

TO BE CONSTRUCTED DE-ENERGISED UNLESS RISK ASSESSED

GOLDEN SAFETY RULES ARE INDICATIVE ONLY - ALWAYS PERFORM A DETAILED HAZARD ANALYSIS.

NO DESIGN CHANGES WITHOUT MANAGER APPROVAL

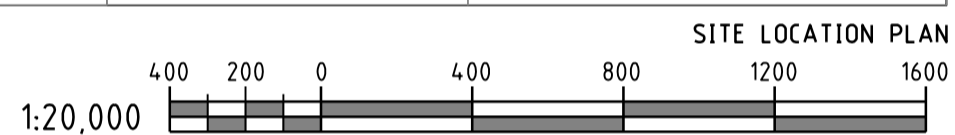
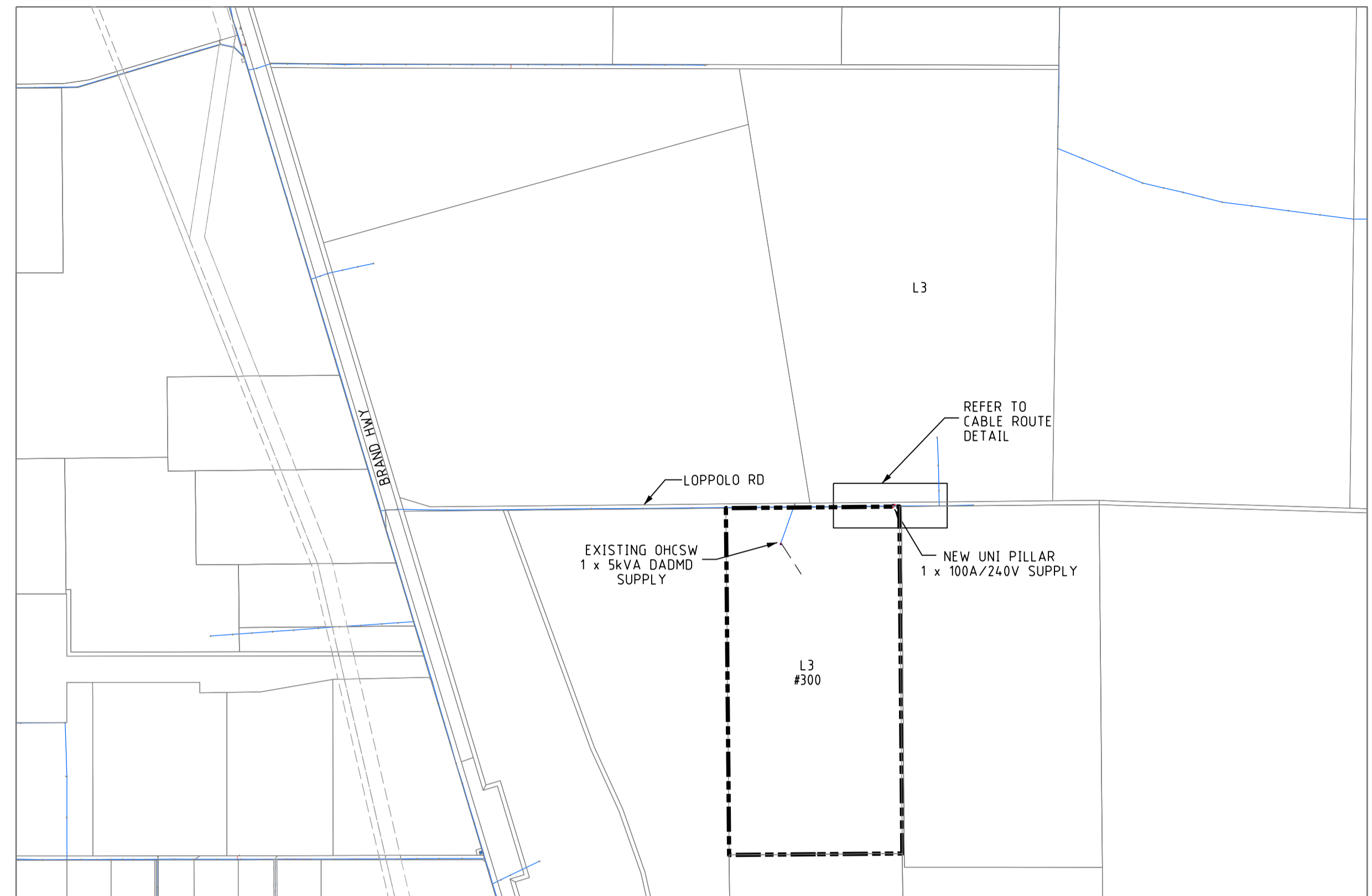
LEGEND

