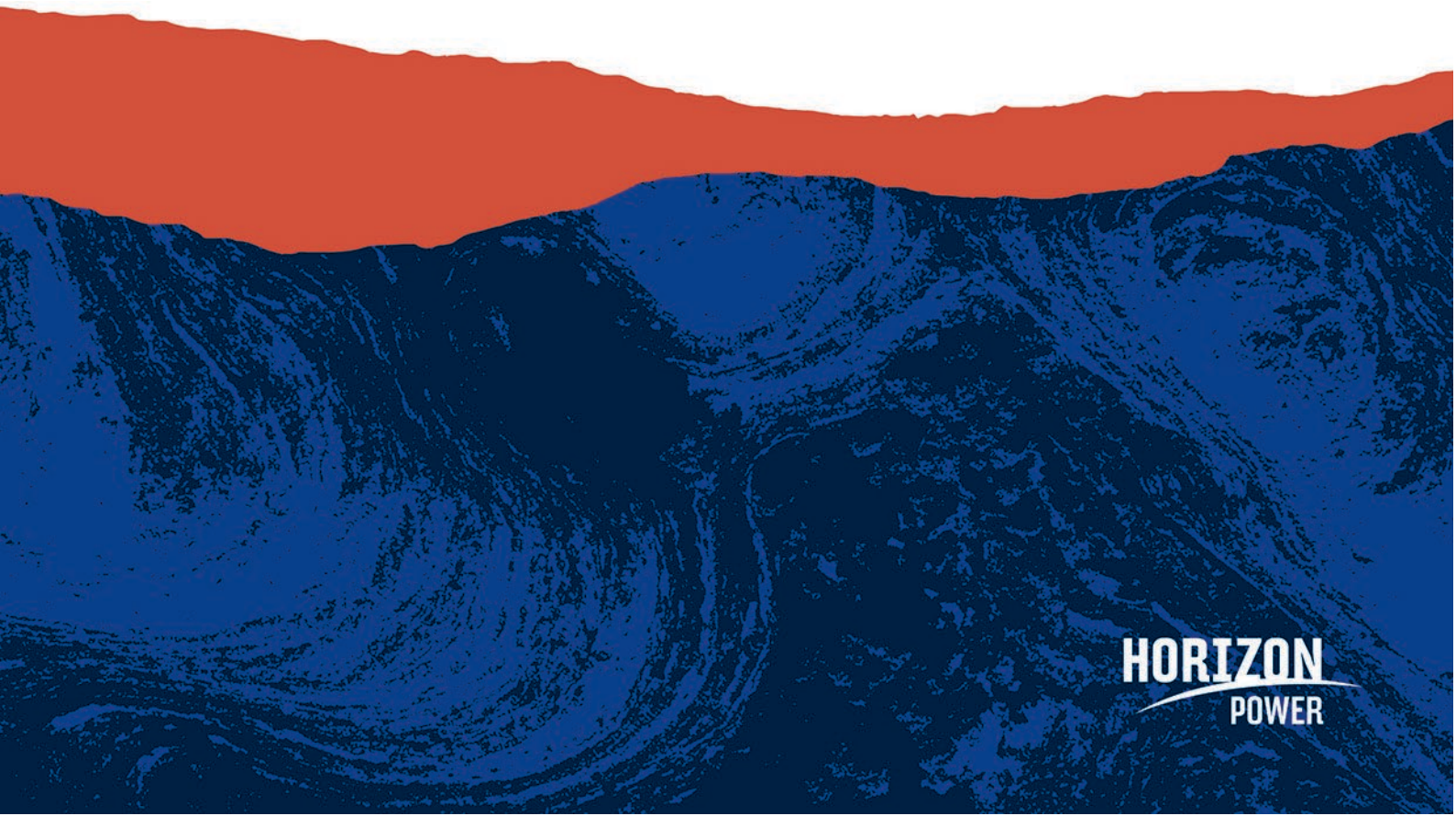
Distribution Construction Standards

Part 09: M – Miscellaneous

HPC-5DM-07-0001-2014

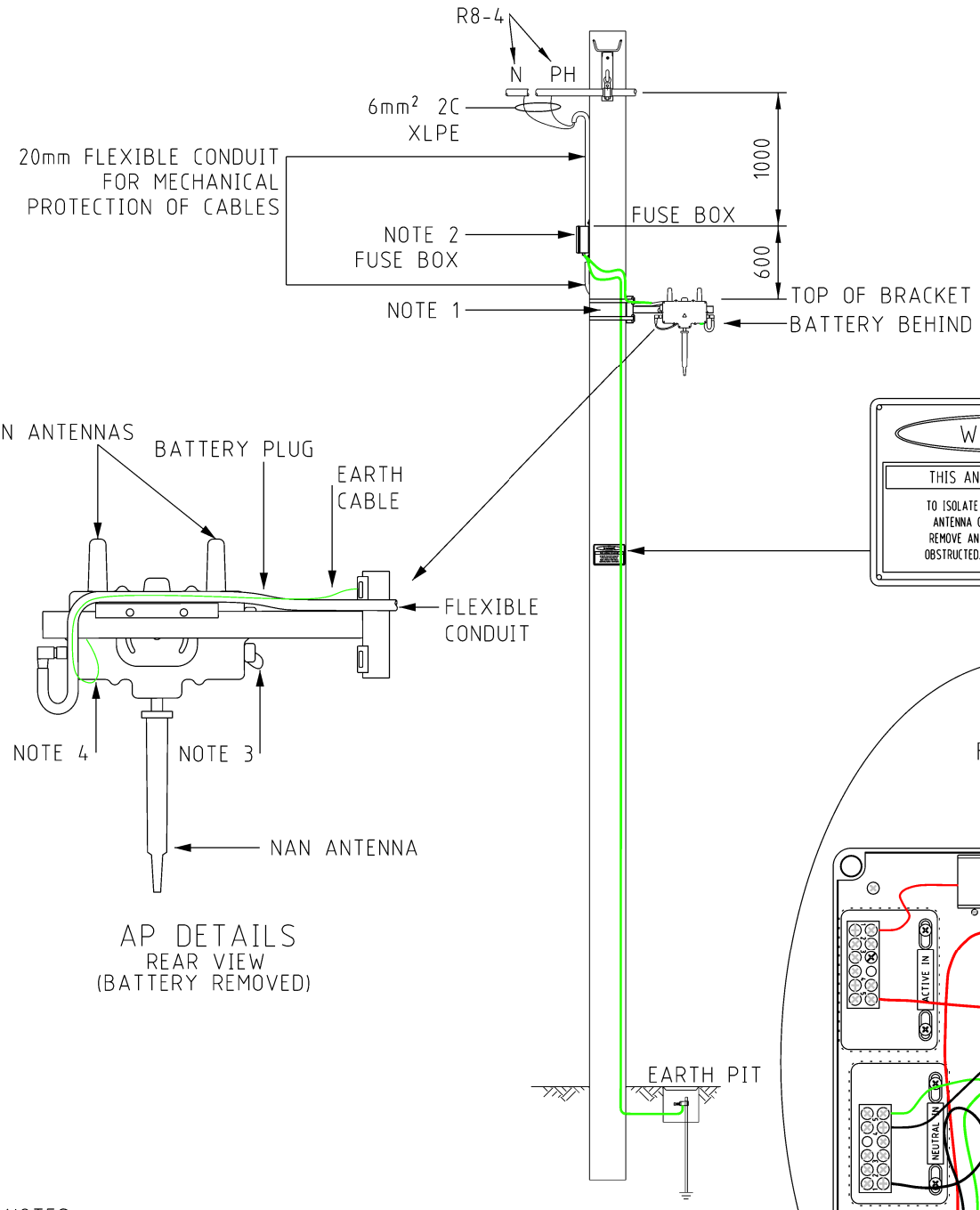
Version: 5

Date of issue: 22/01/2025

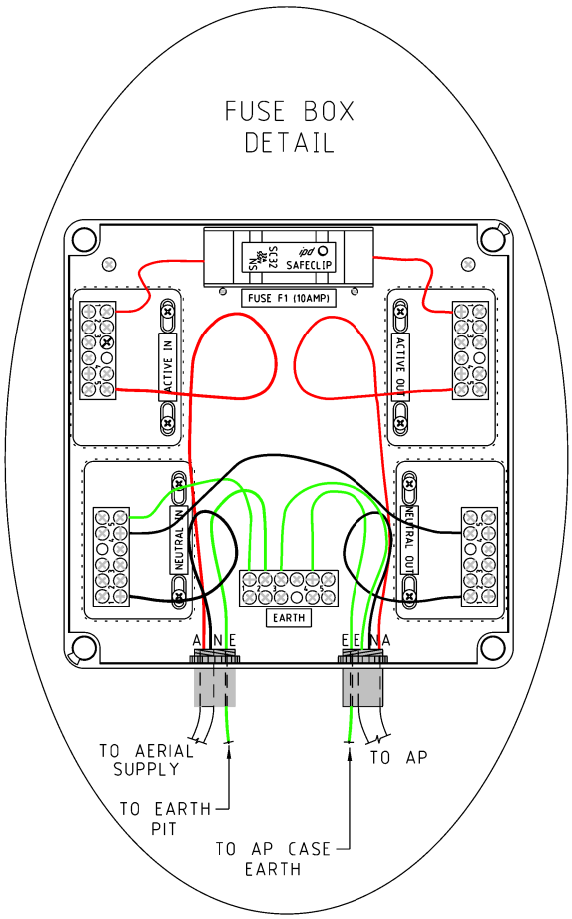


Part 9 – Miscellaneous – Drawing Register

Number	Description
M1-1	SSN Network Device with LV Aerial Supply (ABC) Arrangement
M1-2	SSN Network Device with LV Aerial Supply Arrangement (9.5m Pole)
M1-3	SSN Network Device with LV Aerial Supply Arrangement (11m Pole)
M1-4-1	SSN Network Device with Street Light Supply Class I Arrangement
