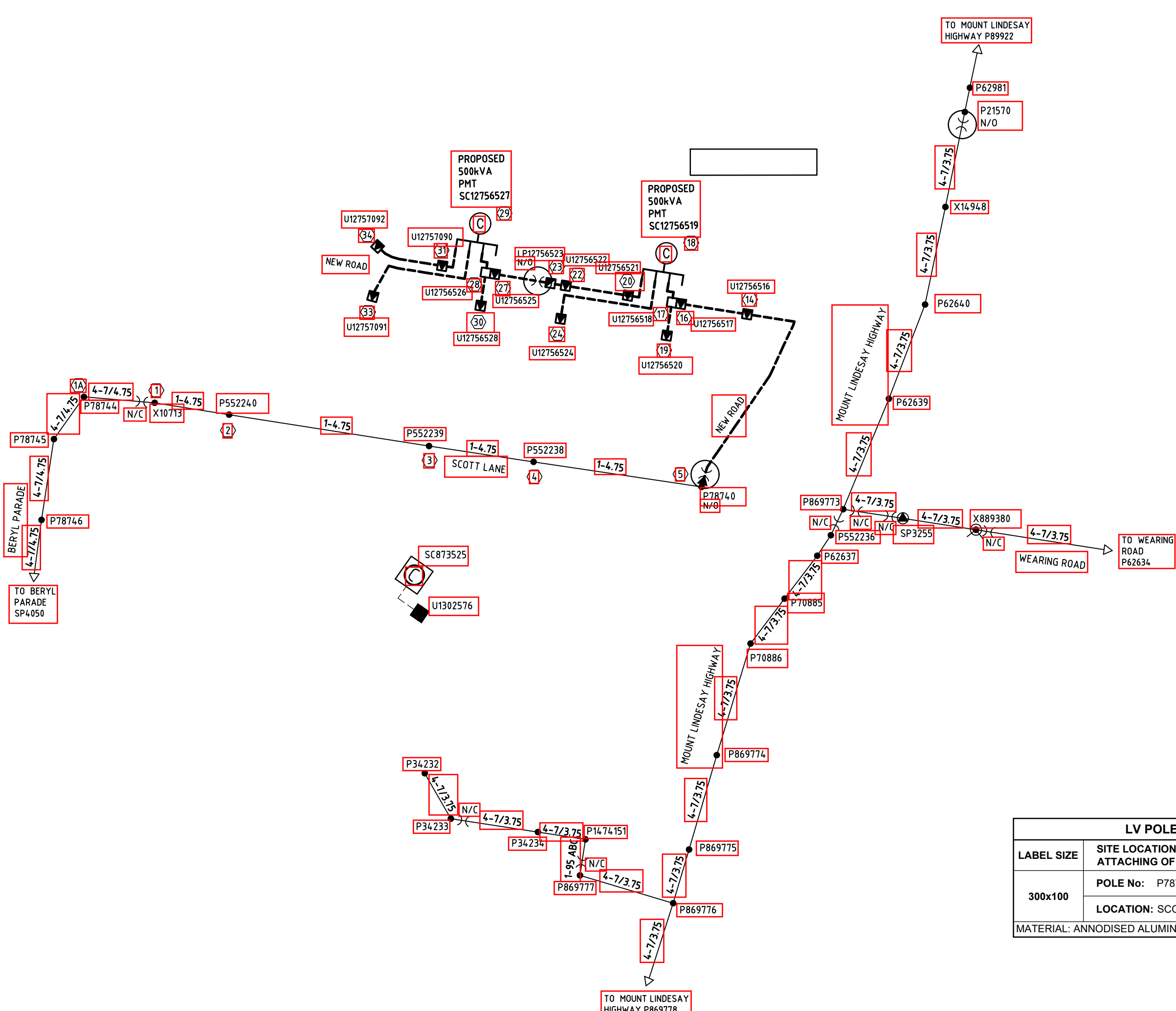
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LEGEND

PROPOSED 240LV
PROPOSED 4C16LV
EXISTING 240LV
EXISTING 4C16LV

EXISTING LV GEOGRAPHIC
ALL UNDERGROUND CABLE 240LV UNLESS OTHERWISE MARKED



LV POLE TERMINATION LABEL		
LABEL SIZE	SITE LOCATION FOR ATTACHING OF LABEL	LABEL INFORMATION
300x100	POLE No: P78740	LV CABLE TO NEW ROAD U12756516
	LOCATION: SCOTT LANE	