SCHEME BOD. [---]

RETAINING WALL [---]

RESTRICTED ZONE [---]

EASEMENT [---]



- ### WESTERN POWER SCOPE OF WORK
- INSTALL NEW UNI PILLAR ON LOT 3, #300 LOPPOLLO RD AS PER TYPICAL PILLAR EXCLUSION ZONE AND CABLE ROUTE DETAIL.  
 CU: LUT1 x 1  
 NON-CU: CR0324 x 1  
 DCSH: U09\_U19-3 MOD (EDM: #68862889)
  - INSTALL NEW 240LV CABLE FROM POLE S508675 TO NEW UNI PILLAR. REFER CABLE ROUTE DETAIL.  
 CU: CN45 x 20m, CN73\_LVMAINS x 3, CN54 x 6
  - AT POLE S508675  
 INSTALL 2PH DOF CROSSARM WITH 3A FAULT TAMER DOFS.  
 INSTALL NEW 25kVA/22kV TWO BUSHING PTTX.  
 TAP NEW PTTX HV BUSHINGS EXISTING HV BARE VIA DOFS.  
 CONFIGURE PTTX LV BUSHINGS TO 240V ARRANGEMENT AS PER DCSH H4.9.  
 TERMINATE 240LV CABLE AND TAP ONTO PTTX BUSHINGS VIA KRONE BOX WITH 160A LV FUSES, TO BE ON:  
 CU: HV20\_2H x 1, HV52\_3FT x 2, TXS\_25/22B2 x 1, CN9\_3/275 x 3, LU37\_2400 x 1, LU37\_2400 x 1, CN11\_95 x 4  
 NON-CU: GF100 x 3  
 DCSH: HV46-2, H49, RB/3, U19-3 MOD (EDM: #68862889)
  - TERMINATE 240LV CABLE INTO UNI PILLAR ON LOT 3 LOPPOLLO RD. REFER TO DETAIL A.  
 CU: LUT\_240 x 1
  - INSTALL 400A LINKS AND TERMINATE CONSUMER MAINS CABLE ONTO THE TOP BAR OF THE NEW UNI PILLAR ON CONJUNCTION WITH CUSTOMER'S ELECTRICAL CONTRACTOR. REFER TO DETAIL A.  
 CU: LUS6\_LINK x 1
  - INSTALL CT METER IN CUSTOMER'S SWITCHBOARD.  
 CU: LM1\_M x 1
  - ENVIRONMENTAL FILTER CHECKED
- THE FOLLOWING ENVIRONMENTAL ISSUES HAVE BEEN IDENTIFIED FOR THIS PROJECT. ALL RELEVANT PERMITS / PROCEDURES MUST BE OBTAINED / ADHERED TO:
- VEGETATION. TO ENABLE THE CUSTOMER TO OBTAIN CLEARING APPROVALS, WESTERN POWER MUST PROVIDE THE CUSTOMER WITH A DRAWING SHEET OF THE VEGETATION CLEARING REQUIRED (VEGETATION CLEARING REQUIREMENTS TEMPLATE EDM#50997884) AND ANY PHOTOS OR GIS SHAPEFILES, SHOWING THE EXACT LOCATIONS WHERE CLEARING IS REQUIRED. REFER TO CLEARING PERMIT WORK INSTRUCTION (EDM 43938228) FOR FURTHER DETAILS.
- PLEASE REFER TO THE ENVIRONMENTAL DRAWING AND ADVICE (EDM #69466974) FOR MORE INFORMATION.

