

Appendix E

**UK Power Network Correspondence** 

AW/W461-01 20



# NetWork Records NetMAP Symbols Booklet East of England

This symbol booklet is intended as a general guide only - some local variations of these symbols may be found.

#### **Version 1.2**

Released October 2010

Always check with your local Network Records office or the UK Power Networks server to ensure that you are using the most up to date copy of this booklet - Tel: 08000 565866.

### Index:-

Page no:		Contents:
1		Guidance notes.
2		The area covered by this guide.
3	1:500 view	
		Scenery.
4		Scenery (UK Power Networks use only).
7		Primary distribution cables (EHV).
8		Secondary distribution cables (HV/LV).
9		Service cables/terminations.
10		Cable ducts.
11		EHV/HV/LV sites.
13		Mains joints.
14		Service joints.
15		Cross sections.
17		Common abbreviations/terminology (all views).
19	1:2500 (LV) &	1:10000 (HV) network views (UK Power Networks use
	only)	
		General.
20		1:2500 scale LV network.
22		1:10000 scale HV network.
23	LV network di	agram view (UK Power Networks use only).
		Overhead lines.
24		Underground cables.
25		Joints.
26		Substations/pole transformers.
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#### **Guidance notes.**

#### Important notice:

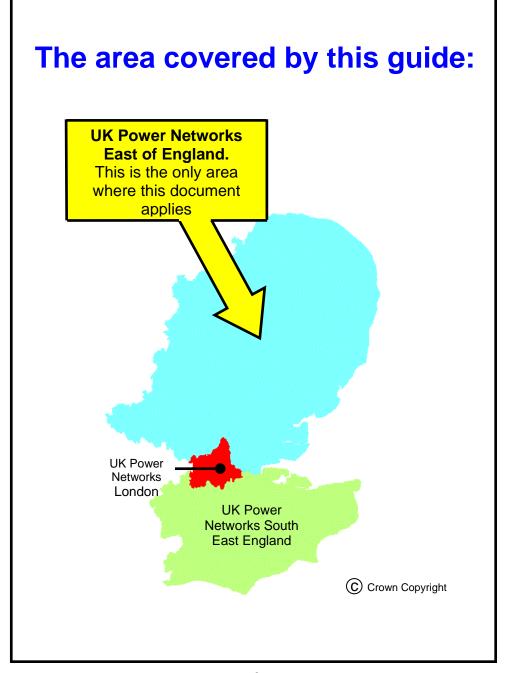
If you do not understand the NetMAP record that you are using, please contact the UK Power Networks Network Records team for guidance

Tel: 08000 565866.

- The position of apparatus shown on NetMAP is believed to be correct, but the original landmarks may have altered since the apparatus was installed.
- It must be assumed that there is at least one service to each property, lamp column, street sign etc.
- All cables must be treated as live, unless proven otherwise by an authorised UK Power Networks representative.
- Third party cables are not usually shown. In cases of doubt, please telephone 08000 565866.
- When two or more maps are supplied for the same area, the maps must be read in conjunction with each other and with this symbol document.
- All LV cables are assumed to be 4 core, and all HV cables assumed to be 3 core unless otherwise stated.



Plan Provision Team
Fore Hamlet
Ipswich
Suffolk IP3 8AA
Tel: 08000 565866



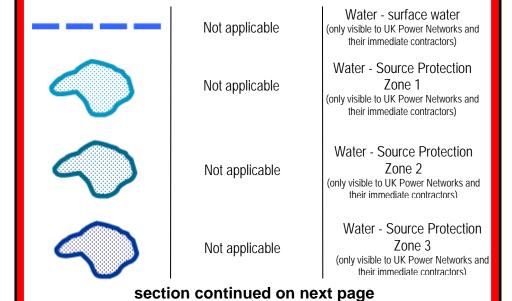
## 1:500 view - underground network

Scenery			
NetMAP system	Scanned image	Description	
		100 metre Ordnance Survey grid line (on O/S based maps only.) Property fence line Building line Kerb line	
		Electrical Boundary	

# Scenery - for UK Power Networks use only - boxed in red

NetMAP system	Scanned image	Description
Inset Network – Contact xxxx IDNO for further information	Not applicable	Area of inset network - not the asset of UK Power Networks (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Proposed Cross Rail route (only visible to UK Power Networks and their immediate contractors)
	Not applicable	High pressure pipelines in the general vicinity (only visible to UK Power Networks and their immediate contractors)

Note: Pipelines are only viewable on NetMAP by UK Power Networks staff and their immediate contractors. Do not carry out any excavation without consent from the relevant agency - legally protected high pressure petroleum products pipeline route in the general vicinity - consult www.linewatch.co.uk for contacts and guidance. Pipeline contact numbers can also be found on the intranet – out of hours, contact our Control Centre.



Scenery for UK Power Networks use only - boxed in red				
NetMAP system	Scanned image	Description		
	Not applicable	Historical - Scheduled  Monuments (only visible to UK Power Networks and their immediate contractors)		
	Not applicable	Historical - Parks and Gardens (only visible to UK Power Networks and their immediate contractors)		
	Not applicable	Historical - Areas of Archaeological Potential (AAP) (only visible to E UK Power Networks and their Immediate contractors)		
	Not applicable	Nature - Ramsar Wetlands of International Importance (only visible to UK Power Networks and their immediate contractors)		
	Not applicable	Nature - Special Area of Conservation (SAC) (only visible to UK Power Networks and their immediate contractors)		
	Not applicable	Nature - Special Protected Area (SPA) (only visible to UK Power Networks and their immediate contractors)		
	AM 200	Nature - Site of Special and Scientific Interest (SSSI) (only visible to UK Power Networks and their immediate contractors)		
section continued on next page				

Scenery for UK Power Networks use only - boxed in red			
NetMAP system	Scanned image	Description	
	Not applicable	Nature - Local Nature Reserve (only visible to UK Power Networks and their immediate contractors)	
	Not applicable	Nature - National Nature Reserve (only visible to UK Power Networks and their immediate contractors)	
	Not applicable	Nature - Area of Outstanding Natural Beauty (AONB) (only visible to UK Power Networks and their immediate contractors)	
	Not applicable	Nature - National Park (only visible to UK Power Networks and their immediate contractors)	
	Not applicable	Fluid filled cables - very high sensitivity (only visible to UK Power Networks and their immediate contractors)	
	Not applicable	Fluid filled cables - high sensitivity (only visible to UK Power Networks and their immediate contractors)	
	Not applicable	Fluid filled cables - medium sensitivity (only visible to UK Power Networks and their immediate contractors)	
	Not applicable	Fluid filled cables - low sensitivity (only visible to UK Power Networks and their immediate contractors)	

Primary distribution cables (1:500 view)			
NetMAP system	Scanned image	Description	
		Over 33kV and up to 132kV	
	SARRY SHARRY ROSSON SARROW SARROW STREET, SARROW SARROW SARROW	Over 11kV and up to 33kV	

