BURO HAPPOLD

Wrexham AFC Kop Stand

Utilities Statement- Additional Capacity Application

WRX-BHE-KOP-ZZZ-RP-CI-000003

0065004

22 July 2025

Revision P02

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P01	Draft for team review	NH/EJ/OM	18/07/2025	JRP
P02	Planning Issue	NH/EJ/OM	22/07/2025	JRP

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Glossary

Term	Definition
AC	Asbestos cement – pipe material for potable water main
HAUC	Highways Authorities and Utilities Committee
HPPE	High pressure polyethylene – pipe material for potable water main
HV	High voltage (electricity) above 11,000 volts
IP	Intermediate pressure gas mains operating between 2 bar and 7 bar
LP	Low pressure gas mains operating approximately between 30 mbar – 75 mbar
LV	Low voltage (electricity) up to 1,000 volts
MP	Medium pressure gas mains operating between 75mbar – 2 bar
CA	Cadent- incumbent gas utility
NRSWA	New Roads and Street Works Act (1991)
Ofcom	The Office of Communications – regulator and competition authority for the UK communications industry
Ofgem	The Office of Gas and Electricity Markets - regulator and competition authority for the UK gas and electricity markets
Ofwat	The Water Services Regulation Authority - regulator and competition authority for the privatised water and sewerage industry in England and Wales
UU	United Utilities – incumbent potable water provider
SPEN	Scottish Power Energy Networks- incumbent electricity utility
HCA	Homes and Communities Agency
EA	Environment Agency
FRA	Flood Risk Assessment
OR	Openreach
Virgin Media	VM

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1 Introduction

This utilities report introduces the proposed design strategy for new and existing utilities connections for the new Kop Stand at WAFC, to support the planning application submission and confirm that the proposed new infrastructure is satisfactory to serve the proposed stadium scheme.

This report to aim to describe the following:

- Establish the basis of design
- Identify the existing infrastructure and new infrastructure requirements
- Confirm the status of utility applications
- Confirm the main incoming plant locations

1.1 Purpose of the Document

This report has been produced to support an additional planning application for the Wrexham A.F.C Kop Development. The permitted development provides for the addition of a new standing terrace with capacity for up to 5,500 spectators, including a viewing platform for disabled supporters, raising the overall capacity of the stadium to approximately 15,500 for league games. It will also include provision for new hospitality space for both match and non-match days, club offices, community space and a club store. This technical note supports an application for additional measures to increase the capacity of the new Kop Stand capacity for up to 7,750 spectators. This report outlines the basis of the proposed design and correspondence with utility providers to date, including developments since the issue of a Utilities Statement alongside the Permitted Planning Application in 2023 (*RUK2021N00485-RAM-RP-00008_Utilities Assessment, Ramboll UK Limited)*.

The report assesses existing electricity, telecommunications and potable water utility networks to understand required network modifications and assess capacity. The report will also identify the anticipated utility peak demands arising from the proposed development.

No new gas supply is proposed to the new Kop Stand, hence this is not considered in this document. As confirmed in the original Utilities statement, there is no existing Wales & West Utilities gas supplies on the Site.

Refer to the drainage strategy document WRX-BHE-KOP-ZZ-RP-CI-000002 for details of existing and proposed drainage.

1.2 Utility Strategy

An assessment has been carried out, in the form of a load profiling exercise, to understand the load requirement of the application Site for the existing utility infrastructure networks. Load profiling provides an estimate of the maximum peak daily utility demand (and provides a worst case) for electricity, fixed telecommunications, potable water services and drainage.

Utility stakeholders have been consulted in order to assess the impact of the demands on existing networks and the design of required system alterations to facilitate the development are ongoing.

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Utility services providers will be supplying their services from existing networks outside the Site's demise and the utility companies will provide distributed services into the Site to serve the new Kop Stand.

1.3 Planning Context

There is a large amount of legislation, regulatory guidance and codes of practice that exists in connection to the utility industry that will be adhered to. The following section summarises the appropriate references.

1.3.1 Legislation, Regulatory Guidance and Codes of Practice

Each of the utility service providers are governed by the respective Act for their service and their market regulated by the appropriate services regulation authority, as detailed below:

Table 1—1 Related Utility Acts and Regulators

Utility	Act	Regulator
Electricity	Electricity Act 1989	Ofgem
Gas	Gas Act 1986 (as amended)	Ofgem
Telecommunications	Communications Act 2003	Ofcom
Potable Water	Water Act 2003	Ofwat
Foul Water Drainage	Water Industry Act 1991	Ofwat

- The New Roads and Street Works Act (NRSWA) 1991 and The Traffic Management Act 2004 will govern any utility modifications or new installations required in the public highway.
- Any diversionary works required will be made based on The Street Works (Recovery of Costs) Regulations whereby the utility will recover Allowable Costs for the necessary work.
- Guidance for the utilities industry is provided by HAUC (Highway Authorities and Utilities Committee) which brings highway authorities; utilities and government together with the aim to improve working practice to reduce the impact of works on members of the public in the UK.
    - The Department for Transport and HAUC provide a number of Code of Practice Documents to assist in the planning of utility works, including:
    - Specification for the Reinstatement of Openings in Highways (Code of Practice), 2010
    - Code of Practice for the Co-ordination of Street Works and Works for Road Purposes and Related Matters, 2009
    - Practical Guide to Street Works, 2006.
- In terms of health and safety, the most relevant regulations/guidance to the application site includes;
    - Construction Design and Management Regulations 2015
    - HS (G) 47 'Avoiding Danger from Underground Services'
    - CIRIA TN95 'Proprietary Trench Support Systems'
    - CIRIA R97 'Trenching Practice'

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2 Project Utility Supply Requirements

The following indicates the incoming utility services requirements for the mechanical services:

2.1 Mains Water Supply

- Peak flow rate Requirement: 3.13l/s
- Required Minimum Pressure: 1.5bar

2.1.1 Basis of design

Water load profiling estimates the peak water demand for the application site, and this hence determines the infrastructure required. The load profiling exercise is based on baseline figures from industry guidance and Buro Happold Engineering experience from similar development proposals.

The Kop Stand has been assessed to date based on a capacity of 7,500 spectators, and the cold-water demand is based on an estimated daily usage of 3 litres per person.

To estimate the peak flow rate for the incoming mains cold water supply, we applied a peak factor method. This approach is commonly used in early-stage design when fixture-level data is not yet available. It is based on converting average daily demand into an estimated maximum instantaneous flow rate using a diversity or peak factor.

- Daily demand: 22,500 litres/day
- Seconds in a day: 86,400
- Peak factor: 12 (used to represent a worst-case scenario for stadium-type buildings, where water usage is highly concentrated during short periods such as halftime)

2.1.2 Existing Infrastructure

Hafren Dyfrdwy/Severn Dee Ltd. is the distribution network company for the Wrexham area. An existing water main serves the STōK Cae Ras, entering the Site in the corner between the Macron Stand and the Kop Stand, from Mold Road, via The Turf car park. The pipe passing through the car park is not recorded on the public records, indicating that this is a private supply pipe.

2.1.2.1 Removals

There are no known mains water supply pipes that need removing or diverting to facilitate the development.

