Abbreviations (1:500 view)					
NetMAP system	Description				
NR SU AB (M) V05 MS MP pmt pl TBS TCB CET IT CAT +sl +sw 2c PESL Added Excluded IIP VSxxxx CB	No record Size unknown Abandoned PME available Year LV linking verified Milestone Marker post Pole mounted transformer Public lighting Temporary builder's supply Telephone call box Cable electronically traced Instrument traced (same as CET) Cable avoidance tool (same as CET) Street lighting Switch wire 2 core Public Electricity Supply License Supplied by SPN Not supplied by SPN Assumed open point Vacant site Callender box				
	Validitati DVX				

Cable phasing (1:500 view)						
Old core colours Neutral Red Yellow Blue	Shown on map Neutral Neu R L Y L B L Note:— Scott is a different	1 Brown 2 Black 3 Grey				

Operational status colours (1:500 view) PROPOSAL — Symbols and cables appear in ORANGE OUT OF SERVICE — Cable and joints appear in BLACK ABANDONED — Cables and joints appear in GREY

21

1:2500 view - for UK Power **Networks use only - boxed red**

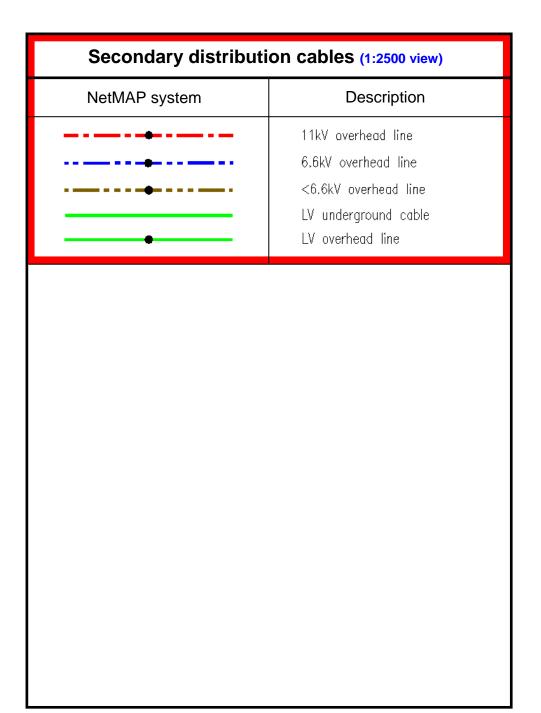
Notes

No underground HV cables are shown on the 1:2500 view

22

- Poles and joint details are similar to the 1:500 view
 For cable/line information refer to the 1:500 view

Primary distribution line route (1:2500 view)						
NetMAP system	Description					
	275—400kV National Grid route 132kV cable route 33kV cable route					



Primary and secondary sites (1:2500 view) NetMAP system Description Note: EHV and HV sites are identified by a unique 6 digit number (SPENS) Ground mounted substation SITE NAME 5.0 3Ph showing capacity, phase, name and SPENS number 521232 SITE NAME Pole mounted substation showing 0.16 1Ph pmt 522154 capacity, phase, name and SPENS number Primary substation showing name SITE NAME and SPENS number 008590 (no site shown) 2 way link box 4 way link box 4Jxxxx Link box identifier 4 way link box without busbar 6 way link box without busbar 8 way link box without busbar section continued on next page

Primary and secondary sites continued (1:2500 view)				
NetMAP system	Description			
_	LV distribution pillar			
V	Voltage regulator			
Ъ	Voltage balancer			
	Open point			
	Open point — out of phase			
E	Earth pín			

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

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

Notes

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

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

Primary and secondary sites (1:10000 view)						
NetMAP system	Description					
Note: EHV and HV sites are identified	l by a unique 6 dígít number (SPENS) '					
SITE NAME 008590	Primary substation showing name and SPENS number					
SITE NAME 521234 ■	11kV ground mounted substation showing name and SPENS number					
SITE NAME 524514	6.6kV ground mounted substation showing name and SPENS number					
SITE NAME □ 523634	<6.6kV ground mounted substation showing name and SPENS number					
SITE NAME pmt 527522	11kV pole mounted substation showing name and SPENS number					
SITE NAME pmt 525743	6.6kV pole mounted substation showing name and SPENS number					
SITE NAME pmt 526543	<6.6kV pole mounted substation showing name and SPENS number					
SITE NAME \bigcirc 527238	Pole mounted switching substation showing name and SPENS number					





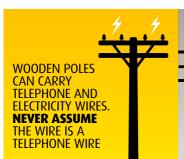


Every year, people are killed or seriously injured when they come into contact with high voltage electricity.

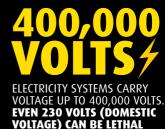
This can have a far-reaching and devastating effect on family, friends and colleagues.

