

SCALE: Not to scale

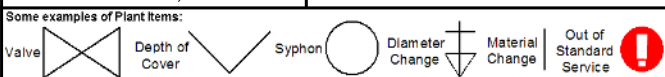
USER ID: utilities

DATE: 14/09/2018

EXTRACT DATE: 13/06/2018

MAP REF: TQ2983

CENTRE: 529436, 183971



This plan shows those pipes owned by Cadent Gas Ltd in their 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 Cadent Gas Ltd 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. Further information on all DR4s can be determined by calling the DR4 hotline on 01455 892426 (9am-5pm) A DR4 is where a potential error has been identified within the asset record and a process is currently underway to investigate and resolve the error as appropriate.

MAPS Viewer Version 5.8.0.1

Local Machine

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# Network Records NetMAP Symbols Booklet - London

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

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## Guidance notes.

### **Important notice:**

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

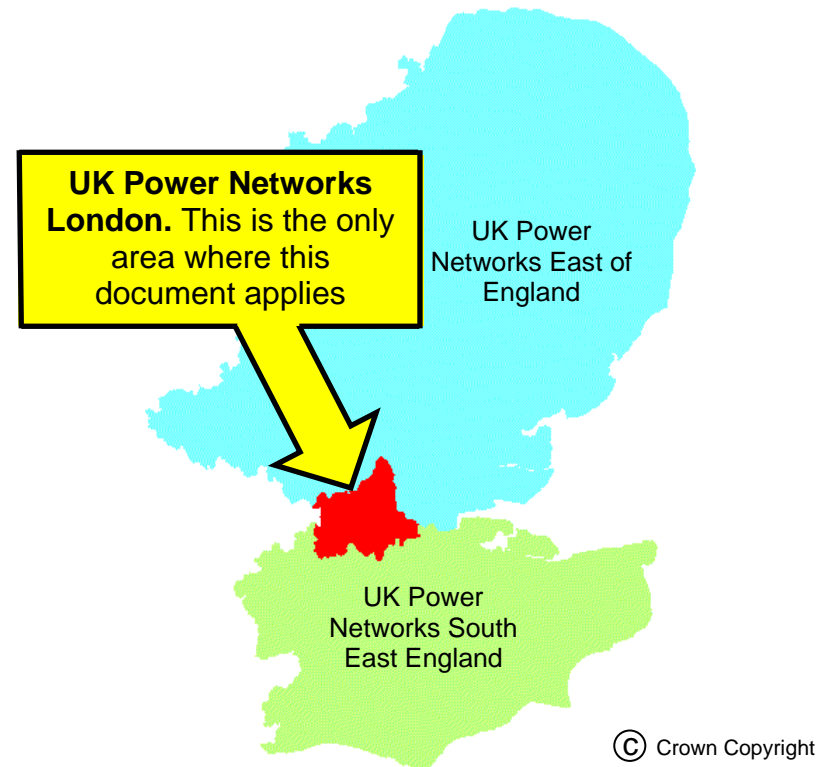
**Tel: 08000 565866.**

- 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. A separate record may be available.
- When excavations are to be carried out near Extra High Voltage (EHV) cables, further details must be obtained before commencement of work.
- Third party cables are not usually shown.
- 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 booklet.
- All LV cables are assumed to be 4 core, and all HV cables assumed to be 3 core – unless otherwise stated.
- All Imperial cable sizes are assumed to be copper and all metric cable sizes are assumed to be aluminium – unless otherwise stated.



















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## **The area covered by this guide:**



Please see the anomalies map at the end of this safety booklet for greater map area detail, and a breakdown of the more significant anomalies within the London area.


















Scenery		
NetMAP system	Scanned image	Description
		100 metre Ordnance Survey grid line (on O/S based maps only)
		Property fence line
		Building line
		Kerb line
		Kerb line on majority of ways & mains maps
		Cable tunnel or subway
NOT APPLICABLE		Borough or City boundary and UK Power Networks boundary
	or 	
		UK Power Networks or Electrical boundary
	or 	

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 of UK Power Networks and their immediate contractors)
	Not applicable	High pressure pipelines in the general vicinity (only visible to of 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 <a href="http://www.linewatch.co.uk">www.linewatch.co.uk</a> 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 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 UK Power Networks and their immediate contractors)
	Not applicable	Nature - Site of Special and Scientific Interest (SSSI) (only visible to UK Power Networks and their immediate contractors)
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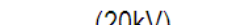
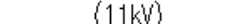
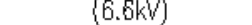







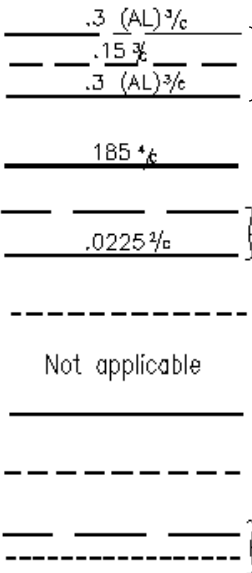
Scenery for UK Power Networks use only - boxed in red		
NetMAP system	Scanned image	Description
	Not applicable	Nature - Local Nature Reserve (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Nature - National Nature Reserve (only visible to UK Power Networks and their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



## Primary distribution cables

NetMAP system	Scanned image	Description
 Solid  Gas  Oil  Cable stop  Shallow	 EHV Cable Route 259  Not applicable  	UK Power Networks route (11,000 , 22,000 to 132,000 volts)  Oil/gas cable stop Part of UK Power Networks cable route where cover is less than normal

## Secondary distribution cables

NetMAP system	Scanned image	Description
 (20kV)  (11kV)  (6.6kV)         		HV cable (up to 20kV)  3 phase LV cable (230V or 400/230V) 1 or 2 phase LV cable (230V or 400/230V) Pilot or Telephone cable, often not shown in plan if running with other cables Fibre-optic cable Earth cable HV or LV cable in duct Duct route(s) not containing live cables



Cable terminology		
NetMAP system	Scanned image	Description
PL	PL	Paper Lead
PLS	PLS	Paper Lead Served
PLST or PLSW	PLA	Paper Lead Armoured
PLSTS	PLTS	Paper Lead Steel Tape Served
PLSTS	PLDT	Paper Lead Double Tape
PLSWS	PLWS	Paper Lead Steel Wire Served
PLSW	PLBW	Paper Lead Bright Wire
PLS	LC & H	Lead Covered & Hessian
PLST or PLSW	LC & A	Lead Covered & Armoured
PLSW	LC & BA	Lead Covered & Bright Armoured
PLST	DSTA	Double steel tape armoured
PLST	STA	Steel Tape Armoured
PLSW	SWA	Steel Wire Armoured
Al	Al	Aluminium
Cu	Cu	Copper
WV	WV	Waveconal
CS	CS	Consac
PVC	PVC	Polyvinyl Chloride
EPR	EPR	Ethylene Propylene Rubber
XLPE	XLPE	Cross Linked Polyethylene
SOL	SOLIDAL	Solid Aluminium
ax	TRIPLEX	Triplex (aluminium)
cx	TRIPLEX	Triplex (copper)

Cable size abbreviations		
NetMAP system	Scanned image	Description
1c	$\frac{1}{c}$	Single core.
c/c	$\frac{9}{c}$	Concentric cores
t/c	$\frac{T}{c}$ or $\frac{T}{cc}$	Triple concentric cores
4c	$\frac{4}{c}$	Four cores
3c CNE	$\frac{3}{c}$ (CNE)	Three cores and concentric neutral – not of the Waveconal type
2c	$\frac{2}{c}$ (or Tw)	Two cores (or twin)
s/c	$\frac{s}{c}$	Split concentric cores
3c	$\frac{3}{c}$	Three cores
DC	DC	Direct current
P	P	Pilot
Pr	Pr	Number of telephone pairs




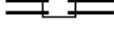

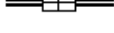







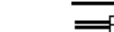


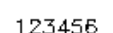
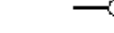

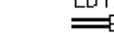





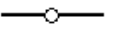



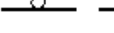
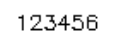

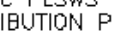
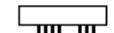
Cable ducts		
NetMAP system	Scanned image	Description
		Single empty ducts
		Cluster of empty ducts (two or more)
		Cable in single duct
		Group of cables shown in a cluster of ducts, plus one or more empty (shown in section)
		Ex-Western area 'ways' maps: This symbol indicates one or more ducts. On City of London area maps "extent of ducts" symbols are not in general use as most duct runs are between pits or boxes

Other NetMAP symbols		
NetMAP system	Scanned image	Description
<u>0.3 4c AL PLSWS</u> (Details also in cable attributes and/or section)		Cable size (and year laid)
		Cable capped end
		Cable pressure (or pot) end or signal end
		Pressure/pot end & earth cable/electrode
		Earth rod (vertical)
		Earth rod (horizontal)
		Earth plate
		Earth plate or end
		Bottle or trouser joint or combined crutch & pressure end - (CPE)
		Straight joints
		Tee joints
		Crutch (or spur) joints (CJ) straight & crutch joints combined (S&CJ)
		Double crutch (or spur) joint
		Sleeve
		Disconnected universal tee

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
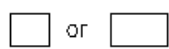

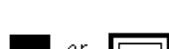

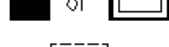

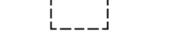










## Other NetMAP symbols

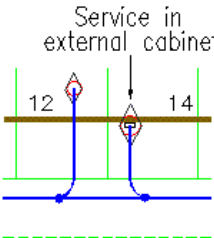
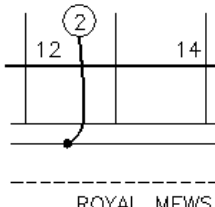
NetMAP system	Scanned image	Description
		Four way underground disconnecting boxes(DB)
		Link boxes(LB)
		Network boxes(NB) or (NWB)
		4 way 6 entry
		6 way box
		6 way 8 entry
		Split bus-bar
		Link box with identification number
		3 way underground disconnecting boxes
		2 way underground disconnecting boxes
		1 way underground disconnecting boxes
		Feeder pillars
		Split bus-bar distribution pillar
		Double bus-bar distribution pillar
		Blind pit/pit
		Pit with access

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## Other NetMAP symbols

NetMAP system	Scanned image	Description
		Transformer chambers (T/C) & transformer compounds
		Underground transformer chamber
		Missing data in or near this location
		Underground tank
		Indicates service between separate buildings is looped
		Jointing schedule numbers or phasing diagram
		Contaminated land reference
		Instrument traced cable or ITC - cable traced electronically using Cable Avoidance Tool (CAT) or similar











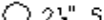













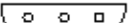
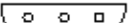


Services		
NetMAP system	Scanned image	Description
<p>SRC = Service Record Card</p> <p>To a property/metered supply (also see SRC)</p> <p>Address point ◇</p> <p>Supply point ○</p> <p>Also see SRC and joint/cable attributes</p> <p>Service in external cabinet</p>  <p>Also see SRC and joint/cable attributes</p>		
	<p>To a property/metered supply (also see SRC)</p> <p>Also see SRC</p> <p>(W) Single phase service</p> <p>(1) Connected to 1 core &amp; neutral</p> <p>(R) Connected to red core &amp; neutral</p> <p>(⊗) Three phase service</p> <p>(+) Connected to inner &amp; outer cores of triple conc cable</p> <p>(-) Connected to middle &amp; outer cores of triple conc cable</p> <p>(⊕) Connected to all three cores of triple conc cable</p> 	<p>Existence of a service with its core connection shown in circle</p>

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Services		
NetMAP system	Scanned image	Description
<p>To street furniture/un-metered supply (also see SRC)</p> <p>Please note that newly edited street furniture no longer has an address point or an SRC</p> <p>(Street furniture general)</p> <p>(Street furniture feeder pillar or cabinet)</p>		
	<p>(Street furniture general)</p> <p>(Street furniture feeder pillar or cabinet)</p> <p>P.L.S.261</p> <p>S.L.261</p> <p>WB</p> <p>TL</p> <p>FB</p> <p>TS</p> <p>B IGP</p> <p>TK TCB</p> <p>TK,TC FP</p>	<p>Public lighting</p> <p>Street lighting</p> <p>Wall bracket</p> <p>Traffic light control</p> <p>Flashing beacon</p> <p>Traffic sign</p> <p>Bollard/illuminated guard post</p> <p>Telephone kiosk, traffic controller, feeder pillar</p>















## Symbols used in cross sections

NetMAP system	Scanned image	Description
		Cable laid direct
		Cable laid in duct
		Blocked duct (sometimes used for unidentified cables)
		Single earthenware duct
		Single steel pipe
		Square cable duct
		Group of circular ducts
		Group of circular ducts (Sykes)
		Group of square ducts (Doulton)
		Cable trough
		Bitumen casing (Crompton)
		Bitumen filled iron trough (Trunks)
		Bitumen casing (Tri-case)

