

Our Reference: RAL/2022/4965
CS Portal Reference: N/A
Your Reference: 3876
Contact Officer: Dennis Raccanello
Contact: 07 4688 6317
Email: development@tr.qld.gov.au

STREET LIGHTING PLAN REVIEW

Marbig Pty Ltd
Aft The Akon Trust C/- Saunders Havill Group
9 Thompson Street
BOWEN HILLS QLD 4006

Email: mary@spaconsulting.com.au

23 February 2026

Dear Sir/Madam

Approval Number: RAL/2022/4965
Application Description: Reconfigure 2 into 340 Lots 3 Balance Lots and 1 Drainage Lot
Location: Lots 5 - 8 & 20-24 A341, 279 AG3110 & 280 AG3111, 689 Toowoomba Cecil Plains Road, WELLCAMP QLD 4350
Property Description: Lot 20 A341, Lot 9 RP113281, Lot 19 RP113281, Lot 3 A341, Lot 4 A341, Lot 5 A341, Emt A SP338301, Lot 6 A341, Lot 7 A341, Lot 8 A341, Emt B SP338301, Lot 10 A341, Lot 16 A341, Lot 18 A341, Lot 21 A341, Lot 22 A341, Emt C SP338301, Lot 23 A341, Lot 24 ...

Council concurs with the following lighting design plan proposed for the abovementioned development approval:

1. Gainsborough Lodge Stage 2 UDC UG Electrical Reticulation Site Plan A & Ergon Works Schedule, 3879-E01 Revision B, prepared by SPA Consulting Engineers and dated 17/02/2026.
2. Gainsborough Lodge Stage 2 UDC UG Electrical Reticulation Site Plan B 7 Workplan Notes, 3879-E02 Revision B, prepared by SPA Consulting Engineers and dated 04/12/2025.
3. Gainsborough Lodge Stage 2 UDC UG Electrical Reticulation Construction & Lighting Schedules, 3879-E03 Revision B, prepared by SPA Consulting Engineers and dated 04/12/2025.
4. Gainsborough Lodge Stage 2 UDC UG Electrical Reticulation Conduit Schematic & Conduit Schedules, 3879-E04 Revision B, prepared by SPA Consulting Engineers and dated 04/12/2025.
5. Gainsborough Lodge Stage 2 UDC UG Electrical Reticulation LV Schematic, Labelling & UG Cable Schedule, 3879-E05 Revision B, prepared by SPA Consulting Engineers and dated 04/12/2025.
6. Gainsborough Lodge Stage 2 UDC UG Electrical Reticulation Hv Schematic, Labelling & Details, 3879-E06 Revision B, prepared by SPA Consulting Engineers and dated 17/02/2025.

In concurrence with the proposed design for this project, Council has carried out an audit check of information submitted by SPA Consulting Engineers. Accordingly, Council has placed reliance on the design signed by the Registered Professional Engineer Queensland (RPEQ) that the Approved Plans and

specifications are correct and in accordance with required engineering standards. The RPEQ bears full responsibility for all aspects of the engineering design.

Council reserves the right to require further amendments and/or additions at a later stage, should design errors become apparent:

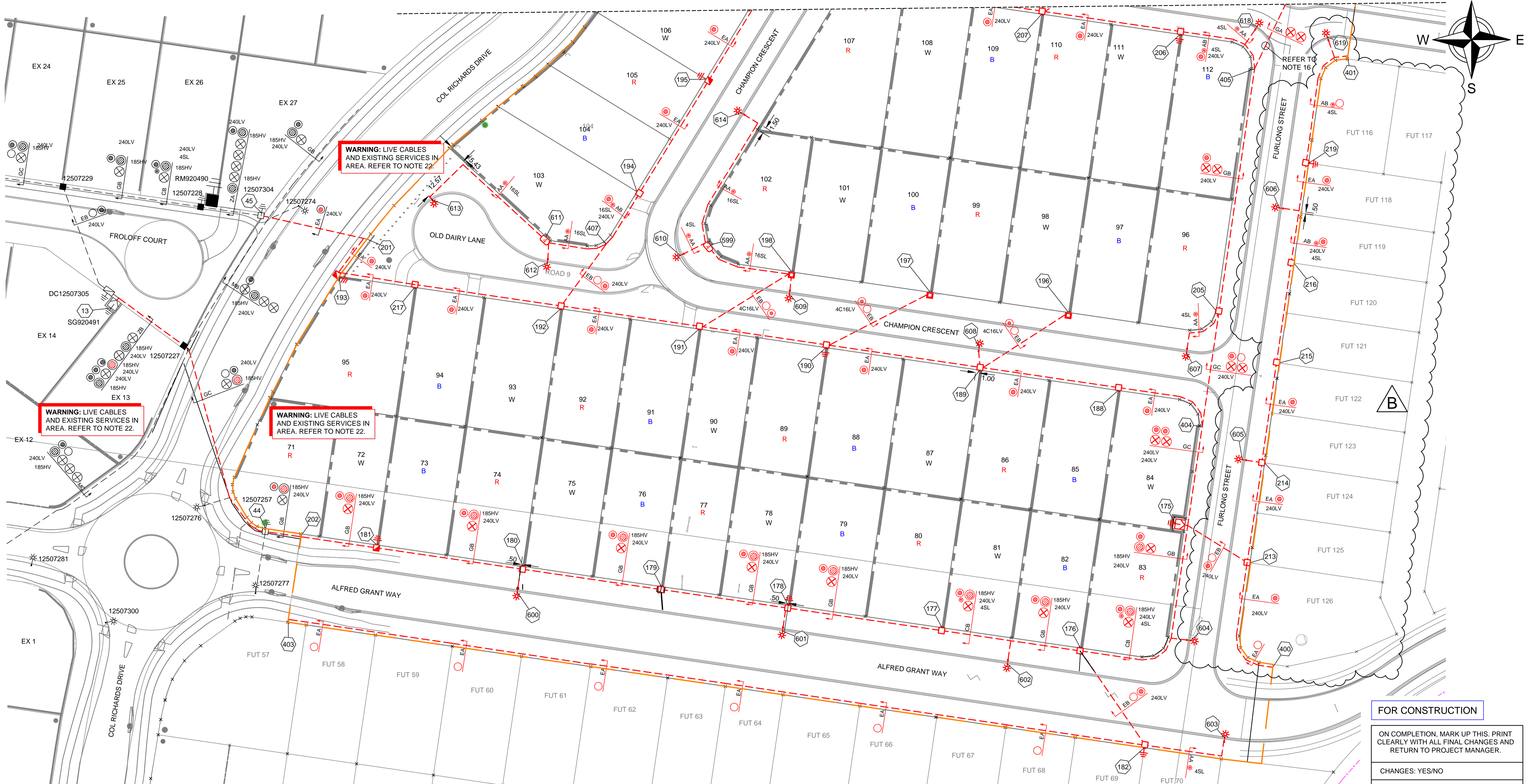
- a) Should any subsequent amendments, changes or alterations of the proposed lighting design occur as a result of an assessment/approval process of a relevant Council application (i.e. RAL/MCU/OW), it will become the responsibility of both the Civil and Electrical Registered Professional Engineer Queensland (RPEQ) to co-ordinate these changes.
- b) Any such changes must be to Council's satisfaction in order to obtain subsequent approval of the lighting design or other impacted Council assets prior to requesting "On-Maintenance" or endorsement of the survey plan.
- c) Modification to any existing or approved infrastructure as a result of any changes is at no cost to Council.
- d) Review of this documentation does not include detailed review of adjoining development approvals.
- e) The construction method for any required road crossings (for service conduits or mains) that are to occur on existing roads will require separate approval from Council's Road Operations Branch as part of any Works in Road Permit.

Should you require further information or clarification of the above, please contact Council's Lead Technical Officer, Dennis Raccanello on the above number.

Yours faithfully



Michael Evans
Principal Engineer, Development Infrastructure and Growth



WARNING: LIVE CABLES AND EXISTING SERVICES IN AREA. REFER TO NOTE 22.

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FOR CONSTRUCTION

ON COMPLETION, MARK UP THIS. PRINT CLEARLY WITH ALL FINAL CHANGES AND RETURN TO PROJECT MANAGER.

CHANGES: YES/NO

ELECTRICAL CONTRACTOR

NAME: _____

SIGNATURE: _____

DATE: _____

CIVIL CONTRACTOR

NAME: _____

SIGNATURE: _____

DATE: _____

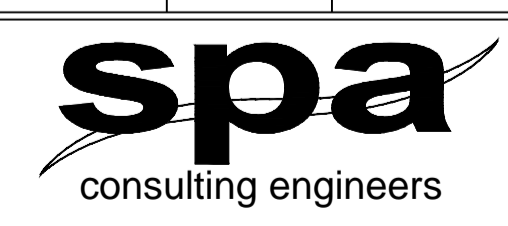
STN NO	SITE LABEL	POLE ALIGNMENT	POLE SETTING DEPTH	ACTION	CONSTRUCTION CLASS	CONSTRUCTION CODE	DRAWING NUMBER	POSITION ON POLE	REMARKS
13	SG920491			INSTALL - ERGON	HV CABLE TERMINATION	11 PM/CTC/ASL/185T	5244		ERGON ENERGY TO INSTALL HV CABLE TERMINATION FOR CABLES STN 13 TO STN 175.
44	12507257			INSTALL - ERGON	PILLAR UPGRADE	LV PNU1-2/240	5074		ERGON ENERGY TO UPGRADE TO TWO WAY PILLAR AND TERMINATE COILED CABLE AT STN 44.
45	12507304			INSTALL - ERGON	PILLAR UPGRADE	LV PNU1-2/240	5074		ERGON ENERGY TO UPGRADE TO TWO WAY PILLAR AND TERMINATE COILED CABLE AT STN 45.

CLIENT: Marbig P/L ATF the Alkon Trust

g-WAGNER, 1 Airport Dr, 1511 Toowoomba, Cecil Plains Rd WELLCAMP QLD 4350 Ph. Fax

CIVIL ENGINEER BURCHILLS ENGINEERING SOLUTIONS (TOOWOOMBA & IPSWICH)

Ph 07 4580 4970 Fax



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 PO Box 664 North Cairns QLD 4870
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TRENCH SECTIONS-LEGEND

