Hundred of Port Adelaide
in the area named
VIRGINIA
City Of Playford

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 within 7 days of submitting certificate of compliance to SA Power Networks Network Management group at no charge.
- Provide documented results proving condition of the existing assets to NPO prior commencing works on any existing infrastructure:
  - megger and phase ID all cables
  - megger all screens and carry out core to screen/earth test for all HV cables
  - contact NPO for direction if any faults discovered.
- Obtain networks access permits for work near live network assets and excavate jointing bays to facilitate works.

NAP1

- Locate all existing underground cables prior to excavation.
- Push 4x150mm² LV cable through existing conduit into existing service pillar lot 864 Kevin Street, cap for termination by SA Power Networks.

NAP2

- Locate all existing underground cables prior to excavation.
- Coil, cap & bury sufficient 3x95mm² HV cable adj lot 1113 Koroneiki Rd for termination to existing TC45065 by SA Power Networks.
- Coil, cap & bury sufficient 3x95mm² HV cable adj lot 1113 Koroneiki Rd for straight jointing by SA Power Networks.
- Coil, cap & bury sufficient 4x150mm² LV cable adj lot 1113 Koroneiki Rd for termination to existing TC45065 by SA Power Networks.

NAP3

- Locate all existing underground cables prior to excavation.
- Coil, cap & bury sufficient 4x150mm² LV cable adj existing stobie for over/under connection by SA Power Networks.

Developer Civil Contractor to:

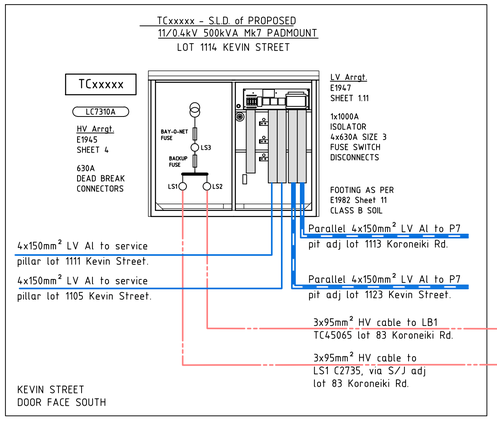
- Comply with requirements of NICC-404, TS105-C1 & C2 when working in the vicinity of the electricity network.
- Remove stobie①&③after SA Power Networks works completed.
- Undertake civil on request by SA Power Networks.

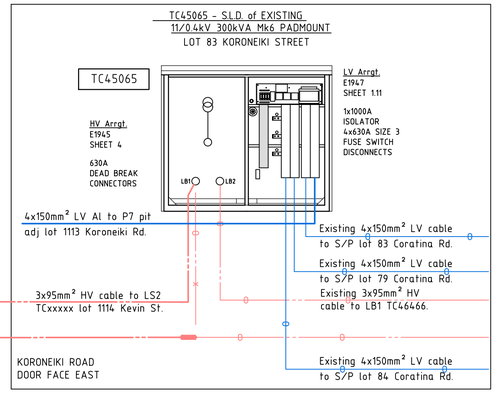
NON CONTESTABLE WORKS

SA Power Networks to:

- Terminate & connect 4x150mm² LV cable into existing service pillar lot 864 Kevin St.
- Disconnect existing HV cable from LB1 TC45065. Pull & coil out of vault.
- Terminate & connect 3x95mm² HV cable from LS2 TCxxxxx to LB1 TC45065.
- Terminate & connect 4x150mm² LV cable from P7 pit adj lot 1114 to FSD4 TC45065.
- Supply and install 1 set of 3x95mm² HV cable straight joints adj lot 83 Koroneiki Rd. Jointing HV cable form LS1 TCxxxxx to cable from LS1 C2735.
- Stobie⑦- Existing to remain.
  - Remove 2 LV spans between stobie①&⑦and⑦&③and associate equipment.
  - Terminate & connect 4x150mm² LV cable to overhead network via over/under with isolating switches similar to E1996 Sht 1.1 Arrgt 1. Cable guard arrgts E1993 Sht 2.3.
  - Connect existing CM lot from lot 91 to proposed P7 pit adj lot 1125.
  - Connect existing CM lot from lot 245 to proposed service pillar lot 1125.