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## Symbols used in cross sections

NetMAP system	Scanned image	Description
		Protective slab
		Tiles.
		Concrete slabs
		Steel plate
		Plastic tile tape
Timber 		Timber



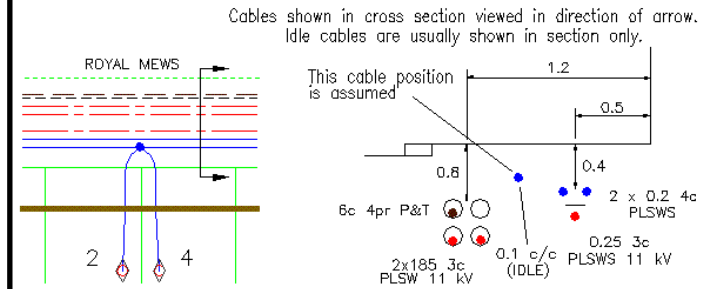
## Abbreviations used in cross sections

NetMAP system	Scanned image	Description
EW	E.W.D(s) or EW.	Earthenware ducts
F	F.P or F or F.D	Fibre duct
A	ASB or A	Asbestos
P	P	Plastic or pitch fibre
S	S.P or S	Steel
C	C.I or C or C.I.P	Cast iron
WI	W.I	Wrought iron pipe
F	F or F.D	Fibre duct
PRD	PRD	Plastic Rigiduct
Left blank – means NR	{ D.N.K or D:NR N.R or (N.R)	Depth not known No record
E.V	E.V.P or E.V	Everite pipe
T/T	T/T	Tape Tile
N/A	3/62 or NOV 79	Date cable laid
N/A—destination now only shown in cable attribute	ABCD etc	HV cable destination (See section sheet HV ref)
	Please note: Ducts are assumed to be 4"/100mm earthenware – unless otherwise stated	

## Typical plan and cross section representations

### Multi-line composite NetMAP/vector representation

All areas – drawn/redrawn using NetMAP GIS

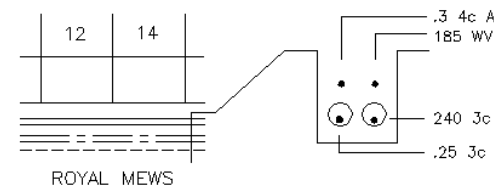


Applies to all composite vector records in both shaded and unshaded areas of the anomalies map.

### Multi-line representation - general composite raster (style 1)

All areas

All cables are shown on plan and represented in section.  
Sections may be shown in plan view or on a supplementary sheet.

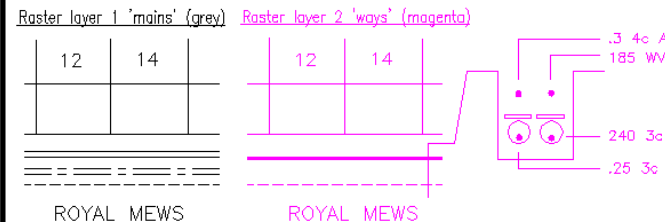


Applies to all composite raster records within the unshaded areas of the anomalies map.  
Can also be found in some shaded areas – in particular the ex-North Eastern shaded areas 3 (b) and 3 (c)

### Main and ways representation – dual layer raster

Ex Western area Holborn and parts of Ex-South Eastern Area only

All cables are shown on plan and represented in cross section on a separate (ways) sheet.



Applies to area 1(a) of the anomalies map.

Applies to area 2(a) of the anomalies map.



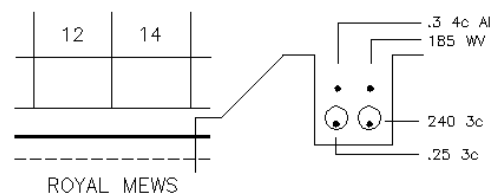
## Typical plan and cross section representations

### Single line representation - raster or vector data

The City of London only

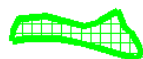
All cables are shown as a single line in plan.  
Sections may be written and not drawn.

OR this style may be used.



1-3 way Tricase  
2-2½" steel pipes  
1-6 way Doulton  
4% (L.V. cable)

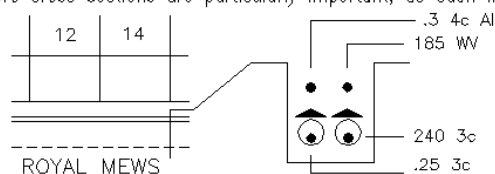
Applies to area 2(b)  
on the anomalies map.



### Multi-single line representation general (style 1)

Finsbury and Shoreditch only

Only the top cables in a vertical cable run are shown in the plan view. See the example below.  
Note that the two lower cables that are in ducts (in this instance), are not shown in plan.  
Therefore cross sections are particularly important, as each line represents one or more cables.



Applies to area 2 (c)  
of the anomalies map.

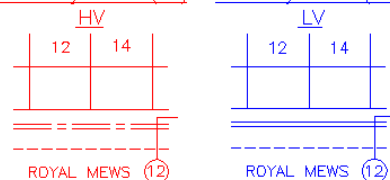


### HV and LV map representation – dual layer raster

Ex-North Eastern area only

HV and LV cables are shown on separate raster layers. These layers MUST be read in conjunction with each other. Sections are shown on a combined supplementary section sheet in numerical sequence.

Raster layer 1 HV (red) Raster layer 2 LV (blue) Separate raster section sheet



Applies to area 3(a)  
of the anomalies map.

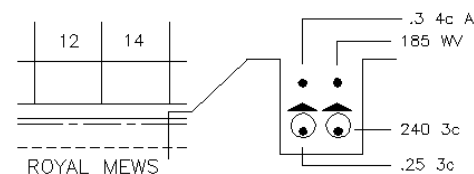


## Typical plan and cross section representations

### Multi-single line representation general (style 2)

Ex-North Eastern area only

In this area each voltage (HV and LV) is represented as an individual line. For example, three HV cables and four LV cables in the same run will be indicated by a single HV line and a single LV line. Therefore cross sections are particularly important, as each line represents one or more cables of that voltage.



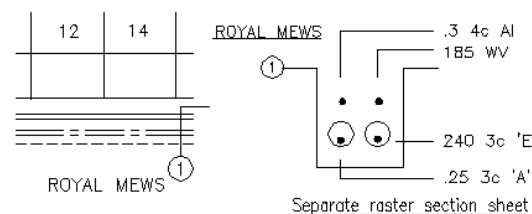
Applies to area 3 (b)  
of the anomalies map.



### Multi-line representation - composite raster (style 2)

Ex North Eastern area only

All cables are individually shown in plan.  
Sections are shown on a supplementary section sheet and recorded under the relevant road name.



Applies to area 3(c)  
of the anomalies map.



### Important note regarding sections:

It does not follow that if the number of cables shown in the cross section have been located, that all live cables have been found. You may have found an unrecorded cable, or a cable belonging to another authority.



## Regional NetMAP Anomalies - general overview:

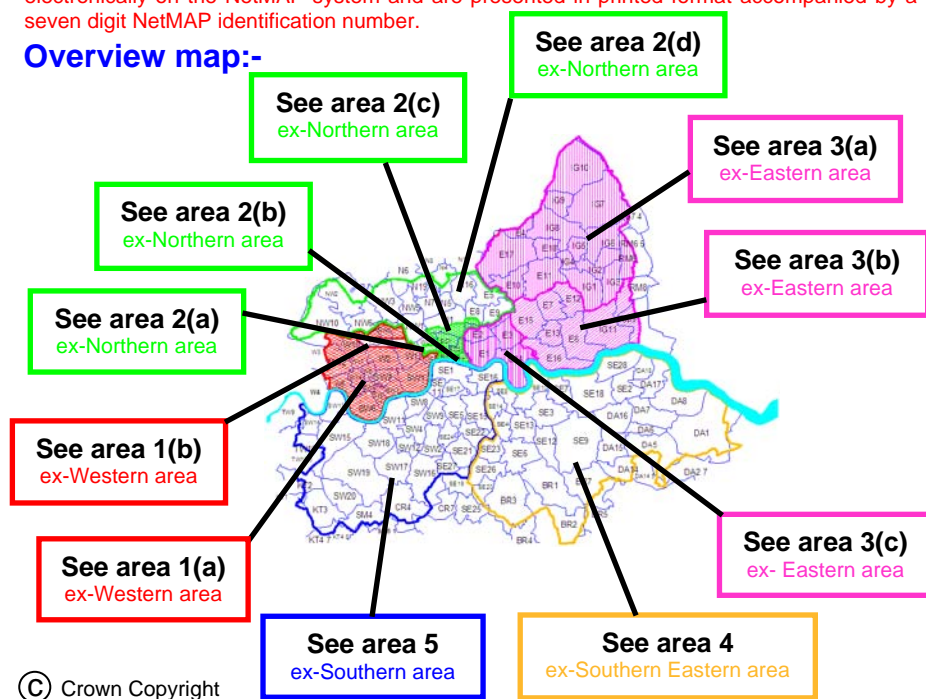
The following pages explain the various major map style anomalies found within the London area. These styles are a legacy from the five individual London Electricity areas which were again formed from seventeen separately organised LEB districts. Areas with significant anomalies are shown in the following pages as cross-hatched areas. Areas with standard composite vector and raster layer information are shown as un-hatched areas.

**Cautionary note:** - any region or sub-region, either shaded or un-shaded, may contain some local anomalies not mentioned in the following pages – if in doubt, please contact the UK Power Networks Plan Provision team on telephone number 08701 963797.

**All regions (1-5) will contain recently created composite vector (NetMAP/AutoCAD) data.**

Recent work created using the NetMAP system and previously created using the AutoCAD system (as opposed to raster/scanned data) are recorded in the composite vector style shown on the UK Power Networks London area symbol sheet - see the first example on page 18 of this document. Recent data will be indicated by the existence of multi-coloured cables on the NetMAP system, but this may not be reflected on printed matter produced with a black and white printer. AutoCAD data looks similar to the coloured NetMAP data, but does not hold any cable 'attributes' when selected using the NetMAP system. These cables will be represented individually (multi-line representation). New NetMAP cross sections may be accessed electronically on the NetMAP system and are presented in printed format accompanied by a seven digit NetMAP identification number.

### Overview map:-



See following pages for further details.

## Region 1 ex-Western area

This region includes Westminster, Kensington, Chelsea, Hammersmith and Fulham. The region is covered by two map layer systems – **region 1(a)** mains and ways dual layer raster, and **region 1(b)** composite raster. The following explains this in greater detail.

### Region 1(a) (hatched )

#### Mains and ways representation:

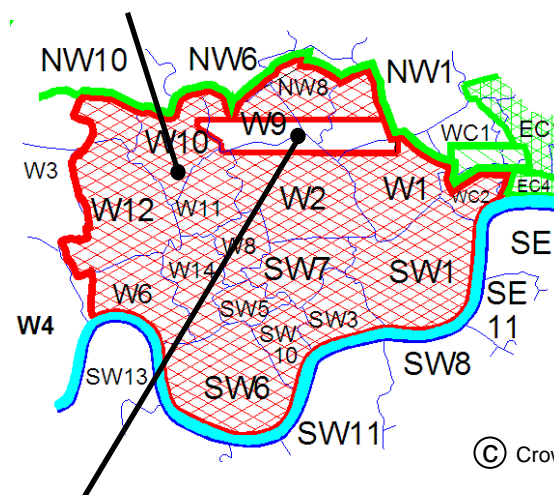
This system consists of two maps layers for the same area.

- The mains map shows all cable routes.
- The ways map shows pipe and duct routes with cross sections.

There are some enlargement sheets, cross sections and jointing details. EHV routes are shown on either the mains or the ways map.

**It is important that all these maps are read in conjunction with each other.**

**Caution:** - It is also important to note that the kerb line detail on these maps is a dash/dot line, which on the majority of UK Power Networks Central (London) records would refer to an HV cable route. HV cables are shown as a solid line when laid direct and a dashed line when in a duct.



### Region 1(b) (un-hatched )

#### Composite single layer (style 1) maps:

Whenever possible, all the information is on one map layer. There are some enlargement sheets in the Aberdeen Place area. Please note that the kerb line is shown as a dotted line and HV cables are shown as dash/dot lines.



## Region 2 ex-Northern area

This region includes Islington, Hackney, the City of London and parts of Brent, Camden and Ealing. The region is covered by four map layer systems - **Region 2(a)** - mains and ways dual layer raster (Holborn area), **Region 2(b)** - single line representation (City of London), **Region 2(c)** - multi-single line representation (Finsbury and Shoreditch) and **Region 2(d)** - composite multi-line maps (all other areas). This following explains this in greater detail.