- ### CUSTOMER SCOPE OF WORK
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE WESTERN AUSTRALIAN SERVICE AND INSTALLATION REQUIREMENTS.
  - PILLAR EXCLUSION ZONE TO BE PREPARED AS PER THE WESTERN AUSTRALIAN SERVICE AND INSTALLATION REQUIREMENTS CLAUSE 12.5.3. THIS INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING:
    - PEGGING THE PILLAR LOCATION AND ADJACENT BOUNDARY LOCATION PRIOR TO CONSTRUCTION.
    - ONLY EASILY REMOVABLE SURFACE TREATMENT IS TO BE INSTALLED IN THIS AREA, SUCH AS BRICK PAVING.
    - CLEAR OF ALL SERVICES INCLUDING CONTAMINATED SOIL, ASBESTOS ETC.
    - LOCATED 300mm ABOVE 100 YEAR FLOOD LEVEL AND NOT IN A PRECARIOUS POSITION.
  - CUSTOMER TO SUPPLY AND INSTALL 'S' TYPE METERING CT'S.
  - CUSTOMER MUST COMPLY WITH POWER QUALITY LIMITS AS PER AS/NZS TS IEC 61000.3.5 AND WESTERN POWER TECHNICAL REQUIREMENTS.
  - CUSTOMER ELECTRICAL CONTRACTOR IS TO SUPPLY SUITABLE LUGS AND CRIMPING TOOLS FOR TERMINATION OF CUSTOMER'S CABLE.
  - CUSTOMER ELECTRICAL CONTRACTOR TO ENSURE CUSTOMER'S SPD GRADES WITH WESTERN POWER'S UPSTREAM PROTECTION AS NOTED ON THE SIMPLIFIED SINGLE LINE DIAGRAM.
  - VEGETATION. BEING A CUSTOMER FUNDED PROJECT, THE CUSTOMER IS RESPONSIBLE FOR OBTAINING ALL NECESSARY CLEARING APPROVALS AND PRIOR TO WESTERN POWER COMMENCING WORKS, THE CUSTOMER IS REQUIRED TO PROVIDE A COPY OF EITHER:
    - A CLEARING PERMIT ISSUED IN THE CUSTOMER'S NAME; OR
    - A REFERRAL DETERMINATION NOTICE ISSUED BY DWER CONFIRMING A CLEARING PERMIT IS NOT REQUIRED BY THE CUSTOMER; OR
    - WRITTEN DETAILS OF A RELEVANT CLEARING PERMIT EXEMPTION AND SUPPORTING DOCUMENTS (REGULATOR CORRESPONDENCE/LANDOWNER EXEMPTION CLEARING LETTER EDM 46147597).
 THIS ALSO INCLUDES RELEVANT DEVELOPMENT APPROVALS FOR THE WORKS (I.E. BUILDING APPROVALS FOR A STRUCTURE THAT REQUIRES CLEARING TO CONSTRUCT), APPROVALS / EXEMPTIONS CAN BE SENT TO THE SETQ ENVIRONMENT TEAM VIA ENVIRONMENT@WESTERNPOWER.COM.AU FOR REVIEW AND SUITABILITY CONFIRMATION. ALLOW 10 BUSINESS DAYS FOR ENVIRONMENT TEAM TO REVIEW.
  - REFER TO SHEET 2 FOR MORE DETAILS.
  - CONSERVATION FLORA. CUSTOMER SHALL UNDERTAKE ANY NECESSARY FLORA SURVEYS AND IF REQUIRED OBTAIN RELEVANT APPROVALS TO CLEAR THREATENED OR PRIORITY FLORA. ALL SURVEYS AND APPROVALS SHALL BE PROVIDED TO WESTERN POWER FOR RECORDKEEPING AND REVIEW.
  - THREATENED & PRIORITY ECOLOGICAL COMMUNITIES. CUSTOMER IS RESPONSIBLE FOR UNDERTAKING ALL SURVEYS REQUIRED TO CONFIRM THE PRESENCE OR ABSENCE OF THREATENED OR PRIORITY ECOLOGICAL COMMUNITIES, AND FOR OBTAINING THE RELEVANT APPROVALS TO CLEAR TCES/PECS IF REQUIRED. ALL SURVEYS AND APPROVALS SHALL BE PROVIDED TO WESTERN POWER PRIOR TO THE COMMENCEMENT OF WORKS.
  - ENVIRONMENTALLY SENSITIVE AREAS. THE PROJECT OCCURS WITHIN WP ESA F655. REFER TO THE RELEVANT ACCESS PROCEDURES. THE PROJECT IS ALSO WITHIN A DWER ESA. REGULATION 5 EXEMPTIONS CANNOT BE USED IN AN ESA. IF CLEARING IS REQUIRED, A NATIVE VEGETATION CLEARING PERMIT OR REFERRAL DETERMINATION NOTICE ISSUED BY DWER CONFIRMING A CLEARING PERMIT IS NOT NECESSARY WILL BE REQUIRED.