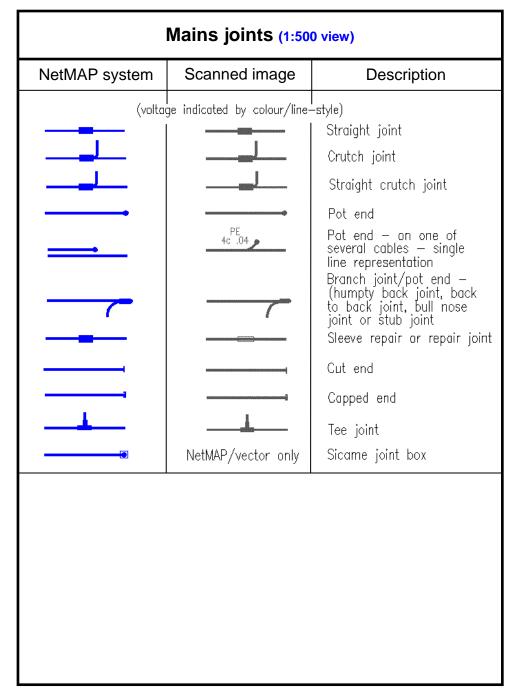
Seconda	ry distribution ca	bles (1:500 view)
NetMAP system	Scanned image	Description
		Over 230/400V and up to 11kV (HV) cable route
		230/400V (LV) cable route
	(Only shown this way if independent from HV cable route)	Pilot cable route
Abandoned cables a	lindepèndent from HV cable route) Ire shown and labelled as	such when applicable

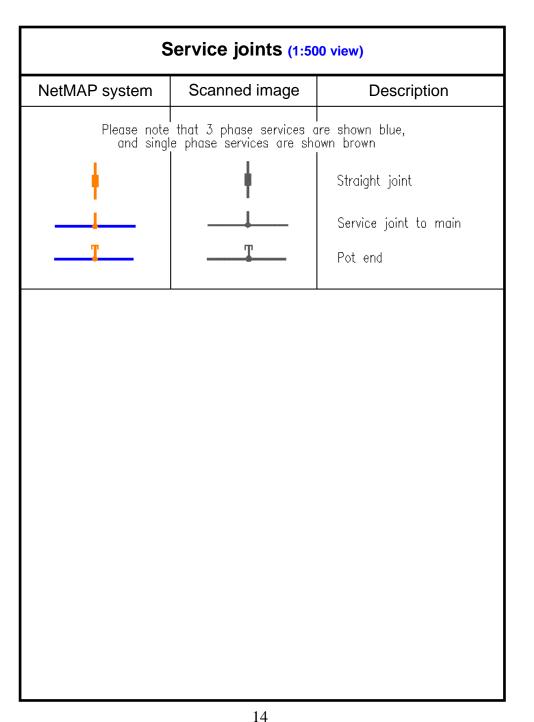
NetMAP system	Scanned image	Description
Street light	Service routes were not always shown on MMS — they were however shown dashed, as indicated above	3 phase service with termination 3 phase service with termination (unknown route) 3 phase service with multi—head termination Single phase service with termination Single phase service with termination (route unknown) Street lighting cable and termination
Street light	Street light	termination

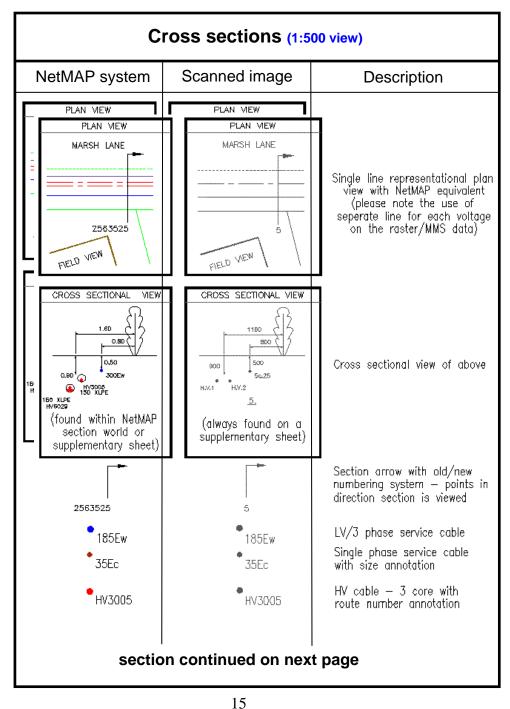
Cable ducts (1:500 view)				
NetMAP system	Scanned image	Description		
{		Empty duct Cable(s) in duct(s) Cable(s) in duct(s) (on some raster maps) Multiple cables in ducts		
<del></del>	<b></b> [] <b>&lt;</b>	Multiple cables in ducts (on some raster maps)		

EHV, HV and LV sites (1:500 view)			
NetMAP system	Scanned image	Description	
COLCHESTER GRID	COLCHESTER GRID	Primary substation	
HIGH STREET	HIGH STREET HIGH STREET	Secondary substation	
		Pad mounted substation	
	35555555555	Link box — 2 way	
===	MAGAGAGAGAGA MAGAGAGAGAGA MAGAGAGAGAGA MAGAGAGAG	Link box — 4 way (6 way etc shown similarly)	
		Feeder pillar — 4 way (6 way etc shown similarly)	
CHURCH RD	CHURCH RD	Pole transformer	
$\overset{\circ}{\sim}$		Poles on underground records	
0-0	0-0	H pole, any voltage	
▼	_	Service turret (solid type)	
section continued on next page			

EHV, HV and LV sites continued (1:500 view)		
NetMAP system	Scanned image	Description
No NetMAP equivalent	$\bigvee$	Service turret (with link facility on LV main)
CAUTION Missing Information	No equivalent	Missing data in or near this location
Contaminated Land refer to SHE 01 016	Not applicable	Contaminated land reference







Cross sections continued (1:500 view)			
NetMAP system	Scanned image	Description	
♣ HV3005	A HV3005	HV cable — modern EPR, Plam and Triplex with route number annotation	
•	•	Pilot cable	
• HV1023	HV3005	33kV cable	
HV3005	HV3005	132kV cable	
0	0	Single duct	
888	888	6 way duct formation — irrespective of duct type and material, all are displayed similarly	
<u>-</u>		Protectíve slab Tiles	
_		Concrete slabs 33kV fibre warning board	
_		Steel plate	
_	— т/т	Plastic tile tape	
Timber 👝	IZZZI	Timber	

