

Hundred of Munno Para
in the area named
ANGLE VALE
City of Playford

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
NCC-400 Information for an Applicant Undertaking a Contestable Extension
NCC-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

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

FOR CONSTRUCTION
14 Jan 2022

LEGEND

- PROPOSED 3x630mm² 11kV XLPE CABLE (CK6039)
EXISTING 630mm² 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 TDAS/ADS 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
LV/HV CABLES CAPPED IN CABLE PIT E1926/E1979
- 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 LV CABLE JOINT
PROPOSED HV CABLE JOINT
PROPOSED PADMOUNT TRANSFORMER
EXISTING PADMOUNT TRANSFORMER
EXISTING SWITCHING CUBICLE
17W STREETLED AEROSCREEN LED, 4000K, BLACK FINISH (EM4422) MOUNTED ON BLACK 6.5m MODERN COLUMN WITH 15m DECORATIVE MODERN OUTREACH (WA4477)
80W ROADLED MDI AEROSCREEN, 4000K, BLACK FINISH (EM4177) MOUNTED ON BLACK 9.0m IMPACT ABSORBING COLUMN (WA4131) WITH SINGLE 3.0m MODERN OUTREACH (WA4531)
EXISTING LED LUMINAIRE

NOTES:

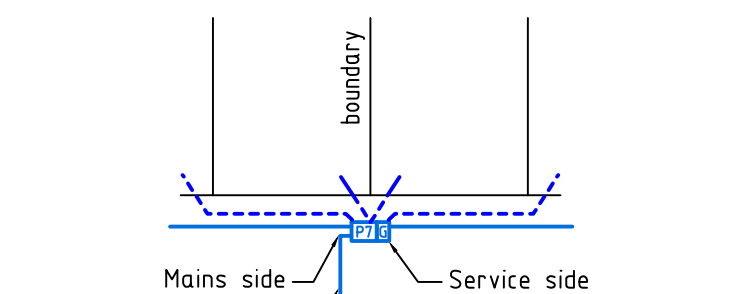
- Developer responsible for trenching in accordance with SA Power Networks trenching & conduit standard TS-085. Construction to be in accordance with SA Power Networks technical standards and SA Power Networks 'E' drawings.
- Cables to be laid in 1x100mm dia. LD (low duty) orange conduit at all road 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.
- The conduit for a radial low voltage road crossing installation needs to be continuous (fully conducted) as per E1904 Sheet 4, with conduit between pillars installed in such way that it will facilitate quick cable replacement. If this is achieved a spare conduit is not required.
- 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.
- For NBN Developments, install the CST Road Crossing 90° to the allotment boundary.
- Cables to have 1000mm minimum cover.
- 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.
- 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.
- Phasing of consumer connections as shown.
- Public lighting to be all-night burning.
- Number of allotments - 43 lots = 258kVA total.
- Number of public lights - 8x17W + 5x80W LED (TFI Tariff).
- Developer - Lanser Communities.
- Consulting Engineer - Kellogg Brown & Root Pty Ltd.
- Surveyor - Alexander Symonds Pty Ltd.
- Due to the schematic nature of the drawing, the position of equipment shown is indicative only. Actual locations should be verified on site.
- Retaining walls are required around transformer and switching cubicle easements where the final level changes by more than 300mm in the 20m 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. Refer to TS-085, TS-100 and TS-102.
- All walls, fences, ceilings and floors within 12m of the padmount transformer station shall have a 3 hour fire rating as determined by the Building Code of Australia.
- SA Power Networks is responsible for the connection and energisation of the stage.
- Contractor to ensure Hydro Vacuum Excavation maximum working pressure is limited to 200kpa as per TS-085. Any proposed excavation methods adjacent SA Power Networks infrastructure should be in accordance with NCC-404. Network Access Permits (NAP) required for works on and/or around SA Power Networks exclusion and/or restricted zones as per NCC-404 section 9.1 - figures 1.2 and 3.
- 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.
- 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 500032241 SHEET 1

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 Gelpoints pit arrgt. refer D51 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 14.0 and Field Instruction FI-A1.

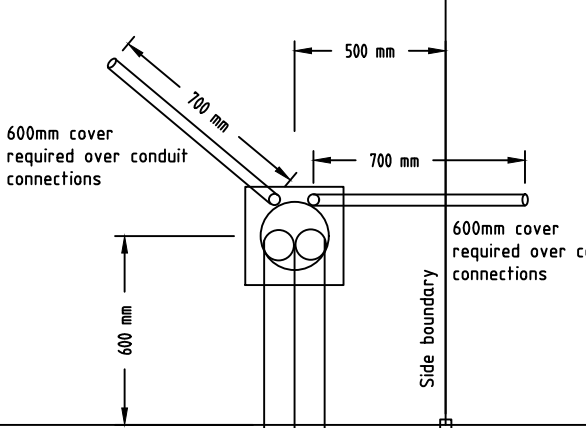


The pit may be offset to avoid a driveway by aligning the short side of the pit with the shared side boundary of the property. The mains and service side can be on either the left or right to suit the site installation.