#### LEGEND

**HV CABLES**

- CN53 - 400mm<sup>2</sup> (3X1c)
- CN49 - 240mm<sup>2</sup> (3X1c)
- CN48 - 185mm<sup>2</sup> (3X1c)
- CN50 - 95mm<sup>2</sup> (3X1c)
- CN51 - 50mm<sup>2</sup> (3X1c)
- CN51 - 50mm<sup>2</sup> (1c)
- CN44 - 35mm<sup>2</sup> (3X1c)
- CN47 - 35mm<sup>2</sup> (1c)

**EXISTING HV CABLES (SIZE AND TYPE INDICATED)**

**LV-SL CABLES**

- CN45 - 240mm<sup>2</sup> (1x3c)
- CN44 - 185mm<sup>2</sup> (1x3c)
- CN43 - 120mm<sup>2</sup> (1x3c)
- CN42 - 25mm<sup>2</sup> (1x3c)
- CN41 - 16mm<sup>2</sup> SL (1c)

**EXISTING LV CABLES (SIZE AND TYPE INDICATED)**

**STREET LIGHTS**

- POLE BRACKET
- SINGLE OUTREACH
- DOUBLE OUTREACH
- L-WAY

**EXISTING**

- POLE BRACKET
- SINGLE OUTREACH
- DOUBLE OUTREACH
- L-WAY

**PILLARS / PITS / ETC**

- MINI (WORKING END)
- UNIVERSAL
- MINI
- LINK
- CABLE MARKER U/G
- Serviced/Unserviced De-energised Lot
- UMS PIT
- UTILITIES PIT
- BGSP PIT
- 100/200AMP CUTOUT
- CONDUIT / POLY PIPE