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

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













OUR NETWORK DISTRIBUTES ELECTRICITY THROUGH UNDERGROUND CABLES, PYLONS, OVERHEAD POWER LINES, SUBSTATIONS AND OTHER EQUIPMENT







POWER CUT? CALL 105



TAKE NOTICE OF ANY YELLOW 'DANGER OF DEATH' WARNING SIGNS. AND STAY WELL AWAY!





OVERHEAD POWER LINES ARE OFTEN UNINSULATED (BARE)



CABLES ARE
OUT OF SIGHT
ALWAYS REQUEST
CABLE PLANS
BEFORE STARTING
WORK





CARRY OBJECTS AND EQUIPMENT
HORIZONTALLY AND AT LOW
LEVEL TO THE GROUND

TOUCHING ANYTHING IN CONTACT WITH ELECTRICAL EQUIPMENT, EVEN THE LOWEST OF VOLTAGES, CAN BE FATAL



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

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

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

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



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



Keep well away - Electricity can kill

Remember:

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



How can we help?

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

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

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

What to do in an emergency

If a mains electricity cable is damaged:

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



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

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



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

- Contact UK Power Networks or Line Search Before U Dig (LSBUD) in advance of the works to obtain relevant cable plans or to request disconnections. The cable plans will only show the indicative route and not the route into the property
- function to and functions are shown to and funderstood by those on site BEFORE starting work
- Confirm the cable location by using a Cable Avoidance Tool (CAT) before digging commences. Once found, mark cable positions with spray paint or similar

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

- Complete a risk assessment and ensure it covers electrical hazards
- 👉 Use spades and shovels with insulated handles in preference to forks and picks
- Look around for anything in the vicinity that would have an electricity service such as street lights, CCTV cameras, or meter boxes and identify where the cables are
- Look for electrical wires, cables and equipment near to where you are going to work and check for warning signs and any other hazards
- Contact UK Power Networks to agree a safe method of work if there is a cable encased in concrete,
 DO NOT BREAK OPEN
- Make sure everyone on site is aware of the presence and location of electrical cables
- Before demolishing a building make sure supplies are disconnected, preferably well clear of the work area. For guidance on how to arrange a disconnection visit www.ukpowernetworks.co.uk

NATIONAL POWER CUT HELPLINE



ADD THIS NUMBER TO YOUR TELEPHONE CONTACTS LIST



Stop! Think before you dig!

#bebrightstaysafe



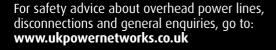
@UKPowerNetworks



f /ukpowernetworks

National power cut helpline

POWER CUT? CALL 105 Or call us 24 hours a day on 0800 31 63 105



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

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

what3words



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





Palmira Titeva

From: Humphris, Brian < Brian. Humphris@richmondandwandsworth.gov.uk >

Sent: 12 May 2022 13:19 **To:** Palmira Titeva

Subject: RE: URGENT - 45746 · Sheldon House - C2 Application

Attachments: PE Sheldon House 12 05 2022.pdf

Follow Up Flag: Follow up **Flag Status:** Flagged

Official

Dear Palmira

Please find attached a plan indicating Richmond's assets within your indicated area.

Lamp columns and illuminated signs, indicated in yellow, and lamps attached to adjacent buildings, indicated in green, are connected to LV electricity cables. I regret that we do not have precise records of the connections. Non-illuminated signs are indicated in red.

Road gullies, indicated in blue, are connected to the Thames Water sewer network, or to a nearby watercourse.

Please address any future such enquiries directly to me.

Yours sincerely

Brian Humphris

Highway Asset Co-ordinator Serving Richmond and Wandsworth Councils

brian.humphris@richmondandwandsworth.gov.uk www.richmond.gov.uk / www.wandsworth.gov.uk

Please note that I am currently working from home and work only on Tuesday, Wednesday and Thursday.

From: Traffic And Engineering <TrafficAndEngineering@richmondandwandsworth.gov.uk>

