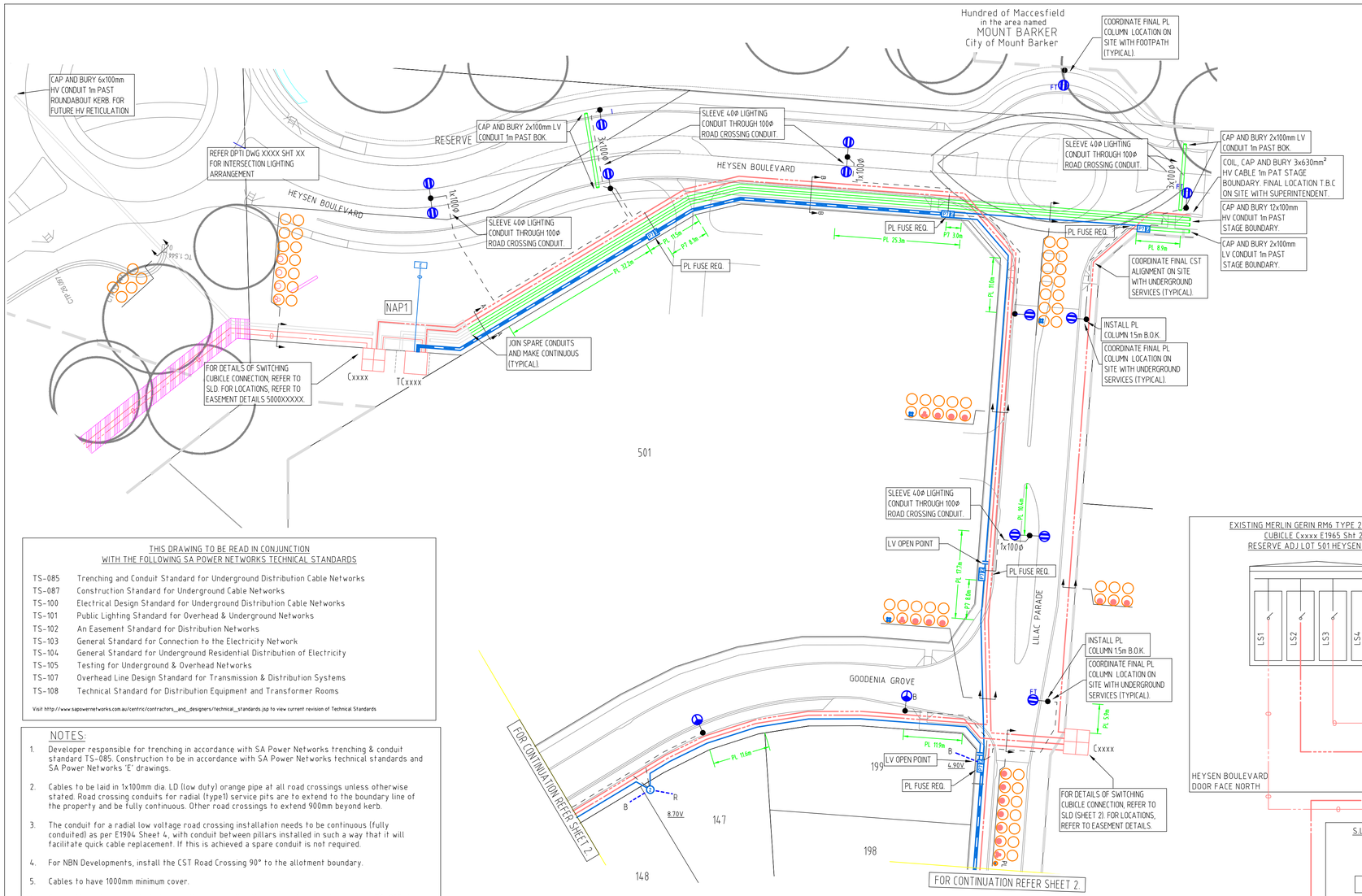
Hundred of Maccesfield
in the area named
MOUNT BARKER
City of Mount Barker