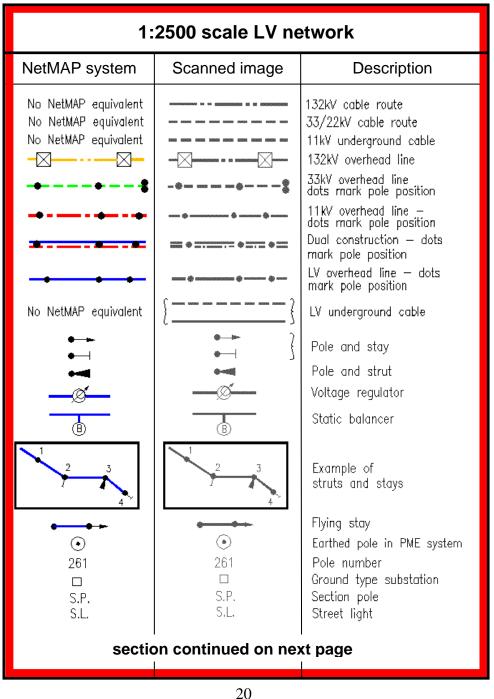
Abbrev.	Description	Abbrev.	Description
1c 1ph 2c 3c 3ph ABC ABI ABSD ACCS AI AR ASL ax CB c/c ccc CCT CNE Cross phased CSE Cu	Single core Single phase Two core Three core Three phase Aerial bunched (bundled)	Cut out or C/O ox DE DSTA Ea EFI EHV  ELCB ELT EPR Ew E/W Fdr or Feeder F/G F/P GRP GVR HV HYBRID Insulation Insulator ITC	Meter/main fuse position  Triplex (copper) Direct earth Double steel tape armoured Alpex cable Earth fault passage indicator Extra high voltage (11,001 Volts and over) Earth leakage circuit breaker Earth leakage trip Ethylene propylene rubber Waveform cable Earthenware duct or earth wire LV or HV cable fed by or feeding a substation Fuse gear Feeder pillar Fibreglass substation Gas vacuum recloser or pole mounted circuit breaker High voltage (1,001— 11,000 Volts incl) Modern plastic cable with mixed conductor material
	section continued on next page		

# Common abbreviations and terminology continued (all views)

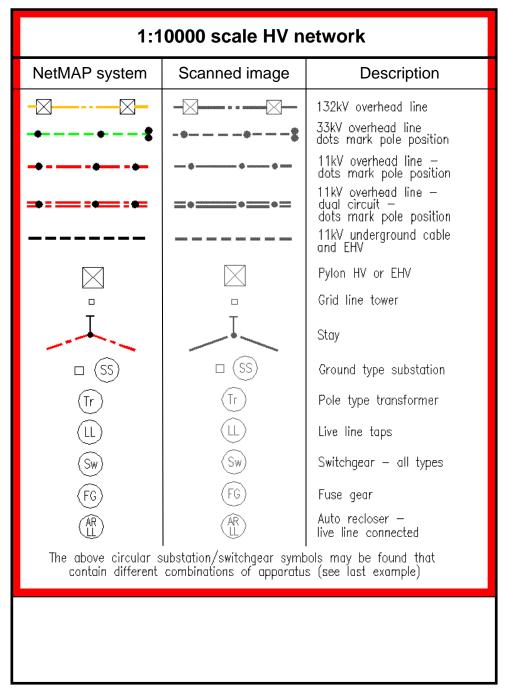
Abbrev.	Description	Abbrev.	Description
or LB LSF LV	Connecting lead between open points, section points and overhead plant Kilovolt (or 1,000 Volts) — unit of electrical pressure Kilowatt (1,000 Watts) — unit of electrical power Kilovolt Amps or power Means of connecting LV feeders together using links or fuses Low smoke & fume Low voltage (up to 1,000 Volts incl) Low voltage fuse distribution board Return path of live cable Overhead line  Oil filled pole mounted sectionaliser Oil filled pole mounted recloser Pole mounted LV fuse unit Pot end or potential end — joint on cable end Usually the core colour of a cable (caution — may be cross phased) — Red, Yellow, Blue on old cables, or L1, L2, L3 on new cables, for example	PICAS PILC PILSTA PL PME PMR PYC PMR PYC PMR S / L STA or T2 etc T/F or TX SWA T1 / F VOITS XLPE	Paper insulated corrugated aluminium sheath armoured Paper insulated lead covered Paper insulated lead covered steel tape armoured cable Plain lead or public lighting Protected multiple earth or CNE Pole mounted transformer Pole mounted recloser (generic term for OYT/GVR) Pole transformer Polyvinyl chloride Ring main unit Reduced neutral Split concentric or single core Street light Substation Steel tape armoured Steel wire armoured Substation TX setup where more than one TX exists Transformer  Unit of electrical pressure Unit of electrical power Cross linked polyethylene

# 1:2500 & 1:10000 view - overhead networks - for UK Power Networks use only - boxed in red

General			
NetMAP system	Scanned image	Description	
* •	•	H pole Pole	



1:2500 scale LV network continued			
NetMAP system	Scanned image	Description	
O.R. Stay Ext. Brkt P. Box N.E. O.R. Brkt	O.R. Stay Ext. Brkt P. Box N.E. O.R. Brkt	Outrigger stay Extension bracket Pole box Neutral and earth Outrigger bracket	