Sent: 12 May 2022 12:51

To: Humphris, Brian < Brian. Humphris@richmondandwandsworth.gov.uk >

Subject: FW: URGENT - 45746 · Sheldon House - C2 Application

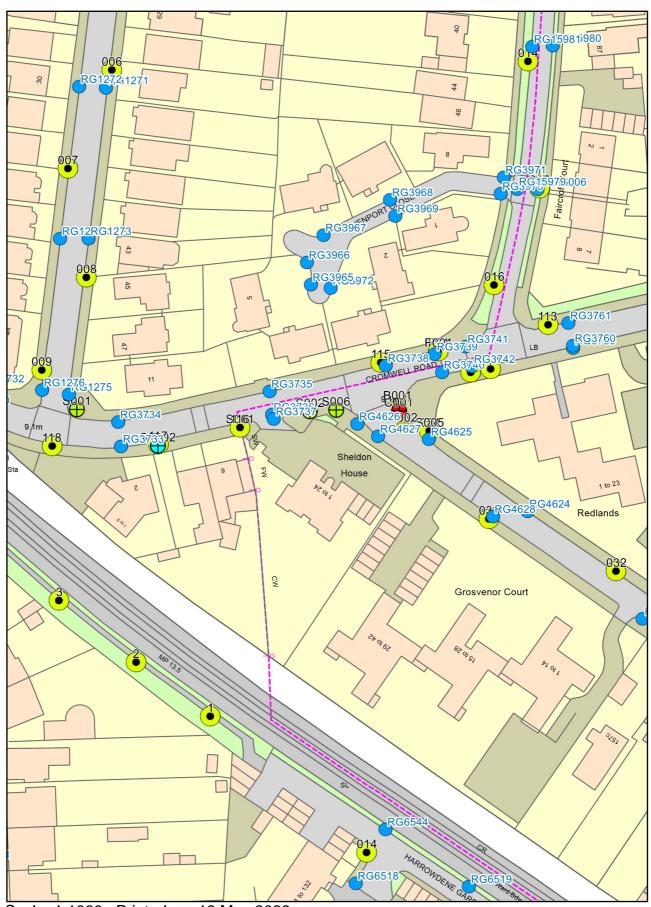
Importance: High

Official

From: Palmira Titeva <ptiteva@murphygs.com>

Sent: 12 May 2022 10:40

To: Palmira Titeva <ptiteva@murphygs.com>



Scale: 1:1000 Printed on: 12 May 2022 Crown Copyright © and database rights 2021 Ordnance Survey 100019441 London Borough of Richmond upon Thames, Civic Centre, 44 York Street, Twickenham, TW1 3BZ Telephone 020 8891 1411 www.richmond.gov.uk