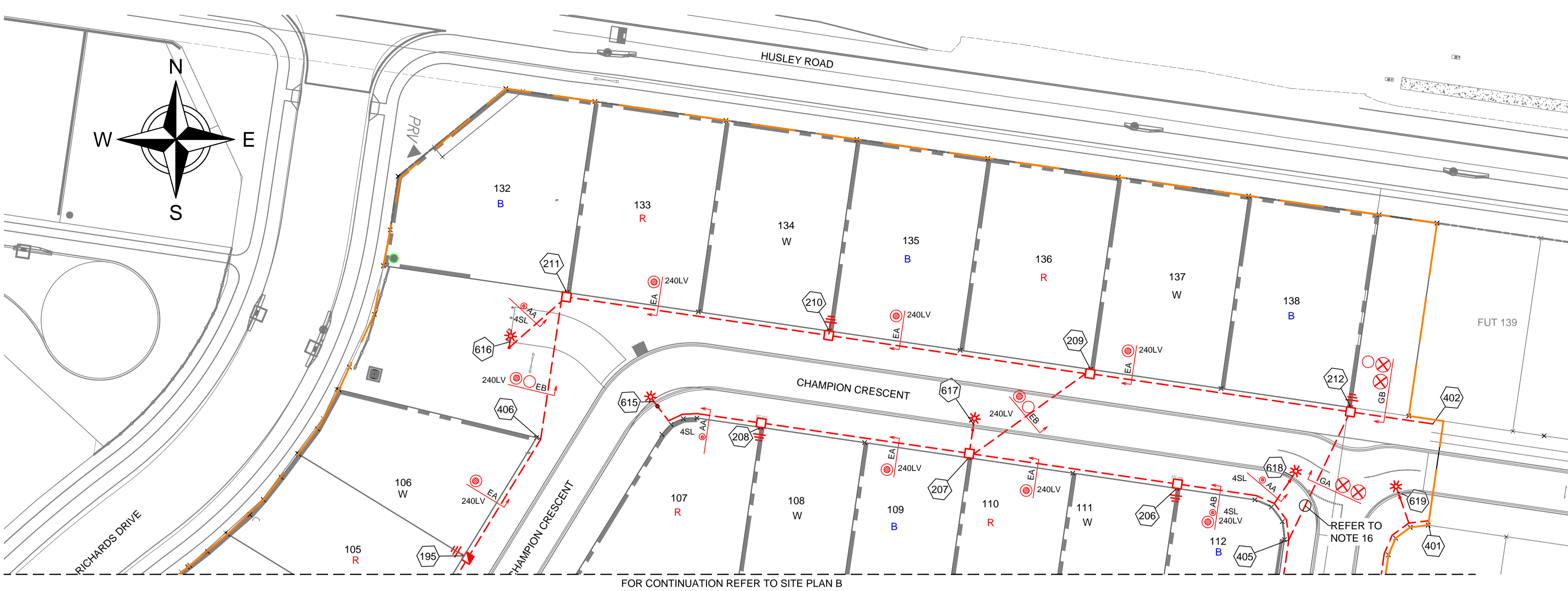
- ⊗ SPARE HV CONDUIT - EXISTING
- ⊗ SPARE HV CONDUIT - PLANNED
- CABLE - PLANNED
- CABLE - EXISTING
- /AB ↓ CONDUITS - EXISTING
- /AB ↑ CONDUITS - PLANNED

LEGEND

- CABLE EXISTING
- - - CABLE PLANNED
- - - CABLE RECOVER
- EQUIPMENT EXISTING
- - - EQUIPMENT RECOVER
- EQUIPMENT PLANNED
- ZERO LOT BOUNDARY
- 150mm HV DUCT
- 125mm HV DUCT
- 100mm LV DUCT
- LIGHTING DUCT
- 35mm sq ANNEALED BARE COPPER EARTH

- ⊠ SUBSTATION
- ⊠ RING MAIN UNIT
- ⊠ CROSS ROAD PILLAR
- ⊠ LINKING PILLAR
- ⊠ LIGHTING PIT
- ⊠ CABLE JOINT
- N1, N2, N3 PILLARS
- DISTRIBUTION CABINET
- ⊠ STREETLIGHT
- ⊠ EARTH
- HV/LV POLE
- POLE MOUNTED TRANSFORMER
- ⊠ CIA1 & CIA2 PILLARS
- HV POLE
- LV POLE

Drawing Title	Date	JUNE 2025
GAINSBOROUGH LODGE STAGE 2 UDC UG ELECTRICAL RETICULATION SITE PLAN A & ERGON WORKS SCHEDULE	Scale	AS SHOWN
	Drawn	MS
	RPEG Design Certification	Michael Dayot 29435
	Sheet	1 OF 6
Project Description	ERGON Project Number	SPA Drawing Number
GAINSBOROUGH LODGE WELLCAMP QLD	2006097	3876-E01
	Revision	B



WORKPLAN NOTES

- FOR STANDARD UNDERGROUND DUCT SECTIONS REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5168.
- POLYMERIC COVER TO BE INSTALLED OVER CONDUITS OUTSIDE NORMAL ERGON ALIGNMENT AND ALONG PROPERTY BOUNDARIES IN FRONT OF PARKS WHERE THE BOUNDARY PEGS ARE MORE THAN 50M APART AS PER ERGON DRAWING. 5022-1 AND 5124-1 & 2.
- STANDARD TRENCH ALIGNMENT IS 0.3 TO 0.9 METRES OFF PROPERTY ALIGNMENT SUBJECT TO LOCATION OF OTHER SERVICES. REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5166 SHEET 1 AND DRAWING 5228 FOR TRENCHES WITH NBNC₆ CONDUITS.
- STREETLIGHT POLE FOOTINGS SHALL BE LOCATED PERPENDICULAR TO THE KERB, AT THE PROLONGATION OF THE SIDE PROPERTY BOUNDARY, UNLESS DETAILED OTHERWISE. WHERE DIMENSIONS ARE SHOWN THEY TAKE PRECEDENCE OVER GRID COORDINATES.
- ALL CONDUITS SHALL BE CONTINUOUS UNLESS DETAILS OTHERWISE.
- FOR STANDARD UDC CONSTRUCTION PRACTICES REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWINGS 5022, 5085 AND 5124.
- INSTALLATION OF PADMOUNT SUBSTATION REQUIRED IN ROAD RESERVE ADJACENT LOT 84, STATION 175. PADMOUNT SITE IS TO BE 3.4m x 3.4m. A RETAINING WALL IS REQUIRED. REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWINGS 5000 & 5007. REFER TO DETAIL A.
- DEVELOPER SHALL INSTALL PLINTH AND CONCRETE SURROUND. REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWINGS 5004 & 5005.
- INSTALL PADMOUNTED SUBSTATION EARTHING - COMMON EARTH ARRANGEMENT. REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5013.
- MINOR STREETLIGHTS - THE DEVELOPER SHALL SUPPLY AND INSTALL STREETLIGHT BASES. FOUNDATION DEPTH IS 1200mm FOR MINOR STREETLIGHTS. REFER TO LIGHTING CONSTRUCTION MANUAL DRAWING 1-6-4-1 & 2.
- THE LIGHTING DESIGN INCLUDES AN ALLOWANCE FOR CONSTRUCTION TOLERANCE OF LIGHT POLES SUCH THAT ANY STREETLIGHT CAN BE POSITIONED UP TO A MAXIMUM OF ±350mm LONGITUDINALLY FROM THE POSITION SHOWN AND UP TO 100mm MAXIMUM FURTHER AWAY FROM KERB EDGE, INCLUDING POLES WITH GRID COORDINATES, AND STILL MAINTAIN COMPLIANCE.
- CONFIRM ALL CONDUIT AND CABLE LENGTHS PRIOR TO INSTALLATION.
- WHERE SHOWN, 35mm sq ANNEALED BARE Cu EARTH SHALL BE INSTALLED AT BOTTOM OF TRENCH, IN NATURAL SOIL, BELOW BEDDING SAND, LOCATED A MINIMUM OF 50mm HORIZONTALLY TOWARDS PROPERTY BOUNDARY FROM CONDUITS (HV OR LV) INSTALLED ON PROPERTY BOUNDARY SIDE OF TRENCH. COIL 2m OF CABLE AT SPECIFIED STATIONS IN THE CONDUIT DUCTING SCHEDULE AND ALL REQUIRED JOINTS FOR CONNECTION BY ELECTRICAL CONTRACTOR. THE USE OF THE EARTH ROD CONNECTOR (J-BOLT, IIN. 0719437) IS NOT ACCEPTABLE FOR CONDUCTOR / CABLE TO CONDUCTOR / CABLE CONNECTIONS. IN ADDITION PARALLEL GROOVE CLAMPS ARE NOT ACCEPTABLE FOR JOINTING OR CONNECTING EARTHS BELOW GROUND LEVEL. ACCEPTABLE METHODS SHALL BE EITHER A CRIMP LINK OR A 'C' TYPE COMPRESSION CONNECTOR. CRIMP LINKS AND 'C' TYPE COMPRESSION CONNECTORS ARE AVAILABLE FROM ERGON ENERGY STORES IIN. 0157746 AND IIN. 2406222 RESPECTIVELY.
- IN ACCORDANCE WITH ELECTRICAL SAFETY ACT, A SAFETY OBSERVER MUST BE PRESENT AT ALL TIMES WHEN WORKING IN THE VICINITY OF ENERGISED CABLES. CONTACT ERGON ENERGY ON 131046.
- ELECTRONIC CABLE MARKERS (ECM'S) ARE TO BE SUPPLIED BY ERGON ENERGY AND ARE REQUIRED AT ENDS OF ALL SPARE CONDUITS AND AT ALL CABLE JOINTS. ECM'S SHALL BE PLACED 150mm ABOVE THE LINE OF CONDUIT FOR CABLE JOINTS AND 150mm ABOVE THE LINE OF CONDUIT FOR SPARE CONDUITS. ECM'S ARE RECOVERABLE AND SHALL BE REMOVED AND RETURNED TO ERGON ENERGY WHEN ALL SPARE CONDUIT ENDS ARE REMOVED FROM A LOCATION.
- WHERE NOTED ON THE DESIGN, ELECTRICAL CONDUITS SHALL BE INSTALLED UNDERNEATH STORMWATER PIPES WHERE CLASHES OCCUR. SEPARATION FROM BOTTOM OF STORMWATER PIPE TO TOP OF ERGON CONDUIT SHALL BE NO LESS THAN 300mm.
- SUPPLY AND INSTALL EXTRA CONDUIT BENDS TO ACHIEVE INCREASED BURIAL DEPTH AT ROAD CROSSINGS. REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5022.
- ALL CONTRACTORS MUST CARRY OUT A DIAL BEFORE YOU DIG ENQUIRY BEFORE COMMENCING ANY EXCAVATION.
- INSTALL PILLAR OFFSET IN ACCORDANCE WITH ERGON DRAWING 5196-2 AND DETAIL B.
- CONTRACTOR TO SUPPLY AND INSTALL ENGRAVED LABEL LOCATED ON LIGHTING TERMINAL STATING 'LIGHT FED FROM PILLAR ASSET NUMBER _____'.
- SERVICE CONDUIT TO BE INSTALLED BEFORE CONSTRUCTION OF RETAINING WALL.
- WARNING:** LIVE CABLES AND EXISTING SERVICES IN AREA. CONTRACTOR TO USE POT HOLING, HYDRO-VAC EXCAVATION AND CABLE LOCATION WHEN INSTALLING NEW INFRASTRUCTURE.
- CONTRACTOR SHALL NOT INSTALL PITS AT THE BOTTOM OF DRAINS, VEHICLE PATHS, ROADWAYS, DRIVEWAYS, DRAIN INVERTS, BIKEWAYS, RAMPS, PEDESTRIAN ALIGNMENTS, WHEELCHAIR ACCESS OR PATHWAYS. WHERE PITS ARE INSTALLED IN THE MEDIAN, PITS SHALL BE OFFSET FROM THE CENTER OF THE MEDIAN TO PREVENT INSTALLATION IN THE BOTTOM OF DRAIN AND TO ALLOW CONDUITS TO PASS BY THE LIGHT FOOTING.



SPA LIGHTING DESIGN COMPLIANCE CERTIFICATE

THIS LIGHTING DESIGN COMPLIES GENERALLY WITH THE NOMINATED CATEGORIES OF AS1158 FOR RATE 1 AND RATE 2 LUMINAIRES.

NAME: Michael Dayot TITLE: ENGINEER RPEQ: 29435

LIGHTING CATEGORIES: CATEGORY PR5 FOR ALL ROADS LOCAL COUNCIL: TOOWOOMBA REGIONAL COUNCIL LUMINAIRE UPCAST: 0 DEGREES UPCAST ANGLE MAINTENANCE FACTOR: 0.75

THE DESIGN ASSUMES MAINTENANCE FACTORS OF 0.75 FOR MINOR ROAD LIGHTING AND 0.75 FOR MAJOR ROAD LIGHTING. THESE MAINTENANCE FACTORS ARE BASED ON THE FOLLOWING MAINTENANCE SCHEDULE, WHICH MIGHT NOT NECESSARILY BE ADOPTED BY ERGON.

