

Desktop Utilities Report

Site Kimberly Clark, Northfleet, DA11 9AD Grid Reference E562656, N174281 Client RES Group, Beaufort Court, Egg Farm Lane, Kings Langley, Hertfordshire, WD4 8LR Job Ref: 8856



Report prepared by:-

Premier Surveys Ltd, Premier Surveys Ltd, 9-11 Lowater Street, Carlton, Nottingham, NG4 1JJ | Unit 3, Ivory Wharf, Elephant Lane, London, SE16 4JD www.premiersurveys.co.uk | mail@premiersurveys.co.uk Tel: 0115 962 2876



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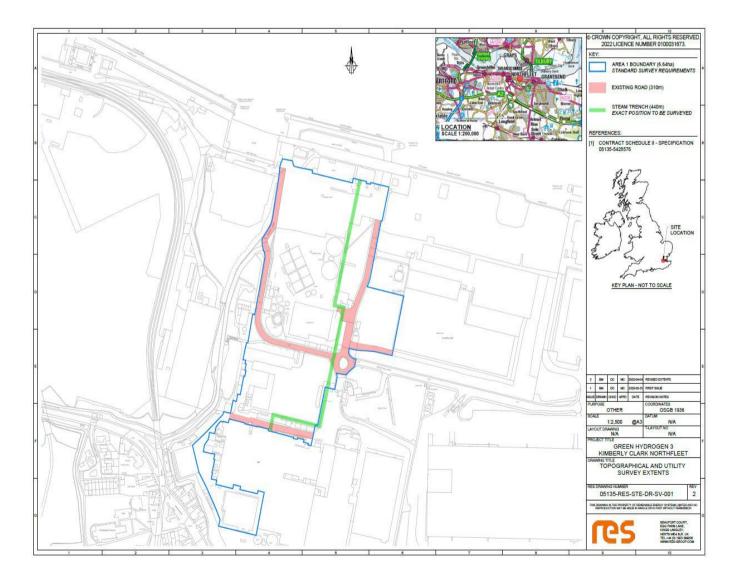
Plans

Supplier responses-Not affected

Site Information

Site	
Kimberly Clark, Northfleet, DA11 9AD	
OS Coordinates	
E562656, N174281	
Date	
17th May 202	
Client	
RES Group, Beaufort Court, Egg Farm Lane, Kings Langley, Hertfordshire, WD4 8I	.R
Collated by D Simms-Premier Surveys Ltd (<u>Daniel.Simms@premiersurveys.co.uk</u>)
lob Ref:8856	

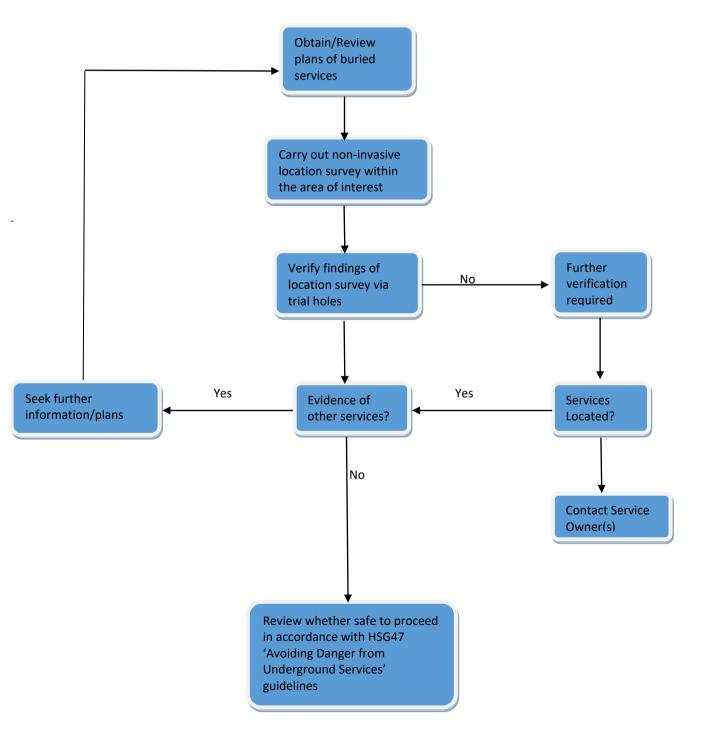
Site Plan



Using this report

PLEASE NOTE, THE USE OF THIS REPORT IS <u>NOT</u> A SUBSTITUTE FOR THE LOCATION AND VERIFICATION OF BURIED SERVICES THAT MAY IMPACT POTENTIAL PLANNED WORKS. THIS REPORT IS BASED ON PUBLICLY AVAILABLE RECORD INFORMATION, IT IS NOT VERIFIED AND MAY BE INCOMPLETE. WHILST EVERY EFFORT IS MADE TO ENSURE ALL POTENTIAL ASSET OWNERS ARE CANVASSED AND PROVIDE RESPONSES, THIS IS NOT GUARANTEED. WORKS SHOULD NOT BE PLANNED BASED ON THIS REPORT, THIS IS NOT BASED ON A SITE SURVEY OR GEOPHYSICAL INVESTIGATION WORKS.

Please refer to the following as a guide to successful project works





Enquiry Confirmation LSBUD Ref: 29231323

Date of enquiry: 20/04/2023 Time of enquiry: 11:38

Enquirer					
Name	Mr Danny Simms	Phone	07564812240		
Company	Premier Surveys	Mobile	Not Supplied		
Address	9-11 Lowater Street Nottingham Nottinghamshire NG4 1	9-11 Lowater Street Nottingham Nottinghamshire NG4 1JJ			
Email	daniel.simms@premiersurveys.co.uk				

Site Map **Enquiry Details** Enquiry type Initial Enquiry Work category **Development Projects** Work type Commercial/industrial Work type buffer* 75 metres Start date 24/04/2023 End date 05/05/2023 Scheme/Reference 8856 Northfleet Search location XY= 562656, 174281 Confirmed location 562731 174436 Site size 493785 metres square Site Contact Name Danny Simms Site Phone No. 07564812240 Plans Only **Description of Works** Please note that the above map only displays the location of the proposed work site and will not display any of the Members' pipes and cables. It is imperative that this area accurately reflects the proposed work site.

* The WORK TYPE BUFFER is a distance added to your search area based on the Work type you have chosen.

Affected LSBUD members							
(LSBUD Members who have assets registered on LSBUD within the vicinity of your search area.)							
Asset Owner	Phone/Email	Emergency Only	Status				
Cadent Gas	0800688588	0800111999	Await response				
ESP Utilities Group	01372227560	01372227560	Await response				
National Grid Electricity Transmission	08000014282	0800404090	Await response				
SGN	08009121722	0800111999	Await response				
UK Power Networks	08000565866	08000565866	Await response				

Status explanation

Await Response means that the asset owner will contact you. This is typically by sending the plan response but they may ask for further information before being able to do so, particularly if any payments or authorisations are required.

Email Additional Info means that the asset owner needs further information about your works to assess your enquiry before providing a response. Please provide any details you have available including plans, method statements etc. if available.



Important notices

It is very important that you correctly understand what the service does and the procedures in order for you to work safely. Please refer to the LSBUD Support Page (www.lsbud.co.uk/linesearchbeforeudig-support) for further guidance. This information includes how to provide additional information to the LSBUD Members who request it to provide a response to your enquiry.

Validity and search criteria. The results of this enquiry are based on the confirmed information you entered and are valid only as at the date and time of the enquiry. It is your responsibility to ensure that the Enquiry Details are correct, and LinesearchbeforeUdig (LSBUD) accepts no responsibility for any errors or omissions in the Enquiry Details or any consequences thereof. LSBUD Members update their asset information on a regular basis so you are advised to consider this when undertaking any works. It is your responsibility to choose the period of time after which you need to resubmit any enquiry but the maximum time (after which your enquiry will no longer be dealt with by the LSBUD Helpdesk and LSBUD Members) is 28 days. If any details of the enquiry change, particularly including, but not limited to, the location of the work, then a further enquiry must be made.

Terms and Conditions. Please note that this enquiry is subject always to our standard terms and conditions available at <u>www.lsbud.co.uk</u> ("Terms of Use") and the disclaimer at the end of this document. Please note that in the event of any conflict or ambiguity between the terms of this Enquiry Confirmation and the Terms of Use, the Terms of Use shall take precedence.

List of not affected LSBUD members

(LSBUD Members who do not have assets registered on the LSBUD service within the vicinity of your search area.)

alea.)		
Angus Energy	AWE Pipeline	B & D Energy Limited
Balfour Beatty Investments Limited	BOC Limited (A Member of the Linde Group)	Box Broadband
BP Exploration Operating Company Limited	BPA	Cambridgeshire County Council Climate Change and Energy Services
Carrington Gas Pipeline	CATS Pipeline c/o Wood Group PSN	Cemex
Centrica Storage Ltd	CNG Services Ltd	Concept Solutions People Ltd
ConocoPhillips (UK) Teesside Operator Ltd	D.S.Smith	Diamond Transmission Corporation
DIO (MOD Abandoned Pipelines)	DIO (MOD Live Pipelines)	E.ON UK CHP Limited
EDF Energy Renewables Ltd	EirGrid	Eleclink Limited
Electricity North West Limited	Energy Assets Networks	ENI & Himor c/o Penspen Ltd
EnQuest NNS Limited	EP Langage Limited	ESSAR
Esso Petroleum Company Limited	euNetworks Fiber UK Ltd	EXA Infrastructure
Exolum Pipeline System	Fulcrum Electricity Assets Limited	Fulcrum Pipelines Limited
Gamma	Gas Networks Ireland (UK)	Gateshead Energy Company
Gigaclear Ltd	Harbour Energy	Heathrow Airport LTD
Humbly Grove Energy	IGas Energy	INEOS FPS Pipelines
INEOS Manufacturing (Scotland and TSEP)	INOVYN ChlorVinyls Limited	INOVYN Enterprises Limited
Intergen (Coryton Energy or Spalding Energy)	Jurassic Fibre Ltd	Last Mile
Mainline Pipelines Limited	Manchester Jetline Limited	Manx Cable Company
Marchwood Power Ltd (Gas Pipeline)	Melbourn Solar Limited	Moray East Offshore Windfarm
MUA Group Limited	National Gas Transmission	National Grid Electricity Distribution
Neos Networks	Northern Gas Networks Limited	Northumbrian Water Group
NPower CHP Pipelines	NTT Global Data Centers EMEA UK Ltd	NYnet Ltd
Ogi	Oikos Storage Limited	Ørsted
Palm Paper Ltd	Perenco UK Limited (Purbeck Southampton Pipeline)	Petroineos
Phillips 66	Portsmouth Water	Premier Transmission Ltd (SNIP)
Redundant Pipelines - LPDA	RWE - Great Yarmouth Pipeline (Bacton to Great Yarmouth Power Station)	RWEnpower (Little Barford and South Haven)
SABIC UK Petrochemicals	SAS Utility Services Ltd	Scottish and Southern Electricity Networks
Scottish Power Generation	Seabank Power Ltd	SES Water
Shell	Shell NOP	SP Energy Networks
Squire Energy Networks	SSE Generation Ltd	SSE Transmission
SSE Utility Solutions Limited	Storengy	Tata Communications (c/o JSM Construction Ltd)
Total Colnbrook Pipelines	Total Finaline Pipelines	Transmission Capital



Enquiry Confirmation LSBUD Ref: 29231323

Uniper UK Ltd	University of Cambridge Granta Backbone Network	Vattenfall
Veolia ES SELCHP Limited	Veolia ES Sheffield Ltd	Voneus Limited
VPI Power Limited	Wales and West Utilities	West of Duddon Sands Transmission Ltd
Westminster City Council	Zayo Group UK Ltd c/o JSM Group Ltd	

Non-LSBUD members (Asset owners not registered on LSBUD)

(The following Non-LSBUD Members may have assets in your search area. It is YOUR RESPONSIBILITY to contact them before proceeding.

Please be aware this list is not exhaustive and it is your responsibility to identify and contact all asset owners within your search area.)

Asset Owner	Preferred contact method	Phone	Status
Anglian Water	http://www.digdat.co.uk	01480323891	Not Notified
BT	https://www.swns.bt.com/pls/mbe/welcome.home	08000232023	Not Notified
CityFibre	asset.team@cityfibre.com	033 3150 7282	Not Notified
Colt	plantenquiries@catelecomuk.com	01227768427	Not Notified
Equans	nrswa.uk@equans.com	0800 130 3600	Not Notified
GTC	https://pe.gtc-uk.co.uk/PlantEnqMembership	01359240363	Not Notified
Lumen Technologies	plantenquiries@instalcom.co.uk	02087314613	Not Notified
Mobile Broadband Network Limited	mbnl.plant.enquiries@turntown.com	01212 621 100	Not Notified
Sky UK Limited	nrswa@sky.uk	02070323234	Not Notified
Sota	SOTA.plantenquiries@instalcom.co.uk		Not Notified
Southern Water	www.digdat.co.uk	08452700212	Not Notified
Thurrock Council	hmaintenance@thurrock.gov.uk	01375652214	Not Notified
Utility assets Ltd	assetrecords@utilityassets.co.uk		Not Notified
Verizon Business	osp-team@uk.verizonbusiness.com	01293611736	Not Notified
Virgin Media	http://www.digdat.co.uk	08708883116	Not Notified
Vodafone	osm.enquiries@atkinsglobal.com	01454662881	Not Notified

Disclaimer

Please refer to LSBUD's Terms of Use for full terms of use available at www.lsbud.co.uk

The results of this Enquiry are personal to the Enquirer and shall not be shared with or relied upon by any other party. The asset information on which the Enquiry results are based has been provided by LSBUD Members, therefore LSBUD will provide no guarantee that such information is accurate or reliable nor does it monitor such asset information for accuracy and reliability going forward. There may also be asset owners which do not participate in the enquiry service operated by LSBUD, including but not exclusively those set out above. Therefore, LSBUD cannot make any representation or give any guarantee or warranty as to the completeness of the information contained in the enquiry results or accept any responsibility for the accuracy of the mapping images used. LSBUD and its employees, agents and consultants accept no liability (save that nothing in this Enquiry Confirmation excludes or limits our liability for death or personal injury arising from our negligence, or our fraud or fraudulent misrepresentation, or any other liability that cannot be excluded or limited by English law) arising in respect thereof or in any other way for errors or omissions including responsibility to any person by reason of negligence.

From:	Daniel Simms
To:	Daniel Simms
Subject:	Request for Plans only-REF 8856 Kimberly Clark, Northfleet, Gravesend DA11 9AD - NGR E562656 N174281
Date:	20 April 2023 12:10:22
Attachments:	8856 Site Map.jpg

Dear Sir/Madam

Re: - Underground Apparatus / Plant-Request for Plans only

Site Ref. 8856 Kimberly Clark, Northfleet, Gravesend DA11 9AD - NGR E562656 N174281

To enable the study of background information for belowground mapping survey works and initial design considerations at the above site location, please provide plan(s) indicating the position and type of your apparatus in the locality of the site detailed above.

The site location is as per the provided OS Coordinates and highlighted on the attached plan. If you have no apparatus in the area, please advise.

Your earliest response would be greatly appreciated.

Best Regards

Daniel Simms Utility Survey Manager For Premier Surveys Limited daniel.simms@premiersurveys.co.uk www.premiersurveys.co.uk Tel: 0115 9622876 Mob: 07564 812240 Midlands Office: 9-11 Lowater Street, Carlton, Nottingham, NG4 1JJ London Office: Unit 3, Ivory Wharf, Elephant Lane, London, SE16 4JD



High-definition Laser Scanning - Measured Building Surveys - GIS Data Capture - BIM - GPS - Topographical Mapping & Site Surveys - Underground Utility Surveys - 3D Modelling

This email and any attachments, replies and forwarded copies are confidential and are strictly for the use of the named recipient(s) only. If you received it in error you may not make use of it. Please email us, including a copy of the message, to: mail@premiersurveys.co.uk. Then please delete the email and any copies. Premier Surveys Limited, Registered No. 2389173, Registered in England. Registered Office: 9-11 Lowater Street, Carlton, Nottingham, NG4 1JJ

Supplier Responses (Tabulated)

Utility/Service	Date	Response Date	Assets in Area Y/N				
Main							
BT	20/04/2023	20/04/2023	Y				
Gas	20/04/2023	20/04/2023	Y				
Electricity	20/04/2023	20/04/2023	Y				
Water	20/04/2023	20/04/2023	Y				
Sewer	20/04/2023	20/04/2023	Y				
	Oth	ner					
Lumen	20/04/2023	24/04/2023	Ν				
City Fibre	20/04/2023	20/04/2023	Ν				
Sky	20/04/2023	21/04/2023	Ν				
MBNL	20/04/2023	20/04/2023	Ν				
SOTA	20/04/2023	23/04/2023	Ν				
Verizon	20/04/2023	21/04/2023	Ν				
Virgin Media	20/04/2023	20/04/2023	Y				
Vodafone	20/04/2023	24/04/2023	Ν				
ESP- Gas	20/04/2023	20/04/2023	Ν				
Colt	20/04/2023	25/04/2023	Ν				
Gas-Cadent	20/04/2023	20/04/2023	Ν				
Equans	20/04/2023	20/04/2023	Ν				
Utility Assets	20/04/2023	20/04/2023	Ν				
GTC	20/04/2023	20/04/2023	Ν				

Supplier responses labelled with a (Y) indicates services in the area and should require consultation of plans and must exercise caution when conducting works in the area	Y
Supplier responses labelled with a (NR) indicates no response from the service provider so there may be services in and around the area and caution must be exercised.	NR
Supplier responses labelled with a (N) indicates no services in the area however services may be near and around site so caution is still recommended.	N

Note, certain suppliers who appear on the linesearch result are not canvassed as it is known that they do not have assets in this location

The above are asset owners/operators are those whose assets may be affected by the proposed works. A full list of asset owners reviewed is compiled later in the report. Every effort is made to canvas all relevant asset owners for response. Whilst we carry out cross checks to ensure all enquiries are made to all relevant parties, we cannot guarantee 100% of asset owners have been contacted.

Please note, the information contained within the following plans/responses is 'record information'. It is not based on site location survey work or any geophysical investigation works. Services may be plotted inaccurately/be incomplete. This information should be used as a guide only.

(Source Linesearch/DigDat)

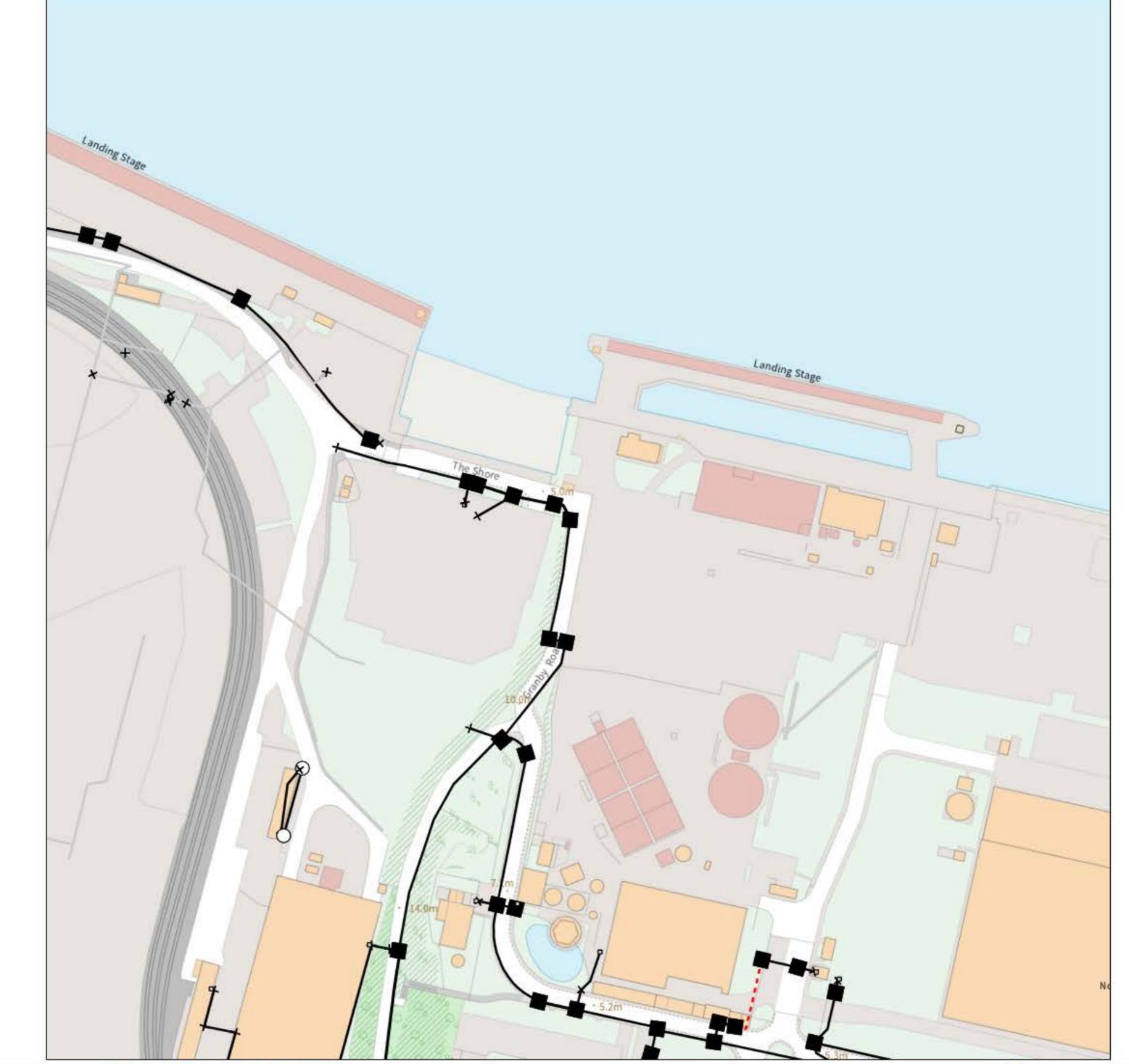




(Openreach)



Maps by email Plant Information Reply



IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.



openreach

CLICK BEFORE YOU DIG

FOR PROFESSIONAL FREE ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS INCLUDING LOCATE AND MARKING SERVICE

email cbyd@openreach.co.uk

ADVANCE NOTICE REQUIRED (Office hours: Monday - Friday 08.00 to 17.00) www.openreach.co.uk/cbyd

Accidents happen

If you do damage any Openreach equipment please let us know by calling 0800 023 2023 (opt 1 + opt 1) and we can get it fixed ASAP

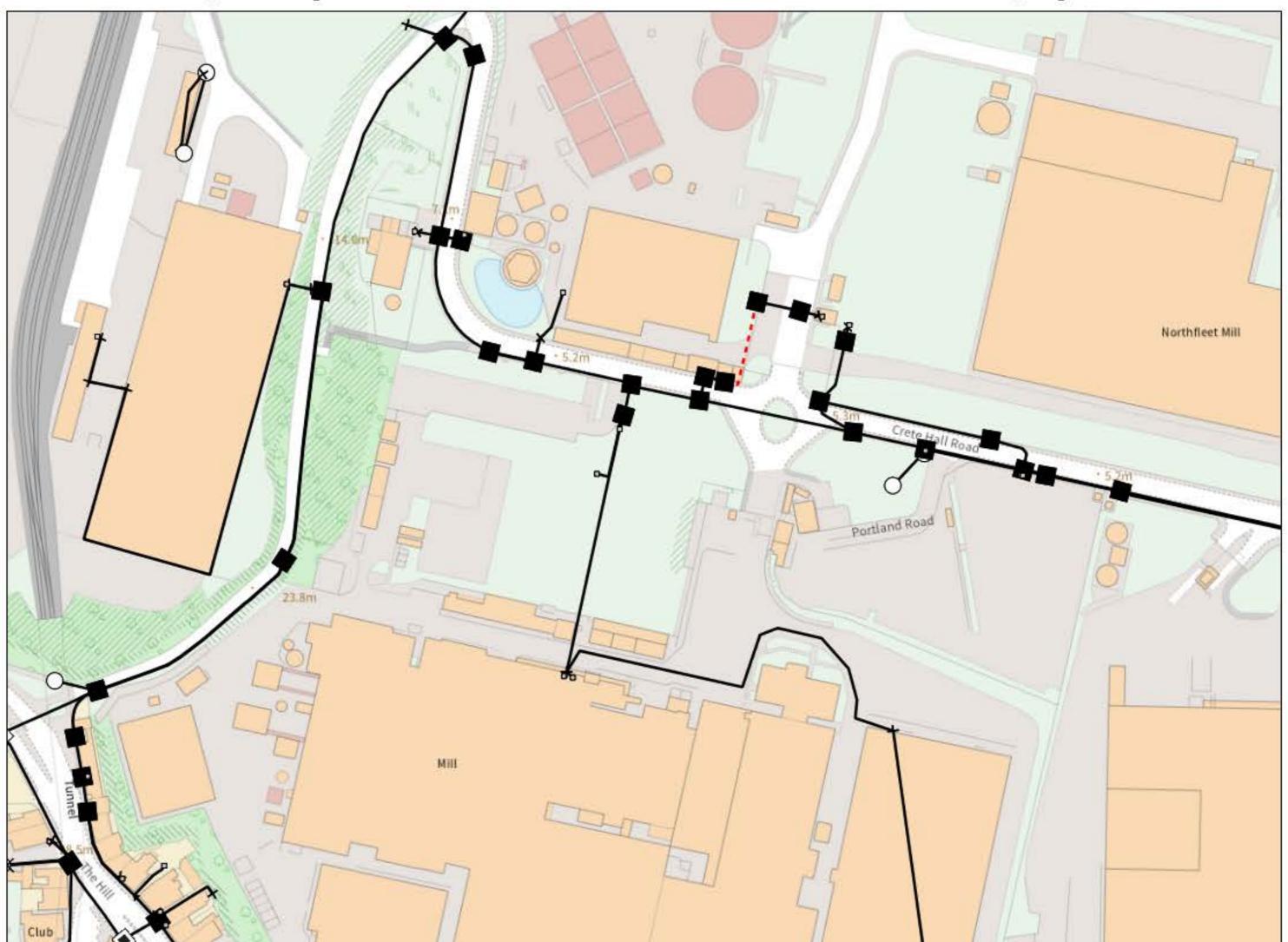
Reproduced from the Ordnance Survey map by BT by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office (C) Crown Copyright British Telecommunications plc 100028040

KEY	KEY TO BT SYMBOLS		Change Of State	+	Hatchings	**
	Planned	Live	Split Coupling	\times	Built	~
РСР		⊠	Duct Tee		Planned	
Pole	0	0	Building		Inferred	~
Box			Kiosk	ĸ	Duct	$\langle \rangle$
Manhole			Other propo	sed plant is	shown using da	shed lines.
Manhole Cabinet		■ 1	BT Symbols Existin Information	not listed al ng BT Plant n valid at time	shown using da bove may be dis nay not be reco e of preparation ter the date of p	sregarded. rded. n. Maps are
	Pending Add	In Place	BT Symbols Existin Information	not listed al ng BT Plant n valid at time	bove may be di: nay not be reco e of preparation	sregarded. rded. n. Maps are
		Û	BT Symbols Existin Information only valid fo Pending	not listed al ng BT Plant n valid at time r 90 days af	bove may be di: nay not be reco e of preparation	sregarded. rded. n. Maps are

BT Ref : CJT12438S Map Reference : (centre) TQ6261474620 Easting/Northing : (centre) 562614,174620 Issued : 20/04/2023 12:43:40

WARNING: IF PLANNED WORKS FALL INSIDE HATCHED AREA IT IS ESSENTIAL BEFORE PROCEEDING THAT YOU CONTACT THE NATIONAL NOTICE HANDLING CENTRE. PLEASE SEND E-MAIL TO: nnhc@openreach.co.uk

Maps by email Plant Information Reply



NORTHFLEET

IMPORTANT WARNING

Church Path

Catholic Church of Our Lady

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.



openreach

CLICK BEFORE YOU DIG

FOR PROFESSIONAL FREE ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS INCLUDING LOCATE AND MARKING SERVICE

email cbyd@openreach.co.uk

ADVANCE NOTICE REQUIRED (Office hours: Monday - Friday 08.00 to 17.00) www.openreach.co.uk/cbyd

Accidents happen

If you do damage any Openreach equipment please let us know by calling 0800 023 2023 (opt 1 + opt 1) and we can get it fixed ASAP

Reproduced from the Ordnance Survey map by BT by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office (C) Crown Copyright British Telecommunications plc 100028040

KEY	TO BT SYM	BOLS	Change Of State	+	Hatchings	***
	Planned	Live	Split Coupling	\times	Built	~
РСР		Ŵ	Duct Tee		Planned	
Pole	0	0	Building		Inferred	~
Вох			Kiosk	ĸ	Duct	$\langle \rangle$
Manhole					shown using da bove may be di	
Cabinet		Û	Exist	ing BT Plant m	ay not be reco	rded.
					of preparation e <mark>r the date of</mark> p	2052 N 107 N 267 A 217
	Pending Add	In Place	Pending Remove	Not In Use		
Power Cable	++	NN	44.	NN		
	And and a second s	And Alla	and the second se		-	

BT Ref : LBH12406T Map Reference : (centre) TQ6265674281 Easting/Northing : (centre) 562656,174281 Issued : 20/04/2023 12:41:07

WARNING: IF PLANNED WORKS FALL INSIDE HATCHED AREA IT IS ESSENTIAL BEFORE PROCEEDING THAT YOU CONTACT THE NATIONAL NOTICE HANDLING CENTRE. PLEASE SEND E-MAIL TO: nnhc@openreach.co.uk



Our Ref: Ref shown on map

Date of issue: shown on map

email: <u>nnhc@openreach.co.uk</u>

Dear Customer,

NR & SW ACT 1991 - PROPOSED WORKS AT: Kimberly Clark, Northfleet, DA11 9AD

Prior to commencement of work: For free onsite guidance and accurate up to date location of BT Apparatus please contact our Plant Protection Service by the following methods:-

Email the Click Before You Dig Team <u>CBYD@openreach.co.uk</u> Visit the Click Before You Dig Website <u>www.openreach.co.uk/cbyd</u>

Thank you for your request of 20/04/23 describing the above proposals.

Enclosed are copies of our drawings marked up to show the approximate locations of BT apparatus in the immediate vicinity of your works. It is intended for general guidance only. No guarantee is given of its accuracy.

The drawings are valid for 90 days from the date of issue and should not be relied upon after this time period has expired.

When planning excavation work or other works near to BT apparatus, please be mindful our apparatus may exist at various depths and may deviate from the marked route.

To avoid damage it is recommended that mechanical excavators or borers are not used within 600mm of BT apparatus. If scaffolding is erected, please ensure that our equipment is not enclosed, blocked, covered or otherwise obstructed by the scaffolding.

In the event of BT apparatus being in the area of your works we recommend that your plant/vehicle crossing is either resited, or apply for a budget estimate by submitting detailed plans to our Network Relocation Team at https://www.ournetwork.openreach.co.uk/altering-our-network.aspx

Yours faithfully,

Julie Cullum NNHC & MBE Manager



Electricity

(National Grid Electricity)



Our Ref: 29231323 8856 Northfleet

Thursday, 20 April 2023

Danny Simms 9-11 Lowater Street Carlton

Nottinghamshire NG4 1JJ



National Grid House Warwick Technology Park Gallows Hill, Warwick CV34 6DA

Electricity Emergency Number: 0800 40 40 90* *Available 24 hours, 7 days/week. Calls may be recorded and monitored. www.nationalgrid.com

Asset Protection Gas Transmission National Grid Warwick Email: assetprotection@nationalgrid.com

National Grid Electricity – High Risk Response Letter

Dear Sir/ Madam,

An assessment has been carried out with respect to National Grid Electricity Transmission plc's apparatus and the proposed work location. Based on the location entered into the system for assessment the area has been found to be within the High Risk zone from National Grid Electricity Transmission plc's apparatus and **Must Not Proceed** without further assessment by Asset Protection.

Could you please send a works description (including how deep you are excavating) and any plans including any commencement dates to the following email address assetprotection@nationalgrid.com including the LSBUD enquiry reference number.

Failure to provide this information will result in a delay to your works being assessed.

Please note this response and any attached map(s) are valid for 28 days from date of this letter. A new enquiry will need to be submitted into LSBUD if the requested information above is not supplied within 28 days.

Yours sincerely,

Asset Protection



Your Responsibilities and Obligations

The "Assessment" Section below outlines the detailed requirements that must be followed when planning or undertaking you activities at this location.

It is your responsibility to ensure that the information you have submitted is accurate and that all relevant documents including links are provided to all persons (either direct labour or contractors) working for you near National Grid Electricity Transmission plc's apparatus, e.g. as contained within the Construction (Design and Management) Regulations.

This assessment solely relates to National Grid Electricity Transmission plc (NGET)

This assessment does **NOT** include:

• National Grid's legal interest (easements or wayleaves) in the land which restricts activity in proximity to National Grid's assets in private land. You must obtain details of any such restrictions from the landowner in the first instance and if in doubt contact Asset Protection.

- Recently installed apparatus
- National Grid Gas plc.

• Apparatus owned by other organisations, e.g. Cadent, other gas distribution operators, local electricity companies, other utilities, etc.

It is **YOUR** responsibility to take into account whether the items listed above may be present and if they could be affected by your proposed activities.

This communication does not constitute any formal agreement or consent for any proposed development work; either generally or with regard to National Grid Electricity Transmission plc easements or wayleaves nor any planning or building regulations applications.

National Grid Electricity Transmission plc or their agents, servants or contractors do not accept any liability for any losses arising under or in connection with this information. This limit on liability applies to all and any claims in contract, tort (including negligence), misrepresentation (excluding fraudulent misrepresentation), breach of statutory duty or otherwise. This limit on liability does not exclude or restrict liability where prohibited by the law nor does it supersede the express terms of any related agreements.

If you require further assistance please contact the Asset Protection team via e-mail (assetprotection@nationalgrid.com) or via the contact details at the top of this response.



Assessment

Affected Apparatus

The apparatus that has been identified as being in the vicinity of your proposed works is:

• Electricity Transmission Underground Cables and associated apparatus.

Requirements

Over Head Lines

BEFORE carrying out any work you must:

(N.B. Works only to be undertaken when contact has been made and response received from Asset Protection) - Carefully read these requirements including the attached guidance documents and maps showing the location of apparatus.

- Contact the landowner and ensure any proposed works in private land do not infringe National Grid Electricity Transmission plc's legal rights (i.e. easements or wayleaves). If the works are in the road or footpath the relevant local authority should be contacted.

- Ensure that all persons, including direct labour and contractors, working for you on or near National Grid Electricity Transmission plc's apparatus follow the requirements of the HSE Guidance Notes HSG47 - 'Avoiding Danger from Underground Services' and GS6 – 'Avoidance of danger from overhead electric power lines'. This guidance can be downloaded free of charge at www.hse.gov.uk

- In line with the above guidance, verify and establish the actual position of mains, pipes, cables, services and other apparatus on site before any activities are undertaken.

DURING any work you must:

- Comply with all guidance for working within the vicinity of overhead lines as detailed within the guidance documents listed below.

- Comply with all guidance relating to general activities and any specific guidance for each asset type as specified in the Guidance Section below.

- Ensure that access to National Grid Electricity Transmission plc's apparatus is maintained at all times.

- Prevent the placing of heavy construction plant, equipment, materials or the passage of heavy vehicles over National Grid Electricity Transmission plc's apparatus unless specifically agreed with National Grid Electricity Transmission plc's apparatus in advance.

- Exercise extreme caution if slab (mass) concrete is encountered during excavation works as this maybe protecting or supporting National Grid Electricity Transmission plc's apparatus.

Underground Cables

BEFORE carrying out any work you must:

(N.B. Works only to be undertaken when contact has been made and response received from Asset Protection)

- Refer to the attached cable profile drawings which provide details about the location of National Grid's high voltage underground cables.

- Carefully read these requirements including the attached guidance documents and maps showing the location of apparatus.

- Contact the landowner and ensure any proposed works in private land do not infringe infringe National Grid Electricity Transmission plc's legal rights (i.e. easements or wayleaves). If the works are in the road or footpath the relevant local authority should be contacted.

- Ensure that all persons, including direct labour and contractors, working for you on or near infringe National Grid Electricity Transmission plc's follow the requirements of the HSE Guidance Notes HS(G)47 "Avoiding Danger From Underground Services". This guidance can be downloaded free of charge at www.hse.gov.uk

- In line with the above guidance, verify and establish the actual position of mains, pipes, cables,





services and other apparatus on site before any activities are undertaken.

DURING any work you must:

- Comply with all guidance for working within the vicinity of Electricity Underground Cables as detailed within the guidance documents listed below.

- Comply with all guidance relating to general activities and any specific guidance for each asset type as specified in the Guidance Section below.

- Ensure that access to National Grid Electricity Transmission plc's apparatus is maintained at all times.

- Prevent the placing of heavy construction plant, equipment, materials or the passage of heavy

vehicles over National Grid Electricity Transmission plc's apparatus unless specifically agreed with National Grid Electricity Transmission plc's in advance.

- Exercise extreme caution if slab (mass) concrete is encountered during excavation works as this maybe protecting or supporting National Grid Electricity Transmission plc's apparatus.



GUIDANCE

National Grid Electricity Transmission Network data

• The Network map for National Grid Electricity Transmission assets can be downloaded at the following link in GIS format.

https://www.nationalgrid.com/uk/electricity-transmission/network-and-infrastructure/network-route-maps

Buried Cables

- National Grid's underground cables are protected by a Deed of grant; Easement; Wayleave Agreement or the provisions of the New Roads and Street Works Act. Which provide full right of access to retain, maintain, repair and inspect our asset. Hence we require that no permanent structures are to be built over our cables or within the easement strip.
- Ground levels above our cables must not be altered in any way. Any alterations to the depth of our cables will subsequently alter the rating of the circuit and can compromise the reliability, efficiency and safety of our electricity network.
- The supplied detailed route records should not be taken as positive indication of the cable location. This can only be determined by digging trial holes. Where trial holes are dug the concrete and / or polymeric cable protection tiles must not be disturbed.
- The normal recommendation is to keep 2 metres clear either side of the 1 metre wide trench containing the AC cable.
- National Grid should be made aware of the works starting and may put in place a representative to monitor the works. The works should be carried out in accordance with the recommendations in document HS (G) 47 available from the HSE web site.
- The relocation of existing underground cables is not normally feasible on grounds of cost, operation and maintenance and environmental impact and we believe that successful development can take place in their vicinity.
- The information supplied is given in good faith and only as a guide to the location of our underground cables. The accuracy of this information cannot be guaranteed. The physical presence of such cables may also be evident from physical protection measures such as ducts or concrete protection tiles. The person(s) responsible for planning, supervising and carrying out work in proximity to our cable(s) shall be liable to us, as cable(s) owner, as well as to any third party who may be affected in any way by any loss or damage resulting from their failure to locate and avoid any damage to such a cable(s).
- The relevant guidance in relation to working safely near to existing underground cables is contained within the Health and Safety Executive's (www.hse.gov.uk) Guidance HS(G)47 "Avoiding Danger From Underground Services" and all relevant site staff should make sure that they are both aware of and understand this guidance.
- Our cables are normally buried to a depth of 0.9 metres to the protective covers but this depth can vary depending on location (bridges may have cables 100mm below surface level)..The specific cable route record drawings show further details along the route of the particular cable. The cable route drawings are attached to this letter for your information.
- Cables installed in cable tunnels, whilst less likely to be affected by surface or shallow works may be affected by activities such as piling.
- National Grid assets can be adversely affected by vibration and can provide guidance on the acceptable levels of vibration due to piling and other construction related operations in the vicinity of national grid assets

Ground cover above our cables should not be reduced or increased without consultation with National Grid.
 National Grid is a trading name for:
 National Grid Electricity Transmission plc
 Registered Office: 1-3 Strand, London WC2N 5EH
 Registered in England and Wales, No 2366977

If a landscaping scheme is proposed as part of the works, we request that no trees and shrubs are planted either directly above or within 3 metres of the existing underground cable, as ultimately the roots may grow to cause damage to the cable.

before

Cables Tunnels

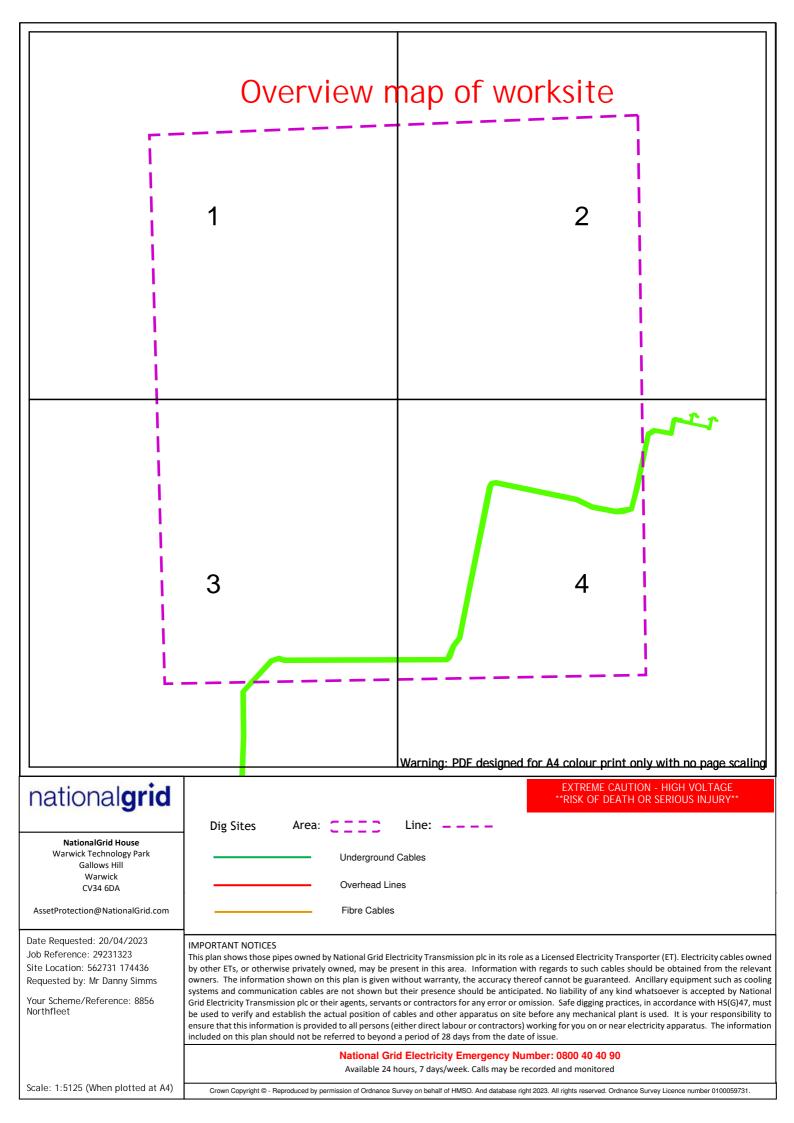
- National Grid's underground cable tunnels are protected by the provisions of a Wayleave/Easement or the New Roads and Street Works Act. This provides full right of access to retain, maintain, repair and inspect our asset.
- Further information and guidance regarding National Grid Cable Tunnels is available on our website at https://www.nationalgrid.com/uk/electricity-transmission/document/121061/download
- National Grid requires that the clearances indicated in the guidance document linked above are maintained at all times. Should it be necessary to enter the exclusion zone discussion/ agreement with National Grid is required to ensure the integrity of their tunnel asset and the high voltage cables is not compromised.
- Ground levels above our cable tunnels must not be altered in any way without prior agreement with National Grid; any alterations to the depth of our tunnels can compromise its integrity which could have an adverse impact on the reliability, efficiency and safety of our electricity network.
- Any works which would create high levels of vibration such as piling would need to be assessed by National Grid to ensure it has limited impact on our cable tunnels. National Grid can advise on acceptable vibration limits.

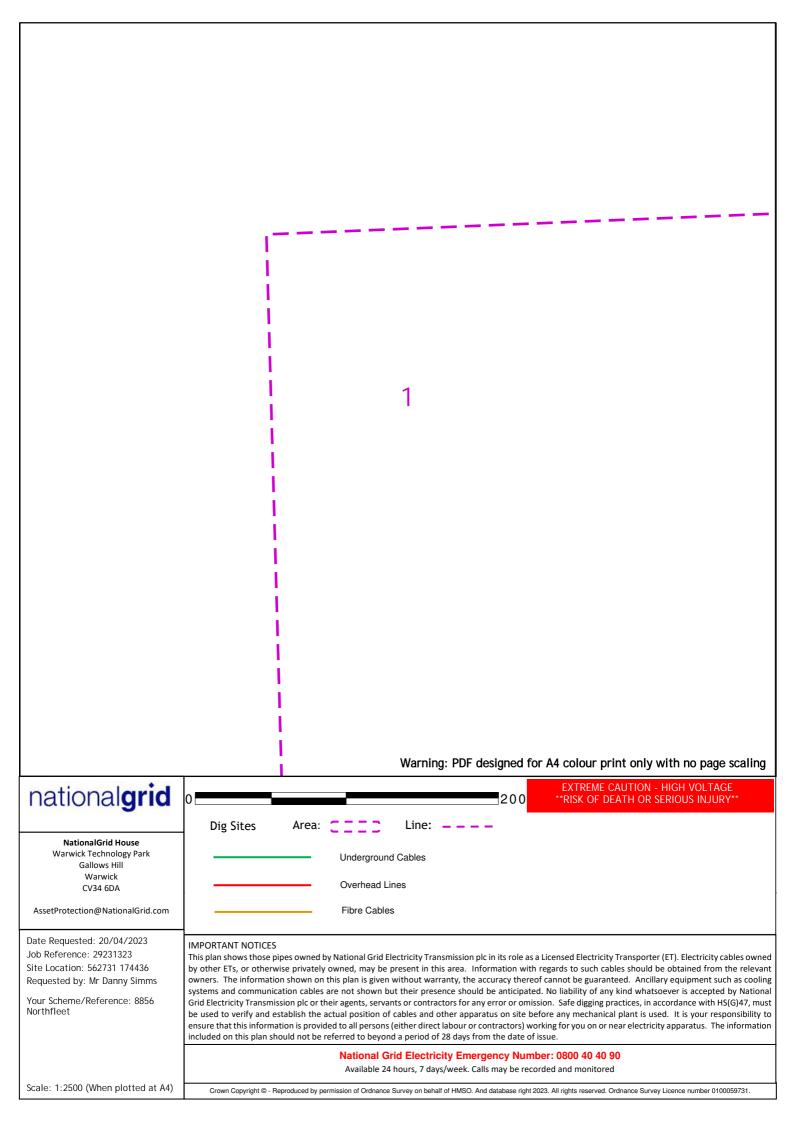
Overhead Lines

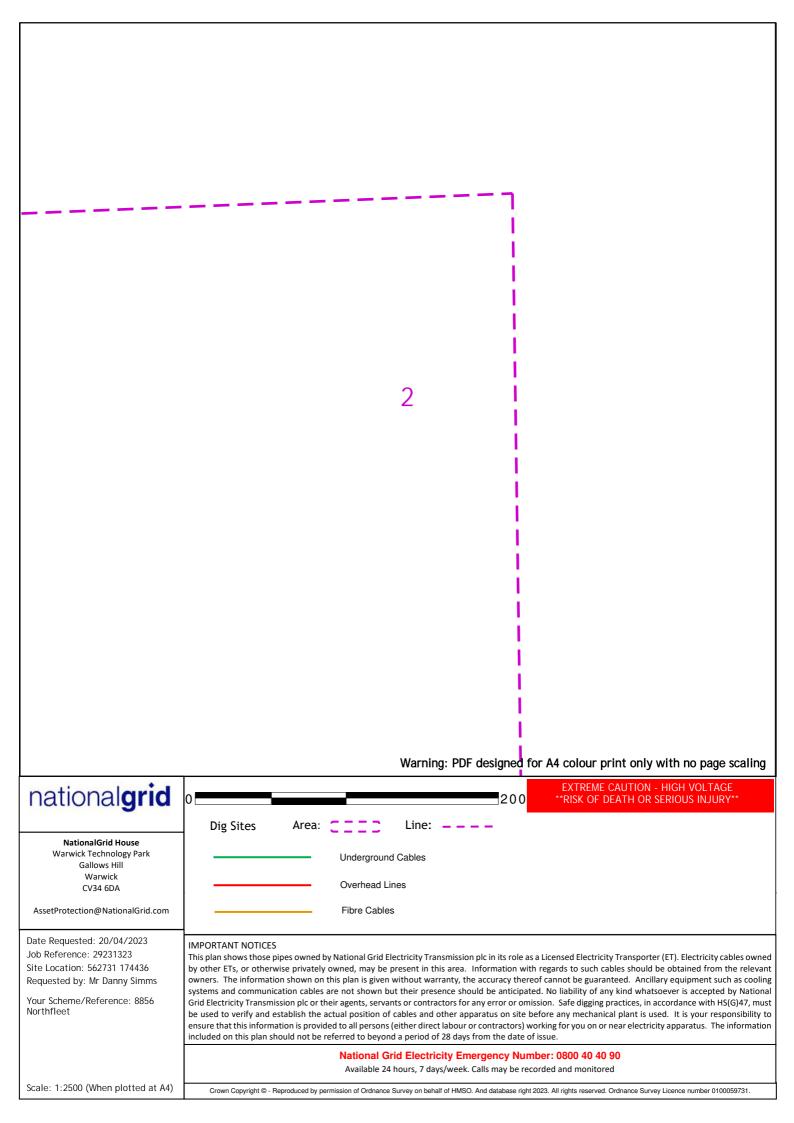
- National Grid's Overhead Line/s is protected by a Deed of Easement/Wayleave Agreement which provides full right of access to retain, maintain, repair and inspect our asset.
- The submitted proposed design does not change after the date of this letter. Any design change that moves the proposal closer to National Grid Overhead Line Assets shall be submitted for assessment.
- Statutory electrical safety clearances shall be maintained at all times. National Grid recommends that no permanent structures are built directly beneath our overhead lines. These distances are set out in EN 43 8 Technical Specification for "Overhead Line Clearances Issue 5 (2019). To purchase & download EN 43 8 Technical Specification for "Overhead Line Clearances Issue 5 (2019) go to https://www.ena-eng.org/ENA-Docs/
- Any changes in ground levels which are proposed either beneath or in close proximity to our existing overhead lines would serve to reduce safety clearances. Safety clearances to existing overhead lines must be maintained in all circumstances.
- To view the Development Near Overhead Lines Document. https://www.nationalgridet.com/document/130626/download
- To view the National Grid Third Party Guidance for working near National Grid Electricity Transmission equipment. https://www.nationalgridet.com/sites/et/files/documents/Working%20near%20electricity%20equipment.pd f

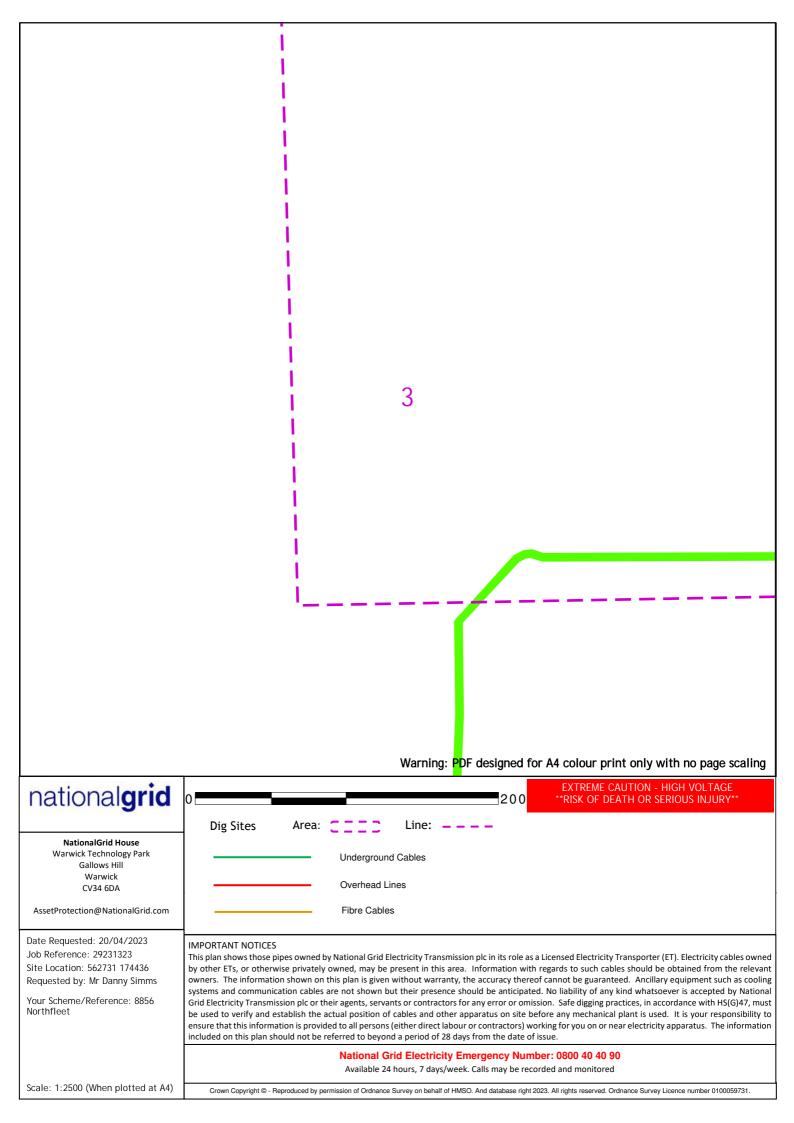


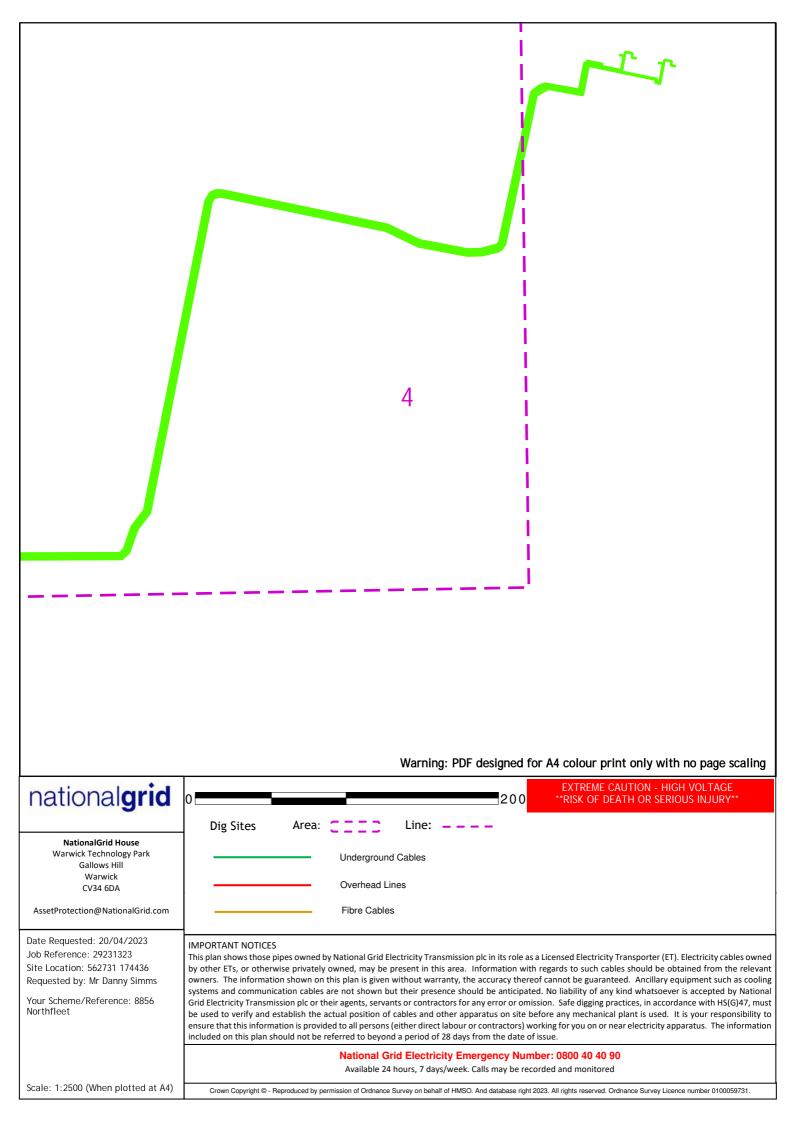
- The relevant guidance in relation to working safely near to existing overhead lines is contained within the Health and Safety Executive's (www.hse.gov.uk) Guidance Note GS 6 "Avoidance of Danger from Overhead Electric Lines."
- If a landscaping scheme is proposed as part of the proposal, only slow and low growing species of trees and shrubs shall be planted beneath and adjacent to the existing overhead line to reduce the risk of growth to a height which compromises statutory safety clearances.
- Drilling or excavation works shall not be undertaken if they have the potential to disturb or adversely affect the foundations or "pillars of support" of our towers. These foundations extend beyond the base of the tower. Pillar of Support drawings shall be obtained using the contact details above.
- Due to the scale, bulk and cost of the transmission equipment required to operate at 275kV or 400kV we only support proposals for the relocation of existing high voltage overhead lines where such proposals directly facilitate a major development or infrastructure project of national importance which has been identified as such by government.
- To promote the successful development of sites crossed by existing overhead lines, and the creation of welldesigned places, National Grid has produced 'Design guidelines for development near pylons and high voltage overhead power lines', which look at how to create high quality development near overhead lines and offer practical solutions which can assist in avoiding the unnecessary sterilisation of land in the vicinity of high voltage overhead lines.
- Further information regarding our undergrounding policy and development near transmission overhead lines is available on our website at: https://www.nationalgridet.com/network-and-assets/planning-and-development











ENQUIRY SUMMARY

Received Date 20/04/2023 10:38

Work Start Date 24/04/2023

Your Reference 8856 Northfleet

Location Centre Point: 562731 174436 X Extent: Y Extent: Postcode: DA119AD

Map Options

Paper Size: A4 Orientation: PORTRAIT Scale: 1:2500 Real World Extents: 673m x 771m

Enquirer Details

Organisation Name: Premier Surveys Contact Name: Danny Simms Email Address: daniel.simms@premiersurveys.co.uk Telephone: 07564812240 Address: 9-11 Lowater Street Carlton, , Nottinghamshire, NG4 1JJ

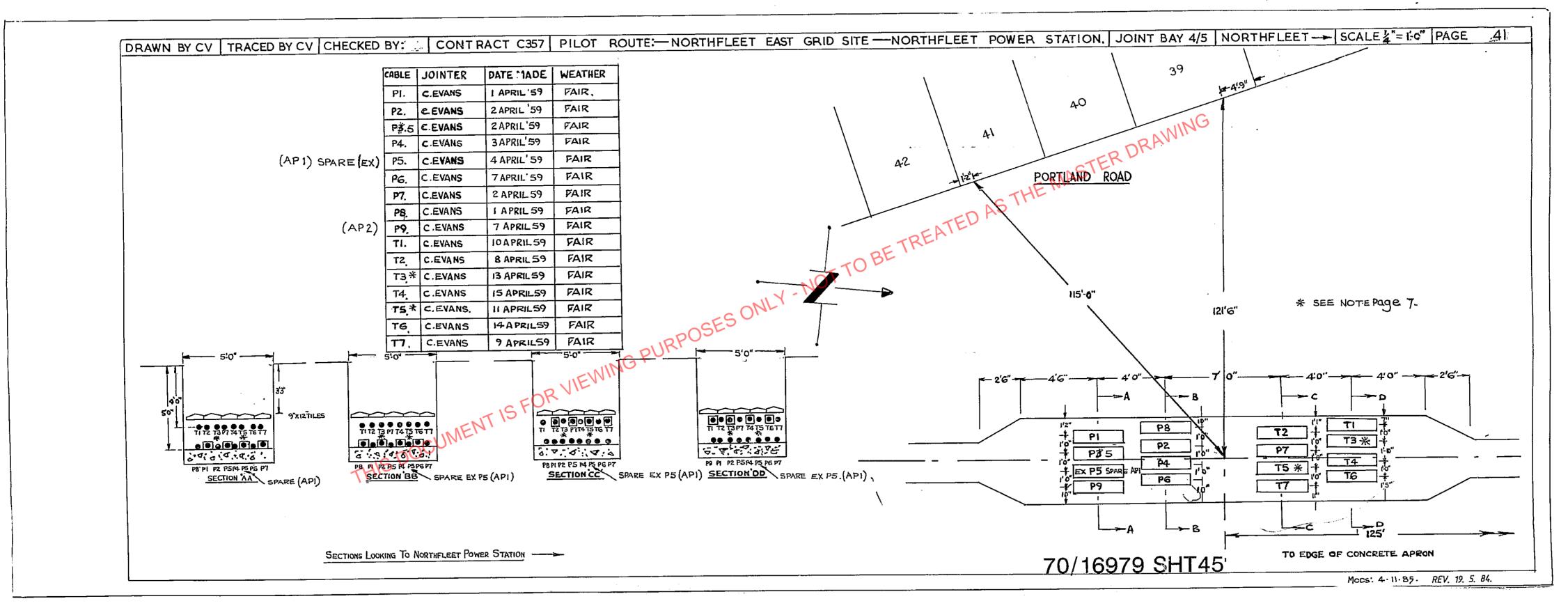
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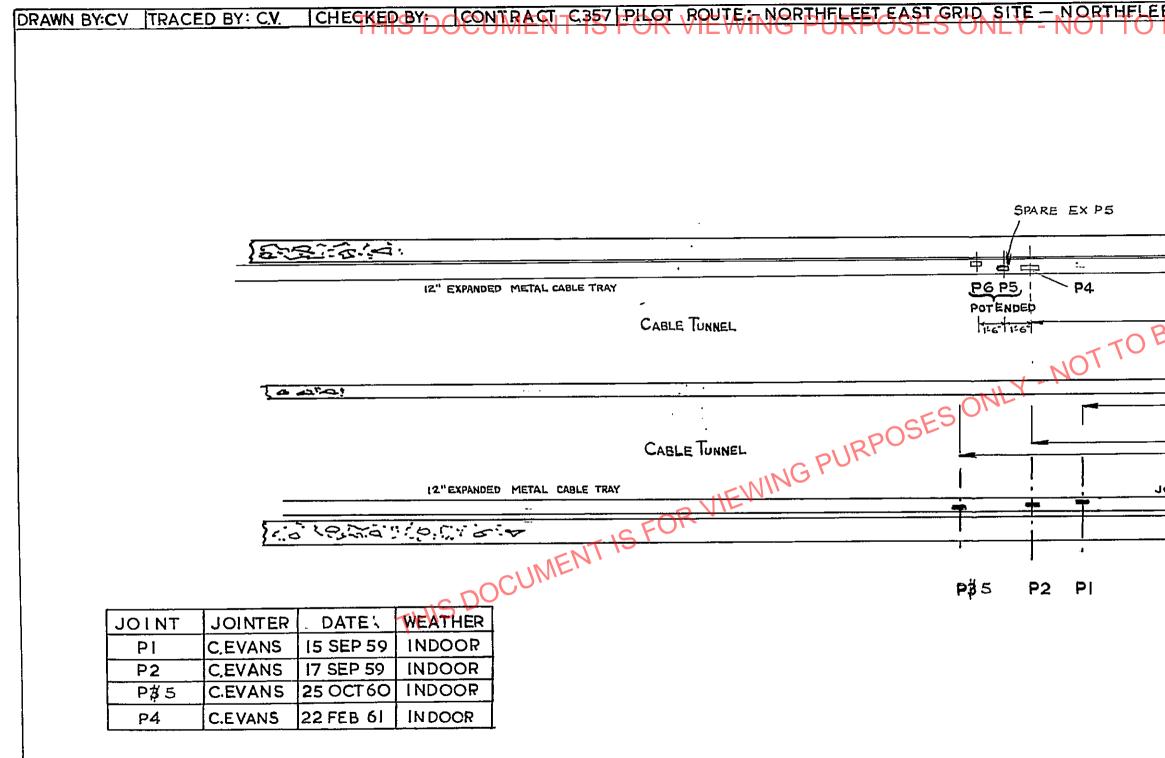
Activity Type Development Projects

Work Types Commercial/industrial

Notes/Works Description (if supplied)

Plans Only <u>Site Contact Name (if supplied)</u> Danny Simms <u>Site Contact Number (if supplied)</u> 07564812240



