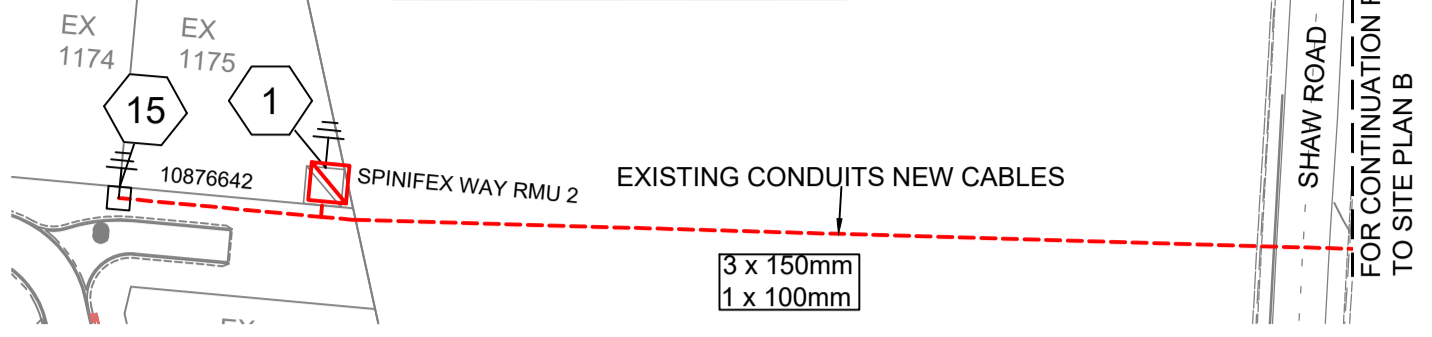


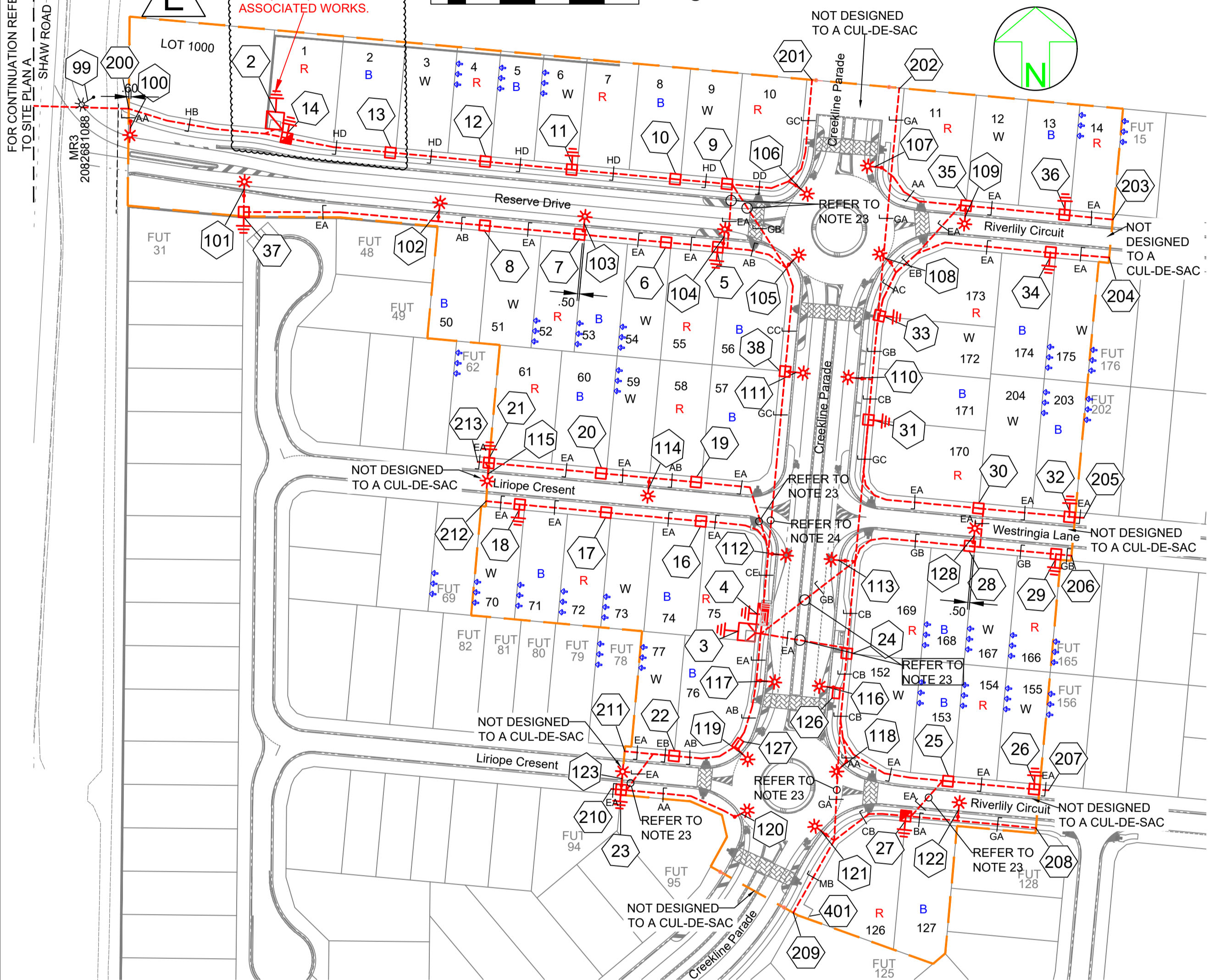
SITE PLAN: A

1:1000 @ A1



SITE PLAN: B

1:1000 @ A1



SPA LIGHTING DESIGN COMPLIANCE CERTIFICATE



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

NAME: JANE ERREY TITLE: SENIOR ELECTRICAL ENGINEER RPEQ: 6863
 LIGHTING CATEGORIES: CATEGORY V5 & PR5
 LOCAL COUNCIL: TOWNSVILLE CITY 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.

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 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 5163 AND DRAWING 5228 FOR TRENCHES WITH NBNC 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 DETAILED 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 75 STATION 3. PADMOUNT SITE IS TO BE 3.0m x 2.8m, REFER TO UNDERGROUND CONSTRUCTION MANUAL DWG 5000. REFER TO DETAIL B.
- INSTALLATION OF FUTURE PADMOUNT SUBSTATION REQUIRED IN ROAD RESERVE ADJACENT LOT 126, STATION 401. PADMOUNT SITE 3.0m x 2.8m. REFER TO DETAIL C.
- INSTALLATION OF RING MAIN UNIT (RMU) REQUIRED IN ROAD RESERVE ADJACENT TO LOT 1, STATION 2. RMU SITE 3.0m x 2.8m, REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5255. REFER TO DETAIL A AND NOTE 32.
- INSTALLATION OF DISTRIBUTION CABINET REQUIRED IN ROAD RESERVE ADJACENT TO LOT 75, STATION 4. CABINET SITE IS TO BE 850mm x 300mm. REFER TO DETAIL B.
- DEVELOPER SHALL INSTALL DISTRIBUTION CABINET FOUNDATION. REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWINGS-ASSEMBLY- 534 & 535.
- DEVELOPER SHALL INSTALL PLINTH AND CONCRETE SURROUND. REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWINGS 5004 & 5005 AND RMU DWG 5217.
- INSTALL PADMOUNTED SUBSTATION AND RING MAIN UNIT (RMU) EARTHING - COMMON EARTH ARRANGEMENT. REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5013 AND RMU DWG. 5221.
- THERE ARE 6 x 17W LED SYLVANIA STREET MINOR ROAD, 19 x 90W PHILIPS ROADFLAIR MAJOR ROAD STREETLIGHTS ON RATE 2.
- STREETLIGHT DESIGN TO AS1158 CATEGORY V5 TO ROAD 1 & 2, AND CATEGORY PR5 TO ALL OTHER ROADS.
- 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. CENTRELINE OF STREETLIGHT SHALL BE 1.05m FROM BACK OF KERB. WHERE THE ROAD IS UN-KERBED OR THERE IS A FLUSH KERB, CENTRELINE OF STREETLIGHT SHALL BE 1.3m FROM THE OUTER EDGE OF THE BITUMEN.
- MAJOR STREETLIGHTS - THE DEVELOPER SHALL SUPPLY AND INSTALL STREETLIGHT BASES. FOUNDATION DEPTH IS 2250mm FOR MAJOR STREETLIGHTS. REFER TO LIGHTING CONSTRUCTION MANUAL DRAWING 1-5-6-1 & 2 FOR BPM FOOTINGS. CENTRELINE OF STREETLIGHT SHALL BE 1.05m FROM THE INVERT OF KERB AND CHANNEL. WHERE THE ROAD IS UN-KERBED, CENTRELINE OF STREETLIGHT SHALL BE 1.3m FROM THE EDGE OF BITUMEN.
- 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.
- 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 ENGINEER ON 131046.
- 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. 0179437) 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.
- ELECTRONIC CABLE MARKERS (ECM'S) ARE TO BE SUPPLIED BY THE ELECTRICAL CONTRACTOR 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 THE ELECTRICAL CONTRACTOR WHEN ALL SPARE CONDUIT ENDS ARE REMOVED FROM A LOCATION.
- WHERE PREVIOUSLY AGREED BY ERGON ENERGY, CONCRETE COVER SHALL BE INSTALLED ABOVE CONDUIT, WHERE CONDUIT BURIAL DEPTH IS LESS THAN THAT SPECIFIED IN UNDERGROUND CONSTRUCTION MANUAL DRAWING 5163. FOR FOOTPATHS REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5016. FOR ROAD CROSSINGS REFER TO UNDERGROUND CONSTRUCTION MANUAL DRAWING 5017.
- 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 150mm.
- ADDITIONAL CONDUIT BENDS SHALL BE INSTALLED 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.
- CONTRACTOR TO SUPPLY AND INSTALL ENGRAVED LABEL LOCATED ON LIGHTING TERMINAL STATING "LIGHT FED FROM PILLAR ASSET NUMBER _____"
- 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.
- PARALLEL FEED FROM STN 3 TO 4. BOTH CABLES TO BE TERMINATED TOGETHER AT BOTH ENDS. PARALLELING KIT REQUIRED AT STN 3 & 4.
- ERGON ENERGY TO PROVIDE RMU AND ALL 150mm HV CONDUITS. CONTRACTOR TO ORGANIZE PICK UP OF MATERIALS FROM ERGON STORES, AND DELIVER TO SITE.

RMU UNIT NOT INSTALLED BY CONTRACTOR. RMU TO BE INSTALLED AT A LATER DATE BY ERGON ENERGY AS CONFIRMED BY BEN ASTON 21/3/22.

