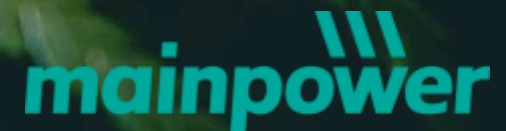




# Case - study LV Fackfeeds

## Incident – Electric Shock from Disconnected Mains Cable (19 April 2018)

EEA H&S Workshop  
10-11 October 2018















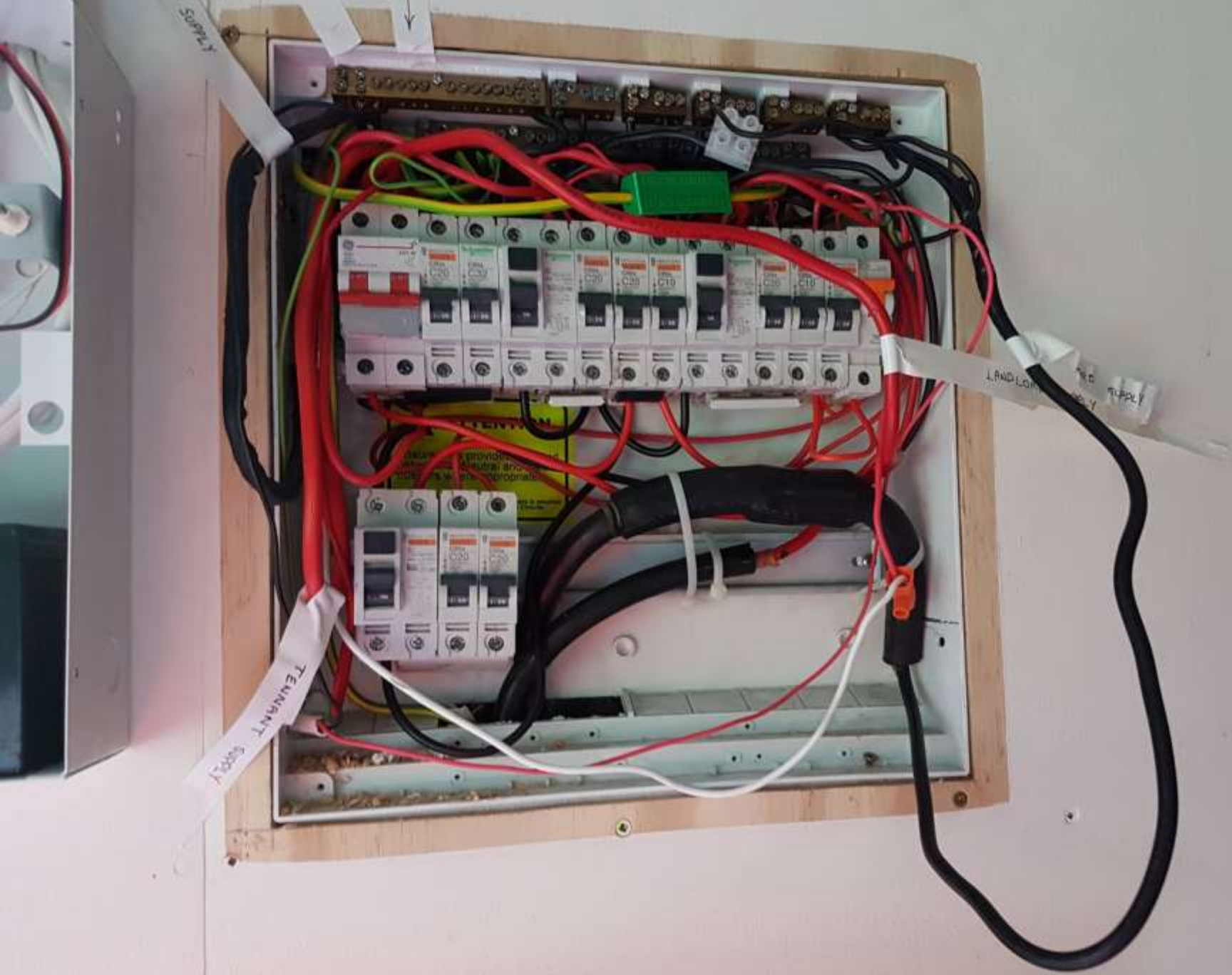














Two  
Supplies  
Labelling

1x From HOUSE  
1x STREET



→ WARNING - 2 Supplies to this sw Bd

MAN Wm over

MIN 100 0000 RED Play Light 10/15 RED Play Play Light  
Wm  
SV 10/15

RED Play Play





TELEPHONE

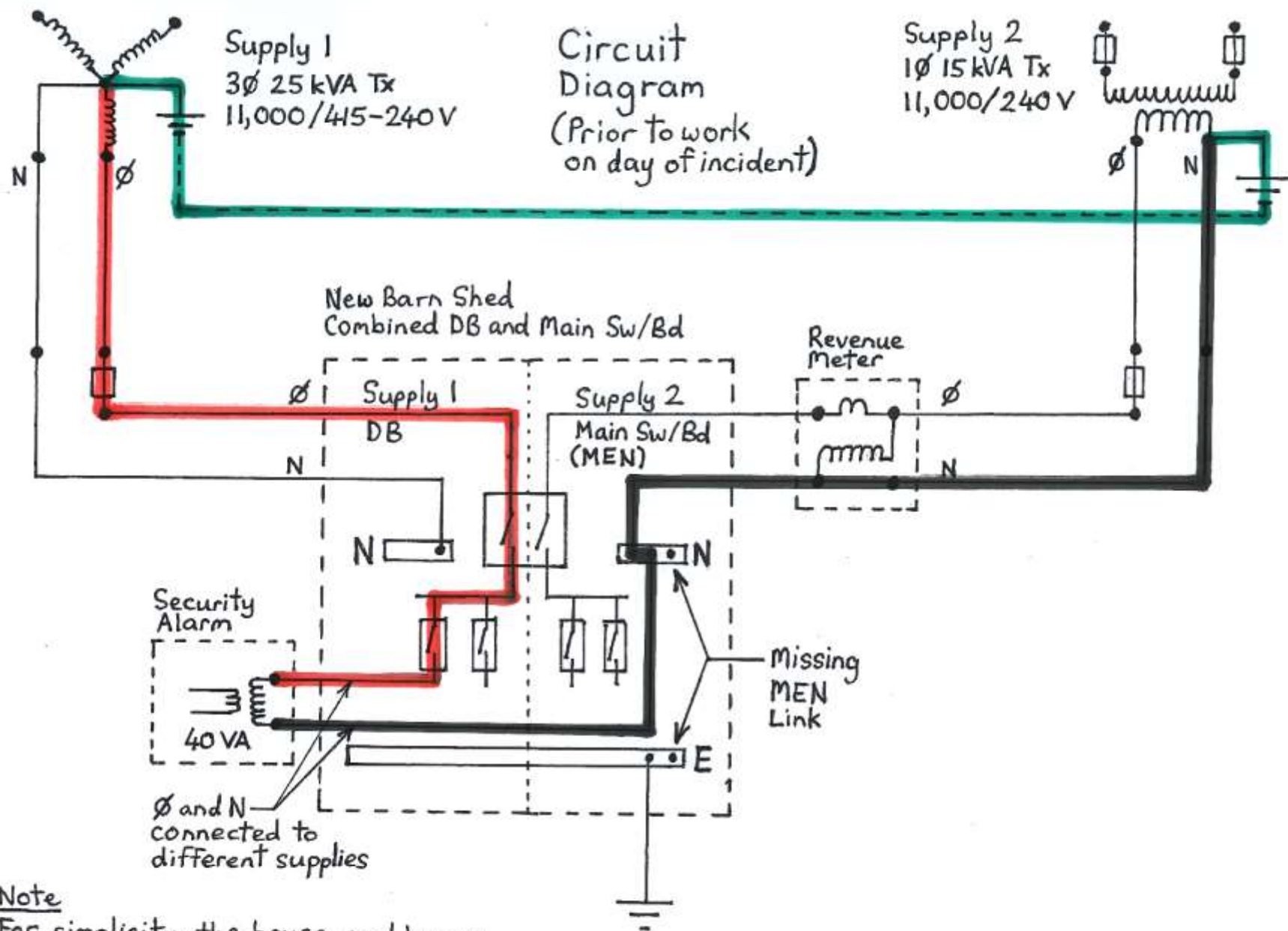
TELEPHONE SUPPLY

TELEPHONE

TELEPHONE







#### Note

For simplicity, the house, pool house, and old barn shed switchboards are not shown.