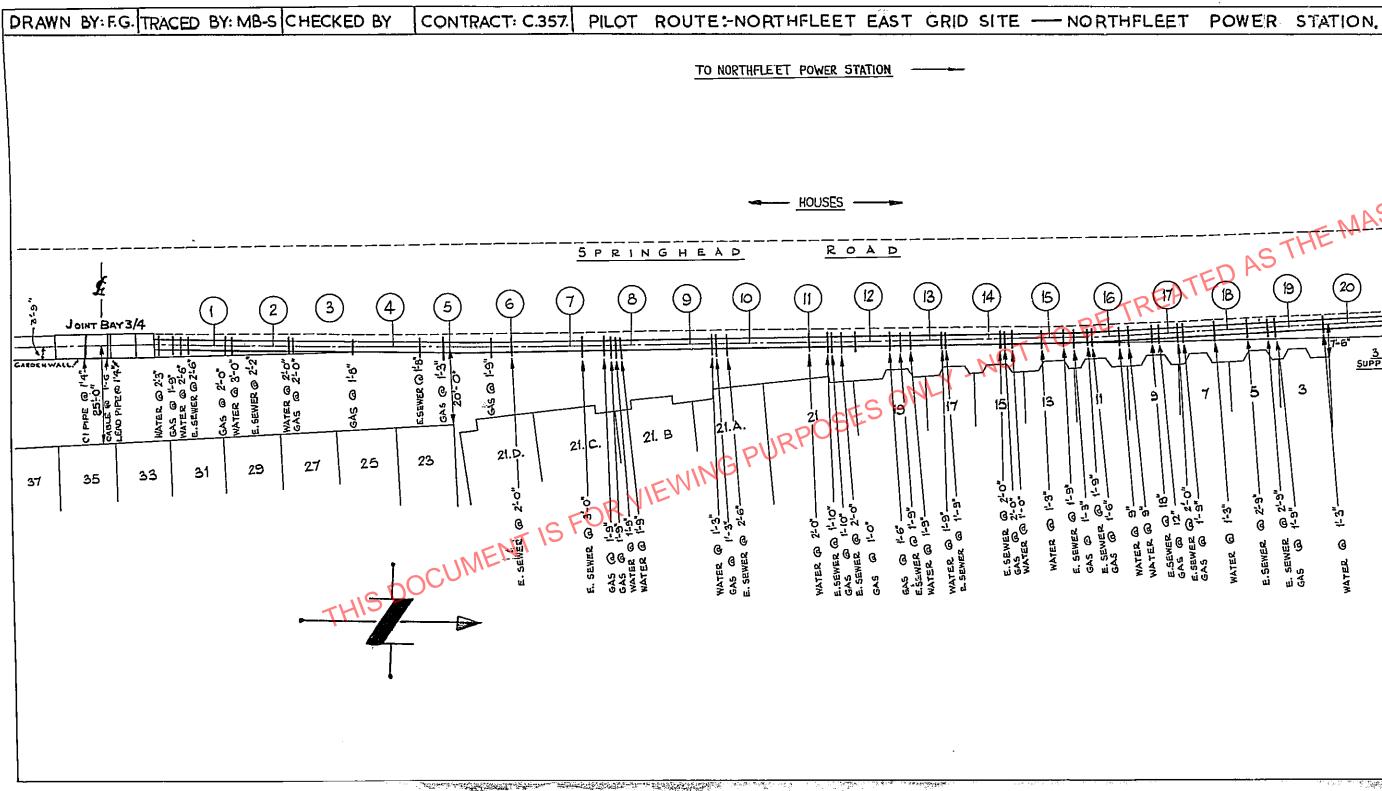


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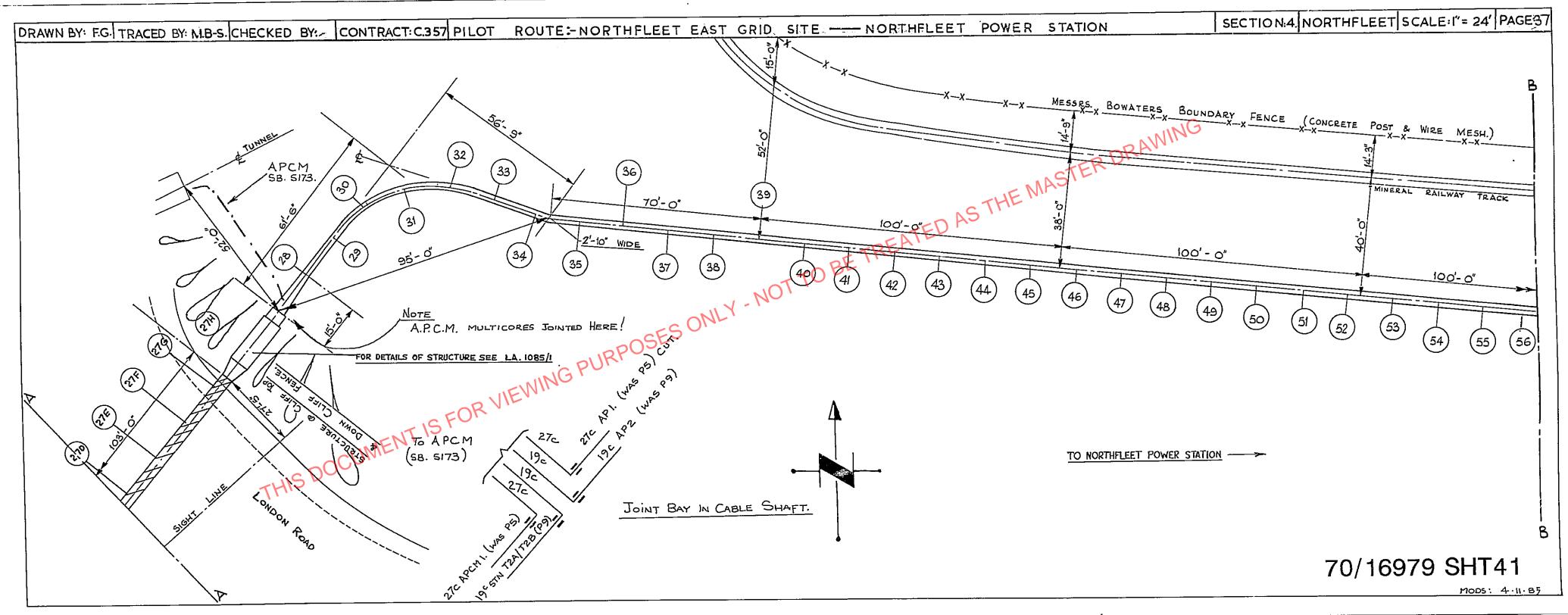
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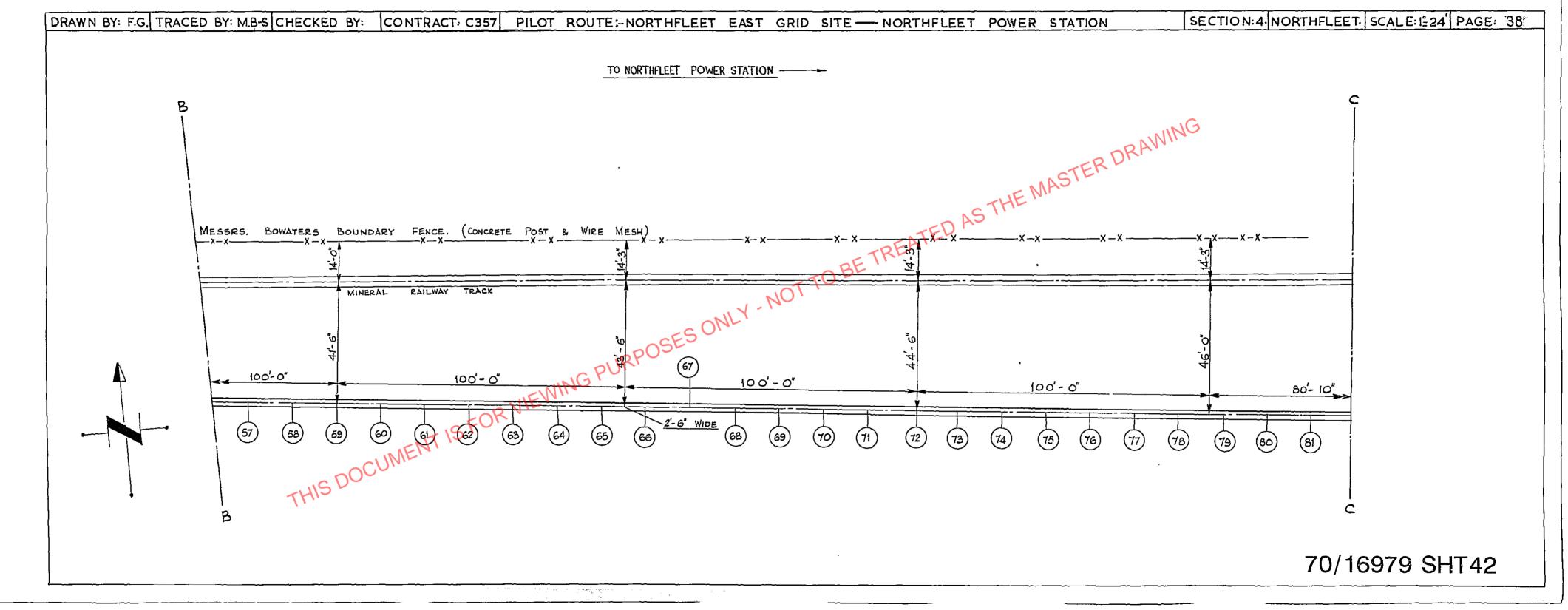




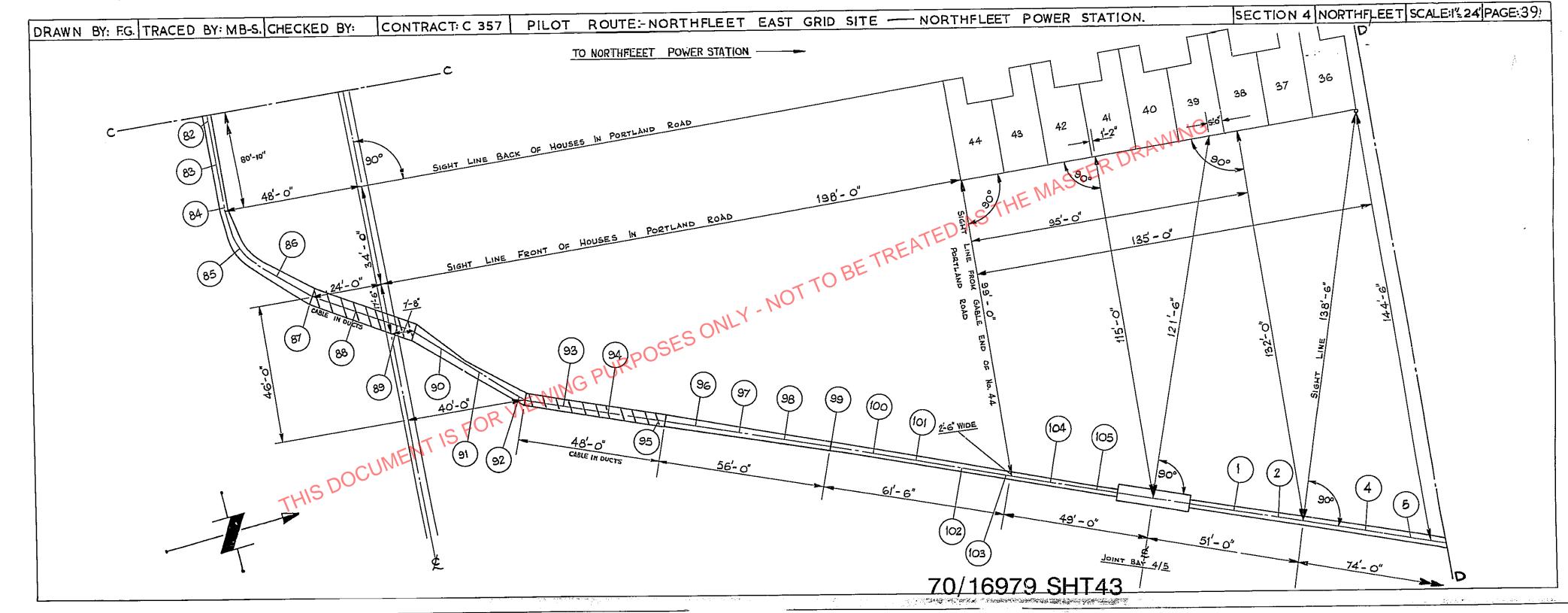
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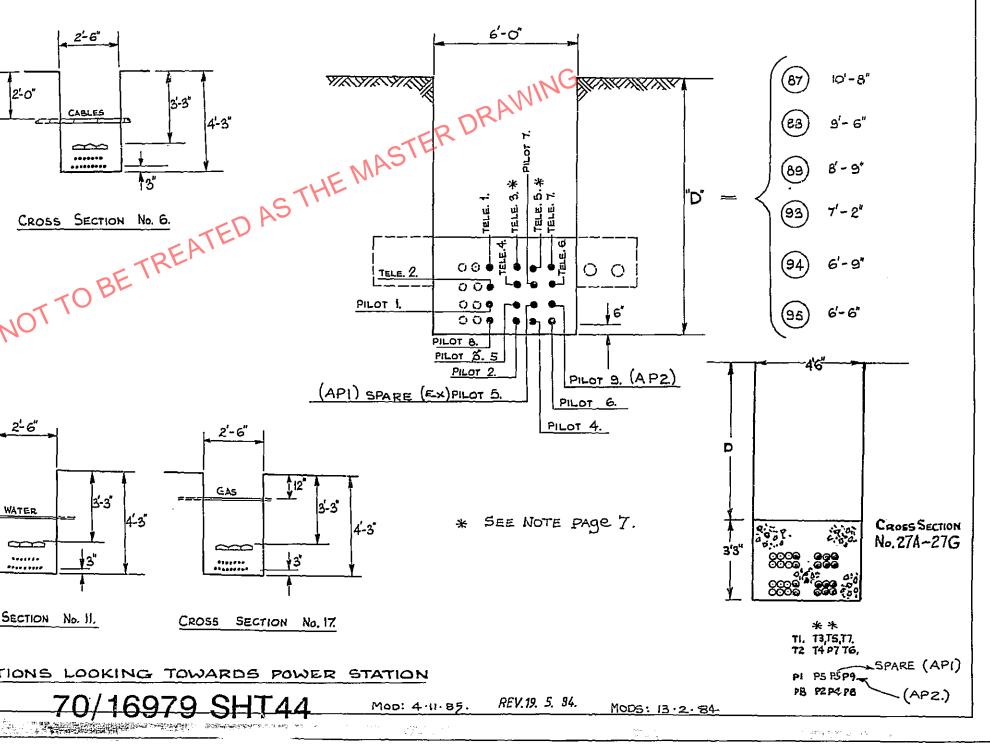


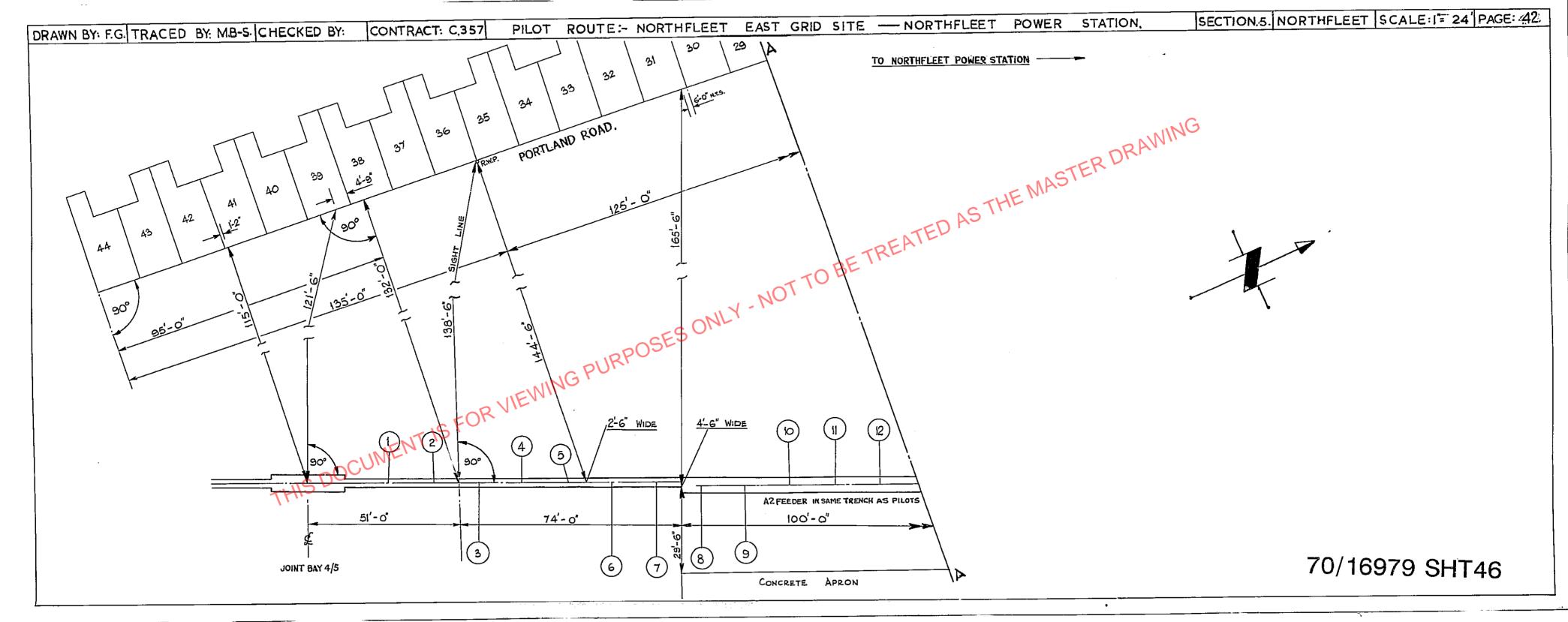
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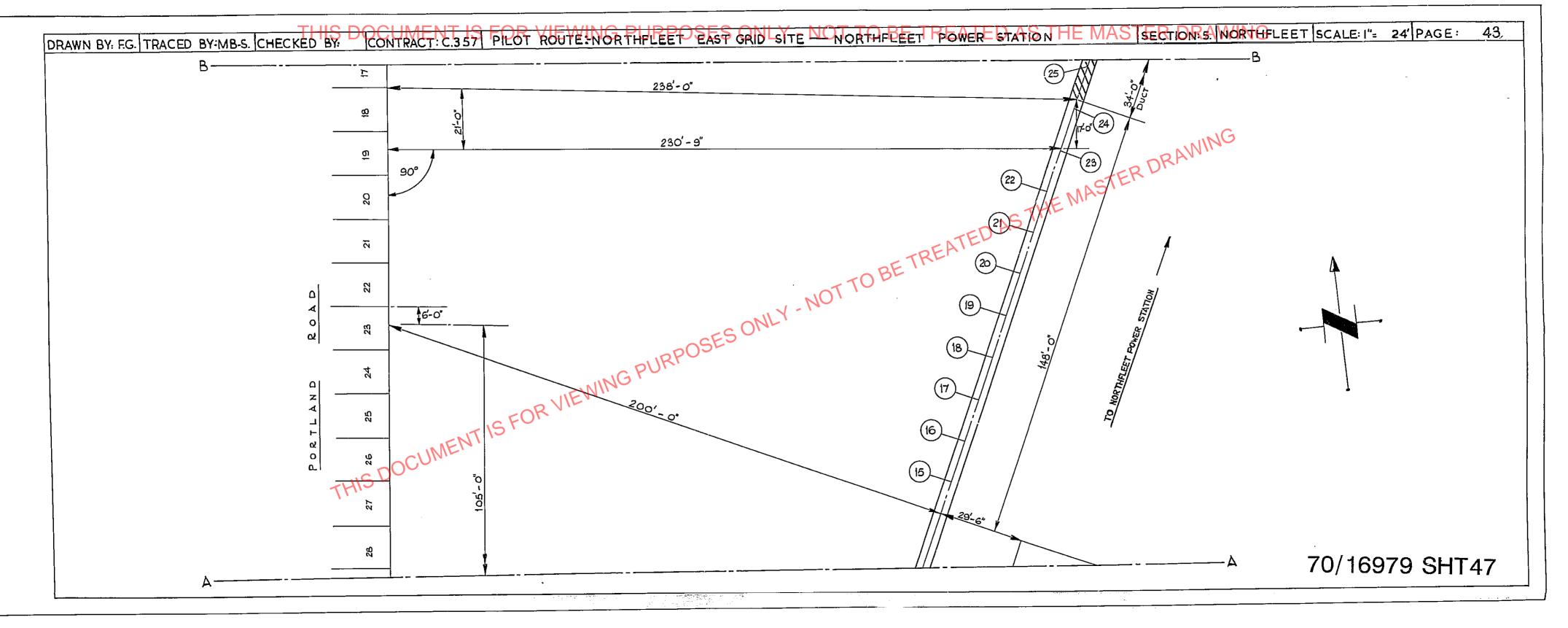


DRAWN BY FG. TRACED BY PC. CHECKED BY CONTRACT: C. 357 PILOT ROUTE -- NORTHFLEET EAST GRID SITE --- NORTHFLEET POWER STATION. SECTION: 4. DEPTH CROSS SECTION No. 9'- 5" 28. 6'-0" 2'-6" 2-6 2'-6" _ 9' - 0" 29. 8' - 3" 30. -R DRAWING YANYANY/ B' - O" 31, 86, 90. 2-0 3-3 3-3 <u>. No. 6</u> 7'-9" 32, 91. 4-3 CABLES 4-6" <u>4'-</u>3' 7'- 6" 33, 92. 5-6 7'- 3" 34. $\sim\sim\sim$ 6'-6" 85. * * ****** ม่ห ഹ് ÷ 6' - 3" 35. TELE Tele. Tele. 6'-0" 96. 23, 24, 25, 36, 97, 27F, 27G 5'- 6" CROSS SECTION Nos. 23, 24 & 25. 이 이 수 한 수 나라 수 한 0 0 5'-0" 37, 83, 84, 98, 27C TO 27E لنے ا 000 4 - 6" 38. 82. 99. 274, 278. 000 ----4' - 3" I TO 5. 7 TO 10, 12 TO 16, 18, 20, 21, 26, 27. 000 •ုခ_ မု 4' - 0" 39 то 51, 80, 81, 100. PILOT D. 5 3' - 9" 52, 66, 79. PILOT 2. 3'-6" 53 TO 65, 67 TO 78, 101. (API) SPARE (E-X)PILOT 5. PILOT 6. 3'-0" 102 TO 105. 2-6 PILOT 4. 2-6 2-9 12 2-0" 3-3 4-3 GAS 33 3-3 45 WATER CABLE * SEE NOTE PAGE 7. 4-3 000 5-6 CABLE 1011100 101000 $\alpha \alpha \alpha \overline{\alpha}$ $\sim \sim \sim$ ******* 13" ******* and. <u>+3</u> ******** THIS ' CROSS SECTION No. 19. ····· 12 CROSS SECTION No. 11. CROSS SECTION No. 17. ******* CROSS SECTION No. 22. 1at SECTIONS LOOKING TOWARDS POWER STATION

NORTHFLEET SCALE: 1-4-0 PAGE: 40

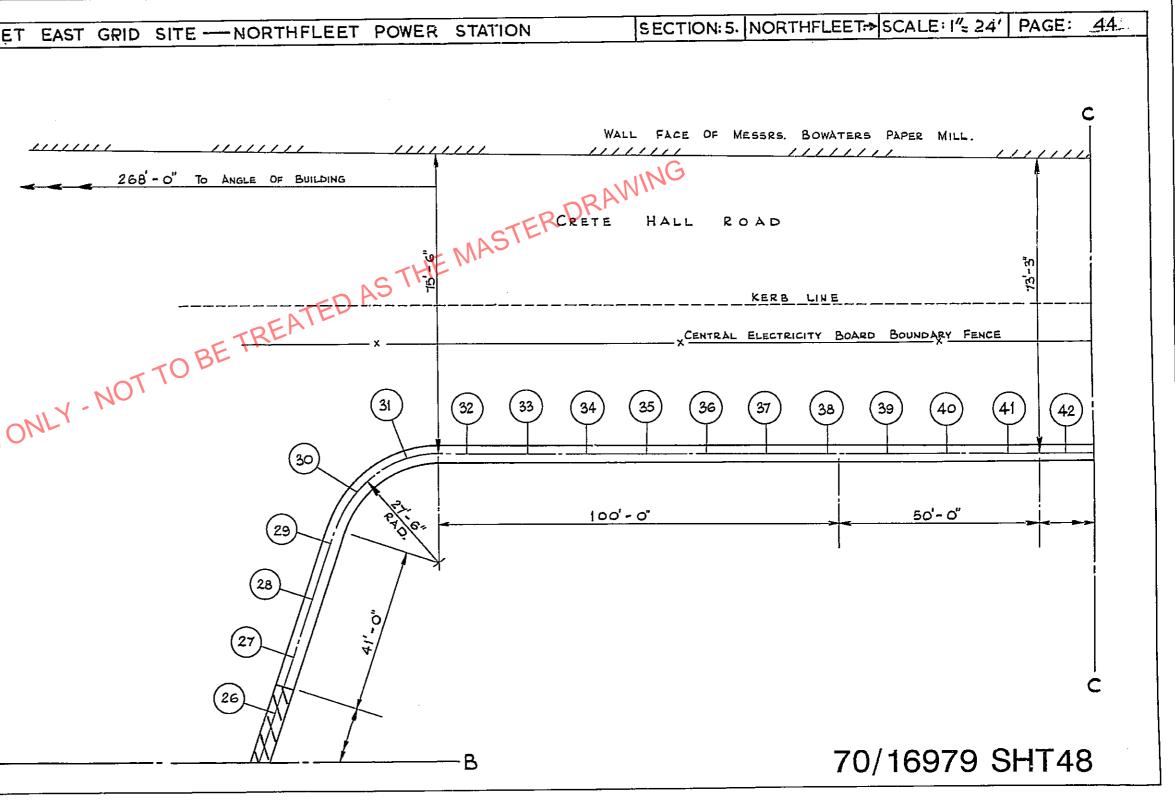




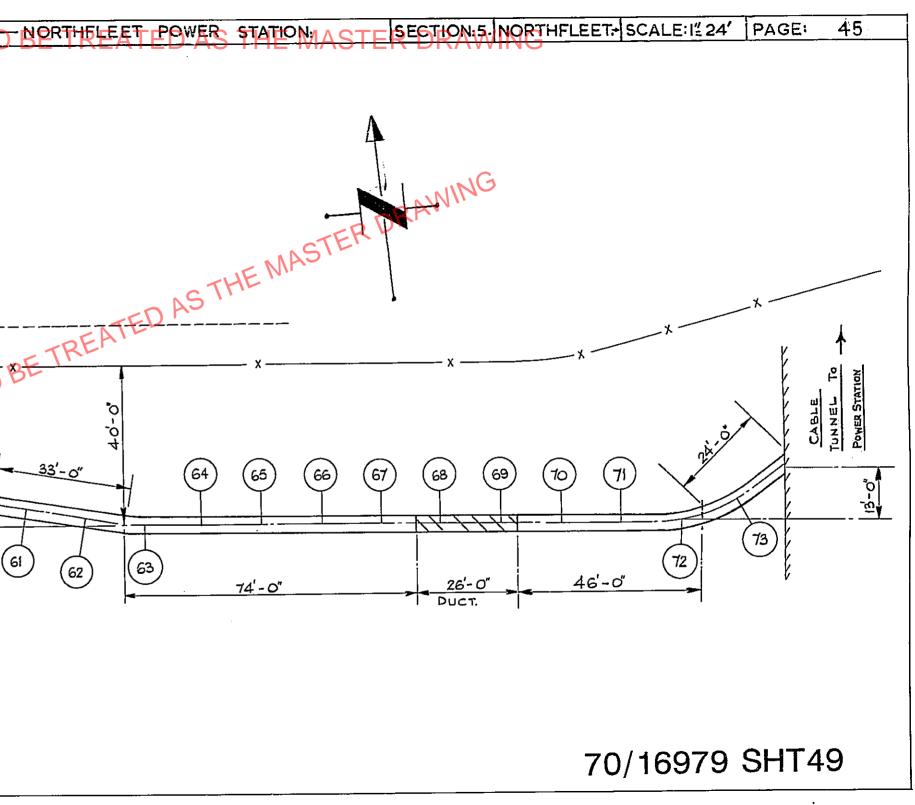


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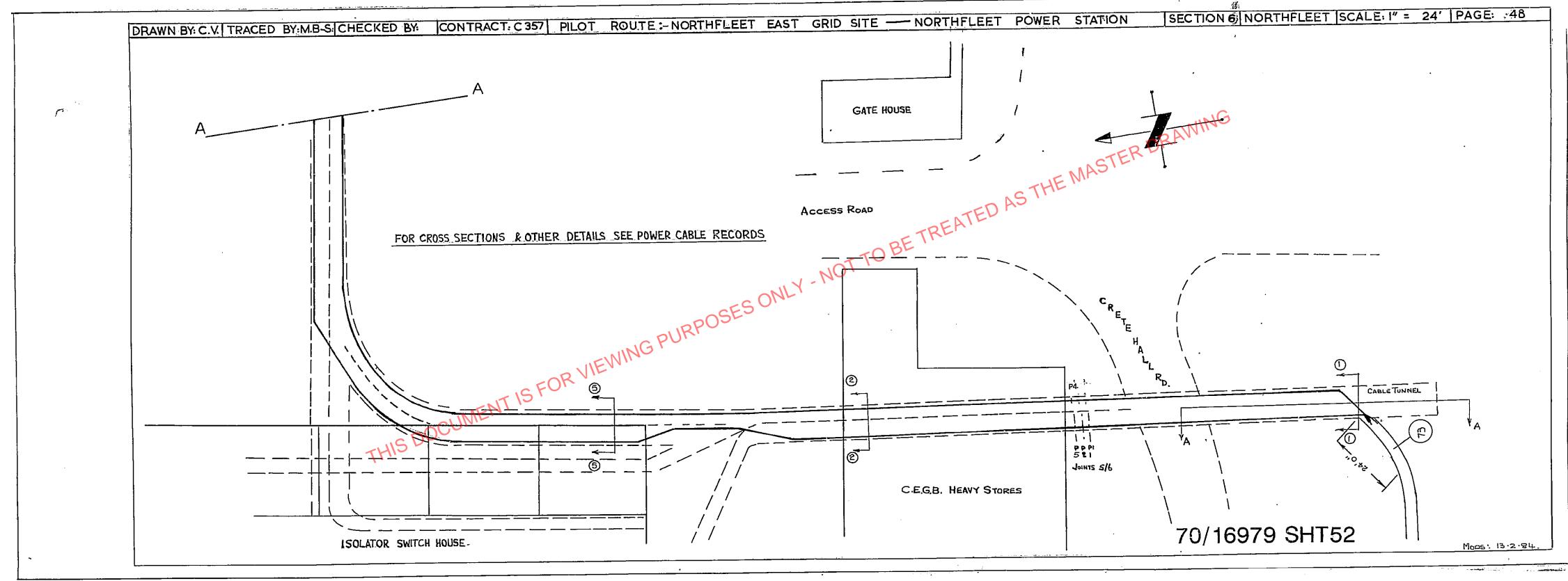
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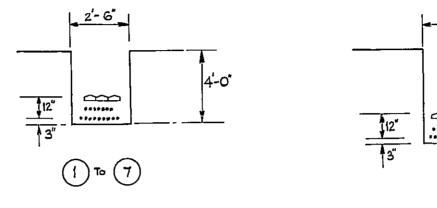
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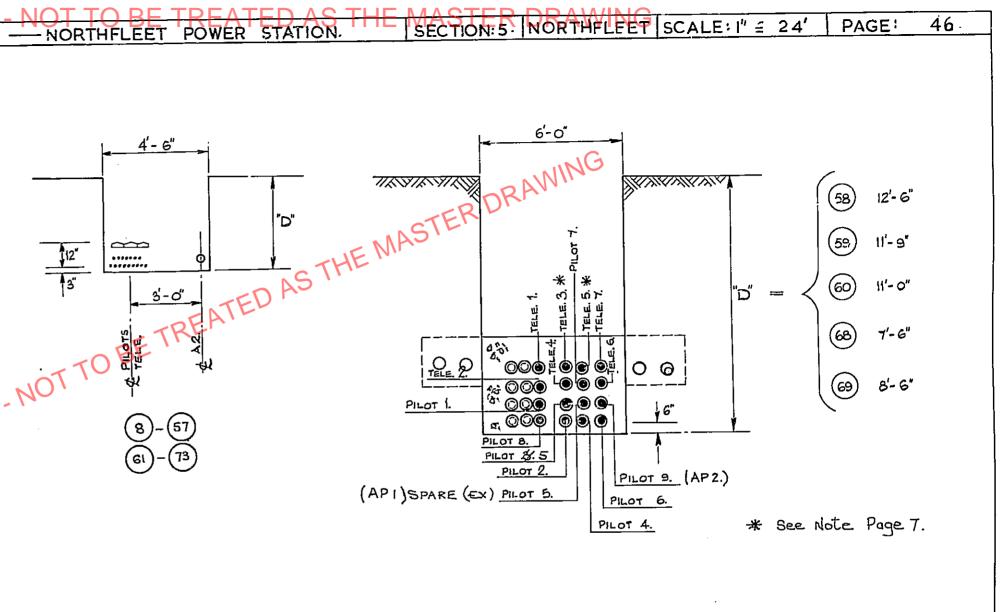
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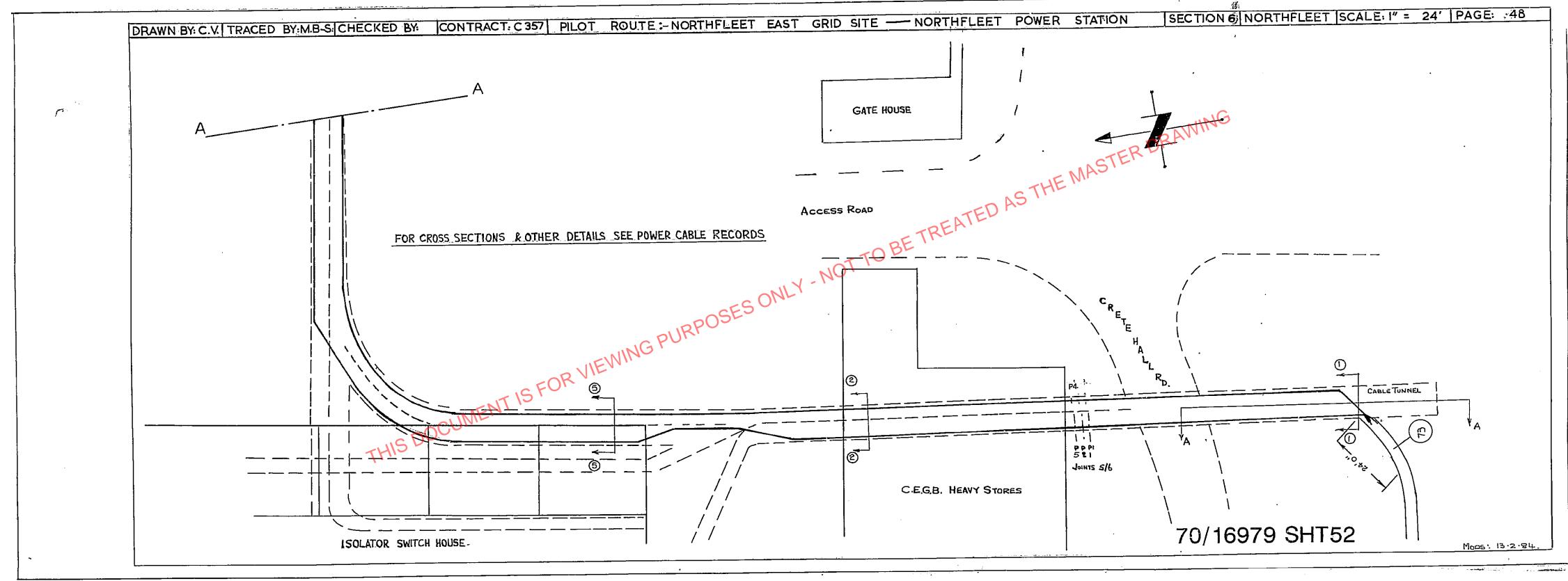
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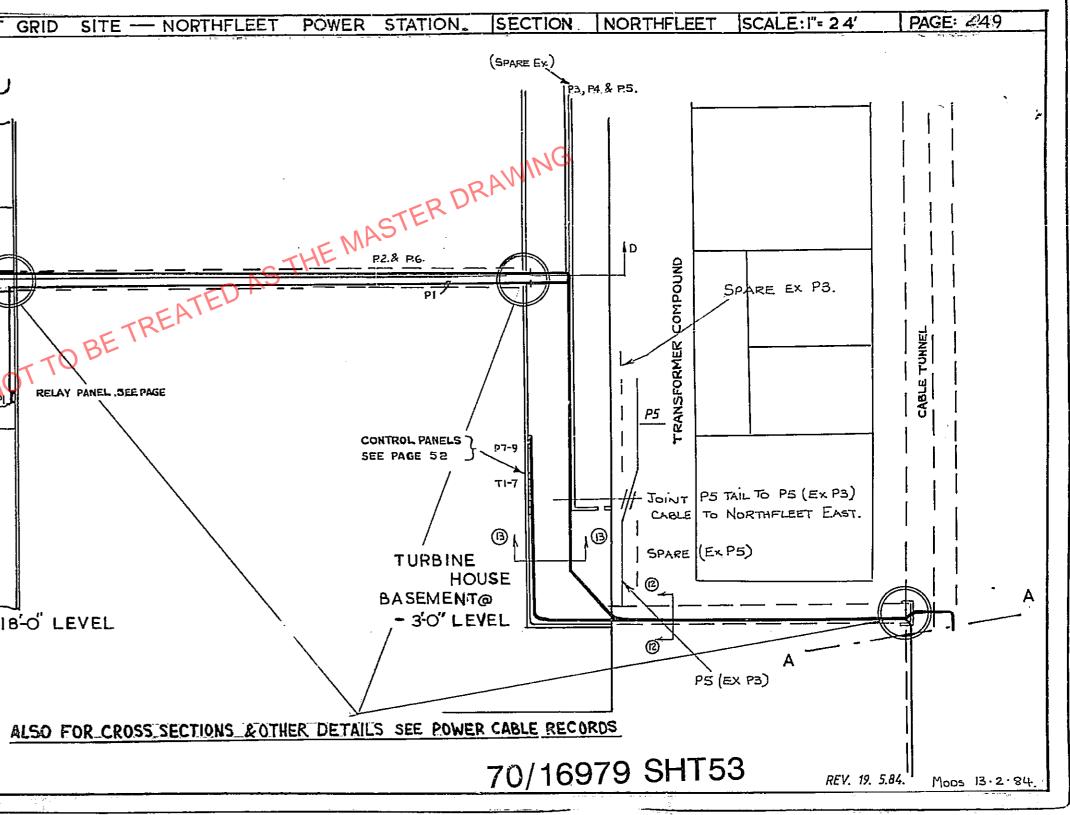
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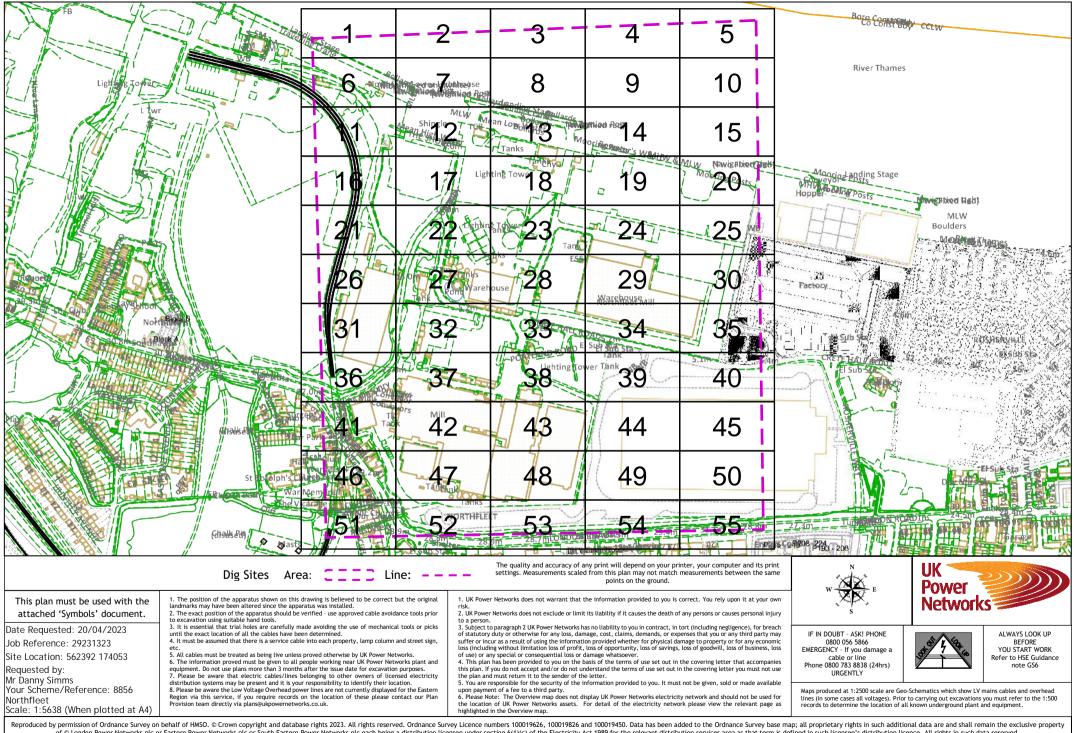




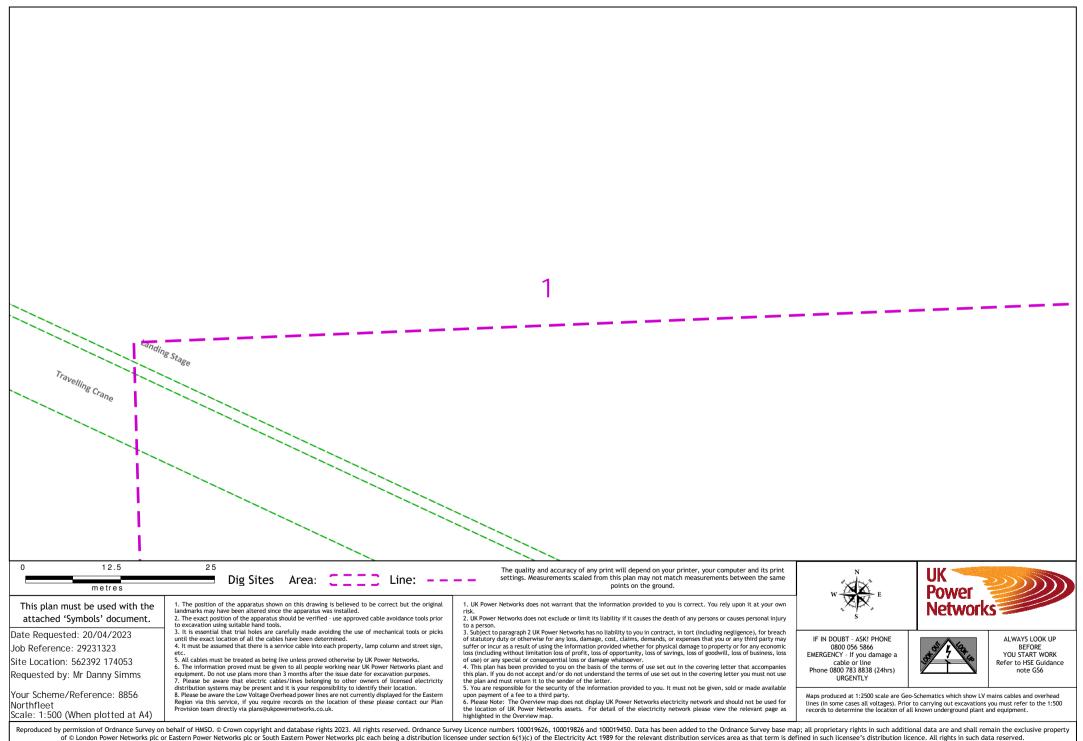
Electricity

(UK Power Networks)





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Job Reference: 29231323	It must be assumed that there is a service cable into each property, lamp column and street sign, etc.	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	0800 056 5866 EMERGENCY - If you damage a	BEFORE YOU START WORK
Site Location: 562392 174053 Requested by: Mr Danny Simms	 All cables must be treated as being live unless proved otherwise by UK Power Networks. 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. 	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	cable or line Phone 0800 783 8838 (24hrs)	Refer to HSE Guidance note GS6
	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.	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	URGENTLY	
Your Scheme/Reference: 8856 Northfleet	8. Please be aware the Low Voltage Overhead power lines are not currently displayed for the Eastern Region via this service, if you require records on the location of these please contact our Plan	upon payment of a fee to a third party. 6. Please Note: The Overview map does not display UK Power Networks electricity network and should not be used for	lines (in some cases all voltages). Price	eo-Schematics which show LV mains cables and overhead or to carrying out excavations you must refer to the 1:500
Scale: 1:500 (When plotted at A4)	Provision team directly via plans@ukpowernetworks.co.uk.	the location of UK Power Networks assets. For detail of the electricity network please view the relevant page as highlighted in the Overview map.	records to determine the location of a	all known underground plant and equipment.
Reproduced by permission of Ordnance Survey or of © London Power Networks plc	or Eastern Power Networks plc or South Eastern Power Networks plc each being a distribution lice	vey Licence numbers 100019626, 100019826 and 100019450. Data has been added to the Ordnance Survey base mansee under section 6(1)(c) of the Electricity Act 1989 for the relevant distribution services area as that term is de lerated by DigSAFE Pro [®] software provided by LinesearchbeforeUdig.	p; all proprietary rights in such additi fined in such licensee's distribution li	ional data are and shall remain the exclusive property cence. All rights in such data reserved.

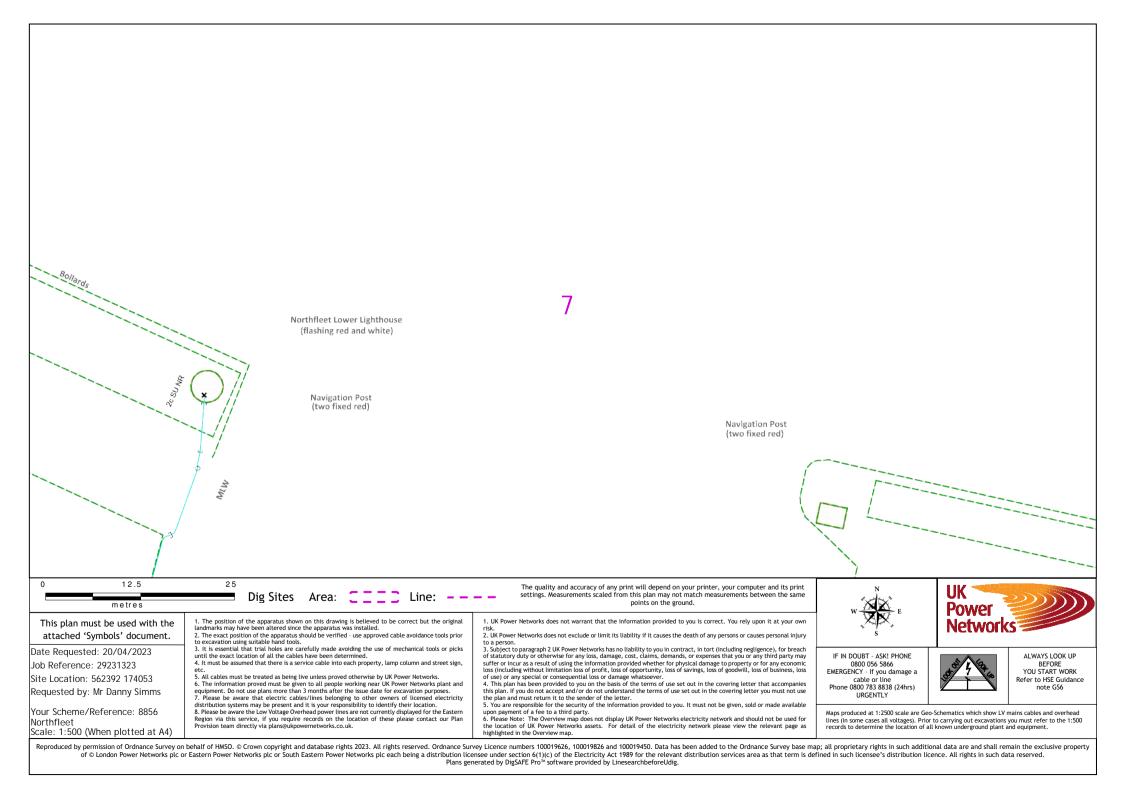
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Your Scheme/Reference: 8856 Northfleet Scale: 1:500 (When plotted at A4) Reproduced by permission of Ordnance Survey on b of © London Power Networks plc or	8. Please be aware the Low Voltage Overhead power lines are not currently displayed for the Eastern Region via this service, if you require records on the location of these please contact our Plan Provision team directly via plans@ukpowernetworks.co.uk. ehalf of HMSO. © Crown copyright and database rights 2023. All rights reserved. Ordnance Surv Eastern Power Networks plc or South Eastern Power Networks plc each being a distribution licer	b) To are responsible for the secting of the momandon provide to you. It must not be given, sould in made available upon payment of a feet to a third party. 6. Please Note: The Overview map does not display UK Power Networks electricity network please view the relevant page as highlighted in the Overview map. ey Licence numbers 100019626, 100019826 and 100019450. Data has been added to the Ordnance Survey base mas see under section 6(1)(c) of the Electricity Act 1989 for the relevant distribution services area as that term is de erated by DisSAFE Pro [®] software provided by LinesearchobeforeUdie.	lines (in some cases all voltages). Prior records to determine the location of all ap; all proprietary rights in such additio	Schematics which show LV mains cables and overhead to carrying out excavations you must refer to the 1:500 known underground plant and equipment. nal data are and shall remain the exclusive property ence. All rights in such data reserved.

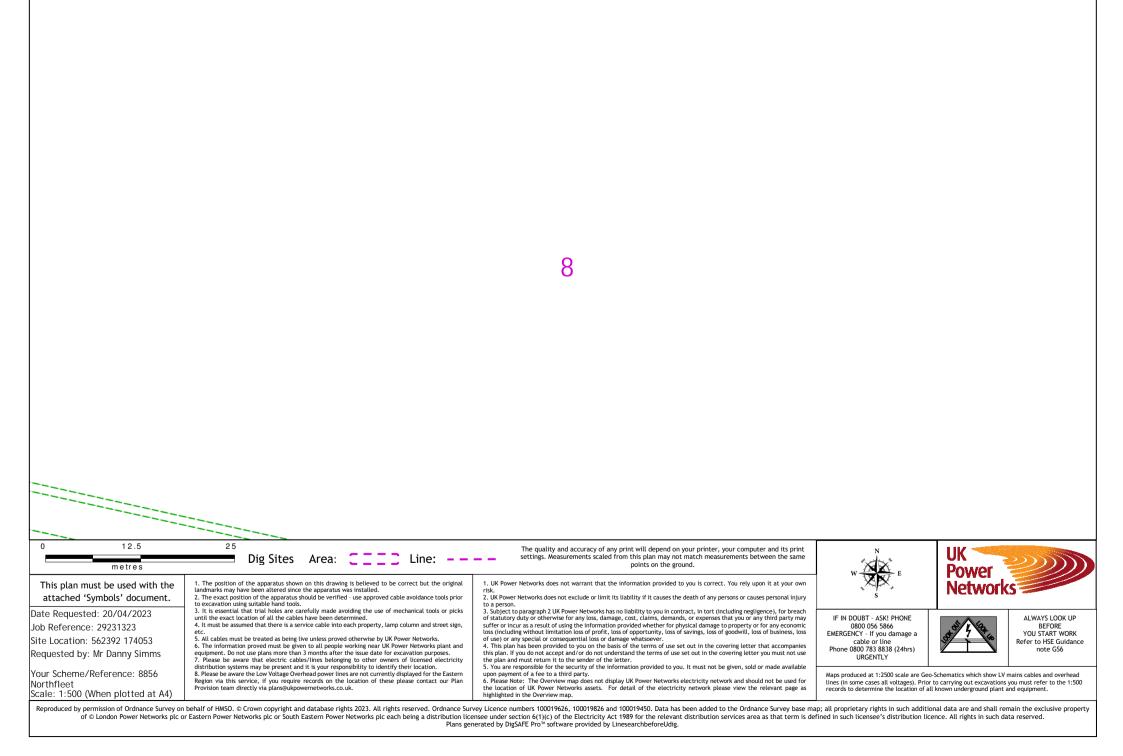
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Your Scheme/Reference: 8856 Northfleet Scale: 1:500 (When plotted at A4) Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright and database rights 2023. All rights reserved. Ordnance Survey on behalf of HMSO.	the plan and 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. 6. Please Note: The Overview map does not display UK Power Networks electricity network and should not be used for the location of UK Power Networks assets. For detail of the electricity network please view the relevant page as highlighted in the Overview map.	lines (in some cases all voltages). Prio records to determine the location of a	eo-Schematics which show LV mains cables and overhead or to carrying out excavations you must refer to the 1:500 all known underground plant and equipment.
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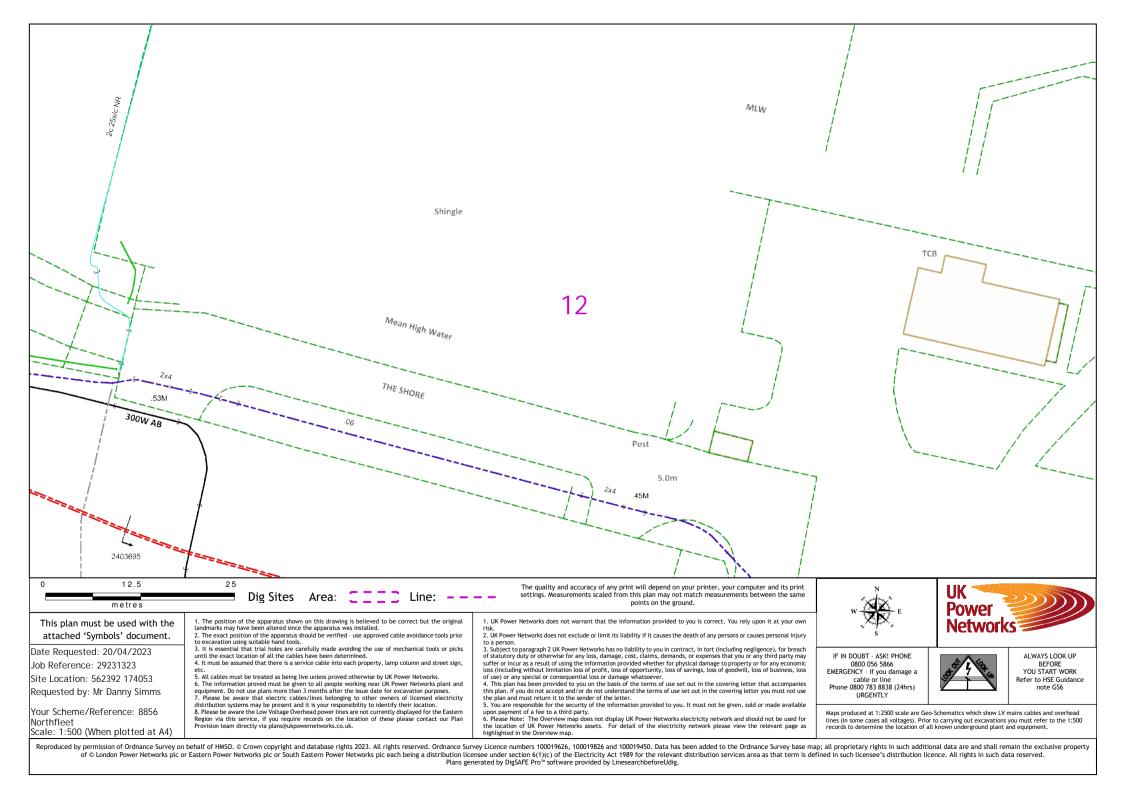


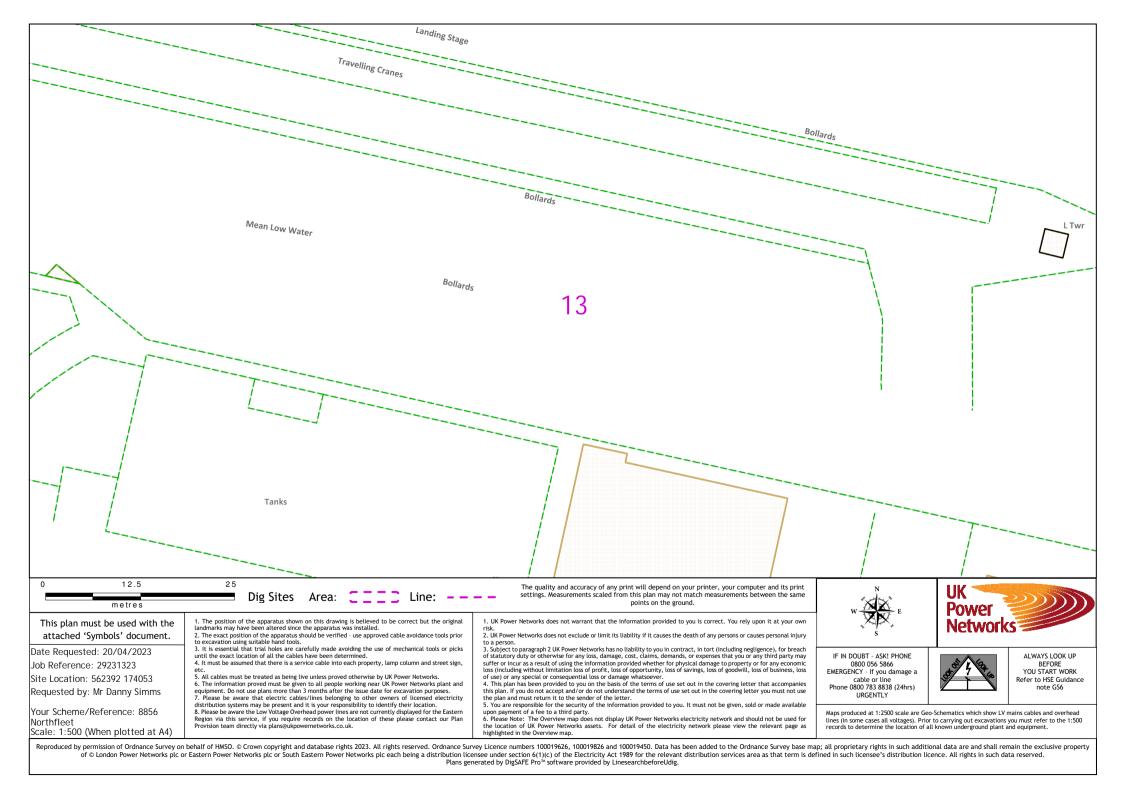


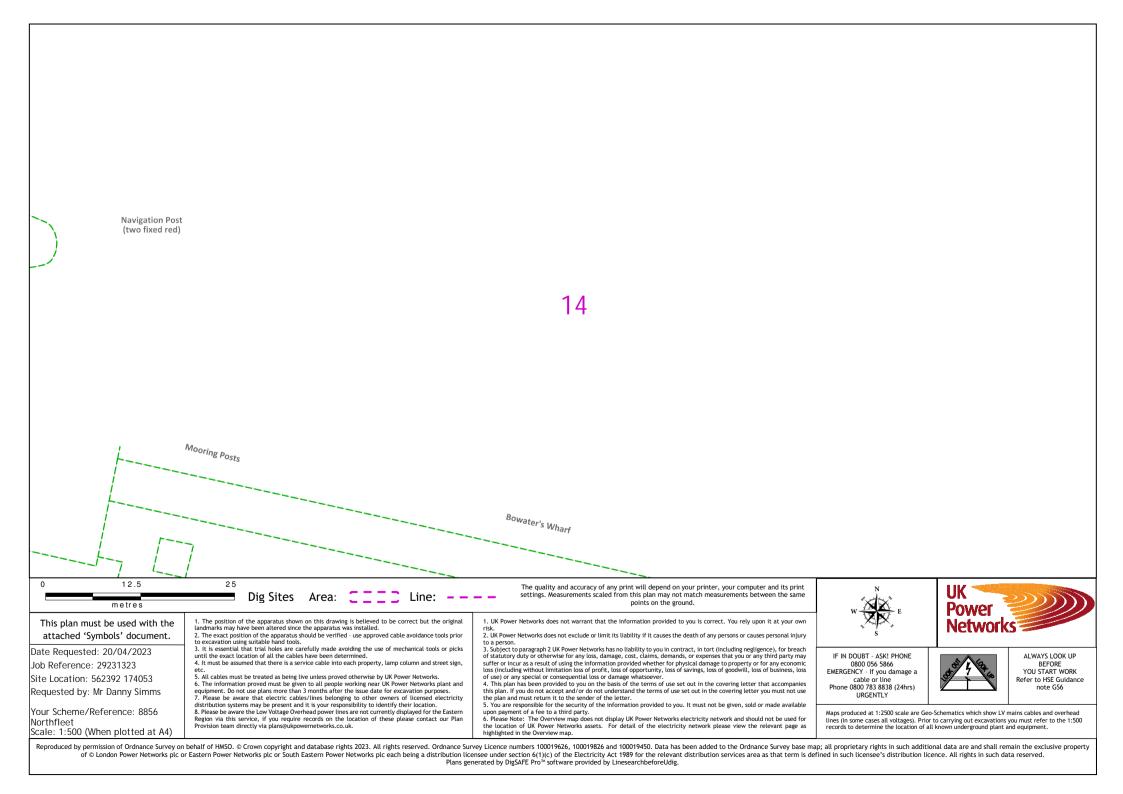
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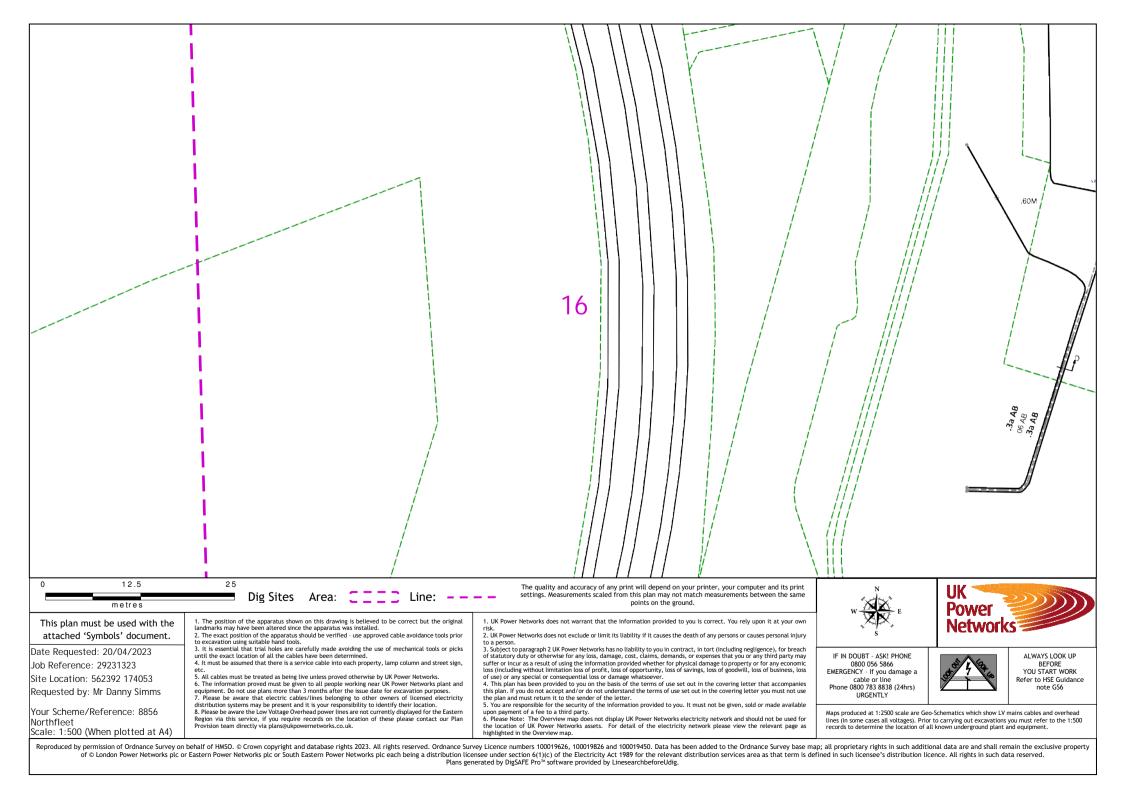
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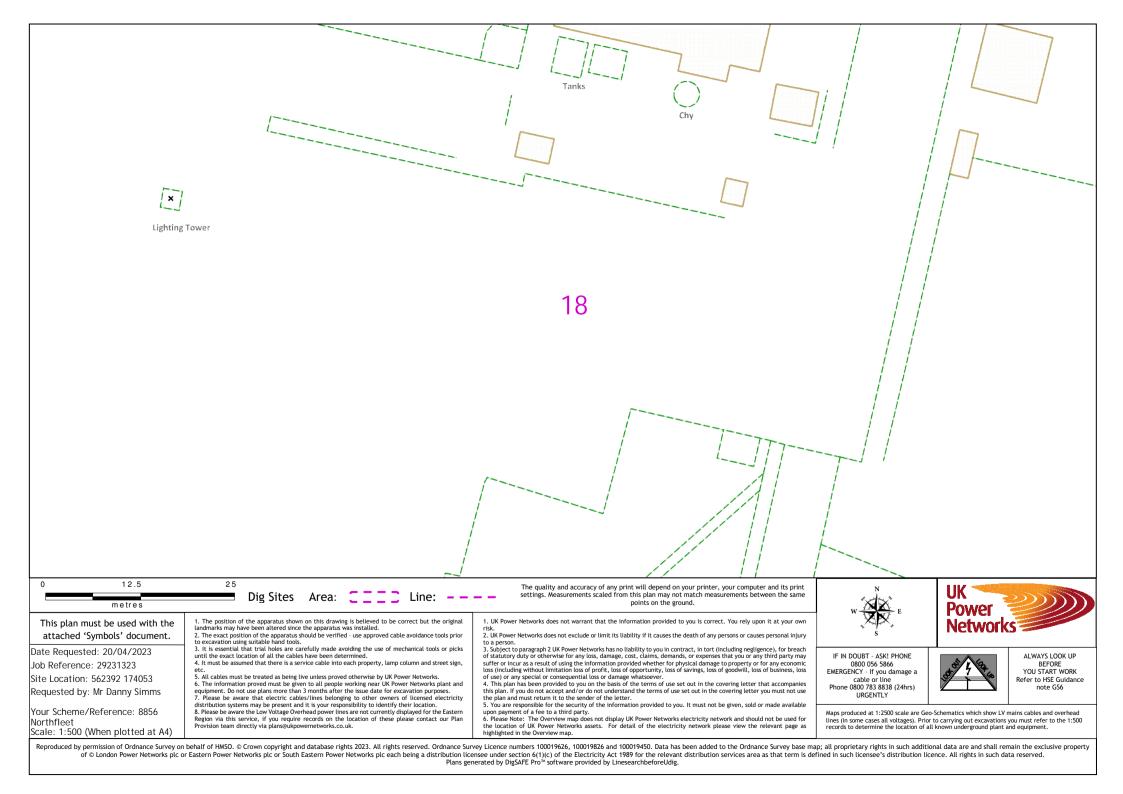




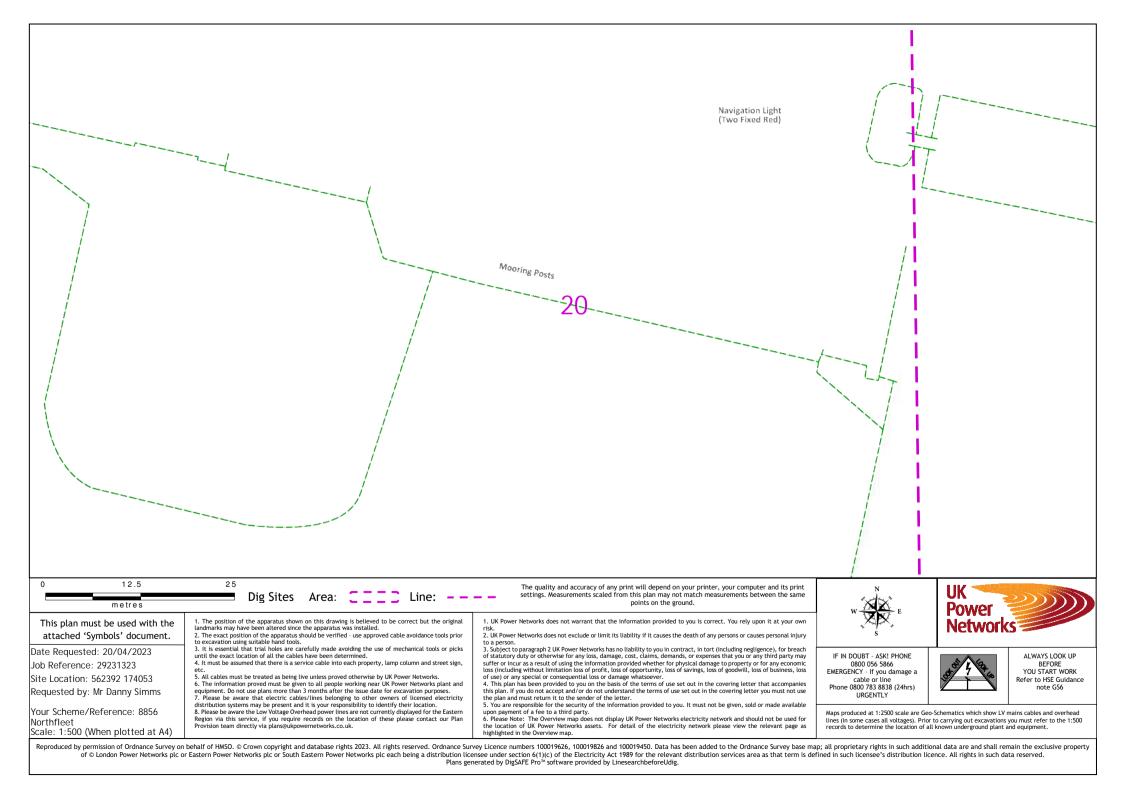
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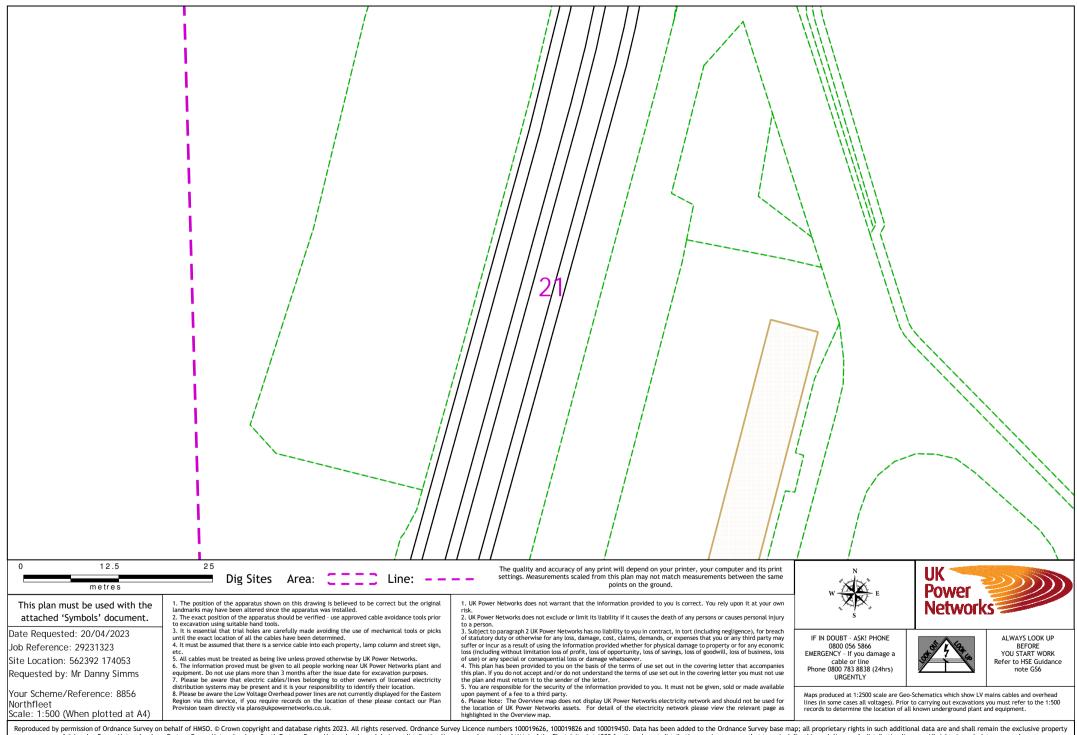


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Your Scheme/Reference: 8856 Northfleet Scale: 1:500 (When plotted at A4) Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright and database rights 2023. All rights reserved. Ordnance Survey	 S. You are responsible for the 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. Please Note: The Overview map does not display UK Power Networks electricity network and should not be used for the location of UK Power Networks assets. For detail of the electricity network please view the relevant page as highlighted in the Overview map. 	lines (in some cases all voltages). Priv	eo-Schematics which show LV mains cables and overhead or to carrying out excavations you must refer to the 1:500 all known underground plant and equipment.