2.1.3 Status of Utility Application

A preliminary application has been made for the proposed scheme's incoming water supply based on the following:

Table 2—1 Peak Water Demand for Application Site

Item	Information
Peak Flow Rate	3.13 l/s
Existing Incoming Mains Water Pressure	1.5 bar

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Incoming Pipe Size & material	50 mm MDPE equivalent (Internal diameter)
Metering Details	Pulse meter to BEMS.
Booster Required	Yes, downstream of water storage tank
Utility Contact details:	Hafren Dyfrdwy (HD Cymru) Packsaddle Bridge Wrexham Road Rhostyllen Wrexham, LL14 4DS Phone: 0330 678 0679 Website: www.hdcymru.co.uk
Quotation reference:	

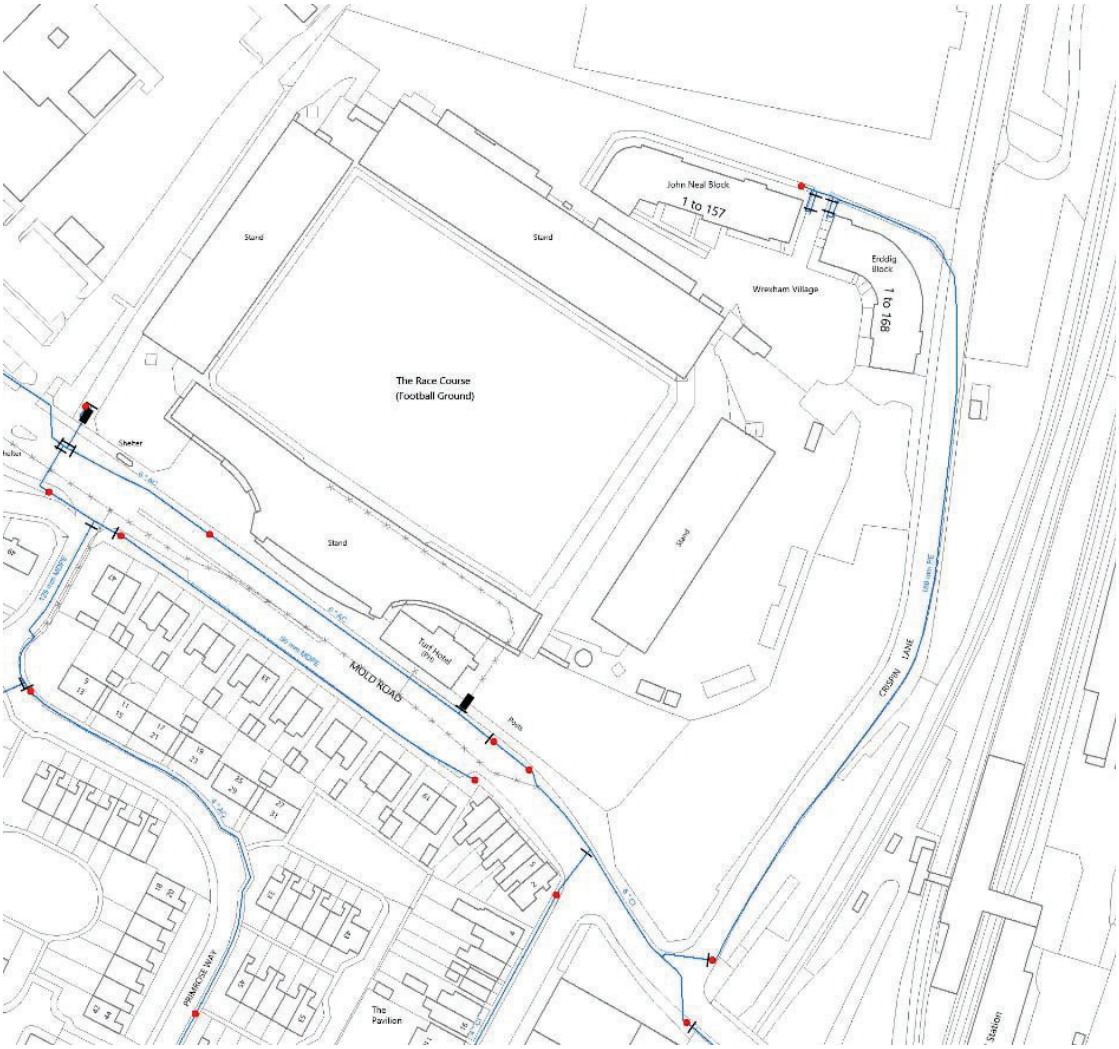


Figure 2—1 Existing Hafren Dyfrdwy/Severn Dee supplies adjacent to the Site.

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3 Electrical Supply

- Total Connected Diversified Load: 1.2 MVA (Estimated load)
- Estimated Max Connected Load: 1.2 MVA (Connected Load)
- No of incomers: 1
- Size and Type of incoming cables: (to be advised by utility company)

3.1 Basis of design

The supply and distribution strategy has to be capable of supporting the new Kop development. We have utilised the plans and area schedule for the fixed planning scheme to inform our load estimates. Where applicable, loads were established from previous experience of stadia projects and recent survey reports of the existing conditions, post occupancy evaluation and from BSRIA & CIBSE Best Practice guides.

The specialist technology loads have been based upon Buro Happold post occupancy evaluation of various stadia in order to determine typical performance and general electrical loads.

3.2 Existing Infrastructure

SPEN Scottish Power Energy Networks is the distribution network operator (DNO) for the Wrexham area. An existing sub-station is present on the southern side of the Site, which provides a LV supply to the nearby student accommodation (marked as GSS-SJ3250 on the figure below; note that this substation was installed as part of the permitted application P/2022/0725 for the Site). A GPR survey has been undertaken and has identified the existing electrical services that run across the Site to the sub-station and from there to the student accommodation.

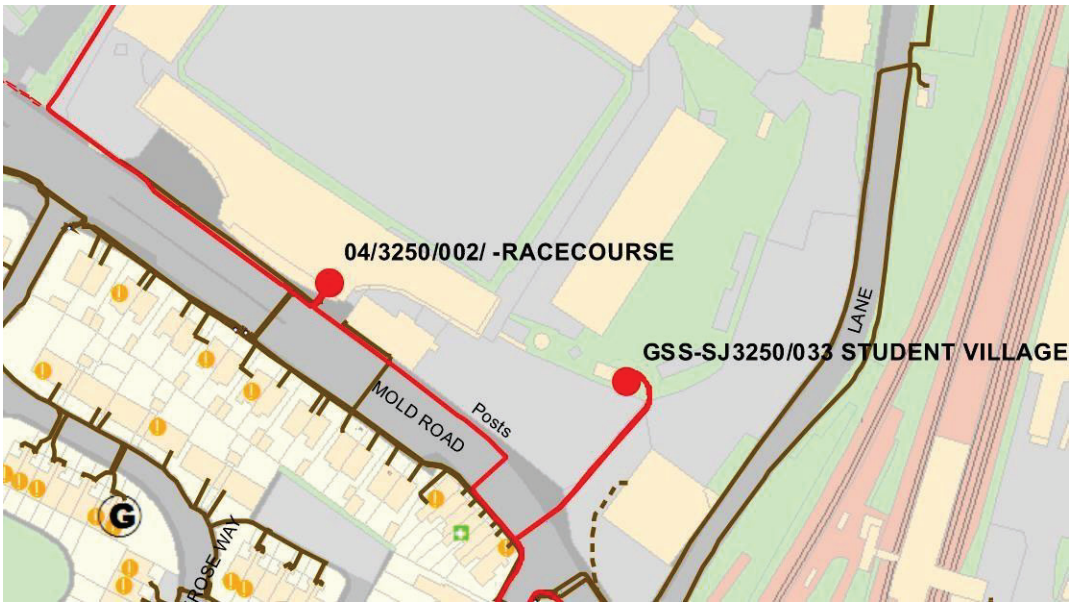


Figure 3—1 Existing SPEN HV Supplies

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A new sub-station is currently being constructed on University land to provide a new LV supply to the student accommodation and Plas Coch campus (as permitted under application P/2023/0291). This will allow the existing sub-station on the Kop Site to be decommissioned and removed.