MATERIAL: ANNOIDISED ALUMINIUM (1.6mm) or similar

!WARNING!
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PE CONSULTING ENGINEERS
STREET ADDRESS: U14, 39 Lawrence Dr, Naring, QLD 4211
POSTAL ADDRESS: PO Box 2835, Naring DC QLD 4211
TELEPHONE: (07) 5596 1425
EMAIL: mail@pece.com.au
WEB: pece.com.au

24-0275-EGX-03

SITE CONTACT DETAILS
NAME: Energex OH
TBC: Energex UG
COMPANY: NBN
GAS: REFER GAS
PHONE: -
MOBILE: -
FAX: -
WATER: REFER CIVIL
SEWERAGE: REFER CIVIL
OTHER: REFER CIVIL

COUNCIL STANDARD ALIGNMENTS
3.075m RP
0-0.75m RP
REFER NBN
REFER GAS
REFER GAS
REFER CIVIL
REFER CIVIL
REFER CIVIL

WORKS COORDINATOR
PARENT PROJECT NO.
WORK REQUEST NO.
LOTS
CANCELLING LOTS
LOCAL AUTHORITY
UBD REF
PEGGED?

PECE
LOT 7 & LOT 8 ON RP137101
LOGAN CITY COUNCIL

APPROVED
CHECKED
DESIGNER
PLANNER
PHONE
ISSUE DATE

KRIS BOVEINIS
DAVID VAN GENT
FELIPE DEL VALLE
JUAN GONZALEZ

PECE
INSTALL NEW PMT, HV & LV CONDUITS, CABLES, PILLARS & STREETLIGHTS
17 LOT SUBDIVISION
MOUNT LINDESAY HWY
NORTH MACLEAN

WORKSPLAN VERSION 5.5
SCALE: N.T.S.
PROJECT / SUB PROJECT NO.
S1302553
Sheet
ISSUE NO: 3 of 4

ABB SAFELINK 2 CFC RMU							
LOCATION: NEW ROAD				STATION: SC12756519			
LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION			LABEL LOCATION	LABEL DESCRIPTION
100x40	BW	15	IS10	SF11	IS12	NEAR ISOLATOR	ISOLATOR IDENTIFICATION
150x40	BW	20	EXISTING			FRONT	FEEDER IDENTIFICATION
150x50	BW	10	TO NEW ROAD SC12756527 IS15	TO TRANSFORMER	TO SCOTT LANE P78740	CABLE BOX	CABLE DESTINATION
150x50	BW	10	TO NEW ROAD SC12756527 IS15	TO TRANSFORMER	TO SCOTT LANE P78740	INSIDE SIDE WALL	CABLE DESTINATION

NOTES:

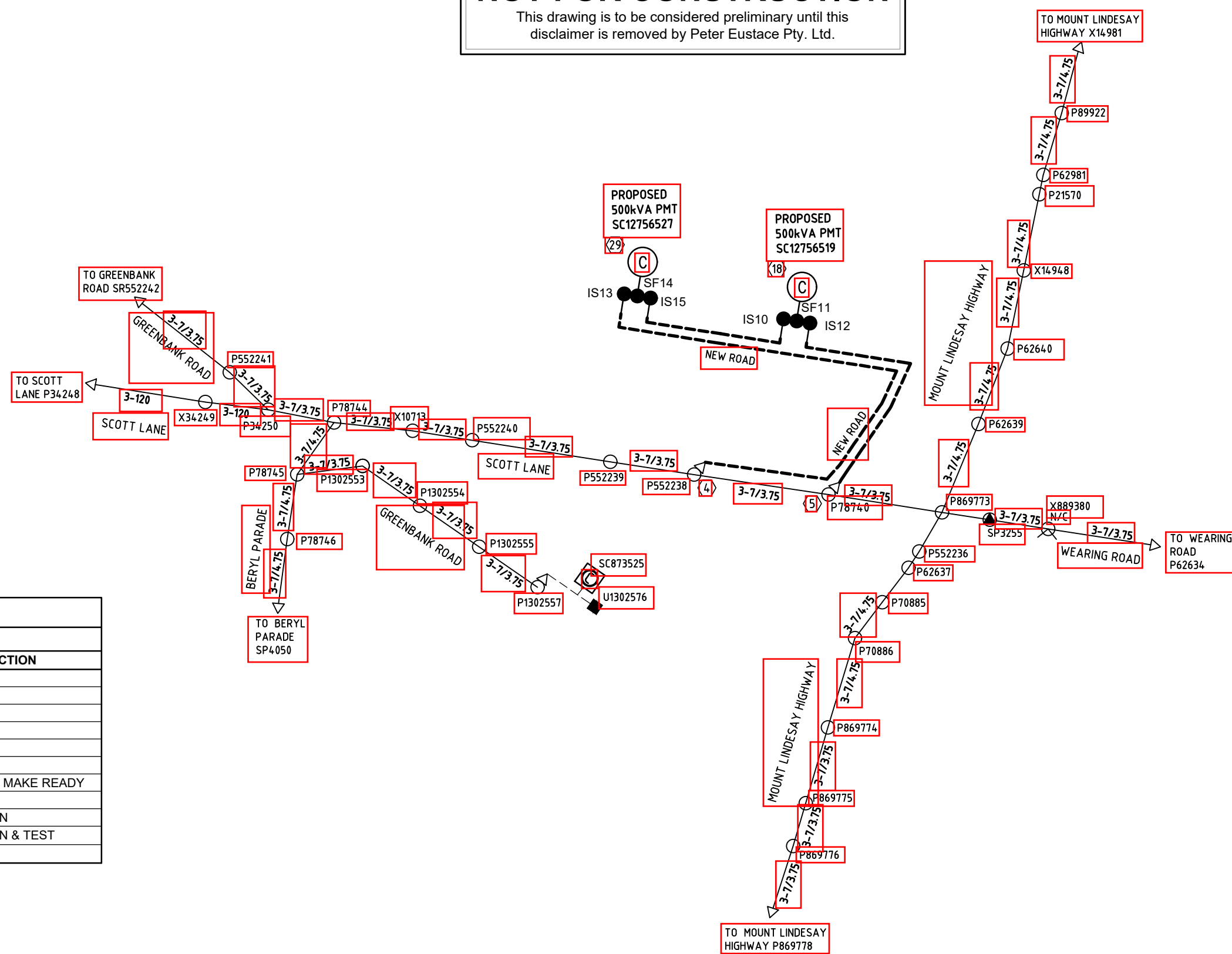
1) Label to be made in GRAVOPLY II (1.5mm) or similar

2) The Feeder I.D Label is only required if the RMU is the first termination inside a Zone Substation

3) Design I.D and Component I.D labels are only required if the RMU is installed in a Zone Substation

**PRELIMINARY ISSUE FOR
INFORMATION ONLY
22 January 2026
NOT FOR CONSTRUCTION**

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PROPOSED COMMISSIONING SCHEDULE			
TENTATIVE ONLY SUBJECT TO AMENDMENT BY SWITCHING CO-ORDINATOR			
ITEM No	LOCATION	APPARATUS	ACTION
	COMMISSION NEW PMT - LV AND HV SWITCHING		
1	ADVISE CONTRACT SUPERVISOR SWITCHING TO COMMENCE		
2	RECEIVE CLEARANCE FROM WORK CREWS ALL WORK COMPLETED		
3	NOTIFY ALL WORK CREWS TREAT PILLARS AS LIVE		
4	WEARING ROAD	X889380	OPEN
5	SCOTT LANE	X10713	OPEN
6	NEW ROAD	NEW EQUIPMENT	CONNECT & MAKE READY
7	REVERSE SWITCHING		REVERSE
8	NEW ROAD	SC12756527 & SC12756519	COMMISSION
9	NEW ROADS	NEW LV EQUIPMENT	COMMISSION & TEST
10	ADVISE CONTRACT SUPERVISOR SWITCHING COMPLETE		