M1-4-2	SSN Network Device with Street Light Supply Class I & II Hybrid Arrangement
M1-6	SSN Network Device with LV Kiosk (Type 1) Supply Arrangement (Above 100km Distance) – Street Light Pole
M1-7	SSN Network Device with LV Kiosk (Type 1) Supply Arrangement (Above 100km Distance) – Street Light Pole
M3-1	Pole Top Switch or Isolator Ground Clearing Details
M3-2	Expulsion Type Drop Out Fuse Ground Clearing Details
M5	WAPOL Camera Bracket Streetlight Attachment
M6	Overhead Fault Indicator Solar Connection



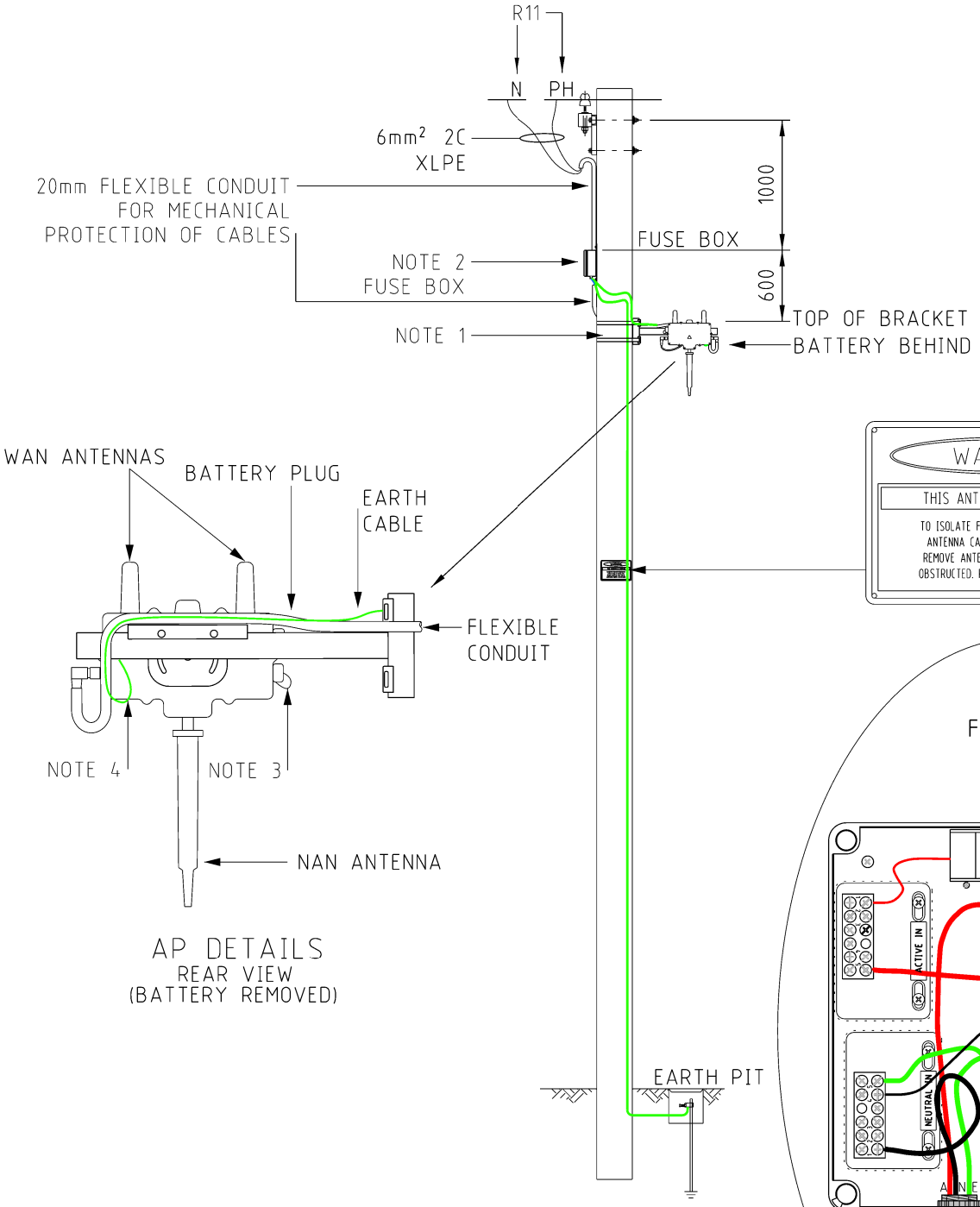
AP DETAILS
REAR VIEW
(BATTERY REMOVED)

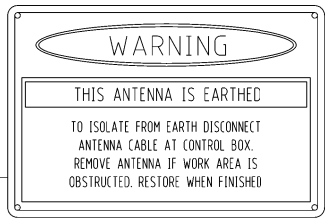


NOTES:

