

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

AS1158.3:2005 ROAD CATEGORY P4
LIGHTING DESIGN

DATE: 14/12/2018
NAME: L. Lukanov (TechIES)

FOR CONSTRUCTION
03 APRIL 2020

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

LEGEND

- EXISTING 95mm² 11kV CABLE
- PROPOSED 150mm² LV LBC XLPE CABLE (CK5310)
- EXISTING 150mm² LV CABLE
- PROPOSED PARALLEL 150mm² LV LBC XLPE CABLE (CK5310)
- EXISTING PARALLEL 150mm² LV LBC 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 TO AS/NZS 3000 DEPTH 800mm REFER TYPICAL LST CROSS SECTION & STANDARD SA POWER NETWORKS SERVICE PIT LOCATION ARRANGEMENT.
- EXISTING CONSUMER MAIN CONDUIT
- PROPOSED LV UNDERGROUND OPEN POINT
- PROPOSED SPARE CONDUITS
- EXISTING SPARE CONDUITS
- LV/HV CABLES CAPPED IN CABLE PIT E1926/E1979

TRAFFICABLE P7 UNFUSED LV JUNCTION PIT WITH GEL PORTS P7 PIT TO BE REINFORCED WITH 200mm CONCRETE SURROUND, N12 BAR TOP AND BOTTOM 480mm DEEP AND CONCRETE LD AS PER E1921 SHEET 7.3

EXISTING JUNCTION PIT

PROPOSED FUSED RADIAL PILLAR

PROPOSED FUSED LOOP PILLAR

PROPOSED FUSED-T/OFF PILLAR

EXISTING SERVICE PILLAR

EXISTING PADMOUNT TRANSFORMER

TW AEROSCREEN LED, 4000K, BLACK FINISH (M6A022) MOUNTED ON BLACK 65mm MODERN COLUMN WITH 15m OVERREACH (M6A001)