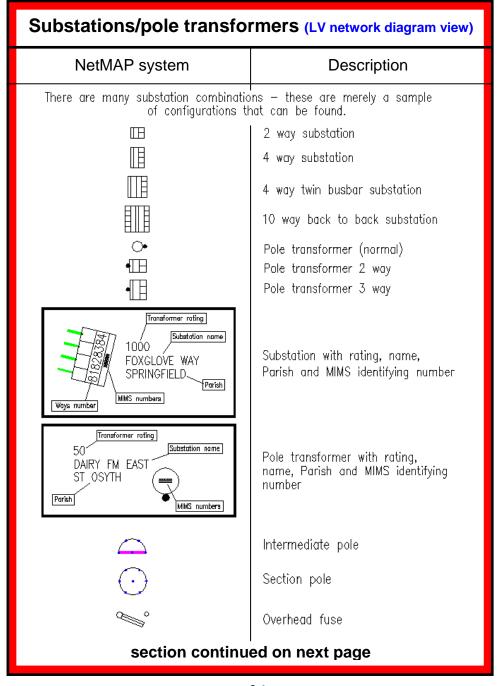


# LV network diagram view-for UK Power Networks use only-boxed in red

Overhead lines		
NetMAP system	Description	
	Unknown	
	Al	
	Cu	
	ABC	
	Pole link	

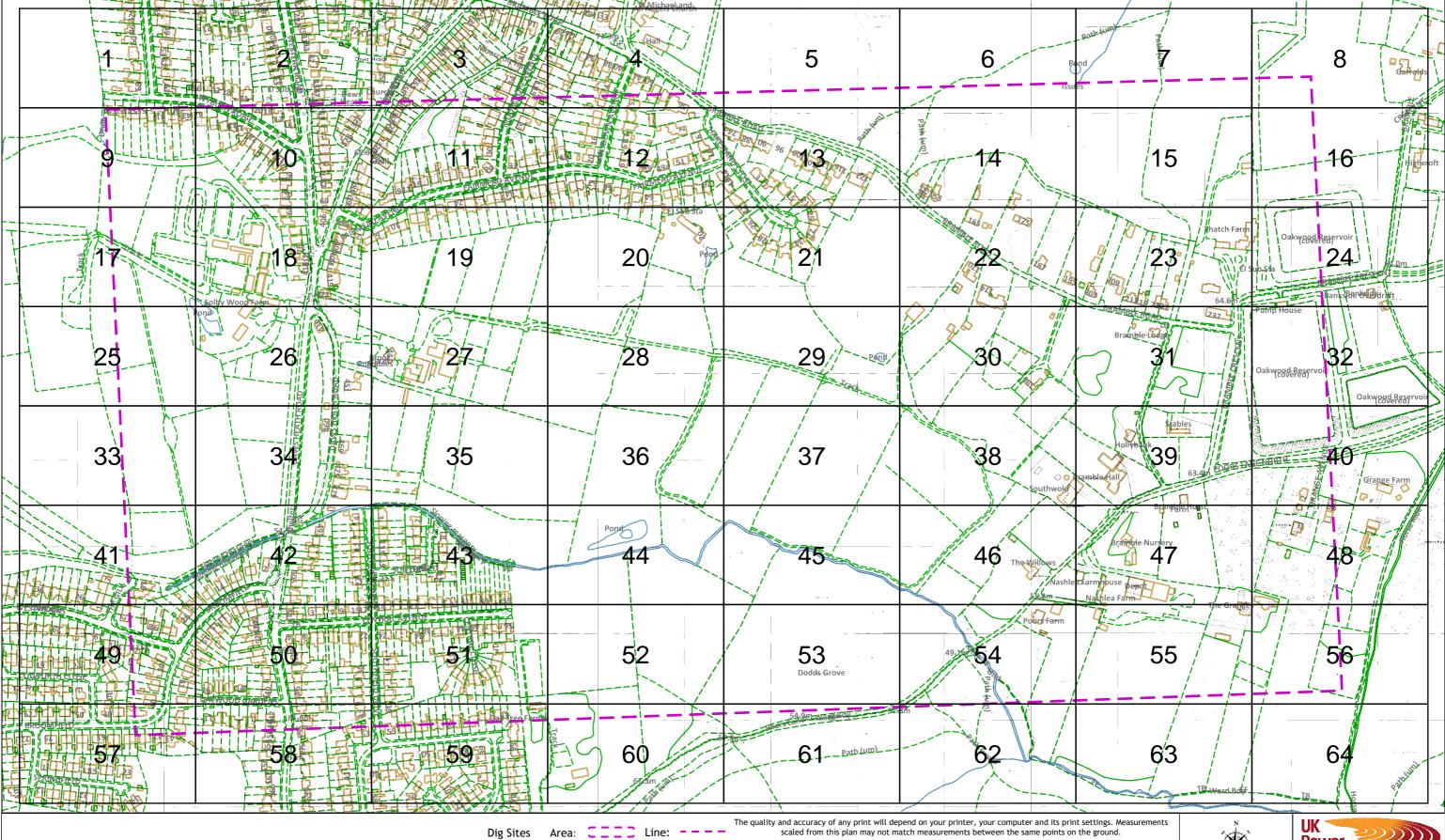
NetMAP system  Unknown  Al  Cu  CC  TCC  Ea  Ec  Ecx  Ew  LSF  Other	Underground cables (LV network diagram view)		
Al Cu CC TCC Ea Ec Ecx Ew LSF	NetMAP system	Description	
Cu CC TCC Ea Ec Ecx Ew LSF	AADOMA ADOMA ADOMA ADOMA SAMAS MARKADAMA ADOMA	Unknown	
CC TCC Ea Ec Ec Ecx Ew LSF		Al	
Ea Ec Ecx Ew LSF		Cu	
Ea Ec Ec Ec Ew LSF		CC	
Ec Ecx Ew LSF		TCC	
Ecx Ew LSF		Ea	
Ew LSF		Ec	
LSF		Ecx	
		Ew	
Other Other		LSF	
		Other	
		Other	

Joints (LV network diagram view)		
NetMAP system	Description	
	Pot end or Sicame Box Straight joint Crutch joint 3 phase termination	



# Substations/pole transformers cont'd (LV network diagram view)

#### NetMAP system Description Overview — the purple lines through the section poles are pole links — these indicate how the network is linked together 2 way link box 田 3 way link box $\blacksquare$ 4 way link box 毌 4 way double busbar link box 4 way BICC link box 5 way link box 6 way link box 6 way double busbar link box TM1215 A two way link box with identification number, connected to ENLARGEMENT: a cable with an open point Feeder pillars - these range from 2 ways through to 9 ways a 9 way and a 2 way are shown as examples



This plan must be used with the attached 'Symbols' document.

Date Requested: 29/03/2022 Job Reference: 25177544 Site Location: 580932 187882 Requested by:

Miss Chloe Inglis Your Scheme/Reference: W461

- 1. The position of the apparatus shown on this drawing is believed to be correct but the original landmarks may have been altered since the apparatus was installed.
- The exact position of the apparatus should be verified use approved cable avoidance tools prior to excavation using suitable hand tools.
   It is essential that trial holes are carefully made avoiding the use of mechanical tools or picks until the exact location of all the
- cables have been determined.
- 4. It must be assumed that there is a service cable into each property, lamp column and street sign, etc.
  5. All cables must be treated as being live unless proved otherwise by UK Power Networks.
- 6. The information proved must be given to all people working near UK Power Networks plant and equipment. Do not use plans more than 3 months after the issue date for excavation purposes.
- 7. Please be aware that electric cables/lines belonging to other owners of licensed electricity distribution systems may be present and it is your responsibility to identify their location.
- 1. UK Power Networks does not warrant that the information provided to you is correct. You rely upon it at your own risk.

  2. UK Power Networks does not exclude or limit its liability if it causes the death of any persons or causes personal injury to a person.
- 2. UK Power Networks does not exclude or limit its liability if it causes the death of any persons or causes personal injury to a person.
  3. Subject to paragraph 2 UK Power Networks has no liability to you in contract, in tort (including negligence), for breach of statutory duty or otherwise for any loss, damage, cost, claims, demands, or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever.
  4. This plan has been provided to you on the basis of the terms of use set out in the covering letter that accompanies this plan. If you do not accept and/or do not understand the terms of use set out in the covering letter you must not use the plan and must return it to the sender of the letter.
- 5. You are responsible for the security of the information provided to you. It must not be given, sold or made available upon payment of a fee to a third party.





