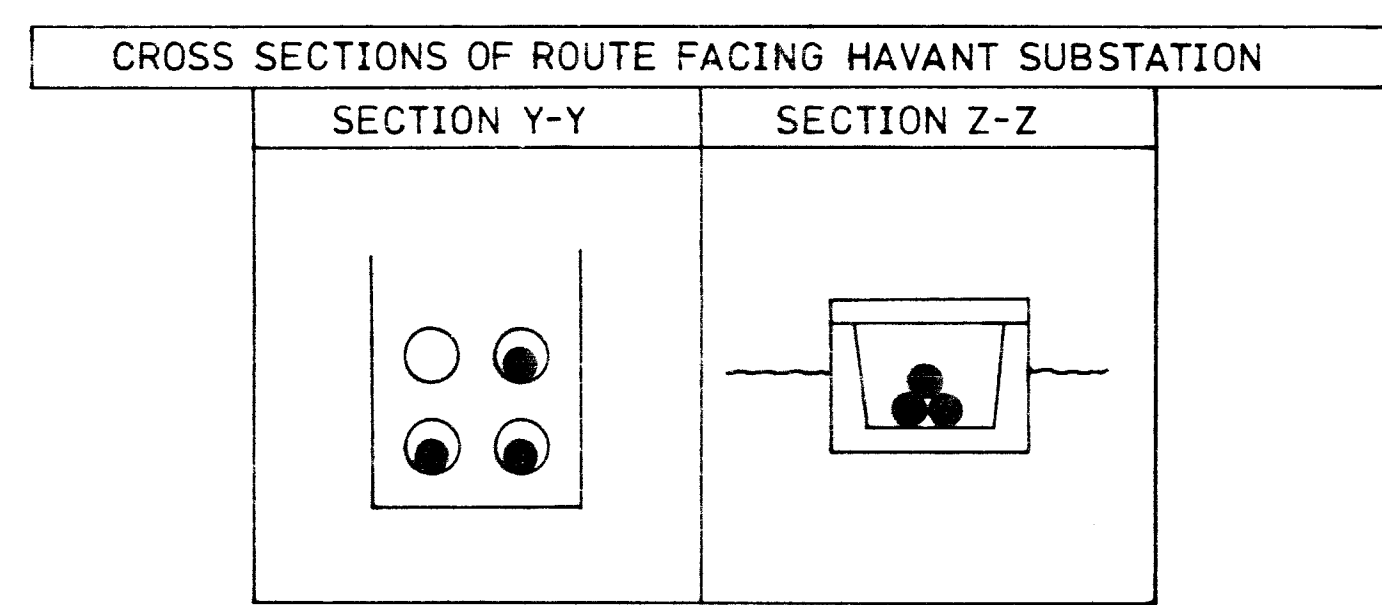


FEEDER No. 2216

CROSS SECTIONS OF ROUTE FACING FRATTON SUB STN.			
A-A	B-B	C-C	D-D
125 MM. A.C. TUBES	125 MM. A.C. TUBES.	125 MM. A.C. TUBES.	125 MM. A.C. TUBES.
190 S.M.T.	190 S.M.T.	190 S.M.T.	



REFERENCE:
 SURFACE ROUTE ———
 BURIED ROUTE - - - - -
 33 KV. FEEDER JOINT. ●
 PILOT JOINT. ■

TOTAL LENGTH OF H.V. FEEDER NO. 2216
 3 X S/C, 185MM², X.L.P.E. CABLE.

RED PHASE : 5596.0 METRES
 YELLOW PHASE : 5594.5 METRES
 BLUE PHASE : 5595.6 METRES

SCALE: - 1/1250
 TITLE: - BRITISH RAILWAYS SOUTHERN REGION
 REPLACEMENT OF FEEDER 215, 1972
 REPLACEMENT OF FDR. 2216, 1998.

HAVANT S/S TO FARLINGTON S/S
 FEEDER No. 2216
 HAVANT S/S TO FRATTON S/S

ALT: 200m Nov. 2000
 APP:
 Details Of 1998
 H.V. Cable Renewals
 Added.

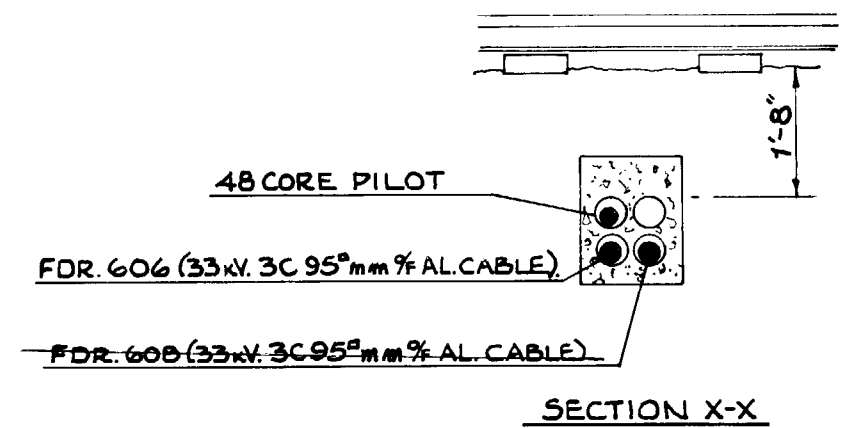
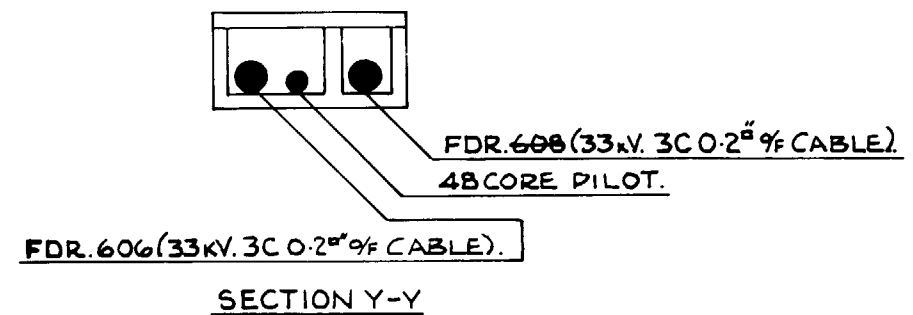
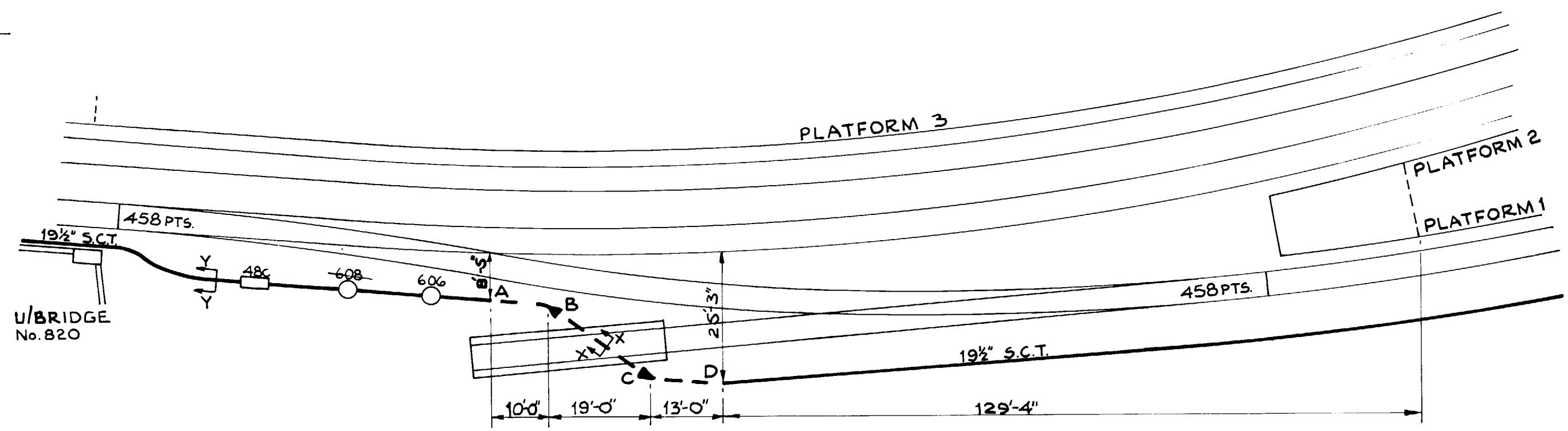
FEEDER No. 215 SHEET 2 OF 9

FEEDER No. 215 185mm² 3 CORE 33 KV. A.C. CONDUCTOR OIL FILLED C.S.A. P.V.C. SHEATHED CABLE.

A
 ALT: KS 24.2.97
 CHD 16.1.97
 APP PR 25.2.97
 FEEDER 608
 ABANDONED
 BETWEEN STONE-
 CROSSING &
 DARTFORD S/S

DARTFORD STATION (LONDON END)

TO LITTLEBROOK T.P. HUT
 TO STONE CROSSING



ROUTE DETAILS

A to B 19 1/2" B.C.T. FALLS FROM SURFACE TO 1'-8".

B to C 4x5" 1/2" TUBES 1'-8" DEEP.

C to D 19 1/2" B.C.T. RISES FROM 1'-8" TO SURFACE.

FEEDER 608 ABANDONED

FEEDER Nos. 606 & 608
AND PILOT CABLE
 DARTFORD S/S TO STONE CROSSING S/S
 DARTFORD S/S TO NORTHFLEET S/S

1 : 240

Veth
 24.1.78

PWC.19-4-78.

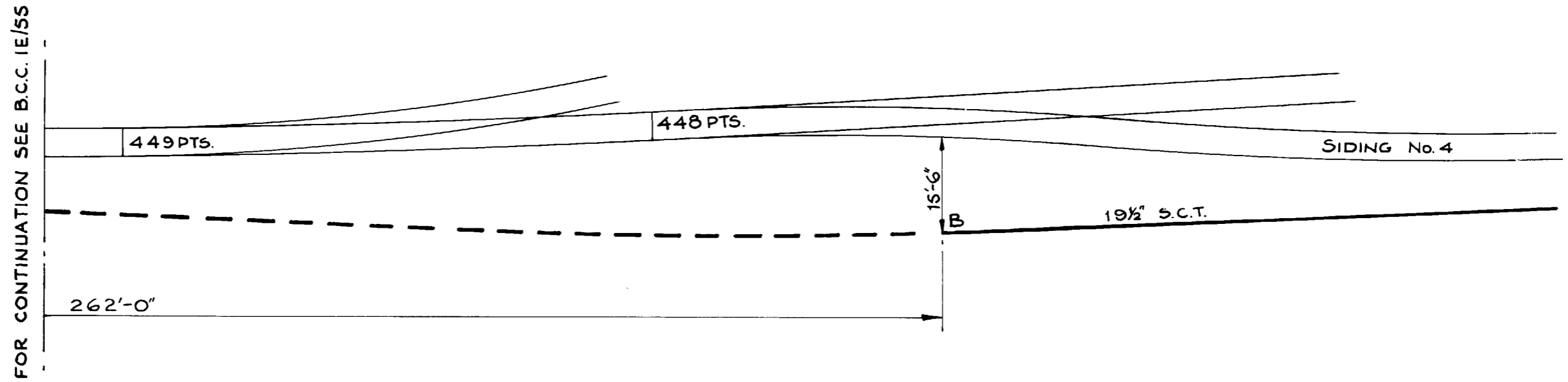
1E/54 A

A | ALT KS 24.2.97
CHD 25.2.97
APP Pd 25.2.97
FEEDER 608
ABANDONED
BETWEEN STONE
CROSSING &
DARTFORD S/S

← TO DARTFORD S/S
← TO DARTFORD

DARTFORD SIDINGS

TO LITTLEBROOK T.P. HUT →
TO STONE CROSSING →



FOR ROUTE DETAILS SEE B.C.C. 1E/55

FEEDER 608 ABANDONED

FEEDER Nos. 606 & 608
AND PILOT CABLE

DARTFORD S/S TO STONE CROSSING S/S

DARTFORD S/S TO NORTHFLEET S/S

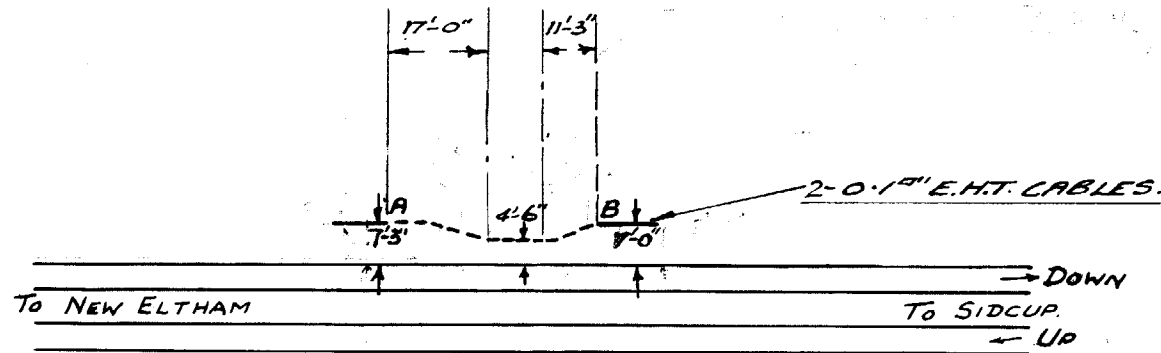
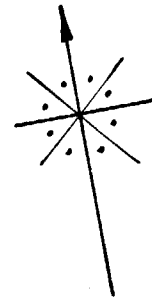
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WLD 24.1.78

P.W.C. 19-4-78.

1E/55A

SITE OF
2ND OCCUPATION CROSSING FROM NEW ELTHAM
TOWARDS DARTFORD

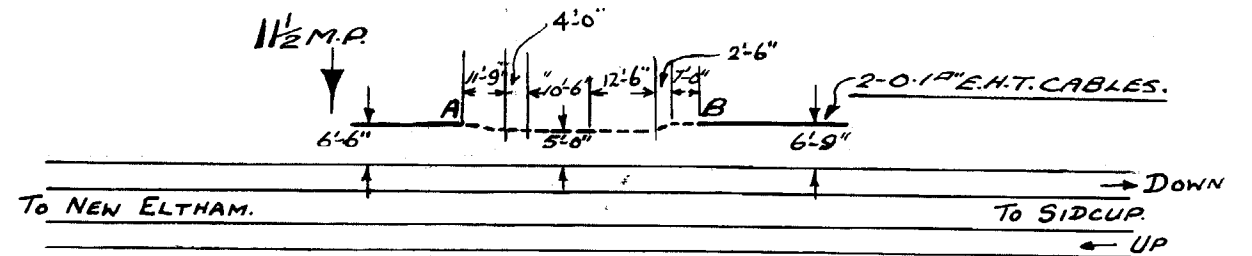
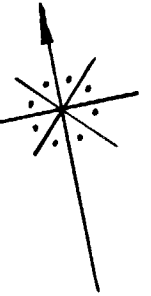


FOR TYPE OF TROUGHING USED,
SEE ELECTRICAL ENGINEER'S DRG.
NO. B-754, OR ELECTRICAL ENGINEER FOR
NEW WORKS DRG. NO. SK. 5198.

A-B. E.H.T. CABLES, APPROX 39'-0" IN HOWARD
TROUGHING, APPROX. 4'-6" DEEP.

CHART NO. S.E. 79.

SITE OF
3RD OCCUPATION CROSSING FROM NEW ELTHAM
TOWARDS DARTFORD



FOR TYPE OF TROUGHING USED, SEE
ELECTRICAL ENGINEERS DRG. NO. B-754, OR
ELECTRICAL ENGINEER FOR NEW WORKS
DRG. NO. SK. 5198.

A-B. E.H.T. CABLES APPROX. 49'-0" IN HOWARD
TROUGHING, APPROX. 4'-6" DEEP.

CHART NO. S.E. 80.

SOUTHERN RAILWAY.
ELECTRICAL ENGINEER FOR NEW WORKS.

DRAWING OFFICE
LONDON BRIDGE.

BURIED CABLE CHART. 5008

2ND & 3RD OCCUPATION CROSSINGS FROM
NEW ELTHAM TOWARDS DARTFORD

SCALE 1" = 40 FEET. DRGN 133739

B-1095

Dr'n by: P.M. 11.7.49
Chd by: P.S. 8.8.52
App'd by: F.W.L. 3.8.53
Conductor Rails removed
on Chart No. S.E. 80 & 79.

A. 15/6/38.
CROSSING SHOWN
ON CHARTS S.E.
79 & 80 CLOSED.
M.S.

1 DATE 4-10-30.
CHECKED. J.O.

Network Rail - Drainage

Legend

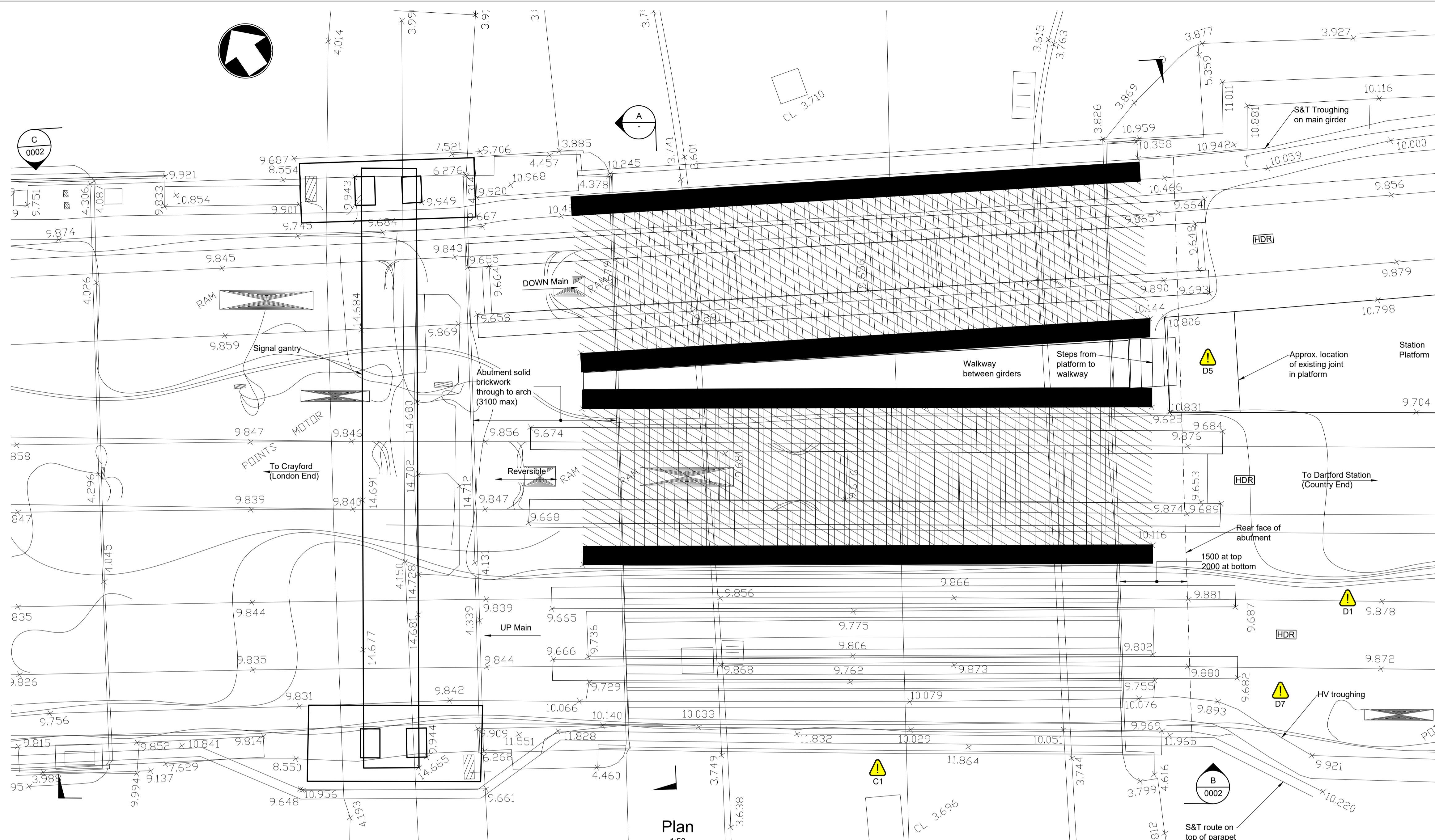
- Company Ownership**
- Freehold Ownership
 - Leasehold Ownership
 - Prohibitive Interest
 - Bridge (Rail over Rail)
 - Bridge (Rail over River)
 - Bridge (Rail over Road)
 - Bridge (Road over Rail)
 - Level Crossing
 - Tunnel
 - Order Polygon
- DB Asset Line**
- DC Asset Line**



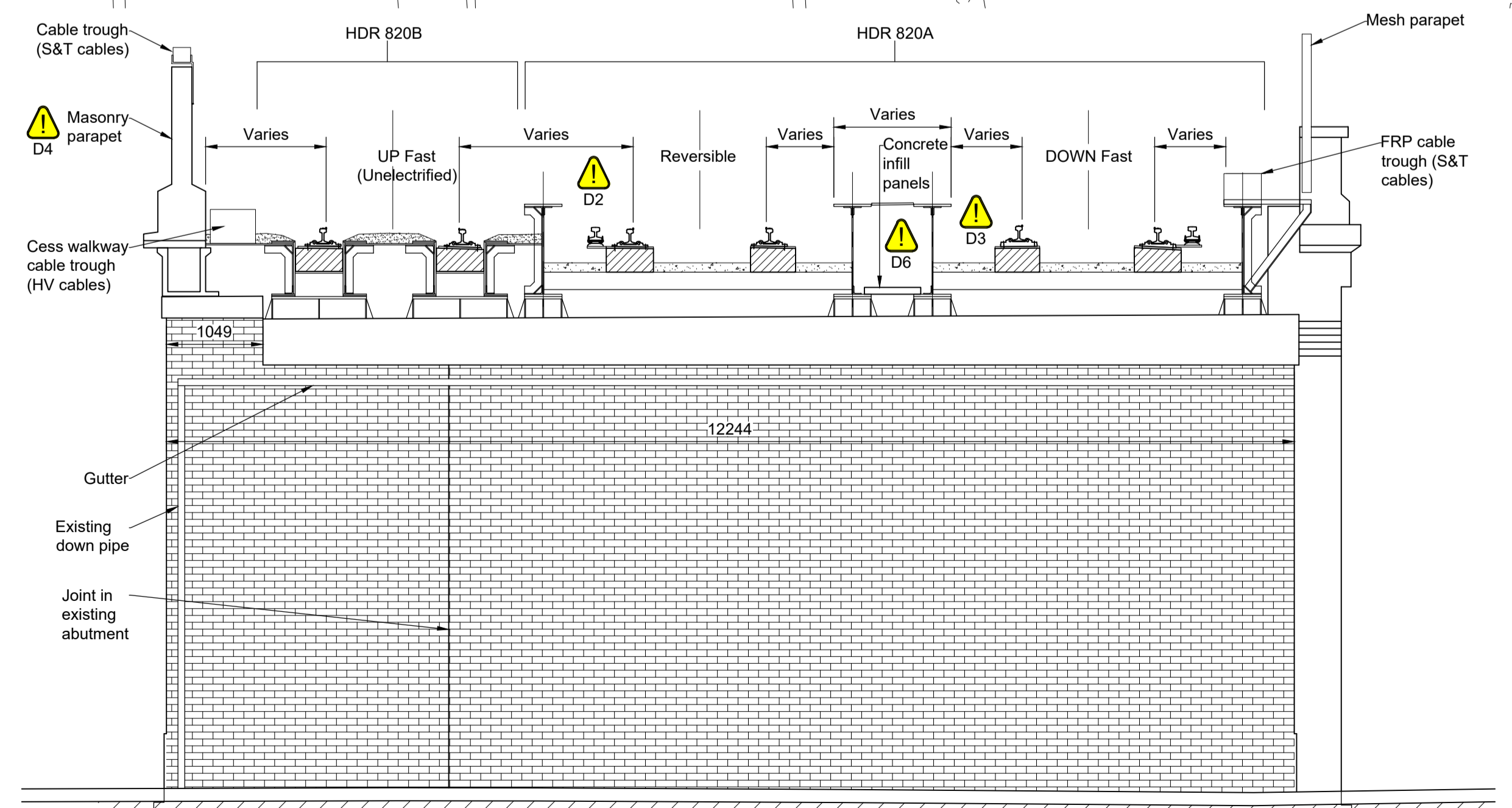
Order Ref: 177095
 Plot Scale: 1:1250
 Page Index: 1
 Centre X, Y: 554263, 174522
 Plot Date: 01/08/23



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 Ordnance Survey 0100040692



Plan
1:50



Section
A
1:50



View Looking North

- Notes
- All dimensions in millimetres uno.
 - All level in metre uno.
 - Topographical Survey by Stuart Callaghan Surveyors carried out in May 2016 with a follow up survey in November 2016.
 - Abutment surveys undertaken by BAM Nuttall in October 2016.
 - The existing load rating of the bridge is RA0, limited by the poor condition of the bridge and by the trough decking.
 - The HDR line is currently subject to a 20mph speed restriction.
 - The required load rating of the bridge is RA10 at 60mph (linespeed).
 - The weight of the existing deck is as follows:
 - HDR 820A (Reversible Deck) Ironwork + Concrete = 39T
 - HDR 820A (DOWN Fast Deck) Ironwork + Concrete = 39T
 - HDR 820B (UP Fast Deck) Steelwork = 23T
 - Parapet girder and masonry parapet = 28T
 - The existing bridge paint system contains lead. **D3**
 - Contractor to confirm existing buried cable layout in the highway and cable layout at track level through a services search. The Contractor is then to protect the services during the works.
 - Track alignment to match existing. Refer to Track Form A & Form B.
 - The condition of the structure is poor and care is required during the removal of the bridge to ensure sudden failure of elements does not occur. **D2**
 - Prior to the removal of the bridge deck, the east abutment is to be adequately propped or anchored (refer to Drg. No. MMD-372821-C-DR-00-XX-0162).
 - Abutment thicknesses shown on this drawing are based on the abutment coring report by BAM Nuttall (October 2016).

Safety, Health and Environmental Information

Notes below are additional to hazard/risks normally associated with this type of work:

Demolition

- D1 Existing railway services.
- D2 Corroded conditions of existing structural components.
- D3 Lead in existing bridge paint system.
- D4 Instability of brick parapet wall.
- D5 Possible services in platform.
- D6 Concrete infill panels falling.
- D7 Possible presence of historical gas pipe in unknown location.

Construction

- C1 Damage to services in the road by SPMT.

These notes are based on the use of experienced and competent contractors carrying out the work using an approved safe method of working.

Refer to Designer's Risk Assessment for further details of any hazards highlighted.

