

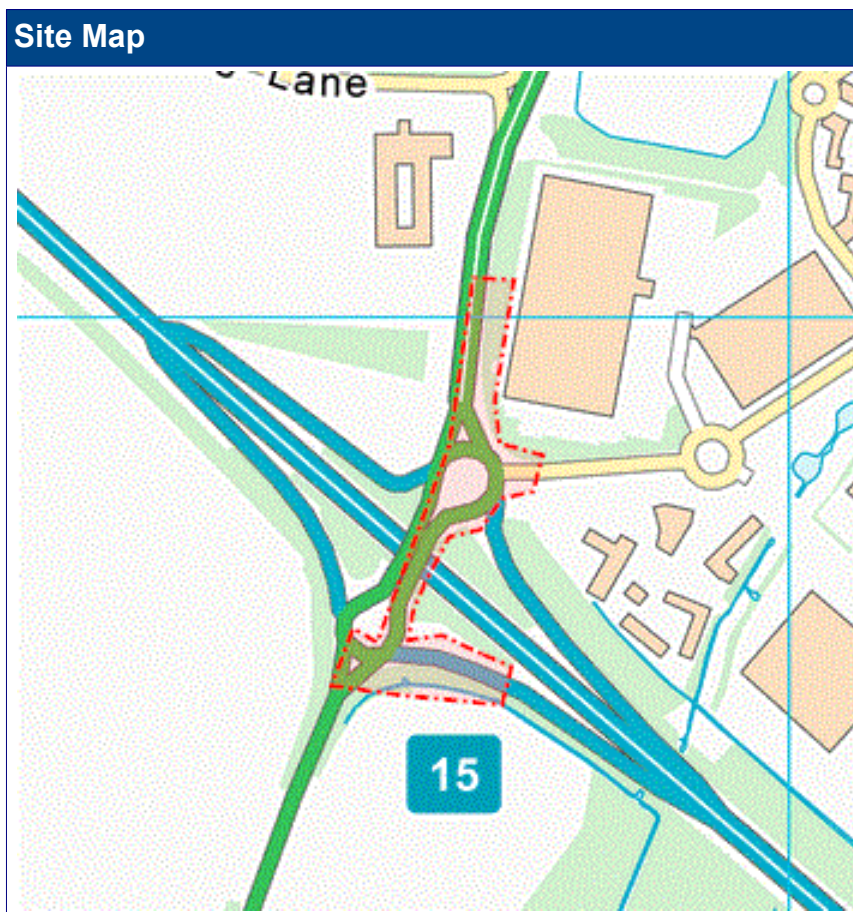
Appendix 15.1 – Utility Asset Plans

Appendix 15.1.11 – Existing Utilities: M1 J15

Enquirer			
Name	Mr Tom Fox	Phone	01752347515
Company	Hydrock Consultants Ltd	Mobile	Not Supplied
		Fax	Not Supplied
Address	Lobb Shippon Newnham Estate, Plympton Plymouth Devon PL7 5BP		
Email	tomfox@hydrock.com		
Notes	Please ensure your contact details are correct and up to date on the system in case the LSBUD Members need to contact you.		

Enquiry Details			
Scheme/Reference	C151171_RailCentral_PL12		
Enquiry type	Initial Enquiry	Work category	Utility Works
Start date	29/01/2018	Work type	Multiple excavations site
End date	29/01/2018	Site size	28341 metres square
Searched location	XY= 475621, 254755 Easting/Northing	Work type buffer*	25 metres
Confirmed location	475671 254817		

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



Asset Owners

Terms and Conditions. Please note that this enquiry is subject always to our standard terms and conditions available at www.lineasearchbeforeudig.co.uk ("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.

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 of the enquiry. It is your responsibility to ensure that the Enquiry Details are correct, and LineasearchbeforeUdig 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.

Asset Owners & Responses. Please note the enquiry results include the following:

1. "LSBUD Members" who are asset owners who have registered their assets on the LSBUD service.
2. "Non LSBUD Members" are asset owners who have not registered their assets on the LSBUD service but LSBUD is aware of their existence. Please note that there could be other asset owners within your search area.

Below are three lists of asset owners:

1. **LSBUD Members who have assets registered within your search area. ("Affected")**
 - a. These LSBUD Members will either:
 - i. Ask for further information ("Email Additional Info" noted in status). The additional information includes: Site contact name and number, Location plan, Detailed plan (minimum scale 1:2500), Cross sectional drawings (if available), Work Specification.
 - ii. Respond directly to you ("Await Response"). In this response they may either send plans directly to you or ask for further information before being able to do so, particularly if any payments or authorisations are required.
2. **LSBUD Members who do not have assets registered within your search area. ("Not Affected")**
3. **Non LSBUD Members who may have assets within your search area.** Please note that this list is not exhaustive and all details are provided as a guide only. It is your responsibility to identify and consult with all asset owners before proceeding.

National Grid. Please note that the LSBUD service only contains information on National Grid's Gas above 7 bar asset, all National Grid Electricity Transmission assets and National Grid's Gas Distribution Limited above 2 bar asset.

For National Grid Gas Distribution Ltd below 2 bar asset information please go to www.beforeyoudig.nationalgrid.com

LSBUD Members who have assets registered on the LSBUD service within the vicinity of your search area.

List of affected LSBUD members

Asset Owner	Phone/Email	Emergency Only	Status
ESP Utilities Group	01372227560	01372227560	Await response
Western Power Distribution	08000963080	08006783105	Await response

LSBUD Members who do not have assets registered on the LSBUD service within the vicinity of your search area. Please be aware that LSBUD Members make regular changes to their assets and this list may vary for new enquiries in the same area.

List of not affected LSBUD members

AWE Pipeline	Gateshead Energy Company	Premier Transmission Ltd (SNIP)
BOC Limited (A Member of the Linde Group)	Gigaclear PLC	Prysmian Cables & Systems Ltd (c/o Western Link)
BP Exploration Operating Company Limited	Gtt	Redundant Pipelines - LPDA
BPA	Humbly Grove Energy	RWEnpower (Little Barford and South Haven)
Carrington Gas Pipeline	IGas Energy	SABIC UK Petrochemicals
CATS Pipeline c/o Wood Group PSN	INEOS FPS Pipelines	Scottish Power Generation
Cemex	INEOS Manufacturing (Scotland and TSEP)	Seabank Power Ltd
Centrica Storage Ltd	INOVYN Enterprises Limited	SGN
CLH Pipeline System Ltd	Interger (Coryton Energy or Spalding Energy)	Shell (St Fergus to Mossmorran)
Concept Solutions People Ltd	Mainline Pipelines Limited	Shell Pipelines
ConocoPhillips (UK) Ltd	Manchester Jetline Limited	SSE (Peterhead Power Station)
DIO (MOD Abandoned Pipelines)	Manx Cable Company	Total (Colnbrook & Colwick Pipelines)
E.ON UK CHP Limited	Marchwood Power Ltd (Gas Pipeline)	Total Finaline Pipelines
EirGrid	Melbourn Solar Limited	Transmission Capital
Electricity North West Limited	National Grid Gas (Above 7 bar), National Grid	UK Power Networks
ENI & Himor c/o Penspen Ltd	Gas Distribution Limited (Above 2 bar) and	
EnQuest NNS Limited	National Grid Electricity Transmission	
EP Langage Limited	Northumbrian Water Group	Uniper UK Ltd
ESSAR	NPower CHP Pipelines	Vattenfall
	Oikos Storage Limited	Veolia ES SELCHP Limited
	Ørsted	Westminster City Council
Esso Petroleum Company Limited	Perenco UK Limited (Purbeck Southampton Pipeline)	Wingas Storage UK Ltd
Fulcrum Pipelines Limited	Petroineos	Zayo Group UK Ltd c/o JSM Group Ltd
Gamma	Phillips 66	

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.

