



Twickenham Riverside Foul Sewage and Utilities Statement



Design Team

Client	London Borough of Richmond upon Thames
Project Manager	Arcadis
Architect	Hopkins Architects
Landscape Architect	LDA Design
Structural Engineer	Webb Yates Engineers
Mechanical & Electrical Engineer	Skelly & Couch
Transport Consultant	WSP
Quantity Surveyor	Arcadis
Planning Consultant	Savills
Townscape & Heritage Consultant	Iceni Projects
Sustainability Consultant	Method Consulting
Accessibility Consultant	Lord Consultants
Fire Consultant	FDS Consult UK
Ecology Consultant	BSG Ecology
Arboricultural Consultant	Thomson Environmental Consultants
Daylight & Sunlight Consultant	GIA Chartered Surveyors
Acoustic Consultant	TetraTech
Alr Quality Consultant	Entran
Land Contamination Consultant	Geosphere Environmental
Archaeological Consultant	AOC Archaeology Group
Viability Consultant	Lambert Smith Hampton
Principal Designer	Nick Perry Associates
BIM Consultant	BIM Technologies

Contents

1.	OVE	RVIEW	3
2.	INCC	MING SERVICES	4
	2.1	Power	.4
	2.2	Water	.5
	2.3	Buried Foul and Surface Drainage	. 6
	2.4	Gas	.7
	2.5	Telecommunications	.8
3.	APPE	ENDICES	9
	APPE	NDIX 1 – UTILITIES DIVERSIONS AND CONNECTIONS	10
	APPE	NDIX 2 – SITE SURVEY INFORMATION	11
	APPE	NDIX 3 – SITE SURVEY ASSET SEARCHES	12

Audit History

Rev	Date of Issue	Status	Issued By	Checked By	Summary of Changes
1.0	24/06/2021	Draft	LW	NA	-
2.0	15/07/2021	Planning	LW	NA	Site plan updated

1. OVERVIEW

Introduction

This Foul Sewage and Utilities Statement has been prepared by Skelly and Couch Ltd on behalf of London Borough of Richmond upon Thames ('the Applicant'), in support of one full planning application for the development of Twickenham Riverside ('the Site'), situated in Twickenham on the northern embankment of the River Thames.

The proposed description of development is (hereafter referred to as the 'Proposed Development'):

Demolition of existing buildings and structures and redevelopment of the site comprising residential (Use Class C3), ground floor commercial/ retail/ cafe (Use Class E), and public house (Sui Generis), boathouse locker storage and floating pontoon with associated landscaping, restoration of Diamond Jubilee Gardens and other relevant works.

The development will provide 45 apartments from studios to 3 bedroom units over two separate buildings. A number of mixed-use commercial premises will be provided within the same buildings, as well as a café and pub/restaurant. The Site will provide flexible recreation space to reflect that which is currently provided by Diamond Jubilee Gardens. The Proposed Development will provide a number of accessible car parking spaces. Cycle parking shall be provided for the use of occupants' use and for users of the commercial buildings and recreation ground.

This report outlines the proposals for incoming services and foul drainage for the Proposed Development. It is to be read in conjunction with all other documents submitted as part of the planning application.

The Site

The Site occupies a space on the northern bank of the River Thames, close to the centre of Twickenham in the LBRuT. The majority of the Site is currently occupied by Diamond Jubilee Gardens, and incorporates a café and a number of car parking spaces for Eel Pie Island residents.

It is bounded by retail units on King Street to the North; Water Lane to the east; Wharf Lane to the west and the River Thames to the south.





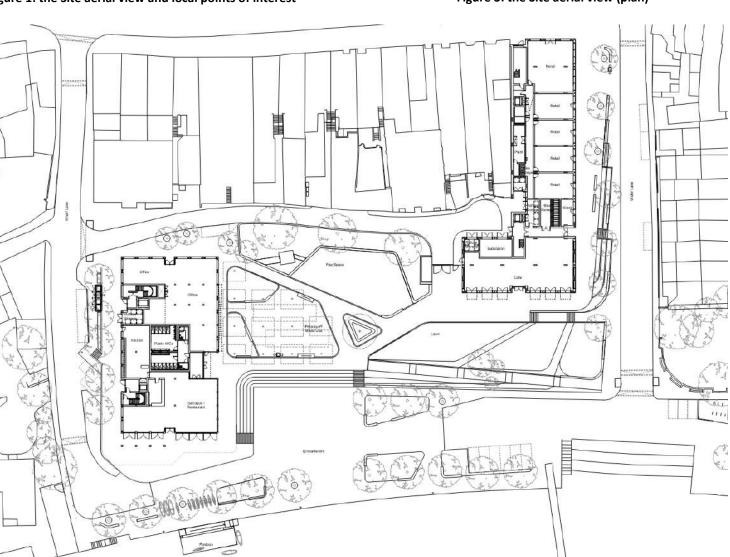


Figure 2: the proposed site layout



Figure 3: the Site aerial view (plan)

2. INCOMING SERVICES

2.1 Power

Existing Services

UKPN record information shows there are two existing UKPN substations on the Site.

Outgoing HV cables from the Wharf Lane substation and the EHV cables that run down Wharf Lane and along The Embankment will need to be diverted to accommodate the Proposed Development.



Figure 4: UKPN record information for Twickenham Riverside

A diversion plan has been produced and communicated with UKPN, who have provided a budget quotation for the proposed diversion works.

Proposed Services

The existing substation on Water Lane is to be upgraded to meet the required additional load for the Proposed Development (estimated to be 830kVA) and replaced with a twin-transformer substation on the Ground Floor of the Water Lane building. This will contain one transformer serving supplies currently served by the existing Water Lane substation and an additional transformer serving new supplies required for the site. The new sub-station will require four hour fire separation from adjacent areas within Water Lane.

Incoming cables are proposed on the north side of the building and the existing access from the service road and Wharf Lane are to be retained.

An initial application has been carried out and UKPN have provided a budget estimate for the works.

See "Appendix I – Utilities Diversions and Connections" for UKPN proposals.

2.2 Water

Existing services

A Thames Water asset search has shown distribution mains on Wharf Lane and The Embankment and a supply main on Water Lane.

Existing mains distributions along Wharf Lane and Water Lane to Eel Pie Island are unaffected by proposals.

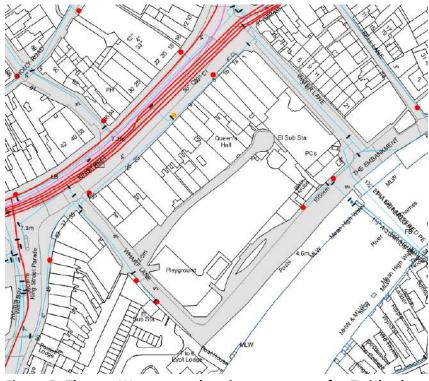


Figure 5: Thames Water asset location water map for Twickenham Riverside

Proposed Services

It is anticipated 2 new connections will be required to accommodate the phasing of the development, and the commercial/residential aspects will have their own metered supplies fed from central water storage and pressure-boosting pumps for each building.

An application has been completed for the proposed development. Thames Water have since confirmed that the requested water capacities for the development can be supported by the network.

Below is a summary of the sizes and capacities requested (correct at the time of application):

Wharf Lane combined supply:

- 63mm
- 1.5 l/s max flow rate
- Serving:
 - o 25 residential units
 - 6 commercial / landlord units

Wharf Lane Firefighting supply:

- 10 l/s max flow rate
- 90mm

Water Lane combined supply

- 63mm
- 1.5 l/s max flow rate
- serving:
 - o 21 residential units
 - 7 commercial / landlord units

The required firefighting supply capacity / size is also dependent upon the requirements of the commercial sprinkler systems. The current proposals represent a worst case scenario both in terms of water storage requirements and inflow rate.

See "Appendix I – Utilities Diversions and Connections" for the proposed water connection locations and estimated demands, and all other relevant Thames Water information.

2.3 Buried Foul and Surface Drainage

Existing services

Record drawings have been obtained from Thames Water indicating existing foul drainage within and surrounding the Site. Refer to Thames Water Asset Drawings below.

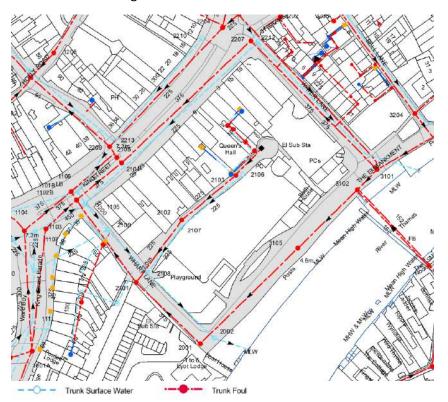


Figure 6: Thames Water asset location sewer map for Twickenham Riverside

Proposed Services

A Pre-Development enquiry has been submitted to Thames Water to confirm that the existing public sewer network has the capacity to accommodate the foul flows for the Proposed Development. The response form Thames Water confirms sufficient capacity.

It is understood that foul flows from the existing site buildings discharge to the Thames Water foul network in the surrounding roads. New connection locations are proposed to suit the new Wharf Lane and Water Lane building layouts.

See "Appendix I – Utilities Diversions and Connections" for the proposed sewer connection locations and all other relevant Thames Water information.

2.4 Gas

Existing services

The Site has a wide gas network present as shown in the utility search map from National Grid. The Water Lane mains supply continues to serve Eel Pie Island and will need to be retained, as will the mains supply on Wharf Lane that runs downs to Eyal Lodge.

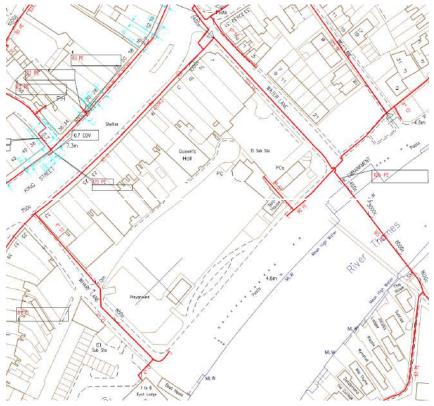


Figure 7: National Grid Gas supply at Twickenham Riverside

Proposed Services

Two services that appear to serve existing building on the site will need to be disconnected and capped off at the mains.

An application had been made to National Grid in request of a new supply to the Wharf Lane building for the scheme presented at Stage 2, which included gas boilers. This application has since been cancelled, as it is not anticipated that there should be any demand for gas supplies to the Proposed Development.

At this stage there has been no allowance made for any additional gas supplies to the commercial kitchen in the pub or café. All existing gas services on site are to be decommissioned and removed.

2.5 Telecommunications

Existing services

Telecommunications asset maps show that both BT and Virgin services are available on site via Water Lane and The Embankment.

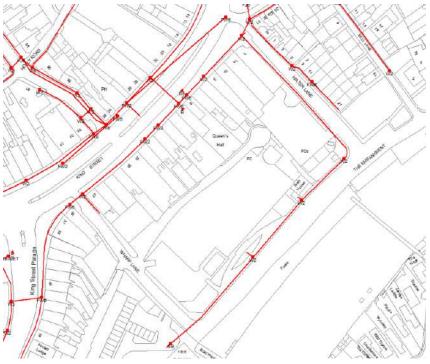


Figure 8: Virgin asset map at Twickenham Riverside

Proposed Services

Existing ducts serving Eyal Lodge will need to be diverted to accommodate the new Wharf Lane building in the Proposed Development. Proposals for these diversions have been developed and included within the overall diversions and construction phasing layouts plans.

The existing infrastructure shown on Water Lane will be used to serve the Water Lane building with individual entry points to each retail unit and the café, as well as a single intake for the residential part of the Proposed Development.

It is proposed that service running along The Embankment will be diverted along a similar route, to the south of the embankment. This diversion will be used with individual entry points to the office unit and the pub, as well as a single intake for the residential part of the Wharf Lane building. The connection to Eyal Lodge will be retained.

Applications have been made to both Virgin and BT OpenReach for the necessary diversion works and new connections.

See "Appendix I – Utilities Diversions and Connections" for the more information on the Virgin Media and OpenReach proposals.



Figure 9: BT asset map at Twickenham Riverside

3. APPENDICES

APPENDIX 1 – UTILITIES DIVERSIONS AND CONNECTIONS



Your reference: DS6072395

Your site address: Twickenham Riverside, Wharf Lane, The Embankment, Water Lane, Twickenham TW1 3SG

Clean water capacity report

Status: Capacity confirmed

Date: 10th May 2021

Validity: Valid until 4th November 2022 or for the duration of your Local Authority planning permission when this report is used to support your application.

We confirm that there will be sufficient capacity on our clean water network to serve the following properties on your development: 54 residential flats, a 35-pupil primary school, 360-seat assembly halls, 80-seat restaurants, 1,350m² of office space and 650m² of commercial premises.

Please be aware that this report is based upon the details and drawings provided. If there are any subsequent changes to these, then the contents of this report will become invalid and a new assessment will be needed.

Nearest point of connection / Your preferred point of connection

3" main on Water Lane and 4" main on Wharf Lane.



Contaminated land

If your site is on contaminated land, any new water pipes laid should be barrier pipe which is more expensive. If you think this is not the case you will need to provide a soil report when applying for new mains and services.

Diversions

From our records we don't anticipate that any clean water assets need to be diverted to accommodate your proposals.

Building water

It's important that you apply for a building water supply before you start using water on site even if you believe your supply is already metered. We need to ensure your account is properly set up and you have the correct meter for your supply or fines maybe imposed. Apply <u>here</u>.

Fire hydrant and sprinkler demand

Please note that we cannot confirm whether a fire hydrant or sprinkler demand can be accommodated on a new connection. You'll need to contact an independent consultant or specialist company for hydrant testing for fire-fighting purposes. Valve operations must be carried out by our Network Service Technician which can be booked on 0800 316 9800.

Asset location search

If you need help in identifying the location of existing water mains and sewers, you can get this information from any property search provider. We have a Property Searches team who will carry out an asset location search, which provides information on the location of known Thames Water clean and/or wastewater assets, including details of pipe sizes, direction of flow and depth (for which a fee is payable). You can find out more <u>online</u> or by calling us on 0845 070 9148.

Issued on behalf of the Clean Water Pre-Planning team, Developer Services, Thames Water, Clearwater Court, Vastern Road, Reading, RG1 8DB



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

Registered in England and Wales No: 3870728

Pedro Valero Skelly & Couch 6-9 Union Wharf 23 Wenlock Road London N1 7SB

09/06/2021

Project: 8600022034 / Budget Estimate: 3600007265

Dear Pedro,

Site Address: Twickenham Riverside Development, TW1 3SG

Thank you for your recent enquiry regarding the above premises. I am writing to you on behalf of South Eastern Power Networks PLC the licensed distributor of electricity for the above address trading as UK Power Networks.

I am pleased to be able to provide you with a budget estimate for the work to divert 33kV cables from your site through your proposed route.

It is important to note that this budget estimate is intended as a guide only. It may have been prepared without carrying out a site visit or system studies. No enquiry has been made as to the availability of consents or the existence of any ground conditions that may affect the works. It is not an offer to provide the connection and nor does it reserve any capacity on UK Power Networks' electricity distribution system.

33kV diversion

Budget Estimate

The budget estimate for the contestable and non-contestable elements of work is **£200,000.00** (exclusive of VAT) of which **£80,000.00** is non-contestable, if the cables are installed on the proposed route.

Proposed Works

- Install 200m of 33kV double circuit (ducted) between proposed points of connection
- Undertake 4 x 33kV closing joints
- Manage Network shutdowns
- Provision of de-oiling the existing 33kV oil filled cables

Budget estimate assumptions

This budget estimate is based on the following assumptions:

- The most appropriate Point of Connection (POC) is as described above.
- A viable cable or overhead line route exists along the route we have assumed between the Point of Connection (POC) and your site.
- In cases where the Point of Connection (POC) is to be at High Voltage, that a substation can be located on your premises at or close to the position we have assumed.



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

Registered in England and Wales No: 3870728

- Where electric lines are to be installed in private land UK Power Networks will require an
 easement in perpetuity for its electric lines and in the case of electrical plant the freehold
 interest in the substation site, on UK Power Networks terms, without charge and before any
 work commences.
- You will carry out, at no charge to UK Power Networks, all the civil works within the site boundary, including substation bases, substation buildings where applicable and the excavation/reinstatement of cable trenches.
- Unless stated in your application, all loads are assumed to be of a resistive nature. Should you intend to install equipment that may cause disturbances on UK Power Networks' electricity distribution system (e.g. motors; welders; etc.) this may affect the estimate considerably.
- All UK Power Networks' work is to be carried out as a continuous programme of work that can be completed substantially within 12 months from the acceptance of the formal offer.

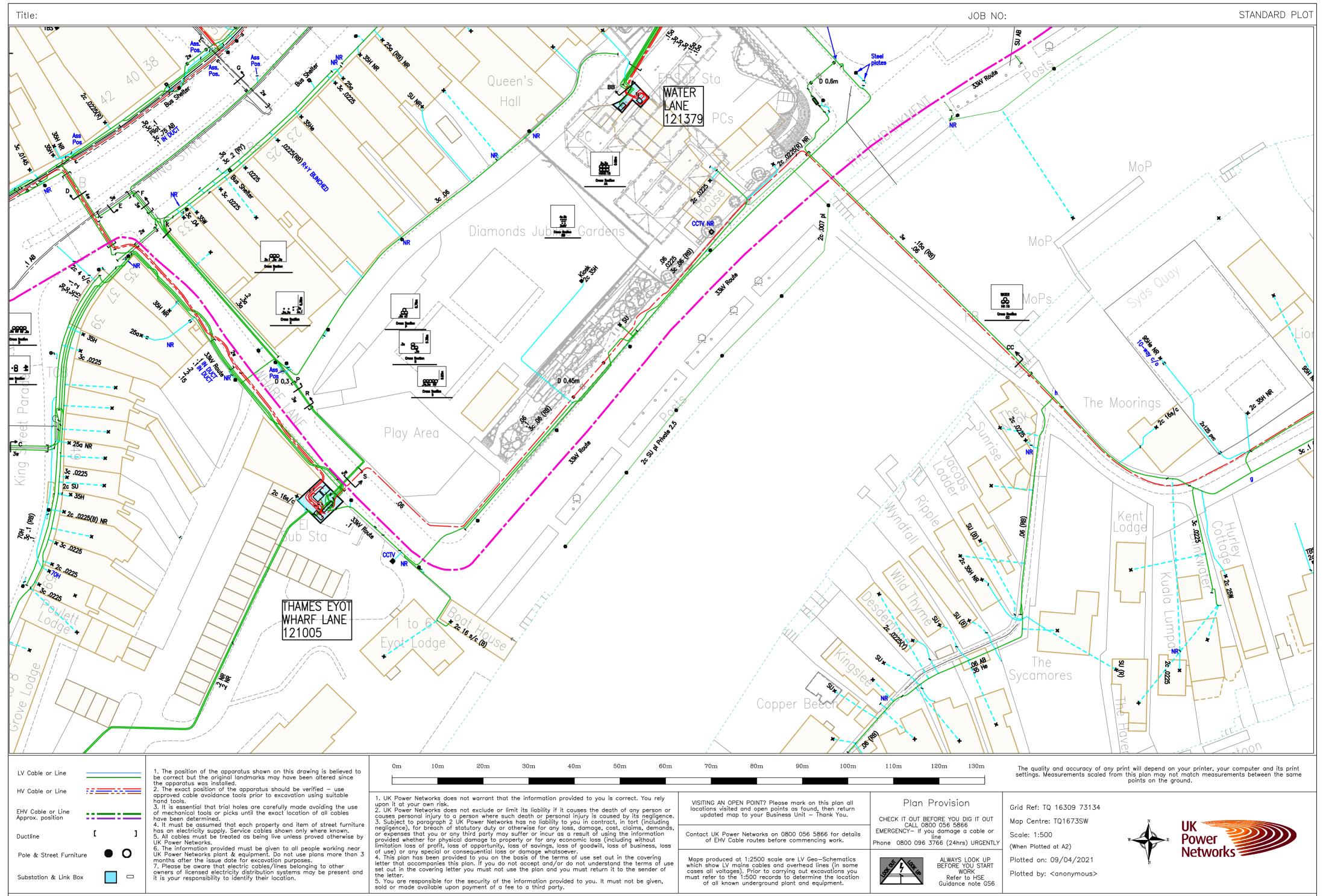
Please note that if any of the assumptions prove to be incorrect, this may have a significant impact on the price in any subsequent quotation. You should note also that UK Power Networks' formal connection offer may vary considerably from the budget estimate. If you place reliance upon the budget estimate for budgeting or other planning purposes, you do so at your own risk.

If you would like to proceed to a formal offer of connection then you should apply for a quotation, Please refer to our website <u>http://www.ukpowernetworks.co.uk/internet/en/help-and-advice/documents/the_connection_process.pdf</u> for '**The connection process**' which details our application process. To help us progress any future enquiry as quickly as possible please quote the UK Power Networks Reference Number from this letter on all correspondence.

If you have any questions about your budget estimate or need more information, please do not hesitate to contact me. The best time to call is between the hours of 9am and 4pm, Monday to Friday. If the person you need to speak to is unavailable or engaged on another call when you ring, you may like to leave a message or call back later.

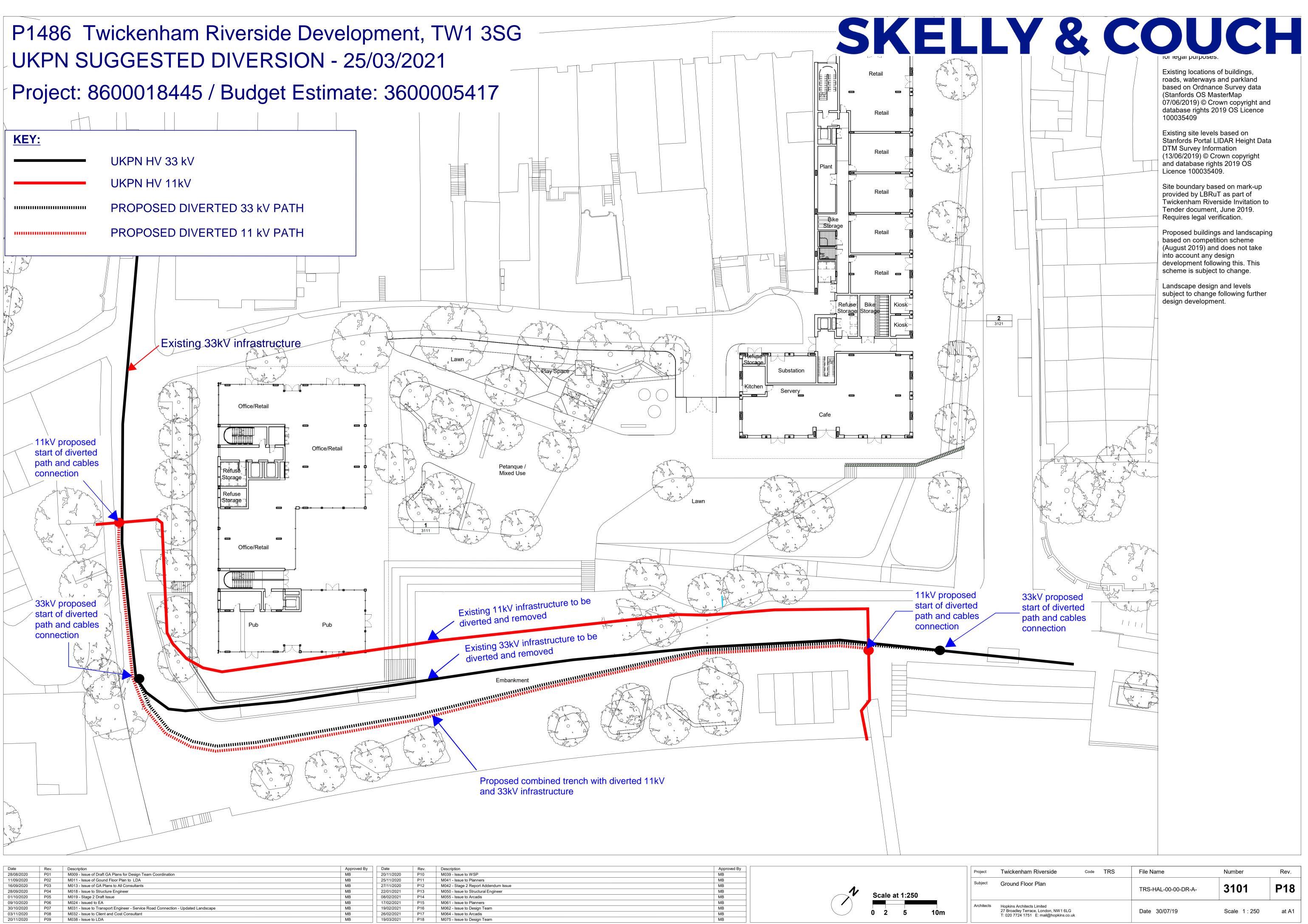
Yours sincerely

Ehsan Hosseini Major Connections Project Manager Tel: 07875114577 Email: <u>Ehsan.hosseini@ukpowernetworks.co.uk</u>



Reproduced by permission of Ordnance Survey on behalf of HMSO. (c) Crown	an unight and database wight 2001. All vights recommend	Ordenses Company Lineses sources and 10001046	O Data has been added to the Andrease Construction in
reproduced by permission of Uranance Survey on penalt of MMSU. (c) Grawn	copyright and database right ZUZT, All rights reserved.	Uranance Survey Licence number 10001943	IV. Data has been added to the Uranance Survey base r
	under eee	tion 6(1)(a) of the Electricity Act 1080 for	the relevant distribution convision area as that term is d

s reserved. Ordnance Survey Licence number 100019450. Data has been added to the Ordnance Survey base map; all proprietary rights in such additional data are and shall remain the exclusive property of (c) South Eastern Power Networks plc or London Power Networks plc each being a distribution licensee under section 6(1)(c) of the Electricity Act 1989 for the relevant distribution services area as that term is defined in such licensee's distribution licence. All rights in such data reserved.



© Copyright Hopkins Architects Limited. Registered in England number: 11779559 Registered address: 27 Broadley Terrace London NW1 6LG Do Not Scale. Use Figured Dimensions Only. All Dimensions to be checked on site. Original Drawing Size A1 (L)

Existing locations of buildings, roads, waterways and parkland based on Ordnance Survey data (Stanfords OS MasterMap 07/06/2019) © Crown copyright and database rights 2019 OS Licence 100035409

Existing site levels based on Stanfords Portal LIDAR Height Data DTM Survey Information (13/06/2019) © Crown copyright and database rights 2019 OS Licence 100035409.

Site boundary based on mark-up provided by LBRuT as part of Twickenham Riverside Invitation to Tender document, June 2019. Requires legal verification.

Proposed buildings and landscaping based on competition scheme (August 2019) and does not take into account any design development following this. This scheme is subject to change.

Landscape design and levels subject to change following further design development.

Twickenham Riverside	Code	TRS	File Name	Number	Rev.
Ground Floor Plan			TRS-HAL-00-00-DR-A-	3101	P18
Hopkins Architects Limited 27 Broadley Terrace, London, NW1 6LG T: 020 7724 1751 E: mail@hopkins.co.uk			Date 30/07/19	Scale 1 : 250	at A1



19th Feb 2021

Pre-planning enquiry: Wastewater Capacity check

Dear Miss Bertram

Thank you for providing details of your development with the Pre-Planning application dated 11th Feb 21 for development @ Twickenham Riverside Wharf Ln The Embk Water Ln Twick TW1 3SG

Brownfield site developed to {49Flats+404m2 Offices+1044m2 Comm. area } as detailed in your above application.

We have completed the current assessment of the foul water flows & surface water discharges based on the information submitted in your application with the purpose of assessing sewerage capacity within the existing Thames Water sewer network, in liaison with TW Asset Planners.

Foul

If your proposals progress in line with the details you've provided as above, we're pleased to confirm that there will be sufficient sewerage capacity in the adjacent TW sewer network to serve your foul discharges from your proposed development, provided its by gravity, to TW foul sewer network as detailed in your application.

This confirmation is valid for 12 months or for the life of any planning approval that this information is used to support, to a maximum of three years.

You'll need to keep us informed of any changes to your design – for example, an increase in the number or density of homes. Such changes could mean there is no longer sufficient capacity and has to be investigated again.

Surface Water

When developing a site, policy 5.13 of the London Plan and Policy 3.4 of the Supplementary Planning Guidance (Sustainable Design And Construction) states that every attempt should be made to use flow attenuation and SuDS/Storage to reduce the surface water discharge from the site as much as possible.