ABB SAFELINK 2 CFC RMU							
LOCATION: NEW ROAD			STATION: SC12756527				
LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION			LABEL LOCATION	LABEL DESCRIPTION
100x40	BW	15	IS13	SF14	IS15	NEAR ISOLATOR	ISOLATOR IDENTIFICATION
150x40	BW	20	EXISTING			FRONT	FEEDER IDENTIFICATION
150x50	BW	10	TO SCOTT LANE P502238	TO TRANSFORMER	TO NEW ROAD SC12756519 IS10	CABLE BOX	CABLE DESTINATION
150x50	BW	10	TO SCOTT LANE P502238	TO TRANSFORMER	TO NEW ROAD SC12756519 IS10	INSIDE SIDE WALL	CABLE DESTINATION

NOTES:

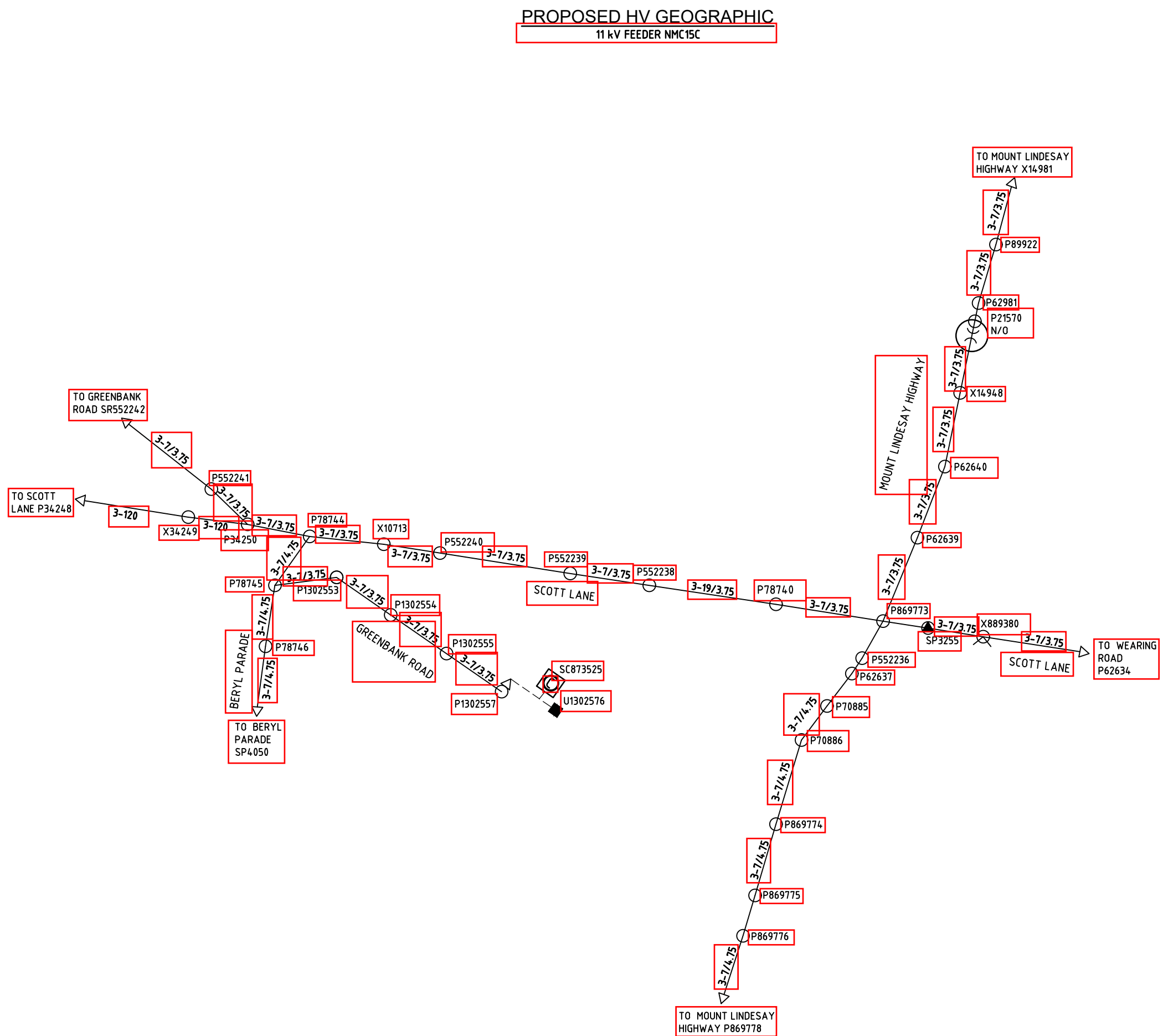
- 1) Label to be made in GRAVPLYY II (1.5mm) or similar
- 2) The Feeder I.D Label is only required if the RMU is the first termination outside a Zone Substation
- 3) Design I.D and Component I.D labels are only required if the RMU is installed in a Zone Substation