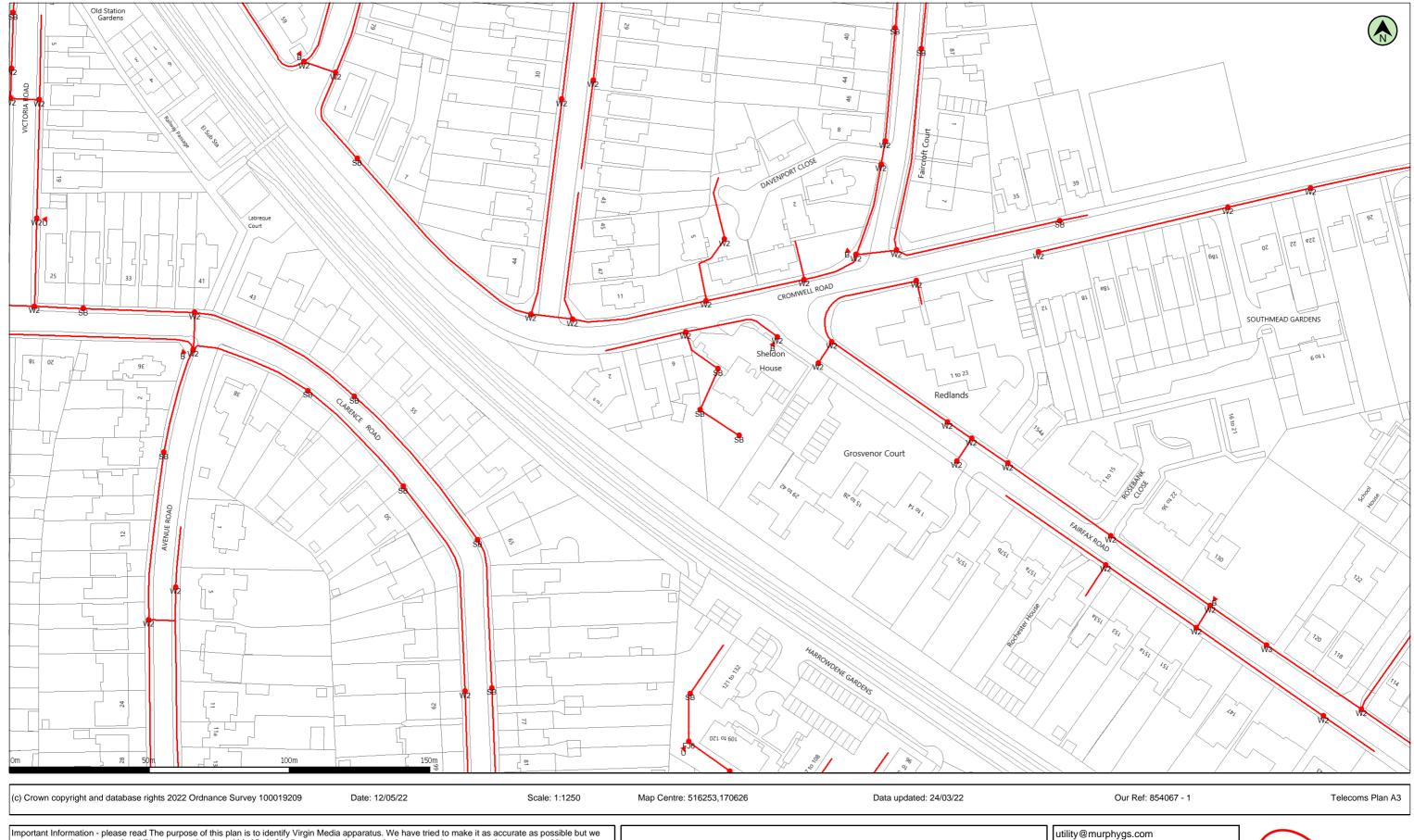




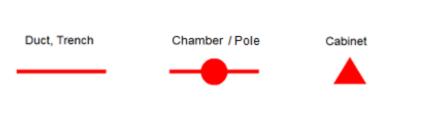
Geospatial certainty you can trust murphygs.com

Telecoms



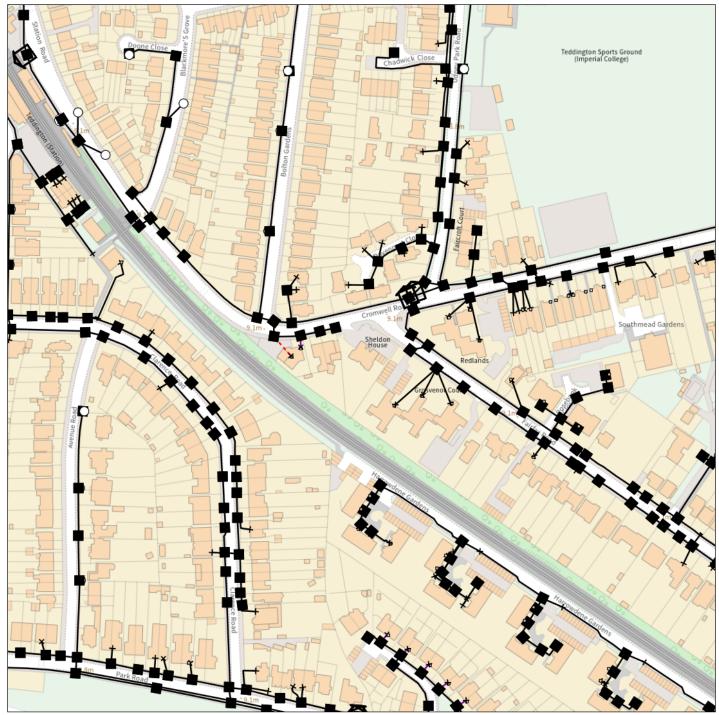


Important Information - please read The purpose of this plan is to identify Virgin Media apparatus. We have tried to make it as accurate as possible but we cannot warrant its accuracy. In addition, we caution that within Virgin Media apparatus there may be instances where mains voltage power cables have been placed inside green, rather than black ducting. Further details can be found using the "Affected Postcodes.pdf", which can be downloaded from this website. Therefore, you must not rely solely on this plan if you are carrying out any excavation or other works in the vicinity of Virgin Media apparatus. The actual position of any underground service must be verified by cable detection equipment, etc. and established on site before any mechanical plant is used. Accordingly, unless it is due to the negligence of Virgin Media, its employees or agents, Virgin Media will not have any liability for any omissions or inaccuracies in the plan or for any loss or damage caused or arising from the use of and/or any reliance on this plan. This plan is produced by Virgin Media Limited (c) Crown copyright and database rights 2022 Ordnance Survey 100019209.





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



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

email <u>cbyd@openreach.co.uk</u>

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

Accidents happen

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

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	2///	1 1	V(/ //	/ X /					
KEY	TO BT SYM	BOLS	Change Of State	+	Hatchings	XX			
	Planned Live		Split Coupling	×	Built				
PCP	*	Duct Tee A Plan	Duct Tee	uct Tee A Planned		uct Tee A Planned	·^_		
Pole	0	0	Building		Inferred				
Вох			Kiosk	(K)	Duct				
Manhole			Other proposed plant is shown using dashed lines.						
Cabinet	Û	Û	BT Symbols not listed above may be disregarded. Existing BT Plant may not be recorded. Information valid at time of preparation. Maps are only valid for 90 days after the date of publication.						
	Pending Add	Add In Place Pending Not In Use							
Power Cable	* *	NN	# # s	N N					
Power Duct	##	-N-N	111	N/A	1				

BT Ref: WKN10321X

Map Reference: (centre) TQ1626370625 Easting/Northing: (centre) 516263,170625

Issued: 12/05/2022 10:32:23

Scale: 1:1000



Geospatial certainty you can trust murphygs.com

Infrastructure





NRSWA Asset Enquiries

Worksite Survey Team National Records Centre Audax Road YORK

YO30 4US

Dear Sir/Madam,

Please find information available as per the checklist.