Within the Macron Stand of the Stok Cae Ras stadium (identified as 04/3250/002 on the figure above), and existing HV/LV substation provides power to the stadium, owned and operated by Scottish Power Energy Networks (SPEN), and containing a 1000kVA HV/LV transformer. Load monitoring was carried out during late 2024 / early 2025 on both match days and non-match days to measure the peak electrical demand in both conditions in order to identify the amount of spare capacity available within the existing Macron Stand substation. The load monitoring indicated a matchday maximum existing demand of circa 537kVA, including circa 125kVA of load associated with the temporary Kop Stand and Fan Zone which have been removed to facilitate the new Kop Stand development. This therefore equates to approx. 588kVA spare capacity in the Macron Stand substation.

Based upon initial load calculations, this is insufficient to serve the Kop Stand. SPEN have advised that they would not accept the installation of two independent electrical supplies to the same site due to concerns over electrical safety. As such, in order to provide sufficient capacity to serve the Kop Stand a new HV supply shall be provided by SPEN, terminated within the ground floor HV Intake room within the Kop Stand, with the existing Macron Stand substation to be isolated and removed. This supply shall be used to serve a client owned HV/LV transformer housed in an adjacent transformer room, which shall in turn serve the Kop Stand and stadium.

3.3 Removals

The existing sub-station within the Site and associated HV/LV cabling is to be removed from site once the Plas Coch campus substation works are complete.

Additionally the existing substation in the Macron stand would be isolated and removed once the new sub-station is operational included within the Kop Stand proposals is complete.

3.4 Status of Utility Application

A preliminary application has been made for the stadium's incoming supply based on the following:

Table 3—1 Status of electrical utility application

Item	Information
Incoming electrical supply 1	MV DNO 11kV network
Metering Details	Metered at 11kv Pulse meter
G99 Connection	TBC
Utility Contact details:	**Brett Monk & Stephen Bell** **SP Energy Networks** Lister Drive Tuebrook Liverpool L13 7HJ 01416149947

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4 Telecommunications

4.1 Basis of design

The Kop Stand will have a dedicated entry point for telecommunications on the northern side of the Site. We propose banks of 2 ducts for a BT Openreach supply entering the Site from Crispin Lane, where existing BT Openreach supplies are present. The telecommunications services to the Site should provide for:

- Connectivity for local authorities (e.g. CCTV monitoring)
- Connectivity for the client (wide area network, internet, telephony)
- Connectivity for public internet
- Connectivity for mobile operator(s)
- Connectivity for broadcasters

4.2 Existing Infrastructure

A desktop utilities search highlights that the following fixed telecommunications infrastructure operators are present within the vicinity, as shown below.

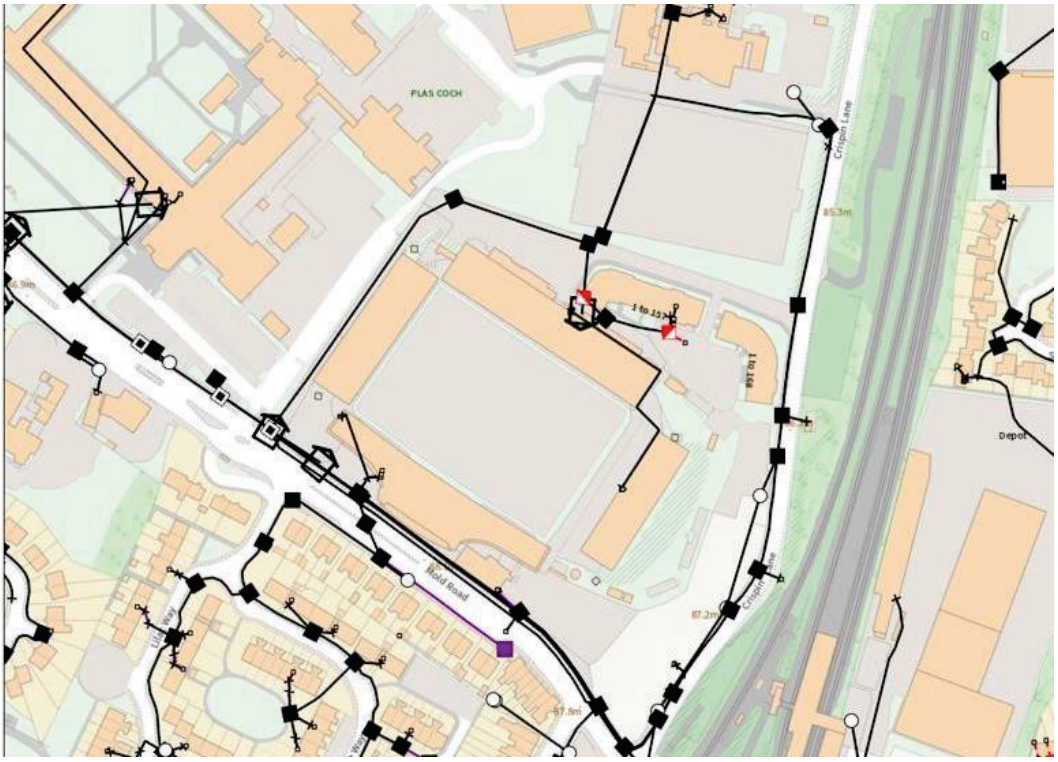


Figure 4—1 BT Openreach Services adjacent to the Site.

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Currently at the Site it is understood there are two existing BT/Openreach fibre connections. One is a 1GB/s line entering into the Macron (Red) stand adjacent to Mold Road. The other is a 10GB/s line entering into the Wrexham Lager (Green) stand adjacent to Wrexham University's student village.

It is proposed that a new 10GB/s line is installed following the new duct path from Crispin Lane to the North Side of the new Kop Stand. The existing 1GB/s line entering into the Macron (red) stand should be upgraded to a 10GB/s line and the existing 10GB/s line into the Wrexham Lager (green) stand should be unleased.

4.3 Removals

An existing Openreach cable is shown to connect from the Wrexham Lager Stand to the old Kop Stand on the records information. This above-ground cable is understood to have been removed as part of the demolition of the old Kop Stand.