11KV FEEDER DESTINATION LABELS		
LOCATION: SCOTT LANE		
LABEL SIZE	STATION I.D	LABEL INFORMATION
300 x 100	POLE NO: P552238	11KV CABLE TO NEW ROAD SC12756527 IS13
MATERIAL: ANNOIDISED ALUMINIUM (1.6mm) or similar		

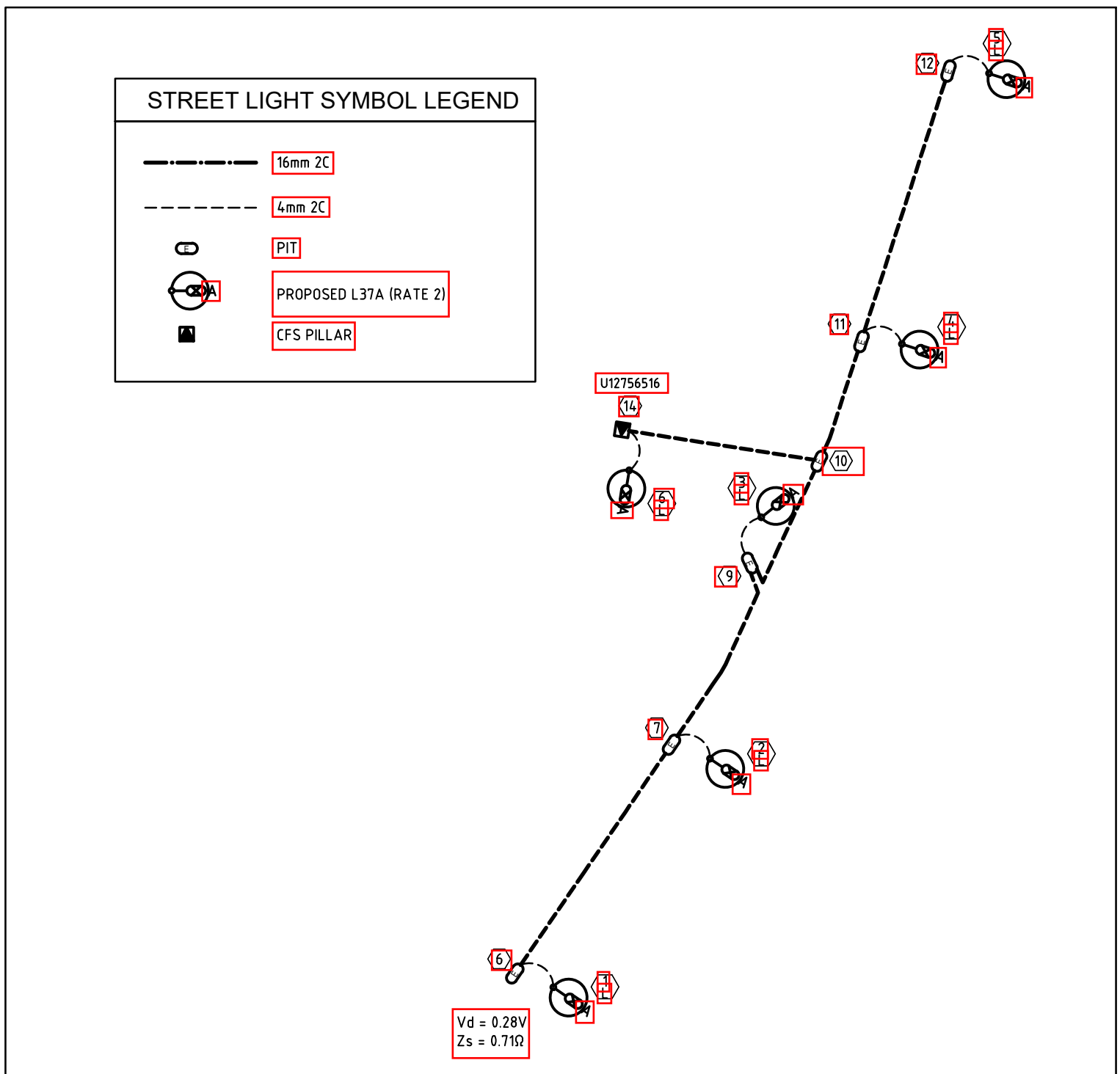
11KV FEEDER DESTINATION LABELS		
LOCATION: SCOTT LANE		
LABEL SIZE	STATION I.D	LABEL INFORMATION
300 x 100	POLE No: P78740	11KV CABLE TO NEW ROAD SC12756519 IS12
MATERIAL: ANNOIDISED ALUMINIUM (1.6mm) or similar		