Rev	Date	Drawn	Description	Ch'k'd	App'd
Z01	27/04/21	RR	AS BUILT	TK	CM
C01	13/12/19	BS	SS: Approved for Construction Shallow girder amendments	SP	MJK
A	13/10/17	PJM	Approved for construction	SP	MJK

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Client

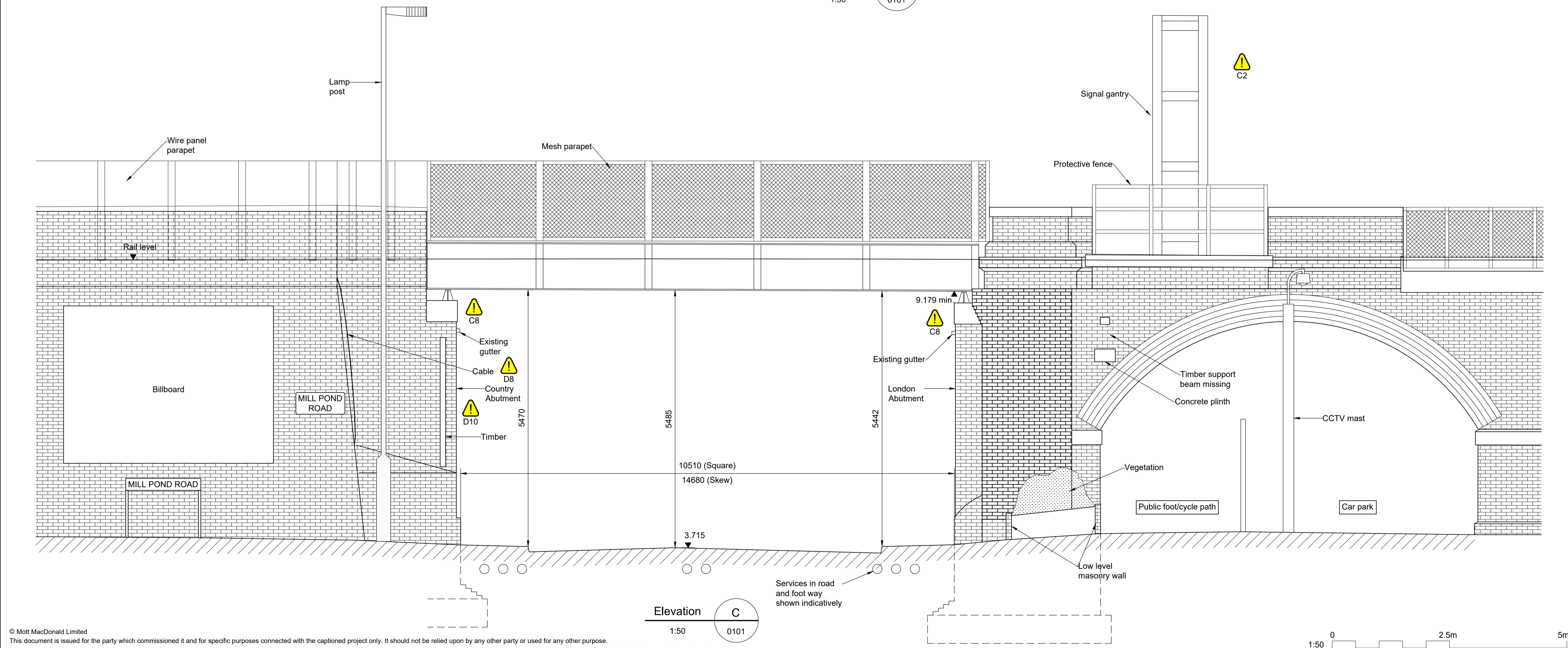
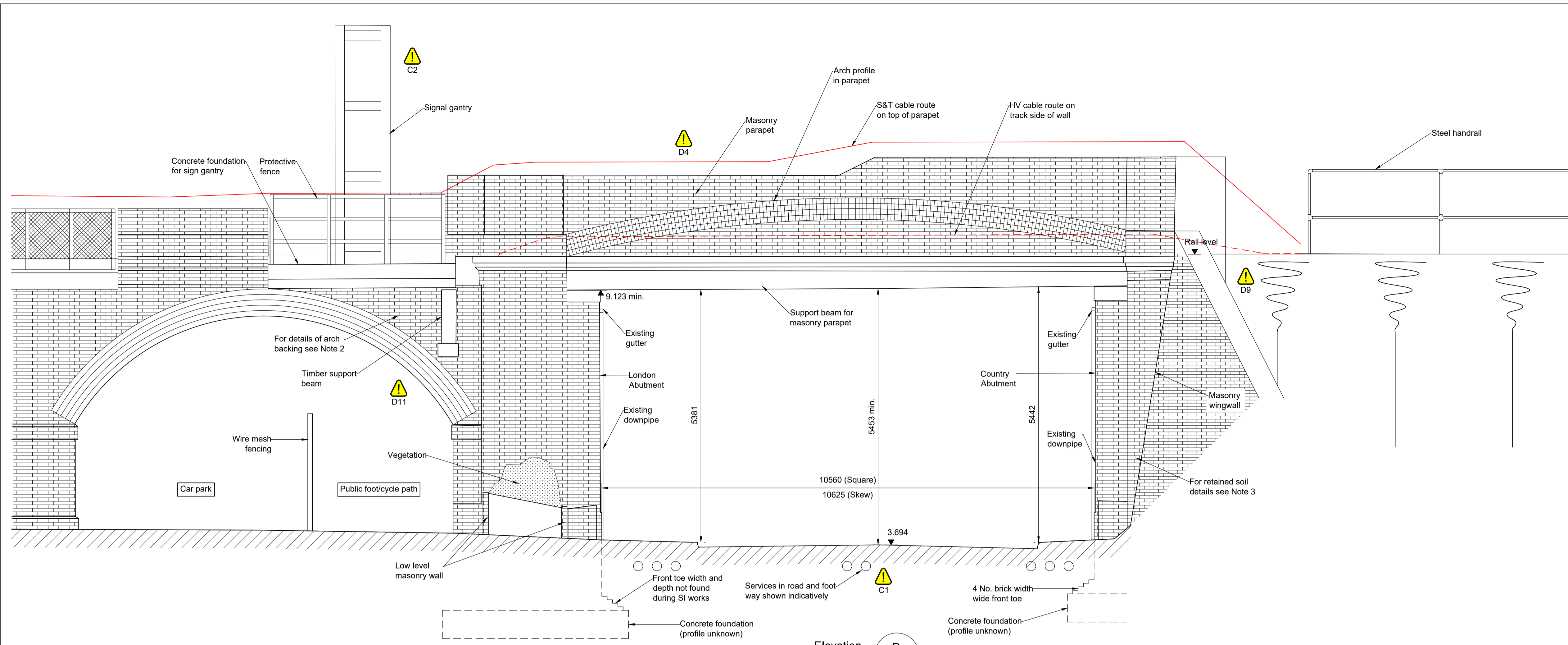
BAM Nuttall
Station Rd
Edenbridge
Kent
TN8 6HL

Title

Hythe Street Bridge Reconstruction
ELR: HDR/820A, HDR/820B
Mileage : 17m 17yds
Existing General Arrangement
Sheet 1 of 2

Designed	S. Poulson	SP	Eng check	J. Banks	JB
Drawn	P. J. Morgan	PJM	Coordination	S. Robinson	SR
Dwg check	S. Poulson	SP	Approved	M. J. Kynoch	MJK
Scale at A1	Status	Rev	Security		
As Shown	ASB	Z01	STD		

Drawing Number
MMD-372821-C-DR-00-XX-0101



- Notes
- For notes, see drawing MMD-372821-C-DR-00-XX-0001.
 - Arch backing is solid brickwork with compacted shingle fill above (see BAM Nuttall coring report (October 2016) for details).
 - Soil behind abutment is typically well compacted chalk (see BAM Nuttall coring report (October 2016) for details).
 - Existing headroom is 5453 min.

Safety, Health and Environmental Information ⚠

Notes below are additional to hazard/risks normally associated with this type of work:

Demolition

- D4 Instability of brick parapet wall.
- D8 Existing cable infrastructure on abutment/wing walls.
- D9 Possible presence of discrete buttresses in east abutment.
- D10 Fractured brickwork requires stitching prior to reconstruction refer to Drg. No. MMD-372821-C-DR-00-XX-0164.
- D11 Extensive brickwork backing in the arch.

Construction

- C1 Damage to services in the road by SPMT.
- C2 Restricted headroom under signal gantry.
- C8 Significant quantities of steel cast into existing concrete cill beams.

These notes are based on the use of experienced and competent contractors carrying out the work using an approved safe method of working.

Refer to Designer's Risk Assessment for further details of any hazards highlighted.

Rev	Date	Drawn	Description	Ch'k'd	App'd
Z01	27/04/21	RR	AS BUILT	TK	CM
C01	13/12/19	BS	SS: Approved for Construction Shallow girder amendments	SP	MJK
A	13/10/17	PJM	Approved for construction	SP	MJK

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Client

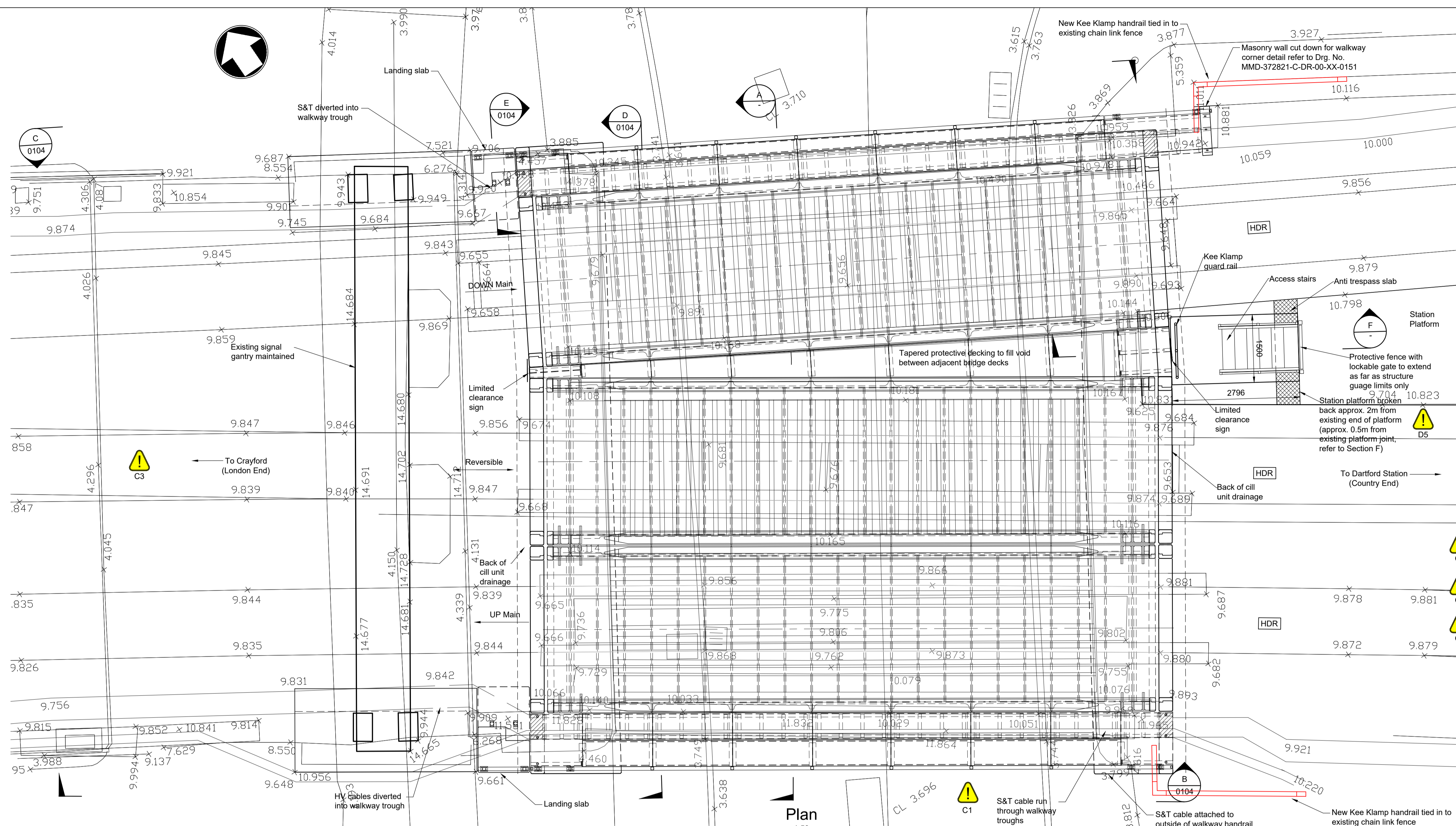
BAM Nuttall
Station Rd
Edenbridge
Kent
TN8 6HL

Title

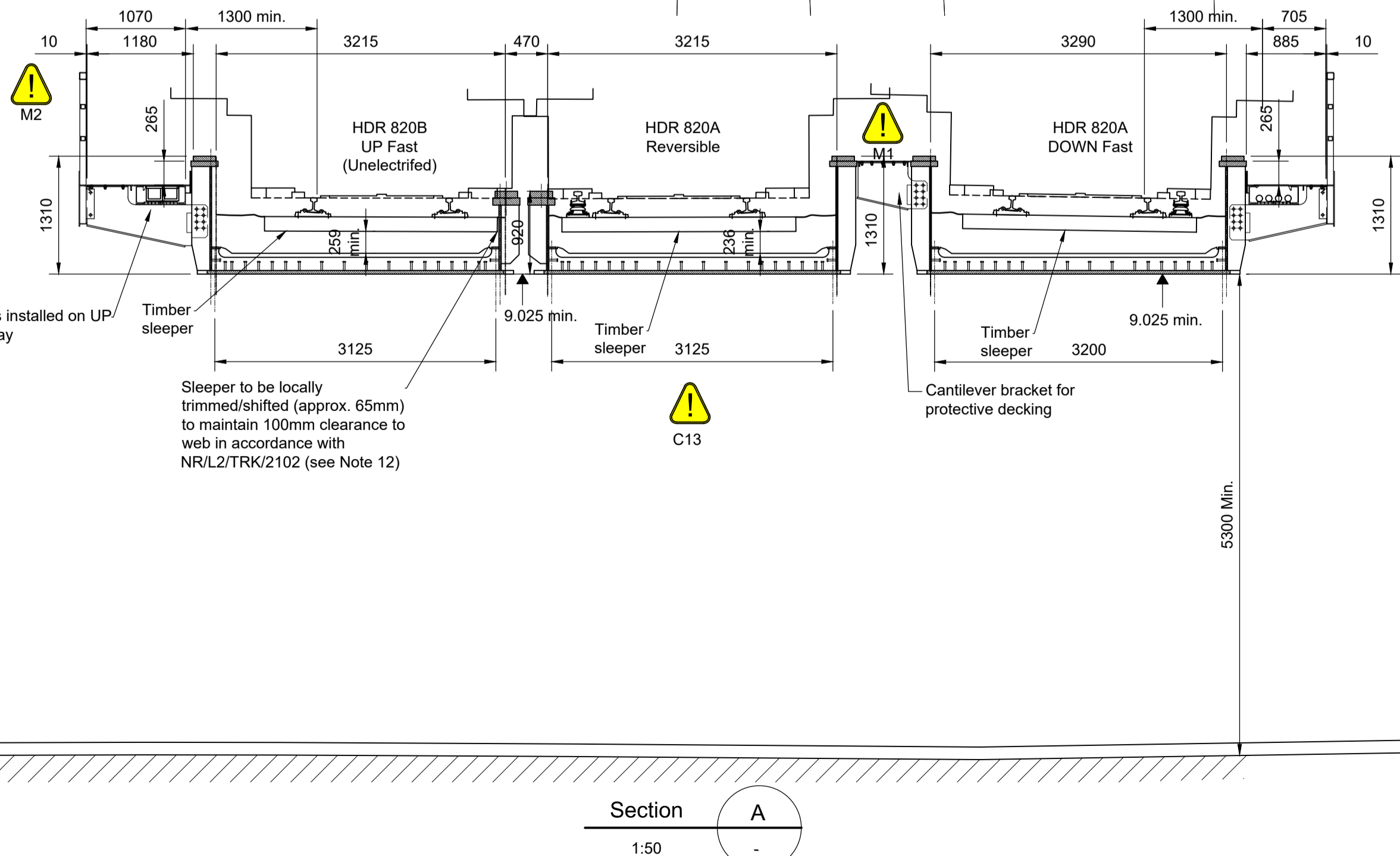
Hythe Street Bridge Reconstruction
ELR: HDR/820A, HDR/820B
Mileage : 17m 17yds
Existing General Arrangement
Sheet 2 of 2

Designed	S. Poulson	SP	Eng check	J. Banks	JB
Drawn	P. J. Morgan	PJM	Coordination	S. Robinson	SR
Dwg check	S. Poulson	SP	Approved	M. J. Kynoch	MJK
Scale at A1	Status	Rev	Security		
As Shown	ASB	Z01	STD		
Drawing Number			MMD-372821-C-DR-00-XX-0102		

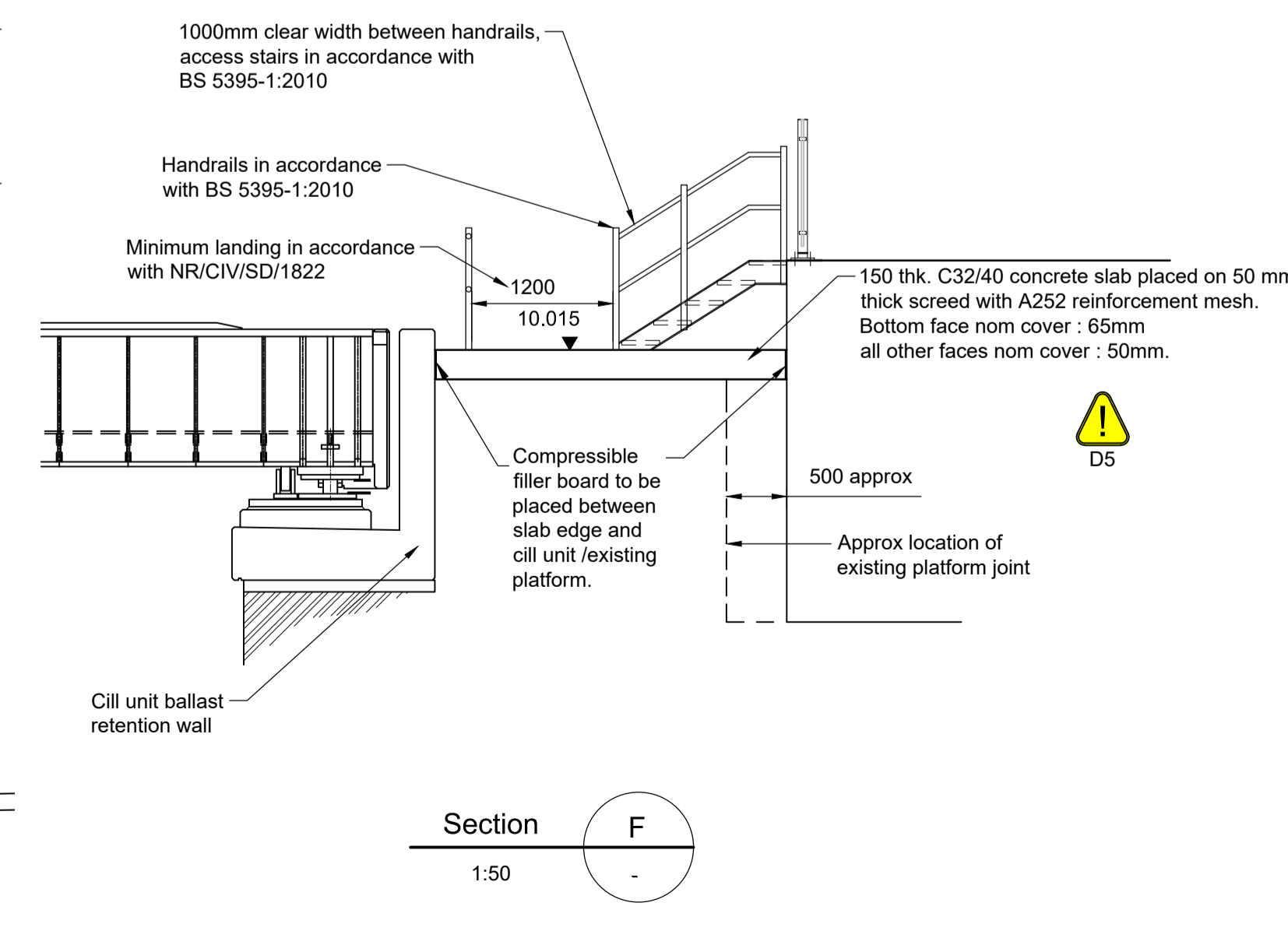
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Plan
1:50



Section A
1:50



Section F
1:50

Safety, Health and Environmental Information

Notes below are additional to hazard/risks normally associated with this type of work:

Demolition
D5 Possible services in platform.

Construction
C1 Damage to services in the road by SPMT.
C3 Undermining track S&C.
C4 Loading restrictions above arch to avoid instability.
C5 Loading restrictions above east abutment to avoid instability.
C9 Abutment ground anchors required in east abutment for stability.
C13 Deck construction tolerance to be 7mm horizontally and 13mm vertically.

Maintenance
M1 Unsafe walking route.
M2 Risk of cables falling onto road during maintenance.

These notes are based on the use of experienced and competent contractors carrying out the work using an approved safe method of working.

Refer to Designer's Risk Assessment for further details of any hazards highlighted.

- Notes**
- All dimensions in millimetres uno.
 - All level in metre uno.
 - Topographical Survey by Stuart Callaghan Surveyors carried out in May 2016 with a follow up survey in November 2016.
 - Abutment surveys undertaken by BAM Nuttall in October 2016.
 - The existing bridges are to be replaced with 3 No. half-through steel U-decks in accordance with Network Rail Standard Design Drawings series 1300.
 - The lift weight of the new decks (not including bearings, walkways, ballast and track) based on a 14m deck and interpolated from drawing NR/CIV/SD/1301 Revision F are:
 - HDR820A Down Fast = 61T
 - HDR820A Reversible = 61T
 - HDR820B Up Fast = 61T
 - Triple deck cill unit (2 No.) = 41T each
 - The bridge is to have a minimum of ballast depth as stated on this drawing and a maximum of 300mm ballast.
 - Bridge is specified to carry 27MTPa of EC Mix load for fatigue purposes.
 - All track cables are to be relocated as required by the Contractor.
 - S&T cables to be rerouted to run along the outside of the walkway handrail.
 - HV troughs to be rerouted into the walkway service routes.
 - The sleepers on the UP Fast line are to be standard length (2585mm) timber sleepers (150mm maximum thickness). Shifted laterally to achieve the minimum 100mm gap between girder web and sleeper end in accordance with NR/L2/TRK/2102.
 - Bridge colour to be as follows:
 - Stiffeners, flanges, handrail etc.: N1 RAL6028 Pine green.
 - Web panels: N1 RAL6021 Pale green.
 - Underside: N1 RAL6028 pine green.
 All protective coating works in accordance with Standard design drawings 1350, 1351 and 1352.
 - Permanent Way to be replaced like for like. Replacement of the existing S&C is not considered in this package of drawings. See Track Form A and Form B for further details.
 - The temporary stability of the existing signal gantry is to be ensured by the Contractor and in accordance with the Designer's requirements set out in a separate temporary works submission.
 - No temporary works are required during excavation and deck removal for the west abutment. However a 10 kPa loading restriction will be in place (refer to Drg. No. MMD-372821-C-DR-00-XX-0162).
 - Temporary propping/anchoring to be installed to the east abutment for stabilisation prior to removal of the existing deck (refer to Drg. No. MMD-372821-C-DR-00-XX-0162).
 - A 10kPa loading restriction above the east abutment must be enforced in addition to the temporary stabilisation works (refer to Drg. No. MMD-372821-C-DR-00-XX-0162).
 - Method of installation is by SPMT.
 - Temporary supporting and permanent relocation of the cables to be undertaken by the Contractor.
 - Trackside cables not shown for clarity. Contractor to relocate cables in permanent scheme.
 - Bridge bearing areas to be protected against roosting birds using demountable grated mesh panelling set between top of cill units and underside of bridge deck. Other potential roost areas (e.g. bridge drain pipe and ledges of cantilever walkway brackets) to be protected using corrosion resistant spikes.
 - A full scale trial erection is required prior to the works.

Rev	Date	Drawn	Description	Ch'kd	App'd
Z01	27/04/21	RR	AS BUILT	TK	CM
C01	13/12/19	BS	S5: Approved for Construction Shallow girder amendments	SP	MJK