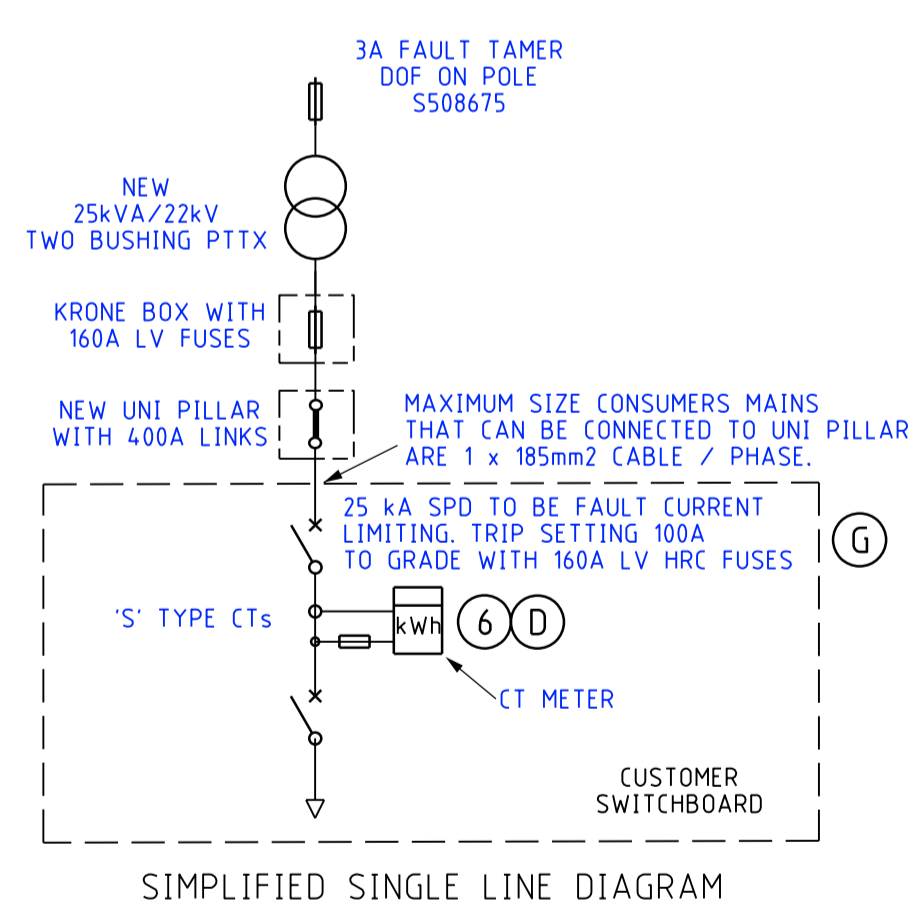
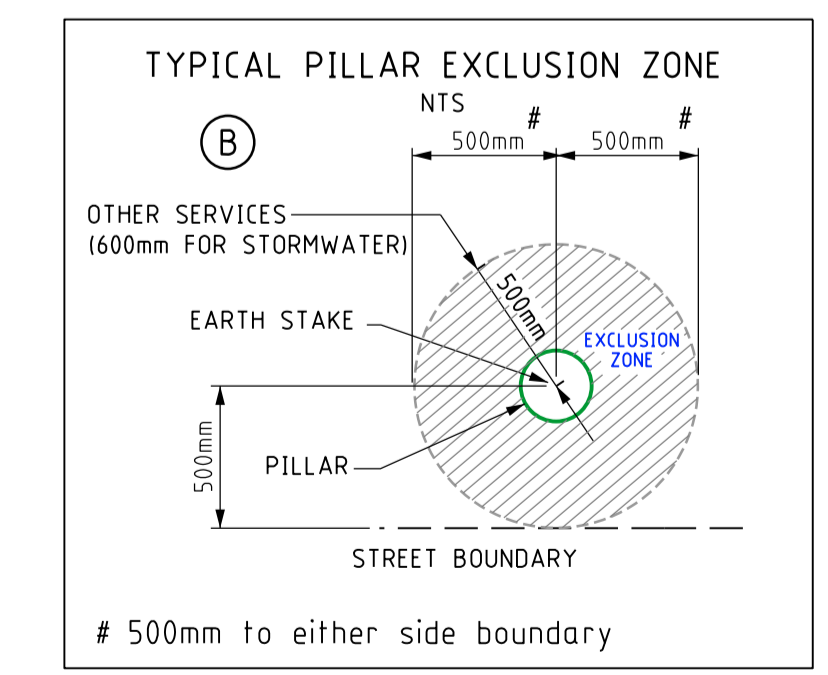
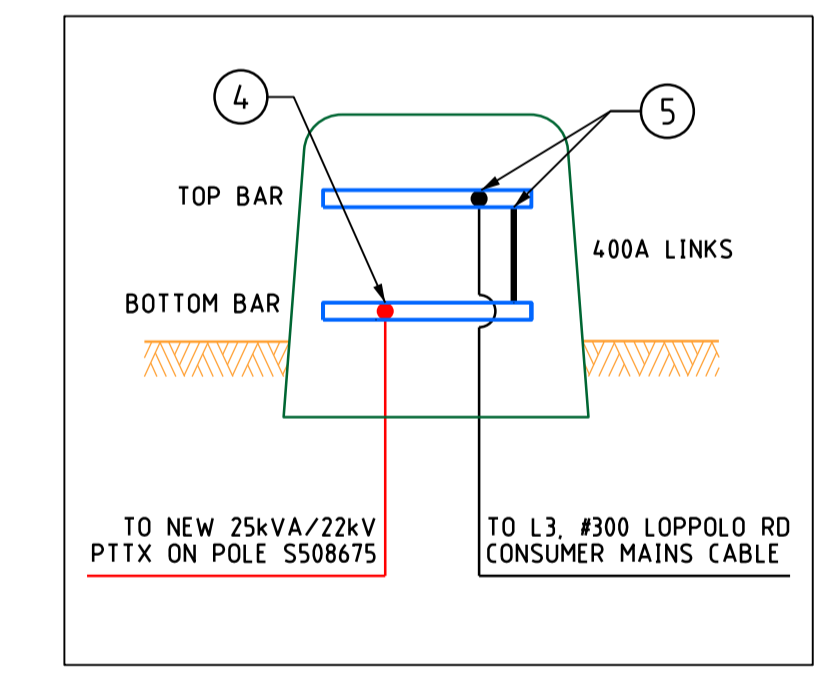