4.4 Status of Utility Application

Application to be submitted.

Table 4—1 Status of communications utility application

Item	Information
Incoming telecommunications supply (indicatively proposed)	10GB/s into Incoming Service Provider Room (ISR) located on the northern edge of the Kop Stand.
Metering Details	N/A
Utility Contact details:	**BT Group PLC** 1 Braham Street London E1 8EE 020 7356 5000 https://www.developers.openreach.co.uk/developerportal
Quotation reference:	To be submitted

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Appendix A – Utility Search

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SUBSITE SURVEYS

Wrexham AFC

Racecourse Ground, Mold Road, Wrexham.

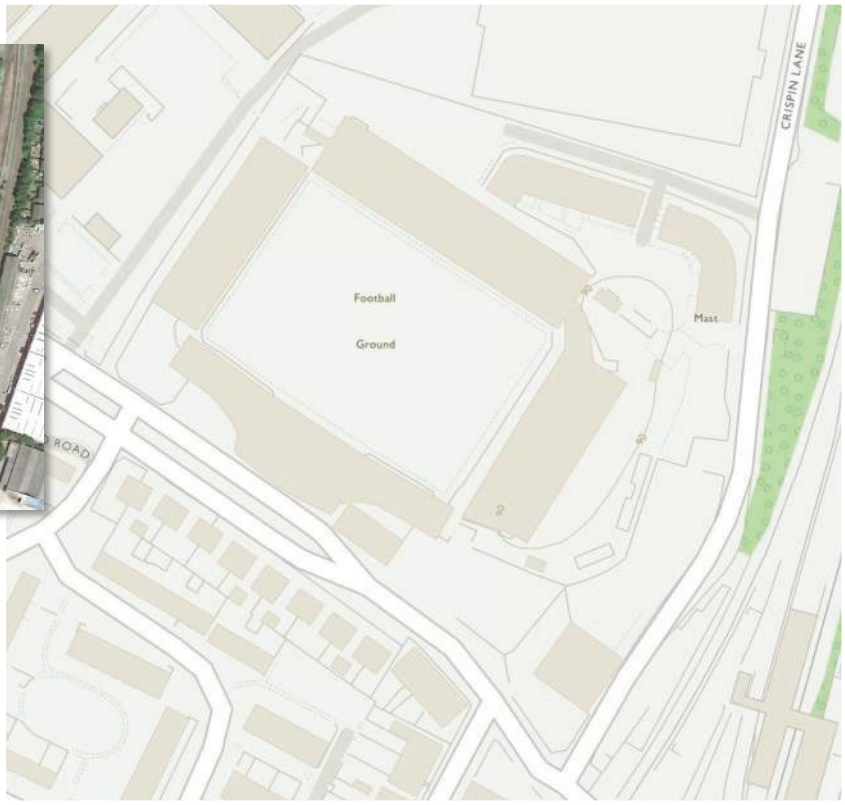
Date: September 2021





Site Location





Grid Reference

SJ 32830 50981

Grid Reference (6 figure)

SJ328509

X (Easting):	Y (Northing):
332830	**350981**
Latitude:	Longitude:
53.051849	**-3.0035216**

Address Near:

Wrexham AFC

Racecourse Ground, Mold Road, Wrexham.

Postcode (nearest):

LL11 2JB

Enclosures

Utility Type	Company	In-house Search	In Vicinity of Development	Not In Vicinity of Development	No Response Received to Date
Water Mains	Welsh Water		21/09/2021		
Drainage	Welsh Water		21/09/2021		
Gas	WWU / (ESP near)		21/09/2021	ESP	
Openreach (BT)	BT	x	21/09/2021		
CATV	Virgin	x	21/09/2021		
Electric	SSE		21/09/2021		
Communication	Colt			21/09/2021	
	sky			21/09/2021	
	Instalcom			21/09/2021	
	Tata			21/09/2021	
	Zayo Europe			21/09/2021	
	Cityfibre			21/09/2021	
	SSE			21/09/2021	
	EU networks			21/09/2021	
	Verizon			21/09/2021	
	SSE			21/09/2021	
	CityFibre			21/09/2021	
	Gtt			21/09/2021	
	gtc			21/09/2021	
Environment Agency				21/09/2021	
Council				21/09/2021	
Tunnels & Pipelines	BT Deep Level Tunnels			21/09/2021	
	Thames Water Ring Main			21/09/2021	
	Post Office Tunnels			21/09/2021	
	Cemex (Cement Tunnel)			21/09/2021	
	BOC			21/09/2021	
	Post Office			21/09/2021	
	Jetline MJL			21/09/2021	
Transport	Canal & River Trust			21/09/2021	
	Network Rail			21/09/2021	
	Crossrail			21/09/2021	
	London Underground / LUHV			21/09/2021	
	Docklands Light Railway			21/09/2021	
	Private Rail Lines			21/09/2021	
	Trams			21/09/2021	
	Traffic Master			21/09/2021	

NOT AFFECTED

	AWE Pipeline Esso Petroleum Company Limited Perenco UK Limited (Purbeck Southampton Pipeline) BOC Limited Fulcrum Pipelines Limited Petroineos BP Midstream Pipelines Phillips 66 Gateshead Energy Company Premier Transmission Ltd (SNIP) Carrington Gas Pipeline Gigaclear PLC Prysmian Cables & Systems Ltd (c/o Western Link)	CATS Pipeline c/o Wood Group PSN Humbly Grove Energy Redundant Pipelines - LPDA Cemex IGas Energy RWEnpower (Little Barford and South Haven) Centrica Energy Ineos Enterprises Limited SABIC UK Petrochemicals Centrica Storage Ltd DIO (MOD Abandoned Pipelines)

Abbreviations

Apparatus	
Electric:	
DNO	Distribution Network Operator
iDNO	Independent Distribution Network Operator
ICP	Independent Connections Provider
LV	Low Voltage
HV	High Voltage
EHV	Extra High Voltage
kVA	Kilovolt Amperes
MVA	Megavolt Amperes
AC	Alternating Current
S/S	Substation
PMT	Pole Mounted Transformer
Gas:	
GT	Gas Transporter
iGT	Independent Gas Transporter
UIP	Utility Infrastructure Provider
PRS	Pressure Reducing Station (Governor)
LP	Low Pressure
MP	Medium Pressure
IP	Intermediate Pressure
HP	High Pressure
Water	
SLO	Self Lay Organization
Incumbent	Local Water only or Water & Sewerage Company
WRAS	Water Regulation Advisory Scheme
Other	
PE	Polyethylene
DI	Ductile Iron
ST	Steel
CI	Cast Iron
SI	Spun Iron
HPPE	High Performance Polyethylene
MDPE	Medium Density Polyethylene
CATV	Cable Television
GRP	Glass Reinforced Plastic
FTTP	Fibre to the premise
FTTC	Fibre to the cabinet
l/min	Litres per minute
H&S	Health and Safety
HBF	House Builders Federation
TPO	Tree Preservation Order

Enclosure Table Key

Desk Research
A cross in this column indicates that the response has been determined In-house.

In Vicinity
Utility plant is expected to be within, adjacent to or very close to the search area. It's recommended to liaise with the utility in advance of any works taking place.