SA Power Networks to carry out testing, connection and energising of the development, including public lighting.





LEGEND

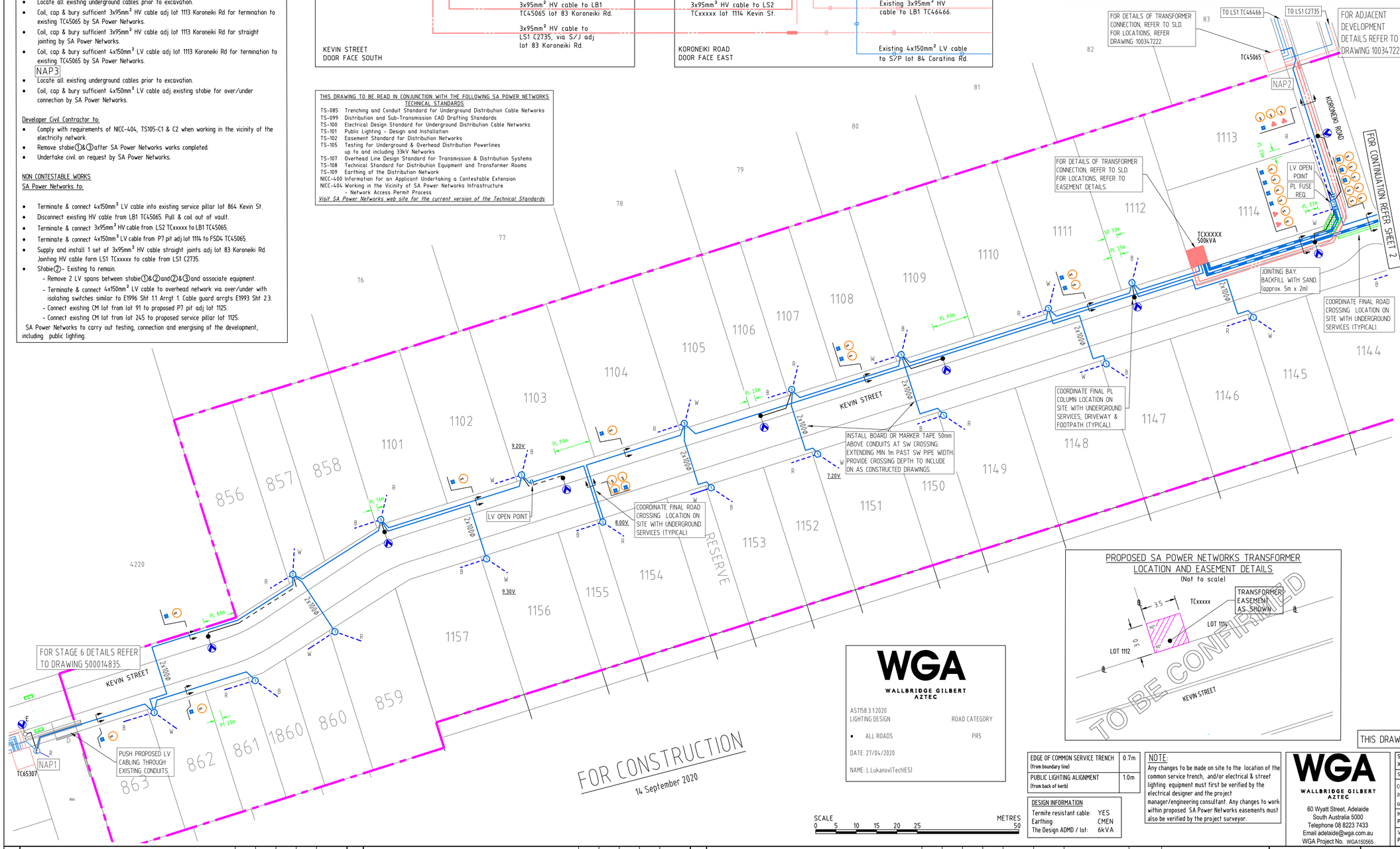
- PROPOSED 3x95mm² 11kV XLPE CABLE (CK6006)
- EXISTING 95mm² 11kV CABLE
- EXISTING 95mm² 11kV CABLE TO BE ABANDONED
- PROPOSED 150mm² LV UBC XLPE CABLE (CK5310)
- EXISTING 150mm² LV CABLE
- PROPOSED PARALLEL 150mm² LV UBC XLPE CABLE (CK5310)
- PROPOSED PUBLIC LIGHTING CABLE 6mm² TWIN & 6mm² EARTH IN 40mm CONDUIT
- PROPOSED 40mm HD ORANGE ELECTRICAL CONDUIT & DRAW ROPE FOR CONSUMERS MAIN TO&S/N/ZS 3000. DEPTH 800mm. REFER TYPICAL CST CROSS SECTION & STANDARD SA POWER NETWORKS SERVICE PIT LOCATION ARRANGEMENT.
- PROPOSED LV UNDERGROUND OPEN POINT
- PROPOSED SPARE CONDUITS
- EXISTING SPARE CONDUITS