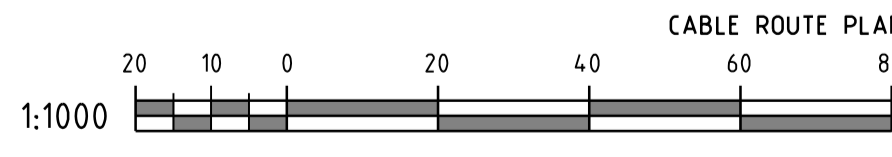
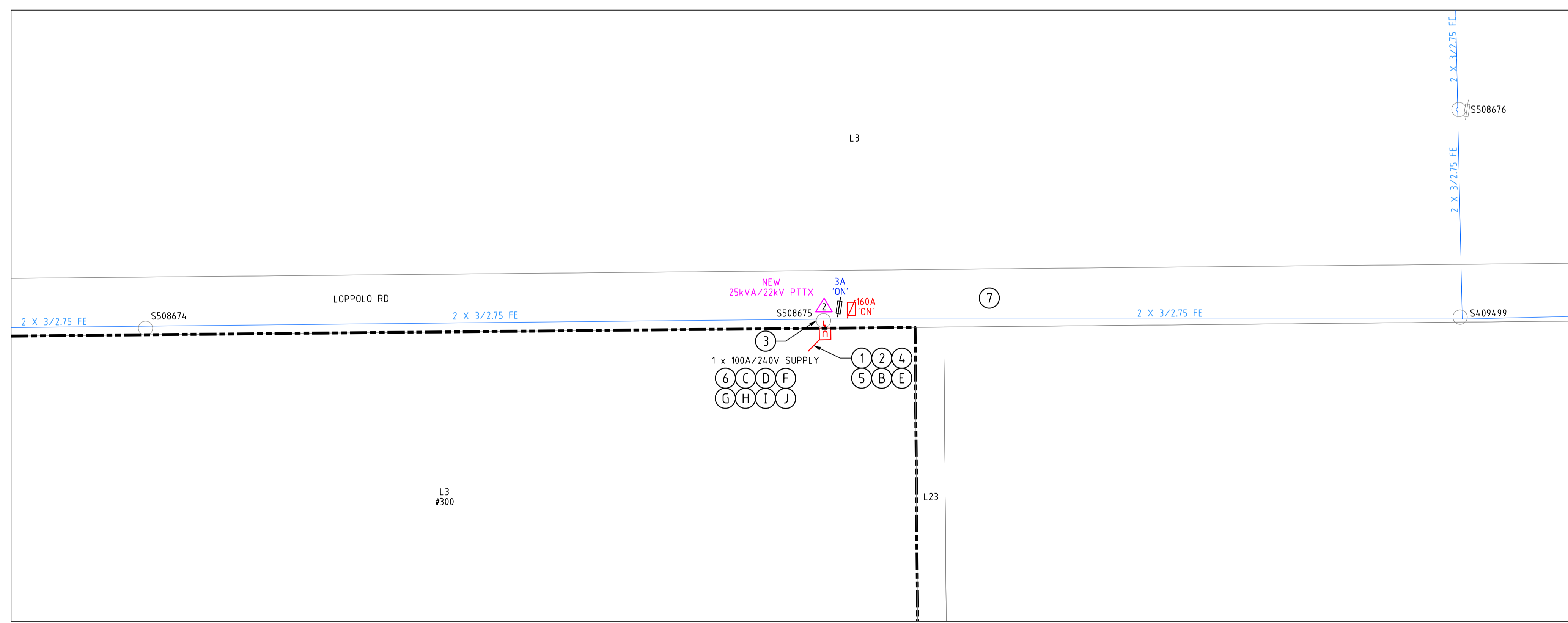
**TRANSFORMER** (T)    **EXISTING** (T)    **SWITCHGEAR** (S)