EXISTING LED LUMINAIRE

BOUNDARY/PROPERTY LINE

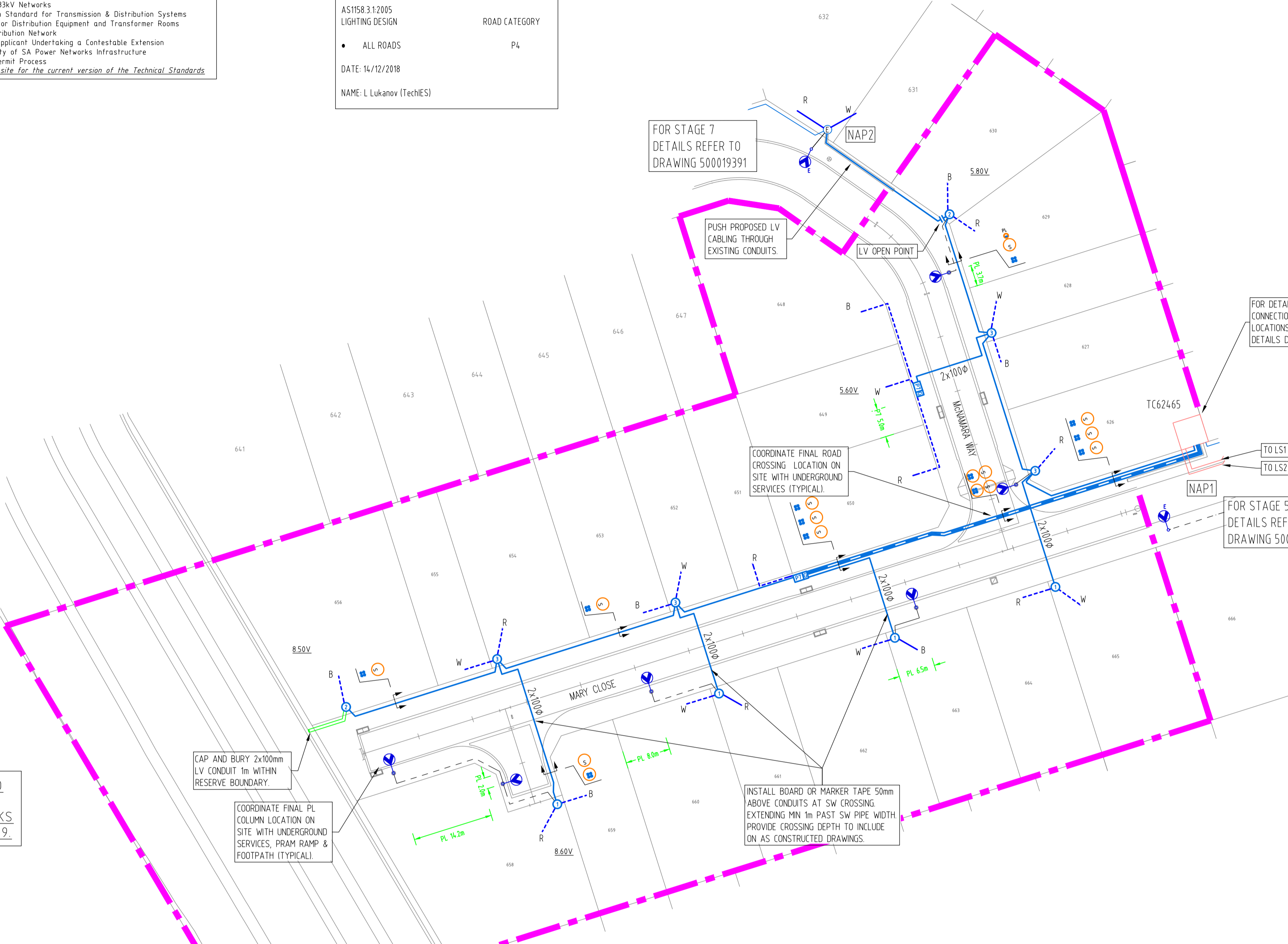
KERB LINE

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

FOR STAGE 7
DETAILS REFER TO
DRAWING 500019391

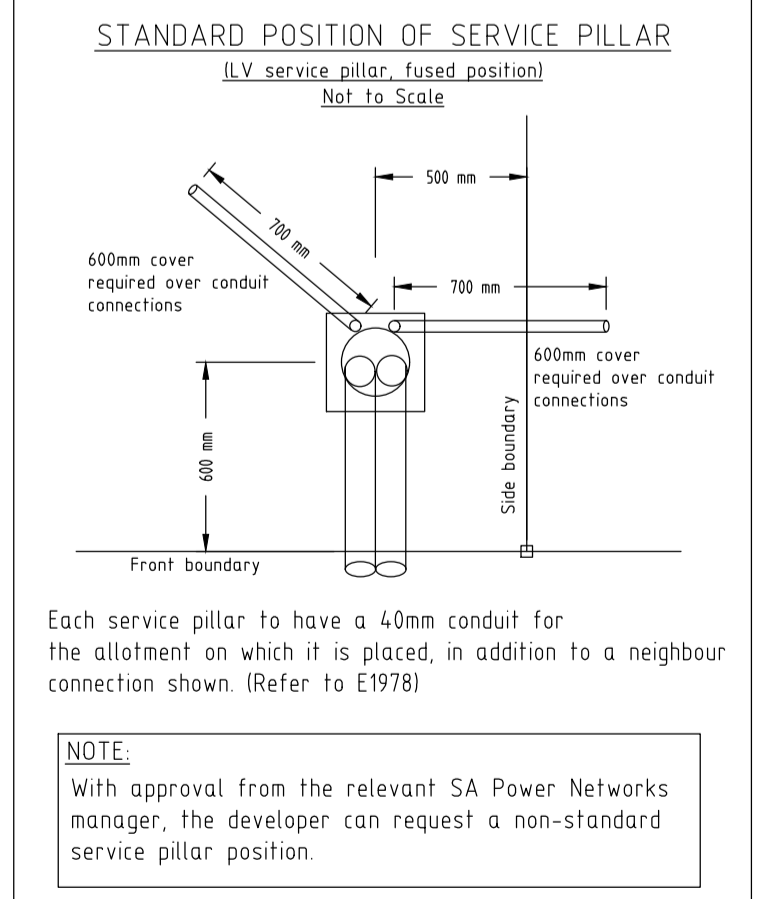
FOR DETAILS OF TRANSFORMER
CONNECTION, REFER TO SLD FOR
LOCATIONS, REFER TO EASEMENT
DETAILS DRAWING 50001842.