Non-LSBUD members (Asset owners not registered on LSBUD)			
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	08009173993	Not Notified
CityFibre	asset.team@cityfibre.com	033 3150 7282	Not Notified
Colt	plantenquiries@catelecomuk.com	01227768427	Not Notified
Energetics Electricity	plantenquiries@energetics-uk.com	01698404646	Not Notified
ENGIE	nrsua@cofely-gdfsuez.com	01293 549944	Not Notified
GTC	https://pe.gtc-uk.co.uk/PlantEnqMembership	01359240363	Not Notified
Interoute	interoute.enquiries@plancast.co.uk	02070259000	Not Notified
KPN (c/-Instalcom)	kpn.plantenquiries@instalcom.co.uk	n/a	Not Notified
Level 3 Communications UK Ltd (C/-Instalcom)	plantenquiries@instalcom.co.uk	02087314613	Not Notified
Mobile Broadband Network Limited	mbnl.plant.enquiries@turntown.com	01212 621 100	Not Notified
National Grid Gas Distribution (below 2 bar)	plantprotection@nationalgrid.com	0800688588	Not Notified
Sky UK Limited	nrsua@sky.uk	02070323234	Not Notified
Tata (c/-McNicholas)	plantenquiries@mcnicholas.co.uk	03300558469	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
Vtesse Networks	https://plant.interoute.com/plant-enquiries/	01992532100	Not Notified

Disclaimer

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Contact Us

Mapping Enquiries:

0121 623 9780

General Enquiries:

All areas

0800 096 3080

**Report damage immediately – KEEP EVERYONE AWAY FROM THE AREA
0800 6783 105**

Date Requested: 22/01/2018

Job Reference: 12049822

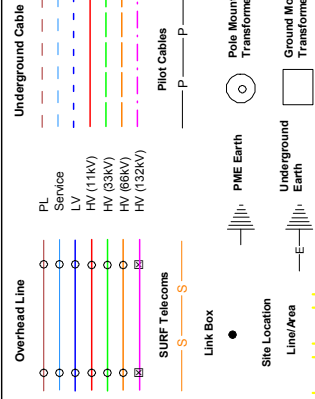
Site Location: 475632 254821

Requested by: Mr Tom Fox

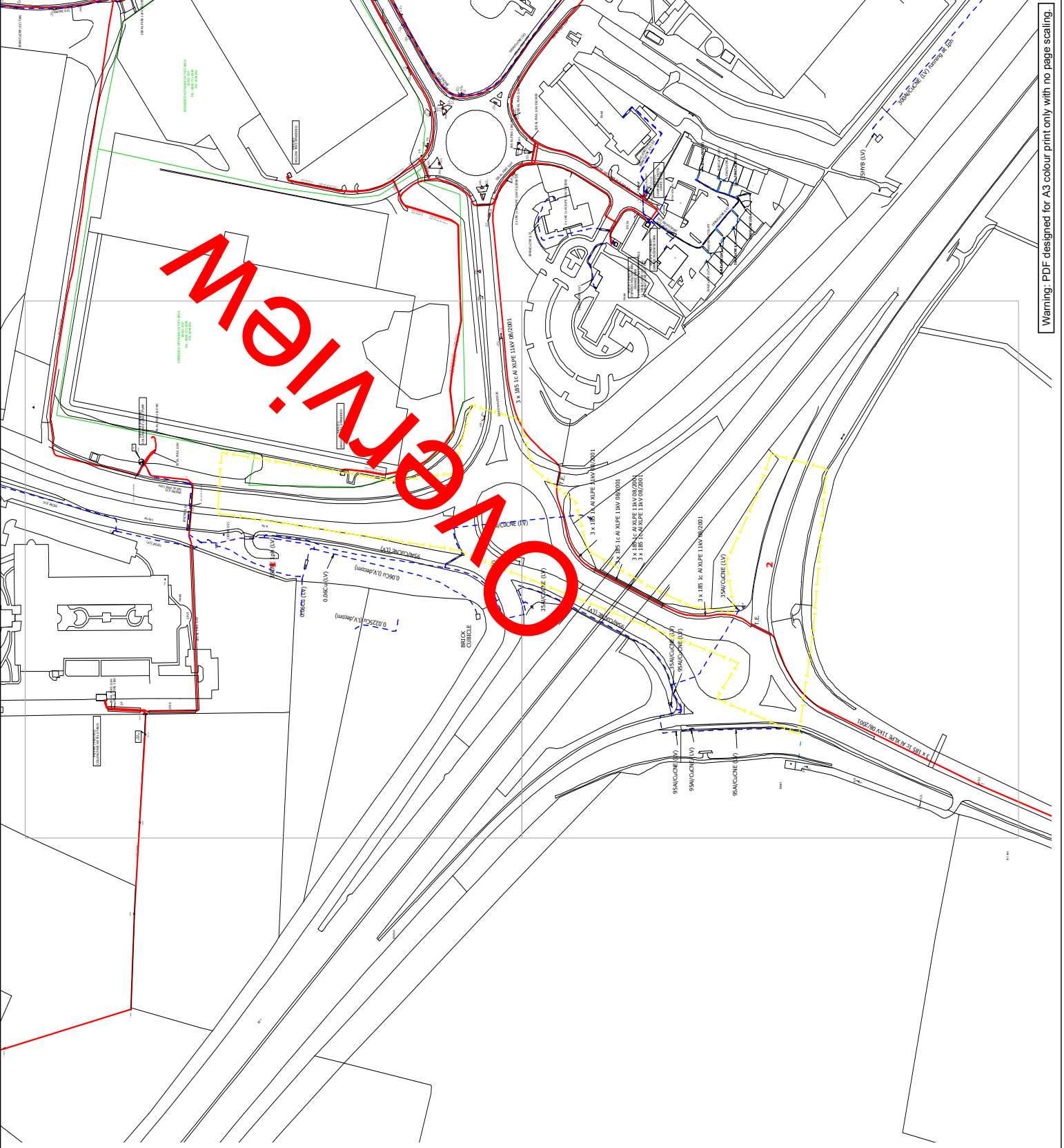
Your Scheme/Reference: C151171_RailCentral_PL12