### Region 2(a) (hatched )

Covers part of WC1 and WC2 (Holborn).

#### Mains and ways representation:

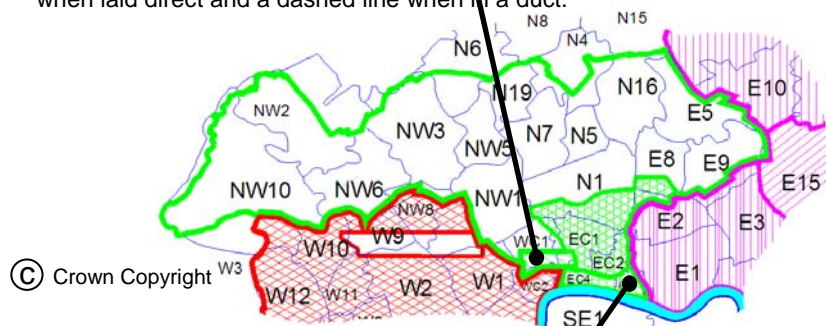
This system consists of two maps layers for the same area.

- i) The mains map shows all cable routes.
- ii) The ways map shows pipe and duct routes with cross sections.

Where needed, extra sheets have been added for enlargements, cross sections and jointing details. EHV routes are shown on the mains map layer.

**It is important that all these maps are read in conjunction with each other.**

**Caution:** - It is also important to note that the kerb line detail on these maps is a dash/dot line, which on the majority of UK Power Networks Central (London) records would refer to an HV cable route. HV cables are shown as a solid line when laid direct and a dashed line when in a duct.



### Region 2(b) (hatched )

Covers parts of postal areas EC1, EC2 and all of postal areas EC3 and EC4.

#### Single line representation maps:

Whenever possible, all the information is on one map layer. One line can represent any number of cables or ducts. It is therefore very important to use cross sections. In some cross sections details may be written and not drawn. In complex and redrawn areas, some detail may be drawn using multi-line representation. There are some enlargement sheets.

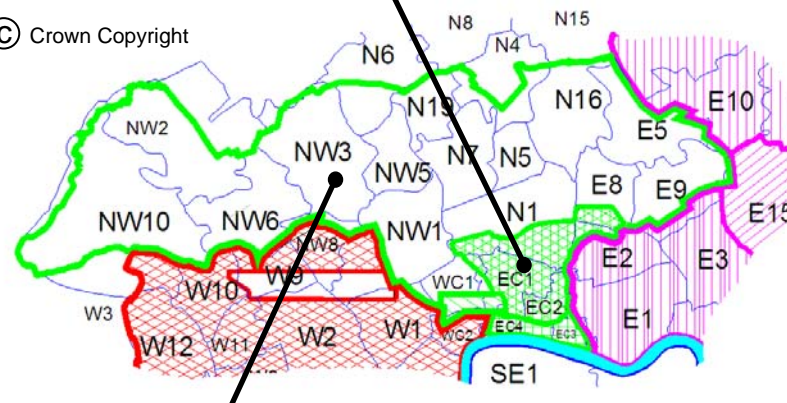
### Region 2(c) (hatched )

Covers parts of postal areas EC1, EC2, N1, E1, E2 and E8.

#### Multi-single line representation (style 1) maps:

Whenever possible, all the information is on one map layer. When cables lay immediately above/below each other, it is shown as a single line. For example if six cables lay three on three, only three lines would indicate the six cables. If the cables were laid flat, six separate lines would be shown. It is therefore important not to assume that the lines drawn indicate the number of cables, at any point. **Cross sections must be used.**

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### Region 2(d) (un-hatched)

Covers all other postal areas in this region

#### Composite single layer (style 1) maps:

Whenever possible, all the information is on one map layer. There are some enlargement sheets.



## Region 3 ex-North Eastern area

This region includes Tower Hamlets, Newham, Redbridge, Waltham Forest, Loughton (Epping) and Barking and Dagenham. This region is covered by three mapping systems.

### Region 3(a) (hatched )

#### Separate HV and LV representation maps:

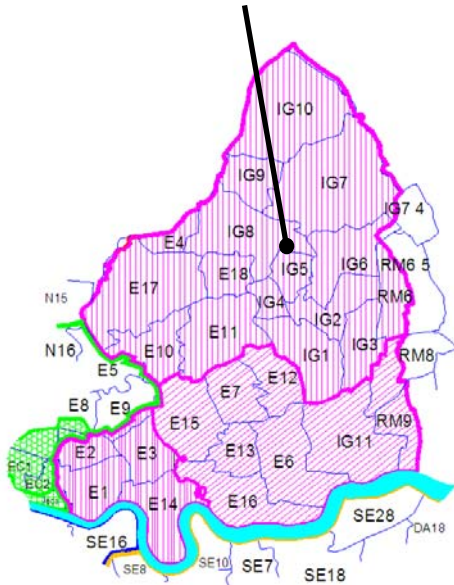
This system consists of two maps layers for the same area.

- i) The HV map layer showing HV cables and duct routes.
- ii) The LV map layer showing LV cables and duct routes.

Cross sections for both HV and LV cable routes are shown on a separate sheet.

EHV cable routes are shown on the HV map layer.

**It is important that all these maps are read in conjunction with each other.**

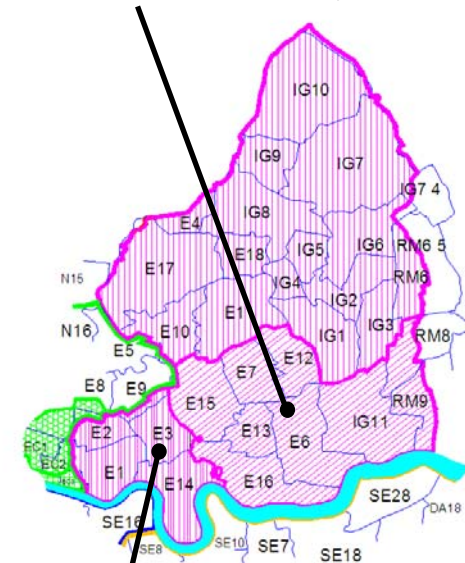


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### Region 3(b) (hatched )

#### A combination of composite single layer (style 1) and multi-single line (style 2):

Whenever possible, all the information is on one map layer. There are some enlargement sheets. There is a combination of map styles used in this area. Some areas may be conventional multi-line line representation with many areas of multi-single line representation. In the multi-line areas each (live) cable is shown individually in plan. In the multi-single line map areas, there is a single line for each voltage type, with a single HV line and a single LV line representing more than one cable run of each voltage (when applicable). Therefore a cable run containing three HV cable and four LV cables will be represented by one HV line and one LV line.



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### Region 3(c) (hatched )

#### A combination of composite single layer (style 2) and multi-single line (style 2):

Whenever possible, all the information is on one map layer. There are some enlargement sheets. In this area (postal code areas E1, E2, E3, E14 and part of E9), the cross sections are listed under each road name. It is therefore extremely important that you have the correct cross sections for the road you are working in.

There is a combination of map styles used in this area. Most areas are composite single layer (style 2) with some areas of multi-single line representation, as described in region 3(b).



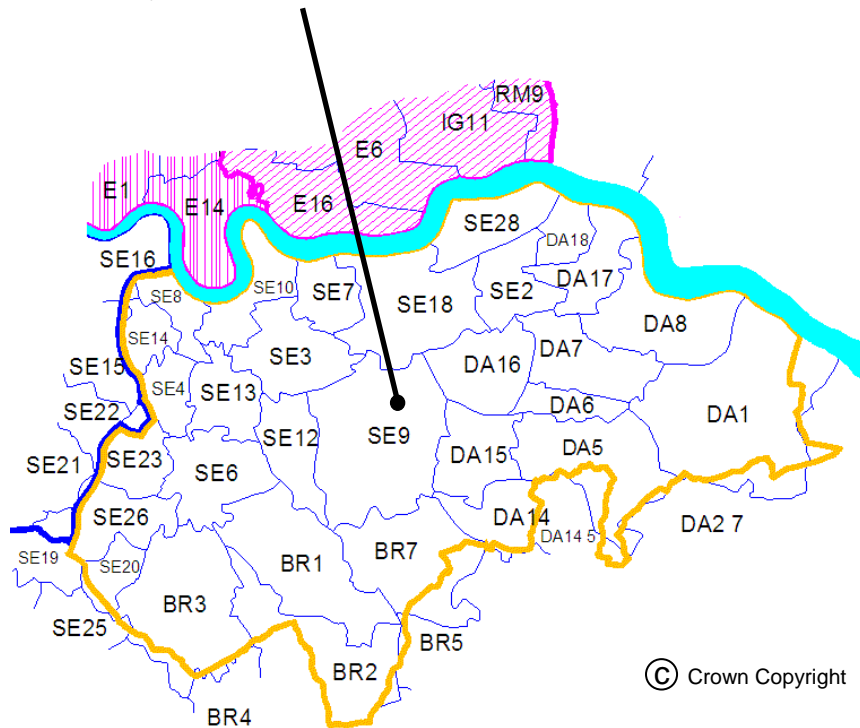
## Region 4 ex-South Eastern area

This region includes Lewisham, Greenwich, Bromley, Bexley and Dartford.  
Nearly all maps are drawn in one style – single layer composite raster/vector.

### Region 4 (un-hatched)

#### Composite single layer (style 1) with a small number of mains and ways representation maps :

Mainly composite maps - whenever possible, all the information is on one map layer. There are some enlargement and cross section sheets. Some maps do not show single phase services unless they are long and deviating. There are however some maps drawn using the mains and ways style. These are rare, but please be aware that they exist.



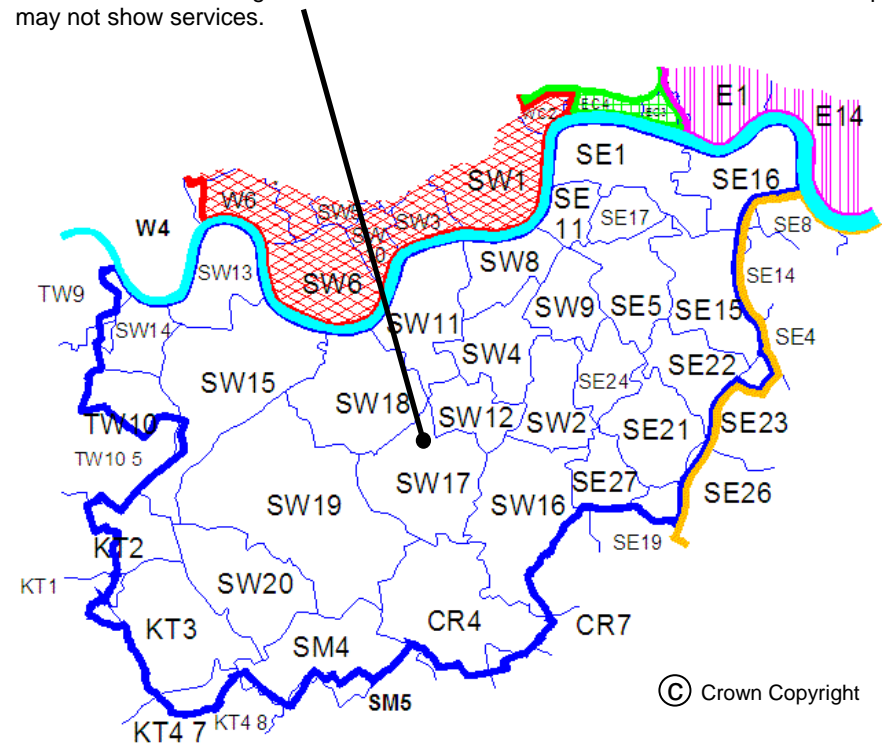
## Region 5 ex-Southern area

This region includes Southwark, Lambeth, Wandsworth, Merton, Kingston upon Thames and Richmond upon Thames. All maps are drawn to one style - single layer composite raster/vector.