- BOUNDARY/KERB LINE
- P7 — PROPOSED TRAFFICABLE P7 UNFUSED LV JUNCTION PIT WITH GELPORTS. P7 PIT TO BE REINFORCED WITH 200mm CONCRETE SURROUND, N12 BAR TOP AND BOTTOM 480mm DEEP AS PER E1921 SHT 7.3
- P3 — TRAFFICABLE P7 UNFUSED LV JUNCTION. P7 PIT TO BE REINFORCED WITH 200mm CONCRETE SURROUND, N12 BAR TOP AND BOTTOM 480mm DEEP AS PER E1921 SHT 7.3.
- ① PROPOSED FUSED RADIAL PILLAR.
- ② PROPOSED FUSED LOOP PILLAR.
- ③ PROPOSED FUSED-T/OFF PILLAR.
- Ⓔ EXISTING SERVICE PILLAR.
- PROPOSED HV CABLE JOINT
- PROPOSED PADMOUNT TRANSFORMER.
- EXISTING PADMOUNT TRANSFORMER.
- 17W AEROSCREEN LED, 4000K, BLACK FINISH (EM4022) MOUNTED ON BLACK 6.5m MODERN COLUMN WITH 1.5m OUTREACH (WA4017).
- EXISTING STOBIE POLE.
- EXISTING STOBIE POLE TO BE REMOVED.
- PROPOSED LV OVER/UNDER