- LAMPS SHALL BE REPLACED AT 36- MONTH INTERVALS.
- ALL THAT TIME, LUMINAIRES SHALL BE CLEANED, INSPECTED AND MAINTAINED.
- VEGETATION SHALL BE KEPT CLEAR OF STREET LIGHTS.
- INSPECTION PATROLS AND SPOT LAMP REPLACEMENT SHALL MAINTAIN SERVICE AVAILABILITY AT NO LESS THAN 95%.
- LUMINAIRES AND LAMPS SHALL BE REPLACED WITH EXACT EQUIVALENTS.

ALL LIGHTING CALCULATIONS ARE AVAILABLE UPON REQUEST.

FOR LIGHTING ARRANGEMENT, SPACINGS, MOUNTING HEIGHTS, OUTREACH DETAILS AND SIGNIFICANT ROAD FEATURES, REFER TO DRAWING.

FOR CONSTRUCTION

ON COMPLETION, MARK UP THIS. PRINT CLEARLY WITH ALL FINAL CHANGES AND RETURN TO PROJECT MANAGER.

CHANGES: YES/NO

ELECTRICAL CONTRACTOR

NAME: _____

SIGNATURE: _____

DATE: _____

CIVIL CONTRACTOR

NAME: _____

SIGNATURE: _____

DATE: _____

LOCALITY PLAN N.T.S.

Code	Date	Description	Revised	Ph	Fax
B	04/12/25	FOR CONSTRUCTION-NO CHANGE	MS		
A	21/10/25	FOR CONSTRUCTION	MS		

CLIENT: Marbig P/L ATF the Alkon Trust
 c/-WAGNER, 1 Airport Dr, 1511 Toowoomba, Cecil Plains Rd WELLCAMP QLD 4350 Ph. Fax
 CIVIL ENGINEER BURCHILLS ENGINEERING SOLUTIONS (TOOWOOMBA & IPSWICH)

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 PO Box 664 North Cairns QLD 4870
 Email Address - admin@spaconsulting.com.au
 A business unit of SPA Consulting Engineers (QLD) Pty Ltd. A.B.N. 91 510 844 418

TRENCH SECTIONS-LEGEND

⊗	SPARE HV CONDUIT - EXISTING
⊗	SPARE HV CONDUIT - PLANNED
●	CABLE - PLANNED
●	CABLE - EXISTING
○AB	CONDUITS - EXISTING
○AB	CONDUITS - PLANNED

LEGEND

---+---	ZERO LOT BOUNDARY	---	CABLE EXISTING
---	150mm HV DUCT	---	CABLE PLANNED
---	125mm HV DUCT	---	CABLE RECOVER
---	100mm LV DUCT	---	EQUIPMENT EXISTING
---	LIGHTING DUCT	---	EQUIPMENT RECOVER
---	35mm sq ANNEALED BARE COPPER EARTH	---	EQUIPMENT PLANNED

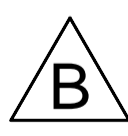
⊠	SUBSTATION	⊠	N1, N2, N3 PILLARS
⊠	RING MAIN UNIT	⊠	DISTRIBUTION CABINET
⊠	CROSS ROAD PILLAR	⊠	STREETLIGHT
⊠	LINKING PILLAR	⊠	EARTH
⊠	LIGHTING PIT	⊠	HV/LV POLE
⊠	CABLE JOINT	⊠	POLE MOUNTED TRANSFORMER

Drawing Title	Date	Scale	Drawn	RPEQ Design Certification	Sheet	Project Description	ERGON Project Number	SPA Drawing Number	Revision
GAINSBOROUGH LODGE STAGE 2 UDC UG ELECTRICAL RETICULATION SITE PLAN B & WORKPLAN NOTES	JUNE 2025	AS SHOWN	MS	Michael Dayot 29435	2 OF 6	GAINSBOROUGH LODGE WELLCAMP QLD	2006097	3876-E02	B

Rev Date	CONSTRUCTION SCHEDULE										(1 / 2)
20/06/25	STN NO	SITE LABEL	POLE ALIGNMENT	POLE SETTING DEPTH	ACTION	CONSTRUCTION CLASS	CONSTRUCTION CODE	DRAWING NUMBER	POSITION ON POLE	REMARKS	
13	SG920491				EXISTING	EARTH					
13	SG920491				INSTALL - ERGON	HV CABLE TERMINATION	0 CTC/ASL/185T			ERGON ENERGY TO INSTALL HV CABLE TERMINATION FOR CABLES STN 13 TO STN 175.	
13	SG920491				EXISTING	SUBSTATION INC HV SWITCHGEAR					
44	12507257				EXISTING	EARTH					
44	12507257				EXISTING	PILLAR				POS FOR LOT 71.	
44	12507257				INSTALL - ERGON	PILLAR UPGRADE	LV PNU1-2/240	5074		ERGON ENERGY TO UPGRADE TO TWO WAY PILLAR AND TERMINATE COILED CABLE AT STN 44.	
45	12507304				EXISTING	EARTH					
45	12507304				EXISTING	PILLAR					
45	12507304				INSTALL - ERGON	PILLAR UPGRADE	LV PNU1-2/240	5074		ERGON ENERGY TO UPGRADE TO TWO WAY PILLAR AND TERMINATE COILED CABLE AT STN 45.	
175	SG924073				INSTALL	EARTH	E PM0/COM				
175	SG924073				INSTALL	HV CABLE TERMINATION	0 CTC/ASL/185T			INSTALL HV CABLE TERMINATION FOR CABLES STN 175 TO STN 13.	
175	SG924073				INSTALL	LV CABLE TERMINATION	LV CT /240			INSTALL LV CABLE TERMINATION FOR CABLES STN 175 TO STN 213.	
175	SG924073				INSTALL	LV CABLE TERMINATION	LV CT /240			INSTALL LV CABLE TERMINATION FOR CABLES STN 175 TO STN 205.	
175	SG924073				INSTALL	LV CABLE TERMINATION	LV CT /240			INSTALL LV CABLE TERMINATION FOR CABLES STN 175 TO STN 188.	
175	SG924073				INSTALL	LV CABLE TERMINATION	LV CT /240			INSTALL LV CABLE TERMINATION FOR CABLES STN 175 TO STN 176.	
175	12716200				INSTALL	SUBSTATION FOUNDATION	FALSE				
175	SG924073				INSTALL	SUBSTATION INC HV SWITCHGEAR				REFER TO NOTE 7 & DETAIL A	
176	12716201				INSTALL	PILLAR	LV PN3/6S/240	5027			
177	12716202				INSTALL	PILLAR	LV PN2/6S/240	5026			
178	12716203				INSTALL	EARTH	E MEN/PIL	5085			
178	12716203				INSTALL	PILLAR	LV PN2/6S/240	5026			
179	12716204				INSTALL	PILLAR	LV PN2/6/240	5026			
180	12716205				INSTALL	PILLAR	LV PN2/6S/240	5026			
181	LP12716206				INSTALL	EARTH	E MEN/PIL	5085			
181	LP12716206				INSTALL	PILLAR	LV PL2/6/240	5042			
182	12716207				INSTALL	EARTH	E MEN/PIL	5085			
182	12716207				INSTALL	PILLAR	LV PN1/6S/240	5025			
188	12716208				INSTALL	PILLAR	LV PN2/6/240	5026			
189	12716209				INSTALL	PILLAR	LV PN2/6S/240	5026			
190	12716210				INSTALL	EARTH	E MEN/PIL	5085			
190	12716210				INSTALL	PILLAR	LV PN2/6/240	5026			
191	12716211				INSTALL	PILLAR	LV PN2/6/240	5026			
192	12716212				INSTALL	PILLAR	LV PN3/6/240	5027			
193	LP12716213				INSTALL	EARTH	E MEN/PIL	5085			
193	LP12716213				INSTALL	PILLAR	LV PL2/6/240	5042		NORMALLY OPEN PILLAR TO STN 45.	
194	12716214				INSTALL	PILLAR	LV PN2/6S/240	5026			
195	LP12716215				INSTALL	EARTH	E MEN/PIL	5085			
195	LP12716215				INSTALL	PILLAR	LV PL2/6/240	5042		NORMALLY OPEN LINK PILLAR TO STN 194.	
196	12716216				INSTALL	PILLAR	LV PX/6/16CU	5041			
197	12716217				INSTALL	PILLAR	LV PX/6/16CU	5041			
198	12716218				INSTALL	PILLAR	LV PX/6S/16CU	5041		ADDITIONAL STREETLIGHT 32A FUSE AND HOLDER REQUIRED. SL FUSE HOLDER TO B INSTALLED BACK TO BACK.	
205	12716219				INSTALL	PILLAR	LV PN2/6S/240	5026			
206	12716220				INSTALL	EARTH	E MEN/PIL	5085			
206	12716220				INSTALL	PILLAR	LV PN2/6S/240	5026			
207	12716221				INSTALL	PILLAR	LV PN3/6S/240	5027			
208	12716222				INSTALL	EARTH	E MEN/PIL	5085			
208	12716222				INSTALL	PILLAR	LV PN1/6S/240	5025			
209	12716223				INSTALL	PILLAR	LV PN3/6/240	5027			
210	12716224				INSTALL	EARTH	E MEN/PIL	5085			
210	12716224				INSTALL	PILLAR	LV PN2/6/240	5026			
211	12716225				INSTALL	PILLAR	LV PN2/6S/240	5026			
212	12716226				INSTALL	EARTH	E MEN/PIL	5085			
212	12716226				INSTALL	PILLAR	LV PN1/6/240	5025			
213	12716227				INSTALL	PILLAR	LV PN2/6/240	5026			
214	12716228				INSTALL	PILLAR	LV PN2/6S/240	5026			
215	12716229				INSTALL	PILLAR	LV PN2/6/240	5026			
216	12716230				INSTALL	PILLAR	LV PN2/6S/240	5026			
217	12716236				INSTALL	PILLAR	LV PN2/6/240	5026			
219	12717007				INSTALL	EARTH	E MEN/PIL	5085			
219	12717007				INSTALL	PILLAR	LV PN1/6S/240	5025			

Rev Date	CONSTRUCTION SCHEDULE										(2 / 2)
20/06/25	STN NO	SITE LABEL	POLE ALIGNMENT	POLE SETTING DEPTH	ACTION	CONSTRUCTION CLASS	CONSTRUCTION CODE	DRAWING NUMBER	POSITION ON POLE	REMARKS	
599	12716231				INSTALL	TYPE 4 LOOP PIT	SUG SLL PIT4	1-4-9-1		REFER TO NOTE 20 & 23.	
600	12716232			0.4M FROM BOK	INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		INSTALL LIGHT POLE OFFSET AS DIMENSIONED. ENSURE POLE FOOTING CLEAR FROM WATER CROSSING.	
601	12716233			0.4M FROM BOK	INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		INSTALL LIGHT POLE OFFSET AS DIMENSIONED. ENSURE POLE FOOTING CLEAR FROM WATER CROSSING.	
602	12716234			0.4M FROM BOK	INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 20.	
603	12716235			0.4M FROM BOK	INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 20.	
604	12716236			0.4M FROM BOK	INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 20.	
605	12716237			0.4M FROM BOK	INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		ENSURE FOOTING CLEAR FROM STORMWATER PIT.	
606	12716238			0.4M FROM BOK	INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		INSTALL LIGHT POLE OFFSET AS DIMENSIONED.REFER TO NOTE 20.	
607	12716239			0.4M FROM BOK	INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 20.	
608	12716240			0.4M FROM BOK	INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		INSTALL LIGHT POLE OFFSET AS DIMENSIONED. ENSURE POLE FOOTING CLEAR FROM WATER CROSSING.	
609	12716241			0.4M FROM BOK	INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2			
610	12716242			0.4M FROM BOK	INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 20.	
611	12716243				INSTALL	TYPE 4 LOOP PIT	SUG SLL PIT4	1-4-9-1		REFER TO NOTE 20 & 23.	
612	12716244			0.4M FROM BOK	INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 20.	
613	12716245			0.4M FROM BOK	INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		INSTALL STREETLIGHT OFFSET AS SHOWN DIMENSIONED.ENSURE POLE FOOTING CLEAR FROM STORMWATER PIT. REFER TO NOTE 20.	
614	12716246			0.4M FROM BOK	INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 20.	
615	12716247			0.4M FROM BOK	INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 20.	
616	12716248			1.0M FROM EDGE OF BITUMEN	INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 20.	
617	12716249			0.4M FROM BOK	INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2			
618	12716250			0.4M FROM BOK	INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 20.	
619	12716251			0.4M FROM BOK	INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 20.	