### Region 5 (un-hatched)

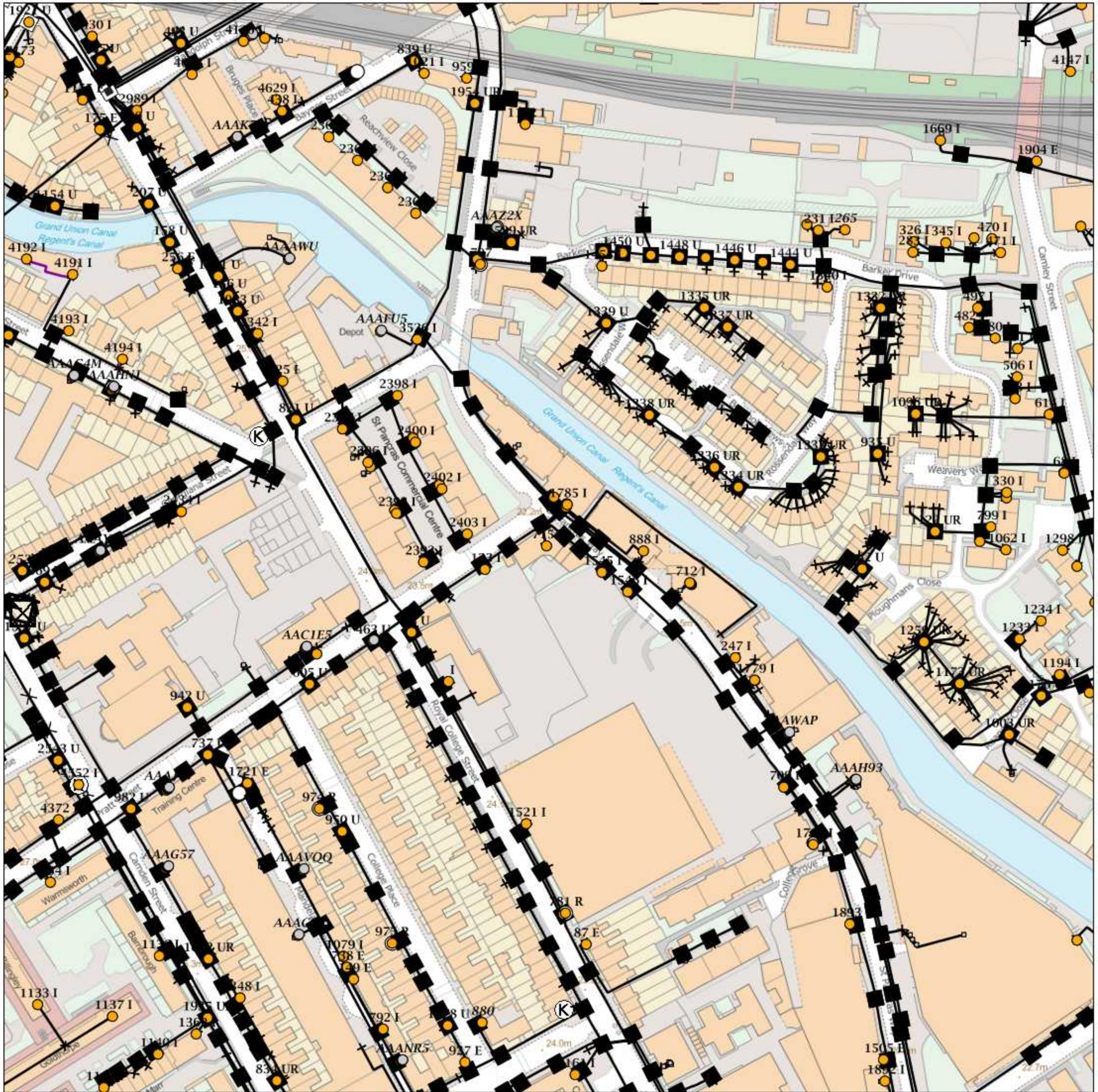
#### Composite single layer (style 1) maps:

Composite maps - whenever possible, all the information is on one map layer. There are some enlargement and cross section sheets. A small number of maps may not show services.





# 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](mailto:cbyd@openreach.co.uk)

ADVANCE NOTICE REQUIRED

(Office hours: Monday - Friday 08.00 to 17.00)  
[www.openreach.co.uk/cbyd](http://www.openreach.co.uk/cbyd)

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 SYMBOLS

DP		Planned Pole	
Planned DP		Joint Box	
PCP		Change Of State	
Planned PCP		Split Coupling	
Built		Duct Tee	
Planned		Planned Box	
Inferred		Manhole	
Duct		Planned Manhole	
Building		Cabinet	
Kiosk		Planned Cabinet	
Hatchings		Other proposed plant is shown using dashed lines.	

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 : ZYC03445G

Map Reference : (centre) TQ2943383925

Easting/Northing : (centre) 529433,183925

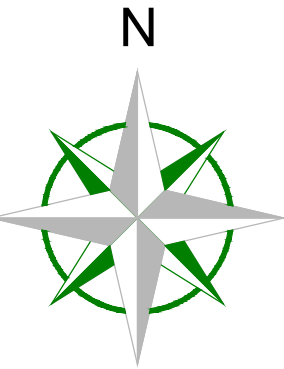
Issued : 14/09/2018 15:44:46

**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](mailto:nnhc@openreach.co.uk)**









Station Information:

Station	Easting (m)	Northing (m)	Level (m)
JK1	529356.123	183977.318	24.760
JK2	529396.673	183913.576	22.994
JK4	529365.884	183892.275	23.820
JK5	529431.372	183938.397	22.203
JK6	529310.922	183970.447	25.003
JK7	529376.692	184017.484	26.517
JK8	529402.908	184068.219	26.228
S2	529366.666	183950.979	24.441
S7	529339.603	183995.388	25.272
S8	529388.370	183989.774	25.688

**OS Note:**  
Some services may have been omitted due to parked vehicles.  
The Ordnance Survey file is to be used as a guide only.

**OS Buildings** Surveyed Buildings

This survey has been orientated to the Ordnance Survey (O.S.) National Grid OSGB36(15) via Global Navigational Satellite Systems (GNSS) and the O.S. Active Network (OS Net).  
A true OSGB36 coordinate has been established near to the site centre via a transformation using the OSTN15GB & OSGM15GB transformation models.  
The survey has been correlated to this point and a further one or more OSGB36 (15) points established to create a true O.S. bearing for angle orientation.  
No scale factor has been applied to the survey therefore the coordinates shown are arbitrary & not true O.S. Coordinates which have a scale factor applied.  
Please refer to Survey Station Table to enable establishment of the on-site grid and datum.

Legend:

Building	Overhead Cable	IC	Intersection chamber	Bc	Barbed
Wall	Concrete edge	Pav	Pipe insert	IB	Buried
Tarmac edge	Gravel	Gr	Gravel	Bm	Buried
Down gully	Down gully	Dg	Down gully	Gd	Ground light
Down gully	Down gully	Dg	Down gully	Gd	Ground light
Centre line	Wedge	Pav	Pipe above ground	Lbck	Lbck
Station and Name	Station and Name	Wl	Water level	Sty	Sty
100.000	100.000	F1	Fixed light	IPL	Internal floor level
Tree (Sketch) - Standing	Tree (Sketch) - Standing	Tp	Telephone post	Sp	Signpost
Area of Undergrowth	Area of Undergrowth	Ep	Electricity post	Thk	Threshold level
Woodland	Woodland	T1	Traffic light	BH	Boundary
Ridge Level	Ridge Level	Bx	Bus stop	ELC	Electric
E Level	E Level	St	Stop sign	BT	British Telecom
The Roof Level	The Roof Level	St	Stop sign	C/W	Control box
Gate	Gate	Er	Earth road	TT	Turbine
Fence types	Fence types	Ww	Water meter	BP	Brick paved
Iron Railings	Iron Railings	Gw	Gas valve	CPS	Concrete paving slabs
Ww	Ww	Av	Air valve	CVR	Cover
Ww	Ww	ICU	Unclassified inspection	Rwall	Retaining wall
Ww	Ww	TTL	Top of Air Level	G	Gully
Ww	Ww	Rw	Rubble drain	G	Gully
Ww	Ww	CIV	Cable to	MG	Multi gully
Ww	Ww	Ww	Water meter	IC	Inverted chamber
Ww	Ww	Gw	Gas meter post	CL	Close level
Ww	Ww	Sd	Slope	IL	Level level
Ww	Ww	Ph	Fire hydrant	URL	Unlevel to level

Rev

Date

Description

Drawn

G. Ref.

☐ Topographical Surveys

☐ Site Engineering

☐ Utility / CCTV Surveys

☐ Measured Building Surveys

☐ 3D Laser Scanning

☐ Revit & BIM Models

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Regent's Park

London

NW1 5LL

t. (02072) 241806

CLIENT

**Blackburn & Co Ltd**

PROJECT

**St Pancras Campus**  
**63 Pratt Street**  
**London, NW1 0DQ**

TITLE

**Topographical Survey**

SCALE

**A1@ 1: 500**

DATE

**13.08.18**

DRAWN

**JK2**

QUALITY REF

**GH3496**

Level datum

See note

Grid orientation

See note

Job number

**31168**

Drawing No.

**31168\_T**

Rev.

**0**

Comments

This plan should only be used for its original purpose. Greenhatch Group accepts no responsibility for this plan if supplied to any party other than the original client.

All dimensions should be checked on site prior to design and construction.

Drainage information (where applicable) has been visually inspected from the surface and therefore should be treated as approximate only.

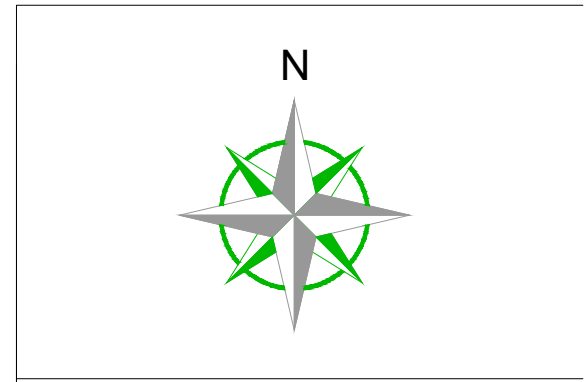
Notes

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NOTES:

UTILITY KEY	
	ELECTRIC CABLE
	ELECTRIC & COMMS CABLE
	TRAFFIC SIGNAL CABLE
	TELECOMS CABLE
	CABLE TELEVISION
	COMMUNICATION CABLE
	WATER PIPE
	GAS PIPE
	FOUL DRAINAGE
	CONTAMINATED SURFACE DRAINAGE
	SURFACE DRAINAGE
	COMBINED DRAINAGE
	PUMPING MAIN
	FUEL PIPE
	VENT PIPE
	OFFSET FILL PIPE
	GAUGE LINE
	VAPOUR RECOVERY
	SERVICE DUCTS
	HEATING PIPES
	UNIDENTIFIED SIGNAL
	SURVEY BOUNDARY
	END OF TRACE

ABBREVIATIONS	
AC	ASBESTOS CEMENT
AR	ASSUMED ROUTE
BB	BASE BEND
BD	BACKSOP
BR	BROCKHOLE
BT	BRICK
CI	CAST IRON
CO	COVER LEVEL
CP	CABLE PIPER
CTV	CATCHMENT
CTV	DUCTILE IRON
CTV	EMPTY DUCT
CTV	END OF TRENCH SCAR
CTV	END OF TRACE
CTV	ELECTRICITY POLE
CTV	FAIRWAY
CTV	GROUND PENETRATING RADAR
CTV	GLASS REINFORCED PLASTIC
CTV	GAS VALVE
CTV	HIGH LEVEL
CTV	HEAD OF RUN
CTV	INSPECTION CHAMBER
CTV	LAMP POST
CTV	MANHOLE
CTV	SURFACE WATER SEWER
CTV	FOUL WATER SEWER
CTV	COMBINED WATER SEWER
CTV	MONITORING WELL
CTV	OVERHEAD
CTV	OFF SURVEY AREA
CTV	POST TENSION
CTV	PIPE RISER
CTV	PURPLE CHLORIDE
CTV	RAMP
CTV	SANITARY
CTV	SPRINKLER
CTV	STOP TAP
CTV	STOP VALVE
CTV	TRAPPED EXIT
CTV	TAKEN FROM RECORD
CTV	TRAFFIC LIGHT
CTV	TELEPHONE POLE
CTV	UNABLE TO LOCATE
CTV	UNABLE TO FIND
CTV	UNABLE TO SURVEY
CTV	VENT PIPE
CTV	VENT VALVE
CTV	WATER RECOVERY
CTV	WATER LEVEL
CTV	WATER METER
CTV	WASH OUT VALVE

**DISCLAIMER**

ELECTRO-MAGNETIC TECHNIQUES AND/OR GROUND PENETRATING RADAR HAVE BEEN USED IN THE LOCATION OF UNDERGROUND SERVICES. THE RESULTS ARE NOT INFALLIBLE AND TRAIL EXCAVATIONS SHOULD BE CARRIED OUT TO CONFIRM SERVICE IDENTIFICATION. POSITIONS AND DEPTHS ARE ESTIMATED. WHERE THESE ARE NOT IDENTICAL TO RECORD INFORMATION, THE COMPARISON OF THE TWO SETS OF DATA WILL BE USED TO DETERMINE THE MOST ACCURATE INFORMATION. THE METHOD OF SURVEY DOES NOT DIFFERENTIATE BETWEEN LIVE AND DEAD SERVICES AND AS SUCH ALL SERVICES SHOULD BE TREATED AS LIVE.