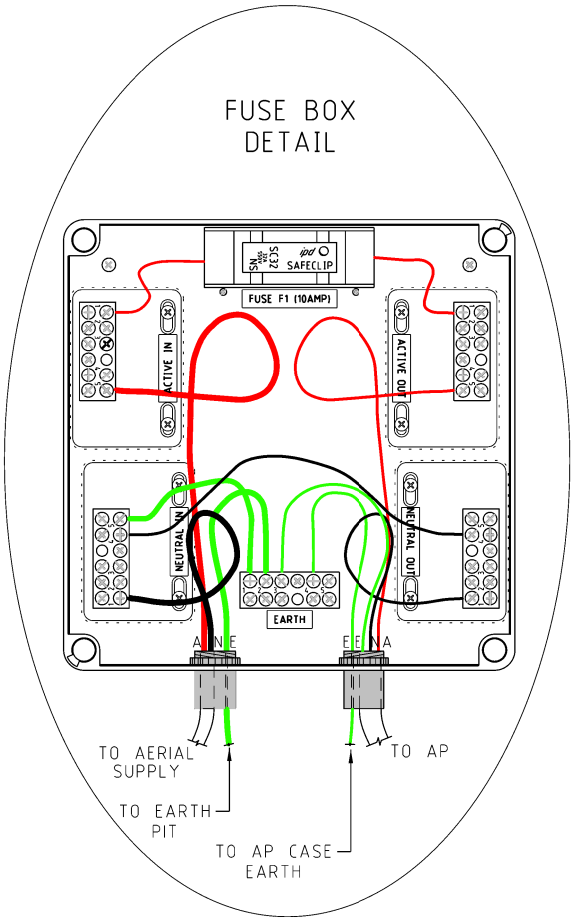
1. USE 2 x 32mm BANDIT STRAPS FOR STEEL POLES, FOR EXISTING WOOD POLES USE 2 x M16 x 400mm BOLTS.
2. FUSE BOX TO POLE USING 20mm BANDIT STRAPS (STEEL) OR 2 x M12 BOLTS (WOOD)
3. BATTERY AND LAN PLUG CAPS TO REMAIN IN PLACE UNTIL CABLE IS FITTED
4. TERMINATE EARTH CABLE TO AP CASE EXTERNAL EARTHING POINT

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS ENGINEERING DIVISION	MISCELLANEOUS	REVISION E	DATE 22/01/2025
	SSN NETWORK DEVICE WITH LV AERIAL SUPPLY (ABC) ARRANGEMENT	DRAWING No. M1-1	





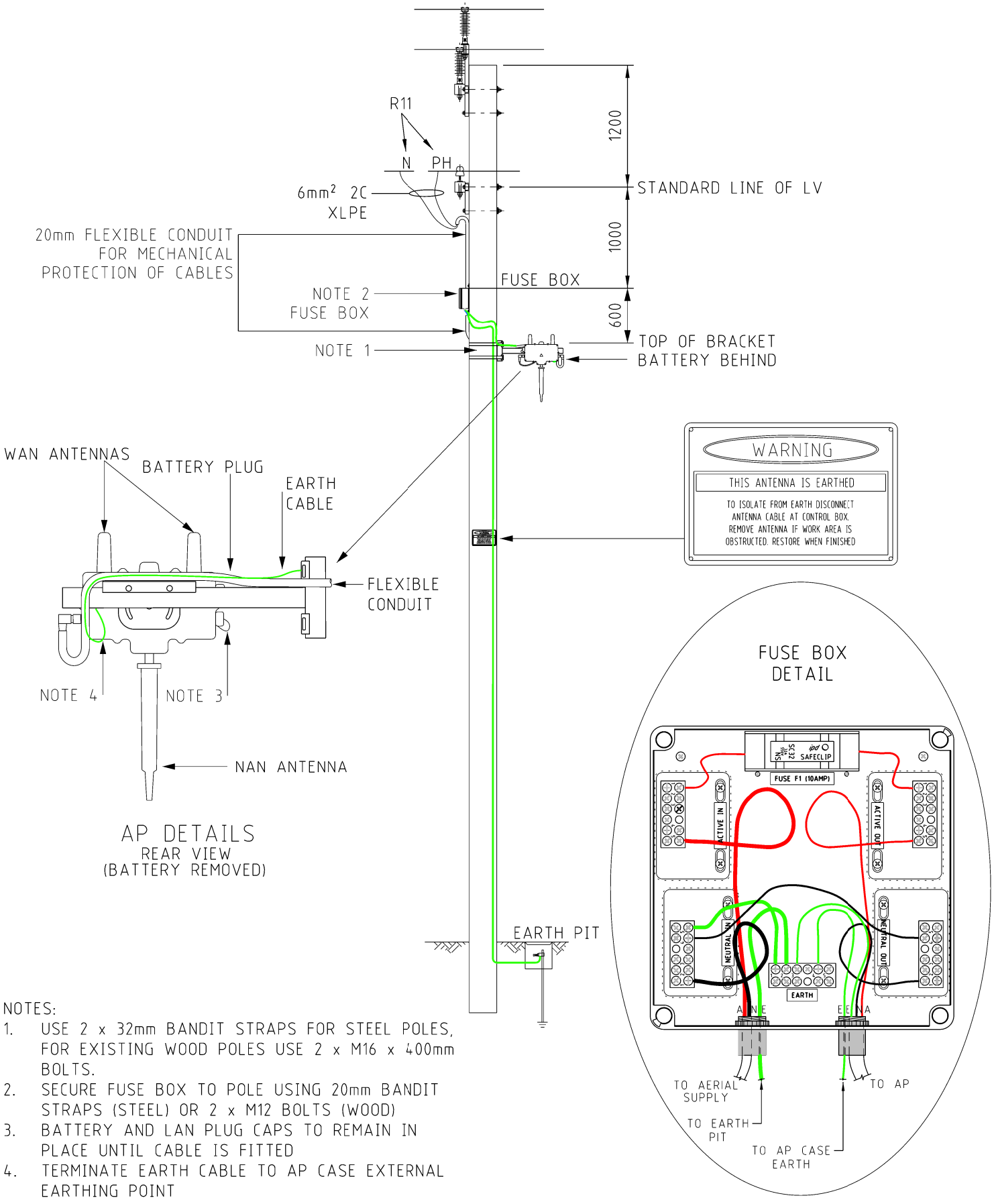
AP DETAILS
REAR VIEW
(BATTERY REMOVED)



NOTES:

1. USE 2 x 32mm BANDIT STRAPS FOR STEEL POLES, FOR EXISTING WOOD POLES USE 2 x M16 x 400mm BOLTS.
2. SECURE FUSE BOX TO POLE USING 20mm BANDIT STRAPS (STEEL) OR 2 x M12 BOLTS (WOOD)
3. BATTERY AND LAN PLUG CAPS TO REMAIN IN PLACE UNTIL CABLE IS FITTED
4. TERMINATE EARTH CABLE TO AP CASE EXTERNAL EARTHING POINT