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.

STANDARD POSITION OF SERVICE PILLAR

(LV service pillar, fused position)
Not to Scale



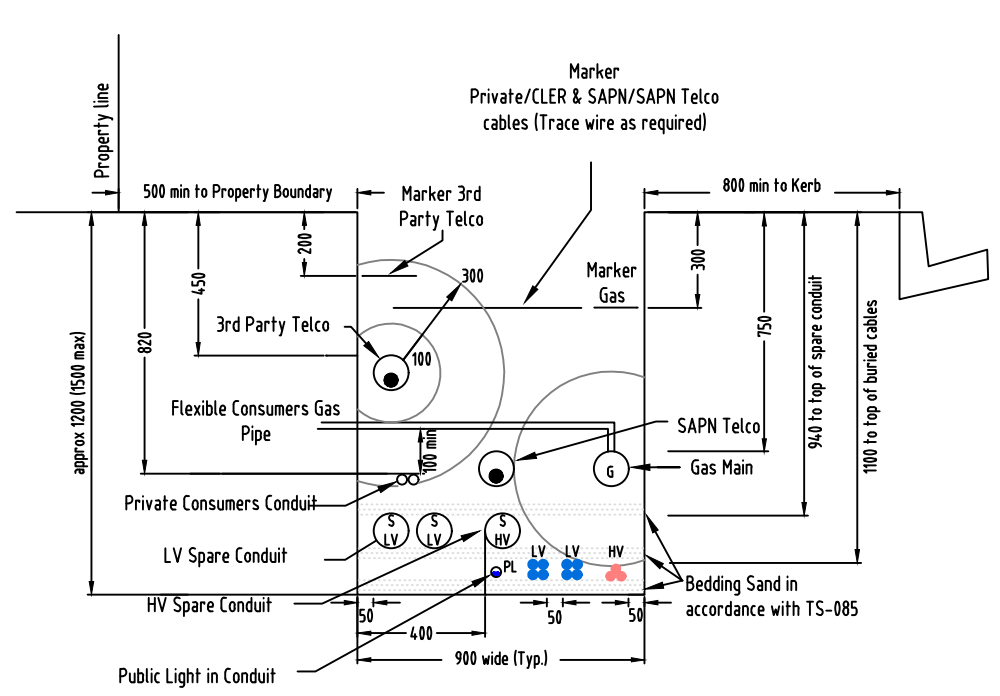
Each service pillar to have a 40mm conduit for the allotment on which it is placed, in addition to a neighbour connection shown. (Refer to E1978)

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

TYPICAL COMMON SERVICE TRENCH CROSS SECTION

(Not to scale)

NOTE: Refer to SA Power Networks Technical Standard TS-85



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

DESIGN INFORMATION
Termite resistant cable: YES
Earthing: CMEN
The Design ADM / 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.

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WGA Project No. WGA189172

SURVEYORS NAME: Alexander Symonds
SURVEY DATE: 28/07/2021
CO-ORDINATE DATUM: GDA94
GROUND SCALE: 1:1000
VERT: 284.438 15 E
6162942.86 N

MAP REF: 6628-19-b
GRID REF: 284706 36
6162989.45
FEEDER NO: EL-17
FEEDER NAME: CURTIS RD 11kV
SUBSTATION NO: SSD-273
SUB NAME: ANGLE VALE
ASSET OWNER: SA POWER NETWORKS
PROJECT DEFINITION: NC-018783
NOTIFICATION TYPE: CN
PRODUCT TYPE: RD

FOR CONSTRUCTION

REV	DETAILS OF REVISION	RVD	CKD	INSP	APD	DATE	REV	DETAILS OF REVISION	RVD	CKD	INSP	APD	DATE	REV	DETAILS OF REVISION	RVD	CKD	INSP	APD	DATE
C	FOR CONSTRUCTION					14.01.22														
B	PRELIMINARY ISSUE					11.01.22														
A	PRELIMINARY ISSUE					13.10.21														
REV	DETAILS OF REVISION	RVD	CKD	INSP	APD	DATE	REV	DETAILS OF REVISION	RVD	CKD	INSP	APD	DATE	REV	DETAILS OF REVISION	RVD	CKD	INSP	APD	DATE

DRAWN: T TOFIGHI
CHECKED: L LUKANOV
INSPECTED:
APPROVED: N GOSDEN
ELIZABETH
08 8202 1543

1-10-21
13-10-21
13-01-22

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MIRAVALE - STAGE 6
UNDERGROUND RESIDENTIAL DEVELOPMENT
DEV. No. 292/D068/17

SCALE: 1:500
A1
500032241
SHEET 2 OF 2
REV: C