In accordance with the Building Act 2000 Clause H3.3, positive connection of surface water to a public sewer will only be consented when it can be demonstrated that the hierarchy of disposal methods have been examined and proven to be impracticable. Before we can consider your surface water needs, you'll need written approval from the lead local flood authority that you have followed the sequential approach to the disposal of surface water and considered all practical means

The disposal hierarchy being:

- 1. store rainwater for later use.
- 2. use infiltration techniques where possible.
- 3. attenuate rainwater in ponds or open water features for gradual release.
- 4. attenuate rainwater by storing in tanks or sealed water features for gradual release.
- 5. discharge rainwater direct to a watercourse.;; and if above cannot be achieved
- 6. discharge rainwater to a surface water sewer/drain.
- 7. discharge rainwater to the combined sewer.
- 8. discharge rainwater to the foul sewer

Where connection to the public sewerage network is still required after examining the hierarchy {1-5} to manage surface water flows we will accept these flows at a discharge rate in line with *CIRIA's best practice guide on SuDS or that stated within the sites planning approval.*

We note that you are using SUDS and discharging most surface water to the River. The rest should be attenuated and discharged as per your application.

Please see the attached 'Planning your wastewater' leaflet for additional information. At the appropriate time, you will have to apply for a S106 connection application to DS Connection team

Source Protection Zone

Please check whether your development falls within a Source Protection Zone for groundwater abstraction. These zones may be at particular risk from polluting activities on or below the land surface. To prevent pollution, the Environment Agency and Thames Water (or other local water undertaker) will use a tiered, risk-based approach to regulate activities that may impact groundwater resources. The applicant is encouraged to read the Environment Agency's approach to groundwater protection (available at https://www.gov.uk/government/publications/ groundwater-protection-position-statements) and may wish to discuss the implications for their development with a suitably qualified environmental consultant.

This confirmation is valid for 12 months or for the life of any planning approval that this information is used to support, to a maximum of three years.

Please note that you must keep us informed of any changes to your design – for example, an increase in the number or density of homes. Such changes could mean there is no longer sufficient sewerage capacity.

What happens next?

Please make sure you submit your connection application, when you are ready, giving us at least 21 days' notice of the date you wish to make your new connection/s.

If you've any further questions, please contact me.

Yours sincerely

sgd: *Siva, sivarajan*

Siva Sivarajan

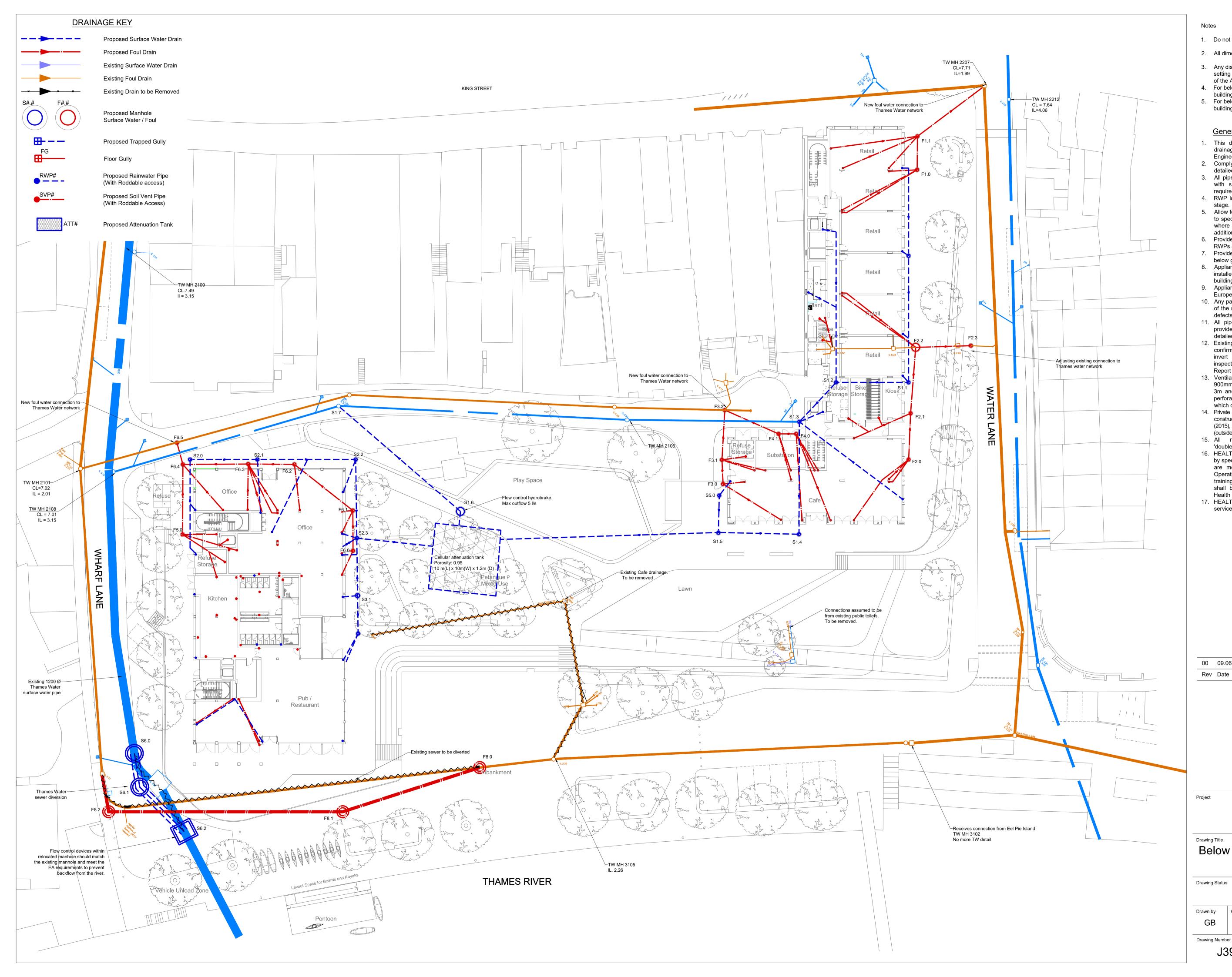
Developer Services- Wastewater Adoptions Engineer

Office:0203 577 7752 Mobile: 07747842608 siva.sivarajan@thameswater.co.uk

Thames Water Utilities Ltd, Clearwater Court, Vastern Road, Reading, Berkshire, RG1 8DB Find us online at <u>developers.thameswater.co.uk</u>



TW Int ref;DTS65539



Notes

- 1. Do not scale the drawing
- 2. All dimensions are in millimetres unless noted otherwise
- 3. Any discrepancies between structural and architectural setting out dimensions must be brought to the attention
- of the Architect and Engineers 4. For below ground drainage drawings for Water Lane building refer to J3932-C-DR-1001
- 5. For below ground drainage drawings for Wharf Lane building refer to J3932-C-DR-1002 and 1003

General Notes to Drainage

- 1. This drawing is to be read in conjunction with the drainage details and other relevant Architects and Engineers drawings and specifications.
- 2. Comply with technical standards and British standards as detailed in the specification. 3. All pipework is to be installed to the recommended falls
- with suitable provision for venting and cleaning as required by the British standards. 4. RWP locations are to be determined at the next design
- stage. 5. Allow for rodding access points in all locations to conform to specification. Notify contractor and architect of places
- where access in required to these rodding points in addition to those shown on plans. 6. Provide 25mm foil face mineral wool insulation to all
- RWPs & SVPs. 7. Provide rodding points to RWPs and SVPs before the below ground connection.
- 8. Appliances connecting to the drainage system shall be installed with a trap to prevent escape of foul air into the buildina.
- 9. Appliances, pipes and fittings shall comply with relevant European standards where applicable. 10. Any part of the existing drainage system retained as part
- of the new scheme shall be cleaned and inspected. Any defects shall be reported to the Engineer. 11. All pipes passing through fire compartments shall be
- provided with fire collars and fire seals. Fire stopping detailed shall be submitted for approval
- 12. Existing drainage connectivity & condition to be confirmed by Contractor. Before starting work, check invert levels & positions of existing drains, sewers, inspection chambers & manholes against drawings. Report discrepancies.
- 13. Ventilating pipes open to outside air should finish at least 900mm above any opening into the the building within 3m and should be finished with a wire cage or other perforated cover, fixed to the end of the ventilating pipe, which does not restrict the flow of air.
- 14. Private foul water and surface water drainage is to be constructed in accordance with the building regulations part H (2015), BS EN 12056:2000 (inside buildings), BS EN 752:2017 (outside buildings) and all relevant agreement certificates. 15. All rodding eyes and access points shall be of
- 'double-seal' type.
- 16. HEALTH AND SAFETY: The works shall be carried out by specialist competent and experienced contractors who are members of a recognised national organisation. Operatives shall have received full and appropriate training for the operations they are to undertake. All work shall be carried out in accordance with all pertinent Health and Safety Regulations.
- 17. HEALTH AND SAFETY: Care should be taken to locate services prior to any excavation.



J3932-C-DR-1000

Revisior

00

openreach

Your Ref: -

Openreach New Sites Ref: L/POP/00B

Wednesday, 30 June 2021

Dear Sir/Madam,

Re: DSI-TWICKENHAM RIVERSIDE WHARF LN, THE EMBANKMENT, WATER LANE TWICKENHAM TW1 3SG

Thank you for your site information. Please find enclosed your site layout marked to show our proposal for providing service to your development, including where appropriate the installation of a street cabinet and associated jointing chamber.

Please confirm at the initial site meeting with the Field Based Co-ordinator (FBC) that the proposed layout is compatible with the order of the build. As part of the contract, you will be asked to sign a wayleave agreement. Should you not own the land or any adjacent land requiring access by Openreach, then please advise your FBC who will work with you to get the appropriate consent.

As part of the contract you accept to carry out the works detailed under the contract with Openreach at the HBF rates of ± 151 per house (inside M25) or ± 50 per flat, payable by BT plc, through its division Openreach, to your company.

If your development is Developer Self Install (DSI) you will also receive an additional £20 payment per house/flat. These payments are exempt from VAT and will be paid in accordance with current Inland Revenue CIS legislation. A copy of our terms and conditions are available at <u>www.ournetwork.openreach.co.uk</u> A Purchase Order for payment will be issued by BT plc, through its division Openreach, when the work is completed to the quality standard.

Acceptance of proposals must be received before any stores will be delivered, and the site progressed through the New Sites planning process. Acceptance can be given via email on receipt of proposals, email direct to the FBC, or signed onsite at the initial site meeting.

If alterations are made to the site layout after the proposal has been agreed, we may need to redesign the site lay out plans which we will charge you in accordance with the price list as set out in the contract.

The work to be carried out and the standards required by Openreach can be found in the developer's handbook at <u>www.ournetwork.openreach.co.uk</u> which can be downloaded. You are responsible for all extension wiring beyond the Network Terminating Equipment (copper or fibre, as applicable).

Openreach 123 Judd Street London WC1H 9NP **British Telecommunications plc** Registered Office: 81 Newgate Street, London EC1A 7AJ Registered in England and Wales no. 1800000

www.openreach.co.uk

Please can you provide the council addressing for your site as soon as it is available - any changes to the council addressing must be passed on to your FBC or New Sites Office as soon as possible in order for us to update the records and make sure that there are no delays when providing service to the homeowner.

Additional works outside of the scope of this agreement will be managed by the Openreach Repayments team. Any alterations to Openreach's existing apparatus may be chargeable. An approximate position of Openreach's existing apparatus is available from the Openreach Maps by E-mail (MBE) service at <u>https://www.ournetwork.openreach.co.uk/locating-ournetwork/maps-by-email.aspx</u>

To obtain a more precise location contact 'Click Before You Dig' at <u>https://www.ournetwork.openreach.co.uk/locating-our-network/letting-us-know-about-streetworks.aspx</u> and an Openreach representative will visit the site and mark existing Openreach apparatus for you.

To receive service homeowners and developers will need to place an order with their chosen Communications Provider (for example orders for lift lines and door entry systems).

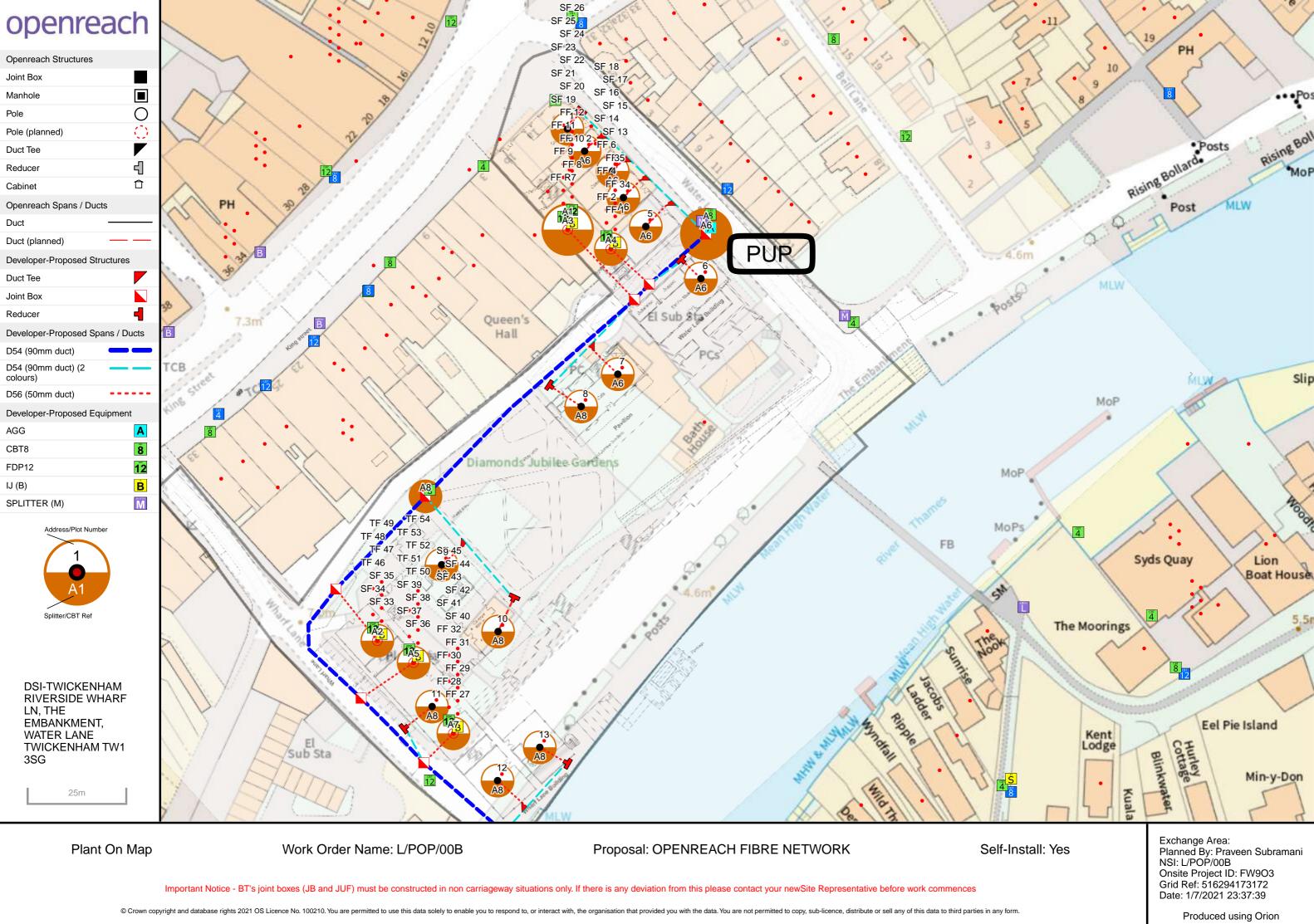
If you have any queries regarding the proposed duct layout, if you do not wish to carry out the work under contract to Openreach, or if you require any further assistance please contact us in the New Site office quoting the above Openreach New Site reference number.

Yours sincerely,

Sneha Shinde.

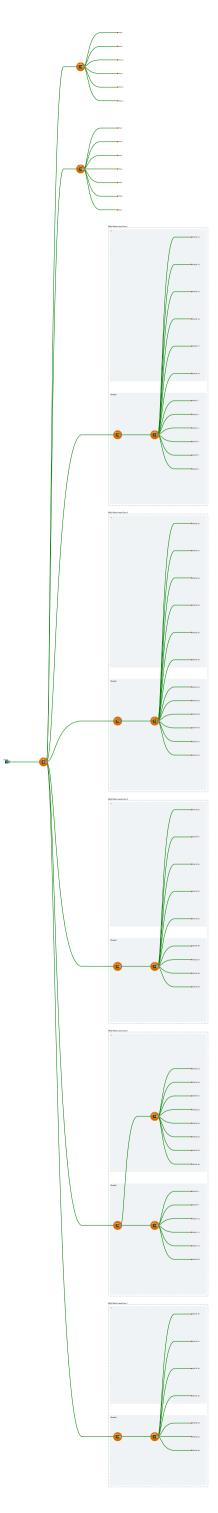
(Sneha.2.shinde@openreach.co.uk)

The New Sites Team

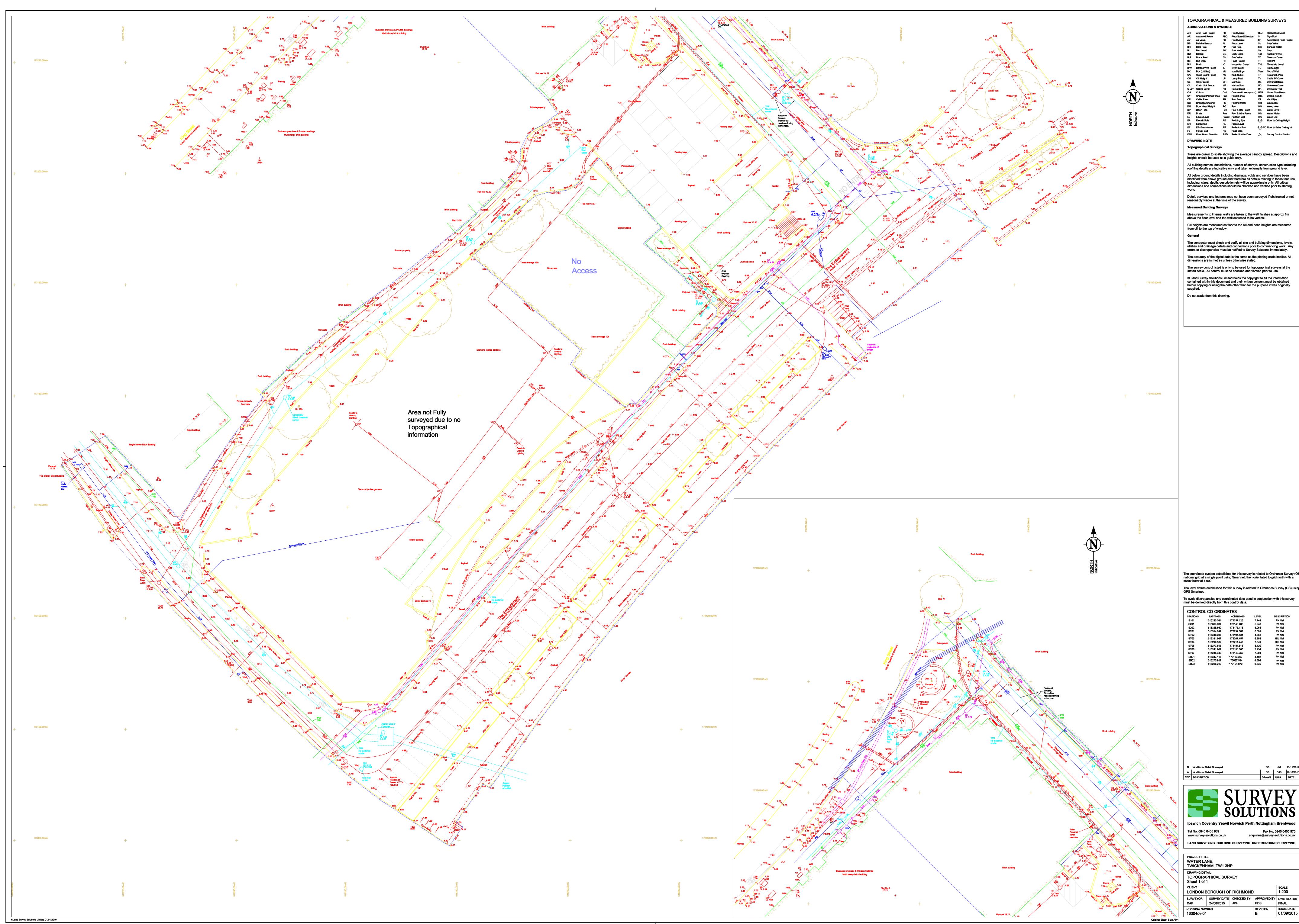




openreach Network Schematic Workorder L/POP/00B / primary equipment 3f11b2b6-c350-4656-9319-fe3e5158ad77



APPENDIX 2 – SITE SURVEY INFORMATION



ER ET EB	Earth Rod EP+Transformer Flower Bed	RL RP RS	Ridge Level Reflector Post Road Sign	<u> </u>	loor to False Ceiling Ht	
-BD DRAV	Floor Board Direction	RSD	Roller Shutter D	oor 🛕 S	urvey Control Station	
•	graphical Surveys are drawn to scale		ing the average		ad Descriptions	and
neigh	ilding names, desc	as a gu	ide only.		·	
oof li	ne details are indic	ative o	nly and taken	externally from	n ground level.	"g
denti nclud	fied from above gro ling; sizes, depth, o nsions and connect	ound ar descript	nd therefore a tion etc will be	II details relatir	ng to these feature only. All critical	S
	, services and feat nably visible at the			een surveyed i	f obstructed or no	t
	ured Building Su	-	are taken to	the wall finishe	s at approx 1m	
above	e the floor level and	the wa	all assumed to	o be vertical.		
	cill to the top of win					
The c utilitie	contractor must che s and drainage de s or discrepancies i	tails an	d connections	s prior to comm	encing work. Any	
The a	ccuracy of the diginations are in metre	tal data	is the same	as the plotting	•	
The s	urvey control listed scale. All control	l is only	/ to be used fe	or topographica		
© Lar	nd Survey Solution	s Limite	ed holds the c	opyright to all f	he information	
pefore suppli	e copying or using ied.	the dat	a other than f	or the purpose	it was originally	
Do no	ot sc ale from this di	rawing.				
ional	rdinate system esta grid at a single poi ctor of 1.000					
eve	l datum establishe artnet.	d for th	is survey is re	elated to Ordna	nce Survey (OS)	using
avoid	l discrepancies any derived directly fro			sed in conjunct	ion with this surve	y
	ITROL CO-OR					
STATIC S101	51 6290 .54	1	NORTHINGS 173257.125	LEVEL 7.744 5.242	DESCRIPTION PK Nail PK Nail	
S201 S202 ST01	516303.004 516328.562 516314.243	2	173149.488 173175.115 173232.087	5.243 5.068 6.601	PK Nail PK Nail PK Nail	
ST02 ST03 ST04	516348.080 516331.967 516299.539	7	173191.534 173207.457 173211.240	4.853 6.984 7.849	PK Nail Hilti Nail Hilti Nail	
ST05 ST06 ST07	516277.85 516241.90 516246.380	9	173181.813 173155.660 173140.250	8.120 7.734 7.904	PK Nail PK Nail PK Nail	
SB01 SB02 SB03	516347.110 516275.917 516236.210	7 1	73163.397 73087.514 73124.870	4.482 4.684 6.835	PK Nail PK Nail PK Nail	
	0 10200.2 H	1		2.200	, it ingili	
3 A	dditional Detail Survey	he		Si	3 JM 13/11	/2017
	dditional Detail Survey dditional Detail Survey ESCRIPTION			SI SI DRAV	3 DJB 12/10	/2015
				2101		
		ς	TT	DI	'EY	7
		3	UL	UII	IONS	
-	vich Coventry Y	eovil	Norwich Po	-		
www.	o: 0845 0405 969 survey-solutions.c			enquiries@su	No: 0845 0405 97 vey-solutions.co.u	JK
) SURVEYING BU	JILDING	G SURVEYIN	g undergro	DUND SURVEYIN	G

SCALE 1:200

FINAL ISSUE DATE 01/09/2015

PDS

B

REVISION

APPENDIX 3 – SITE SURVEY ASSET SEARCHES



Utility site Search DONCASTER DN7 5SX

Search address supplied

The Embankment King Street Twickenham TW1 3SD

 Your reference
 N/A

 Our reference
 ALS/ALS Standard/2017_3513520

23 February 2017

Search date

Notification of Price Changes...

From **1 September 2016** Thames Water Property Searches will be increasing the prices of its Asset Location Searches. This will be the first price rise in three years and is in line with the RPI at 1.84%. The increase follows significant capital investment in improving our systems and infrastructure.

Enquiries received with a higher payment prior to 1 September 2016 will be non-refundable. For further details on the price increase please visit our website at

www.thameswater-propertysearches.co.uk





Search address supplied: The Embankment, King Street, Twickenham, TW1 3SD

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 searchprovides 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: <u>searches@thameswater.co.uk</u> Web: <u>www.thameswater-propertysearches.co.uk</u>

<u>Thames Water Utilities Ltd</u>, Property Searches, PO Box 3189, Slough SL1 4W, DX 151280 Slough 13 T0845 070 9148<u>Esearches@thameswater.co.uk</u> I <u>www.thameswater-propertysearches.co.uk</u>



Waste Water Services

Please provide a copy extract from the public sewer map.

The following quartiles have been printed as they fall within Thames' sewerage area:

TQ1672NW TQ1673SE TQ1673SW

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.