IF IN DOUBT - ASK! PHONE 0800 056 5866 EMERGENCY - If you damage a cable or line Phone 0800 783 8838 (24hrs) URGENTLY

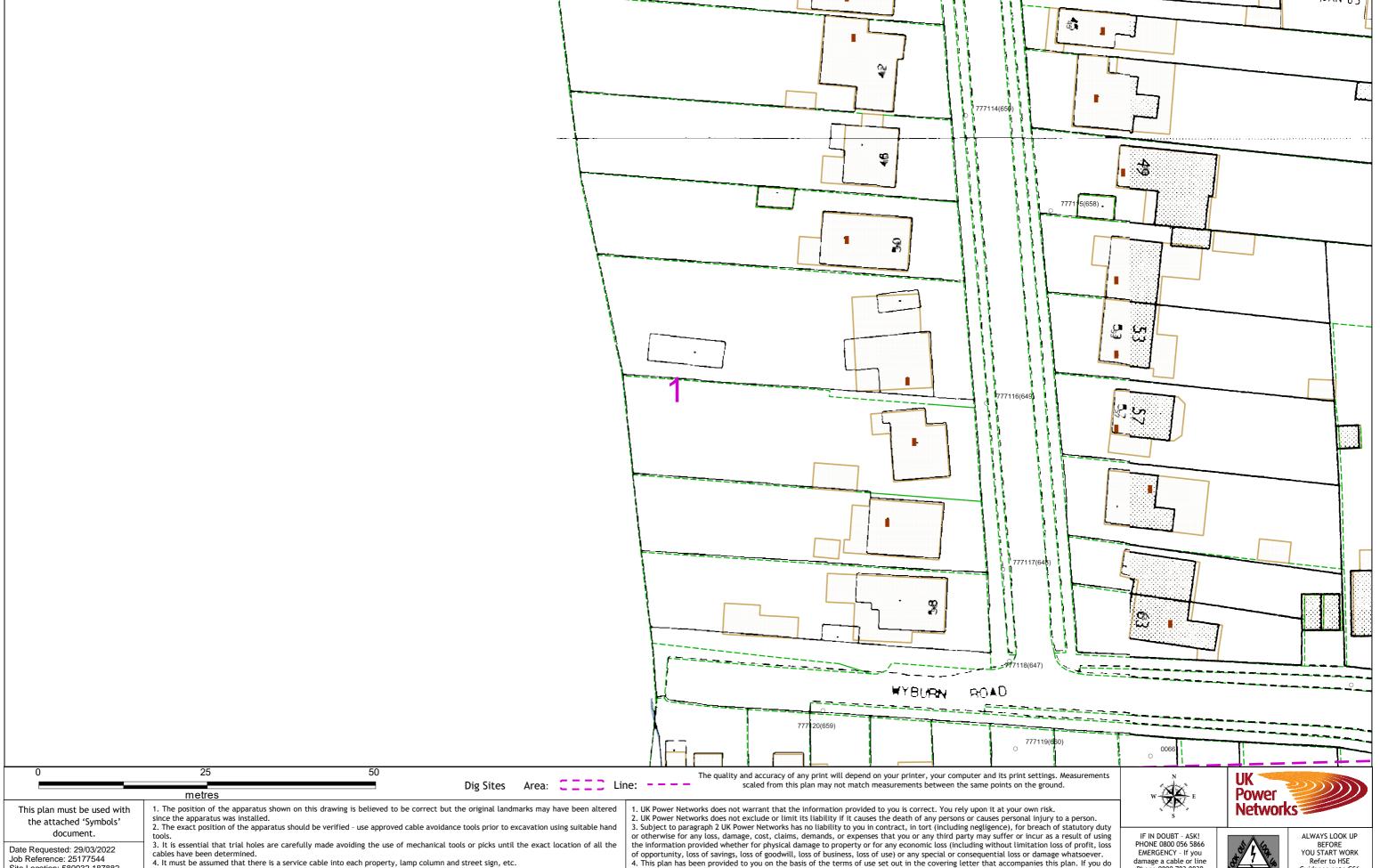


ALWAYS LOOK UP BEFORE YOU START WORK Refer to HSE Guidance note GS6

Maps produced at 1:2500 scale are Geo-Schematics which show LV mains cables and overhead lines (in some cases all voltages). Prior to carrying out excavations you must refer to the 1:500 records to determine the location of all known underground plant and equipment.

Scale: 1:4100 (When plotted at A3)

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Site Location: 580932 187882 Requested by:

Miss Chloe Inglis Your Scheme/Reference: W461

Scale: 1:500 (When plotted at A3)

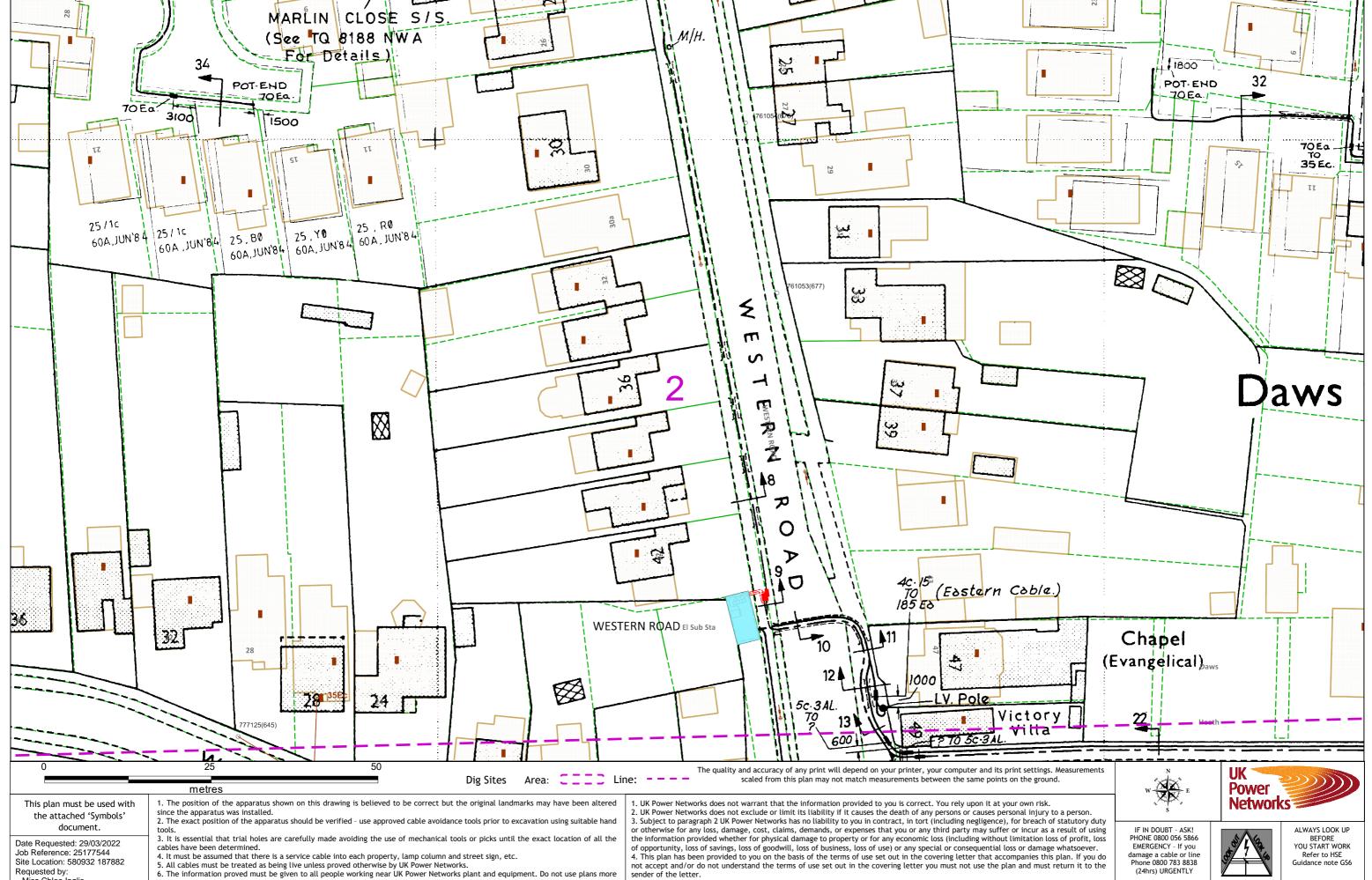
- 5. All cables must be treated as being live unless proved otherwise by UK Power Networks.
- 6. The information proved must be given to all people working near UK Power Networks plant and equipment. Do not use plans more than 3 months after the issue date for excavation purposes.
- 7. Please be aware that electric cables/lines belonging to other owners of licensed electricity distribution systems may be present and it is your responsibility to identify their location.
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Phone 0800 783 8838 (24hrs) URGENTLY