FOR CONDUIT BEND DETAIL REFER SA POWER NETWORKS TS-085 TABLE 7 to 9.

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-099	Distribution and Sub-Transmission CAD Drafting Standards
TS-100	Electrical Design Standard for Underground Distribution Cable Networks
TS-101	Public Lighting - Design and Installation
TS-102	Easement Standard for Distribution Networks
TS-105	Testing for Underground & Overhead Distribution Powerlines up to and including 33kV Networks
TS-107	Overhead Line Design Standard for Transmission & Distribution Systems
TS-108	Technical Standard for Distribution Equipment and Transformer Rooms
TS-109	Earthing of the Distribution Network
NICC-400	Information for an Applicant Undertaking a Contestable Extension
NICC-404	Working in the Vicinity of SA Power Networks Infrastructure - Network Access Permit Process

Visit SA Power Networks web site for the current version of the 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 conduit 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 away that it will facilitate quick cable replacement. If this is achieved a spare conduit is not required.
4. Spare conduits for LV cables are to be inserted to approximately 25mm and capped within P7 pits. HV spares are to be diverted around pits, as per TS-085 section 11.2 and appendix D requirements.
5. For NBN Developments, install the CST Road Crossing 90° to the allotment boundary.
6. Cables to have 1000mm minimum cover.
7. 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.
8. 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.
9. 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.
10. Phasing of consumer connections as shown.
11. Public lighting to be all-night burning.
12. Number of allotments - 65 Lots (390kVA)
13. Number of public lights - 16x17W LED (TFI Tariff).
14. Developer - Lanser Communities.
15. Consulting Engineer - Tonkin Consulting.
16. Surveyor - Alexander Symonds Pty Ltd.
17. Due to the schematic nature of the drawing, the position of equipment shown is indicative only. Actual locations should be verified on site.
18. 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.
19. 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.
20. SA Power Networks is responsible for the connecting and energising of the stage.
21. Contractor to ensure Hydro Vacuum Excavation maximum working pressure is limited to 2000psi as per TS-085 section 10.14. Any proposed excavation methods adjacent SA Power Networks infrastructure should be in accordance with NICC-404. Network Access Permits (NAP) required for works on and/or around SA Power Networks exclusion and/or restricted zones as per NICC-404 section 9.1 - figures 1,2 and 3.
22. 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.
23. Construction by -
    'As Constructed' details provided by -
    WGA is not responsible for the accuracy of the 'As Constructed' details provided.

THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING 500025376 SHEET 2

WGA
WALLBRIDGE GILBERT AZTEC

AS1158.3.1:2020
LIGHTING DESIGN — ROAD CATEGORY
- ALL ROADS — PR5

DATE: 27/04/2020

NAME: L.Lukanov(TechIES)

EDGE OF COMMON SERVICE TRENCH (from boundary line)	0.7m
PUBLIC LIGHTING ALIGNMENT (from back of kerb)	1.0m

DESIGN INFORMATION

Termite resistant cable:	YES
Earthing:	CMEN
The Design ADMD / lot:	6kVA

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.

WGA
WALLBRIDGE GILBERT AZTEC
60 Wyatt Street, Adelaide
South Australia 5000
Telephone 08 8223 7433
Email adelaide@wga.com.au
WGA Project No. WGA150565

SURVEYORS NAME: XXX	MAP REF: 6628-20
SURVEY DATE:XXX	GRID REF: 276742.80 E 6160347.80 N
CO-ORDINATE DATUM ZONE: MGA-54-(GDA94) GROUND SCALE:XXX	
HORIZ: PSM XXXXXXXXX PLANE	276121.20 E 6159992.90 N
VERT: PSM XXXXXXXXX AHD	

NBFRA — NON BUSHFIRE RISK AREA

FEEDER NO:EL-20
FEEDER NAME:SUPPLE ROAD 11kV
SUBSTATION NO: SSD-184
SUB NAME:VIRGINIA
ASSET OWNER: SA POWER NETWORKS

PROJECT DEFINITION	NOTIFICATION TYPE	PROJECT TYPE
NC-15123	CN	RD

FOR CONSTRUCTION

REV	DETAILS OF REVISION	RVD	CKD	INSP	APD	DATE
D	FOR CONSTRUCTION	WGA	JP			14-09-20
C	PRELIMINARY ISSUE - LOT & ROAD LAYOUT UPDATED	WGA	JP			17-08-20
B	PRELIMINARY ISSUE - LOT LAYOUT UPDATED	WGA	JP			23-06-20
A	PRELIMINARY ISSUE	WGA	LL			05-05-20

DRAWN	T SABET	04-05-20
CHECKED	L LUKANOV	05-05-20
INSPECTED		
APPROVED	T CADDY HOLDEN HILL (08) 8366 7429	10-09-20

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)
ABN 13 332 330 749

SA Power Networks

SHEEDY ROAD - STAGE 9
UNDERGROUND RESIDENTIAL DEVELOPMENT
DEV. 292/D003/20

SCALE		SHEET 1 OF 2	REV
1:500	A1	500025376	D