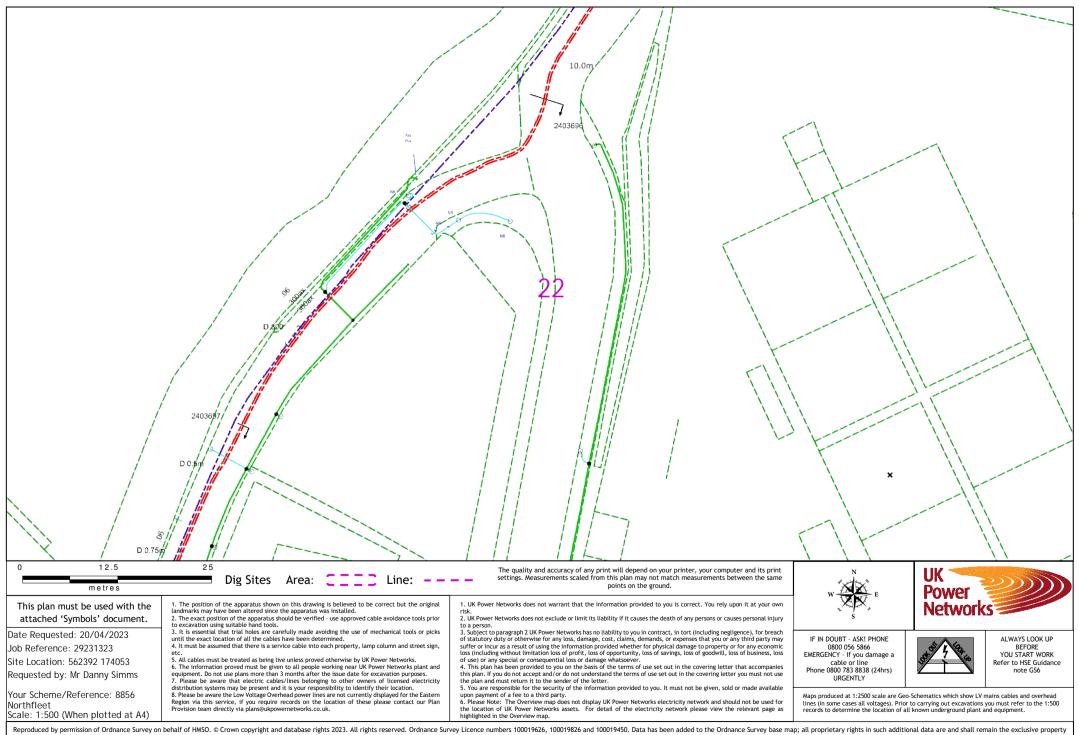


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Date Requested: 20/04/2023 Job Reference: 29231323 Site Location: 562392 174053 Requested by: Mr Danny Simms Your Scheme/Reference: 8856 Northfleet	 to excavation using suitable hand tools. 3. It is essential that trial holes are carefully made avoiding the use of mechanical tools or picks until the exact location of all the cables have been determined. 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. 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. 8. Please be aware the Lev Oklage Overhaad power lines are not currently displayed for the Easterm Region via this service, if you require records on the location of these please contact our Plan Provision team directly via plansgukpowernetworks.co.uk. 	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. 6. Please Note: The Overview map does not display UK Power Networks electricity network and should not be used for the location of UK Power Networks assets. For detail of the electricity network please withe the relevant page as	IF IN DOUBT - ASKI PHONE 0800 056 5866 EMERCENCY - If you damage a cable or line Phone 0800 783 8838 (24hrs) URGENTLY Maps produced at 1:2500 scale are Ge lines (in some cases all voltages). Pri records to determine the location of	ALWAYS LOOK UP BEFORE YOU START WORK Refer to HSE Guidance note GS6

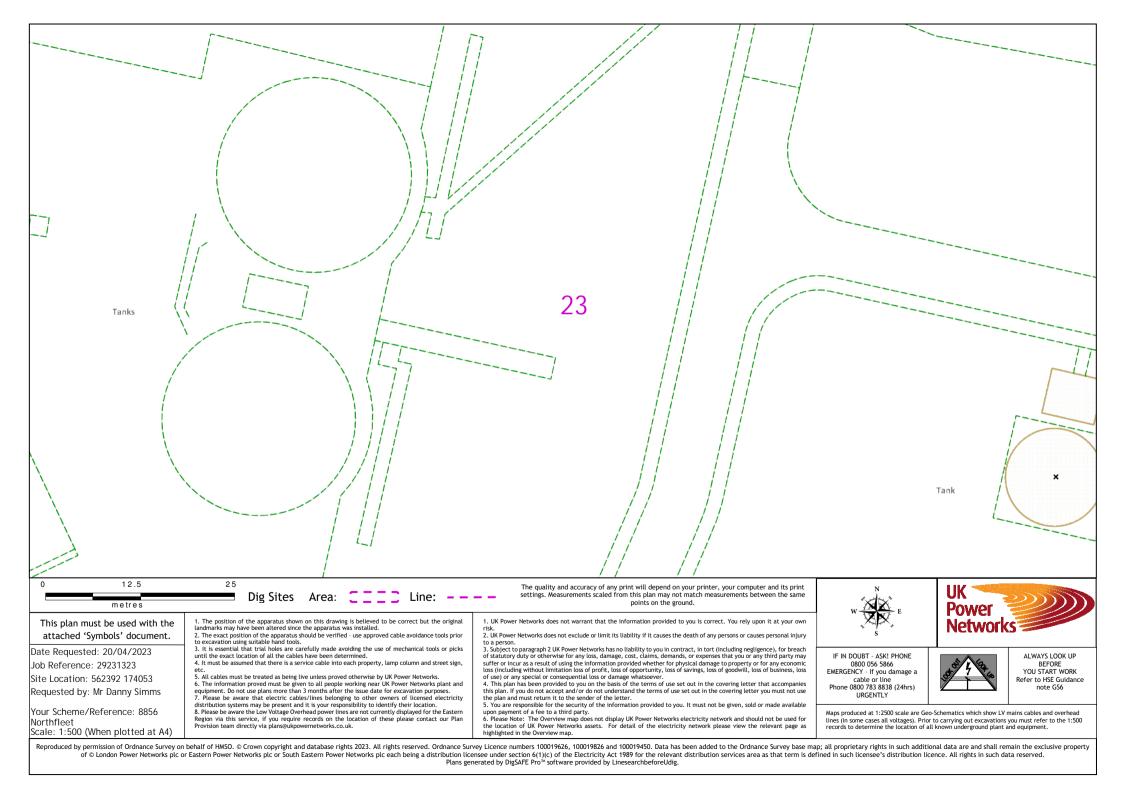


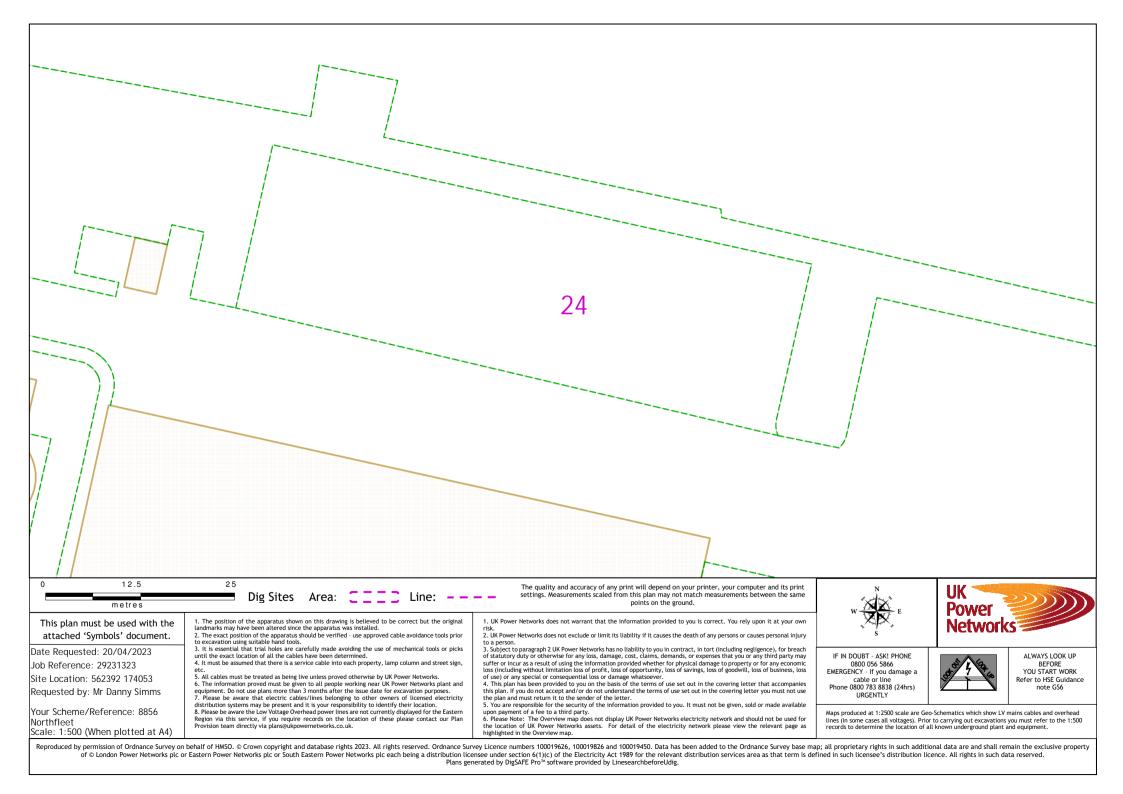


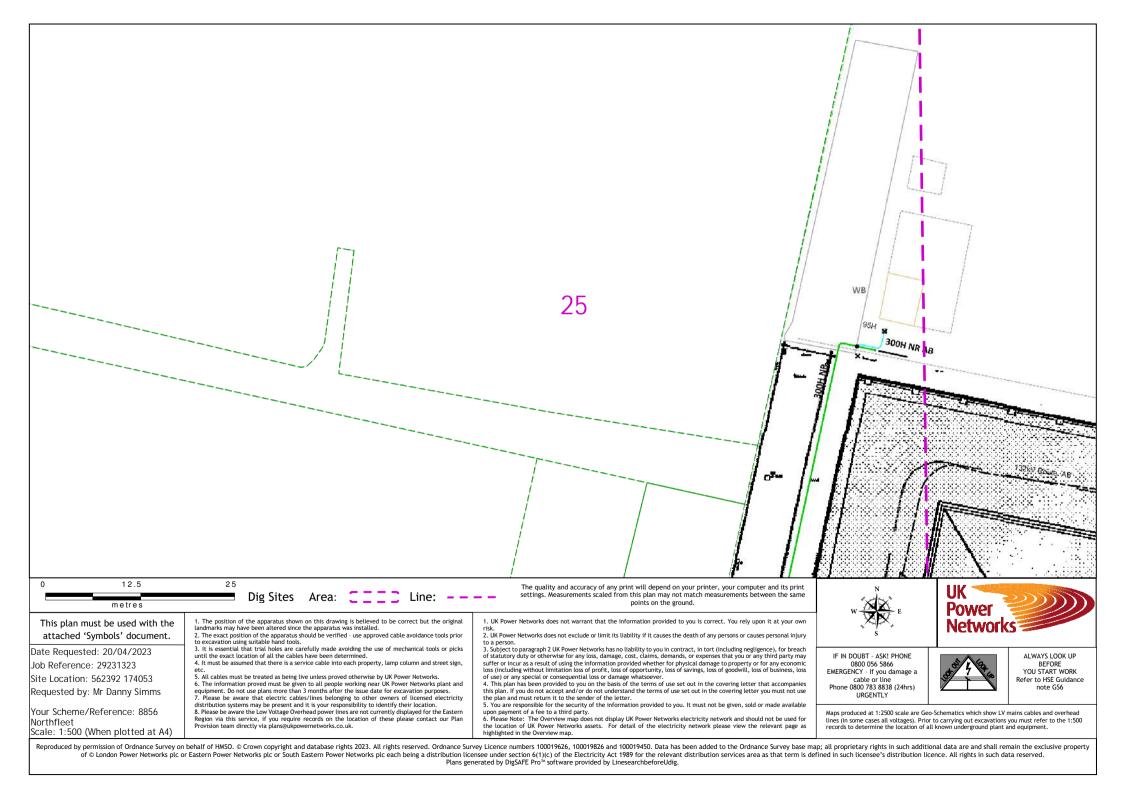
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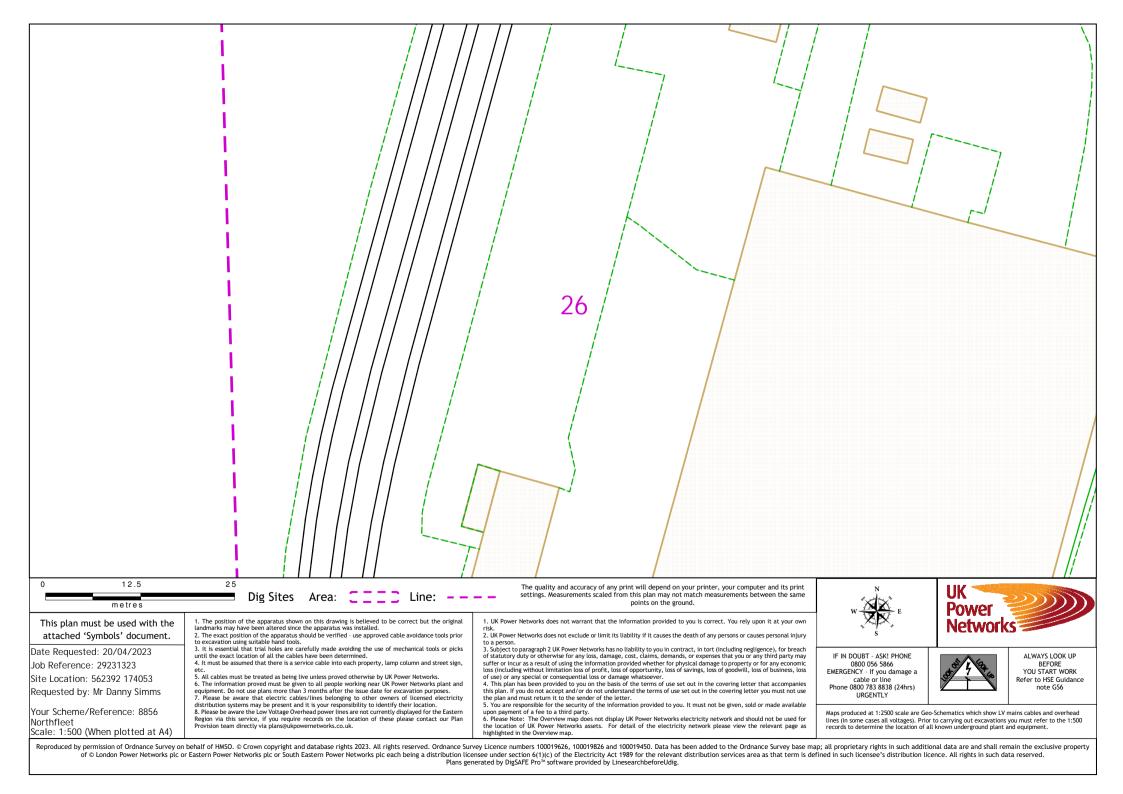


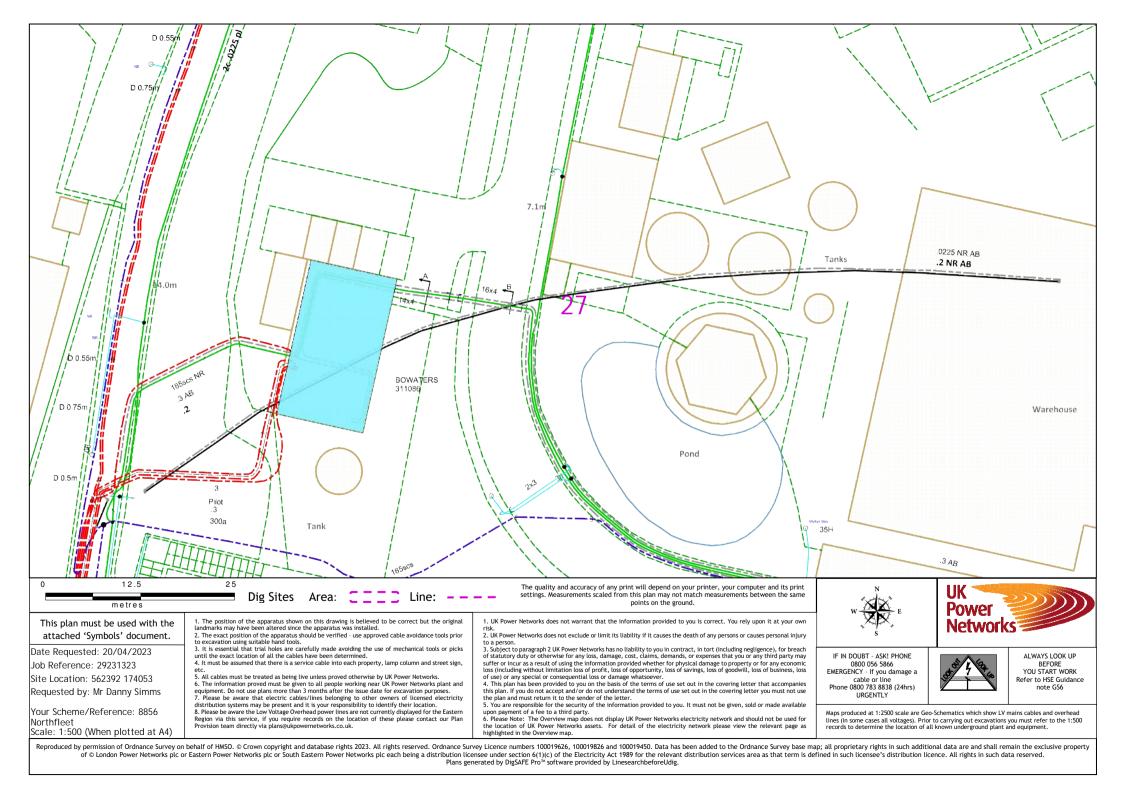
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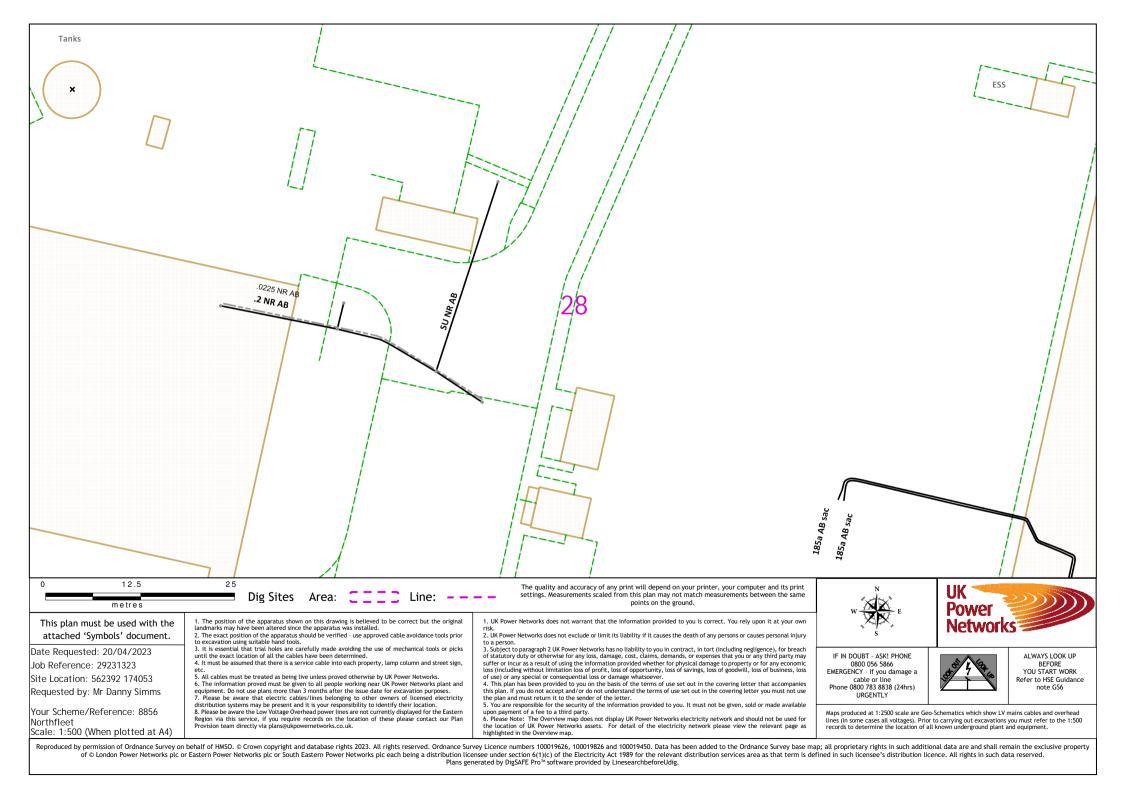


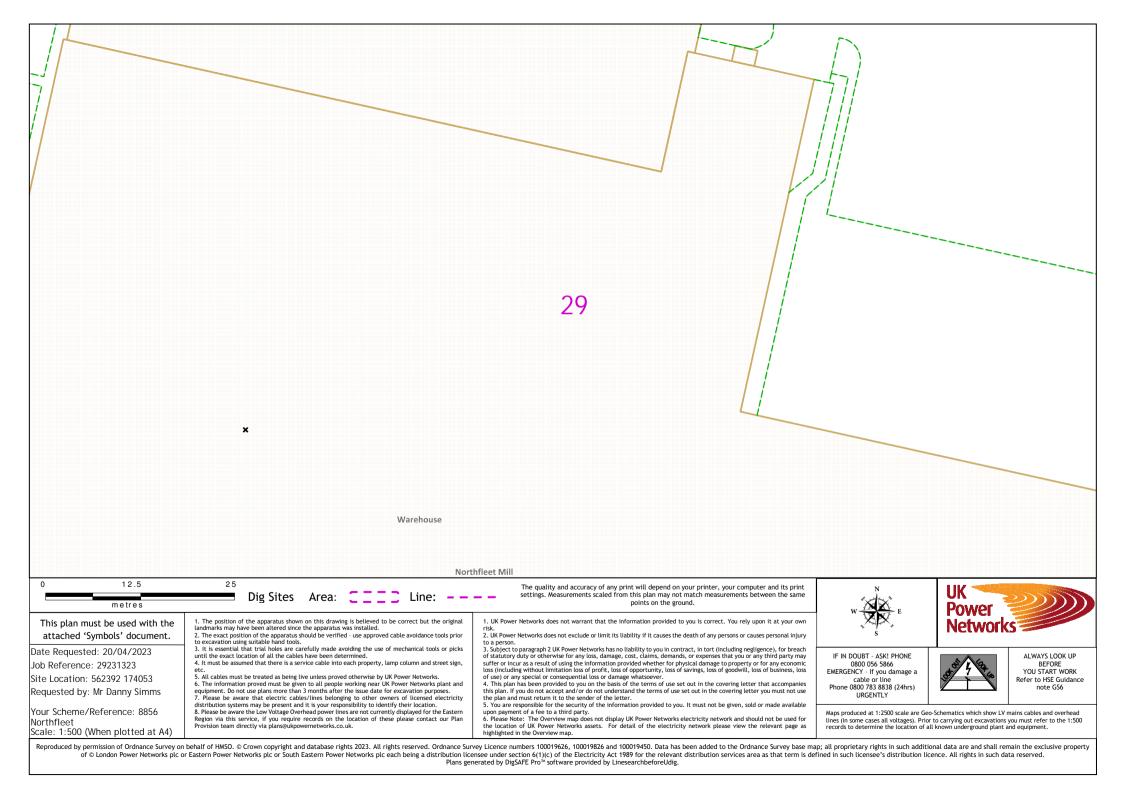


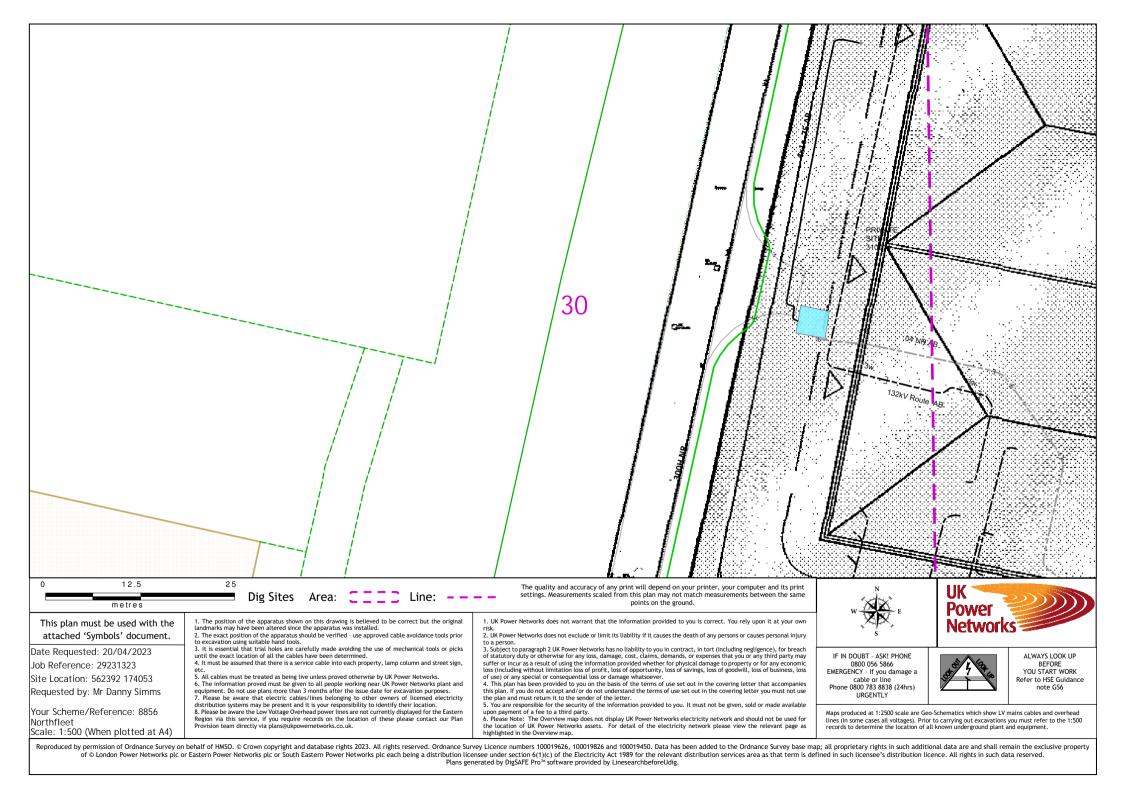


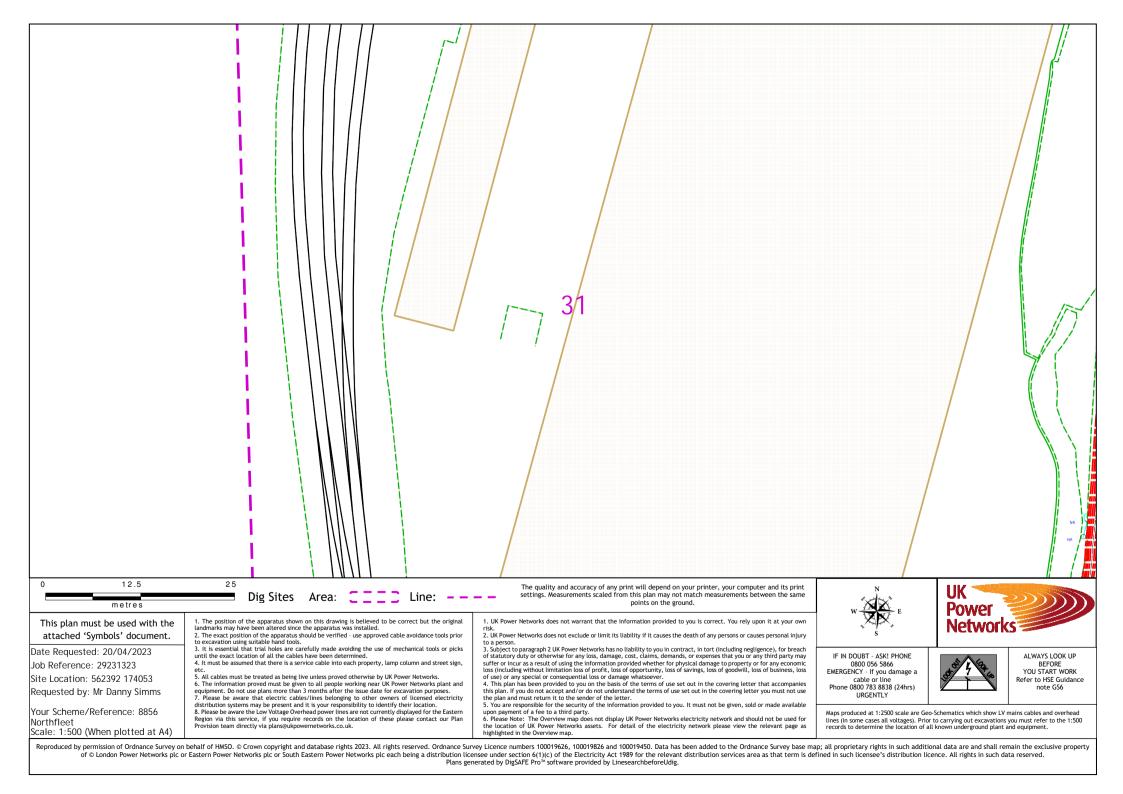


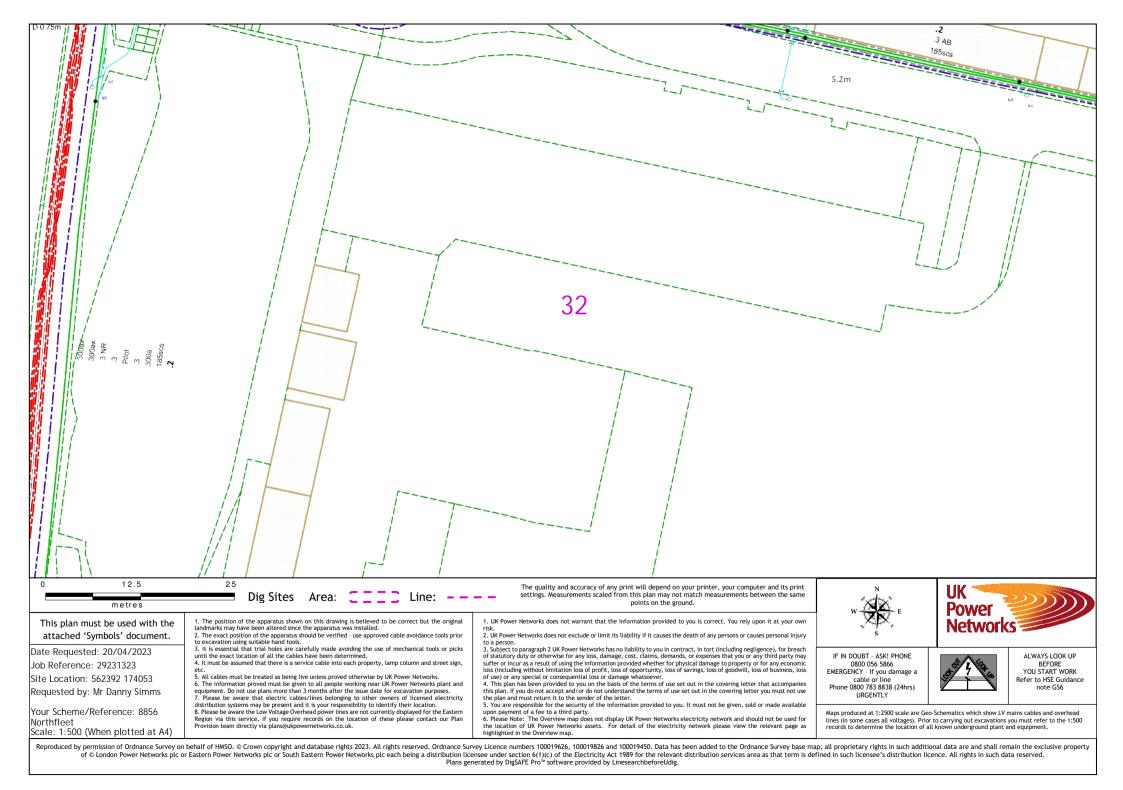


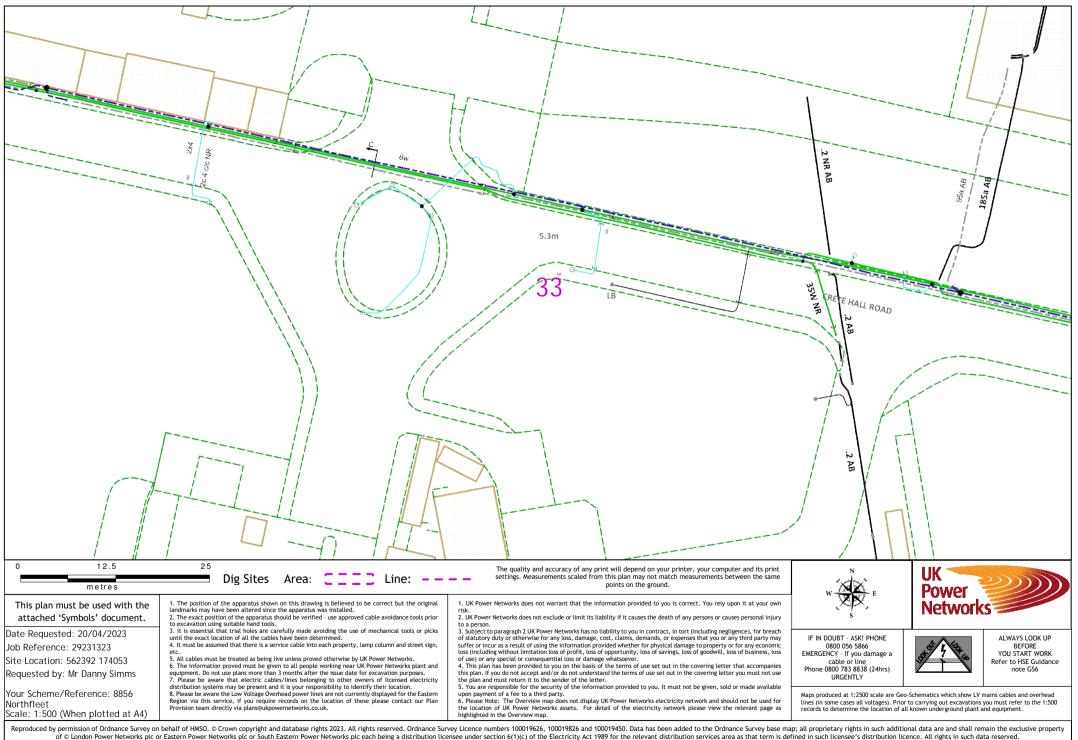




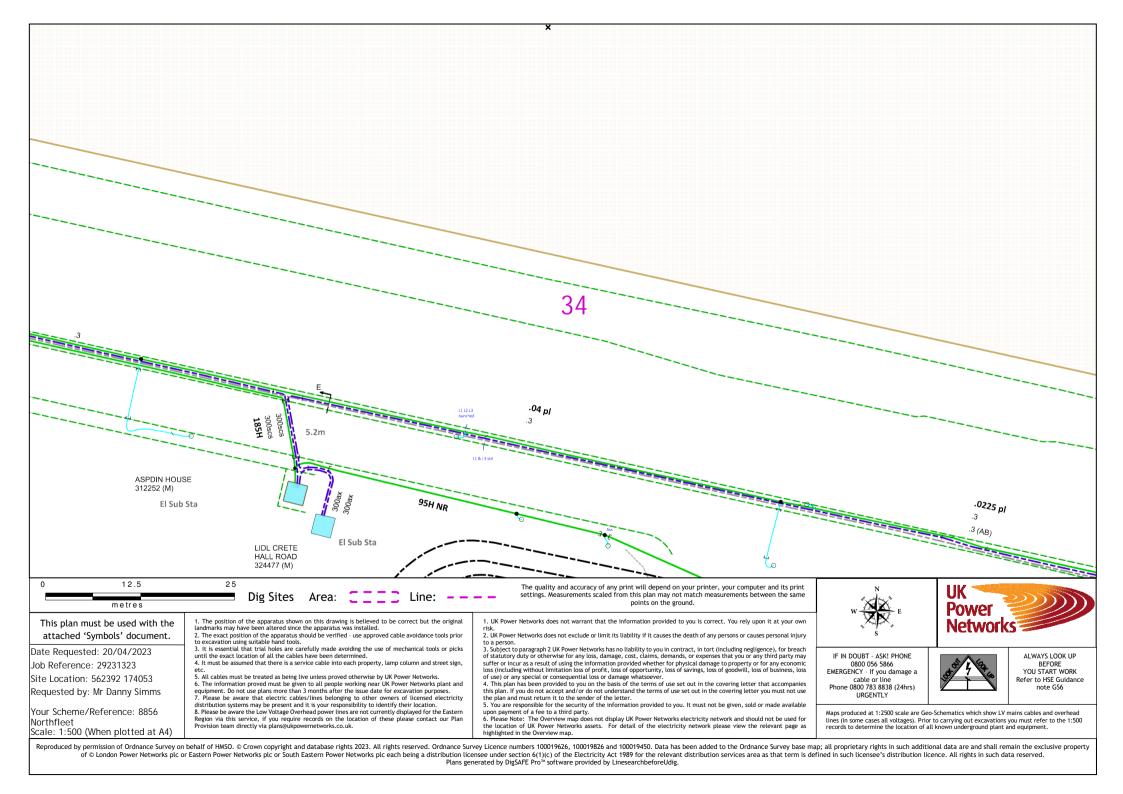


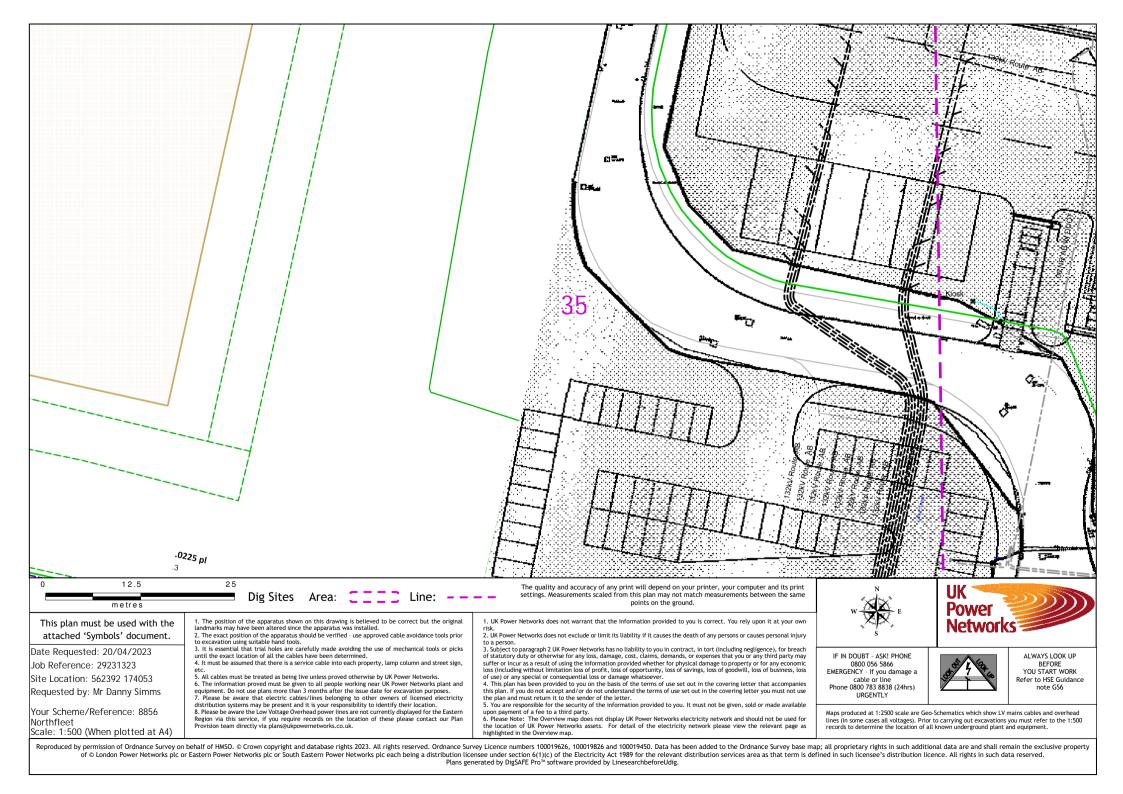


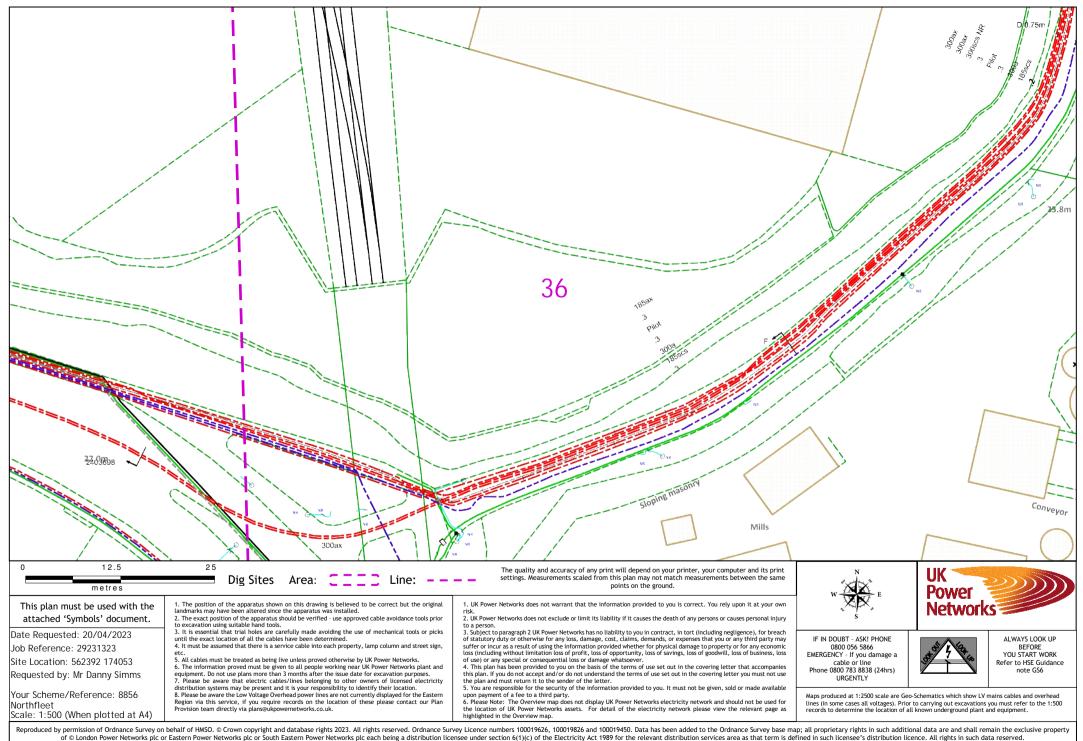




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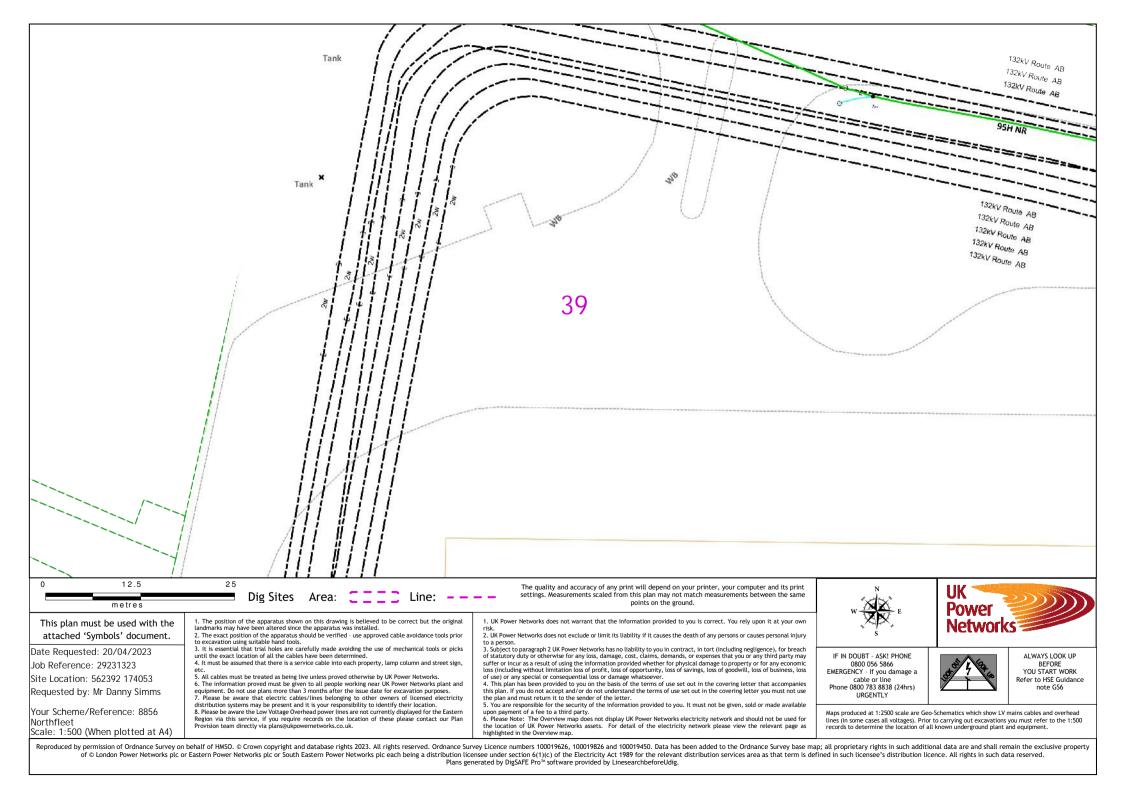


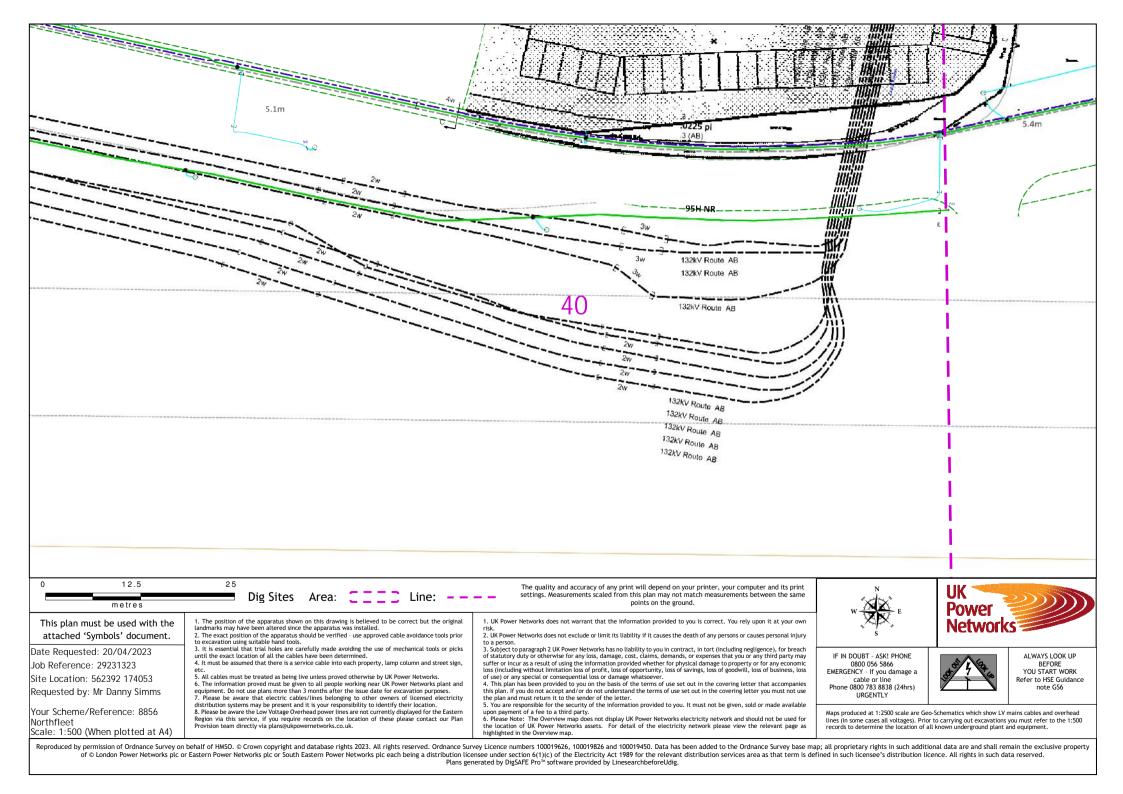
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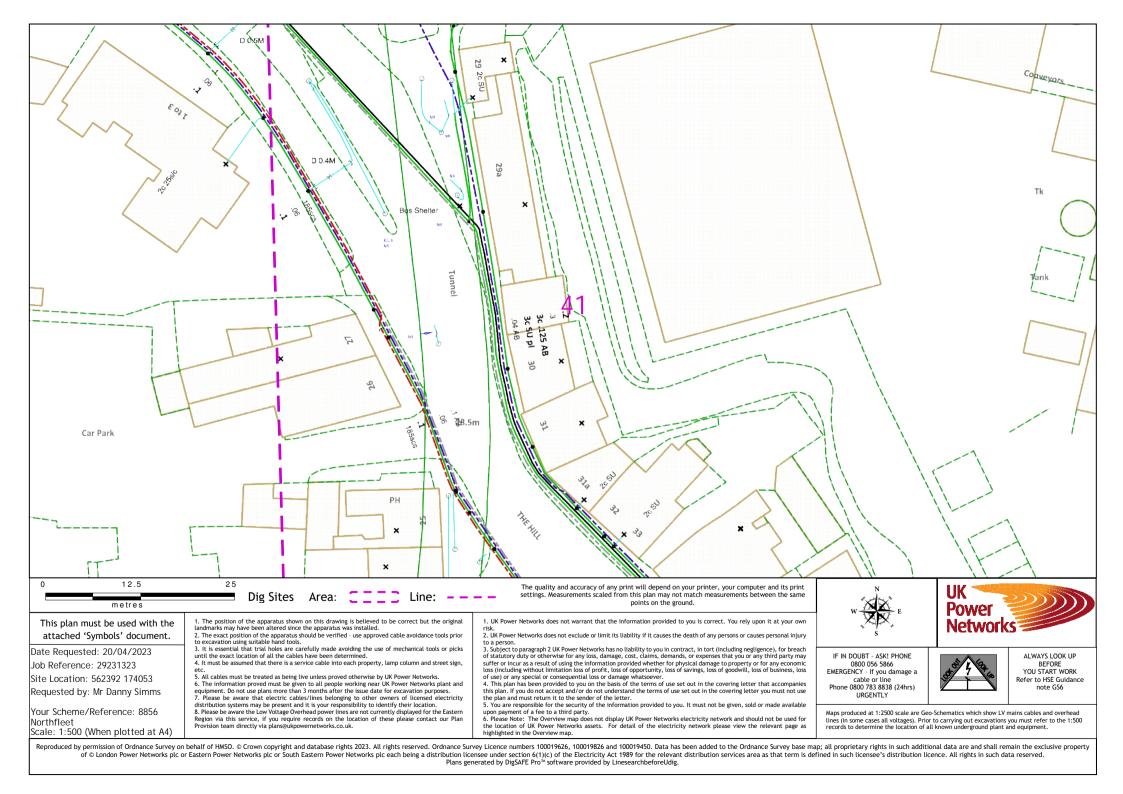
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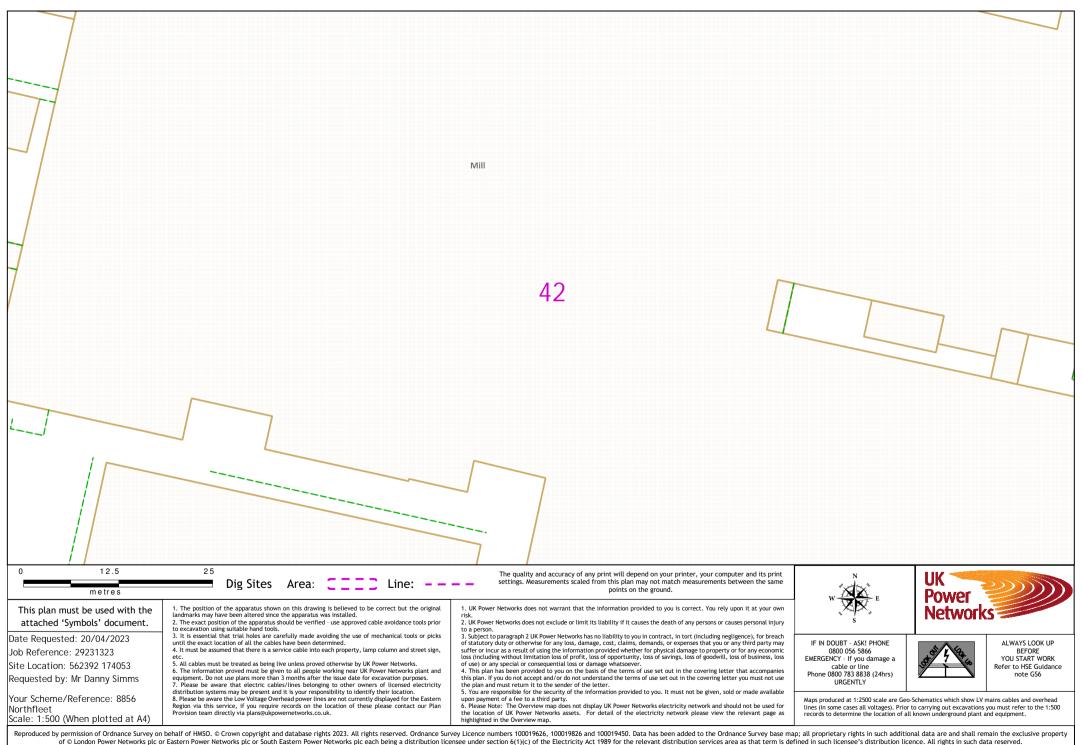
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Requested by: Mr Danny Simms Your Scheme/Reference: 8856 Northfleet Scale: 1:500 (When plotted at A4)	equipment. Do not use plans more than 3 months after the issue date for excavation purposes. 7. Please be aware that electric cables/lines belonging to other owners of licensed electricity distribution systems may be present and it is your responsibility to identify their location. 8. Please be aware the Low Voltage Overhead power lines are not currently displayed for the Eastern Region via this service, if you require records on the location of these please contact our Plan Provision team directly via plans@ukpowernetworks.co.uk.	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. 6. Please Note: The Overview map does not display UK Power Networks electricity network and should not be used for the location of UK Power Networks assets. For detail of the electricity network please view the relevant page as highlighted in the Overview map.	URGENTLY Maps produced at 1:2500 scale are Geo lines (in some cases all voltages). Prior	-Schematics which show LV mains cables and overhead to carrying out excavations you must refer to the 1:500 Il known underground plant and equipment.
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Your Scheme/Reference: 8856 Northfleet Scale: 1:500 (When plotted at A4)	8. Please be aware the Low Voltage Overhead power lines are not currently displayed for the Eastern Region via this service, if you require records on the location of these please contact our Plan Provision team directly via plans@ukpowernetworks.co.uk.	upon payment of a fee to a third party. 6. Please Note: The Overview map does not display UK Power Networks electricity network and should not be used for the location of UK Power Networks assets. For detail of the electricity network please view the relevant page as highlighted in the Overview map.	lines (in some cases all voltages). Prior	o-Schematics which show LV mains cables and overhead to carrying out excavations you must refer to the 1:500 Il known underground plant and equipment.
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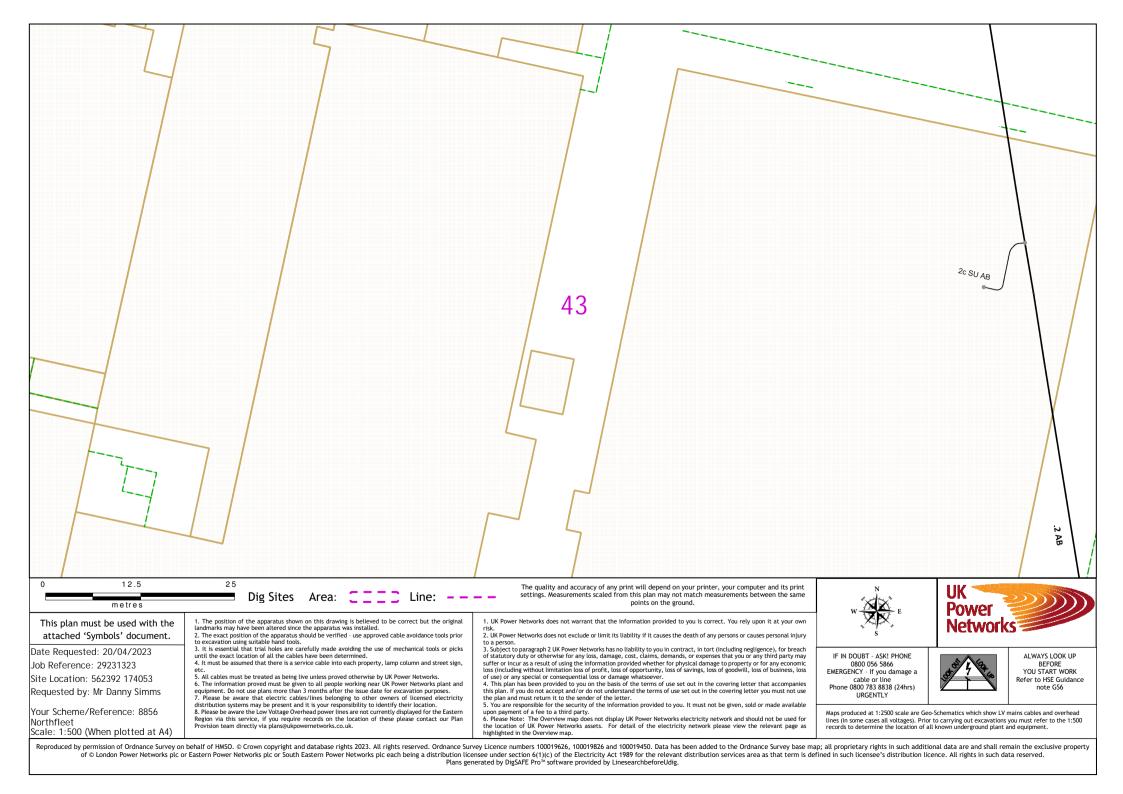






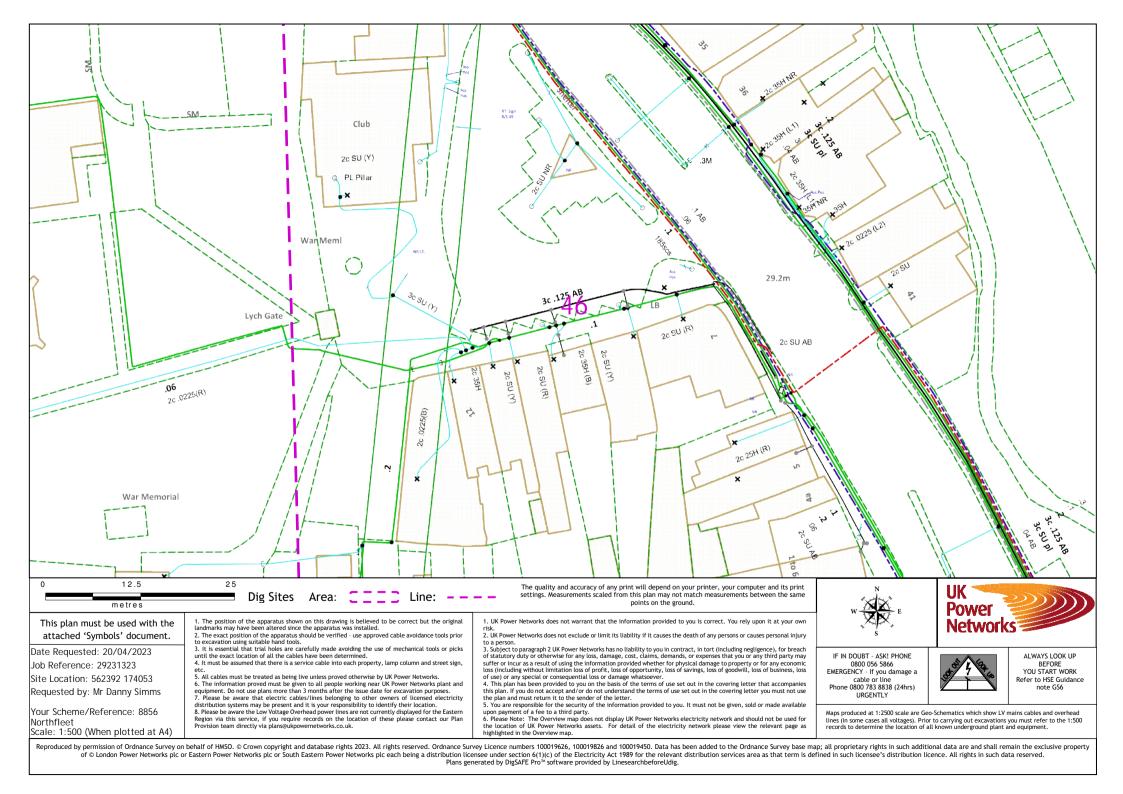
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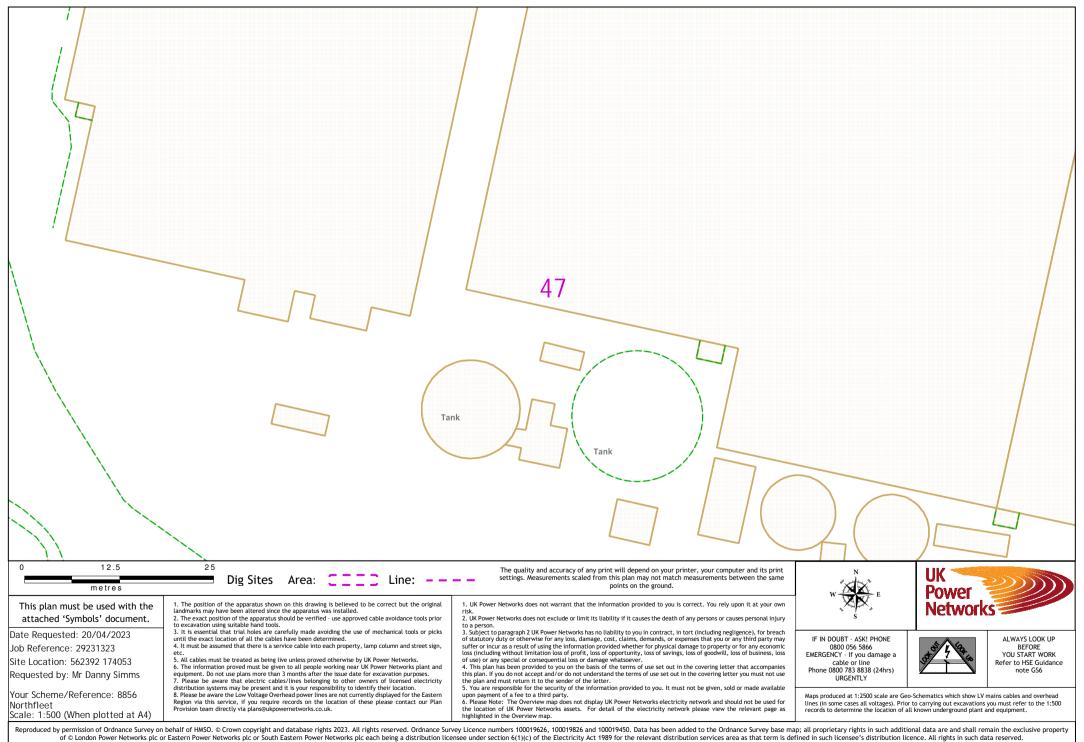
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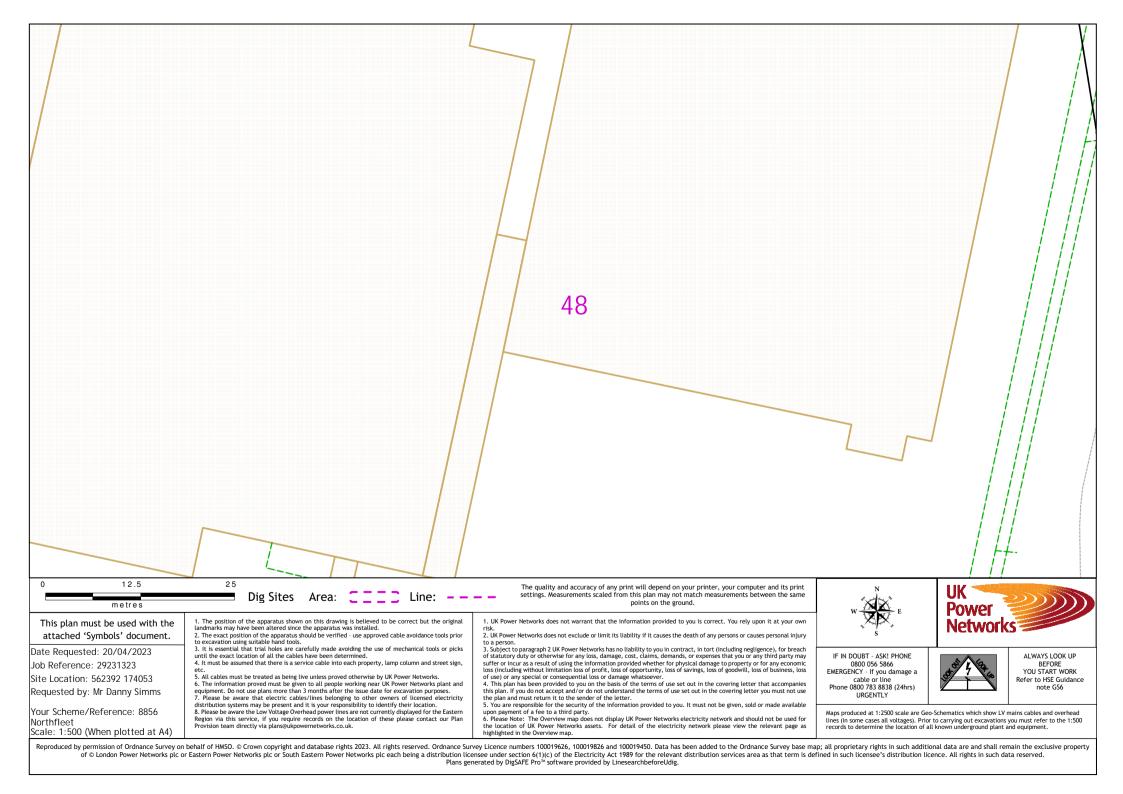