AS CONSTRUCTED

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

CHANGES: YES/NO

ELECTRICAL CONTRACTOR
 NAME: POWER UP
 SIGNATURE: BEN HALL
 DATE: 11/04/2022

CIVIL CONTRACTOR
 NAME:
 SIGNATURE:
 DATE:

HV PULLING TENSION CALCULATED AND RECORDED

STATION FROM	STATION TO	CALCULATED	RECORDED
1	2	6,459.03 N	4500 N
2	3	15,348.33 N	7700 N

LV PULLING TENSION CALCULATED AND RECORDED

STATION FROM	STATION TO	CALCULATED	RECORDED
4	5	2,423.43 N	910 N
3	33	1,913.21 N	860 N

- ADDITIONAL ERGON WORKS:**
- ERGON TO INSTALL RMU UNIT
 - ERGON TO INSTALL HV TERMINATION STN 1-2
 - ERGON TO INSTALL HV TERMINATION STN 2-3
 - ERGON ENERGY TO TERMINATE CABLES FROM STN 1-2 & 2-3 COILED IN FRONT OF THE PLINTH.
 - ERGON ENERGY TO COMPLETE ALL OTHER ASSOCIATED WORKS REQUIRED TO INSTALL NEW RMU UNIT AS PER STANDARDS

STN NO	SITE LABEL	POLE ALIGNMENT	POLE SETTING DEPTH	ACTION	CONSTRUCTION CLASS	CONSTRUCTION CODE	DRAWING NUMBER	POSITION ON POLE	REMARKS
1	RM870856			INSTALL - ERGON	HV CABLE TERMINATION	11 PM/CTC/ASL/400TI	5245		ERGON ENERGY TO INSTALL HV CABLE TERMINATION FOR CABLE STN 1 TO 2.
1	RM870856			INSTALL - ERGON	RMU	11 RMU/O/ASL2 4S	5308		ERGON ENERGY TO RECOVER EXISTING 3S RMU AND REPLACE WITH A 4S RMU. ERGON FUNDED.
1	SPINIFEX WAY RMU 2			RECOVER - ERGON	RMU				ERGON ENERGY TO RECOVER EXISTING 3S RMU AND REPLACE WITH A 4S RMU.
15	10876642			INSTALL - ERGON	PILLAR UPGRADE	LV PNU2-3/240/N	5074		ERGON ENERGY TO UPGRADE PILLAR TO 3-WAY IN THIS STAGE AND TERMINATE CABLE FROM STN 15 TO 14.

Rev	Date	Description	Revised
E	11/04/22	AS CONSTRUCTED	NJ
D	16/12/21	ADDED SITE LABELS	SW
C	10/9/21	ADDED ERGON WORKS	SW
B	17/8/21	UPDATE RMU NOTES	SW
A	11/6/21	FOR CONSTRUCTION	SW

CLIENT: URBEX PTY LTD (TOWNSVILLE)
 PO Box 6008, TOWNSVILLE, QLD. 4810
 Ph. 07 4750 7007 Fax

spa consulting engineers
 Simon Perkins & Associates
 Tel: (07) 4032 3311 Fax: (07) 4032 5633
 PO Box 664 North Cairns QLD 4870
 Email Address: admin@spaconsltd.com.au
 A business unit of SPA Consulting Engineers (OLD) Pty Ltd a.s. 015644416