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Job Reference: 25177544 Site Location: 580932 187882

Requested by: Miss Chloe Inglis

Your Scheme/Reference: W461 Scale: 1:500 (When plotted at A3)

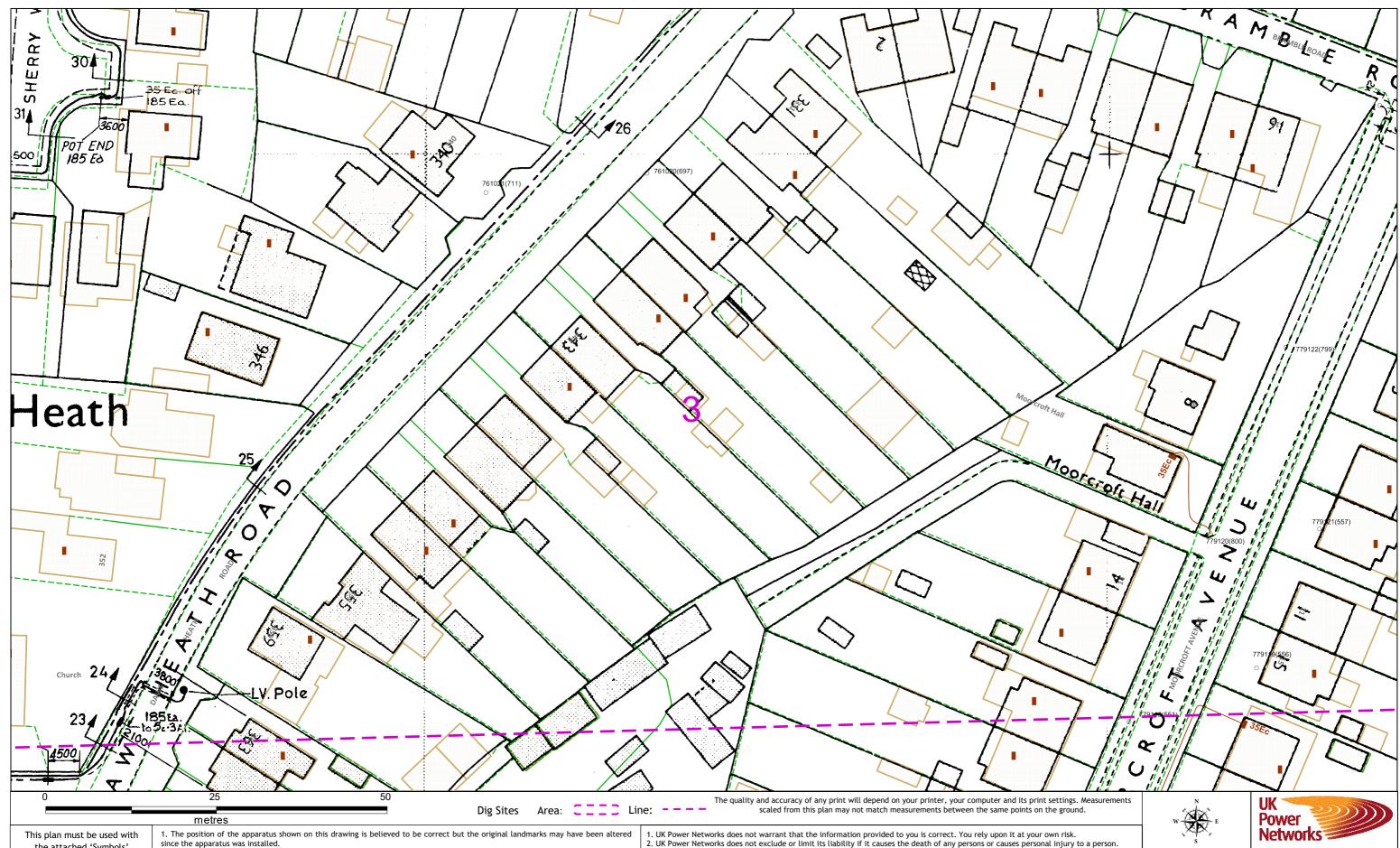
- than 3 months after the issue date for excavation purposes. 7. Please be aware that electric cables/lines belonging to other owners of licensed electricity distribution systems may be present and it is your responsibility to identify their location.
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the attached 'Symbols' document

Date Requested: 29/03/2022 Job Reference: 25177544 Site Location: 580932 187882

Requested by: Miss Chloe Inglis

Your Scheme/Reference: W461

Scale: 1:500 (When plotted at A3)

- since the apparatus was installed.
- 2. The exact position of the apparatus should be verified use approved cable avoidance tools prior to excavation using suitable hand 3. It is essential that trial holes are carefully made avoiding the use of mechanical tools or picks until the exact location of all the
- cables have been determined.
- It must be assumed that there is a service cable into each property, lamp column and street sign, etc.
   All cables must be treated as being live unless proved otherwise by UK Power Networks.
- 6. The information proved must be given to all people working near UK Power Networks plant and equipment. Do not use plans more than 3 months after the issue date for excavation purposes.
- 7. Please be aware that electric cables/lines belonging to other owners of licensed electricity distribution systems may be present and it is your responsibility to identify their location.
- 3. Subject to paragraph 2 UK Power Networks has no liability to you in contract, in tort (including negligence), for breach of statutory duty or otherwise for any loss, damage, cost, claims, demands, or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever. 4. This plan has been provided to you on the basis of the terms of use set out in the covering letter that accompanies this plan. If you do

not accept and/or do not understand the terms of use set out in the covering letter you must not use the plan and must return it to the sender of the letter

