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

WGA
WALLBRIDGE GILBERT AZTEC

AS1158.3.1:2020 LIGHTING DESIGN | ROAD CATEGORY
• ALL ROADS | PR5
DATE: 12/08/2021
NAME: J Parker

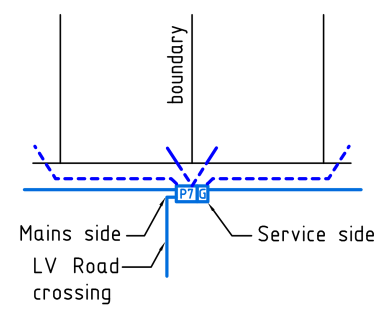
FOR CONDUIT BEND DETAIL REFER SA POWER NETWORKS TS-085 TABLE 7 to 9.

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

UNFUSED P7 PIT WITH GEL PORTS ARRANGEMENT

Service fuses required in customer's meter box when supplied from unfused P7 junction pit. Install 40mm HD orange electrical conduit from P7 pit to property boundary as per AS/NZS3000.

- For service connections details refer E1921 Sheet 4 and TS-085 for cable entry and exiting positioning.
- For unmetered supply/public lighting supply refer E1921 Sheet 4.3.
- For P7 Gelports pit arrgt. refer DST 1745 Sheet, arrgt. 1, 2 & 3
- For LV main cable junction connection details refer E1921 Sheet 3.3.
- For installation and connection refer E-drawings, JSWP 140 and Field Instruction FI-A1.



The pit may be offset to avoid a driveway by aligning the short side of the pit with the shared side boundary of the property. The mains and service side can be on either the left or right to suit the site installation.

NOTE: Ends of consumers mains to be 600mm into lot boundary, extended above ground level and marked with a 'star dropper' and orange marker tape. Final consumer main locations to be coordinated on site with existing and proposed services.

POLE SCHEDULE

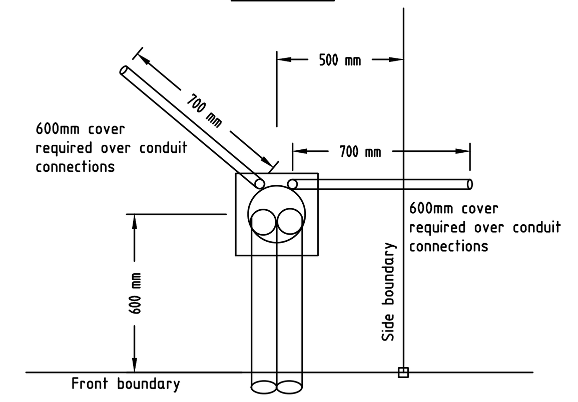
POLES					HIGH VOLTAGE ARRANGEMENT						EARTH	LOW VOLTAGE ARRANGEMENT				
POLE	SPAN	EXISTING	PROP.	PROP. FOOTING	EXISTING ARRGT.	PROP. ARRGT.	X-ARM SI NO.	DEVICE SI NO.	COND.	REMARKS	PROP.	EXISTING ARRGT.	PROP. ARRGT.	X-ARM SI NO.	COND.	REMARKS
1	197	EXISTING WB1320 TO BE REMOVED	-	-	DEAD END LOAD SWITCH	-	-	LS3006	AAC 7/3.75	REMOVE LOAD SWITCH AND OVERHEAD CONDUCTOR BETWEEN POLES 1 & 4. POLES TO REMAIN IN SITU TO BE REMOVED BY DEVELOPER		N/A				
2	176	EXISTING WB1205 TO BE REMOVED	-	-	3ø PF	-		-		REMOVE OVERHEAD CONDUCTOR BETWEEN POLE TO REMAIN IN SITU TO BE REMOVED BY DEVELOPER		N/A				
3	59	EXISTING WB1205 TO BE REMOVED	-	-	3ø PF	-	-	-		REMOVE OVERHEAD CONDUCTOR BETWEEN POLE TO REMAIN IN SITU TO BE REMOVED BY DEVELOPER		N/A				
4			WB1220 NEW	E1808/08	-	E1221 SHEET 1 ARRGT1	ZA1725	-		INSTALL DEAD END POLE. NEW POLE TO BE LOCATED 1m ON THE EASTERN SIDE OF THE PROPERTY BDY. TERMINATE 11kV OVERHEAD FROM OLD PORT WAKEFIELD ROAD ON THE PROPOSED POLE. REMOVE CONDUCTOR BACK TO POLE 1.		N/A				
5, 6 ,7		EXISTING TO REMAIN	-	-	-	-	-	-		-		N/A				