The following quartiles have been printed as they fall within Thames' water area:

TQ1672NW

<u>Thames Water Utilities Ltd</u>, Property Searches, PO Box 3189, Slough SL1 4W, DX 151280 Slough 13 T0845 070 9148<u>Esearches@thameswater.co.uk</u> I <u>www.thameswater-propertysearches.co.uk</u>



TQ1673SE TQ1673SW

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: 0845 850 2777 Email: 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

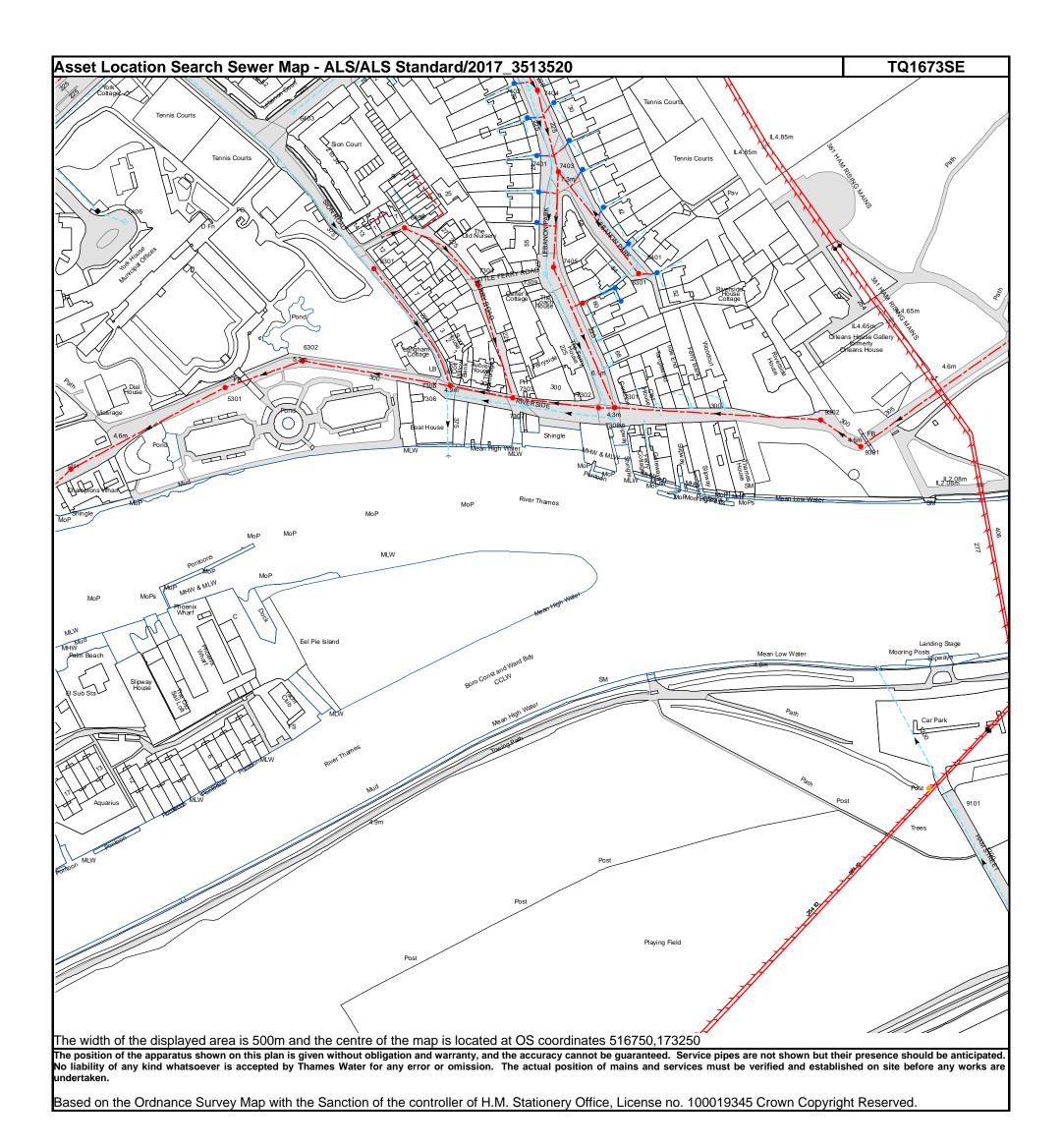
Tel: 0845 850 2777 Email: developer.services@thameswater.co.uk



Thames Water Utilities Ltd, Property Searches, PO Box 3189, Slough SL1 4W, DX 151280 Slough 13 T 0845 070 9148 E searches@thameswater.co.uk I www.thameswater-propertysearches.co.uk

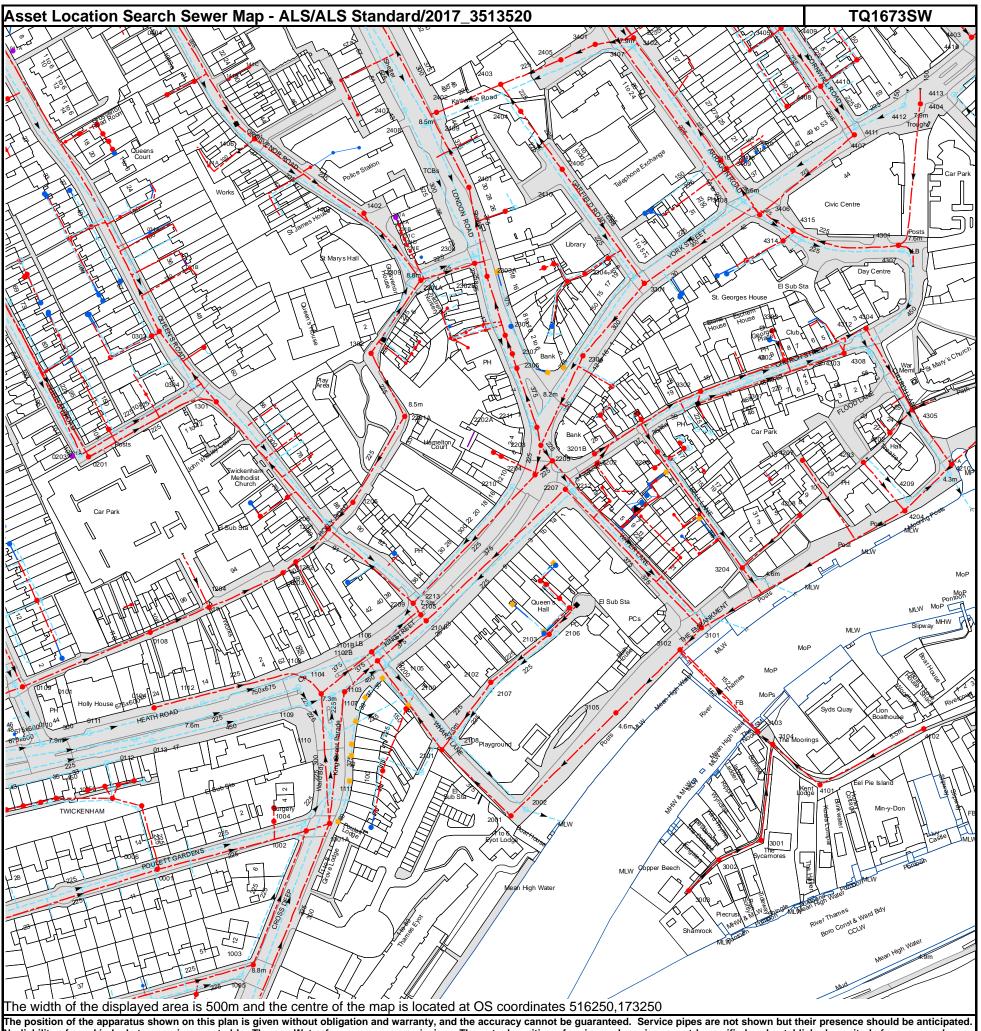
8.92 8.92 n/a 8.77 8.37 n/a n/a n/a n/a n/a n/a n/a n/a 8.9	6.94 5.95 n/a 6.33 6.87 n/a n/a n/a n/a n/a n/a n/a
n/a 8.77 8.37 n/a n/a n/a n/a n/a n/a n/a n/a	n/a 6.33 6.87 n/a n/a n/a n/a n/a
8.77 8.37 n/a n/a n/a n/a n/a n/a n/a	6.33 6.87 n/a n/a n/a n/a n/a
8.37 n/a n/a n/a n/a n/a n/a n/a	6.87 n/a n/a n/a n/a
n/a n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a
n/a n/a n/a n/a n/a	n/a n/a n/a n/a
n/a n/a n/a n/a	n/a n/a n/a
n/a n/a n/a	n/a n/a
n/a n/a n/a	n/a
n/a n/a	
n/a	n/a
89	n/a
	6.35
8.9	6.32
8.75	6.24
8.71	2.23
8.79	6.05
n/a	n/a
n/a	4.6
n/a	n/a
n/a	n/a
9.14	2.68
8.57	7.05
8.57	2.5
n/a	n/a
8.58	6.6
8.54	2.39
	8.79 n/a n/a n/a 9.14 8.57 8.57 n/a n/a n/a n/a n/a n/a n/a n/a

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



NR Lovels quoted in metres	Ordnance Newlyn Datum Th	e value -0000 00 indicates that n	o survey information is available
ND. Levels quoted in metres	Orunance Newlyn Dalum. The	s value -3333.00 multales mai n	o survey information is available

Manhole Reference	Manhole Cover Level	Manhole Invert Level
9101	n/a	n/a
74JK	n/a	n/a
7403	n/a	n/a
74EL	n/a	n/a
7401	n/a	n/a
74KK	n/a	n/a
74FF	n/a	n/a
74LJ	n/a	n/a
6403	n/a	n/a
74HE	n/a	n/a
7404	n/a	n/a
7402	n/a	n/a
74MJ	n/a	n/a
9301	n/a	n/a
9302	n/a	n/a
7308	n/a	n/a
7301	n/a	n/a
83MH	n/a	n/a
83MM	n/a	n/a
83NE	n/a	n/a
73MJ	n/a	n/a
73NH	n/a	n/a
73NF	n/a	n/a
8301	n/a	n/a
83LL	n/a	n/a
8401	n/a	n/a
84NH	n/a	n/a
74DM	n/a	n/a
5201	n/a	n/a
5406	n/a	n/a
5301	n/a	n/a
6302	n/a	n/a
6301	n/a	n/a
6401	n/a	n/a
7306	n/a	n/a
7305	n/a	n/a
7304	n/a	n/a
7303	n/a	n/a
7307	n/a	n/a
74NH	n/a	n/a
7309	n/a	n/a
7405	n/a	n/a
73NC	n/a	n/a
7302	n/a	n/a
73NL	n/a	n/a
	en	
		d the accuracy cannot be guaranteed. Service pipes are not
shown but their presence should be anticipated. of mains and services must be verified and estal		y Thames Water for any error or omission. The actual position



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.

Manhole Reference	Manhole Cover Level	Manhole Invert Level
341C	n/a	n/a
341D	n/a	n/a
4407	7.85	5.26
4411	7.8	5.93
44ML 4412	n/a 7.91	n/a 5.93
4412	7.96	5.55
4413	7.96	5.55
4410	7.88	6.56
4408	7.9	5.85
44NK	n/a	n/a
34NL	n/a	n/a
4416 4403	n/a n/a	n/a n/a
3405	8.03	6.99
4409	7.87	6.91
4315	n/a	n/a
4314	n/a	n/a
4303	6.55	3.65
4312 4304	6.86 6.94	n/a 3.38
4308	5.55	3.65
4202	n/a	5.7
4301	7.56	5.12
4307	7.61	4.43
4305	4.88	2.59
22MK 22MJ	n/a n/a	n/a n/a
22MJ 2210	n/a n/a	n/a 5.21
2204	n/a	3.38
2203	n/a	4.83
2205	n/a	4.79
2207	7.71	1.99
2212 3201B	7.64 n/a	4.36 7.81
3202	n/a	7.72
32NC	n/a	n/a
32MN	n/a	n/a
321H	n/a	n/a
321T	n/a	n/a
321G 321L	n/a n/a	n/a n/a
32KD	n/a	n/a
3205	7.74	5.51
0101	8.74	4.27
0109 01NF	8.78 n/a	6.93 n/a
01MC	n/a	n/a
02MF	n/a	n/a
02MN	n/a	n/a
02MM	n/a	n/a
2001 2002	n/a n/a	n/a n/a
3105	n/a	n/a
2107	n/a	n/a
2102	n/a	n/a
2103	n/a	n/a
2106 21MI	n/a n/a	n/a n/a
21ML 22ML	n/a n/a	n/a n/a
22ML 22MM	n/a	n/a
22MN	n/a	n/a
22NC	n/a	n/a
22NE 321S	n/a n/a	n/a n/a
321S 321E	n/a n/a	n/a n/a
321E 321F	n/a	n/a
321K	n/a	n/a
1109	7.31	4
1104	7.3	3.5
1206 1201	8.13 8.13	5.06 1.52
1001A	7.38	2.03
1111	7.28	5.28
1110	7.15	5.09
1107	n/a	3.97
1103 12LC	n/a n/a	1.98 n/a
1205	8.17	4.52
10NM	n/a	n/a
1101B	7.21	1.86
1102B	7.05	1.78
1106	n/a	4.3
11NL 1105	n/a n/a	n/a 3.63
22LH	n/a	n/a
21NM	n/a	n/a
2109	7.49	3.15
2209 2213	7.33 n/a	1.59 4.78
Utilities Ltd, Property Searches, PO Box 3189, Slough SL1 4W.		טויב

Manhole Reference	Manhole Cover Level	Manhole Invert Level
2105	7.19	1.67
21NK 2104	n/a n/a	n/a 1.8
2101	7.02	2.01
2108	7.01	3
01LD	n/a	n/a
01MH 01ME	n/a n/a	n/a n/a
01MF	n/a	n/a
01LF	n/a	n/a
01KN	n/a	n/a
021B	n/a	n/a
01LC 0112	n/a 7.54	n/a 5.65
00NM	n/a	n/a
00NF	n/a	n/a
01MG	n/a	n/a
0108 0006	n/a 8.01	n/a 5.57
0113	7.46	4.22
0104	7.43	5.34
0001	8.02	6.13
1112	7.35	4.93
1204 12LF	8.11 n/a	3.81 n/a
12LF 10ND	n/a	n/a
10NC	n/a	n/a
1203	8.2	3.44
1202	8.28	3.34
1108 1004	n/a 7.46	5.39 5.3
1002	7.52	5.02
3003	n/a	n/a
3002	n/a	n/a
3001 4101	n/a n/a	n/a n/a
3104	n/a	n/a
3103	n/a	n/a
4102	n/a	n/a
3102 3101	n/a n/a	n/a n/a
3204	n/a	n/a
321D	n/a	n/a
32KL	n/a	n/a
321C 32KK	n/a n/a	n/a n/a
32KN	n/a	n/a
32MK	n/a	n/a
4208	n/a	n/a
32MJ 32ML	n/a n/a	n/a n/a
4204	4.55	2.59
4209	4.53	3.29
321A 4210	n/a 4.07	n/a
321B	4.07 n/a	2.59 n/a
421A	n/a	n/a
4203	n/a	n/a
4207	n/a	n/a
00NJ 00NH	n/a n/a	n/a n/a
OONK	n/a	n/a
01LJ	n/a	n/a
01LN	n/a	n/a
01LH 01LE	n/a n/a	n/a n/a
01MM	n/a	n/a
0110	7.79	5.11
011A	n/a	n/a
0111 001B	7.63 n/a	5.05 n/a
001B	n/a n/a	n/a n/a
1005	8.59	6.5
1003	8.55	5.9
041B 04KH	n/a n/a	n/a n/a
041A	n/a	n/a
04LH	n/a	n/a
	n/a	n/a n/a
04LL	n/a	
04LL 04ME	n/a n/a	
04LL 04ME 04LD 04MF	n/a n/a n/a	n/a n/a
04LL 04ME 04LD 04MF 04MH	n/a n/a n/a	n/a n/a n/a
04LL 04ME 04LD 04MF 04MH 04MJ	n/a n/a n/a	n/a n/a n/a
04LL 04ME 04LD 04MF 04MH 04MJ 04MK	n/a n/a n/a n/a	n/a n/a n/a n/a
04LL 04ME 04LD 04MF 04MH 04MJ	n/a n/a n/a	n/a n/a n/a n/a n/a
04LL 04ME 04LD 04MF 04MH 04MJ 04MK 04ML 04MM 1407	n/a n/a n/a n/a n/a 8.43	n/a n/a n/a n/a n/a 6.4
04LL 04ME 04LD 04MF 04MH 04MJ 04MK 04ML 04MM 1407 141F	n/a n/a n/a n/a n/a 8.43 n/a	n/a n/a n/a n/a n/a 6.4 n/a
04LL 04ME 04LD 04MF 04MH 04MJ 04MK 04ML 04ML 1407 141F 141A	n/a n/a n/a n/a n/a 8.43 n/a n/a	n/a n/a n/a n/a n/a 6.4 n/a n/a
04LL 04ME 04LD 04MF 04MH 04MJ 04MK 04ML 04MM 1407 141F	n/a n/a n/a n/a n/a 8.43 n/a	n/a n/a n/a n/a n/a 6.4 n/a