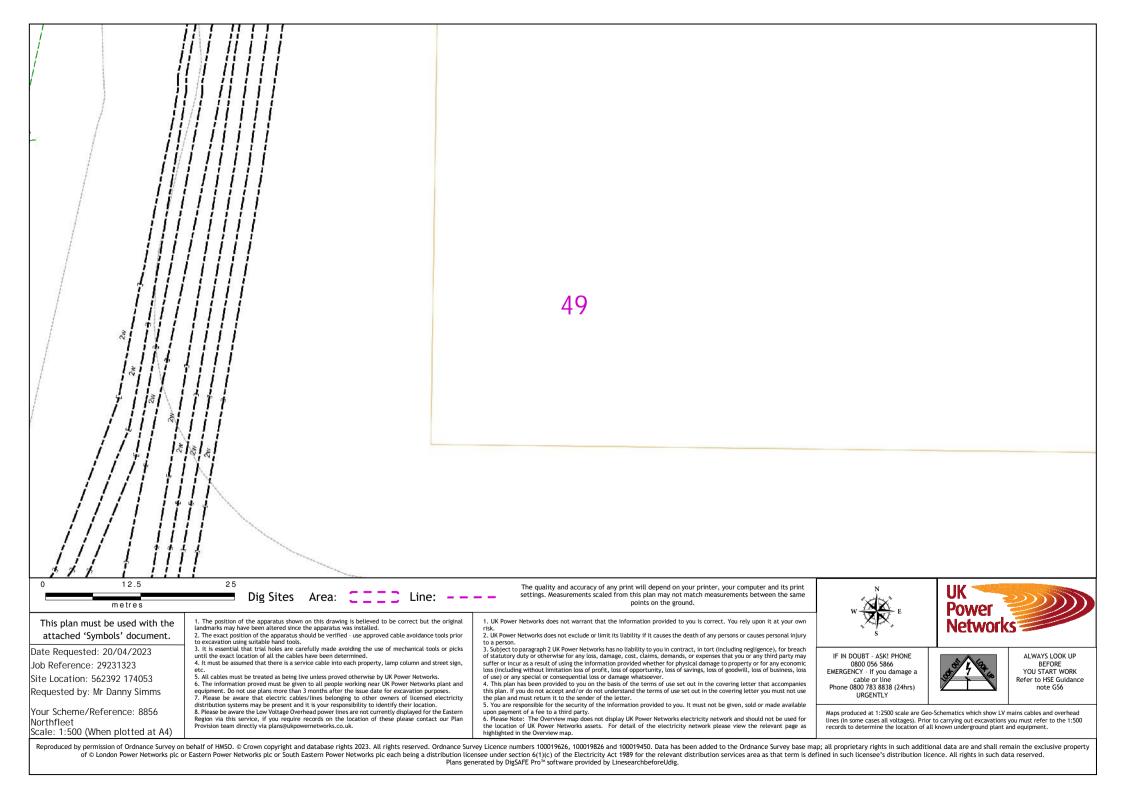
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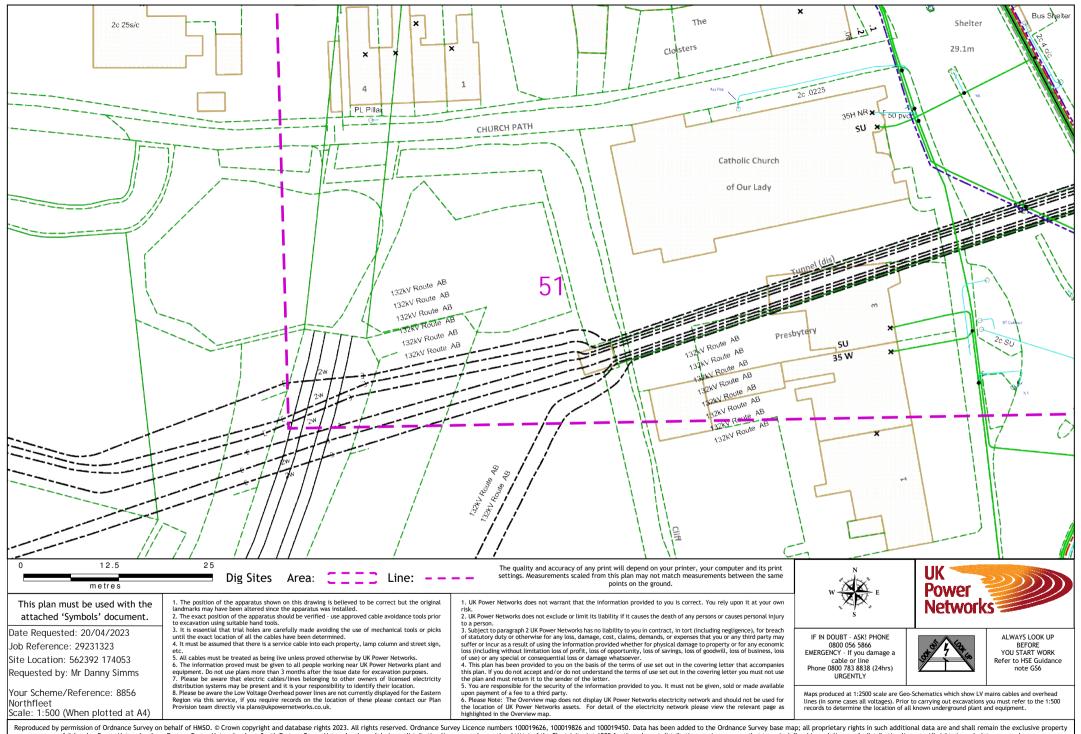




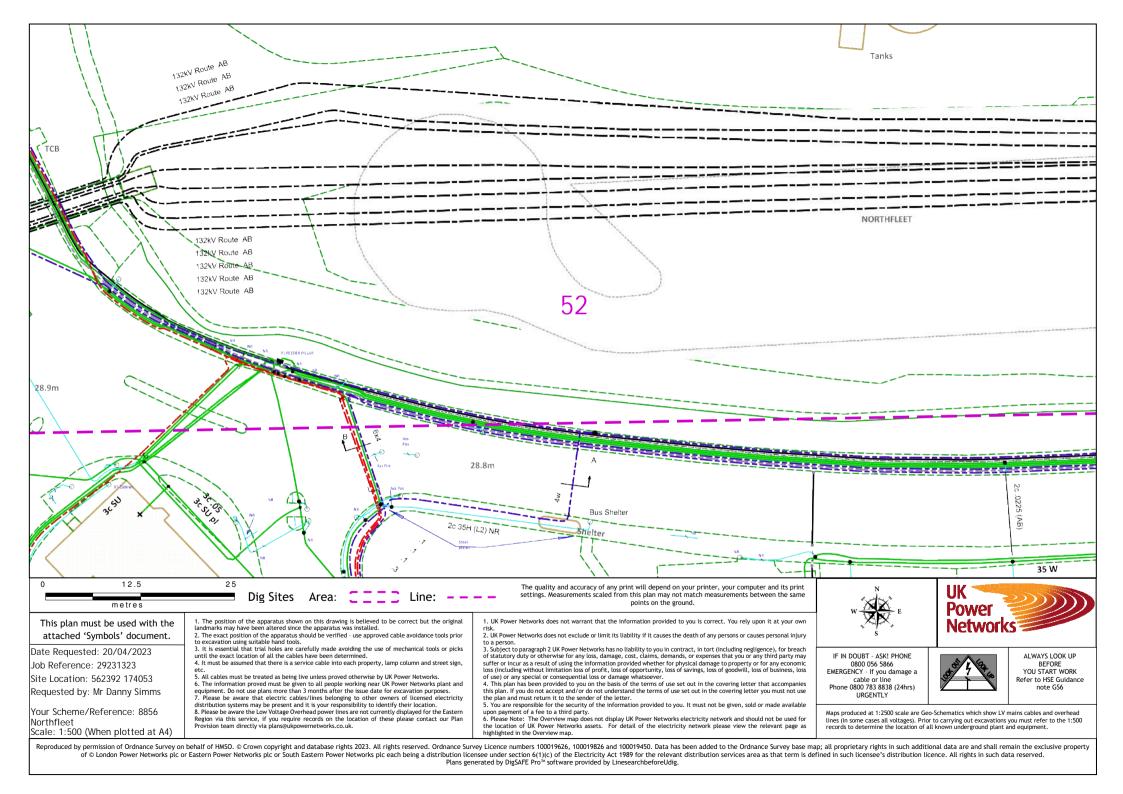


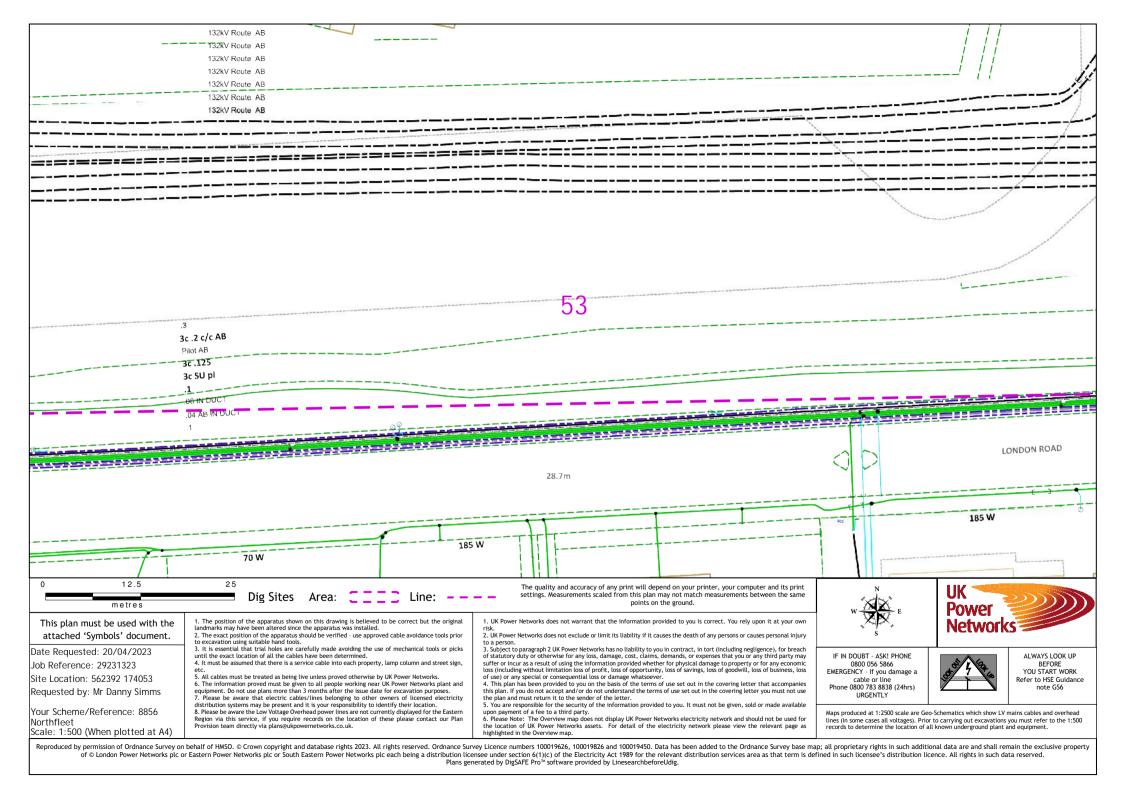


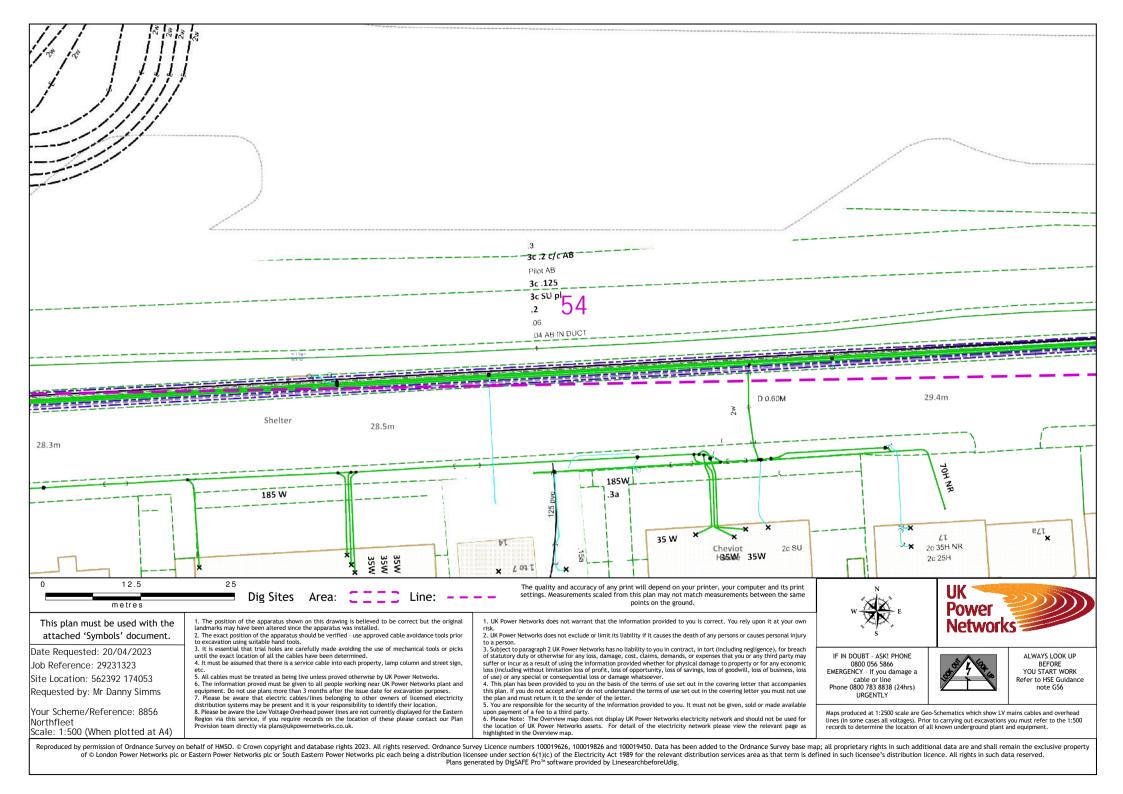
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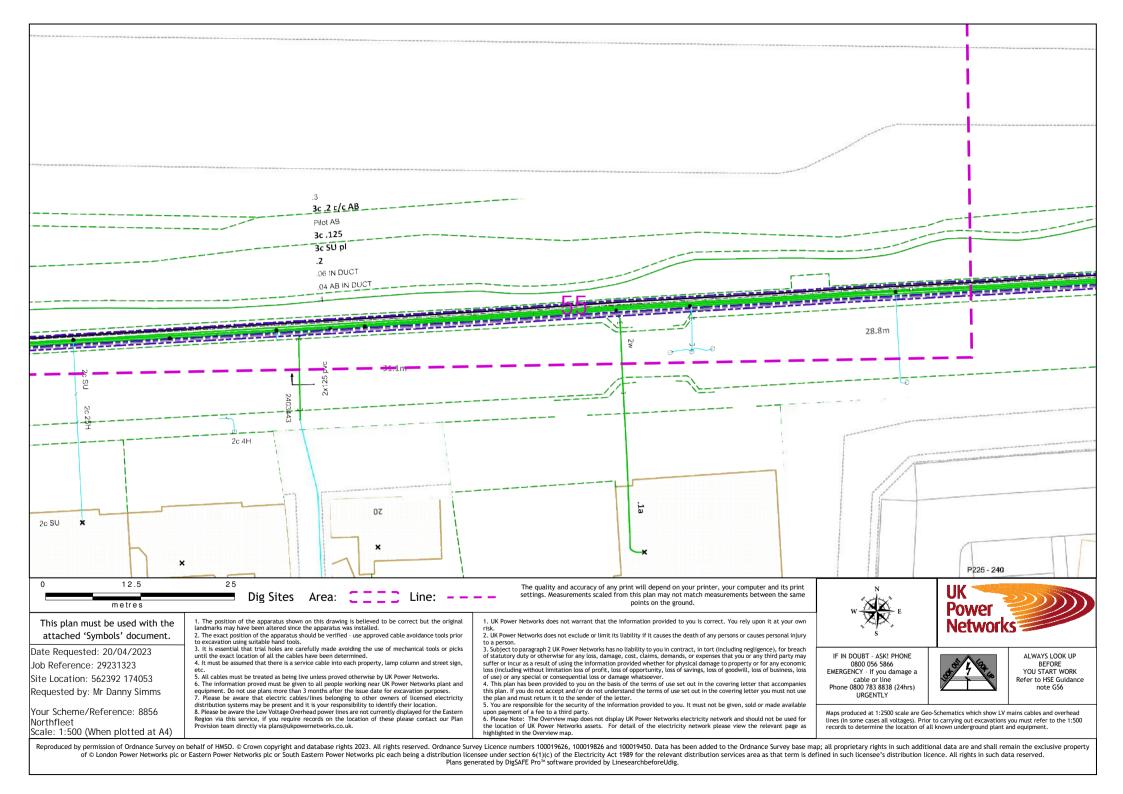


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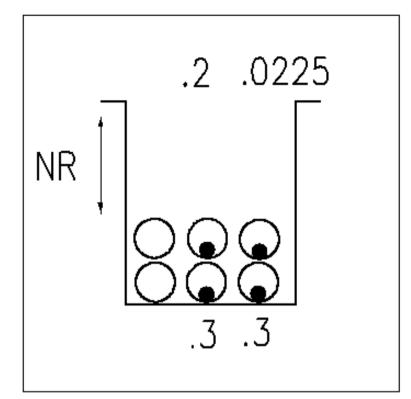




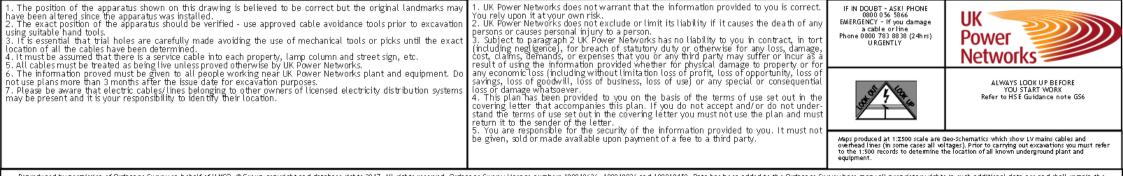




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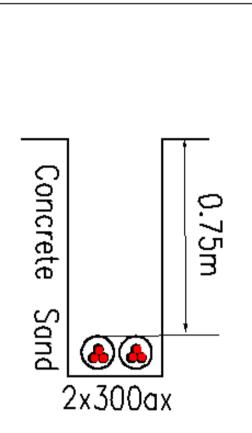


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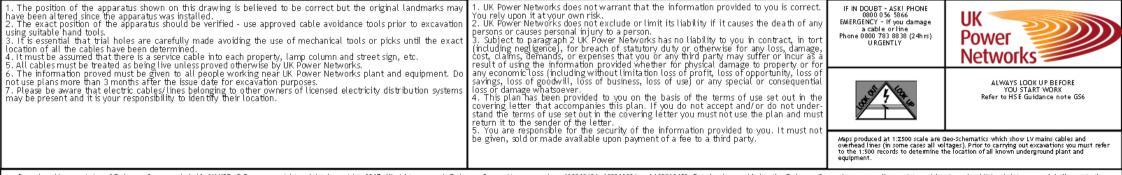


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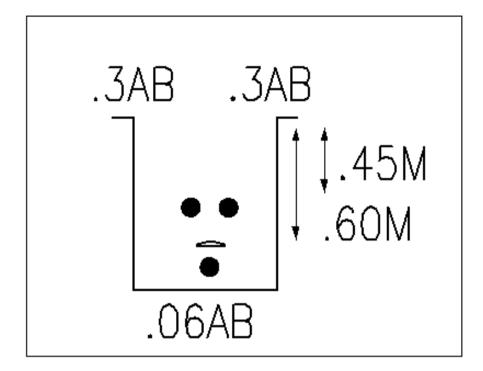


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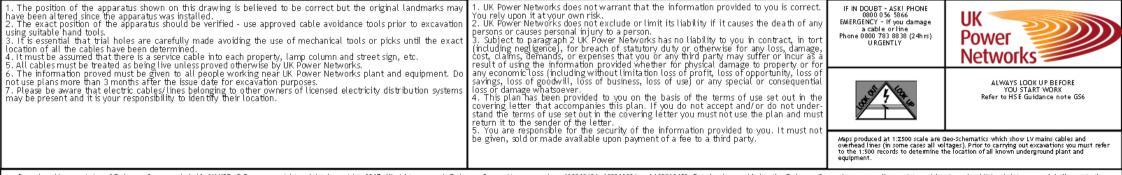


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Cross Section : D

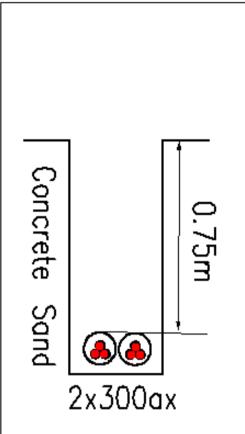


Cross Section D

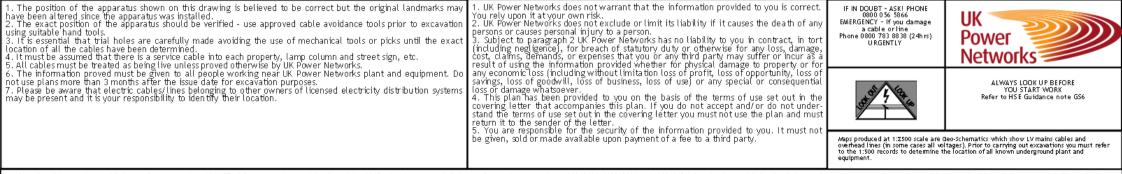


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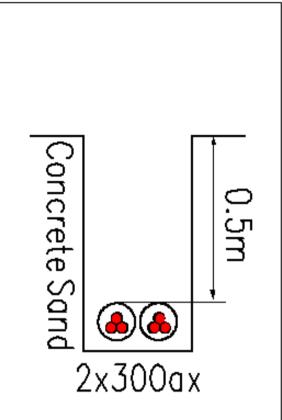


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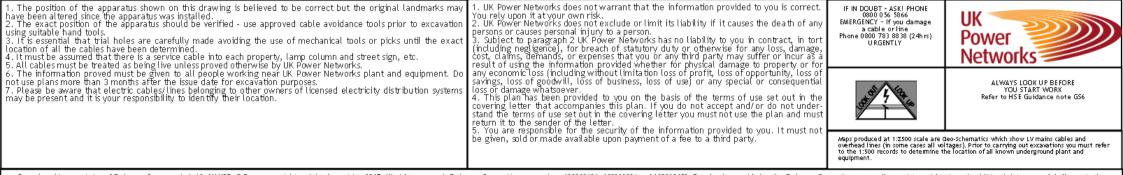


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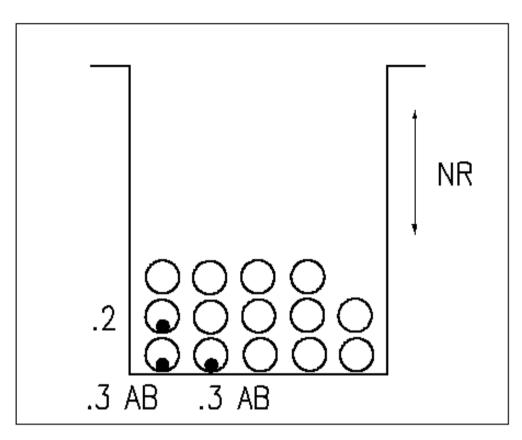
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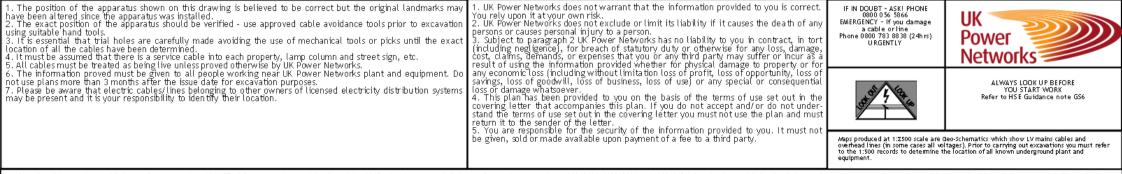
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Cross Section : A

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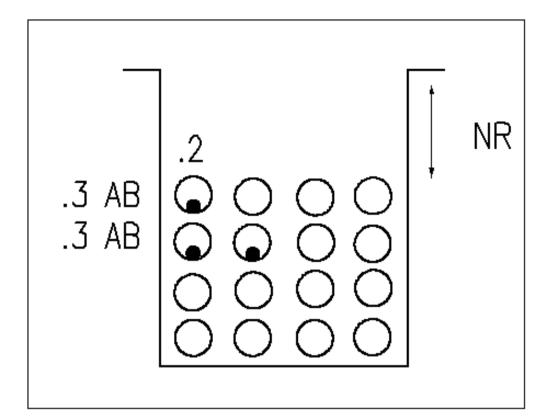
Cross Section A



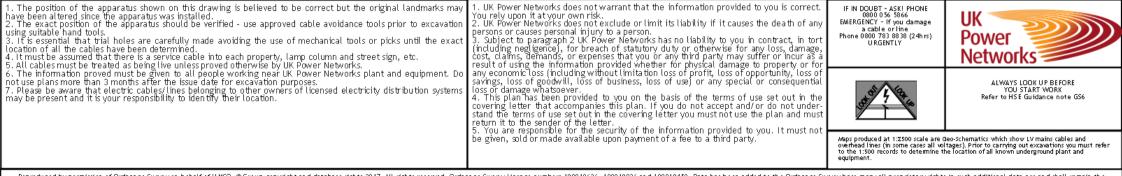
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Cross Section : B

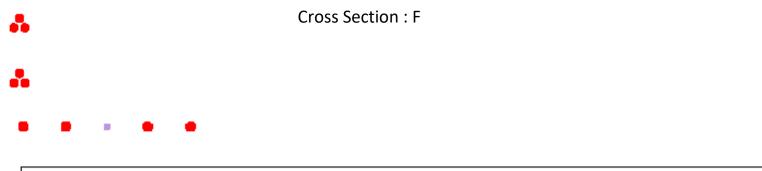


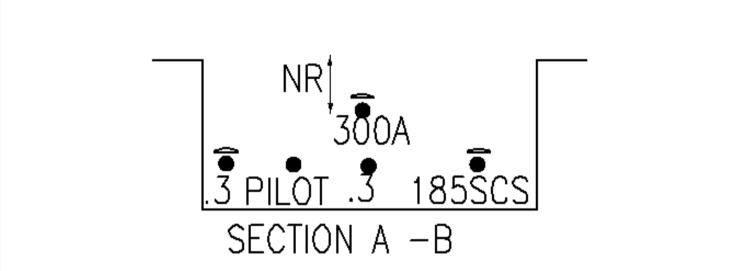
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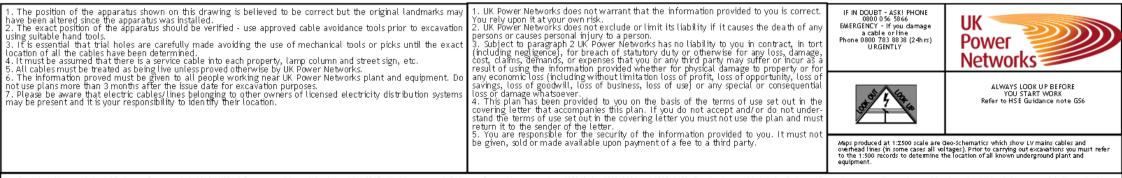
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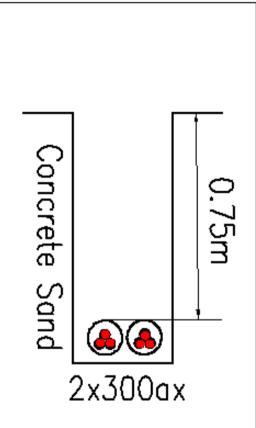




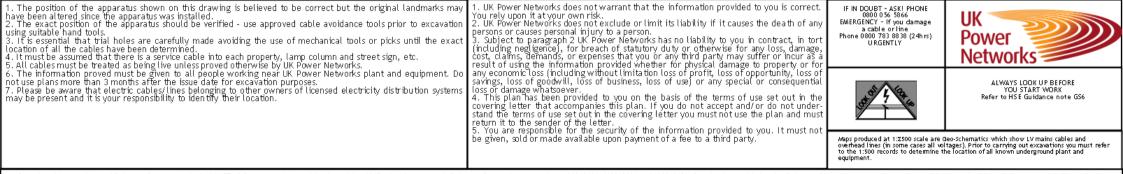
Cross Section F



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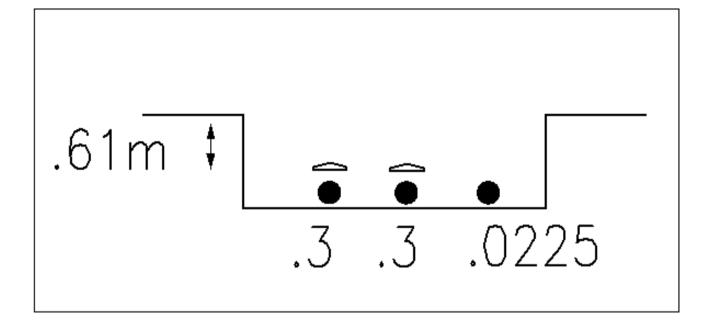


Cross Section 2403698

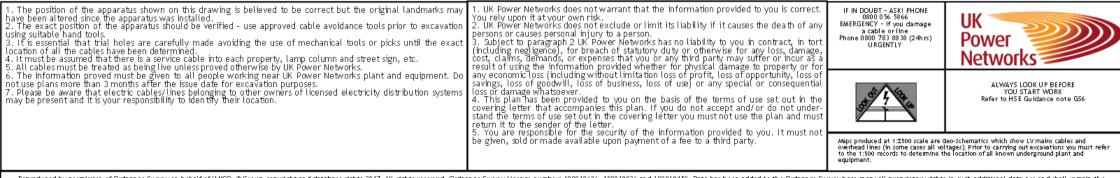


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Cross Section : E



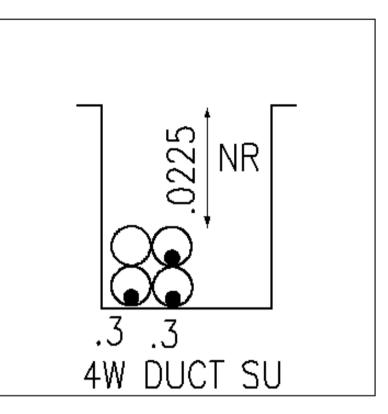
Cross Section F



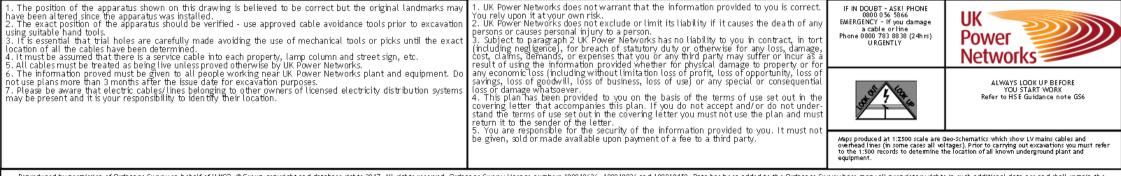
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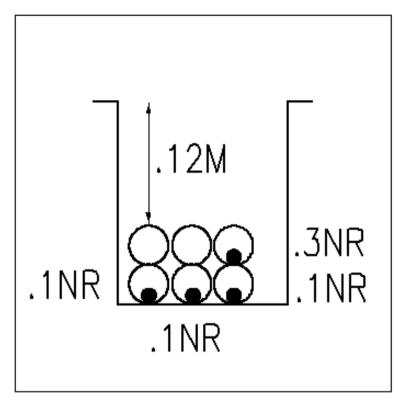
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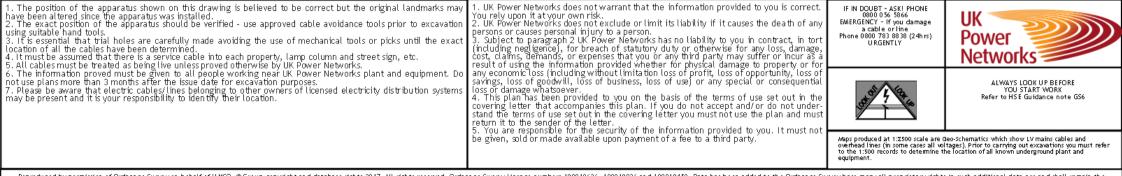
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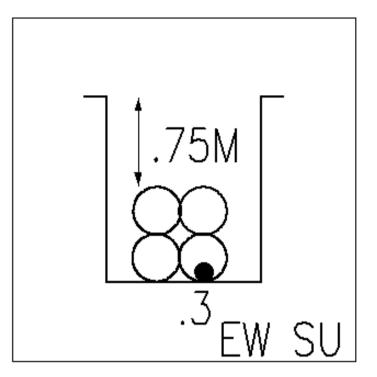


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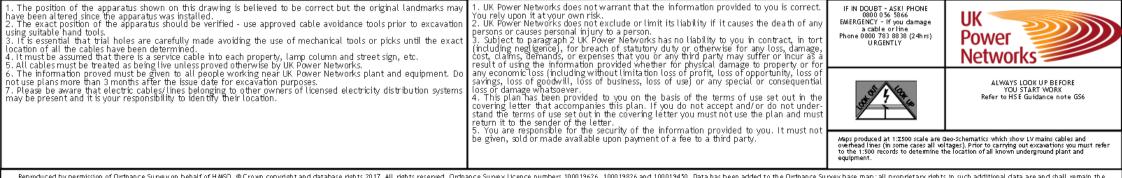


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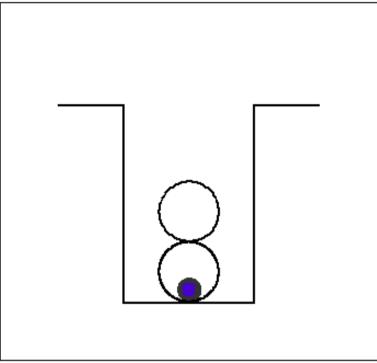


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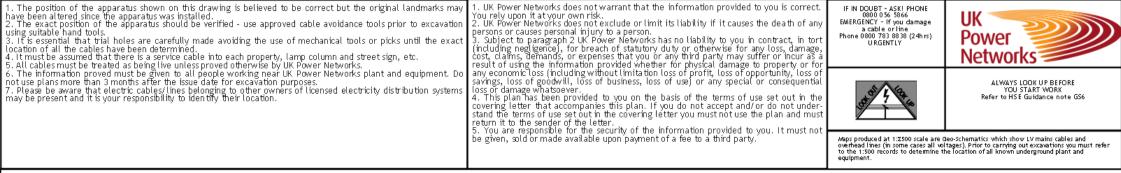


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Cross Section : 2403443



Cross Section 2403443



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UK Power Networks Feedback Tool

Please help UK Power Networks improve the accuracy of their network records and help make it safer for all those working around them in future.

All you need to do is:

- 1. Use your phone camera to scan the QR code:
- 2. Provide feedback on what you have found on site (good or bad)
- 3. Upload a photo if needed



Thank you for making the area a safer place to dig.

UK Power Networks, working with LSBUD



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 2		Guidance notes. The area covered by this guide.
3 4 7 8 9 10 11 13 14 15 17	<u>1:500 view</u>	Scenery. Scenery (UK Power Networks use only). Primary distribution cables (EHV). Secondary distribution cables (HV/LV). Service cables/terminations. Cable ducts. EHV/HV/LV sites. Mains joints. Service joints. Cross sections. Common abbreviations/terminology (all views).
19 20 22		<u>:10000 (HV) network views</u> (UK Power Networks use General. 1:2500 scale LV network. 1:10000 scale HV network.
23 24 25 26	LV network diag	<u>gram view</u> (UK Power Networks use only). Overhead lines. Underground cables. Joints. Substations/pole transformers.

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.**

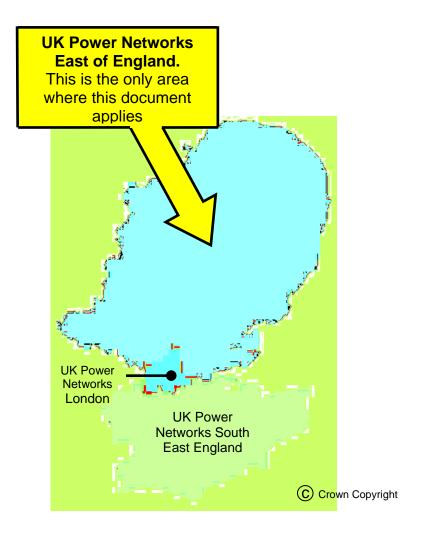
- The position of apparatus shown on NetMAP is believed to be correct, but the original landmarks may have altered since the apparatus was installed.
- It must be assumed that there is at least one service to each property, lamp column, street sign etc.
- All cables must be treated as live, unless proven 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.

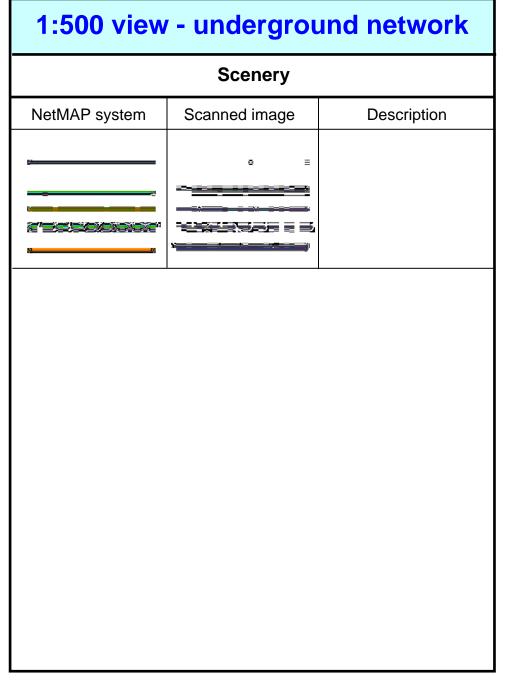


1

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

The area covered by this guide:





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.			
	Not applicable	Water - surface water (only visible to UK Power Networks and their immediate contractors)	
	Not applicable	Water - Source Protection Zone 1 (only visible to UK Power Networks and their immediate contractors)	
	Not applicable	Water - Source Protection Zone 2 (only visible to UK Power Networks and their immediate contractors)	
	Not applicable	Water - Source Protection Zone 3 (only visible to UK Power Networks and their immediate contractors)	
section continued on next page			

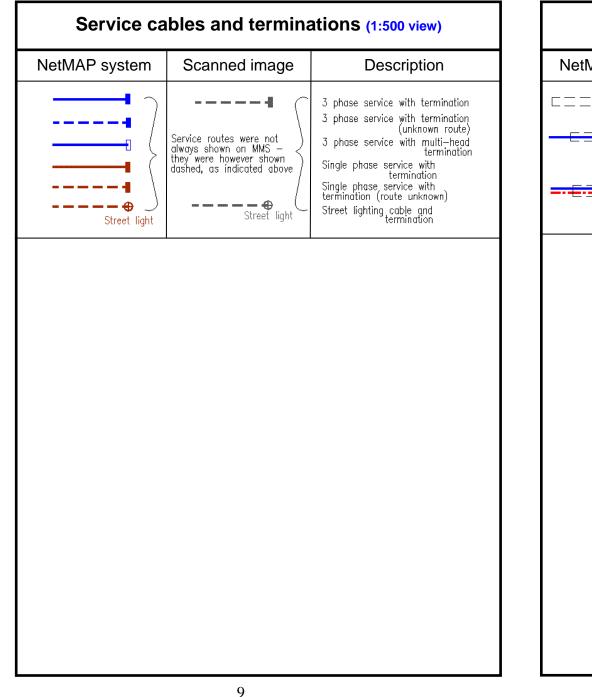
Scenery for UK Power Networks use only - boxed in red				
NetMAP system	Scanned image	Description		
	Not applicable	Historical - Scheduled Monuments (only visible to UK Power Networks and their immediate contractors)		
	Not applicable	Historical - Parks and Gardens (only visible to UK Power Networks 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)		
		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)
\diamondsuit	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 Over 11kV and up to 33kV

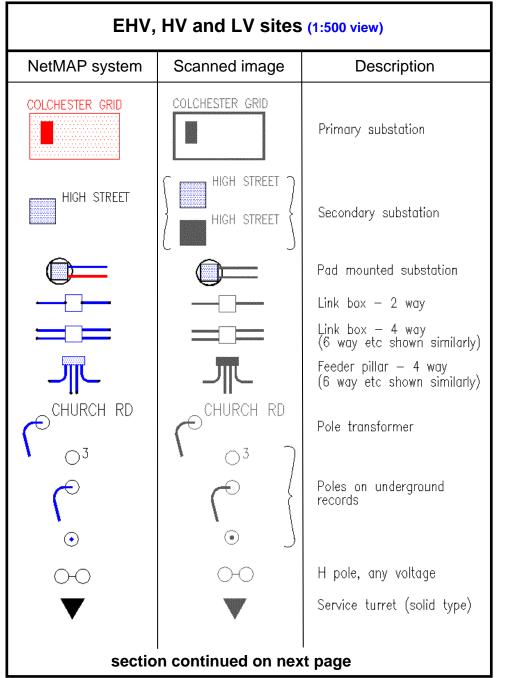
Secondary distribution cables (1:500 view)

NetMAP system	Scanned image	Description
3 - 120 C - 136 2 - 13		

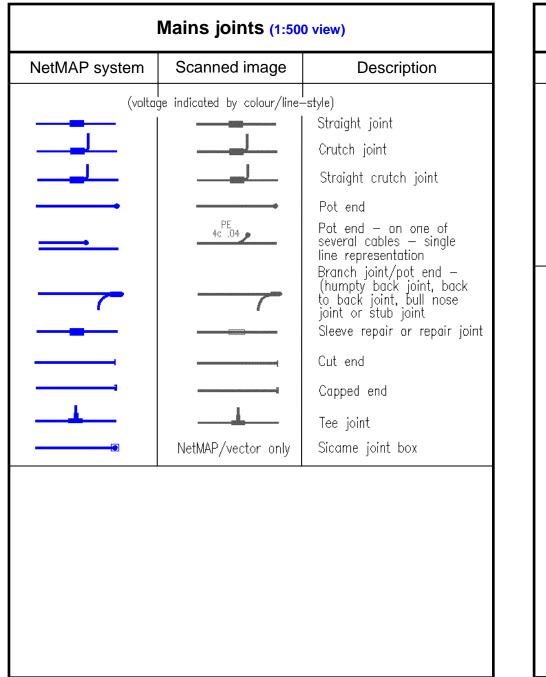


NetMAP system Scanned image Description Image Image

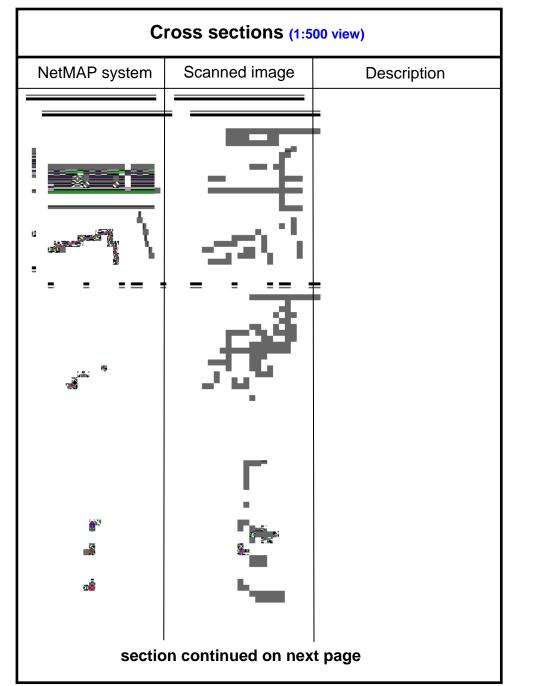
10



NetMAP system	Scanned image	Description
No NetMAP equivalent	\bigtriangledown	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



Service joints (1:500 view)				
NetMAP system	Scanned image	Description		
Please note that 3 phase services are shown blue, and single phase services are shown brown				
•	•	Straight joint		
		Service joint to main		
<u>T</u>	Ţ	Pot end		
	1	1		



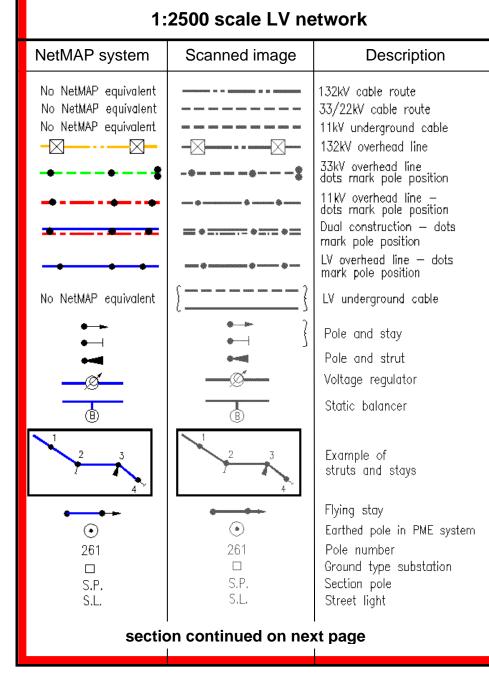
Cross sections continued (1:500 view)			
NetMAP system	Scanned image	Description	
Ĩ	J		
300			
P *			
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	-		

Abbrev.Description1cSingle core1phSingle phase2cTwo core3cThree core3phThree phase	Abbrev.	Description
1ph Single phase 2c Two core 3c Three core	Cut out or C/O	
ABC Aerial bunched (bundled) conductor (modem LV overhead line) ABI Air break isolator (no fuses) ABSD Air break switch disconnector ACCS Aluminium concentric copper sheathed AI Aluminium AR Auto recloser ASL Automatic sectionalising links ax Triplex (aluminium) 2 x 22mm AL PVC (example) Duplex	cx DE DSTA EG EFI EHV ELCB ELT EPR EW E/W Fdr_or Fdr_or F/G	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
3 x 22mm AL PVC (example) Triplex CB Circuit breaker c/c Concentric cores ccc Compact covered conductor CCT Circuit CNE Combined neutral and earth Cross The core colour may be phased different to originating CS Consac CSE Cable sheath earth Cu Copper	F/P GRP GVR HV HYBRID Insulation Insulator	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 Electrically protective material surrounding a conductor Porcelain or glass over– head line support (on poles) Instrument traced cable or ITC - cable traced electronically using Cable Avoidance Tool (CAT) or similar

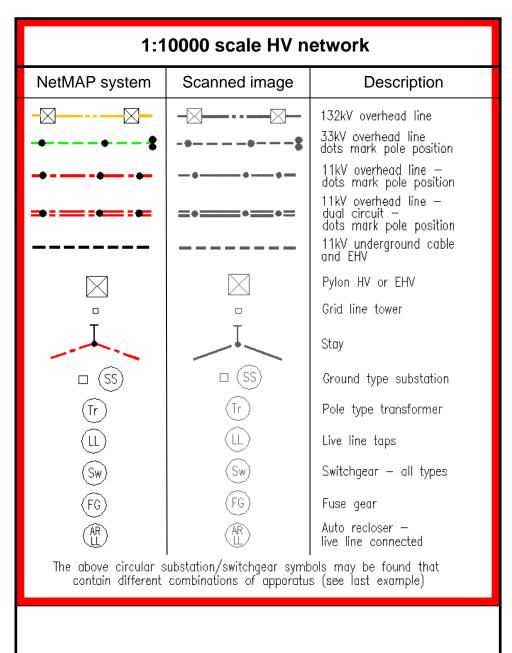
Common abbreviations and terminology continued (all views)

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

General				
NetMAP system	Scanned image	Description		
•	00 0	H pole Pole		

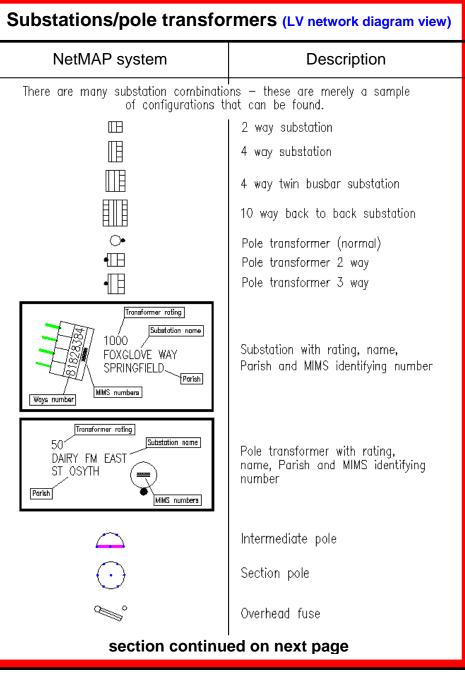


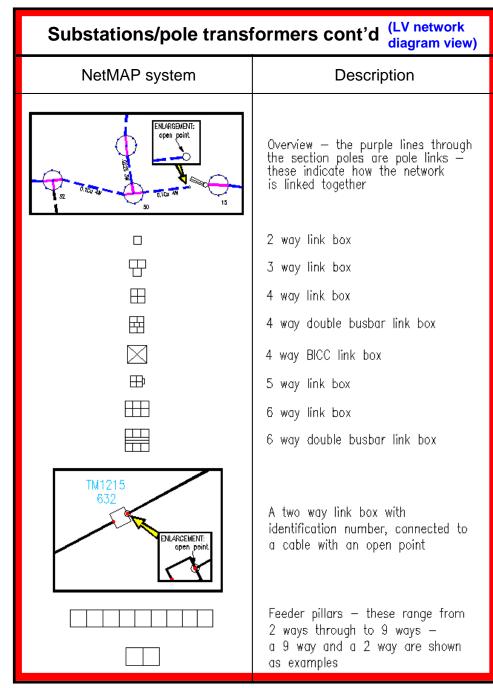
1:2500 scale LV network continued			
NetMAP system	Scanned image	Description	
O.R. Stay Ext. Brkt P. Box N.E. O.R. Brkt	O.R. Stay Ext. Brkt P. Box N.E. O.R. Brkt	Outrigger stay Extension bracket Pole box Neutral and earth Outrigger bracket	
	21		



LV network diagram view-for UK Power Networks use only-boxed in red		
Overhead lines NetMAP system Description		
	Unknown	
	Al	
	Си	
	ABC	
	Pole línk	

Underground cables (LV network diagram view)	
NetMAP system	Description
	Unknown
	AI
	Cu
	СС
	TCC
	Ea
	Ec
	Ecx
	Ew
	LSF
	Other
	24









ukpowernetworks.co.uk

Your life can be lost within seconds if you come into contact with electricity.

Every year, people are killed or seriously injured when they come into contact with high voltage electricity.

This can have a far-reaching and devastating effect on family, friends and colleagues.

Distractions, working long hours, rushing to get the job done, can all impact on how we work and our safety.

Taking time to plan, being prepared and focusing on the way we work can help keep us safe.



The electricity network is designed to keep you safe. But how safe are you when you are working?

UK Power Networks is the country's biggest electricity distributor, making sure the lights stay on for more than eight million homes and businesses across London, the South East and the East of England.

The safety of our customers and staff is our top priority.

Underground cables carry a powerful electrical charge which can be conducted through machinery and equipment with fatal consequences. Anyone working close to live underground cables should take the time to read this simple leaflet and identify the precautions they should be taking.



WATCH OUR EXCAVATION ANIMATION BY SCANNING THE QR CODE WITH YOUR PHONE CAMERA.





Remember:

- The depth and location of cables and services shown on the plans may have changed because of subsequent site alterations
- Be aware that not all cables and services may be shown on the plans
- Cables do not run in straight lines. Underground cables may be deflected around underground obstacles and can change depth
- Wear Personal Protective Equipment to minimise the harm of electric shock and burns



How can we help?

If you work or live in the UK Power Networks area contact us or look on our website. We provide free information and advice about the precautions and safe working practices to be followed when working close to electrical equipment.

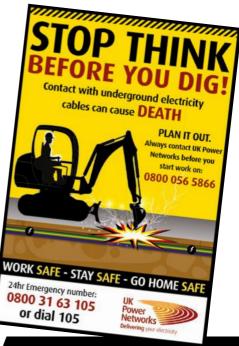
Further advice and guidance is available from the Health and Safety Executive (HSE):

HSG85 - Electricity at Work – Safe Working Practices GS6 - Avoiding Danger from Overhead Power Lines HSG47 - Avoiding Danger from Underground Services

What to do in an emergency

If a mains electricity cable is damaged:

- STOP WORK IMMEDIATELY
- Notify UK Power Networks: Dial 105
- If you damage a cable, stay calm, keep clear, and call for help
- Call the emergency services if anyone is injured or there is a fire. Anyone who has received an electric shock should go to hospital as damage may have occurred to the heart
- Always treat the cable(s) as live even if they are not sparking
- Never remove anything that is stuck or in contact with the cable
- Stay clear keep everyone away until assistance arrives



To request your FREE vehicle cab stickers visit www.ukpowernetworks.co.uk/ internet/en/safety/

If you are unsure who your network operator is then please visit **www.energynetworks.org**



You could be in danger when carrying out your everyday trades activities such as digging, construction and demolition.

Contact UK Power Networks or Line Search Before U Dig (LSBUD) in advance of the works to obtain relevant cable plans or to request disconnections. The cable plans will only show the indicative route and not the route into the property

Ensure the cable plans are shown to and understood by those on site BEFORE starting work

Confirm the cable location by using a Cable Avoidance Tool (CAT) before digging commences. Once found, mark cable positions with spray paint or similar

For cable plans visit www.linesearchbeforeudig.co.uk or www.ukpowernetworks.co.uk

Complete a risk assessment and ensure it covers electrical hazards

Use spades and shovels with insulated handles in preference to forks and picks

Look around for anything in the vicinity that would have an electricity service such as street lights, CCTV cameras, or meter boxes and identify where the cables are

Look for electrical wires, cables and equipment near to where you are going to work and check for warning signs and any other hazards

Contact UK Power Networks to agree a safe method of work if there is a cable encased in concrete, DO NOT BREAK OPEN

Make sure everyone on site is aware of the presence and location of electrical cables

Before demolishing a building make sure supplies are disconnected, preferably well clear of the work area. For guidance on how to arrange a disconnection visit www.ukpowernetworks.co.uk

NATIONAL POWER CUT HELPLINE



TELEPHONE CONTACTS LIST



Stop! Think before you dig!

#bebrightstaysafe



@UKPowerNetworks

f /ukpowernetworks

National power cut helpline

POWER CUT?

CALL 105

Or call us 24 hours a day on **0800 31 63 105**

For safety advice about overhead power lines, disconnections and general enquiries, go to: **www.ukpowernetworks.co.uk**

To request your FREE vehicle cab stickers visit www.ukpowernetworks.co.uk/internet/en/safety/

If you are unsure who your network operator is then please visit **www.energynetworks.org**

/// what3words



Scan the QR code on your phone to get the app

To report broken or damaged electrical equipment or in an emergency call 0800 31 63 105 or 105 and use what3words to help us locate you faster.







Network Records NetMAP Symbols Booklet -South East England

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:-

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1		Guidance notes.
2		The area covered by this guide.
3	<u>1:500 (& 1:125</u>	
4		Scenery.
4		Scenery (UK Power Networks use only).
7		Primary distribution line route (EHV).
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29		Secondary distribution cables.
30		Primary and secondary sites.
		•

Guidance notes.

Important notice:

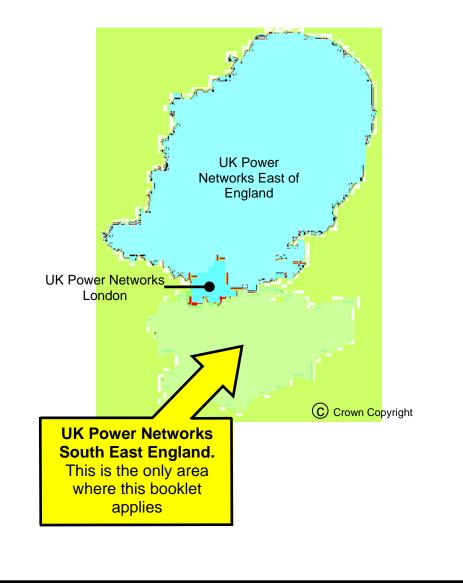
If you do not understand the NetMAP record that you are using, please contact the UK Power Networks Network Records team for guidance on **Tel: 08000 565866.**

- 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.
- Third party cables are not usually shown.
- When viewed in black and white, the line-style indicates the voltage.
- All LV cables are 4 core and all HV cables are 3 core unless otherwise stated.
- All cables are copper unless otherwise stated.