Rev Date	PUBLIC LIGHTING SCHEDULE							
15/10/24	STN NO	SITE LABEL	ACTION	CONSTRUCTION CODE	RATE	TARIFF OWNER	MOUNTING HEIGHT (m)	REMARKS
600	12716232		INSTALL	SLED SY 0244 O	RATE 2	TRC	7.5	
601	12716233		INSTALL	SLED SY 0244 O	RATE 2	TRC	7.5	
602	12716234		INSTALL	SLED SY 0244 O	RATE 2	TRC	7.5	REFER TO NOTE 20.
603	12716235		INSTALL	SLED SY 0244 O	RATE 2	TRC	7.5	REFER TO NOTE 20.
604	12716236		INSTALL	SLED SY 0137 N	RATE 2	TRC	7.5	REFER TO NOTE 20.
605	12716237		INSTALL	SLED SY 0137 N	RATE 2	TRC	7.5	
606	12716238		INSTALL	SLED SY 0137 N	RATE 2	TRC	7.5	REFER TO NOTE 20.
607	12716239		INSTALL	SLED SY 0137 N	RATE 2	TRC	7.5	REFER TO NOTE 20.
608	12716240		INSTALL	SLED SY 0137 N	RATE 2	TRC	7.5	
609	12716241		INSTALL	SLED SY 0137 N	RATE 2	TRC	7.5	
610	12716242		INSTALL	SLED SY 0137 N	RATE 2	TRC	7.5	REFER TO NOTE 20.
612	12716244		INSTALL	SLED SY 0137 N	RATE 2	TRC	7.5	REFER TO NOTE 20.
613	12716245		INSTALL	SLED SY 0137 N	RATE 2	TRC	7.5	REFER TO NOTE 20.
614	12716246		INSTALL	SLED SY 0137 N	RATE 2	TRC	7.5	REFER TO NOTE 20.
615	12716247		INSTALL	SLED SY 0137 N	RATE 2	TRC	7.5	REFER TO NOTE 20.
616	12716248		INSTALL	SLED SY 0137 N	RATE 2	TRC	7.5	REFER TO NOTE 20.
617	12716249		INSTALL	SLED SY 0137 N	RATE 2	TRC	7.5	
618	12716250		INSTALL	SLED SY 0244 O	RATE 2	TRC	7.5	REFER TO NOTE 20.
619	12716251		INSTALL	SLED SY 0244 O	RATE 2	TRC	7.5	REFER TO NOTE 20.



FOR CONSTRUCTION

ON COMPLETION, MARK UP THIS. PRINT CLEARLY WITH ALL FINAL CHANGES AND RETURN TO PROJECT MANAGER.

CHANGES: YES/NO

ELECTRICAL CONTRACTOR

NAME: _____

SIGNATURE: _____

DATE: _____

CIVIL CONTRACTOR

NAME: _____

SIGNATURE: _____

DATE: _____

CLIENT:	Marbig P/L ATF the Alkon Trust
g-WAGNER, 1 Airport Dr, 1511 Toowoomba, Cecil Plains Rd	
WELLCAMP QLD 4350	
Ph. _____	Fax _____
CIVIL ENGINEER	BURCHILLS ENGINEERING SOLUTIONS
B 04/12/25	FOR CONSTRUCTION-UPDATE LOT LAYOUT
A 21/10/25	FOR CONSTRUCTION
Code	Date
	Description
Revised	Ph. _____
	Fax _____

spa
consulting engineers

Tel: (07) 4032 3311 or (07) 4728 3026
PO Box 664 North Cairns QLD 4870
Email Address - admin@spaconsulting.com.au
A business unit of SPA Consulting Engineers (SOL) Pty Ltd. A.B.N. 91 510 844 418

TRENCH SECTIONS-LEGEND

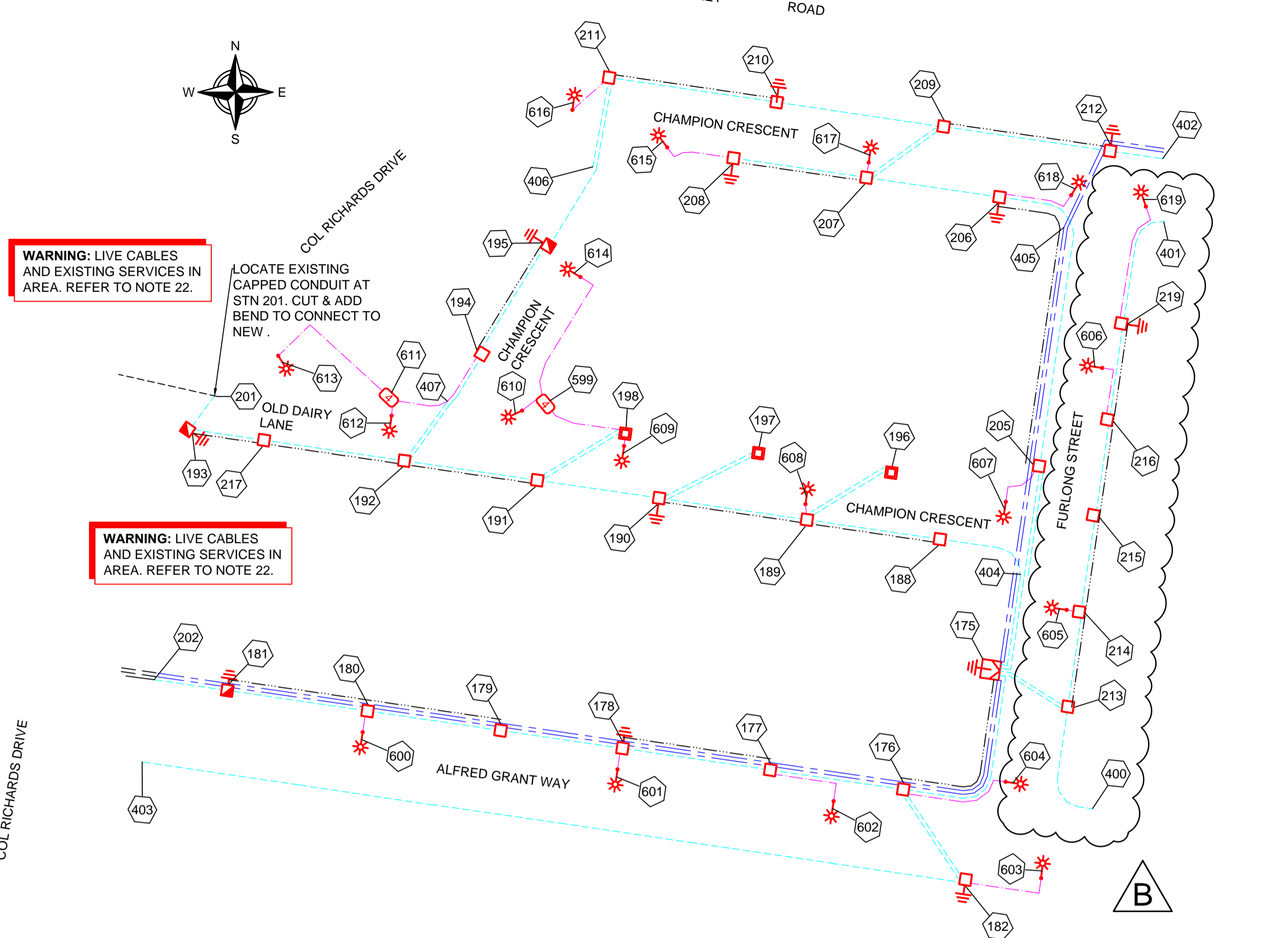
- ⊗ SPARE HV CONDUIT - EXISTING
- ⊗ SPARE HV CONDUIT - PLANNED
- CABLE - PLANNED
- CABLE - EXISTING
- AB ↓ CONDUITS - EXISTING
- AB ↑ CONDUITS - PLANNED

LEGEND

- ZERO LOT BOUNDARY
- 150mm HV DUCT
- 125mm HV DUCT
- 100mm LV DUCT
- LIGHTING DUCT
- 35mm sq ANNEALED BARE COPPER EARTH
- CABLE EXISTING
- CABLE PLANNED
- CABLE RECOVER
- EQUIPMENT EXISTING
- EQUIPMENT RECOVER
- EQUIPMENT PLANNED
- SUBSTATION
- RING MAIN UNIT
- CROSS ROAD PILLAR
- LINKING PILLAR
- LIGHTING PIT
- CABLE JOINT
- N1, N2, N3 PILLARS
- DISTRIBUTION CABINET
- STREETLIGHT
- EARTH
- HV/LV POLE
- POLE MOUNTED TRANSFORMER
- CIA1 & CIA2 PILLARS
- HV POLE
- LV POLE

Drawing Title	GAINSBOROUGH LODGE STAGE 2 UDC UG ELECTRICAL RETICULATION CONSTRUCTION & LIGHTING SCHEDULES		
Date	JUNE 2025		
Scale	NTS		
Drawn	MS		
RPEQ Design Certification	Michael Dayot 29435		
Sheet	3 OF 6		
Project Description	ERGON Project Number	SPA Drawing Number	Revision
GAINSBOROUGH LODGE WELLCAMP QLD	2006097	3876-E03	B

CONDUIT SCHEMATIC



WARNING: LIVE CABLES AND EXISTING SERVICES IN AREA. REFER TO NOTE 22.

WARNING: LIVE CABLES AND EXISTING SERVICES IN AREA. REFER TO NOTE 22.