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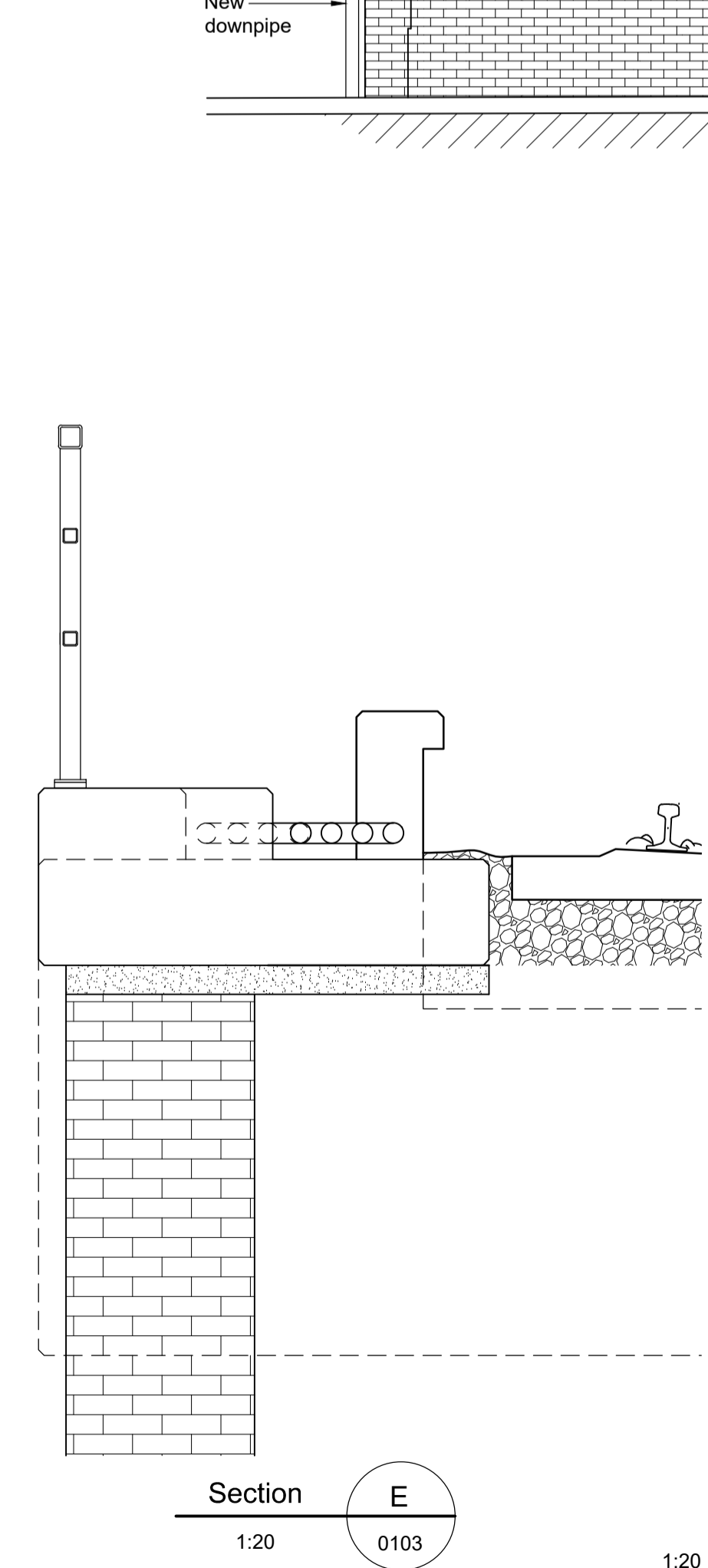
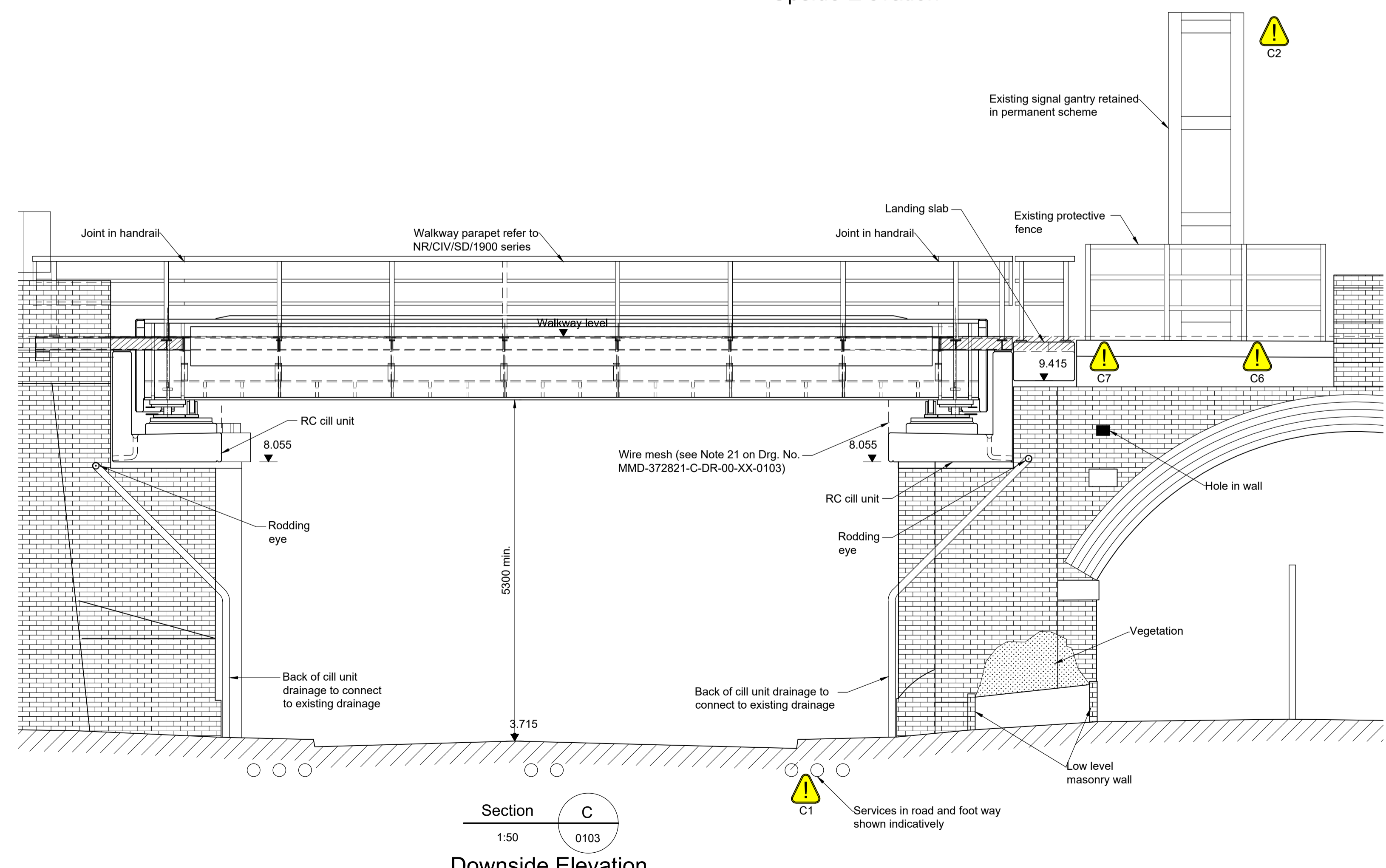
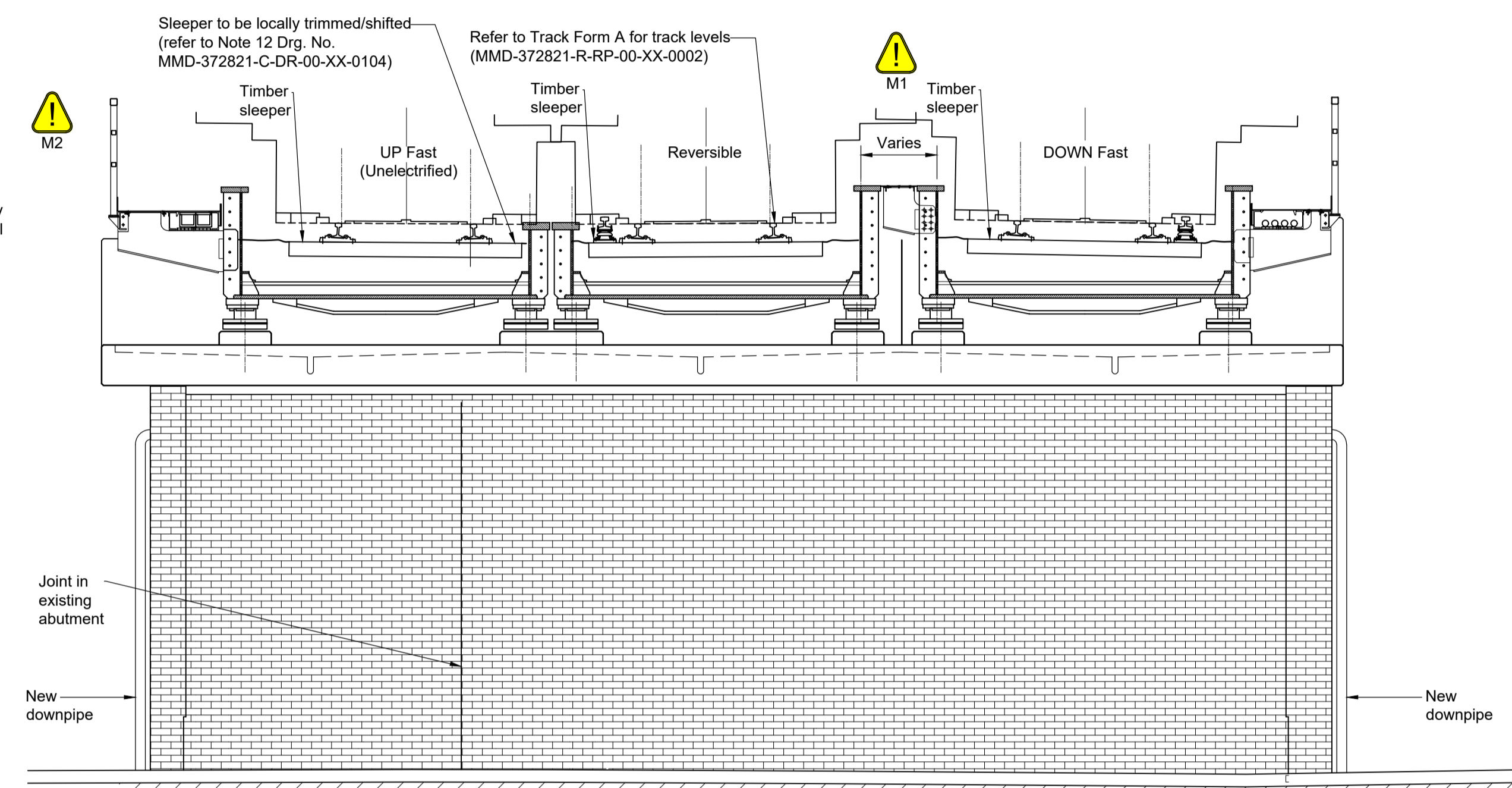
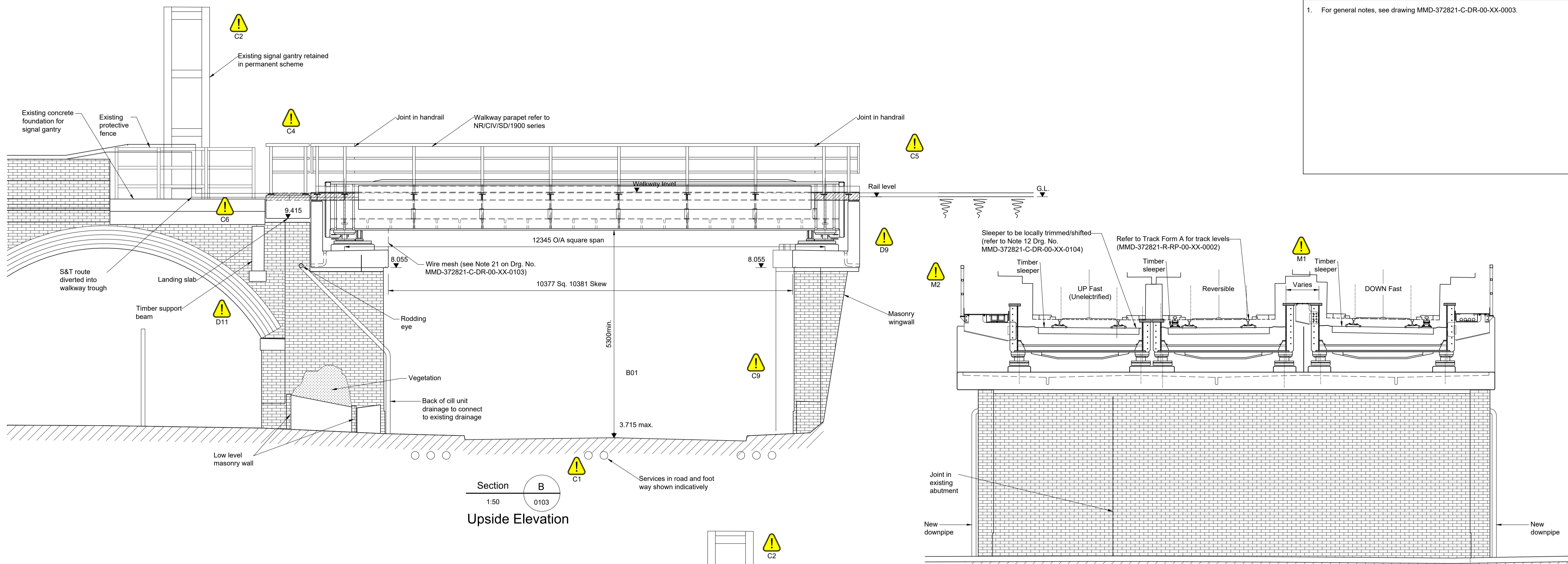
Title

Hythe Street Bridge Reconstruction
ELR: HDR/820A, HDR/820B
Mileage : 17m 17yds
Proposed General Arrangement
Sheet 1 of 2

Designed	S. Poulson	SP	Eng check	J. Banks	JB
Drawn	P. J. Morgan	PJM	Coordination	S. Robinson	SR
Dwg check	S. Poulson	SP	Approved	M. J. Kynoch	MJK
Scale at A1	Status	Rev	Security		
As Shown	ASB	Z01	STD		

Drawing Number
MMD-372821-C-DR-00-XX-0103

Notes
 1. For general notes, see drawing MMD-372821-C-DR-00-XX-0003.



Safety, Health and Environmental Information ⚠️

Notes below are additional to hazard/risks normally associated with this type of work:

Demolition
 D9 Possible presence of discrete buttresses.
 D11 Extensive brickwork backing to arch.

Construction
 C1 Damage to services in the road by SPMT.
 C2 Restricted headroom under signal gantry.
 C4 Loading restrictions above arch refer to Drg. No. MMD-372821-C-DR-00-XX-0162.
 C5 Loading restrictions above east abutment refer to Drg. No. MMD-372821-C-DR-00-XX-0162.
 C6 Risk of undermining signal gantry refer to Drg. No. MMD-372821-C-DR-00-XX-0162.
 C7 Risk of ballast instability in temporary case during battering of ballast behind abutment. Abutment anchors required for stability refer to Drg. No. MMD-372821-C-DR-00-XX-0162.
 C9

Maintenance
 M1 Unsafe walking route.
 M2 Risk of cables falling onto road during maintenance.

These notes are based on the use of experienced and competent contractors carrying out the work using an approved safe method of working.
 Refer to Designer's Risk Assessment for further details of any hazards highlighted.

Rev	Date	Drawn	Description	Ch'k'd	App'd
Z01	27/04/21	RR	AS BUILT	TK	CM
C01	13/12/19	BS	SS: Approved for Construction Shallow girder amendments	SP	MJK
A	13/10/17	PJM	Approved for construction	SP	MJK

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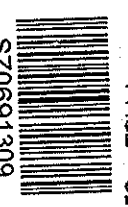
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 TN8 6HL

Title
Hythe Street Bridge Reconstruction
 ELR: HDR/820A, HDR/820B
 Mileage : 17m 17yds
 Proposed General Arrangement
 Sheet 2 of 2

Designed	S. Poulson	SP	Eng check	J. Banks	JB
Drawn	P. J. Morgan	PJM	Coordination	S. Robinson	SR
Dwg check	S. Poulson	SP	Approved	M. J. Kynoch	MJK
Scale at A1	Status	Rev	Security		
As Shown	ASB	Z01	STD		

Drawing Number
MMD-372821-C-DR-00-XX-0104



SZ0691309

Rail First

Fax Transmission

Rail First Ltd

To: Tony Norman-Railtrack Southern

Floor 13, Marlowe House
109 Station Road, Sidcup, Kent
DA15 7AU

Fax number: 0207 902 3632 Date: 14/03/01

Tel: 020 8308 7314
Fax: 020 8308 7309

From: Tim Axten

Total number of pages (including this one): 2

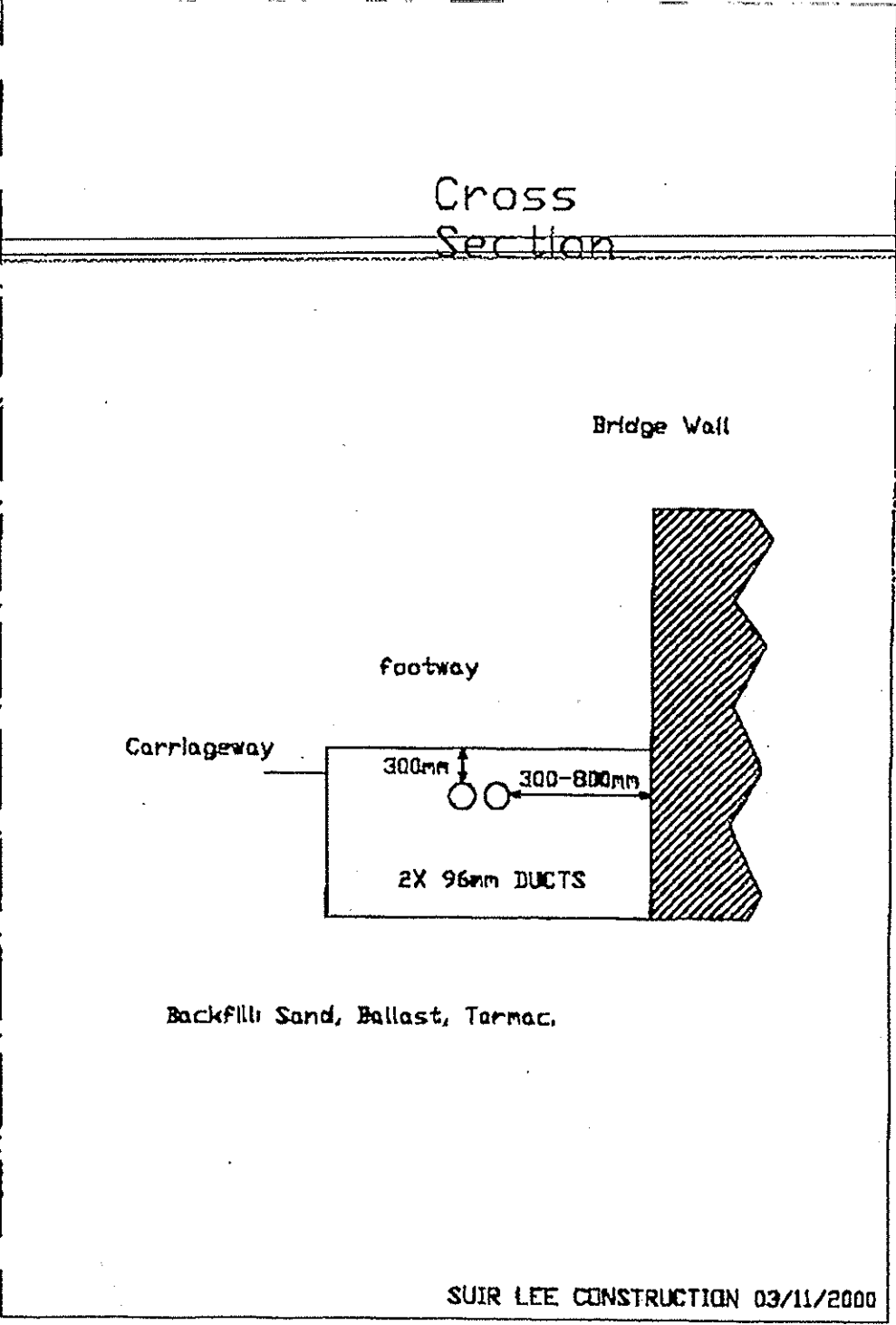
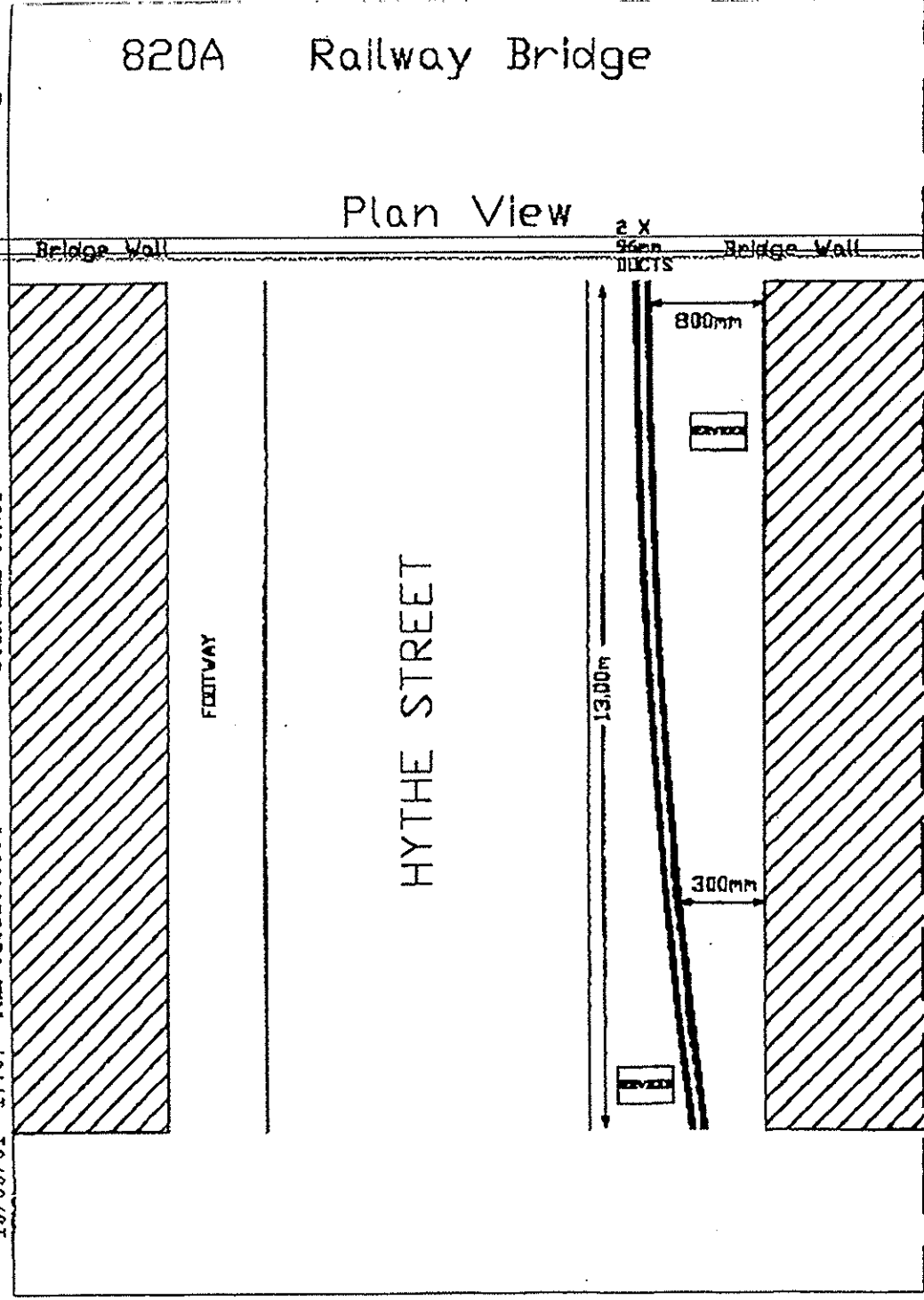
**CRAWFORD TO DARTFORD RAILWAY UNDERBRIDGE No 820A&B.
INSTALLATION OF DUCT ROUTE FOR TELEWEST. HR 217405A**

Following the completion of the above works please find attached the as built drawing for the above works for your information and records.
This completes our work under this order and we will issue a completion certificate unless we hear otherwise within the next fourteen days.
Do not hesitate to contact us should you require any further information or assistance.

Yours Sincerely

T. Axten
Project Manager

Is it which Footway East / West?



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13/03/01 17:07 FAX 013222558854 SUIR-LEE CONST

820A Railway Bridge

From: Plantenquiries <Plantenquiries@ocugroup.com>
Sent: 03 August 2023 15:46
To: Utility Solutions GDC Requests
Subject: E08-23-0809 RE: Plant Enquiry - 208638 - Site off Hythe Street, Dartford - Please respond by 10/08/2023

Dear Sir or Madam,

Thank you for your plant enquiry below.

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

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

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

Regards

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

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



From: Utility Solutions Orders <requests.utilitysolutions@atkinsglobal.com>
Sent: Tuesday, August 1, 2023 7:13 AM
To: Plantenquiries <Plantenquiries@ocugroup.com>
Subject: Plant Enquiry - 208638 - Site off Hythe Street, Dartford - Please respond by 10/08/2023

External Email Warning: Do not click on links or open attachments unless you recognise the sender & know

From: NRSWA <nrswa.nrswa@sky.uk>
Sent: 02 August 2023 17:13
To: Utility Solutions GDC Requests
Subject: Plant Enquiry - 208638 - Site off Hythe Street, Dartford - 10/08/2023



Thank you for your enquiry.

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

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

Regards



NRSWA Department
Sky UK - Technology - Operations

 nrswa@sky.uk  +44 2070323234

From: Utility Solutions Orders <requests.utilitysolutions@atkinsglobal.com>
Sent: Tuesday, August 1, 2023 7:13 AM
To: NRSWA <nrswa.nrswa@sky.uk>
Subject: [EXTERNAL] Plant Enquiry - 208638 - Site off Hythe Street, Dartford - Please respond by 10/08/2023

Our Reference: 208638
Site Name: Site off Hythe Street, Dartford
Works Description: BoringVertical
Site Grid References: 554208 174565

To whom it may concern,

Please find enclosed a plant enquiry for your attention.

From: UK OSP-Team . <osp-team@verizon.com>
Sent: 07 August 2023 13:11
To: Utility Solutions GDC Requests; UK OSP-Team
Subject: Re: Plant Enquiry - 208638 - Site off Hythe Street, Dartford - Please respond by 10/08/2023

Dear Sir/Madam

Verizon is a licensed Statutory Undertaker.

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

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

Yours faithfully

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

On Tue, 1 Aug 2023 at 07:15, Utility Solutions Orders <requests.utilityolutions@atkinglobal.com> wrote:

Our Reference: 208638
Site Name: Site off Hythe Street, Dartford
Works Description: BoringVertical
Site Grid References: 554208 174565

To whom it may concern,

Please find enclosed a plant enquiry for your attention.

We request plans showing the location of your company's affected plant in relation to the entire site area shown within the boundary on the attached map. Grid references and



As of 01/08/2023, Virgin Media are deemed to be not affected by your site.

An additional response from Virgin Media in relation to your area of interest is available on request from Landmark Customer Services with prices starting from £45.55 + VAT.

No liability of any kind whatsoever is accepted by Landmark Information Group, its servants or agents, for any error or omission in respect of information contained in this report. The underground services must be verified and established on site before any excavation is carried out.

From: National Plant Enquiries
Sent: 07 August 2023 19:32
To: Utility Solutions GDC Requests
Subject: RE: Plant Enquiry - 208638 - Site off Hythe Street, Dartford - Please respond by 10/08/2023
Attachments: 208638.pdf; Special Requirements v3.pdf

Please accept this email as confirmation that Vodafone: Fixed **does** have apparatus within the vicinity of your proposed works detailed below.

Please see attached network information.

Please note that according to our records there is leased and/or third party network within your proposed works. However, because the plant is leased/third party we strongly recommend you contact all other utility providers to gather the extent of services within that area. Unfortunately, we are unable to advise who the plant is leased to or who the third party is.

IMPORTANT - PLEASE READ = Your Next Step?:-

Where apparatus is affected and requires diversion, please send all the scheme related proposals that affects the Vodafone Network to c3requests@vodafone.com with a request for a 'C3 Budget Estimate'. Please ensure you include a plan showing proposed works. (A location plan is insufficient for Vodafone to provide a costing). These estimates will be provided by Vodafone directly, normally within 20 working days from receipt of your request. Please include proof of this C2 response when requesting a C3 (using the 'forward' option). Diversionary works may be necessary if the existing line of the highway/railway or its levels are altered.

If you require a quote for new development, commercial site connections - please email your requirements and associated plans to c3requests@vodafone.com and a budget estimate will be returned, within 10 working days of receipt

Plant Enquiries Team
T: +44 (0)1454 662881
E: osm.enquiries@atkinsglobal.com

This response is made only in respect to electronic communications apparatus forming part of the Vodafone Limited electronic communications network formerly being part of the electronic communications networks of Cable & Wireless UK (now re-named Vodafone Enterprise UK), Energis Communications Limited, Thus Group Holdings Limited and Your Communications Limited.

ATKINS working on behalf of Vodafone: Fixed

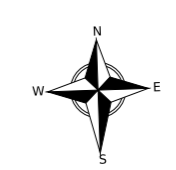


PLEASE NOTE:

The information given is indicative only. No warranty is made as to its accuracy. This information must not be solely relied upon in the event of excavation or other works carried out in the vicinity of Vodafone plant. No liability of any kind whatsoever is accepted by Vodafone, its servants, or agents, for any error or omission in respect of information contained on this information. The actual position of underground services must be verified and established on site before any mechanical plant is used. Authorities and contractors will be held liable for the full cost of repairs to Vodafone's apparatus and all claims made against them by Third parties as a result of any interference or damage.



Please consider the environment before printing this e-mail



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Legend

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

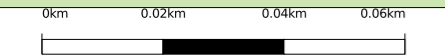


Vodafone Limited (No01471587) registered office is at Vodafone House, The Connection, Newbury, Berkshire, RG142FN

Plot Date : 07/08/2023 Scale : 1:1250

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

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





Special Requirements relating to the External Plant Network of Vodafone

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1. Introduction

This document sets out the procedure that will apply when Other Parties intend or are undertaking works in the vicinity of Vodafone apparatus (see Appendix B for further information on what constitutes Vodafone apparatus).

2. Purpose of document

This document provides a means by which the Vodafone specific special requirements relating to their apparatus, regardless of it being situated in the public highway / road, private street, land or any other areas, is made aware to Other Parties.



3. Scope

This document will be presented to Other Parties or Contractors to encourage those undertaking works within the vicinity of Vodafone apparatus to refer to and comply with. This is in order to protect where necessary the Vodafone apparatus and to avoid damage to the apparatus and loss of service.

A National Joint Utilities Group (NJUG) document NJUG Volume 3 Guidelines on the Management of Third Party Cable Ducting provides useful reference material.

It should be noted that, where appropriate, additional information on avoiding danger from underground apparatus is contained within the HSG47 guidance book titled "Avoiding Danger from Underground Services."

4. Vodafone Network and Apparatus

Damage to Vodafone apparatus is extremely disruptive and can be expensive to repair, especially where long lengths of cable have to be replaced.

In order to maintain the network integrity and minimise disruption to service, it is essential that disturbances are absolutely minimal. When working within the vicinity of Vodafone apparatus, extreme care is necessary in order to avoid costly repairs. The Other Parties / Contractor shall make every effort to ensure that disturbance of Vodafone apparatus is no more than is absolutely necessary for the completion of the works in accordance with their contract. It should be noted that it is an offence to interfere with Vodafone apparatus without first contacting the company for advice.

5. Plant records

It is the responsibility of the Other Parties undertaking works which may affect Vodafone apparatus to obtain all relevant Vodafone plant records from our agent Atkins Global prior to works commencing. This may be done by contacting the Atkins Global Plant Enquiries Team listed in Appendix B.

Plant records for such enquiries will generally be provided within 10 working days of receipt and in compliance with the New Roads and Street Works Act 1991 [NRSWA] requirements.

6. Definitions

The following definitions are applicable in this document:

- a) **Apparatus** - means all surface or sub-surface equipment and plant used by Vodafone including any associated cables or ducts owned, leased or rented by Vodafone.
- b) **Cable** - means any polythene or other sheath containing optical fibres or metallic conductors.
- c) **Depth of cover** - means the depth from the surface to the topmost barrel of the duct nest, in the case of ducts encased in concrete, to the top of the concrete, and in the case of directly buried cable, the top of the cable.
- d) **Jointing chamber** - means any manhole, surface box or other chamber giving access to Vodafone apparatus or their network.
- e) **Utility** - means an organisation licensed to provide gas, water, electricity, Cable TV or telecommunications services.
- f) **Developer** - means an organisation licensed to develop industrial/residential premises or given license to connect to utility apparatus.



- g) **Contractor** - means the individual, firm or company contracted to undertake the work for a Utility or Other Parties.
- h) **Other Parties** - means the Utilities, Highway or Roads Authorities, Developers, Street/Roads Authority Section 50/109 licensees
- i) **Site** - means the location of, or in the vicinity of, the various works.

7. Requirements

Prior to commencing any work or moving heavy plant or equipment over any portion of the site, the Other Parties or Contractor shall notify Vodafone of their intentions. This may be done by contacting Vodafone via the contact list in Appendix B.

Upon receipt of this notification, Vodafone will identify if their apparatus is affected. If any Vodafone apparatus is affected by the works then they will arrange for the necessary records to be provided and confirm details of Vodafone apparatus and network operated within the affected area or adjacent to the proposed work site.

7.1 Location of Plant

It is the responsibility of the Other Parties or Contractors to undertake adequate plant location procedures. These may include searches for metallic cables which must be performed by actively inducing a signal in a cable conductor via a transmitter. A passive search is not considered sufficient.

Before applying a tracing signal to the Vodafone apparatus, the Other Parties or Contractors shall seek confirmation from Atkins Global that the Vodafone apparatus will not suffer any disruption to its networks normal workings as a result of the nature of the signal being induced.