IMPORTANT NOTICES

- This information is given as a guide only and its accuracy cannot be guaranteed. Services or recent additions to the network may not be shown.
- Cables, overhead lines & substations owned by other electricity network owners or private companies may be present and may not be shown.
- You should always verify exact locations of cables using a cable locator and by careful use of hand tools in accordance with HSE guidance note HSG47.
- When working within 10m of any overhead electric line you should follow the requirements of HSE Guidance Note GS6.
- For further advice on working near our electricity cables or lines, call our Contact Centre on 0800 096 3080.
- Advice should be sought from the Western Power Distribution Contact Centre for any work that is to take place in proximity to 66kV or 132kV underground cables and 66kV 132kV overhead lines – 0800 096 3080



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Contact Us

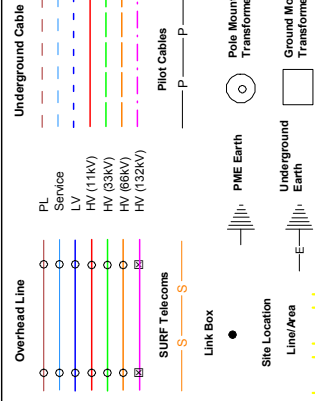
Mapping Enquiries:
All areas 0121 623 9780 General Enquiries: 0800 096 3080

Report damage immediately – KEEP EVERYONE AWAY FROM THE AREA
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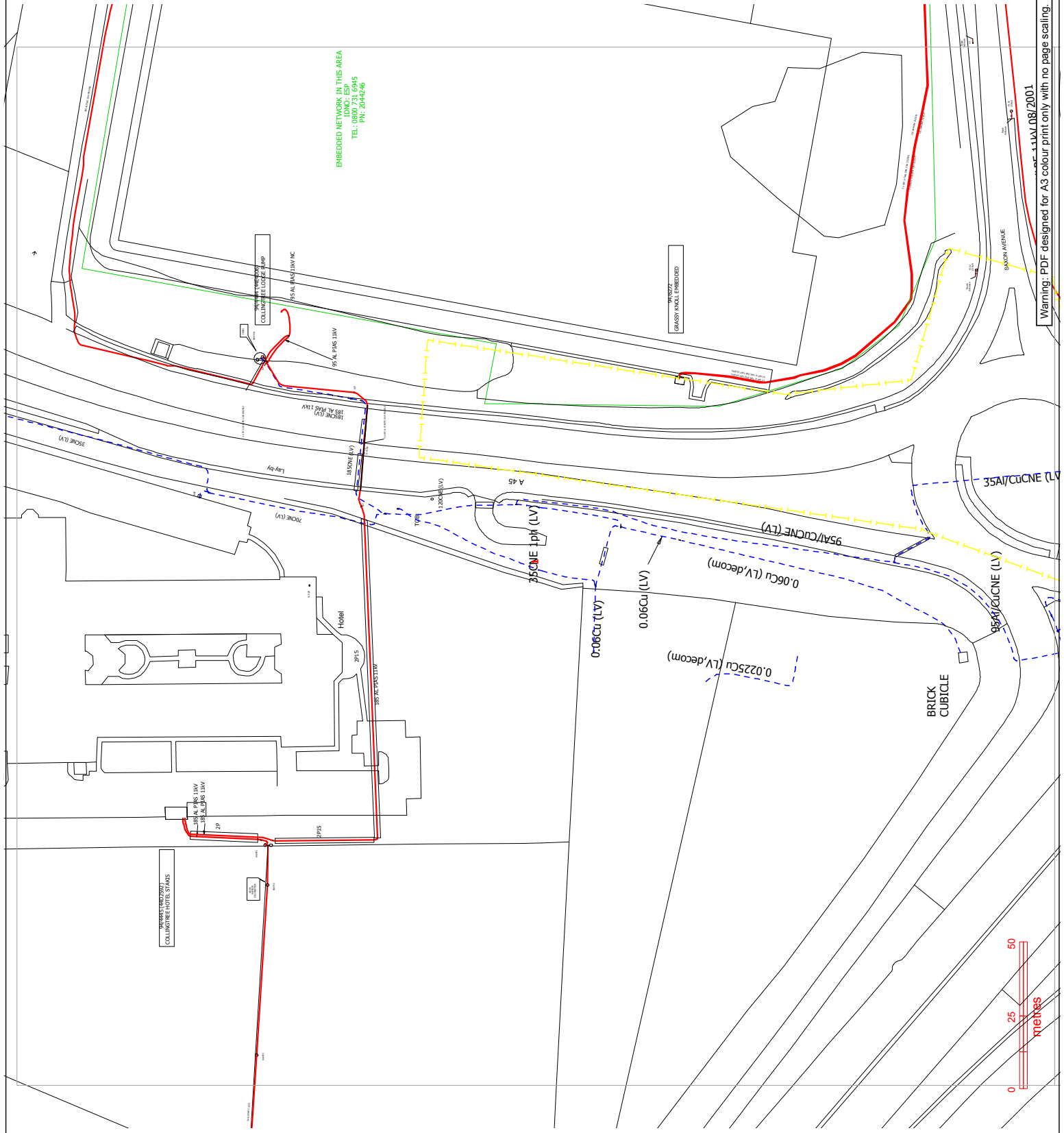
Date Requested: 22/01/2018
Job Reference: 12049822
Site Location: 475632 254821
Requested by: Mr Tom Fox
Your Scheme/Reference: C151171_RailCentral_PL12
Exact Scales:
1:1250 Area or Circle dig site
1:500 Line dig site

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Requested by: Mr Tom Fox

Your Scheme/Reference: C151171_RailCentral_PL12

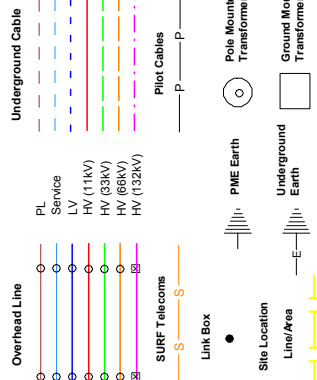
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PRECAUTIONS TO BE TAKEN WHEN CARRYING OUT WORK IN THE VICINITY OF ELECTRICITY CABLES

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 Electricity Ltd prior to excavation is recommended to obtain the location of plant and precautions to be taken when working nearby.

This has been produced after consultation with and at the request of the Health and Safety Executive, the construction industry and the electricity companies.

1.0 Introduction

This procedure should be read in conjunction with the ESP Electricity Distribution Safety Rules and other relevant procedures. The object of this procedure is:

- a) To lay down the rules for the location of cable before work is started.
- b) To specify the safe working procedure to be adopted by persons who have to work on or in the vicinity of cables.

2.0 Reference

ESP Electricity G81 – Design and Planning
ESP Electricity G81 – Installation and Records
National Joint Utilities Group (NJUG) Guidance Notes
Avoiding danger from underground services HSG47 HSE Advice Booklet.

3.0 Work

- 3.1 All cables and apparatus to which the cables are connected shall be treated as being live, until they have been proved dead and all points of isolation have been established and controlled.
- 3.2 All work carried out under this procedure shall also be carried out in strict accordance with the ESP Electricity Distribution Safety Rules and other relevant procedures.
- 3.3 For the purpose of this procedure:
 - a) Work on a cable includes the intentional cutting or removal of its Sheath or Armour, cutting of its core(s) or conductor(s) and the removal of a spiking gun.
 - b) Work in the vicinity of a cable includes digging or any activity carried out at any work location where cables are or may be present, whether or not for the specific purpose of preparation for work on a cable.