14056.576.521407ndanda1407ndanda1407ndanda1407ndanda1411ndanda0404ndanda1411ndanda1411ndanda1412ndanda1415ndanda1416ndanda1416ndanda1417ndanda1418ndanda1418ndanda14198.394.6924018.396.6924028.396.6924038.396.6424048.416.3224058.416.3224068.416.3224078.416.3224088.416.3224098.416.3224098.416.3224098.416.3224098.416.3224098.416.3224098.416.3224098.416.3224098.416.3224098.416.3224098.416.3424098.416.3424098.416.3424098.416.3424098.416.3424098.416.3424098.416.3424098.416.3424098.416.34 <trr< th=""><th>Manhole Reference</th><th>Manhole Cover Level</th><th>Manhole Invert Level</th></trr<>	Manhole Reference	Manhole Cover Level	Manhole Invert Level
1416nana24078.415.11411na6.41411na6.41411na6.41411na6.41412na6.61413na6.61414a.56.61415a.56.61416a.56.61417a.56.61418a.56.624028.246.624038.324.6824048.326.7240514.66.7240514.66.724068.246.724078.115.7240816.77.3240916.77.3240916.77.3240916.77.3240916.77.3240916.77.3240916.77.3240916.77.3240916.77.3240916.77.3240916.77.3240916.77.3240916.77.3240916.716.7240916.716.7240916.716.7240916.716.7240916.716.7240916.716.7240916.716.7240916.716.7240916.716.7240916.716.7251916.7<			
24078.415.12404.0n/an/a041.0n/an/a041.0n/an/a1411n/an/a1412n/an/a1413n/an/a1414n/an/a1415n/an/a1416n/an/a1417n/an/a1418n/an/a24098.415.0624098.326.0724048.386.0724058.416.0724068.786.0724078.736.1324088.746.3324098.746.4324098.746.4324098.746.4324098.746.4324098.746.4324098.746.4324098.746.4324098.746.4324098.746.4324098.746.4324098.746.4324098.746.4324098.746.4324098.746.4324098.746.4324098.746.4324098.746.4324098.746.4324098.746.4324098.747.324098.747.324098.747.324098.747.325097.447.44 </td <td>2408</td> <td>n/a</td> <td>n/a</td>	2408	n/a	n/a
1411nhnhnh64MCnhnh64MCnhnh64MCnhnh64MCnhnh64MCnhnh141Cnhnh141Cnhnh141Cnhnh141Cnhnh141Cnhnh240015.25.024015.35.22402nhnh24035.15.224045.35.224058.145.224065.45.224077.35.324088.145.324091.41.424098.145.324091.41.424111.41.424111.41.424111.			
6dMCninninnin6411ninnin1411ninnin1411ninnin1412ninnin1414ninnin1415ninnin1416ninnin1416ninnin14178.45.824028.304.524038.301.524048.301.62405nin1.624051.75.224048.146.5224058.141.624058.141.624068.141.624078.141.624088.141.624098.141.624098.141.624098.141.624098.141.624098.141.624098.141.624098.141.624098.141.624098.141.624091.731.7324018.141.624021.731.7324111.741.7424121.741.7424141.741.7424151.741.7424161.741.7424171.741.7424181.741.7424191.741.7424111.741.7424111.741.74			
bd.Mnhnhnh1411nhNA1416nhNA1416nhNA1416nhNA1416NASe1416SeSe2402SeSe2402SeSe2402SeSe2403SeSe2404SeSe2404SeSe2405nhSe2406SeSe2407SeSe2408NhSe2409SeSe2409SeSe2409SeSe2409SeSe2409SeSe2409SeSe2409SeSe2409SeSe2409SeSe2409SeSe2409SeSe2409SeSe2409SeSe2409SeSe2409SeSe2409SeSe2409SeSe2409SeSe2409SeSe2409NhNh2409NhNh2409NhNh2509NhNh2516NhNh2517NhNh2518NhNh2519NhNh2519NhNh2519NhNh <tr< td=""><td></td><td></td><td></td></tr<>			
1411nhanhanha1412nhanha1413nhanha1414nhanha1415nhanha14168.415.6624028.214.5924038.224.592404nhanha2405nhanha24051.615.224068.246.4624078.145.3224082.415.3324091.615.7324091.615.7324091.611.6124091.611.6124091.611.6124091.611.6124091.611.6124091.611.6124091.611.6124091.611.6124091.611.6124091.611.6124091.611.6124091.611.6124091.611.6124091.611.6125101.611.6125111.611.6125121.611.6125141.611.6125141.611.6125141.611.6125141.611.6125151.611.6125161.611.6125171.621.6125181.611.6125141.611.6125151.61			
1416n/an/a143Cn/a0.0004040.010.0004050.010.0004060.020.0004070.020.0224070.020.0224080.020.0224090.020.0224090.020.0224090.020.0224090.020.0224090.020.0224090.020.0224090.020.0224090.020.0224090.020.0224090.020.0224090.020.0224090.020.0224090.020.0224090.020.0224090.020.0224090.020.0224100.120.0224110.020.0224120.020.0224140.020.0224140.020.0224140.020.0224140.020.0224140.020.0224140.020.0224140.020.0224140.020.0224140.020.0224140.020.0224140.020.0224140.020.0224140.020.0224140.020.0224140.020.0224140.02			
141Cn/an/a04048.646.8924098.425.6824018.425.6824038.425.6824048.425.6824058.595.224048.786.6624058.786.6624068.746.6224078.746.6224088.746.6224098.746.7324048.146.7324058.146.7324068.146.7324078.117.7324088.146.7324098.146.7324098.147.7324098.147.7325051.647.7325051.647.7325051.647.7425051.647.7425051.747.6425077.667.6425077.667.6425081.747.6425097.667.7425057.747.7425077.667.7725077.667.7725087.747.7425097.747.7425097.747.7725017.747.7725027.747.7725037.747.7725047.747.7725057.747.7725067.747.7725077.74			
60448.66.8924098.416.624018.304.6924028.304.6924038.304.6924048.186.724058.416.4224068.446.4224078.446.4224088.446.4224098.446.4224098.446.4224098.446.4224098.446.4224098.446.4224098.446.4224098.446.4224098.446.4424098.446.4424097.866.4424097.867.3334077.867.3334077.867.3334081.411.4124091.421.4434091.421.4434091.421.4434091.441.4434111.441.4434111.441.4434141.441.4434151.441.4434161.441.4434171.441.4434181.441.4434141.441.4434141.441.4434141.441.4434141.441.4434141.441.4434141.441.4434141.441.4434141.44			
20096.415.0620076.324.8920086.394.8920096.186.0720046.186.0720051.186.0720056.246.4220106.146.3220215.146.3220327.263.4320406.147.3620411.145.7320511.641.4420621.641.4420711.641.4420811.641.4420841.641.4420851.641.4420861.641.4420871.641.4420861.641.4420871.641.4420861.641.4420871.765.0620871.765.0620871.641.4420871.641.4420871.641.4420871.641.4420871.641.4420871.641.4420871.641.4420871.641.4420871.641.4420871.641.4420871.641.4420871.641.4420871.641.4420871.641.4420871.641.4420871.641.4420881.641.4420891			
24023.324.5924038.304.68240410.46.0724058.406.4624058.416.4224068.426.4224077.933.3334087.934.3524098.416.4224017.933.3334027.934.3534027.934.3624051.411.6224061.411.6224071.621.6224081.641.6224091.641.6424041.641.6424051.641.6424061.641.6425071.621.6425081.761.6425091.765.0625091.765.0624001.641.6425077.865.1625081.761.6425091.765.1625091.761.6425091.761.6425091.761.6425091.761.6425091.761.6425091.761.6425091.761.6425091.761.6425091.761.6425091.761.6425091.761.6425091.761.6425091.761.6425091.741.6425091			
2013.394.6820053.085.220161.041.0420173.045.420185.45.420195.45.420105.45.420105.45.420117.353.3330277.853.3330281.041.0420111.041.0420121.041.0420141.041.0420151.041.0420161.041.0420171.041.0420181.041.0420191.041.0420101.041.0420111.041.0420121.041.0420141.041.0420151.041.0420141.041.0420151.041.0420161.041.0420171.041.0420181.041.0420191.041.0420141.041.0420141.041.0420151.041.0420141.041.0420151.041.0420161.041.0420171.041.0420181.041.0420191.041.0420141.041.0420141.041.0420141.041.0420151.04 <td< td=""><td></td><td></td><td></td></td<>			
2035.085.220410.5180.6720400.5180.6720400.5180.6220103.145.8220107.833.333027.864.4620100.5115.7330217.864.4630775.110.7302540.627.3302550.610.6102560.610.6102570.610.6103050.620.6203050.620.6203050.620.6203050.620.6203050.620.6203050.620.6203050.620.6203050.620.6203050.620.6203050.620.6203050.620.6203050.620.6203050.620.6203050.620.6203050.620.6203050.620.6203140.620.6203240.620.6203150.640.6203160.620.6203170.620.6203160.620.6203170.620.6203160.620.6203170.620.6203180.620.6203190.620.6203140.620.620315			
2NEnhnhnh20646,136,072065nhnh20611,246,0720611,246,0720611,246,0720611,246,0720611,246,0720627,366,0720637,366,0720641,267,3620701,261,2720841,241,2620851,461,4620861,461,4620871,461,4620861,461,4620871,461,4620871,461,4620871,461,4620871,461,4620871,461,4620871,461,4620871,461,4620871,761,6620871,761,6620871,761,6620871,761,6620871,761,6620871,761,6620871,761,6620871,761,6620871,761,6620871,761,6620871,761,6720871,761,6720871,761,6720871,761,6720871,821,7720871,821,7720871,821,7720871,821,772087 <td< td=""><td></td><td></td><td></td></td<>			
24045.186.072405NANA24065.246.4624015.145.2224027.363.4624037.363.442404NANA24078.11NA2507NANA2608NANA2058NANA2059NANA2050NANA2051NANA2052NANA2053NANA2054NANA2055NANA2054NANA </td <td></td> <td></td> <td></td>			
2065négnégnég20666.246.4624106.146.2224017.934.3330277.814.4630107.836.33028négnég0584négnég0584négnég0584négnég0585négnég0586négnég0586négnég0586négnég0587négnég0588négnég0589négnég0589négnég0589négnég0589négnég0589négnég0589négnég0589négnég0589négnég0589négnég0589négnég0589négnég0591négnég0592négnég0593négnég0594négnég0594négnég0594négnég0594négnég0595négnég0595négnég0596négnég0597négnég0597négnég0597négnég0597négnég0598négnég0599négnég0599négnég <td></td> <td></td> <td></td>			
2062.446.4624108.146.4234017.353.3334027.865.6234037.865.6234041.646.6234051.646.6234071.646.6234081.646.6234091.646.6234091.646.6234091.641.6435101.641.6435111.641.6435121.641.6435141.			
24108.146.8234017.363.3334027.864.4634078.115.7303EL0a0a03EL0a0a03EL0a0a03EL0a0a03D50a0a03D50a0a03D50a0a03D50a0a03D50a0a03FM0a0a <td></td> <td></td> <td></td>			
30117.933.3334027.864.4634076.115.7334076.115.7334070.810.4634070.810.4634080.810.4635160.860.4630360.460.4630360.460.4630360.460.4603970.460.4603960.460.4603970.460.4603970.460.4603970.460.4603970.460.4603970.460.4603970.460.4603970.460.4603970.460.4603970.460.4603970.460.4603970.460.4623977.865.1623977.861.4623977.861.4723977.861.4723940.460.4623947.861.4723947.861.4723940.460.4723947.861.4723940.460.4623940.460.4623940.460.4723940.460.4723940.460.4623940.460.4623940.460.4623940.460.4623940.460.4623940			
34078.115.73025MNaNa034ENaNa034CNaNa035JNaNa036GNaNa036GNaNa036GNaNa037JNaNa034GNaNa03	3401		
02EMnana03HEnana03FJnana03Gnana03Gnana03Gnana03Gnana03Gnana03Gnana03FMnana03FMnana03FMnana03FMnana03FMnana03Inana23JLnana23UA	3402	7.86	
C3HEnanaC3GFJNaNaC3GSNaNaC3GSNaNaC3GSNaNaC3GSNaNaC3GSNaNaC3GSNaNaC3GSNaNaC3GSNaNaC3GSNaNaC3GSNaNaC3JLNaNaC3JLNaNaC3JSANaNaC3JSANaNaC3GS7.76S0GC3GS7.76S0GC3GS7.76S0GC3GS7.76S0GC3GSNaNa <td>3407</td> <td>8.11</td> <td>5.73</td>	3407	8.11	5.73
D2F.JNaNa0305NaNa0305NaNa0305NaNa0305NaNa0314NaNa0354NaNa0354NaNa0344NaNa0354NaNa0345NaNa0346NaNa0347NaNa0348NaNa0344NaNa0344NaNa0345NaNa0346NaNa0346NaNa23057.66So623410NaNa23411NaNa2344NaNa2344NaNa2344NaNa2344NaNa2344NaNa2344NaNa2344NaNa2344NaNa2344NaNa2344NaNa2344NaNa2344NaNa33017.84So13444NaNa3444NaNa3444NaNa3444NaNa3444NaNa3444NaNa3444NaNa3444NaNa3444NaNa3444NaNa3444NaNa<	03EM	n/a	
0306n'an'a0335n'an'a034Cn'an'a034Cn'an'a034Cn'an'a035Tn'an'a034Cn'an'a0331n'an'a0332n'an'a0334n'an'a0335n'an'a0336n'an'a2344n'an'a2345n'an'a23467.76Sofe2347n'an'a2348n'an'a2349n'an'a2349n'an'a2341n'an'a2344n'an'a23457.76Sofe23467.76Sofe2347n'an'a2348n'an'a2349n'an'a2344n'an'a2345n'an'a2346n'an'a2347n'an'a2348n'an'a3301n'an'a3301n'an'a3302n'an'a3303n'an'a3304n'an'a3304n'an'a3304n'an'a3304n'an'a3304n'an'a3304n'an'a3304n'an'a3304n'an'a3304n'an'a			
0305n'an'a03HCn'an'a03FMn'an'a03FMn'an'a03JLn'an'a03JLn'an'a03JLn'an'a03JLn'an'a03JLn'an'a03JLn'an'a03JLn'an'a03JLn'an'a03JLn'an'a03JLn'an'a23DS8.144.823DS7.765.0624NDn'an'a23DS7.765.0624NDn'an'a23Tn'an'a23SJn'an'a23HNn'an'a23KJn'an'a23KJn'an'a23KJn'an'a23KJn'an'a23KJn'an'a23KJn'an'a23KJn'an'a23KJn'an'a23KJn'an'a23KJn'an'a23KJn'an'a23KJn'an'a23KJn'an'a23KJn'an'a23KJn'an'a23KJn'an'a23KJn'an'a23KJn'an'a23KLn'an'a23KLn'an'a23KLn'an'a23LLn'an'a23			
03HCn/an/a03KCn/an/a03KCn/an/a03Jn/an/a03Jn/an/a03Jn/an/a03Jn/an/a03Jn/an/a23MKn/aa23028.14a23038.14a23048.14a23057.6a23077.8b2314n/an/a2314n/an/a2314n/an/a2314n/an/a2314n/an/a2314n/an/a2314n/an/a2314n/an/a2315n/an/a2316n/an/a2317n/an/a2318n/an/a2319n/an/a2314n/an/a2314n/an/a2315n/an/a2316n/an/a2316n/an/a2317n/an/a2318n/an/a2319n/an/a2314n/an/a2314n/an/a2315n/an/a2316n/an/a2316n/an/a2317n/an/a2318n/an/a2319n/an/a2314n/an/a2314n/a <td></td> <td></td> <td></td>			
DSFMn'an'a03NCn'an'a03JLn'an'a03JLn'an'a03JFn'an'a23LMXn'an'a23LMXn'an'a23LJn'an'a23DSA8.144.8230SA7.765.0623NLn'an'a <td< td=""><td></td><td></td><td></td></td<>			
03KCn'an'a03JLn'an'a03JLn'an'a03JLn'an'a23MKn'an'a23MKn'an'a23MJn'aa2303A8.144.823057.765.0624NDn'an'a231n'an'a23057.765.0624NDn'an'a231n'an'a231n'an'a231n'an'a231n'an'a231n'an'a231n'an'a231n'an'a231n'an'a231n'an'a231n'an'a231n'an'a231n'an'a231n'an'a231n'an'a334n'an'a334n'an'a334n'an'a334n'an'a344n'an'a345n'an'a346n'an'a347n'an'a348n'an'a349n'an'a341n'an'a342n'an'a344n'an'a345n'an'a346n'an'a347n'an'a348n'an'a349n'an'a </td <td></td> <td></td> <td></td>			
03.Nn/an/an/a03.JLn/an/a03.JFn/an/a03.JFn/an/a23.MKn/an/a23.JAn/an/a23.JAn/an/a23.JAn/an/a23.JAn/an/a23.JAn/an/a23.JAn/an/a23.MKn/an/a23.MIn/an/a <t< td=""><td></td><td></td><td></td></t<>			
03.JLn/an/an/a03.JFn/an/a23.MKn/an/a23.MKn/an/a23.J.n/an/a23.J.n/an/a23.SA8.144.823.SDn/an/a23.MNn/an/a23.MNn/an/a23.MIn/an/a23.MIn/an/a23.MIn/an/a23.MIn/an/a23.MIn/an/a23.MIn/an/a23.MIn/an/a23.MIn/an/a23.MIn/an/a23.MIn/an/a33.MIn/an/a			
03JFn/an/a23MKn/an/a23LJn/an/a23LJn/an/a23JA8.144.8230507.765.0623MNn/an/a23MNn/an/a23MNn/an/a23MNn/an/a23MNn/an/a23M1n/an/a23M2n/an/a23M4n/an/a23M4n/an/a23M4n/an/a23M4n/an/a23M4n/an/a23M4n/an/a23M4n/an/a23M4n/an/a23M4n/an/a23M4n/an/a23M4n/an/a23M4n/an/a23M4n/an/a23M4n/an/a23M4n/an/a23M4n/an/a23M4n/an/a23M4n/an/a23M4n/an/a23M5n/an/a23M6n/an/a23M6n/an/a23M7n/an/a23M8n/an/a23M6n/an/a23M6n/an/a23M6n/an/a23M6n/an/a23M6n/an/a23M6n/an/a23M6n/an/a23			
23MKn/an/a23UJn/an/a2305A8.144.82305A8.144.82305C7.765.0624MDn/an/a23MTn/an/a23MT7.865.1623JLn/an/a23JLn/an/a23JLn/an/a23JLn/an/a23KDn/an/a23KDn/an/a23KHn/an/a23KHn/an/a23KHn/an/a23KHn/an/a23MDn/an/a23KHn/an/a23KHn/an/a23KHn/an/a23MDn/an/a23MDn/an/a23MDn/an/a24Kn/an/a23MDn/an/a24Kn/an/a25NDn/an/a21MDn/an/a23MDn/an/a23MDn/an/a23MDn/an/a23MCn/an/a23MCn/an/a23MCn/an/a23MCn/an/a23MCn/an/a23MSn/an/a23MCn/an/a23MCn/an/a23MCn/an/a23MCn/an/a23MCn/an/a <td< td=""><td></td><td></td><td></td></td<>			
23Ljn/an/a2303A8.1414.82305A7.765.0623NDn/an/a23NDn/an/a23NTn/an/a23NTn/an/a23NTn/an/a23NTn/an/a23NDn/an/a23NDn/an/a23NDn/an/a23NDn/an/a23NDn/an/a23NHn/an/a23NHn/an/a33NHn/an/a33NHn/an/a33NHn/an/a33ND7.865.1933NLn/an/a34MDn/an/a <t< td=""><td></td><td></td><td></td></t<>			
2303A8.144.823057.765.0624MDNaNa23MTNaNa23NT7.865.1623KJNaNa23KJNaNa23KLNaNa23KLNaNa23KLNaNa23KLNaNa23KLNaNa23KLNaNa23KLNaNa23KLNaNa33017.865.7733047.845.7733047.845.7734LKNaNa2201A8.284.7723MDNaNa23MDNaNa23MLNaNa23MLNaNa23LKNaNa23LMNaNa23LNaNa<			
23057.765.0624NDNan/a23NNNan/a23NNNan/a23NJNan/a23XJNan/a23XLNan/a23XLNan/a23KHNan/a23KHNan/a23KHNan/a23KHNan/a23KHNan/a33047.865.1933047.865.1933047.865.1934LKn/an/a201A8.287.7723NDn/an/a34MDn/an/a34MDn/an/a34MDn/an/a34MDn/an/a23Ln/an/a33NA			
24MDn/an/a23HNn/an/a23D77.865.1623KJn/an/a23KJn/an/a23KLn/an/a23KDn/an/a23KHn/an/a23KHn/an/a23KHn/an/a23KHn/an/a23KHn/an/a23KHn/an/a23KHn/an/a23KHn/an/a23KLn/a5.1933d17.865.1934MDn/an/a201A8.284.7721MDn/an/a21Ln/an/a23LKn/an/a23LKn/an/a13028.685.0423LKn/an/a23LKn/an/a23LKn/an/a23LKn/an/a23LFn/an/a132n/an/a23HFn/an/a23HFn/an/a23HGn/an/a23HFn/an/a23HFn/an/a23HFn/an/a23HFn/an/a23HFn/an/a23HFn/an/a23HFn/an/a23HFn/an/a23HFn/an/a23HFn/an/a23HFn/an/a <td< td=""><td></td><td></td><td></td></td<>			
23HNn/an/a23077.865.1623KJn/an/a23KLn/an/a23KDn/an/a23KHn/an/a23KHn/an/a23KHn/an/a23KHn/an/a23KHn/an/a33R47.845.7733017.865.1934LKn/an/a34MDn/an/a24018.284.7723MDn/an/a34MDn/an/a23Ln/an			
23077.865.1623KJNaNa23KLNaNa23KLNaNa23KHNaNa23KHNaNa23KHNaNa23KLNaNa23MDNaNa23MLNaNa23MLNaNa33M17.865.1933017.865.1934MDNaNa34MDNaNa34MDNaNa2101A8.284.7723NDNaNa34MDNaNa23LMNaNa13028.685.0423LKNaNa13028.685.0423LKNaNa23LKNaNa23LKNaNa23LFNaNaNaNaNa23LFNaNaNaNaNa23MMNaNa23MMNaNa23MMNaNa23MMNaNa23MMNaNa23MMNaNa23MMNaNa23MMNaNa23MMNaNa23MMNaNa23MMNaNa23MMNaNa23MMNaNa23MMNaNa23MMNaNa23MMNaNa <td></td> <td></td> <td></td>			
23kJn'an'a23uLn'an'a23kDn'an'a23kCn'an'a23kEn'an'a23kEn'an'a23kGn'an'a23kGn'an'a23kGn'an'a23kGn'an'a23kGn'an'a23kGn'an'a23kGn'an'a30d17.865.1934kKn'an'a2201A8.284.7723kGn'an'a23kGn'an'a23kGn'an'a23kLn'an'a2			
23.Ln'an'a23.RDn'an'a23.RLn'an'a23.RLn'an'a23.MLn'an'a23.MLn'an'a23.MLn'an'a23.MLn'an'a23.MLn'an'a33.NL7.845.7733.NL7.845.1933.NLn'an'a34.NLn'an'a34.NLn'an'a201A8.284.7723.NDn'an'a13028.685.0423.LLn'an'a13028.685.0423.LLn'an'a23.			
23kDnanana23kEnanana23kEnanana23kMnanana33kHnanana33kHnanana33kHnanana33kHnanana34kKnanana23kHnanana34kKnanana22kHnanana22kHnanana23kMnanana23kKnanana <tr< td=""><td></td><td></td><td></td></tr<>			
23KHn'an'a23KEn'an'a23MMn'an'a23MMn'an'a33G47.845.793017.865.193017.865.1934LKn'an'a34MDn'an'a34MDn'an'a34MDn'an'a34MDn'an'a23NDn'an'a13028.685.0423LKn'an'a23LKn'an'a23LKn'an'a23LKn'an'a23LFn'an'a23LFn'an'a23LFn'an'a23LGn'an'a23LGn'an'a23MQn'an'a23MGn'an'a			
23KEn/an/a33M4n/an/a33KHn/an/a33047.845.7733047.865.1934LKn/an/a2010n/an/a2201A8.284.7723LMn/an/a23LMn/an/a23LMn/an/a23LMn/an/a23LMn/an/a23LNn/an/a23LNn/an/a23LNn/an/a23LNn/an/a23LNn/an/a23LNn/an/a23LNn/an/a23LKn/an/a23LKn/an/a23LKn/an/a23LFn/an/a23LFn/an/a23MMn/an/a23MMn/an/a23MMn/an/a23MMn/an/a23MMn/an/a23MMn/an/a23MMn/an/a23MMn/an/a23MMn/an/a23MMn/an/a23MMn/an/a23MMn/an/a23MMn/an/a23MMn/an/a23MMn/an/a23MMn/an/a23MMn/an/a23MMn/an/a23MMn/an/a <td< td=""><td>23KH</td><td></td><td></td></td<>	23KH		
23JMn/an/a33KHn/an/a33047.845.7733017.865.1733017.865.1934LKn/an/a34MDn/an/a201A8.284.7723NDn/an/a13028.685.0423LLn/an/a23LLn/an/a23LLn/an/a23LLn/an/a23LLn/an/a23LLn/an/a23LRn/an/a23LRn/an/a23LRn/an/a23LRn/an/a23LRn/an/a23LRn/an/a23LRn/an/a23LRn/an/a23NCn/an/a23NGn/an/a23NGn/an/a23NGn/an/a23NGn/an/a23NGn/an/a23NGn/an/a23NGn/an/a23NGn/an/a23NGn/an/a23NGn/an/a23NGn/an/a23NGn/an/a23NGn/an/a23NGn/an/a23NGn/an/a23NGn/an/a23NGn/an/a23NGn/an/a23NGn/an/a	23KE	n/a	n/a
33KHn/an/a33047.845.7733017.865.1934LKn/an/a34LKn/an/a34LKn/an/a201A8.284.7723LMn/an/a23LMn/an/a13028.685.0423LMn/an/a23LMn/an/a23LMn/an/a23LMn/an/a23LKn/an/a23LFn/an/a23LFn/an/a23LFn/an/a23LFn/an/a23LFn/an/a23LFn/an/a23LFn/an/a23HFn/an/a23HFn/an/a23HGn/an/a23HFn/an/a23HFn/an/a23HFn/an/a23HFn/an/a23HGn/an/a23HGn/an/a23HGn/an/a23Hn/an/a23Hn/an/a23Hn/an/a23Hn/an/a23Hn/an/a23Hn/an/a23Hn/an/a23Hn/an/a23Hn/an/a23Hn/an/a23Hn/an/a23Hn/an/a23H <t< td=""><td>23JM</td><td>n/a</td><td>n/a</td></t<>	23JM	n/a	n/a
33047.845.7733017.865.1934LKn/an/a34MDn/an/a34MDn/an/a201A8.284.7723NDn/an/a13028.685.0432LKn/an/a23NPn/an/a23LNn/an/a23LNn/an/a23LNn/an/a23LSn/an/a23LSn/an/a23NFn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NCn/an/a23NGn/an/a23NJn/an/a23NJn/an/a23NJn/an/a23NJn/an/a23NJn/an/a23NJn/an/a23NJn/an/a23NJn/an/a23NJn/an/a23NJn/an/a23NJn/an/a23NJn/an/a23NJn/an/a23NJn/an/a23NJn/an/a23NJn/an/a23NJn/an/a <t< td=""><td>33KH</td><td>n/a</td><td>n/a</td></t<>	33KH	n/a	n/a
34LKn/an/a34MDn/an/a34MDa.284.77201A8.284.7723NDn/an/a13028.685.0432LLn/an/a32LNn/an/a23NEn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NNn/an/a23NNn/an/a23NNn/an/a23NNn/an/a23NNn/an/a23NNn/an/a23NNn/an/a23NNn/an/a23NNn/an/a23NNn/an/a23NNn/an/a23NNn/an/a23NNn/an/a23NNn/an/a23NNn/an/a23NNn/an/a23NNn/an/a23NNn/an/a23NNn/an/a			
34MDn/an/a2201A8.284.7723NDn/an/a23LMn/an/a13028.685.0423LLn/an/a23LNn/an/a23LCn/an/a23NEn/an/a23LFn/an/a23LFn/an/a23LFn/an/a23HFn/an/a2			
2201A8.284.7723NDn/an/a23LMn/an/a13028.685.0423LNn/an/a23LNn/an/a23NEn/an/a23NEn/an/a23NEn/an/a23NEn/an/a23NEn/an/a23NEn/an/a23NEn/an/a23NEn/an/a23NLn/an/a23NLn/an/a23NCn/an/a23NCn/an/a23NMn/an/a23NCn/an/a23NCn/an/a23NSn/an/a23NGn/an/a23NGn/an/a23NGn/an/a23NMn/an/a23NMn/an/a23NSn/an/a23NSn/an/a23NSn/an/a23NSn/an/a23NSn/an/a23NSn/an/a23NSn/an/a23NSn/an/a23NSn/an/a23NSn/an/a23NSn/an/a23NSn/an/a23NSn/an/a23NSn/an/a23NSn/an/a23NSn/an/a23NSn/an/a2			
33NDn/an/a23LMn/an/a13028.685.0423LLn/an/a23LLn/an/a23LLn/an/a23LLn/an/a23LLn/an/a23LLn/an/a23LLn/an/a23NEn/an/a23NDn/an/a23NDn/an/a23NBn/an/a23NBn/an/a23NBn/an/a23NDn/an/a23NBn/an/a23NBn/an/a23NBn/an/a23NBn/an/a23NBn/an/a23NBn/an/a23NDn/an/a23ND			
23LMn/an/a13028,685.0413028,685.041302n/a1/a23LLn/an/a23NEn/an/a23NEn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NLn/an/a23NCn/an/a23NNn/an/a23			
13028.685.04231L1n/an/a231L2n/an/a231R2n/an/a231R4n/an/a231L4n/an/a231L5n/an/a231L6n/an/a231L7n/an/a231Gn/an/a231Gn/an/a23N1n/an/a23N2n/an/a23N4n/an/a23N5n/an/a23N6n/an/a23N6n/an/a23N7n/an/a23N8n/an/a23N9n/an/a23N1n/an/a2311n/an/a23028.765.1123028.886.1623028.165.112303n/an/a2314n/an/a2315n/an/a2316n/an/a2317n/an/a2318n/an/a2318n/an/a2314n/an/a14028.426.392314n/an/a3314n/an/a3314n/an/a3314n/an/a3314n/an/a3314n/an/a3314n/an/a3314n/an/a3315n/an/a3316n/an/a<			
23LLn/an/a23LNn/an/a23LSn/an/a23LKn/an/a23LKn/an/a23LKn/an/a23LFn/an/a23LFn/an/a23HFn/an/a23HFn/an/a23NCn/an/a23NLn/an/a23NLn/an/a23NGn/an/a23NGn/an/a23NL </td <td></td> <td></td> <td></td>			
23.LNn/an/a23.NEn/an/a23.LKn/an/a23.LKn/an/a23.LKn/an/a23.LTn/an/a23.LFn/an/a23.LFn/an/a23.LFn/an/a23.LFn/an/a23.LFn/an/a23.LFn/an/a23.LFn/an/a23.LFn/an/a23.NJn/an/a23.NJn/an/a23.NJn/an/a23.NJn/an/a23.NJn/an/a23.NJn/an/a23.NJn/an/a23.NJn/an/a23.NJn/an/a23.NJn/as.7623.02B8.765.1123.02B8.154.7723.1Fn/an/a23.028.165.1123.1En/an/a23.1En/an/a23.1Bn/an/a23.1An/an/a23.1Bn/an/a23.1An/an/a23.1An/an/a23.1An/an/a23.1An/an/a23.1An/an/a33.1Mn/an/a33.1Mn/an/a33.1Cn/an/a33.1Cn/an/a33.1Cn/an/a			
23NEn/an/a23LKn/an/a23NLn/an/a23LFn/an/a23HFn/an/a23HFn/an/a23HFn/an/a23HFn/an/a23NCn/an/a23NLn/an/a23NJn/an/a23NJn/an/a2301A8.765.112302B8.886.162302B8.154.77231En/an/a231Bn/an/a231Cn/an/a231Bn/an/a231Cn/an/a231An/an/a231Bn/an/a231Bn/an/a231An/an/a231Bn/an/a231Bn/an/a231Cn/an/a231Bn/an/a231Bn/an/a231Cn/an/a231Bn/an/a231Bn/an/a231Cn/an/a231Bn/an/a231Cn/an/a231Bn/an/a231Cn/an/a231Bn/an/a231Cn/an/a321Ln/an/a33JMn/an/a33JMn/an/a33JMn/an/a33JMn/an/a3			
23LKn/an/a23NLn/an/a23LFn/an/a23HFn/an/a23HFn/an/a23NCn/an/a23NCn/an/a23NJn/an/a231Hn/an/a23NJn/an/a2301A8.765.112302B8.154.77231Fn/an/a23088.165.112310n/an/a2311n/an/a2302B8.165.112312n/an/a2314n/an/a2315n/an/a2316n/an/a2317n/an/a2318n/an/a2319n/an/a2314n/an/a2315n/an/a2316n/an/a2317n/an/a2318n/an/a2319n/an/a2314n/an/a2315n/an/a2316n/an/a2317n/an/a2318n/an/a2319n/an/a2319n/an/a2310n/an/a2311n/an/a2312n/an/a2314n/an/a3314n/an/a3314n/an/a2315n/an/a <tr< td=""><td></td><td></td><td></td></tr<>			
23NLn/an/a23LFn/an/a23HFn/an/a231Gn/an/a23NCn/an/a23NMn/an/a23NJn/an/a231Hn/an/a2302B8.765.112302B8.886.162302B8.154.77231Fn/an/a23088.165.11231Bn/an/a231Cn/an/a231An/an/a231Cn/an/a231An/an/a231An/an/a231Cn/an/a231An/an/a231An/an/a231An/an/a231An/an/a231An/an/a231An/an/a231An/an/a231An/an/a231An/an/a231An/an/a231An/an/a231An/an/a321An/an/a321An/an/a321An/an/a331Mn/an/a331Mn/an/a331Mn/an/a331Mn/an/a331Mn/an/a331Mn/an/a331Mn/an/a331Mn/an/a331Mn/an/a <tr< td=""><td></td><td></td><td></td></tr<>			
23LFn/an/a23HFn/an/a23HGn/an/a23NCn/an/a23NLn/an/a23NLn/an/a23NJn/an/a23NJn/an/a231Hn/an/a23028.765.112302B8.154.77231Fn/an/a2302B8.165.11231En/an/a231Bn/an/a231An/an/a231Bn/an/a231An/an/a231An/an/a231Bn/an/a231An/an/a <t< td=""><td></td><td></td><td></td></t<>			
23HFn/an/a231Gn/an/a23NCn/an/a23MMn/an/a23NJn/an/a231Hn/an/a231Hn/an/a23028.765.1123028.886.162302B8.154.77231Fn/an/a23088.165.11231Cn/an/a231Bn/an/a231An/an/a231Cn/an/a231Bn/an/a231An/an/a231Bn/an/a231An/an/a231Bn/an/a231An/an/a231Bn/an/a231Cn/an/a231Bn/an/a231Cn/an/a231Bn/an/a231Cn/an/a231Bn/an/a231Cn/an/a231Bn/an/a321Cn/an/a3321Mn/an/a3322n/an/a33331Mn/an/a33341n/an/a33442n/an/a33443n/an/a33444n/an/a33444n/an/a33444n/an/a33444n/an/a33444n/an/a33444n/an/a <td></td> <td></td> <td></td>			
231Gn/an/a23NCn/an/a23MMn/an/a23MJn/an/a231Hn/an/a2301A8.765.112302B8.886.162302B8.154.77231Fn/an/a23088.165.1123088.165.11231En/an/a231Bn/an/a231An/an/a231Bn/an/a231An/an/a231An/an/a14028.426.3922LKn/an/a33JMn/an/a32MCn/an/a33JMn/an/a32LMn/an/a33JCn/an/a33JCn/an/a33JCn/an/a33JMn/an/a33JMn/an/a33JMn/an/a33JMn/an/a33JMn/an/a33JMn/an/a33JCn/an/a33JCn/an/a33JMn/an/a33JMn/an/a33JMn/an/a33JMn/an/a33JMn/an/a33JMn/an/a33JMn/an/a33JMn/an/a33JMn/an/a33JMn/an/a <td></td> <td></td> <td></td>			
23NC n/a n/a 23MM n/a n/a 23NJ n/a n/a 2301A 8.76 5.11 2302B 8.15 4.77 231F n/a n/a 2308 8.16 5.11 231D n/a n/a 231D n/a n/a 231B n/a n/a 231A n/a n/a 231B n/a n/a 231A n/a n/a 241A n/a n/a 1402 8.42 6.39 22LK n/a n/a 33JM n/a n/a 32LM n/a n/a 33JM n/a n/a 32LL n/a n/a 32LL n/a n/a 32LL n/a n/a 32LL n/a n/a 33LF n/a n/a			
23MMn/an/a23NJn/an/a231Hn/an/a2301A8.765.1123098.886.162302B8.154.77231Fn/an/a23088.165.11231En/an/a231Dn/an/a231Bn/an/a231An/an/a231An/an/a241An/an/a231An/an/a241An/an/a32LKn/an/a33JMn/an/a32MCn/an/a33JMn/an/a32MEn/an/a32MEn/an/a32MEn/an/a32MDn/an/a32MDn/an/a32MDn/an/a32JLn/an/a33LFn/an/a33LFn/an/a33LFn/an/a33LFn/an/a33LFn/an/a33LFn/an/a33LFn/an/a33LFn/an/a33LFn/an/a33LFn/an/a33LFn/an/a33LFn/an/a33LFn/an/a33LFn/an/a33LFn/an/a			
23NJ n/a n/a 231H n/a n/a 2301A 8.76 5.11 2309 8.88 6.16 2302B 8.15 4.77 231F n/a n/a 2308 8.16 5.11 231E n/a n/a 231D n/a n/a 231C n/a n/a 231A n/a n/a 241A n/a n/a 1402 8.42 6.39 32MC n/a n/a 33JM n/a n/a 33JM n/a n/a 33JM n/a n/a 32ME n/a n/a 32MD n/a n/a 32JL n/a n/a 33JT n/a n/a 33JL n/a n/a 33LF <td></td> <td></td> <td></td>			
231H n/a 2301A 8.76 2309 8.88 2302B 8.15 2308 8.16 231F n/a 231E n/a 231D n/a 231C n/a 231B n/a 231A n/a 1402 8.42 232LK n/a 32MC n/a 33JM n/a 32LK n/a 33JM n/a 32LK n/a 33JM n/a 32LK n/a 32JL n/a 33LF n/a			
2301A 8.76 5.11 2309 8.88 6.16 2302B 8.15 4.77 231F n/a n/a 2308 8.16 5.11 231E n/a n/a 231D n/a n/a 231C n/a n/a 231A n/a n/a 231B n/a n/a 231A n/a n/a 231A n/a n/a 231A n/a n/a 241A n/a n/a 1402 8.42 6.39 32LK n/a n/a 33JM n/a n/a 32LM n/a n/a 32LM n/a n/a 32LM n/a n/a 33JC n/a n/a 33JL n/a n/a 33UD n/a n/a 33LF n/a n/a			
2309 8.88 6.16 2302B 8.15 4.77 231F n/a n/a 2308 8.16 5.11 231E n/a n/a 231D n/a n/a 231C n/a n/a 231B n/a n/a 231A n/a n/a 231B n/a n/a 231A n/a n/a 231B n/a n/a 241A n/a n/a 1402 8.42 6.39 32LK n/a n/a 32MC n/a n/a 33JM n/a n/a 32LM n/a n/a 33JC n/a n/a 33JC n/a n/a 32LL n/a n/a 32MD n/a n/a 32JL n/a n/a 32JL n/a n/a 32JL			
2302B 8.15 4.77 231F n/a n/a 2308 8.16 5.11 231E n/a n/a 231D n/a n/a 231C n/a n/a 231B n/a n/a 231A n/a n/a 241A n/a n/a 4402 8.42 6.39 32LK n/a n/a 33JM n/a n/a 32MC n/a n/a 33JM n/a n/a 32LK n/a n/a 33JM n/a n/a 32LK n/a n/a 32JMC n/a n/a 32LM n/a n/a 32LM n/a n/a 32LM n/a n/a 32LL n/a n/a 33LF			
231F n/a n/a 2308 8.16 5.11 231E n/a n/a 231D n/a n/a 231C n/a n/a 231B n/a n/a 231A n/a n/a 241A n/a n/a 1402 8.42 6.39 32MC n/a n/a 32MC n/a n/a 32ME n/a n/a 32ME n/a n/a 32LK n/a n/a 32LM n/a n/a 32LL n/a n/a 3302 7.75 4.37 32JM <td>2302B</td> <td>8.15</td> <td></td>	2302B	8.15	
2308 8.16 5.11 231E n/a n/a 231D n/a n/a 231D n/a n/a 231C n/a n/a 231B n/a n/a 231A n/a n/a 231A n/a n/a 241A n/a n/a 1402 8.42 6.39 32LK n/a n/a 32MC n/a n/a 33JM n/a n/a 32LK n/a n/a 32MC n/a n/a 32ME n/a n/a 32LL n/a n/a 32LL n/a n/a 32LL n/a n/a 32JL n/a n/a 3302	231F	n/a	n/a
231D n/a n/a 231C n/a n/a 231B n/a n/a 231A n/a n/a 241A n/a n/a 32LK n/a n/a 32MC n/a n/a 32LM n/a n/a 33JC n/a n/a 32LL n/a n/a 32LL n/a n/a 32LL n/a n/a 3302 7.75 4.37 332JM n/a n/a 332JM			
231C n/a n/a 231B n/a n/a 231A n/a n/a 241A n/a n/a 1402 8.42 6.39 32LK n/a n/a 33MC n/a n/a 33JM n/a n/a 32LM n/a n/a 33JM n/a n/a 32LM n/a n/a 33JC n/a n/a 32LL n/a n/a 32MD n/a n/a 3202 7.75 4.37 32JM n/a n/a 33LF n/a n/a			
231B n/a n/a 231A n/a n/a 241A n/a n/a 1402 8.42 6.39 32LK n/a n/a 32MC n/a n/a 33JM n/a n/a 32LK n/a n/a 32MC n/a n/a 33JM n/a n/a 32LM n/a n/a 32LM n/a n/a 32LK n/a n/a 32LM n/a n/a 32LM n/a n/a 33JC n/a n/a 32LL n/a n/a 32MD n/a n/a 3302 7.75 4.37 32JM n/a n/a 33LF n/a n/a			
231A n/a n/a 241A n/a n/a 1402 8.42 6.39 32LK n/a n/a 32MC n/a n/a 33JM n/a n/a 32LK n/a n/a 32MC n/a n/a 33JM n/a n/a 32LM n/a n/a 32LL n/a n/a 32LL n/a n/a 32LL n/a n/a 32JL n/a n/a 3302 7.75 4.37 32JM n/a n/a 33LF n/a n/a			
241An/an/a14028.426.3932LKn/an/a32MCn/an/a33JMn/an/a32LMn/an/a32LMn/an/a32MEn/an/a33JCn/an/a32LLn/an/a32LLn/an/a32MDn/an/a32JLn/an/a32JLn/an/a32JLn/an/a32JLn/an/a32JLn/an/a32JLn/an/a33027.754.3732JMn/an/a32LFn/an/a			
14028.426.3932LKn/an/a32MCn/an/a33JMn/an/a32LMn/an/a32MEn/an/a33JCn/an/a32LLn/an/a32MDn/an/a32JLn/an/a32MDn/an/a32JLn/an/a32JLn/an/a32JLn/an/a32JLn/an/a32JLn/an/a33027.754.3732JMn/an/a32LFn/an/a			
32LK n/a n/a 32MC n/a n/a 33JM n/a n/a 32LM n/a n/a 32LM n/a n/a 32ME n/a n/a 33JC n/a n/a 32LL n/a n/a 32MD n/a n/a 32JL n/a n/a 32MD n/a n/a 32JL n/a n/a 3302 7.75 4.37 32JM n/a n/a 33LF n/a n/a			
32MC n/a n/a 33JM n/a n/a 32LM n/a n/a 32ME n/a n/a 33JC n/a n/a 32LL n/a n/a 32LL n/a n/a 32LL n/a n/a 32JL n/a n/a 33J2 n/a n/a 33J2 n/a n/a 33J2 n/a n/a 32JL n/a n/a 33J2			
33JM n/a n/a 32LM n/a n/a 32ME n/a n/a 33JC n/a n/a 32LL n/a n/a 32MD n/a n/a 32JL n/a n/a 33J2 n/a n/a			
32LM n/a n/a 32ME n/a n/a 33JC n/a n/a 32LL n/a n/a 32MD n/a n/a 32JL n/a n/a 32MD n/a n/a 32JL n/a n/a 3302 7.75 4.37 32JM n/a n/a 33LF n/a n/a			
32ME n/a n/a 33JC n/a n/a 32LL n/a n/a 32MD n/a n/a 32JL n/a n/a 3302 7.75 4.37 32JM n/a n/a 33LF n/a n/a			
33JC n/a n/a 32LL n/a n/a 32MD n/a n/a 32JL n/a n/a 3302 7.75 4.37 32JM n/a n/a 33LF n/a n/a			
32LL n/a n/a 32MD n/a n/a 32JL n/a n/a 3302 7.75 4.37 32JM n/a n/a 33LF n/a n/a			
32MD n/a n/a 32JL n/a n/a 3302 7.75 4.37 32JM n/a n/a 33LF n/a n/a			
32JL n/a n/a 3302 7.75 4.37 32JM n/a n/a 33LF n/a n/a			
3302 7.75 4.37 32JM n/a n/a 33LF n/a n/a			
32JM n/a n/a 33LF n/a n/a			
33LF n/a n/a	3302		
			n/a
	32JM	n/a	