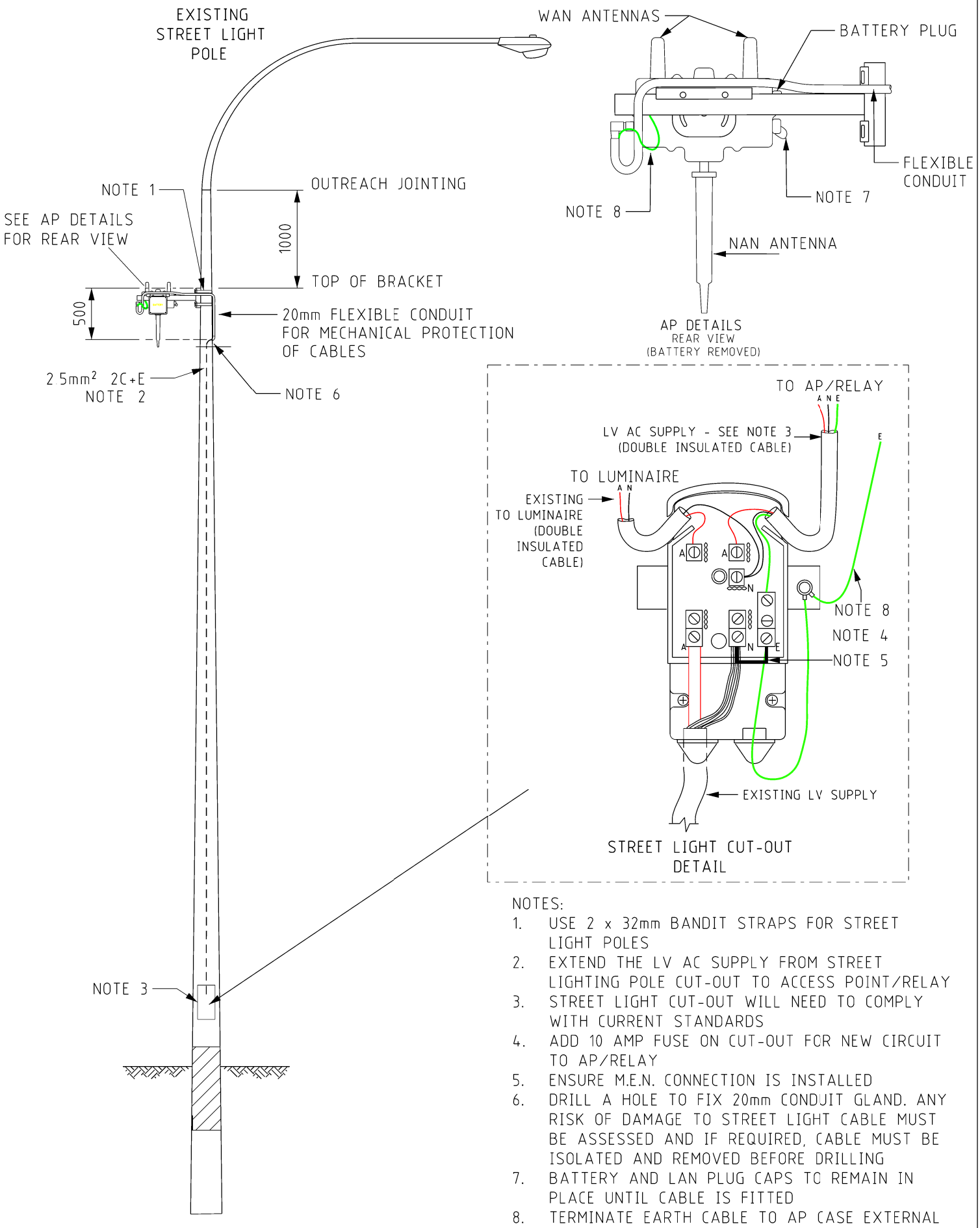
HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS ENGINEERING DIVISION	MISCELLANEOUS	REVISION E	DATE 22/01/2025
	SSN NETWORK DEVICE WITH LV AERIAL SUPPLY ARRANGEMENT 9.5m POLE	DRAWING No. M1-2	



AP DETAILS
REAR VIEW
(BATTERY REMOVED)

NOTES:
1. USE 2 x 32mm BANDIT STRAPS FOR STEEL POLES, FOR EXISTING WOOD POLES USE 2 x M16 x 400mm BOLTS.
2. SECURE FUSE BOX TO POLE USING 20mm BANDIT STRAPS (STEEL) OR 2 x M12 BOLTS (WOOD)
3. BATTERY AND LAN PLUG CAPS TO REMAIN IN PLACE UNTIL CABLE IS FITTED
4. TERMINATE EARTH CABLE TO AP CASE EXTERNAL EARTHING POINT

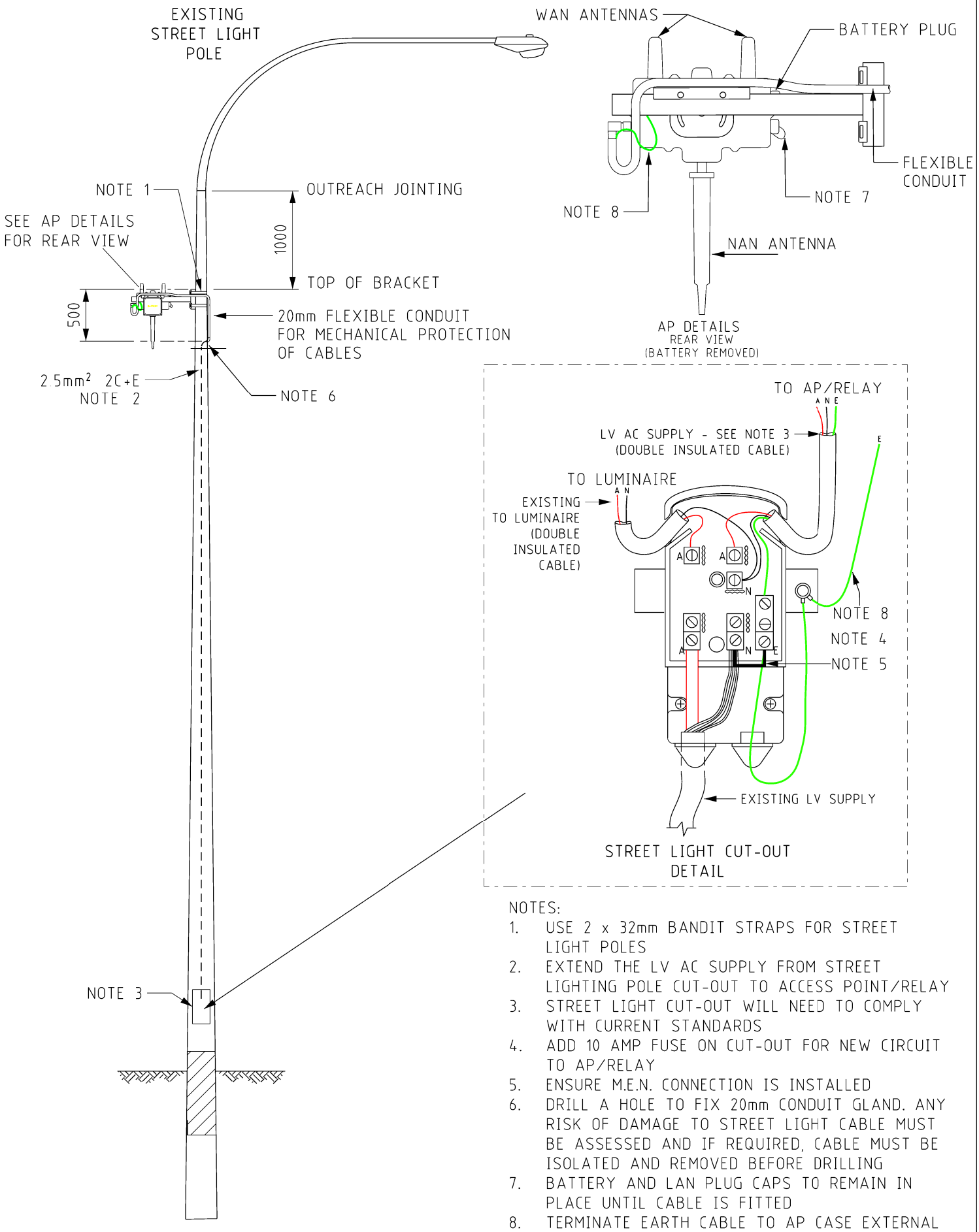
HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS ENGINEERING DIVISION	MISCELLANEOUS	REVISION E	DATE 22/01/2025
	SSN NETWORK DEVICE WITH LV AERIAL SUPPLY (ON HV POLE) ARRANGEMENT 11m POLE	DRAWING No. M1-3	



NOTES:

1. USE 2 x 32mm BANDIT STRAPS FOR STREET LIGHT POLES
2. EXTEND THE LV AC SUPPLY FROM STREET LIGHTING POLE CUT-OUT TO ACCESS POINT/RELAY
3. STREET LIGHT CUT-OUT WILL NEED TO COMPLY WITH CURRENT STANDARDS
4. ADD 10 AMP FUSE ON CUT-OUT FOR NEW CIRCUIT TO AP/RELAY
5. ENSURE M.E.N. CONNECTION IS INSTALLED
6. DRILL A HOLE TO FIX 20mm CONDUIT GLAND. ANY RISK OF DAMAGE TO STREET LIGHT CABLE MUST BE ASSESSED AND IF REQUIRED, CABLE MUST BE ISOLATED AND REMOVED BEFORE DRILLING
7. BATTERY AND LAN PLUG CAPS TO REMAIN IN PLACE UNTIL CABLE IS FITTED
8. TERMINATE EARTH CABLE TO AP CASE EXTERNAL EARTHING POINT

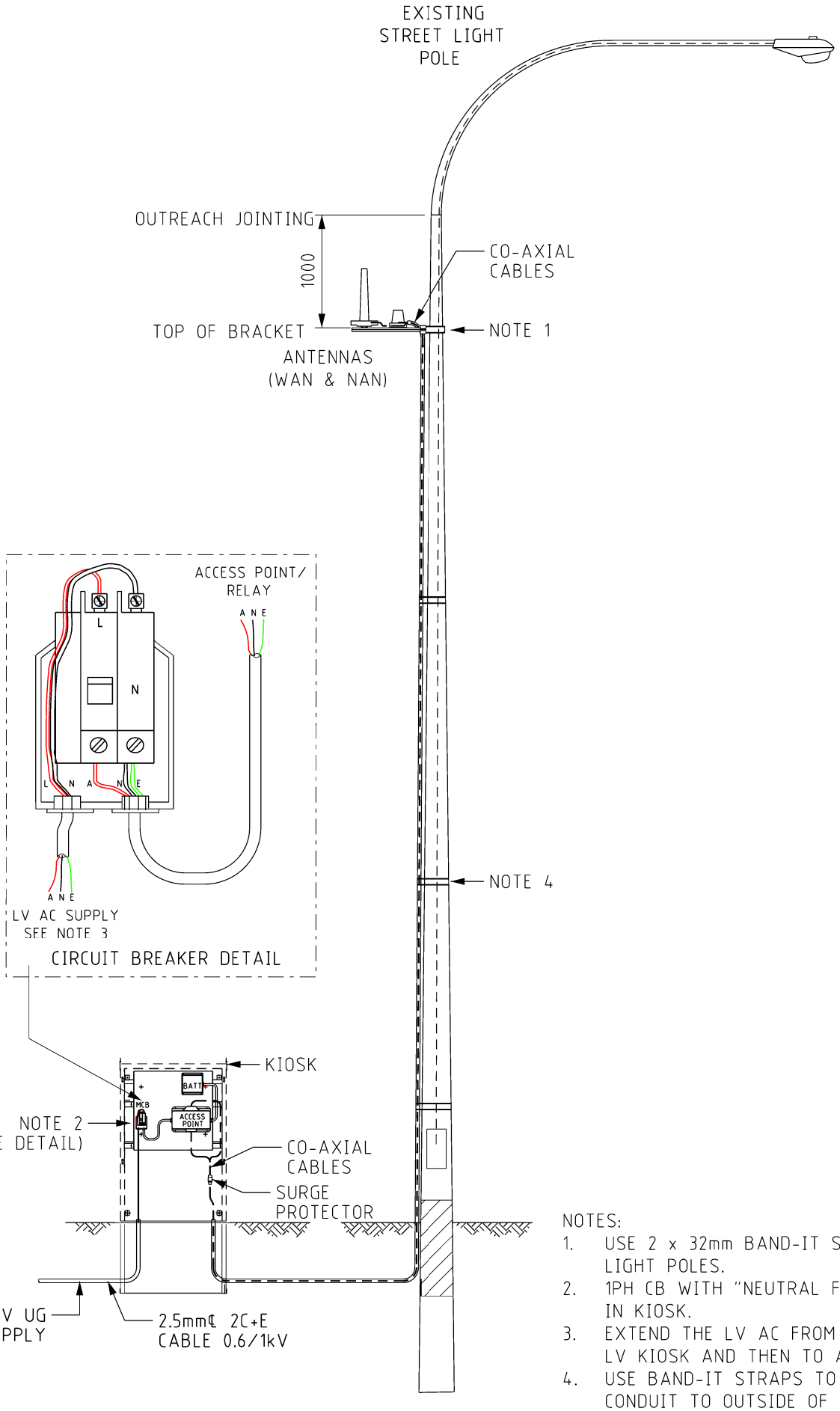
HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS ENGINEERING DIVISION	MISCELLANEOUS	REVISION E	DATE 22/01/2025
	SSN NETWORK DEVICE WITH STREET LIGHT SUPPLY CLASS 1 ARRANGEMENT	DRAWING No. M1-4-1	



NOTES:

1. USE 2 x 32mm BANDIT STRAPS FOR STREET LIGHT POLES
2. EXTEND THE LV AC SUPPLY FROM STREET LIGHTING POLE CUT-OUT TO ACCESS POINT/RELAY
3. STREET LIGHT CUT-OUT WILL NEED TO COMPLY WITH CURRENT STANDARDS
4. ADD 10 AMP FUSE ON CUT-OUT FOR NEW CIRCUIT TO AP/RELAY
5. ENSURE M.E.N. CONNECTION IS INSTALLED
6. DRILL A HOLE TO FIX 20mm CONDUIT GLAND. ANY RISK OF DAMAGE TO STREET LIGHT CABLE MUST BE ASSESSED AND IF REQUIRED, CABLE MUST BE ISOLATED AND REMOVED BEFORE DRILLING
7. BATTERY AND LAN PLUG CAPS TO REMAIN IN PLACE UNTIL CABLE IS FITTED
8. TERMINATE EARTH CABLE TO AP CASE EXTERNAL EARTHING POINT