4.0 Cable Locating Devices

- 4.1 An approved cable locating device is to be used on every occasion before any surface is removed or any digging is started. It must also be used during the course of any digging work.
- 4.2 Cable location devices provide information on the position of cables. They must not be used as the only means of cable location.
- 4.3 Cable locating devices must be regularly checked for correct operation.

All persons using cable locating devices must be adequately trained in their use and must be Competent Persons.

5.0 Location of Cables

- 5.1 The depth of underground cables varies greatly. It is essential that a site specific risk assessment is undertaken for the proposed work you are planning this must include obtaining an up-to-date map of the electricity cables in the area and to make use of it. The electricity cable records must be checked before any work is started. Changes in surface level or reference points, and work carried out by other people may affect the reliability of these records. Anybody excavating must be told of these possibilities.
- 5.2 Before the start of any excavation work, a cable locating device shall be used to establish the run of live cables. Reasonable steps should be taken to establish the runs of cables both along and across the length of the intended area of digging. The cable avoidance tool shall be used together with mains records and where provided, service records.

- 5.3 All cable runs either confirmed by use of the cable locating device or indicated on the mains records must be marked out on the surface using a waterproof marker. Marked cable runs must be extended 300mm beyond either end or side of the intended digging area, and must stay visible while the digging is going on. The trial hole dig method can be used to identify the run of cables using hand dig tools only.

6.0 Precautions to be Taken while Working in Vicinity of Cables

- 6.1 Work in the vicinity of cables must be carried out as if the cables are live and all excavation work must be personally supervised by a Competent Person. All persons shall wear a minimum of safety footwear, Safety Glasses, hard hat, Task Specific Gloves flame retardant overalls.
- 6.2 Approved hand tools should always be used in preference to power tools in the vicinity of cables, unless site conditions make this impracticable. Spades should always be used in preference to forks. Extreme care must always be taken when using a fork or pick. Forks must be of approved type with shortened chisel ended tines. Spades must have sharp corners of the blade rounded. The selection of a fork or pick will be assessed on a Task Specific Risk Assessment.
- 6.3 A proprietary air digging tool, which removes soil with a high-velocity jet of air, can be used to expose buried services without damage to the service. However, it will not penetrate asphalt, concrete or frozen ground. Also precautions need to be taken that will prevent injury to the operator and members of the public from ejected soil and other materials.
- 6.4 When site conditions require the use of hand held power tools they must be fitted with a short bit. The following method of work must be used:
- Using all the information provided, together with an approved cable locating device, the line of all known cables must be marked out at least 300mm past the hole that will be dug using waterproof marker.
 - Encroachment lines must be drawn 300mm parallel to and away from the outer and innermost cable marker lines. And as in (a) above these must be drawn to extend at least 300mm beyond the edge of the hole that will be dug.
 - Hand held power tools must not be used below ground level in between the encroachment lines. Hand tools must be used for progressive and careful undermining from outside the encroachment lines towards the cable(s). Hand power tools must only be used to break up any hard surface, keeping pace with, but not going past the undermining. Extreme care must, in particular, be exercised when using power tools above cables already exposed by undermining. The use of power tools must stop if at any time the cutting rate quickens, indicating softer ground. At all times, attention must be paid to the cable run marker lines outside the edges of the holes.
 - The safe digging procedure in (c) above must be followed until all cable(s) required for work or for identification have been located.
 - If all recorded or detected cables inside the digging area have been located then hand held power tools may be used below ground level to break up concrete or similar structures, but even then only when site conditions render the use of hand tools impractical.
- 6.5 During excavation, full use must be made of cable locating devices which must be used to assist in establishing the exact location of live cables.
- 6.6 Where exposed cables are likely to be damaged in any way they shall be adequately protected and/or supported. Where in the opinion of the person in charge on site it is appropriate, warning notices must be attached to cables e.g. 'live cable exposed above ground level' or 'live coiled cables'.
- 6.7 Irrespective of the color of the electricity cable it shall be considered as being in a 'live' status unless it has been confirmed and proven that the cable has been physically isolated or turned off.

If damage is caused or suspected the following action should be taken at once:

- ❖ Remove all personnel from the immediate vicinity
- ❖ Contact ESP Electricity 01372 227560 or out of hours Emergency contact Number 0800 731 6945
- ❖ Prevent any approach by the public.
- ❖ Assist electricity personnel, Police or Fire Service as requested.

REMEMBER - IF IN DOUBT, SEEK ADVICE FROM ESP Electricity Ltd.

ESP Electricity Ltd can be contacted at:

Office Address: Hazeldean, Station Road, Leatherhead, Surrey, KT22 7AA

Office Tel: 01372 227560; **Fax:** 01372 377996; **email:** plantresponses@espipelines .com

ESP Utilities Group
Unit 22, Bluebird House, Mole Business Park
Leatherhead
Surrey, KT22 7BA
Phone: 01372 587500
Email: plantresponses@espug.com



Dear Sir/Madam,

Thank you for your recent plant enquiry.

We can confirm that ESP Utilities Group Ltd may have gas and electric assets within the vicinity of your search. We ask that you contact ESP Utilities Ltd directly on the details shown below to request further information.

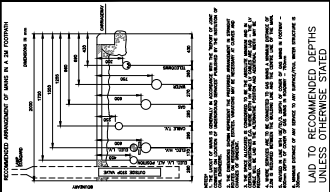
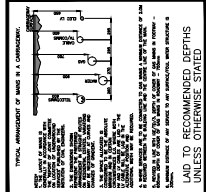
ESP are continually laying new gas and electricity networks and this notification is valid for 90 days from the date of this email. If your proposed works start after this period of time, please re-submit your enquiry.

Yours faithfully,

ESP Utilities Group

Phone: 01372 587500

Email: plantresponses@espug.com

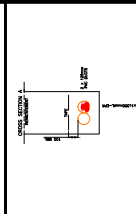


AS BUILT KEY:

- HY CABLE
- EXISTING CABLE
- CABLE IN DUCT
- MAINS BRANCH JUNCTION
- BOTTLE END WITH EARTH
- SERVICE CABLE
- SERVICE BRANCH JUNCTION
- STREET LIGHTING COLUMN
- SECTION MARKER
- DEPTH MARKER
- POSITION NODE
- PHASE ALLOCATION

AS BUILT KEY:

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- CABLE IN DUCT
- MAINS BRANCH JUNCTION
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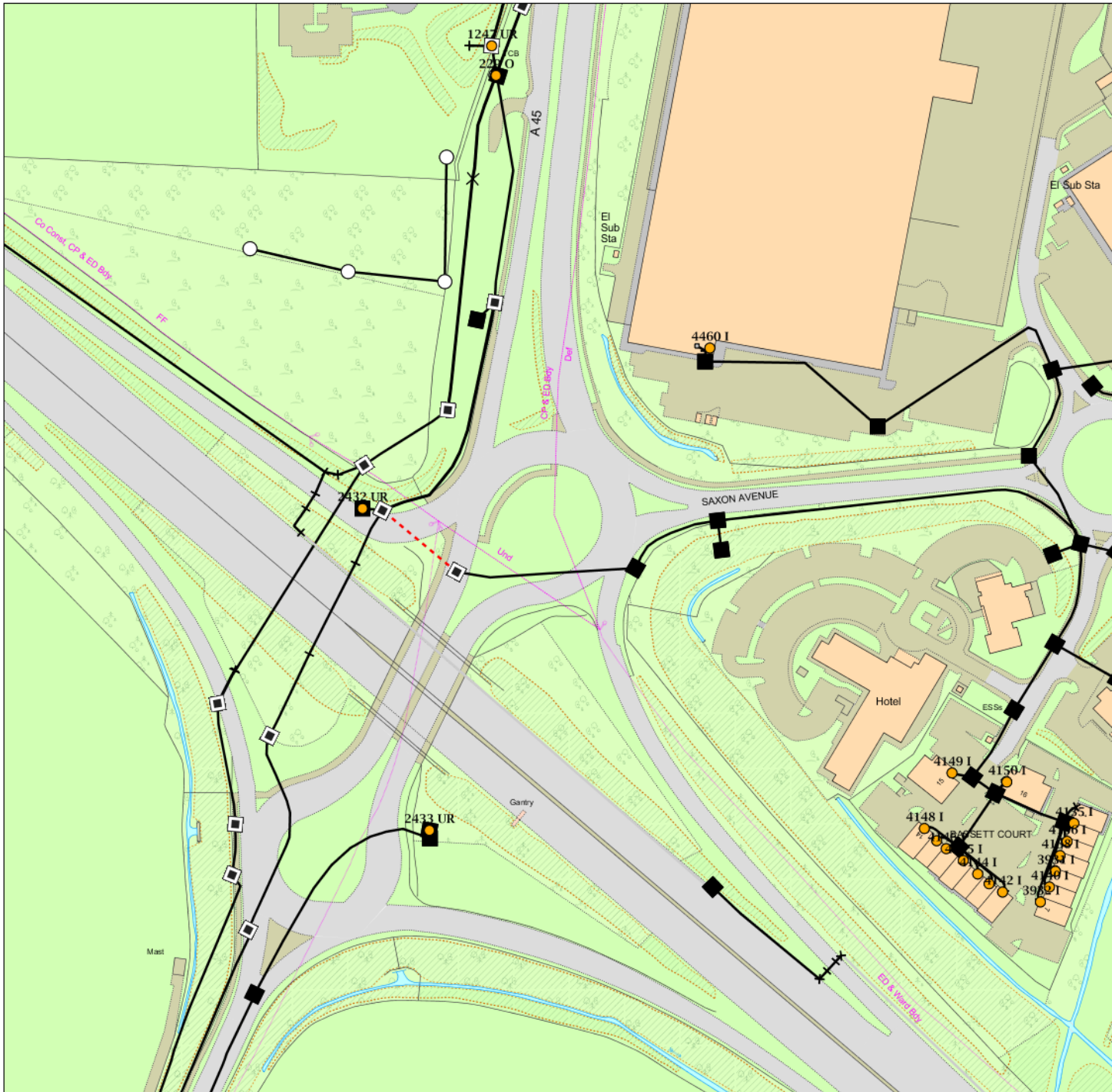
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- STREET LIGHTING COLUMN
- SECTION MARKER
- DEPTH MARKER
- POSITION NODE
- PHASE ALLOCATION

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

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KEY TO BT SYMBOLS

DP	
Planned DP	
PCP	
Planned PCP	
Built	
Planned	
Inferred	
Building	
Kiosk	
Hatchings	

Pole	
Planned Pole	
Joint Box	
Change Of State	
Split Coupling	
Duct Tee	
Planned Box	
Manhole	
Planned Manhole	
Cabinet	
Planned Cabinet	

Other proposed plant is shown using dashed lines.
BT Symbols not listed above maybe disregarded.
Existing BT Plant may not be recorded.
Information valid at time of preparation