LEGEND

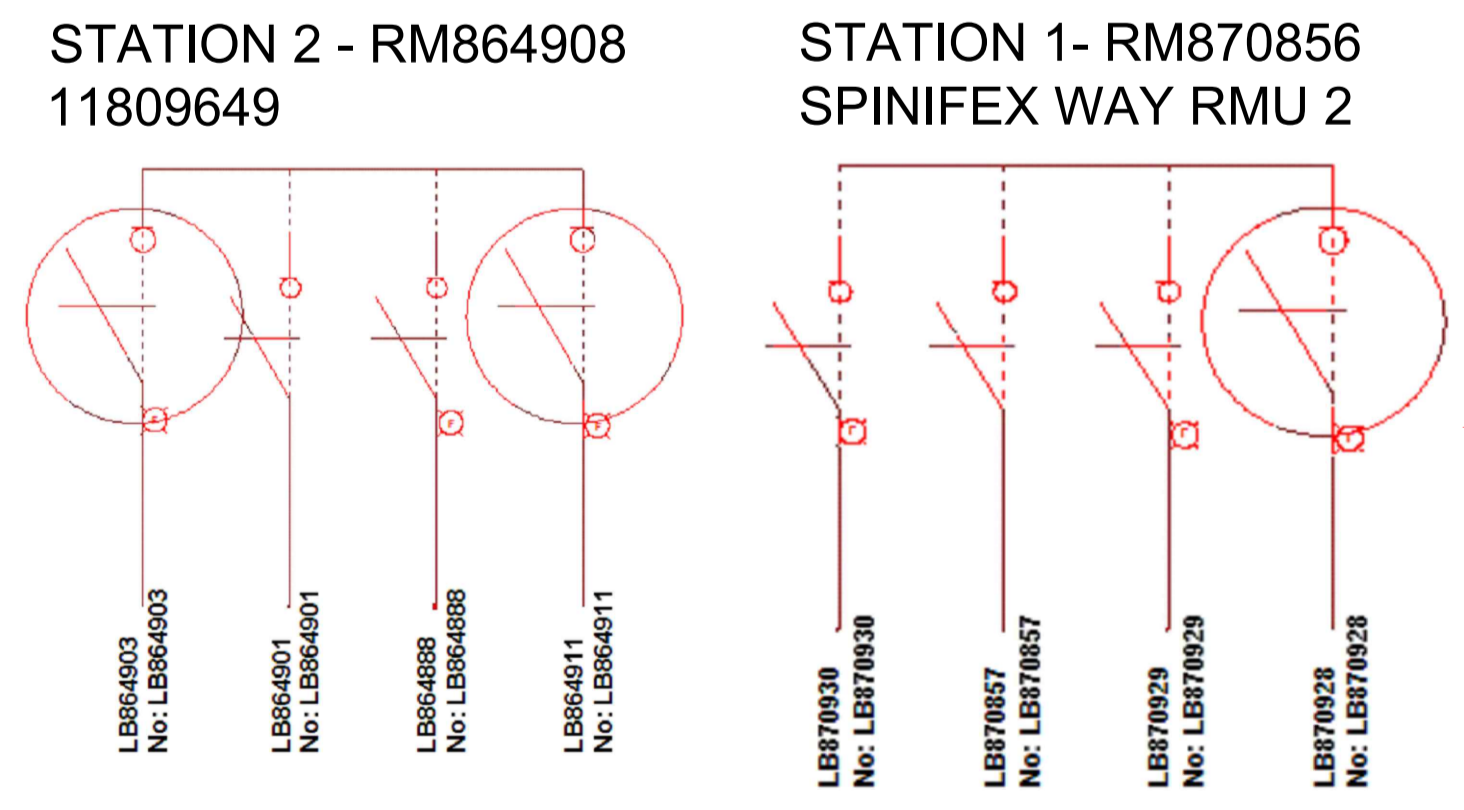
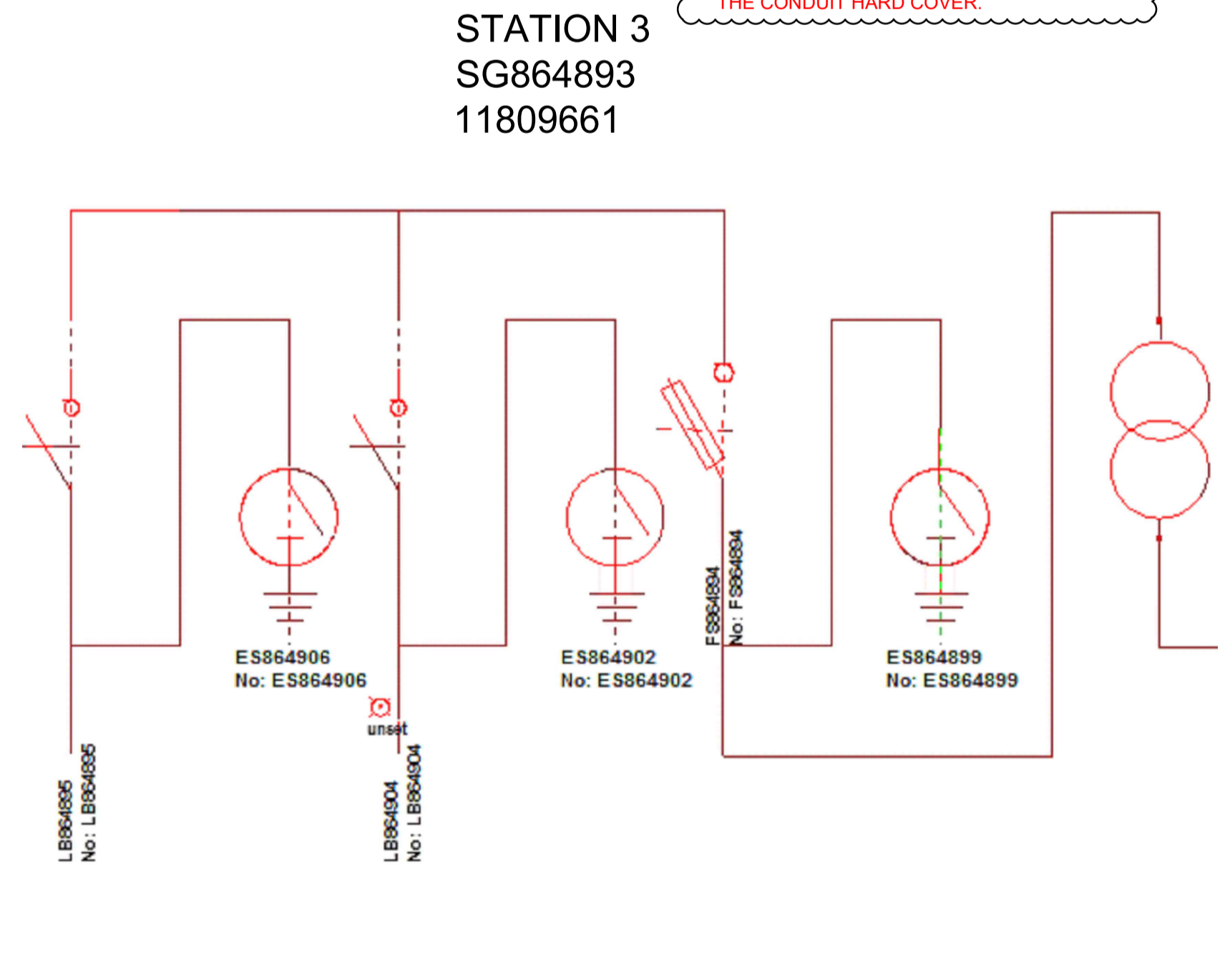
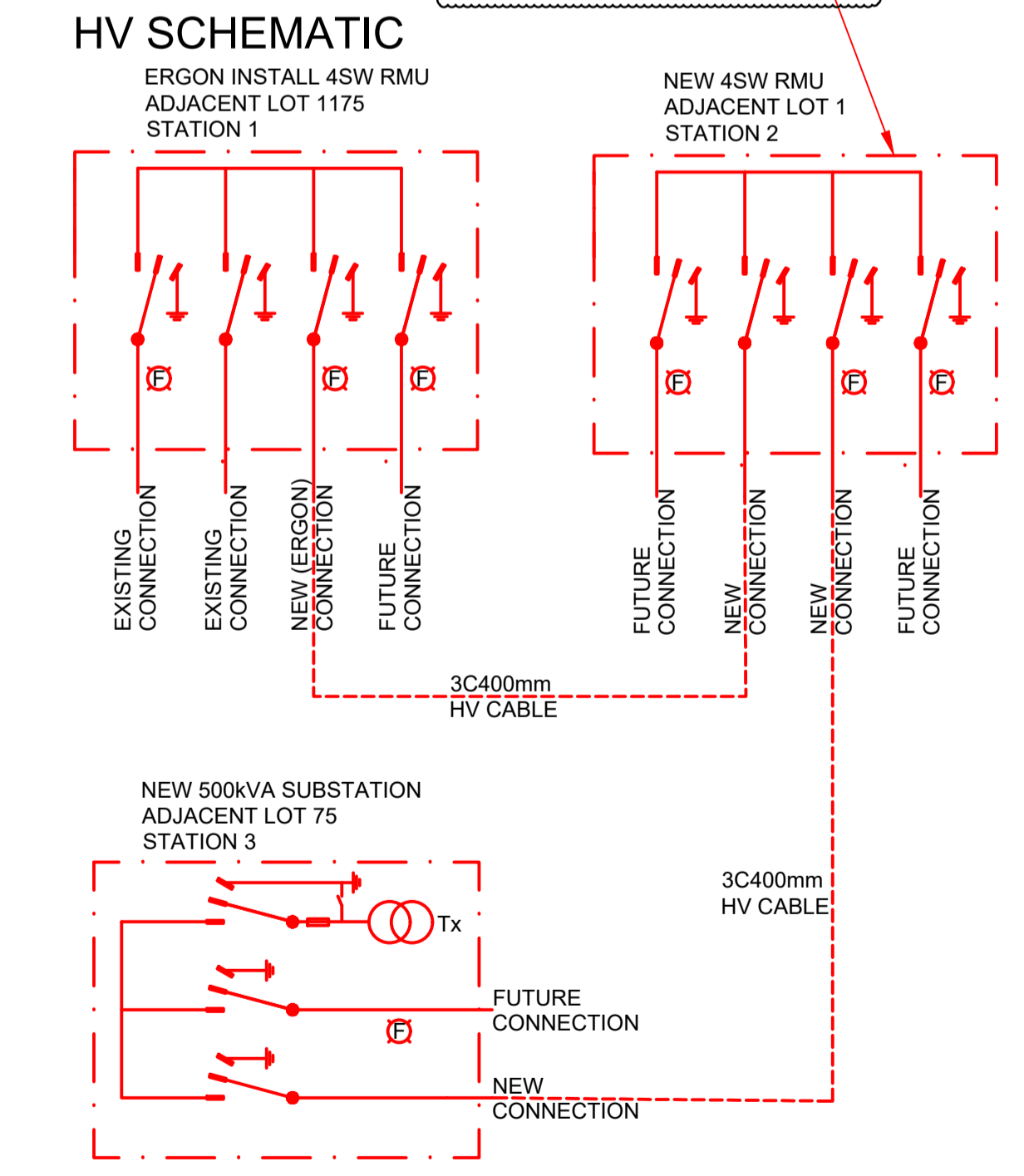
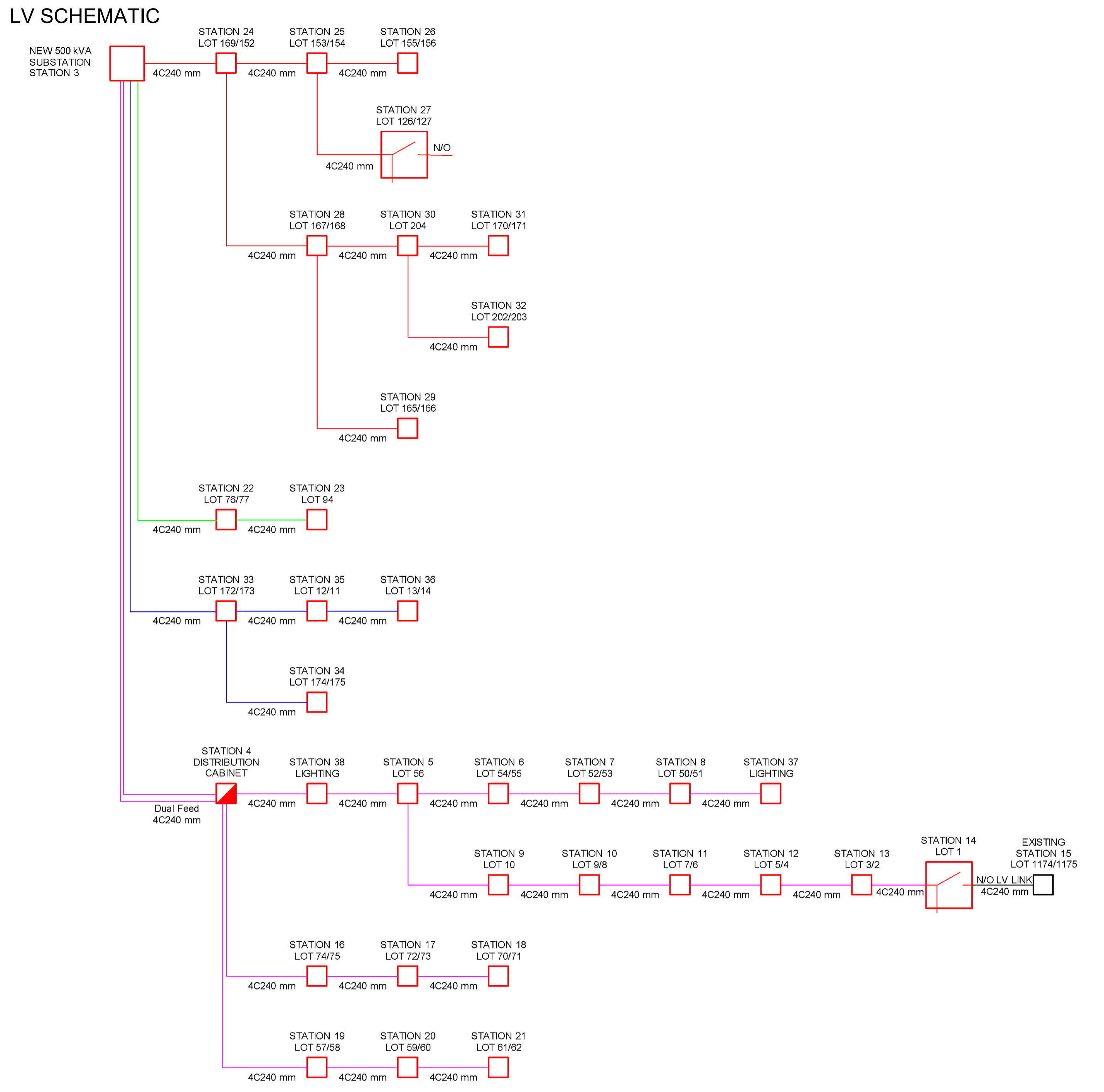
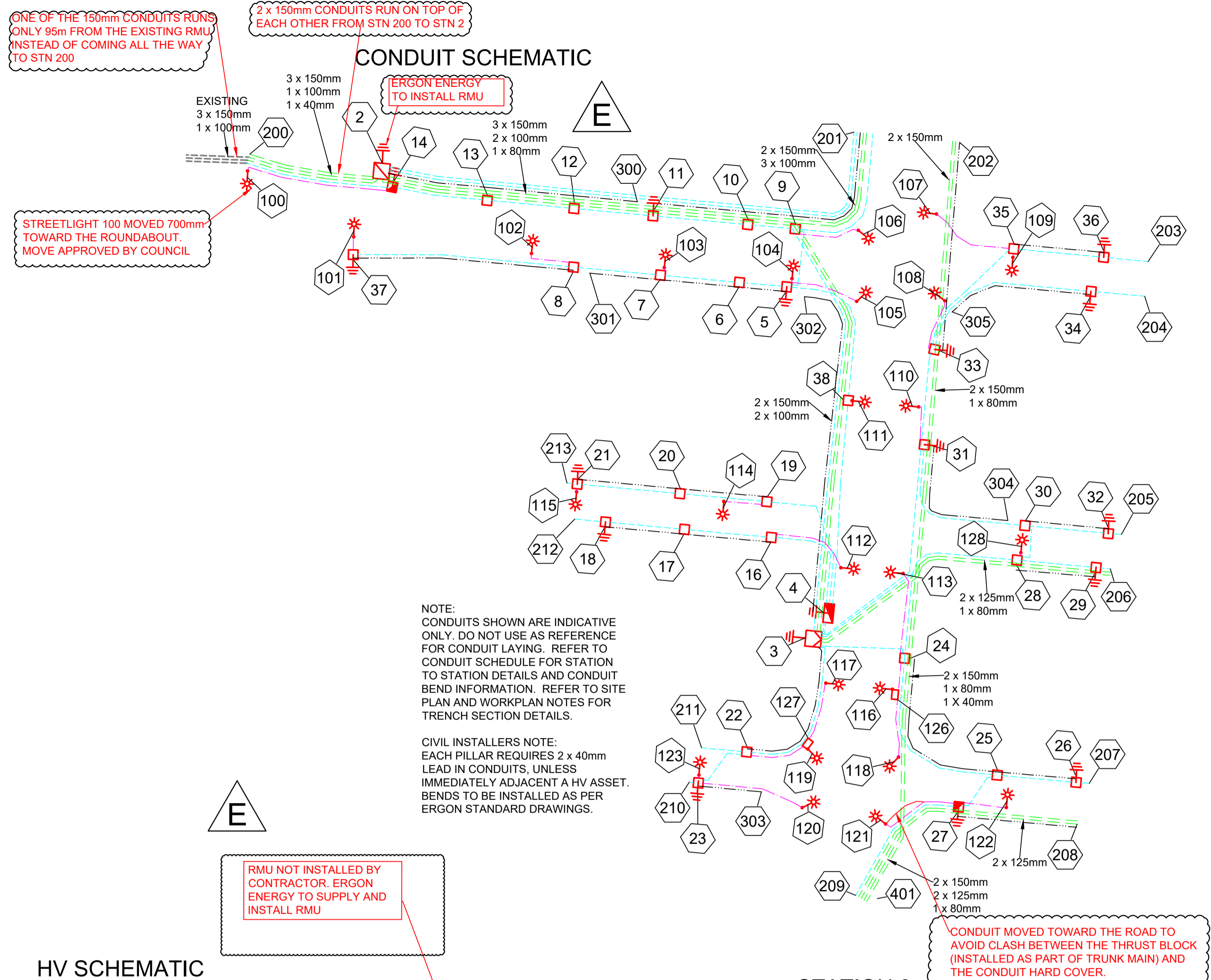
- CABLE EXISTING
- CABLE PLANNED
- CABLE RECOVER
- HV DUCT
- LV DUCT
- LIGHTING DUCT
- 35mm sq ANNEALED BARE COPPER EARTH
- SUBSTATION
- ✓ HV ISOLATING DEVICE
- I LV ISOLATING DEVICE
- NORMAL PILLAR
- CROSS ROAD PILLAR
- LINKING PILLAR
- COMMERCIAL/ INDUSTRIAL PILLAR
- DISTRIBUTION CABINET
- * STREETLIGHT
- EARTH
- POLE
- CABLE JOINT

Drawing Title: THE RESERVE (KALYNDA CHASE) STG 13A UDC UG ELECTRICAL RETICULATION SITE PLAN, ERGON WORKS SCHEDULE LIGHTING CERTIFICATE & TENSION TABLE

Date: APRIL 2021
 Scale: 1:1000@A1
 Drawn: SW
 RPEQ Design Certification: Jane Errey 6863
 Sheet: 1 OF 5

Project Description: KALYNDA CHASE, BOHLE PLAINS

ERGON Project Number: 1668965
 SPA Drawing Number: 3391-E01
 Revision: E



RMU NOT INSTALLED BY CONTRACTOR. ERCON ENERGY TO SUPPLY AND INSTALL RMU

AS CONSTRUCTED	
ON COMPLETION, MARK UP THIS PRINT CLEARLY WITH ALL FINAL CHANGES AND RETURN TO PROJECT MANAGER	
CHANGES: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
ELECTRICAL CONTRACTOR	
NAME: POWER UP	
SIGNATURE: BEN HALL	
DATE: 11/04/2022	
CIVIL CONTRACTOR	
NAME: _____	
SIGNATURE: _____	
DATE: _____	