7.2 Trial excavations

Optic fibre cables are very susceptible to damage from excavation tools. They are not electrically conductive and cannot be located by radio induction methods. Once an approximate location is known, the exact location must be ascertained by means of hand dug pilot holes. Where the work to be carried out by the Other Party or Contractor involves excavation in the vicinity of our apparatus, the Other Party or Contractor shall, by trial excavation at his own expense, determine the exact location and depth of the Vodafone apparatus. All excavations adjacent to the Vodafone apparatus are to be carried out by hand until the extent and /or location of the apparatus is known.

All excavation work shall be executed in accordance with the current issue of Health and Safety series booklet HSG47, Avoiding danger from underground services.

8. Depths of cover

The Other Party or Contractor should note that the minimum depths of cover for Vodafone apparatus shall be maintained together with specified separation requirements. Where the minimum depths of cover specified by Vodafone cannot be maintained, the Other Party or Contractor shall at their own expense, carry out the instructions of Vodafone requirements for the protection or diversion of their apparatus.

The Other Party or Contractor should have particular regard to the possibility of encountering Vodafone apparatus (including ducts and cables), at depths of cover other than that reported.

Surface cables (such as cables on bridges or walls) which are liable to be placed in danger from the Other Parties or Contractors works shall be protected, at the Other Parties expense, as directed by the Vodafone representative.



9. Separation

Reference should be made to HSG47 to ensure that adequate separation is achieved. The following details outline the specific requirements of Vodafone and capture the HSG47 requirements.

9.1 High voltage cables

High voltage single core cables of 1000 V and above shall have a minimum clearance from Company Apparatus of 500 mm.

High voltage multi-core cables of 1000 V and above shall have a minimum clearance from Company Apparatus of 350 mm.

In exceptional circumstances where the above clearances cannot be maintained, the separating distance may be reduced to a minimum of 175 mm. In such circumstances, concrete, of a quality as directed by the Company Representative, must be inserted to completely fill the space between the High Voltage cable and the Company Apparatus, in accordance with the requirements of the Company Representative. Any further services must have a minimum clearance of 250 mm from the concrete.

9.2 Low voltage cables

Low voltage cables of less than 1000 V shall have a minimum clearance from Company Apparatus of 180 mm. In exceptional circumstances where the above clearance cannot be maintained, the separating distance may be reduced to a minimum of 75 mm. In such circumstances, concrete, of a quality as directed by the Company Representative, must be inserted to completely fill the space between the services, in accordance with the requirements of the Company Representative. Any further services must have a minimum clearance of 250 mm from the concrete.

9.3 Ancillary electrical apparatus

Street furniture such as lamp posts, traffic posts and other such ancillary electrical apparatus shall have a minimum clearance of 150 mm from underground Company Apparatus and 600mm clearance from above ground Company Apparatus.

9.4 High pressure gas mains and other Undertakers plant/equipment

High pressure gas mains shall have a minimum clearance of 450 mm from Company Apparatus. All other undertakers' plant and equipment, when running in parallel with Company Apparatus, shall have a minimum clearance of 200mm. Where gas mains cross Company Apparatus, the minimum clearance shall be 200mm. All other undertakers' plant and equipment, when running across Company Apparatus, shall have a minimum clearance of 100 mm. NJUG Volume 1, Guidelines on the positioning and colour coding of underground utilities' apparatus refers.

9.5 Other Undertakers plant

Other undertakers' plant and equipment which runs in parallel with Company Apparatus shall have a minimum clearance of 200mm. All other undertakers' plant and equipment when running across Company Apparatus shall have a minimum clearance of 100mm.

9.6 Tramways

Each separating distance shall be individually agreed with the Company Representative.



10. Jointing chambers

10.1 Protection

Footway type jointing chambers are not designed to withstand carriageway loadings.

Where such chambers are liable to be placed at risk, either temporarily or permanently, from vehicular traffic or from the movement of plant and/or equipment, they will need to be adequately protected. Alternatively, they may have to be demolished and rebuilt to carriageway standards, at the Other Parties or Contractors expense under supervision of Vodafone representative.

All Vodafone jointing chambers and / or other access points shall be kept clear and unobstructed. Access for vehicles, winches, cable drums and / or any further equipment required by Vodafone for the maintenance of its apparatus, must be maintained at all reasonable times.

10.2 Access

The covers to Vodafone jointing chambers and / or apparatus shall only be lifted by means of the appropriate keys and under the direct supervision of a Vodafone representative. Other Parties or Contractors shall not enter any Vodafone jointing chamber and / or apparatus unless under the supervision of a Vodafone representative and in any case not before the mandatory gas test has been carried out in the presence of Vodafone representative and such checks have shown it to be safe to enter the Vodafone chamber and / or apparatus. The Other Parties or Contractors shall be given reasonable access to Vodafone apparatus and chambers when required.

11. Notification periods

Where the Other Parties or Contractors works or the movement of plant or equipment may endanger Vodafone apparatus, the Other Party or Contractor shall give **Vodafone at least 7 working days' notice in writing** of the intended date to commence operations.

No excavation should be made without first consulting the relevant Vodafone apparatus layout drawings, which will be made available from the Vodafone agent Atkins Global on request and allowing 28 working days for processing the relevant drawings. However, should this not be possible, direct contact should be made to the Atkins Global Plant Enquiries Team as soon as possible to assess the situation.

When excavating, moving or backfilling (including use of Foamed Concrete for Reinstatements – FCR) around Vodafone apparatus, **Vodafone shall be given adequate prior written notice of the Other Parties or Contractors intentions, in order that the works may be adequately supervised. Such notice shall not be less than 3 working days.**

12. Excavation and backfill

All excavations adjacent to Vodafone apparatus are to be carried out by hand until the extent and or location of the Vodafone apparatus is known.

Use of mechanical borers and / or excavators shall not be used without the supervisory presence of a Vodafone representative or a given exemption.

Shuttering of the excavation or support to Vodafone apparatus, at the Other Parties or Contractors expense, shall be used as directed by the Vodafone representative.

At least 7 working days' notice must be given to Vodafone in order that any special protective measures which may be required to protect Vodafone apparatus, at the Other Parties or Contractors expense, when equipment such as pile driving, explosives, laser cutting high powered RF equipment or RF test gear, is to be used in conjunction with the works.



Other Parties or Contractors are advised to refer to the National Joint Utilities Group publication: NJUG Volume 1- Guidelines on the Positioning and Colour Coding of Underground Utilities' Apparatus

13. Foam concrete

If foam concrete is being used as the backfill material, it shall not be used either above or within 500 mm of any Company Apparatus. A suitable material in accordance with the specification for the Reinstatement of Openings in Highways shall be substituted.

14. Attendance of Company Representative

If a situation requires the attendance on site of a Vodafone representative for a continuous period of more than 6 hours, suitable facilities shall be provided by the Other Party or Contractor, at their expense, to meet the office and ablution requirements. If a situation arises that requires urgent attention Vodafone will endeavour to attend site within 2 hours for all other occasions arising, 24 hours.

15. Damage reports

In the event of any damage whatsoever occurring to Vodafone apparatus, the Other Party or Contractor shall immediately inform Vodafone by contacting their 24/7 number , (for contact details please refer to Appendix A).

All relevant costs of any subsequent repair and / or removal of the Vodafone apparatus shall be charged to the Other Party or Contractor, irrespective of who affects the repair.

The above requirements do not relieve the Other Party or Contractor of any of their obligations under their contract.



16. Appendix A – Street Works Team Contacts for Vodafone

Function	Address	Phone	Email Address
Streetworks Team	Vodafone, Street Works, Faraday House, Ground Floor, The Connection, Newbury, RG14 2FN	0333 304 0759	utilitiescentre@vodafone.com
Customer Complaints	n/a	0333 304 0762	n/a
Liability Claims Or Damage to Vodafone Apparatus	Vodafone Damage Claims, 1-2 Berkeley Square, 99 Berkeley Street Glasgow G3 7HR	0333 304 1104	claims@vodafone.com
Diversionary Works C2/C3	Atkins Global, PO Box 290, 500 Aztec West, Almondsbury, Bristol, BS32 4RZ.	01454 662881	osm.enquiries@atkinsglobal.com
Diversionary Works C4 / Escalations Networks Manager	Vodafone, Diversionary Works, 1-2 Berkeley Square, 99 Berkeley Street Glasgow G3 7HR	0141 303 2855	c3requests@vodafone.com
Emergencies 24 Hour – Defects & Faults	n/a	0333 304 0762	n/a
Vodafone Plant Enquiries includes: Cable & Wireless; Mercury Comms; Thus plc; Scottish Telecoms; Your Comms; Norweb Comms; Energis	Atkins Global PO Box 290 500 Aztec West, Almondsbury, Bristol, BS32 4RZ	01454 662881	osm.enquiries@atkinsglobal.com



17. Appendix B – What constitutes Vodafone Network

Vodafone own fibre network dedicated to business and residential users of telecommunications and has an international cable network that provides connectivity to 153 countries, either directly or indirectly through partners, reaching across the Atlantic Ocean, through Europe and on to India and throughout Asia. Spanning approximately 500,000 km in length, including interests in more than 69 major global cable systems, our next-generation network improves the quality and performance of telecommunications services through our use of advance optical and IP transmission.

In the UK & Ireland Vodafone’s overall network includes the following legacy networks now owned through acquisitions or Company name changes.

Below are examples of what you could see on the streets and should be aware of:



Cable & Wireless became Cable & Wireless Worldwide in 2010





Mercury Communications – changed its name to Cable & Wireless in 1996



Energis – was acquired by Cable Wireless in 2005





Thus plc was acquired by Cable & Wireless in 2008



Scottish Telecom

Scottish Telecom demerged from its parent company Scottish Power to become Thus plc in 2002





your communications

Your Communications was integrated into Thus plc in 2006



NORWEB COMMS

Norweb Communications became Your Communications in 2000



Our apparatus is installed in roads and streets of UK and Ireland, however in some places is undistinguishable from other operators' apparatus, for example in City Centres where high quality infill modular paving chamber covers are found; some with labels and some without.

See below as examples:





The apparatus shown here is now owned, maintained and still in operation by Vodafone and includes.

- Vodafone
- Cable & Wireless
- Mercury Communications
- Energis
- Thus plc
- Your Communications
- Norweb Communications
- Scottish Telecom

Please see the Contact Details in Appendix A for Plant Enquiries and help on site.

18. About this Document

Content Owner

Chris Nesbitt

Changes since last version

Reformatted using the current Vodafone template to include updated Contact Details .

End of Document

Our Ref: Ref shown on map

Date of issue: shown on map

email: nnhc@openreach.co.uk

Dear Customer,

NR & SW ACT 1991 – PROPOSED WORKS AT: **SITE LOCATION**

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

Email the Click Before You Dig Team CBYD@openreach.co.uk

Visit the Click Before You Dig Website www.openreach.co.uk/cbyd

Thank you for your request of **/**/** describing the above proposals.

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

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

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

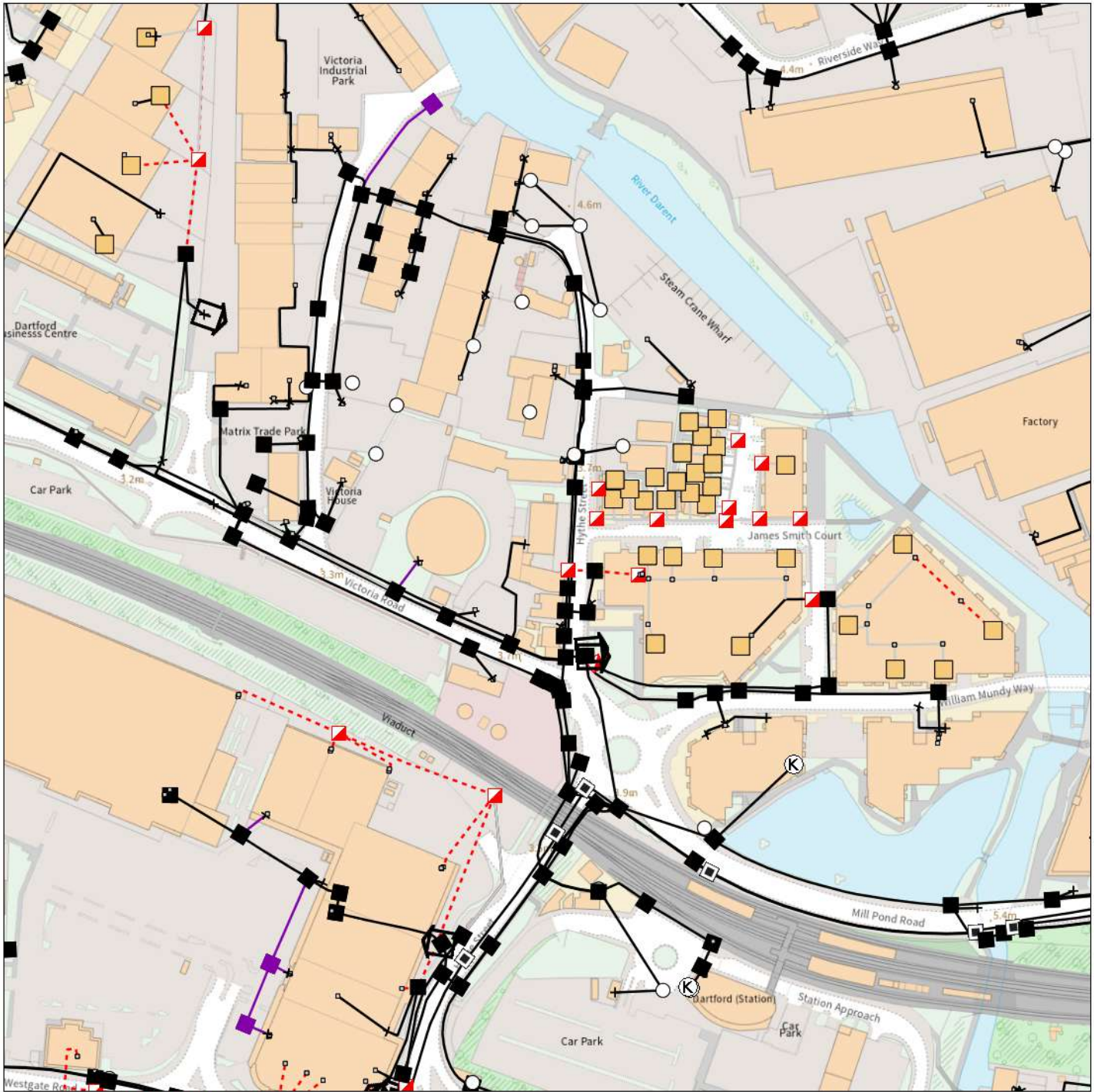
To avoid damage it is recommended that mechanical excavators or borers are not used within 600mm of BT apparatus. If scaffolding is erected, please ensure that our equipment is not enclosed, blocked, covered or otherwise obstructed by the scaffolding.

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

Yours faithfully,

Julie Cullum
NNHC & MBE Manager

Maps by email Plant Information Reply



IMPORTANT WARNING

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



openreach

CLICK BEFORE YOU DIG

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

email cbyd@openreach.co.uk

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

Accidents happen

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

KEY TO BT SYMBOLS		Change Of State	+	Hatchings	
	<i>Planned</i>	<i>Live</i>	×	Built	
PCP			▲	Planned	
Pole			■	Inferred	
Box			Ⓚ	Duct	
Manhole			Other proposed plant is shown using dashed lines. BT Symbols not listed above may be disregarded. Existing BT Plant may not be recorded. Information valid at time of preparation. Maps are only valid for 90 days after the date of publication.		
Cabinet					
	<i>Pending Add</i>	<i>In Place</i>	<i>Pending Remove</i>	<i>Not In Use</i>	
Power Cable					
Power Duct				N/A	

BT Ref : DKE09476M

Map Reference : (centre) TQ5420674565

Easting/Northing : (centre) 554206,174565

Issued : 02/08/2023 09:47:29

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



Our Ref: 30352943 Your Ref: LM 208638/KaY

Tuesday, 01 August 2023

Ben Evans
The Hub, 500 Park Avenue, Aztec West
Almondsbury
Not Supplied
BS32 4RZ

Dear Ben Evans

Thank you for your enquiry dated Tuesday, 01 August 2023

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

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

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

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

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

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

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

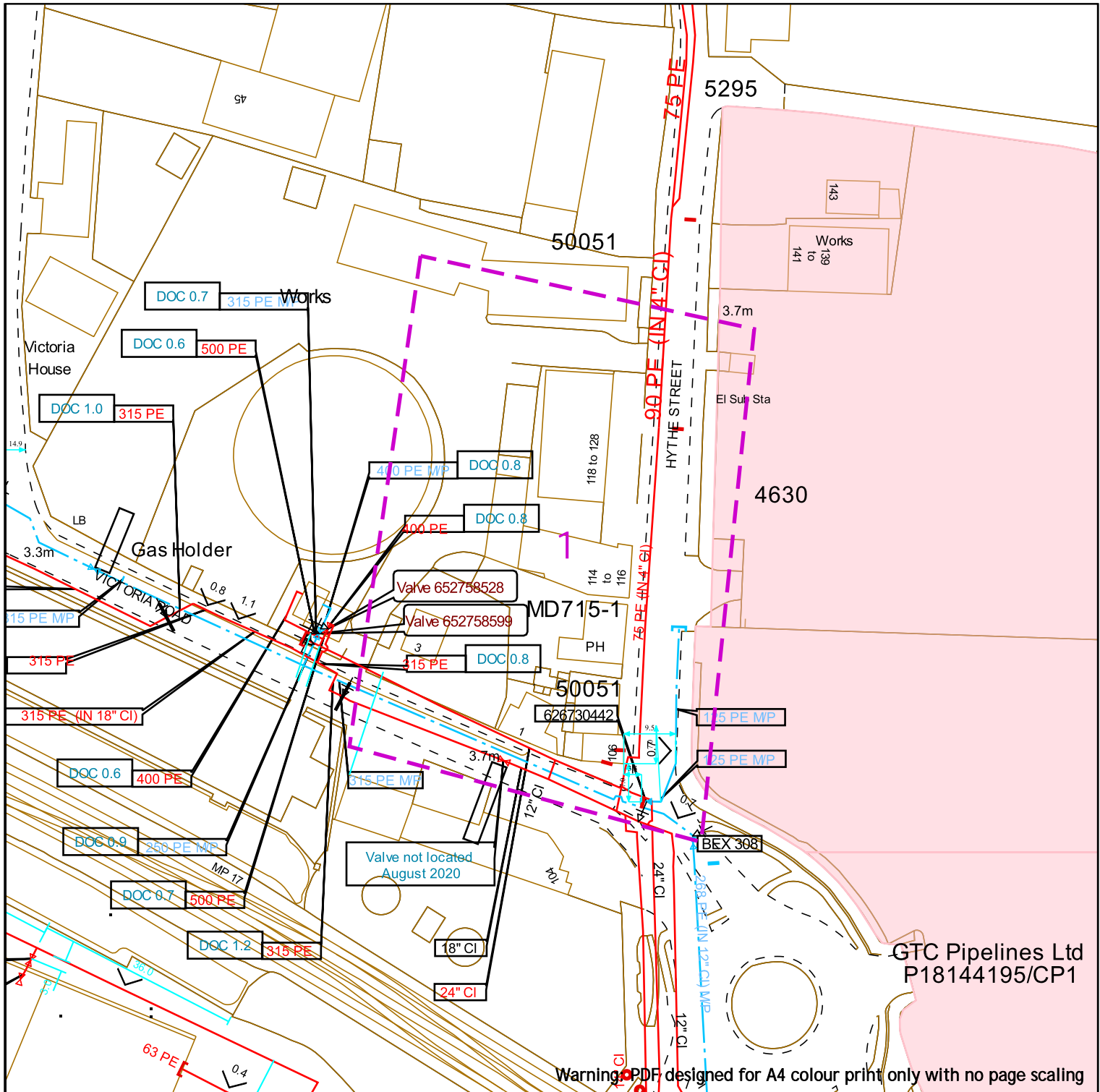
If you require any further information please do not hesitate to contact us.

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

Smell gas?
Call 0800 111 999

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

Authorised and regulated by the Financial Conduct Authority



GTC Pipelines Ltd
P18144195/CP1

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



Contact Us
SGN Safety Admin Team:
 0800 912 1722
Email:
 plantlocation@sgn.co.uk



Date Requested: 01/08/2023
 Job Reference: 30352943
 Site Location: 554201 174555
 Requested by: Mr Ben Evans

Your Scheme/Reference: LM
 208638/KaY

Scale: 1:1000 (When plotted at A4)

Low Pressure Mains		Digsite:	
Medium Pressure Mains		Line:	
Intermediate Pressure Mains		Area:	
High Pressure Mains		LAs	
Some Examples Of Plant Items		GTs	
Valve		SSSIs	
Syphon			
Depth of Cover		Diameter Change	
		Material Change	

This information is given as a guide only and its accuracy cannot be guaranteed.










































This plan shows the location of those pipes owned by Scotia Gas Networks (SGN) by virtue of being a licensed Gas Transporter (GT). Gas pipes owned by other GTs or third parties may also be present in this area but are not shown on this plan. Information with regard to such pipes should be obtained from the relevant owners. No warranties are given with regard to the accuracy of the information shown on this plan. Service pipes, valves, siphons, sub-connections etc. are not shown but their presence should be anticipated. You should be aware that a small percentage of our pipes/assets may be undergoing review and will temporarily be highlighted in yellow. If your proposed works are close to one of these pipes, you should contact the SGN Safety Admin Team on 0800 912 1722 for advice. No liability of any kind whatsoever is accepted by SGN or its agents, servants or sub-contractors for any error or omission contained herein. Safe digging practices, in accordance with HS (G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that plant location information is provided to all persons (whether direct labour or sub-contractors) working for you on or near gas apparatus. Information included on this plan should not be referred to beyond a period of 28 days from the date of issue.

Report damage immediately – KEEP EVERYONE AWAY FROM THE AREA
0800 111 999

This plan is reproduced from or based on the OS map by Scotia Gas Networks plc, with the sanction of the controller of HM Stationery Office. Crown Copyright Reserved. Southern Gas – 100044373 and Scotland Gas – 100044366.

Map Symbols

						
VALVE OPEN	VALVE CLOSED	GOVERNOR	END CLOSURE	SYPHON	REDUCER	TEE
						
TEST POINT	CATHODIC PROTECTION	GENERAL REFERENCE	FLOW MEASURE	DIP POINT	MONO ETHYLENE GLYCOL	OILING POINT
						
FLOW STOP	PRESSURE MEASUREMENT	STAND PIPE	OFFICIAL MINISTRY RECORD	PURGE POINT	GAS CONDITIONER	DRAIN POINT
						
SKETCH BUBBLE	DEPTH OF COVER	METER	MATERIAL CHANGE	LP MAINS	MP MAINS	IP MAINS
						
PIG TRAP	CROSSOVER CONNECTION	CHANGE OF DIAMETER	PIPE JOINT	LHP MAINS	HISTORY DATA	SSSI
						
				GTs	CONTACT ZONE	LTS



SGN

Your gas. Our network.

Dig safely

Measures to avoid injury
and damage to gas pipes



The following protective and precautionary measures MUST be taken when working in the vicinity of gas mains and services.

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

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

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

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

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

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

In a gas emergency

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

- **Ask people to move away from the area of the gas escape.**
 - **Call 0800 111 999 immediately.**
1. **Don't attempt to repair the escape or stop the leakage.**
 2. **As gas may enter buildings, ask people in the surrounding premises to leave until it's safe for them to return.**
 3. **Stop anyone going near the immediate vicinity of the gas escape.**
 4. **Prohibit smoking and extinguish all naked flames.**
 5. **Don't use mobile phones or other ignition sources.**
 6. **Assist our representatives and other emergency services such as the police, ambulance, and fire service as requested.**

Additional reference material

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





Making an enquiry for gas mains or services maps

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

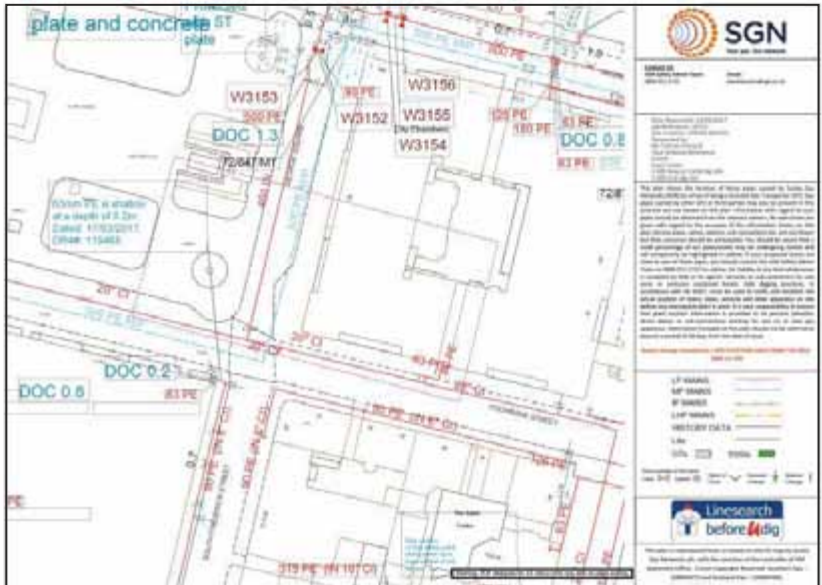
Our simple and easy to use online mapping system is available 24/7, 365 days a year.

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

What you're likely to be sent

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

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



Example of a gas map

Note: Service pipes are not shown on our maps

When working near our gas mains and services

Safe system of work

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

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

Financial

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

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

HSE

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

Minimum safe working distances

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

Surface boxes and manholes

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

Deep excavations

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



Crossing our mains or services

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

Exposed plant

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

Hot work

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

Backfilling

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

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

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

Access





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





Mechanical excavation

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

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

Major accident hazard pipelines

High pressure pipeline

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



Pipeline markers

High pressure

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

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



Wind turbines

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



Tree planting

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

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

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

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



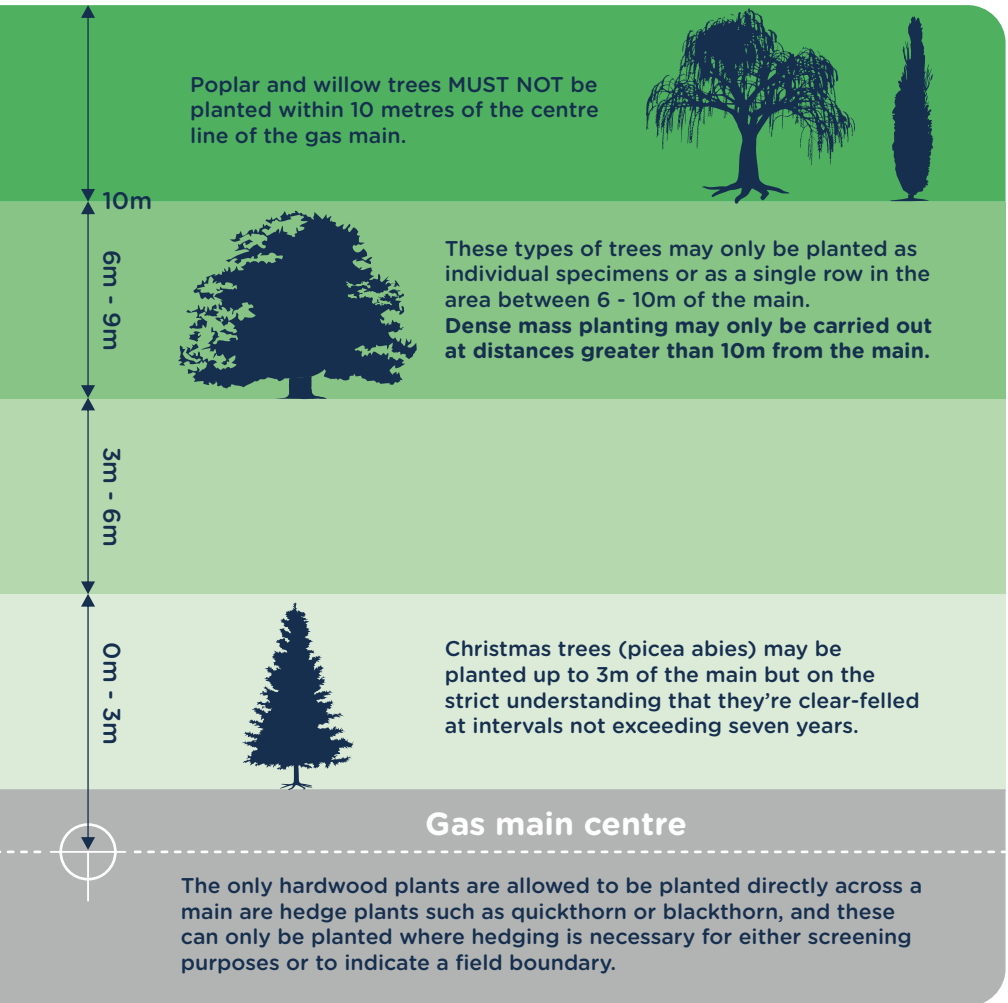
In cases where screening is required, the following are shallow rooting and may be planted close to the gas mains and services: blackthorn, broom, cotoneaster, elder, hazel, laurel, quickthorn, privet, snowberry and most ornamental shrubs.