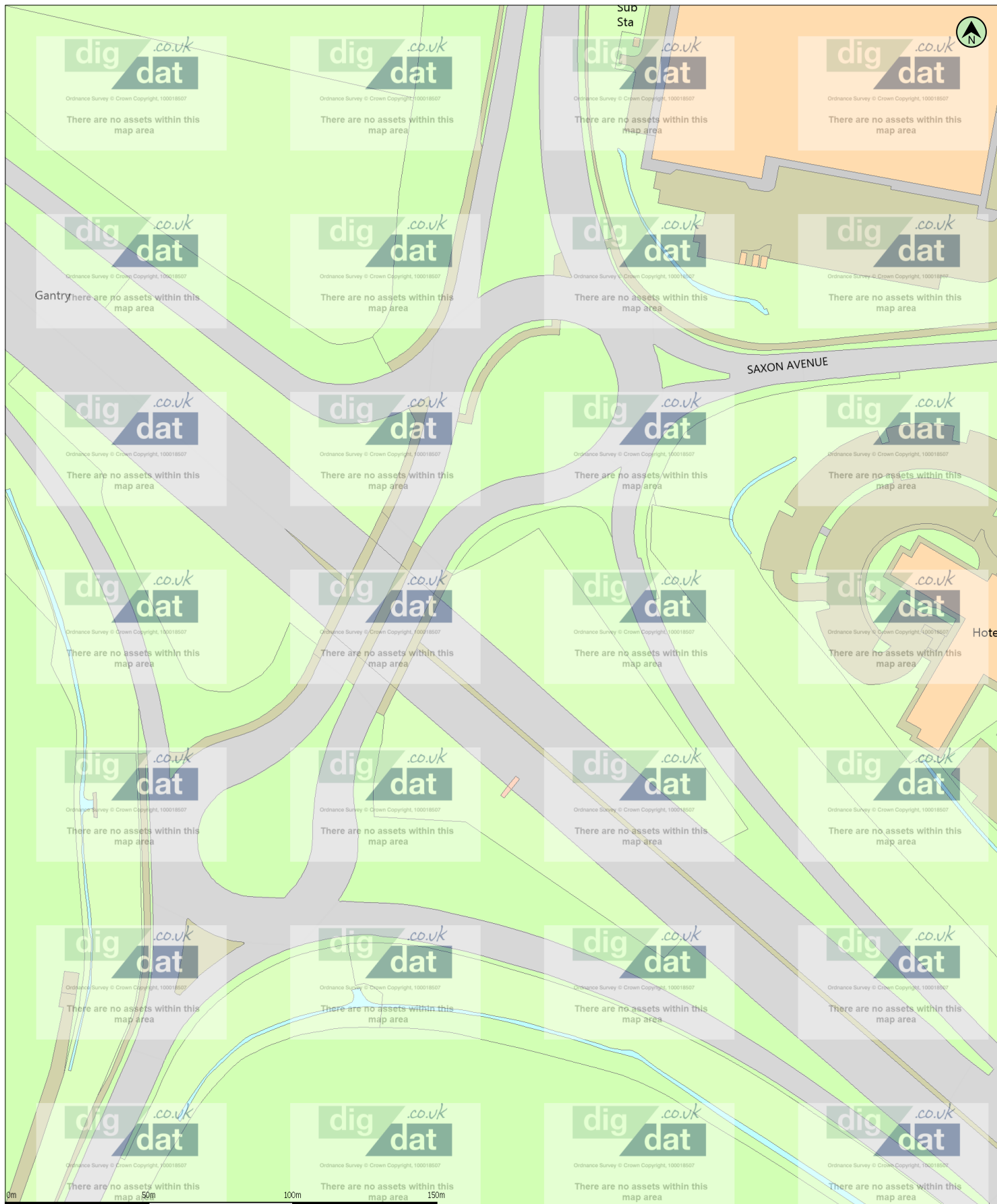
BT Ref : YQP02114M

Map Reference : (centre) SP7567154817

Easting/Northing : (centre) 475671,254817

Issued : 24/01/2018 14:12:15

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



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Data updated: 04/01/18

Scale: 1:1250
Map Centre: 475651,254756

Date: 24/01/18
Our Ref: 250474 - 1

Clean Water Plan A3
Powered by digdat

Potable Water



Fitting



Raw Water



Hydrant



Decommissioned Water



Please note: Not all fittings are shown on the map

tomfox@hydrock.com

PL12



This plan is provided by Anglian Water pursuant to its obligations under the Water Industry Act 1991 sections 198 or 199. It must be used in conjunction with any search results attached. The information on this plan is based on data currently recorded but position must be regarded as approximate. Service pipes, private sewers and drains are generally not shown. Users of this map are strongly advised to commission their own survey of the area shown on the plan before carrying out any works. The actual position of all apparatus MUST be established by trial holes. No liability whatsoever, including liability for negligence, is accepted by Anglian Water for any error or inaccuracy or omission, including the failure to accurately record, or record at all, the location of any water main, discharge pipe, sewer or disposal main or any item of apparatus. This information is valid for the date printed. This plan is produced by Anglian Water Services Limited (c) Crown copyright and database rights 2018 Ordnance Survey 100022432. This map is to be used for the purposes of viewing the location of Anglian Water plant only. Any other uses of the map data or further copies is not permitted. This notice is not intended to exclude or restrict liability for death or personal injury resulting from negligence.

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 ES Pipelines Ltd prior to excavation is recommended to obtain the location of plant and precautions to be taken when working nearby.

This note has been produced after consultation with and at the request of the Health and Safety Executive, the construction industry and the local authorities as an interim measure pending the issue of an HSE Guidance Note.

Introduction

Damage to ES Pipelines Ltd'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. ES Pipelines Ltd 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 Transco.

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, E S Pipelines Ltd 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. E S Pipelines Ltd'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 E S Pipelines Ltd'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 E S Pipelines Ltd 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. E S Pipelines Ltd 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 E S Pipelines Ltd.

E S Pipelines Ltd must 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, E S Pipelines Ltd 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 E S Pipelines Ltd.

Support and Backfill

Where excavation of trenches adjacent to any pipe affects its support, the pipe must be supported to the satisfaction of E S Pipelines Ltd 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 300 mm 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 E S Pipelines Ltd 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, E S Pipelines Ltd 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:

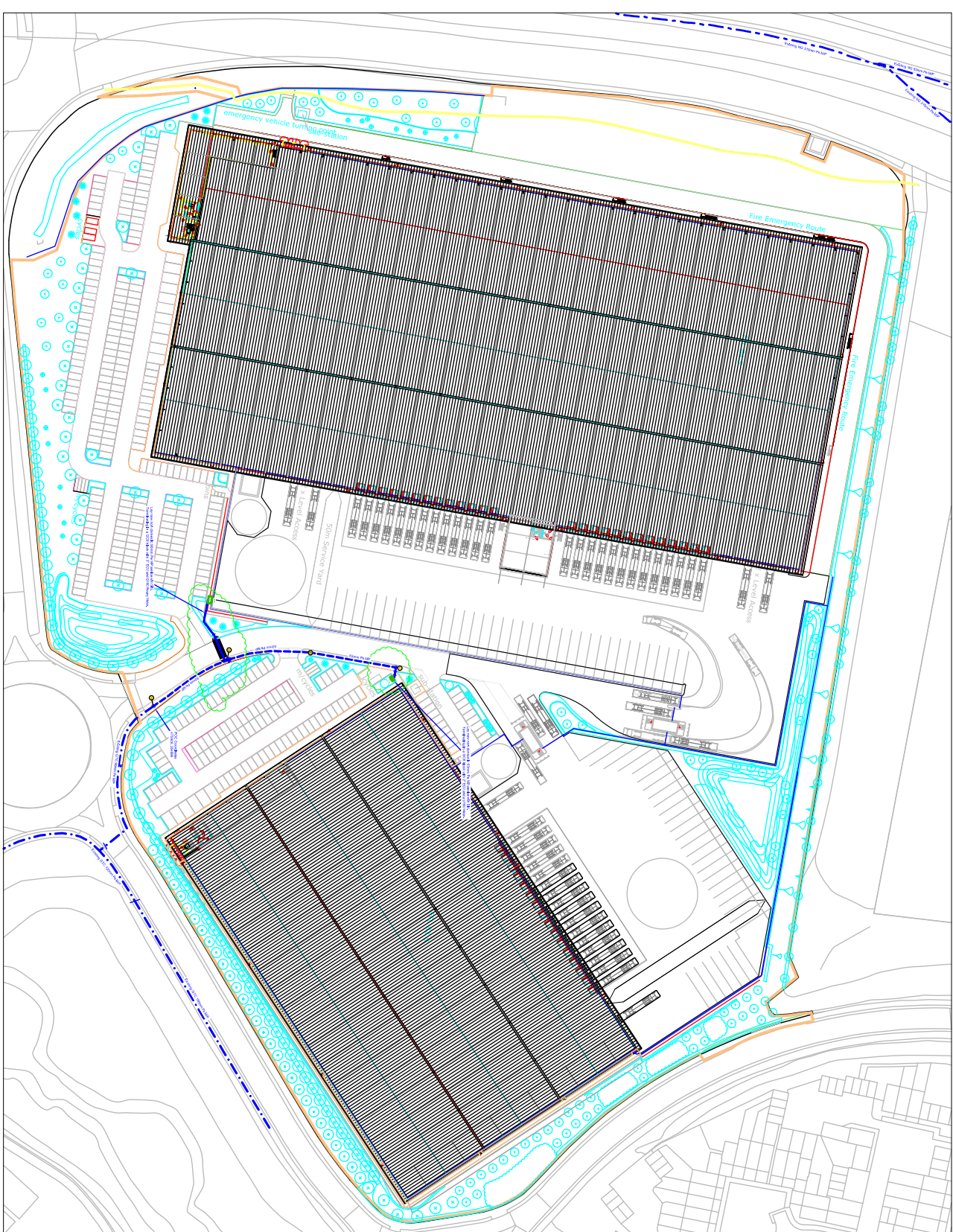
- ❖ Remove all personnel from the immediate vicinity of the escape;
- ❖ Contact Transco's National Gas Escape Call Centre, on: **0800 111 999**;
- ❖ Prevent any approach by the public, prohibit smoking, extinguish all naked flames or other source of ignition for at least 15 metres from the leakage;
-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

REMEMBER - IF IN DOUBT, SEEK ADVICE FROM E S PIPELINES LTD.