WHERE SERVICES ARE IDENTICAL POSITIONS MAY BE TAKEN FROM RECORDS, TRENCH SCARS & SURFACE DETAIL. WHERE QUOTED DEPTHS ESTIMATIONS ARE GENERALLY TO THE CENTRE OF THE SERVICE, DEPTHS TO GRAVITY SEWERS AND DRAINAGE ARE GENERALLY TO INVERT LEVELS UNLESS OTHERWISE STATED.

PIES SIZES WHICH CANNOT BE OBTAINED BY VISUAL SURVEY ARE TAKEN FROM RECORD DRAWINGS OR MARKER PLATES WHERE AVAILABLE.

WHERE GROUND PENETRATING RADAR HAS BEEN USED IT WILL PROVIDE AN INDICATION OF THE PRESENCE OF SERVICES. IT IS NOT POSSIBLE TO IDENTIFY UNDERGROUND STRUCTURES, TRENCHES, BUT CANNOT GUARANTEE TO HAVE LOCATED ALL SUCH ITEMS. THE USE OF RADAR CAN BE LIMITED BOTH BY SURFACE CONDITIONS AND ALSO BY SOIL TYPE. DEPTH ESTIMATES WOULD NOT NORMALLY BE PROVIDED FOR SERVICES LOCATED WITH GPR.

Rev

Date

Description

Drawn

Q Ref

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group

☐ Topographical Surveys

☐ Measured Building Surveys

☐ Site Engineering

☐ 3D Laser Scanning

☐ Utility / CCTV Surveys

☐ Revit & BIM Models

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Poland

ul. Różewickiego 91

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Poland

t. 0048 32 202 2292

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CLIENT		Blackburn & Co LTD			
PROJECT		St Pancras Campus 63 Pratt Street London NW1 0DQ			
TITLE		Underground Utility Survey			
SCALE		DATE			
A1@ 1:200		20/09/18			
DRAWN		QUALITY REF			
SL		13275			
Level datum		DATE			
Grid orientation		20/09/18			
Job number		31168			
Drawing No.		Rev.			
31168_UG_2		0			
Comments					
This plan should only be used for its original purpose. Greenhatch Group accepts no responsibility for this plan if supplied to any party other than the original client.					
All dimensions should be checked on site prior to design and construction.					
Drainage information (where applicable) has been visually inspected from the surface and therefore should be treated as approximate only.					
Notes:					
Copyright Greenhatch Group, 2007/13					



# Asset location search



## Property Searches

Greenhatch Group  
Rowan House Duffield Road Little Eaton  
DERBY  
DE21 5DR

**Search address supplied** Flat 1  
124  
Pratt Street  
London  
NW1 0DQ

**Your reference** St Pancras

**Our reference** ALS/ALS Standard/2018\_3873664

**Search date** 14 September 2018

### Keeping you up-to-date

#### Notification of Price Changes

From 1 September 2018 Thames Water Property Searches will be increasing the price of its Asset Location Search in line with RPI at 3.23%.

For further details on the price increase please visit our website: [www.thameswater-propertysearches.co.uk](http://www.thameswater-propertysearches.co.uk)  
Please note that any orders received with a higher payment prior to the 1 September 2018 will be non-refundable.



Thames Water Utilities Ltd  
Property Searches, PO Box 3189, Slough SL1 4WW  
DX 151280 Slough 13



[searches@thameswater.co.uk](mailto:searches@thameswater.co.uk)  
[www.thameswater-propertysearches.co.uk](http://www.thameswater-propertysearches.co.uk)



0845 070 9148





**Search address supplied:** Flat 1, 124, Pratt Street, London, NW1 0DQ

Dear Sir / Madam

**An Asset Location Search is recommended when undertaking a site development.** It is essential to obtain information on the size and location of clean water and sewerage assets to safeguard against expensive damage and allow cost-effective service design.

The following records were searched in compiling this report: - the map of public sewers & the map of waterworks. Thames Water Utilities Ltd (TWUL) holds all of these.

This search provides maps showing the position, size of Thames Water assets close to the proposed development and also manhole cover and invert levels, where available.

Please note that none of the charges made for this report relate to the provision of Ordnance Survey mapping information. The replies contained in this letter are given following inspection of the public service records available to this company. No responsibility can be accepted for any error or omission in the replies.

You should be aware that the information contained on these plans is current only on the day that the plans are issued. The plans should only be used for the duration of the work that is being carried out at the present time. Under no circumstances should this data be copied or transmitted to parties other than those for whom the current work is being carried out.

Thames Water do update these service plans on a regular basis and failure to observe the above conditions could lead to damage arising to new or diverted services at a later date.

### Contact Us

If you have any further queries regarding this enquiry please feel free to contact a member of the team on 0845 070 9148, or use the address below:

Thames Water Utilities Ltd  
Property Searches  
PO Box 3189  
Slough  
SL1 4WW

Email: [searches@thameswater.co.uk](mailto:searches@thameswater.co.uk)

Web: [www.thameswater-propertysearches.co.uk](http://www.thameswater-propertysearches.co.uk)



### Waste Water Services

**Please provide a copy extract from the public sewer map.**

Enclosed is a map showing the approximate lines of our sewers. Our plans do not show sewer connections from individual properties or any sewers not owned by Thames Water unless specifically annotated otherwise. Records such as "private" pipework are in some cases available from the Building Control Department of the relevant Local Authority.

Where the Local Authority does not hold such plans it might be advisable to consult the property deeds for the site or contact neighbouring landowners.

This report relates only to sewerage apparatus of Thames Water Utilities Ltd, it does not disclose details of cables and or communications equipment that may be running through or around such apparatus.

The sewer level information contained in this response represents all of the level data available in our existing records. Should you require any further Information, please refer to the relevant section within the 'Further Contacts' page found later in this document.

For your guidance:

- The Company is not generally responsible for rivers, watercourses, ponds, culverts or highway drains. If any of these are shown on the copy extract they are shown for information only.
- Any private sewers or lateral drains which are indicated on the extract of the public sewer map as being subject to an agreement under Section 104 of the Water Industry Act 1991 are not an 'as constructed' record. It is recommended these details be checked with the developer.

### Clean Water Services

**Please provide a copy extract from the public water main map.**

Enclosed is a map showing the approximate positions of our water mains and associated apparatus. Please note that records are not kept of the positions of individual domestic supplies.

For your information, there will be a pressure of at least 10m head at the outside stop valve. If you would like to know the static pressure, please contact our Customer Centre on 0800 316 9800. The Customer Centre can also arrange for a full flow and pressure test to be carried out for a fee.





For your guidance:

- Assets other than vested water mains may be shown on the plan, for information only.
- If an extract of the public water main record is enclosed, this will show known public water mains in the vicinity of the property. It should be possible to estimate the likely length and route of any private water supply pipe connecting the property to the public water network.

## **Payment for this Search**

A charge will be added to your suppliers account.



### Further contacts:

#### Waste Water queries

Should you require verification of the invert levels of public sewers, by site measurement, you will need to approach the relevant Thames Water Area Network Office for permission to lift the appropriate covers. This permission will usually involve you completing a TWOSA form. For further information please contact our Customer Centre on Tel: 0845 920 0800. Alternatively, a survey can be arranged, for a fee, through our Customer Centre on the above number.

If you have any questions regarding sewer connections, budget estimates, diversions, building over issues or any other questions regarding operational issues please direct them to our service desk. Which can be contacted by writing to:

Developer Services (Waste Water)  
Thames Water  
Clearwater Court  
Vastern Road  
Reading  
RG1 8DB

Tel: 0800 009 3921  
Email: [developer.services@thameswater.co.uk](mailto:developer.services@thameswater.co.uk)

#### Clean Water queries

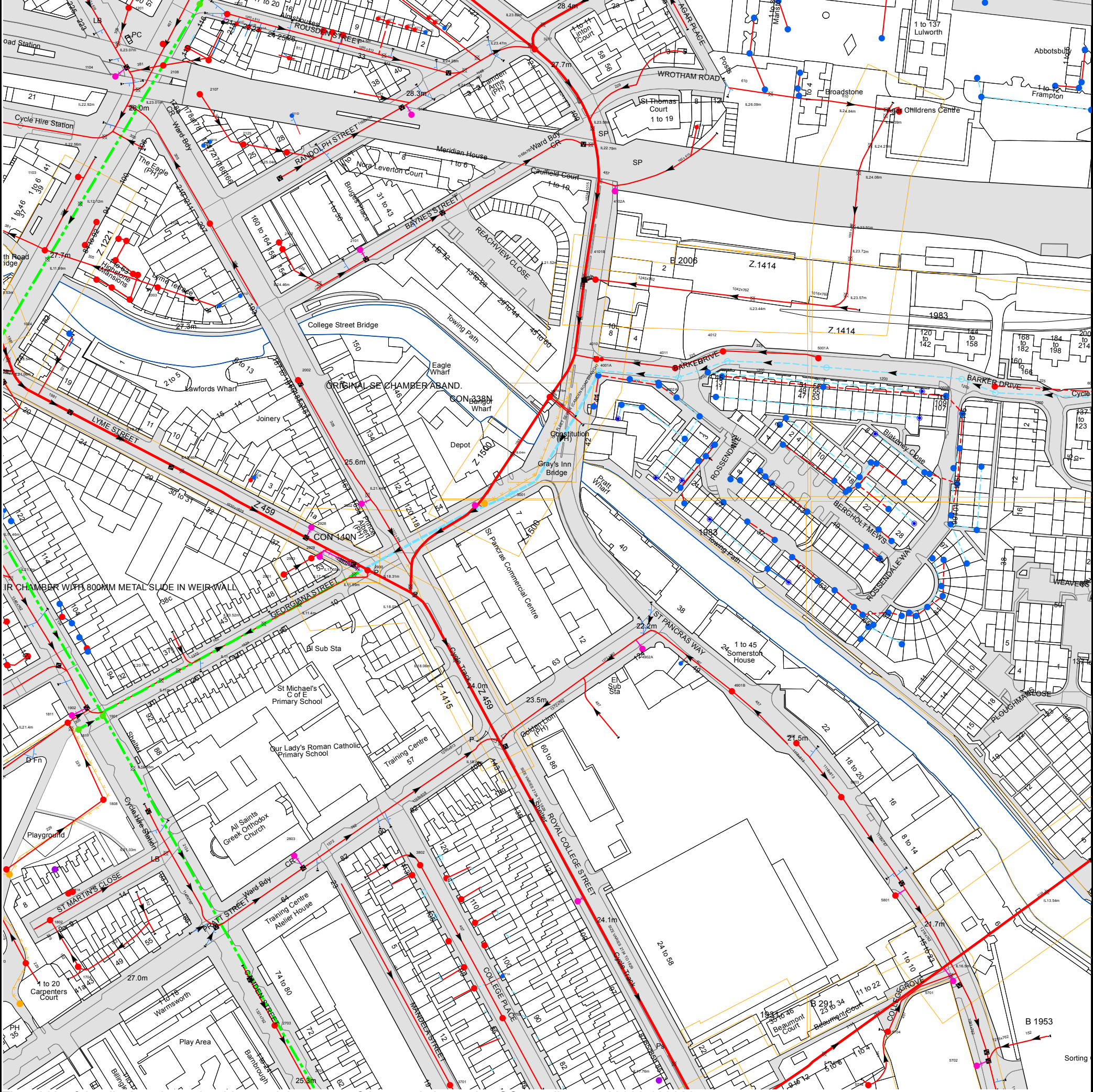
Should you require any advice concerning clean water operational issues or clean water connections, please contact:

Developer Services (Clean Water)  
Thames Water  
Clearwater Court  
Vastern Road  
Reading  
RG1 8DB

Tel: 0800 009 3921  
Email: [developer.services@thameswater.co.uk](mailto:developer.services@thameswater.co.uk)



Asset Location Search Sewer Map - ALS/ALS Standard/2018 3873664



The width of the displayed area is 500 m and the centre of the map is located at OS coordinates 529382,183980  
The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

Based on the Ordnance Survey Map with the Sanction of the controller of H.M. Stationery Office, License no. 100019345 Crown Copyright Reserved.