FOR STAGE 5
DETAILS REFER TO
DRAWING 500014842.



- 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.
 - Provide documented results proving condition of the existing assets to NPD 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
- NAP 1**
- Push 4x150mm² LV cable through existing conduits into TC62465 vault located lot 626 Mary Close for termination by SA Power Networks.
 - Push parallel 4x150mm² LV cable through existing conduits into TC62465 vault located lot 626 Mary Close for termination by SA Power Networks.
- NAP 2**
- Push 4x150mm² LV cable through existing conduit into existing service pillar lot 631 McNamara Way 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.
 - The developer will undertake the civil works on request by SA Power Networks or its contractors. The developer is responsible for all costs associated with civil works.
- NON CONTESTABLE WORKS**
SA Power Networks to:
- Terminate 4x150mm² LV cable into FSD1 TC62465 lot 626 Mary Close.
 - Terminate parallel 4x150mm² LV cable into FSD2 TC62465 lot 626 Mary Close.
 - Terminate 4x150mm² LV cable into service pillar lot 631 McNamara Ave.
 - SA Power Networks to carry out testing, connection and energising of the development including public lighting.

- 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) radial conduit at all road crossings unless otherwise stated. Road crossing conduits for radial (type) 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 conduit) 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 section 112 and appendix D requirements.
 - 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 clause 10.12. Cable markers are to be installed in cable easement as per E1979.
 - 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.
 - 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 - 22 Lots (132kVA)
 - Number of public lights - 6x17W LED (IFI Tariff).
 - Developer - Lanser Communities
 - Consulting Engineer - Tonkin Consulting
 - 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.
 - 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 connecting and energising of the stage.
 - 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.
 - 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.