Code	Date	Description	Revised	Code	Date	Description	Revised
E	11/04/22	AS CONSTRUCTED					
D	16/12/21	ADDED HV DIAGRAMS		SW			
C	10/9/21	ADDED ERCON WORKS		SW			
B	17/8/21	UPDATE CABLE SIZE		SW			
A	11/6/21	FOR CONSTRUCTION		SW			

CLIENT: URBEX PTY LTD (TOWNSVILLE)
 PO Box 6008, TOWNSVILLE, QLD 4810
 Ph: 07 4750 7007 Fax: _____
 CIVIL ENGINEER: Empower Engineers & Project Managers (Townsville)
 PO Box 6008, TOWNSVILLE, QLD 4810
 Ph: 07 4750 7000 Fax: _____

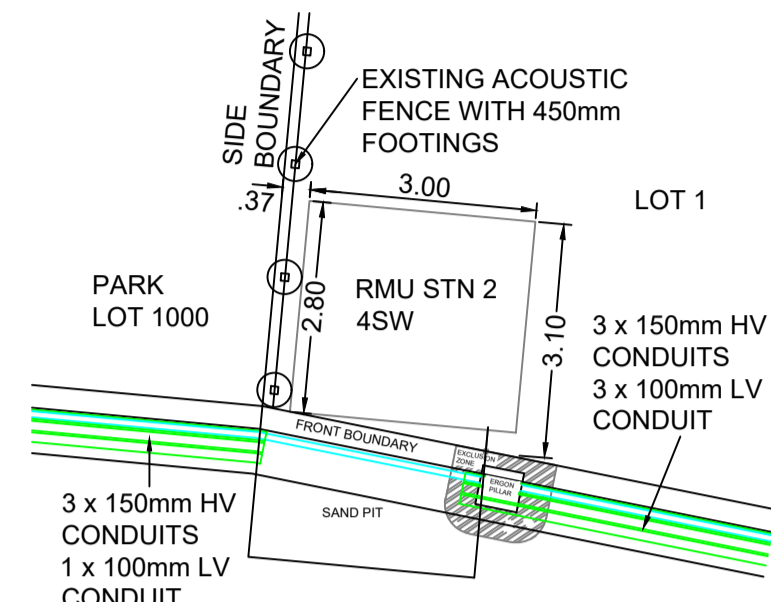
spa
 consulting engineers
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 PO Box 664 North Cairns QLD 4870
 Email Address: admin@spaconconsulting.com.au
 A business unit of SPA Consulting Engineers (Qld) Pty Ltd a.c.n. 012664416

LEGEND	
--- CABLE EXISTING	□ SUBSTATION
--- CABLE PLANNED	✓ HV ISOLATING DEVICE
--- CABLE RECOVER	LV ISOLATING DEVICE
--- HV DUCT	□ COMMERCIAL/ INDUSTRIAL PILLAR
--- LV DUCT	□ DISTRIBUTION CABINET
--- LIGHTING DUCT	□ NORMAL PILLAR
--- 35mm sq ANNEALED BARE COPPER EARTH	□ CROSS ROAD PILLAR
---	□ EQUIPMENT EXISTING
---	□ EQUIPMENT RECOVER
---	□ EQUIPMENT PLANNED
---	□ LINKING PILLAR
---	□ COMMERCIAL/ INDUSTRIAL PILLAR
---	□ DISTRIBUTION CABINET
---	□ STREETLIGHT
---	□ EARTH
---	□ POLE
---	□ CABLE JOINT

Drawing Title	Date	APRIL 2021
THE RESERVE (KALYNDA CHASE) STG 13A UDC UG ELECTRICAL RETICULATION CONDUIT, HV & LV SCHEMATICS	Scale	N.T.S
	Drawn	SW
	RPEQ Design Certification	Jane Errey 6863
	Sheet	2 OF 5
Project Description	ERCON Project Number	SPA Drawing Number
KALYNDA CHASE BOHLE PLAINS	1668965	3391-E02
	Revision	E

Rev Date	UNDERGROUND CABLE SCHEDULE						
STN FROM	STN TO	ACTION	VOLTAGE	CONSTRUCTION CODE	ROUTE LENGTH	CABLE LENGTH	REMARKS
1	2	INSTALL	11KV	111-4007/1726	225	235	COIL CABLE AT STN 1 FOR FINAL CONNECTION BY ERGON ENERGY
2	3	INSTALL	11KV	111-4007/1726	270	285	ERGON FUNDED CABLE
3	4	INSTALL	415V	LVI-240C4/1611	4	17	REFER TO NOTE 31.
3	4	INSTALL	415V	LVI-240C4/1611	4	17	REFER TO NOTE 31.
3	22	INSTALL	415V	LVI-240C4/1611	52	64	
3	24	INSTALL	415V	LVI-240C4/1611	25	37	
3	33	INSTALL	415V	LVI-240C4/1611	108	120	
4	16	INSTALL	415V	LVI-240C4/1611	41	46	
4	19	INSTALL	415V	LVI-240C4/1611	55	60	
4	38	INSTALL	415V	LVI-240C4/1611	70	75	
5	6	INSTALL	415V	LVI-240C4/1611	15	19	
5	9	INSTALL	415V	LVI-240C4/1611	23	27	
5	104	INSTALL	240V	LVI-16CU2NS/1672	4	9	
5	105	INSTALL	240V	LVI-16CU2NS/1672	21	26	
6	7	INSTALL	415V	LVI-240C4/1611	25	29	
7	8	INSTALL	415V	LVI-240C4/1611	27	31	
7	103	INSTALL	240V	LVI-16CU2NS/1672	4	9	
8	37	INSTALL	415V	LVI-240C4/1611	71	75	
8	102	INSTALL	240V	LVI-16CU2NS/1672	15	20	
9	10	INSTALL	415V	LVI-240C4/1611	15	19	
9	106	INSTALL	240V	LVI-16CU2NS/1672	20	25	
10	11	INSTALL	415V	LVI-240C4/1611	30	34	
11	12	INSTALL	415V	LVI-240C4/1611	25	29	
12	13	INSTALL	415V	LVI-240C4/1611	27	31	
13	14	INSTALL	415V	LVI-240C4/1611	30	34	
14	15	INSTALL	415V	LVI-240C4/1611	225	229	COIL CABLE AT STN 15 FOR FINAL TERMINATION BY ERGON ENERGY. LV LINK
14	100	INSTALL	240V	LVI-16CU2NS/1672	60	65	
16	17	INSTALL	415V	LVI-240C4/1611	27	31	
16	112	INSTALL	240V	LVI-16CU2NS/1672	23	28	
17	18	INSTALL	415V	LVI-240C4/1611	25	29	
19	20	INSTALL	415V	LVI-240C4/1611	27	31	
19	114	INSTALL	240V	LVI-4CU2NS/1671	16	21	
20	21	INSTALL	415V	LVI-240C4/1611	33	37	
21	115	INSTALL	240V	LVI-4CU2NS/1671	4	9	
22	23	INSTALL	415V	LVI-240C4/1611	21	25	
22	127	INSTALL	240V	LVI-16CU2NS/1672	19	23	
23	120	INSTALL	240V	LVI-16CU2NS/1672	34	39	
23	123	INSTALL	240V	LVI-4CU2NS/1671	4	9	
24	25	INSTALL	415V	LVI-240C4/1611	60	64	
24	28	INSTALL	415V	LVI-240C4/1611	63	67	
24	113	INSTALL	240V	LVI-16CU2NS/1672	28	33	
24	126	INSTALL	240V	LVI-16CU2NS/1672	12	16	
25	26	INSTALL	415V	LVI-240C4/1611	25	29	
25	27	INSTALL	415V	LVI-240C4/1611	18	22	
27	121	INSTALL	240V	LVI-16CU2NS/1672	24	29	
27	122	INSTALL	240V	LVI-4CU2NS/1671	16	21	
28	29	INSTALL	415V	LVI-240C4/1611	25	29	
28	30	INSTALL	415V	LVI-240C4/1611	14	18	
28	128	INSTALL	240V	LVI-4CU2NS/1671	4	9	
30	31	INSTALL	415V	LVI-240C4/1611	51	55	
30	32	INSTALL	415V	LVI-240C4/1611	28	32	
31	110	INSTALL	240V	LVI-16CU2NS/1672	14	19	
33	34	INSTALL	415V	LVI-240C4/1611	62	66	
33	35	INSTALL	415V	LVI-240C4/1611	41	45	
33	108	INSTALL	240V	LVI-16CU2NS/1672	16	21	
35	36	INSTALL	415V	LVI-240C4/1611	30	34	
35	107	INSTALL	240V	LVI-16CU2NS/1672	28	33	
35	109	INSTALL	240V	LVI-4CU2NS/1671	4	9	
37	101	INSTALL	240V	LVI-16CU2NS/1672	5	10	
38	5	INSTALL	415V	LVI-240C4/1611	51	55	
38	111	INSTALL	240V	LVI-16CU2NS/1672	5	10	
126	116	INSTALL	240V	LVI-16CU2NS/1672	4	9	
126	118	INSTALL	240V	LVI-16CU2NS/1672	21	26	
127	117	INSTALL	240V	LVI-16CU2NS/1672	21	26	
127	119	INSTALL	240V	LVI-16CU2NS/1672	4	9	

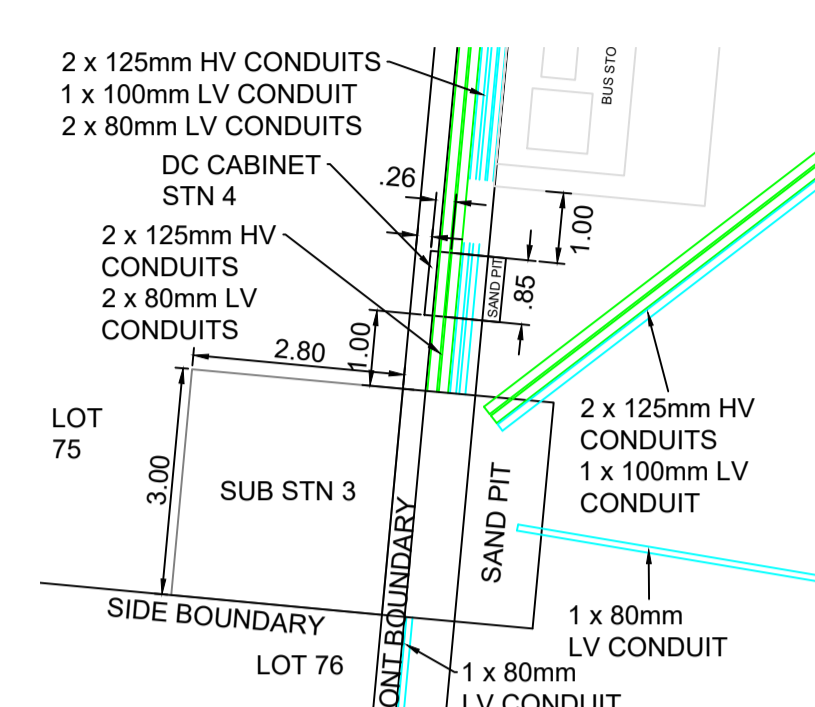
CABLES INSTALLED FROM STN 1-2 & 2-3 AND COILED AT STN 1 & 2 AND 3 & 2 FOR FINAL TERMINATION BY ERGON ENERGY