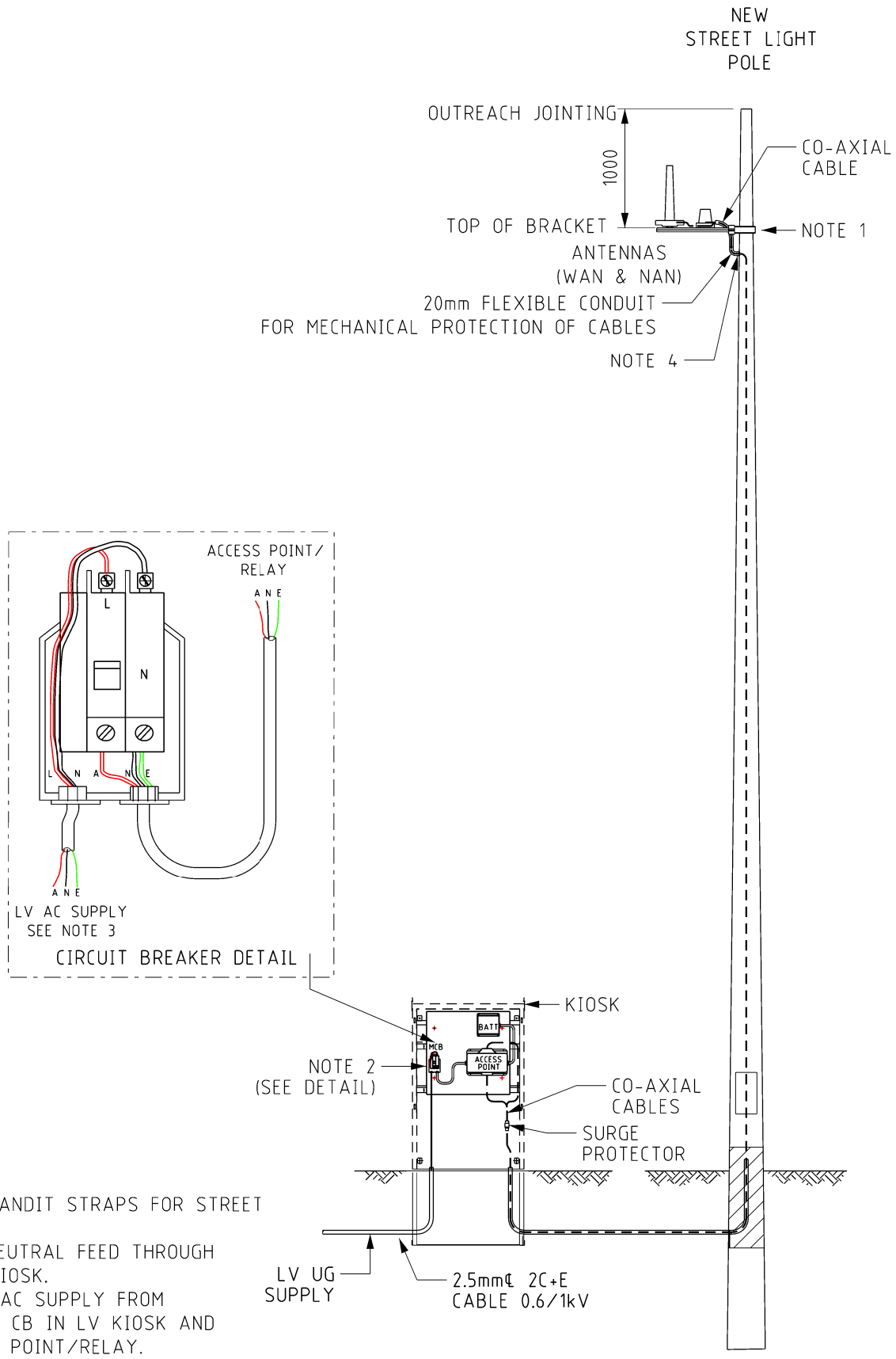
HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS ENGINEERING DIVISION	MISCELLANEOUS	REVISION E	DATE 22/01/2025
	SSN NETWORK DEVICE WITH STREET LIGHT SUPPLY CLASS 1 & 2 HYBRID ARRANGEMENT	DRAWING No. M1-4-2	



NOTES:

1. USE 2 x 32mm BAND-IT STRAPS FOR STREET LIGHT POLES.
2. 1PH CB WITH "NEUTRAL FEED THROUGH POLE". MTD IN KIOSK.
3. EXTEND THE LV AC FROM UG SUPPLY TO CB IN LV KIOSK AND THEN TO ACCESS POINT/RELAY.
4. USE BAND-IT STRAPS TO FIX CO-AX CABLE CONDUIT TO OUTSIDE OF POLE.

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS ENGINEERING DIVISION	MISCELLANEOUS	REVISION B	DATE 22/01/2025
	SSN NETWORK DEVICE WITH LV KIOSK (TYPE-1) SUPPLY ARRANGEMENT (ABOVE 100kM DISTANCE)	DRAWING No. M1-6	

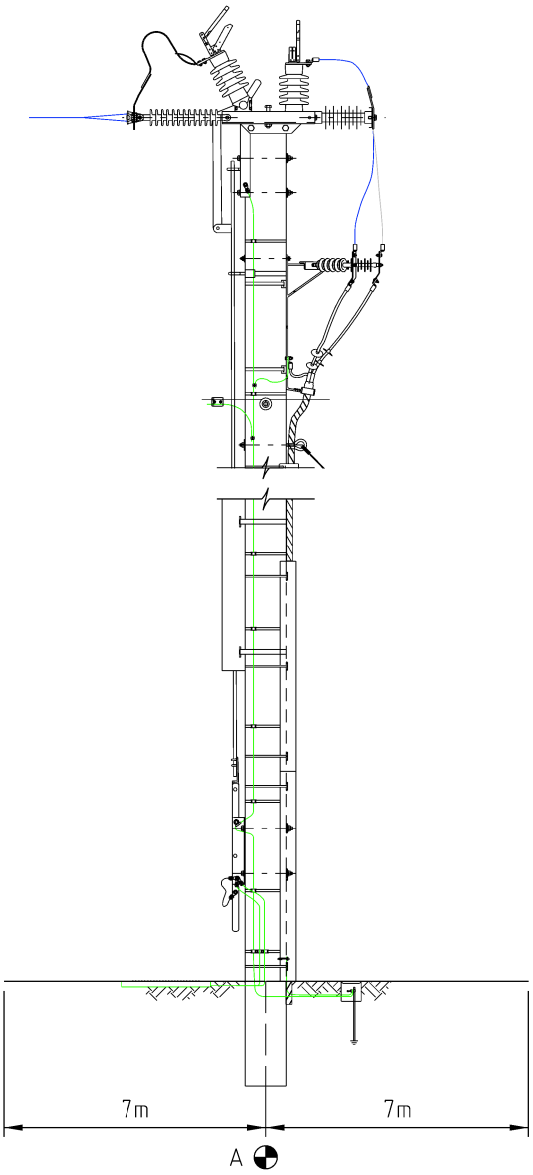


NOTES:

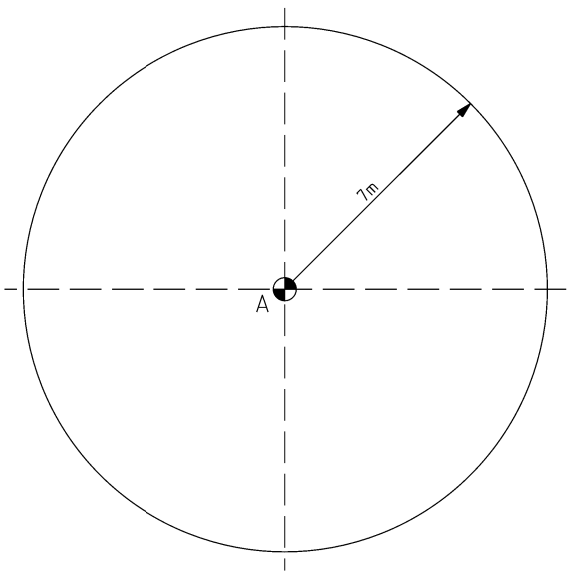
1. USE 2 x 32mm BANDIT STRAPS FOR STREET LIGHTING POLES.
2. 1PH CB WITH "NEUTRAL FEED THROUGH POLE". MTD IN KIOSK.
3. EXTEND THE LV AC SUPPLY FROM LV UG CABLE TO CB IN LV KIOSK AND THEN TO ACCESS POINT/RELAY.
4. DRILL A HOLE TO FIX 20mm RUBBER SEAL.