Gas main centre

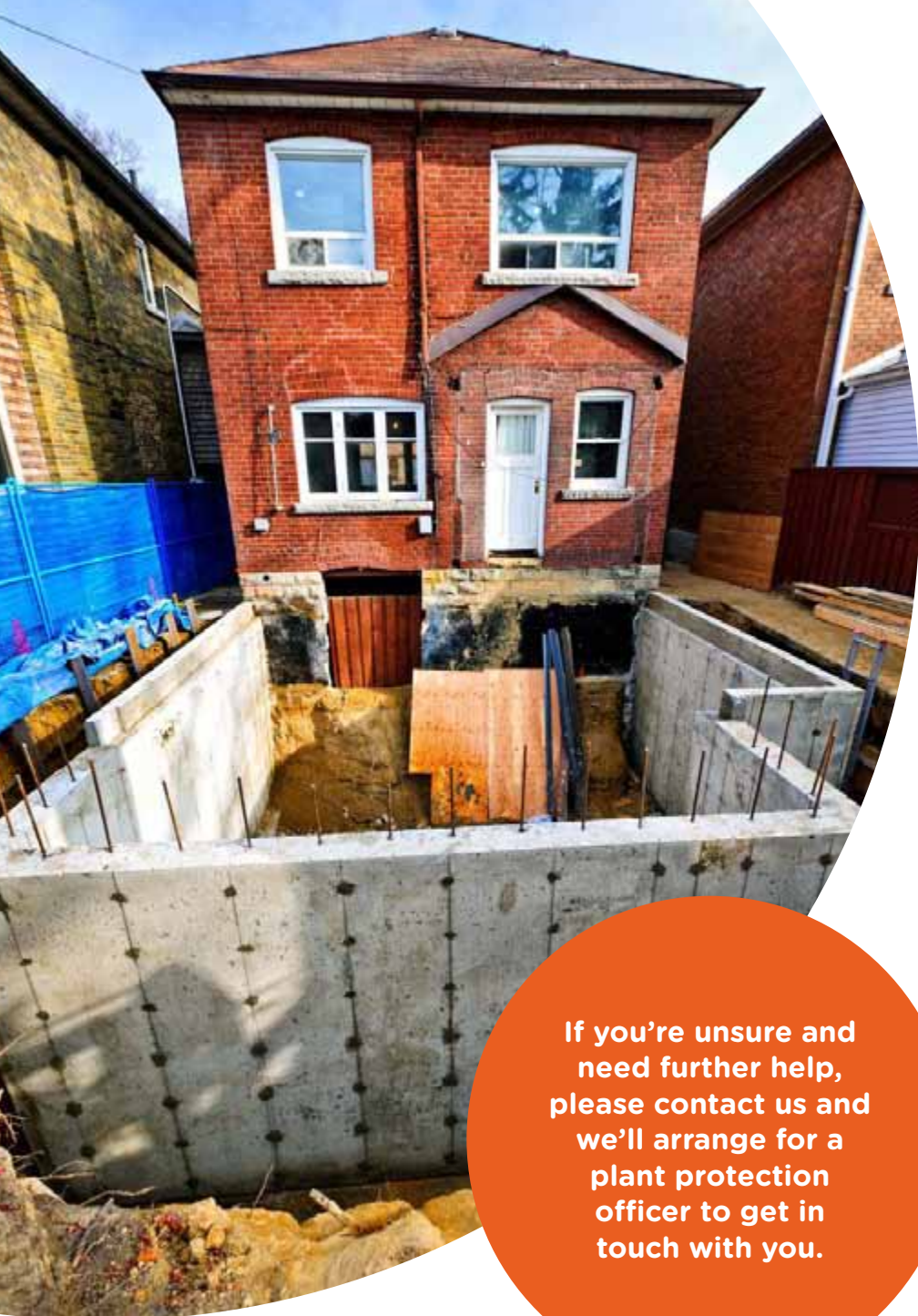
Raspberries, gooseberries and blackcurrants may be planted on the gas main, but a four metre strip, centred on the main, **MUST** be left clear at all times.

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

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



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

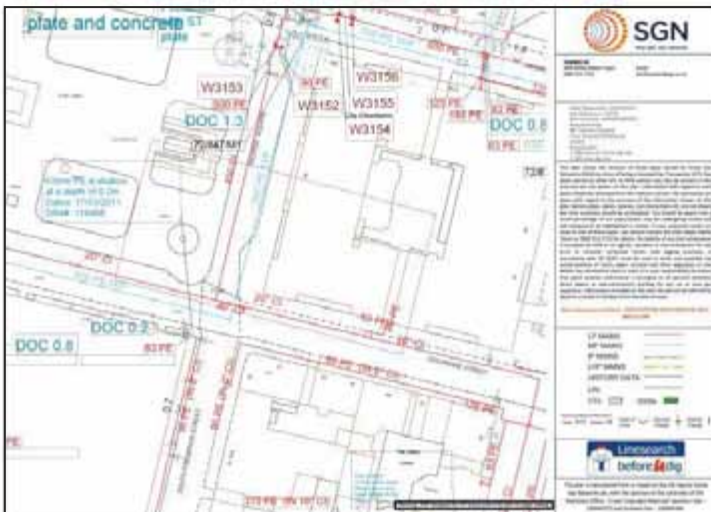


If you're unsure and need further help, please contact us and we'll arrange for a plant protection officer to get in touch with you.

Gas services/work in gardens

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

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



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



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



Visit our **Dig safely** pages on [sgn.co.uk](https://www.sgn.co.uk)



0800 912 1722 *

*All calls are recorded and may be monitored



SGN

Your gas. Our network.

Know what's below

Protecting you and your family

Protecting you and your family

Are you planning on carrying out any home improvements such as building a conservatory, an extension, a new pond, decking, concreting, landscaping, fencing or planting trees in your garden? You must make sure you have drawings/maps showing any pipes or cables around your home. To obtain copies of our gas drawings/maps please visit our **Dig safely** pages on sgn.co.uk and follow the link to our online system.

This service is free of charge.

Our Dig safely page is also where you'll find advice on any protective measures you may need to take before you start work, whether you're planning on doing it yourself or hiring a professional.

Damaging gas pipes is dangerous and could lead to a fire or an explosion. It could also cause large-scale loss of gas supply to the local community and is potentially very expensive.



Responsibilities

It's the responsibility of whoever is doing the work to make sure they've complied with the relevant legislation and Health and Safety Executive (HSE) guidance.

In practice, this means anyone carrying out work must obtain a copy of any available colour drawings showing the position of buried utilities for reference before and during the project.

Non-recording of service pipes >

Individual service pipes are not normally recorded on gas network drawings. This is accepted practice and reinforced by guidance given in Design, construction and installation of service pipes – approved code of practice, published by the HSE, and IGE/TD/4 – Gas Services, published by the Institute of Gas Engineers and Managers.

What you need to do when planning a conservatory or house extension, landscaping, fencing or any other groundworks

It's the responsibility of whoever is undertaking the work to check with utility companies before the work starts.

If you're planning any building or digging work remember that gas pipes, power cables, water pipes and sewers all run underground and could be right beneath your feet. Construction or excavation work can damage underground services or prevent further maintenance.

Remember that obtaining planning permission or a building warrant from your local authority doesn't normally involve consultation with utility companies so you should get in touch with them when you start planning your project. This will help keep everyone safe.

Please visit our **Dig safely** pages on sgn.co.uk for more information and our online mapping system.



< Service entry



Gas services/work in gardens

If you're going to be carrying out work around your home, or a third party is carrying out work on your behalf and you have requested a map from us, **your own gas service may not be marked**. The simplest way to understand the location of your gas service is to know where it enters your house, as pictured.

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

If you're unsure and need further help, please contact us and we'll arrange for a Plant Protection officer to contact you.



Any damage, however minor, must be reported to the National Gas Emergency Service

Planting a tree or landscaping your garden

Tree roots can damage utilities.

If you're planting trees or shrubs, make sure you consider the type of plant, root type and their location in relation to buried gas pipes to avoid any damage. We may need access to repair and maintain our pipes and equipment in the future, and we reserve the right to remove any tree or bush if we need to.

What happens if you damage a pipe?

If you damage a gas pipe:

- Call the National Gas Emergency Service on 0800 111 999 immediately
- **DON'T** attempt to make repairs yourself
- **DON'T** handle or attempt to alter the position of the exposed pipe

Damaging a gas pipe can result in:

- Major fire/explosion leading to death or serious injury
- Asphyxiation due to gas exposure leading to death or serious injury
- Loss of gas supply to individuals or communities
- Financial costs to you for repair and remedial work
- Enforcement action by the HSE

We will recover all reasonable costs incurred in repairing damaged gas pipes.

Delivering gas safely, reliably and efficiently

Your safety is our top priority

We manage the network that distributes natural and green gas to over 5.9 million customers in Scotland and the south of England.

We own and operate 74,000km of gas mains, and associated plant and equipment. We're committed to delivering gas safely, reliably and efficiently to every one of our customers.

Accidental damage to our pipes could put you or members of the public at risk.



Service entry



All our engineers and contractors carry a photo ID card with our company logo on it. Don't be afraid to check with our Security team on **0800 015 5170** that the person on your property is supposed to be there.



Meter box

Help

If you're planning any work on or around your property and you need more information, you'll find everything you need on our Dig Safely pages.



sgn.co.uk



0800 912 1722

Smell gas? 0800 111 999

Follow these six steps if you smell gas:



DO open windows and doors to help ventilate the gas



DO turn off the gas supply at the meter and make sure any gas appliances are turned off



DO call the National Gas Emergency number on 0800 111 999. Lines are open 24 hours a day, 365 days a year



DON'T smoke or use any naked flames



DON'T touch any electrical switches. Turning a switch on or off could ignite a gas leak



DON'T enter a cellar if you smell gas, even if your gas meter is located in the cellar



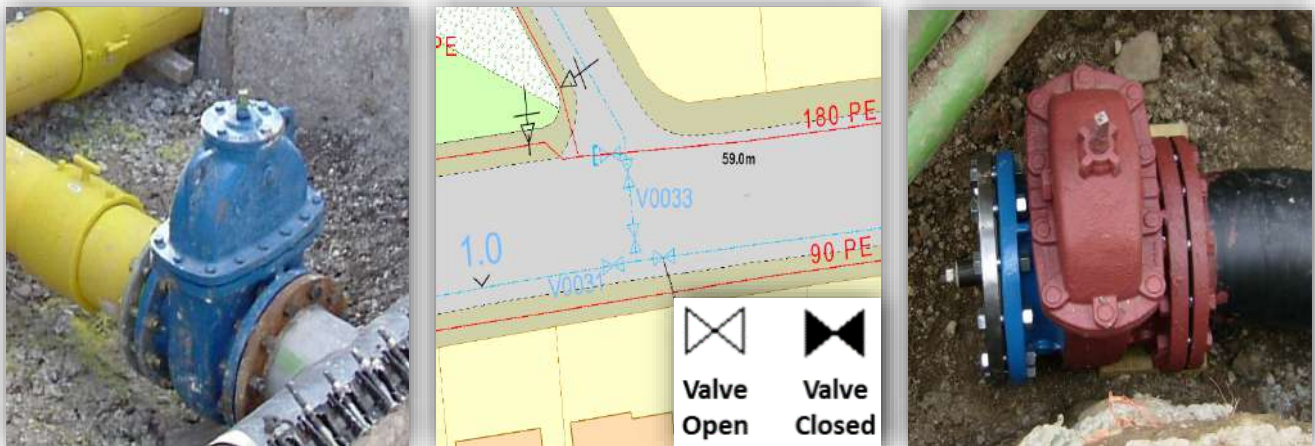
Guidance when undertaking work near gas valves in our network areas

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

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

Identifying gas valves

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



What should you do?

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

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

Contact details

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

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

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

Asset location search



Property Searches

Atkins Ltd
Stats Enquiries Team The Hub
500 Park Avenue
BRISTOL
BS32 4RZ

Search address supplied Site off Hythe Street,
Dartford
DA1 1BN

Your reference 208638

Our reference ALS/ALS Standard/2023_4866070

Search date 2 August 2023

Notification of Price Changes

From 1st April 2023 Thames water Property Searches will be increasing the prices of its CON29DW, CommercialDW Drainage & Water Enquiries and Asset Location Searches. Historically costs would rise in line with RPI but as this currently sits at 14.2%, we are capping it at 10%.

Customers will be emailed with the new prices by January 1st 2023.

Any orders received with a higher payment prior to the 1st April 2023 will be non-refundable. For further details on the price increase please visit our website at www.thameswater-propertysearches.co.uk



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



searches@thameswater.co.uk
www.thameswater-propertysearches.co.uk



0800 009 4540

Search address supplied: Site off Hythe Street,, Dartford, DA1 1BN

Dear Sir / Madam

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

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

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

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

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

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

Contact Us

If you have any further queries regarding this enquiry please feel free to contact a member of the team on 0800 009 4540, or use the address below:

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

Email: searches@thameswater.co.uk

Web: www.thameswater-propertysearches.co.uk

Waste Water Services

Please provide a copy extract from the public sewer map.

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

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

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

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

For your guidance:

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

Clean Water Services

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

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

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



For your guidance:

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

Payment for this Search

A charge will be added to your suppliers account.

Further contacts:

Waste Water queries

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

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

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

Tel: 0800 009 3921
Email: developer.services@thameswater.co.uk

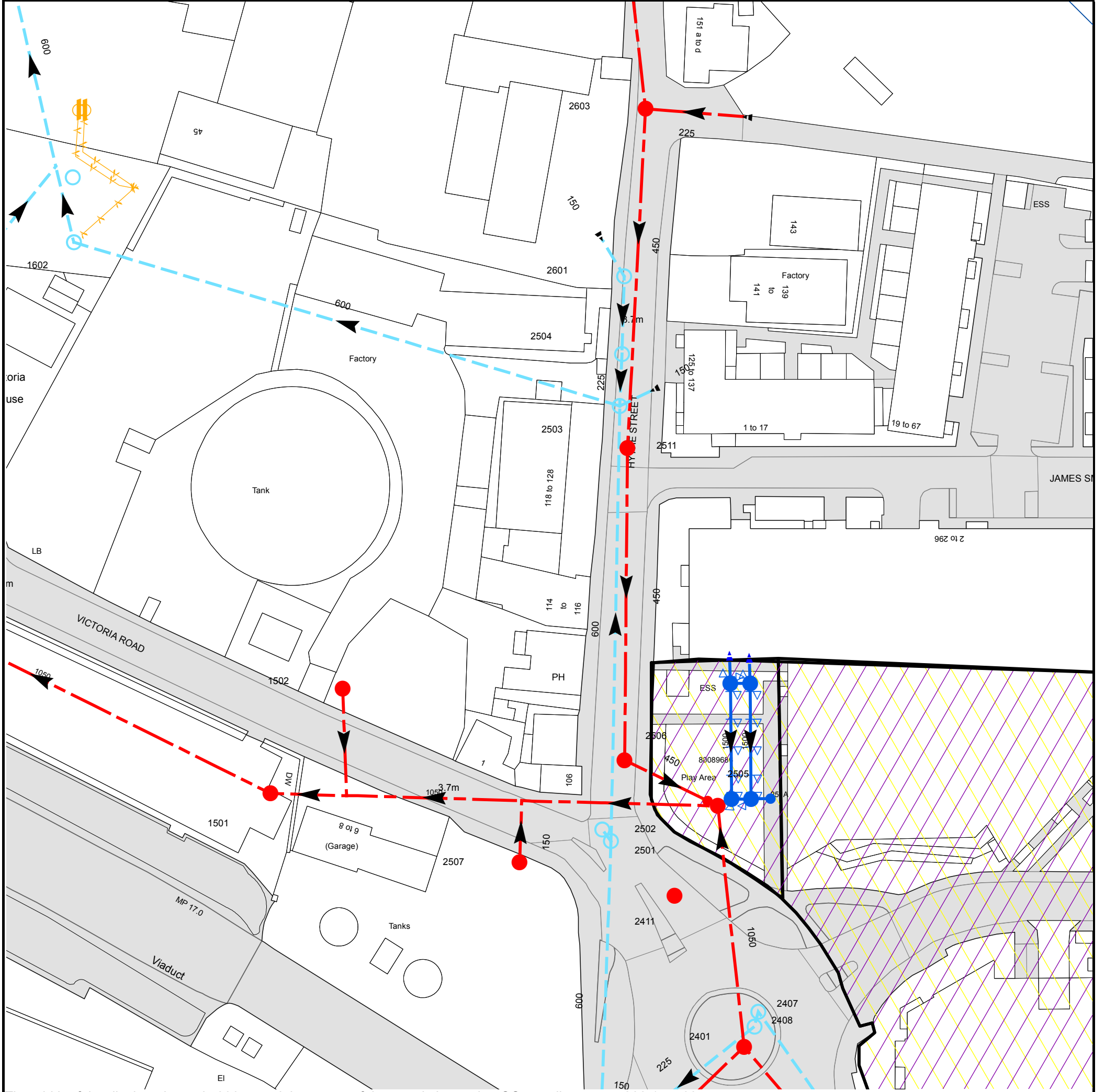
Clean Water queries

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

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

Tel: 0800 009 3921
Email: developer.services@thameswater.co.uk

Asset Location Search Sewer Map - ALS/ALS Standard/2023_4866070



The width of the displayed area is 200 m and the centre of the map is located at OS coordinates 554208,174560
 The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

Based on the Ordnance Survey Map (2020) with the Sanction of the controller of H.M. Stationery Office, License no. 100019345 Crown Copyright Reserved.

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
















Manhole Reference	Manhole Cover Level	Manhole Invert Level
2401	4.39	-.82
n/a	n/a	n/a
2408	3.98	2.71
2407	3.96	3
251A	n/a	n/a
1501	4.02	-1.09
1502	4.01	3.24
2507	4.05	3.02
2502	3.73	n/a
2501	3.81	2.32
2506	n/a	1.03
2411	3.92	n/a
2505	4.18	n/a
n/a	n/a	n/a
1603	4.1	n/a
1602	n/a	n/a
2503	3.68	2.17
2504	3.73	2.66
2601	3.75	2.93
2511	3.74	n/a
2603	3.86	1.43
n/a	n/a	n/a
n/a	n/a	n/a

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.









Asset Location Search - Sewer Key

Public Sewer Types (Operated and maintained by Thames Water)

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

Other Sewer Types (Not operated and maintained by Thames Water)

-  Sewer
-  Culverted Watercourse
-  Proposed
-  Decommissioned Sewer
-  Content of this drainage network is currently unknown
-  Ownership of this drainage network is currently unknown

Notes:

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

Sewer Fittings

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

-  Air Valve
-  Meter
-  Dam Chase
-  Vent
-  Fitting

Operational Controls

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

-  Ancillary
-  Drop Pipe
-  Control Valve
-  Weir





End Items

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

-  Inlet
-  Outfall
-  Undefined End




Other Symbols

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

-  Change of Characteristic Indicator
-  Public / Private Pumping Station
-  Invert Level
-  Summit

Areas

Lines denoting areas of underground surveys, etc.

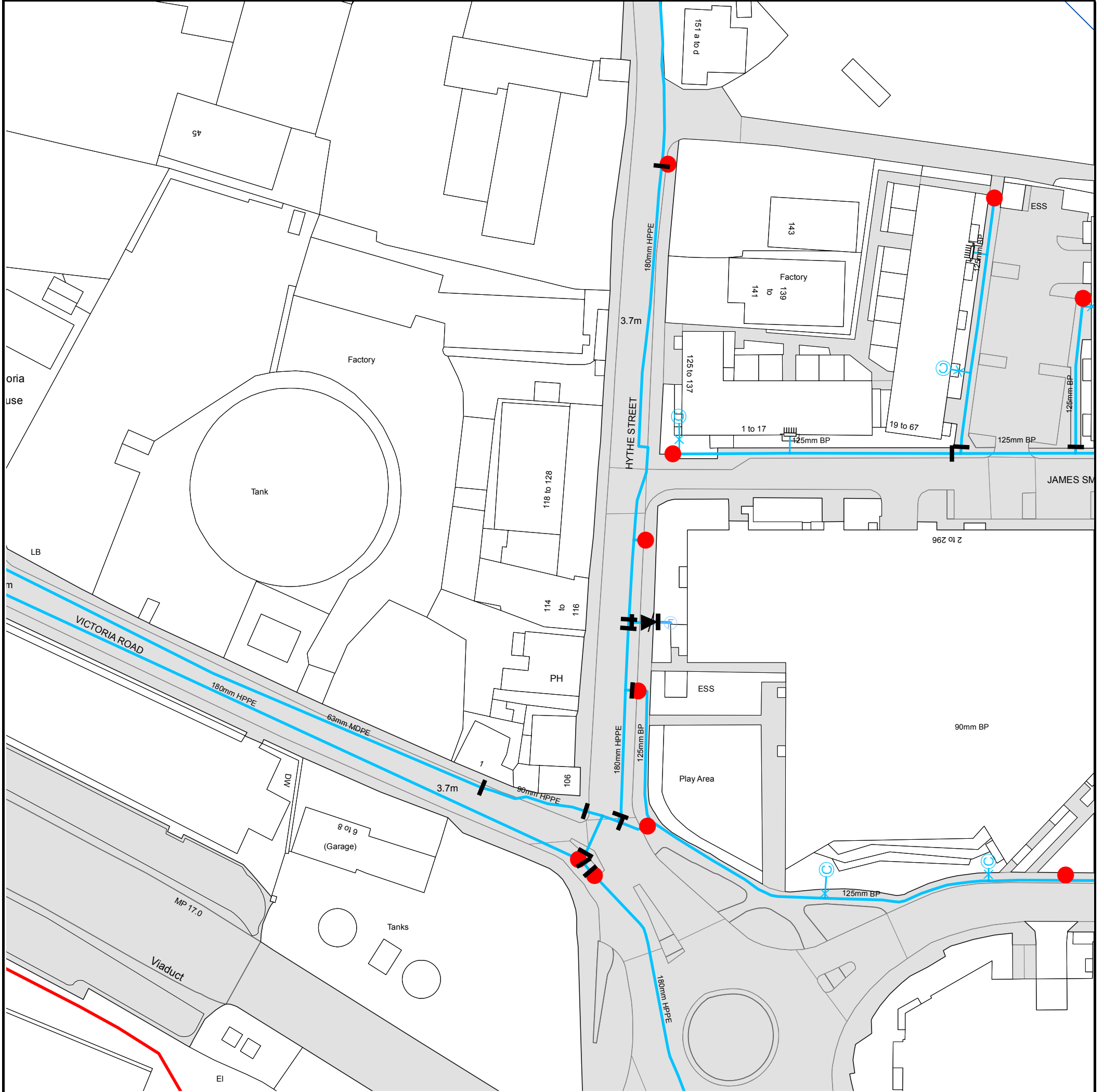
-  Agreement
-  Chamber
-  Operational Site

Ducts or Crossings

-  Casement
 -  Conduit Bridge
 -  Subway
 -  Tunnel
- Ducts may contain high voltage cables. Please check with Thames Water.

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

6) The text appearing alongside a sewer line indicates the internal diameter of the pipe in millimeters. 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, please contact Property Searches on 0800 009 4540.



The width of the displayed area is 200 m and the centre of the map is located at OS coordinates 554208, 174560.








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

Based on the Ordnance Survey Map (2020) with the Sanction of the controller of H.M. Stationery Office, License no. 100019345 Crown Copyright Reserved.



Asset Location Search - Water 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 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')

Valves

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

Hydrants

-  Single Hydrant

Meters

-  Meter

End Items



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

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

Operational Sites

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

Other Symbols

-  Data Logger
-  **Casement:** Ducts may contain high voltage cables. Please check with Thames Water.

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

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

Payment 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 within 14 days of the 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. 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'.
5. Interest will be charged in line with current Court Interest Charges, if legal action is taken.
6. 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 still not satisfied with the outcome provided, we will refer the matter to a Senior Manager for resolution who will provide you with a response.

If you are still dissatisfied with our final response, and in certain circumstances such as you are buying a residential property or commercial property within certain parameters, The Property Ombudsman will investigate your case and give an independent view. The Ombudsman can award compensation of up to £25,000 to you if he finds that you have suffered actual financial loss and/or aggravation, distress, or inconvenience because of your search not keeping to the Code. Further information can be obtained by visiting www.tpos.co.uk or by sending an email to admin@tpos.co.uk.

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 0300 034 2222 or write to them at Consumer Council for Water, 1st Floor, Victoria Square House, Victoria Square, Birmingham, B2 4AJ.

Ways to pay your bill

Credit Card	BACS Payment	Telephone Banking
Please Call 0800 009 4540 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

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

Our Ref: 30352943 Your Ref: LM 208638/KaY

Tuesday, 01 August 2023

Ben Evans
The Hub, 500 Park Avenue, Aztec West
Almondsbury
Not Supplied
BS32 4RZ

Dear Ben Evans

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

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

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

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

Plan Provision
0800 056 5866



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

1. UK Power Networks does not warrant that the information provided to you is correct. You rely upon it at your own risk.
2. UK Power Networks does not exclude or limit its liability if it causes the death of any person or causes personal injury to a person where such death or personal injury is caused by its negligence.
3. Subject to paragraph 2 UK Power Networks has no liability to you in contract, in tort (including negligence), for breach of statutory duty or otherwise how for any loss, damage, costs, claims, demands, or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever.
4. The information about UK Power Networks electrical plant and/or electric lines provided to you belongs to and remains the property of UK Power Networks. You must not alter it in any respect.
5. The information provided to you about the electrical plant and/or electric lines depicted on the plans may NOT be a complete record of such apparatus belonging to UK Power Networks. The information provided relates to electric lines and/or electrical plant belonging to UK Power Networks that it believes to be present but the plans are not definitive: other electric lines and/or electrical plant may be present and that may or may not belong to UK Power Networks.
6. Other apparatus not belonging to UK Power Networks is not shown on the plan. It is your responsibility to make your own enquiries elsewhere to discover whether apparatus belonging to others is present. It would be prudent to assume that other apparatus is present.
7. You are responsible for ensuring that the information made available to you is passed to those acting on your behalf and that all such persons are made aware of the contents of this letter.
8. Because the information provided to you may not be accurate, you are recommended to ascertain the presence of UK Power Networks electric lines and/or electrical plant by the digging of trial holes. Trial holes should be dug by hand only.