RMU LOCATION DETAIL A

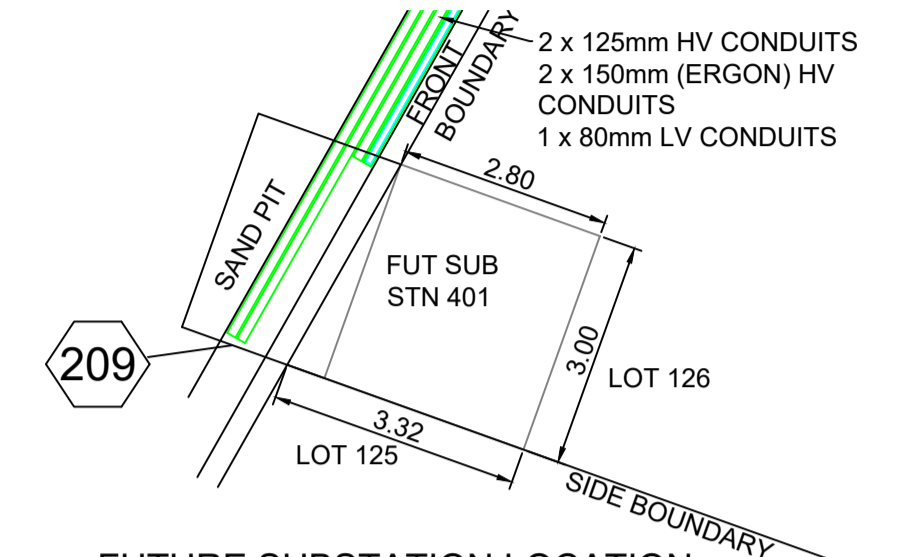
- EXISTING ACOUSTIC FENCE LOCATED ON THE WESTERN BOUNDARY OF LOT 1. FOOTINGS ARE LOCATED 370mm INSIDE THE LOT.
- 3m x 2.8m CONCRETE PLINTH TO START 370mm OFF THE BOUNDARY TO AVOID EXISTING FOOTINGS.

RMU NOT INSTALLED BY CONTRACTOR. ERGON ENERGY TO SUPPLY AND INSTALL RMU



SUBSTATION LOCATION DETAIL B

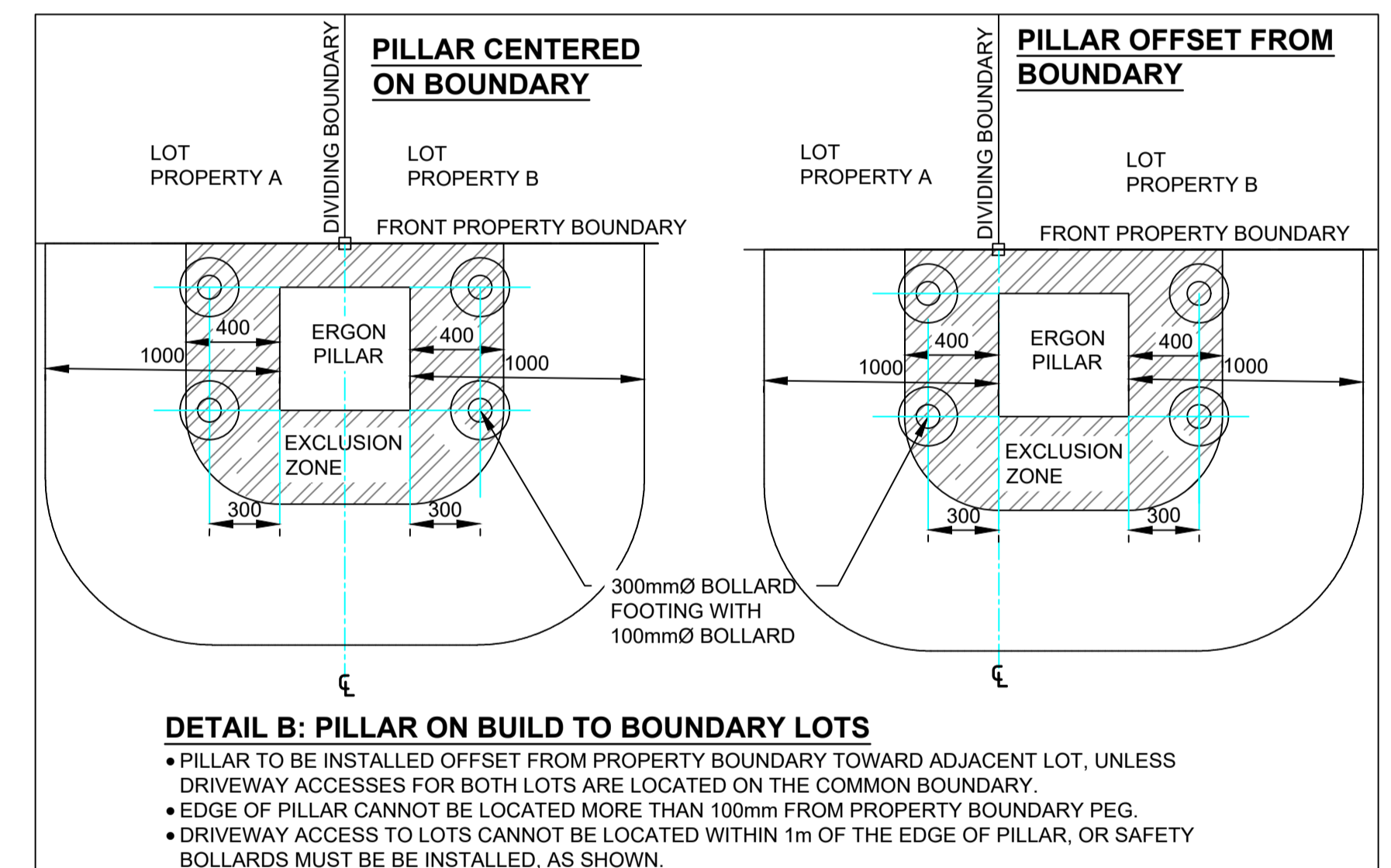
- DISTRIBUTION CABINET TO BE INSTALLED OFFSET 1m FROM THE SUBSTATION SITE.
- BUS STOP TO BE LOCATED 1m FROM THE DISTRIBUTION CABINET.



FUTURE SUBSTATION LOCATION DETAIL C

- FUTURE SITE TO BE SURVEYED AND PEGGED IN THIS STAGE AS ROAD RESERVE FOR FUTURE SITE.

Rev Date	PUBLIC LIGHTING SCHEDULE									
STN NO	SITE LABEL	ACTION	CONSTRUCTION CODE	RATE	OWNER	MOUNTING HEIGHT (m)	POLE EASTING	POLE NORTHING	BEARING	REMARKS
99	2082681088	EXISTING								
100	11809648	INSTALL	SLED PH 0912A	RATE 2	TCC	10.5	467970.222	7865741.088	183	
101	11809603	INSTALL	SLED PH 0912A	RATE 2	TCC	10.5	468003.646	7865720.306	2	
102	11809638	INSTALL	SLED PH 0912A	RATE 2	TCC	10.5	468059.612	7865713.323	6	
103	11809633	INSTALL	SLED PH 0912A	RATE 2	TCC	10.5	468101.428	7865709.371	6	
104	11809643	INSTALL	SLED PH 0912A	RATE 2	TCC	10.5	468141.756	7865705.635	6	
105	11809653	INSTALL	SLED PH 0912A	RATE 2	TCC	10.5	468160.613	7865699.552	46	
106	11809663	INSTALL	SLED PH 0912A	RATE 2	TCC	10.5	468162.721	7865722.369	129	
107	11809608	INSTALL	SLED PH 0912A	RATE 2	TCC	10.5	468187.378	7865727.508	276	
108	11809615	INSTALL	SLED PH 0912A	RATE 2	TCC	10.5	468190.009	7865700.152	308	
109	11809605	INSTALL	SLED GL 0167 N	RATE 2	TCC	7.5	468211.609	7865715.348	185	
110	11809664	INSTALL	SLED PH 0912A	RATE 2	TCC	10.5	468181.741	7865666.710	275	
111	11809637	INSTALL	SLED PH 0912A	RATE 2	TCC	10.5	468160.731	7865668.658	95	
112	11809647	INSTALL	SLED PH 0912A	RATE 2	TCC	10.5	468155.862	7865616.140	95	
113	11809657	INSTALL	SLED PH 0912A	RATE 2	TCC	10.5	468176.872	7865614.192	275	
114	11809654	INSTALL	SLED GL 0167 N	RATE 2	TCC	7.5	468120.320	7865636.910	185	
115	11809660	INSTALL	SLED GL 0167 N	RATE 2	TCC	7.5	468074.018	7865641.203	185	
116	11809623	INSTALL	SLED PH 0912A	RATE 2	TCC	10.5	468173.486	7865577.675	275	
117	11809630	INSTALL	SLED PH 0912A	RATE 2	TCC	10.5	468152.476	7865579.623	95	
118	11809658	INSTALL	SLED PH 0912A	RATE 2	TCC	10.5	468177.246	7865556.310	224	
119	11809634	INSTALL	SLED PH 0912A	RATE 2	TCC	10.5	468145.928	7865559.812	135	
120	11809644	INSTALL	SLED PH 0912A	RATE 2	TCC	10.5	468145.040	7865540.389	64	
121	11809628	INSTALL	SLED PH 0912A	RATE 2	TCC	10.5	468171.348	7865535.222	308	
122	11809646	INSTALL	SLED GL 0167 N	RATE 2	TCC	7.5	468209.375	7865540.447	5	
123	11809602	INSTALL	SLED GL 0167 N	RATE 2	TCC	7.5	468112.375	7865549.400	5	
128	11809650	INSTALL	SLED GL 0167 N	RATE 2	TCC	7.5	468213.857	7865619.501	5	



DETAIL B: PILLAR ON BUILT TO BOUNDARY LOTS

- 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, OR SAFETY BOLLARDS MUST BE INSTALLED, AS SHOWN.

AS CONSTRUCTED

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

CHANGES: YES NO

ELECTRICAL CONTRACTOR

NAME: POWER UP

SIGNATURE: BEN HALL

DATE: 11/04/2022

CIVIL CONTRACTOR

NAME: _____

SIGNATURE: _____

DATE: _____

Code	Date	Description	Revised	Code	Date	Description	Revised
E	11/04/22	AS CONSTRUCTED		NJ			
D	16/12/21	ADDED PILLAR DETAIL		SW			
C	10/9/21	ADDED ERGON WORKS		SW			
B	17/8/21	UPDATE CABLE & CONDUIT SIZE		SW			
A	11/6/21	FOR CONSTRUCTION		SW			

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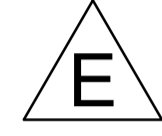
Tel: (07) 4032 3311 Fax: (07) 4032 5633
 PO Box 664 North Cairns QLD 4870
 Email Address: admin@spaconconsulting.com.au
 A business unit of SPA Consulting Engineers (Qld) Pty Ltd. a.c.n. 015644416

LEGEND

- CABLE EXISTING
- CABLE PLANNED
- HV DUCT
- LV DUCT
- LIGHTING DUCT
- 35mm sq ANNEALED BARE COPPER EARTH
- EQUIPMENT EXISTING
- EQUIPMENT RECOVER
- EQUIPMENT PLANNED
- SUBSTATION
- ✓ HV ISOLATING DEVICE
- | LV ISOLATING DEVICE
- NORMAL PILLAR
- CROSS ROAD PILLAR
- LINKING PILLAR
- COMMERCIAL/ INDUSTRIAL PILLAR
- DISTRIBUTION CABINET
- * STREETLIGHT
- EARTH
- POLE
- CABLE JOINT

Drawing Title	Date	Scale	Drawn	RPEQ Design Certification	Sheet	Project Description	ERGON Project Number	SPA Drawing Number	Revision
THE RESERVE (KALYNDIA CHASE) STG 13A UDC UG ELECTRICAL RETICULATION LIGHTING & CABLE SCHEDULES AND SUBSTATION, RMU & PILLAR DETAILS	APRIL 2021	N.T.S	SW	Jane Errey 6863	3 OF 5	KALYNDIA CHASE, BOHLE PLAINS	1668965	3391-E03	E

RMU STN 2 NOT INSTALLED BY CONTRACTOR. ERGON ENERGY TO INSTALL RMU AND COMPLETE ALL ASSOCIATED WORKS REQUIRED.