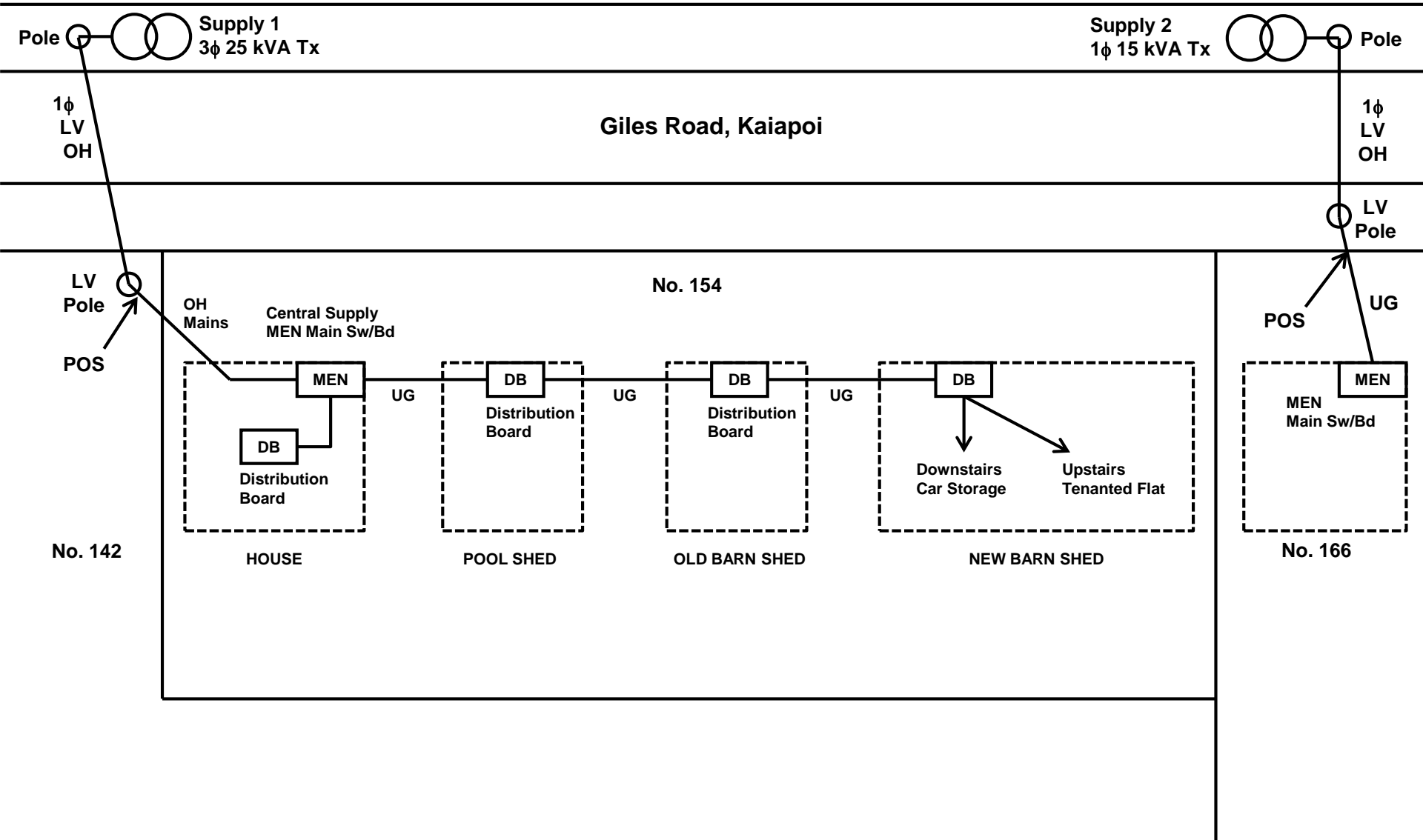






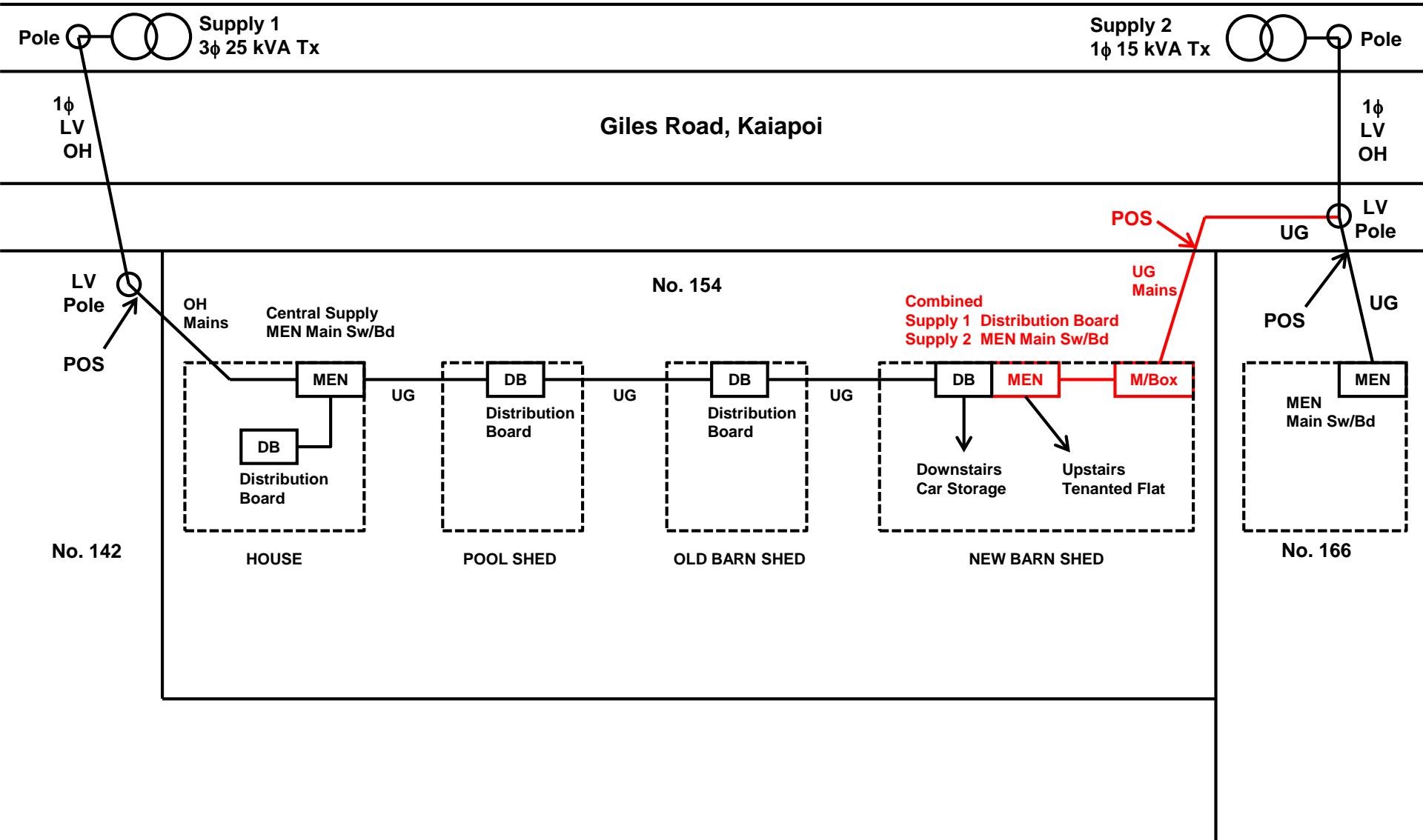


Single Line Diagram

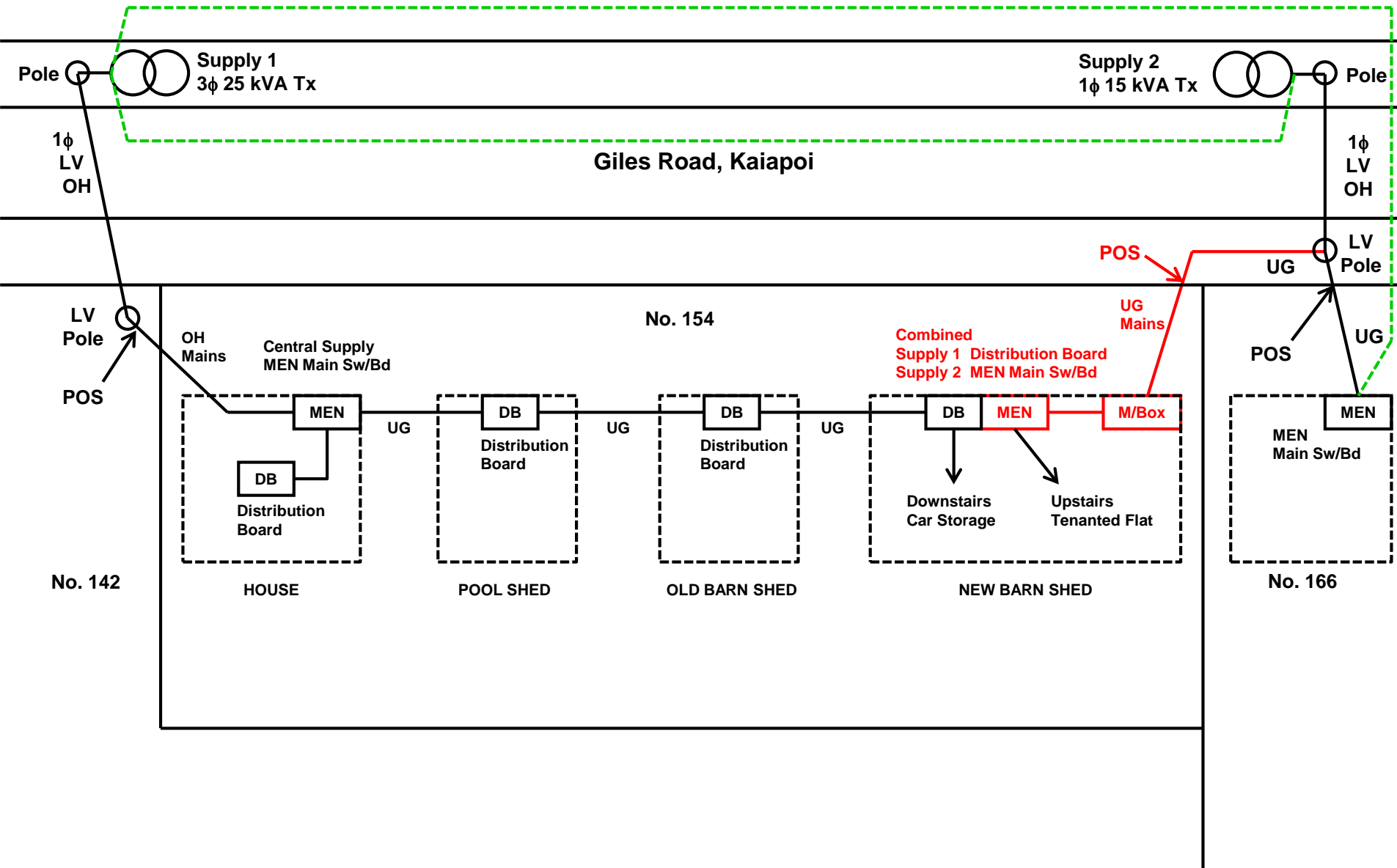




Single Line Diagram

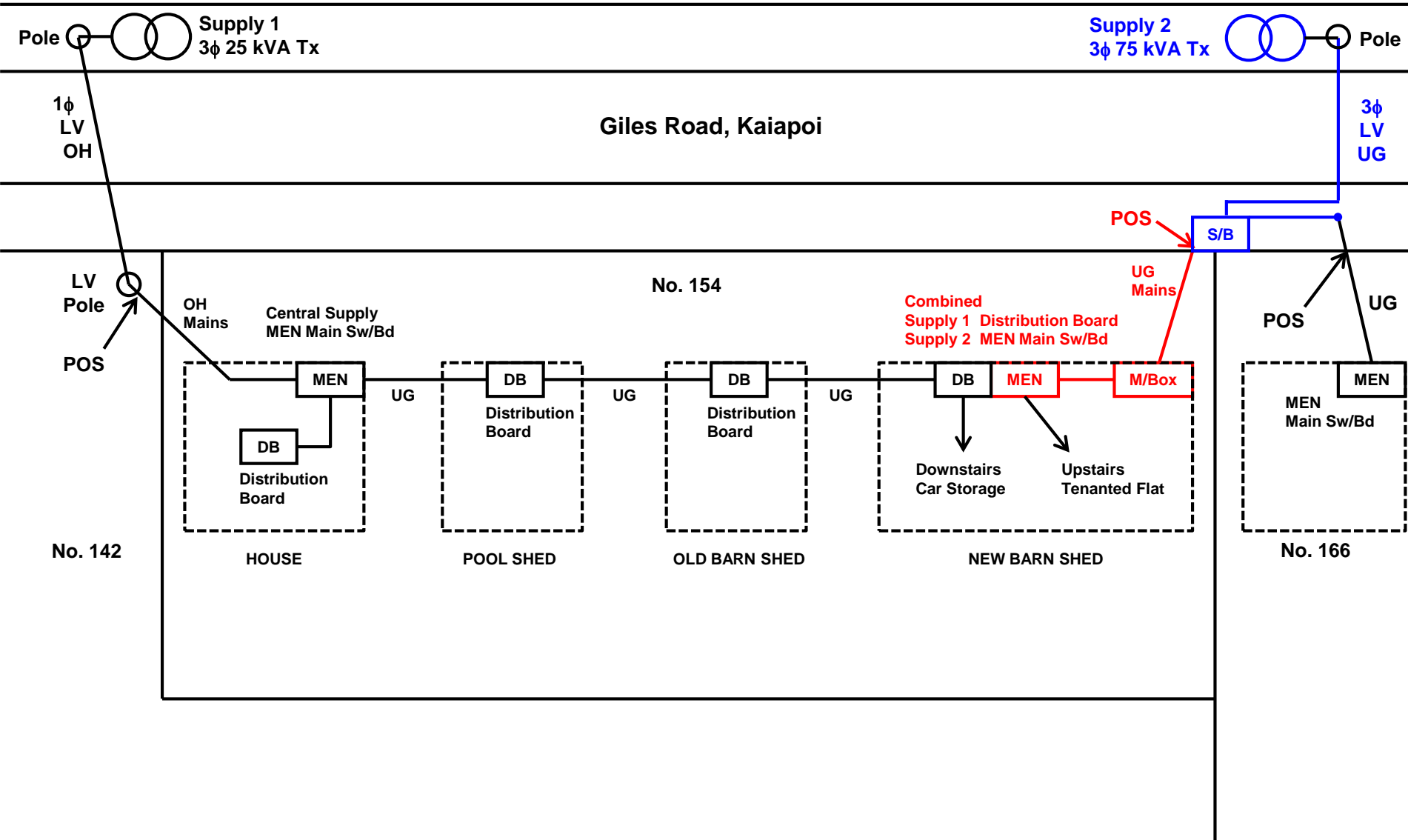