NB. Levels quoted in metres Ordnance Newlyn Datum. The value -9999.00 indicates that no survey information is available

Manhole Reference	Manhole Cover Level	Manhole Invert Level
52AE	n/a	n/a
42DG	n/a	n/a
42DE	n/a	n/a
42DF	n/a	n/a
2234	28.42	12.52
2202	n/a	25.51
221C	n/a	n/a
221B	n/a	n/a
221A	n/a	n/a
2239	n/a	n/a
2240	n/a	n/a
2241	n/a	n/a
321E	n/a	n/a
321F	n/a	n/a
321H	n/a	n/a
321I	n/a	n/a
321G	n/a	n/a
321C	n/a	n/a
321B	n/a	n/a
321D	n/a	n/a
1201	n/a	23.55
5003B	28.8	22.52
50BJ	n/a	n/a
59EF	n/a	n/a
59EH	n/a	n/a
51AC	n/a	n/a
51AI	n/a	n/a
50AG	n/a	n/a
5004	28.8	24.25
5005	28.8	22.6
61AD	n/a	n/a
61AC	n/a	n/a
61AB	n/a	n/a
62AE	n/a	n/a
61AE	n/a	n/a
59FJ	n/a	n/a
59DH	n/a	n/a
50EF	n/a	n/a
59DI	n/a	n/a
50EA	n/a	n/a
59FH	n/a	n/a
59FI	n/a	n/a
59AF	n/a	n/a
59FD	n/a	n/a
59FG	n/a	n/a
59AE	n/a	n/a
59DG	n/a	n/a
50DJ	n/a	n/a
59AJ	n/a	n/a
59AD	n/a	n/a
50DH	n/a	n/a
59BA	n/a	n/a
50DF	n/a	n/a
59BC	n/a	n/a
59BB	n/a	n/a
59AC	n/a	n/a
59AB	n/a	n/a
59EG	n/a	n/a
59FC	n/a	n/a
50AI	n/a	n/a
50BI	n/a	n/a
50AH	n/a	n/a
40EB	n/a	n/a
491A	n/a	n/a
49DI	n/a	n/a
40DJ	n/a	n/a
40EC	n/a	n/a
49DF	n/a	n/a
40FA	n/a	n/a
40FC	n/a	n/a
49CC	n/a	n/a
40DA	n/a	n/a
40DB	n/a	n/a
49DG	n/a	n/a
40DC	n/a	n/a
49CD	n/a	n/a
40BI	n/a	n/a
49AJ	n/a	n/a
49CB	n/a	n/a
59EC	n/a	n/a
50ED	n/a	n/a
59AH	n/a	n/a
50EC	n/a	n/a
50EH	n/a	n/a
59DJ	n/a	n/a
50EB	n/a	n/a
50EG	n/a	n/a
59EB	n/a	n/a
59AG	n/a	n/a
5718	20.05	17.31
471A	n/a	n/a



Manhole Reference	Manhole Cover Level	Manhole Invert Level
5702	n/a	n/a
5704	19.71	16.96
5701	21.24	14.4
5801	n/a	n/a
5803	21.36	16.99
4802	21.26	17.29
4901B	21.24	19.17
40EJ	n/a	n/a
40FD	n/a	n/a
40DF	n/a	n/a
40BJ	n/a	n/a
40FE	n/a	n/a
40GD	n/a	n/a
40BG	n/a	n/a
50CA	n/a	n/a
50CB	n/a	n/a
40GC	n/a	n/a
40FJ	n/a	n/a
4002A	27.8	21.85
40AE	n/a	n/a
40BF	n/a	n/a
4011	27.8	23.74
5002A	28.5	22.2
4003B	28.3	21.97
5001A	28.5	24.75
4012	28.3	24.2
411A	n/a	n/a
5101	28.91	24.96
41CB	n/a	n/a
41BE	n/a	n/a
41BJ	n/a	n/a
41BI	n/a	n/a
42DH	n/a	n/a
52BE	n/a	n/a
3701	24.89	21.41
2102	n/a	n/a
2124	n/a	n/a
2901	n/a	n/a
211C	n/a	n/a
221F	n/a	n/a
211D	n/a	n/a
2002	26.34	22.4
2928	25.09	20.58
2903	n/a	n/a
2929	25.02	22.03
2101	n/a	n/a
2902	n/a	n/a
2930	24.89	18.08
3105	n/a	n/a
3901	25.29	18.49
3001	25.29	12.67
3217	27.88	23.77
3019	26.44	n/a
40GA	n/a	n/a
4101B	26.49	22.99
4010	26.7	20.12
40GB	n/a	n/a
4001A	26.29	13.44
4102A	27.1	n/a
40FG	n/a	n/a
40FI	n/a	n/a
40FH	n/a	n/a
19FA	n/a	n/a
1103	27.7	n/a
11DE	n/a	n/a
11DG	n/a	n/a
11DD	n/a	n/a
10DI	n/a	n/a
1104	n/a	n/a
11CJ	n/a	n/a
11CH	n/a	n/a
11CI	n/a	n/a
10DJ	n/a	n/a
11DA	n/a	n/a
11DB	n/a	n/a
2003	n/a	n/a
2201	n/a	n/a
2108	27.88	n/a
22FD	n/a	n/a
2107	n/a	n/a
211B	n/a	n/a
21CG	n/a	n/a
2103	27.58	23.31
211A	n/a	n/a
201C	n/a	n/a
201D	n/a	n/a
2125	n/a	n/a
201A	n/a	n/a
201B	n/a	n/a
3702	24.74	19.9
37JE	n/a	n/a
371A	n/a	n/a
37JH	n/a	n/a



Manhole Reference	Manhole Cover Level	Manhole Invert Level
1704	27.73	23.22
3703	n/a	n/a
37AH	n/a	n/a
38CI	n/a	n/a
38CA	n/a	n/a
3814	23.94	n/a
38EI	n/a	n/a
38DF	n/a	n/a
181A	n/a	n/a
38FD	n/a	n/a
38FE	n/a	n/a
38DI	n/a	n/a
3802	n/a	n/a
38GA	n/a	n/a
2803	n/a	n/a
1808	26.21	22.82
1810	26.13	n/a
1901	25.96	10.77
1902	n/a	n/a
19BC	n/a	n/a
4902A	n/a	n/a
19BG	n/a	n/a
19ED	n/a	n/a
2703	25.97	22.3
2701	25.41	9.46
1805	26.63	n/a
19GF	n/a	n/a
19FC	n/a	n/a
1703	27.45	22.73
19FE	n/a	n/a
1802	26.8	21.57
181C	n/a	n/a
19EH	n/a	n/a
19EI	n/a	n/a
1811	26.09	21.32
181B	n/a	n/a
19II	n/a	n/a
19IH	n/a	n/a
1101	27.58	22.24
10CH	n/a	n/a
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# ALS Sewer Map Key

## Public Sewer Types (Operated & Maintained by Thames Water)

	<b>Foul:</b> A sewer designed to convey waste water from domestic and industrial sources to a treatment works.		Trunk Foul
	<b>Surface Water:</b> A sewer designed to convey surface water (e.g. rain water from roofs, yards and car parks) to rivers or watercourses.		Trunk Surface Water
	<b>Combined:</b> A sewer designed to convey both waste water and surface water from domestic and industrial sources to a treatment works.		Trunk Combined
	Storm Relief		Bio-solids (Sludge)
	Vent Pipe		Proposed Thames Water Foul Sewer
	Proposed Thames Surface Water Sewer		Foul Rising Main
	Gallery		Combined Rising Main
	Surface Water Rising Main		Proposed Thames Water Rising Main
	Sludge Rising Main		Vacuum

### Notes:

- 1) All levels associated with the plans are to Ordnance Datum Newlyn.
- 2) All measurements on the plans are metric.
- 3) Arrows (on gravity fed sewers) or flecks (on rising mains) indicate direction of flow.
- 4) Most private pipes are not shown on our plans, as in the past, this information has not been recorded.
- 5) 'na' or '0' on a manhole level indicates that data is unavailable.

## Sewer Fittings

A feature in a sewer that does not affect the flow in the pipe. Example: a vent is a fitting as the function of a vent is to release excess gas.

	Air Valve
	Dam Chase
	Fitting
	Meter
	Vent Column

## Operational Controls

A feature in a sewer that changes or diverts the flow in the sewer. Example: A hydrobrake limits the flow passing downstream.

	Control Valve
	Drop Pipe
	Ancillary
	Weir

## End Items

End symbols appear at the start or end of a sewer pipe. Examples: an Undefined End at the start of a sewer indicates that Thames Water has no knowledge of the position of the sewer upstream of that symbol, Outfall on a surface water sewer indicates that the pipe discharges into a stream or river.

	Outfall
	Undefined End
	Inlet

## Other Symbols

Symbols used on maps which do not fall under other general categories

	Public/Private Pumping Station
	Change of characteristic indicator (C.O.C.I.)
	Invert Level
	Summit

### Areas

Lines denoting areas of underground surveys, etc.

	Agreement
	Operational Site
	Chamber
	Tunnel
	Conduit Bridge

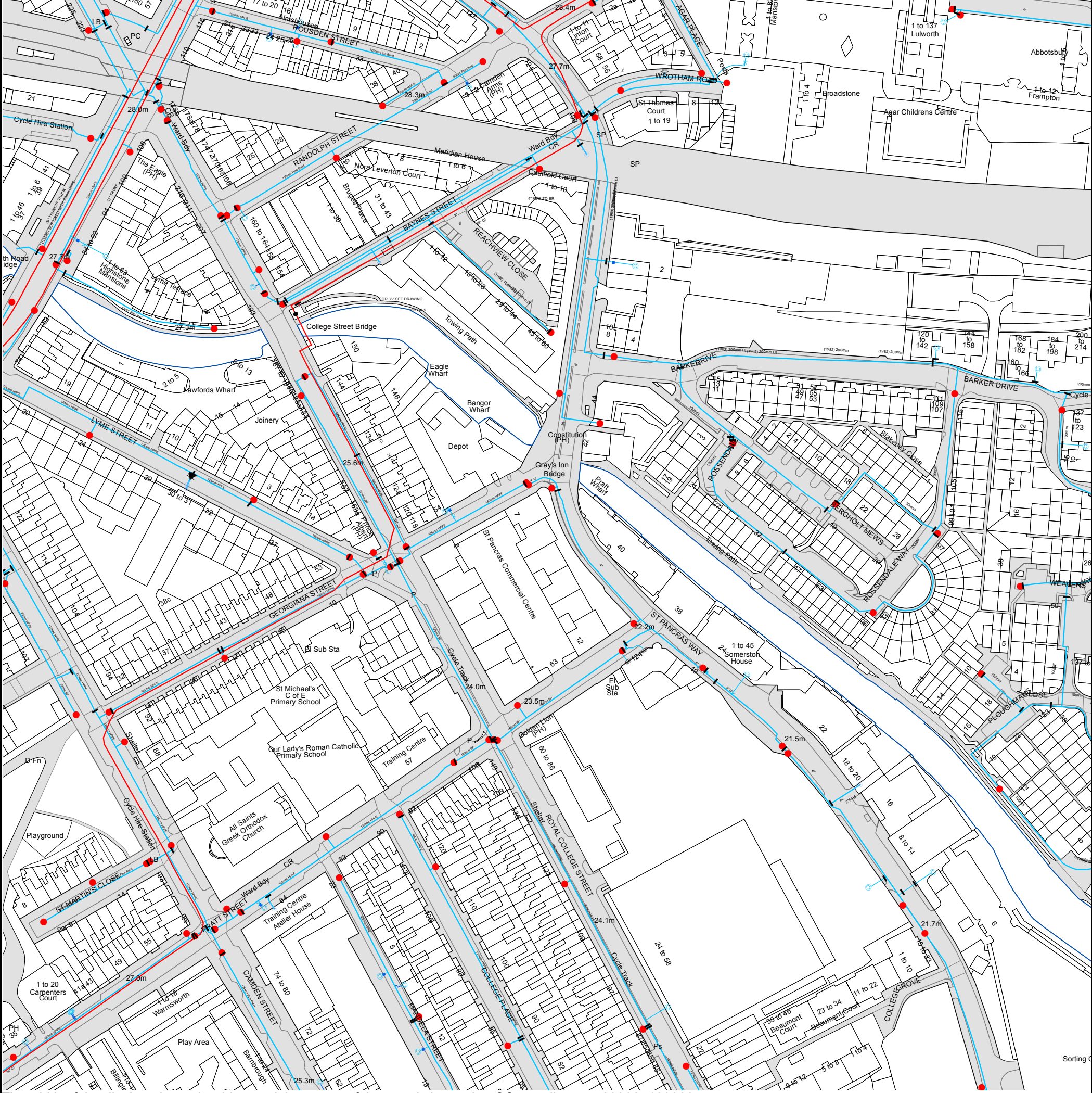
## Other Sewer Types (Not Operated or Maintained by Thames Water)

	Foul Sewer		Surface Water Sewer
	Combined Sewer		Gully
	Culverted Watercourse		Proposed
			Abandoned Sewer

- 6) The text appearing alongside a sewer line indicates the internal diameter of the pipe in millimetres. Text next to a manhole indicates the manhole reference number and should not be taken as a measurement. If you are unsure about any text or symbology present on the plan, please contact a member of Property Insight on 0845 070 9148.