Not In Vicinity
Utility plant is not expected to be within, adjacent to or very close to the search area. It may be located some distance from the search area.

Disclaimer

Relevant Documents

The following documents must be referred to before work commences in the vicinity of existing services:

Health and Safety Booklet HS (GS) 6 Avoidance of Danger from Overhead Electric Lines.
General Safety Measures to Avoid Injury and Damage to Gas Apparatus.
HSE Guidance Note HS (G) 47 Avoiding Danger from Underground Services.
National Joint Utilities Group (NJUG) Publications Vol. 1.
CDM Regulations 2007 (Regulation 34 – Energy Distribution Installations).
Electricity at Work Regulations 1989.

Basic Risk Assumption for all Services

When dealing with existing services the following assumptions must always be accepted:
All existing buildings have gas, water electric and telecoms supplies to them until proven otherwise.
Any supply to an existing building, no matter how old the building is or how deteriorated the supply may appear, is taken to be 'live' until proven otherwise. All open land, vacant lots and derelict sites are deemed to have services beneath them until proven otherwise.

The only acceptable proof that a service is 'dead' and can be removed is written confirmation from the owner of the service. The quality and accuracy of information provided by utilities about their existing plant is indicative and no warranty is made as to its accuracy. Therefore, any utility record plans and/or marked up drawings provided by each utility must only be used as a guide and the actual location of plant should be verified by CAT Scan or trial holes before construction works commence.

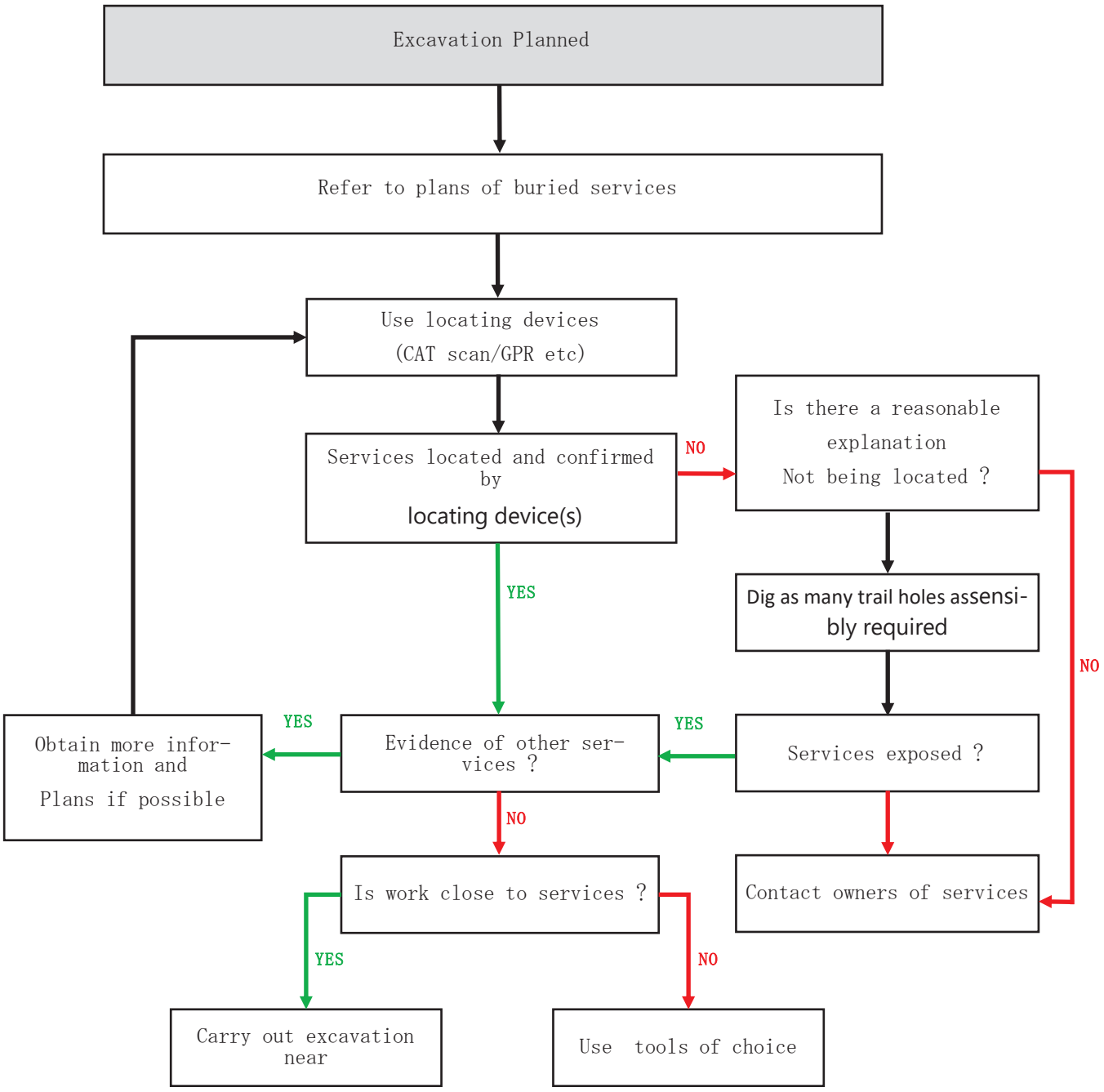
Please note not all service connections are shown on the utility record plans.

Plant Found Within Site Boundaries

Where utility plant is found within the site boundary, it is recommended for the client to check for legal easements or wayleaves.

Diversions of plant within site boundaries can be expensive and time consuming to relocate.
Further investigation of costs and timescales are recommended. Please ask PES for further details.

This flow diagram is intended to help give an understanding of the process from referring to plans on-site through to the start of excavation.



For example, could services be non-metallic pipes? Please refer to HS (G) 47 text for further information.

† In particular; visual evidence. Ensure that the presence of services, which may be unmarked on plans or for which no plans are available, has been considered, for example service connections.

*** If there is visual evidence of services, but owners cannot be traced, despite all reasonable attempts to do so, any excavation could proceed but using hand-dug trial holes and proceeding with great care.*

Guidelines on the Positioning and Colour Coding of Underground Utilities' Apparatus

Recommended Colour Coding of Underground Utilities Apparatus

All depths are from the surface level to the crown of the apparatus.