STN FROM	STN TO	ACTION	CONSTRUCTION CODE	LENGTH (m)	No. of LENGTHS / DRUM	BENDS (Degrees/ Radius(mm) x No.)	Remarks
175	213	INSTALL - CIVIL	C100L	18	3.0	45/1200x1 45/1830x2 15/1830x4	
175	213	INSTALL - CIVIL	C100L	18	3.0	45/1200x1 15/1830x2	CAP CONDUIT AT STN 175 AND STN 213
176	182	INSTALL - CIVIL	C100L	29	4.8	15/1830x2	CAP CONDUIT AT STN 176 & STN 182
176	182	INSTALL - CIVIL	C100L	29	4.8	45/1200x1 45/1830x2 15/1830x2	
189	196	INSTALL - CIVIL	C100L	26	4.3	90/450x2 15/1830x2	ENSURE CONDUIT AVOIDS FIRE HYDRANT. CAP CONDUIT AT STN 189 & STN 196
189	196	INSTALL - CIVIL	C100L	26	4.3	90/450x2 45/1830x1 15/1830x2	ENSURE CONDUIT AVOIDS FIRE HYDRANT.
190	197	INSTALL - CIVIL	C100L	28	4.7	90/450x2 15/1830x2	
190	197	INSTALL - CIVIL	C100L	28	4.7	90/450x2 15/1830x2	CAP CONDUIT AT STN 190 & STN 197
191	198	INSTALL - CIVIL	C100L	28	4.7	90/450x2 45/1830x2 15/1830x2	
191	198	INSTALL - CIVIL	C100L	28	4.7	90/450x2 15/1830x2	CAP CONDUIT AT STN 191 & STN 198
192	407	INSTALL - CIVIL	C100L	20	3.3	45/1200x1 15/1830x2	CONNECT TO VERGE CONDUIT AT STN 407.
192	407	INSTALL - CIVIL	C100L	20	3.3	45/1200x1 15/1830x2	CAP CONDUIT AT STN 192 & STN 407.
207	209	INSTALL - CIVIL	C100L	25	4.2	45/1200x2 45/1830x2 15/1830x4	ENSURE CONDUIT AVOIDS FIRE HYDRANT.
207	209	INSTALL - CIVIL	C100L	25	4.2	15/1830x4	ENSURE CONDUIT AVOIDS FIRE HYDRANT. CAP CONDUIT AT STN 207 & STN 209.
211	406	INSTALL - CIVIL	C100L	25	4.2	15/1830x2	CAP CONDUIT AT STN 406 & STN 211.
211	406	INSTALL - CIVIL	C100L	25	4.2	15/1830x2	CAP CONDUIT AT STN 406 & STN 211.
211	616	INSTALL - CIVIL	C50H	16	4.0	90/300x2	
404	205	INSTALL - CIVIL	C150L	29	4.8	15/1830x2	CONNECT TO CROSSING CONDUIT AT STN 404 & STN 205.REFER TO NOTE 16.
404	205	INSTALL - CIVIL	C100L	29	4.8	45/1200x1 15/1830x2	CONNECT TO CROSSING CONDUIT AT STN 404 & STN 205.
404	205	INSTALL - CIVIL	C100L	29	4.8	15/1830x2	CAP CONDUIT AT STN 404 & STN 205.
404	205	INSTALL - CIVIL	C150L	29	4.8	15/1830x2	CONNECT TO CROSSING CONDUIT AT STN 404 & STN 205.REFER TO NOTE 16.
405	212	INSTALL - CIVIL	C150L	24	4.0	15/1830x2	CONNECT TO VERGE CONDUIT AT STN 405 & STN 212.
405	212	INSTALL - CIVIL	C150L	24	4.0	15/1830x2	CONNECT TO VERGE CONDUIT AT STN 405 & STN 212.

FOR CONSTRUCTION

ON COMPLETION, MARK UP THIS. PRINT CLEARLY WITH ALL FINAL CHANGES AND RETURN TO PROJECT MANAGER.

CHANGES: YES/NO

ELECTRICAL CONTRACTOR

NAME: _____

SIGNATURE: _____

DATE: _____

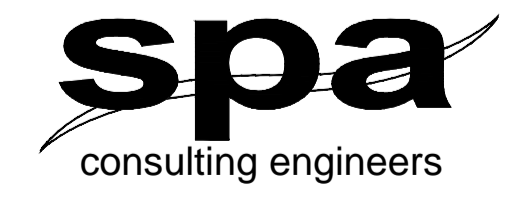
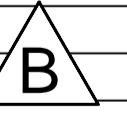
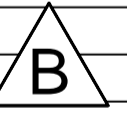
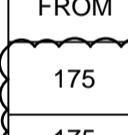
CIVIL CONTRACTOR

NAME: _____

SIGNATURE: _____

DATE: _____

STN FROM	STN TO	ACTION	CONSTRUCTION CODE	LENGTH (m)	No. of LENGTHS / DRUM	BENDS (Degrees/ Radius(mm) x No.)	Remarks
175	176	INSTALL - CIVIL	C100L	56	9.3	45/1200x1 15/1830x6	
175	176	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	49	0.2		COIL 2M OF CABLE AT STN 175 FOR CONNECTION BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 176.
175	188	INSTALL - CIVIL	C100L	52	8.7	45/1200x1 15/1830x6	
175	202	INSTALL - CIVIL	C125L	258	43.0	15/1830x6	LOCATE CAPPED CONDUIT ST STN 202 AND CONNECT TO NEW. CAP CONDUIT AT STN 175.
175	202	INSTALL - CIVIL	C125L	258	43.0	15/1830x6	LOCATE CAPPED CONDUIT ST STN 202 AND CONNECT TO NEW.
175	404	INSTALL - CIVIL	C100L	26	4.3		CONNECT TO CROSSING CONDUIT AT STN 404.
175	404	INSTALL - CIVIL	C150L	26	4.3		CONNECT TO CROSSING CONDUIT AT STN 404. CAP CONDUIT AT STN 175
175	404	INSTALL - CIVIL	C150L	26	4.3		CONNECT TO CROSSING CONDUIT AT STN 404. CAP CONDUIT AT STN 175
176	177	INSTALL - CIVIL	C100L	36	6.0	45/1200x2	
176	604	INSTALL - CIVIL	C50H	30	7.5	90/300x2 90/600x4	
177	178	INSTALL - CIVIL	C100L	40	6.7	45/1200x2	
177	602	INSTALL - CIVIL	C50H	23	5.8	90/300x2 90/600x1	
178	177	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	40	0.2		COIL 2M OF CABLE AT STN 178 FOR CONNECTION BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 177.
178	179	INSTALL - CIVIL	C100L	33	5.5	45/1200x2	
178	601	INSTALL - CIVIL	C50H	6	1.5	90/300x2	ENSURE CONDUIT CLEAR FROM WATER CROSSING.
179	180	INSTALL - CIVIL	C100L	36	6.0	45/1200x2	
180	181	INSTALL - CIVIL	C100L	38	6.3	45/1200x2	
180	600	INSTALL - CIVIL	C50H	6	1.5	90/300x2	ENSURE CONDUIT AVOIDS WATER CROSSING.
181	179	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	74	0.3		COIL 2M OF CABLE AT STN 181 FOR CONNECTION BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 179.
181	202	INSTALL - CIVIL	C100L	20	3.3	45/1200x1	LOCATED CAPPED CONDUIT AT STN 202 AND CONNECT TO NEW.
182	403	INSTALL - CIVIL	C100L	223	37.2		ENSURE CONDUIT INSTALLED AT FINISHED GROUND LEVEL. CAP CONDUIT AT STN 403.
182	603	INSTALL - CIVIL	C50H	24	6.0	90/300x2 90/600x1	
188	189	INSTALL - CIVIL	C100L	36	6.0	45/1200x2	
189	190	INSTALL - CIVIL	C100L	40	6.7	45/1200x2	
189	608	INSTALL - CIVIL	C50H	4	1.0	90/300x2	ENSURE CONDUIT CLEAR FROM WATER CROSSING.
190	188	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	74	0.3		COIL 2M OF CABLE AT STN 190 FOR CONNECTION BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 188.
190	191	INSTALL - CIVIL	C100L	33	5.5	45/1200x2	
191	192	INSTALL - CIVIL	C100L	36	6.0	45/1200x2	
192	217	INSTALL - CIVIL	C100L	38	6.3	45/1200x2	
193	191	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	74	0.3		COIL 2M OF CABLE AT STN 193 FOR CONNECTION BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 191.
193	201	INSTALL - CIVIL	C100L	11	1.8	45/1200x1 45/1830x2	LOCATE EXISTING CAPPED CONDUIT AT STN 201 7 CUT AND ADD BENDS TO CONNECT TO NEW.
194	611	INSTALL - CIVIL	C50H	31	7.8		
195	194	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	34	0.1		COIL 2M OF CABLE AT STN 195 FOR CONNECTION BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 194.
195	406	INSTALL - CIVIL	C100L	24	4.0	45/1200x1	CONNECT TO CROSSING CONDUIT AT STN 406.
198	599	INSTALL - CIVIL	C50H	23	5.8	90/300x1 90/600x2	
198	609	INSTALL - CIVIL	C50H	4	1.0	90/300x2	
205	206	INSTALL - CIVIL	C100L	87	14.5	45/1200x2 15/1830x6	
205	405	INSTALL - CIVIL	C150L	63	10.5		CONNECT TO CROSSING CONDUIT AT STN 205 & STN 405
205	405	INSTALL - CIVIL	C150L	63	10.5		CONNECT TO CROSSING CONDUIT AT STN 205 & STN 405
205	607	INSTALL - CIVIL	C50H	15	3.8	90/300x2 90/600x3	
206	205	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	83	0.3		COIL 2M OF CABLE AT STN 206 FOR CONNECTION BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 205.
206	207	INSTALL - CIVIL	C100L	36	6.0	45/1200x2	
206	618	INSTALL - CIVIL	C50H	21	5.3	90/300x2 90/600x2	
207	208	INSTALL - CIVIL	C100L	36	6.0	45/1200x2	
207	617	INSTALL - CIVIL	C50H	3	0.8	90/300x2	
208	207	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	36	0.1		COIL 2M OF CABLE AT STN 208 FOR CONNECTION BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 207.
208	615	INSTALL - CIVIL	C50H	19	4.8	90/300x2 90/600x3	
209	210	INSTALL - CIVIL	C100L	45	7.5	45/1200x2	
209	212	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	45	0.2		COIL 2M OF CABLE AT STN 212 FOR CONNECTION BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 209.
209	212	INSTALL - CIVIL	C100L	45	7.5	45/1200x2	
210	211	INSTALL - CIVIL	C100L	46	7.7	45/1200x2	
211	210	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	47	0.2		COIL 2M OF CABLE AT STN 210 FOR CONNECTION BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 211.
212	402	INSTALL - CIVIL	C150L	14	2.3	45/1830x1	CONNECT TO CROSSING CONDUIT AT STN 212. CAP CONDUIT AT STN 402.
212	402	INSTALL - CIVIL	C150L	14	2.3	45/1830x1	CONNECT TO CROSSING CONDUIT AT STN 212. CAP CONDUIT AT STN 402.
212	402	INSTALL - CIVIL	C100L	14	2.3	45/1200x1	CAP CONDUIT AT STN 402.
213	214	INSTALL - CIVIL	C100L	26	4.3	45/1200x2	
214	215	INSTALL - CIVIL	C100L	42	7.0	45/1200x2	
214	605	INSTALL - CIVIL	C50H	3	0.8	90/300x2	
215	216	INSTALL - CIVIL	C100L	42	7.0	45/1200x2	
215	606	INSTALL - CIVIL	C50H	17	4.3	90/300x2 90/600x1	
216	219	INSTALL - CIVIL	C100L	26	4.3	45/1200x2	
216	619	INSTALL - CIVIL	C50H	28	7.0	90/300x2 90/600x3	
217	193	INSTALL - CIVIL	C100L	20	3.3	45/1200x2	
217	213	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	104	0.4		COIL 2M OF CABLE AT STN 219 FOR CONNECTION BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 213.
219	401	INSTALL - CIVIL	C100L	31	5.2	45/1200x1 15/1830x6	CAP CONDUIT AT STN 401.
400	213	INSTALL - CIVIL	C100L	33	5.5	45/1200x1 15/1830x6	CAP CONDUIT AT STN 400.
407	194	INSTALL - CIVIL	C100L	16	2.7	45/1200x1 15/1830x1	CONNECT TO CROSSING CONDUIT AT STN 407.
599	610	INSTALL - CIVIL	C50H	6	1.5	90/300x1	
599	614	INSTALL - CIVIL	C50H	38	9.5	90/300x1 90/600x3	
611	612	INSTALL - CIVIL	C50H	4	1.0	90/300x2	
611	613	INSTALL - CIVIL	C50H	39	9.8	90/300x2 90/600x1	