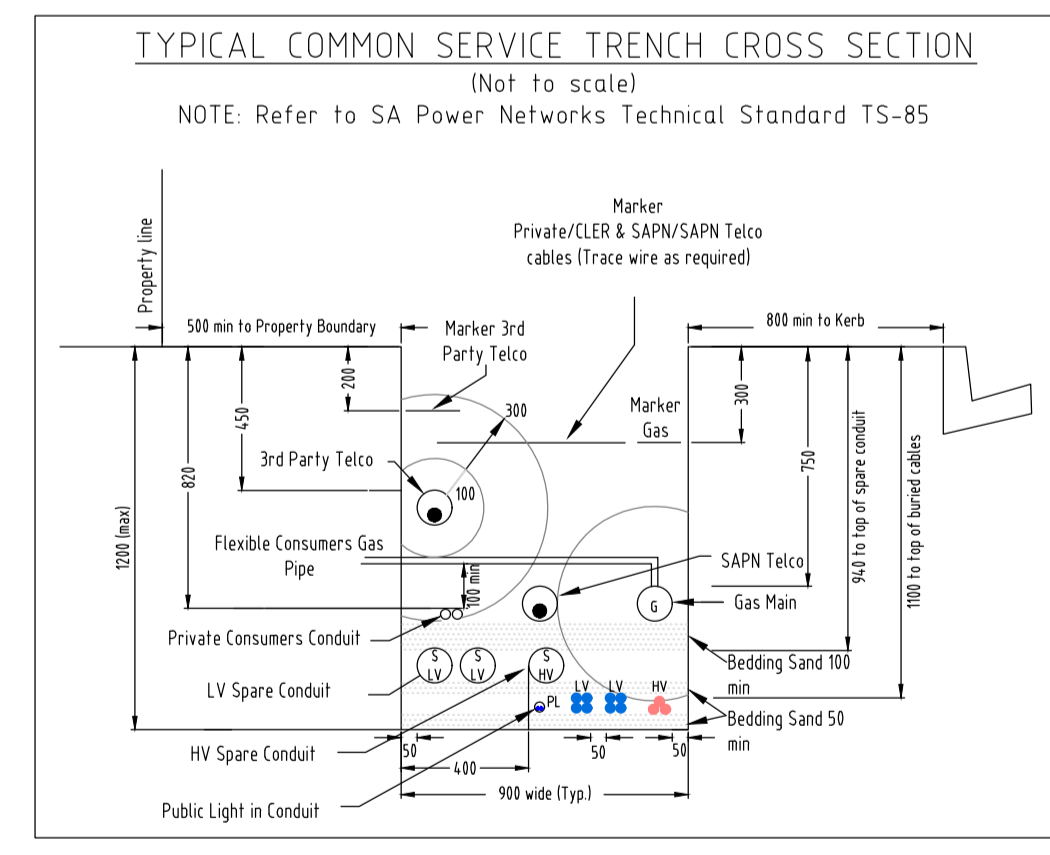
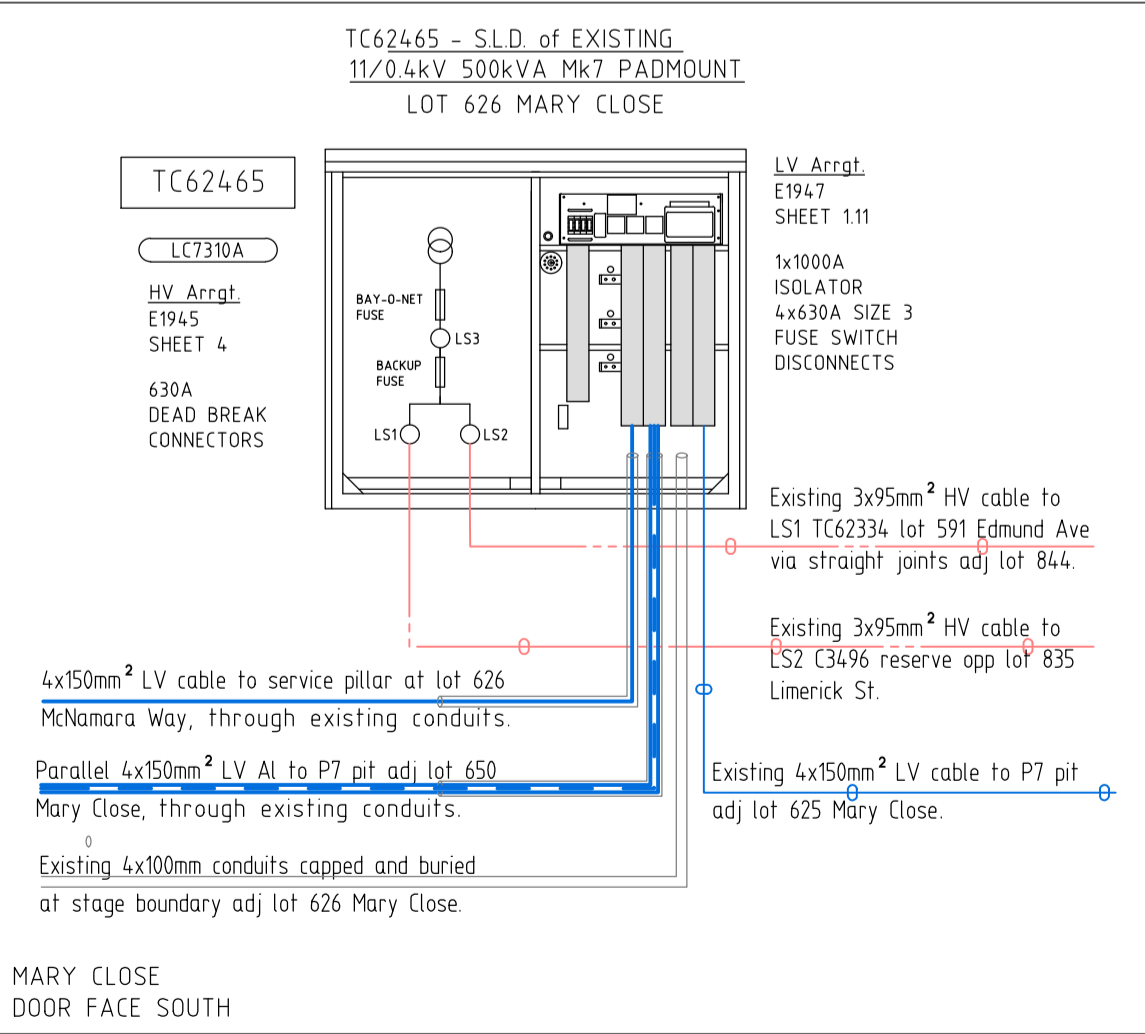
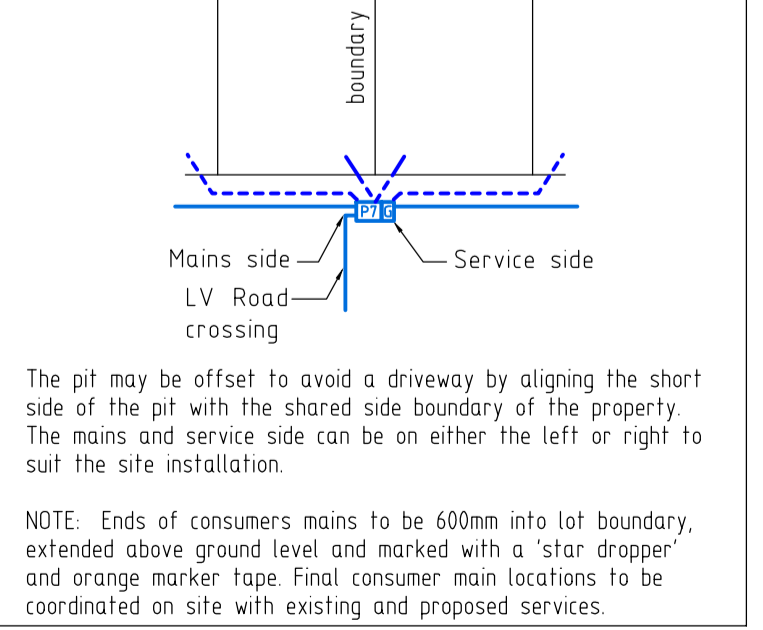