Utility	Duct	Pipe	Cable	Marker Systems	Recommended Minimum Depths	
					Footway Verge	Carriageway
Electricity HV (High Voltage)	Black or red duct or tile	N/A	Red or black	Yellow with black and red legend or concrete tiles	450mm - 1200mm	750m - 1200mm
Electricity LV (Low Voltage)	Black or red duct or tile	N/A	Black or red	Yellow with black legend		750mm
Gas	Yellow	* See row below	N/A	Black legend on PE pipes every linear metre.	600mm footway 750mm verge	750mm
	*** PE - up to 2 bar - yellow or yellow with brown stripes (removable skin revealing white or black core pipe). - between 2 to 7 bar -orange. Steel pipes may have yellow wrap or black tar coating or no coating. Ductile Iron may have plastic wrapping Asbestos & Pit / Spun Cast Iron – No distinguishable colour					
Water non Potable & Grey Water	N/A	Black with green stripes	N/A	N/A	600mm - 750mm	600mm - 750mm
Water - Firefighting	N/A	Black with red stripes or bands	N/A	N/A	600mm - 750mm	600mm - 750mm
Oil / fuel pipelines	N/A	Black	N/A	Various Surface markers Marker tape or tiles above red concrete	900mm All work within 3 metres of oil fuel pipelines must receive prior approval	900mm All work within 3 metres of oil fuel pipelines must receive prior approval
Sewerage	Black	No distinguishing colour / material (eg: Ductile Iron may be red; PVC may be brown)	N/A	N/A	Variable	Variable
Communications	Grey, white, green, Black, purple	N/A	Black or Light Grey	Various	250mm - 350mm	750mm minimum
Water 	Blue or Grey	Blue polymer or blue or uncoated Iron / GRP. Blue polymer with brown stripe (removable skin revealing white or black pipe)	N/A	Blue or blue/ black	750mm	750mm minimum
Water pipes for special purposes (e.g. contaminated ground) 	N/A	Blue polymer with brown stripes (non removable skin)	N/A	Blue or blue/ black	750mm	750mm minimum

*These guidelines describe utility industry practice. However, it should not be Assumed that all apparatus will conform the recommendations for positioning And colour coding contained in this report.

Recommended Colour Coding of Other Underground Apparatus
All depths are from the surface level to the crown of the apparatus.

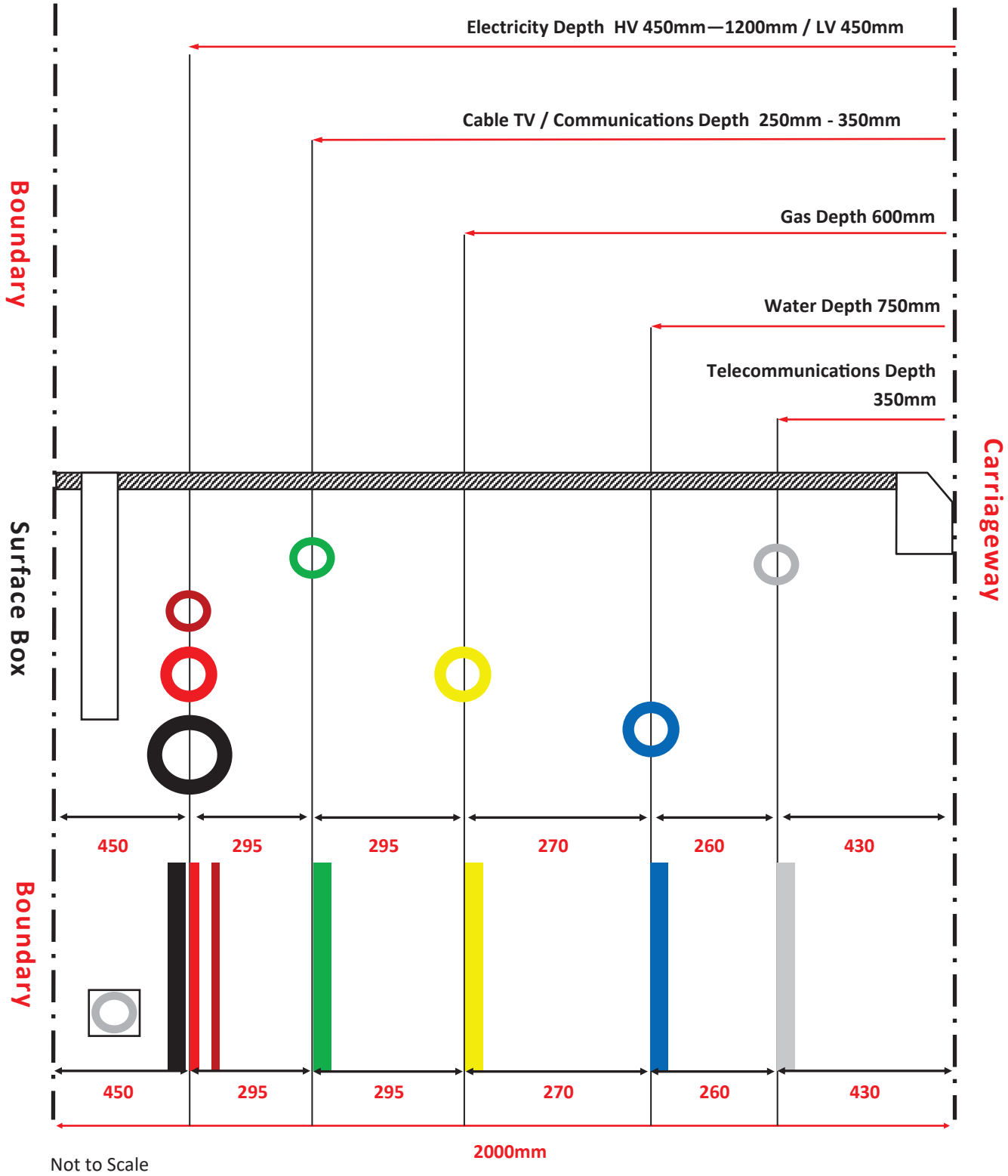
Utility	Duct	Pipe	Cable	Marker Systems	Recommended Minimum Depths	
					Footway Verge	Carriageway
At the time of publication the following were current examples of known highway authority apparatus colour coding but local variations may occur.						
Street Lighting						
England and Wales	Orange	N/A	Black	Yellow with black legend	450mm	600mm
Scotland	Purple	N/A	Purple	Yellow with black legend	450mm	450mm
Northern Ireland	Orange	N/A	Black or orange		450mm	450mm
Other						
Traffic Control	Orange	N/A	Orange	Yellow with black legend		
Street Furniture		N/A	Black	Yellow with black legend	450mm	600mm
Communications		N/A	Light grey or black	Yellow with black legend		
CCTV	Purple	N/A		Yellow with black legend		
Motorways and Trunk Roads England and Wales						
Communications	Purple	N/A	Grey	Yellow with black legend	450mm	
Communications Power	Purple	N/A	Black	Yellow with black legend		
Road Lighting	Orange	N/A	Black	Yellow with black legend		
Scotland						
Communications ○ ●	Black or grey	N/A	Black	Yellow with black legend		
Road Lighting	Purple	N/A	Purple	Yellow with black legend		

*These guidelines describe utility industry practise. However, it should not Be assumed that all apparatus will confirm to the recommendations for Positioning and colour coding contained in this publication.

NJUG Guidelines on the Positioning and Colour Coding of Underground Utilities

Recommended Positioning of Utility Apparatus in a 2 metre Footway (s)

Note - the same positioning should apply in the carriageway service strip (if safe and practical to do so) where a development has footways). available for services and or the boundary of the property in on the carriageway (please refer to minimum depths in carriageways) For further advise please contact the asset owner.



Not to Scale

SUBSITE SURVEYS

Other warnings

WARNING
PIPELINE OFFSET BEHIND MARKER

The markers may not always be directly over the pipeline. In which case an additional waring sticker will indicate the direction of off-set.



Studs such as these may be found in footpaths and car parks etc.