The information contained herein is based on Network Rail's records and, where appropriate, third parties such as utility companies. The search enclosed does not cover a search of local council records. Also, schematic Signal and Telecom (S&T) cables plans are not provided as part of the search results, therefore you must assume S&T cables are present until proven otherwise.

Although at the date of this letter the information is as up to date as possible, it is **NOT** a statement of validity, accuracy or completeness as to any of the enclosed search information and must not be relied on as such.

Your risk assessment **MUST** take into account:

- That the information supplied, including the services shown on the map from the Rail Infrastructure Network Model (RINM), does not provide any guarantee as to the accuracy of the actual location of services on site and **MUST** be considered as for guidance purposes only.
- That new/unrecorded services are likely to be present
- That the enclosed buried services search information has been collated only for the ELR and Mileage boundaries as stated on the original request form

Included in the buried services search is a list of ASPRO engineers & managers you **MUST** contact before any ground disturbance is carried out, to check whether further information is held locally.

Further guidance can be obtained from the Health and Safety Executive publication HSG47 "Avoiding Danger from Underground Services" and the Network Rail Publication NR/L2/INI/CP1030.

Should you become aware of any additional underground services or assets within the locality during your investigations and/or works, including redundant assets, please identify them as a matter of urgency to the site manager. Records of the location of these assets should be kept for onward transmission and entry into the Hazard Directory.