LEGEND

- EXISTING 11kV OVERHEAD MAINS
- EXISTING LV OVERHEAD MAINS TO BE REMOVED
- PROPOSED 3x630mm ² 11kV XLPE CABLE (CK6039)
- PROPOSED 3x95mm² 11kV XLPE CABLE (CK6006)
- EXISTING 3x630mm ² 11kV XLPE CABLE
- EXISTING 3x95mm² 11kV XLPE CABLE
- PROPOSED PARALLEL 150mm² LV UBC XLPE CABLE (CK5310)
- PROPOSED 150mm² LV UBC XLPE CABLE (CK5310)
- EXISTING 150mm² LV UBC XLPE CABLE
- PROPOSED PUBLIC LIGHTING CABLE 6mm² TWIN & 6mm² EARTH IN 40mm CONDUIT
- PROPOSED 40mm HD ORANGE ELECTRICAL CONDUIT & DRAW ROPE FOR CONSUMERS MAIN TOAS/NZS 3000. DEPTH 800mm. REFER TYPICAL CST CROSS SECTION & STANDARD SA POWER NETWORKS SERVICE PIT LOCATION ARRANGEMENT.
- PROPOSED LV UNDERGROUND OPEN POINT
- PROPOSED SPARE CONDUITS
- LV/HV CABLES CAPPED IN CABLE PIT E1926/E1979
- BOUNDARY/PROPERTY LINE
- KERB LINE
- TRAFFICABLE PT UNFUSED LV JUNCTION PIT WITH GELPORTS. PT PIT TO BE REINFORCED WITH 200mm CONCRETE SURROUND, N12 BAR TOP AND BOTTOM 480mm DEEP AND STEEL LID AS PER E1921 SHT 7.3
- PROPOSED FUSED RADIAL PILLAR.
- PROPOSED FUSED LOOP PILLAR.
- PROPOSED FUSED-T/OFF PILLAR.
- PROPOSED PADMOUNT TRANSFORMER
- PROPOSED SWITCHING CUBICLE
- EXISTING 11kV POLEMOUNT TRANSFORMER TO BE REMOVED
- EXISTING 11kV LOAD SWITCH TO BE REMOVED
- EXISTING POLE
- EXISTING POLE TO BE REMOVED
- 17W AEROSCREEN LED, 4000K, BLACK FINISH (EM4004) MOUNTED ON BLACK 6.5m MODERN COLUMN WITH 1.5m DECORATIVE MODERN OUTREACH (WA4017).
- B 35W AEROSCREEN LED, 4000K, BLACK FINISH (EM4010) MOUNTED ON BLACK 6.5m MODERN COLUMN WITH 1.5m DECORATIVE MODERN OUTREACH (WA4017).
- 105W LED, 4000K, BLACK FINISH (EM4110), MOUNTED ON BLACK 9.0m IMPACT ABSORBING COLUMN (WA4113) WITH SINGLE 3.0m MODERN OUTREACH (WA4531).
- 105W LED, 4000K, BLACK FINISH (EM4110), MOUNTED ON BLACK 9.0m IMPACT ABSORBING COLUMN (WA4113) WITH DOUBLE 3.0m MODERN OUTREACH (WA4530).
- FT 105W LED, 4000K, BLACK FINISH (EM4111), MOUNTED ON BLACK 9.0m IMPACT ABSORBING COLUMN (WA4113) WITH SINGLE 3.0m MODERN OUTREACH (WA4531).

PRELIMINARY ISSUE
NOT TO BE USED FOR CONSTRUCTION
30 JANUARY 2018

THIS DRAWING TO BE READ IN CONJUNCTION
WITH THE FOLLOWING SA POWER NETWORKS TECHNICAL STANDARDS

TS-085	Trenching and Conduit Standard for Underground Distribution Cable Networks
TS-087	Construction Standard for Underground Cable Networks
TS-100	Electrical Design Standard for Underground Distribution Cable Networks
TS-101	Public Lighting Standard for Overhead & Underground Networks
TS-102	An Easement Standard for Distribution Networks
TS-103	General Standard for Connection to the Electricity Network
TS-104	General Standard for Underground Residential Distribution of Electricity
TS-105	Testing for Underground & Overhead Networks
TS-107	Overhead Line Design Standard for Transmission & Distribution Systems
TS-108	Technical Standard for Distribution Equipment and Transformer Rooms

Visit http://www.sapowernetworks.com.au/centric/contractors_and_designers/technical_standards.jsp to view current revision of Technical Standards

NOTES:

1. Developer responsible for trenching in accordance with SA Power Networks trenching & conduit standard TS-085. Construction to be in accordance with SA Power Networks technical standards and SA Power Networks 'E' drawings.
2. Cables to be laid in 1x100mm dia. LD (low duty) orange pipe at all road crossings unless otherwise stated. Road crossing conduits for radial (type1) service pits are to extend to the boundary line of the property and be fully continuous. Other road crossings to extend 900mm beyond kerb.
3. The conduit for a radial low voltage road crossing installation needs to be continuous (fully conduited) as per E1904 Sheet 4, with conduit between pillars installed in such a way that it will facilitate quick cable replacement. If this is achieved a spare conduit is not required.
4. For NBN Developments, install the CST Road Crossing 90° to the allotment boundary.
5. Cables to have 1000mm minimum cover.
6. Cables through easements to be installed in conduit with spare and marker tape as per TS-085 clause 10.12. Cable markers are to be installed in cable easement as per E1979.
7. Electrical contractor to provide 45° sweep bends. Provide lube injection points prior to each bend for long cable pulling distances. Refer SA Power Networks E1906 drawings for detailed requirements.
8. Any existing underground services shown on these drawings are indicative only, no claim is made that the existing services shown are accurate or complete. Other services may be present which shall be the contractor's responsibility to locate and depth prior to any construction works. Any cable system and equipment must be treated as energised unless otherwise confirmed by SA Power Networks.
9. Phasing of consumer connections as shown.
10. Public lighting to be all-night burning.
11. Number of allotments - 33 lots (32 lots Stage 1 + 1 lots Stage 4) = 264kVA.
12. Number of public lights - 14x17W led + 1x35W led + 13x105W (TFI Tariff)..
13. Developer - Lanser Communities.
14. Consulting Engineer - Wallbridge Gilbert Aztec.
15. Surveyor - Alexander & Symonds Pty Ltd.
16. Due to the schematic nature of the drawing, the position of equipment shown is indicative only. Actual locations should be verified on site.
17. Retaining walls are required around transformer and switching cubicle easements where the final level changes by more than 300mm in the 2.0m adjacent the easement. The walls are to be built prior to installation of the transformer or switching cubicle and are to be located on the easement.
18. All walls, fences, ceilings and floors within 1.2m of the padmount transformer station shall have a 3 hour fire rating as determined by the Building Code of Australia.
19. SA Power Networks is responsible for the connecting and energising of the stage.
23. Contractor to provide as constructed drawings to SA Power Networks for approval prior to practical completion. Changes can be made by design consultant for hourly rate charge or AutoCAD format drawings can be purchased from consultant for revision by contractor.
24. Construction by -
'As Constructed' details provided by -
WGA is not responsible for the accuracy of the 'As Constructed' details provided.

SCOPE OF WORKS

CONTESTABLE WORKS
Electrical Contractor to:

- Undertake all new work within development.
- Provide completed TS-105 C1 & C2 forms.
- Provide 'As Constructed' drawings to SA Power Networks Network Management group at no charge.

NAP 1

- Push 3x630mm² HV cables through existing conduit into CXXXX Heysen Boulevard, cap for termination by SA Power Networks.
- Push 3x95mm² HV cables through existing conduit into TCXXXX Heysen Boulevard, cap for termination by SA Power Networks.
- Push parallel 4x150mm² LV cables through existing conduit into TCXXXXX Heysen Boulevard, cap for termination by SA Power Networks.

Developer Civil Contractor to:

- Comply with requirements of NICC-404, TS105-C1 & C2 when working in the vicinity of the electricity network.
- Developer/contractor to take ownership and responsibility for removal of existing poles as marked and remove all associate redundant cabling and conduits from within property boundaries

NON CONTESTABLE WORKS
SA Power Networks to:

- Terminate 3x630mm² HV cables to LS2 CXXXX Heysen Boulevard
- Terminate 3x95mm² HV cables to LS1 TCXXXX Heysen Boulevard
- Terminate parallel 4x150mm² LV cables to FSD1 TCXXXXX Heysen Boulevard
- Public lighting to energised by SA Power Networks.
- SA Power Networks to carry out testing, connection and energising of the development.

CROSS SECTION
A-A
MINIMUM 300mm

CROSS SECTION
B-B
MINIMUM 300mm

CONDUIT BEND DETAIL
(not to scale)

All conduit bends to contain 45° angles, using High Density conduit and lubrication points.

WGA
WALLBRIDGE GILBERT AZTEC

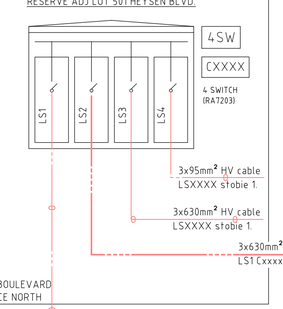
AS1158.3.1:2005
LIGHTING DESIGN — ROAD CATEGORY

- HEYSEN BLVD — V5
- LILAC PARADE (DEVELOPMENT ENTRANCE) — V5
- ALL OTHER ROADS — P4

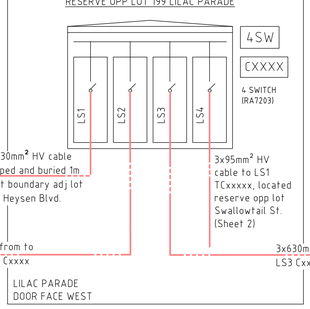
DATE: 12/09/2017

NAME: L Lukanov (Associes)

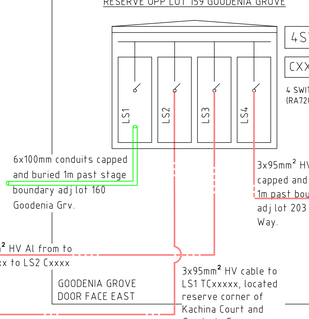
EXISTING MERLIN GERIN RM6 TYPE 2 SWITCHING CUBICLE Cxxxx E1965 Sht 2.2 RESERVE ADJ LOT 501 HEYSEN BLVD.