Single Line Diagram

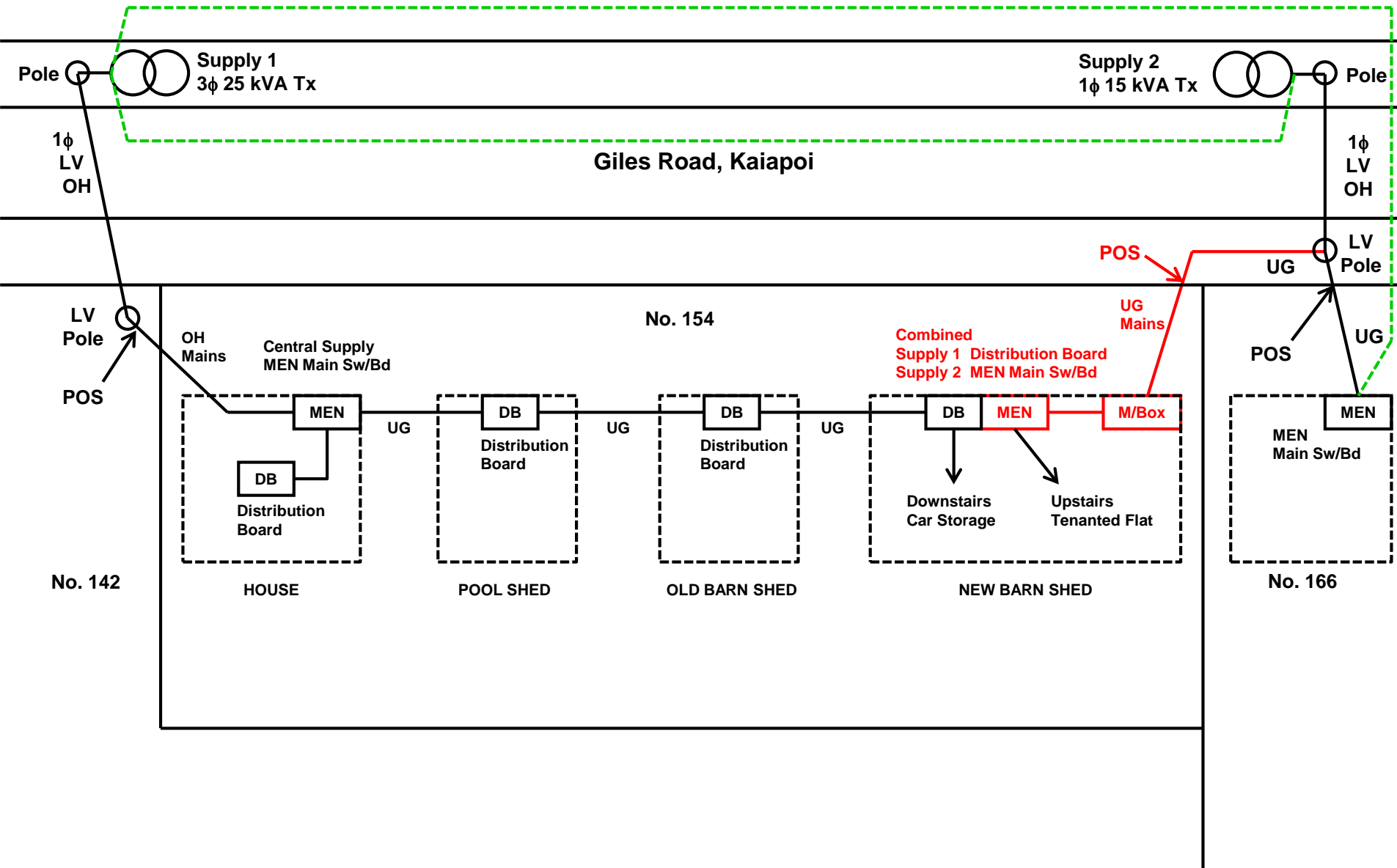




Single Line Diagram

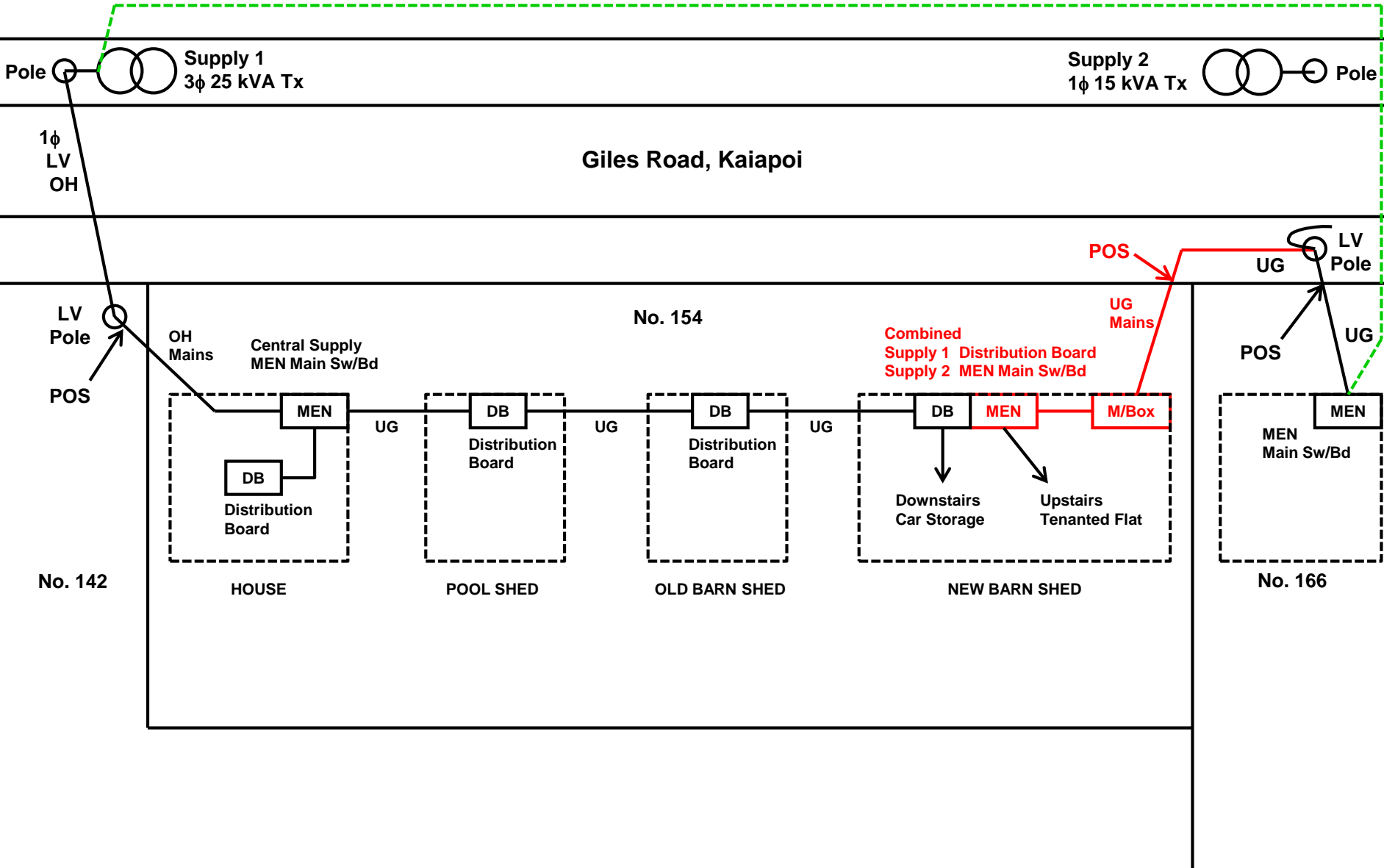


# Single Line Diagram

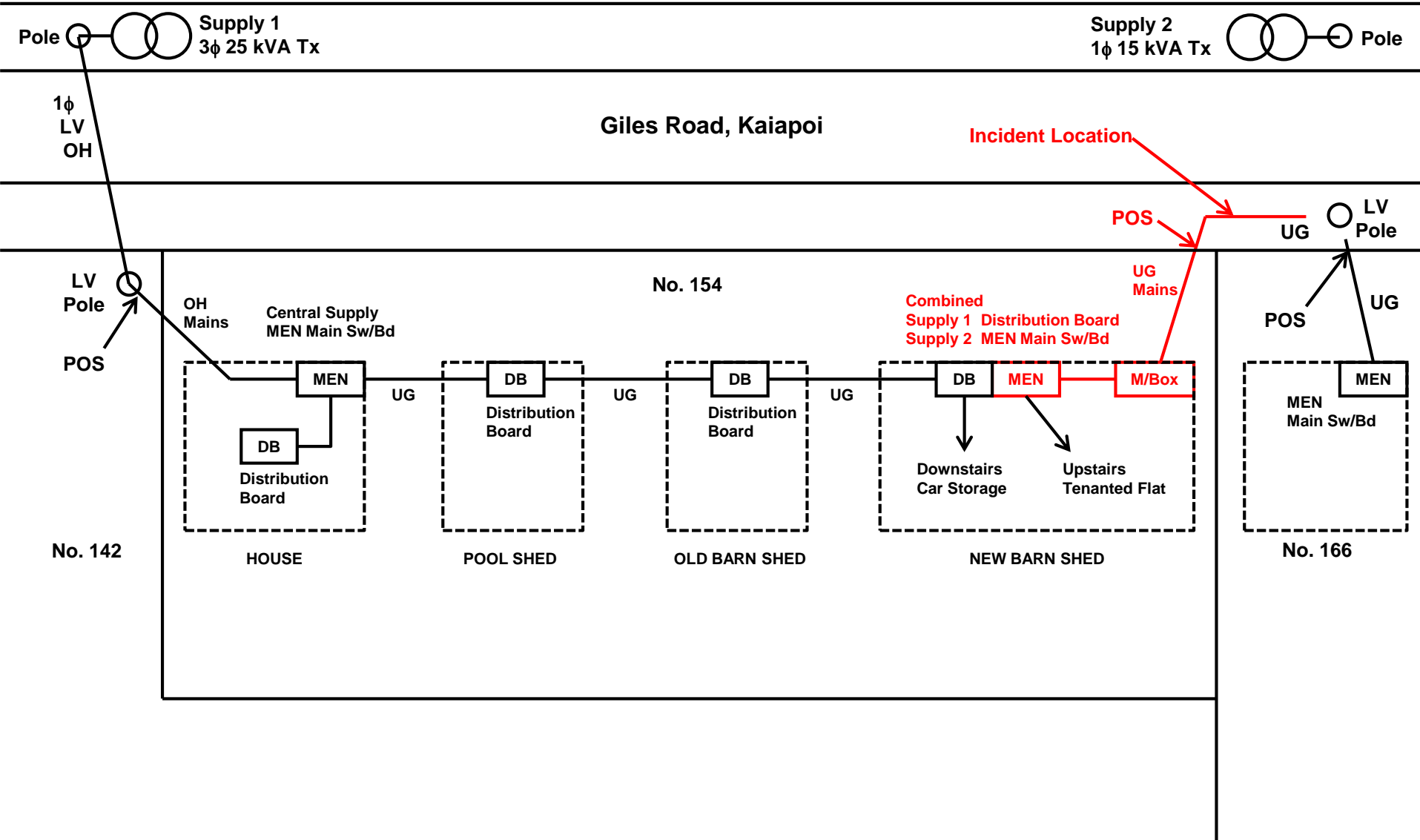