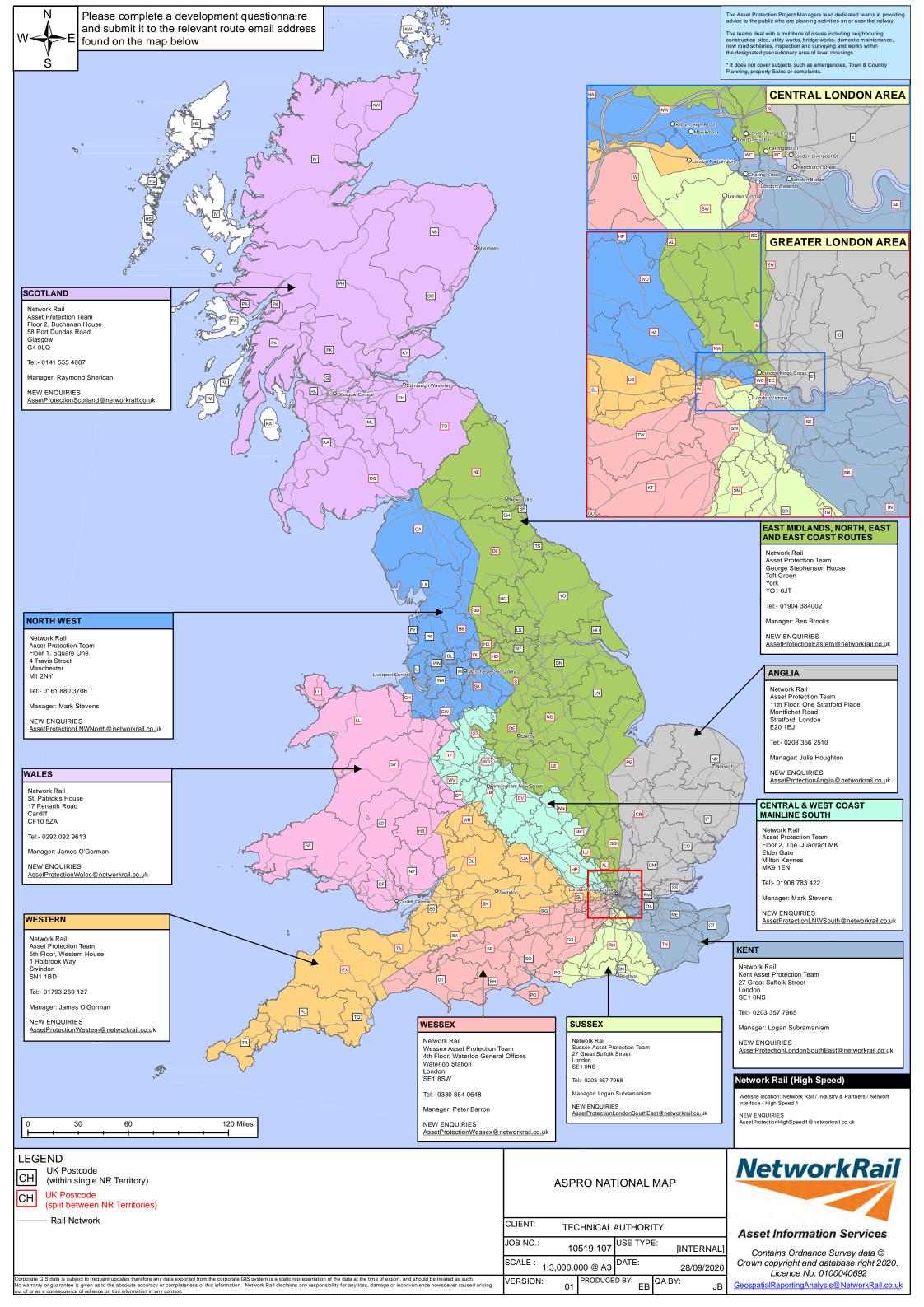
Yours sincerely

NRSWA Team

Worksite Survey

Buried S Information	NetworkRail			
Your Ref	Our Order Ref		134497	
Network Rail Record ⁻	Гуре	Category	Enclosed Yes/No	Notes (e.g. Nil Return)
Asset Protection Natio	nal Map	Contact Ino	Υ	
Hazard Directory		Hazard	Υ	
Site Map		GIS Systems	Υ	
eB - Corporate records	National Records Group	Υ		
Network Rail - Drainage	GIS Systems	Υ		
Treework Kail - Drailiage	•	National	'	
National Records Group	- Civils Records	Records Group	N	Nil Return

NIL RETURN: After interrogating the information made available to us, no records containing buried services information have been returned for this worksite. However, reference must be made to the guidelines supplied with this buried services search, which contain important information on safe working practices.





Order ID: 134497

ELR	Start Mileage	End Mileage	
NMS1	13.0854	13.0904	



National Hazard Directory

Terms and Conditions

The National Hazard Directory (NHD) is issued by Network Rail to provide information on those hazards recorded as present on Network Rail's infrastructure. Its' purpose is to alert users to the typical hazards they may come across whilst working on Network Rail's Infrastructure. The National Hazard Directory is maintained by Network Rail to provide its employees and contractors with information on known hazards present on the infrastructure in order to assist in the identification of the associated risks working 'on or near the line'.

The records are updated regularly and therefore Network Rail believe that the contents are reasonably accurate at the time of issue, but some of the information can vary in age and accuracy so for that reason Network Rail will give no warranty as to the suitability of its use. It is recommended that all searches (in particular for buried services) should be conducted together with a site specific risk assessment/site visit, taking into account the requirements of the appropriate track safety rules, rule books/industry standards and so on. Network Rail will accept no liability in respect of the content or subsequent use of the National Hazard Directory or any of the information contained within.

Users of the Directory must note that when working on or near the line that the appropriate requirements of the Rule Book, especially the provisions of the track safety rules, must be applied as appropriate to the activity concerned.

OnTrac Ltd does not warrant the use of the Network Rail National Hazard Directory or any of the information contained within and no representations or warranties are made as to completeness or accuracy of the data. The data should be used for reference purposes only. Accordingly, OnTrac Ltd will accept no responsibility for loss of profit or for any indirect, incidental or consequential damages.