Rev Date	CONSTRUCTION SCHEDULE										1/2
STN NO	SITE LABEL	POLE ALIGNMENT	POLE SETTING DEPTH	ACTION	CONSTRUCTION CLASS	CONSTRUCTION CODE	DRAWING NUMBER	POSITION ON POLE	REMARKS		
1	RM870856			EXISTING	EARTH						
1	RM870856			INSTALL - ERGON	HV CABLE TERMINATION	11 PM/CTC/ASL/400T	5245		ERGON ENERGY TO INSTALL HV CABLE TERMINATION FOR CABLE STN 1 TO 2.		
1	RM870856			INSTALL - ERGON	RMU	11 RMU/O/ASL2 4S	5308		ERGON ENERGY TO RECOVER EXISTING 3S RMU AND REPLACE WITH A 4S RMU. ERGON FUNDED.		
1	SPINIFEX WAY RMU 2			RECOVER - ERGON	RMU				ERGON ENERGY TO RECOVER EXISTING 3S RMU AND REPLACE WITH A 4S RMU.		
2	11809649			INSTALL	EARTH	E RMU11/COM	5221		INSTALLED BY CONTRACTOR		
2	LB864901			ERGON INSTALL	HV CABLE TERMINATION	11 PM/CTC/ASL/400T	5245	ERGON	INSTALL HV CABLE TERMINATION FOR CABLE STN 2 TO 1.		
2	LB864888			ERGON INSTALL	HV CABLE TERMINATION	11 PM/CTC/ASL/400T	5245	ERGON	INSTALL HV CABLE TERMINATION FOR CABLE STN 2 TO 3.		
2	RM864908			INSTALL	RMU	11 RMU/O/ASL2 4S	5308		REFER TO DETAIL A		
2	11809649			INSTALL	RMU FOUNDATION	11 RMUF / ASL	5255, 5217 & 5232		INSTALLED BY CONTRACTOR		
3	11809661			INSTALL	EARTH	E PM11/COM	5013				
3	LB864895			INSTALL	HV CABLE TERMINATION	11 PM/CTC/8DJH/400T	5373		INSTALL HV CABLE TERMINATION FOR CABLE STN 3 TO 2.		
3	SG864893			INSTALL	LV CABLE TERMINATION	LV CT PM11/240	5087		INSTALL LV CABLE TERMINATION FOR CABLE STN 3 TO 24.		
3	SG864893			INSTALL	LV CABLE TERMINATION	LV CT PM11/240	5087		INSTALL LV CABLE TERMINATION FOR CABLE STN 3 TO 4. REFER TO NOTE 31.		
3	SG864893			INSTALL	LV CABLE TERMINATION	LV CT PM11/240	5087		INSTALL LV CABLE TERMINATION FOR CABLE STN 3 TO 4. REFER TO NOTE 31.		
3	SG864893			INSTALL	LV CABLE TERMINATION	LV CT PM11/240	5087		INSTALL LV CABLE TERMINATION FOR CABLE STN 3 TO 33.		
3	SG864893			INSTALL	LV CABLE TERMINATION	LV CT PM11/240	5087		INSTALL LV CABLE TERMINATION FOR CABLE STN 3 TO 22.		
3	11809661			INSTALL	SUBSTATION FOUNDATION	PMF 11 US	5005				
3	11809661			INSTALL	SUBSTATION INC HV SWITCHGEAR	PM 11/500/8DJH 2S1F	5191		REFER TO DETAIL B		
4	11809617			INSTALL	DISTRIBUTION CABINET	LV DC6/1 4/PC	5136		INSTALL CABINET OFFSET 2M FROM THE SUBSTATION. REFER TO DETAIL B.		
4	11809617			INSTALL	EARTH	E MEN/DC	5085				
4	11809617			INSTALL	LV CABLE TERMINATION	LV CT DC/240	5087		INSTALL LV CABLE TERMINATION FOR CABLE STN 4 TO 38.		
4	11809617			INSTALL	LV CABLE TERMINATION	LV CT DC/240	5087		INSTALL LV CABLE TERMINATION FOR CABLE STN 4 TO 3. REFER TO NOTE 31.		
4	11809617			INSTALL	LV CABLE TERMINATION	LV CT DC/240	5087		INSTALL LV CABLE TERMINATION FOR CABLE STN 4 TO 16.		
4	11809617			INSTALL	LV CABLE TERMINATION	LV CT DC/240	5087		INSTALL LV CABLE TERMINATION FOR CABLE STN 4 TO 19.		
4	11809617			INSTALL	LV CABLE TERMINATION	LV CT DC/240	5087		INSTALL LV CABLE TERMINATION FOR CABLE STN 4 TO 3. REFER TO NOTE 31.		
5	11809645			INSTALL	EARTH	E MEN/PIL	5085				
5	11809645			INSTALL	PILLAR	LV PN3/6S/240I/N	5027		ADDITIONAL 32AMP SL FUSE REQUIRED. INSTALL PILLAR OFFSET TOWARD LOT 55. REFER TO NOTE 27		
6	11809616			INSTALL	PILLAR	LV PN2/6/240I/N	5026		INSTALL PILLAR OFFSET TOWARD LOT 54. REFER TO NOTE 27		
7	11809621			INSTALL	PILLAR	LV PN2/6S/240I/N	5026		INSTALL PILLAR OFFSET TOWARD LOT 52		
8	11809629			INSTALL	PILLAR	LV PN2/6S/240I/N	5026		INSTALL PILLAR OFFSET TOWARD LOT 50. REFER TO NOTE 27		
9	11809604			INSTALL	PILLAR	LV PN2/6S/240I/N	5026		INSTALL PILLAR OFFSET TOWARD LOT 9. REFER TO NOTE 27. PILLAR TO BE UPGRADED TO 3-WAY IN FUTURE.		
10	11809611			INSTALL	PILLAR	LV PN2/6/240I/N	5026		INSTALL PILLAR OFFSET TOWARD LOT 8. REFER TO NOTE 27		
11	11809619			INSTALL	EARTH	E MEN/PIL	5085				
11	11809619			INSTALL	PILLAR	LV PN2/6/240I/N	5026		INSTALL PILLAR OFFSET TOWARD LOT 6. REFER TO NOTE 27		
12	11809625			INSTALL	PILLAR	LV PN2/6/240I/N	5026		INSTALL PILLAR OFFSET TOWARD LOT 4. REFER TO NOTE 27		
13	11809631			INSTALL	PILLAR	LV PN2/6/240I/N	5026		INSTALL PILLAR OFFSET TOWARD LOT 2. REFER TO NOTE 27		
14	11809635			INSTALL	EARTH	E MEN/PIL	5085				
14	11809635			INSTALL	PILLAR	LV PL2/6S/240I/N	5042		INSTALL PILLAR OFFSET FROM RMU. REFER TO NOTE 27 & DETAIL A		
15	10876642			EXISTING	EARTH						
15	10876642			EXISTING	PILLAR						
15	10876642			INSTALL - ERGON	PILLAR UPGRADE	LV PNU2-3/240I/N	5074		ERGON ENERGY TO UPGRADE PILLAR TO 3-WAY IN THIS STAGE AND TERMINATE CABLE FROM STN 15 TO 14.		
16	11809607			INSTALL	PILLAR	LV PN2/6S/240I/N	5026				
17	11809627			INSTALL	PILLAR	LV PN2/6/240I/N	5026				
18	11809662			INSTALL	EARTH	E MEN/PIL	5085				
18	11809662			INSTALL	PILLAR	LV PN1/6/240I/N	5025		PILLAR TO BE UPGRADED TO 2-WAY IN FUTURE.		
19	11809609			INSTALL	PILLAR	LV PN2/6S/240I/N	5026		INSTALL PILLAR OFFSET TOWARD LOT 58. REFER TO NOTE 27.		
20	11809640			INSTALL	PILLAR	LV PN2/6/240I/N	5026		INSTALL PILLAR OFFSET TOWARD LOT 60. REFER TO NOTE 27.		
21	11809622			INSTALL	EARTH	E MEN/PIL	5085				
21	11809622			INSTALL	PILLAR	LV PN1/6S/240I/N	5025		PILLAR TO BE UPGRADED TO 2-WAY IN FUTURE.		
22	11809618			INSTALL	PILLAR	LV PN2/6S/240I/N	5026		PILLAR TO BE UPGRADED TO 3-WAY IN FUTURE.		
23	11809614			INSTALL	EARTH	E MEN/PIL	5085				
23	11809614			INSTALL	PILLAR	LV PN1/6S/240I/N	5025		PILLAR TO BE UPGRADED TO 2-WAY IN FUTURE. ADDITIONAL 32AMP SL FUSE REQUIRED.		
24	11809655			INSTALL	PILLAR	LV PN3/6S/240I/N	5027		ADDITIONAL 32AMP SL FUSE REQUIRED		
25	11809610			INSTALL	PILLAR	LV PN3/6/240I/N	5027		INSTALL PILLAR OFFSET TOWARD LOT 153. REFER TO NOTE 27		