Asset Location Search Water Map - ALS/ALS Standard/2018 3873664



The width of the displayed area is 500 m and the centre of the map is located at OS coordinates 529382, 183980.  
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## ALS Water Map Key

### Water Pipes (Operated & Maintained by Thames Water)

- 4"** **Distribution Main:** The most common pipe shown on water maps. With few exceptions, domestic connections are only made to distribution mains.
- 16"** **Trunk Main:** A main carrying water from a source of supply to a treatment plant or reservoir, or from one treatment plant or reservoir to another. Also a main transferring water in bulk to smaller water mains used for supplying individual customers.
- 3" SUPPLY** **Supply Main:** A supply main indicates that the water main is used as a supply for a single property or group of properties.
- 3" FIRE** **Fire Main:** Where a pipe is used as a fire supply, the word FIRE will be displayed along the pipe.
- 3" METERED** **Metered Pipe:** A metered main indicates that the pipe in question supplies water for a single property or group of properties and that quantity of water passing through the pipe is metered even though there may be no meter symbol shown.
- Transmission Tunnel:** A very large diameter water pipe. Most tunnels are buried very deep underground. These pipes are not expected to affect the structural integrity of buildings shown on the map provided.
- Proposed Main:** A main that is still in the planning stages or in the process of being laid. More details of the proposed main and its reference number are generally included near the main.

PIPE DIAMETER	DEPTH BELOW GROUND
Up to 300mm (12")	900mm (3')
300mm - 600mm (12" - 24")	1100mm (3' 8")
600mm and bigger (24" plus)	1200mm (4')

### Valves

- General Purpose Valve
- Air Valve
- Pressure Control Valve
- Customer Valve

### Hydrants

- Single Hydrant

### Meters

- Meter

### End Items

Symbol indicating what happens at the end of a water main.

- Blank Flange
- Capped End
- Emptying Pit
- Undefined End
- Manifold
- Customer Supply
- Fire Supply

### Operational Sites

- Booster Station
- Other
- Other (Proposed)
- Pumping Station
- Service Reservoir
- Shaft Inspection
- Treatment Works
- Unknown
- Water Tower

### Other Symbols

- Data Logger

### Other Water Pipes (Not Operated or Maintained by Thames Water)

- Other Water Company Main:** Occasionally other water company water pipes may overlap the border of our clean water coverage area. These mains are denoted in purple and in most cases have the owner of the pipe displayed along them.
- Private Main:** Indicates that the water main in question is not owned by Thames Water. These mains normally have text associated with them indicating the diameter and owner of the pipe.



## Terms and Conditions

All sales are made in accordance with Thames Water Utilities Limited (TWUL) standard terms and conditions unless previously agreed in writing.

1. All goods remain in the property of Thames Water Utilities Ltd until full payment is received.
2. Provision of service will be in accordance with all legal requirements and published TWUL policies.
3. All invoices are strictly due for payment 14 days from due date of the invoice. Any other terms must be accepted/agreed in writing prior to provision of goods or service, or will be held to be invalid.
4. Thames Water does not accept post-dated cheques-any cheques received will be processed for payment on date of receipt.
5. In case of dispute TWUL's terms and conditions shall apply.
6. Penalty interest may be invoked by TWUL in the event of unjustifiable payment delay. Interest charges will be in line with UK Statute Law 'The Late Payment of Commercial Debts (Interest) Act 1998'.
7. Interest will be charged in line with current Court Interest Charges, if legal action is taken.
8. A charge may be made at the discretion of the company for increased administration costs.

A copy of Thames Water's standard terms and conditions are available from the Commercial Billing Team (cashoperations@thameswater.co.uk).

We publish several Codes of Practice including a guaranteed standards scheme. You can obtain copies of these leaflets by calling us on 0800 316 9800

If you are unhappy with our service you can speak to your original goods or customer service provider. If you are not satisfied with the response, your complaint will be reviewed by the Customer Services Director. You can write to her at: Thames Water Utilities Ltd. PO Box 492, Swindon, SN38 8TU.

If the Goods or Services covered by this invoice falls under the regulation of the 1991 Water Industry Act, and you remain dissatisfied you can refer your complaint to Consumer Council for Water on 0121 345 1000 or write to them at Consumer Council for Water, 1st Floor, Victoria Square House, Victoria Square, Birmingham, B2 4AJ.

### Ways to pay your bill

Credit Card	BACS Payment	Telephone Banking	Cheque
Call <b>0845 070 9148</b> quoting your invoice number starting CBA or ADS / OSS	Account number <b>90478703</b> Sort code <b>60-00-01</b> A remittance advice must be sent to: <b>Thames Water Utilities Ltd., PO Box 3189, Slough SL1 4WW.</b> or email <a href="mailto:ps.billing@thameswater.co.uk">ps.billing@thameswater.co.uk</a>	By calling your bank and quoting: Account number <b>90478703</b> Sort code <b>60-00-01</b> and your invoice number	Made payable to ' <b>Thames Water Utilities Ltd</b> ' Write your Thames Water account number on the back. Send to: <b>Thames Water Utilities Ltd., PO Box 3189, Slough SL1 4WW</b> or by DX to <b>151280 Slough 13</b>

Thames Water Utilities Ltd Registered in England & Wales No. 2366661 Registered Office Clearwater Court, Vastern Rd, Reading, Berks, RG1 8DB.





## **Search Code**

### **IMPORTANT CONSUMER PROTECTION INFORMATION**

This search has been produced by Thames Water Property Searches, Clearwater Court, Vastern Road, Reading RG1 8DB, which is registered with the Property Codes Compliance Board (PCCB) as a subscriber to the Search Code. The PCCB independently monitors how registered search firms maintain compliance with the Code.

#### **The Search Code:**

- provides protection for homebuyers, sellers, estate agents, conveyancers and mortgage lenders who rely on the information included in property search reports undertaken by subscribers on residential and commercial property within the United Kingdom
- sets out minimum standards which firms compiling and selling search reports have to meet
- promotes the best practise and quality standards within the industry for the benefit of consumers and property professionals
- enables consumers and property professionals to have confidence in firms which subscribe to the code, their products and services.

By giving you this information, the search firm is confirming that they keep to the principles of the Code. This provides important protection for you.

#### **The Code's core principles**

Firms which subscribe to the Search Code will:

- display the Search Code logo prominently on their search reports
- act with integrity and carry out work with due skill, care and diligence
- at all times maintain adequate and appropriate insurance to protect consumers
- conduct business in an honest, fair and professional manner
- handle complaints speedily and fairly
- ensure that products and services comply with industry registration rules and standards and relevant laws
- monitor their compliance with the Code

#### **Complaints**

If you have a query or complaint about your search, you should raise it directly with the search firm, and if appropriate ask for any complaint to be considered under their formal internal complaints procedure. If you remain dissatisfied with the firm's final response, after your complaint has been formally considered, or if the firm has exceeded the response timescales, you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). The Ombudsman can award compensation of up to £5,000 to you if he finds that you have suffered actual loss as a result of your search provider failing to keep to the Code.

**Please note that all queries or complaints regarding your search should be directed to your search provider in the first instance, not to TPOs or to the PCCB.**

#### **TPOs Contact Details**

The Property Ombudsman scheme  
Milford House  
43-55 Milford Street  
Salisbury  
Wiltshire SP1 2BP  
Tel: 01722 333306  
Fax: 01722 332296  
Email: [admin@tpos.co.uk](mailto:admin@tpos.co.uk)

You can get more information about the PCCB from [www.propertycodes.org.uk](http://www.propertycodes.org.uk)

**PLEASE ASK YOUR SEARCH PROVIDER IF YOU WOULD LIKE A COPY OF THE SEARCH CODE**



Overview

Date Requested: 14/09/2018

Requested by: Adam Sneddon

Job Reference: 13735222

Company: Greenhatch Group Ltd

Your Scheme/Reference: St Pancras

#### 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

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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UTILITIES GROUP

ESP Utilities Group Ltd  
Bluebird House  
Mole Business Park  
Leatherhead  
Surrey  
KT22 7BA

Phone: 01372 587500

Email: [info@espug.com](mailto:info@espug.com)

Dig Sites:

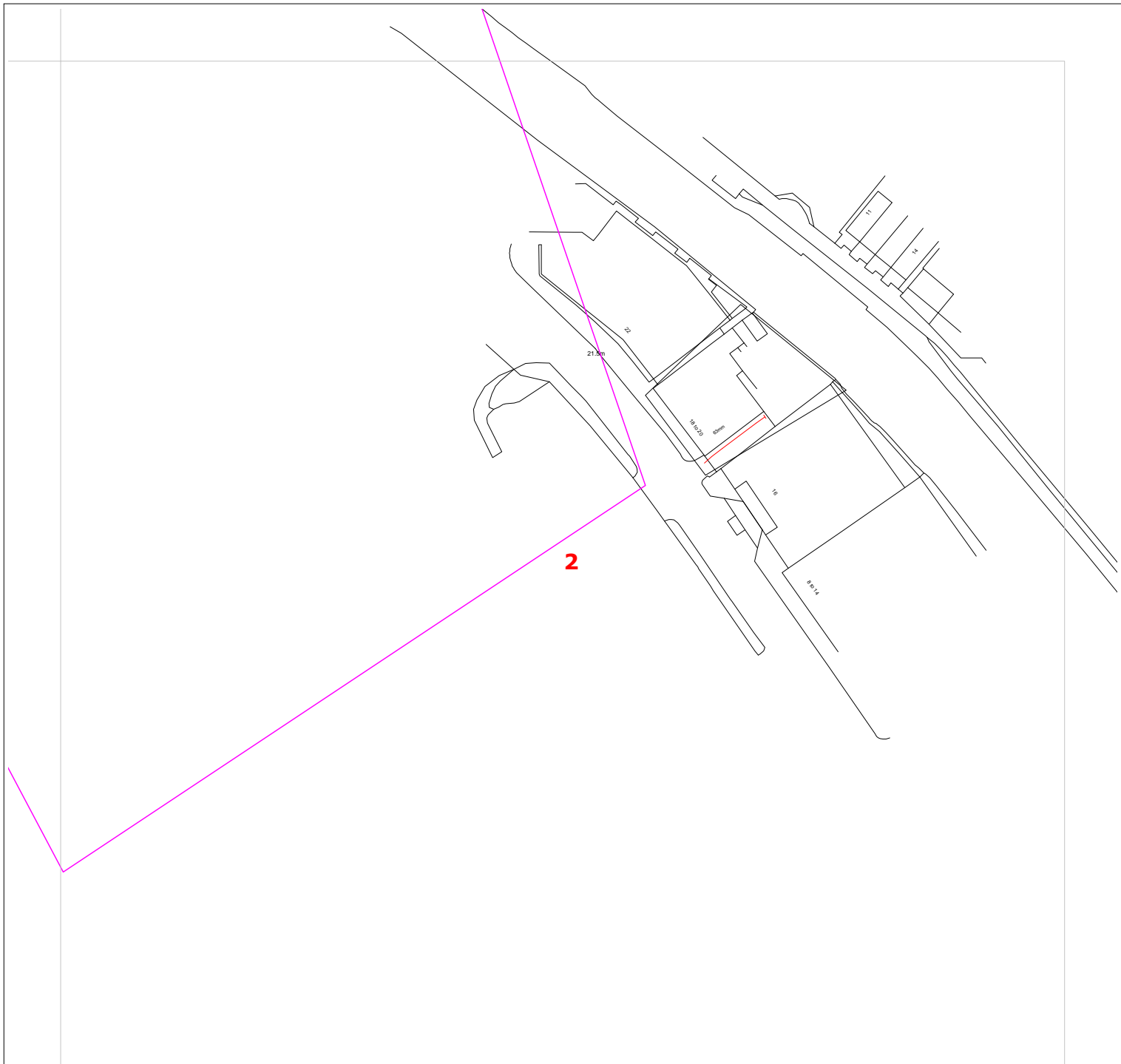
Area Line

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









Date Requested: 14/09/2018

Requested by: Adam Sneddon

Job Reference: 13735222

Company: Greenhatch Group Ltd

Your Scheme/Reference: St Pancras

#### 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

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**UTILITIES GROUP**

ESP Utilities Group Ltd  
Bluebird House  
Mole Business Park  
Leatherhead  
Surrey  
KT22 7BA