National Hazard Directory

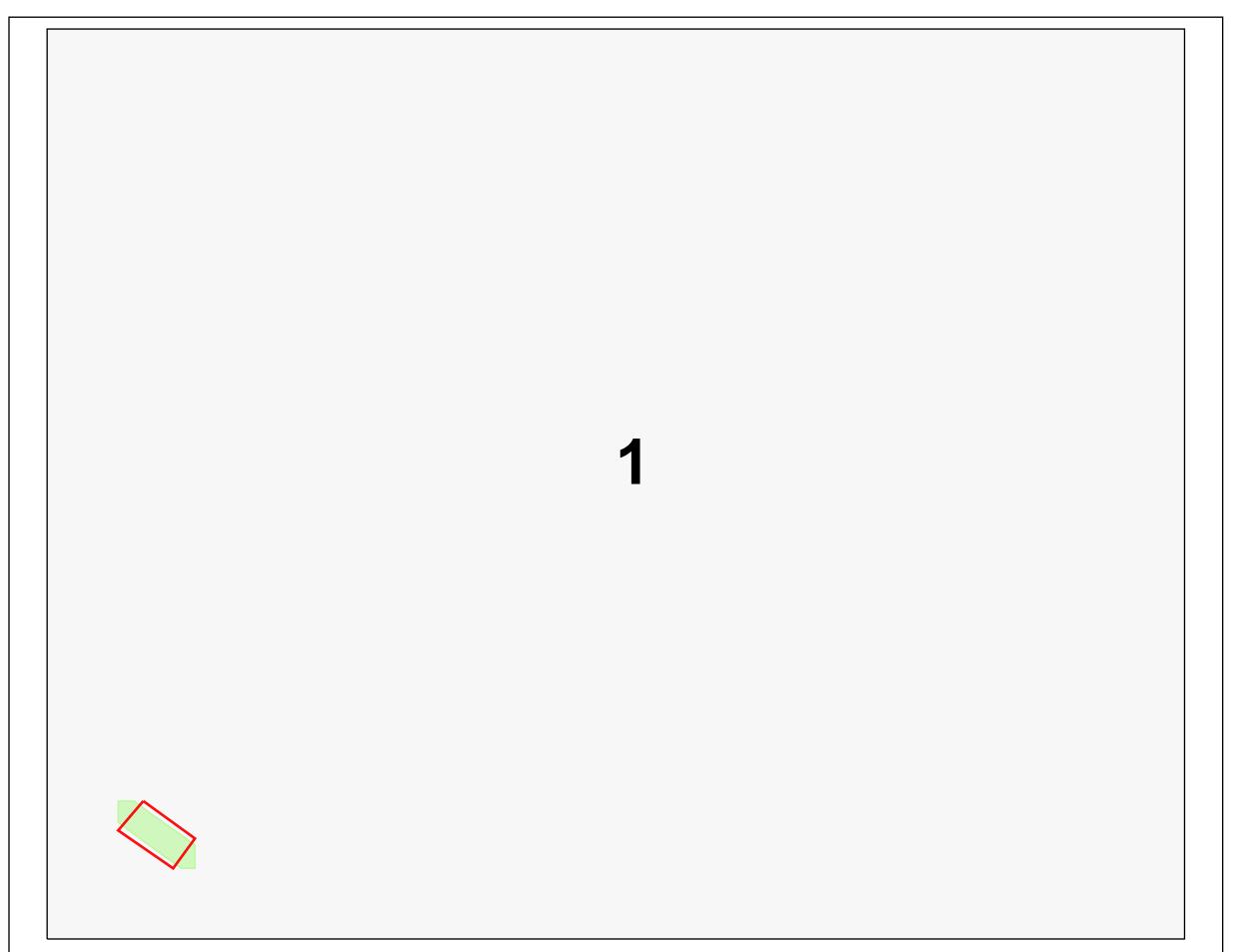
Customised Report

Search Criteria: ELR(s) = NMS1; Mileage From = 13.0854; Mileage To = 13.0904; Hazard Code(s) = HB, HBA, HBC, HBCS, HBD, HBE, HBF, HBFR, HBFS, HBG, HBI, HBL, HBM, HBN, HBO, HBP, HBR, HBS, HBSW, HBT, HBU, HBW, HCT, HU, HXE Date: 13/05/2022

8 Hazards found.

ELR	ELR Name	Mileage From	Mileage To	Hazard Code	Hazard Description	Local Name	Track ID	Free Text
NMS1	NEW MALDEN JN - FULWELL JN	10.1318	13.1105	HBE	Buried Electrical Cables	Norbiton-Teddington	Unknown	
NMS1	NEW MALDEN JN - FULWELL JN	12.0417	14.0550	HXE	Buried & Overhead Electric Cable	Hampton Wick Buried & overhead electric cables	All/Multiple Tracks	Elect Cables
NMS1	NEW MALDEN JN - FULWELL JN	12.0461	14.0659	HXE	Buried & Overhead Electric Cable	Hampton Wick Buried & overhead electric cables	All/Multiple Tracks	Elect Lines along Rly. See also 11236.
NMS1	NEW MALDEN JN - FULWELL JN	12.0461	14.0659	HXE	Buried & Overhead Electric Cable	Hampton Wick Buried & overhead electric cables	All/Multiple Tracks	Elect Lines. Annex to 10046.
NMS1	NEW MALDEN JN - FULWELL JN	12.0461	14.0659	HXE	Buried & Overhead Electric Cable	Hampton Wick Buried & overhead electric cables	All/Multiple Tracks	Elect Lines along Rly. See also 11236.
NMS1	NEW MALDEN JN - FULWELL JN	12.0461	14.0659	HXE	Buried & Overhead Electric Cable	Hampton Wick Buried & overhead electric cables	All/Multiple Tracks	Elect Lines. Annex to 42353.
NMS1	NEW MALDEN JN - FULWELL JN	12.0461	14.0659	HXE	Buried & Overhead Electric Cable	Hampton Wick Buried & overhead electric cables	All/Multiple Tracks	Elect Lines. Annex to 10046.
NMS1	NEW MALDEN JN - FULWELL JN	12.0461	14.0659	HXE	Buried & Overhead Electric Cable	Hampton Wick Buried & overhead electric cables	All/Multiple Tracks	Additional Cable. Annex to 4790. Cancelled by Agt. 21/09/1932

Page Navigation Index Map (1:2500 scale maps)