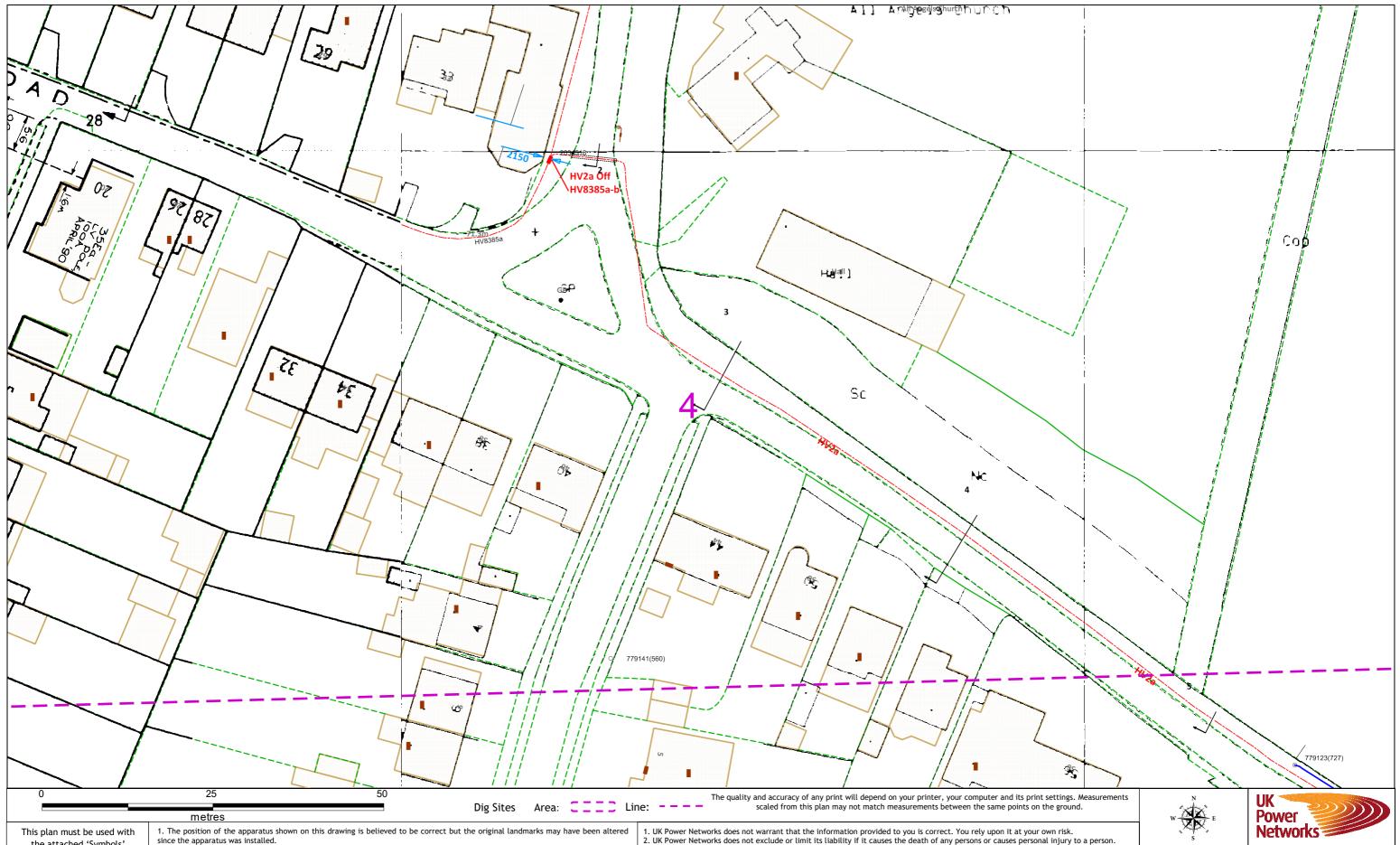
5. You are responsible for the security of the information provided to you. It must not be given, sold or made available upon payment of a fee to a third party.

IF IN DOUBT - ASK! PHONE 0800 056 5866 EMERGENCY - If you damage a cable or line Phone 0800 783 8838 (24hrs) URGENTLY



ALWAYS LOOK UP BEFORE YOU START WORK Refer to HSE Guidance note GS6

Maps produced at 1:2500 scale are Geo-Schematics which show LV mains cables and overhead lines (in some cases all voltages). Prior to carrying out excavations you must refer to the 1:500 records to determine the location of all known underground plant



the attached 'Symbols' document

Date Requested: 29/03/2022 Job Reference: 25177544 Site Location: 580932 187882 Requested by:

Miss Chloe Inglis

Your Scheme/Reference: W461

Scale: 1:500 (When plotted at A3)

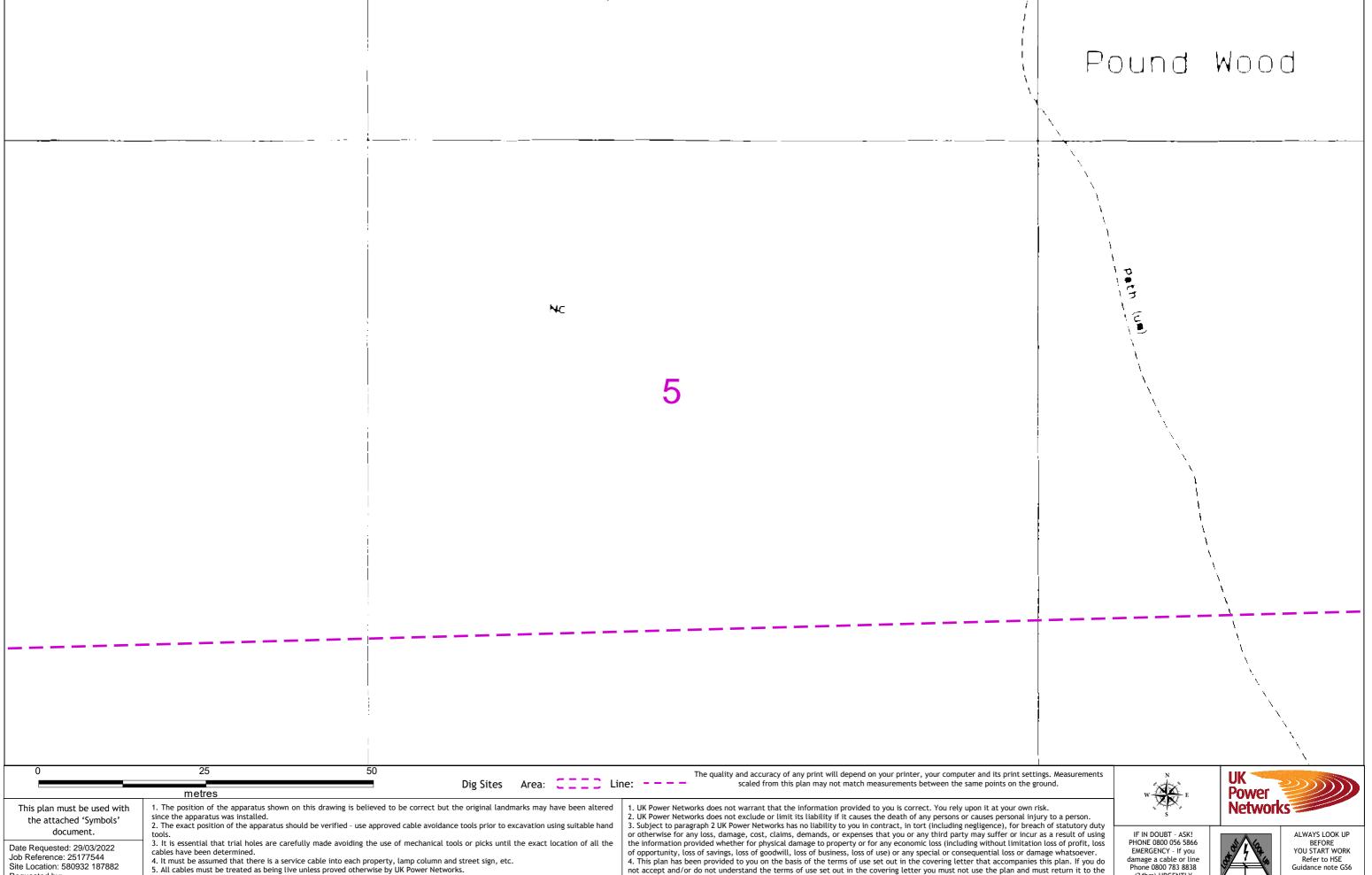
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- 3. Subject to paragraph 2 UK Power Networks has no liability to you in contract, in tort (including negligence), for breach of statutory duty or otherwise for any loss, damage, cost, claims, demands, or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever. 4. This plan has been provided to you on the basis of the terms of use set out in the covering letter that accompanies this plan. If you do not accept and/or do not understand the terms of use set out in the covering letter you must not use the plan and must return it to the sender of the letter
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ALWAYS LOOK UP YOU START WORK Refer to HSE Guidance note GS6