ES Pipelines Ltd can be contacted at:

Office Address: Hazeldean, Station Road, Leatherhead, Surrey, KT22 7AA

Office Tel: 01372 227560; **Fax:** 01372 377996; **email:** plantresponses@espipelines.com



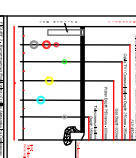
Service 1 - Design		Pipe Lengths and Dimensions	
	Lp		Po
Service Source Pressure	350 milbar	63mm	100mm
Peak Flow	240 ml/hr	90mm	250mm
Maximum Velocity	9.74 m/s	90mm	25
Mean Pressure	346.63 milbar	75mm	315mm
Pressure Drop	4.37 milbar		Sum
Correction			
Coordinates: 475000, 254604			

Service 2 - Design		Pipe Lengths and Diameter	
	L _p		P _g
Source Source Pressure	300 ft-lbf	63mm	5" 10mm
Isual Flow	10 ft-lbf	63mm	5" 20mm
Maximum Velocity	6.98 ft/s	90mm	31mm
Minimum Pressure	34.5 ft-lbf	125mm	31mm
Pressure Drop	4.5 ft-lbf		31mm
Correction			
	Exam Inputting line		
Coordinates: 47302, 26404			

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Study of 1st Edition (year)	Study of 2nd Edition (year)		
	Frequency (times in 1st)	Frequency (times in 2nd)	Frequency (times in 3rd)
1	25	25	24
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Author	Year	Country	Sample Size	Study Design	Intervention	Outcome
1. Smith, J. A.	2015	USA	120	Randomized Controlled Trial	Hand hygiene training	Reduced infection rates by 30%
2. Doe, M. B.	2016	UK	80	Quasi-experimental	Antibiotic stewardship program	Decreased antibiotic resistance
3. Lee, S. C.	2017	Canada	150	Observational	Wound care protocol	Improved wound healing time
4. Kim, P. D.	2018	Australia	90	Case-control	Pain management strategy	Reduced opioid use
5. Brown, L. E.	2019	Germany	200	Systematic Review	Telemedicine implementation	Increased patient satisfaction
6. White, R. F.	2020	France	110	Interventional	Diabetes management plan	Better glycemic control
7. Green, T. H.	2021	Italy	130	Longitudinal	Mental health support	Improved patient compliance
8. Black, N. G.	2022	Spain	70	Pre-post	Emergency response training	Reduced response time
9. Clark, K. I.	2023	Japan	160	Cluster Randomized Trial	Hand hygiene training	Reduced infection rates by 25%
10. Evans, J. M.	2024	USA	95	Quasi-experimental	Antibiotic stewardship program	Decreased antibiotic resistance

[illegible][illegible]

Color	Symbol
Yellow	100% Insured (100% Coverage)
Orange	75% Insured (75% Coverage)
Red	50% Insured (50% Coverage)
Green	25% Insured (25% Coverage)
Blue	10% Insured (10% Coverage)
Purple	5% Insured (5% Coverage)
Black	0% Insured (0% Coverage)

ESP Utilities Group
Unit 22, Bluebird House, Mole Business Park
Leatherhead
Surrey, KT22 7BA
Phone: 01372 587500
Email: plantresponses@espug.com



Dear Sir/Madam,

Thank you for your recent plant enquiry.

We can confirm that ESP Utilities Group Ltd may have gas and electric assets within the vicinity of your search. We ask that you contact ESP Utilities Ltd directly on the details shown below to request further information.

ESP are continually laying new gas and electricity networks and this notification is valid for 90 days from the date of this email. If your proposed works start after this period of time, please re-submit your enquiry.

Yours faithfully,

ESP Utilities Group

Phone: 01372 587500

Email: plantresponses@espug.com

Tom Fox
Hydrock
Lobb Shippon.
Plympton
Plymouth
PL7 5BP

Plant Protection
Cadent
Block 1; Floor 1
Brick Kiln Street
Hinckley
LE10 0NA
E-mail: plantprotection@cadentgas.com
Telephone: +44 (0)800 688588

National Gas Emergency Number:
0800 111 999*

National Grid Electricity Emergency Number:
0800 40 40 90*

* Available 24 hours, 7 days/week.
Calls may be recorded and monitored.

www.cadentgas.com

Date: 23/01/2018

Our Ref: EM_TW_Z2_3SWP_397354

Your Ref: C151171 PL12 (CB2)

RE: Proposed Works, NN7 2QA, M1, Northampton.

Thank you for your enquiry which was received on 22/01/2018.
Please note this response and any attached map(s) are valid for 28 days.

An assessment has been carried out with respect to Cadent Gas Ltd, National Grid Electricity Transmission plc's and National Grid Gas plc's apparatus. Please note it does not cover the items listed in the section "Your Responsibilities and Obligations", including gas service pipes and related apparatus.
For details of Network areas please see the Cadent website (<http://cadentgas.com/Digging-safely/Dial-before-you-dig>) or the enclosed documentation.

As your works are at a "proposed" stage, any maps and guidance provided are for information purposes only. This is not approval to commence work. You must submit a "Scheduled Works" enquiry at the earliest opportunity and failure to do this may lead to disruption to your plans and works. Plant Protection will endeavour to provide an initial assessment within 14 days of receipt of a Scheduled Works enquiry and dependent on the outcome of this, further consultation may be required.

In any event, for safety and legal reasons, works must not be carried out until a Scheduled Works enquiry has been completed and final response received.

Your Responsibilities and Obligations

The "Assessment" Section below outlines the detailed requirements that must be followed when planning or undertaking your scheduled 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 Cadent and/or National Grid's apparatus, e.g. as contained within the Construction (Design and Management) Regulations.

This assessment solely relates to Cadent Gas Ltd, National Grid Electricity Transmission plc (NGET) and National Grid Gas plc (NGG) and apparatus. This assessment does **NOT** include:

- Cadent and/or National Grid's legal interest (easements or wayleaves) in the land which restricts activity in proximity to Cadent and/or 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 Plant Protection.
- Gas service pipes and related apparatus
- Recently installed apparatus
- Apparatus owned by other organisations, e.g. 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. Further "Essential Guidance" in respect of these items can be found on the National Grid Website (<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=8589934982>).

This communication does not constitute any formal agreement or consent for any proposed development work; either generally or with regard to Cadent and/or National Grid's easements or wayleaves nor any planning or building regulations applications.

Cadent Gas Ltd, NGG and NGET 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 Plant Protection team via e-mail ([click here](#)) or via the contact details at the top of this response.

Yours faithfully

Plant Protection Team

ASSESSMENT

Affected Apparatus

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

- Low or Medium pressure (below 2 bar) gas pipes and associated equipment. (As a result it is highly likely that there are gas services and associated apparatus in the vicinity)

Requirements

BEFORE carrying out any work you must:

- 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 Cadent and/or National Grid'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 Cadent and/or National Grid'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 <http://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.