Legend



Network Rail Company Ownership Boundary



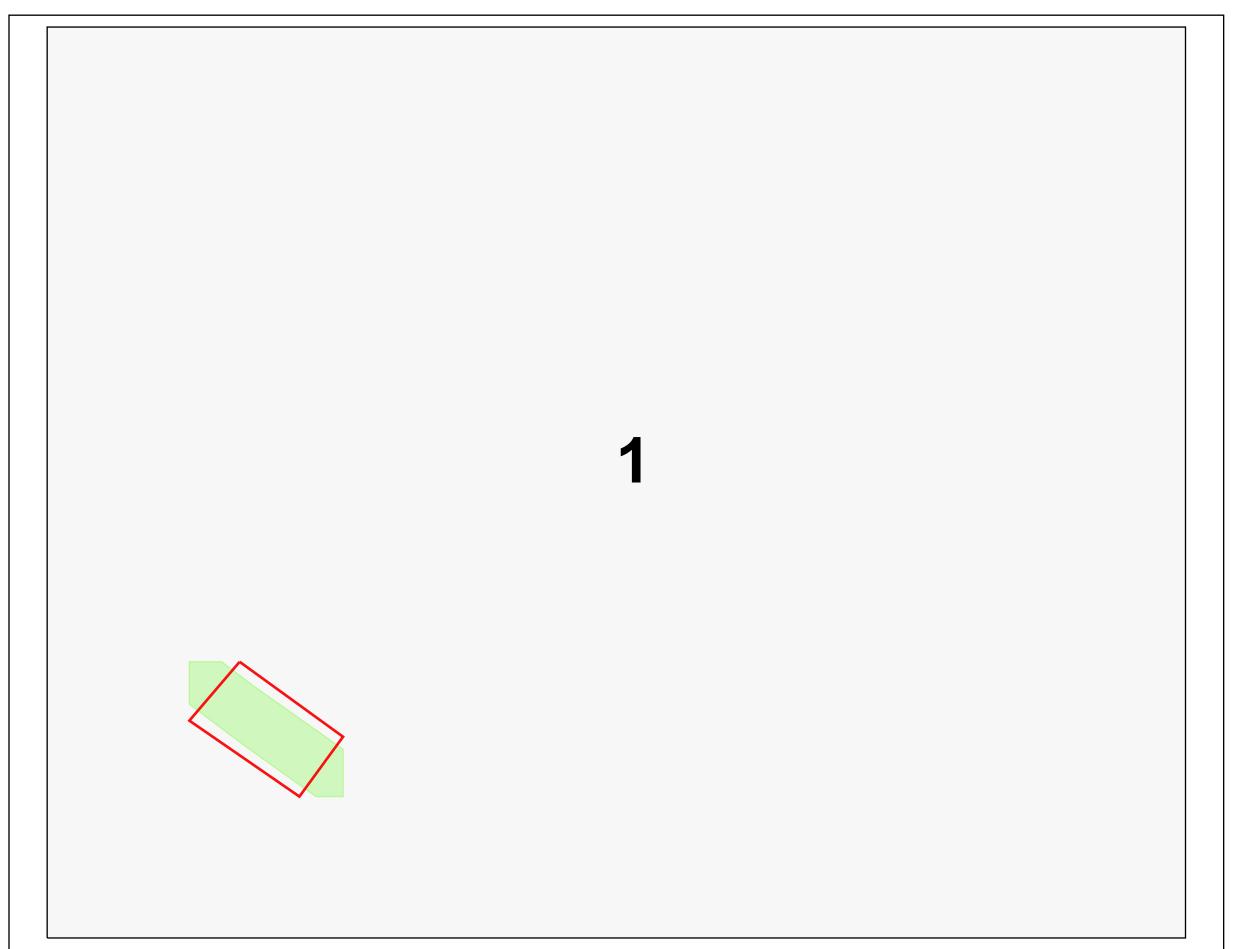
Order Polygon

Order ID: 134497
Plot Date: 12/05/22



Crown copyright and database rights 2022 Ordnance Survey 0100040692 **User Drawn Polygon / Area of Interest - Order ID: 134497** Legend Company Ownership Freehold Ownership Leasehold Ownership Prohibitive Interest Bridge (Rail over Rail) Bridge (Rail over River) St Mary's University Teddington Lock Campus 🔲 Bridge (Rail over Road) Bridge (Road over Rail) Level Crossing Order Polygon Teddington Sports Ground (Imperial College) Tennis Courts **Nearest station: Teddington Stn** Order ID: 134497 Order Ref: 134497 Plot Scale: 1:2500 Page Index: 1 Centre X, Y: 516556, 170830 Plot Date: 12/05/22 **NetworkRail** Crown copyright and database rights 2022 Ordnance Survey 0100040692

Page Navigation Index Map (1:1250 scale maps)



Legend



Network Rail Company Ownership Boundary



Order Polygon

Order ID: 134497
Plot Date: 12/05/22



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