Maps produced at 1:2500 scale are Geo-Schematics which show LV mains cables and overhead lines (in some cases all voltages). Prior to carrying out excavations you must refer to the 1:500 records to determine the location of all known underground plant



Your Scheme/Reference: W461 Scale: 1:500 (When plotted at A3)

Requested by:

Miss Chloe Inglis

6. The information proved must be given to all people working near UK Power Networks plant and equipment. Do not use plans more than 3 months after the issue date for excavation purposes.

7. Please be aware that electric cables/lines belonging to other owners of licensed electricity distribution systems may be present and

it is your responsibility to identify their location.

not accept and/or do not understand the terms of use set out in the covering letter you must not use the plan and must return it to the sender of the letter.

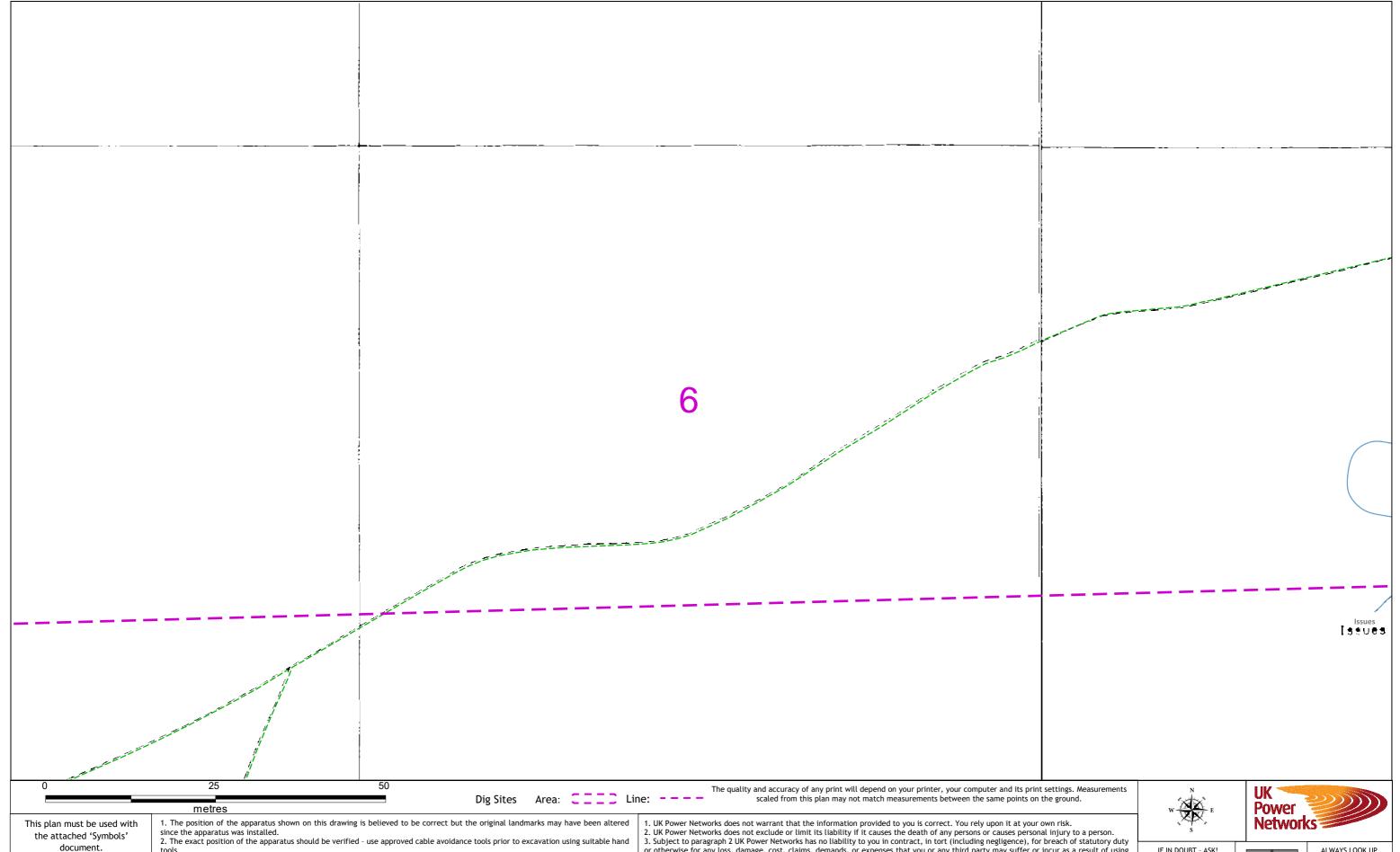
5. You are responsible for the security of the information provided to you. It must not be given, sold or made available upon payment of a fee to a third party.

(24hrs) URGENTLY



Guidance note GS6

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Date Requested: 29/03/2022 Job Reference: 25177544 Site Location: 580932 187882 Requested by:

Miss Chloe Inglis Your Scheme/Reference: W461

Scale: 1:500 (When plotted at A3)

3. It is essential that trial holes are carefully made avoiding the use of mechanical tools or picks until the exact location of all the cables have been determined.

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than 3 months after the issue date for excavation purposes. 7. Please be aware that electric cables/lines belonging to other owners of licensed electricity distribution systems may be present and

it is your responsibility to identify their location.

or otherwise for any loss, damage, cost, claims, demands, or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever. 4. This plan has been provided to you on the basis of the terms of use set out in the covering letter that accompanies this plan. If you do

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