Stile warning marker

CAUTION

THIS STRUCTURE IS IN CLOSE PROXIMITY TO A HIGH PRESSURE OIL PIPELINE.
BEFORE COMMENCING ANY EXCAVATION WORK PLEASE CALL

FREEFONE 0800 XXXXXX.

You may find signs such as these on apparatus close to the pipeline.



When the pipeline route has been located it will be marked with location pegs.



Pole warning marker

IMPORTANT

Marker posts only denote the presence of our pipelines. Never presume that the pipeline runs in a straight line between marker posts as there could either be a bend or the posts may have been moved without our knowledge.

DO NOT PRESUME ANYTHING; TELEPHONE OUR AGENTS AND WE WILL SEND SOMEONE TO VERIFY EXACTLY WHERE THE PIPELINE IS SITUATED.



Watch out– there's a pipeline about!

Typical pipeline Markers

LINEWATCH WEBSITE
www.linewatch.co.uk

Revision No **06.1**

Awareness and preparation is the key to safe excavation

Typical pipeline markers



Mainline marker post



Huntsman marker post



BPA marker post



ConocoPhillips marker post



MJL marker post



BP marker post



Esso marker posts



Total marker post



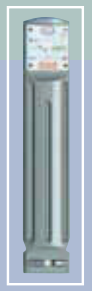
GPSS marker post



Shell marker posts



Beware of posts with brass studs (such as the post above) which have cables connecting to the pipeline below.



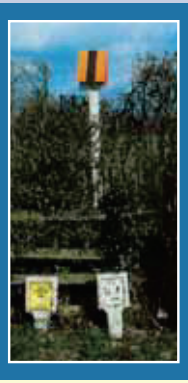
New design marker post

Typical pipeline aerial markers





Shell aerial marker



Esso & MLP aerial marker



GPSS aerial marker



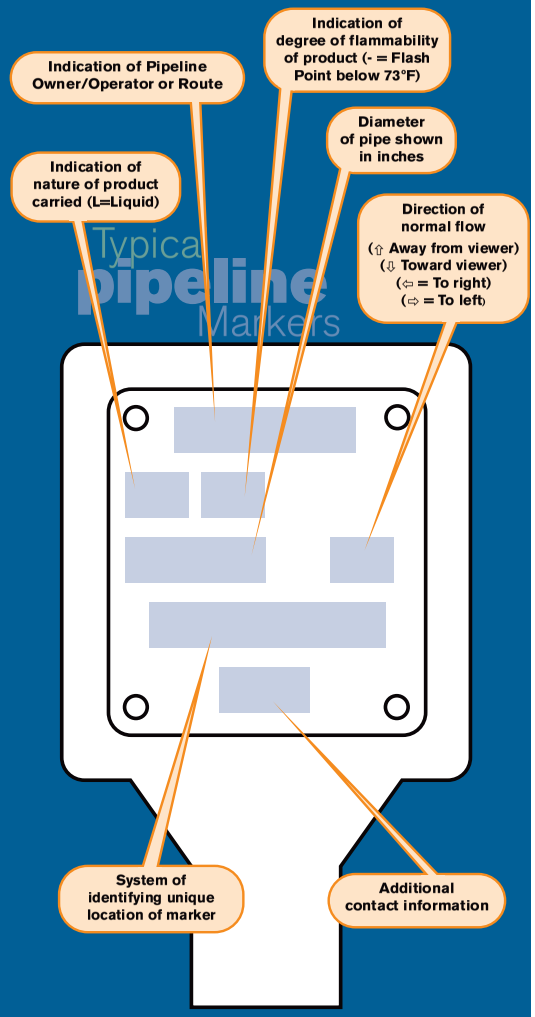
BP aerial marker



Plain orange with white stick

BPA
ConocoPhillips
Total/Huntsman
have similar aerial markers to left

Standard symbols on marker posts



The above information may not appear in the same order as indicated and some items may be omitted

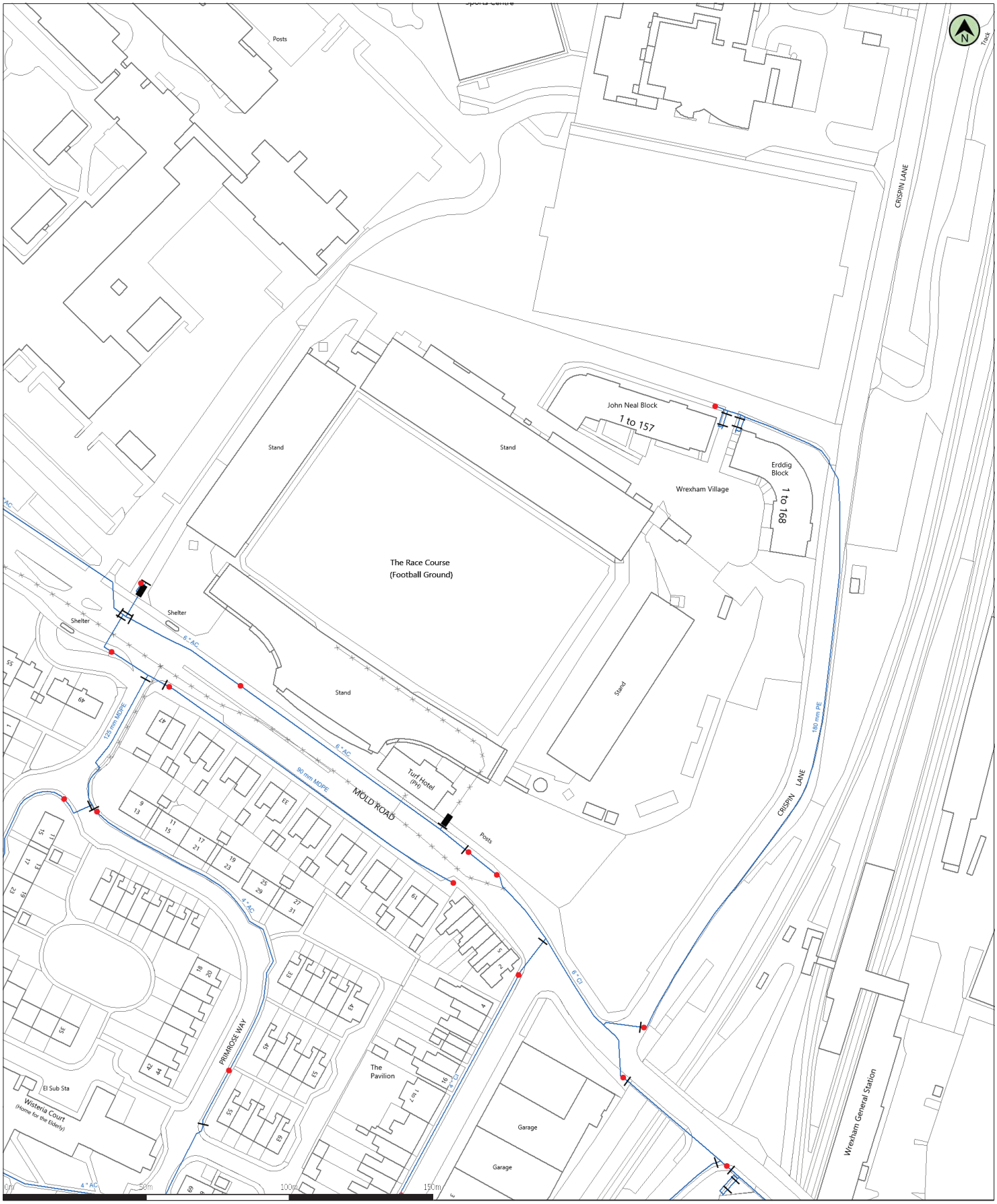
Useful pipeline enquiry sites

www.linewatch.co.uk

for links to individual pipeline websites

www.linesearch.org

Water



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Scale: 1:1250 | Date: 17/09/21 | Clean Water Plan A3