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS ENGINEERING DIVISION	MISCELLANEOUS	REVISION B	DATE 22/01/2025
	SSN NETWORK DEVICE WITH LV KIOSK (TYPE-1) SUPPLY ARRANGEMENT (ABOVE 100kM DISTANCE)	DRAWING No. M1-7	

SIDE VIEW OF P.T.S



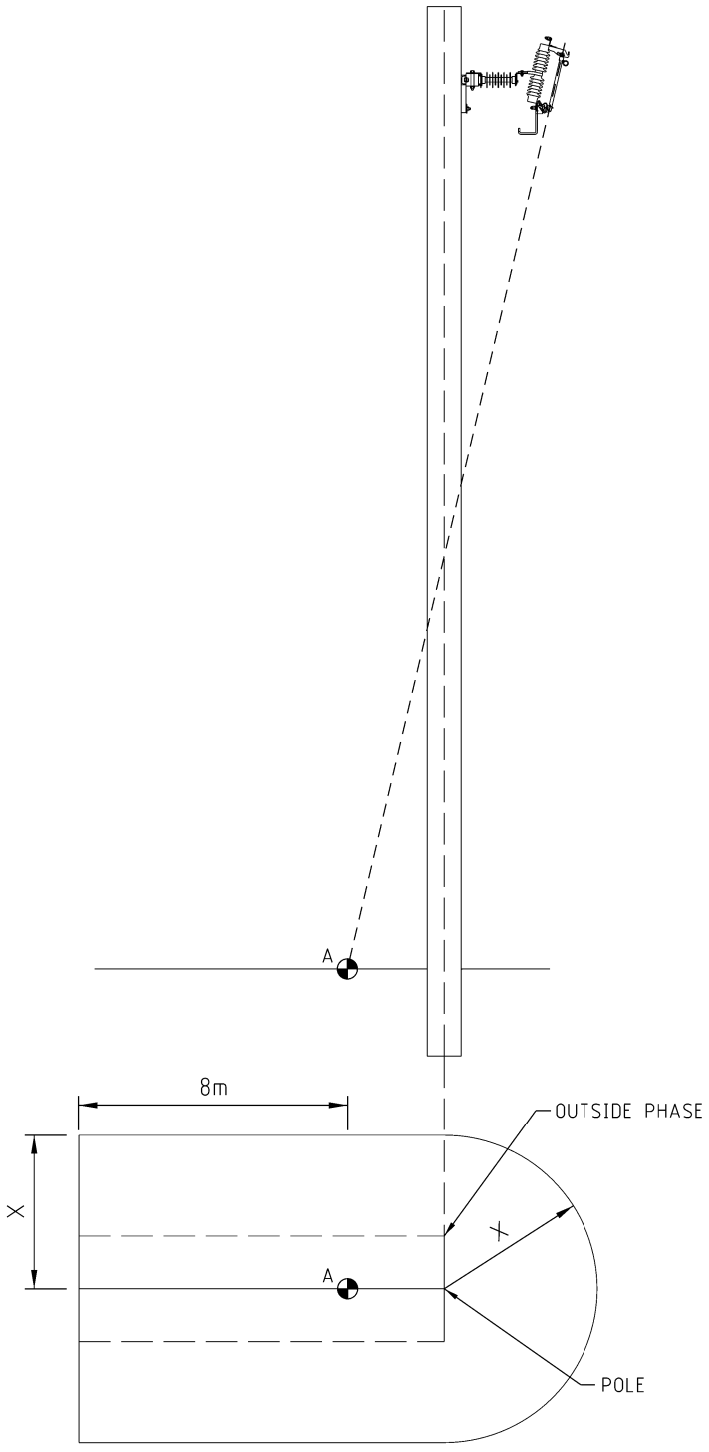
OVERHEAD VIEW



OVERHEAD VIEW SHOWS THE
FOOTPRINT TO BE CLEARED

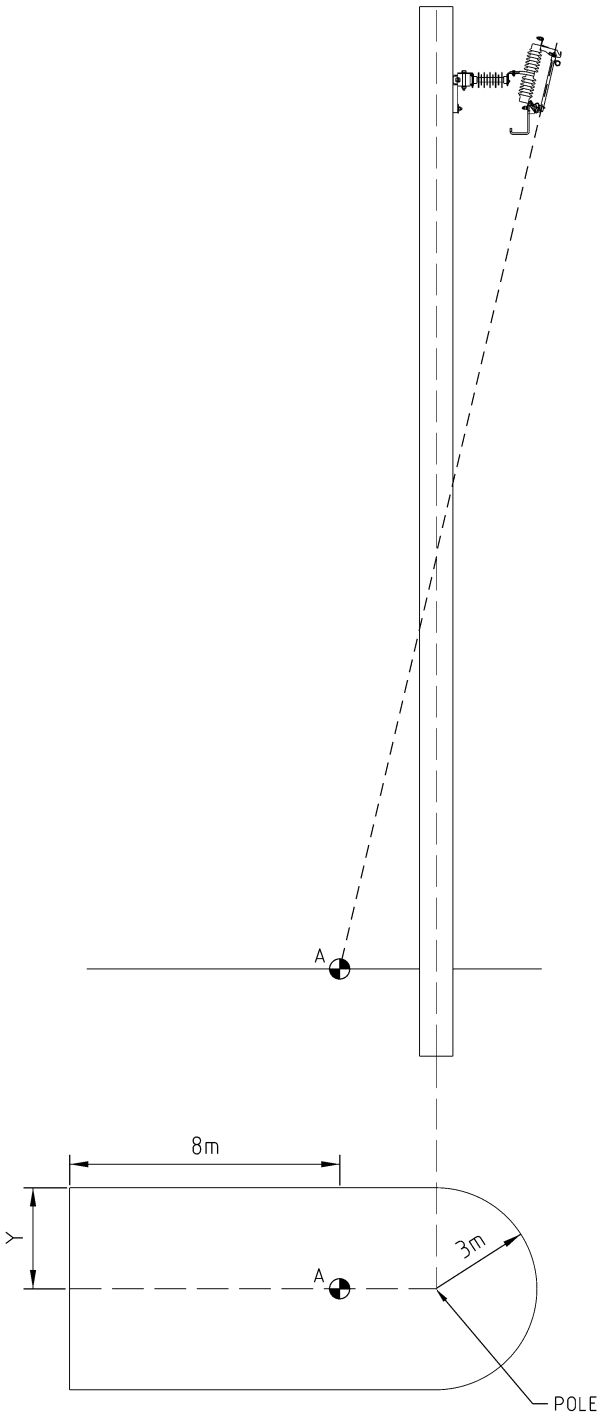
HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS ENGINEERING DIVISION	MISCELLANEOUS	REVISION C	DATE 22/01/2025
	POLE TOP SWITCH OR ISOLATOR GROUND CLEARING DETAILS	DRAWING No. M3-1	