Manhole Reference	Manhole Cover Level	Manhole Invert Level
33LD	n/a	n/a
3409	7.74	4.75
341A	n/a	n/a
3408	7.76	6.01
341B	n/a	n/a
33HL	n/a	n/a
33HK	n/a	n/a
3307	n/a	n/a
3406	7.8	5.89
33ML	n/a	n/a
3303	7.54	5.98
43MH	n/a	n/a
43MK	n/a	n/a 3.72
4302 03ME	7.1	3.72 n/a
021A	n/a n/a	n/a
0203	n/a	n/a
0203 03KJ	n/a n/a	n/a n/a
0201	n/a n/a	n/a n/a
03LC	n/a	n/a
03JK	n/a	n/a
03JE	n/a	n/a
03JD	n/a	n/a
03JJ	n/a	n/a
0355 02NL	n/a	n/a
03KF	n/a	n/a
03KM	n/a	n/a
03HN	n/a	n/a
041C	n/a	n/a
03MJ	n/a	n/a
031E	n/a	n/a
03KL	n/a	n/a
031A	n/a	n/a
03KE	n/a	n/a
0303	8.79	1.25
031B	n/a	n/a
0304	n/a	n/a
13MM	n/a	n/a
1301	8.48	n/a
12LJ	n/a	n/a
12LE	n/a	n/a
321M	n/a	n/a
321P	n/a	n/a
321N	n/a	n/a
3210	n/a	n/a
321R	n/a	n/a
321J	n/a	n/a
321Q	n/a	n/a
3211	n/a	n/a
2202A	n/a	5.35
2211	n/a	4.36
32LH	n/a	n/a
33NH	n/a	n/a
33LK	n/a	n/a
33LJ	n/a	n/a
33LH	n/a	n/a
2306	n/a	5.25
2304	n/a	n/a
03EC	n/a	n/a
03FC	n/a	n/a
03FF	n/a	n/a
031F	n/a	n/a
03FD	n/a	n/a
03EK	n/a	n/a
UJER		
USER		

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.

(Thames Water	
ALS Sewer	
Map Ke	

Public Sewer Types (Operated & Maintained by Thames Water)

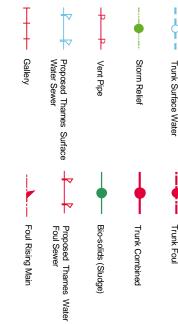




į

İ

Trunk Foul







Notes:

 Most private pipes a not been recorded 	 Arrows (on gravity flow. 	2) All measurements on the plans are metric.	1) All levels associated	
 Most private pipes are not shown on our plans, as in the past, this information has not been recorded 	 Arrows (on gravity fed sewers) or flecks (on rising mains) indicate direction of flow. 	he plans are metric.	1) All levels associated with the plans are to Ordnance Datum Newlyn.	
, this information has	indicate direction of		Newlyn.	

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.

	•
Dam Chase	Air Valve

2		-
		-

- IIIII
- Μ 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

M

- ÷ Drop Pipe
- Ancillary
- Weir

([][]

End Items

End symbols appear at the start or end of a sewer pipe. Examples: a Undefined End at the start of a sewer indicates that Thames Water has r knowledge of the position of the sewer upstream of that symbol, Outfall on surface water sewer indicates that the pipe discharges into a stream or river

- $\langle \cdot \rangle$ Outfall
- ţŢ Undefined End
- € Inlet

6) The text appearing alongside a sewer line indicates the internal diameter of the pipe in milimetres. 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.

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

Δ Ø *

Areas

Lines denoting areas of underground surveys, etc.

- Agreement
- $\langle \rangle \rangle$ Operational Site
- Chamber
- Tunnel
- Conduit Bridge

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

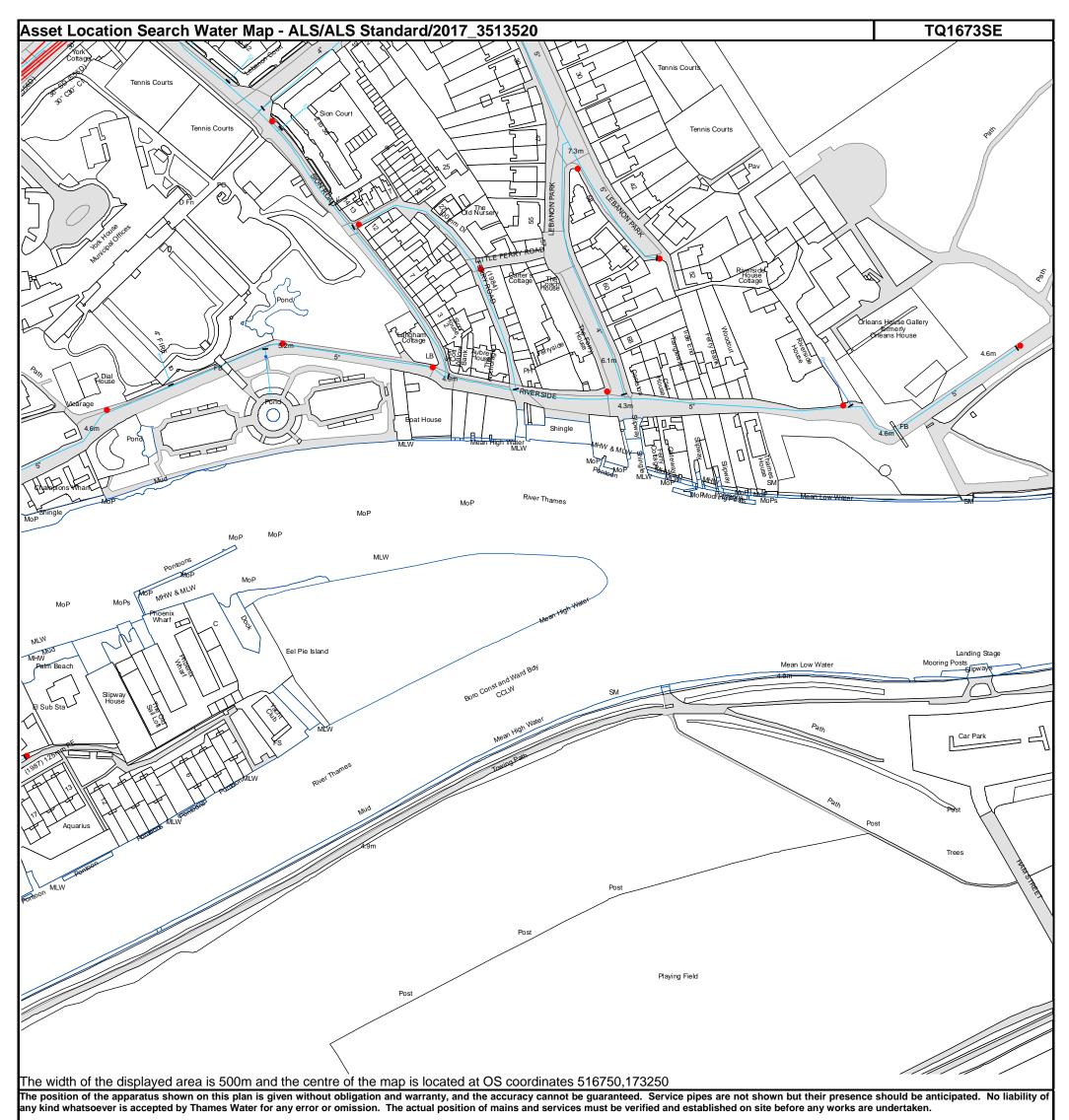
		-	ano
	W	•	•
	W Culverted Watercourse	 Combined Sewer 	Foul Sewer
* • *		T T Gulley	•
Abandoned Sewer	Proposed	Gulley	- Surface Water Sewer

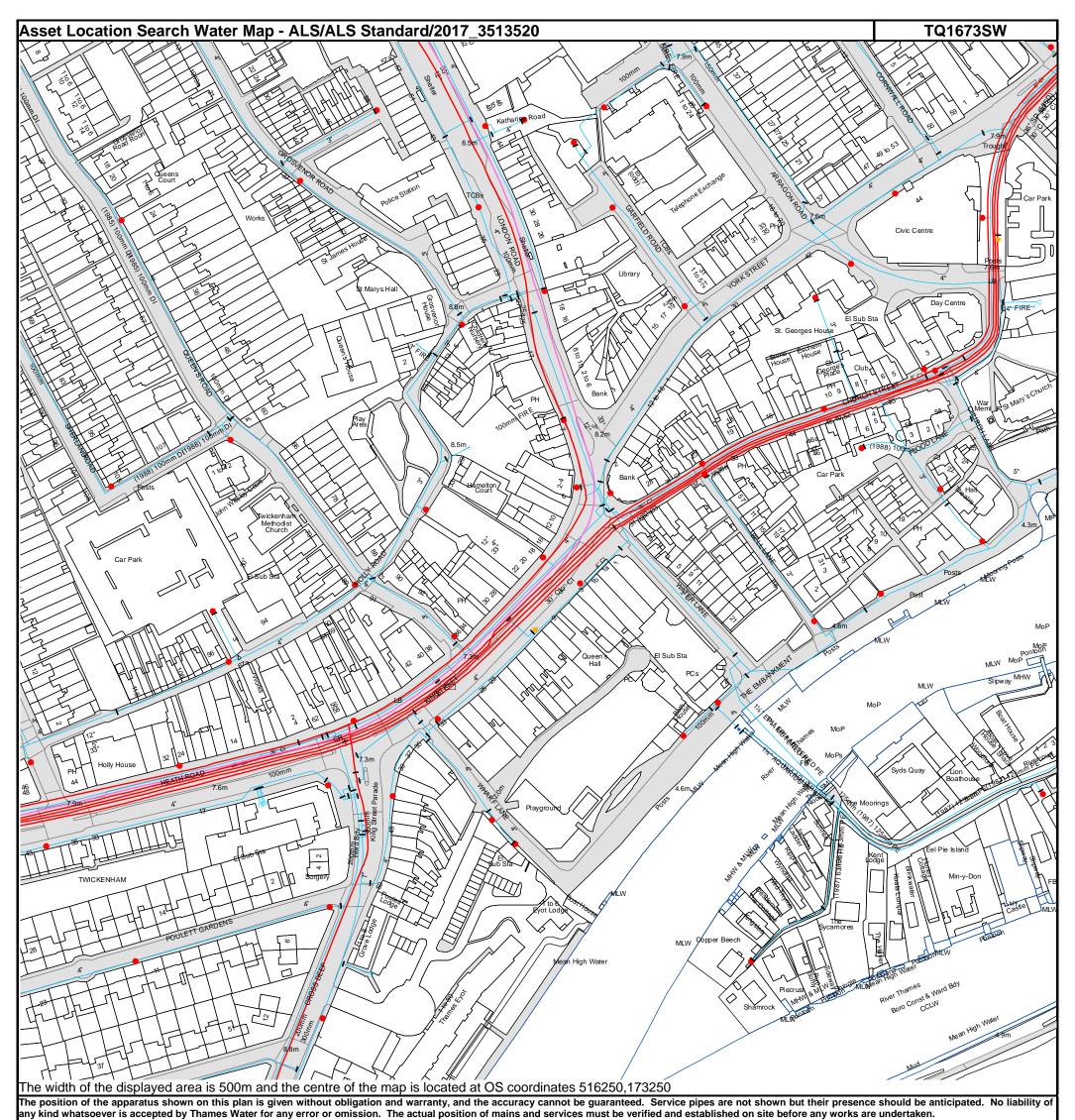
Pa
g
Φ
-
S
오
2

T 0845 070 9148 E searches@thameswater.co.uk | www.thameswater-propertysearches.co.uk Water Utilities Ltd, Property Searches, PO Box 3189, Slough SL1 4W, DX 151280 Slough 13

5) 'na' or '0' on a manhole level indicates that data is unavailable.







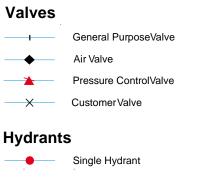


ALS Water Map Key

Water Pipes (Operated & Maintained by Thames Water)

- Distribution Main: The most common pipe shown on water maps.
 With few exceptions, domestic connections are only made to distribution mains.
- 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.
- **Supply Main:** A supply main indicates that the water main is used as a supply for a single property or group of properties.
- FIRE Fire Main: Where a pipe is used as a fire supply, the word FIRE will be displayed along the pipe.
- **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')		



Meters

End Items

 $-\bigcirc$

Symbol indicating what happens at the end of ^L a water main. Blank Flange

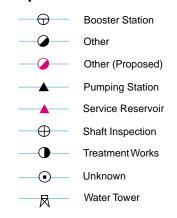
- Capped End
- Undefined End

Emptying Pit

- Manifold

— Fire Supply

Operational Sites



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: Indiates 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 him 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.

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

Ways to pay your bill

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.

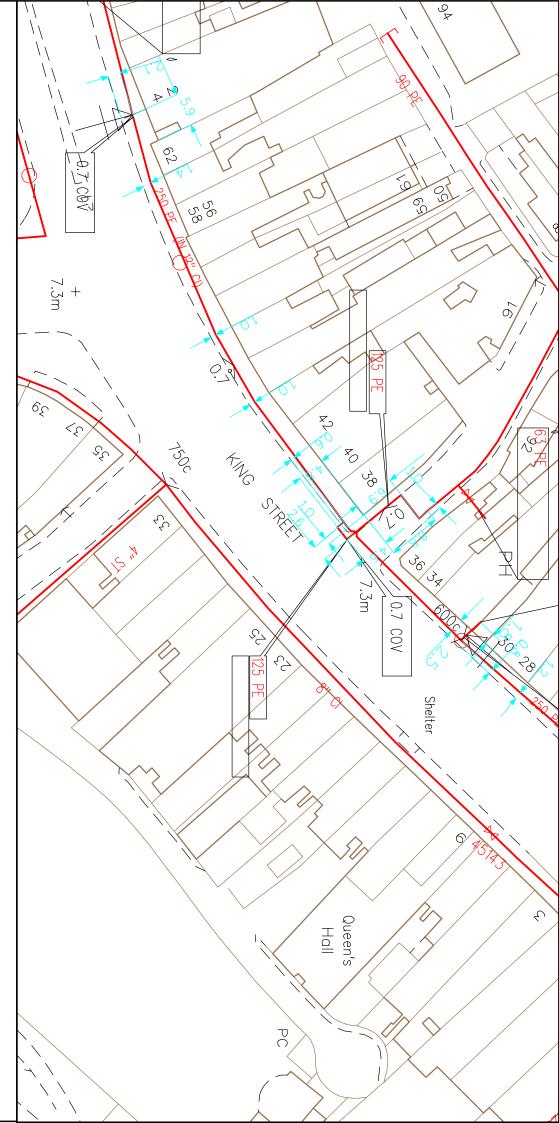
Please note that all queries or complaints regarding your search should be directed to your search provider in the first instance, not to TPOs or to the PCCB.

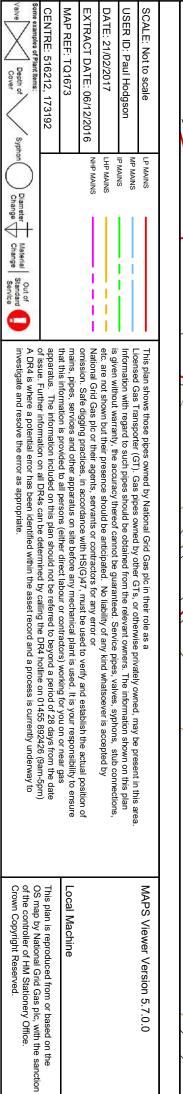
TPOs Contact Details

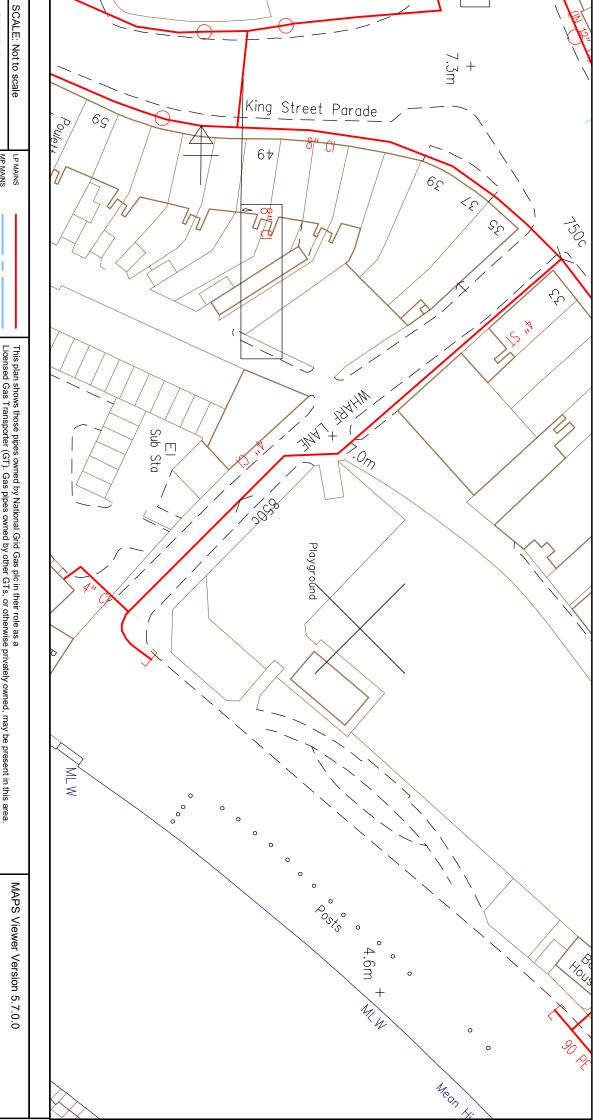
The Property Ombudsman scheme Milford House 43-55 Milford Street Salisbury Wiltshire SP1 2BP Tel: 01722 333306 Fax: 01722 332296 Email: <u>admin@tpos.co.uk</u>

You can get more information about the PCCB from www.propertycodes.org.uk

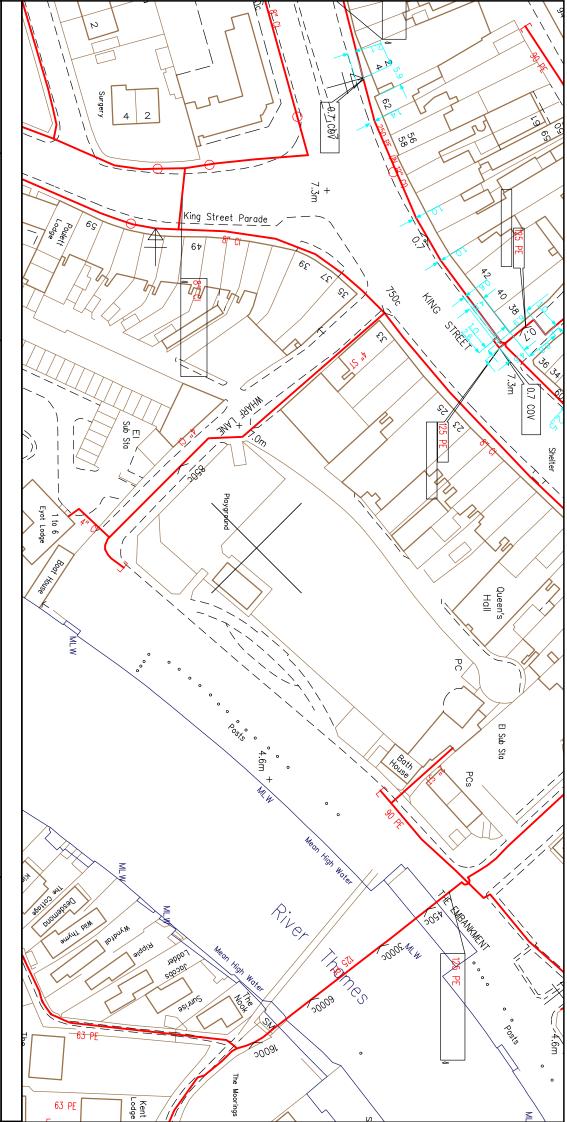
PLEASE ASK YOUR SEARCH PROVIDER IF YOU WOULD LIKE A COPY OF THE SEARCH CODE



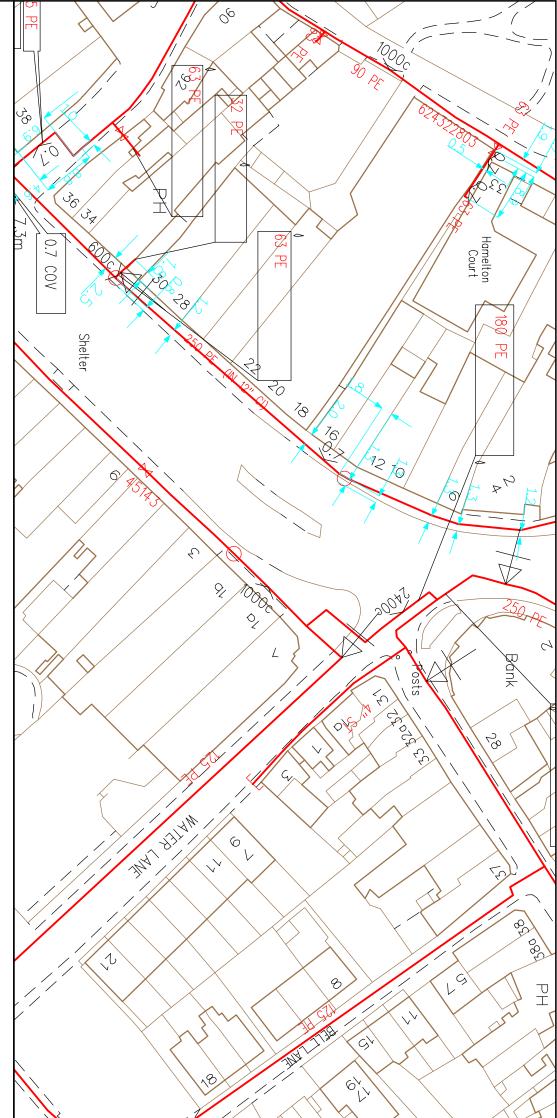


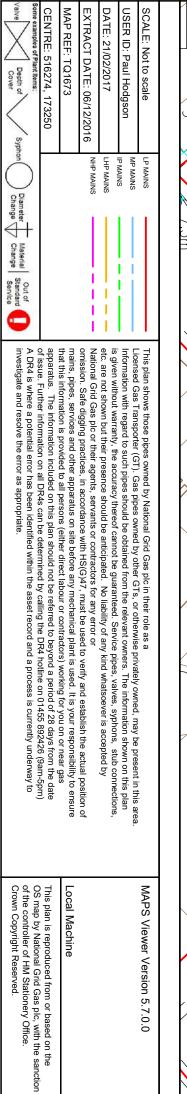


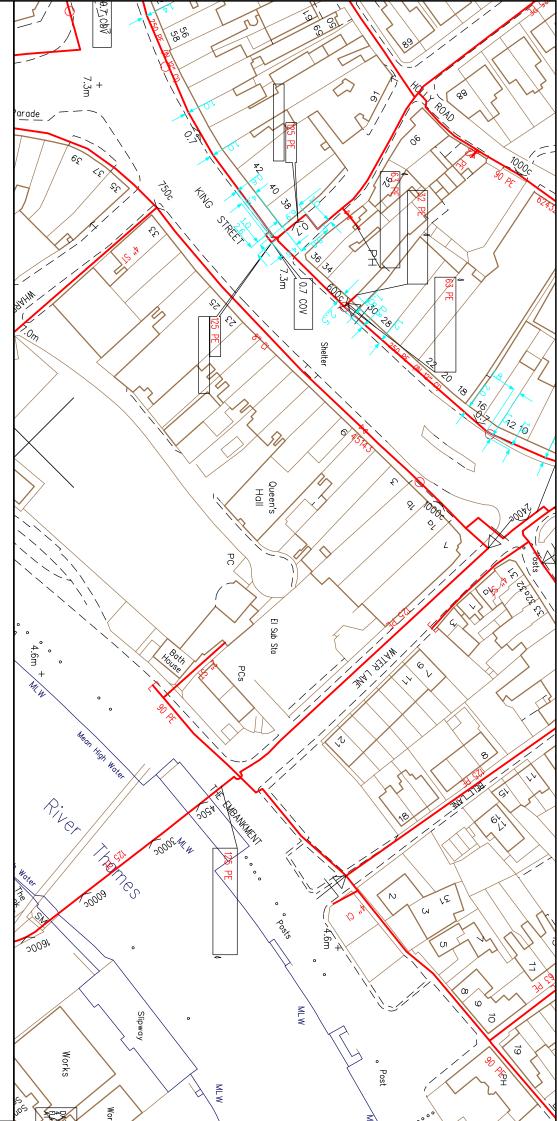
SCALE: Not to scale	LP MAINS	This plan shows those pipes owned by National Grid Gas plc in their role as a	MAPS Viewer Version 5.7.0.0
USER ID: Paul Hodgson	MP MAINS	Licensed Gas I ransporter (GI). Gas pipes owned by other GIs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan	
DATE: 21/02/2017		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	
EXTRACT DATE: 06/12/2016	NHP MAINS	National Grid Gas plc or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of	
MAP REF: TQ1673		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	Local Machine
CENTRE: 516250, 173130		apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue Europer information on all DR4s can be determined by calling the DR4 bottine on 11455 802/05 (Gam-Som)	This plan is reproduced from or based on the
Some examples of Plant Items: Valve Depth of Cover Syphon	n Dameter Hateriel Standard Change Change Service	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.	OS map by National Grid Gas pic, with the sanction of the controller of HM Stationery Office. Crown Copyright Reserved.