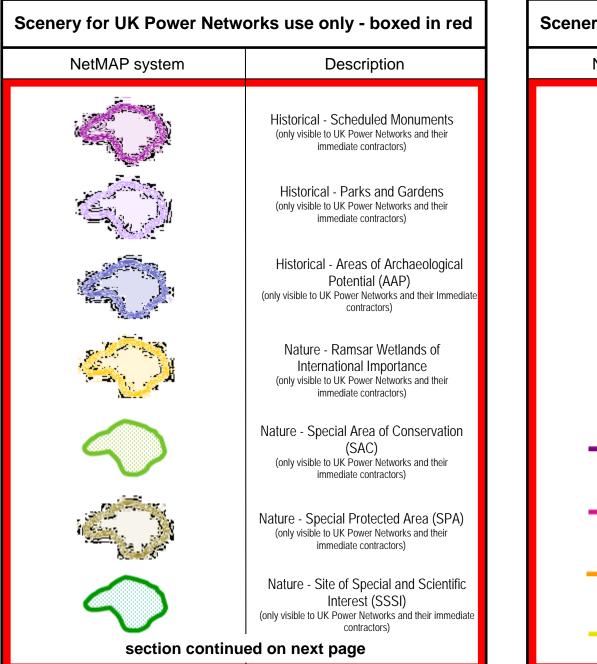


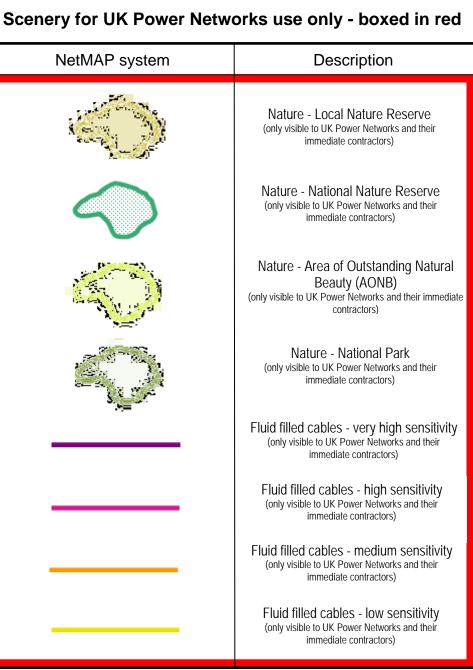
Plan Provision Team and CableWatch Fore Hamlet Ipswich Suffolk IP3 8AA Tel: 08000 565866

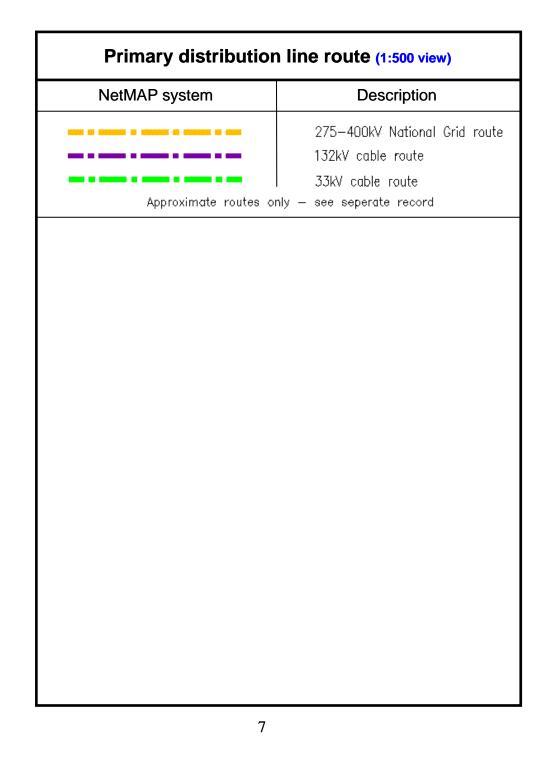
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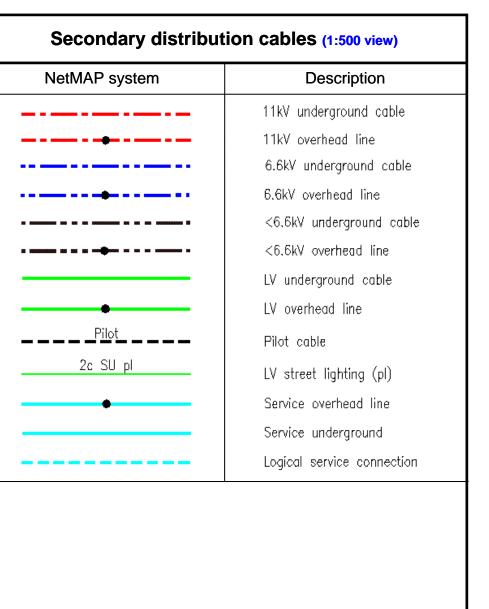


Scene	v [NetMAP system	Description
1:500 (& 1:12 Scene NetMAP system		Inset Network – Contact xxxx IDNO for further information Note: Pipelines are only viewable on NetMAP by not carry out any excavation without consent from products pipeline route in the general vicinity - coi	Area of inset network - not the UK Power Networks (only visible to UK Power Networks immediate contractors) Proposed Cross Rail ro (only visible to UK Power Networks immediate contractors) High pressure pipelines in the vicinity (only visible to UK Power Networks immediate contractors) UK Power Networks staff and their immediate cont







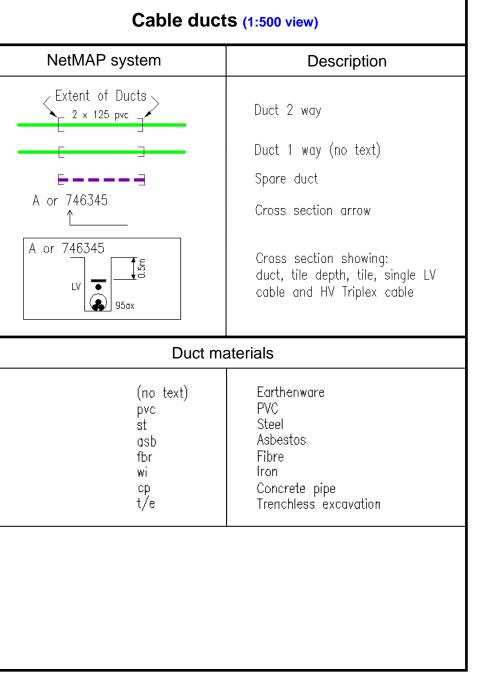


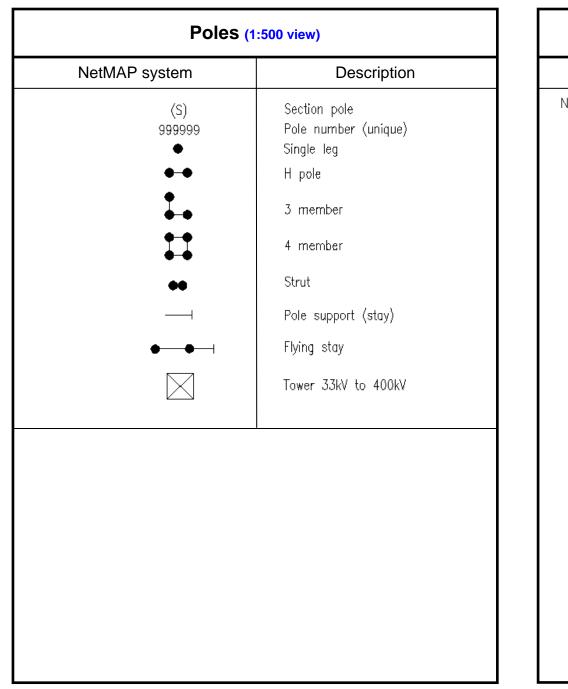
Secondary distribution cable terminology (1:500 view)			
	HV underground		
sta (no text) XLPE bcs scs ua c/c Poly BOTES of 33 kV design ax cx	PILCSTA (paper insulated lead covered steel tape armour) PILCSWA (paper insulated lead covered steel wire armour) XLPE (cross linked polyethylene) insulation CAS (corrugated aluminium sheath) belted construction CAS (corrugated aluminium sheath) with screened cores PILC (paper insulated lead covered) unarmoured Concentric cores Poly (polyethylene) insulation BOTES - Board of Trade earth screen Oil filled Constructed to 33 kV specification Triplex with aluminium conductor Triplex with copper conductor		
	HV overhead		
(no text) pvc cat +ew ccc	Bare open wire Open wire PVC covered ABC (aerial bundled or bunched conductor) with supporting strain wire Open wire with extra earth conductor Compact covered conductor		
	Overhead line materials		
sca cc st sil ccs cpl	Steel cored aluminium Cadmium copper Steel Simalec Copper covered steel Compactal		
section continued on next page			

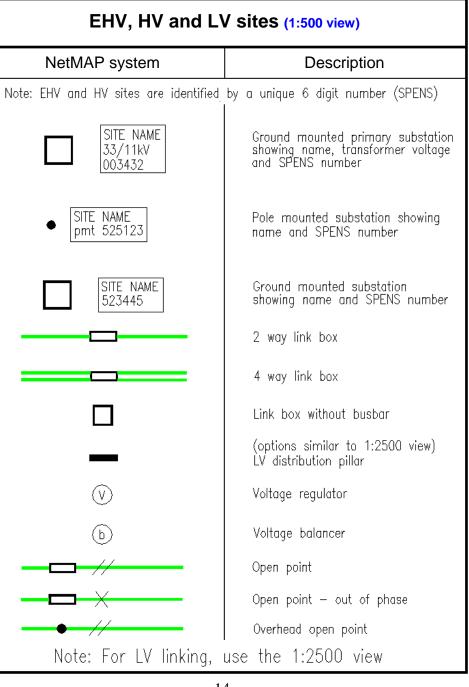
(1:500 view) LV underground mains and services W Waveform Waveform with seperate earth wire We Н Hybrid - copper neutral with aluminium phase conductor He Hybrid with seperate earth wire PILC (paper insulated lead covered) unarmoured ЦŰ PILC (paper insulated lead covered) with/without armour (no text) XLPE (cross linked polyethylene) insulation XLPE PISTA (paper insulated steel tape armour) 4c SAC (solid aluminium core) with lead covered neutral DISTRI c/c Concentric cores s/c Split concentric with seperated neutral and earth wires Paper insulated aluminium sheathed 3 core with solid aluminium CONSAC cores Vulcanised bitumen/rubber insulation vb Capothene core insulation Capothene Tape braid and yarn tby PILSWA (paper insulated lead steel wire armour) SW0 PILSTA (paper insulated steel tape armour) solid aluminium core SOC Solidal 4 sector SAC with solid aluminium cores Low smoke and fume (orange cable) LSF Cable laid in filled trough Trough LV overhead mains and services (no text) Bare open wire ABC Aerial bundled (or bunched) conductor ABC (aerial bundled or bunched conductor) with supporting strain wire cat PVC covered open wire DAC. c/c Concentric cores Hybrid - copper neutral with aluminium phase conductor Н Under eaves - hessian covered lead cable ue Vulcanised India rubber insulation νіг section continued on next page

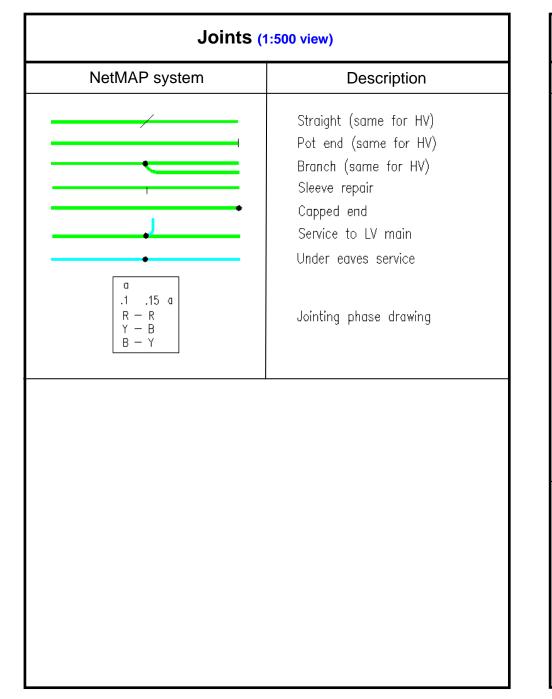
Secondary distribution cable terminology continued

Seconda	ry distribution cable terminology continued (1:500 view)	
	Various annotation	
.1	Cable size (sq. inches)	
185	Cable size (sq. millimetres)	
а	Aluminium	
ITC	Instrument traced cable or ITC - cable traced electronically using Cable Avoidance Tool (CAT) or similar	
		Δ

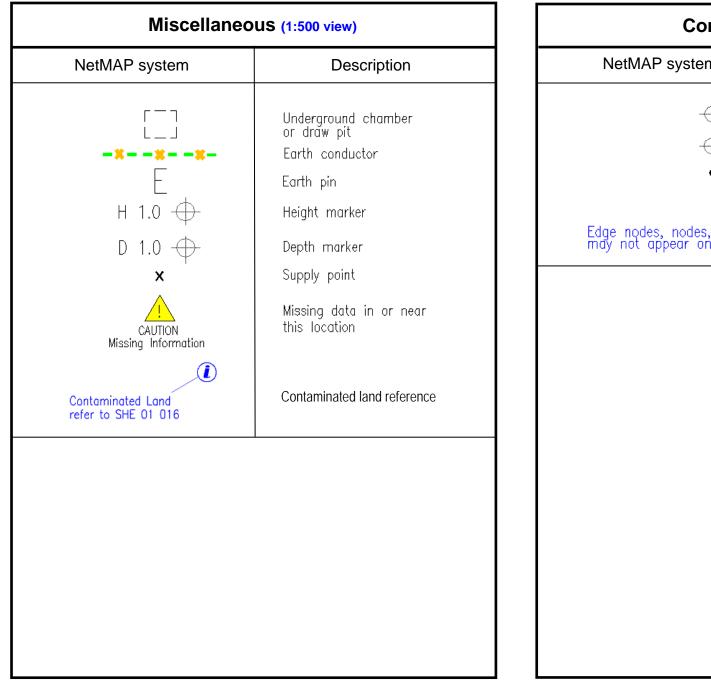








Street furniture (1:500 view)			
NetMAP system	Description		
-0	Pole mounted street light		
0	Street light Zebra crossing Road sign Bollard Pelican crossing		
0	Traffic controller Advertising sign Amplifier station		
	Control cubicle <u>Text_displayed/description</u>		
D ^{TBS}	Pay and display Bus shelter TBS Kiosk Water meter PL pillar		
	TCB Unknown		

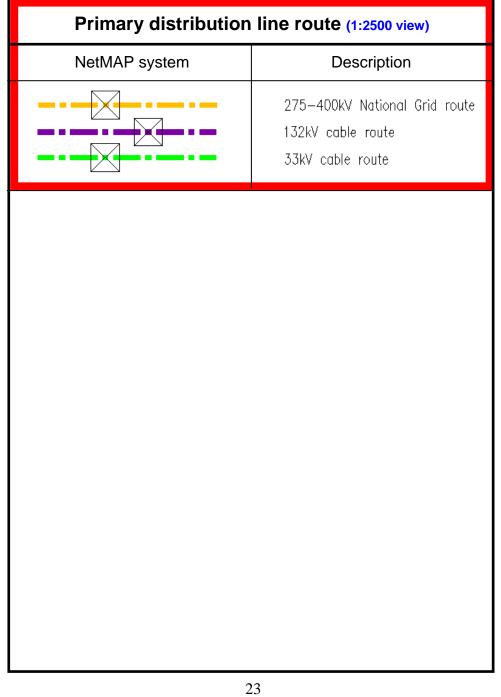


Connectivity (1:500 view)			
NetMAP system Description			
Edge nodes, nodes, connectors may not appear on screen un	Edge node Node Connector Pole termination (nothing visible unless selected)		

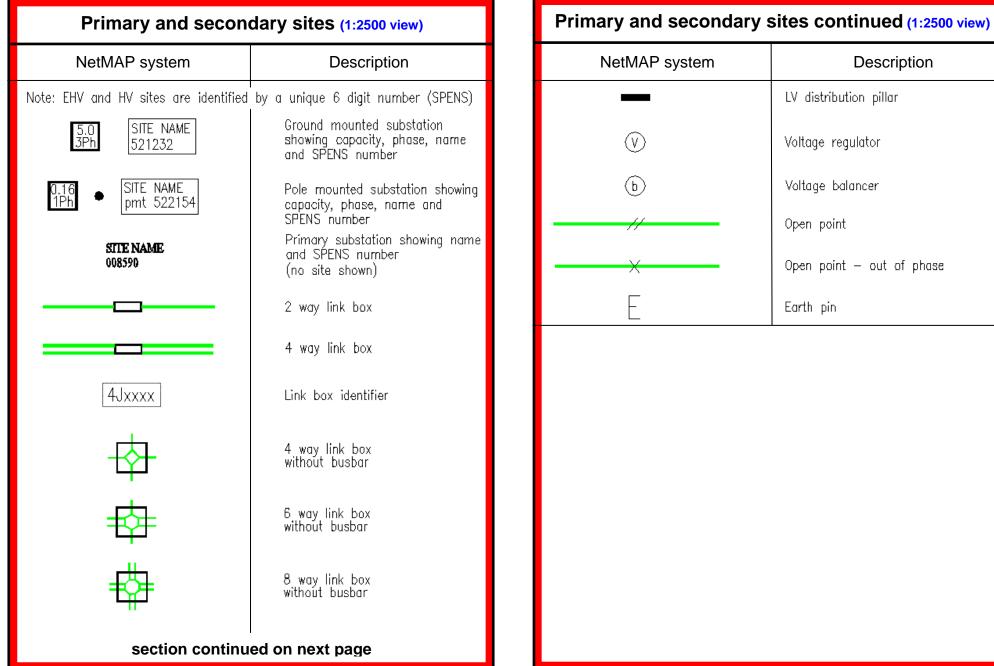
Abbreviations (1:500 view)				
NetMAP system Description				
NR SU AB (M) VO5 MS MP pmt pl TBS TCB CET IT CAT +sl +sw 2c PESL Added Excluded IIP VSxxxx CB	No record Size unknown Abandoned PME available Year LV linking verified Milestone Marker post Pole mounted transformer Public lighting Temporary builder's supply Telephone call box Cable electronically traced Instrument traced (same as CET) Cable avoidance tool (same as CET) Street lighting Switch wire 2 core Public Electricity Supply License Supplied by SPN Not supplied by SPN Assumed open point Vacant site Callender box			

Cable phasing (1:500 view)			
Neutral R Y B	Neutral L1 L2 L3	<u>New core colours</u> Blue Brown Black Grey system	
	<u>Shown or</u> Neutral R Y B	<u>Shown on map</u> Neutral Neutral R L1	

Operatio	onal status colours (1:500 view)	1:2500 view - for UK Power
PROPOSAL		Networks use only - boxed red Notes
ABANDONED	——— Lables and joints appear in GREY	 No underground HV cables are shown on the 1:2500 view Poles and joint details are similar to the 1:500 view For cable/line information refer to the 1:500 view



NetMAP system Description 11kV overhead line 6.6kV overhead line < 6.6kV overhead line	Secondary distribution cables (1:2500 view)			
 6.6kV overhead line <6.6kV overhead line LV underground cable 	NetMAP system	Description		
	6.6kV overhead line Control of the second difference of the s			



NetMAP system	Description	
-	LV distribution pillar	
\heartsuit	Voltage regulator	
b	Voltage balancer	
	Open point	
—X	Open point — out of phase	
E	Earth pin	

Switch types (1:2500 view)			
NetMAP system Description			
ABSD A/R A/S FUSE S/D PF ASL PMR PMS GVR	Air brake switch disconnector Auto recloser Sectionaliser Fuse Surge diverter Pathfinder Automatic sectionalising links Pole mounted recloser Pole mounted sectionaliser Gas vacuum recloser		

1:10000 view - for UK Power Networks use only - boxed red

Notes

- 1. No EHV cables/overhead lines shown on 1:10000 view.
- 2. For congested areas print at 1:5000.
- 3. HV site used instead of branch joint on 1:10000 for connectivity purposes. The site is not displayed until it is selected.

Secondary distribution cables (1:10000 view)			
NetMAP system	Description		
	11kV underground cable		
6.6kV underground cable			
<6.6kV underground cable			
11kV overhead line			
	6.6kV overhead line		
	<6.6kV overhead line		

Primary and secondary sites (1:10000 view)			
NetMAP system	Description		
Note: EHV and HV sites are identified	l by a unique 6 dígít number (SPENS)		
SITE NAME 008590	Primary substation showing name and SPENS number		
SITE NAME 521234	11kV ground mounted substation showing name and SPENS number		
SITE NAME Z 524514	6.6kV ground mounted substation showing name and SPENS number		
SITE NAME D	<6.6kV ground mounted substation showing name and SPENS number		
SITE NAME pmt 527522 ●	11kV pole mounted substation showing name and SPENS number		
SITE NAME pmt 525743 🛛 👁	6.6kV pole mounted substation showing name and SPENS number		
SITE NAME prnt 526543 O	<6.6kV pole mounted substation showing name and SPENS number		
SITE NAME O	Pole mounted switching substation showing name and SPENS number		



Registered Office: Newington House 237 Southwark Bridge Road London SE1 6NP Company: UK Power Networks (Operations) Limited

Registered in England and Wales No: 3870728

Our Ref: 29231323 Your Ref: 8856 Northfleet

Thursday, 20 April 2023

Danny Simms 9-11 Lowater Street Carlton Nottingham Nottinghamshire NG4 1JJ

Dear Danny Simms

Thank you for contacting us regarding UK Power Networks equipment at the above site. I have enclosed a copy of our records which show the electrical lines and/or electrical plant. I hope you find the information useful.

I have also enclosed a fact sheet which contains important information regarding the use of our plans and working around our equipment. Safety around our equipment is our number one priority so please ensure you have completed all workplace risk assessments before you begin any works.

Should your excavation affect our Extra High Voltage equipment (6.6 KV, 22 KV, 33 KV or 132 KV), please contact us to obtain a copy of the primary route drawings and associated cross sections.

If you have any further queries do not hesitate to contact us.

Plan Provision 0800 056 5866









Registered Office: Newington House 237 Southwark Bridge Road London SE1 6NP

Registered in England and Wales No: 3870728

This information is made available to you on the terms set out below. If you do not accept the terms of use set out in this fact sheet please do not use the plans and return them to UK Power Networks.

- 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 person or causes personal injury to a person where such death or personal injury is caused by its negligence.
- 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 how for any loss, damage, costs, 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. The information about UK Power Networks electrical plant and/or electric lines provided to you belongs to and remains the property of UK Power Networks. You must not alter it in any respect.
- 5. The information provided to you about the electrical plant and/or electric lines depicted on the plans may NOT be a complete record of such apparatus belonging to UK Power Networks. The information provided relates to electric lines and/or electrical plant belonging to UK Power Networks that it believes to be present but the plans are not definitive: other electric lines and/or electrical plant may be present and that may or may not belong to UK Power Networks.
- 6. Other apparatus not belonging to UK Power Networks is not shown on the plan. It is your responsibility to make your own enquiries elsewhere to discover whether apparatus belonging to others is present. It would be prudent to assume that other apparatus is present.
- 7. You are responsible for ensuring that the information made available to you is passed to those acting on your behalf and that all such persons are made aware of the contents of this letter.
- 8. Because the information provided to you may not be accurate, you are recommended to ascertain the presence of UK Power Networks electric lines and/or electrical plant by the digging of trial holes. Trial holes should be dug by hand only.

Excavations must be carried out in line with the Health and Safety Executive guidance document HSG 47. We will not undertake this work. A copy of HSG 47 can be obtained from the Health and Safety Executives website.

All electric lines discovered must be considered LIVE and DANGEROUS at all times and must not be cut, resited, suspended, bent or interfered with unless specially authorised by UK Power Networks.

The electric line and electrical plant belonging to UK Power Networks remains so even when made dead and abandoned and any such electric line and/or electrical plant exposed shall be reported to UK Power Networks.

Where your works are likely to affect our electric lines and/or electrical plant an estimate of the price of any protective /diversionary works can be prepared by UK Power Networks Branch at Metropolitan House, Darkes Lane, Potters Bar, Herts. , EN6 1AG, telephone no. 0845 2340040



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Registered Office: Newington House 237 Southwark Bridge Road London SE1 6NP

Registered in England and Wales No: 3870728

9 Any work near to any overhead electricity lines must be carried out by you in accordance with the Health and Safety Executive guidance document GS6 and the Electricity at Work Regulations.

The GS6 Recommendations may be purchased from HSE Books or downloaded from the Energy Networks Association's website.

If given a reasonable period of prior notice UK Power Networks will attend on site without charge to advise how and where "goal posts" should be erected. If you wish to use this service, in the first instance please telephone: 0845 6014516 between 08:30 and 17:00 Monday to Friday.

- 10. 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.
- 11. If in carrying out work on land in, on, under or over which is installed an electric line and/or electrical plant that belongs to UK Power Networks you and/or anyone working on your behalf damages (however slightly) that apparatus you must inform immediately UK Power Networks by our emergency 24 hour three digit telephone number **105** providing;
 - your name, address and telephone number;
 - the date, time and place at which such damage was caused;
 - a description of the electric line and/or electrical plant to which damage was caused;
 - the name of the person whom it appears to you is responsible for that damage;
 - the nature of the damage.
- 12. The expression "UK Power Networks" includes UK Power Networks (EPN) plc, UK Power Networks (LPN) plc, UK Power Networks (SEPN) plc, UK Power Networks and any of their successors and predecessors in title.





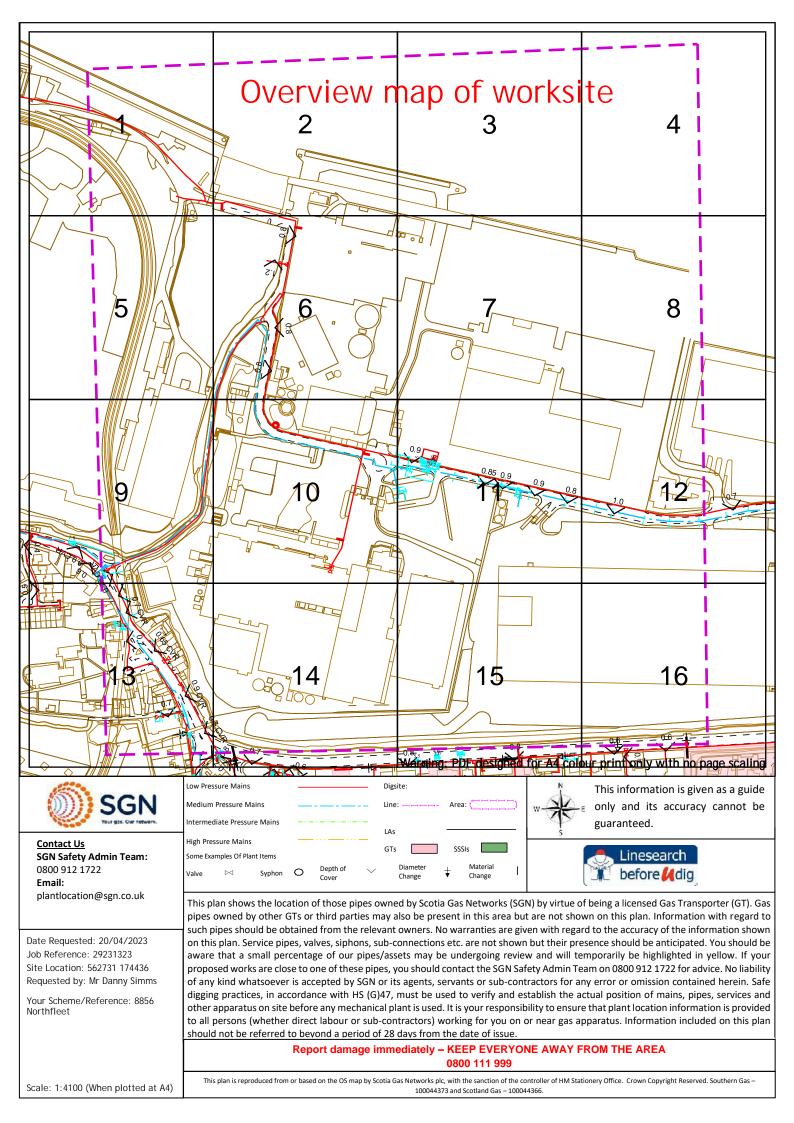


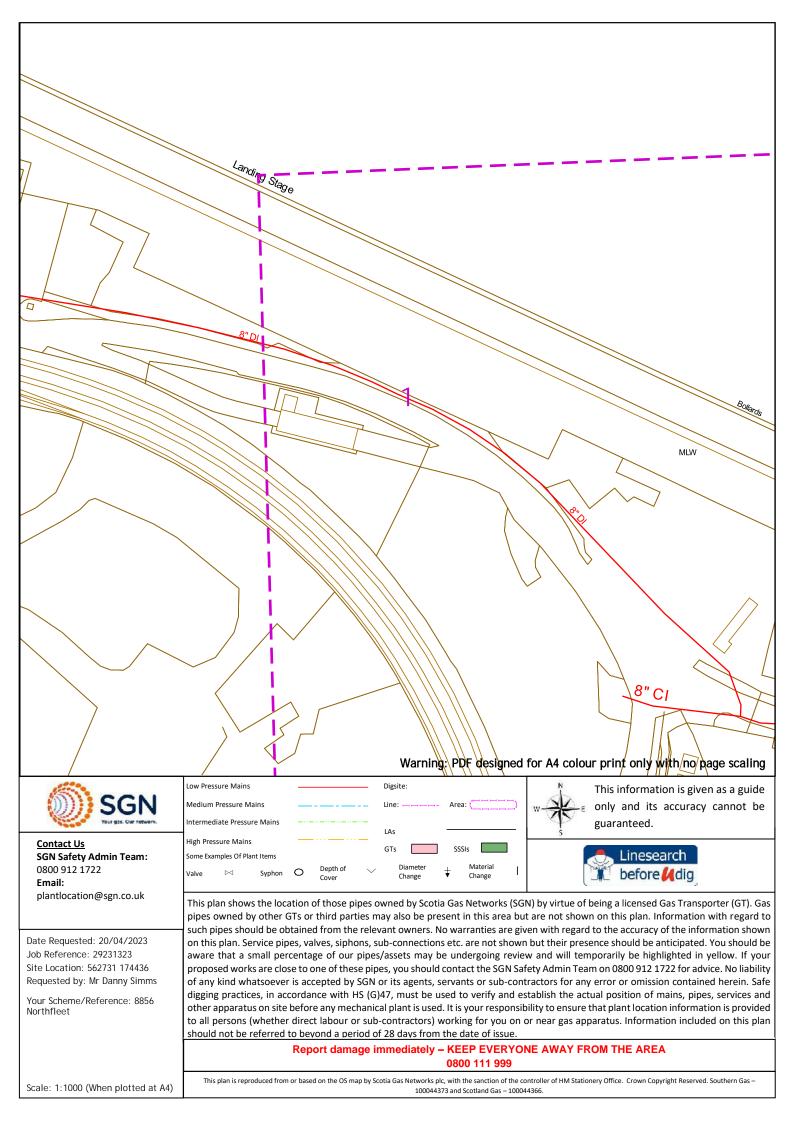


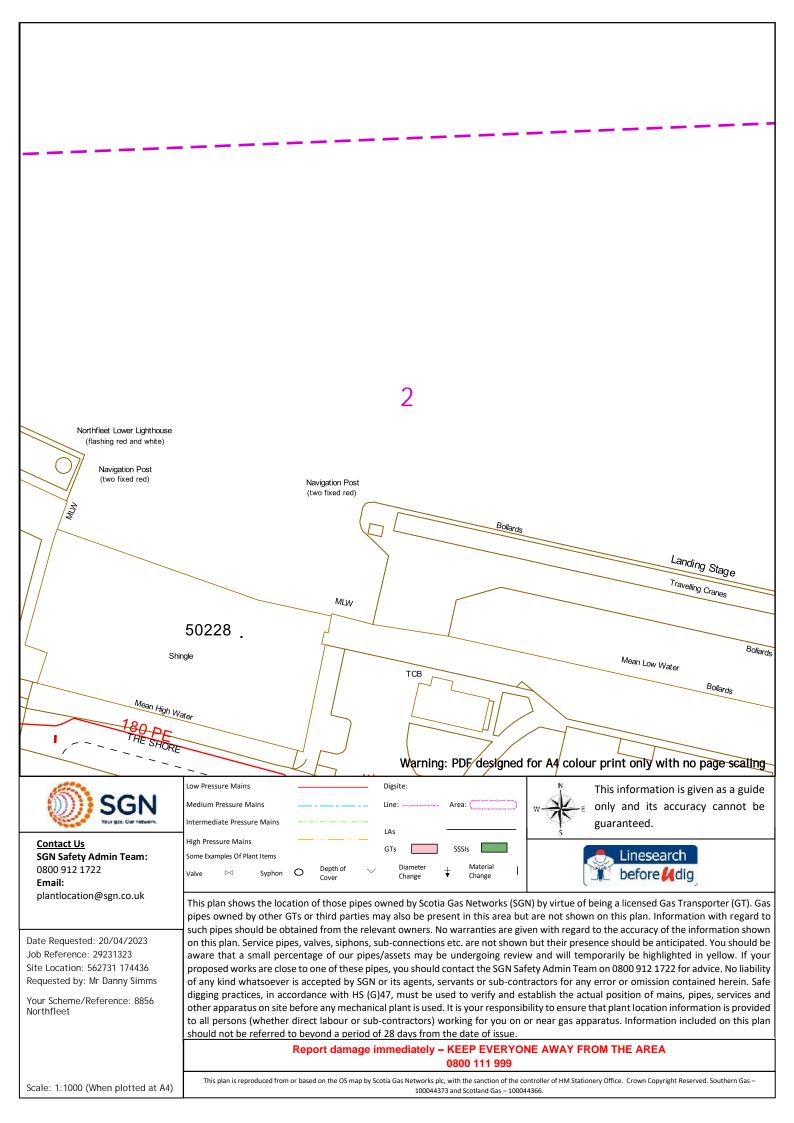


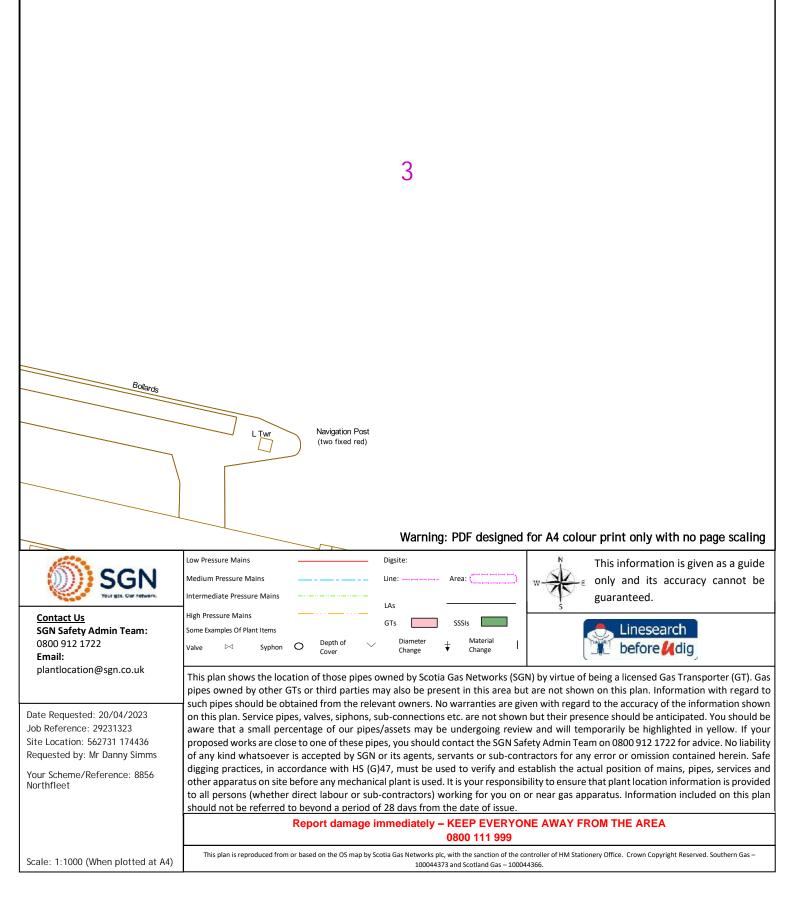
(Scotia Gas Network)







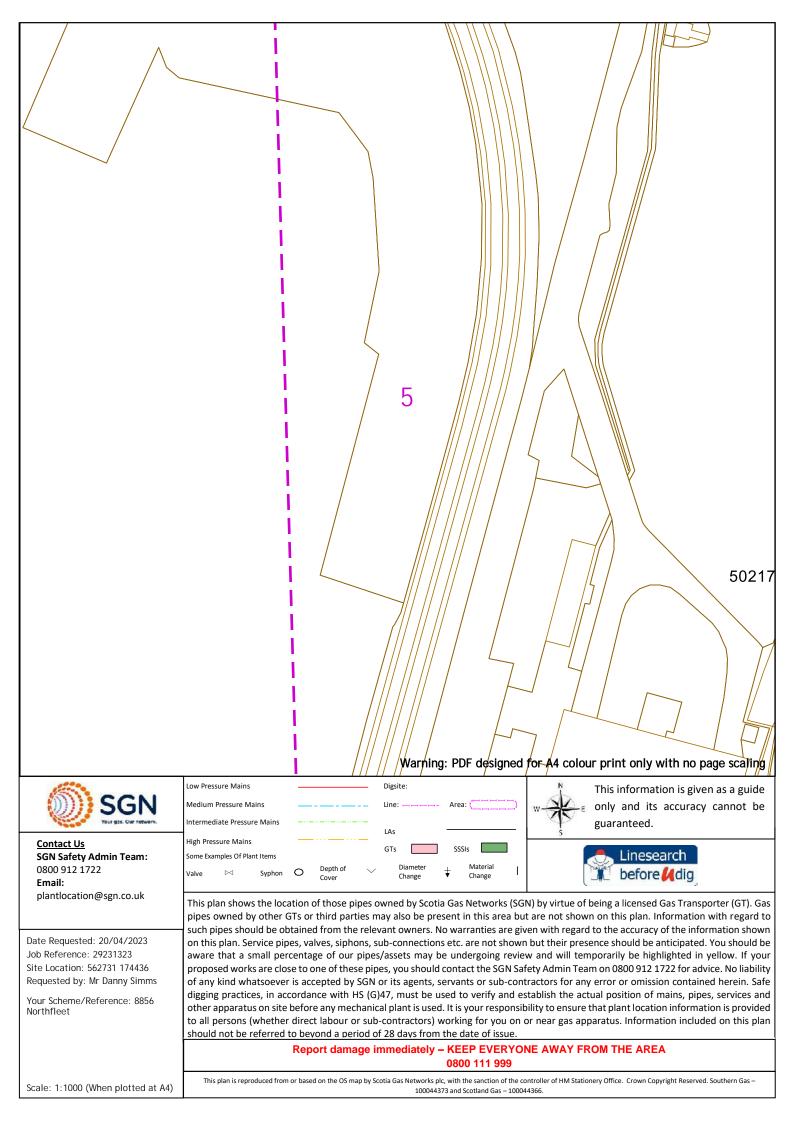




Warning: PDF designed for A4 colour print only with no page scaling

SGN	Low Pressure Mains Medium Pressure Mains Intermediate Pressure Mains	Digsite:	This information is given as a guide only and its accuracy cannot be guaranteed.
Contact Us SGN Safety Admin Team: 0800 912 1722 Email:	High Pressure Mains Some Examples Of Plant Items Valve 🖂 Syphon O Depth of V Cover	LAs GTs SSSIs Diameter Change Change	Linesearch before (/dig
plantlocation@sgn.co.uk	pipes owned by other GTs or third parties n	nay also be present in this area bu	N) by virtue of being a licensed Gas Transporter (GT). Gas t are not shown on this plan. Information with regard to ven with regard to the accuracy of the information shown
Date Requested: 20/04/2023 Job Reference: 29231323 Site Location: 562731 174436 Requested by: Mr Danny Simms Your Scheme/Reference: 8856 Northfleet	on this plan. Service pipes, valves, siphons, s aware that a small percentage of our pipes proposed works are close to one of these pip of any kind whatsoever is accepted by SGN digging practices, in accordance with HS (G	sub-connections etc. are not showr s/assets may be undergoing revie bes, you should contact the SGN Saf or its agents, servants or sub-cont)47, must be used to verify and es	a but their presence should be anticipated. You should be w and will temporarily be highlighted in yellow. If your fety Admin Team on 0800 912 1722 for advice. No liability tractors for any error or omission contained herein. Safe stablish the actual position of mains, pipes, services and bility to ensure that plant location information is provided
Northneet	to all persons (whether direct labour or sub-contractors) working for you on or near gas apparatus. Information included on this plan should not be referred to beyond a period of 28 days from the date of issue.		
	Report damage immediately – KEEP EVERYONE AWAY FROM THE AREA 0800 111 999		
Scale: 1:1000 (When plotted at A4)	This plan is reproduced from or based on the OS map by So	cotia Gas Networks plc, with the sanction of the co 100044373 and Scotland Gas – 10004	ontroller of HM Stationery Office. Crown Copyright Reserved. Southern Gas – 14366.

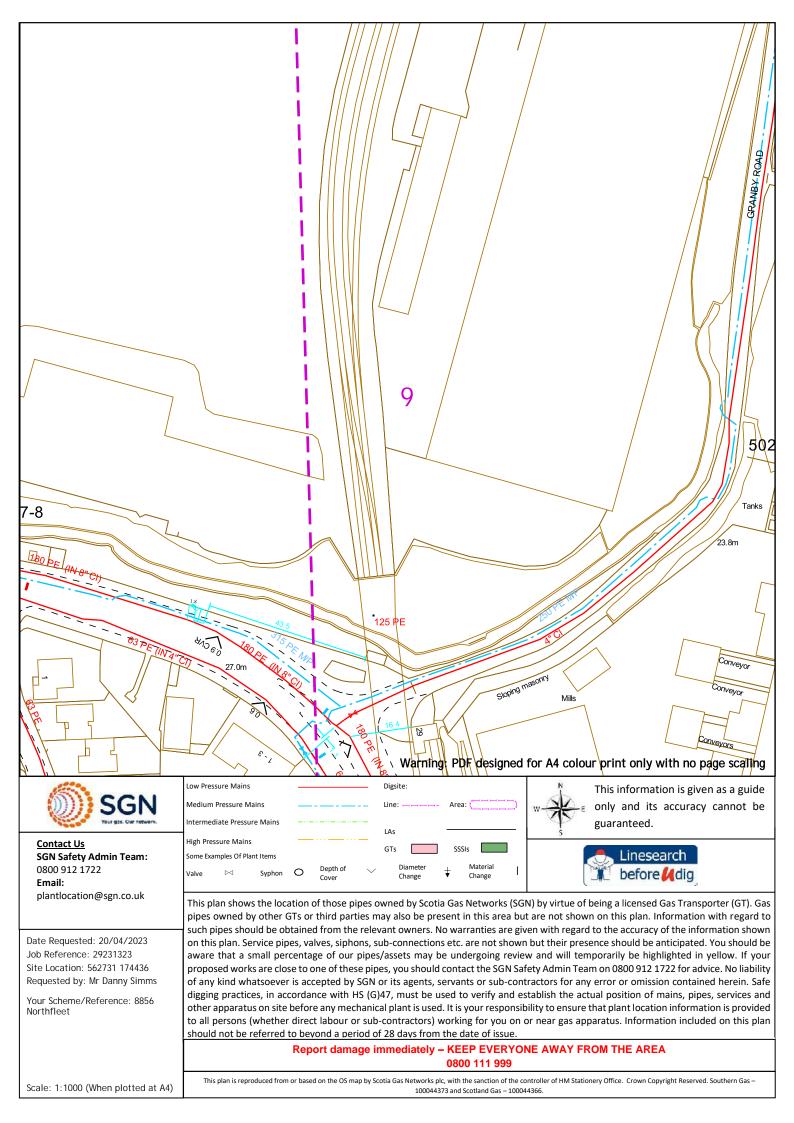
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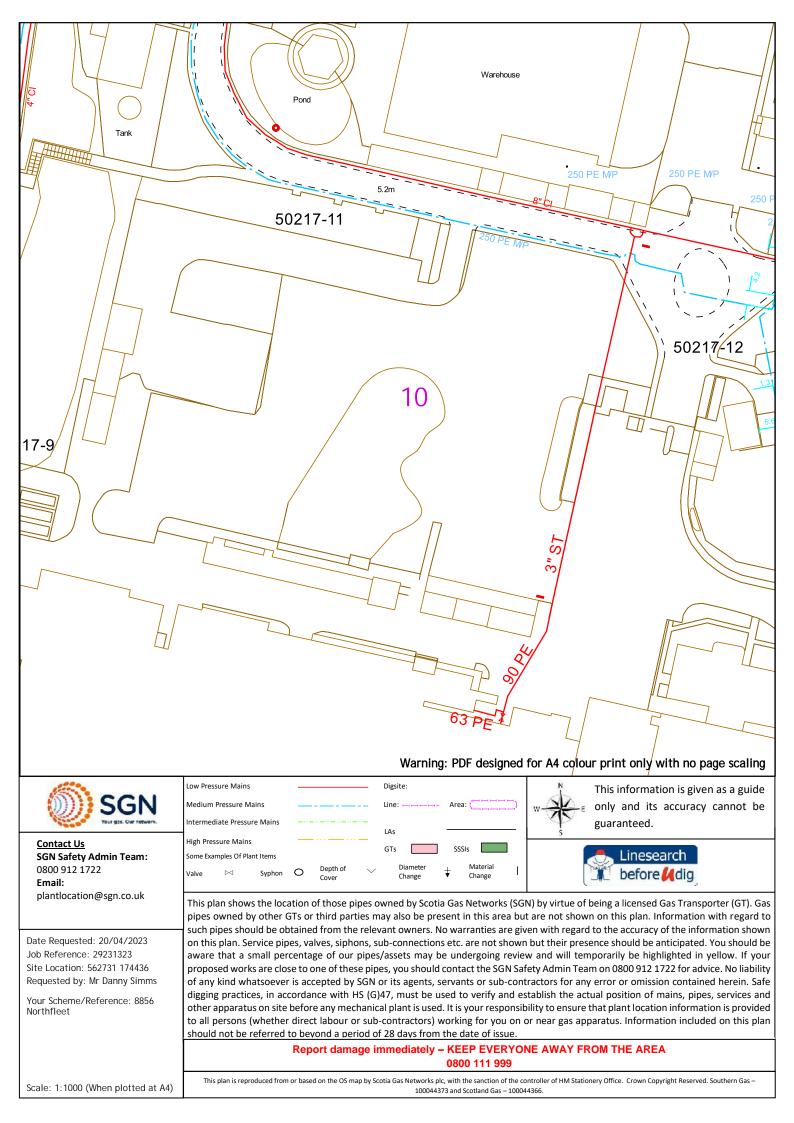


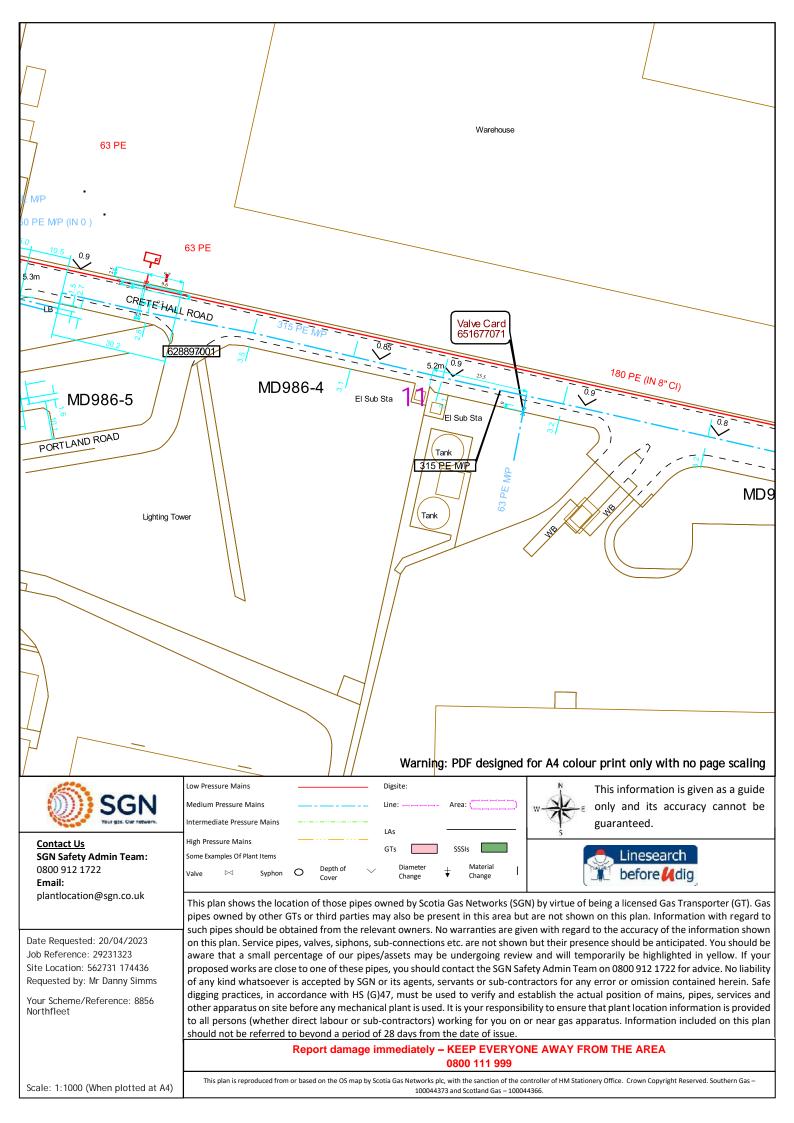
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	Low Pressure Mains Medium Pressure Mains Intermediate Pressure Mains	Digsite: Line: Area: ()	This information is given as a guide only and its accuracy cannot be guaranteed.
<u>Contact Us</u> SGN Safety Admin Team:	High Pressure Mains	LAs 5 GTs SSSIs	Linesearch
0800 912 1722 Email:	Valve 🖂 Syphon O Depth of 🗸	Diameter 🕁 Material Change 🕁 Change	before 🖊 dig
plantlocation@sgn.co.uk	pipes owned by other GTs or third parties m	ay also be present in this area but are not s	e of being a licensed Gas Transporter (GT). Gas shown on this plan. Information with regard to
Date Requested: 20/04/2023 Job Reference: 29231323	on this plan. Service pipes, valves, siphons, su	b-connections etc. are not shown but their	egard to the accuracy of the information shown presence should be anticipated. You should be I temporarily be highlighted in yellow. If your
Site Location: 562731 174436 Requested by: Mr Danny Simms	proposed works are close to one of these pipe of any kind whatsoever is accepted by SGN of	es, you should contact the SGN Safety Admin or its agents, servants or sub-contractors for	Team on 0800 912 1722 for advice. No liability r any error or omission contained herein. Safe
Your Scheme/Reference: 8856 Northfleet	other apparatus on site before any mechanica	al plant is used. It is your responsibility to en contractors) working for you on or near ga	e actual position of mains, pipes, services and sure that plant location information is provided s apparatus. Information included on this plan
		nmediately – KEEP EVERYONE AWA 0800 111 999	Y FROM THE AREA
Scale: 1:1000 (When plotted at A4)	This plan is reproduced from or based on the OS map by Sco	tia Gas Networks plc, with the sanction of the controller of HN 100044373 and Scotland Gas – 100044366.	1 Stationery Office. Crown Copyright Reserved. Southern Gas –

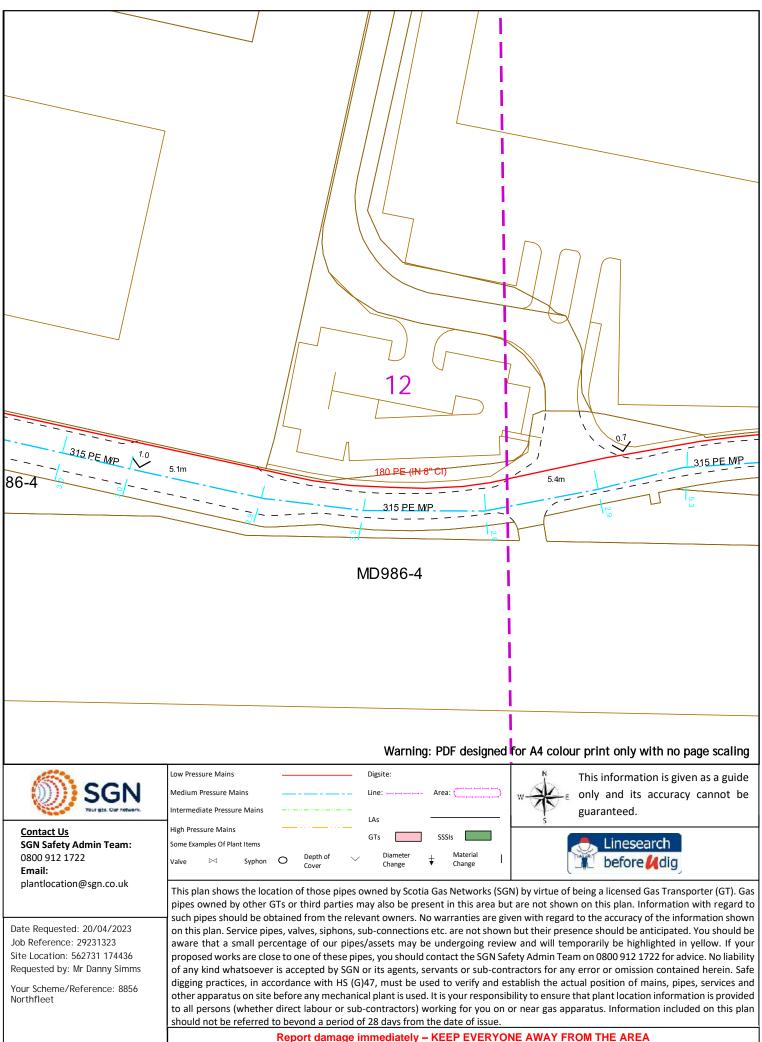
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and a second	Low Pressure Mains Digsite: This information is given as a guide
SGN	Medium Pressure Mains Line: Area: only and its accuracy cannot be
Your gas. Cur network.	Intermediate Pressure Mains guaranteed.
Contact Us	LAS S Guilanteed.
<u>Contact Us</u> SGN Safety Admin Team:	Some Examples Of Plant Items GTs SSSIs
0800 912 1722	Value Suppon O Depth of V Diameter + Material
Email:	Valve 🗠 Syphion Cover Change 🕈 Change
plantlocation@sgn.co.uk	This plan shows the location of those pipes owned by Scotia Gas Networks (SGN) by virtue of being a licensed Gas Transporter (GT). Gas
	pipes owned by other GTs or third parties may also be present in this area but are not shown on this plan. Information with regard to
Date Requested: 20/04/2023	such pipes should be obtained from the relevant owners. No warranties are given with regard to the accuracy of the information shown on this plan. Service pipes, valves, siphons, sub-connections etc. are not shown but their presence should be anticipated. You should be
Job Reference: 29231323	aware that a small percentage of our pipes/assets may be undergoing review and will temporarily be highlighted in yellow. If your
Site Location: 562731 174436	proposed works are close to one of these pipes, you should contact the SGN Safety Admin Team on 0800 912 1722 for advice. No liability
Requested by: Mr Danny Simms	of any kind whatsoever is accepted by SGN or its agents, servants or sub-contractors for any error or omission contained herein. Safe
Your Scheme/Reference: 8856	digging practices, in accordance with HS (G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that plant location information is provided
Northfleet	to all persons (whether direct labour or sub-contractors) working for you on or near gas apparatus. Information included on this plan
	should not be referred to bevond a period of 28 days from the date of issue.
	Report damage immediately – KEEP EVERYONE AWAY FROM THE AREA
	0800 111 999
Scale: 1:1000 (When plotted at A4)	This plan is reproduced from or based on the OS map by Scotia Gas Networks plc, with the sanction of the controller of HM Stationery Office. Crown Copyright Reserved. Southern Gas – 100044373 and Scotland Gas – 100044366.

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		Warning: PDE designed	d for A4 colour print only with no page scaling
SGN	Low Pressure Mains Medium Pressure Mains Intermediate Pressure Mains	Digsite:	w w the second
Contact Us SGN Safety Admin Team: 0800 912 1722 Email: plantlocation@sgn.co.uk		GTs SSSIS Diameter Change Sowned by Scotia Gas Networks (S	I Linesearch before (4dig) GGN) by virtue of being a licensed Gas Transporter (GT). Gas
Date Requested: 20/04/2023 Job Reference: 29231323 Site Location: 562731 174436 Requested by: Mr Danny Simms Your Scheme/Reference: 8856 Northfleet	such pipes should be obtained from the re on this plan. Service pipes, valves, siphons, aware that a small percentage of our pip proposed works are close to one of these p of any kind whatsoever is accepted by SG digging practices, in accordance with HS (other apparatus on site before any mechar	levant owners. No warranties are g , sub-connections etc. are not show es/assets may be undergoing rev ipes, you should contact the SGN S N or its agents, servants or sub-co G)47, must be used to verify and nical plant is used. It is your respon- ub-contractors) working for you of	but are not shown on this plan. Information with regard to given with regard to the accuracy of the information shown wn but their presence should be anticipated. You should be riew and will temporarily be highlighted in yellow. If your Safety Admin Team on 0800 912 1722 for advice. No liability pontractors for any error or omission contained herein. Safe establish the actual position of mains, pipes, services and sibility to ensure that plant location information is provided n or near gas apparatus. Information included on this plan
	Report damage	immediately – KEEP EVERY 0800 111 999	ONE AWAY FROM THE AREA
Scale: 1:1000 (When plotted at A4)	This plan is reproduced from or based on the OS map by	Scotia Gas Networks plc, with the sanction of the 100044373 and Scotland Gas – 10	e controller of HM Stationery Office. Crown Copyright Reserved. Southern Gas – 0044366.





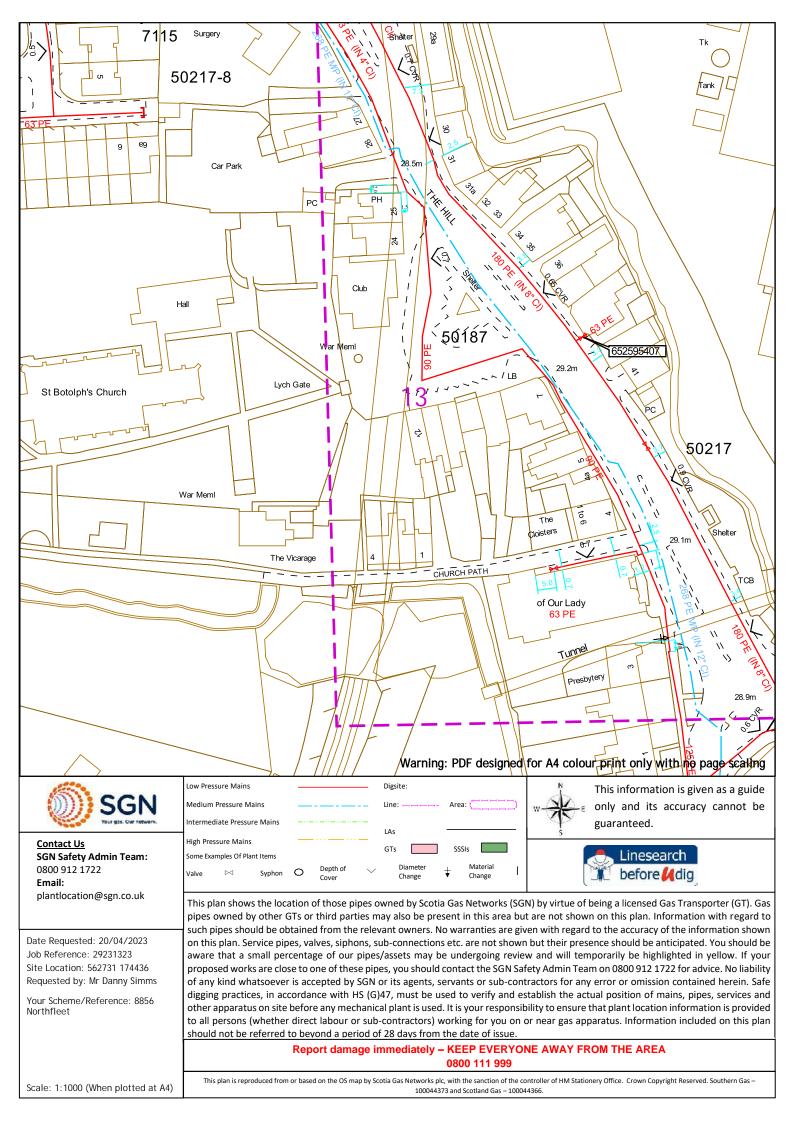




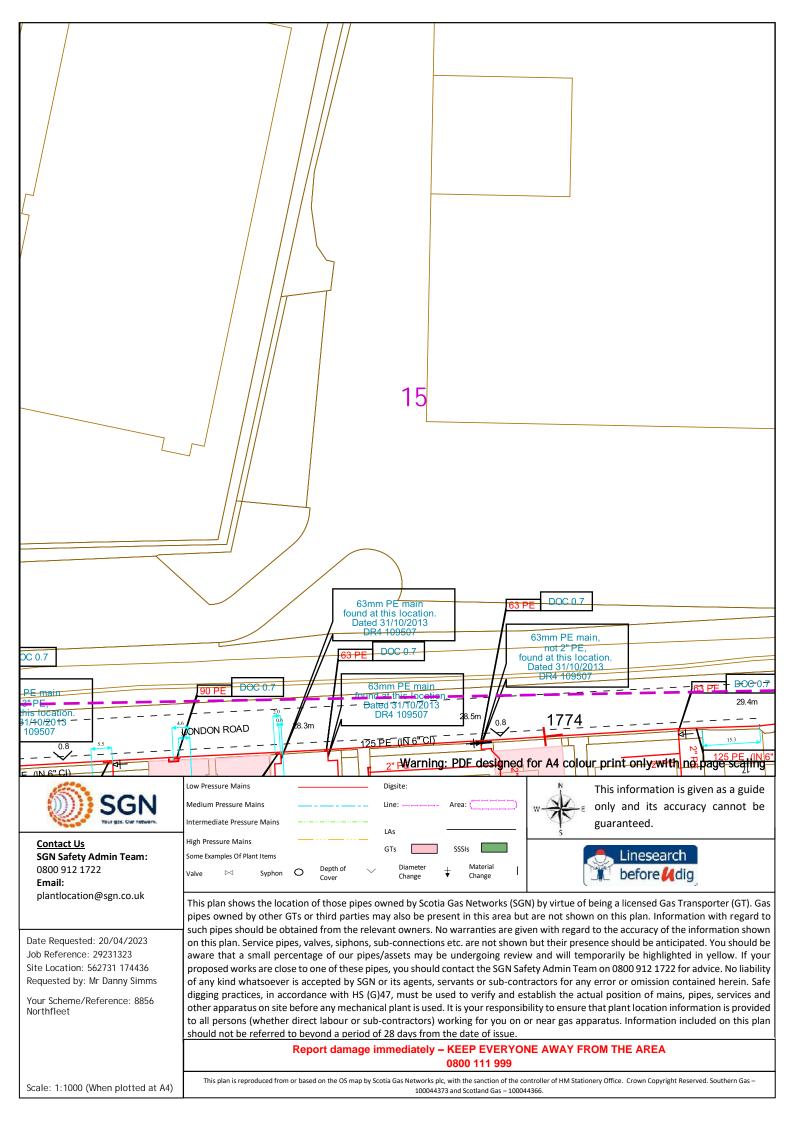
rt damage immediately	- KEEP EVERYONE
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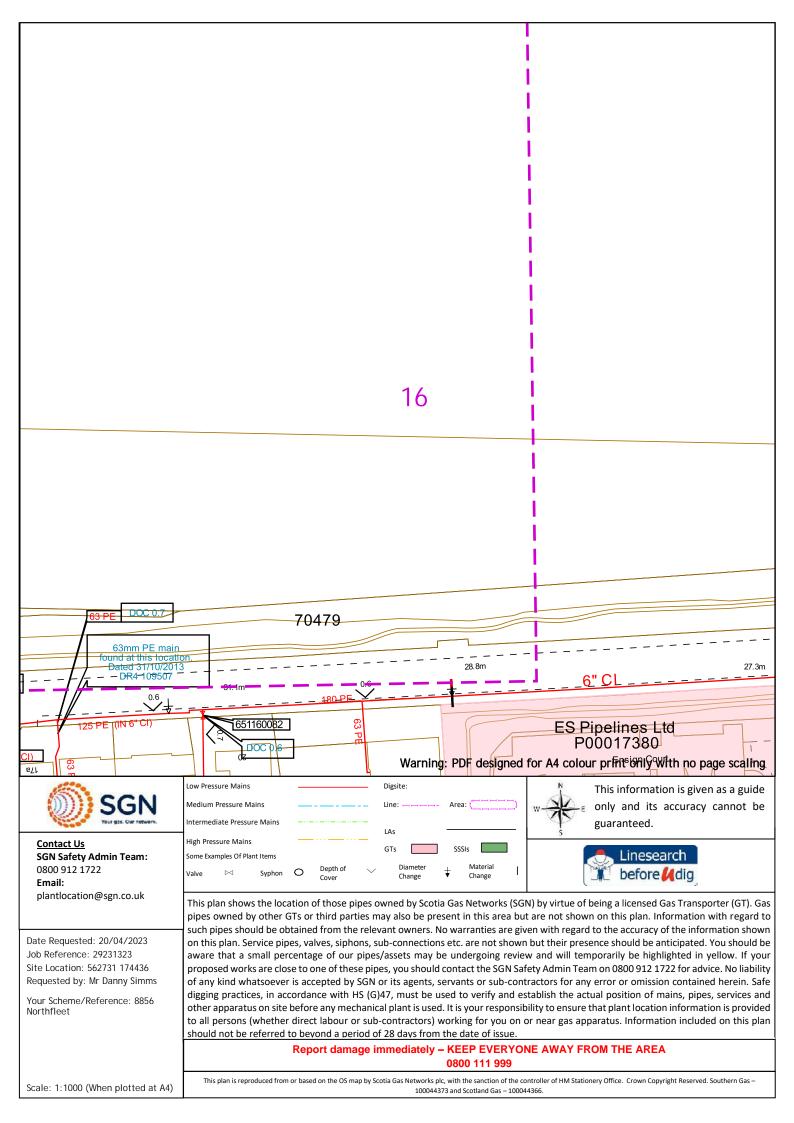
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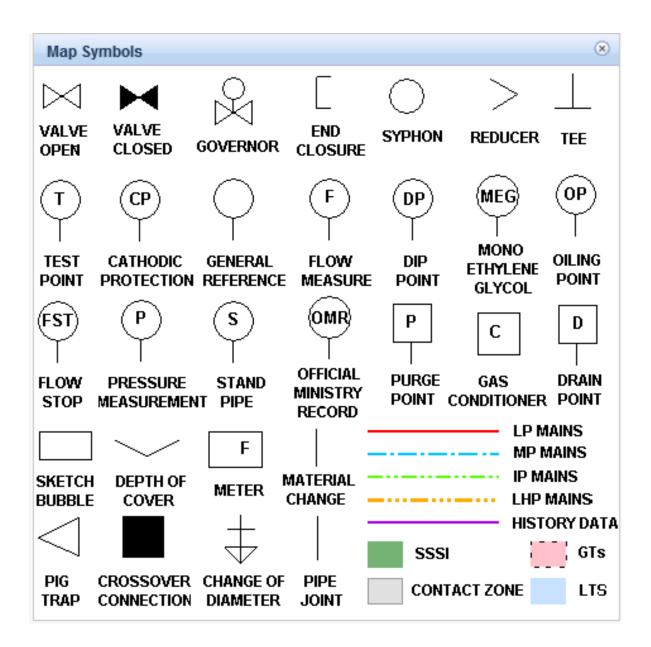
This plan is reproduced from or based on the OS map by Scotia Gas Networks plc, with the sanction of the controller of HM Stationery Office. Crown Copyright Reserved. Southern Gas – 100044376.



	Mill
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MD962	NORTHFLEET
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Safety Advice - Valves



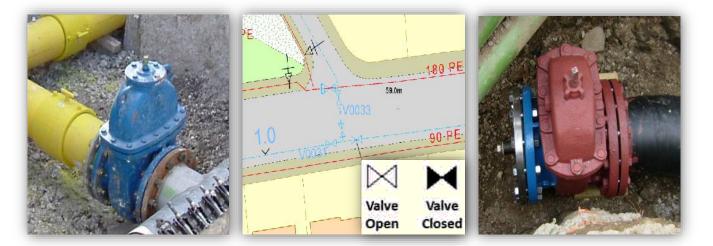
Guidance when undertaking work near gas valves in our network areas

SGN manages the network that distributes gas to 5.8 million homes and businesses across Scotland and the south of England.

Due to a manufacturing issue, we are currently replacing or upgrading certain valve types that are at risk of bolt failure. In extreme cases, this can lead to gas escapes. This is a safety hazard and we have produced this guide to ensure you undertake adequate safety precautions when working near gas valves.

Identifying gas valves

The images below are an illustration of typical gas valves. Please note, valves come in various colours, shapes and sizes, and you may come across a valve that looks different to those found in the images.



What should you do?

When planning to work in our network areas, please observe the following points:

- 1. You must contact us before starting any work activity within <u>3.0m</u> of a gas valve identified on our maps.
- **2.** If an unexpected gas valve is exposed you must immediately stop excavation works and report this to us.
- **3.** To protect yourself against the risks associated with exposing a valve, we advise that you contact us when in doubt.

Contact details

If you require further information or need assistance please contact us:

Safety Admin Team: 0800 912 1722 plantlocation@sgn.co.uk

Valve enquiries will be forwarded to a local engineer who will provide further safety information.

Our Ref: 29231323 Your Ref: 8856 Northfleet



1|1

Thursday, 20 April 2023

Danny Simms 9-11 Lowater Street Carlton Nottingham Nottinghamshire NG4 1JJ

Dear Danny Simms

Smell gas?

Thank you for your enquiry dated Thursday, 20 April 2023

Please find an extract from our mains records for your proposed work area, any SGN assets are described in the map legend. On some occasions blank maps may be sent to you, this is due to your proposed work being in a no gas area but within our operational boundaries.

This mains record only shows the pipes owned by SGN in our role as a Licensed Gas Transporter (GT). Please note that privately owned gas pipes or pipes owned by other GTs may be present in this area and information regarding those pipes needs to be requested from the owners. If we know of any other pipes in the area we will note them on the plans as a shaded area and/or a series of x's.

The information shown on this plan is given without obligation or warranty and the accuracy cannot be guaranteed. Service pipes, valves, siphons, stub connections etc. are not shown but their presence should be anticipated. Your attention is drawn to the information and disclaimer on these plans. The information included on the plan is only valid for 28 days.

On the mains record you may see the low/medium/intermediate pressure gas main near your site. There should be no mechanical excavations taking place above or within 0.5m of a low/medium pressure system or above or within 3.0m of an intermediate pressure system. You should, where required confirm the position using hand dug trial holes.

A colour copy of these plans and the gas safety advice booklet enclosed should be passed to the senior person on site in order to prevent damage to our plant and potential direct or consequential costs to your organisation.

Safe digging practices in accordance with HSE publication HSG47 "Avoiding Danger from Underground Services" must be used to verify and establish the actual position of the mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all relevant people (direct labour or contractors) working for you on or near gas pipes.

It must be stressed that both direct and consequential damage to gas plant can be dangerous for your employees and the general public and repairs to any such damage will incur a charge to you or the organisation carrying out work on your behalf. Your works should be carried out in such a manner that we are able to gain access to our apparatus throughout the duration of your operations.

If you require any further information please do not hesitate to contact us.

Yours sincerely, The Safety Admin Team For more information, visit our Dig Safely pages on sgn.co.uk Tel: 0800 912 1722

Call 0800 111 999 SGN is a brand name of Scotia Gas Networks Limited Registered in England & Wales No. 04958135 Registered Office: St Lawrence House | Station Approach | Horley | Surrey RH6 9HJ

Authorised and regulated by the Financial Conduct Authority



Dig safely

CA

Measures to avoid injury and damage to gas pipes The following protective and precautionary measures MUST be taken when working in the vicinity of gas mains and services.

It is the responsibility of the property owner or company carrying out the work to make sure they've complied with the relevant legislation and Health and Safety Executive (HSE) guidance, eg HS(G)47. In practice, this means that whoever is carrying out the work MUST obtain gas mains location information and/or maps showing the indicative position of the gas network before any work takes place.

To avoid injury to yourself, your employees, colleagues and the general public you MUST suitably mark the position of the pipes on site.

HS(G)47 outlines best practice that should be followed to ensure you work safely:

- 1. Plan the work, obtain maps.
- 2. Detecting, identifying and marking underground services.
- 3. Safe excavation and safe digging practices.

In addition to the requirements under the Health and Safety At Work etc. Act 1974 to prevent injuries to employees and others (not employed), it is an offence under regulation 15 of the Pipelines Safety Regulations 1996 to cause damage to a pipeline (which includes gas mains and services as well as higher pressure pipelines) so as to give rise to a danger to persons.

You MUST make sure that current full colour copies of our maps are issued to all relevant personnel on site and they're aware of the presence and location of our gas mains and services prior to any excavation.

In a gas emergency

If you cause a gas leak or suspect a main or service pipe or equipment is leaking, you MUST take the following emergency actions immediately:

- Ask people to move away from the area of the gas escape.
- Call 0800 111 999 immediately.

1. Don't attempt to repair the escape or stop the leakage.

 As gas may enter buildings, ask people in the surrounding premises to leave until it's safe for them to return.

3. Stop anyone going near the immediate vicinity of the gas escape.

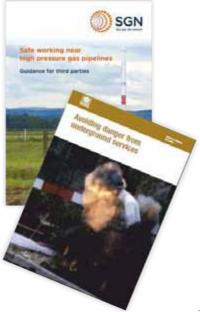
 Prohibit smoking and extinguish all naked flames.

 Don't use mobile phones or other ignition sources.

6. Assist our representatives and other emergency services such as the police, ambulance, and fire service as requested.

Additional reference material

- SGN guidance for Safe Working in the Vicinity of Pipelines & Associated Installations operating >7barg. Applicable for HP only.
- HS(G)47 Avoiding Danger from Underground Services available from hse.gov.uk
- NJUG Utilities Guidance on Positioning and Colour Coding of Apparatus available from njug.org.uk





Making an enquiry for gas mains or services maps

Please visit our **Dig safely** pages on **sgn.co.uk** for plant protection information and links to our online mapping system and other associated information and guidance.