Phone: 01372 587500

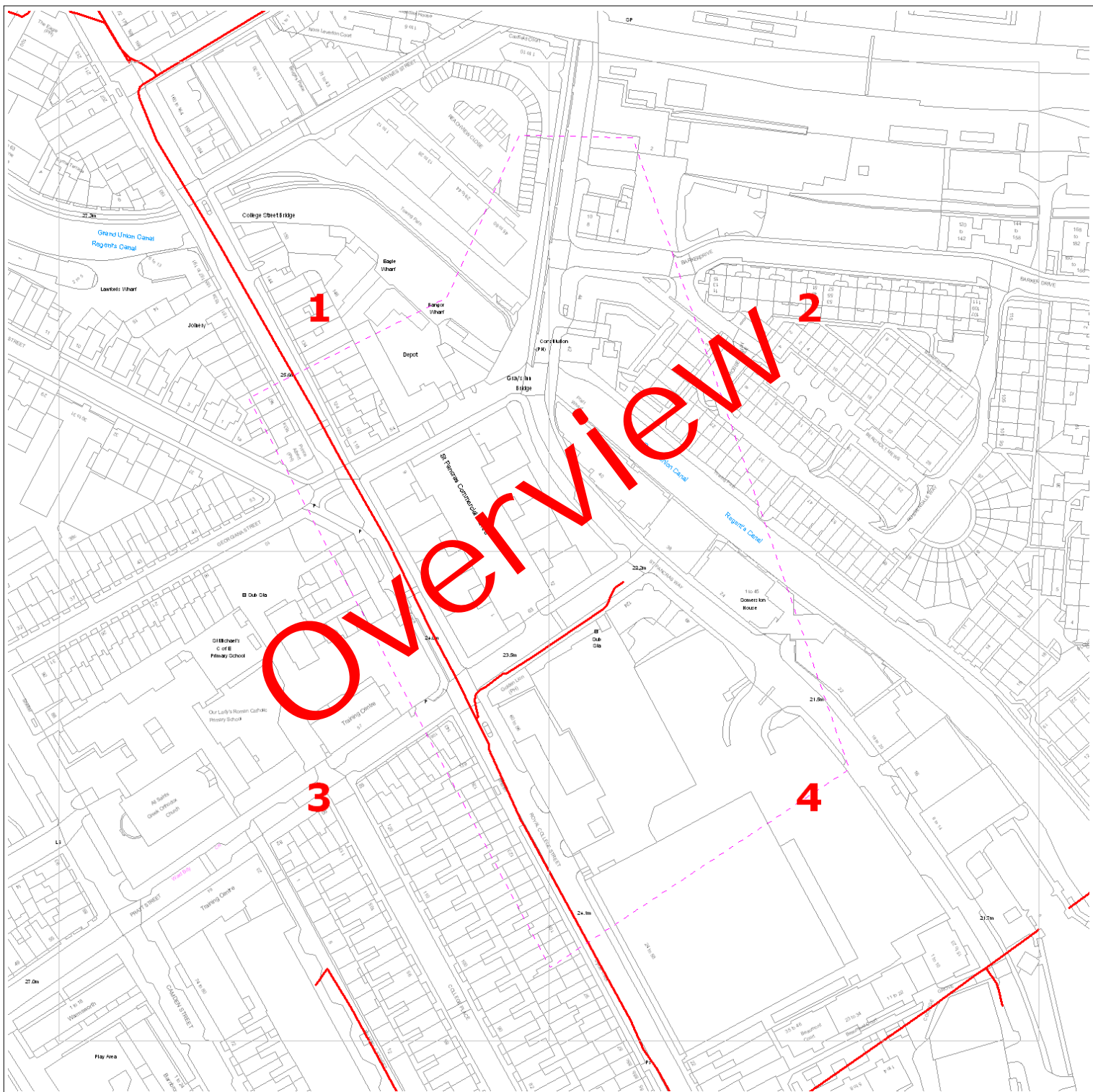
Email: [info@espug.com](mailto:info@espug.com)

Dig Sites:

Area  Line 

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










Date Requested: 14/09/2018

Requested by: Adam Sneddon

Company: Greenhatch Group Ltd

Job Reference: 13735222

Your Scheme/Reference: St Pancras

 ZAYO DUCT  
 or  ZAYO CHAMBER  
 Dig Sites: Line  Area   
 Scale on A4 paper: 1:1000

**zayo**  
GROUP

4th Floor Harmsworth House  
13-15 Bouverie Street  
London EC4Y 8DP



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Sterling House  
Mutton Lane, Potters Bar  
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Date Requested: 14/09/2018

Requested by: Adam Sneddon

Company: Greenhatch Group Ltd

Job Reference: 13735222

Your Scheme/Reference: St Pancras

— ZAYO DUCT



or



ZAYO CHAMBER

Dig Sites:

Line

Area



Scale on A4 paper: 1:1000

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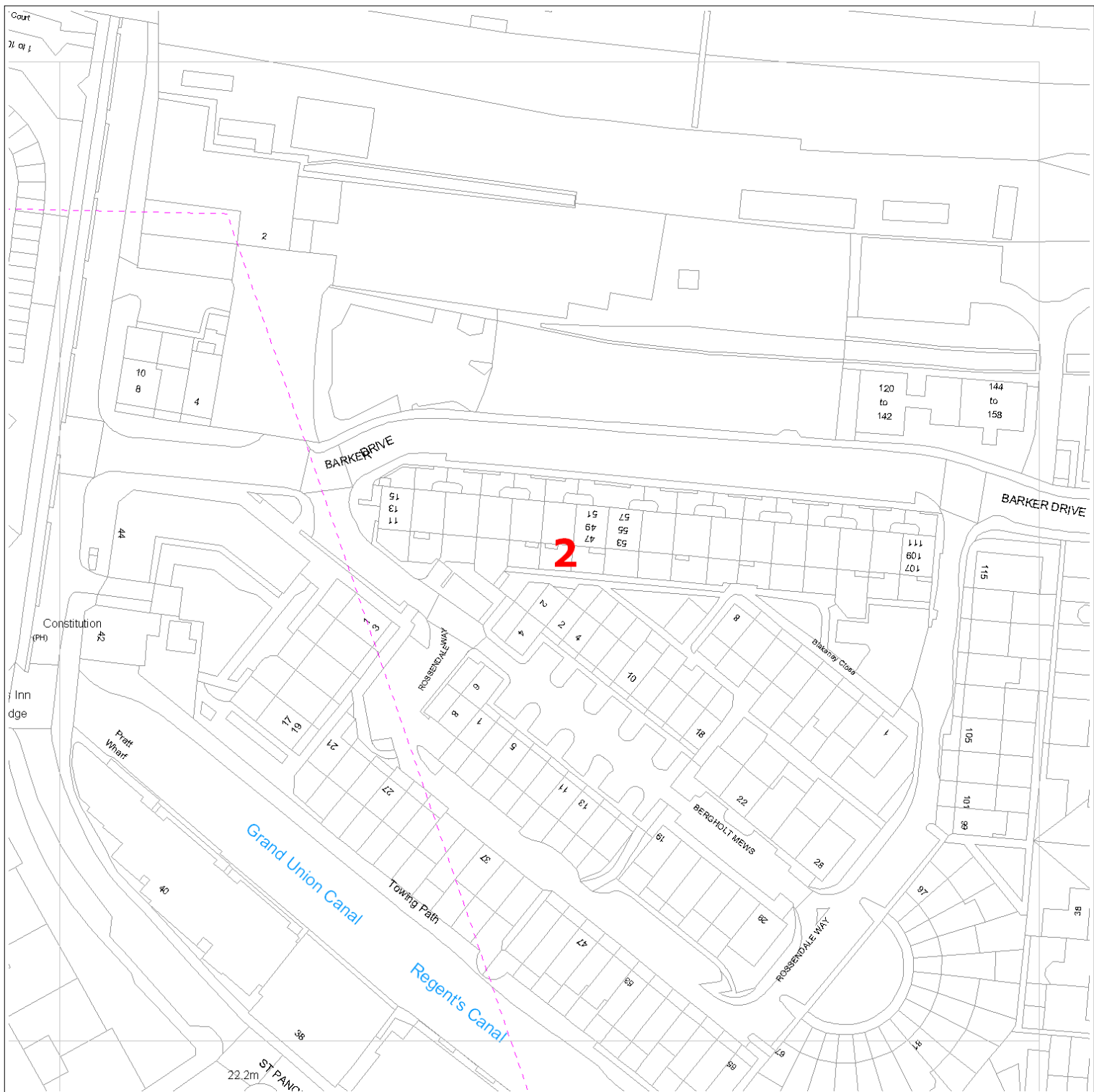
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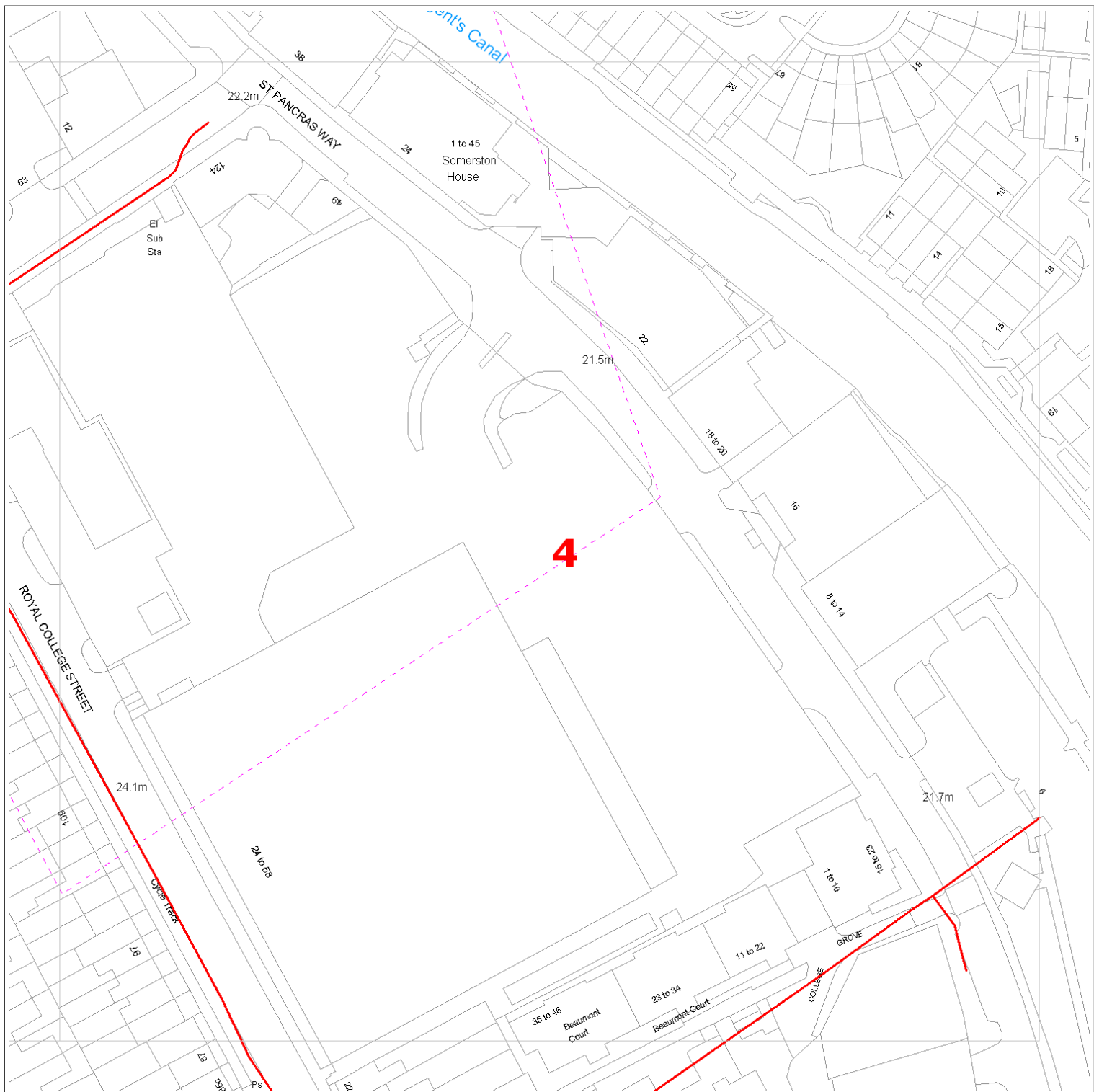
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