Rev Date	CONSTRUCTION SCHEDULE										2/2
STN NO	SITE LABEL	POLE ALIGNMENT	POLE SETTING DEPTH	ACTION	CONSTRUCTION CLASS	CONSTRUCTION CODE	DRAWING NUMBER	POSITION ON POLE	REMARKS		
26	11809613			INSTALL	EARTH	E MEN/PIL	5085				
26	11809613			INSTALL	PILLAR	LV PN1/6/240I/N	5025		INSTALL PILLAR OFFSET TOWARD LOT 155. REFER TO NOTE 27. PILLAR TO BE UPGRADED TO 2-WAY IN FUTURE		
27				INSTALL	EARTH	E MEN/PIL	5085				
27	11809626			INSTALL	PILLAR	LV PL2/6S/240I/N	5042		ADDITIONAL 32AMP SL FUSE REQUIRED. NORMALLY OPEN		
28	11809652			INSTALL	PILLAR	LV PN3/6S/240I/N	5027		INSTALL PILLAR OFFSET TOWARD LOT 168. REFER TO NOTE 27		
29	11809656			INSTALL	EARTH	E MEN/PIL	5085				
29	11809656			INSTALL	PILLAR	LV PN1/6/240I/N	5025		INSTALL PILLAR OFFSET TOWARD LOT 166. REFER TO NOTE 27. PILLAR TO BE UPGRADED TO 2-WAY IN FUTURE		
30	11809612			INSTALL	PILLAR	LV PN3/6/240I/N	5027				
31	11809639			INSTALL	EARTH	E MEN/PIL	5085				
31	11809639			INSTALL	PILLAR	LV PN1/6S/240I/N	5025				
32				INSTALL	EARTH	E MEN/PIL	5085				
32	11809620			INSTALL	PILLAR	LV PN1/6/240I/N	5025		INSTALL PILLAR OFFSET TOWARD LOT 203. REFER TO NOTE 27. PILLAR TO BE UPGRADED TO 2-WAY IN FUTURE		
33	11809642			INSTALL	EARTH	E MEN/PIL	5085				
33	11809642			INSTALL	PILLAR	LV PN3/6S/240I/N	5027				
34	11809636			INSTALL	EARTH	E MEN/PIL	5085				
34	11809636			INSTALL	PILLAR	LV PN1/6/240I/N	5025		INSTALL PILLAR OFFSET TOWARD LOT 174. REFER TO NOTE 27. PILLAR TO BE UPGRADED TO 2-WAY IN FUTURE		
35	11809659			INSTALL	PILLAR	LV PN2/6S/240I/N	5026		ADDITIONAL 32AMP SL FUSE REQUIRED.		
36	11809606			INSTALL	EARTH	E MEN/PIL	5085				
36	11809606			INSTALL	PILLAR	LV PN1/6/240I/N	5025		INSTALL PILLAR OFFSET TOWARD LOT 13. REFER TO NOTE 27. PILLAR TO BE UPGRADED TO 2-WAY IN FUTURE		
37	11871521			INSTALL	EARTH	E MEN/PIL	5085				
37	11871521			INSTALL	PILLAR	LV PN1/6S/240I/N	5025				
38	11871520			INSTALL	PILLAR	LV PN2/6S/240I/N	5026				
99	2082681088			EXISTING	POLE						
100	11809648			INSTALL	POLE	SL BPM/105/1 15/UG C1	1-5-6-1 & 2		REFER TO NOTE 28.		
101	11809603			INSTALL	POLE	SL BPM/105/1 15/UG C1	1-5-6-1 & 2				
102	11809638			INSTALL	POLE	SL BPM/105/1 15/UG C1	1-5-6-1 & 2		REFER TO NOTE 28.		
103	11809633			INSTALL	POLE	SL BPM/105/1 15/UG C1	1-5-6-1 & 2		INSTALL LIGHT POLE OFFSET 0.5M TOWARD LOT 52.		
104	11809643			INSTALL	POLE	SL BPM/105/1 15/UG C1	1-5-6-1 & 2				
105	11809653			INSTALL	POLE	SL BPM/105/1 15/UG C1	1-5-6-1 & 2		REFER TO NOTE 28.		
106	11809663			INSTALL	POLE	SL BPM/105/1 15/UG C1	1-5-6-1 & 2		REFER TO NOTE 28.		
107	11809608			INSTALL	POLE	SL BPM/105/1 15/UG C1	1-5-6-1 & 2		REFER TO NOTE 28.		
108	11809615			INSTALL	POLE	SL BPM/105/1 15/UG C1	1-5-6-1 & 2		REFER TO NOTE 28.		
109	11809605			INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 28.		
110	11809664			INSTALL	POLE	SL BPM/105/1 15/UG C1	1-5-6-1 & 2		REFER TO NOTE 28.		
111	11809637			INSTALL	POLE	SL BPM/105/1 15/UG C1	1-5-6-1 & 2				
112	11809647			INSTALL	POLE	SL BPM/105/1 15/UG C1	1-5-6-1 & 2		REFER TO NOTE 28.		
113	11809657			INSTALL	POLE	SL BPM/105/1 15/UG C1	1-5-6-1 & 2		REFER TO NOTE 28.		
114	11809654			INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 28.		
115	11809660			INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 28.		
116	11809623			INSTALL	POLE	SL BPM/105/1 15/UG C1	1-5-6-1 & 2		REFER TO NOTE 28.		
117	11809630			INSTALL	POLE	SL BPM/105/1 15/UG C1	1-5-6-1 & 2		REFER TO NOTE 28.		
118	11809658			INSTALL	POLE	SL BPM/105/1 15/UG C1	1-5-6-1 & 2		REFER TO NOTE 28.		
119	11809634			INSTALL	POLE	SL BPM/105/1 15/UG C1	1-5-6-1 & 2		REFER TO NOTE 28.		
120	11809644			INSTALL	POLE	SL BPM/105/1 15/UG C1	1-5-6-1 & 2		REFER TO NOTE 28.		
121	11809628			INSTALL	POLE	SL BPM/105/1 15/UG C1	1-5-6-1 & 2		REFER TO NOTE 28.		
122	11809646			INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 28.		
123	11809602			INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		REFER TO NOTE 28.		
126	11809632			INSTALL	TYPE 4 LOOP PIT	SUG SLL/PIT	1-4-9-1		REFER TO NOTE 30.		
127	11809641			INSTALL	TYPE 4 LOOP PIT	SUG SLL/PIT	1-4-9-1		REFER TO NOTE 30.		
128	11809650			INSTALL	POLE	SL BPM/75/1 15 CI	1-6-4-1 & 2		INSTALL LIGHT POLE OFFSET 0.5M TOWARD LOT 168.		

Code	Date	Description	Revised	Code	Date	Description	Revised
E	11/04/22	AS CONSTRUCTED					
D	16/12/21	ADDED PILLAR DETAIL		SW			
C	10/9/21	ADDED ERGON WORKS		SW			
B	26/7/21	ADDED SITE LABELS		SW			
A	11/6/21	FOR CONSTRUCTION		SW			

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A business unit of SPA Consulting Engineers (Q/D) Pty Ltd a/c. 02566416

Rev Date	CONDUIT DUCTING SCHEDULE							1/2
STN FROM	STN TO	ACTION	CONSTRUCTION CODE	LENGTH (m)	No. of LENGTHS / DRUM	BENDS (Degrees/ Radius(mm) x No.)	Remarks	
2	201	INSTALL - CIVIL	C100L	180	30.0	30/1830x2 15/1830x3	CAP CONDUIT AT STN 201 & 2. SPARE ERGON FUNDED CONDUITS	
2	201	INSTALL - CIVIL	C150L	180	30.0	30/1830x2 15/1830x3	CAP CONDUIT AT STN 201 & 2. ERGON FUNDED CONDUITS	
2	201	INSTALL - CIVIL	C100L	180	30.0	30/1830x2 15/1830x3	CAP CONDUIT AT STN 201 & 2. SPARE ERGON FUNDED CONDUITS	
3	2	INSTALL - CIVIL	C150L	270	45.0	45/1830x1 30/1830x1 15/1830x11	CAP CONDUIT AT STN 2 & 3. REFER TO NOTE 23 & 24. ERGON FUNDED CONDUITS	
3	2	INSTALL - CIVIL	C150L	270	45.0	45/1830x1 30/1830x1 15/1830x11	REFER TO NOTE 23 & 24. ERGON FUNDED CONDUITS	
3	4	INSTALL - CIVIL	C80L	4	0.7			
3	4	INSTALL - CIVIL	C80L	4	0.7			
3	9	INSTALL - CIVIL	C100L	138	23.0	15/1830x12	CAP CONDUIT AT STN 9 & 3. REFER TO NOTE 23 & 24. SPARE ERGON FUNDED CONDUIT	
3	22	INSTALL - CIVIL	C80L	52	8.7	45/1200x1 30/1830x2 15/1830x2		
3	24	INSTALL - CIVIL	C80L	25	4.2	45/1200x1 45/1830x2 15/1830x5	REFER TO NOTE 23	
3	33	INSTALL - CIVIL	C100L	108	18.0	45/1200x1 45/1830x1 15/1830x8	REFER TO NOTE 23.	
3	206	INSTALL - CIVIL	C125L	100	16.7	30/1830x3 15/1830x7	CAP CONDUIT AT STN 206 & 3	
3	206	INSTALL - CIVIL	C125L	100	16.7	30/1830x3 15/1830x7	CAP CONDUIT AT STN 206 & 3	
4	16	INSTALL - CIVIL	C80L	41	6.8	45/1200x1 30/1830x2 15/1830x2		
4	19	INSTALL - CIVIL	C80L	55	9.2	45/1200x1 45/1830x1 30/1830x1 15/1830x6	REFER TO NOTE 23.	
4	38	INSTALL - CIVIL	C80L	70	11.7	45/1200x1 15/1830x5	REFER TO NOTE 24	
5	6	INSTALL - CIVIL	C80L	15	2.5	45/1200x2		
5	9	INSTALL - CIVIL	C80L	23	3.8	45/1200x2 45/1830x4 15/1830x5	REFER TO NOTE 23.	
5	104	INSTALL - CIVIL	C40H	4	1.0	90/300x2		
5	105	INSTALL - CIVIL	C40H	21	5.3	90/300x2 90/600x1		
6	7	INSTALL - CIVIL	C80L	25	4.2	45/1200x2		
7	8	INSTALL - CIVIL	C80L	27	4.5	45/1200x2		
7	103	INSTALL - CIVIL	C40H	4	1.0	90/300x2		
8	37	INSTALL - CIVIL	C80L	71	11.8	45/1200x2		
8	37	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	71	0.3		COIL 2M OF CABLE AT STN 37 FOR CONNECTION BY ELECTRICAL CONTRACTOR. LEAVE AT BOTTOM OF TRENCH AT STN 8.	
8	102	INSTALL - CIVIL	C40H	15	3.8	90/300x2 90/600x1		
9	10	INSTALL - CIVIL	C80L	15	2.5	45/1200x2		
9	106	INSTALL - CIVIL	C40H	20	5.0	90/300x2 90/600x1		
9	201	INSTALL - CIVIL	C150L	49	8.2	30/1830x2 15/1830x2	CAP CONDUIT AT STN 201 & 9. ERGON FUNDED CONDUITS	
9	201	INSTALL - CIVIL	C100L	49	8.2	45/1200x1 30/1830x2 15/1830x2	CAP CONDUIT AT STN 201.	
10	11	INSTALL - CIVIL	C80L	30	5.0	45/1200x2		
11	12	INSTALL - CIVIL	C80L	25	4.2	45/1200x2		
12	13	INSTALL - CIVIL	C80L	27	4.5	45/1200x2		
13	14	INSTALL - CIVIL	C80L	30	5.0	45/1200x2 15/1830x1		
14	100	INSTALL - CIVIL	C40H	60	15.0	90/300x2 90/600x1		
16	17	INSTALL - CIVIL	C80L	27	4.5	45/1200x2		
16	18	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	54	0.2		COIL 2M OF CABLE AT STN 18 FOR CONNECTION BY ERGON ENERGY. LEAVE AT BOTTOM OF TRENCH AT STN 16.	
16	112	INSTALL - CIVIL	C40H	23	5.8	90/300x2 90/600x2		
17	18	INSTALL - CIVIL	C80L	25	4.2	45/1200x2		
18	212	INSTALL - CIVIL	C80L	10	1.7	45/1200x1	CAP CONDUIT AT STN 212.	
19	20	INSTALL - CIVIL	C80L	27	4.5	45/1200x2		
19	21	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	62	0.2		COIL 2M OF CABLE AT STN 21 FOR CONNECTION BY ERGON ENERGY. LEAVE AT BOTTOM OF TRENCH AT STN 19.	
19	114	INSTALL - CIVIL	C40H	16	4.0	90/300x2 90/600x1		
20	21	INSTALL - CIVIL	C80L	33	5.5	45/1200x2		
21	115	INSTALL - CIVIL	C40H	4	1.0	90/300x2		
21	213	INSTALL - CIVIL	C80L	2	0.3	45/1200x1	CAP CONDUIT AT STN 213.	
22	3	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	51	0.2		COIL 2M OF CABLE AT STN 3 FOR CONNECTION BY ERGON ENERGY. LEAVE AT BOTTOM OF TRENCH AT STN 22.	
22	23	INSTALL - CIVIL	C80L	21	3.5	45/1200x2 45/1830x2 15/1830x5	ADDITIONAL BENDS ADDED TO AVOID NBN & SW PIT.	
22	127	INSTALL - CIVIL	C40H	19	4.8	90/300x1 90/600x1		
22	211	INSTALL - CIVIL	C80L	14	2.3	45/1200x1	CAP CONDUIT AT STN 211	
23	120	INSTALL - CIVIL	C40H	34	8.5	90/300x2 90/600x1		
23	123	INSTALL - CIVIL	C40H	4	1.0	90/300x2		
23	210	INSTALL - CIVIL	C80L	2	0.3	45/1200x1	CAP CONDUIT AT STN 210	
24	25	INSTALL - CIVIL	C80L	60	10.0	45/1200x2 15/1830x4		
24	26	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	82	0.3		COIL 2M OF CABLE AT STN 26 FOR CONNECTION BY ERGON ENERGY. LEAVE AT BOTTOM OF TRENCH AT STN 24.	
24	28	INSTALL - CIVIL	C80L	63	10.5	45/1200x2 15/1830x3		
24	113	INSTALL - CIVIL	C40H	28	7.0	90/300x2 90/600x1		
24	126	INSTALL - CIVIL	C40H	12	3.0	90/300x1		
25	26	INSTALL - CIVIL	C80L	25	4.2	45/1200x2		
25	27	INSTALL - CIVIL	C80L	18	3.0	45/1200x2 45/1830x2 15/1830x5	ADDITIONAL BENDS ADDED TO AVOID NBN PITS. REFER TO NOTE 23.	
26	207	INSTALL - CIVIL	C80L	2	0.3	45/1200x1	CAP CONDUIT AT STN 207	
27	121	INSTALL - CIVIL	C40H	24	6.0	90/300x2 90/600x2		
27	122	INSTALL - CIVIL	C40H	16	4.0	90/300x2 90/600x1		
27	209	INSTALL - CIVIL	C100L	47	7.8	45/1200x1 30/1830x2	CAP CONDUIT AT STN 209	
28	29	INSTALL - CIVIL	C80L	25	4.2	45/1200x2		
28	29	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	27	0.1		COIL 2M OF CABLE AT STN 29 FOR CONNECTION BY ERGON ENERGY. LEAVE AT BOTTOM OF TRENCH AT STN 28.	
28	30	INSTALL - CIVIL	C80L	14	2.3	45/1200x2 45/1830x4 15/1830x2	ADDITIONAL BENDS ADDED TO AVOID NBN PITS AND SL FOOTING.	
28	128	INSTALL - CIVIL	C40H	4	1.0	90/300x2		
29	206	INSTALL - CIVIL	C80L	3	0.5	45/1200x1	CAP CONDUIT AT STN 206	
30	31	INSTALL - CIVIL	C80L	51	8.5	45/1200x2 30/1830x2 15/1830x2		
30	32	INSTALL - CIVIL	C80L	28	4.7	45/1200x2		