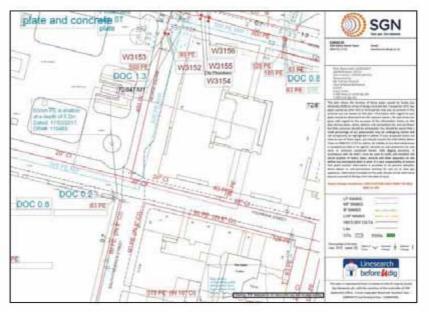
Our simple and easy to use online mapping system is available 24/7, 365 days a year.

You'll need to register/log in and provide a few details about your site location and the work you'll be carrying out. We'll respond immediately by email.

What you're likely to be sent

You'll be sent an email with a map. This will be an extract from our gas mains record, showing your site and any of our gas pipes as well as relevant safety information.

We always send out safety information, however we may forward your enquiry on to a local plant protection officer or a pipelines engineer to make direct contact with you depending on the work location.



Example of a gas map

Note: Service pipes are not shown on our maps

When working near our gas mains and services

Safe system of work

To satisfy ourselves that work in the vicinity of our gas mains is being carried out safely, we may ask for a copy of your risk assessment and/or method statement paperwork.

Where work falls under the Construction (Design and Management) Regulations 2015 reference to our gas mains and services MUST be made within your site Health and Safety file.

Financial

Every reasonable precaution MUST be taken to avoid personal injury or damage to our gas network at all times.

If we incur any costs to repair direct or consequential damage or divert any gas main or service, you'll be recharged in full.

HSE

Any damage to our gas mains or services will be subject to legislative reporting responsibilities to the Health and Safety Executive under Reporting of Injuries, Diseases & Dangerous Occurrences Regulations 2013, Gas Safety Management Regulations 1996, and the Pipelines Safety Regulations 1996.

Minimum safe working distances

Depending on the activity being undertaken and the gas mains or services you are working within the vicinity of, there are different safe distances that MUST be adhered to. SGN plant protection officers or pipeline engineers will inform you of these if required.

Surface boxes and manholes

Do not bury or move our surface boxes. Free access MUST be maintained during and after your work. No manhole cover or other structure can be built over, around or under a gas main, and no work is to be carried out that results in a reduction or increase in cover or protection without prior written agreement.

Deep excavations

Adequate protection, approved by us, MUST be applied for any deep excavations in the vicinity of our gas mains and services that may affect its security and integrity. Ground movement around gas mains MUST be prevented. We MUST be contacted if a sewer trench or any other water authority is to be constructed at greater than 1.5 metres depth near a buried gas main or service pipe. You MUST give us detailed drawings showing the line and width of the proposed sewer or other trench, together with the soil group classification of the area concerned.



Crossing our mains or services

The placing of heavy construction plant, equipment, materials or the passage of heavy vehicles over our gas mains is prohibited unless specifically agreed protective measures (ie the construction of reinforced crossing points) have been carried out. This is particularly important where reductions in side support or ground cover are planned. You MUST NOT carry out any work in servitudes/easements without our prior written consent.

Exposed plant

Where excavations in the vicinity of our gas mains affect its support, the plant MUST be adequately supported and protected in consultation with us and to our satisfaction. It MUST be protected from impact, restraints and thrust blocks, and supports MUST NOT be removed without our agreement.

Hot work

One of our representatives should be present when welding or other hot work involving naked flames is being carried out near our gas mains, as there's potential for heat damage to plastic pipeline/coatings.

Backfilling

Concrete backfill should not be placed closer than 300mm to our mains. No concrete or hard material should be placed under or adjacent to any of our gas mains. Shuttering MUST be constructed to maintain the stated clearances and prevent fresh concrete encasing our mains or services. Material used for backfill around our gas mains MUST conform to the following:

- If sand, it MUST be well-graded in accordance with BS EN 12620:2002.
- It MUST NOT contain any sharp particles (stones, bricks, lumps or corrosive materials).
- Foamed concrete MUST NOT be used.
- It MUST be laid to a minimum depth of 250mm above the crown of the gas main.

Note: Power ramming MUST NOT take place until a 300mm hand rammed layer has been completed over the crown of the main.

Access

Free access to our sites, mains and services, including temporary structures and spoil heaps MUST be available at all times.





Mechanical excavation

Mechanical excavators (including breaker attachments) MUST NOT be used within the following distances from the confirmed location of our gas mains and services shown on our gas maps without prior agreement:

Type of mains and services	Gas map identification	Hand excavation required inside	Pipe pressure indication shown on map
Low Pressure (LP)	0 - 75mbar	0.5 metres	
Medium Pressure (MP)	75mbar to 2 bar	0.5 metres	
Intermediate Pressure (IP)	2 - 7 bar	3.0 metres	
High Pressure (HP)	Above 7 bar	You must seek approval from us prior to any work	

Major accident hazard pipelines

High pressure pipeline

No work is to take place near an HP pipeline until it is agreed with us. After agreement and before any work does take place, the location of our pipeline MUST be marked up and its position confirmed by digging trial holes with our personnel in attendance.





Pipeline markers

High pressure

We will be involved in any work taking place near high pressure pipelines. We will provide you with additional information that you MUST familiarise yourself with before carrying out any work.

The default method of excavating near high pressure gas pipelines MUST always be by hand.

Wind turbines

The UK Onshore Pipelines Operations Association (UKOPA) has identified the appropriate exclusion zone (distance from the base of the wind turbine mast to the edge of the pipeline) as 1.5 times the turbine height. Contact MUST be made with us during the planning stages of a wind turbine or wind farm.



Tree planting

If trees or shrubs are to be planted in the vicinity of our gas mains and services, the selection of tree or shrub type and how it's planted MUST be considered carefully. This is to avoid root damage to buried mains or services, and to ensure our subsequent excavations for main repair and maintenance won't damage the trees or shrubs.

Written approval from us MUST be obtained before any tree planting is carried out on a servitude/easement. Any approval we grant to plant trees

The following trees and those of similar size (deciduous or evergreen) MUST NOT be planted within 6m of the centre line of the main: ash, beech, birch, most conifers, elm, maple, lime, horse chestnut, oak, and sycamore. Apple and pear trees are also included in this category.

Dwarf apple stocks may be planted up to 3m of the centre line of the main.



In cases where screening is required, the following are shallow rooting and may be planted close to the gas mains and services: blackthorn, broom, cotoneaster, elder, hazel, laurel, quickthorn, privet, snowberry and most ornamental shrubs.

Gas main centre

Raspberries, gooseberries and blackcurrants may be planted on the gas main, but a four metre strip, centred on the main, MUST be left clear at all times.

on a servitude/easement will be subject to us retaining the right to remove any tree, which in our opinion may become a danger to our mains in the future.

The written consent to plant trees will state what area may be planted and also the type of tree. The diagram details the specific species and the distances they MUST be planted from gas mains or services. You MUST contact us for further information.

Poplar and willow trees MUST NOT be planted within 10 metres of the centre line of the gas main.

⁻10m

6m

- 9m

3m - 6m

0m - 3m



Christmas trees (picea abies) may be planted up to 3m of the main but on the strict understanding that they're clear-felled at intervals not exceeding seven years.

These types of trees may only be planted as

area between 6 - 10m of the main.

individual specimens or as a single row in the

Dense mass planting may only be carried out at distances greater than 10m from the main.

Gas main centre

The only hardwood plants are allowed to be planted directly across a main are hedge plants such as quickthorn or blackthorn, and these can only be planted where hedging is necessary for either screening purposes or to indicate a field boundary.

Note: For further guidance, please refer to NJUG 10.

If you're unsure and need further help, please contact us and we'll arrange for a plant protection officer to get in touch with you.

Gas services/work in gardens

If you're going to be carrying out work around your home, or a third party is carrying out work on your behalf, we may send you a site map of our gas mains and services but your own gas service won't be marked.

The simplest way to understand the location of your gas service is to know where it enters your house.







< Your gas service pipe usually takes the shortest route to the gas main, as shown on the sample network map/drawing.



We provide a free plant location enquiry service and we're always happy to help.



Visit our **Dig safely** pages on **sgn.co.uk**



0800 912 1722 *

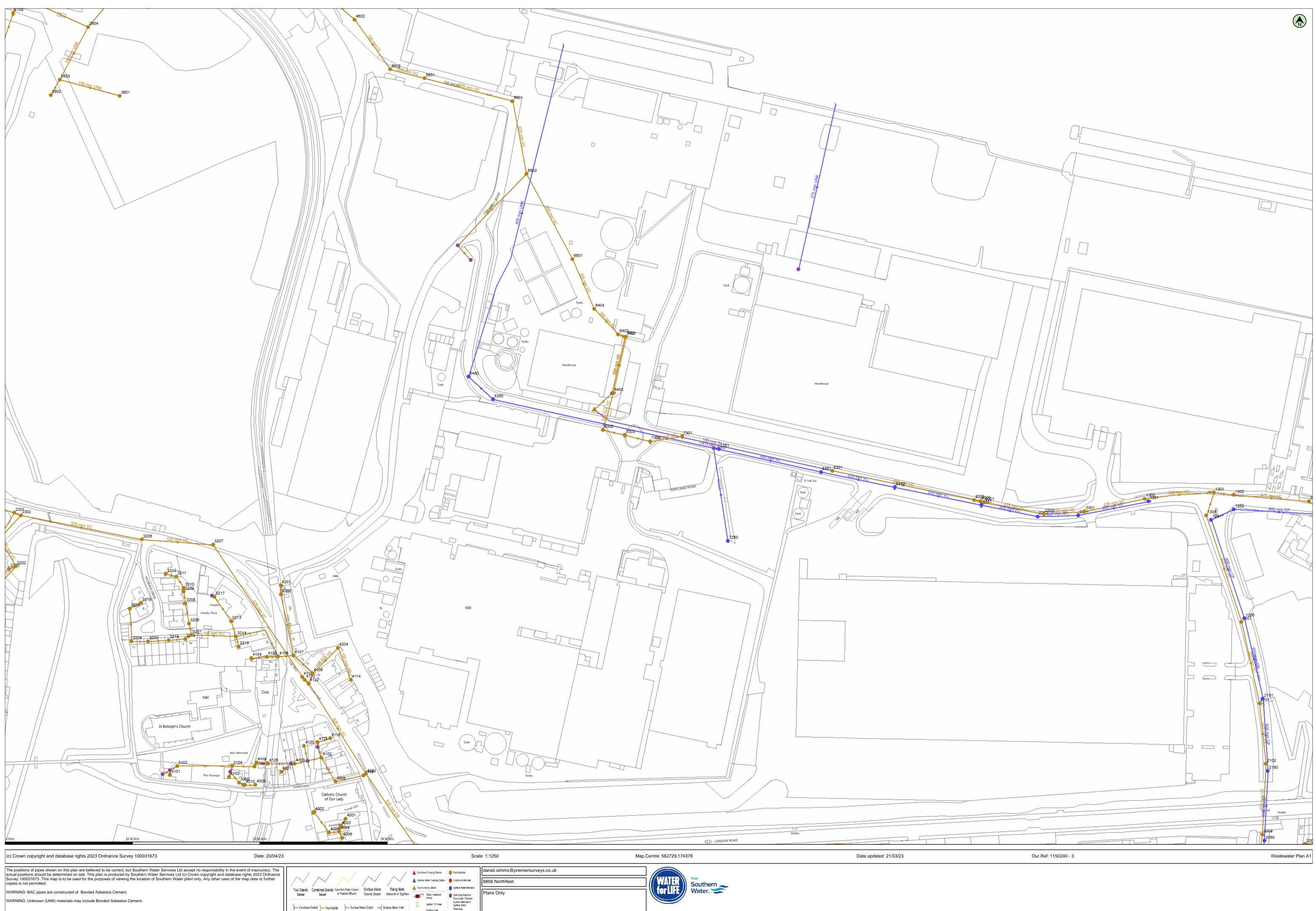
*All calls are recorded and may be monitored





(Southern Water)





The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site. This plan is produced by Southern Water Services Ltd (c) Crown copyright and database rights 2023 Ordnance		1 1	A Combined Pumping Station	🛑 Foul Manhole	daniel
Survey 100031673 .This map is to be used for the purposes of viewing the location of Southern Water plant only. Any other uses of the map data or further copies is not permitted.		$\sim \sim$	Surface Water Pumping Station	Combined Manhole	8856
WARNING: BAC pipes are constructed of Bonded Asbestos Cement.	Foul Gravity Combined Gravity Culverted Water Course Sewer Sewer or Treated Effluent	Surface Water Rising Main, Gravity Sewer Vacuum or Syphor		Surface Water Manhole Side Entry Manhole,	Plans
WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement.)— Combined Outfall)— Foul Outfall)— Surface V	Vater Outfall — (Surface Water Inlet	Works Section 104 Area Building Over Agreement Area	Deparcation Chamber Dummy Manhole or Surface Weter Soakaway	

	erence Liquid Ty		vel Invert Level	Depth to Invert
0301	F	5.33	3.22	
0302 1201	F F	5.06 5.34	3.36 4.88	
1201 1301	F	5.34 6.27	2.82	
1302	F	6.53	2.78	
1303	F	5.23	3.02	
1304	F	6.02	3.27	
2002	F	24.96	23.41	
2008	F	8.17	6.01	
2101	F	7.24	5.23	
2102 2202	F F	7.70	5.58 30.42	
2202	F	34.27	33.60	
2301	F.	28.91	10.41	
2302	F	28.90	10.41	
2303	F	7.54	2.74	
2602	F	0.00	0.00	
2603	F	0.00	0.00	
2604	F	0.00	0.00	
2706	F	4.80	0.00	
3000 3101	F F	0.00	0.00	
3101	F	0.00	0.00	
3103	F	0.00	0.00	
3104	F	0.00	0.00	
3201	F	29.20	26.79	
3202	F	29.43	26.96	
3203	F	29.71	27.46	
3204	F	29.79	27.67	
3205	F	28.84	27.16	
3206	F	27.17	10.17	
3207 3208	F F	26.85	10.00	
3208 3209	F	28.67 28.54	27.16 27.39	
3209 3210	F	28.08	27.39	
3210	F	28.12	27.64	
3212	F	28.06	27.72	
3213	F	28.57	26.53	
3214	F	28.86	26.66	
3215	F	28.86	28.56	
3216	F	28.86	28.28	
3217	F	28.32	28.00	
3218	F	0.00	0.00	
3219 3601	F F	29.46 0.00	27.11 0.00	
4001	F	29.31	28.61	
4002	F.	29.18	28.35	
4003	F	29.31	28.50	
4004	F	29.15	28.25	
4005	F	29.43	28.33	
4006	F	29.11	27.61	
4008	F	29.51	26.37	
4009	F	0.00	0.00	
4010	F	0.00	0.00	
4101	F	29.19	9.84	
4102 4103	F F	29.74 30.37	26.59 0.00	
4103	F	28.87	28.21	
4105	F	28.76	27.82	
4106	F	28.35	24.60	
4107	F	28.46	24.37	
4108	F	29.04	24.08	
4109	F	0.00	0.00	
4110	F	28.92	10.52	
4112	F	28.89	9.69	
4113	F	29.15	9.65	
4114	F	29.33	27.51	
4115	F	29.58	28.42	
4116 4119	F F	29.67 29.81	28.67 29.80	
4119 4120	F	0.00	0.00	
4120	F	0.00	0.00	
4122	F	29.92	10.17	
4125	F	29.81	0.00	
4201	F	27.20	26.05	
4202	F	27.30	25.63	
4204	F	29.44	26.64	
4602	F	5.39	0.00	
5601 5602	F F	4.82 4.92	0.22	
5602 6302	F	4.92	-0.03	
6402	F	5.26	-0.03	
6403	F	4.95	-1.25	
6404	F	5.24	0.00	
6501	F	3.97	-0.55	
6502	F	7.39	-0.13	
6601	F	5.54	-0.13	
7301	F	5.22	1.02	
7303	F	5.30	0.15	
7304 7401	F	5.26 5.07	0.00	
7401 7402	F F	5.07	-0.93	
7402 8301	F	5.07 5.32	-1.33 3.55	
9301 9301	F	5.32	3.55	
9301	F	5.00	3.55	
9302	F	0.00	0.00	
0351	S	5.28	4.34	
0352	S	5.03	4.33	
1250	S	6.68	4.80	
1251	S	5.99	3.83	
1351	S	5.22	4.57	
1352	S	6.38	3.50	
2050	S	8.16	6.31	
11E0	S	7.65	5.84	
2150 2151	S	7.20	5.33	

5350				
5550	S	0.00	0.00	
5450	S	0.00	0.00	
7250	S	0.00	0.00	
7351	S	5.12	0.00	
8351	S	5.28	3.65	
9351	S	5.05	4.12	
9352	S	5.29	3.87	
			1	

Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert	Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert	Manhole Reference	Liquid Type	Cover Level	In
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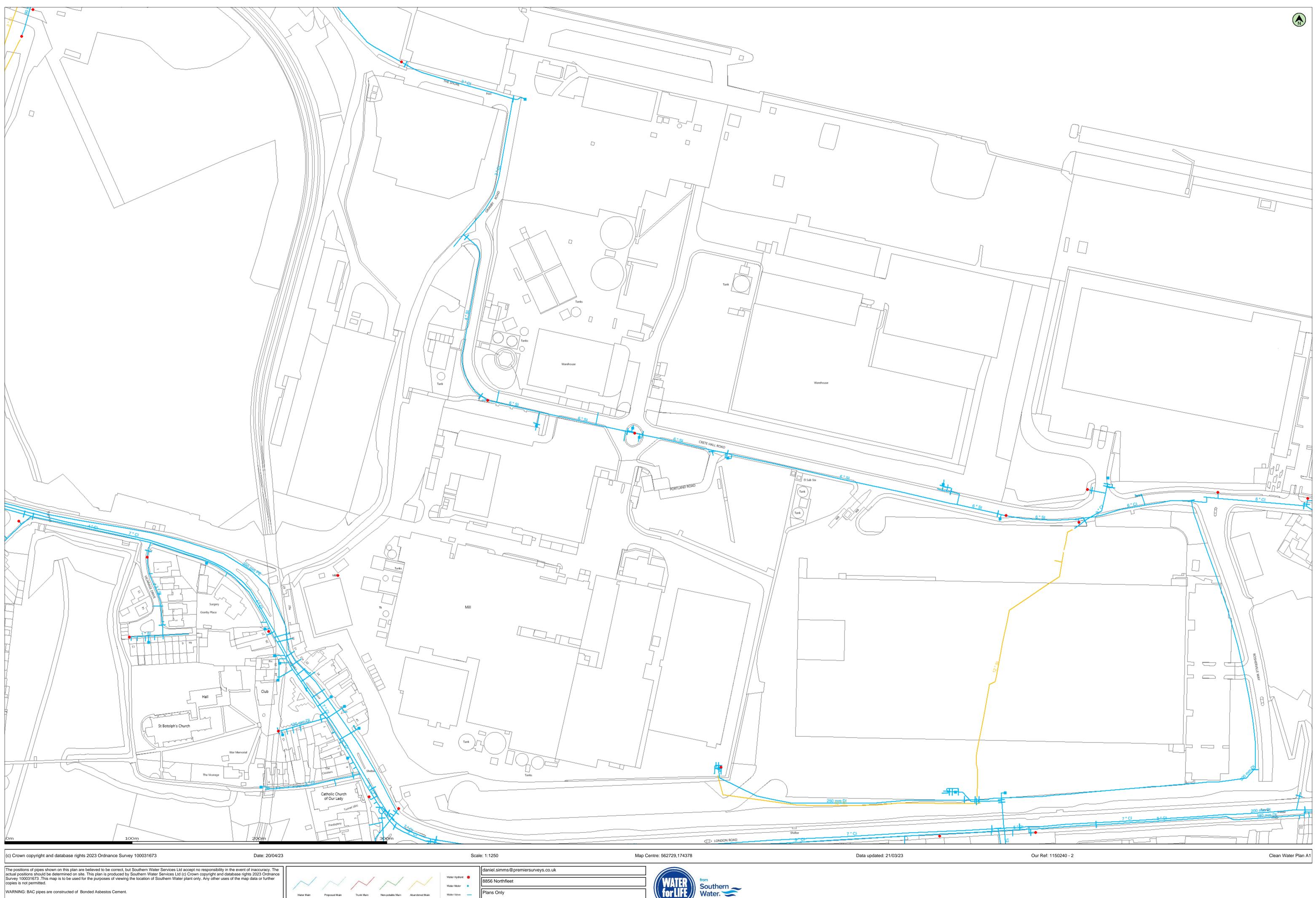
<u>a</u> [Invert Level	Depth to Invert
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(Southern Water)





Water Valve 🛛 🗕 WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement.



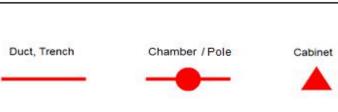


(Virgin Media)





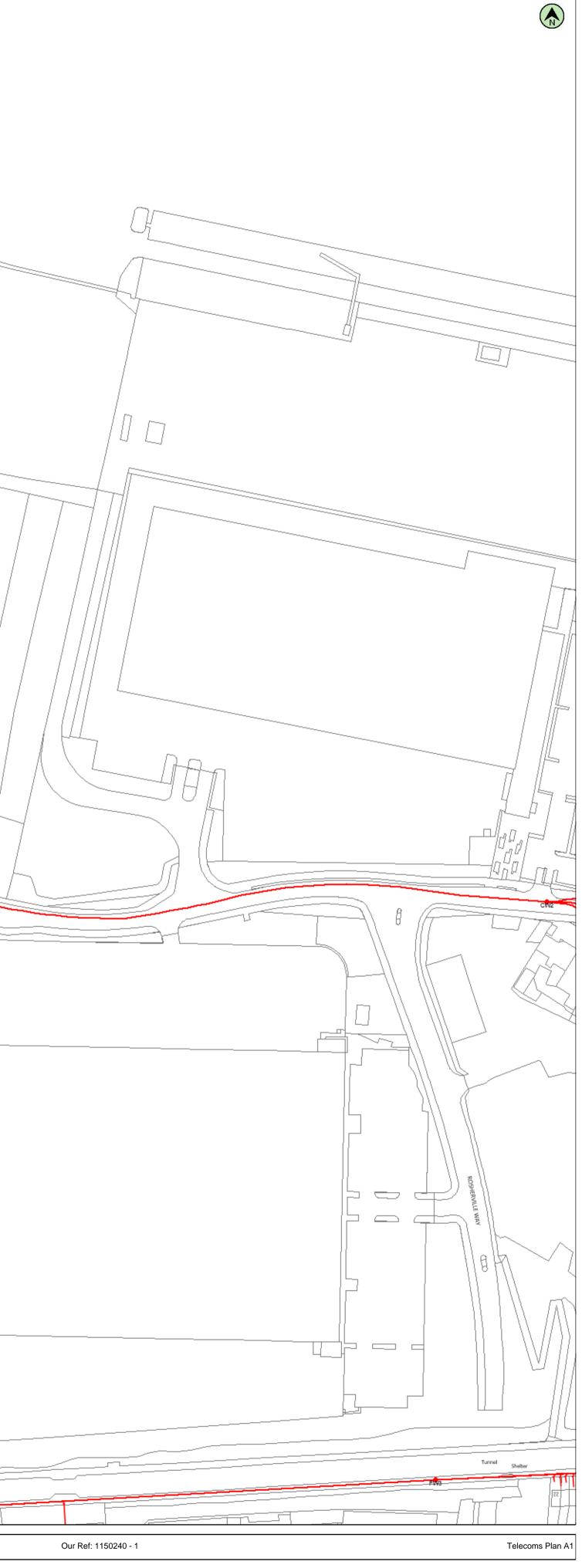
Important Information - please read The purpose of this plan is to identify Virgin Media apparatus. We have tried to make it as accurate as possible but we cannot warrant its accuracy. In addition, we caution that within Virgin Media apparatus there may be instances where mains voltage power cables have been placed inside green, rather than black ducting. Further details can be found using the "Affected Postcodes.pdf", which can be downloaded from this website. Therefore, you must not rely solely on this plan if you are carrying out any excavation or other works in the vicinity of Virgin Media apparatus. The actual position of any underground service must be verified by cable detection equipment, etc. and established on site before any mechanical plant is used. Accordingly, unless it is due to the negligence of Virgin Media, its employees or agents, Virgin Media will not have any liability for any omissions or inaccuracies in the plan or for any loss or damage caused or arising from the use of and/or any reliance on this plan. This plan is produced by Virgin Media Limited (c) Crown copyright and database rights 2023 Ordnance Survey 100019209.



Cabinet

daniel.s 8856 No Plans C

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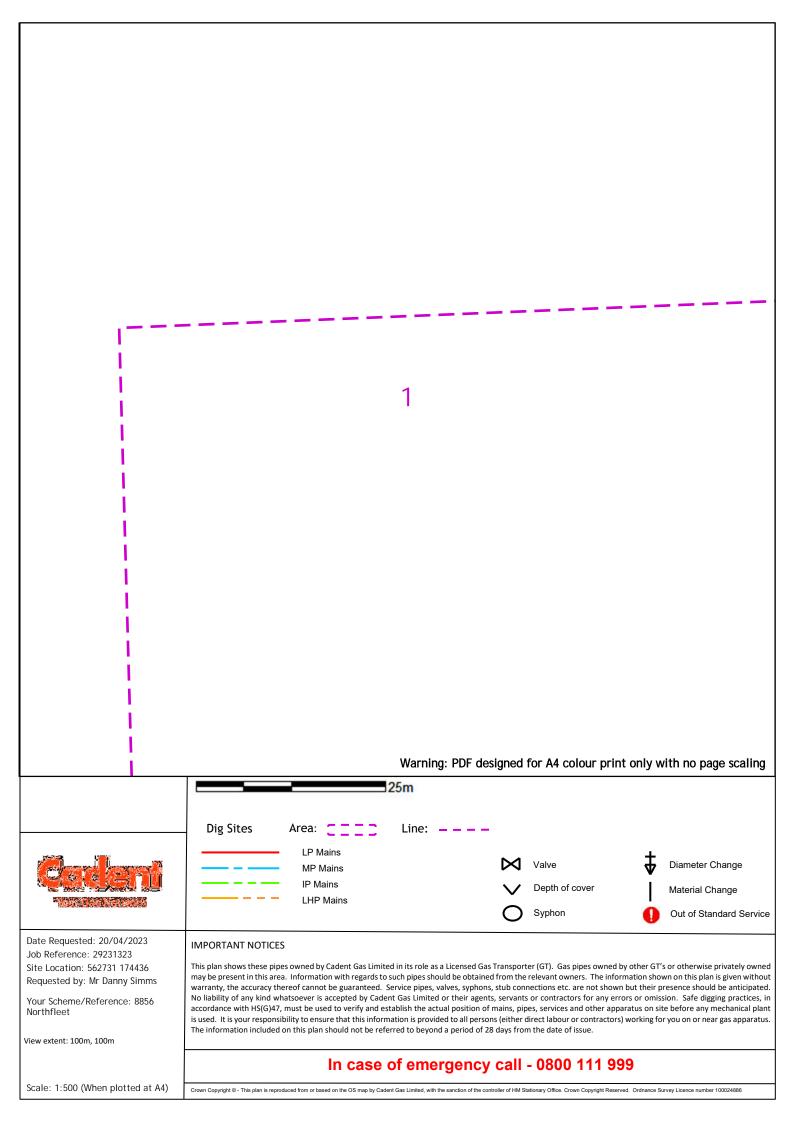


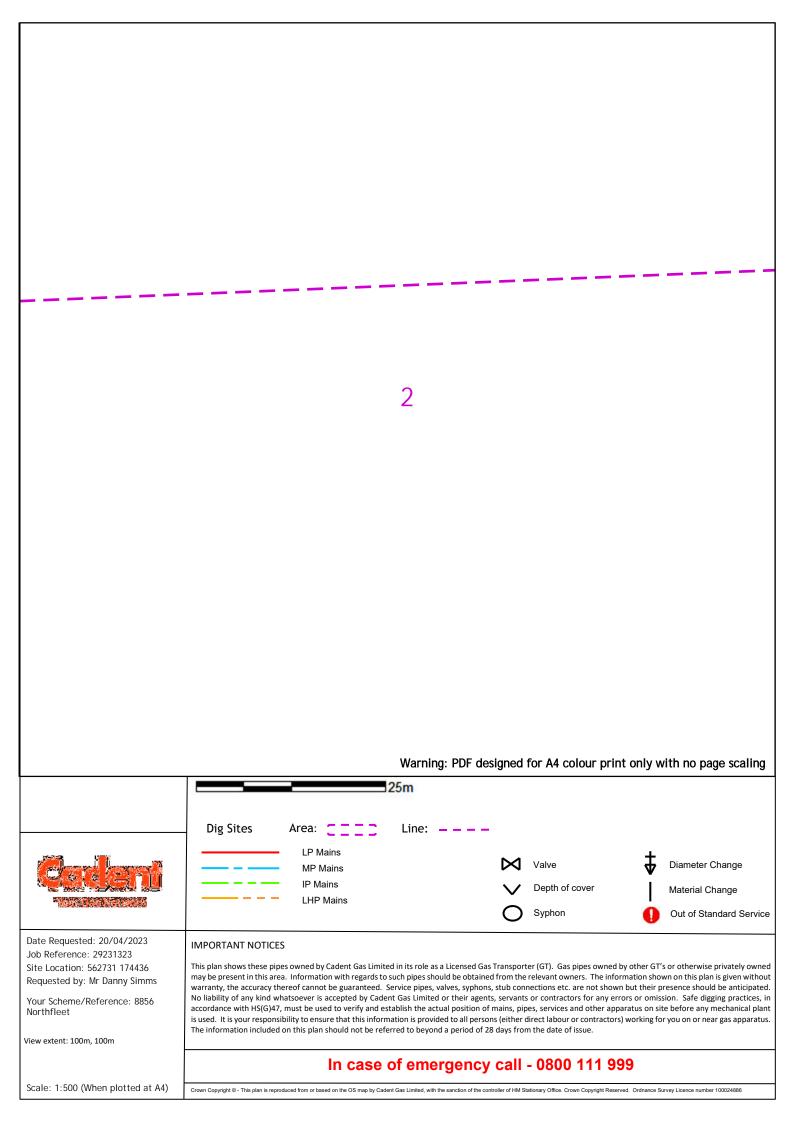


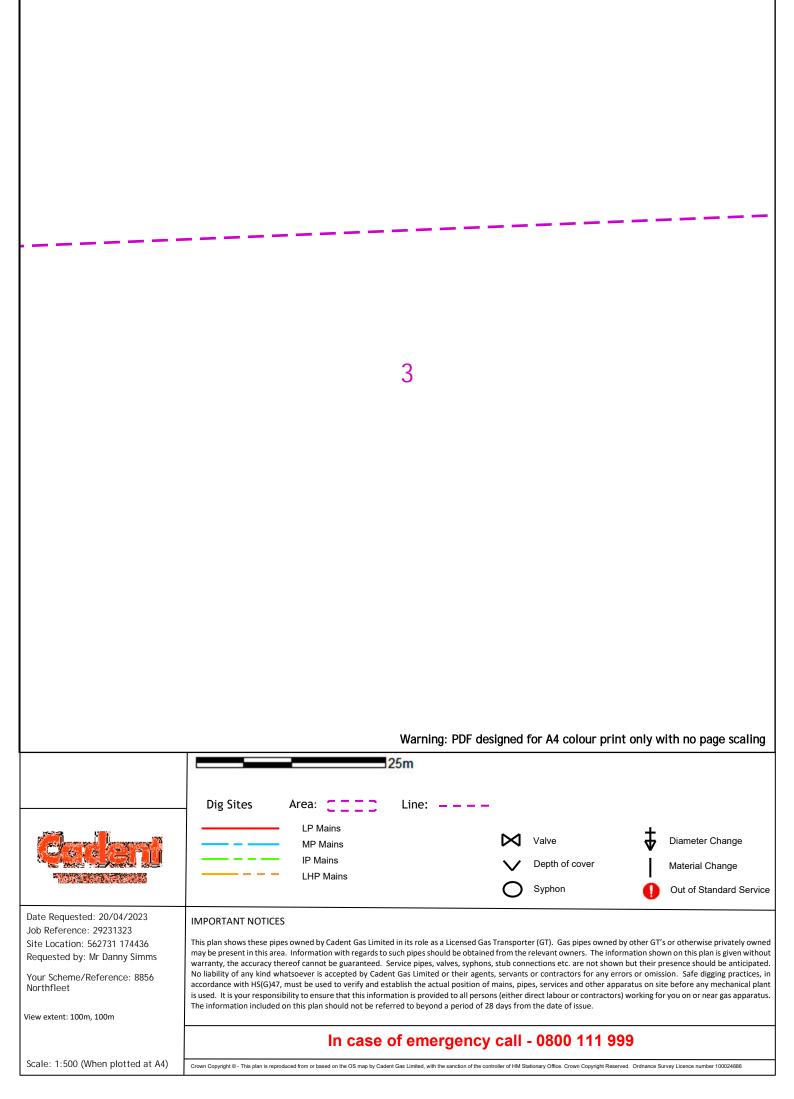
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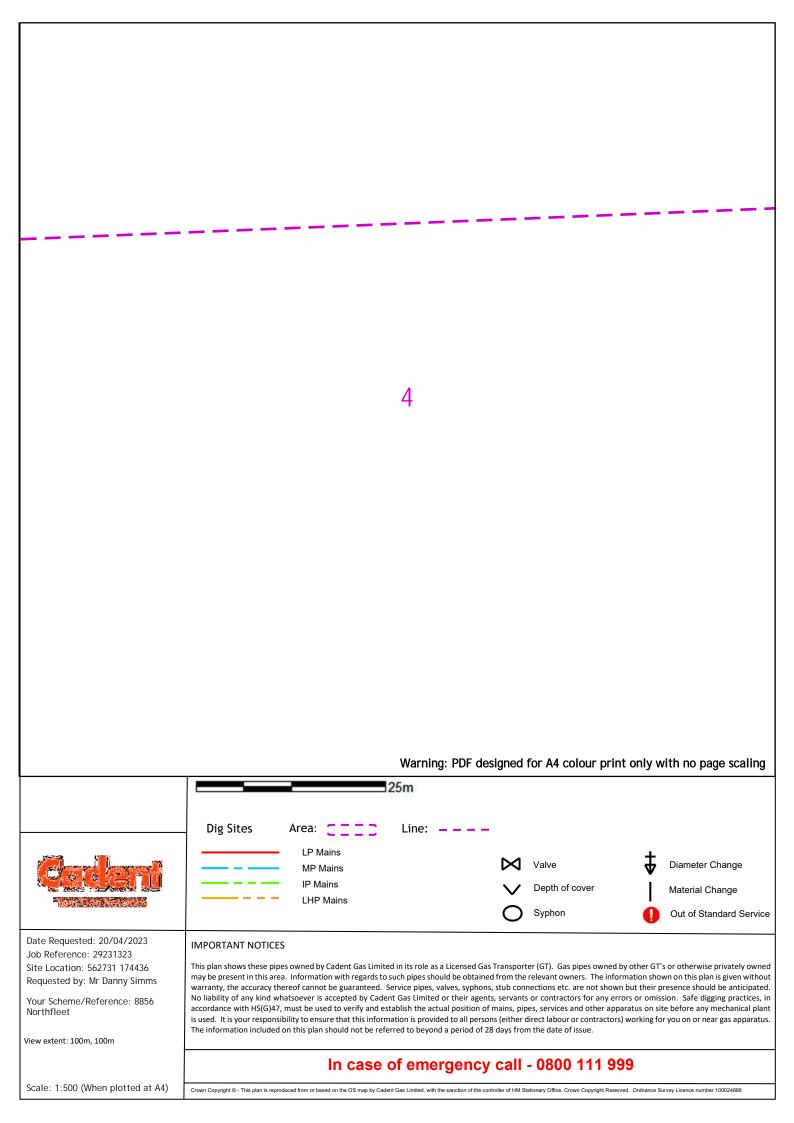


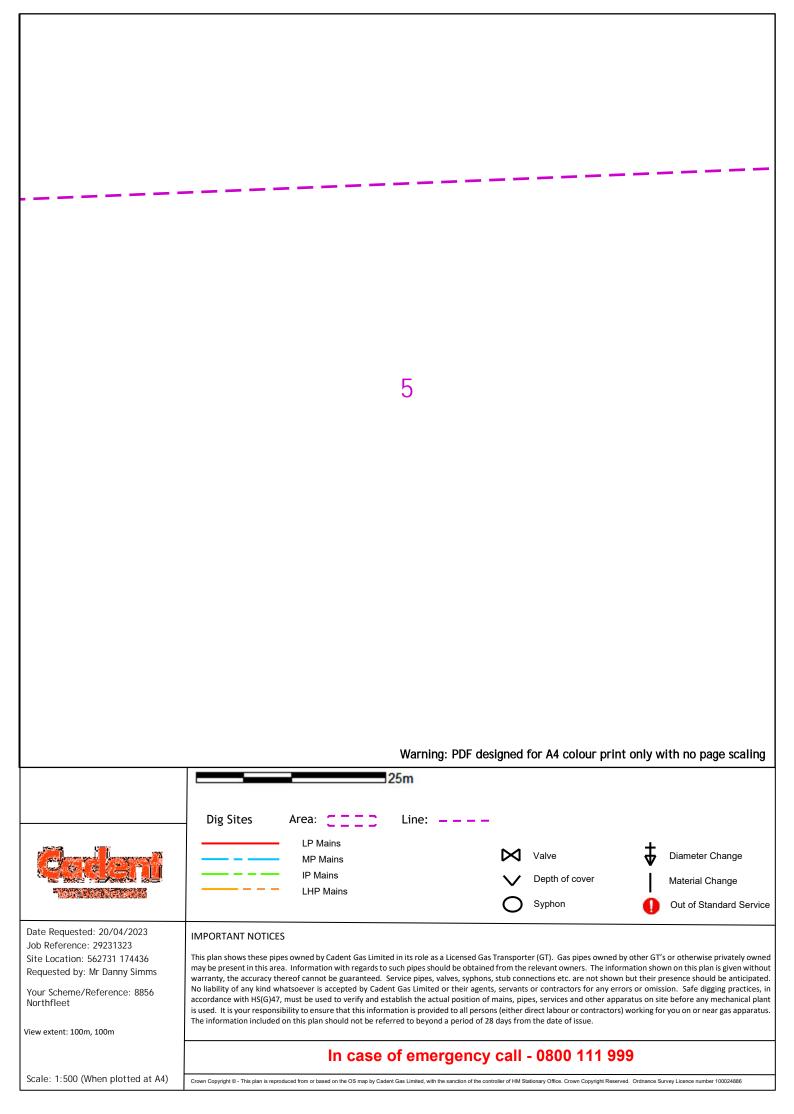
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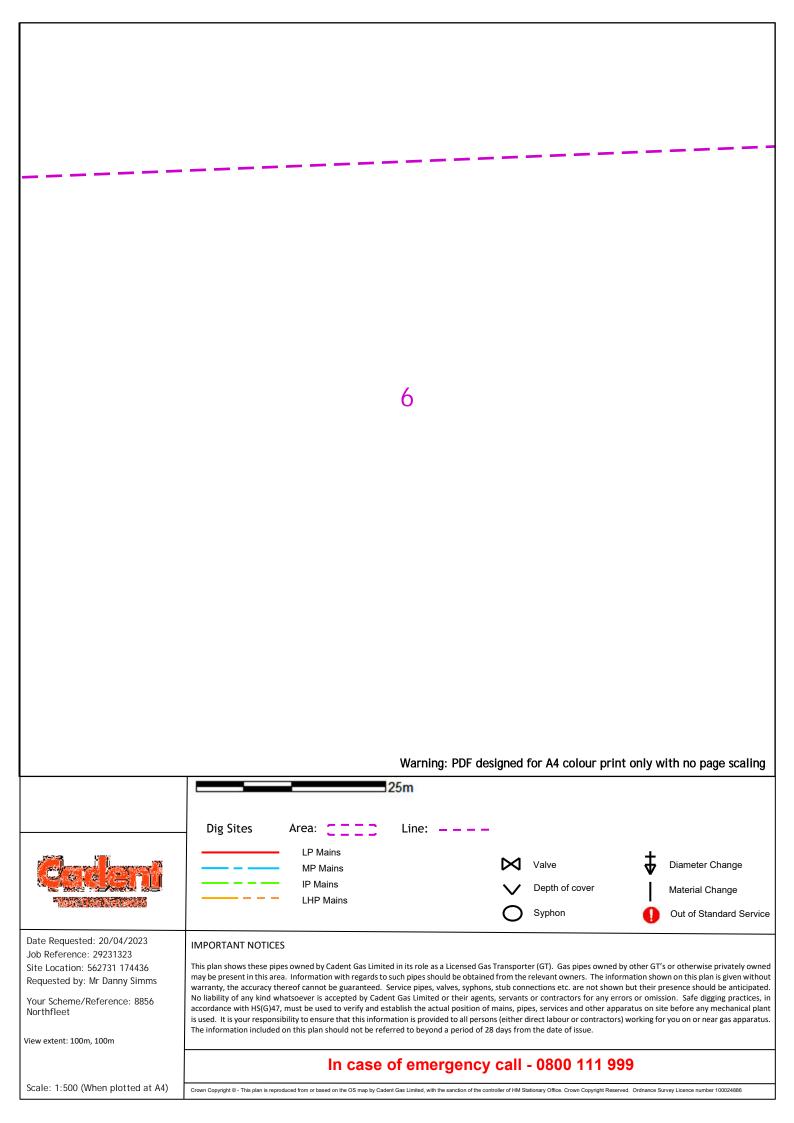