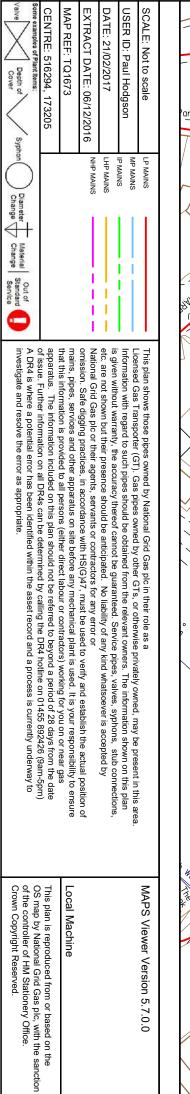


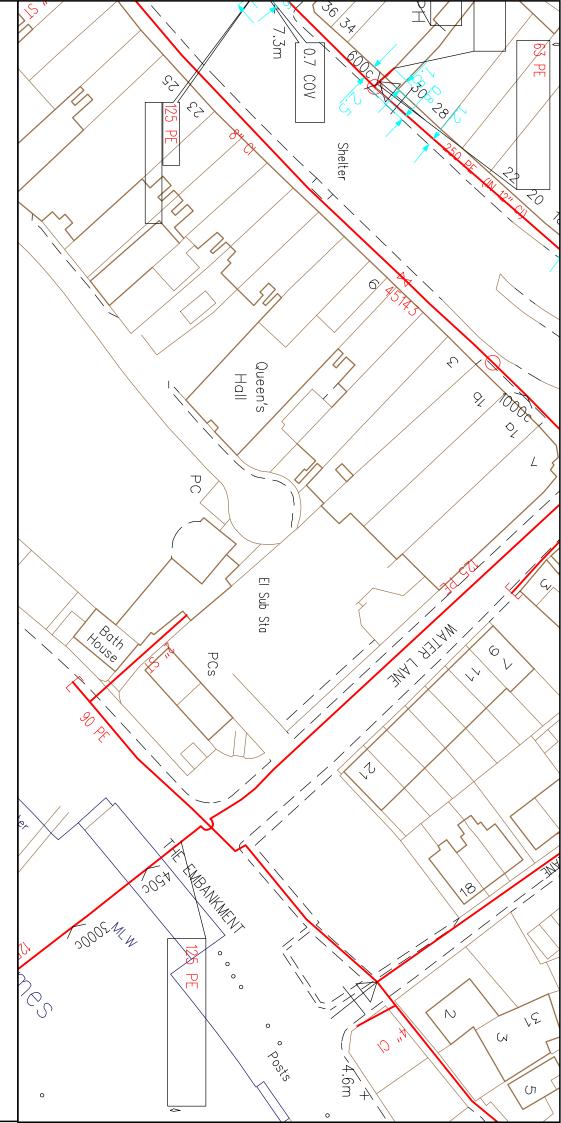
SCALE: Not to scale	LP MAINS	This plan shows those pipes owned by National Grid Gas plc in their role as a	MAPS Viewer Version 5.7.0.0
USER ID: Paul Hodgson	MP MAINS	Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan	
DATE: 21/02/2017		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	
EXTRACT DATE: 06/12/2016	NHP MAINS	National Grid Gas plc or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of	
MAP REF: TQ1673		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 ras	Local Machine
CENTRE: 516266, 173147		apparatus. The information included on this paraonical contract of bottom accord, working for you or or non-use apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue Europer information on all DBAs can be determined by colling the DB4 bottine on 01455 802426 (Jam Som)	This plan is reproduced from or based on the
Some examples of Plant Items: Valve Depth of Syphon Cover Syphon	n Diameter Material Survice Diameter Sanvice	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.	OS map by National Grd Gas pic, with the sanction of the controller of HM Stationery Office. Crown Copyright Reserved.

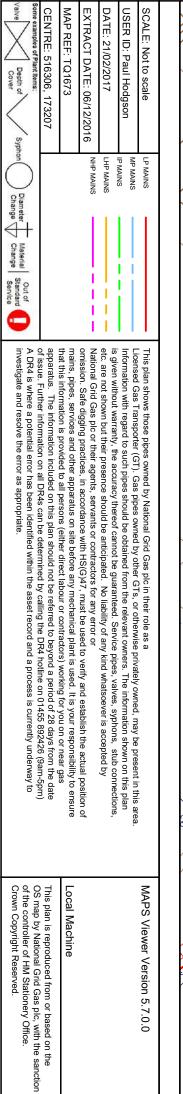














Mr. Paul Hodgson Utility Site Search Towpath Cottage Top Lane Braithwaite Doncaster DN7 5SX

> Our Ref: 2017/2247057 Your Ref: 23/02/2017

Dear Sir/Madam

THE EMBANKMENT, KING STREET, TWICKENHAM, TW1 3SD

Thank you for your letter of 22/02/2017 in which you asked if there are any electric lines and/or electrical plant belonging to UK Power Networks (SEPN) plc ("UK Power Networks") within the land identified by your enquiry.

I enclose a copy of UK Power Networks record of its electric lines and/or electrical plant at the site identified by your enquiry. If the records provided do not relate to the land to which you had intended to refer please resubmit your enquiry.

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

This information is made available to you on the terms set out below.

1. UK Power Networks does not warrant that the information provided to you is correct. You rely upon it at your own risk.

- 2. UK Power Networks does not exclude or limit its liability if it causes the death of any person or causes personal injury to a person where such death or personal injury is caused by its negligence.
- 3. Subject to paragraph 2 UK Power Networks has no liability to you in contract, in tort (including negligence), for breach of statutory duty or otherwise how for any loss, damage, costs, claims, demands, or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever.
- 4. The information about UK Power Networks electrical plant and/or electric lines provided to you belongs to and remains the property of UK Power Networks. You must not alter it in any respect.
- 5. The information provided to you about the electrical plant and/or electric lines depicted on the plans may <u>NOT</u> be a complete record of such apparatus belonging to UK Power Networks. The information provided relates to electric lines and/or electrical plant belonging to UK Power Networks that it believes to be present but the plans are <u>NOT</u> definitive: other

electric lines and/or electrical plant may be present and that may or may not belong to UK Power Networks.

- 6. Other apparatus not belonging to UK Power Networks is not shown on the plan. It is your responsibility to make your own enquiries elsewhere to discover whether apparatus belonging to others is present. It would be prudent to assume that other apparatus is present.
- 7. You are responsible for ensuring that the information made available to you is passed to those acting on your behalf and that all such persons are made aware of the contents of this letter.
- 8. Because the information provided to you may <u>NOT</u> be accurate, you are recommended to ascertain the presence of UK Power Networks electric lines and/or electrical plant by the digging of trial holes. <u>Trial holes should be dug by hand only</u>. Excavations must be carried out in line with the Health and Safety Executive guidance document HSG:47. We will not undertake to do this work. A copy of HSG:47 can be obtained from the Health and Safety Executives website.

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

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

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

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

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

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

- 10. You are responsible for the security of the information provided to you. It must not be given, sold or made available upon payment of a fee to a third party.
- 11. If in carrying out work on land in, on, under or over which is installed an electric line and/or electrical plant that belongs to UK Power Networks you and/or anyone working on your behalf damages (however slightly) that apparatus you must inform immediately UK Power Networks by telephone at the number below providing:
 - your name, address and telephone number; and
 - the date, time and place at which such damage was caused; and
 - a description of the electric line and/or electrical plant to which damage was caused; and
 - the name of the person whom it appears to you is responsible for that damage; and
 - the nature of the damage

In the South East of England 0800 0963766 (24 Hours).

12. The expression "UK Power Networks" includes UK Power Networks (EPN) plc, UK Power Networks (LPN) plc, UK Power Networks (SEPN) plc, UK Power Networks and any of their successors and predecessors in title.

IF YOU DO **NOT** ACCEPT AND/OR **<u>DO NOT</u>** UNDERSTAND THE TERMS OF USE SET OUT IN PARAGRAPHS 1 TO 12 INCLUSIVE ABOVE YOU MUST NOT USE THE PLANS AND RETURN THEM TO ME.

I would remind you that work adjacent to electric lines and/or electrical plant represents a serious risk to health and safety and as such should feature amongst the items you have assessed in your workplace risk assessment and method statement.

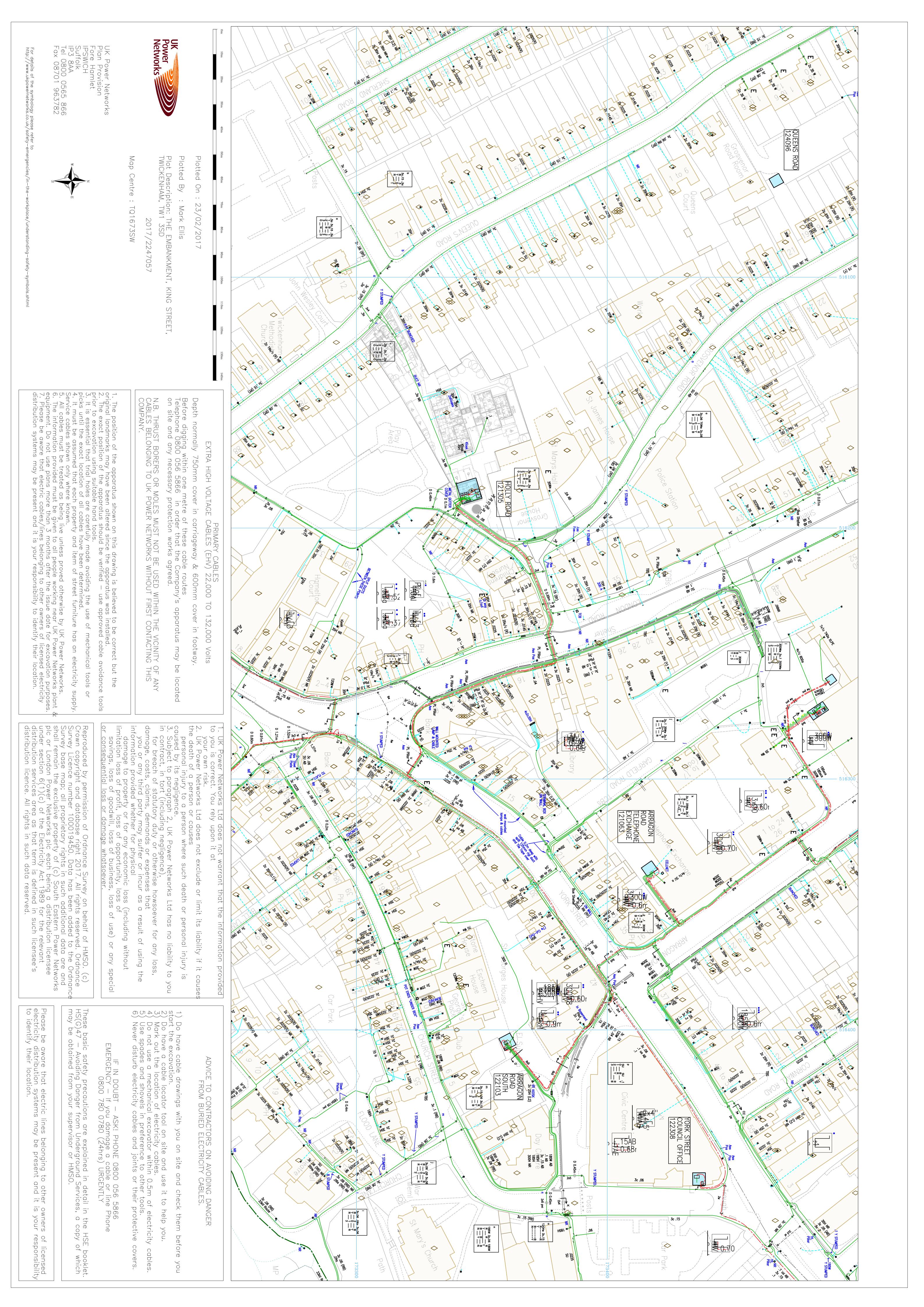
I shall be pleased to supply you with further assistance if you require it.

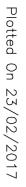
Yours sincerely M. Ellis

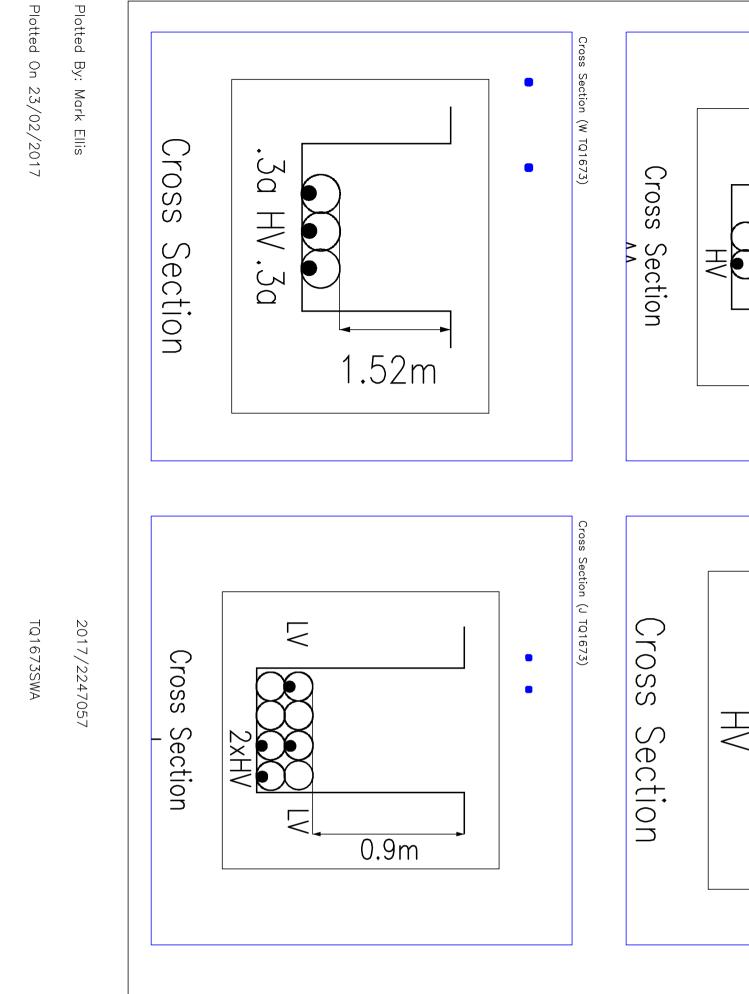
Mark Ellis - Telephone: 0800 0565 866 Plan Provision

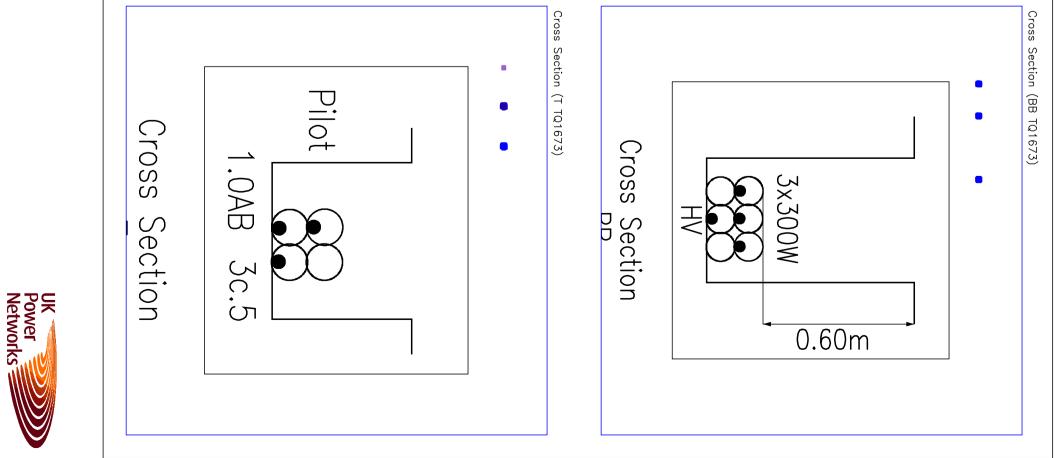
UK Power Networks, Plan Provision, Fore Hamlet, Ipswich, IP3 8AA. Tel: 0800 0565866. Fax: 0870 1963782.

UK Power Networks Registered in England and Wales Registered No 7290590. Registered office: Newington House, 237 Southwark Bridge Road London, SE1 6NP.









Cross Section (Y TQ1673)

Cross Section (AA TQ1673)