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

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

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

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



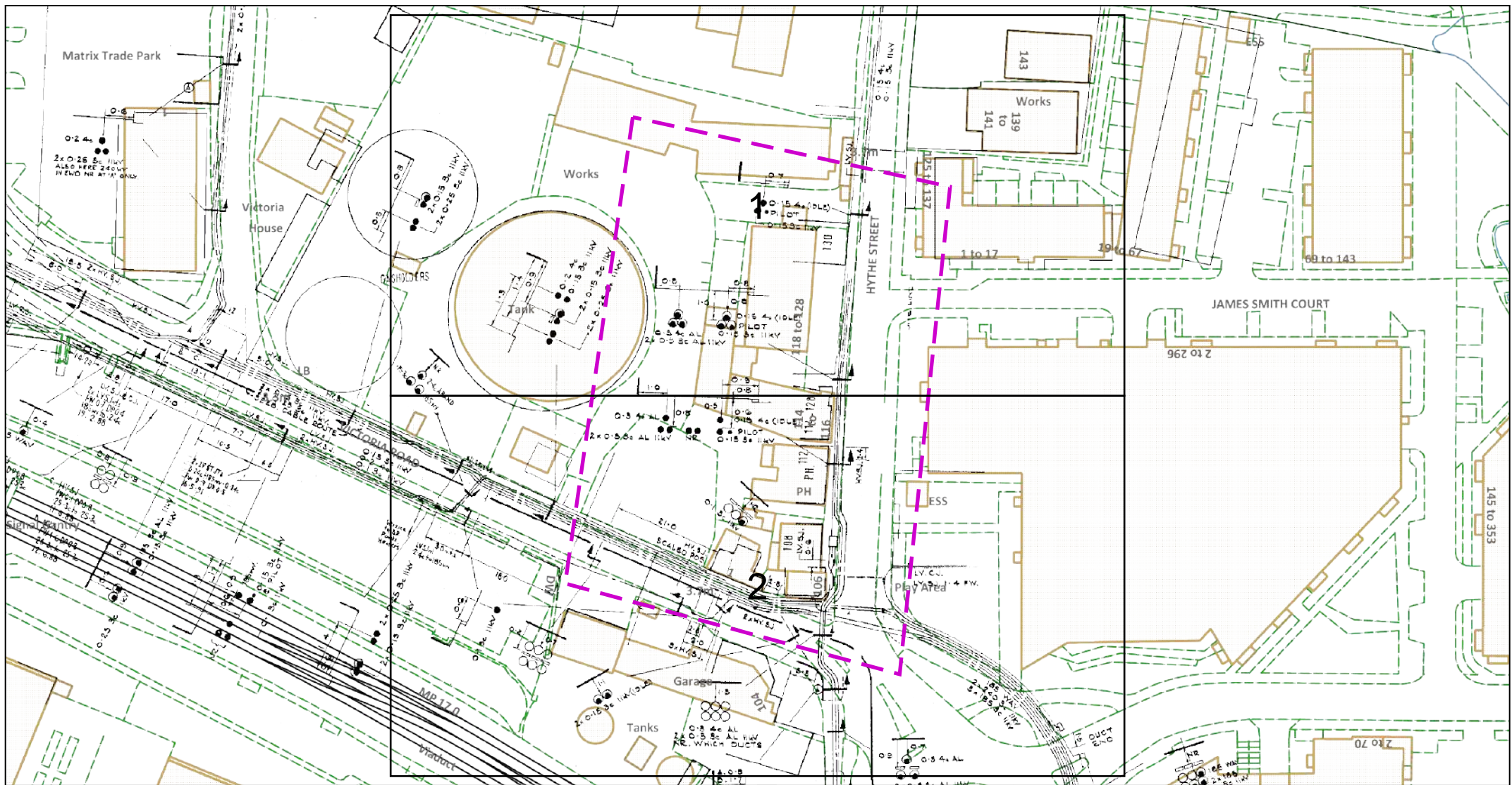
- 9 Any work near to any overhead electricity lines must be carried out by you in accordance with the Health and Safety Executive guidance document GS6 and the Electricity at Work Regulations.

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

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

10. You are responsible for the security of the information provided to you. It must not be given, sold or made available upon payment of a fee to a third party.
11. If in carrying out work on land in, on, under or over which is installed an electric line and/or electrical plant that belongs to UK Power Networks you and/or anyone working on your behalf damages (however slightly) that apparatus you must inform immediately UK Power Networks by our emergency 24 hour three digit telephone number **105** providing;
- your name, address and telephone number;
 - the date, time and place at which such damage was caused;
 - a description of the electric line and/or electrical plant to which damage was caused;
 - the name of the person whom it appears to you is responsible for that damage;
 - the nature of the damage.
12. The expression "UK Power Networks" includes UK Power Networks (EPN) plc, UK Power Networks (LPN) plc, UK Power Networks (SEPN) plc, UK Power Networks and any of their successors and predecessors in title.





Dig Sites Area: Line:

The quality and accuracy of any print will depend on your printer, your computer and its print settings. Measurements scaled from this plan may not match measurements between the same points on the ground.

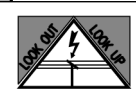


This plan must be used with the attached 'Symbols' document.
 Date Requested: 01/08/2023
 Job Reference: 30352943
 Site Location: 554163 174499
 Requested by:
 Mr Ben Evans
 Your Scheme/Reference: LM 208638/KaY
 Scale: 1:1025 (When plotted at A4)

1. The position of the apparatus shown on this drawing is believed to be correct but the original landmarks may have been altered since the apparatus was installed.
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7. Please be aware that electric cables/lines belonging to other owners of licensed electricity distribution systems may be present and it is your responsibility to identify their location.
8. Please be aware the Low Voltage Overhead power lines are not currently displayed for the Eastern Region via this service, if you require records on the location of these please contact our Plan Provision team directly via plans@ukpowernetworks.co.uk.

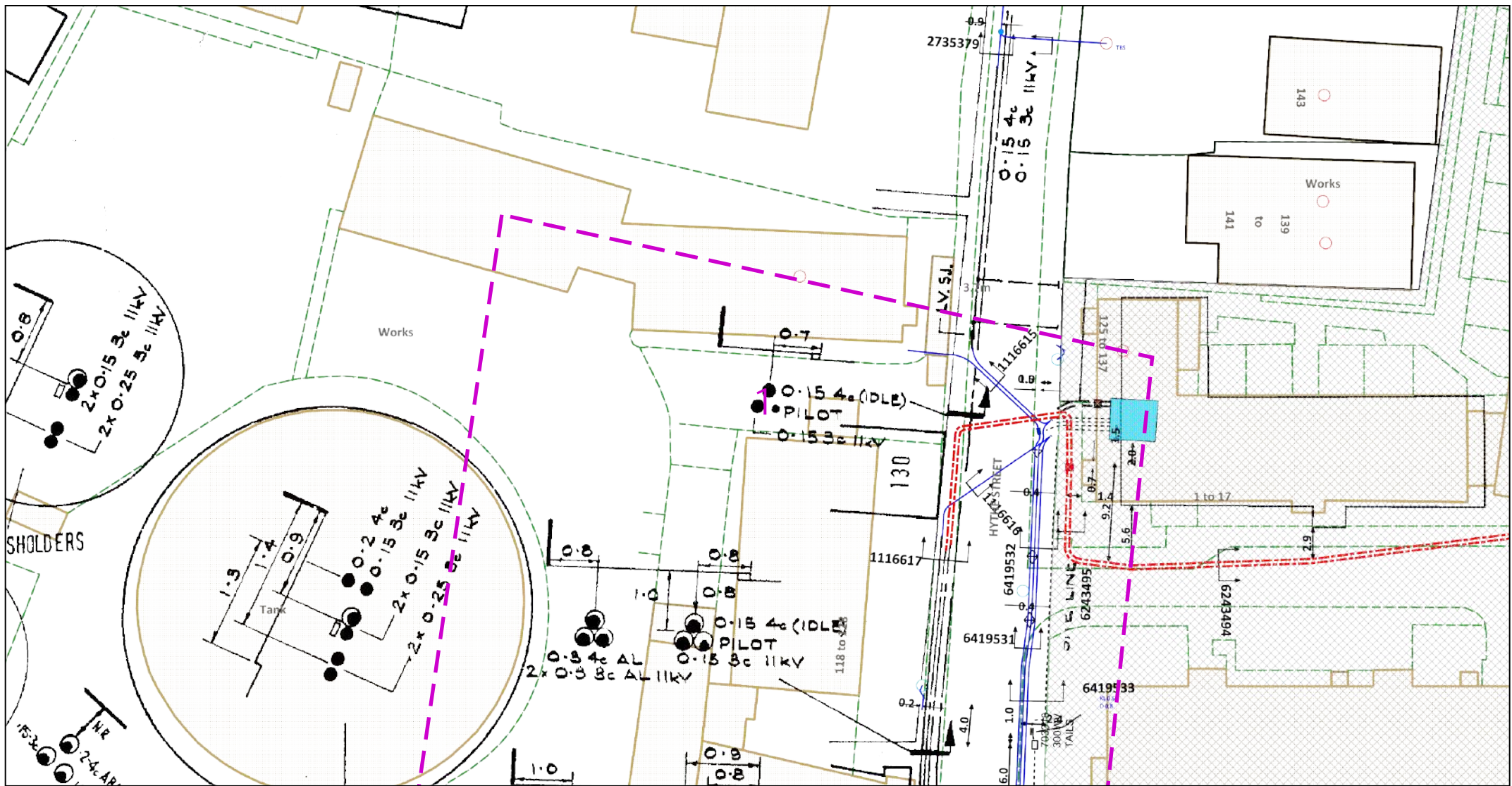
1. UK Power Networks does not warrant that the information provided to you is correct. You rely upon it at your own risk.
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3. Subject to paragraph 2 UK Power Networks has no liability to you in contract, in tort (including negligence), for breach of statutory duty or otherwise for any loss, damage, cost, claims, demands, or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever.
4. This plan has been provided to you on the basis of the terms of use set out in the covering letter that accompanies this plan. If you do not accept and/or do not understand the terms of use set out in the covering letter you must not use the plan and must return it to the sender of the letter.
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IF IN DOUBT - ASK! PHONE
 0800 056 5866
 EMERGENCY - If you damage a
 cable or line
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 URGENTLY

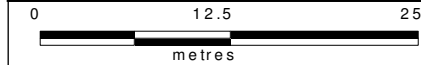


ALWAYS LOOK UP
 BEFORE
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 Refer to HSE Guidance
 note GS6

Maps produced at 1:2500 scale are Geo-Schematics which show LV mains cables and overhead lines (in some cases all voltages). Prior to carrying out excavations you must refer to the 1:500 records to determine the location of all known underground plant and equipment.



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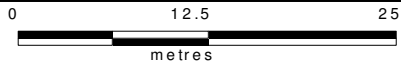
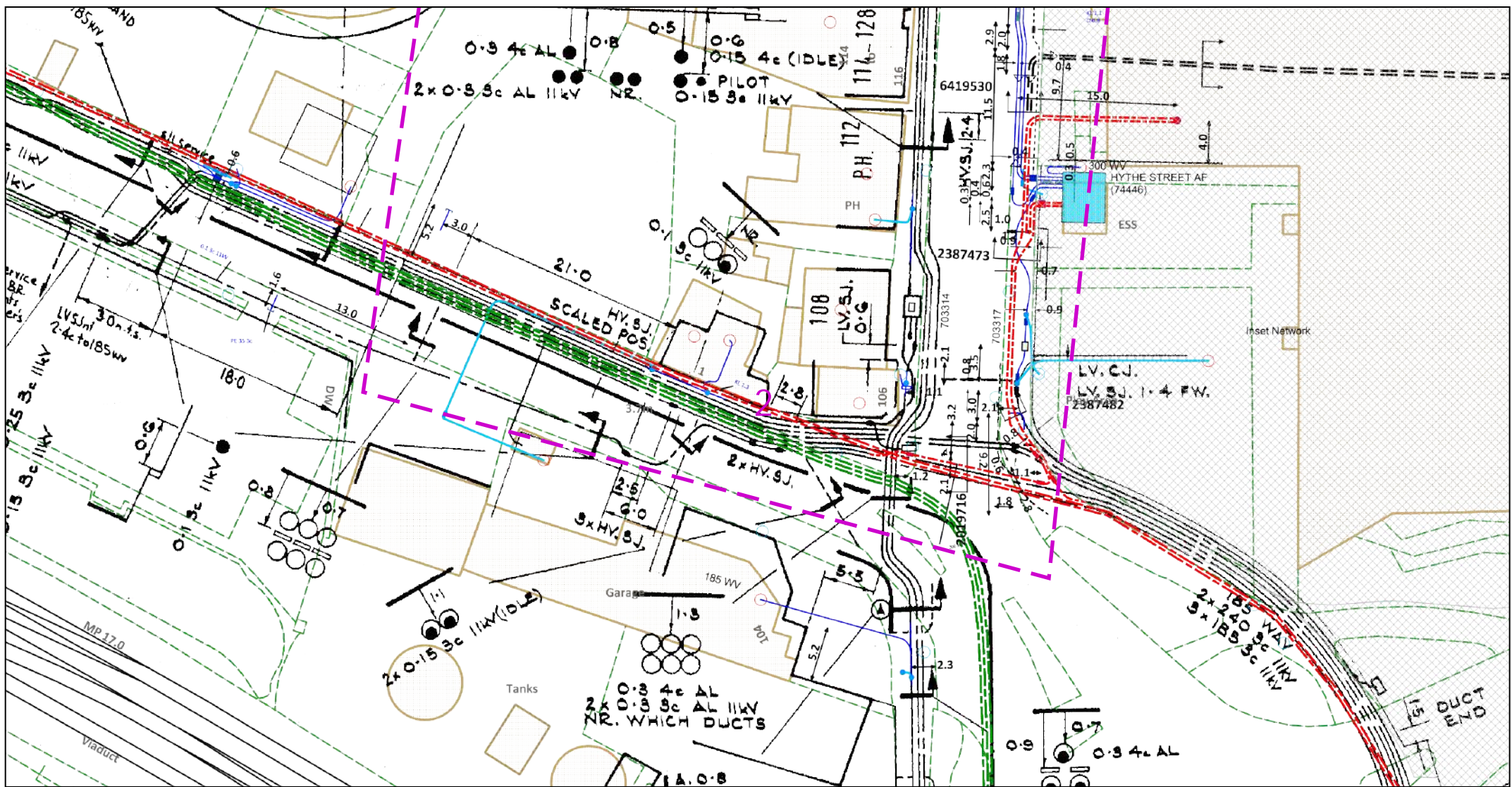
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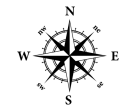
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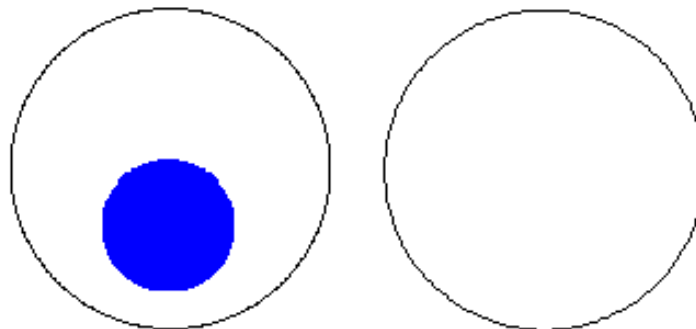
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 note GS6

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Cross Section : 2735380



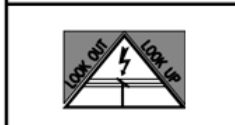
35 WV

Cross Section 2735380

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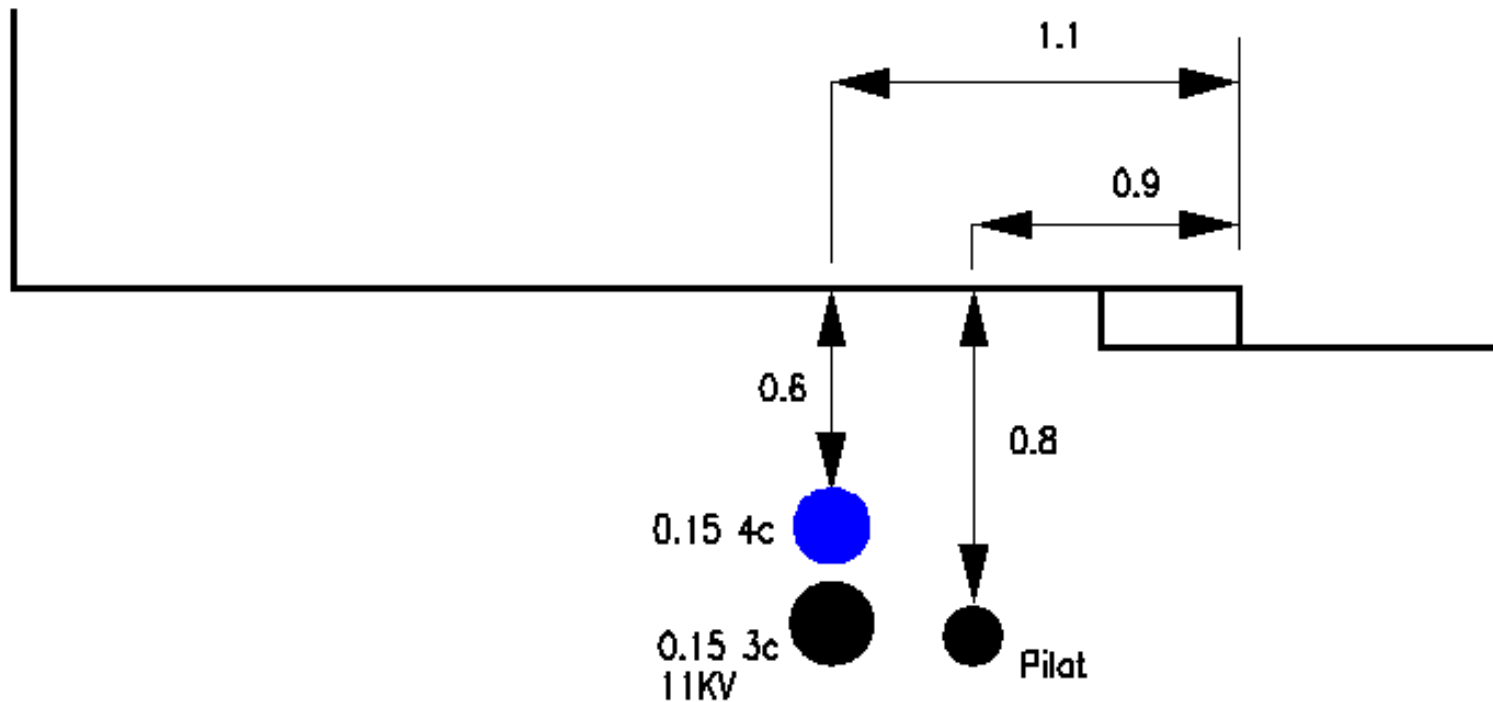
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Cross Section : 2735379

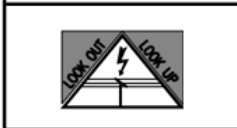


Cross Section 2735379

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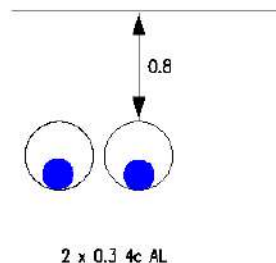
IF IN DOUBT - ASK! PHONE
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 URGENTLY**



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Cross Section : 1116615

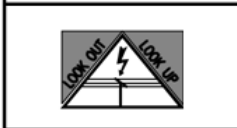


Cross Section
1116615

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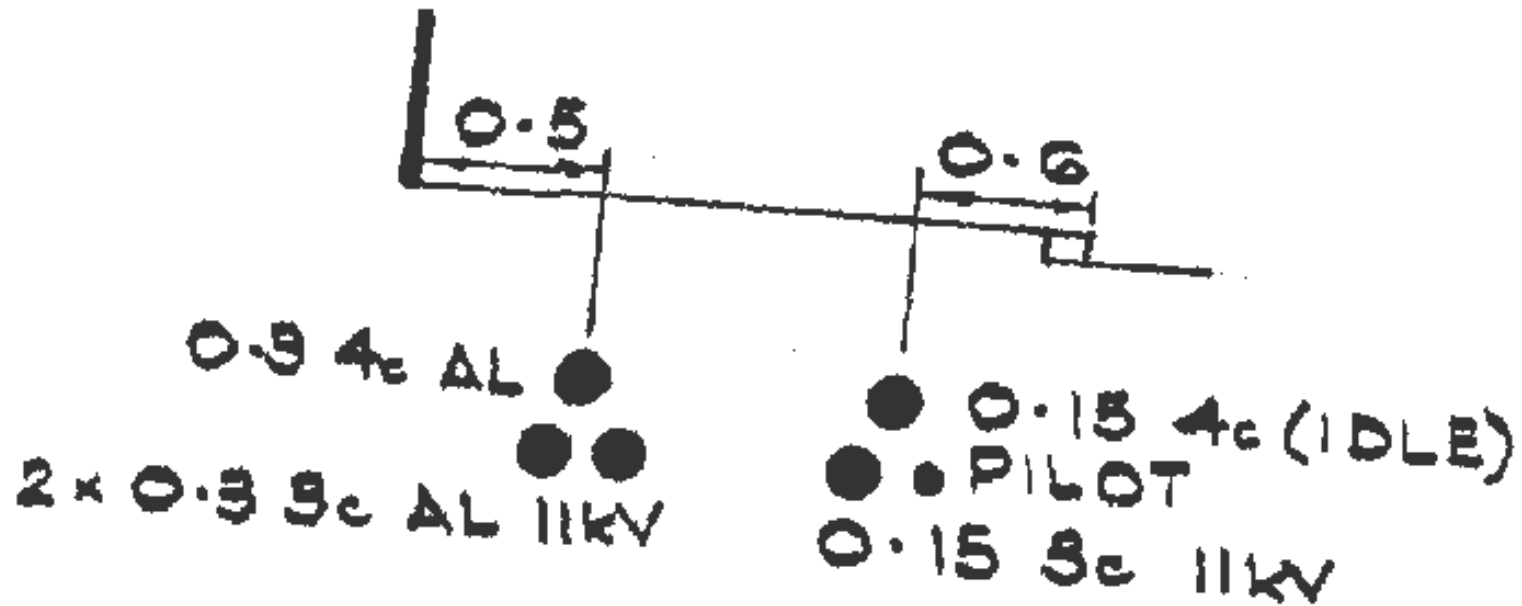
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Cross Section : 1116617

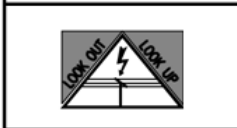


Cross Section
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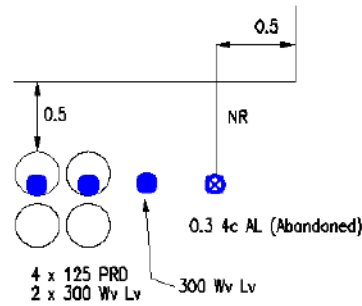
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Cross Section : 6419532



Cross Section
6419532

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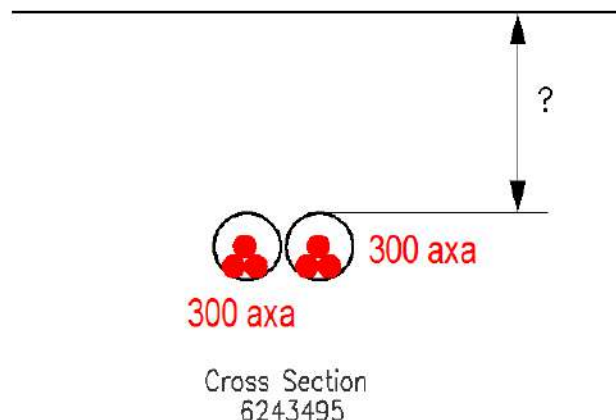
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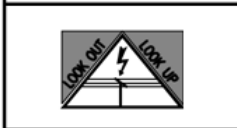
Cross Section : 6243495



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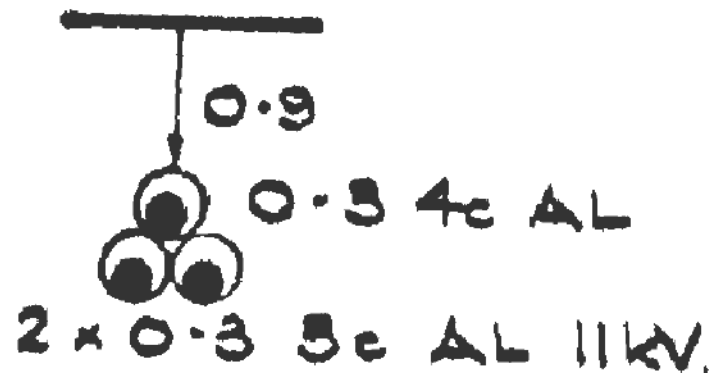
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Cross Section : 1116616

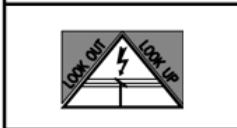


Cross Section
1116616

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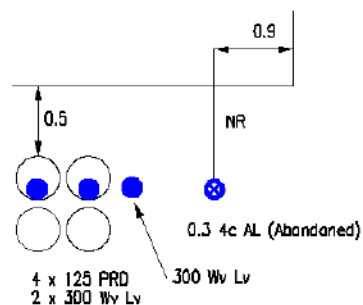
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Cross Section : 6419530

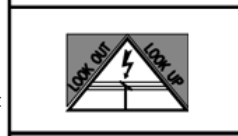


Cross Section
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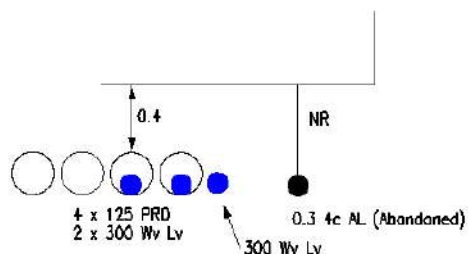
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Cross Section : 6419531

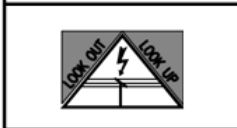


Cross Section
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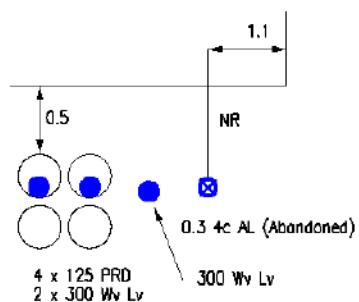
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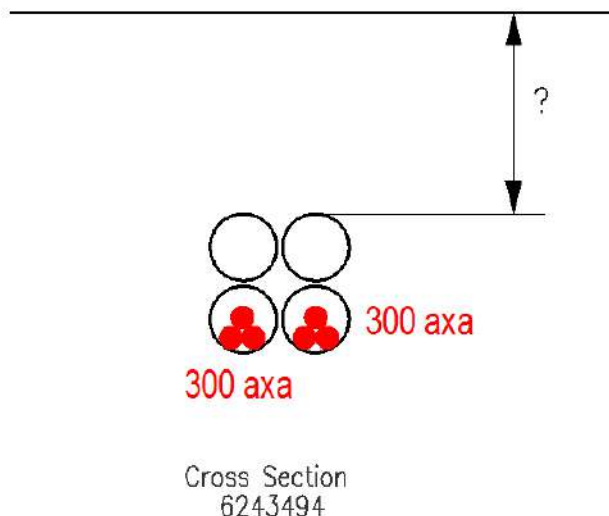
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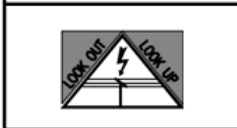
Cross Section : 6243494



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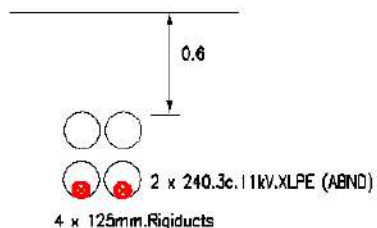
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Cross Section : 2044305

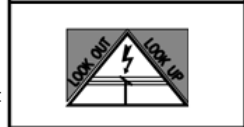


Cross Section
2044305

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 3. Subject to paragraph 2 UK Power Networks has no liability to you in contract, in tort (including negligence), for breach of statutory duty or otherwise for any loss, damage, cost, claims, demands, or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever.
 4. This plan has been provided to you on the basis of the terms of use set out in the covering letter that accompanies this plan. If you do not accept and/or do not understand the terms of use set out in the covering letter you must not use the plan and must return it to the sender of the letter.
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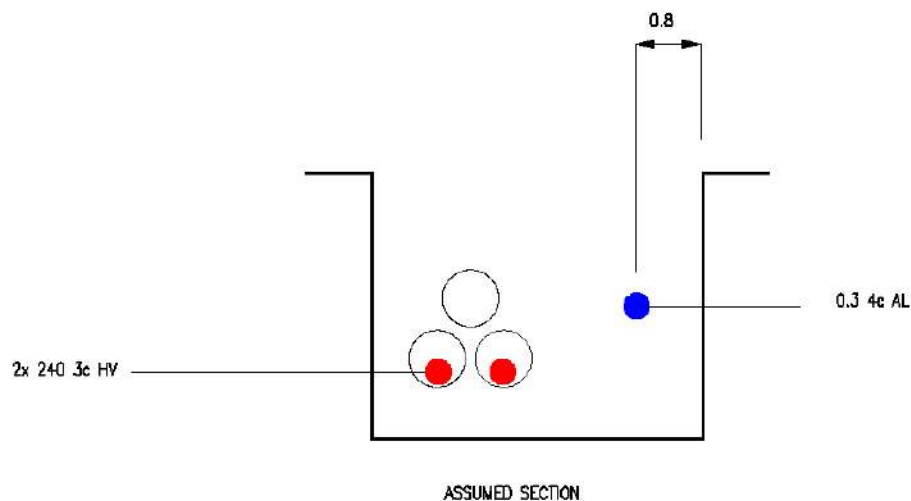
IF IN DOUBT - ASK! PHONE
 0800 056 5866
**EMERGENCY - If you damage
 a cable or line
 Phone 0800 783 8838 (24hrs)
 URGENTLY**



**ALWAYS LOOK UP BEFORE
 YOU START WORK**
 Refer to HSE Guidance note GS6

Maps produced at 1:2500 scale are Geo-Schematics which show LV mains cables and overhead lines (in some cases all voltages). Prior to carrying out excavations you must refer to the 1:500 records to determine the location of all known underground plant and equipment.