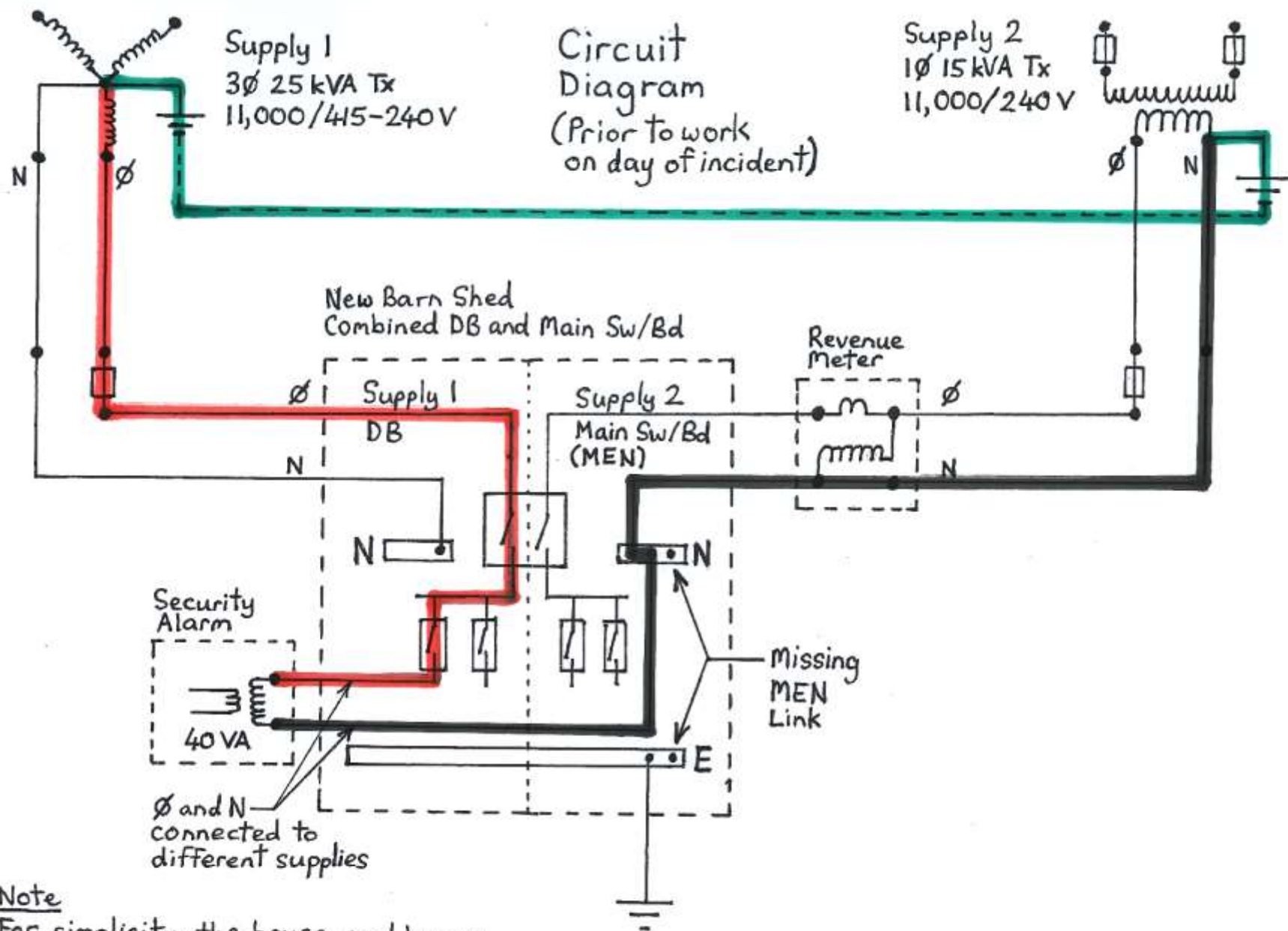
Single Line Diagram



## Single Line Diagram

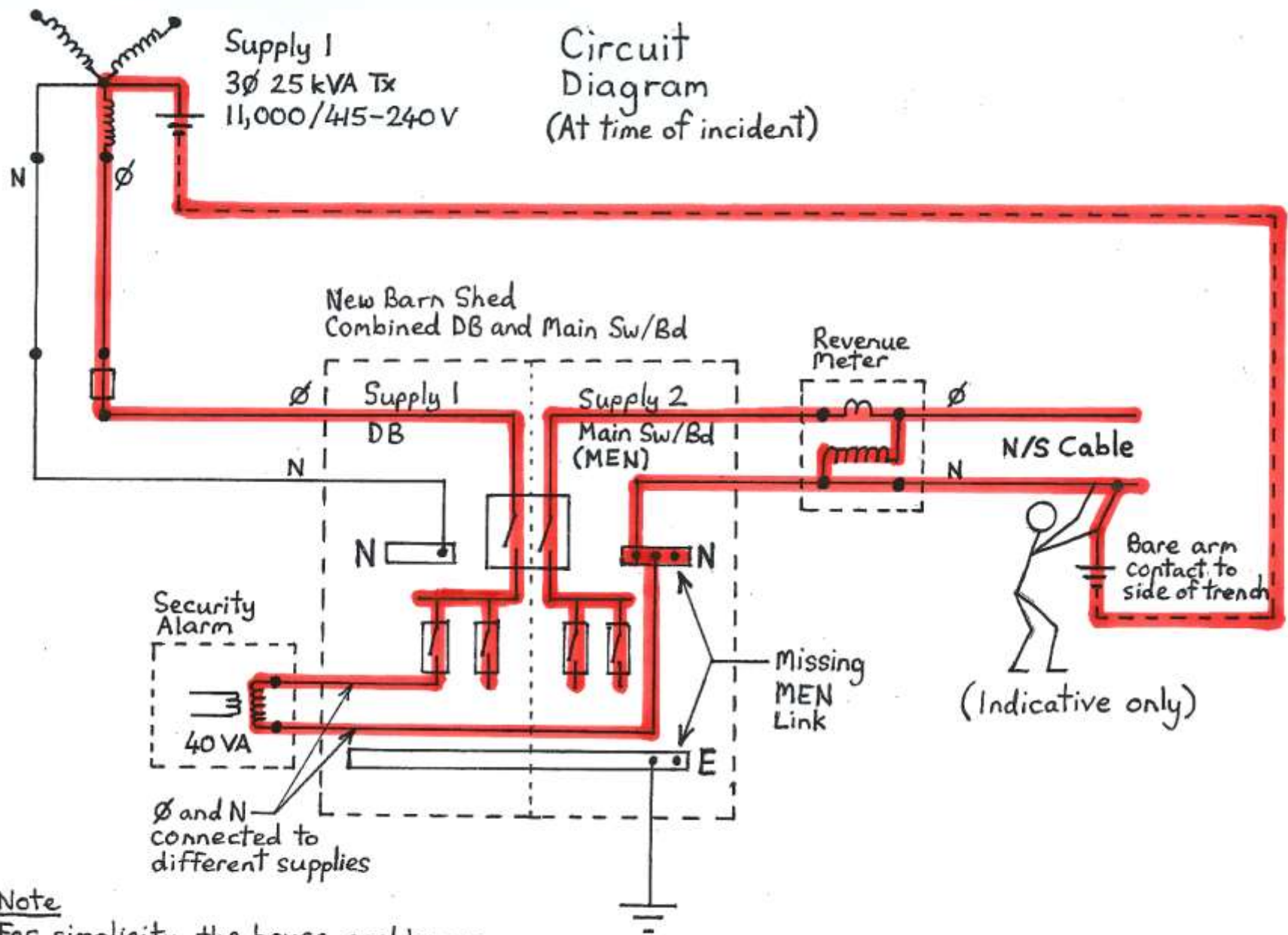




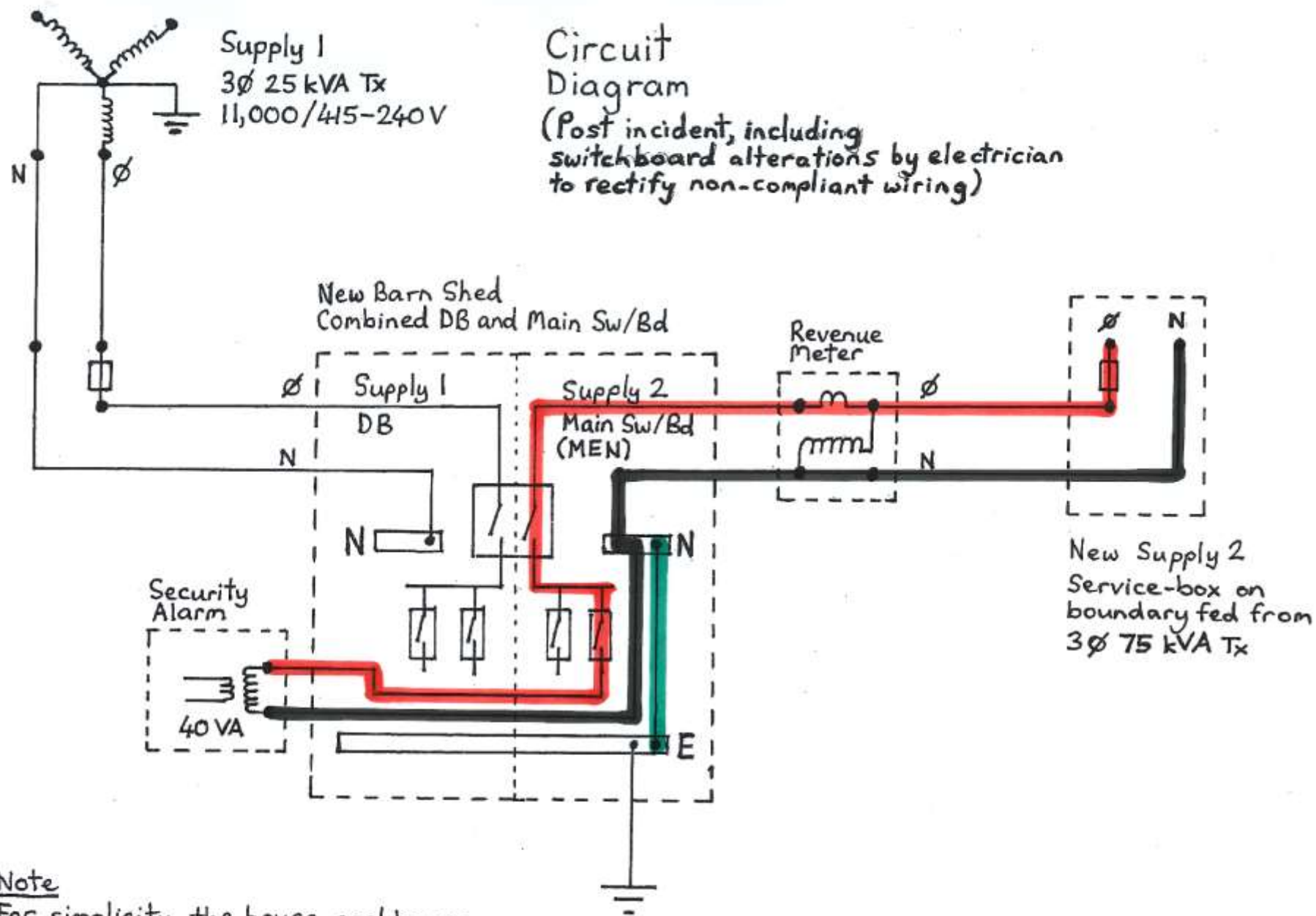


#### Note

For simplicity, the house, pool house, and old barn shed switchboards are not shown.







Note

For simplicity, the house, pool house, and old barn shed switchboards are not shown.

# **Industry Rules and Guidance Documentation**

- SM-EI Rule 3.731 (Power Cables)
- Safe Practices for LV Electrical Work (Jul 2012)
- Guide to Live LV Electrical Work (May 2017)
- Guide to Safe Work with Cables (Nov 2017)
- The Line Mechanics' and Cable Jointers' Handbook (6th Ed)



# Potential Sources of Backfeeds

- More than one transformer supply
- Photovoltaic systems
- Battery / inverter systems
- Fixed wired generators
- Portable generators

# **Risk Mitigation for Potential Backfeeds**

- Control of isolation points
- Earthing
- Equipotential zone at the working position
- Live work practices and wear appropriate PPE, including insulating gloves