CASE 1: THREE PHASE POLE



X = DISTANCE FROM CENTRE OF POLE TO OUTSIDE PHASE + 3m

CASE 2: SINGLE PHASE POLE

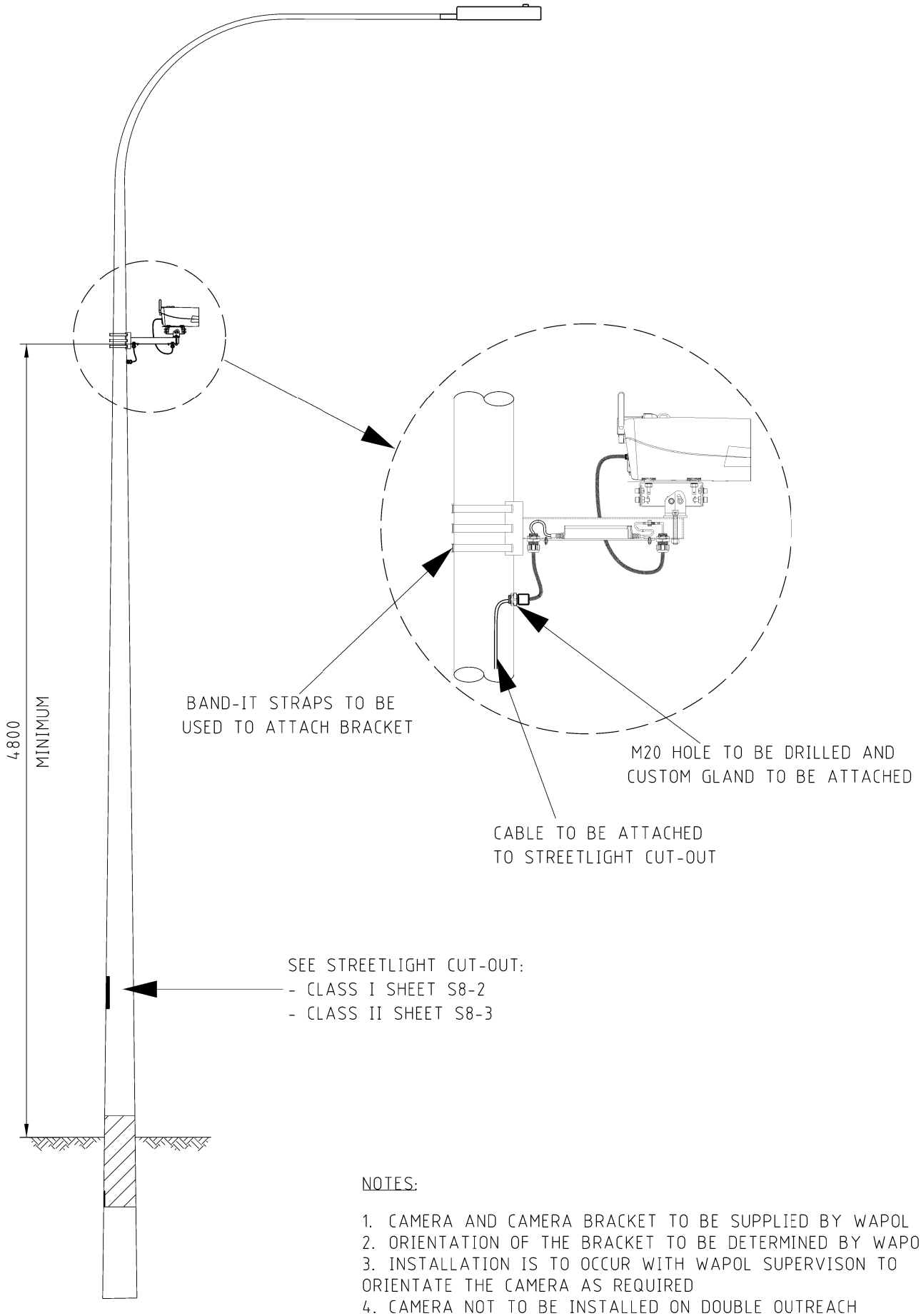


Y = 3m FROM CENTRE OF POLE

NOTE:

1. POINT A SHALL BE DETERMINED BY FOLLOWING A LINE FROM THE FUSE TO THE GROUND ALONG THE ANGLE OF THE FUSE.
2. FOR THREE-PHASE POLES, POINT A SHALL BE DETERMINED FROM CENTRE PHASE.

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS ENGINEERING DIVISION	MISCELLANEOUS EXPULSION TYPE DROPOUT FUSE GROUND CLEARING DETAILS	REVISION C	DATE 22/01/2025
		DRAWING No. M3-2	

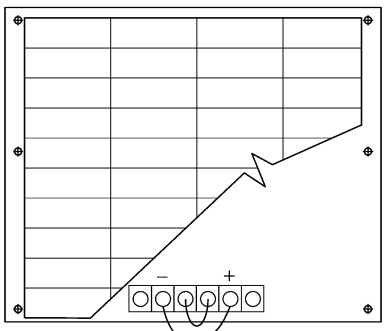


NOTES:

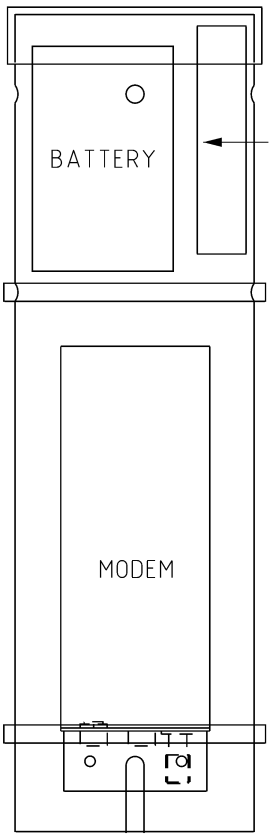
1. CAMERA AND CAMERA BRACKET TO BE SUPPLIED BY WAPOL
2. ORIENTATION OF THE BRACKET TO BE DETERMINED BY WAPOL
3. INSTALLATION IS TO OCCUR WITH WAPOL SUPERVISON TO ORIENTATE THE CAMERA AS REQUIRED
4. CAMERA NOT TO BE INSTALLED ON DOUBLE OUTREACH STREETLIGHTS

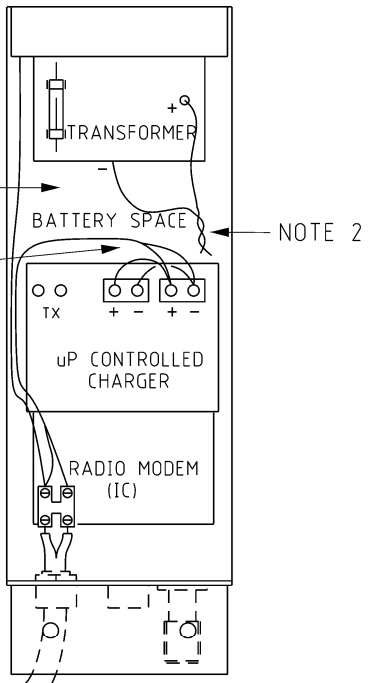
HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS ENGINEERING DIVISION	MISCELLANEOUS	REVISION A	DATE 22/01/2025
	WAPOL CAMERA BRACKET STREETLIGHT ATTACHMENT	DRAWING No. M5	

20W SOLAR PANEL

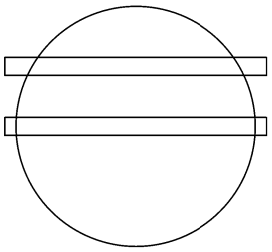


NOTE 4 & 5



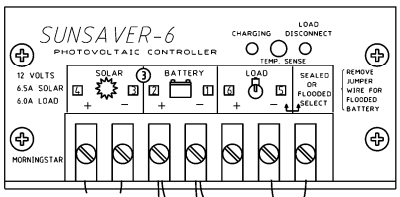


RADIO MODEM RTU



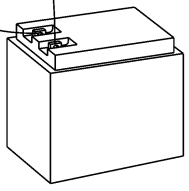
ENCLOSURE (TOP VIEW)

SOLAR CONTROLLER



NOTE 7

NOTE 6



BATTERY

NOTES:

1. REMOVE BATTERY AND TAILS. (ALLOW FOR RETERMINATING)
2. REMOVE TRANSFORMER CONNECTION.
3. PROVIDE LOOP AT BATTERY AND SOLAR TERMINALS.
4. SOLAR PANEL MAY BE PROVIDED WITH FLEXIBLE CABLE TAIL.
5. FOR 2 x 10W SOLAR PANELS REQUIRED AT SOLAR PANEL OR REGULATOR.
6. DO NOT USE LOAD TERMINALS FOR CONTROLLERS WITH LOAD DISCONNECT.
7. LINK REQUIRED FOR SEALED LEAD ACID BATTERY.
8. CONSTRUCTION USING 2 x 7Ah BATTERIES REQUIRES LARGER VERSION OF ENCLOSURE

HORIZON POWER DISTRIBUTION CONSTRUCTION STANDARDS ENGINEERING DIVISION	MISCELLANEOUS	REVISION A	DATE 22/01/2025
	OVERHEAD FAULT INDICATOR SOLAR CONNECTION	DRAWING No. M6	