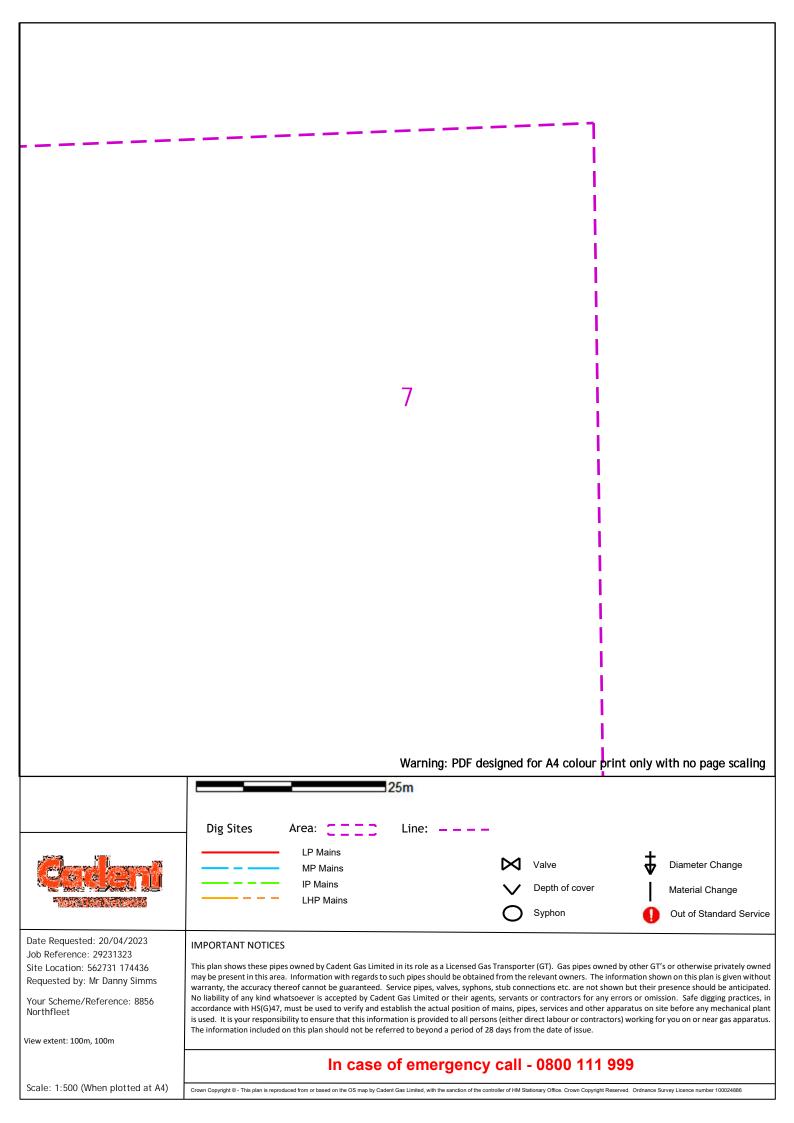


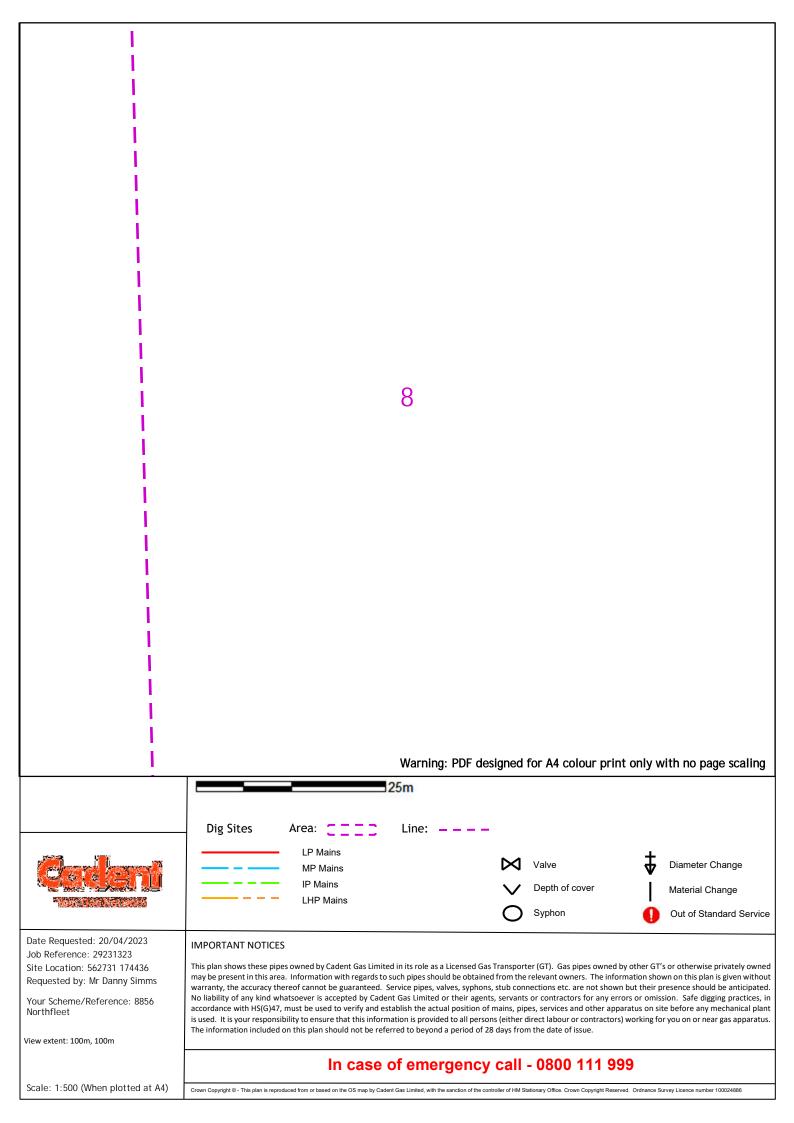


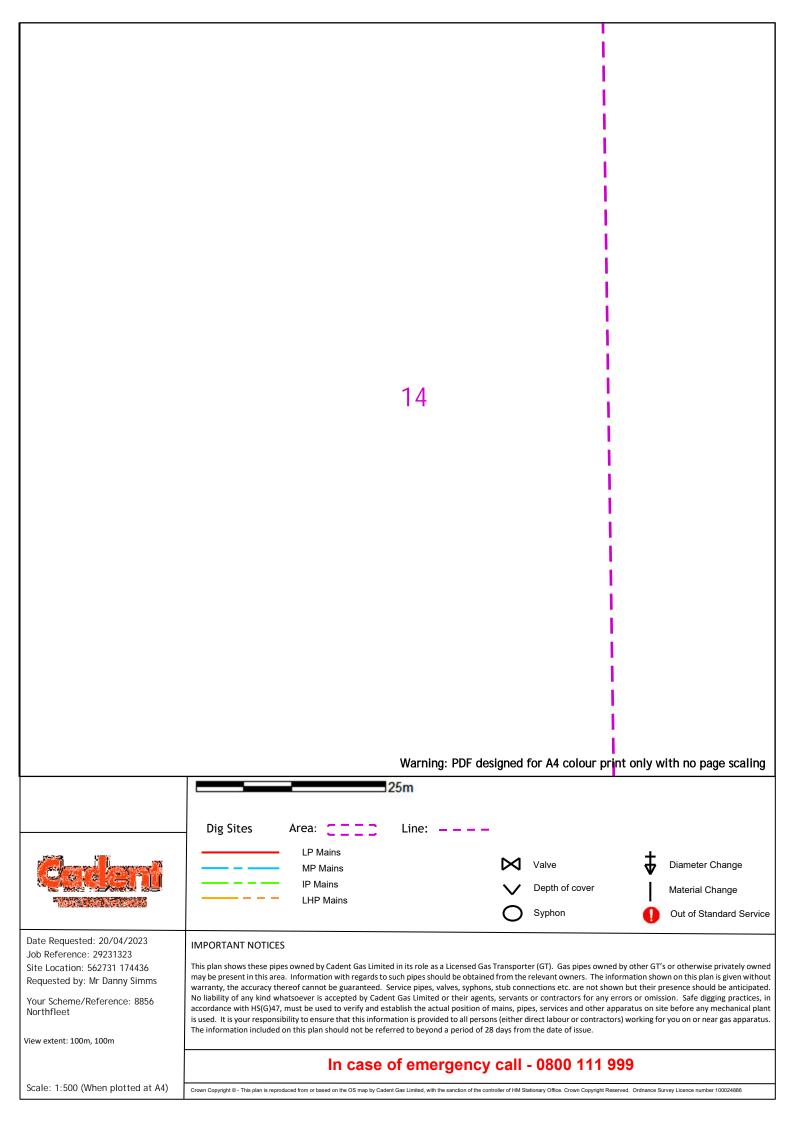


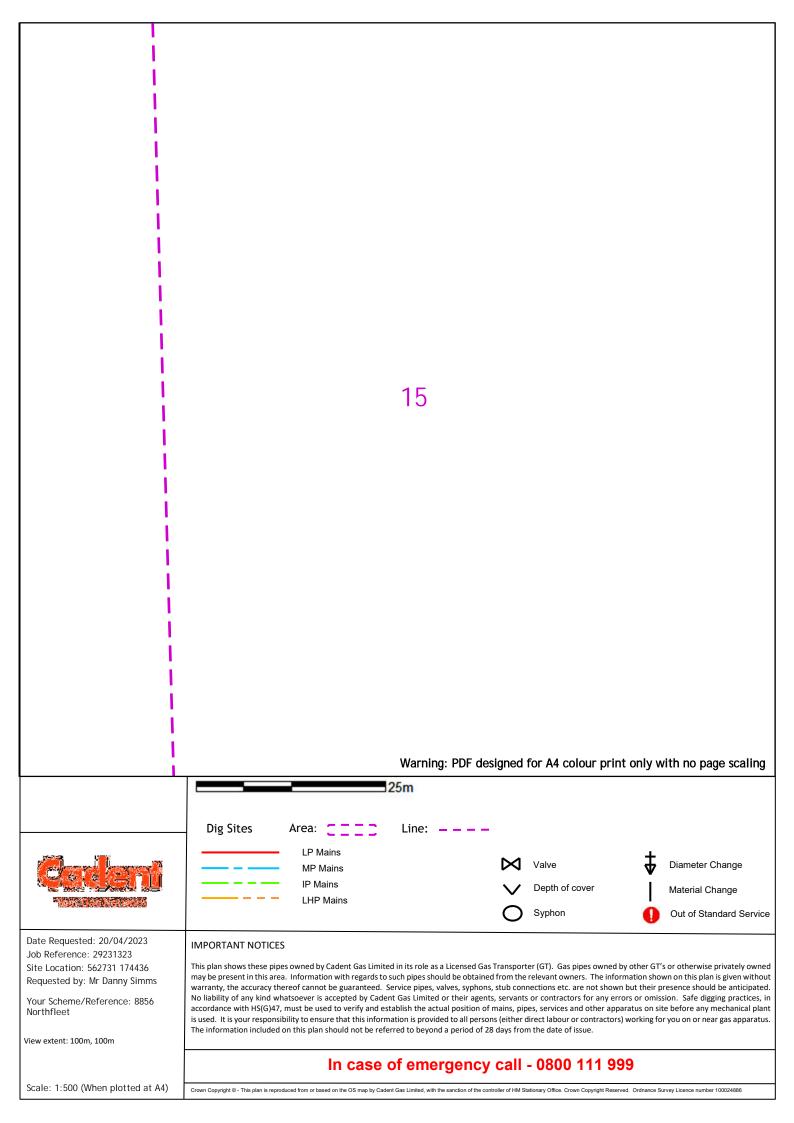


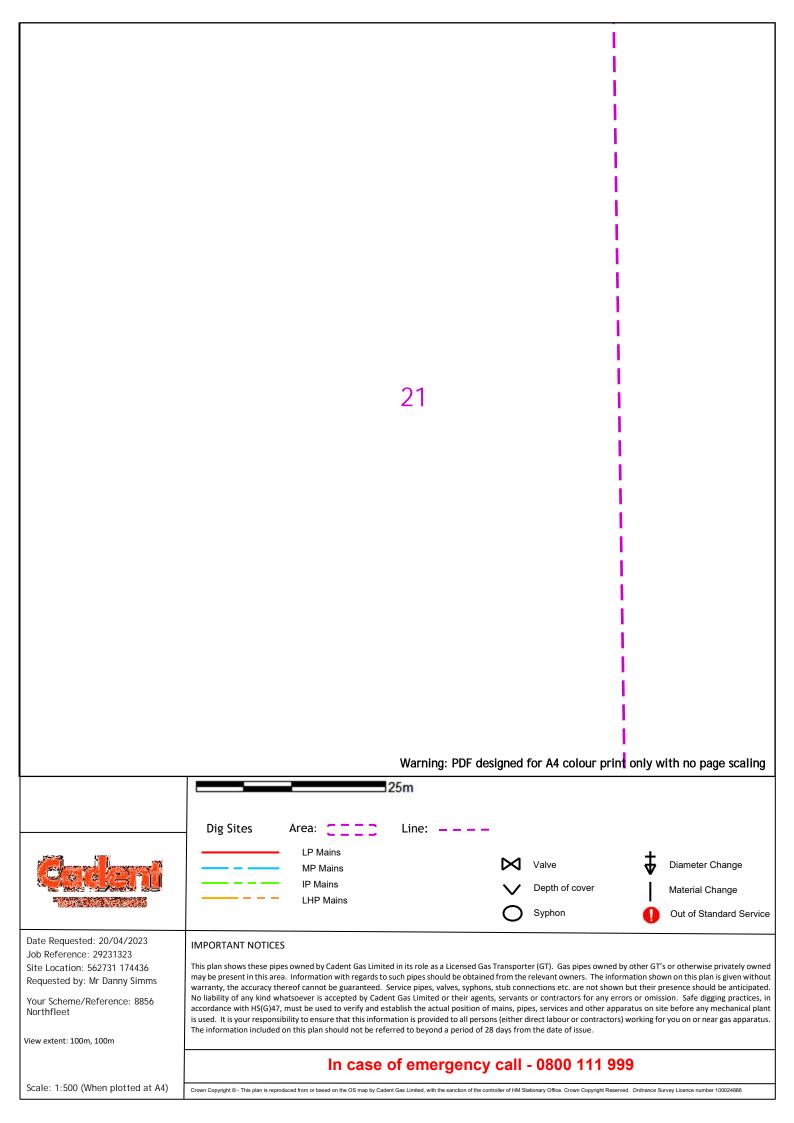


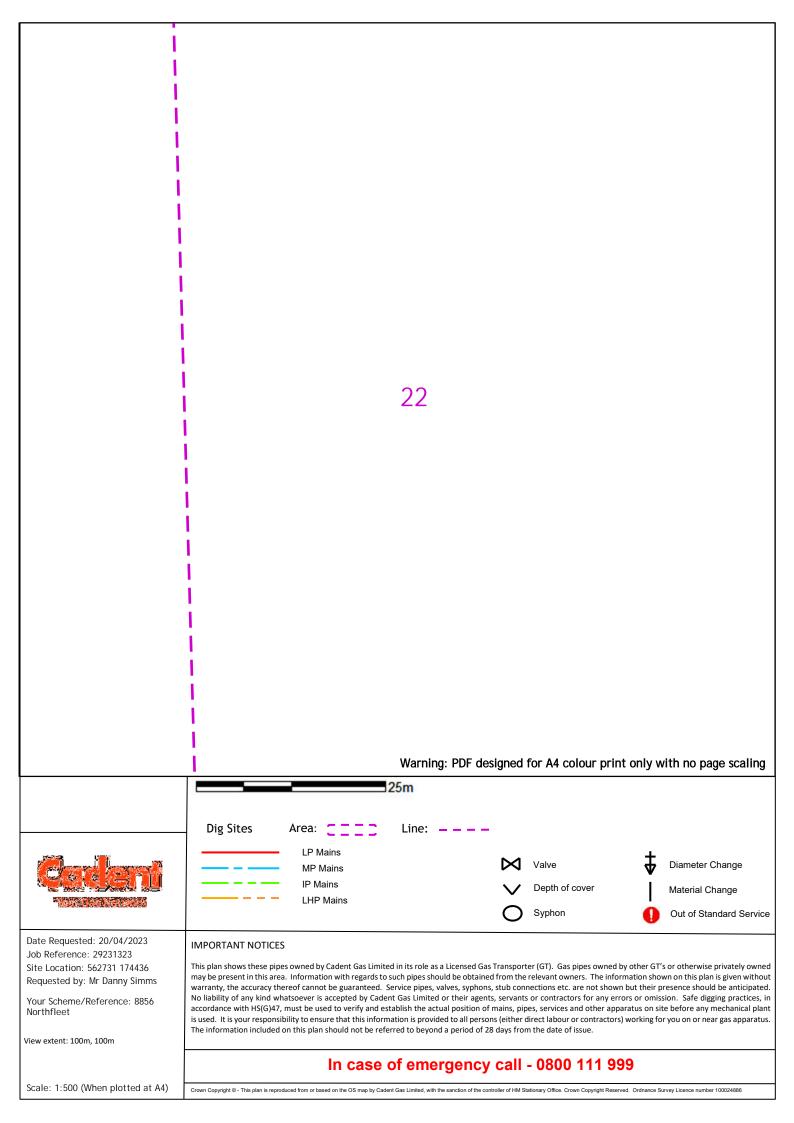


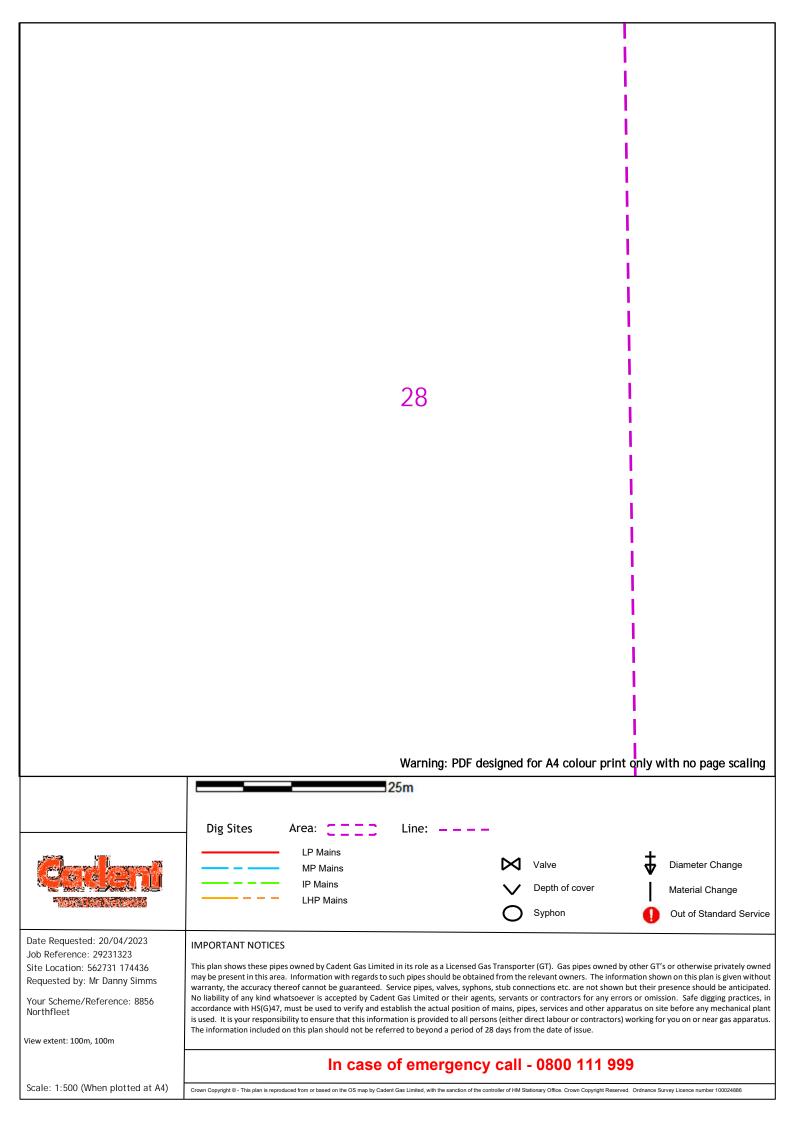


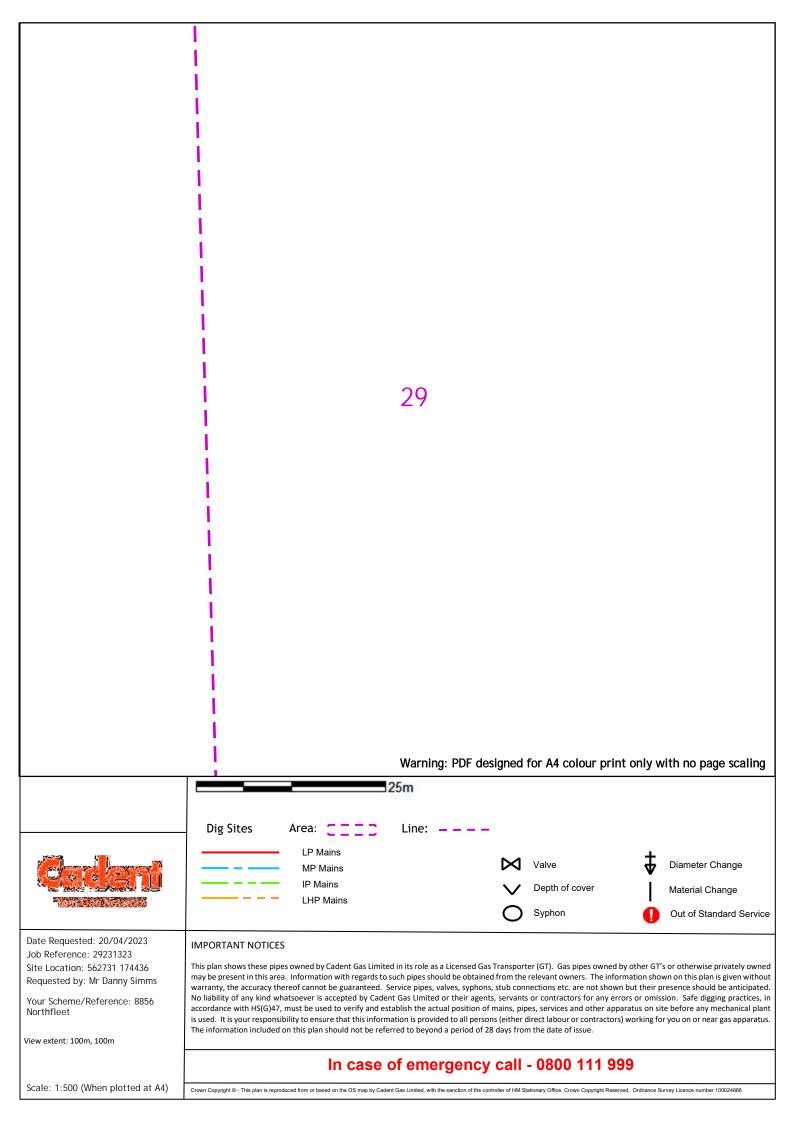


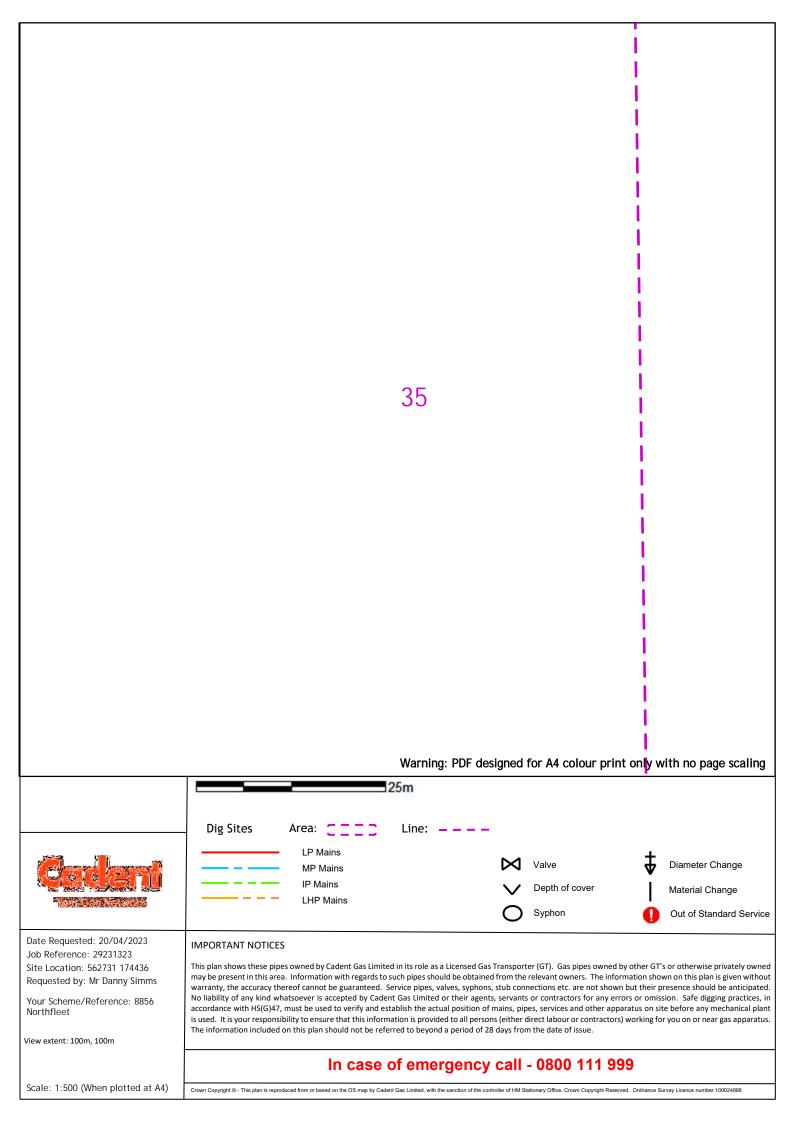


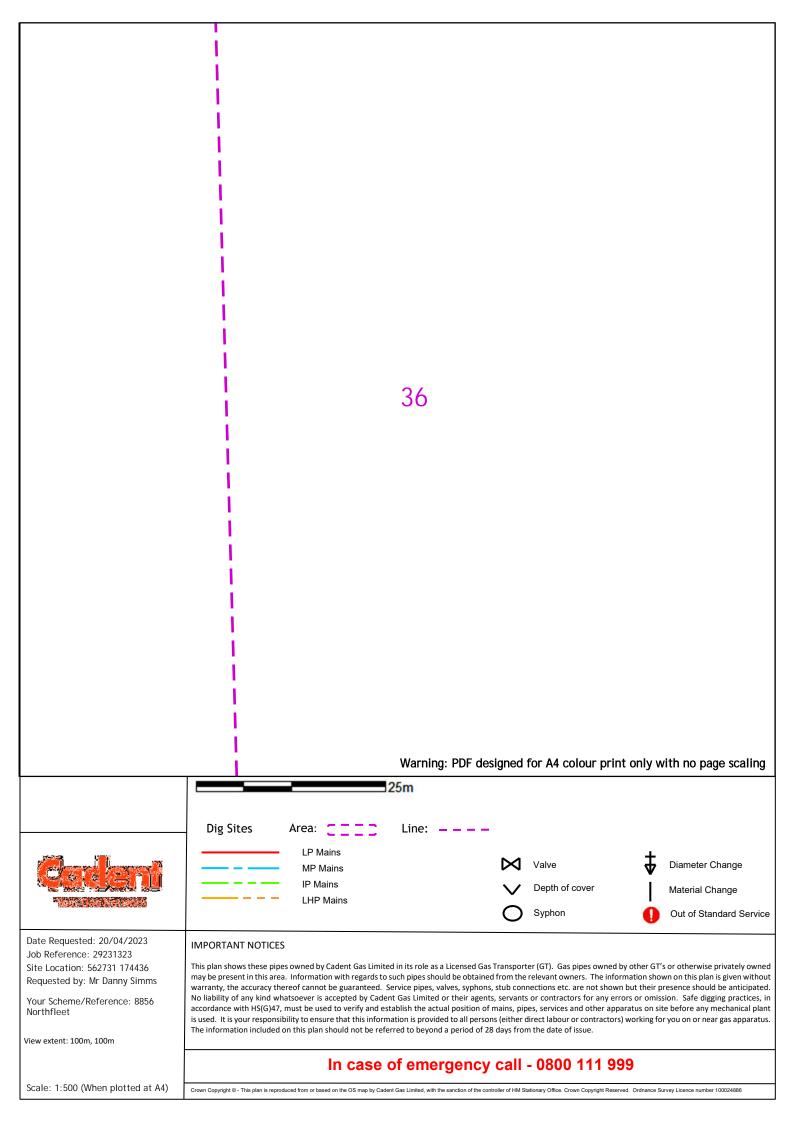


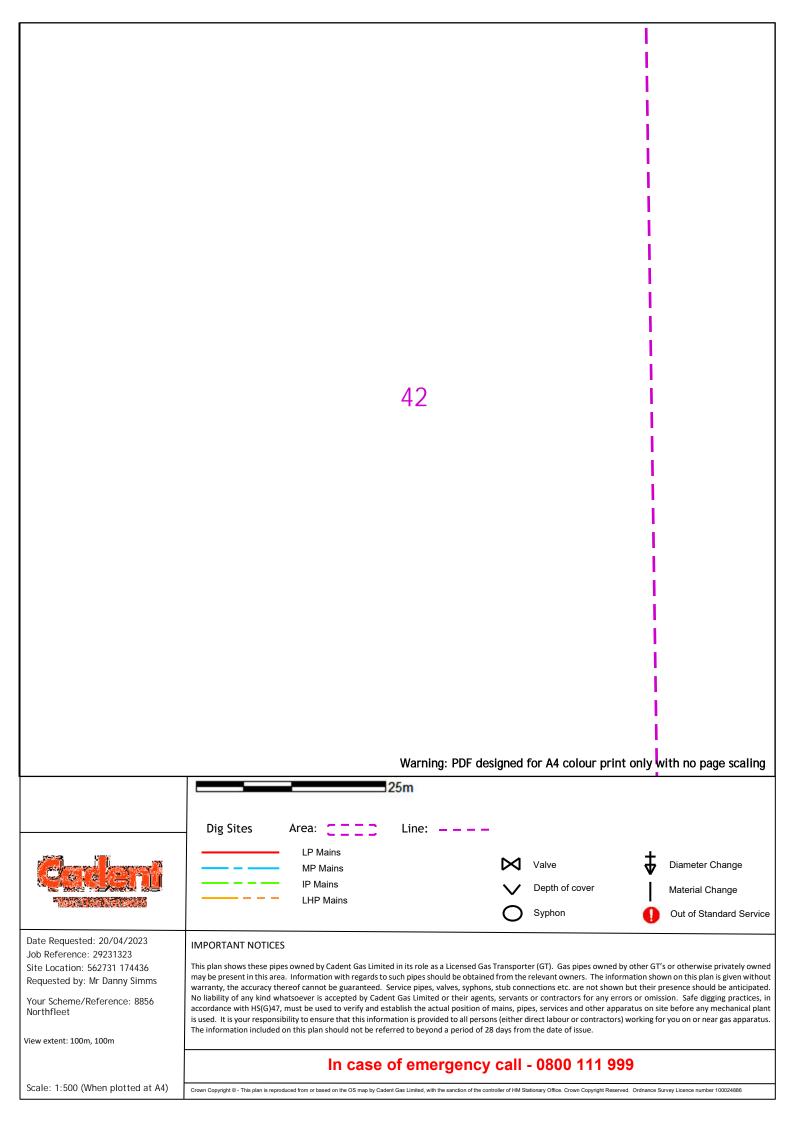


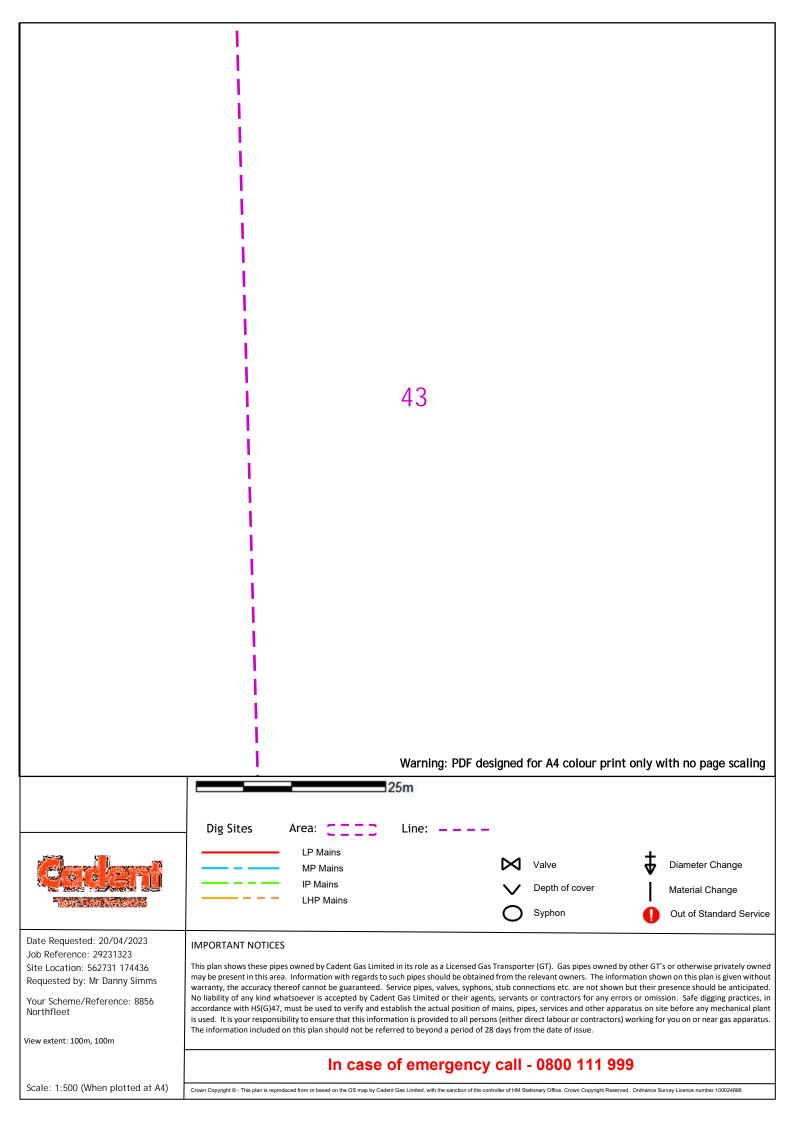


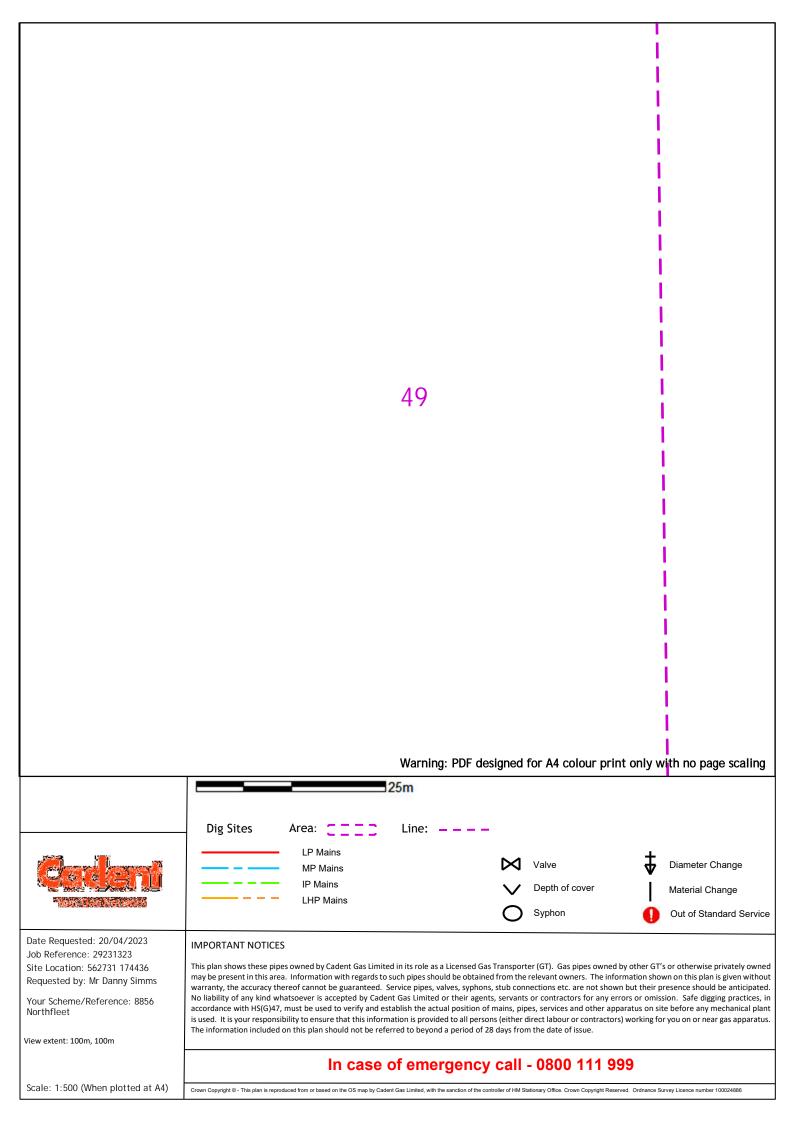


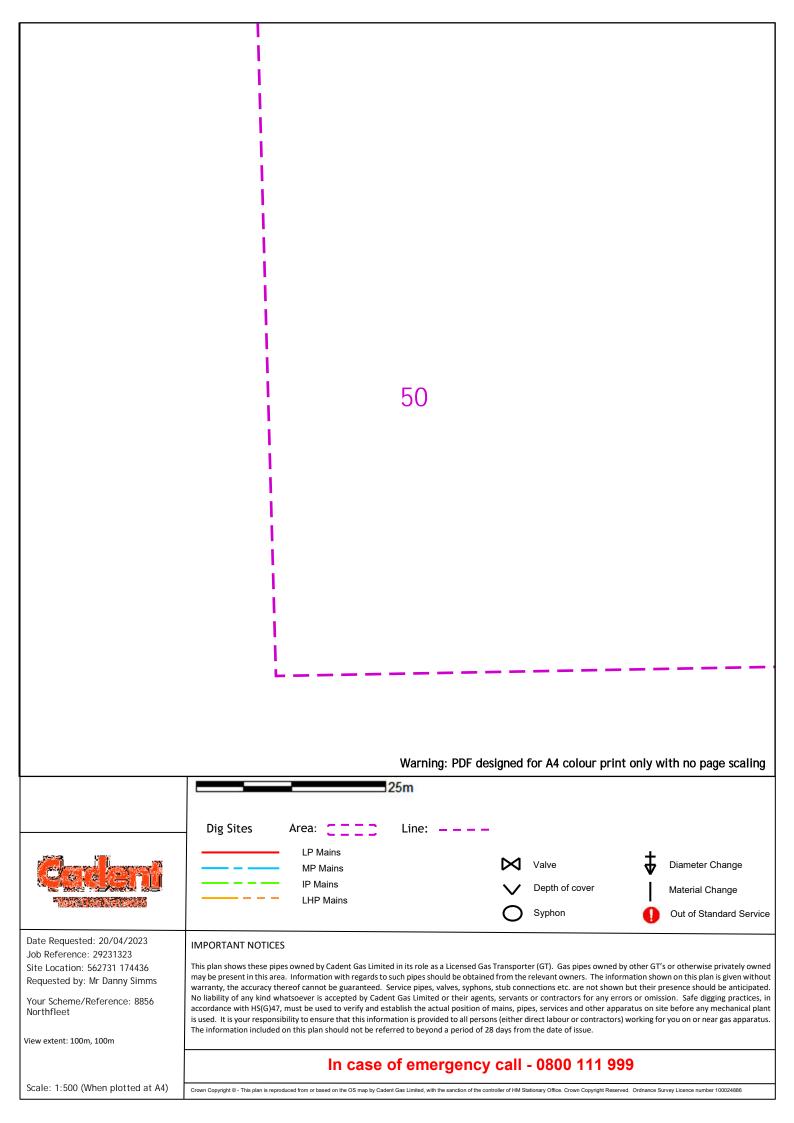


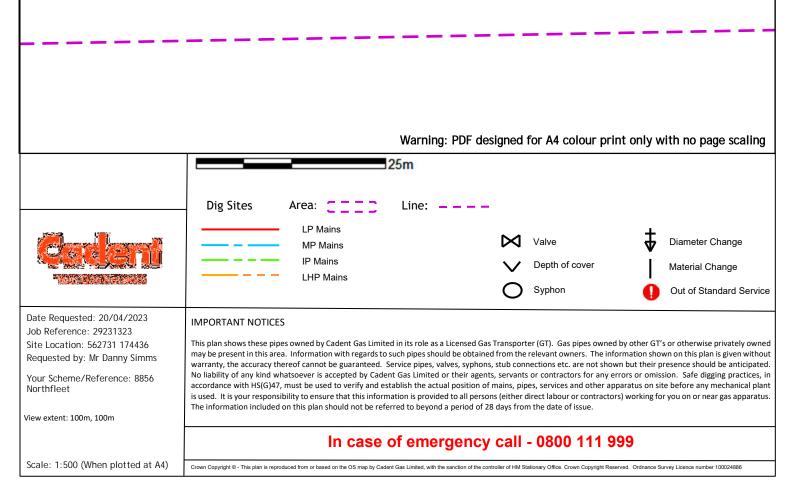


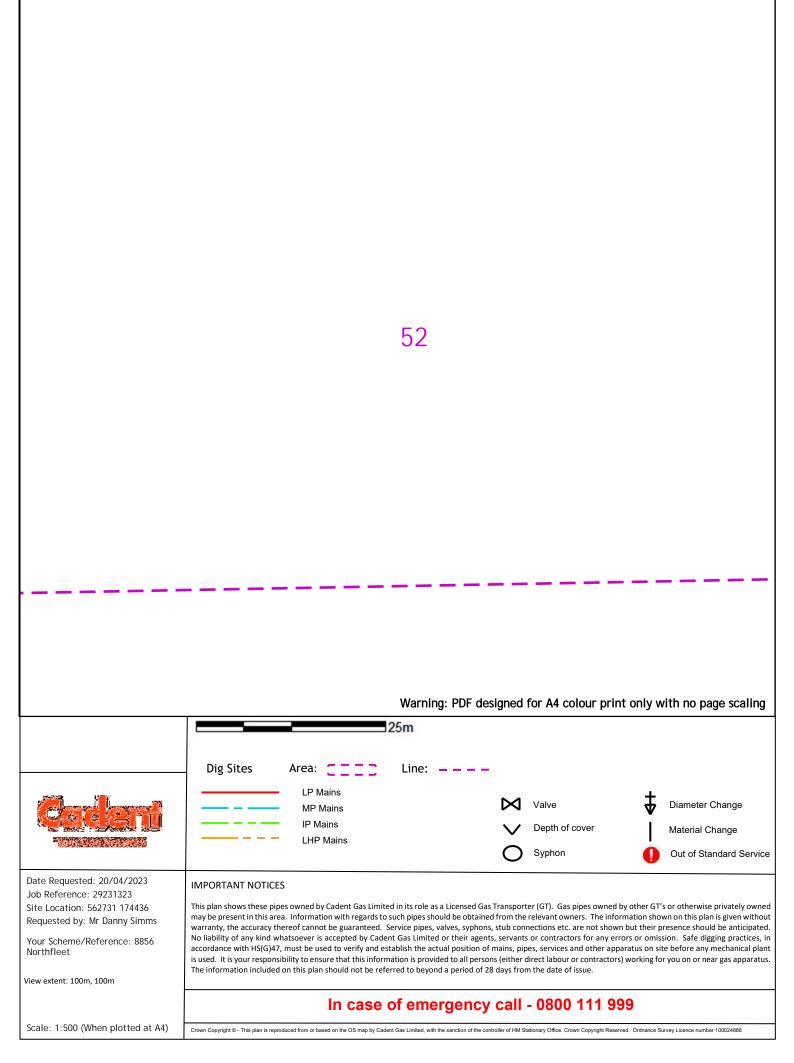


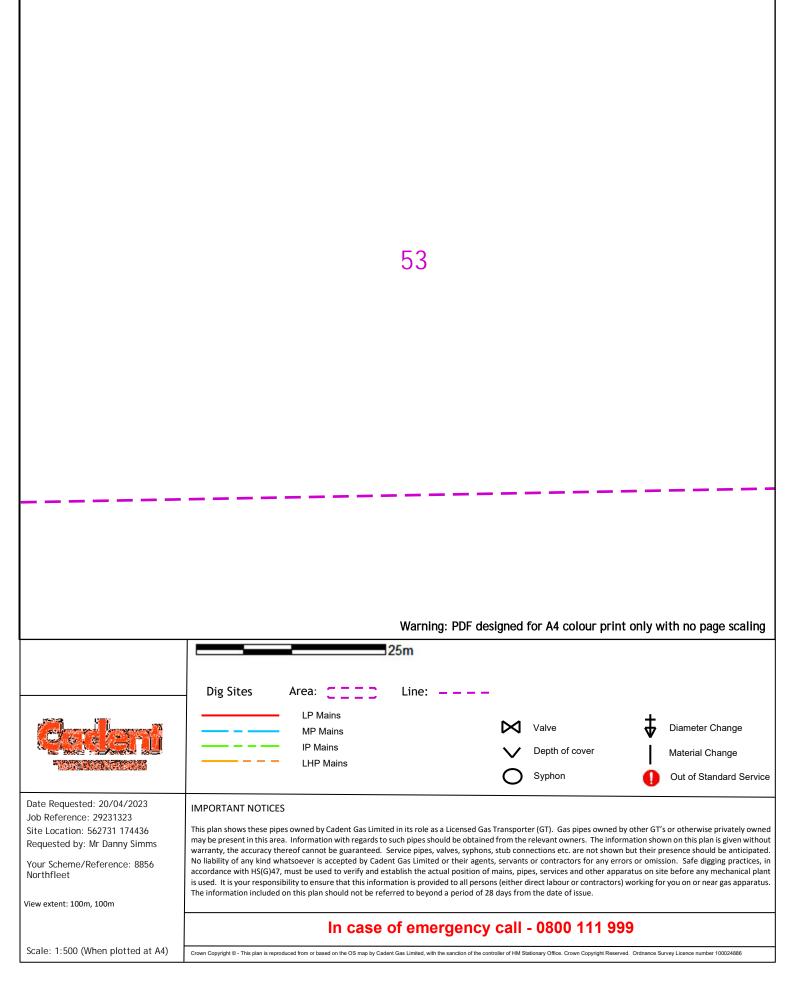


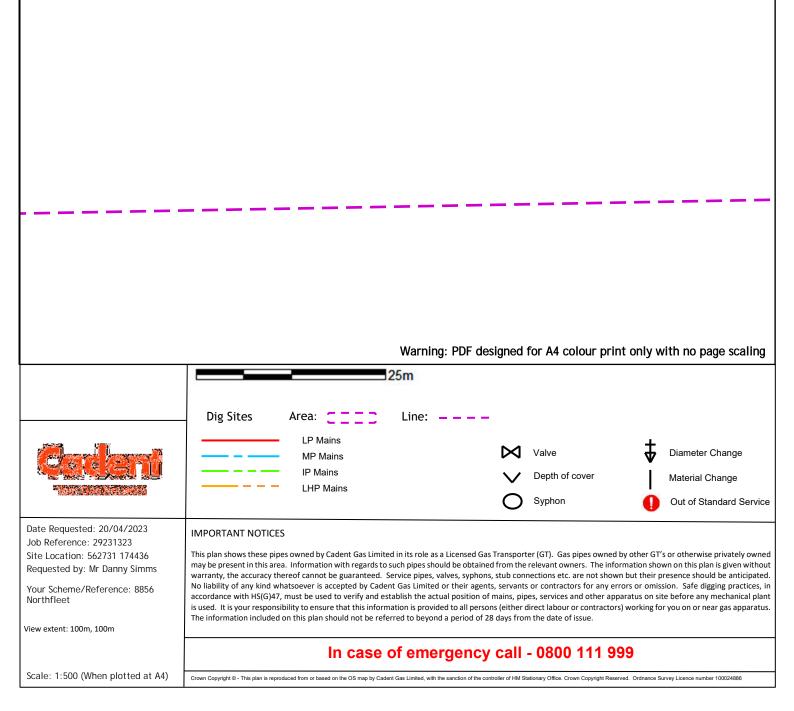


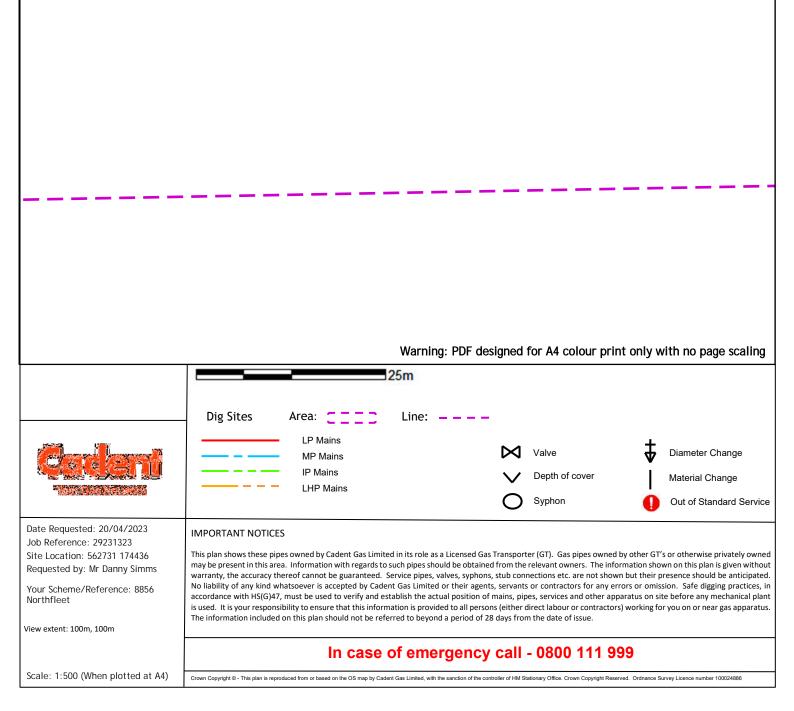


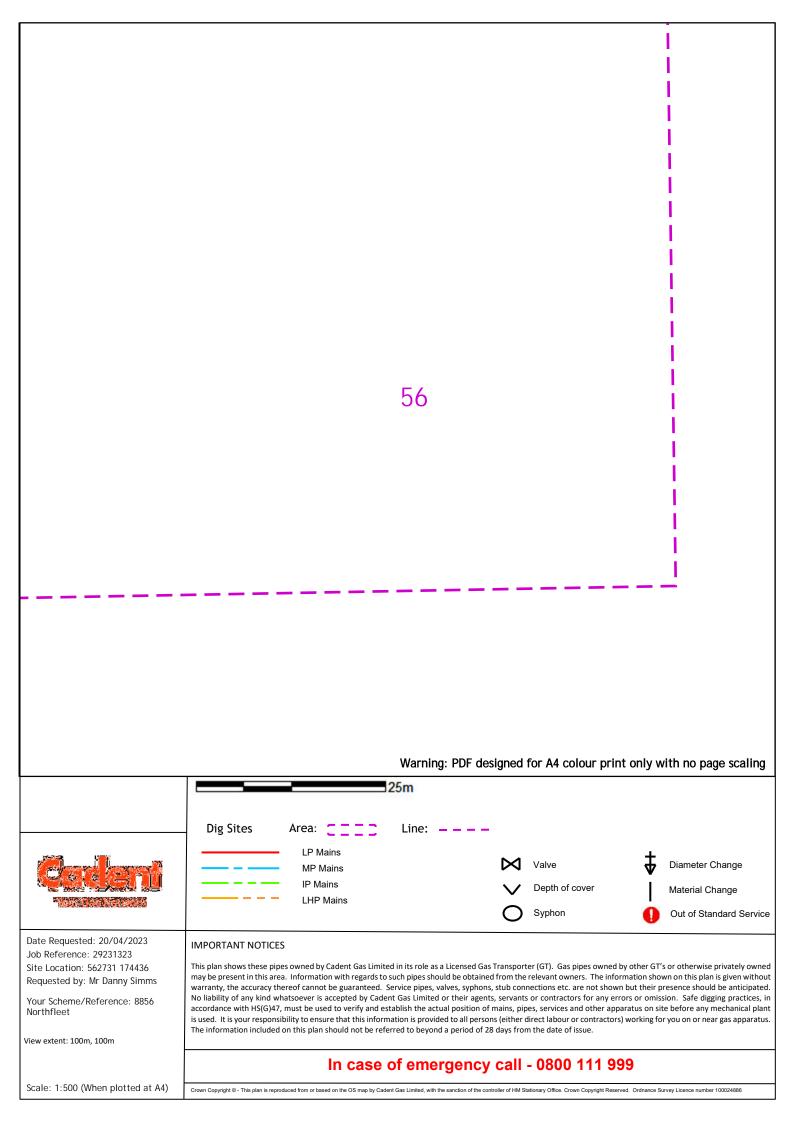














Specification for Safe Working in the Vicinity of Cadent Assets

CAD/SP/SSW/22 March 2022





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Cadent contact details



Central admin team

Address: Cadent Gas Limited, Pilot Way, Anstey Park, Coventry, CV7 9JU Phone: 0800 688 588 Email: plantprotection@cadentgas.com

East of England Operations Plant Protection

Address: Cadent Gas Limited, Vicarage Farm Road, Peterborough, PE1 5TP Email: <u>eaplantprotectionops@cadentgas.com</u>

East Midlands Operations Plant Protection

Address: Cadent Gas Limited, Effingham Street, Sheffield, S4 7YP Email: emplantprotectionops@cadentgas.com

North London Operations Plant Protection

Address: Cadent Gas Limited, Uxbridge Road, Slough, SL2 5NA Email: nlplantprotection@cadentgas.com

North West Operations Plant Protection

Address: Cadent Gas Limited, Plant Protection (Block C), Mersey Road North, Failsworth, Greater Manchester, M35 9FF Email: plantprotection.nw@cadentgas.com

West Midlands Operations Plant Protection

Address: Cadent Gas Limited, Windsor Street, Birmingham, B7 4DN Email: plantprotection.wm@cadentgas.com



Step by Step Process

Register with LinesearchbeforeUdig (LSBUD)

LSBUD provide a free online enquiry service giving results within minutes from a grid reference, postcode or street name. This allows you to submit enquiries about activities and work that you are planning which may have an impact on the gas network.

www.linesearchbeforeudig.co.uk

Submit an enquiry

Within LSBUD there are 3 enquiry types, initial enquiry, planned works and emergency works. Initial enquires are for information only purposes and will not be escalated for operational site-specific advice, should you wish to carry out works you must submit a planned works enquiry. If your works are of a genuine emergency nature (e.g. burst water main etc.) then you should submit an emergency enquiry.

Review the response, asset location and enclosed guidance

LSBUD will auto-generate a response based on your enquiry details and our assets in the area. The assessment will be based on the selected Work Category and Work Type, if your planned works propose activities to be undertaken within the distances specified within this booklet you must obtain site specific advice from our specialist operational plant protection team.

If your response says that we need to assess your enquiry further, you must not start any work until we confirm it is safe to do so.

If you are advised to proceed with caution, then you must ensure that you utilise the provided asset plans and follow the guidance in this document.

Observe restrictions

In addition to the guidance contained in this booklet, you must ensure that you observe any site-specific advice provided by our specialist operational plant protection teams.

If in doubt contact Cadent using the details in this booklet



Keeping you, your workers and the public safe when working near our pipelines



Disclaimer

This document is provided for use by third parties for safe working in the vicinity of Cadent assets. Where this document is used by any other party it is the responsibility of that party to ensure that this document is correctly applied.

Users should ensure that they are in possession of the latest edition of this document by referring to the Digging Safely webpage on the Cadent website. www.cadentgas.com/help-advice/digging-safely

Mandatory and non-mandatory requirements

In this document:

- Shall: indicates a mandatory requirement
- Should: indicates best practice and is the preferred option

If an alternative method is used then a suitable and sufficient risk assessment shall be completed to show that the alternative method delivers the same, or better, level of protection.



Introduction Safe Working in the Vicinity of Cadent Assets: Requirements for Third Parties

This specification is for issue to third parties carrying out work in the vicinity of Cadent gas assets and associated installations. It is provided to ensure that individuals planning and undertaking work take appropriate measures to prevent damage.

Any damage to a gas asset, or its coating, can affect its integrity and can result in failure leading to potentially serious hazardous consequences for individuals located in the vicinity.

It is therefore essential that the safety advice outlined in this document, along with any site-specific advice given by our operatives, is complied with when working near to our assets. If Cadent consider any work to be in breach of the requirements stipulated in this document, then the Cadent Plant Protection Officer will request that work is suspended until the non-compliances have been rectified.

Every reasonable precaution shall be undertaken to avoid personal injury or damage to our apparatus. If we incur any direct or indirect costs as a consequence of your works and we are required to repair or divert any gas apparatus, you'll be recharged in full.

Any damage to our apparatus will be subject to legislative reporting responsibilities to the HSE under Reporting of Injuries, Diseases & Dangerous Occurrences Regulations 2013, Gas Safety Management Regulations 1996 and the Pipelines Safety Regulations 1996.

The requirements in this document are in line with the Institution of Gas Engineers and Managers (IGEM) recommendations IGEM/SR/18 Edition 3 - Safe Working Practices to Ensure the Integrity of Gas Assets and Associated Installations and the HSE's guidance document HS(G)47 Avoiding Danger from Underground Services.

It is the responsibility of the third party to ensure that any work carried out also conforms with the requirements of the Construction and Design Management (CDM) Regulations 2015 and all other relevant health and safety legislation. Reference shall be made to our apparatus within your site Health and Safety file.



1.Scope

This specification sets out the safety precautions and other conditions associated with working in the vicinity of Cadent assets, located in negotiated easements (see Section 13) and public highways.

Where the guidance in this document cannot be adhered to, then the diversions process shall be followed.



Before contacting our diversions team, you'll

need to have your site information and any design proposals available.

Once you have this information, please contact our diversions team <u>diversions@cadentgas.com</u> or on 0330 678 1034.

Visit <u>www.cadentgas.com/diversions</u> for more information.







2. Formal Consent

Cadent's assets are either located in an easement agreed with the landowner at the time of installation, or within the highway. As the required arrangements for working in an easement and working in the highway differ, this section describes the specific requirements for these two areas.

Any documents handed to contractors or other individuals undertaking work (e.g. farmers, local authorities etc.), on site by Cadent, shall be signed for and adhered to by the site. All personnel working on site shall be made aware of the potential hazards of working near gas assets and the actions they should follow in case of an emergency.

2.1 Within an easement

The promoter of any works (see Section 13) within an easement shall provide Cadent with details of the proposed works, including a risk assessment and method statement of how the work is intended to be carried out. Work shall not commence in an easement strip until formal written consent has been provided by Cadent. This will include details of Cadent's protection requirements, contact telephone numbers and the emergency telephone number. On acceptance of Cadent's requirements, the promoter of the works shall give Cadent at least 14 days' notice before commencing work on site.

Where clearance to proceed has been granted directly from the system, for example, if your works only affect low pressure assets (operating at less than 75 mbar), but the asset concerned is within an easement, the promoter of the works shall contact the network Plant Protection Office for formal written consent.

In addition to formal written consent, an easement crossing agreement (deed of indemnity) may be required. This shall be discussed with the Cadent Plant Protection Officer prior to the commencement of the works.

The width of an easement is dependent on a number of factors and is mainly dependent on the operating pressure, pipeline material and diameter as these factors influence safe working requirements and building proximity distances. Easement details should be registered at Land Registry however if you are unsure please liaise with your network Plant Protection Officer.





Below is a list of our standard easement widths, however, some easements may vary:

Pressure tier/ Material	Diameter	Easement Width (total)
HP Steel	900mm, 1060mm, 1200mm (36", 42", 48")	24.4m (80')
HP Steel	750mm and 600mm (30" & 24")	18.3m (60')
HP Steel	Up to and including 450mm (18")	12.2m (40')
HP RTP	Determined on a case by case basis	
IP Steel	All sizes	6m plus pipe diameter
IP PE > 5.5 bar	Above 500mm (19")	30m plus pipe diameter
	356mm to 500mm	16m plus pipe diameter
	126mm to 365mm	12m plus pipe diameter
	Up to and including 125mm	12m plus pipe diameter
IP PE <5.5 bar	Above 500mm (19")	26m plus pipe diameter
	356mm to 500mm	8m plus pipe diameter
	126mm to 365mm	8m plus pipe diameter
	Up to and including 125mm	8m plus pipe diameter
AGI's	All sites	3m restrictive width around the installation
MP PE	Above 500mm (19")	12m plus pipe diameter
	356mm to 500mm	6m plus pipe diameter
	126mm to 355mm	5m plus pipe diameter
	Up to and including 125mm	4.5m plus pipe diameter
MP Steel	All sizes	6m plus pipe diameter
MP Iron*	All sizes	6m plus pipe diameter
LP	Above 125mm	3m plus pipe diameter
	Up to and including 125mm	1m plus pipe diameter







2.2 Within a highway

Work shall be notified to Cadent in accordance with the requirements of the New Roads and Street Works Act (NRSWA) and HS(G)47. The promoter of any works within the highway should provide Cadent with details of the proposed works, including a risk assessment and method statement of how the work is intended to be carried out. This shall be submitted at least 14 days before the planned work is to be carried out. If similar works are being carried out at several locations in close proximity, a single risk assessment and method statement should be adequate depending on the nature of the works. Work should not go ahead until formal written consent has been given by Cadent. This will include details of Cadent's protection requirements, contact telephone numbers and the emergency telephone number.









3. Location of Gas Assets

A copy of our plans with your marked-out site is provided in our LSBUD response. Cadent asset records shall be consulted to establish the indicative location of the gas assets in relation to the promoter's work area.

If the marked-out area is incorrect you MUST resubmit your enquiry with the correct area marked out.

Prior to work commencing on site, the gas assets should be located to verify the indicative location from plans.

This should initially be carried out through nonintrusive methods utilising pipe locators where possible. The indicative location should be verified through trial holes. Once located, the gas assets should be marked out at regular



intervals using asset location markers with triangular flags (see Appendix A) or other suitable methods.

For assets exceeding 2 bar, the excavation of all trial holes shall be monitored by Cadent. For assets not exceeding 2 bar, monitoring will be at the discretion of the Cadent Plant Protection Officer.

Safe digging practices, in accordance with HSE publication HS(G)47, shall be followed. Direct and consequential damage to gas plant can be dangerous both to employees and to the general public.

We utilise marker posts and surface boxes to denote the location of our apparatus providing access to key parts of our network. Free access shall be maintained to such apparatus during and after your works and these shall not be moved, covered or damaged during the works.

 Low Pressure
 Medium Pressure
 Intermediate Pressure
 High Pressure





4. Temporary and Permanent Protective Measures

No temporary or permanent protective measures, including the installation of concrete slab protection, shall be installed over or near to a Cadent asset without the prior written consent of Cadent. Cadent will need to approve the material, dimensions and method of installation for the proposed protective measure.

The method of installation shall be confirmed through the submission of a formal written method statement from the contractor to Cadent. Where permanent protection is to be installed over an asset, Cadent will normally carry out a coating survey of metallic assets to check that there is no existing damage to the coating, prior to the slab protection being installed. Cadent shall, therefore, be given at least 14 days' notice prior to the laying of any slab protection to arrange for this survey to be carried out.

Generally, due to the need for future access to below 2 bar gas assets, permanent protection is not permitted, however, can be approved at Cadent's discretion.

The safety precautions detailed in Sections 5, 6, 7 or 8 of this document should also be observed during the installation of the asset protection.







5. Working in the Vicinity of a High or Intermediate Pressure Gas Asset (Operating at Pressures Greater than 2 bar)

The below information shall only be used as guidance, for all works in the vicinity of High and Intermediate Pressure Pipelines the auto-response from the system will advise not to carry out any works until we have undertaken a technical review of the planned works and provided site specific safe working advice.

Initial enquires are for information only purposes and will not be escalated for operational site-specific advice, should you wish to carry out works you must submit a planned works enquiry for assessment.





5.1 Excavation

Mechanical excavators should not be sited or moved above an asset.

Mechanical excavators, and any other powered mechanical plant, shall not dig on one side of the asset with the cab of the excavator positioned on the other side.

All traffic should be positioned far enough away from the trench to prevent trench wall collapse.

5.1.1 In proximity to an asset in an easement

Following location and marking of assets in agreement with the Cadent Plant Protection Officer, powered mechanical excavation may be used no closer than 3m (see Figure 1). The use of toothed excavator buckets vastly increases the potential for damage to assets, therefore only toothless buckets shall be used.

Any fitting, attachment or connecting pipework on an asset shall be exposed by hand.

If third parties are using any form of trench support system, they shall ensure that none of the components are in contact with the Cadent asset.

Consideration may be given to a relaxation of these limits or lower risk excavation methods by agreement with the Cadent Plant Protection Officer on site.

Where sufficient depth of cover exists and the absence of attachments and projections has been confirmed (e.g. valve spindles, pressure points etc.) and following evidence from hand dug trial holes, light tracked vehicles may be permitted to strip topsoil to a depth of 250mm, using a toothless bucket.

No topsoil or other materials shall be stored within the easement without the written permission of Cadent. No fires are allowed in the easement strip or close to above ground gas installations.

After the completion of the work, the level of cover over an asset should be the same as that prior to work commencing, unless otherwise agreed by Cadent.

No new service shall be laid parallel to an asset within the easement. In special circumstances, and only with formal written agreement from Cadent, this may be relaxed for short excursions where the service shall be laid no closer than 600mm.

Where work is being carried out parallel to an asset, within or just alongside the easement, suitable barriers shall be erected for protection between the works and the asset to prevent encroachment.

5.1.2 In proximity to an asset in the highway

Following locating and marking of assets in agreement with the Cadent Plant Protection Officer, powered mechanical excavation may be used no closer than 3 meters (see Figure 1).

The use of toothed excavator buckets vastly increases the potential for damage to assets, therefore only toothless buckets shall be used.



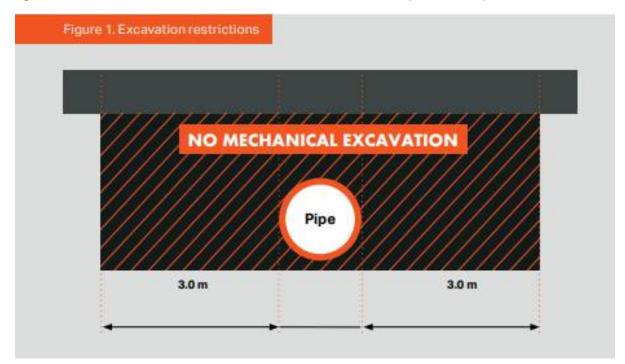


Any fitting, attachment or connecting pipework shall be exposed by hand.

If third parties are using any form of trench support system, they shall ensure that none of the components are in contact with the Cadent asset.

Removal of the bituminous or concrete highway surface layer by mechanical means is permitted to a depth of 300mm, unless any attachments or projections are present on an asset (e.g. valve spindles, pressure points etc.). The use of chain trenchers is not permitted within 3m of an asset. The Cadent Plant Protection Officer may need to be present to monitor this work. Where the bituminous or concrete highway surface layer extends below 300mm deep, it shall only be removed by handheld power assisted tools under the observation of Cadent.

In special circumstances, consideration may be given to a relaxation of these rules by agreement with the Cadent Plant Protection Officer and only whilst they remain on site.



5.1.3 Crossing over an asset (Open cut)

Where a new service is to cross over an asset, a clearance distance of 600mm between the crown of the asset and underside of the service should be maintained. If this cannot be achieved, the service shall cross below the asset (see Section 5.1.4).

In special circumstances, this distance may be reduced at the discretion of the Cadent Plant Protection Officer on site.

5.1.4 Crossing below an asset (Open cut)

Where a service is to cross below an asset, a clearance distance of 600mm between the crown of the new service and underside of the asset shall be maintained. Where lengths of pipe greater than one metre are to be exposed, the Cadent Plant Protection Officer shall be consulted. Exposed assets should be suitably supported and protected by matting and timber cladding. Any supports shall be removed prior to backfilling.



In special circumstances, this clearance distance may be reduced at the discretion of the Cadent Plant Protection Officer on site.

5.1.5 Cathodic protection

Cathodic protection (CP) is applied to Cadent's buried steel pipe and is a method of protecting assets from corrosion by maintaining an electrical potential between the pipe and anodes placed at strategic points along the asset.

Where a new service is to be laid and similarly protected, the party installing the CP system shall undertake tests to determine whether the new service is interfering with the cathodic protection of Cadent assets.

Should any cathodic protection posts or associated apparatus need to be moved to facilitate third party works, at least 14 days' notice shall be given to Cadent. Cadent will undertake this work and any associated costs will be borne by the third party.

5.1.6 Installation of electrical equipment

Where electrical equipment is being installed close to Cadent's buried steel assets, the effects of a rise of earth potential under fault conditions shall be considered by the third party and a risk assessment and method statement shall be submitted to Cadent for approval, prior to the works commencing.

The installation of electrical cables parallel to Cadent assets may induce currents into the asset. This may interfere with the effective operation of the cathodic protection system. In these instances, Cadent will require the promoter of the works to conduct pre and post energisation potential surveys of Cadent's assets. The costs for any stray current mitigation systems required will be borne by the promoter of the works.

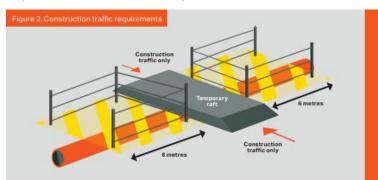
5.2 Construction traffic

Where existing roads cannot be used, construction traffic shall only cross an asset at locations agreed with the Cadent Plant Protection Officer. Notices shall be placed directing traffic to the crossing points. Post and wire fencing shall be erected at all crossing points, and the fence should cover the width of the easement and extend a further 6 metres along the length of the easement on both sides (see Figure 2).

Assets shall be protected at all crossing points by a suitable method agreed with the Cadent Plant Protection Officer prior to installation. The promoter of the works shall

review ground conditions, vehicle types and crossing frequencies to determine the type and construction of the protection required.

For larger scale projects or permanent solutions, a protection slab may be required.







5.3 Specific activities

This section details the precautions that need to be taken when carrying out certain prescribed activities in the vicinity of an asset. The promoter of works is required to consult Cadent when intending to undertake one of the listed activities and/or further advice is required on whether the work has the potential to affect the asset. The table below shows, for some specific activities, the prescribed distances where the advice of Cadent shall be sought.

Activity	Distance within which Cadent advice shall be sought
Piling	15m
Surface mineral extraction	100m
Landfilling	100m
Demolition	150m or 400m for structure mass > 10,000 tonnes
Blasting	500m if the MIC is > 200kg 250m if the MIC is > 10kg but \leq 200kg 100m if the MIC is \leq 10kg
Deep mining	1000m
Wind turbine	1.5 times mast height

5.3.1 Trenchless techniques

Where trenchless techniques are being considered, a formal risk assessment and method statement shall be produced. This risk assessment and method statement shall be formally agreed with Cadent prior to the commencement of the work. Please provide Cadent with at least 14 days' notice as the Cadent Plant Protection Officer may wish to be present to monitor this work.

5.3.2 Changes to depth of cover

The depth of cover over Cadent's asset shall not be altered. Cadent shall be consulted for any activity proposed that will lead to a change in cover over the asset. Expert advice may need to be sought, which will be determined by the Cadent Plant Protection Officer.



5.3.3 Piling

No piling shall be allowed within 15m of an asset without an assessment of the vibration levels at the asset. The peak particle velocity at the asset shall be limited to a maximum level of 75mm/sec. The promoter of the works should provide Cadent the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent Plant Protection Officer on request.

Where ground conditions include silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the asset shall be made. Expert advice may need to be sought, which can be arranged through Cadent.

5.3.4 Demolition

No demolition should be allowed within 150m of an asset, or 400m for a structure mass greater than 10,000t without an assessment of the vibration levels at the asset. The peak particle velocity at the asset shall be limited to a maximum level of 75mm/sec.

The promoter of the works should provide Cadent the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent Plant Protection Officer on request.

Where ground conditions include silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the asset shall be made. Expert advice may need to be sought, which can be arranged through Cadent.

5.3.5 Blasting

The Maximum Instantaneous Charge (MIC) dictates the distance at which an assessment of the vibration levels (at the located asset) is required. The measured distances are as follows:

- 500m if the MIC is greater than 200kg
- 250m if the MIC is greater than 10kg but less than 200kg
- 100m if the MIC is 10kg or less

The peak particle velocity at the asset shall be limited to a maximum level of 75mm/sec.

The promoter of the works should provide Cadent the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance.





The promoter shall retain records of ground vibration levels for provision of the Cadent Plant Protection Officer on request.

Where ground conditions include silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the asset shall be made. Expert advice may need to be sought, which can be arranged through Cadent.

5.3.6 Surface mineral extraction

An assessment shall be carried out on the effect of surface mineral extraction activity within 100 metres of an asset. Consideration should also be given to extraction around other plant and equipment associated with assets (e.g. cathodic protection ground beds).

Where the mineral extraction extends up to the asset easement, a stable slope angle and stand-off distance between the asset and slope crest shall be determined by Cadent. The easement strip should be clearly marked by a suitable permanent boundary, such as a post and wire fence. Additionally, where appropriate, slope indicator markers shall be erected to facilitate the verification of the recommended slope angle as the slope is formed, by the third party. The asset easement and slope need to be inspected periodically to identify any signs of developing instability. This may include any change of slope profile including:

- Bulging
- The development of tension cracks on the slope or easement
- Any changes in drainage around the slope

The results of each inspection should be recorded

Where surface mineral extraction activities are planned within 100m of the asset but do not extend up to the asset easement boundary, Cadent shall assess whether this could promote instability in the vicinity of the asset. This may occur where the asset is routed across a natural slope or the excavation is deep. A significant cause of this problem is where the groundwater profile is affected by changes in drainage or the development of lagoons.

Where the extraction technique involves explosives, the provisions of Section 5.3.5 apply.

5.3.7 Deep mining

Assets within 1km of active deep mining may be affected by subsidence resulting from mineral extraction. The determination of protective or remedial measures will normally require expert assistance, which can be arranged through Cadent.

5.3.8 Landfilling

The creation of slopes outside of the asset easements may promote instability within the vicinity of an asset. Cadent should carry out an assessment to determine the effect of any landfilling activity within 100m of an asset. The assessment is particularly important if landfilling operations are taking place on a slope in which an asset is routed.



5.3.9 Pressure testing

Hydrostatic testing of a third-party asset should not be permitted within 8 metres either side of a Cadent asset, to provide protection against the effects of a burst. Where this cannot be achieved, typically where the third-party asset needs to cross a Cadent asset, one of the following precautions would need to be adopted:

- Iimiting of the design factor of the third-party pipeline to 0.3 at the asset's nominated maximum operating pressure (MOP), and the use of pre-tested pipe
- the use of sleeving
- Cadent conduct risk analysis of pipe failure

In either case, the third party shall submit their site-specific risk assessment and safe system of works for consideration by Cadent.

5.3.10 Seismic surveys

The promoter of works shall advise Cadent of any seismic surveying work in the vicinity of an asset that will result in peak particle velocities in excess of 75mm/sec at the asset.

The promoter of the works should provide Cadent the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent Plant Protection Officer on request.

5.3.11 Hot work

Where a Cadent metallic gas asset has been exposed, welding (or other hot works that may involve naked flames) should not be carried out in proximity of the gas asset. This may be reduced if suitable protection and precautions has been agreed with Cadent.

If the gas asset is PE (or a PE asset is contained within a metallic sleeve) welding, or other hot works that may involve naked flames, should not take place within 500mm of the gas asset. This may be reduced if suitable protection and precautions have been agreed with the Cadent Plant Protection Officer to prevent against the effects of sparks, radiant heat transfer etc.

The Cadent Plant Protection Officer shall be present to monitor all welding, burning or other 'hot work' that takes place.

5.3.12 Wind turbines

Wind turbines shall not be sited any closer than 1.5 times the proposed height of the turbine mast away from the nearest edge of a gas asset.

Further guidance can be found from UKOPA's Good Practice Guide 13 (UKOPA/GP/013) -Requirements for the Siting and Installation of Wind Turbines Installations in the Vicinity of Buried Pipelines.





5.3.13 Solar farms

Solar Farms can be built adjacent to gas assets but never within an easement. Advice shall be sought from Cadent at the early stages of design to ensure that electrical interference, security, future access and construction methods can be mutually agreed.

Further guidance can be found from UKOPA's Good Practice Guide 14 (UKOPA/GP/014) -Requirements for the Siting and Installation of Solar Photovoltaic (PV) Installations in the Vicinity of Buried Pipelines.

5.4 Backfilling

No backfilling should be undertaken without Cadent's agreement to proceed and the Cadent Plant Protection Officer will stipulate the necessary requirements. Some equipment may not be suitable for use over or around an asset due to the adverse effects of excessive compaction and vibration levels. The Cadent Plant Protection Officer will be able to advise on suitable equipment. Third parties undertaking work shall provide Cadent with 48 hours' notice, or shorter only if agreed with Cadent, of the intent to backfill over, under or alongside the asset.

This requirement should also apply to any backfilling operations that:

- are within 3 metres of an asset
- could influence the ground stability

Any damage to an asset or its coating shall be reported to Cadent in order that damage can be assessed, and repairs carried out.

Minor damage to pipe coating and cathodic protection test leads will be repaired by Cadent free of charge. If an asset has been backfilled without the knowledge of the Cadent Plant Protection Officer, the third party shall re-excavate to enable the condition of the asset coating to be assessed.





6. Working in the Vicinity of a Medium Pressure Gas Asset (Operating at Pressures Greater than 75 mbar but not Exceeding 2 bar)

The below information shall only be used as guidance, and where appropriate, will be supplemented by site specific safe working advice from the network Plant Protection Officer.

Initial enquires are for information only purposes and will not be escalated for operational site-specific advice, should you wish to carry out works you must submit a planned works enquiry for assessment.

6.1 Temporary and permanent structures

No temporary or permanent structures are permitted to be installed above, or in close proximity to a gas asset or easement due to the restriction of access this imposes. This includes, but is not limited to, permanent street furniture such as planters and bollards and temporary buildings such as welfare units and other enclosed spaces. The building proximity distances for medium pressure assets is as follows:

Material	Minimum proximity to premises
Cast/Spun Iron	3m
Ductile Iron	30m
Steel	1m
PE (inserted)	1m
PE (non-inserted)	2m for diameters ≤ 500mm 5m for diameters > 500mm

Please note that the easement distance may be greater than the building proximity distance. For any proposed structures in the easement, please consult with the Cadent network Plant Protection Officer.







6.2 Excavation

6.2.1 General

Mechanical excavators should not be sited or moved above an asset.

Mechanical excavators and any other powered mechanical plant shall not dig on one side of the asset with the cab of the excavator positioned on the other side. All traffic should be positioned far enough away from the trench to prevent trench wall collapse.

Excavation with a powered mechanical excavator should not be carried out until the asset has been located through vacuum excavation or by hand. No mechanical excavation is permitted within 500mm of a gas asset. Any mechanical excavation should utilise a banksman. Toothless buckets shall be used due to the potential of damage to assets using toothed excavator buckets.

Consideration shall be given to apparatus installed on gas assets including valves, spindles, pressure points etc. Any fitting, attachment or connecting pipework on an asset shall be exposed by hand.

Where concrete is exposed around gas apparatus, it shall not be removed without first consulting with a Cadent Plant Protection Officer as it could be providing protection or anchorage to live apparatus.

Where a third party is using any trench support system, they shall ensure that none of its components are in contact with an asset.

The use of chain trenchers is not permitted within 3m of the confirmed location of an asset.

6.2.2 Working in vicinity of iron pipework

When deep excavation greater than 1.5m in depth is carried out in the vicinity of iron pipework, steps shall be taken to ensure the risk associated with immediate and latent asset failure are considered and, where necessary, excavations are cut back to reduce the shear factor created by ground disturbance likely to result in settlement. This also includes instances where excavations are part of construction works, including basement conversions, underground carparks, shaft construction, etc.

Care should be taken to ensure that any exposed iron pipework is suitably supported at 1m intervals and protected from damage to avoid creating tensions that could lead to joint disturbance or pipe barrel fracture.

Where fittings or existing repairs are uncovered, care shall be taken to ensure that these are not disturbed.

When working near ductile iron pipework, any corrosion identified on the pipeline shall be reported to 0800 111 999 for a first call operative to attend to undertake a hazard assessment.



6.2.3 In proximity to an asset in an easement

Where sufficient depth of cover exists and the absence of attachments and projections has been confirmed (e.g. valve spindles, pressure points etc.), following evidence from hand dug trial holes, light tracked vehicles may be permitted to strip topsoil to a depth of 250mm using a toothless bucket.

No topsoil or other materials shall be stored within the easement without the written permission of Cadent. No fires are allowed in the easement strip or other gas assets.

After the completion of the work, the level of cover over the asset should be the same as that prior to work commencing.

No new service shall be laid parallel to the asset within the easement.

Where work is being carried out parallel to the asset, within or alongside the easement, suitable barriers shall be erected between the works and the asset to prevent encroachment or damage.

6.2.4 In proximity to an asset in the highway

Where sufficient depth of cover exists, and the absence of attachments and projections has been confirmed (e.g. valve spindles, pressure points etc.), following evidence from hand dug trial holes, removal of the bituminous or concrete highway surface layer by mechanical means is permitted to a depth of 300mm. Where the bituminous or concrete highway surface layer extends below 300mm deep, it shall only be removed by handheld power assisted tools.

6.2.5 Crossing over an asset (Open cut)

Where a new service is to cross over a gas asset, a minimum clearance distance of 1.5 times the diameter of the gas asset or 300mm, whichever is greater, shall be maintained. If this cannot be achieved, the service shall cross below the asset, see Section 6.2.6.

6.2.6 Crossing below an asset (Open cut)

Where a service is to cross below a gas asset, a minimum clearance distance of 1.5 times the diameter of the gas asset or 300mm, whichever is greater, between the crown of the new service and underside of the asset shall be maintained. The exposed asset shall be suitably supported and protected by matting and timber cladding. Any supports shall be removed prior to backfilling.









6.2.7 Cathodic protection

Cathodic protection (CP) is applied to some buried steel pipes and is a method of protecting assets from corrosion by maintaining an electrical potential between the asset and anodes placed at strategic points along the asset. Where a new service is to be laid and similarly protected, the party installing the CP system shall liaise with the Cadent Plant Protection Officer and undertake tests to determine whether the new service is interfering with the cathodic protection of the Cadent asset.

Should any cathodic protection posts or associated apparatus need moving to facilitate third party works, at least 14 days' notice shall be given to Cadent. Cadent will undertake this work and any associated costs will be borne by the third party.

6.2.8 Installation of electrical equipment

Where electrical equipment is being installed close to Cadent's buried steel assets, the effects of a rise of earth potential under fault conditions shall be considered by the third party, a risk assessment carried out and this shall be provided to the Cadent Plant Protection Officer for inspection. Equipment shall not be installed if the integrity of Cadent's assets is compromised. In this case, diversion of the affected assets is required.

The installation of electrical cables parallel to Cadent assets may induce currents into the asset. This may interfere with the effective operation of cathodic protection systems. In these instances, Cadent will require the promoter of the works to work with the Cadent Plant Protection Officer to ensure that pre and post energisation potential surveys of Cadent's assets are undertaken. The costs for any stray current mitigation systems required will be borne by the third-party promoter.

6.3 Construction traffic

The promoter of the works shall review the ground conditions, vehicle types and crossing frequency to determine the type and construction of crossing that will be required. Additionally, no undue loads such as spoil heaps, lighting columns, permanent traffic lights or road signs should be allowed over gas assets.

Iron pipes, or pipes that are not already within an existing road (such as those within footways or verges), shall not be crossed by construction vehicles without suitable protection and the consent of the Cadent Plant Protection Officer.

Where existing roads cannot be used, construction traffic should only cross Cadent assets at specific locations, with notices directing traffic to the crossing points erected. All crossing points shall:

- Be at right angles to the asset
- Be fenced denoting the existence of the asset to ensure all traffic uses the crossing point. The fencing shall cover the width of any easements and extend a further 6m along the length of any easements on both sides (see Figure 2).
- Have signs attached to the fence denoting the asset that the crossing point is located over







Be regularly inspected and maintained in good condition

Note: A 5mph speed restriction should be enforced at all crossing points.

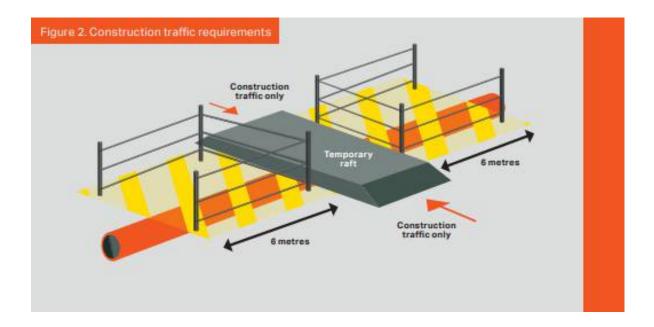




Suitable protection methods may include:

- Temporary protection slab
- Free-standing bridges (prefabricated modular steel or pre-cast concrete bridges)
- Proprietary access roadways
- Haul roads (including hardcore, sleepers, steel plates or a combination)

For larger scale projects or permanent crossings, diversion of the asset may be required.







6.4 Specific activities

This section details the precautions that need to be taken when carrying out certain prescribed activities in the vicinity of a Cadent asset. The promoter of works is required to consult Cadent when intending to undertake one of the activities listed below to obtain further site-specific advice on whether the work has the potential to affect the asset. The table below shows, for some specific activities, the prescribed distances where the advice of Cadent shall be sought.

Activity	Distance within which Cadent advice shall be sought
Piling	15m
Surface mineral extraction	100m
Landfilling	100m
Demolition	150m or 400m for structure mass > 10,000 tonnes
Blasting	500m if the MIC is > 200kg 250m if the MIC is > 10kg but \leq 200kg 100m if the MIC is \leq 10kg
Deep mining	1000m
Wind turbine	1.5 times mast height

6.4.1 Carriageway construction (including widening & bell mouth construction)

Where it is proposed to carry out carriageway construction over an asset previously located in a footway or verge, you must contact the diversions team to determine if diversion or replacement of the asset is required before commencement of your works.

6.4.2 Trenchless techniques

Where trenchless techniques are being considered, a formal risk assessment and method statement shall be produced and submitted to the Cadent Plant Protection Officer for review prior to commencing work. Please provide Cadent with at least 14 days' notice as we may wish to be present to monitor the work.







6.4.2.1 Tunnelling

Ground movement may occur when tunnelling in soft ground conditions. Ground movement contours from the tunnelling operation shall be calculated and all gas assets within the affected zone should be identified and assessed.

PE assets can tolerate some differential ground movement.

For cast and ductile iron assets, acceptable limits on stress increase and joint disturbances are defined in the performance acceptance criteria for iron mains.

For steel assets, an integrity assessment should be carried out according to the industry standard **IGEM/TD/12 – Pipework stress analysis for gas industry plant**. An expert on Soil/Pipe Interaction Analysis should be consulted when required for the evaluation of ground movement effects on the assets.

For any proposed tunnelling works, you must contact the diversions team to determine if diversion or replacement of the asset is required before commencement of your works, due to the likely impact on our assets.

6.4.3 Changes to depth of cover

The depth of cover over Cadent's asset shall not be altered. Where a change in cover is required, contact your network Plant Protection Officer.

6.4.4 Piling

No piling shall be allowed within 15m of an asset without an assessment of the vibration levels at the asset.

For steel or PE assets, the peak particle velocity at the asset shall be limited to a maximum level of 75mm/sec.

For iron assets, the peak particle velocity at the asset shall be limited to a maximum level of 25mm/sec.

The promoter of the works should provide the Cadent Plant Protection Officer with the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure the allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent Plant Protection Officer on request.

Where ground conditions include silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the asset shall be made, which may require expert advice.





6.4.5 Demolition

No demolition should be allowed within 150m of an asset for 400m for a structure mass greater than 10,000 tonnes without an assessment of the vibration levels at the asset.

For steel or PE assets, the peak particle velocity at the asset shall be limited to a maximum level of 75mm/sec.

For iron assets, the peak particle velocity at the asset shall be limited to a maximum level of 25mm/sec.

The promoter of the works should provide the Cadent Plant Protection Officer with the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure the allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent Plant Protection Officer on request.

Where ground conditions include silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the asset shall be made. Expert advice may need to be sought, which can be arranged through Cadent.

6.4.6 Blasting

The Maximum Instantaneous Charge (MIC) dictates the distance at which an assessment of the vibration levels (at the located asset) is required. The measured distances are as follows:

- 500m if the MIC is greater than 200kg
- 250m if the MIC is greater than 10kg but less than 200kg
- 100m if the MIC is 10kg or less

For steel or PE assets, the peak particle velocity at the asset shall be limited to a maximum level of 75mm/sec.

For iron assets, the peak particle velocity at the asset shall be limited to a maximum level of 25mm/sec.

The promoter of the works should provide the Cadent Plant Protection Officer with the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent Plant Protection Officer on request.

Where ground conditions include silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the asset shall be made. Expert advice may need to be sought, which can be arranged through Cadent.





6.4.7 Surface mineral extraction

An assessment shall be carried out on the effect of surface mineral extraction activity within 100m of a gas asset. Consideration should also be given to extraction around plant and equipment associated with assets (e.g. cathodic protection ground beds).

Where the mineral extraction extends up to the asset easement, a stable slope angle and stand-off distance between the asset and slope crest shall be determined. Where an easement exists, the easement strip shall be clearly marked by a suitable permanent boundary, such as a post and wire fence. Additionally, where appropriate, slope indicator markers shall be erected to facilitate the verification of the recommended slope angle as the slope is formed, by the third party. The asset easement and slope need to be inspected periodically to identify any signs of developing instability. This may include any change of slope profile including:

- Bulging
- The development of tension cracks on the slope or easement
- Any changes in drainage around the slope

The results of each inspection should be recorded.

Where surface mineral extraction activities are planned within 100m of the asset but do not extend up to the asset easement boundary, an assessment should be made as to whether this could promote instability in the vicinity of the asset. This may occur where the asset is routed across a natural slope or the excavation is deep. A significant cause of this problem is where the groundwater profile is affected by changes in drainage or the development of lagoons.

Where the extraction technique involves explosives, the provisions of Section 6.4.6 apply.

6.4.8 Deep mining

Gas assets within 1km of active deep mining may be affected by subsidence resulting from mineral extraction. The determination of protective or remedial measures will normally require expert assistance, which can be arranged through Cadent.

6.4.9 Landfilling

The creation of slopes outside of the asset easements may promote instability within the vicinity of the asset. Cadent should carry out an assessment to determine the effect of any landfilling activity within 100m of an asset. The assessment is particularly important if landfilling operations are taking place on a slope in which the asset is routed.

6.4.10 Pressure testing

Pressure testing should not be permitted within 8m of an asset unless suitable precautions have been taken against the effects of a pipe failure.







6.4.11 Seismic surveys

The promoter of works shall advise Cadent of any seismic surveying work in the vicinity of PE or steel assets that will result in peak particle velocities in excess of 75mm/sec at the asset or for iron assets that will result in peak particle velocities in excess of 25mm/sec at the asset.

The promoter of the works should provide Cadent the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent Plant Protection Officer on request.

6.4.12 Hot work

Where the Cadent's metallic gas assets have been exposed, welding (or other hot works that may involve naked flames) should not be carried out in proximity of the gas asset. This may be reduced if suitable protection and precautions have been agreed with Cadent.

If the gas asset is PE (or a PE asset is contained within a metallic sleeve) welding, or other hot works that may involve naked flames, shall not take place within 500mm of the gas asset. For further advice contact your network Plant Protection Officer.

Protection measures shall be agreed with the Cadent Plant Protection Officer prior to installation to prevent the effects of sparks, radiant heat transfer etc.

Any hot works in proximity to a Cadent gas asset require leakage surveys prior to, during and after the works. If gas is detected, all works shall stop, and the leak immediately reported to the National Gas Emergency Service on 0800 111 999.

The Cadent Plant Protection Officer will determine the need to remain on site to monitor all welding, burning or other 'hot work' that takes place.

6.4.13 Wind turbines

Wind turbines shall not be sited any closer than 1.5 times the proposed height of the turbine mast away from the nearest edge of the asset.

Further guidance can be found from UKOPA's Good Practice Guide 13 (UKOPA/GP/013) -Requirements for the Siting and Installation of Wind Turbines Installations in the Vicinity of Buried Pipelines.

6.4.14 Solar farms

Solar Farms can be built adjacent to gas assets, but never within an easement. Advice shall be sought from Cadent at the early stages of design to ensure that electrical interference, security, future access and construction methods can be mutually agreed.

Interference checks shall be completed by the third party to ensure that the solar installations and associated infrastructure have no negative effect on cathodic protection systems.