Cross Section : 2387473

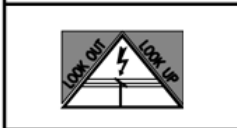


ASSUMED SECTION
Cross Section
2387473

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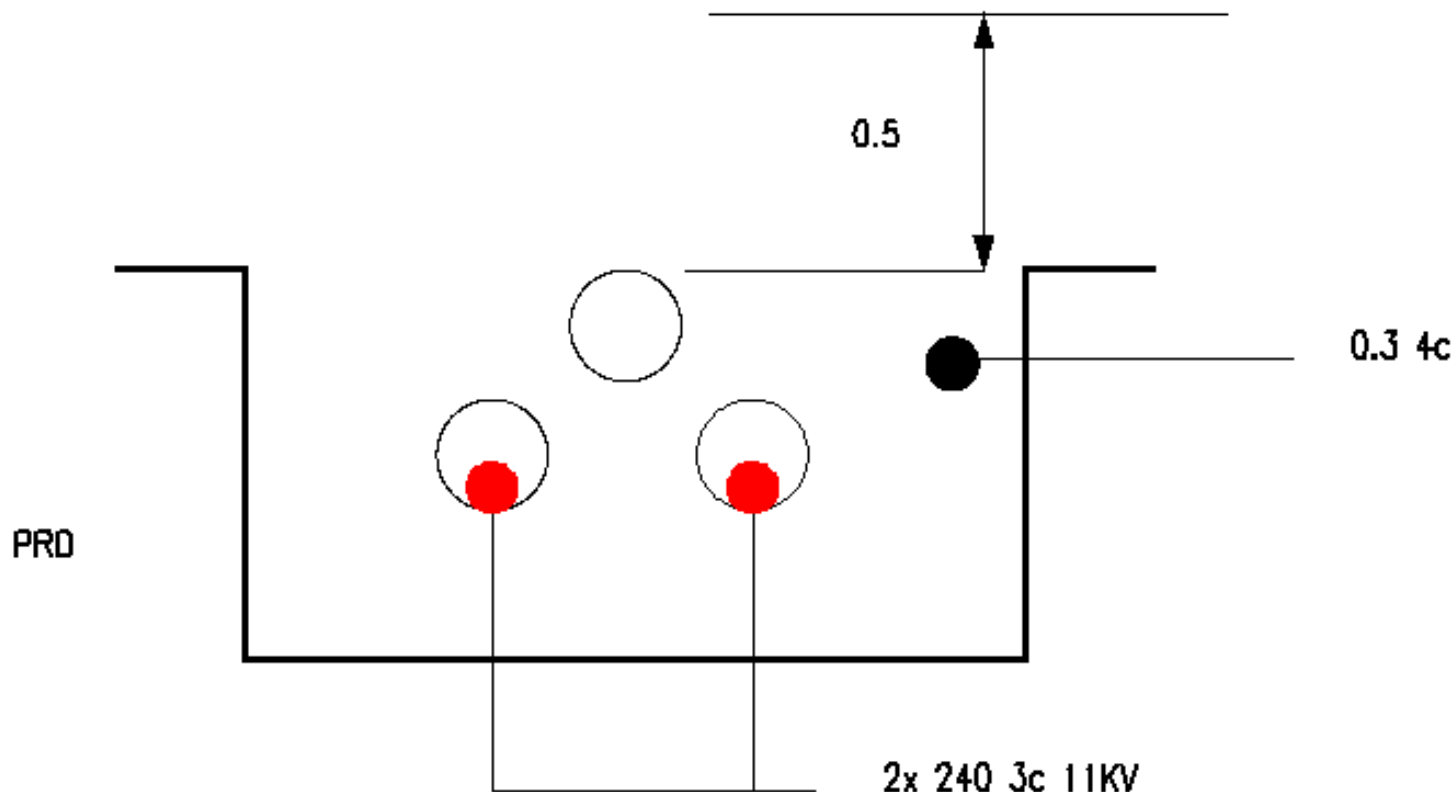
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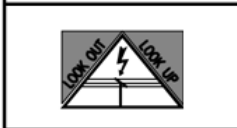
Cross Section

2387482

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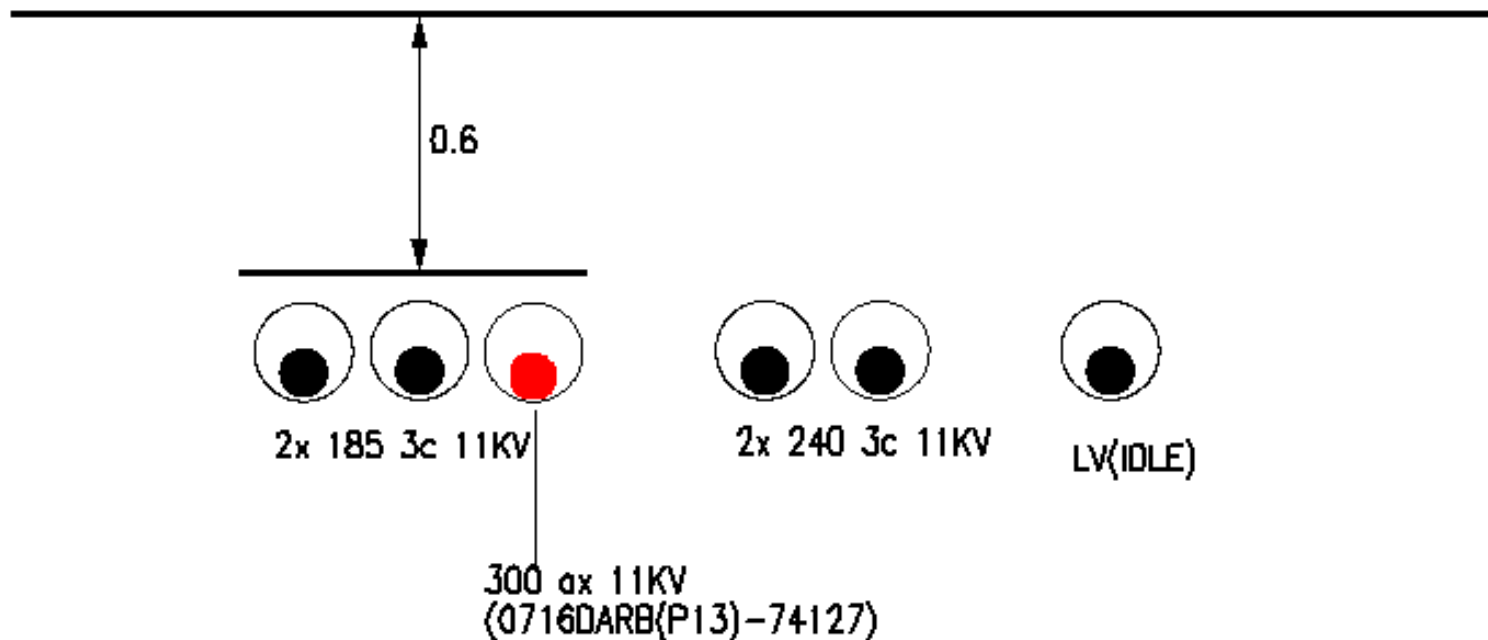
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Cross Section : 2019716

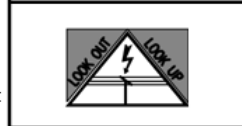


Cross Section 2019716

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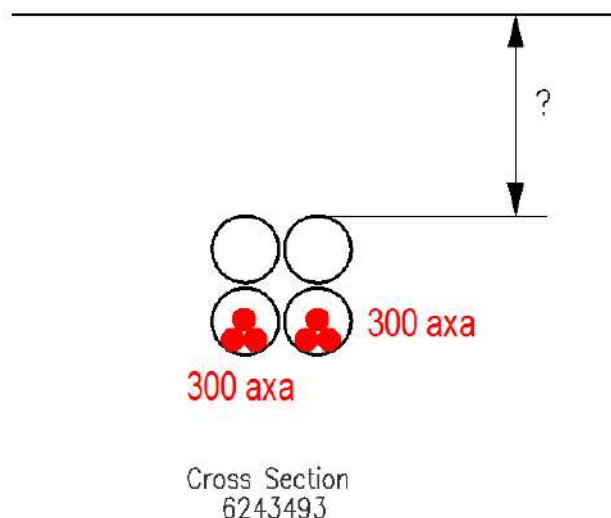
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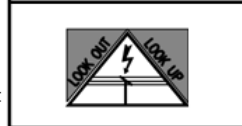
Cross Section : 6243493



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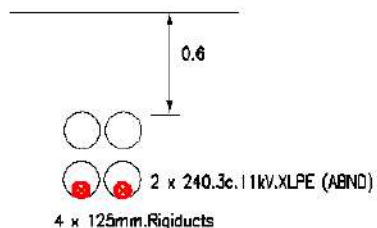
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Cross Section : 2387486

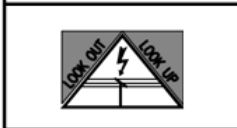


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UK Power Networks Feedback Tool

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

All you need to do is:

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



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

UK Power Networks, working with LSBUD



Network Records NetMAP Symbols Booklet - London

This symbol booklet is intended as a general guide only - some local variations of these symbols may be found.

Version 1.2

Released October 2010

Always check with your local Network Records office or the UK Power Networks server to ensure that you are using the most up to date copy of this booklet. Tel: 08000 565866

(i)

Index:-

Page no:	Contents:
1	Guidance notes.
2	The area covered by this guide.
3	Scenery.
4	Scenery (UK Power Networks use only-boxed red)
7	Primary distribution cables (EHV).
8	Secondary distribution cables (LV/HV).
9	Cable terminology.
10	Cable size abbreviations.
11	Cable ducts.
12	Other NetMAP symbols.
15	Services.
17	Symbols used in cross sections.
19	Abbreviations used in cross sections.
20	Typical plan and cross section representations: <ul style="list-style-type: none">All areas: NetMAP/vector.All areas: composite raster style 1.Ex-Western area and Holborn: main and ways.The City of London: single line.Finsbury and Shoreditch: multi-single line style 1.Ex-North Eastern area: HV/LV.Ex-North Eastern area: multi-single line style 2.Ex-North Eastern area: composite raster style 2.
23	Regional NetMAP anomalies - general overview.
24	Region 1: ex-Western area.
25	Region 2: ex-Northern area.
27	Region 3: ex-North eastern area.
29	Region 4: ex-South Eastern area.
30	Region 5: ex Southern area.

(ii)

Guidance notes.

Important notice:

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

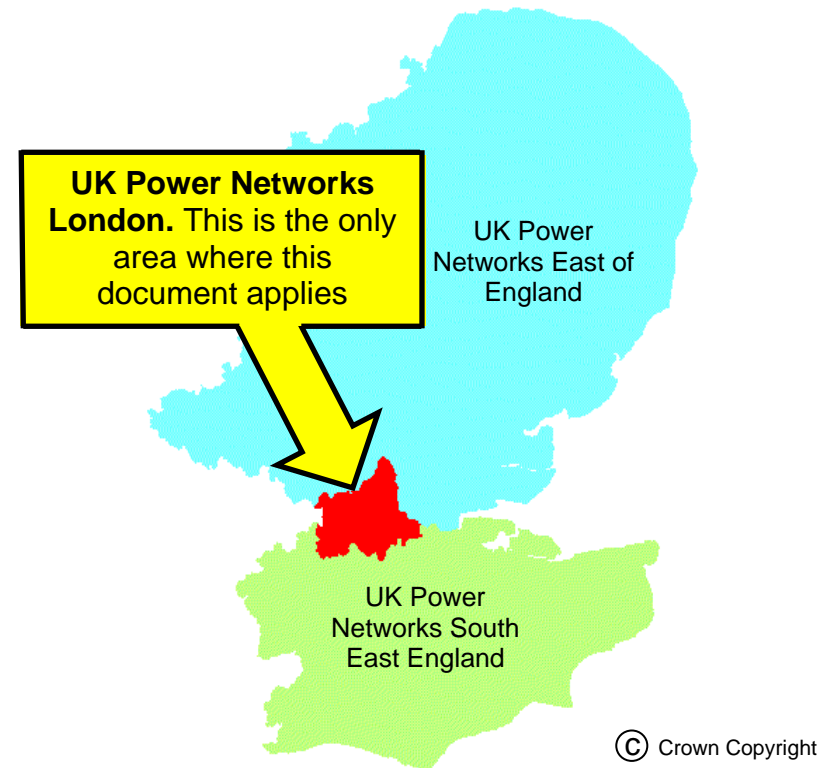
Tel: 08000 565866.

- The position of apparatus shown on NetMAP is believed to be correct, but the original landmarks may have altered since the apparatus was installed.
- It must be assumed that there is at least one service to each property, lamp column, street sign etc. A separate record may be available.
- When excavations are to be carried out near Extra High Voltage (EHV) cables, further details must be obtained before commencement of work.
- Third party cables are not usually shown.
- When two or more maps are supplied for the same area, the maps must be read in conjunction with each other and with this symbol booklet.
- All LV cables are assumed to be 4 core, and all HV cables assumed to be 3 core – unless otherwise stated.
- All Imperial cable sizes are assumed to be copper and all metric cable sizes are assumed to be aluminium – unless otherwise stated.












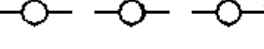













**Plan Provision Team
Fore Hamlet
Ipswich
Suffolk IP3 8AA
Tel: 08000 565866**

The area covered by this guide:










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

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

Scenery for UK Power Networks use only - boxed in red		
NetMAP system	Scanned image	Description
 Inset Network – Contact xxxx IDNO for further information	Not applicable	Area of inset network - not the asset of UK Power Networks (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Proposed Cross Rail route (only visible to of UK Power Networks and their immediate contractors)
	Not applicable	High pressure pipelines in the general vicinity (only visible to of UK Power Networks and their immediate contractors)
Note: Pipelines are only viewable on NetMAP by UK Power Networks staff and their immediate contractors. Do not carry out any excavation without consent from the relevant agency - legally protected high pressure petroleum products pipeline route in the general vicinity - consult www.linewatch.co.uk for contacts and guidance. Pipeline contact numbers can also be found on the intranet – out of hours, contact our Control Centre.		
	Not applicable	Water - surface water (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Water - Source Protection Zone 1 (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Water - Source Protection Zone 2 (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Water - Source Protection Zone 3 (only visible to UK Power Networks and their immediate contractors)









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Scenery for UK Power Networks use only - boxed in red






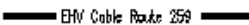

NetMAP system	Scanned image	Description
	Not applicable	Historical - Scheduled Monuments (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Historical - Parks and Gardens (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Historical - Areas of Archaeological Potential (AAP) (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Nature - Ramsar Wetlands of International Importance (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Nature - Special Area of Conservation (SAC) (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Nature - Special Protected Area (SPA) (only visible UK Power Networks and their immediate contractors)
	Not applicable	Nature - Site of Special and Scientific Interest (SSSI) (only visible to UK Power Networks and their immediate contractors)

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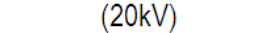
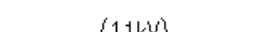







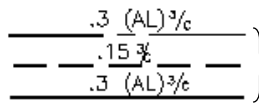
Scenery for UK Power Networks use only - boxed in red

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

Primary distribution cables

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

Secondary distribution cables

NetMAP system	Scanned image	Description
(20kV)  (11kV)  (6.6kV)       	 $.3 (AL)\%e$ $.15\%$ $.3 (AL)\%e$ $185\%e$ $.0225\%e$ Not applicable Not applicable Not applicable Not applicable	HV cable (up to 20kV) 3 phase LV cable (230V or 400/230V) 1 or 2 phase LV cable (230V or 400/230V) Pilot or Telephone cable, often not shown in plan if running with other cables Fibre-optic cable Earth cable HV or LV cable in duct Duct route(s) not containing live cables

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

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

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

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

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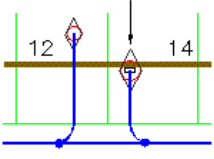
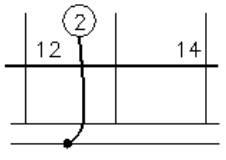
Other NetMAP symbols




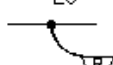

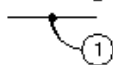
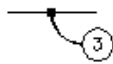
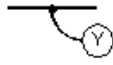

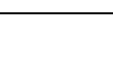
NetMAP system	Scanned image	Description
		Four way underground disconnecting boxes(DB)
		Link boxes(LB)
		Network boxes(NB) or (NWB)
		4 way 6 entry
		6 way box
		6 way 8 entry
		Split bus-bar
		Link box with identification number
		3 way underground disconnecting boxes
		2 way underground disconnecting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

section continued on next page


















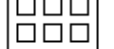



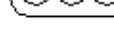




Other NetMAP symbols

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

Services		
NetMAP system	Scanned image	Description
SRC = Service Record Card		
To a property/metered supply (also see SRC)		
<p>Address point ◇</p> <p>Supply point ○</p> <p>Also see SRC and joint/cable attributes</p> <p>Service in external cabinet</p>  <p>Also see SRC and joint/cable attributes</p>	<p>Also see SRC</p> <ul style="list-style-type: none"> Ⓜ Single phase service ① Connected to 1 core & neutral Ⓡ Connected to red core & neutral ⊕ Three phase service ⊕ Connected to inner & outer cores of triple conc cable ⊖ Connected to middle & outer cores of triple conc cable ⊕ Connected to all three cores of triple conc cable 	<p>Existence of a service with its core connection shown in circle</p>
section continued on next page		













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

Symbols used in cross sections

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

section continued on next page

Symbols used in cross sections

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

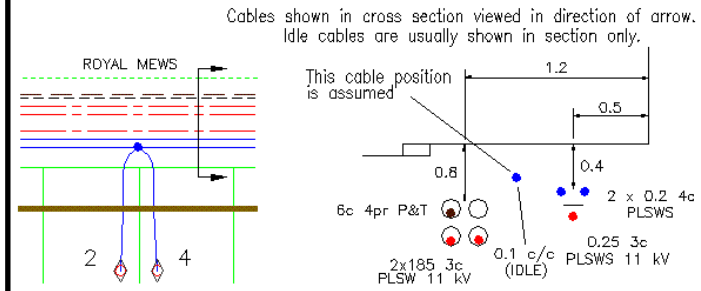
Abbreviations used in cross sections

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

Typical plan and cross section representations

Multi-line composite NetMAP/vector representation

All areas – drawn/redrawn using NetMAP GIS

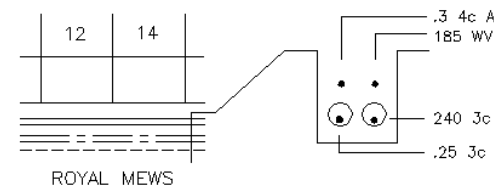


Applies to all composite vector records in both shaded and unshaded areas of the anomalies map.

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

All areas

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

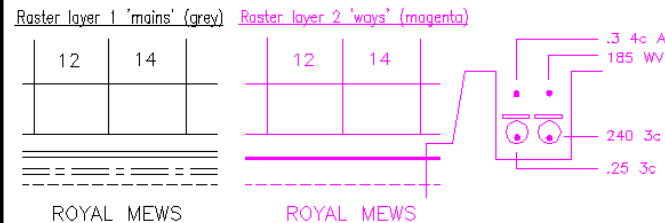


Applies to all composite raster records within the unshaded areas of the anomalies map.
Can also be found in some shaded areas – in particular the ex-North Eastern shaded areas 3 (b) and 3 (c)

Main and ways representation – dual layer raster

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

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



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



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



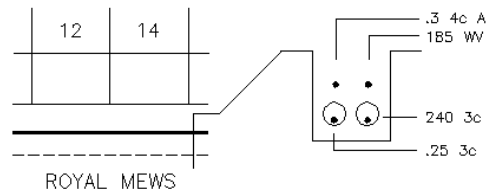
Typical plan and cross section representations

Single line representation - raster or vector data

The City of London only

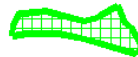
All cables are shown as a single line in plan.
Sections may be written and not drawn.

OR this style may be used.



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

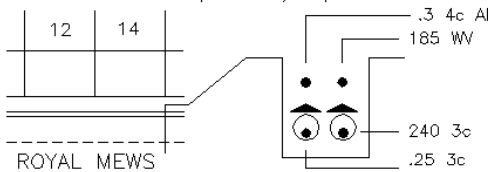
Applies to area 2(b)
on the anomalies map.



Multi-single line representation general (style 1)

Finsbury and Shoreditch only

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



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

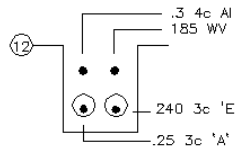
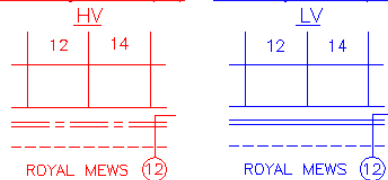


HV and LV map representation – dual layer raster

Ex-North Eastern area only

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

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



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

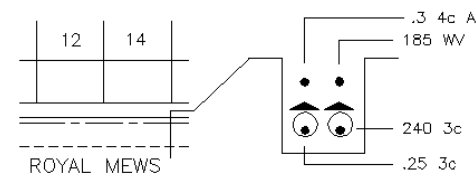


Typical plan and cross section representations

Multi-single line representation general (style 2)

Ex-North Eastern area only

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



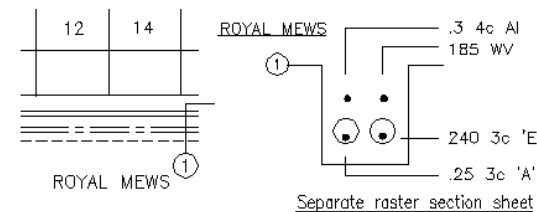
Applies to area 3 (b)
of the anomalies map.



Multi-line representation - composite raster (style 2)

Ex North Eastern area only

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



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



Important note regarding sections:

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

Regional NetMAP Anomalies - general overview:

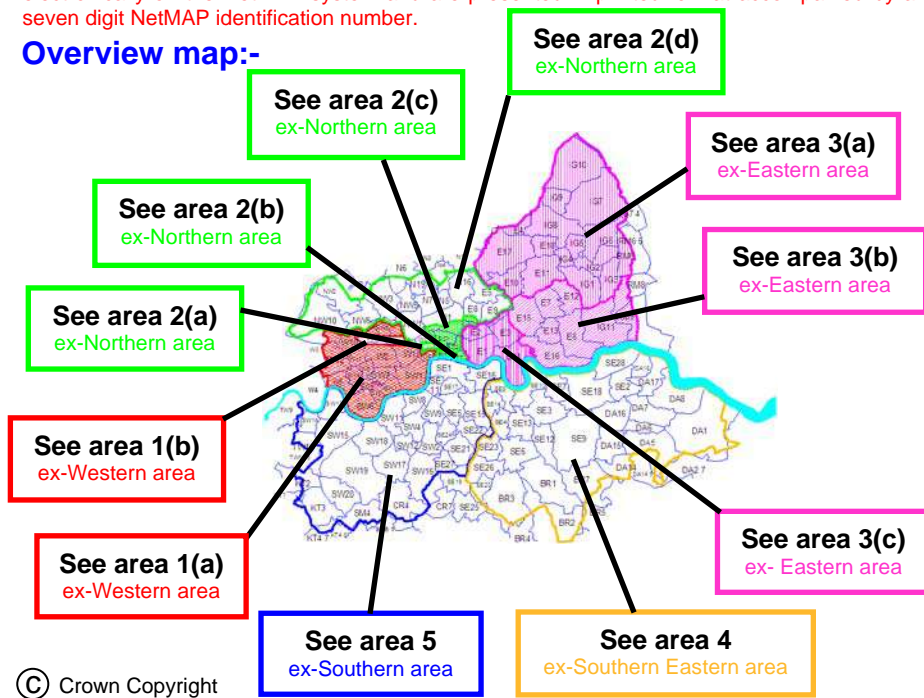
The following pages explain the various major map style anomalies found within the London area. These styles are a legacy from the five individual London Electricity areas which were again formed from seventeen separately organised LEB districts. Areas with significant anomalies are shown in the following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

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

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

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


Overview map:-



See following pages for further details.

Region 1 ex-Western area

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

Region 1(a) (hatched )

Mains and ways representation:

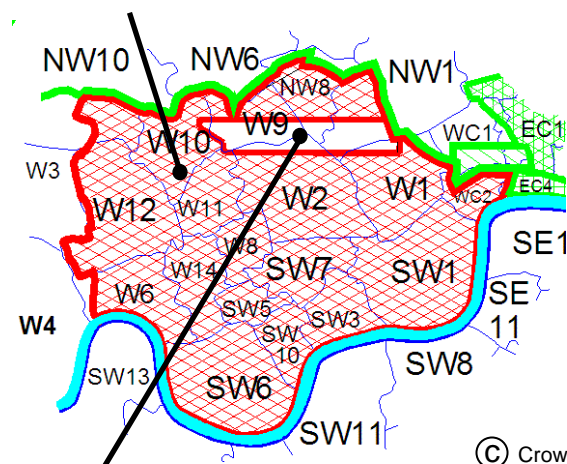
This system consists of two maps layers for the same area.


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

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

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

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



Region 1(b) (un-hatched )

Composite single layer (style 1) maps:

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

Region 2 ex-Northern area

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

Region 2(a) (hatched)

Covers part of WC1 and WC2 (Holborn).

Mains and ways representation:

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

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

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

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

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



Region 2(b) (hatched)

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

Single line representation maps:

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

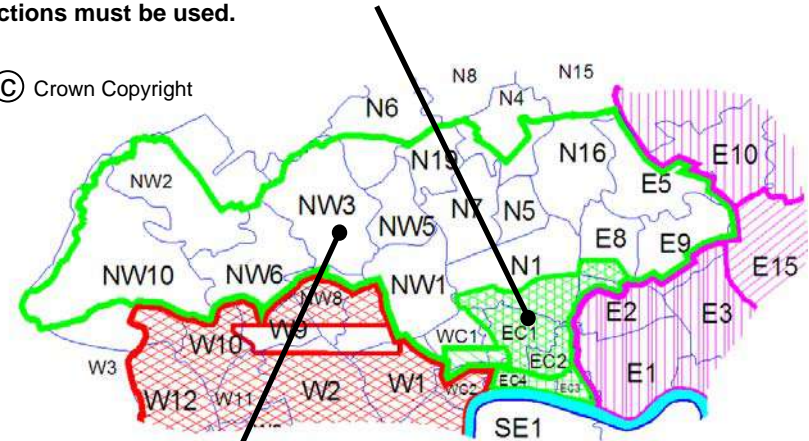
Region 2(c) (hatched)

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

Multi-single line representation (style 1) maps:

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

© Crown Copyright



Region 2(d) (un-hatched)

Covers all other postal areas in this region

Composite single layer (style 1) maps:

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

Region 3 ex-North Eastern area

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

Region 3(a) (hatched)

Separate HV and LV representation maps:

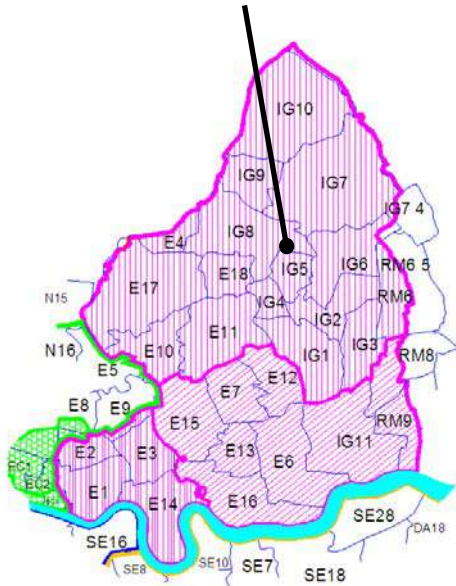
This system consists of two maps layers for the same area.

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

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

EHV cable routes are shown on the HV map layer.