!WARNING!
FIRE ANT TERRITORY

THIS SITE IS WITHIN A RED IMPORTED FIRE ANT BIOSECURITY ZONE. CALL 132523 FOR FURTHER INFORMATION.



EQUIPMENT SCHEDULE													
LOCATION	STN No	SITE I.D.	EXIST	REC	INSTALL	SIZE & DESCRIPTION	IIN	COMP ID	PLANT No.	MODEL ID	QTY	LCC	REMARKS
NEW ROAD	6				*	S/L PIT & LID (TYPE 4)		PT1		ASSY833-1	1		
					*	JUNCTION BOX KIT (NO FUSE)				ASSY833-5	1		
	7				*	S/L PIT & LID (TYPE 4)		PT1		ASSY833-1	1		
					*	JUNCTION BOX KIT (NO FUSE)				ASSY833-5	1		
	9				*	S/L PIT & LID (TYPE 4)		PT1		ASSY833-1	1		
					*	JUNCTION BOX KIT (NO FUSE)				ASSY833-5	1		
	10				*	S/L PIT & LID (TYPE 4)		PT1		ASSY833-1	1		
NEW ROAD					*	JUNCTION BOX KIT (NO FUSE)				ASSY833-5	1		
	11				*	S/L PIT & LID (TYPE 4)		PT1		ASSY833-1	1		
					*	JUNCTION BOX KIT (NO FUSE)				ASSY833-5	1		
	12				*	S/L PIT & LID (TYPE 4)		PT1		ASSY833-1	1		
					*	JUNCTION BOX KIT (NO FUSE)				ASSY833-5	1		
	14	U12756516			*	C + I PILLAR		CI1		LVSP17-CFS	1		
					*	FUSES				ASSY801-1	A/R		
					*	S/L FUSE				ASSY1037-1	A/R		
					*	EARTH					1		
	16	U12756517			*	C + I PILLAR		CI1		LVSP17-CFS	1		
					*	FUSES					A/R		
					*	EARTH				ASSY1037-1	1		
	17	U12756518			*	SUPPLY PILLAR (240-240-240 7F)		PI1		LVSP9-6SL	1		
	18	SC12756519			*	500KVA PMT TRANSFORMER SAFELINK 2 CFC		TR1		2475044	1		
					*	CULVERT & BASE				C & B	1		
					*	PMT INSTALLATION				PMTINSTALL	1		
					*	PMT COMMISSION				PMTCOM	1		
					*	HV FUSES				DSHVFSCLK	1		
					*	LV FUSES				DSLWF31	3		
					*	EXTENSION PALM KIT 2X240 LV CABLES				SC0022544	1		
					*	HV TERMINATIONS				1CFC0524XLG	2		
					*	LV TERMINATIONS				LTSA24D	3		
					*	COMMON EARTHING				DSSQPMCEG	1		
	19	U12756520			*	C + I PILLAR		CI1		LVSP17-CFS	1		
					*	FUSES				ASSY801-1	A/R		
					*	S/L FUSE				ASSY1037-1	A/R		
					*	EARTH					1		
	20	U12756521			*	C + I PILLAR		CI1		LVSP17-CFS	1		
					*	FUSES				ASSY1037-1	A/R		
					*	EARTH					1		
	22	U12756522			*	C + I PILLAR		CI1		LVSP17-CFS	1		
					*	FUSES				ASSY801-1	A/R		
					*	S/L FUSE				ASSY1037-1	A/R		
				*	EARTH					1			
23	LP12756523			*	LINK PILLAR (240-240 6F)		LP1		LVSP14-6	1			
				*	EARTH				ASSY1037-1	1			
24	U12756524			*	C + I PILLAR		CI1		LVSP17-CFS	1			
				*	FUSES					A/R			
				*	EARTH				ASSY1037-1	1			
27	U12756525			*	C + I PILLAR		CI1		LVSP17-CFS	1			
				*	FUSES				ASSY801-1	A/R			
				*	S/L FUSE				ASSY1037-1	A/R			
				*	EARTH					1			
28	U12756526			*	SUPPLY PILLAR (240-240-240 7F)		PI1		LVSP9-6SL	1			
29	SC12756527			*	500KVA PMT TRANSFORMER SAFELINK 2 CFC		TR1		2475044	1			
				*	CULVERT & BASE				C & B	1			
				*	PMT INSTALLATION				PMTINSTALL	1			
				*	PMT COMMISSION				PMTCOM	1			
				*	HV FUSES				DSHVFSCLK	1			
				*	LV FUSES				DSLWF31	3			
				*	EXTENSION PALM KIT 2X240 LV CABLES				SC0022544	1			
				*	HV TERMINATIONS				1CFC0524XLG	2			
				*	LV TERMINATIONS				LTSA24D	3			
				*	COMMON EARTHING				DSSQPMCEG	1			
30	U12756528			*	C + I PILLAR		CI1		LVSP17-CFS	1			
				*	FUSES				ASSY1037-1	A/R			
				*	EARTH					1			
31	U12757090			*	C + I PILLAR		CI1		LVSP17-CFS	1			
				*	FUSES				ASSY1037-1	A/R			
				*	EARTH					1			
34	U12757091			*	C + I PILLAR		CI1		LVSP17-CFS	1			
				*	FUSES				ASSY801-1	A/R			
				*	EARTH				ASSY1037-1	A/R			
35	U12757092			*	C + I PILLAR		CI1		LVSP17-CFS	1			
				*	FUSES				ASSY801-1	A/R			
				*	S/L FUSE				ASSY1037-1	A/R			
				*	EARTH					1			