Further guidance can be found from UKOPA's Good Practice Guide 14 (UKOPA/GP/014) -Requirements for the Siting and Installation of Solar Photovoltaic (PV) Installations in the Vicinity of Buried Pipelines.

6.4.15 Lifting operations

Where lifting operations are planned to be carried out in the vicinity of medium pressure apparatus a site-specific risk assessment and lift plan is required to be reviewed by the Cadent Plant Protection Officer.

Protection shall be afforded to live apparatus when carrying out the works to prevent impact damage in the event of an uncontrolled failure or drop. Any loads shall be secured using suitable and sufficient lifting accessories to reduce the likelihood of the load being dropped.

Consideration shall be given to the location of lifting equipment and the loads induced into the ground to avoid the potential overloading of buried apparatus. Where the site cannot be laid out to avoid loading gas apparatus, the asset shall be suitably protected with the consent of the Cadent Plant Protection Officer. Alternatively, the asset will require replacement/diversion.

6.5 Backfilling and reinstatement

Reinstatement around Cadent apparatus still poses a risk to the integrity of the asset. A gas asset must not be located within the footway or carriageway construction as this has the potential to cause damage to the apparatus during and post completion of the reinstatement.

No backfilling should be undertaken without Cadent's agreement to proceed. Some equipment may not be suitable for use over or around assets due to the adverse effects of excessive compaction and vibration levels.

A gas asset shall not be encased in concrete or have concrete positioned within 300mm of the asset, or anywhere above an iron gas asset due to the need for future access.

The fine fill material should be firmly packed around the pipe in 100mm layers to achieve a compacted thickness of 75mm and shall be laid to a minimum depth of 150mm above the crown of the asset.

Mechanical compaction equipment shall not be used until a 250mm hand rammed layer has been compacted above the crown of the pipe.

For backfilling and reinstatement in the vicinity of iron apparatus, in addition to the above, the maximum weight of compaction equipment used above the crown of the asset shall not exceed 1.5t/m² and vibratory compaction shall not be used.

Material used in the backfill shall conform to the following requirements:

- Sand shall be well-graded in accordance with BS EN 13242:2002+A1:2007
- It shall not contain any sharp objects, large stones or bricks





Foamed concrete shall not be used

We will require marker tape to be installed at least 250mm above the crown of the main.

Prior to backfilling, if the asset is coated, Cadent require the opportunity to inspect its condition in order assess and to carry out any repairs as necessary. Please contact your network Plant Protection office to arrange this. Any damage to the asset or coating shall be reported to the Cadent Plant Protection Officer so that damage can be assessed, and repairs carried out.

Minor (and existing) damage to pipe coating and cathodic protection test leads will be repaired by Cadent free of charge. If the asset has been backfilled without the knowledge of the Cadent Plant Protection Officer, the third party will need to re-excavate to enable the condition of the asset coating to be assessed.

All temporary supports shall be removed prior to backfill but only when the asset is sufficiently supported by bedding material around the pipe.







7. Working in the Vicinity of a Low Pressure Gas Asset (Operating at Pressures up to 75 mbar)

For planned and emergency works in the vicinity of Low Pressure gas assets, the promoter will be advised proceed with caution. The guidance contained within this section must be followed. If it cannot, contact shall be made with the network Plant Protection office for advice.

7.1 Temporary and permanent structures

No temporary or permanent structures are permitted to be installed above, or in close proximity to a gas asset or easement due to the restriction of access this imposes. This includes, but is not limited to, permanent street furniture such as planters and bollards and temporary buildings such as welfare units and other enclosed spaces. The building proximity distances for low pressure assets is as follows:

Material	Minimum proximity to premises
All materials	1m

Please note that the easement distance may be greater than the building proximity distance, for any proposed structures in the easement please consult with the Cadent network Plant Protection Officer.

7.2 Excavation

7.2.1 General

Mechanical excavators should not be sited or moved above an asset.

Mechanical excavators and any other powered mechanical plant shall not dig on one side of an asset with the cab of the excavator positioned on the other side. All traffic should be positioned far enough away from the trench to prevent trench wall collapse.

Excavation with a powered mechanical excavator should not be carried out until gas assets have been located through vacuum excavation or by hand. No mechanical excavation is permitted within 500mm of gas assets. Any mechanical excavation should utilise a banksman. Toothless buckets shall be used due to the potential of damage to assets using toothed excavator buckets.

Consideration shall be given to apparatus installed on gas assets including valves, spindles, pressure points etc. Any fitting, attachment or connecting pipework on the asset shall be exposed by hand.





Where concrete is exposed around gas apparatus this shall not be removed as it could be providing protection or anchorage to the live apparatus.

Where a third party is using any trench support system, they shall ensure that none of its components are in contact with the asset.

The use of chain trenchers to do this is not permitted within 3m of the confirmed location of the asset.

7.2.2 Working in vicinity of iron pipework

When deep excavation greater than 1.5m in depth is carried out in the vicinity of iron pipework, steps shall be taken to ensure the risk associated with immediate and latent asset failure are considered, and where necessary, excavations are cut back to reduce the shear factor created by ground disturbance likely to result in settlement. This also includes instances where excavations are part of construction works including basement conversions, underground carparks, shaft construction, etc.

Care should be taken to ensure that any exposed iron pipework is suitably supported at 1m intervals and is protected from damage to avoid creating tensions that could lead to joint disturbance or pipe barrel fracture.

Where fittings or existing repairs are uncovered care shall be taken to ensure that these are not disturbed.

When working near ductile iron pipework should any corrosion be identified on the pipeline this shall be reported to 0800 111 999 for a first call operative to attend to undertake a hazard assessment.

7.2.3 In proximity to an asset in an easement

Where sufficient depth of cover exists and the absence of attachments and projections has been confirmed (e.g. valve spindles, pressure points etc.), following evidence from hand dug trial holes, light tracked vehicles may be permitted to strip topsoil to a depth of 250mm using a toothless bucket.

No topsoil or other materials shall be stored within the easement without the written permission of Cadent. No fires are allowed in the easement strip or other gas assets.

After the completion of the work, the level of cover over an asset should be the same as that prior to work commencing.

No new service shall be laid parallel to an asset within an easement.

Where work is being carried out parallel to an asset, within or alongside an easement, suitable barriers shall be erected between the works and the asset to prevent encroachment or damage.

7.2.4 In proximity to an asset in the highway

Where sufficient depth of cover exists, and the absence of attachments and projections has been confirmed (e.g. valve spindles, pressure points etc.), following evidence from hand dug trial holes, removal of the bituminous or concrete highway surface layer by





mechanical means is permitted to a depth of 300mm. Where the bituminous or concrete highway surface layer extends below 300mm deep, it shall only be removed by handheld power assisted tools.

7.2.5 Crossing over an asset (Open cut)

Where a new service is to cross over an asset, a minimum clearance distance of 1.5 times the diameter of the gas asset or 300mm, whichever is greater shall be maintained. If this cannot be achieved, the service shall cross below the asset, see Section 7.2.6.

7.2.6 Crossing below an asset (Open cut)

Where a service is to cross below an asset, a minimum clearance distance of 1.5 times the diameter of the gas asset or 300mm, whichever is greater, between the crown of the new service and underside of the asset shall be maintained. The exposed asset shall be suitably supported and protected by matting and timber cladding. Any supports shall be removed prior to backfilling.

7.2.7 Cathodic protection

Cathodic protection (CP) is applied to some buried steel pipes and is a method of protecting assets from corrosion by maintaining an electrical potential between the asset and anodes placed at strategic points along the asset. Where a new service is to be laid and similarly protected, the party installing the CP system shall undertake tests to determine whether the new service is interfering with the cathodic protection of the Cadent asset.

Should any cathodic protection posts or associated apparatus need moving to facilitate third party works, appropriate notice, shall be given to Cadent. Cadent will undertake this work and any associated costs will be borne by the third party.

7.2.8 Installation of electrical equipment

Where electrical equipment is being installed close to Cadent's buried steel assets, the effects of a rise of earth potential under fault conditions shall be considered by the third party and a risk assessment carried out. Equipment shall not be installed if the integrity of Cadent's assets is compromised. In this case, diversion of the affected assets will be required.

The installation of electrical cables parallel to Cadent assets may induce currents into the asset. This may interfere with the effective operation of cathodic protection systems. In these instances, Cadent will require the promoter of the works to conduct pre and post energisation potential surveys of Cadent's assets. The costs for any stray current mitigation systems required will be borne by the third-party promoter.

7.3 Construction traffic

The promoter of the works should review the ground conditions, vehicle types and crossing frequency to determine the type and construction of crossing that will be required. Additionally, no undue loads such as spoil heaps, lighting columns, permanent traffic lights or road signs shall be allowed over gas assets.





Iron pipes, or pipes that are not already within an existing road such as those within footways or verges shall not be crossed by construction vehicles without suitable protection being designed and installed. Consideration shall be given to the requirement for access to low pressure apparatus therefore for large scale, long duration projects, or permanent crossings, the diversions process shall be followed to determine whether the asset requires diversion/replacement in advance of the works taking place.

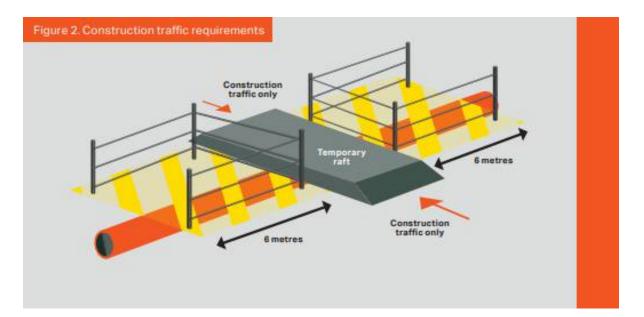
Where existing roads cannot be used, construction traffic should only cross Cadent assets with a minimum depth of cover of 750mm (post crossing construction) at specific locations, with notices directing traffic to the crossing points erected. All crossing points shall:

- Be at right angles to the asset
- Be fenced denoting the existence of the asset to ensure all traffic uses the crossing point. The fencing shall cover the width of any easements and extend a further 6m along the length of any easements on both sides (see Figure 2).
- Have signs attached to the fence denoting the asset that the crossing point is located over
- Be regularly inspected and maintained in good condition

Note: A 5mph speed restriction should be enforced at all crossing points.

Suitable protection methods may include:

- Temporary protection slab
- Free-standing bridges (prefabricated modular steel or pre-cast concrete bridges)
- Proprietary access roadways
- Haul roads (including hardcore, sleepers, steel plates or a combination)





7.4 Specific activities

This section details the precautions that need to be taken when carrying out certain prescribed activities in the vicinity of a Cadent asset. The promoter of works is required to consult Cadent when intending to undertake one of the activities listed below and further advice is required on whether the work has the potential to affect the asset.

7.4.1 Carriageway construction (including widening & bell mouth construction)

Where it is proposed to carry out carriageway construction over an asset previously located in a footway or verge you must contact the diversions team to determine if diversion or replacement of the asset is required before commencement of your works.

7.4.2 Trenchless techniques

Where trenchless techniques are being considered, a formal risk assessment and method statement shall be produced prior to commencing work.

Trial holes shall be undertaken to ensure that sufficient clearance exists between gas assets and the proposed third-party asset (or the pipe to be split if a pipe splitting technique is being used) prior to the works.

If an asset is to be replaced using pipe splitting techniques in the vicinity of iron mains, in addition to the below clauses, an integrity assessment shall be undertaken.

When running parallel to gas assets, the minimum clearance shall be:

1m

When crossing gas assets, the minimum clearance shall be:

500mm or 1.5 times the diameter of the asset, whichever is greater.

Clearances may need to be increased due to the following factors:

- Ground conditions
- Largest reamer diameter
- Type of reamer used, e.g. hollow, finned, etc.
- Accuracy of equipment being used
- Construction of adjacent services and structures
- Configuration of other underground services crossing or running parallel to the drill path
- Consequences of damage
- Pipe stress increase from potential ground movement





The exposed asset should be suitably supported and be protected by matting and suitable timber cladding to reduce the risk of damage from any broken pipe fragments (if pipe

splitting is used). Supports shall be removed prior to backfill but only when the asset is sufficiently supported by bedding material around the pipe.

All lateral crossings shall be exposed around their full circumference with an additional 250mm clearance below. The width of the excavation shall be three times the diameter of the largest reamer or 500mm either side of the largest reamer, whichever is the greatest. These clearances shall be measured from the drill path centre. Each crossing should be manned during the drilling/splitting operation to watch the reamer/splitter pass.

For pipe splitting running parallel to a buried gas asset, trial holes should be undertaken at suitable and frequent locations along the proposed route to confirm sufficient clearance distances exist, and the pipe route is confirmed.

The line of the pipe to be installed/split should be monitored along its length to ensure no variance from its path.

Consideration should be given for a leakage survey to be undertaken before work starts, during the works if safe to do so and following completion. If there is any likelihood of damage to the asset, the operation shall be stopped immediately.

7.4.2.1 Tunnelling

Ground movement may occur when tunnelling in soft ground conditions. Ground movement contours from the tunnelling operation shall be calculated and all gas assets within the affected zone should be identified and assessed.

PE assets can tolerate some differential ground movement.

For cast and ductile iron assets, acceptable limits on stress increase and joint disturbances are defined in the performance acceptance criteria for iron mains.

For steel assets an integrity assessment should be carried out according to the industry standard **IGEM/TD/12 – Pipework stress analysis for gas industry plant**. An expert on Soil/Pipe Interaction Analysis should be sought when required for the evaluation of ground movement effects on the assets.

For any proposed tunnelling works, due to the likely impact on our assets you must contact the diversions team to determine if diversion or replacement of the asset is required before commencement of your works.







7.4.3 Changes to depth of cover

The depth of cover over or around Cadent's iron assets shall not be altered. If a change in the depth of cover is required, you must contact the diversions team to arrange for diversion or replacement of the asset before commencement of your works.

For PE and steel pipes, reductions in depth of cover are only permitted if the below minimum depths of cover can be maintained (following investigation across the affected length):

- In fields and agricultural land 1.1m
- In roads and verges 750mm
- In footpaths 600mm
- In private property 600mm

Substantial increases in depth of cover shall not be permitted.

Where a change in the depth of cover affects attachments and projections such as services and valves, liaison with our diversions team is required to ensure these are appropriately protected or altered.

7.4.4 Piling

No piling shall be allowed within 15m of an asset without an assessment of the vibration levels at the asset.

For steel or PE assets, the peak particle velocity at the asset shall be limited to a maximum level of 75mm/sec.

For iron assets, the peak particle velocity shall be limited to a maximum level of 25mm/sec.

The promoter of the works should determine the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure the allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent Plant Protection Officer on request.

Where ground conditions include silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the asset shall be made, which may require expert advice.





7.4.5 Demolition

No demolition should be allowed within 150m of an asset for 400m for a structure mass greater than 10,000 tonnes without an assessment of the vibration levels at the asset.

For steel or PE assets, the peak particle velocity at the asset shall be limited to a maximum level of 75mm/sec.

For iron assets, the peak particle velocity at the asset shall be limited to a maximum level of 25mm/sec.

The promoter of the works should determine the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure the allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent Plant Protection Officer on request.

Where ground conditions include silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the asset shall be made. Expert advice may need to be sought.

Where demolition is proposed you must ensure that the gas supply to the premises has been isolated in a suitable, identified location.

7.4.6 Blasting

The Maximum Instantaneous Charge (MIC) dictates the distance at which an assessment of the vibration levels (at the located asset) is required. The measured distances are as follows:

- 500m if the MIC is greater than 200kg
- 250m if the MIC is greater than 10kg but less than 200kg
- 100m if the MIC is 10kg or less

For steel or PE assets, the peak particle velocity at the asset shall be limited to a maximum level of 75mm/sec.

For iron assets, the peak particle velocity at the asset shall be limited to a maximum level of 25mm/sec.

The promoter of the works should determine the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent Plant Protection Officer on request.







Where ground conditions include silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the asset shall be made. Expert advice may need to be sought.





7.4.7 Surface mineral extraction

An assessment shall be carried out on the effect of surface mineral extraction activity within 100m of an asset. Consideration should also be given to extraction around plant and equipment associated with assets (e.g. cathodic protection ground beds).

Where the mineral extraction extends up to the asset easement, a stable slope angle and stand-off distance between the asset and slope crest shall be determined. Where an easement exists, the easement strip shall be clearly marked by a suitable permanent boundary, such as a post and wire fence. Additionally, where appropriate, slope indicator markers shall be erected to facilitate the verification of the recommended slope angle as the slope is formed, by the third party. The asset easement and slope need to be inspected periodically to identify any signs of developing instability.

This may include any change of slope profile including:

- Bulging
- The development of tension cracks on the slope or easement
- Any changes in drainage around the slope

The results of each inspection should be recorded.

Where surface mineral extraction activities are planned within 100m of the asset but do not extend up to the asset easement boundary, an assessment should be made as to whether this could promote instability in the vicinity of the asset. This may occur where the asset is routed across a natural slope or the excavation is deep. A significant cause of this problem is where the groundwater profile is affected by changes in drainage or the development of lagoons.

Where the extraction technique involves explosives, the provisions of Section 7.4.6 apply.

7.4.8 Deep mining

Assets routed within 1km of active deep mining may be affected by subsidence resulting from mineral extraction. The determination of protective or remedial measures will normally require expert assistance.

7.4.9 Landfilling

The creation of slopes outside of the asset easements may promote instability within the vicinity of the asset. An assessment shall be carried out by the promoter of the works to determine the effect of any landfilling activity within 100m of an asset. The assessment is particularly important if landfilling operations are taking place on a slope in which the asset is routed.

7.4.10 Pressure testing

Pressure testing should not be permitted within 8m of an asset unless suitable precautions have been taken against the effects of a pipe failure.







7.4.11 Seismic surveys

The promoter of works shall advise Cadent of any seismic surveying work in the vicinity of PE or steel assets that will result in peak particle velocities in excess of 75mm/sec at the asset or for iron assets that will result in peak particle velocities in excess of 25mm/sec at the asset.

The promoter of the works should determine the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent Plant Protection Officer on request.

7.4.12 Hot work

Where the Cadent's metallic gas asset has been exposed, welding (or other hot works that may involve naked flames) should not be carried out in proximity of the gas asset.

If the gas asset is PE (or a PE asset is contained within a metallic sleeve) welding, or other hot works that may involve naked flames, shall not take place within 500mm of the gas asset.

Protection measures shall be installed to prevent the effects of sparks, radiant heat transfer etc.

Any hot works in proximity to a Cadent gas asset shall require leakage surveys prior to, during and after the works. If gas is detected, all works shall stop, and the leak immediately reported to the National Gas Emergency Service on 0800 111 999.

7.4.13 Wind turbines

Wind turbines shall not be sited any closer than 1.5 times the proposed height of the turbine mast away from the nearest edge of the asset.

Further guidance can be found from UKOPA's Good Practice Guide 13 (UKOPA/GP/013) -Requirements for the Siting and Installation of Wind Turbines Installations in the Vicinity of Buried Pipelines.

7.4.14 Solar farms

Solar Farms can be built adjacent to assets but never within an easement.

Interference checks shall be completed by the third party to ensure that the solar installations and associated infrastructure have no negative effect on cathodic protection systems.

Further guidance can be found from UKOPA's Good Practice Guide 14 (UKOPA/GP/014) -Requirements for the Siting and Installation of Solar Photovoltaic (PV) Installations in the Vicinity of Buried Pipelines.







7.4.15 Lifting operations

Where lifting operations are planned to be carried out in the vicinity of low pressure apparatus a site-specific risk assessment and lift plan is required.

Protection shall be afforded to live apparatus when carrying out the works to prevent impact damage in the event of an uncontrolled failure or drop. Any loads shall be secured using suitable and sufficient lifting accessories to reduce the likelihood of the load being dropped.

Consideration shall be given to the location of lifting equipment and the loads induced into the ground to avoid the potential overloading of buried apparatus. Where the site cannot be laid out to avoid loading gas apparatus, the asset shall be suitably protected with the consent of the Cadent Plant Protection Officer. Alternatively, the asset will require replacement/diversion.

7.5 Backfilling and reinstatement

Reinstatement around Cadent apparatus still poses a risk to the integrity of the asset. A gas asset must not be located within the footway or carriageway construction as this has the potential to cause damage to the apparatus during and post completion of the reinstatement.

No backfilling should be undertaken without Cadent's agreement to proceed. Some equipment may not be suitable for use over or around assets due to the adverse effects of excessive compaction and vibration levels.

A gas asset shall not be encased in concrete or have concrete positioned within 300mm of the asset or anywhere above an iron gas asset due to the need for future access.

The fine fill material should be firmly packed around the pipe in 100mm layers to achieve a compacted thickness of 75mm and shall be laid to a minimum depth of 150mm above the crown of the asset

Mechanical compaction equipment shall not be used until a 250mm hand rammed layer has been compacted above the crown of the pipe

For backfilling and reinstatement in the vicinity of iron apparatus, in addition to the above, the maximum weight of compaction equipment used above the crown of the pipe shall not exceed 1.5t/m² and vibratory compaction shall not be used.

Material used in the backfill shall conform to the following requirements:

- Sand shall be well-graded in accordance with BS EN 13242:2002+A1:2007
- It shall not contain any sharp objects, large stones or bricks
- Foamed concrete shall not be used

We will require marker tape to be installed at least 250mm above the crown of the pipe. Any damage to the asset or coating shall be reported to the Cadent Plant Protection Office so that damage can be assessed, and repairs carried out.





Minor (and existing) damage to pipe coating and cathodic protection test leads will be repaired by Cadent free of charge. If the asset has been backfilled without the knowledge of the Cadent Plant Protection Officer, the third party will need to re-excavate to enable the condition of the asset coating to be assessed.

All temporary supports shall be removed prior to backfill but only when the asset is sufficiently supported by bedding material around the pipe.



8. Working in the Vicinity of a Pressure Reduction Installation (PRI)

Pressure reduction installations come in a variety of forms:

- Above Ground Installation (AGI) Sites with exposed pipes surrounded by fencing
- Above Ground Installation (AGI) District governors often found in large above ground kiosks with vent stacks attached
- Below Ground Installation District governors with large surface governors for valves and pressure reduction equipment with an above ground control cabinet and vent stack
- Service governor Installations Small service governors providing gas to a small number of customers in an area often identified by a small green or brick kiosk

Where excavations are to be made within 10 metres of the perimeter of a pressure reduction installation (above or below ground), with the exception of service governor installations, appropriate protection methods should be determined and recorded by the Cadent Plant Protection Officer.

These installations may have magnetic slam shut devices which could operate in the event of high vibration levels being caused by the works. Advice on whether these are present shall be sought from the Cadent Plant Protection Officer and we may need to have an operative, with the competence to reset the plant, on site whilst your works are being undertaken.

Hazardous areas may be present around these installations and no ignition sources are permitted within these zones. Information on the zonings shall be sought from the Cadent Plant Protection Officer prior to commencement of any works on site.

There may be telemetry and pressure recording lines in the vicinity of these installations therefore extreme caution must be exercised when planning and undertaking works it the vicinity of these assets.

In addition to this, the safety advice detailed in either or a combination of Sections 5, 6 or 7 shall be observed when working in the proximity of an AGI.

Access to gas assets shall be maintained at all times.



9. Tree Planting

Before any tree planting is carried out in the vicinity of a Cadent asset or its easement, written consent should be obtained. This approval should be subject to Cadent retaining the right to remove any trees which might become a danger or restrict access to the asset at any time in the future.

The only hardwood plants which can be planted directly across an asset are shallow rooting hedge plants such as Quickthorn, Blackthorn, etc., and these shall only be planted where a hedge is necessary for screening or to indicate a field boundary.

Raspberries, Gooseberries and Blackcurrants shall not be planted within 2m of the outside edge of the pipe.

Dwarf Apple Stocks shall not be planted within 3m of an asset.

Christmas trees (Picea Abies) shall not be planted within 3 metres of an asset. However, permission may be given on the strict understanding that Christmas trees are clear-felled at intervals not exceeding seven years.

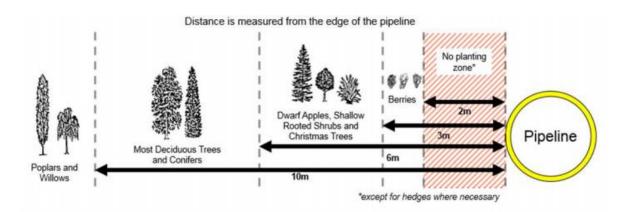
The following trees, and those of similar size which may be deciduous or evergreen, shall not be planted within 6 metres of an asset:

 Ash, Beech, Birch, most Conifers, Elm, Maple, Horse Chestnut, Oak, Sycamore, Apple, Lime and Pear trees.

Dense mass planting shall not be carried out within 10m of the outside edge of the pipe.

Poplar and Willow trees shall not be planted within 10m of the outside edge of the pipe.

For further guidance please refer to NJUG Volume 4.







10. Unidentified Exposed Pipes

An unidentified pipe is one that is not shown on any current or historical records.

Iron and steel water pipes and gas pipelines may appear very similar. If any such pipe is uncovered, it shall be treated as if it were a gas pipe.

If upon checking with all other utilities you believe an unidentified pipe to be a gas pipe, the promoter of the works shall contact plantprotection@cadentgas.com with the following information:

- LSBUD enquiry reference
- Site address (please include postcode and grid references)
- Site contact details
- Size of pipe
- Pipe material
- Confirmation that the unidentified pipe is exposed (if not, it will need to be exposed prior to our attendance)
- Confirmation that Cadent and all other asset owners plans, are available for review and inspection
- Photos of the pipe

Please be aware that it can take up to 28 days for us to confirm whether the unidentified exposed pipe is a gas asset or not.





11. Action in case of Damage to an Asset

If you hit a gas asset, whether the damage is visible or not, or in the event of an emergency, call the National Gas Emergency Service immediately on 0800 111 999*.

If the Cadent asset is damaged, even slightly, and even if no gas leak has occurred, then the following precautions shall be taken immediately:

- Shut down all plant and machinery and extinguish any potential sources of ignition.
- Evacuate all personnel from the vicinity of the asset
- Notify Cadent using the free 24-hour emergency telephone number 0800 111999
- Notify the Cadent responsible person immediately using the contact telephone number provided.
- Ensure no one approaches the asset.
- Do not try to stop any leaking gas.
- Provide assistance as requested by Cadent, or emergency services to safeguard persons and property





12. References

Document reference	Title
HASAWA	The Health and Safety at Work etc Act 1974
CDM	The Construction (Design and Management) Regulations 2015
LOLER	Lifting Operations and Lifting Equipment Regulations 1998
RIDDOR	Reporting of Injuries, Diseases & Dangerous Occurrences Regulations 2013,
GS(M)R	Gas Safety (Management) Regulations 1996
PSR	Pipelines Safety Regulations 1996
NRSWA	New Roads and Street Works Act 1991
HS(G)47	Avoiding Danger from Underground Services
IGEM/SR/18	Safe Working Practices to Ensure the Integrity of Gas Pipelines and Associated Installations
IGEM/TD/12	Pipework stress analysis for gas industry plant
NJUG Volume 4	Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees
UKOPA/11/0027	Requirements for the Siting of Wind Turbines Close to HP Pipelines
UKOPA/GP/013	Requirements for the Siting and Installation of Wind Turbines Installations in the Vicinity of Buried Pipelines
UKOPA/GP/014	Requirements for the Siting and Installation of Solar Photovoltaic (PV) Installations in the Vicinity of Buried Pipelines







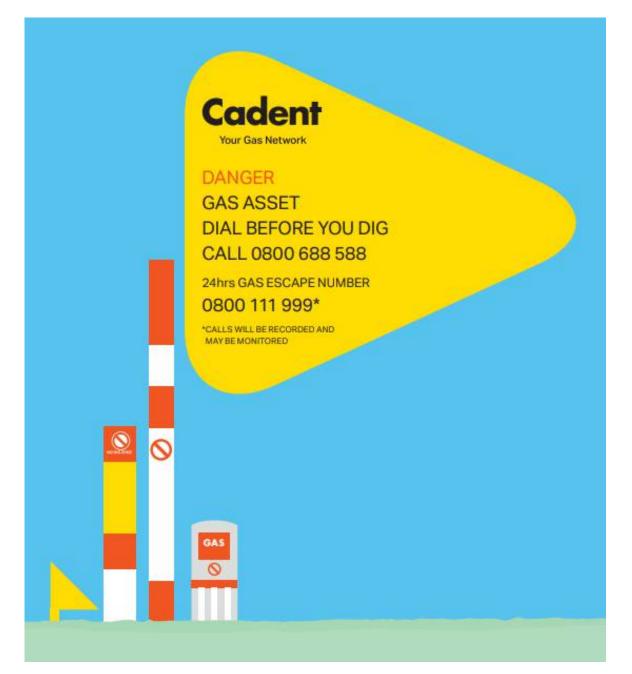
13. Glossary of Terms

Term	Definition	
Easement	Easements are negotiated legal entitlements between Cadent and landowners and allow Cadent to lay, operate and maintain assets within the easement strip. Easement strips may vary in width, typically between 6 and 25 metres depending on the diameter and pressure of the pipeline. Consult Cadent for details of the extent of the easement strip where work is intended.	
Liquefaction	Liquefaction is a phenomenon in which the strength and stiffness of the soil is reduced by earthquake shaking or other rapid loading. Liquefaction occurs in saturated soils, that is, soils in which the space between individual particles is completely filled with water. When liquefaction occurs, the strength of the soil decreases and the ability of the soil to support assets are reduced.	
Promoter of works	The person or persons, firm, company or authority for whom new services, structures or other works in the vicinity of existing Cadent assets and associated installations operating above 7 bar gauge are being undertaken.	
Cadent Plant Protection Officer	The person or persons appointed by Cadent with the competencies required to act as the Cadent representative for the purpose of monitoring a particular activity.	
Banksman	Another person who assists the machine operator from a position where they can safely see into the excavation and warn the driver of any services or other obstacles. This person should remain outside of the operating radius of the excavator arm and bucket.	





Appendix A – Asset Location Markers









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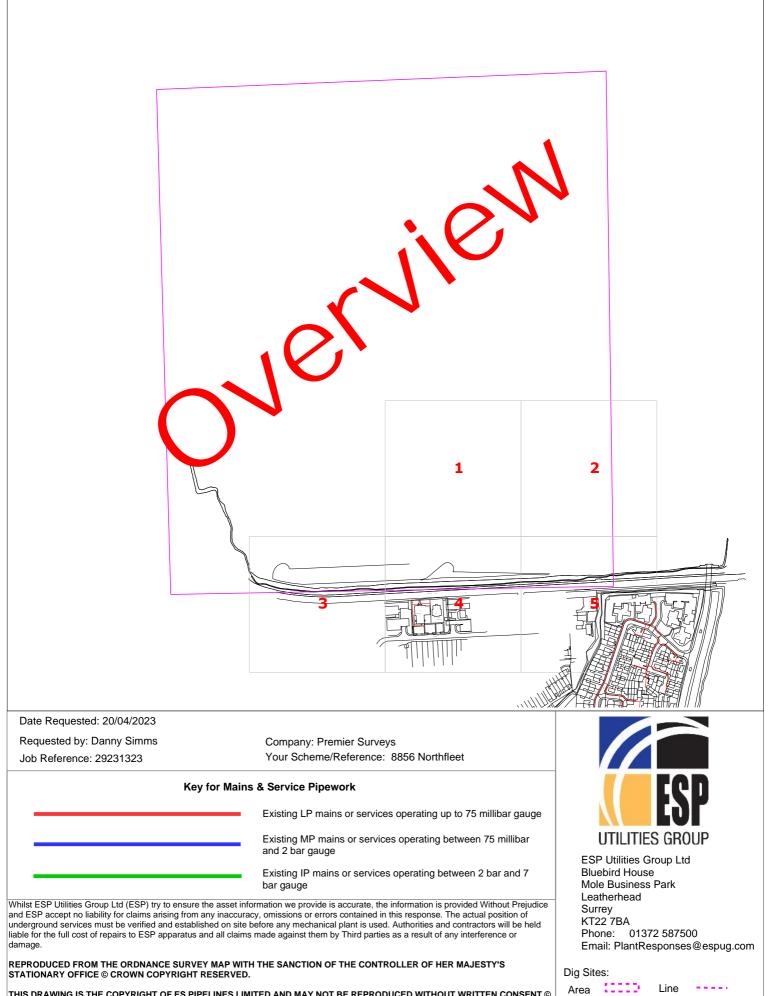






(ESP)





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Approx scale on A4 paper: 1:1000 (excluding Overview map)

Date Requested: 20/04/2023

Requested by: Danny Simms Job Reference: 29231323

Company: Premier Surveys Your Scheme/Reference: 8856 Northfleet

Key for Mains & Service Pipework

Existing LP mains or services operating up to 75 millibar gauge

Existing MP mains or services operating between 75 millibar and 2 bar gauge

Existing IP mains or services operating between 2 bar and 7 bar gauge $% \left({\left[{{{\rm{D}}_{\rm{T}}} \right]_{\rm{T}}} \right)_{\rm{T}}} \right)$

Whilst ESP Utilities Group Ltd (ESP) try to ensure the asset information we provide is accurate, the information is provided Without Prejudice and ESP accept no liability for claims arising from any inaccuracy, omissions or errors contained in this response. The actual position of underground services must be verified and established on site before any mechanical plant is used. Authorities and contractors will be held liable for the full cost of repairs to ESP apparatus and all claims made against them by Third parties as a result of any interference or damage.

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ESP Utilities Group Ltd Bluebird House Mole Business Park Leatherhead Surrey KT22 7BA Phone: 01372 587500 Email: PlantResponses@espug.com

Dig Sites:

Area Line -----Approx scale on A4 paper: 1:1000 (excluding Overview map)



	Requested: 20/04/2023		
	ested by: Danny Simms	Company: Premier Surveys	
Job R	eference: 29231323	Your Scheme/Reference: 8856 Northfleet	
_		Key for Mains & Service Pipework Existing LP mains or services operating up to 75 millibar gauge	
		Existing MP mains or services operating between 75 millibar and 2 bar gauge	UTILITIES GROUP ESP Utilities Group Ltd

2

Existing IP mains or services operating between 2 bar and 7 bar gauge $% \left({\left[{{{\rm{D}}_{\rm{T}}} \right]_{\rm{T}}} \right)_{\rm{T}}} \right)$

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Bluebird House

Leatherhead

Surrey

KT22 7BA

Mole Business Park

Phone: 01372 587500

Area Line -----Approx scale on A4 paper: 1:1000 (excluding Overview map)

Email: PlantResponses@espug.com

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Requested by: Danny Simms	Company: Premier Surveys	
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	Existing MP mains or services operating between 75 millibar and 2 bar gauge	UTILITIES GROUP ESP Utilities Group Ltd
	Existing IP mains or services operating between 2 bar and 7 bar gauge	Bluebird House Mole Business Park Leatherhead
Whilst ESP Utilities Group Ltd (ESP) try to ensure the asset information we provide is accurate, the information is provided Without Prejudice and ESP accept no liability for claims arising from any inaccuracy, omissions or errors contained in this response. The actual position of underground services must be verified and established on site before any mechanical plant is used. Authorities and contractors will be held liable for the full cost of repairs to ESP apparatus and all claims made against them by Third parties as a result of any interference or damage.		Surrey KT22 7BA Phone: 01372 587500 Email: PlantResponses@espug.com
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	and 2 bar gauge	ESP Utilities Group Ltd
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Date Requested: 20/04/2023		
Requested by: Danny Simms Job Reference: 29231323	Company: Premier Surveys Your Scheme/Reference: 8856 Northfleet	
Key fo	or Mains & Service Pipework	
	Existing LP mains or services operating up to 75 millibar gauge	163
	Existing MP mains or services operating between 75 millibar and 2 bar gauge	UTILITIES GROUP ESP Utilities Group Ltd
	Existing IP mains or services operating between 2 bar and 7 bar gauge	Bluebird House Mole Business Park
nd ESP accept no liability for claims arising from any	e asset information we provide is accurate, the information is provided Without Prejudice v inaccuracy, omissions or errors contained in this response. The actual position of d on site before one mechanical plant is used. Authorities and contractors will be held.	Leatherhead Surrey KT22 7BA
nderground services must be verified and establishe able for the full cost of repairs to ESP apparatus and amage.	d on site before any mechanical plant is used. Authorities and contractors will be held all claims made against them by Third parties as a result of any interference or	Phone: 01372 587500 Email: PlantResponses@espug.com
EPRODUCED FROM THE ORDNANCE SURVEY N TATIONARY OFFICE © CROWN COPYRIGHT RES	NAP WITH THE SANCTION OF THE CONTROLLER OF HER MAJESTY'S SERVED.	Dig Sites:

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Approx scale on A4 paper: 1:1000 (excluding Overview map)

Area



PRECAUTIONS TO BE TAKEN WHEN CARRYING OUT WORK IN THE VICINITY OF UNDERGROUND GAS PIPES

ADVICE TO SITE PERSONNEL

MANAGEMENT NOTE

Please ensure that a copy of this note is read by your site management and to your site operatives.

Early consultation with ESP Utilities Group prior to excavation is recommended to obtain the location of plant and precautions to be taken when working nearby.

This Guidance Note should be read in conjunction with the Health and Safety Executive guidance HSG47 "Avoiding danger from underground services".

Introduction

Damage to ESP Utilities Group's plant can result in uncontrolled gas escapes which may be dangerous. In addition these occurrences can cause expense, disruption of work and inconvenience to the public.

Various materials are used for gas mains and services. Cast Iron, Ductile Iron, Steel and Plastic pipes are the most widely found. Modern Plastic pipes are either bright yellow or orange in colour.

Cast Iron and Ductile Iron water pipes are very similar in appearance to Cast Iron and Ductile Iron gas pipes and if any Cast Iron or Ductile Iron pipe is uncovered, it should be treated as a gas pipe. ESP Utilities Group do not own any metallic gas pipes but their gas network infrastructures may be connected to Cast Iron, Ductile Iron or Steel pipes owned by Distribution Network Operators.

The following general precautions apply to Intermediate Pressure (2-7barg MOP), Medium Pressure (75mbarg-2barg MOP), Low Pressure (up to 75mbarg MOP) and other gas mains and services likely to be encountered in general site works and are referred to within this document as '**pipes**'.

Locating Gas Pipes

It should be assumed when working in urban and residential areas that gas mains and services are likely to be present. On request, ESP Utilities Group will give approximate locations of pipes derived from their records. The records do not normally show the position of service pipes but their probable line can be deducted from the gas meter position. ESP Utilities Group's staff will be pleased to assist in the location of gas plant and provide advice on any precautions that may be required. The records and advice are given in good faith but cannot be guaranteed until hand excavation has taken place. Proprietary pipe and cable locators are available although generally these will not locate plastic pipes.

Safe working Practices

To achieve safe working conditions adjacent to gas plant the following must be observed:

Observe any specific request made by ESP Utilities Group's staff.

Gas pipes must be located by hand digging before mechanical excavation. Once a gas pipe has been located, mechanical excavation must proceed **with care**. A mechanical excavator must not in any case be used within 0.5 metre of a gas pipe and greater safety distances may be advised by ESP Utilities Group depending on the mains maximum operating pressure (MOP).

Where heavy plant may have to cross the line of a gas pipe during construction work, the number of crossing points should be kept to a minimum. Crossing points should be clearly indicated and crossings at other places along the line of the pipe should be prevented.

Where the pipe is not adequately protected by an existing road, crossing points should be suitably reinforced with sleepers, steel plates or a specially constructed reinforced concrete raft as necessary. ESP Utilities Group staff will advise on the type of reinforcement necessary.

No explosives should be used within 30 metres of any gas pipe without prior consultation with ESP Utilities Group.

ESP Utilities Group <u>must</u> be consulted prior to carrying out excavation work within 10 metres of any above ground gas installation.

Where it is proposed to carry out piling or boring within 15 metres of any gas pipe, ESP Utilities Group should be consulted prior to the commencement of the works.

Access to gas plant must be maintained at all times during on site works.



Proximity of Other Plant

A minimum clearance of 300 millimetres (mm) should be allowed between any plant being installed and an existing gas main to facilitate repair, whether the adjacent plant be parallel to or crossing the gas pipe. No apparatus should be laid over and along the line of a gas pipe irrespective of clearance.

No manhole or chambers shall be built over or around a gas pipe and no work should be carried out which results in a reduction of cover or protection over a pipe, without consultation with ESP Utilities Group.

Support and Backfill

Where excavation of trenches adjacent to any pipe affects its support, the pipe must be supported to the satisfaction of ESP Utilities Group and must not be used as an anchor or support in any way. In some cases, it may be necessary to divert the gas pipe before work commences.

Where a trench is excavated crossing or parallel to the line of the gas pipe, the backfill should be adequately compacted, particularly beneath the pipe, to prevent any settlement which could subsequently cause damage to the pipe.

In special cases it may be necessary to provide permanent support to the gas pipe, before backfilling and reinstatement is carried out. Backfill material adjacent to gas plant must be selected fine material or sand, containing no stones, bricks or lumps of concrete, etc., placed to a minimum depth of 150mm around the pipes and well compacted by hand. No power compaction should take place until 300mm of selected fine fill has been suitably compacted.

If the road construction is in close proximity to the top of the gas pipe, a "cushion" of selected fine material such as sand must be used to prevent the traffic shock being transmitted to the gas pipe. The road construction depth must not be reduced without permission from the local Highway Authority.

No concrete or other hard material must be placed or left under or adjacent to any Cast Iron pipe as this may cause fracture of the pipe at a later date.

Concrete backfill should not be used closer than 300 mm to the pipe.

Damage to Coating

Where a gas pipe is coated with special wrapping and this is damaged, even to a minor extent ESP Utilities Group must be notified so that repairs can be made to prevent future corrosion and subsequent leakage.

Welding or "Hot Works"

When welding or other "hot works" involving naked flames are to be carried out in close proximity to gas plant and the presence of gas is suspected, ESP Utilities Group must be contacted before work commences to check the atmosphere. Even when a gas free atmosphere exists care must be taken when carrying out hot works in close proximity to gas plant in order to ensure that no damage occurs.

Particular care must be taken to avoid damage by heat or naked flame to plastic gas pipes or to the protective coating on other gas pipes.

Leakage from Gas Mains or Services

If damage or leakage is caused or an escape of gas is smelt or suspected the following action should be taken at once:

- Remove all personnel from the immediate vicinity of the escape;
- Contact the National Gas Emergency Service on: 0800 111 999;
- Prevent any approach by the public, prohibit smoking, extinguish all naked flames or other source of ignition for at least 15 metres from the leakage;
- Assist gas personnel, Police or Fire Service as requested.

REMEMBER - IF IN DOUBT; SEEK ADVICE FROM ESP UTILITIES GROUP.

ESP Utilities Group can be contacted at:

Office Address: Bluebird House, Mole Business Park, Leatherhead, Surrey, KT22 7BA

Office Tel: 01372 587 500; Fax: 01372 377 996

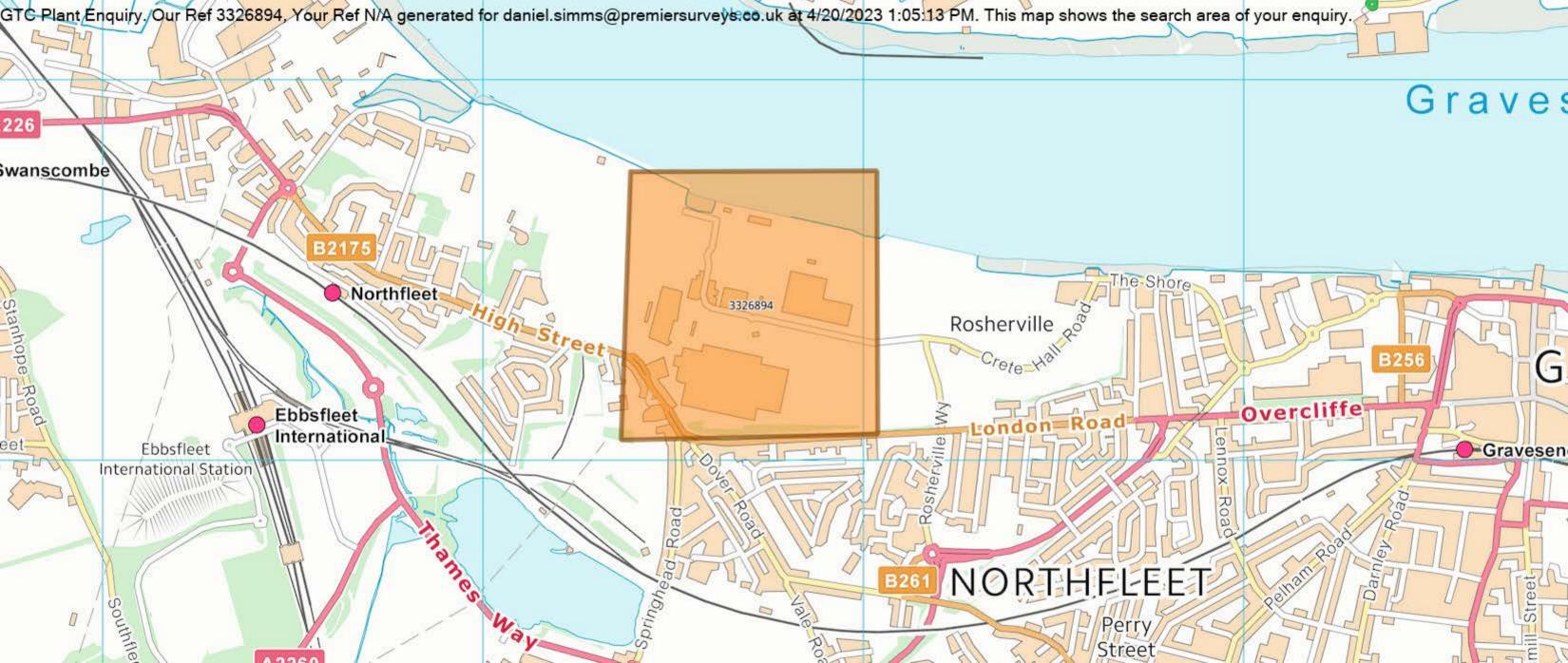
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(Electricity and gas)





GTC Apparatus Not Found In Search Area

Our Plant Enquiry Service Ref: 3326894 Your Enquiry Ref: N/A

Dear Danny,

Thank you for your enquiry concerning apparatus in the vicinity of your proposed work. GTC can confirm that we have no apparatus in the vicinity but please note that other asset owners may have and ensure all utility owners have been consulted. For your records, the search area is shown in the attached map.

Please note our assets now include those owned and operated by:

- GTC Pipelines Limited
- Independent Pipelines Limited
- Quadrant Pipelines Limited
- Electricity Network Company Limited
- Independent Power Networks Limited
- Independent Water Networks Limited
- Open Fibre Networks Limited
- Independent Community Heating Limited

If you have any queries or require any further information please do not hesitate to contact us.

Your sincerely,

GTC Plant Enquiry Service.

GTC Synergy House Woolpit Business Park Woolpit Bury St Edmunds Suffolk, IP30 9UP Tel: 01359 240363 plant.enquiries@gtc-uk.co.uk

NOTE: This E-Mail originates from GTC, Synergy House, Woolpit Business Park, Woolpit, Bury St Edmunds, Suffolk, IP30 9UP VAT Number: GB688 8971 40. Registered No: 029431.

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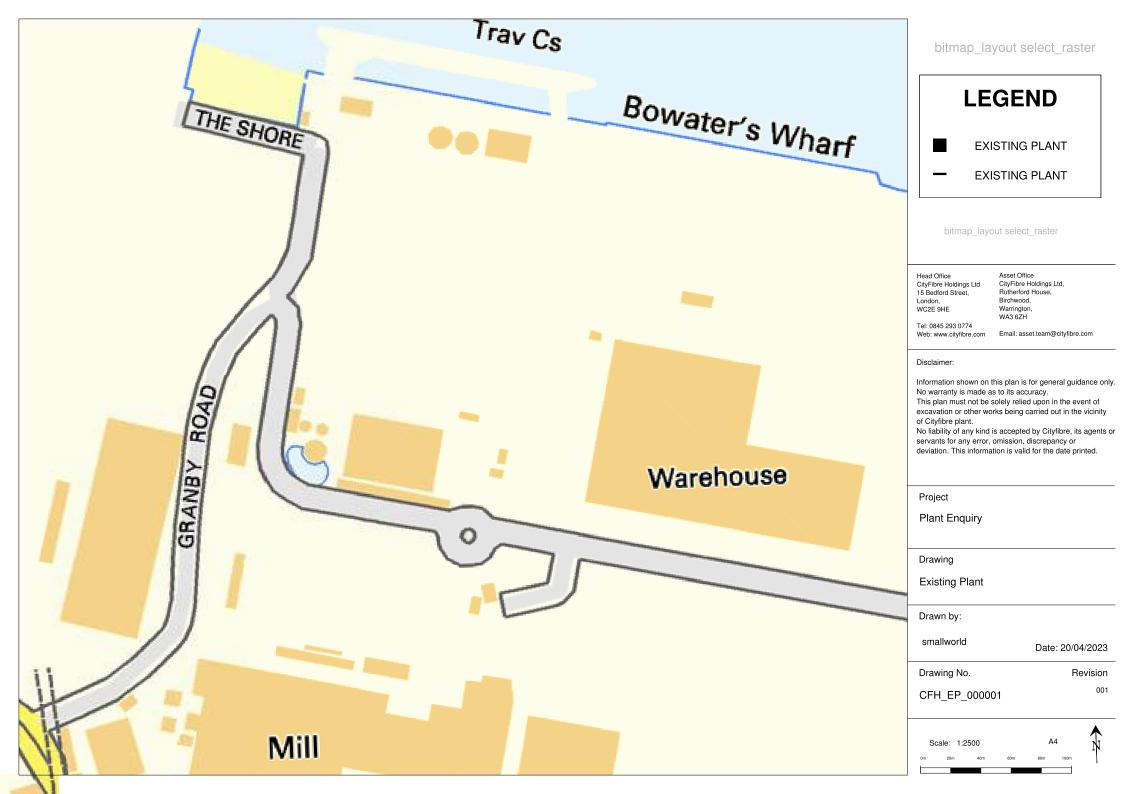
Thank you

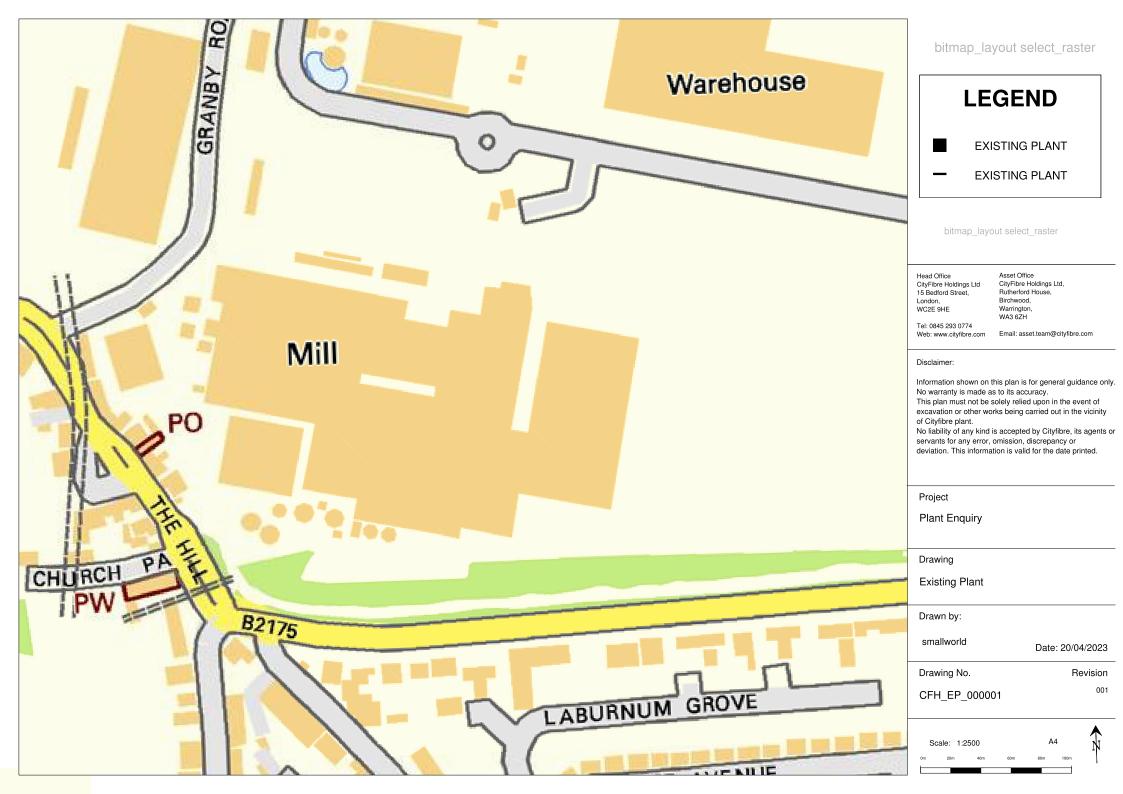


Fibre Optic

(City Fibre)











(EQUANS)



 From:
 nrswa.uk@equans.com

 To:
 Daniel Simms

 Subject:
 REF 8856 Kimberly Clark, Northfleet, Gravesend DA11 9AD - NGR E562656 N174281

 Date:
 21 April 2023 10:50:35

 Attachments:
 image002.png

To whom it may concern

Regarding your request for details of existing services in the specified area(s):

POSTCODE: DA11 9AD

We can confirm that, based on the details provided to us, we have no buried plant or equipment in the identified area(s).



UK & IRELAND

From: Daniel Simms <Daniel.Simms@premiersurveys.co.uk>
Sent: 20 April 2023 12:10
To: Daniel Simms <Daniel.Simms@premiersurveys.co.uk>
Subject: [External] Request for Plans only-REF 8856 Kimberly Clark, Northfleet, Gravesend DA11 9AD - NGR E562656 N174281

Dear Sir/Madam

Re: - Underground Apparatus / Plant-Request for Plans only Site Ref. 8856 Kimberly Clark, Northfleet, Gravesend DA11 9AD - NGR E562656 N174281 To enable the study of background information for belowground mapping survey works and initial design considerations at the above site location, please provide plan(s) indicating the position and type of your apparatus in the locality of the site detailed above. The site location is as per the provided OS Coordinates and highlighted on the attached plan. If you have no apparatus in the area, please advise. Your earliest response would be greatly appreciated.

Best Regards

Daniel Simms Utility Survey Manager For Premier Surveys Limited daniel.simms@premiersurveys.co.uk www.premiersurveys.co.uk Tel: 0115 9622876 Mob: 07564 812240 Midlands Office: 9-11 Lowater Street, Carlton, Nottingham, NG4 1JJ London Office: Unit 3, Ivory Wharf, Elephant Lane, London, SE16 4JD



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(Vodafone)







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Legend

Access Chamber.Location Active Footway Chamber ----- Underground Route.Route Active - Owned Underground Route.Route Active - Leased

vodafone

Vodafone Limited (No01471587) registered office is at Vodafone House, The Connection, Newbury, Berkshire, RG142FN

Plot Date : 24/04/2023 Scale : 1:1250

S

This plan shows apparatus owned by members of the Vodafone Group of companies (including legacy telecommunication companies currently within the group)

Information with regard to such apparatus should always be obtained from Vodafone or its appointed agents.



(Colt)



From:	Plantenquiries - CA Telecom
To:	Daniel Simms
Subject:	RE: Request for Plans only-REF 8856 Kimberly Clark, Northfleet, Gravesend DA11 9AD - NGR E562656 N174281
Date:	25 April 2023 09:49:41
Attachments:	image002.png
	image003.png

Please Note: Our search criteria has changed. We previously searched for Colt Network which was within 200 metres, this has now changed to 50 metres. The negative response will be for all enquiries that the network is 50 metres or more away from the place of enquiry.

Dear Sir/Madam,

Thank you for your enquiry for the above reference.

We can confirm that Colt Technology Services do not have apparatus near the above location as presented on your submitted plan, if any development or scheme amendments fall outside the 50 metre perimeter new plans must be submitted for review.

Search is based on Overseeing Organisation Agent data supplied; we do not accept responsibility for O.O. Agent inaccurate data.

If we can be of any further assistance please do not hesitate to contact us.

Kind regards,

Plant Enquiry Team



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From: Daniel Simms < Daniel.Simms@premiersurveys.co.uk>

Sent: 20 April 2023 12:10

To: Daniel Simms < Daniel.Simms@premiersurveys.co.uk>

Subject: Request for Plans only-REF 8856 Kimberly Clark, Northfleet, Gravesend DA11 9AD - NGR E562656 N174281

Dear Sir/Madam

Re: - Underground Apparatus / Plant-Request for Plans only

Site Ref. 8856 Kimberly Clark, Northfleet, Gravesend DA11 9AD - NGR E562656 N174281

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Best Regards

Daniel Simms Utility Survey Manager For Premier Surveys Limited danieLsimms@premiersurveys.co.uk www.premiersurveys.co.uk Tel: 0115 9622876 Mob: 07564 812240 Midlands Office: 9-11 Lowater Street, Carlton, Nottingham, NG4 1JJ London Office: Unit 3, Ivory Wharf, Elephant Lane, London, SE16 4JD





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(Lumen)



From:
To:
Subject:
Date:
Attachmen

Plantenquiries Daniel Simms RE: E04-23-4310 Request for Plans only-REF 8856 Kimberly Clark, Northfleet, Gravesend DA11 9AD - NGR E562656 N174281 24 April 2023 13:25:12 image001.png image006.png image599145.p image861201.p

Dear Sir or Madam,

Thank you for your plant enquiry below.

image250440.png image213011.png image627687.png

We can confirm that Lumen Technologies (formerly CenturyLink Communications UK Limited, Level 3, Global Crossing (UK) Ltd, Global Crossing PEC, Fibernet UK Ltd and Fibrespan Ltd) do not have any apparatus within the indicated works area.

OCU responds to plant enquiries for all of the above and therefore you only need send one plant enquiry to cover all of these companies.

Please note that this response is only valid for 3 months. If your works do not commence within this time period, please resubmit your plant enquiry for assessment before any works commence

Regards

Plant Enquiries Dept OCU Borehamwood Ind. Park Rowley Lane Borehamwood WD6 5PZ

Office: +44 (0)208 731 4613 Fax: +44 (0)208 731 4601 Email: plantenquiries@ocugroup.com Web: http://www.ocugroup.com





Plantenquiries

OCU

plantenquiries@ocugroup.com Ghat with me on Teams



in 🕨 www.ocugroup.com

Reg. No.: 09307607 Head Office: Artemis House, Greek Street, Stockport, SK3 8AB VAT No.: 426 430 711

From: Daniel Simms < Daniel.Simms@premiersurveys.co.uk>

Sent: 20 April 2023 12:10

To: Daniel Simms < Daniel.Simms@premiersurvevs.co.uk>

Subject: Request for Plans only-REF 8856 Kimberly Clark, Northfleet, Gravesend DA11 9AD - NGR E562656 N174281

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Dear Sir/Madam

Re: - Underground Apparatus / Plant-Request for Plans only

Site Ref. 8856 Kimberly Clark, Northfleet, Gravesend DA11 9AD - NGR E562656 N174281

To enable the study of background information for belowground mapping survey works and initial design considerations at the above site location, please provide plan(s) indicating the position and type of your apparatus in the locality of the site detailed above.

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Best Regards

DR

Daniel Simms Utility Survey Manager For Premier Surveys Limited daniel.simms@premiersurveys.co.uk www.premiersurveys.co.uk Tel: 0115 9622876 Mob: 07564 812240 Midlands Office: 9-11 Lowater Street, Carlton, Nottingham, NG4 1JJ London Office: Unit 3, Ivory Wharf, Elephant Lane, London, SE16 4JD

FRSI

No designed to measure





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F35571

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(MBNL)





onfidential - External

Dear Sir/Madam

Turner & Townsend Project Management are appointed on behalf of MBNL to conduct Plant (apparatus) Searches in accordance with the relevant NRSWA Act 1991- Diversionary Works legislation. These searches considered plant belonging to EE (T-Mobile and Orange sites) and the HG3 mobile telecommunication networks.

MBNL do not have any plant that would be affected by the proposed work. Should you have any further queries please use the contact details below.

Thank you,

Kind regards,

MBNL SHQE Team

Turner & Townsend Advisory t: 0121 262 3663 | www.turnerandtownsend.com

Turner & Townsend Europe Limited

Registered office: Low Hall, Calverley Lane, Horsforth, Leeds LS18 4GH, United Kingdom | Registered in England and Wales | Registration No: 3514794

From: Daniel Simms <Daniel.Simms@premiersurveys.co.uk> Sent: 20 April 2023 12:10

To: Daniel Simms < Daniel.Simms@premiersurvevs.co.uk>

Subject: Request for Plans only-REF 8856 Kimberly Clark, Northfleet, Gravesend DA11 9AD - NGR E562656 N174281

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Best Regards

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Turner & Townsend Limited

For further information and registration details visit our website http://www.turnerandtownsend.com

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(Sky)



From: To: Subject: Date: Attachment

Daniel Simms Request for Plans only-REF 8856 Kimberly Clark, Northfleet, Gravesend DA11 9AD - NGR E562656 N174281 20 April 2023 16:05:43 image003.png



Thank you for your enquiry.

Please be advised that Sky Telecommunications Services Ltd will not be affected by your proposal.

Best endeavours have been made to ensure accuracy, however if you require further information, please contact us by email at nrswa@sky.uk.

Regards



From: Daniel Simms < Daniel.Simms@premiersurveys.co.uk> Sent: 20 April 2023 12:10 To: Daniel Simms < Daniel.Simms@premiersurveys.co.uk> Subject: [EXTERNAL] Request for Plans only-REF 8856 Kimberly Clark, Northfleet, Gravesend DA11 9AD - NGR E562656 N174281 Dear Sir/Madam Re: - Underground Apparatus / Plant-Request for Plans only Site Ref. 8856 Kimberly Clark, Northfleet, Gravesend DA11 9AD - NGR E562656 N174281 To enable the study of background information for belowground mapping survey works and initial design considerations at the above site location, please provide plan(s) indicating the position and type of your apparatus in the locality of the site detailed above. The site location is as per the provided OS Coordinates and highlighted on the attached plan. If you have no apparatus in the area, please advise. Your earliest response would be greatly appreciated. Best Regards Daniel Simms Utility Survey Manager For Premier Surveys Limited daniel.simms@premiersurveys.co.uk www.premiersurveys.co.uk Tel: 0115 9622876 Mob: 07564 812240 Midlands Office: 9-11 Lowater Street, Carlton, Nottingham, NG4 1JJ London Office: Unit 3, Ivory Wharf, Elephant Lane, London, SE16 4JD Design ? High-definition Laser Scanning - Measured Building Surveys - GIS Data Capture - BIM - GPS - Topographical Mapping & Site Surveys -

Underground Utility Surveys - 3D Modelling

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(Sota)





SOTA Plant Enquiries Daniel Simms RE: S04-23-1670 Request for Plans only-REF 8856 Kimberly Clark, Northfleet, Gravesend DA11 9AD - NGR E562656 N174281 23 April 2023 22:13:51 image002,png image429578,png image429578,png image4295640,png image4395163,png image439514,png



Dear Sir or Madam,

With reference to your plant enquiry below, we can confirm that SOTA do not have any apparatus within the immediate proximity of your proposed works.

If you require any further information, please do not hesitate to contact us.

Please note that this response is only valid for 3 months. If your works do not commence within this time period, please resubmit your plant enquiry for assessment before any works commence.



Office: +44 (0)208 731 4613 Fax: +44 (0)208 731 4601 Email: plantenquiries@ocugroup.com Web: http://www.ocugroup.com





in 🕨

SOTA Plant Enquiries

sota.plantenquiries@ocugroup.com
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Reg. No.: 09307607 Head Office: Artemis House, Greek Street, Stockport, SK3 8AB VAT No.: 426 430 711

From: Daniel Simms <Daniel.Simms@premiersurveys.co.uk>

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Sent: 20 April 2023 12:10
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To: Daniel Simms < Daniel.Simms@premiersurveys.co.uk>

Subject: Request for Plans only-REF 8856 Kimberly Clark, Northfleet, Gravesend DA11 9AD - NGR E562656 N174281

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Daniel Simms Utility Survey Manager For Premier Surveys Limited daniel.simms@premiersurveys.co.uk www.premiersurveys.co.uk Tel: 0115 9622876 Mob: 07564 812240 Midlands Office: 9-11 Lowater Street, Carlton, Notlingham, NG4 1JJ London Office: Unit 3, Ivory Wharf, Elephant Lane, London, SE16 4JD



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Power Networks

(Utility Assets)



From:	assetrecords@utilityassets.co.uk
То:	Daniel Simms
Subject:	Re: Request for Plans only-REF 8856 Kimberly Clark, Northfleet, Gravesend DA11 9AD - NGR E562656 N174281
Date:	20 April 2023 12:10:36

Thank you for recently contacting Utility Assets plant record department. We will check whether we have any plant present at your site and contact you within 5 - 7 working days ONLY if we own any plant in the vicinity.

If you have sent an asset records enquiry to enquiries@utilityassets.co.uk please change to assetrecords@utilityassets.co.uk

If we do not reply, we do not have any apparatus in the area of your works. However, PLEASE TAKE CARE when excavating around electricity cables in the event that not all cables present may be accurately shown. We recommend you use detecting equipment to map the site before excavating and fully comply with HSG47. DO NOT assume that a cable is dead if you don't have a record of its presence. The cable must be treated as live unless PROVEN DEAD by the cable owner. In case of emergency please contact your local electricity distribution company.

This is an automated reply from our dedicated asset records email address. If you receive further correspondence from us it will be from asset.manager@utilityassets.co.uk quoting a site reference number.

Asset Manager - Utility Assets Ltd



(Verizon)

verizon

From:	UK OSP-Team .
To:	Daniel Simms; UK OSP-Team
Subject:	Re: Request for Plans only-REF 8856 Kimberly Clark, Northfleet, Gravesend DA11 9AD - NGR E562656 N174281
Date:	21 April 2023 09:56:41

Dear Sir/Madam

Verizon is a licensed Statutory Undertaker.

We have reviewed your plans and have determined that Verizon (Formally known as MCI WorldCom, MFS) has no apparatus in the areas concerned.

If you have any further queries please do not hesitate to get in touch.

Yours faithfully

Plant Protection Officer (GB) Email osp-team@uk.verizon.com

On Thu, 20 Apr 2023 at 12:10, Daniel Simms < Daniel.Simms@premiersurveys.co.uk > wrote:

Dear Sir/Madam

Re: - Underground Apparatus / Plant-Request for Plans only

Site Ref. 8856 Kimberly Clark, Northfleet, Gravesend DA11 9AD - NGR E562656 N174281

To enable the study of background information for belowground mapping survey works and initial design considerations at the above site location, please provide plan(s) indicating the position and type of your apparatus in the locality of the site detailed above.

The site location is as per the provided OS Coordinates and highlighted on the attached plan. If you have no apparatus in the area, please advise.

Your earliest response would be greatly appreciated.

Best Regards

Daniel Simms

Utility Survey Manager For Premier Surveys Limited daniel.simms@premiersurveys.co.uk

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Prepared: DS	Date: 17.05.2023
Checked: DS	Date: 17.05.2023
Approved: AF	Date: 17.05.2023