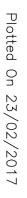
300W

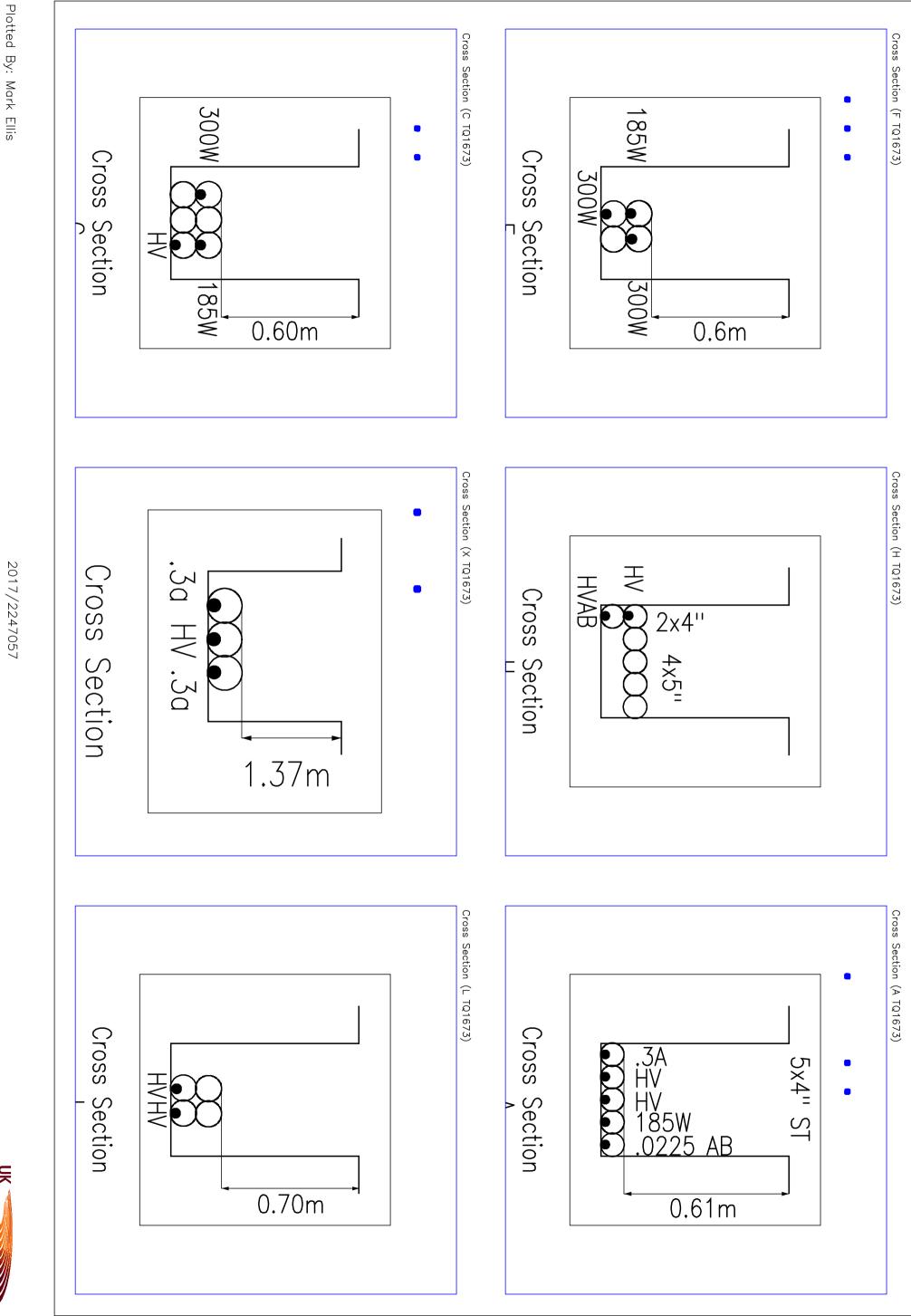
300W

 \vdash

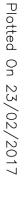
. За

0.70m





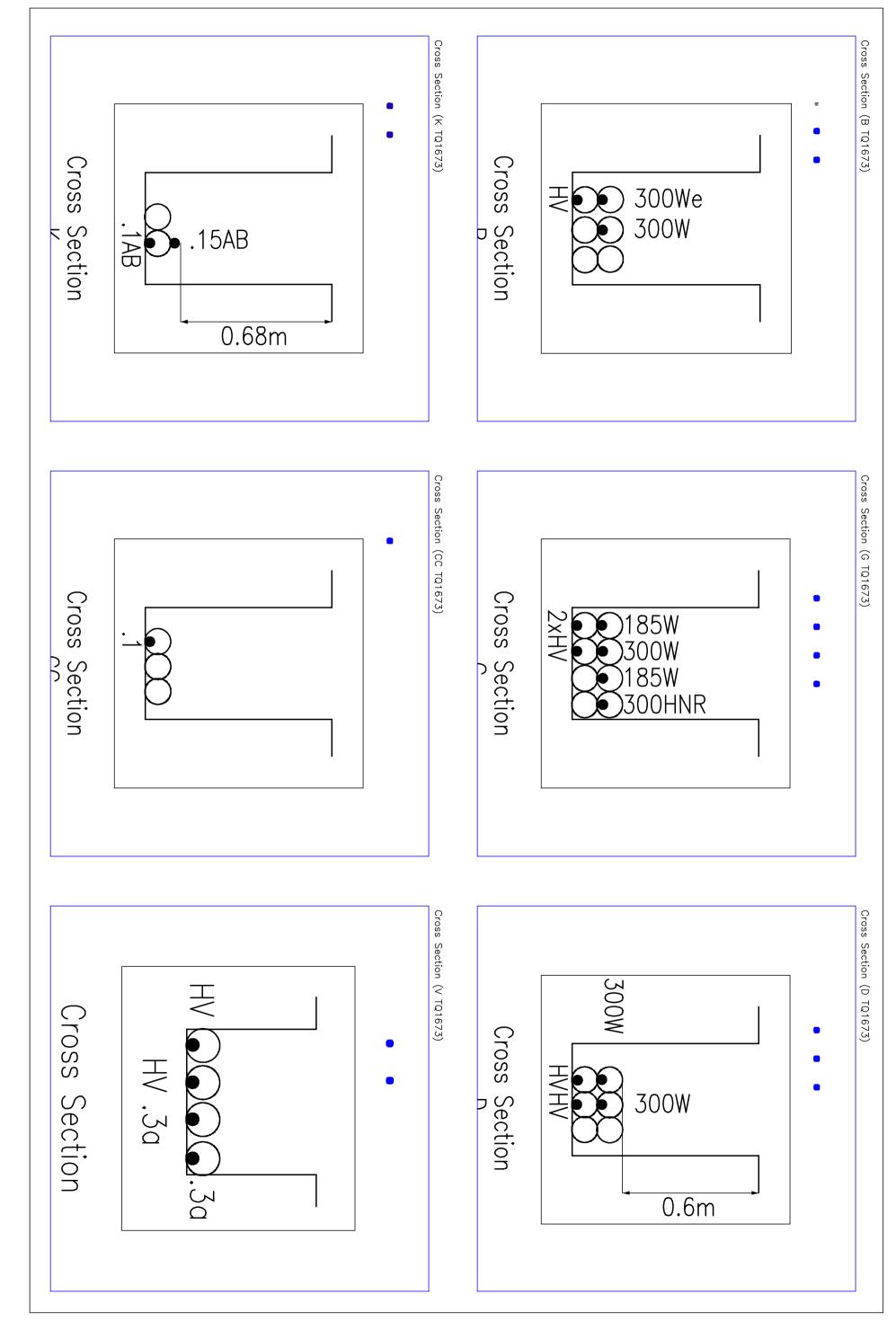




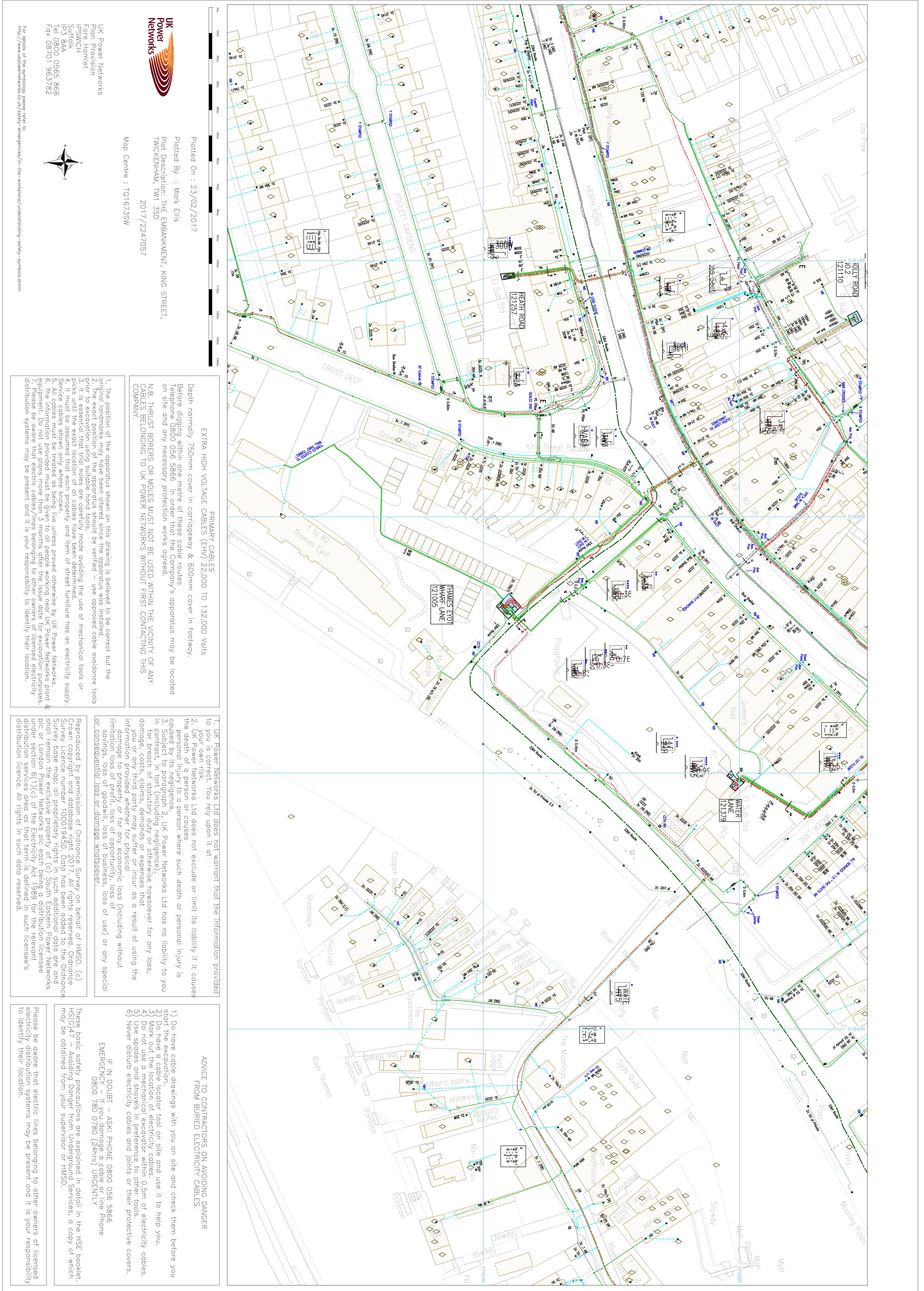
Plotted By: Mark Ellis

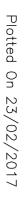
2017/2247057

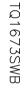
TQ1673SWA



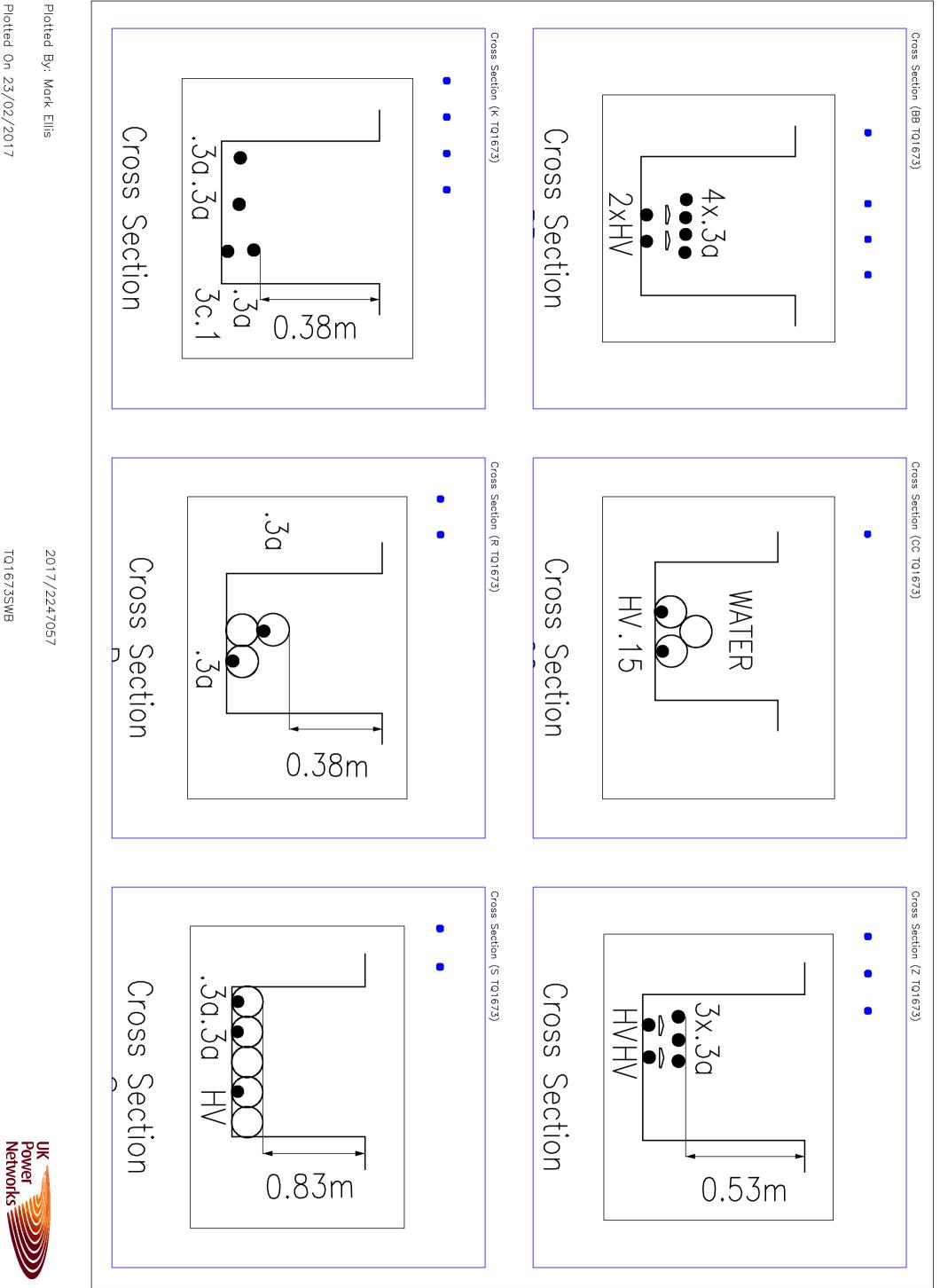


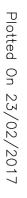




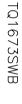




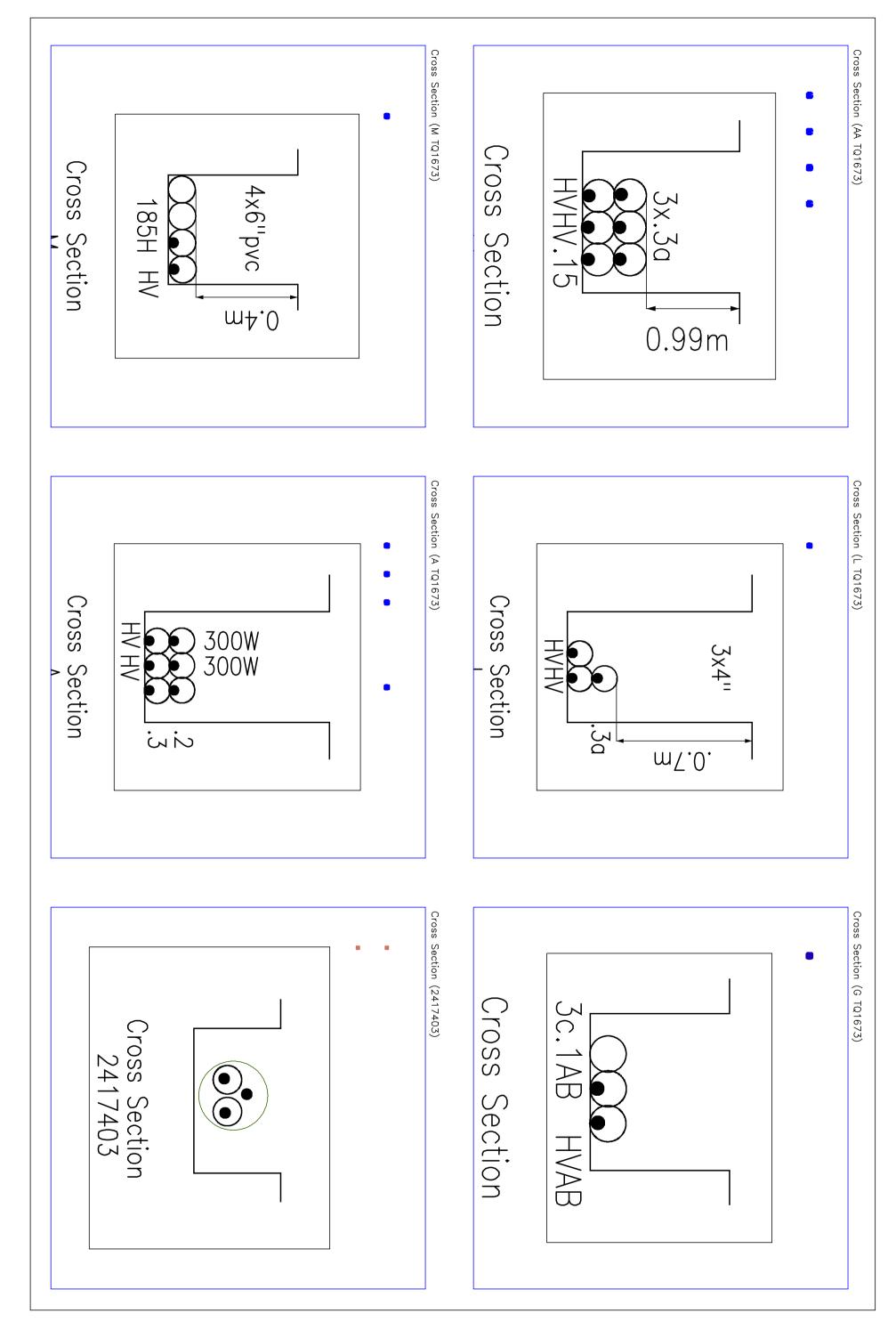




Plotted By: Mark Ellis



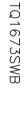




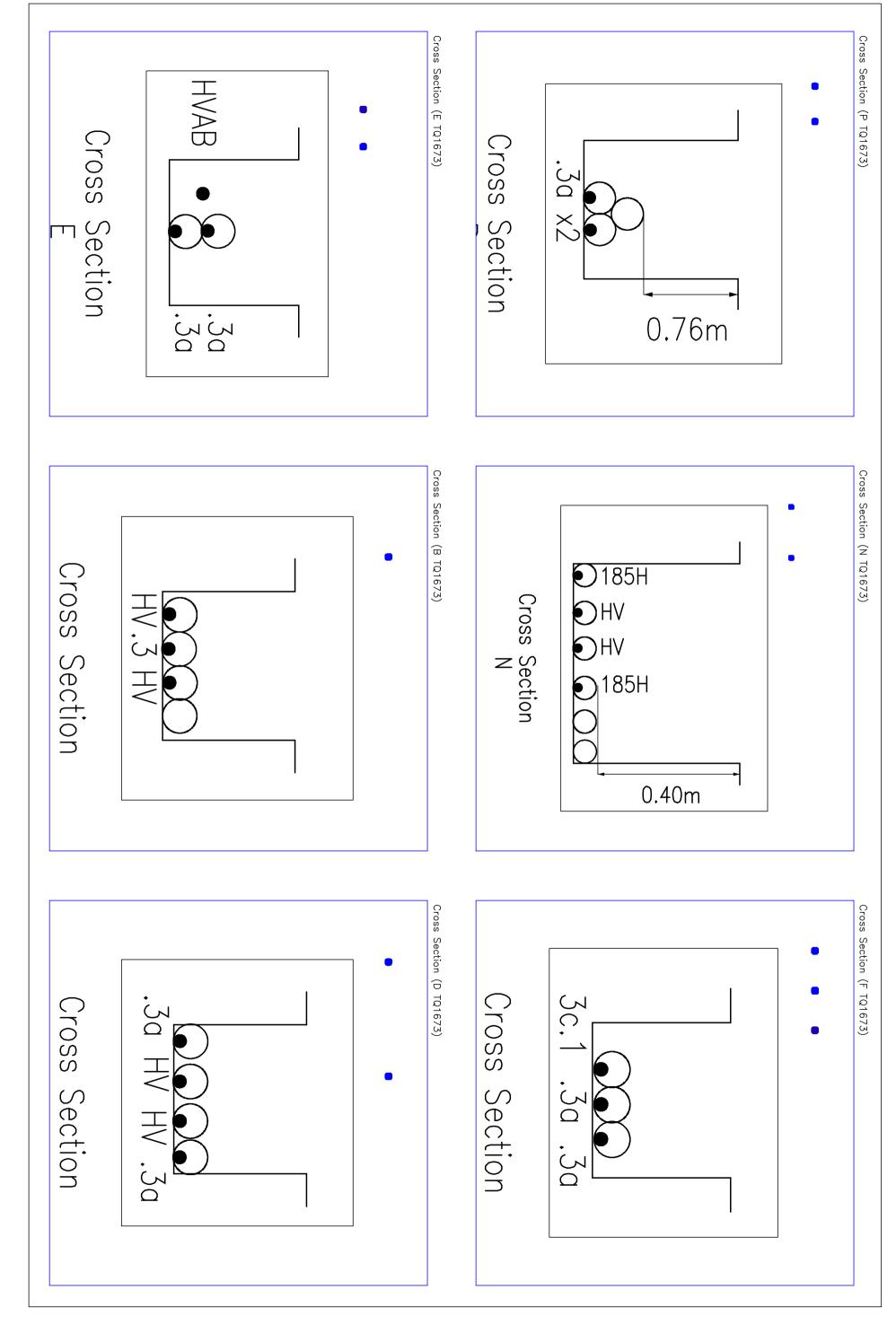


Plotted On 23/02/2017

Plotted By: Mark Ellis







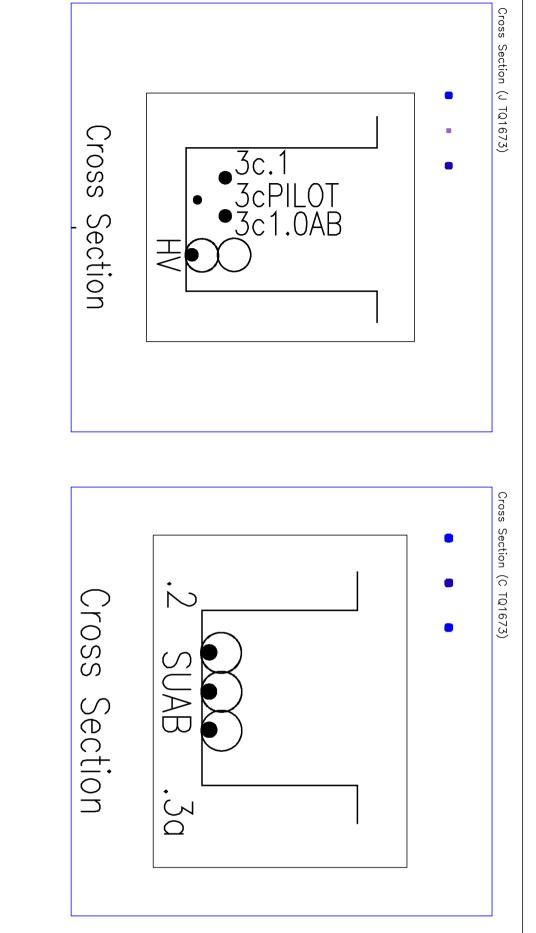


TQ1673SWB

Plotted On 23/02/2017

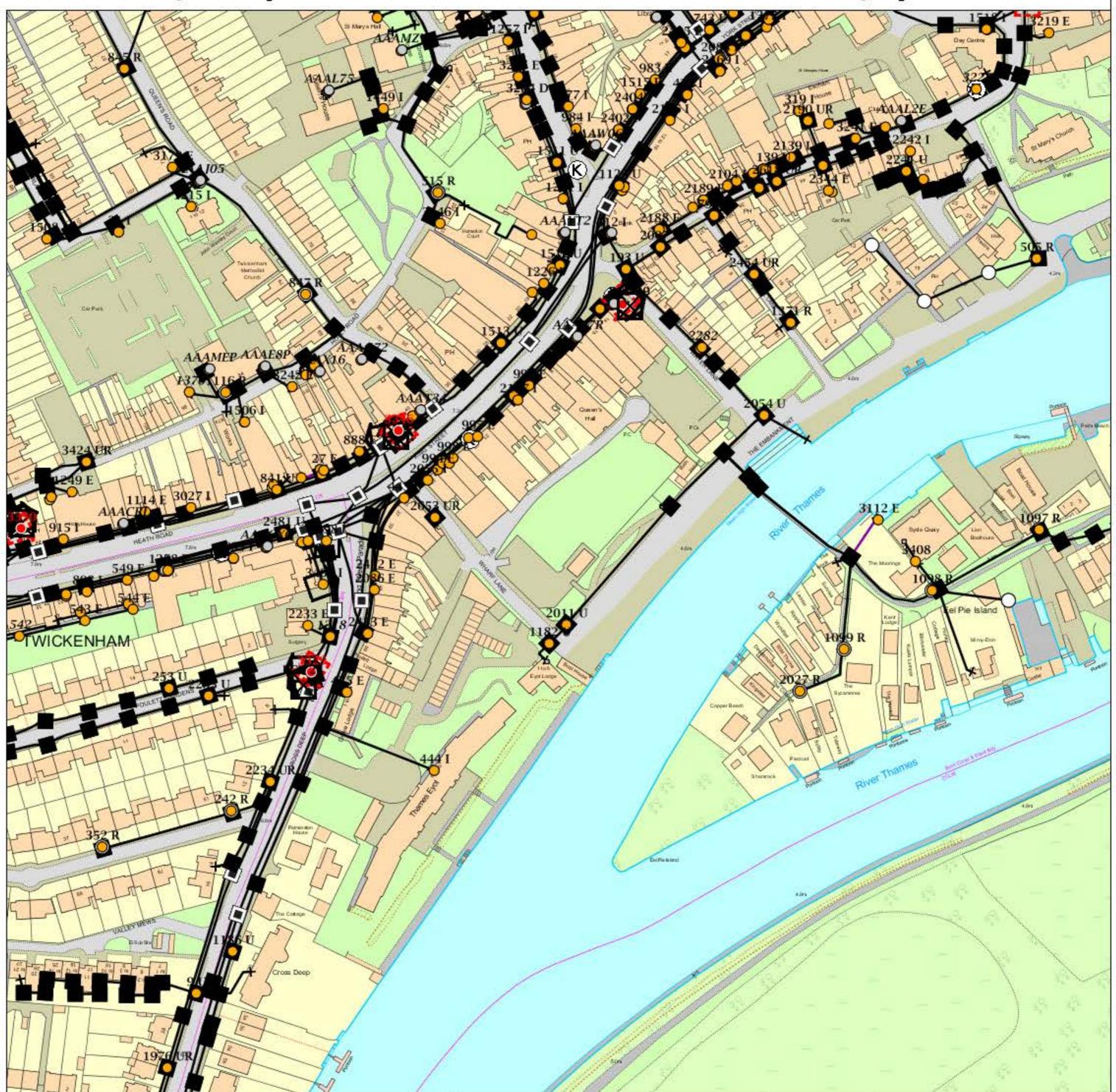
Plotted By: Mark Ellis

2017/2247057





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 BTO

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

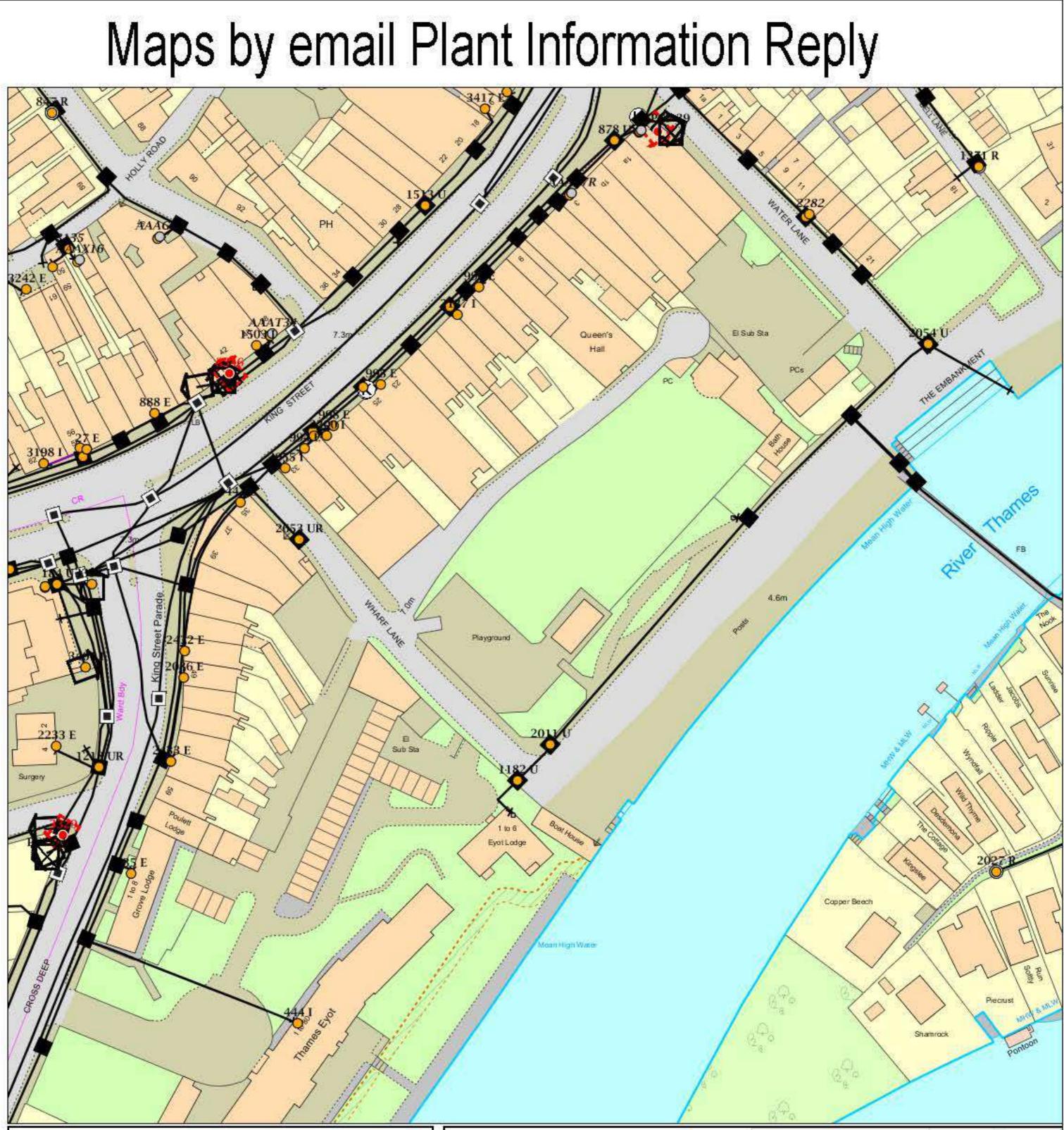
email cbyd@openreach.co.uk

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

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	Pole	0
DP O	Planned Pole	O.
Planned DP •	Joint Box	
PCP 🕅	Change Of State	+
Planned PCP	Split Coupling	×
Built	Duct Tee	
Planned	Planned Box	
Inferred	Manhole	
Building	Planned Manhole	
Kiosk 🛞	Cabinet	Û
Hatchings	Planned Cabinet	Û
	Other proposed plant is shown usi BT Symbols not listed above mays Existing BT Plant may not be Information valid at time of pr	oe disregarded. recorded.
a BT Group business BT	BT Ref : ISA07161V Map Reference : (centre) T Easting/Northing : (centre) Issued : 21/02/2017 19:1	2) 516262,173

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



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 BTO

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

email cbyd@openreach.co.uk

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

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	Pole	0
DP	Planned Pole	0
Planned DP	Joint Box	
PCP 🕅	Change Of State	+
Planned PCP	Split Coupling	×
Built	Duct Tee	
Planned	Planned Box	
Inferred	Manhole	
Building	Planned Manhole	
Kiosk 🛞	Cabinet	Û
Hatchings	Planned Cabinet	1
	Other proposed plant is shown usi BT Symbols not listed above mays Existing BT Plant may not be Information valid at time of pr	be disregarded. recorded.
a BT Group business BT	BT Ref : LDJ07162H Map Reference : (centre) T Easting/Northing : (centre) Issued : 21/02/2017 19:1	e) 516262,1

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



Enquiry Confirmation LSBUD Ref: 9936172

Enquirer						
Name	Mr Pa	ul Hodgson	Phone	01302 3	52116	
Company	Plan Search		Mobile	Not Sup	Not Supplied	
			Fax	Not Sup	ot Supplied	
Address		ath Cottage Top Lane Braithwaite aster South Yorkshire 5SX				
Email	hodba	te@yahoo.com				
Notes	Please contact	ensure your contact details are correct and up to date on the system in case the LSBUD Members need to				
Enquiry Details						
Scheme/Re	neme/Reference Twickenham					
Enquiry type Planned Works		Work ca	tegory	Utility Works		
Start date		24/02/2017	Work ty	be	Multiple excavations site	
End date 18/03/2017		18/03/2017	Site size	;	325 metres diameter	

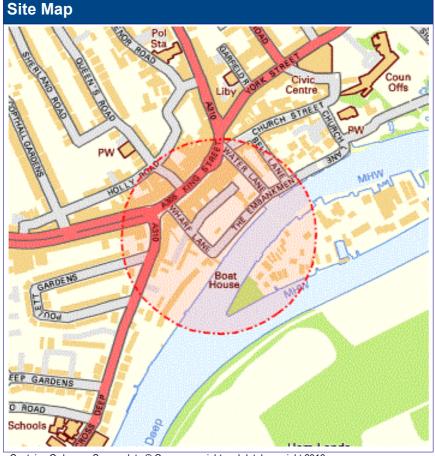
Confirmed location 516274 173122

XY= 516262, 173137 Easting/Northing

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

Work type buffer*

25 metres



Searched location

Contains Ordnance Survey data © Crown copyright and database right 2016



Enquiry Confirmation LSBUD Ref: 9936172

Date of enquiry: 21/02/2017 Time of enquiry: 19:24

Asset Owners

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

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

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

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

Below are three lists of asset owners:

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

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

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



Enquiry Confirmation LSBUD Ref: 9936172

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

List of affected LSBUD members

No LinesearchbeforeUdig Asset Owners within the Zone of Interest

LSBUD members who do not have assets registered on the LSBUD service within the vicinity of your search area. Please be aware that LSBUD members make regular changes to their assets.

	List of not affected LSBUD members		
AWE Pipeline	Esso Petroleum Company Limited	Petroineos	
BOC Limited (A Member of the Linde Group)	Fulcrum Pipelines Limited	Phillips 66	
BP Midstream Pipelines	Gamma	Premier Transmission Ltd (SNIP)	
ВРА	Gateshead Energy Company	Prysmian Cables & Systems Ltd (c/o Western Link)	
Carrington Gas Pipeline	Humbly Grove Energy	Redundant Pipelines - LPDA	
CATS Pipeline c/o Wood Group PSN	IGas Energy	RWEnpower (Little Barford and South Haven)	
Cemex	Ineos Enterprises Limited	SABIC UK Petrochemicals	
Centrica Energy	INEOS Manufacturing (Scotland and TSEP)	Scottish Power Generation	
Centrica Storage Ltd	Intergen (Coryton Energy or Spalding Energy)	Seabank Power Ltd	
CLH Pipeline System Ltd	Lark Energy	Shell (St Fergus to Mossmorran)	
Concept Solutions People Ltd	Lightsource SPV Limited	Shell Pipelines	
ConocoPhillips (UK) Ltd	Mainline Pipelines Limited	Total (Finaline, Colnbrook & Colwick Pipelines)	
DIO (MOD Abandoned Pipelines)	Manchester Jetline Limited	Transmission Capital	
Dong Energy (UK) Ltd	Manx Cable Company	Uniper UK Ltd	
E.ON UK CHP Limited	Marchwood Power Ltd (Gas Pipeline)	Vattenfall	
	National Grid Gas (Above 7 bar), National Grid		
EirGrid	Gas Distribution Limited (Above 2 bar) and	Veolia ES SELCHP Limited	
	National Grid Electricity Transmission		
Electricity North West Limited	Northumbrian Water Group	Western Power Distribution	
ENI & Himor c/o Penspen Ltd	NPower CHP Pipelines	Wingas Storage UK Ltd	
ESP Utilities Group	Oikos Storage Limited	Zayo Group UK Ltd c/o JSM Group Ltd	
ESSAR	Perenco UK Limited (Purbeck Southampton Pipeline)		



Enquiry Confirmation LSBUD Ref: 9936172

The following non-LSBUD members may have assets in your search area. It is YOUR RESPONSIBILITY to contact them before proceeding. Please be aware this list is not exhaustive and it is your responsibility to identify and contact all asset owners within your search area.

Non-LSBUD members (Asset owners not registered on LSBUD)					
Asset Owner	Preferred contact method	Phone	Status		
BT	https://www.swns.bt.com/pls/mbe/welcome.home	08009173993	Not Notified		
CityFibre	asset.team@cityfibre.com	033 3150 7282	Not Notified		
Colt	plantenquiries@catelecomuk.com	01227768427	Not Notified		
Energetics Electricity	plantenquiries@energetics-uk.com	01698404646	Not Notified		
ENGIE	nrswa@cofely-gdfsuez.com	01293 549944	Not Notified		
GTC	https://pe.gtc-uk.co.uk/PlantEnqMembership	01359240363	Not Notified		
GTT (formerly Hibernia Networks)	owen.maguire@gtt.net	01704 322 300	Not Notified		
Instalcom	plantenquiries@instalcom.co.uk	02087314613	Not Notified		
Interoute	interoute.enquiries@plancast.co.uk	02070259000	Not Notified		
London Underground	lulcedip@tube.tfl.gov.uk	02071261542	Not Notified		
Mobile Broadband Network Limited	mbnl.plant.enquires@turntown.com	01212 621 100	Not Notified		
National Grid Gas Distribution (below 2 bar)	plantprotection@nationalgrid.com	0800688588	Not Notified		
Richmond upon Thames London Borough Council	highwaysandtransport@richmond.gov.uk	08456122660	Not Notified		
Sky UK Limited	nrswa@sky.uk	02070323234	Not Notified		
Tata, KPN (c/- McNicholas)	plantenquiries@mcnicholas.co.uk	03300558469	Not Notified		
Teliasonera	telenttelia.plantenquiries@telent.com	0800526015	Not Notified		
Thames Water	http://www.digdat.co.uk	08450709145	Not Notified		
UK Power Networks	plans@ukpowernetworks.co.uk	08000565866	Not Notified		
Utility assets Ltd	assetrecords@utilityassets.co.uk		Not Notified		
Verizon Business	osp-team@uk.verizonbusiness.com	01293611736	Not Notified		
Virgin Media	http://www.digdat.co.uk	08708883116	Not Notified		
Vodafone	osm.enquiries@atkinsglobal.com	01454662881	Not Notified		
Vtesse Networks	https://vtplant.vtesse.com	01992532100	Not Notified		

Disclaimer

The results of this Enquiry have been provided for the sole use of the Enquirer and no other party. The asset information on which the Enquiry results are based has been provided by LinesearchbeforeUdig members, LinesearchbeforeUdig will provide no guarantee that such information is accurate or reliable nor does it monitor such asset information for accuracy and reliability going forward. There are also asset owners which do not participate in the enquiry service operated by LinesearchbeforeUdig, including but not exclusively those set out above. Therefore, LinesearchbeforeUdig cannot make any representation or give any guarantee or warranty as to the completeness of the information contained in the enquiry results. LinesearchbeforeUdig and its employees, agents and consultants accept no liability (except insofar as liability under any statute that cannot be excluded) arising in respect thereof or in any other way for errors or omissions including responsibility to any person by reason of negligence. Please refer to LinesearchbeforeUdig's Terms of Use for full terms of use available at www.linesearchbeforeudig.co.uk

Please find attached a plan indicating Richmond's lighting assets within your indicated area. Lamp columns and signs are connected to LV electricity cables. I regret that we do not have precise records of the connections.