GUIDANCE

Excavating Safely - Avoiding injury when working near gas pipes:

http://www.nationalgrid.com/NR/rdonlyres/2D2EEA97-B213-459C-9A26-18361C6E0B0D/25249/Digsafe_leaflet3e2finalamends061207.pdf

Standard Guidance

Essential Guidance document:

<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=8589934982>

General Guidance document:

<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=35103>

Excavating Safely in the vicinity of gas pipes guidance (Credit card):

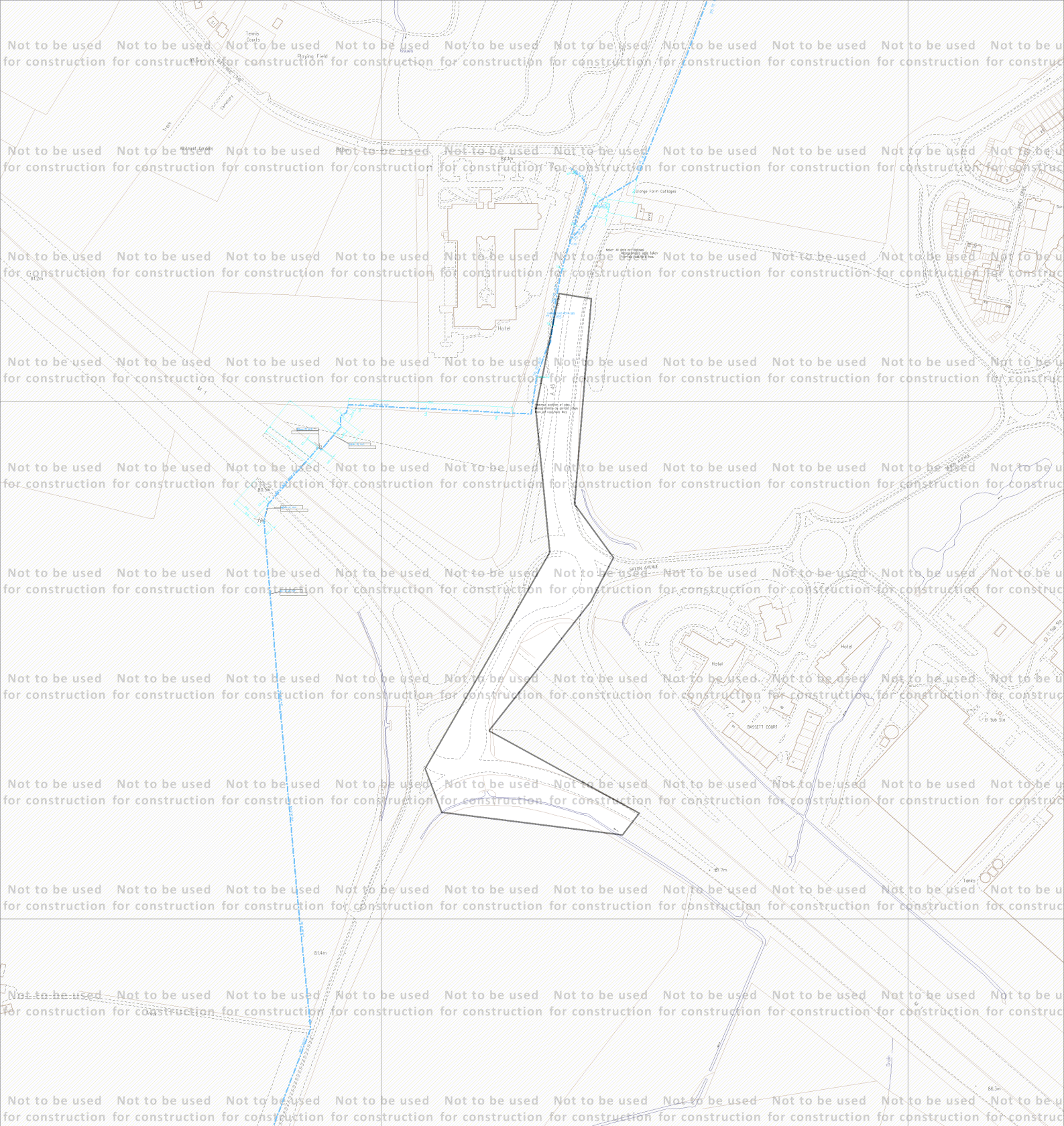
<http://www.nationalgrid.com/NR/rdonlyres/A3D37677-6641-476C-9DDA-E89949052829/44257/ExcavatingSafelyCreditCard.pdf>

Excavating Safely in the vicinity of electricity cables guidance (Credit card):

<http://www.nationalgrid.com/NR/rdonlyres/35DDEC6D-D754-4BA5-AF3C-D607D05A25C2/44858/ExcavatingSafelyCreditCardelectricitycables.pdf>

Copies of all the Guidance Documents can also be downloaded from the National Grid Website:

<http://www.nationalgrid.com/uk/Gas/Safety/work/downloads/>



ID: EM_TW_Z2_3SWP_397354		View extent: 1010m, 1090m	Map not to be used for construction
USER: Christopher.Brockbank	LP MAINS MP MAINS IP MAINS LHP MAINS NHP MAINS 0m 100m Approximate scale 1:5000 on A4 Colour Portrait	MAPS Plot Server Version 1.9.0	
DATE: 23/01/2018		Cadent Your Gas Network	
DATA DATE: 22/01/2018			
REF: C151171 PL12 (CB2)			
MAP REF: SP7554		Requested by: Hydrock	
CENTRE: 475643, 254843	Map 1 of 1 (GAS)		
Some examples of Plant Items:			This plan is reproduced from or based on the OS map by National Grid Gas plc, with the sanction of the controller of HM Stationery Office. Crown Copyright Reserved. Ordnance Survey Licence number 100024886
Valve Depth of Cover Syphon Diameter Change Material Change Out of Standard Service			

This plan shows those pipes owned by National Grid Gas plc in its role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc., are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by National Grid Gas plc or their agents, servants or contractors for any error or omission. Safe 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 this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue.

ENQUIRY SUMMARY

Received Date

22/01/2018

Your Reference

C151171 PL12 (CB2)

Location

Centre Point: 475643, 254843

X Extent: 205

Y Extent: 525

Postcode: NN7 2QA

Location Description: NN7 2QA, M1, Northampton.

Map Options

Paper Size: A4

Orientation: PORTRAIT

Requested Scale: 2500

Actual Scale: 1:5000 (GAS)

Real World Extents: 1010m x 1090m (GAS)

Recipients

pprsteam@nationalgrid.com

Enquirer Details

Organisation Name: Hydrock

Contact Name: Tom Fox

Email Address: TomFox@hydrock.com

Telephone: 01752 347 515

Address: Lobb Shippon., Plympton, Plymouth, PL7 5BP

Description of Works

(E) PLANS REQUEST for information on any assets in the vicinity of the junctions requested.

Enquiry Type

Proposed Works

Activity Type

Highways

Work Types

Work Type: Plans Only