TRENCH SECTIONS-LEGEND

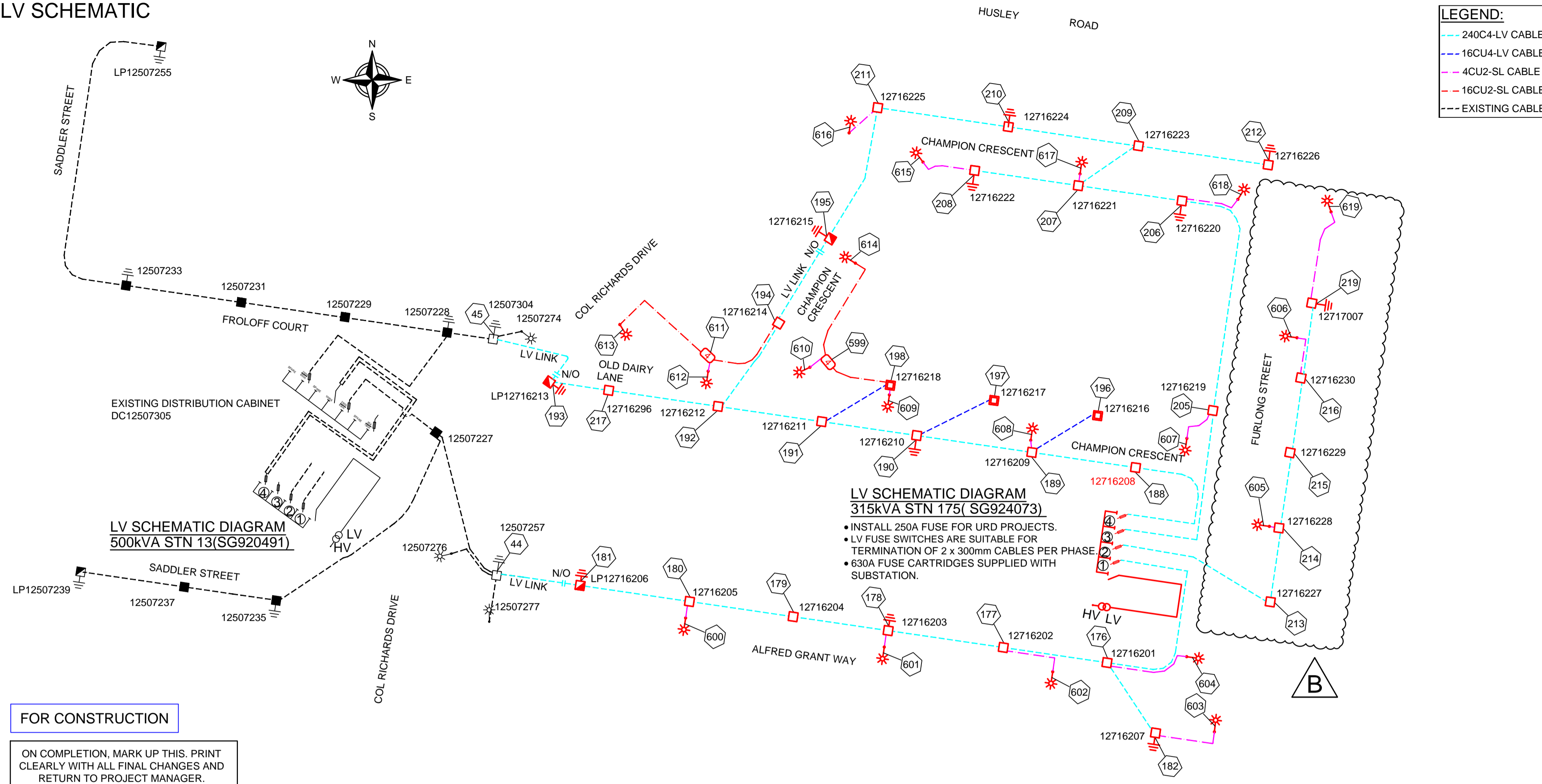
	SPARE HV CONDUIT - EXISTING
	SPARE HV CONDUIT - PLANNED
	CABLE - PLANNED
	CABLE - EXISTING
	CONDUITS - EXISTING
	CONDUITS - PLANNED

LEGEND

	ZERO LOT BOUNDARY
	150mm HV DUCT
	125mm HV DUCT
	100mm LV DUCT
	LIGHTING DUCT
	35mm sq ANNEALED BARE COPPER EARTH
	CABLE EXISTING
	CABLE PLANNED
	CABLE RECOVER
	EQUIPMENT EXISTING
	EQUIPMENT RECOVER
	EQUIPMENT PLANNED
	SUBSTATION
	RING MAIN UNIT
	CROSS ROAD PILLAR
	LINKING PILLAR
	LIGHTING PIT
	CABLE JOINT
	N1, N2, N3 PILLARS
	DISTRIBUTION CABINET
	STREETLIGHT
	EARTH
	HV/LV POLE
	POLE MOUNTED TRANSFORMER
	C1A1 & C1A2 PILLARS
	HV POLE
	LV POLE

Client: Marbig P/L ATF the Alkon Trust	Rev Date: 20-4-23	Project Description: GAINSBOROUGH LODGE STAGE 2 UDC UG ELECTRICAL RETICULATION CONDUIT SCHEMATIC & CONDUIT SCHEDULES
Drawn: Michael Dayot 29435	Date: JUNE 2025	Scale: NTS
Sheet: 4 OF 5	ERGON Project Number: 2006097	SPA Drawing Number: 3876-E04
Revised: _____	Revision: B	

LV SCHEMATIC



UNDERGROUND CABLE SCHEDULE							
STN FROM	STN TO	ACTION	VOLTAGE	CONSTRUCTION CODE	ROUTE LENGTH	CABLE LENGTH	REMARKS
13	175	INSTALL	#N/A	FALSE	343	363	COIL CABLE AT STN 13 FOR FINAL TERMINATION BY ERGON ENERGY.
44	181	INSTALL	415V	LV-240C4/673	29	33	LV LINK. COIL CABLE AT STN 44 FOR FINAL TERMINATION BY ERGON ENERGY.
45	193	INSTALL	415V	LV-240C4/673	39	43	LV LINK. COIL CABLE AT STN 45 FOR FINAL TERMINATION BY ERGON ENERGY.
175	176	INSTALL	415V	LV-240C4/673	56	68	
175	188	INSTALL	415V	LV-240C4/673	52	64	
175	205	INSTALL	415V	LV-240C4/673	56	60	
175	213	INSTALL	415V	LV-240C4/673	18	30	
176	177	INSTALL	415V	LV-240C4/673	36	40	
176	182	INSTALL	415V	LV-240C4/673	29	33	
176	604	INSTALL	240V	LVI-4CU2NS/1671	30	35	
177	178	INSTALL	415V	LV-240C4/673	40	44	
177	602	INSTALL	240V	LVI-4CU2NS/1671	23	28	
178	179	INSTALL	415V	LV-240C4/673	33	37	
178	601	INSTALL	240V	LVI-4CU2NS/1671	6	11	
179	180	INSTALL	415V	LV-240C4/673	36	40	
180	181	INSTALL	415V	LV-240C4/673	38	42	
180	600	INSTALL	240V	LVI-4CU2NS/1671	6	11	
182	603	INSTALL	240V	LVI-4CU2NS/1671	24	29	
188	189	INSTALL	415V	LV-240C4/673	36	40	
189	190	INSTALL	415V	LV-240C4/673	40	44	
189	196	INSTALL	415V	LV-16CUC4/614	26	30	
189	608	INSTALL	240V	LVI-4CU2NS/1671	4	9	
190	191	INSTALL	415V	LV-240C4/673	33	37	
190	197	INSTALL	415V	LV-16CUC4/614	28	32	
191	192	INSTALL	415V	LV-240C4/673	36	40	
191	198	INSTALL	415V	LV-16CUC4/614	28	32	
192	194	INSTALL	415V	LV-240C4/673	36	40	
192	217	INSTALL	415V	LV-240C4/673	38	42	
194	611	INSTALL	240V	LVI-16CU2NS/1672	31	35	
195	194	INSTALL	415V	LV-240C4/673	34	38	LV LINK.
198	599	INSTALL	240V	LVI-16CU2NS/1672	23	27	
198	609	INSTALL	240V	LVI-4CU2NS/1671	4	9	
205	206	INSTALL	415V	LV-240C4/673	87	91	
205	607	INSTALL	240V	LVI-4CU2NS/1671	15	20	
206	207	INSTALL	415V	LV-240C4/673	36	40	
206	618	INSTALL	240V	LVI-4CU2NS/1671	21	26	
207	208	INSTALL	415V	LV-240C4/673	36	40	
207	209	INSTALL	415V	LV-240C4/673	25	29	
207	617	INSTALL	240V	LVI-4CU2NS/1671	3	8	
208	615	INSTALL	240V	LVI-4CU2NS/1671	19	24	
209	210	INSTALL	415V	LV-240C4/673	45	49	
209	212	INSTALL	415V	LV-240C4/673	45	49	
210	211	INSTALL	415V	LV-240C4/673	46	50	
211	195	INSTALL	415V	LV-240C4/673	49	53	
211	616	INSTALL	240V	LVI-4CU2NS/1671	16	21	
213	214	INSTALL	415V	LV-240C4/673	26	30	
214	215	INSTALL	415V	LV-240C4/673	42	46	
214	605	INSTALL	240V	LVI-4CU2NS/1671	3	8	
215	216	INSTALL	415V	LV-240C4/673	42	46	
215	606	INSTALL	240V	LVI-4CU2NS/1671	17	22	
216	219	INSTALL	415V	LV-240C4/673	26	30	
216	619	INSTALL	240V	LVI-4CU2NS/1671	28	33	
217	193	INSTALL	415V	LV-240C4/673	20	24	
599	610	INSTALL	240V	LVI-4CU2NS/1671	6	11	
599	614	INSTALL	240V	LVI-16CU2NS/1672	38	43	
611	612	INSTALL	240V	LVI-4CU2NS/1671	4	9	
611	613	INSTALL	240V	LVI-16CU2NS/1672	39	44	

FOR CONSTRUCTION

ON COMPLETION, MARK UP THIS. PRINT CLEARLY WITH ALL FINAL CHANGES AND RETURN TO PROJECT MANAGER.