PROPOSED STREETLIGHT GEOGRAPHICS

DATE	PRELIMINARY ISSUE FOR INFORMATION ONLY 22 January 2026 NOT FOR CONSTRUCTION This drawing is to be considered preliminary until this disclaimer is removed by Peter Eustace Pty. Ltd.			PE CONSULTING ENGINEERS STREET ADDRESS POSTAL ADDRESS TELEPHONE EMAIL WEB U14, 39/ Lawrence Dr, Nareng QLD 4211 PO Box 2835, Nareng DC QLD 4211 (07) 5596 1425 mail@pece.com.au pece.com.au	NORTH 24-0275-EGX-04	SITE CONTACT DETAILS Energex OH TBC COMPANY - PHONE MOBILE FAX - - - - - -	COUNCIL STANDARD ALIGNMENTS 3.075m RP 0-0.75m RP REFER NBN GAS HP GAS WATER STORMWATER SEWER REFER CIVIL OTHER - - - - - - - - - -	WORKS COORDINATOR PARENT PROJECT NO. WORK REQUEST NO. LOTS CANCELLING LOTS LOCAL AUTHORITY UBD REF PEGGED? - - - - - - - - - -	PECE 1 TO 17 LOT 7 & LOT 8 ON RP137101 LOGAN CITY COUNCIL	APPROVED CHECKED DESIGNER PHONE PLANNER PHONE ISSUE DATE KRIS BOVEINIS DAVID VAN GENT FELIPE DEL VALLE (07) 5996 1425 JUAN GONZALEZ (07) 5996 1425	PECE INSTALL NEW PMT, HV & LV CONDUITS, CABLES, PILLARS & STREETLIGHTS 17 LOT SUBDIVISION MOUNT LINDSEAY HWY NORTH MACLEAN	WORKSPLAN VERSION 5.5 SCALE: N.T.S. PROJECT / SUB PROJECT NO. S1302553 Sheet ISSUE NO. 4 of 4