**AERIAL CONDUCTORS AND POLES**

- NEW POLE (ANY TYPE AS INDICATED)
- EXISTING POLE (ANY TYPE AS INDICATED)
- EXISTING AERIAL CONDUCTORS (SIZE AND TYPE INDICATED)

**OH EQUIPMENT**

- INTERMEDIATE
- DOP
- INLINE STRAIN
- PTT
- AERIAL STAY
- RECLOSER
- LOAD BREAK SWITCH
- CAPACITOR
- LBPTS
- PTS
- HV ISOLATOR
- LV DISCONNECTOR
- ISOL TX
- OUTRIGGER STAY
- GROUND STAY
- SECTIONALISER
- KRONE FUSE
- STREETLIGHT BDX



NO NATIVE VEGETATION MAY BE DISTURBED WITHOUT A PERMIT. IF IN DOUBT PLEASE CONTACT THE RELEVANT MANAGER WHO WILL CONTACT WESTERN POWER ENVIRONMENTAL OPERATION TO ARRANGE A PERMIT. PLEASE NOTE: HEAVY PENALTIES MAY APPLY TO INDIVIDUALS AND BUSINESSES FOR DAMAGE TO NATIVE VEGETATION WITHOUT A PERMIT.

**NOTE TO SPIDA FOR POLE S508675**  
 PLEASE INCLUDE FEATURE TEXT, DETAIL AND COMMENT IN SPIDA ASSET MANAGEMENT PORTAL DX STATING 'NON-STANDARD POLE CONSTRUCTION-EDM#68862889' REFER TO DQM PROJECT NP031879'

ISSUED FOR CONSTRUCTION

**CUSTOMER CONTACT DETAILS**  
 COMPANY NAME: BMM GROUP  
 CONTACT: PETER EDWARDS    TEL: +61 2 8358 8611

**CONSULTANT CONTACT DETAILS**  
 COMPANY NAME: RAIDEN CENTAURI  
 CONTACT: ABDIKARIM SAID    TEL: +61 4 8199 6343

Rev.	ISSUED FOR CONSTRUCTION	REVISIONS	I.D.	DRN	DATE	HAZARD MANAGEMENT REGISTER EDM: # 68501980	REFERENCE FILE DETAILS
A	ISSUED FOR CONSTRUCTION				08/24		

## NEW COMMERCIAL SUPPLY

### 1 x 24kVA/100A SUPPLY - NETWORK VOLTAGE: 22kV/240V

L3, #300 LOPPOLLO RD, CHITTERING

DESIGN DRAWING

DESIGNER: CUSTOMER CONNECTION DESIGN

DESIGN TEAM: CCS SBM QAT - GHD

EMAIL: ccs.sbm.qat@westernpower.com.au

TEL: 13 10 87

DATE: 08/24    SCALE: AS NOTED @ A1

GEO REF: Lat. - 31°28'25.7" S  
 Long. - 115°57'36.8" E

**westernpower**

DRAWING NUMBER

# NP031879

SHEET 01 OF 02

REV: A    ORIGINAL SIZE - A1