Rev Date	CONDUIT DUCTING SCHEDULE							2/2
STN FROM	STN TO	ACTION	CONSTRUCTION CODE	LENGTH (m)	No. of LENGTHS / DRUM	BENDS (Degrees/ Radius(mm) x No.)	Remarks	
30	32	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	28	0.1		COIL 2M OF CABLE AT STN 32 FOR CONNECTION BY ERGON ENERGY. LEAVE AT BOTTOM OF TRENCH AT STN 30.	
31	110	INSTALL - CIVIL	C40H	14	3.5	90/300x2 90/600x1		
32	205	INSTALL - CIVIL	C80L	2	0.3	45/1200x1	CAP CONDUIT AT STN 205	
33	34	INSTALL - CIVIL	C80L	62	10.3	45/1200x2 15/1830x4		
33	35	INSTALL - CIVIL	C80L	41	6.8	45/1200x2 45/1830x1 15/1830x6	ADDITIONAL BEND ADDED TO AVOID NBN PIT.	
33	108	INSTALL - CIVIL	C40H	16	4.0	90/300x2 90/600x1		
34	204	INSTALL - CIVIL	C80L	17	2.8	45/1200x1	CAP CONDUIT AT STN 204	
35	36	INSTALL - CIVIL	C80L	30	5.0	45/1200x2		
35	36	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	30	0.1		COIL 2M OF CABLE AT STN 36 FOR CONNECTION BY ERGON ENERGY. LEAVE AT BOTTOM OF TRENCH AT STN 35.	
35	107	INSTALL - CIVIL	C40H	28	7.0	90/300x2 90/600x1		
35	109	INSTALL - CIVIL	C40H	4	1.0	90/300x2 90/600x1		
36	203	INSTALL - CIVIL	C80L	14	2.3	45/1200x1	CAP CONDUIT AT STN 203	
37	101	INSTALL - CIVIL	C40H	5	1.3	90/300x2		
38	5	INSTALL - CIVIL	C80L	51	8.5	45/1200x2 30/1830x2 15/1830x2	REFER TO NOTE 24.	
38	111	INSTALL - CIVIL	C40H	5	1.3	90/300x2		
126	116	INSTALL - CIVIL	C40H	4	1.0	90/300x1		
126	118	INSTALL - CIVIL	C40H	21	5.3	90/300x1		
127	117	INSTALL - CIVIL	C40H	21	5.3	90/300x1 90/600x1		
127	119	INSTALL - CIVIL	C40H	4	1.0	90/300x1		
200	2	INSTALL - CIVIL	C150L	42	7.0	15/1830x3	LOCATE EXISTING CAPPED CONDUIT AT STN 200 AND CONNECT TO NEW. PROVE CONDUIT BACK TO STN 1. CAP CONDUIT AT STN 2. ERGON FUNDED CONDUITS	
200	2	INSTALL - CIVIL	C150L	42	7.0	15/1830x3	LOCATE EXISTING CAPPED CONDUIT AT STN 200 AND CONNECT TO NEW. PROVE CONDUIT BACK TO STN 1. CAP CONDUIT AT STN 2. ERGON FUNDED CONDUITS	
200	2	INSTALL - CIVIL	C150L	42	7.0	15/1830x3	LOCATE EXISTING CAPPED CONDUIT AT STN 200 AND CONNECT TO NEW. PROVE CONDUIT BACK TO STN 1. ERGON FUNDED CONDUITS	
200	14	INSTALL - CIVIL	C100L	44	7.3	45/1200x1 15/1830x3	LOCATE EXISTING CAPPED CONDUIT AT STN 200 AND CONNECT TO NEW. PROVE CONDUIT BACK TO STN 15. ERGON FUNDED CONDUITS	
201	11	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	91	0.4		COIL 2M OF CABLE AT STN 11 FOR CONNECTION BY ERGON ENERGY. LEAVE AT BOTTOM OF TRENCH AT STN 201.	
202	33	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	68	0.3		COIL 2M OF CABLE AT STN 33 FOR CONNECTION BY ERGON ENERGY. LEAVE AT BOTTOM OF TRENCH AT STN 202.	
202	209	INSTALL - CIVIL	C150L	242	40.3	30/1830x1 15/1830x9	CAP CONDUIT AT STN 202 & 209. REFER TO NOTE 23.	
202	209	INSTALL - CIVIL	C150L	242	40.3	30/1830x1 15/1830x9	CAP CONDUIT AT STN 202 & 209. REFER TO NOTE 23.	
208	27	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	40	0.2		COIL 2M OF CABLE AT STN 27 FOR CONNECTION BY ERGON ENERGY. LEAVE AT BOTTOM OF TRENCH AT STN 208.	
209	208	INSTALL - CIVIL	C125L	83	13.8	30/1830x2 15/1830x1	CAP CONDUIT AT STN 208 & 209	
209	208	INSTALL - CIVIL	C125L	83	13.8	30/1830x2 15/1830x1	CAP CONDUIT AT STN 208 & 209	
300	14	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	82	0.3		COIL 2M OF CABLE AT STN 14 FOR CONNECTION BY ERGON ENERGY. LEAVE AT BOTTOM OF TRENCH AT STN 300.	
301	5	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	65	0.3		COIL 2M OF CABLE AT STN 5 FOR CONNECTION BY ERGON ENERGY. LEAVE AT BOTTOM OF TRENCH AT STN 301.	
302	4	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	114	0.5		COIL 2M OF CABLE AT STN 4 FOR CONNECTION BY ERGON ENERGY. LEAVE AT BOTTOM OF TRENCH AT STN 302.	
303	23	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	22	0.1		COIL 2M OF CABLE AT STN 23 FOR CONNECTION BY ERGON ENERGY. LEAVE AT BOTTOM OF TRENCH AT STN 303.	
304	31	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	48	0.2		COIL 2M OF CABLE AT STN 31 FOR CONNECTION BY ERGON ENERGY. LEAVE AT BOTTOM OF TRENCH AT STN 304.	
305	34	INSTALL - CIVIL	35mm2 ANNEALED BARE Cu EARTH	48	0.2		COIL 2M OF CABLE AT STN 34 FOR CONNECTION BY ERGON ENERGY. LEAVE AT BOTTOM OF TRENCH AT STN 305.	

AS CONSTRUCTED

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

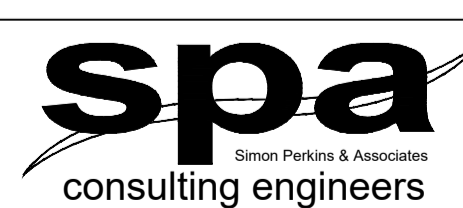
CHANGES: YES

ELECTRICAL CONTRACTOR
 NAME: POWER UP
 SIGNATURE: BEN HALL
 DATE: 11/04/2022

CIVIL CONTRACTOR
 NAME:
 SIGNATURE:
 DATE:

Code	Date	Description	Revised	Code	Date	Description	Revised
D	11/04/22	AS CONSTRUCTED		NJ			
C	10/9/21	ADDED ERGON WORKS		SW			
B	17/8/21	AMENDED HV CONDUIT SIZE		SW			
A	11/6/21	FOR CONSTRUCTION		SW			

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LEGEND

- CABLE EXISTING
- CABLE PLANNED
- CABLE RECOVER
- EQUIPMENT EXISTING
- EQUIPMENT RECOVER
- 35mm sq ANNEALED BARE COPPER EARTH
- SUBSTATION
- ✓ HV ISOLATING DEVICE
- | LV ISOLATING DEVICE
- NORMAL PILLAR
- CROSS ROAD PILLAR
- LINKING PILLAR
- COMMERCIAL/ INDUSTRIAL PILLAR
- DISTRIBUTION CABINET
- ✱ STREETLIGHT
- ⊥ EARTH
- POLE
- CABLE JOINT

Drawing Title	Date	APRIL 2021
THE RESERVE (KALYNDIA CHASE) STG 13A UDC UG ELECTRICAL RETICULATION CONDUIT SCHEDULE	Scale	N.T.S
	Drawn	SW
	RPEQ Design Certification	Jane Errey 6863
	Sheet	5