In addition there are road gullies which are connected to the Thames Water sewer network, for which graphical information is not available.

Yours sincerely

Brian Humphris

Highway Asset Co-ordinator Serving Richmond and Wandsworth Councils

Environment Directorate London Borough of Richmond upon Thames 2nd Floor Civic Centre 44 York Street Twickenham TW1 3BZ

020 8891 7738

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

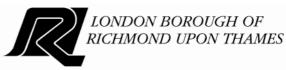
Map Extract

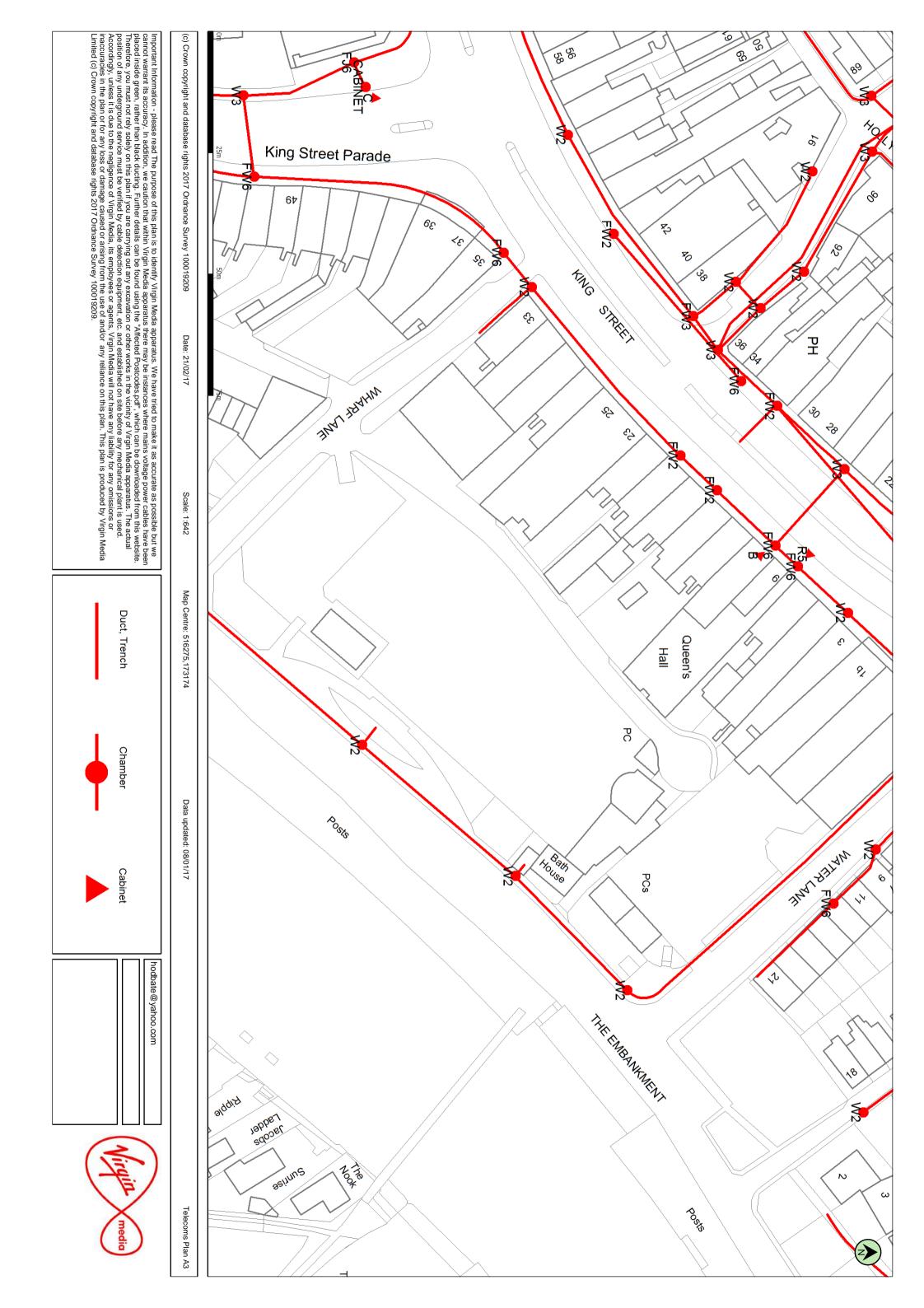


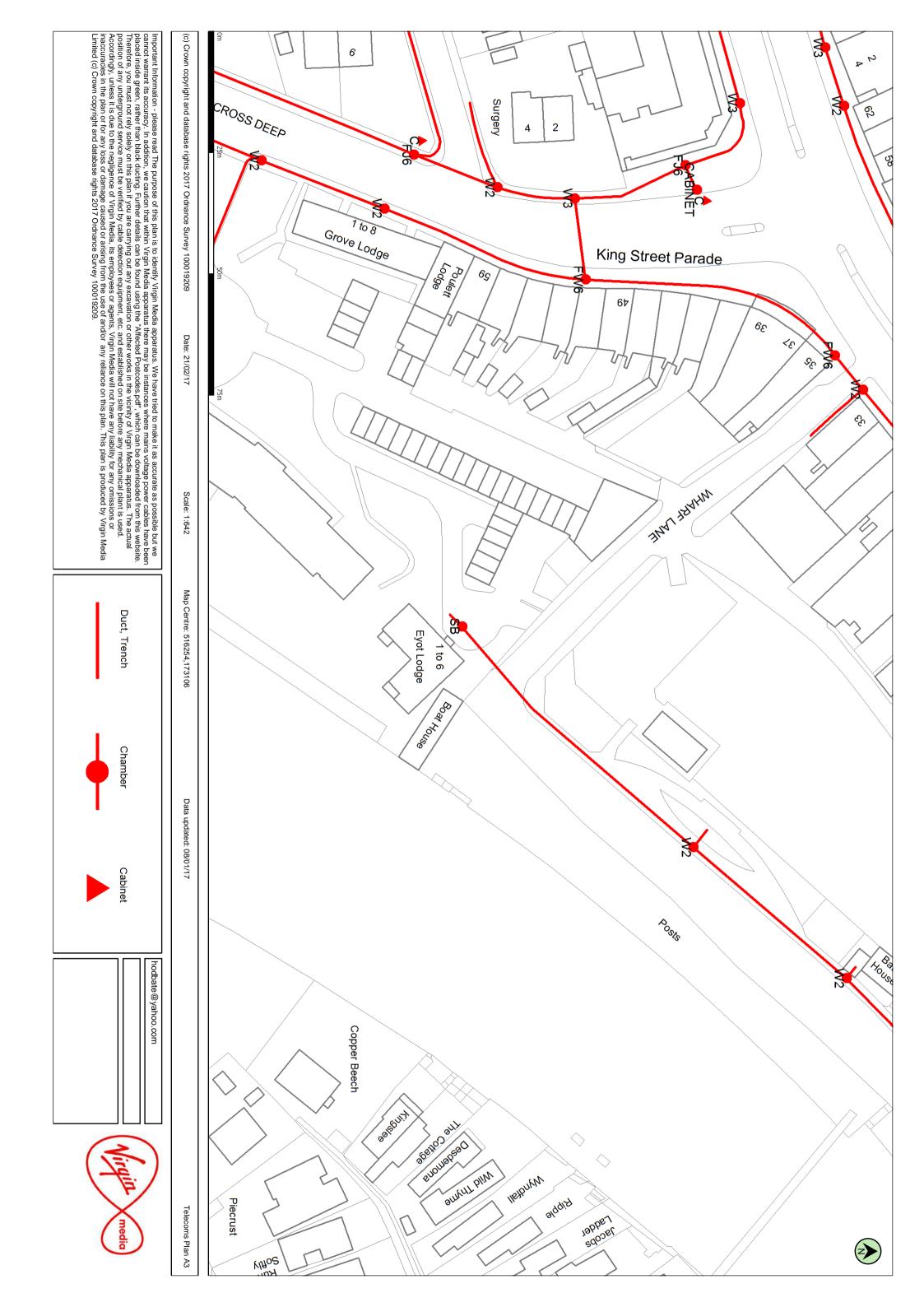
<--enter your text here e.g. address etc--> Produced by LB Richmond MapAll

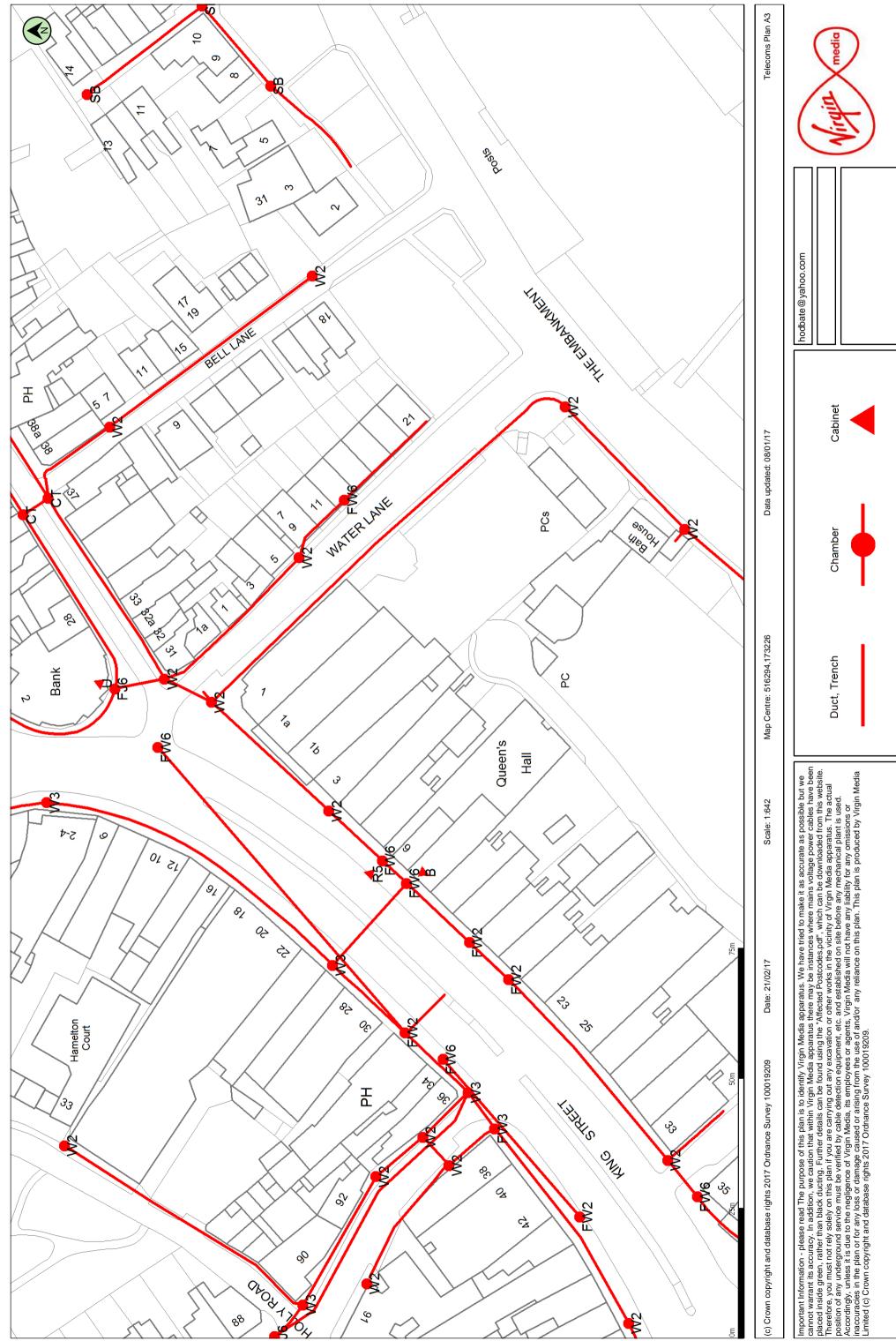
Crown copyright (c) and database rights 2017 Ordnance Survey 100019441 Scale: 1:1250 Printed on: 22-Feb-2017 Centre of map: [516286.77295295,173182.18210403] London Borough of Richmond upon Thames, Civic Centre, 44 York Street, Twickenham, TW1 3BZ Telephone 020 8891 1411 www.richmond.gov.uk

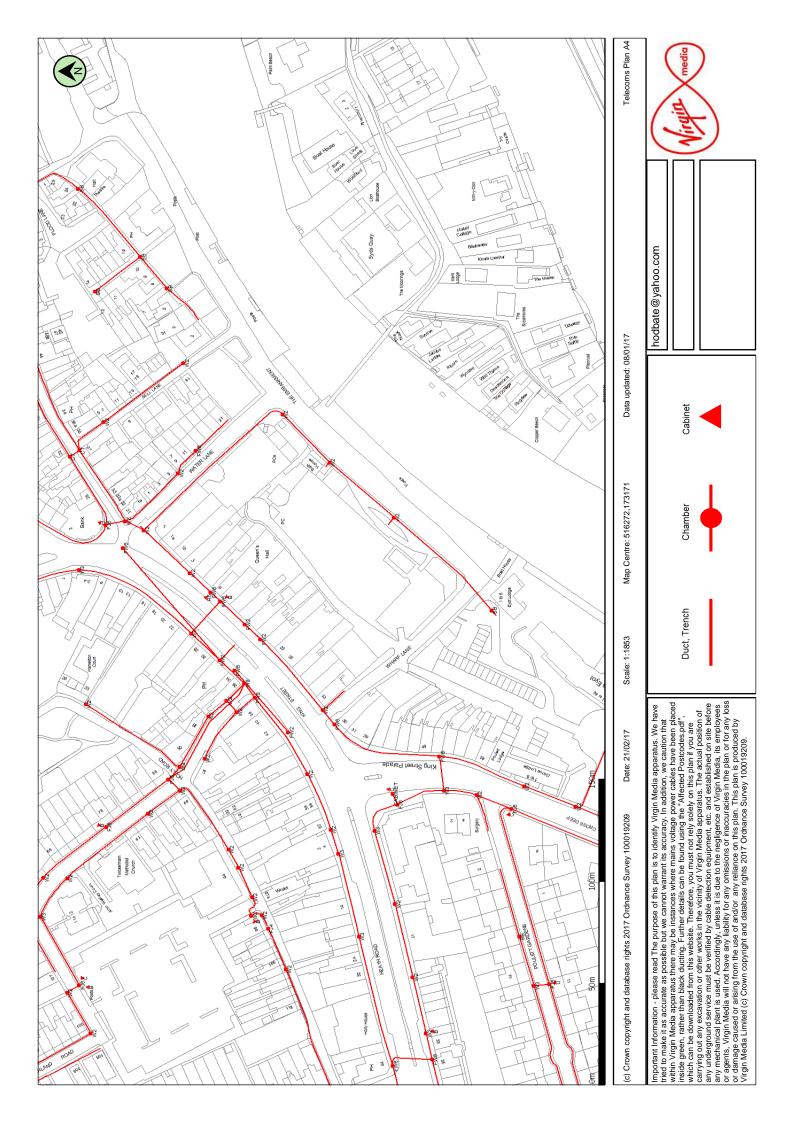












Standard notice [not for use with Special Data, Personal Data or unlicensed 3rd party rights]



Information warning

We (The Environment Agency) do not promise that the Information supplied to You will always be accurate, free from viruses and other malicious or damaging code (if electronic), complete or up to date or that the Information will provide any particular facilities or functions or be suitable for any particular purpose. You must ensure that the Information meets your needs and are entirely responsible for the consequences of using the Information. Please also note any specific information warning or guidance supplied to you.

Permitted use

- The Information is protected by intellectual property rights and whilst you have certain statutory rights which include the right to read the Information, you are granted no additional use rights whatsoever unless you agree to the licence set out below.
- Commercial use of anything except EA OpenData is subject to payment of a £50 licence fee (+VAT) for each person seeking the benefit of the licence, except for use as an Environment Agency contractor or for approved media use.
- To activate this licence you do not need to contact us (unless you need to pay us a Commercial licence fee) but if you make any use in excess of your statutory rights you are deemed to accept the terms below.

Licence

We grant you a worldwide, royalty-free (apart from the £50 licence fee for commercial use), perpetual, non-exclusive licence to use the Information subject to the conditions below.

You are free to:



copy, publish, distribute and transmit the Information

adapt the Information

exploit the Information commercially, for example, by combining it with other Information, or by including it in your own product or application

You must (where you do any of the above):

acknowledge the source of the Information by including the following attribution statement: "Contains Environment Agency information © Environment Agency and database right"

ensure that you do not use the Information in a way that suggests any official status or that We endorse you or your use of the Information



ensure that you do not mislead others or misrepresent the Information or its source or use the Information in a way that is detrimental to the environment, including the risk of reduced future enhancement

ensure that your use of the Information does not breach the Data Protection Act 1998 or the Privacy and Electronic Communications (EC Directive) Regulations 2003

These are important conditions and if you fail to comply with them the rights granted to you under this licence, or any similar licence granted by us will end automatically.

No warranty

The Information is licensed 'as is' and We exclude all representations, warranties, obligations and liabilities in relation to the Information to the maximum extent permitted by law. We are not liable for any errors or omissions in the Information and shall not be liable for any loss, injury or damage of any kind caused by its use. We do not guarantee the continued supply of the Information.

Governing Law

This licence is governed by the laws of England and Wales.

Definitions

"Information" means the information that is protected by copyright or by database right (for example, literary and artistic works, content, data and source code) offered for use under the terms of this licence.

"Commercial" means:

- offering a product or service containing the Information, or any adaptation of it, for a charge, or
- internal use for any purpose, or offering a product or service based on the Information for indirect commercial advantage, by an organisation that is primarily engaged in trade, commerce or a profession.

Ourref: Damian Sweeney TEL: 07712129249

New Roads and Street Works Act 1991- Sections 83, 84,142 and 143 Codes of Practice Appendix C2

In response to your notice regarding works which you, are proposing to undertake.

I can confirm that Traffic master does not have equipment installed within the boundary of the works.

If you have any further queries regarding this or any other programme, please do not hesitate to contact me on my details below.

Yours sincerely For & on Behalf of Trafficmaster Ltd

Infrastructure Maintenance plantenquiries@trafficmaster.co.uk



The contents of this e-mail and any attachments are private and confidential to the intended recipient. If you have received this message in error, please notify us and remove it from your system.

Dear Sir/Madam

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

Further to your plant enquiry please see the response below to the NRSWA request submitted

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

PS: Please can you send all future Plant enquiries for EE or H3G to this email address mbnlplantenquiries@turntown.com

Kind Regards

MBNL SHQE Team

Turner & Townsend

Tel: +44 (0) 121 262 3663

http://www.turnerandtownsend.com

Turner & Townsend Europe Limited

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

Subject: The Embankment, King Street Twickenham TW1 3SD - CRL-00-165367

Dear Paul Hodgson

Crossrail Ref: CRL-00-165367

Site at The Embankment, King Street Twickenham TW1 3SD

Thank you for your enquiry of 21 February 2017 regarding the effect of Crossrail on the above property.

Crossrail is a new railway currently being constructed that will link Reading and Heathrow in the west to Shenfield and Abbey Wood in the east using existing Network Rail tracks and new tunnels under Central London.

The Crossrail Bill which was introduced into Parliament by the Secretary of State for Transport in February 2005 was enacted as the Crossrail Act on the 22nd July 2008. The first stage of Crossrail preparatory construction works began in early 2009. Main construction works have started with works to the central tunnel section to finish in 2018, to be followed by a phased opening of services.

Crossrail Limited (CRL) administers a Direction issued by the Department for Transport on 24 January 2008 for the safeguarding of the proposed alignment of Crossrail.

The above property is outside the safeguarded limits of land as defined by the Safeguarding Direction (the maximum extent of land that may be required for the construction and operation of Crossrail).

You may inspect copies of Plans, Sections, Environmental Statements, Explanatory Notes and Non-Technical Summaries pertaining to the Crossrail proposals on the Crossrail website http://www.crossrail.co.uk/construction/crossrail-act-2008-and-crossrail-bill-supporting-documents.

In addition, the latest project developments can be found on the Crossrail website <u>www.crossrail.co.uk/safeguarding</u>, which is updated on a regular basis.

I hope this information is helpful, but if you require any further assistance then please feel free to contact a member of the Safeguarding Team on 0345 602 3813, or by email to <u>safeguarding@crossrail.co.uk</u>.

Yours sincerely,

Georgia Ruffell | Community Relations Assistant Crossrail | 25 Canada Square, Canary Wharf, London E14 5LQ Helpdesk (24hr) 0345 602 3813 helpdesk@crossrail.co.uk | www.crossrail.co.uk

MOVING LONDON FORWARD

DISCLAIMER: Whilst every effort has been made to ensure the accuracy of the information provided herein, Crossrail Limited and its employees are not responsible for any loss or damage whatsoever caused as a result of any information provided being inaccurate. You should satisfy yourself of the accuracy of the information provided by making your own enquiries of the documents and websites referred to above.

Crossrail operates in accordance with the Data Protection Act 1998 and the policy statement as set out below. If at any time you no longer wish to receive information from us please let us know in writing or by email.

Crossrail Limited and its agents will process personal information that you may provide for the purpose of consultation, statistical analysis, profiling and administration of the Crossrail project. The data may be used in order to keep you informed about the progress of the Crossrail proposals, for maintaining the book of reference of those with relevant interests in the land affected by the proposals (and keeping it up to date) and for the purposes of serving any notices which may require to be served in connection with the proposals.

Subject: RE: The Embankment Twickenham

To whom it may concern

With regard to your request for details of existing services in the areas of;

Location	Postcode	Grid Ref
Twickenham	TW1	As Per Your Map

we can confirm that, based on the **<u>details provided to us</u>**, we have no buried plant or equipment in the identified areas.

Kind Regards.

Philip. J. Tyler. Document Controller Urban Energy UK & Ireland

philip.tyler@engie.com

Mob. +44 (0) 7562 310 024

Cofely GDF SUEZ is now ENGIE



engie.co.uk

Kings Yard,

1 Waterden Road,

Queen Elizabeth Olympic Park London E15 2GP - UK

Subject: RE: The Embankment Twickenham

Hi, thanks for the advance notice however I can confirm on this occasion we have <u>NO</u> apparatus in the vicinity of the proposed works.(Gtt formally Hibernia Networks)

Owen Maguire Northern Ireland Networks Operations Manager office: +44 1704-322-311 | mobile: +44 754-553-2224 www.gtt.net



Subject: RE:E02/17- 4785 The Embankment Twickenham

Dear Sir or Madam,

Thank you for your plant enquiry below.

We can confirm that Level 3 does not have any apparatus within the indicated works area.

Instalcom responds to plant enquiries for LEVEL 3, GLOBAL CROSSING (UK) LTD, GLOBAL CROSSING PEC and FIBERNET UK LTD and FIBRESPAN LTD simultaneously and therefore you only need send one copy of a plant enquiry to cover all of these companies.

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

Regards

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

 Office: +44 (0)208 731 4613

 Fax: +44 (0)208 731 4601

 Email: plantenquiries@instalcom.co.uk

 Web: http://www.instalcom.co.uk



Dear Sir/Madam

Regarding your email and supporting details regarding your proposed works I now write to advise you that London Underground have no shallow railway structures within the area(s) outlined and therefore should not be affected by your proposal.

Please note as an additional precaution I have forwarded your enquiry onto our power supply division who may contact you directly regarding the prospect of any LUL powers cable/duct routes that may be affected.

Andrew Harrison Infrastructure Protection | STREETWORKS

London Underground | Albany House Floor 3, 55 Broadway, London SW1H 0BD. Email: <u>andrewharrison1@tfl.gov.uk</u> Mobile: 07932766603

Find out more about Infrastructure Protection - https://youtu.be/OhGoJMTBOEg



Mitigating risk - while helping London develop.

Please consider the environment before printing this e-mail

Transport for London London Underground



London Underground Infrastructure Protection

3rd Floor Albany House 55 Broadway London SW1H 0BD

www.tfl.gov.uk/tube

Your ref: Our ref: 20403-SI-5-220217

Paul Hodgson Utility Site Searches utilitysitesearch@outlook.com

22 February 2017

Dear Paul,

King Street Twickenham TW1 3SD

Thank you for your communication of 21st February 2017.

I can confirm that London Underground has no assets within 50 metres of your site as shown on the plan you provided.

However we do have cable ducts in the area. Should you or your client intend undertaking highway works at this location, please contact:

NRSWA Enquiries Power Delivery London Underground

Tel: 0203 054 8354

LULHVpowerassets@tfl.gov.uk

If I can be of further assistance, please contact me.

Yours sincerely

Shahina Inayathusein Information Manager Email: locationenquiries@tube.tfl.gov.uk Direct line: 020 3054 1365

> London Underground Limited trading as London Underground whose registered office is 55 Broadway London SW1H 0BD

Registered in England and Wales Company number 1900907

VAT number 238 7244 46



London Underground Limited is a company controlled by a local authority within the meaning of Part V Local Government and Housing Act 1989. The controlling authority is Transport for London.



Subject: RE: The Embankment Twickenham WEXX

Dear Sir/Madam,

With regards to your enquiry, Network Rail does not believe there is any Network Rail owned apparatus or underground services within the area you have defined. As there is always the possibility that new works could be planned and undertaken in this area by Network Rail this information is valid as at today's date and is supplied for general guidance only.

Please be aware that this response is based on Network Rail's records and knowledge and no guarantee can be given regarding accuracy or completeness. CAT scans, safe digging practices (as contained in HSE publications) and other appropriate investigative techniques should always be carried out.

There may be other apparatus or underground services owned or operated by Utility Companies and accordingly you should contact individual utilities for information.

If, in connection with your investigations and/or work, you become aware of Network Rail apparatus or underground services within your area of work, please ensure these are notified to our Asset Protection team via the following link as a matter of urgency so that appropriate measures for avoidance of risk and damage can be put in place.

http://www.networkrail.co.uk/aspx/1758.aspx?cd=1

If you require any further clarification on any of the information please contact <u>opburiedservicesenquiries@networkrail.co.uk</u>.

Regards,

Richard Purser

Distribution Administrator (Underground Services), Asset Information Services

Asset Information Services: to inspire & enable through the power of data National Records Group, Audax Road, Clifton Moor York YO30 4US

T: 01904 386 388 E: richard.purser@networkrail.co.uk



telent

Mayne House Fenton Way Basildon Essex SS15 6TD United Kingdom

Telephone: +44 (0)800 526 015

www.telent.com

 Date
 02/03/2017

 Our Ref
 LPENQ0000087093

Dear Sir/Madam

Teliasonera Line Plant Enquiry.

Thank you for your correspondence enclosing details of your proposals as per your reference below.

The Embankment, King Street, Twickenham

Our client's apparatus, Teliasonera, is not located within the vicinity of the above reference and we therefore have no further interest in this current location.

Please note that all enquiries relating to the Teliasonera line plant should be forwarded to:

By post – to, telent, Teliasonera line plant enquiries, Mayne House, Fenton Way, Basildon, Essex SS15 6TD By email - to, <u>telenttelia.plantenquiries@telent.com</u>

01268 412670

Yours faithfully

By phone – to,

Telent CCO

Basildon

telent Technology Services Limited. Registered in England. No. 703317. Registered Office: Point 3, Haywood Road, Warwick, CV34 5AH, England

RE: The Embankment Twickenham

To whom it may concern

Thank you for your enquiry regarding the above proposals at the above location

We would advise that we are unaware of any Interoute plant or services in this Location as indicated in your enquiry.

We bring to your attention the fact that whilst we try to ensure the information we provide is accurate, the information is provided Without Prejudice and Interoute and its Agents accept no liability for claims arising from any inaccuracy, omissions or errors contained in this response.

All responses are only vaild for 28 days

Yours faithfully

PLANCAST Plant Enquiry Department



The Old Haybarn Rosebery Mews, Mentmore Bedfordshire LU7 0UE

T: 01296 662647 www.plancast.co.uk

Save Paper - Do you really need to print this email? This email and any attachments are or may be confidential and legally privileged and are sent solely for the attention of the addressee(s). If you have received this email in error, please delete it from your system: it's use, disclosure or copying is unauthorised. Statements and opinions expressed in this email may not represent those of PLANCAST. Any representations or commitments in this email are subject to contract.

Registered office: 1st Floor, The Old Haybarn, Rosebery Mews, Mentmore LU7 0UE. Registered in England and Wales with number 4455025 VAT No. 8567 195 80

Subject: RE: The Embankment Twickenham

Dear Sir/Madam

Verizon is a licensed Statutory Undertaker.

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

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

Yours faithfully

Plant Protection Officer E.mail osp-team@uk.verizon.com