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

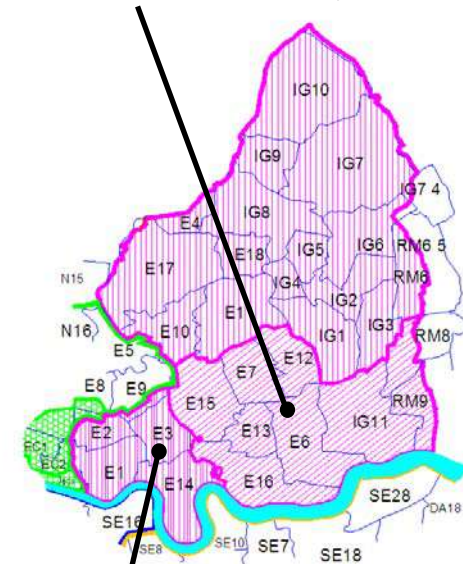


© Crown Copyright

Region 3(b) (hatched)

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

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



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Region 3(c) (hatched)

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

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

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

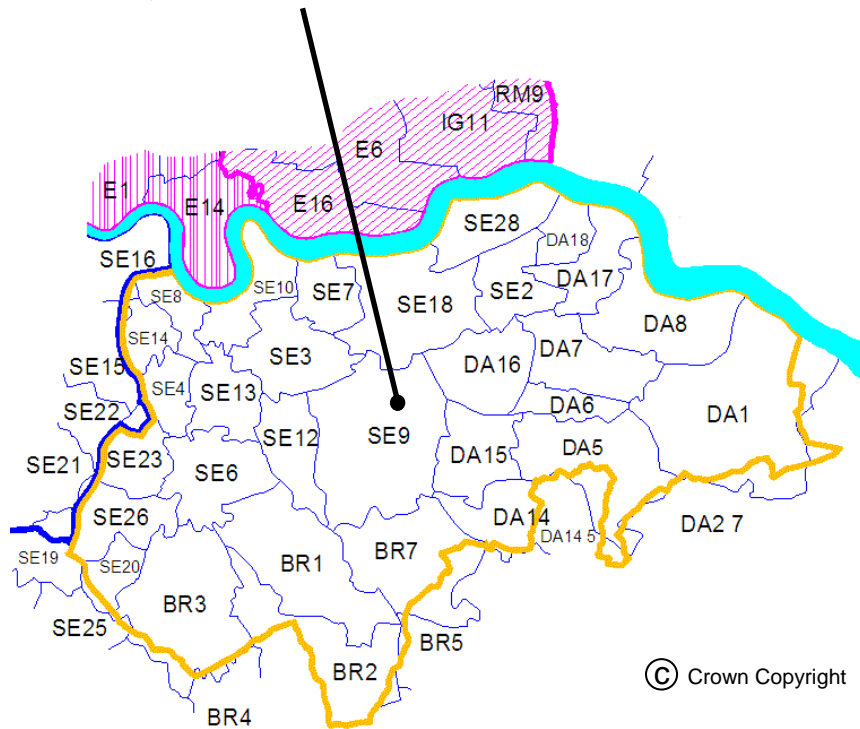
Region 4 ex-South Eastern area

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

Region 4 (un-hatched)

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

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



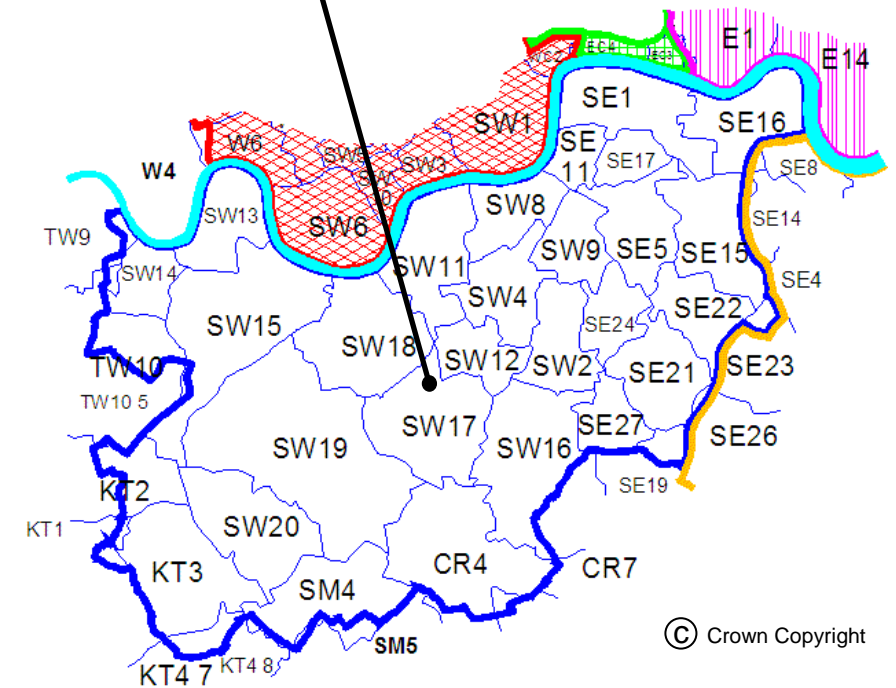
Region 5 ex-Southern area

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

Region 5 (un-hatched)

Composite single layer (style 1) maps:

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

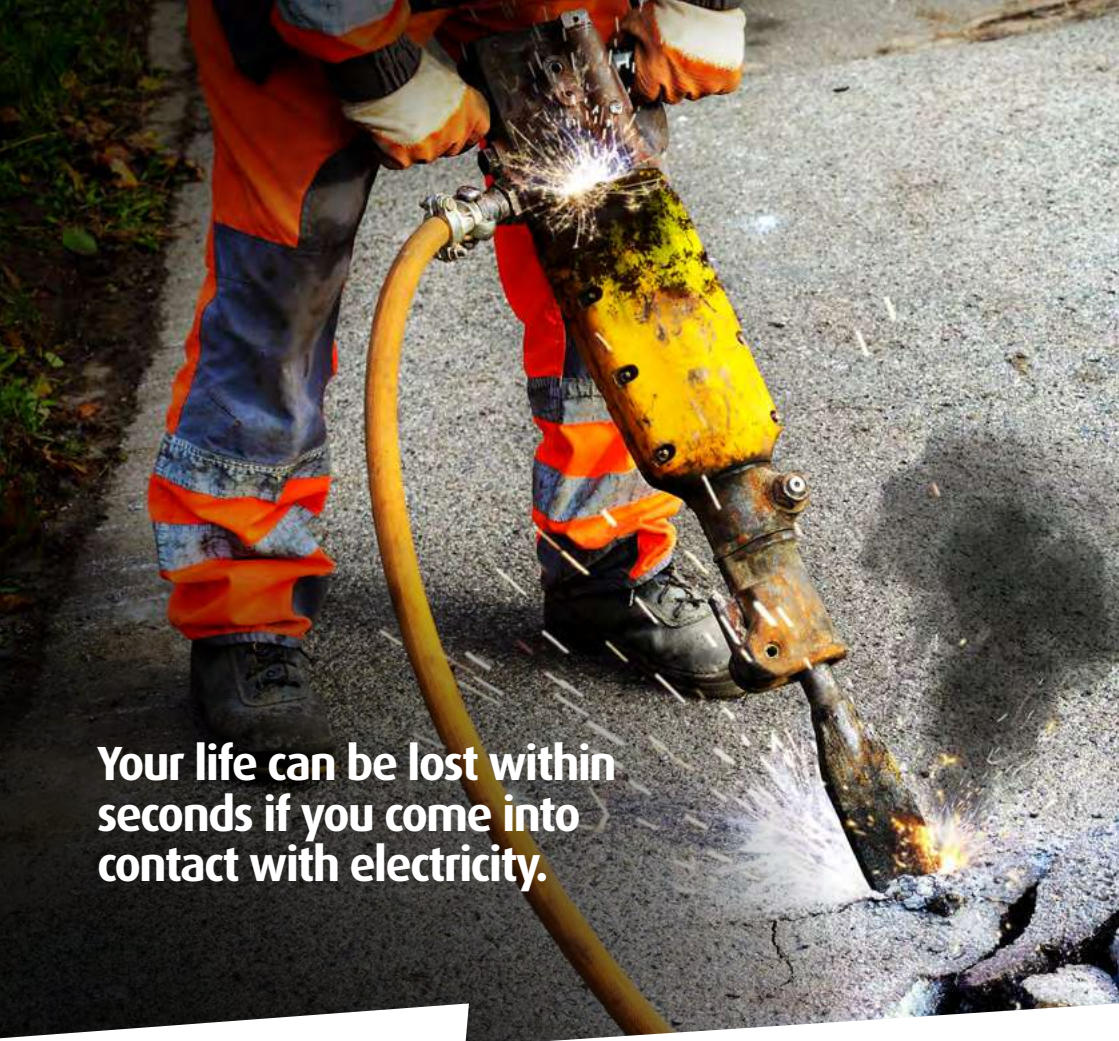




Be Bright

Stay Safe

Stop!
Think before
you dig!



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

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

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

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

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

WOODEN POLES CAN CARRY TELEPHONE AND ELECTRICITY WIRES. **NEVER ASSUME** THE WIRE IS A TELEPHONE WIRE



LINES CAN BE **RE-ENERGISED** AT ANY TIME



400,000 VOLTS

ELECTRICITY SYSTEMS CARRY VOLTAGE UP TO 400,000 VOLTS. **EVEN 230 VOLTS (DOMESTIC VOLTAGE) CAN BE LETHAL**

Be Bright

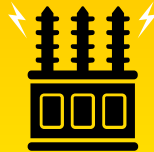
Stay Safe

UK Power Networks
Delivering your electricity



RUBBER BOOTS WILL NOT PROTECT YOU!

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



National power cut helpline

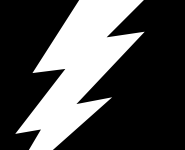
**POWER CUT?
CALL 105**

OR CALL US 24 HOURS A DAY ON
0800 31 63 105

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



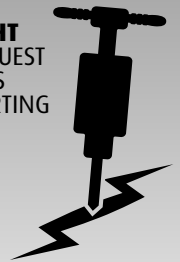
REMEMBER ELECTRICITY **CAN JUMP GAPS**



OVERHEAD POWER LINES ARE OFTEN UNINSULATED (BARE)



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



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



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



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

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

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

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



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



Keep well away - Electricity can kill



Remember:

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



How can we help?

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

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

HSG85 - Electricity at Work – Safe Working Practices

GS6 - Avoiding Danger from Overhead Power Lines

HSG47 - Avoiding Danger from Underground Services

What to do in an emergency

If a mains electricity cable is damaged:

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



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


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




Be Bright

Stay Safe

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

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


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


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


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

 **Complete a risk assessment and ensure it covers electrical hazards**

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

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

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

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

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

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

NATIONAL POWER CUT HELPLINE

**POWER CUT?
CALL 105**



**ADD THIS NUMBER TO YOUR
TELEPHONE CONTACTS LIST**



Stop! Think before you dig!

#bebrightstaysafe



@UKPowerNetworks



/ukpowernetworks

National power cut helpline

**POWER CUT?
CALL 105**



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

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

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

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

 what3words



Scan the QR code on your phone to get the app

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



UK Power Networks
Delivering your electricity

ADVISORY NOTICE

SUPPLIER UPDATE: Utility Assets

On 01/08/2023 an enquiry was sent to Utility Assets' plant record department. As of the date of issue of this Utilities Report, we have not received a formal response from Utility Assets in regards to owning any equipment on this site. Utility Assets have however advised the following:

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

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

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

Asset Manager - Utility Assets Ltd"

If a formal response is received within 3 months of the date of this search it will be forwarded onto you as per our usual service. However, without formal communication from Utility Assets it remains unconfirmed that your site will not be affected by their network. Utility Assets will not acknowledge receipt of this enquiry, or any subsequent chases, unless their network will be affected.

Terms and Conditions

Full Terms and Conditions can be found on the following URL:
<http://www.landmarkinfo.co.uk/Terms/Show/515>

Please note that Utilities Reports have a validity of 3 months from the date of purchase.

If you experience difficulties accessing our Terms and Conditions, please telephone our Customer Service Team on 0844 844 9966.

From: zayo@safedigs.co.uk
Sent: 01 August 2023 11:16
To: Utility Solutions Searches
Subject: LSBUD Job No 30352943
Attachments: LSBUD Job No 30352943 - Zayo Plan.pdf; Guide to Excavation within the Vicinity of Zayo Apparatus.pdf



Zayo Group UK Ltd
c/o JSM Group Ltd
Plant Protection Department
Sterling House
Mutton Lane
Potters Bar
Herts, EN6 3AR

Date: 01 Aug 2023

To: Mr Ben Evans

ZAYO GROUP LTD UK AFFECTED C2 PRELIMINARY PLANT ENQUIRY

Please DO NOT SEND A REPLY to this email as it has been automatically generated and replies are not monitored.

We acknowledge with thanks your LSBUD request (referenced below) dated 01 Aug 2023 06:44:05 AM for information on the location of our assets.

LSBUD REFERENCE:	30352943
YOUR REFERENCE:	LM 208638/KaY

Having examined our records, we can confirm that Zayo Group have apparatus within the specific search area of your enquiry detailed in the reference/location provided.

Please refer to the attached plan(s) showing the approximate position of our apparatus.

WARNING: When working in the vicinity of Zayo Group's assets you have a legal *Duty of Care* that must be observed.

Please note the attached plan(s) indicate approximate location only and their accuracy cannot be guaranteed. To determine the exact location a trial hole must be dug using extreme caution and hand dig methods only.

Please refer to the attached document "Guide to Excavation within the Vicinity of Zayo Apparatus".

If the attached plan(s) contain **no** OS background (ie, only shows red line(s) and nothing else) please email zayoplantenquiries@jsmgroup.com with copies of the plan(s) attached, together with location map **and** coordinates and/or postal code; we will then endeavour to reply to you within 10 working days.

Please forward all C3 and C4 Diversionary Estimate requests for diversionary works under the *New Roads and Street Works Act 1991* "Measures necessary where apparatus is affected by Major Works (Diversionary Works), A Code of Practice", to zayodiversions@jsmgroup.com.

Please do not hesitate to contact us for further assistance.

Yours faithfully,

Zayo Group UK Ltd c/o JSM Group Ltd

JSM Plant Protection Department

T: [01992 655 919](tel:01992655919)

E: zayoplantenquiries@jsmgroup.com

Important Notice

This enquiry response, including any associated documentation, has been assessed and compiled from the information detailed within the LSBUD enquiry outlined above. **Please ensure that the LSBUD enquiry details and this response accurately reflect your proposed works.**

This response is intended for use only by the addressee. If you have received the enquiry response in error, please let us know by telephone and delete all copies; you are advised that copying, distributing, disclosing or otherwise acting in reliance on the response is expressly prohibited. Full terms can be found at www.lsbud.co.uk

Disclaimer: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither Zayo Group nor PelicanCorp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms. Full terms can be found at www.lsbud.co.uk



If you are unable to launch any of the files for viewing and printing, you may need to download and install free viewing and printing software such as [Adobe Acrobat Reader \(for PDF files\)](#)



Zayo Group UK Ltd
 4th Floor Harmsworth House
 13-15 Bouverie Street
 London, EC4Y 8DP

JSM Group Ltd
 Sterling House
 Mutton Lane, Potters Bar
 Hertfordshire, EN6 3AR
 T: 01992 655 919
 zayoplantenquiries@jsmgroup.com

Legend

-  Zayo Duct
-  Enquiry area

Date requested: 01 Aug 2023
 Requested by: Mr Ben Evans
 Company: Atkins - Utility Solutions
 Job reference: 30352943
 Your reference: LM 208638/KaY

Scale on A4 paper: 1:1250

Warning: PDF designed for colour print only with no page scaling. This Information is given as a guide only and its accuracy cannot be guaranteed.



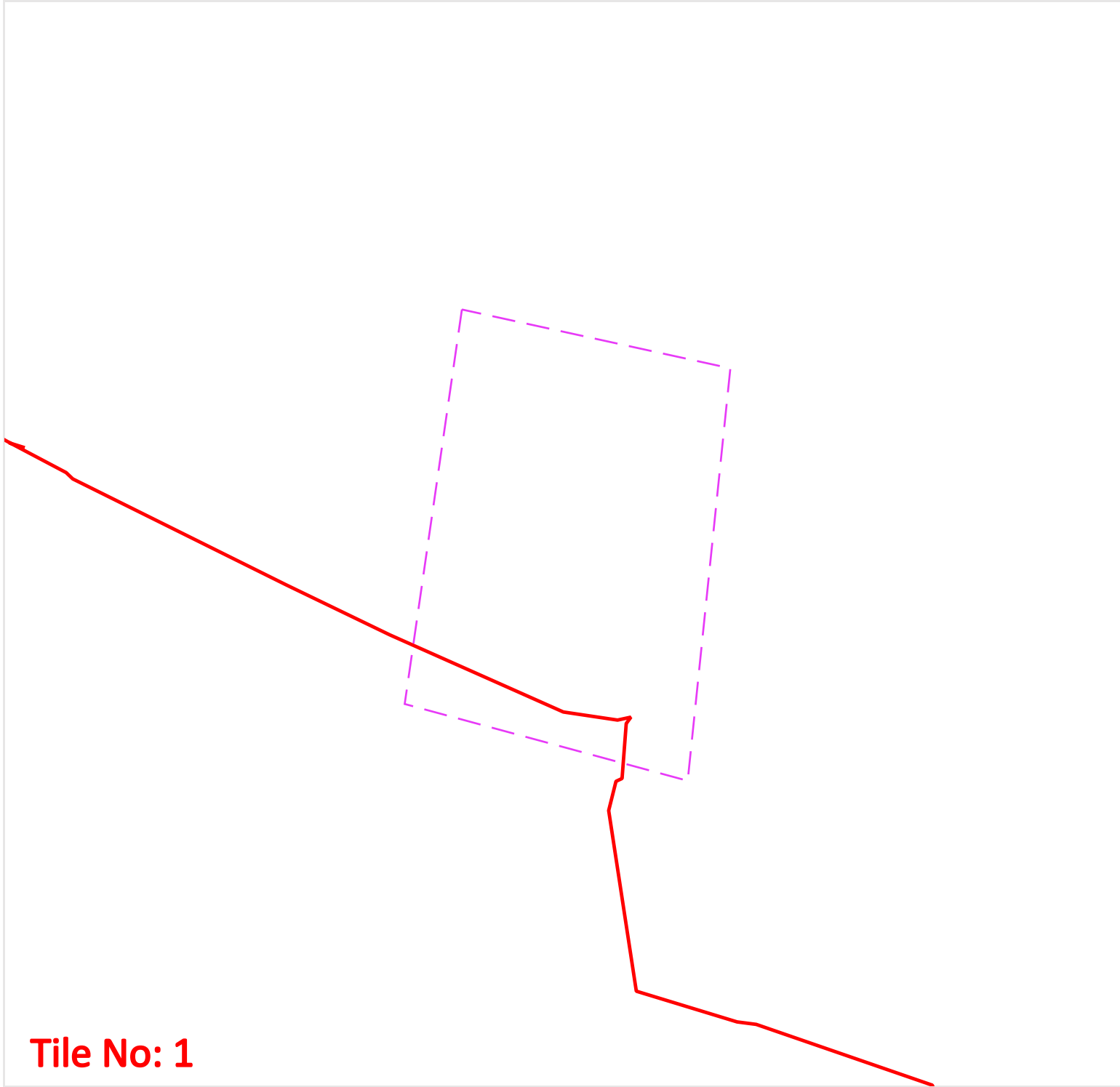
The information on this document is proprietary and shall not be used, copied, reproduced or disclosed in whole or in part without written consent of Zayo Group UK Ltd. Approximate location only is shown. To determine exact location a trial hole must be dug with a Zayo Group UK Ltd Supervisor present. Zayo Group UK Ltd accept no liability for any errors or omissions.



Protecting Lives, Cables & Pipes

In Emergency Only and if Zayo Plant or Cables damaged call: 0800 169 1646

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Tile No: 1

GUIDE TO CONTRACTORS UNDERTAKING EXCAVATIONS IN THE VICINITY OF ZAYO PLANT

1. Prior to commencing any work or moving heavy plant or equipment over any portion of the site, the Contractor shall confirm details of the location of the Zayo apparatus by contacting and requesting utility drawings from LinesearchbeforeUdig

All Enquirers should register free of charge for the Zayo plant enquiry service at LinesearchbeforeUdig <http://www.linesearchbeforeudig.co.uk/>

Or follow the direct link to register at <http://onecall.linesearchbeforeudig.co.uk/RegisterNewUser> and start your search there.

If you have any queries or wish to speak to a member of the JSM Plant Protection Team please call 01992 655 919.

The accuracy of information on the plans cannot be guaranteed and no liability can be accepted for errors or omissions.

2. Where the utility drawings show that the works or the movement of plant or equipment may endanger the Zayo Apparatus the Contractor must mark out the location of the Zayo Apparatus and ensure the apparatus is adequately protected from damage.
3. The contractor should note that damage to Zayo's Fibre-optic network is extremely disruptive and costly to reinstate. The Contractor shall make every effort to avoid the disturbance of Zayo's apparatus for the completion of the work.
4. When excavating, moving or backfilling around Zayo's apparatus The Contractor should note that the normal depth of cover for Zayo ducts are as follows:
 - Carriageway 600mm
 - Footway 350mm
 - Verge 350mm
5. With regard to excavation in the vicinity of Zayo's apparatus the Contractor should be aware of the possibility of reduced cover and the possibility of encountering Zayo apparatus at depths of cover less than that given above.
6. All excavation adjacent to Zayo apparatus is to be carried out by hand until the exact extent and/or location of the Zayo apparatus is known. Use spades and shovels in preference to other tools.

7. Do NOT use Mechanical borers and/or excavators within 0.5m of Zayo Apparatus.
8. To prevent any movement of Zayo apparatus during excavations, complete shuttering shall be used if:
 - The excavation is deeper than the depth of cover of the adjacent Zayo apparatus.
 - The excavation is within 1.0m of Zayo apparatus in stable ground.
 - The excavation is within 5.0m of Zayo apparatus in unstable ground.
9. If for the completion of the works the Contractor intends using any of the following:
 - Pile driving equipment within 10.0m of Company Apparatus.
 - Explosives within 20.0m of Company Apparatus.

Then the Contractor shall advise the Zayo Plant Protection Centre giving a minimum 10 working days written notice.

10. All Zayo manhole, joint box and /or other access points and chambers within the site shall be kept clear and unobstructed at all times to allow access by Zayo and /or their Contractor to carryout maintenance on the network. The Contractor should particularly note that footway type jointing chambers are not specified for carriageway loadings and will need to be adequately protected and/or demolished and rebuilt by Zayo where such chambers are likely to be placed at risk, either temporarily or permanently, from the movement of plant and/or equipment on the site.
11. The covers to Zayo chambers and/or apparatus shall only be lifted by means of appropriate manhole keys under the direct supervision of a Zayo Representative. No employee of the Contractor or of any sub-contractor employed by the Contractor shall enter any Zayo chamber and/or apparatus unless under the supervision of a Zayo Representative.
12. In the event of any damage whatsoever to Zayo apparatus, the Contractor shall immediately report the incidence to Zayo by contacting Zayo as follows:

Telephone: 0800 169 1646 (Zayo 24Hr Network Operations Centre)

Damage to Communications Plant is Expensive – Please Take Care

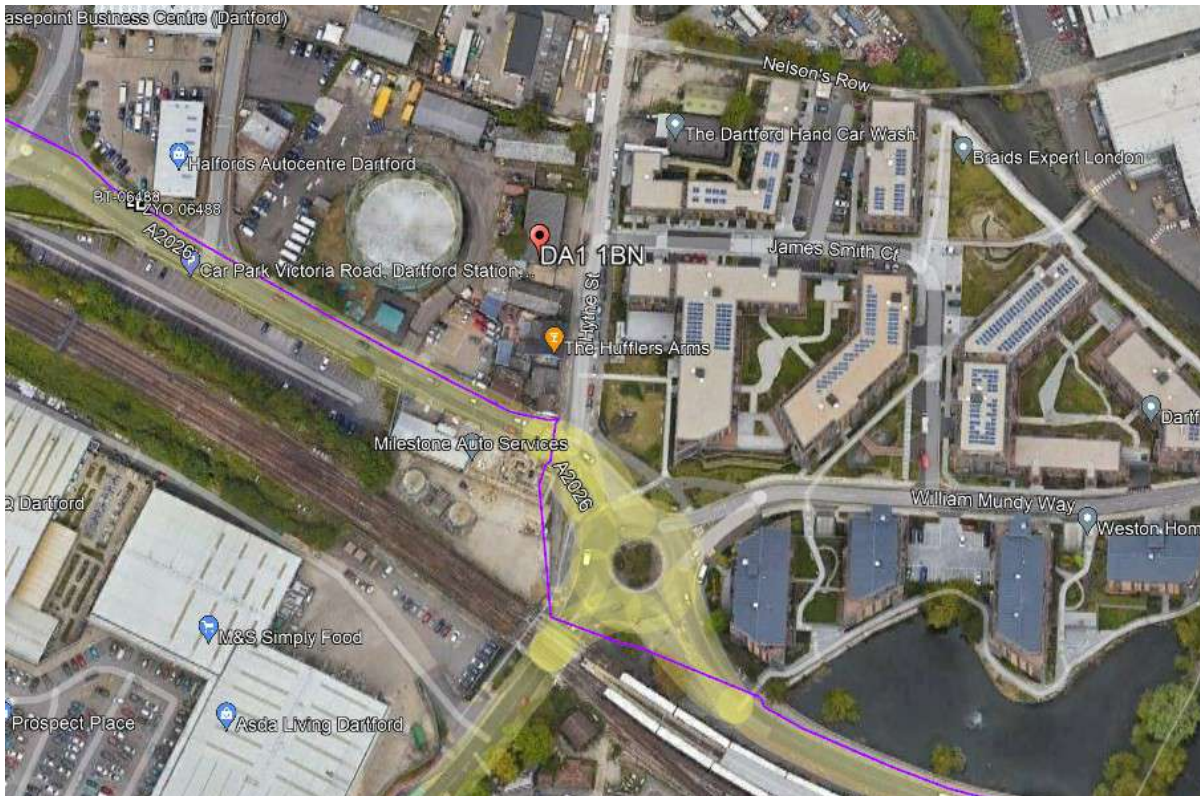
Please note these basic safety details are explained in detail in the HSE booklet HS(G)47 – Avoiding Danger from Underground Services.

Ahmad, Ejaz

From: ZayoPlantEnquiries <ZayoPlantEnquiries@jsmgroup.com>
Sent: 09 August 2023 18:14
To: Utility Solutions GDC Requests
Cc: Utility Solutions Searches; Nicola Harris
Subject: RE: Saved/RPA LSBUD Job No 30352943

Good Afternoon

Please see below.



Kind Regards

Gemma Bunce
Senior Utility Drawings Administrator

T. 01992 257626 M. 07971 585293 F. 01992 788026
E. Gemma.Bunce@jsmgroup.com W. www.jsmgroup.com



Head Office
Sterling House, Mutton Lane, Potters Bar, Hertfordshire, EN6 3AR

Operational Depot
Steel Wharf, 28 River Road, Barking, IG11 0DG

Training School
19 Creek Road, Barking, Essex, IG11 0JH

From: EnergyAssets@safedigs.co.uk
Sent: 01 August 2023 11:15
To: Utility Solutions Searches
Subject: Plant Enquiry Ref Job No. 30352943
Attachments: EAN0167_1.pdf; EAP001214_1.pdf

01/08/2023

LinesearchbeforeUdig ref: 30352943

Your ref: LM 208638/KaY

Dear Sir/Madam,

Thank you for contacting us regarding equipment and apparatus operated by Energy Assets Networks.

We can confirm that Energy Assets Networks currently has (or is planning to have) gas pipes or cables in the vicinity of your proposed works. A copy of our drawings and site location has been enclosed to aid you in locating them.

We will do everything that we can to assist you in safe working procedures. However, it is important to note that we are not responsible for any incidents or accidents that may occur during your work around our network.

Furthermore, we draw your attention to the following general guidance notes:

- This information is given as a general guide for information purposes only and Energy Assets Networks gives no warranty, representation, or guarantee, whether express or implied, that the content is accurate, complete, or up to date.
- Where applicable, 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 Energy Assets Networks, its agents, servants or contractors for any error, omission, or misstatement.
- Please note that all Energy Assets Networks equipment on site should be assumed to be LIVE until proven otherwise.
- Referral to the HSE document HSG47 is essential for any information regarding trial holes and safe digging practice when working near our networks. A copy of this document can be downloaded from the following HSE website link - <https://www.hse.gov.uk/pubns/books/hsg47.htm>.
- Energy Assets Networks reserves its position completely to enforce the terms of any easement against the landowner, even if this results in any planning permission granted not being able to be fully implemented.
- You must not build over any of our plant or enclose our apparatus or equipment.
- Additional costs may be incurred if our plant must be relocated due to your proposed works.
- Do please note that other utility network operators may have assets in the area which could be affected by your proposed works.
- In the case of an emergency please use the phone number listed below

If you require advice in connection with your search, please contact the relevant number below.

Your sincerely,

Energy Assets Networks

Pipelines: 01506 425 362
pipelines@EnergyAssets.co.uk

Networks: 0333 666 2008
info@energyassetsnetworks.co.uk

Gas Emergency Number
0800 111 999

Electric Emergency Number
0333 800 2016

LinesearchbeforeUdig:

If you have an enquiry relating to the use of the LinesearchbeforeUdig website, please contact LinesearchbeforeUdig using the following information:

Telephone: 0845 437 7365

Email: enquiries@lsbud.co.uk

Website: www.lsbud.co.uk