CHANGES: YES/NO

ELECTRICAL CONTRACTOR

NAME: _____

SIGNATURE: _____

DATE: _____

CIVIL CONTRACTOR

NAME: _____

SIGNATURE: _____

DATE: _____

NEW STYLE LINK PILLAR					
LOCATION:	ALFRED GRANT WAY			STATION:	LP12716206
CIRCUIT No.	LABEL SIZE LABEL	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION	
1(LHS)	150 x 50	WB	5	TO FROHLOFF CRT DC12507305 FS3/ SADDLER ST LP12507239 & SERVICES	
2(RHS)	150 x 50	WB	5	TO FURLONG ST SG924073 FS1/ 12716207 & SERVICES	

NEW STYLE LINK PILLAR					
LOCATION:	OLD DAIRY LANE			STATION:	LP12716213
CIRCUIT No.	LABEL SIZE LABEL	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION	
1(LHS)	150 x 50	WB	5	TO FURLONG ST SG924073 FS4/ CHAMPION CRES LP12716215 & SERVICES	
2(RHS)	150 x 50	WB	5	TO FROHLOFF CRT DC12507305 / SADDLE ST LP12507255 & SERVICES	

NEW STYLE LINK PILLAR					
LOCATION:	CHAMPION CRESCENT			STATION:	LP12716215
CIRCUIT No.	LABEL SIZE LABEL	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION	
1(LHS)	150 x 50	WB	5	TO FURLONG ST SG924073 FS4/ OLD DAIRY LANE LP12716213 & SERVICES	
2(RHS)	150 x 50	WB	5	TO FURLONG ST SG924073 FS3 / CHAMPION CRES 12716222 / 12716222 & SERVICES	

OLD STYLE LINK PILLAR					
LOCATION:	SADDLER STREET			STATION:	LP12507255
CIRCUIT No.	LABEL SIZE LABEL	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION	
1(LHS)	150 x 50	WB	5	EXISTING	
2(RHS)	150 x 50	WB	5	TO FROHLOFF CRT DC12507305 FS5 / COL RICHARDS DR LP12716213 & SERVICES	

OLD STYLE LINK PILLAR					
LOCATION:	SADDLER STREET			STATION:	LP12507239
CIRCUIT No.	LABEL SIZE LABEL	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION	
1(LHS)	150 x 50	WB	5	TO FROHLOFF CRT DC12507305 FS3 / ALFRED GRANT WAY LP12716206 & SERVICES	
2(RHS)	150 x 50	WB	5	EXISTING	

NEW PMT LV SWBD- SWITCH FUSE CIRCUIT					
LOCATION:	FURLONG STREET			STATION:	SG924073
CIRCUIT No.	LABEL SIZE LABEL	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION	
TFMR 1	80 x 35	WB	6		
1	150 x 50	WB	5	TO ALFRED GRANT WAY 12716201 DIRECT / LP12716206 / 12716207 & SERVICES	
2	150 x 50	WB	5	TO FURLONG ST 12716227 DIRECT / 12717007 & SERVICES	
3	150 x 50	WB	5	TO FURLONG ST 12716219 DIRECT / CHAMPION CRES 12716222 / LP12716215 / 12716226 & SERVICES	
4	150 x 50	WB	5	TO CHAMPION CRES 12716208 DIRECT / LP12716215 / OLD DAIRY LANE LP12716213 & SERVICES	

EXISTING LV DISTRIBUTION SUPPLY CABINET LV SWBD- SWITCH FUSE CIRCUIT Y ERGON					
LOCATION:	FROHLOFF COURT			STATION:	DC12507305
CIRCUIT No.	LABEL SIZE LABEL	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION	
MAIN	150 x 50	WB	5	SPARE	
1	150 x 50	WB	5	SPARE	
2	150 x 50	WB	5	SPARE	
3	150 x 50	WB	5	TO FROHLOFF CRT 12507227 DIRECT / SADDLER ST LP12507239 / ALFRED GRANT WAY LP12716206 & SERVICES	
ISOLATOR 1	150 x 50	WB	5	EXISTING	
4	150 x 50	WB	5	SPARE ISOLATOR	
5	150 x 50	WB	5	TO FROHLOFF CRT 12507228 DIRECT / SADDLER ST LP12507255 / OLD DAIRY LANE LP12716213 & SERVICES	
6	150 x 50	WB	5	SPARE	

Code	Date	Description	Revised	Ph	Fax
B	04/12/25	FOR CONSTRUCTION-UPDATE LOT LAYOUT	MS		
A	21/10/25	FOR CONSTRUCTION	MS		

CLIENT: Marbig P/L ATF The Alkon Trust

g-WAGNER, 1 Airport Dr, 1511 Toowoomba, Cecil Plains Rd WELLCAMP QLD 4350 Ph. Fax

CIVIL ENGINEER BURCHILLS ENGINEERING SOLUTIONS (TOOWOOMBA & IPSWICH)



TRENCH SECTIONS-LEGEND

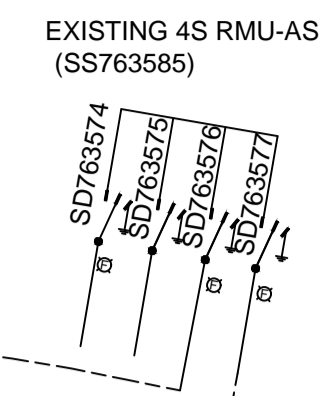
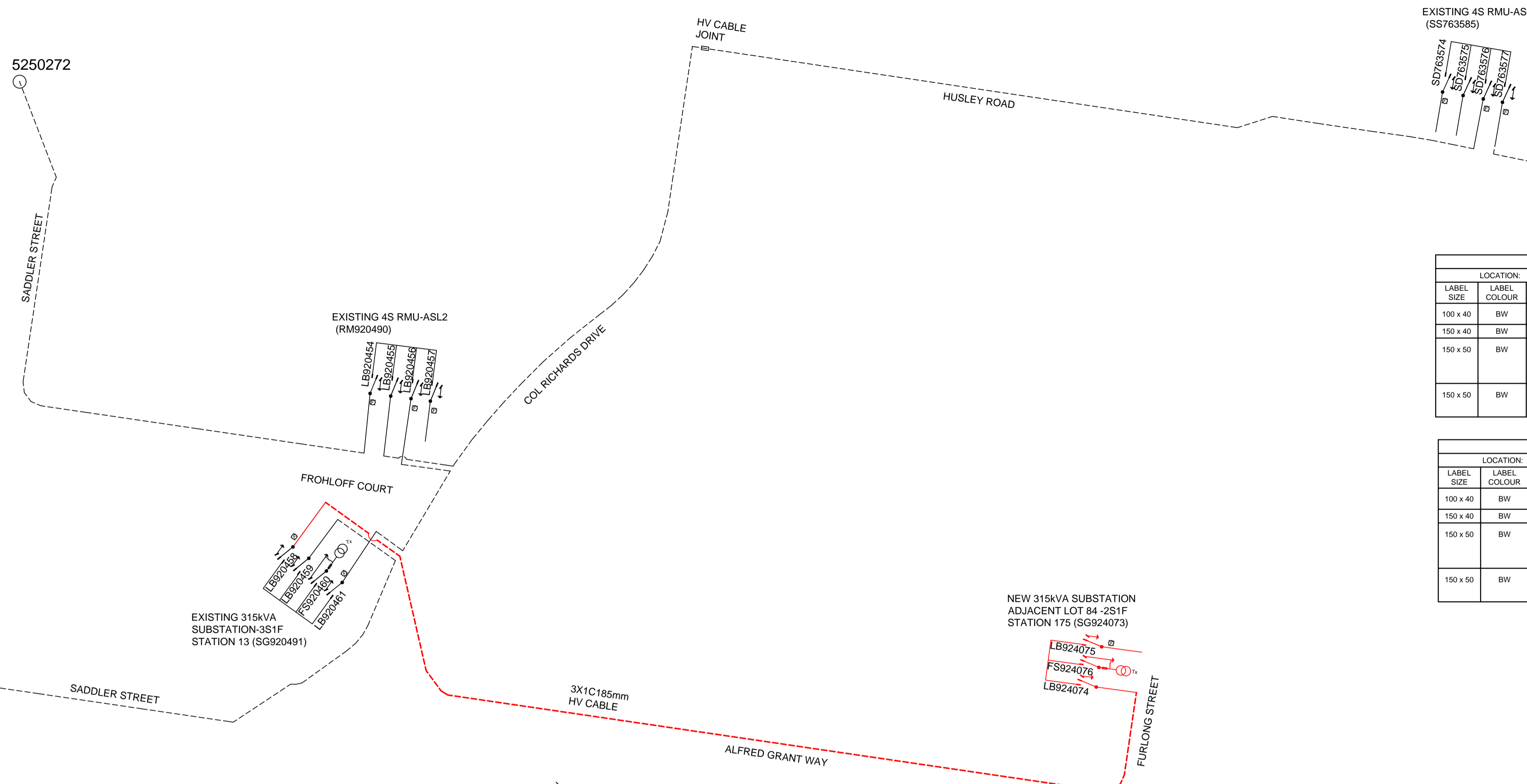
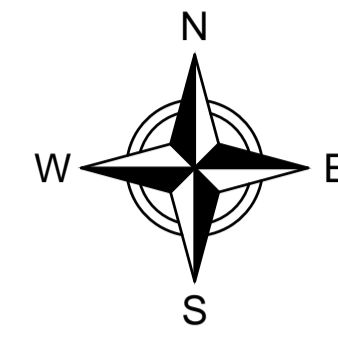
- ⊗ SPARE HV CONDUIT - EXISTING
- ⊗ SPARE HV CONDUIT - PLANNED
- CABLE - PLANNED
- CABLE - EXISTING
- AB ↓ CONDUITS - EXISTING
- AB ↑ CONDUITS - PLANNED

LEGEND

- ◆◆◆ ZERO LOT BOUNDARY
- 150mm HV DUCT
- 125mm HV DUCT
- 100mm LV DUCT
- LIGHTING DUCT
- 35mm sq ANNEALED BARE COPPER EARTH
- CABLE EXISTING
- CABLE PLANNED
- CABLE RECOVER
- EQUIPMENT EXISTING
- EQUIPMENT RECOVER
- EQUIPMENT PLANNED
- SUBSTATION
- RING MAIN UNIT
- CROSS ROAD PILLAR
- LINKING PILLAR
- LIGHTING PIT
- CABLE JOINT
- N1, N2, N3 PILLARS
- DISTRIBUTION CABINET
- STREETLIGHT
- CIA1 & CIA2 PILLARS
- HV POLE
- LV POLE
- POLE MOUNTED TRANSFORMER

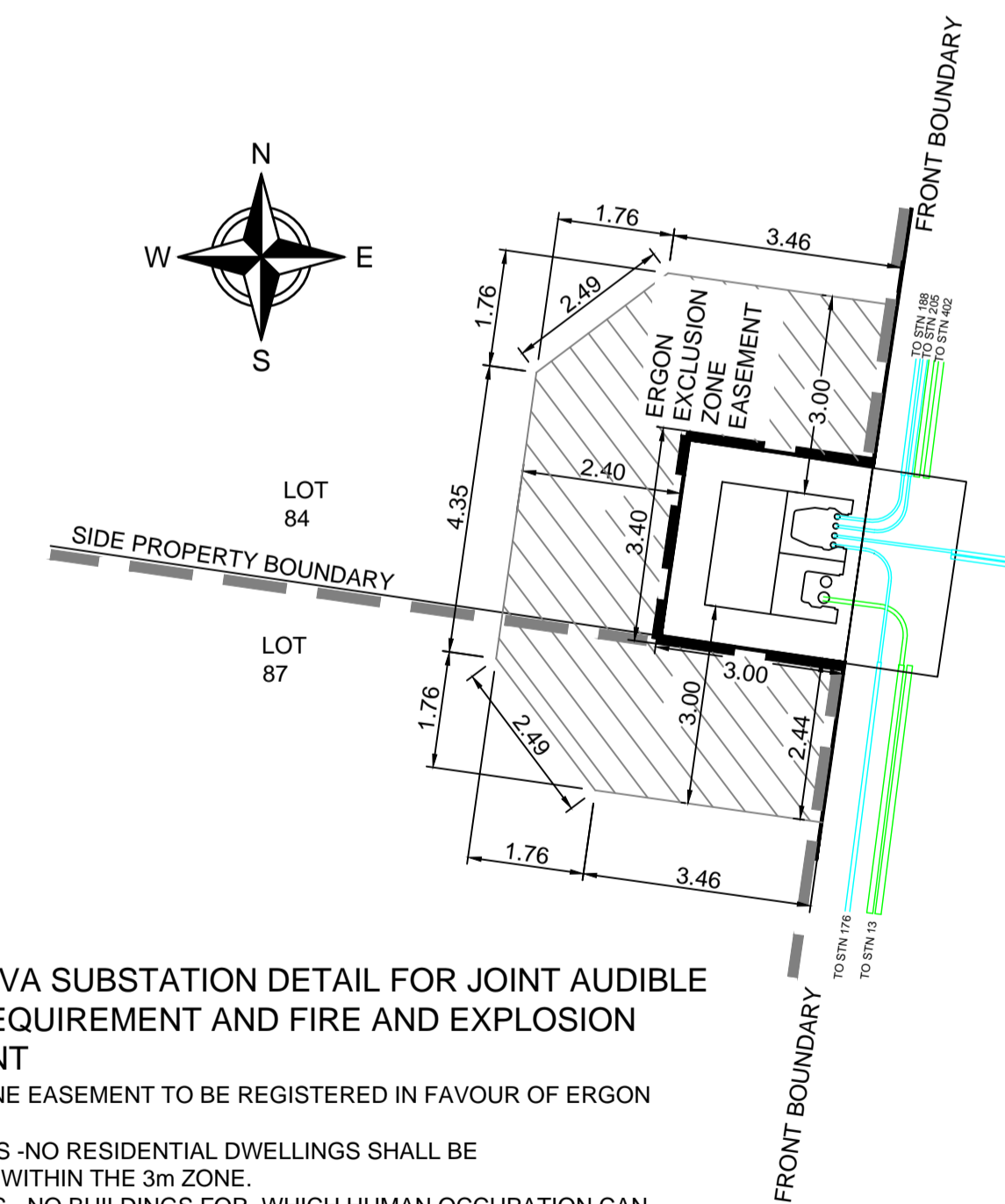
Drawing Title	Date	JUNE 2025
GAINSBOROUGH LODGE STAGE 2 UDC UG ELECTRICAL RETICULATION LV SCHEMATIC, LABELLING & UG CABLE SCHEDULE	Scale	NTS
Drawn	MS	
RPEQ Design Certification Michael Dayot 29435	Sheet	5 OF 6
Project Description	ERGON Project Number	SPA Drawing Number
GAINSBOROUGH LODGE WELLCAMP QLD	2006097	3876-E05
		Revision
		B