CAP AND BURY 2x100mm
LV CONDUIT 1m WITHIN
RESERVE BOUNDARY

COORDINATE FINAL PL
COLUMN LOCATION ON
SITE WITH UNDERGROUND
SERVICES, PRAM RAMP &
FOOTPATH (TYPICAL)

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.



SCALE 0 5 10 15 20 25 METRES 50

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 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.

REV	DETAILS OF REVISION	RVD	CKD	APD	DATE	REV	DETAILS OF REVISION	RVD	CKD	APD	DATE	REV	DETAILS OF REVISION	RVD	CKD	APD	DATE	DRAWN	L. LUKANOV	17-12-18	Head Office 1 Anzac Highway Keswick South Australia 5035						
D	FOR CONSTRUCTION	WGA	JP	AI	03-04-20													DESIGNED	L. LUKANOV	14-12-18	Postal address GPO Box 77 Adelaide South Australia 5001						
C	PRELIMINARY ISSUE - STAGE BOUNDARY UPDATED	WGA	JP	AI	17-12-19													CHECKED	J. PARKER	14-12-18	Corporate switchboard 08 8404 5667 19:00am - 5:00pm Monday to Friday)						
B	PRELIMINARY ISSUE	WGA	JP	AI	02-12-19													PROJECT MANAGER	T. CADDY HOLDEN HILL (08) 8366 7429	01-04-20	www.sapowernetworks.com.au						
A	PRELIMINARY ISSUE	WGA	JP	AI	17-12-18																						
																		SCALE 1:500		A1		500019392		SHEET 1 OF 1		REV D	

WGA
WALLBRIDGE GILBERT
AZTEC

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South Australia 5000
Telephone 08 8223 7433
Email adelaide@wga.com.au
WGA Project No. WGA150665

ZONE MGA-54-GDA94
MAP REF: 6628-20
GRID REF: 275853.80
6159905.90

NBFA NON BUSHFIRE RISK AREA

FEEDER NO. EL-20
FEEDER NAME: SUPPLE ROAD 11kV
SUBSTATION NO. SSD-184
SUBSTATION NAME: VIRGINIA
ASSET OWNER: SA POWER NETWORK
PROJECT DEFINITION: NOTIFICATION TYPE: PROJECT TYPE
NC-11688 CN RD

275722.10 E
6159737.40 N

FOR CONSTRUCTION

SHEEDY ROAD, STAGE 8A
PROPOSED UNDERGROUND RESIDENTIAL DEVELOPMENT
DEV 292/D071/14

SA Power Networks