PROPOSED MERLIN GERIN RM6 TYPE 2 SWITCHING CUBICLE Cxxxx E1965 Sht 2.2 RESERVE OPP LOT 199 LILAC PARADE

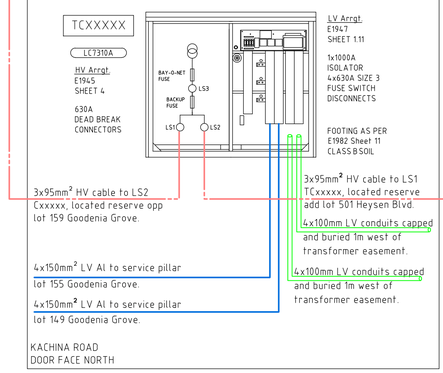


PROPOSED MERLIN GERIN RM6 TYPE 2 SWITCHING CUBICLE Cxxxx E1965 Sht 2.2 RESERVE OPP LOT 159 GOODENIA GROVE

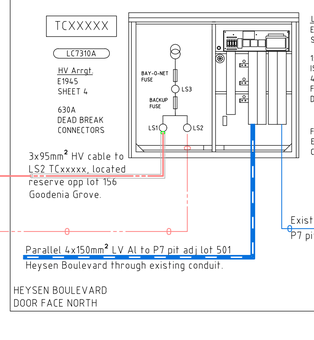


3x95mm² HV cable to LS1 TCxxxxx, located reserve corner of Kachina Court and Goodenia Grove.

S.L.D. OF PROPOSED 11/0.4kV 500kVA LOOP Mk7 PADMOUNT TRANSFORMER TCXXXXX - (LC7310A) RESERVE CORNER OF KACHINA COURT AND GOODENIA GROVE



S.L.D. OF EXISTING 11/0.4kV 500kVA LOOP Mk7 PADMOUNT TRANSFORMER TCXXXXX - (LC7310A) RESERVE ADJ. LOT 501 HEYSEN BOULEVARD



SCALE 0 5 10 15 20 25 METRES 50

EDGE OF COMMON SERVICE TRENCH (from boundary line)	0.5m
PUBLIC LIGHTING ALIGNMENT (from back of kerb)	1.0m

DESIGN INFORMATION

Termite resistant cable:	Yes
Earthing:	CMEN
The Design ADMD / lot:	8 kVA

NOTE:
Any changes to be made on site to the location of the common service trench, and/or electrical & street lighting equipment must first be verified by the electrical designer and the project manager/engineering consultant. Any changes to work within proposed SA Power Networks easements must also be verified by the project surveyor.

DRAWING No. ADL161322-161.dwg

THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING 5000xxxxx SHEET 2

WGA
WALLBRIDGE GILBERT AZTEC
60 Wyatt Street, Adelaide
South Australia 5000
Telephone 08 8223 7433
Email adelaide@wga.com.au

ZONE:MGA-54-GDA94
MAP REF: 6627-07-q
GRID REF: 303487.20 E 6115006.70 N
303255.30 E 6114904.00 N

HBFRA HIGH BUSHFIRE RISK AREA
FEEDER NO: XX-000
FEEDER NAME: XXX
SUBSTATION NO: SSD-777
SUBSTATION NAME: Mt Barker Distribution
ASSET OWNER: SA POWER NETWORKS

PROJECT DEFINITION	NOTIFICATION TYPE	PROJECT TYPE
XX-000000	CN	RD

PRELIMINARY

REV	DETAILS OF REVISION	RVD	CKD	APD	DATE
C	PRELIMINARY ISSUE - STAGE SPLIT TO 1A & 1B	WGA	MD	AI	30.01.18
B	PRELIMINARY ISSUE	WGA	MD	AI	08.11.17
A	PRELIMINARY ISSUE	WGA	MD		20.09.17

DRAWN	L LUKANOV	19.09.17
DESIGNED	L LUKANOV	19.09.17
CHECKED	M DENNES	20.09.17
PROJECT MANAGER	R GEUE MT BARKER (08) 8391 7721	

Head Office:
1 Anzac Highway
Keswick South Australia 5035

Postal address:
GPO Box 77
Adelaide South Australia 5001

Corporate switchboard
08 8404 5667
(9.00am - 5.00pm
Monday to Friday)

SA Power Networks
www.sapowernetworks.com.au

CLOVER PARK - STAGE 1B
PROPOSED UNDERGROUND RESIDENTIAL DEVELOPMENT
DEV. No. 580/D030/15

SCALE			SHEET 1 OF 2	REV
1:500	A1	5000XXXXX		C