LEGEND

- EXISTING 11kV OVERHEAD MAINS
- EXISTING 11kV OVERHEAD MAINS TO BE REMOVED
- EXISTING LV OVERHEAD MAINS
- EXISTING 300mm² 11kV CABLE
- PROPOSED 3x95mm² 11kV XLPE CABLE (CK6006)
- EXISTING 95mm² 11kV CABLE
- PROPOSED 150mm² LV UBC XLPE CABLE (CK5310)
- EXISTING 150mm² LV CABLE
- PROPOSED PARALLEL 150mm² LV UBC XLPE CABLE (CK5310)
- EXISTING PARALLEL 150mm² LV UBC XLPE CABLE
- PROPOSED PUBLIC LIGHTING CABLE 6mm² TWIN & 6mm² EARTH IN 40mm CONDUIT
- EXISTING PUBLIC LIGHTING CABLE
- 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.
- EXISTING CONSUMERS MAIN
- PROPOSED LV UNDERGROUND OPEN POINT
- PROPOSED SPARE CONDUITS
- EXISTING SPARE CONDUITS
- BOUNDARY OF DESIGN AREA
- 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
- EXISTING JUNCTION PIT.
- PROPOSED FUSED RADIAL PILLAR.
- PROPOSED FUSED LOOP PILLAR.
- PROPOSED FUSED-T/OFF PILLAR.
- EXISTING SERVICE PILLAR.
- PROPOSED HV CABLE JOINT
- PROPOSED PADMOUNT TRANSFORMER.
- EXISTING PADMOUNT TRANSFORMER.
- EXISTING STOBIE POLE.
- EXISTING STOBIE POLE TO BE REMOVED.
- PROPOSED STOBIE POLE
- BOUNDARY/PROPERTY LINE
- KERB LINE
- NAPx NETWORK ACCESS PERMIT
- 17W STREETLED AEROSCREEN LED, 4000K, BLACK FINISH (EM4022) MOUNTED ON BLACK 6.5m MODERN COLUMN WITH 1.5m DECORATIVE MODERN OUTREACH (WA4017).
- EXISTING LED LUMINAIRE

STANDARD POSITION OF SERVICE PILLAR

(LV service pillar, fused position)
Not to Scale



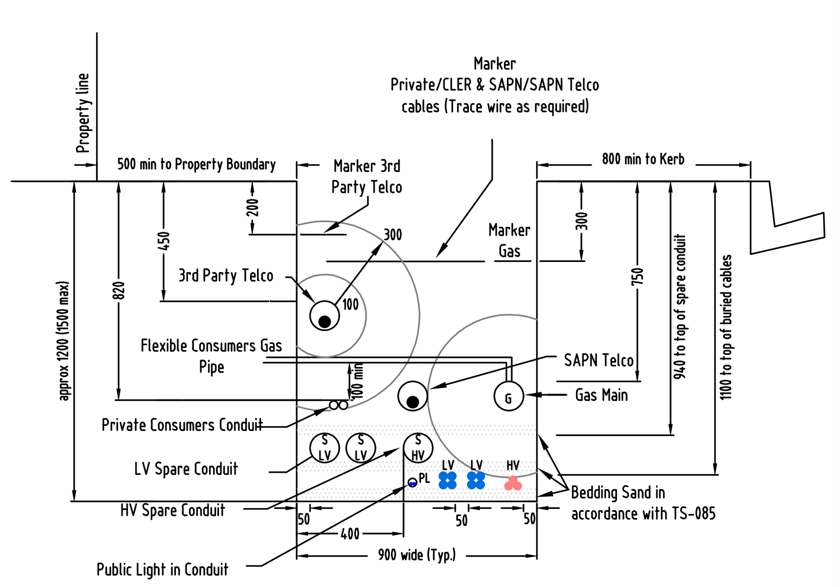
Each service pillar to have a 40mm conduit for the allotment on which it is placed, in addition to a neighbour connection shown. (Refer to E1978)

NOTE:
With approval from the relevant SA Power Networks manager, the developer can request a non-standard service pillar position.

PRELIMINARY ISSUE
NOT TO BE USED FOR CONSTRUCTION
19 October 2021

TYPICAL COMMON SERVICE TRENCH CROSS SECTION

(Not to scale)
NOTE: Refer to SA Power Networks Technical Standard TS-85



SCALE
0 5 10 15 20 25 50
METRES

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 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. Cable markers are to be installed in cable easement as per TS-085 Appendix A.
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. Contractor shall supply a bore log for the total length of the bore for inclusion on the As Constructed drawing. Refer TS-085 'Directional Boring' for requirements.
10. Phasing of consumer connections as shown.
11. Public lighting to be all-night burning.
12. Number of allotments - 50 lots - 300kVA total
13. Number of public lights - 12x17W 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 connection and energisation 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 500029544 SHEET 1 & 2

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:
SURVEY DATE:
CO-ORDINATE DATUM
ZONE: MGA-54-GDA94
GROUND SCALE:
HORIZ:
VERT:
MAP REF: 6628-20
GRID REF: 276587.90 E 6160260.10 N
276238.10 E 6159997.60 N

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-17321	CN	RD

PRELIMINARY

REV	DETAILS OF REVISION	RVD	CKD	INSP	APD	DATE
C	PRELIMINARY ISSUE - SAPN COMMENTS INCORPORATED	WGA	LL			19-10-21
B	PRELIMINARY ISSUE	WGA	JP			03-09-21
A	PRELIMINARY ISSUE - FOR COORDINATION ONLY	WGA	JP			25-08-21

DRAWN	L LUKANOV	11-08-21
CHECKED	J PARKER	12-08-21
INSPECTED		
APPROVED	T CADDY HOLDEN HILL (08) 8366 7429	

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 11
UNDERGROUND RESIDENTIAL DEVELOPMENT
DEV. 292/D003/20

SCALE 1:500 | A1 | SHEET 3 OF 3 | 500029544 | REV C