HV SCHEMATIC



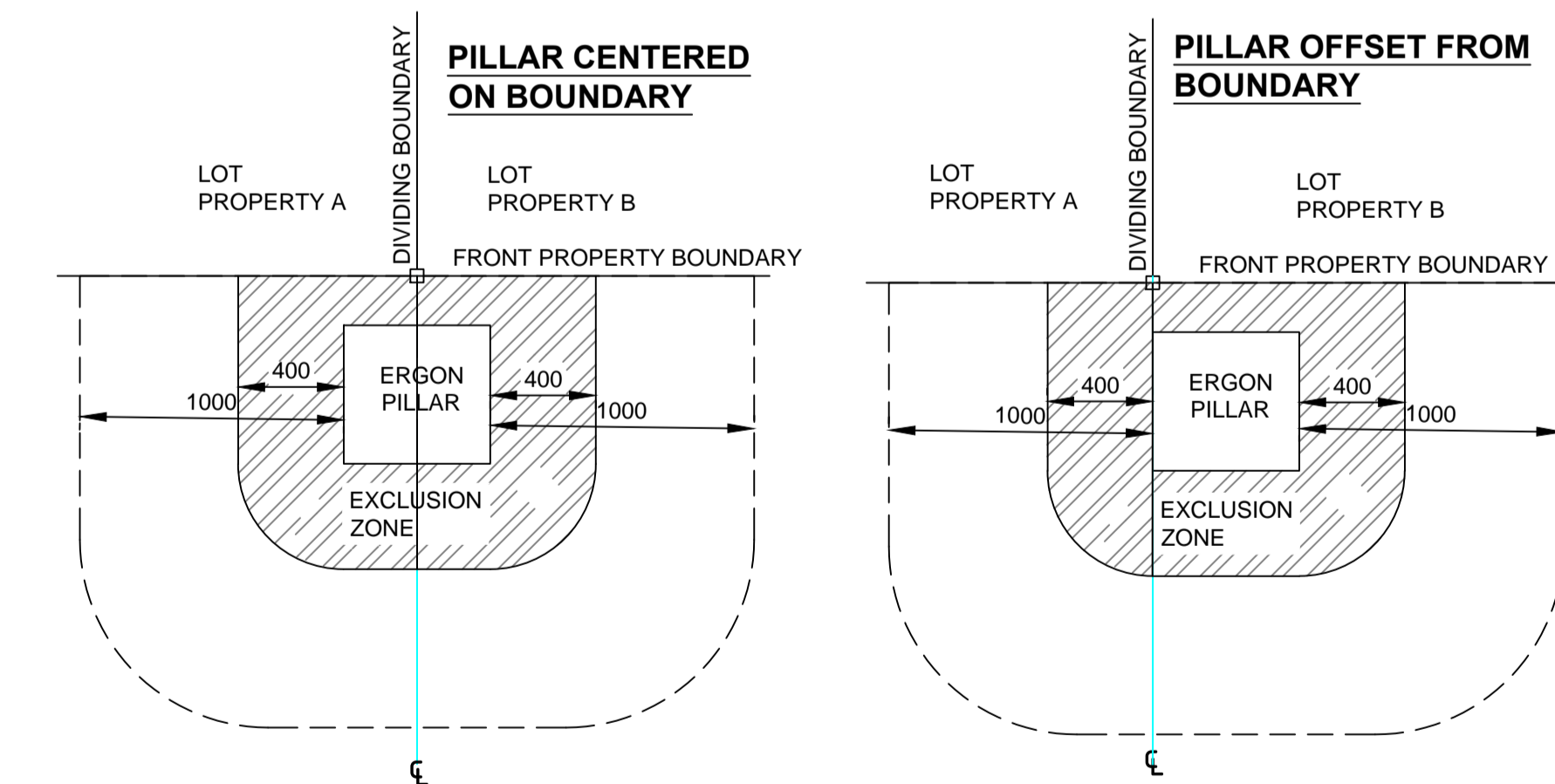
EXISTING PMT HV SWBD - SWITCH FUSE CIRCUITS BY ERGON										
LOCATION:			FROHLOFF COURT				STATION: 13			SG920491
LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION			LABEL LOCATION	LABEL DESCRIPTION			
100 x 40	BW	15	LB920461	FS920460	LB920459	LB920458	NEAR ISOLATOR	ISOLATOR IDENTIFICATION		
150 x 40	BW	20	EXISTING			FRONT	FEEDER IDENTIFICATION			
150 x 50	BW	10	EXISTING	TO TRANSFORMER	EXISTING	TO FURLONG ST SG924073 LB924074	CABLE BOX	CABLE DESTINATION		
150 x 50	BW	10	EXISTING	TO TRANSFORMER	EXISTING	TO FURLONG ST SG924073 LB924074	INSIDE SIDE WALL	CABLE DESTINATION		

EXISTING PMT HV SWBD - SWITCH FUSE CIRCUITS BY ERGON										
LOCATION:			FURLONG STREET				STATION: 175			SG924073
LABEL SIZE	LABEL COLOUR	LETTER SIZE	LABEL INFORMATION			LABEL LOCATION	LABEL DESCRIPTION			
100 x 40	BW	15	LB924074	FS924076	LB924075	NEAR ISOLATOR	ISOLATOR IDENTIFICATION			
150 x 40	BW	20	EXISTING			FRONT	FEEDER IDENTIFICATION			
150 x 50	BW	10	TO FROHLOFF CRT SG920491 LB920458	TO TRANSFORMER	SPARE	CABLE BOX	CABLE DESTINATION			
150 x 50	BW	10	TO FROHLOFF CRT SG920491 LB920458	TO TRANSFORMER	SPARE	INSIDE SIDE WALL	CABLE DESTINATION			



DETAIL A: 315kVA SUBSTATION DETAIL FOR JOINT AUDIBLE NOISE, EMF REQUIREMENT AND FIRE AND EXPLOSION RISK EASEMENT

- EXCLUSION ZONE EASEMENT TO BE REGISTERED IN FAVOUR OF ERGON ENERGY.
- FOR FIRE ZONES - NO RESIDENTIAL DWELLINGS SHALL BE CONSTRUCTED WITHIN THE 3m ZONE.
- FOR EMF ZONES - NO BUILDINGS FOR, WHICH HUMAN OCCUPATION CAN BE EXPECTED FOR SIGNIFICANT PERIODS OF TIME CAN BE LOCATED WITHIN 3m OF THE SUBSTATION.



DETAIL B: PILLAR LOCATION CLEARANCE FROM LOT ACCESS

- WHERE REQUIRED PILLAR TO BE INSTALLED OFFSET FROM PROPERTY BOUNDARY TOWARD ADJACENT LOT, UNLESS DRIVEWAY ACCESSES FOR BOTH LOTS ARE LOCATED ON THE COMMON BOUNDARY.
- EDGE OF PILLAR CANNOT BE LOCATED MORE THAN 100mm FROM PROPERTY BOUNDARY PEG.
- DRIVEWAY ACCESS TO LOTS CANNOT BE LOCATED WITHIN 1m OF THE EDGE OF PILLAR, AS SHOWN.

HV PULLING TENSION CALCULATED AND RECORDED			
STATION FROM	STATION TO	CALCULATED	RECORDED
13	175	10,088.59 N	

FOR CONSTRUCTION

ON COMPLETION, MARK UP THIS. PRINT CLEARLY WITH ALL FINAL CHANGES AND RETURN TO PROJECT MANAGER.

CHANGES: YES/NO

ELECTRICAL CONTRACTOR

NAME: _____

SIGNATURE: _____

DATE: _____

CIVIL CONTRACTOR

NAME: _____

SIGNATURE: _____

DATE: _____

CLIENT: Marbig P/L ATF the Alkon Trust	
c/- WAGNER, 1 Airport Dr, 1511 Toowoomba, Cecil Plains Rd WELLCAMP QLD 4350 Ph. _____ Fax _____	
CIVIL ENGINEER BURCHILLS ENGINEERING SOLUTIONS (TOOWOOMBA & IPSWICH)	
B 04/12/25	FOR CONSTRUCTION- NO CHANGE MS
A 21/10/25	FOR CONSTRUCTION MS
Code	Date Description Revised Ph. Fax

spa
consulting engineers

Tel: (07) 4032 3311 or (07) 4728 3026
PO Box 664 North Cairns QLD 4870
Email Address - admin@spaconslting.com.au
A business unit of SPA Consulting Engineers (Q/D) Pty Ltd ABN 91 910 844 418

TRENCH SECTIONS-LEGEND

- ⊗ SPARE HV CONDUIT - EXISTING
- ⊗ SPARE HV CONDUIT - PLANNED
- CABLE - PLANNED
- CABLE - EXISTING
- AB → CONDUITS - EXISTING
- AB → CONDUITS - PLANNED

LEGEND

- ZERO LOT BOUNDARY
- 150mm HV DUCT
- 125mm HV DUCT
- 100mm LV DUCT
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- CABLE EXISTING
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- EQUIPMENT EXISTING
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- SUBSTATION
- RING MAIN UNIT
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- LINKING PILLAR
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Drawing Title	Date	JUNE 2025
GAINSBOROUGH LODGE STAGE 2 UDC UG ELECTRICAL RETICULATION HV SCHEMATIC, LABELLING & DETAILS	Scale	NTS
	Drawn	MS
	RPEQ Design Certification Michael Dayot 29435	
	Sheet	6 OF 6
Project Description	ERGON Project Number	SPA Drawing Number
GAINSBOROUGH LODGE WELLCAMP QLD	2006097	3876-E06
		Revision
		B