Data updated: 14/08/21 | Map Centre: 332836,350979 | Our Ref: 651821 - 2 | Powered by digdat

Hydrant | Valve | Aqueduct

Meter | Water Main | Duct

AirValve | Abandoned Pipe | Service Pipe

utilitysitesearch@outlook.com

WREXHAM

HAFREN DYFRDWY severn dee

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GENERAL CONDITIONS AND PRECAUTIONS TO BE TAKEN WHEN CARRYING OUT WORK ADJACENT TO SEVERN TRENT WATER'S APPARATUS

Please ensure that a copy of these conditions is passed to your representative and/or your contractor on site. If any damage is caused to Hafren Dyfrdwy (HD) apparatus (defined below), the person, contractor or subcontractor responsible must inform HD immediately on: **0800 085 8033 (24 hours)**

a) These general conditions and precautions apply to the public sewerage, water distribution and cables in ducts including (but not limited to) sewers which are the subject of an Agreement under Section 104 of the Water Industry Act 1991(a legal agreement between a developer and HD, where a developer agrees to build sewers to an agreed standard, which HD will then adopt); mains installed in accordance with an agreement for the self-construction of water mains entered into with HD and the assets described at condition b) of these general conditions and precautions. Such apparatus is referred to as "HD Apparatus" in these general conditions and precautions.

b) Please be aware that due to The Private Sewers Transfer Regulations June 2011, the number of public sewers has increased, but many of these are not shown on the public sewer record. However, some idea of their positions may be obtained from the position of inspection covers and their existence must be anticipated.

c) On request, STW will issue a copy of the plan showing the approximate locations of HD Apparatus although in certain instances a charge will be made. The position of private drains, private sewers and water service pipes to properties are not normally shown but their presence must be anticipated. This plan and the information supplied with it is furnished as a general guide only and HD does not guarantee its accuracy.

d) STW does not update these plans on a regular basis. Therefore the position and depth of HD Apparatus may change and this plan is issued subject to any such change. Before any works are carried out, you should confirm whether any changes to the plan have been made since it was issued.

e) The plan must not be relied upon in the event of excavations or other works in the vicinity of HD Apparatus. It is your responsibility to ascertain the precise location of any HD Apparatus prior to undertaking any development or other works (including but not limited to excavations).

f) No person or company shall be relieved from liability for loss and/or damage caused to HD Apparatus by reason of the actual position and/or depths of HD Apparatus being different from those shown on the plan.

In order to achieve safe working conditions adjacent to any HD Apparatus the following should be observed:

1. All HD Apparatus should be located by hand digging prior to the use of mechanical excavators.

2. All information set out in any plans received from us, or given by our staff at the site of the works, about the position and depth of the mains, is approximate. Every possible precaution should be taken to avoid damage to HD Apparatus. You or your contractor must ensure the safety of HD Apparatus and will be responsible for the cost of repairing any loss and/or damage caused (including without limitation replacement parts).

3. Water mains are normally laid at a depth of 900mm. No records are kept of customer service pipes which are normally laid at a depth of 750mm; but some idea of their positions may be obtained from the position of stop tap covers and their existence must be anticipated.

4. During construction work, where heavy plant will cross the line of HD Apparatus, specific crossing points must be agreed with HD and suitably reinforced where required. These crossing points should be clearly marked and crossing of the line of HD Apparatus at other locations must be prevented.

5. Where it is proposed to carry out piling or boring within 20 metres of any HD Apparatus, HD should be consulted to enable any affected HD Apparatus to be surveyed prior to the works commencing.

6. Where excavation of trenches adjacent to any HD Apparatus affects its support, the HD Apparatus must be supported to the satisfaction of HD. Water mains and some sewers are pressurised and can fail if excavation removes support to thrust blocks to bends and other fittings.

7. Where a trench is excavated crossing or parallel to the line of any HD Apparatus, the backfill should be adequately compacted to prevent any settlement which could subsequently cause damage to the HD Apparatus. In special cases, it may be necessary to provide permanent support to HD Apparatus which has been exposed over a length of the excavation before backfilling and reinstatement is carried out. There should be no concrete backfill in contact with the HD Apparatus.

8. No other apparatus should be laid along the line of HD Apparatus irrespective of clearance. Above ground apparatus must not be located within a minimum of 3 metres either side of the centre line of HD Apparatus for smaller sized pipes and 6 metres either side for larger sized pipes without prior approval. No manhole or chamber shall be built over or around any HD Apparatus.

9. A minimum radial clearance of 300 millimetres should be allowed between any plant or equipment being installed and existing HD Apparatus. We reserve the right to increase this distance where strategic assets are affected.

10. Where any HD Apparatus coated with a special wrapping is damaged, even to a minor extent, HD must be notified and the trench left open until the damage has been inspected and the necessary repairs have been carried out. In the case of any material damage to any HD Apparatus causing leakage, weakening of the mechanical strength of the pipe or corrosion-protection damage, the necessary remedial work will be recharged to you.

11. It may be necessary to adjust the finished level of any surface boxes which may fall within your proposed construction. Please ensure that these are not damaged, buried or otherwise rendered inaccessible as a result of the works and that all stop taps, valves, hydrants, etc. remain accessible and operable. Minor reduction in existing levels may result in conflict with HD Apparatus such as valve spindles or tops of hydrants housed under the surface boxes. Checks should be made during site investigations to ascertain the level of such HD Apparatus in order to determine any necessary alterations in advance of the works.

12. With regard to any proposed resurfacing works, you are required to contact HD on the number given above to arrange a site inspection to establish the condition of any HD Apparatus in the nature of surface boxes or manhole covers and frames affected by the works. HD will then advise on any measures to be taken, in the event of this a proportionate charge will be made.

13. You are advised that HD will not agree to either the erection of posts, directly over or within 1.0 metre of valves and hydrants,

14. No explosives are to be used in the vicinity of any HD Apparatus without prior consultation with HD.

TREE PLANTING RESTRICTIONS

There are many problems with the location of trees adjacent to sewers, water mains and other HD Apparatus and these can lead to the loss of trees and hence amenity to the area which many people may have become used to. It is best if the problem is not created in the first place. Set out below are the recommendations for tree planting in close proximity to public sewers, water mains and other HD Apparatus.

15. Please ensure that, in relation to HD Apparatus, the mature root systems and canopies of any tree planted do not and will not encroach within the recommended distances specified in the notes below.

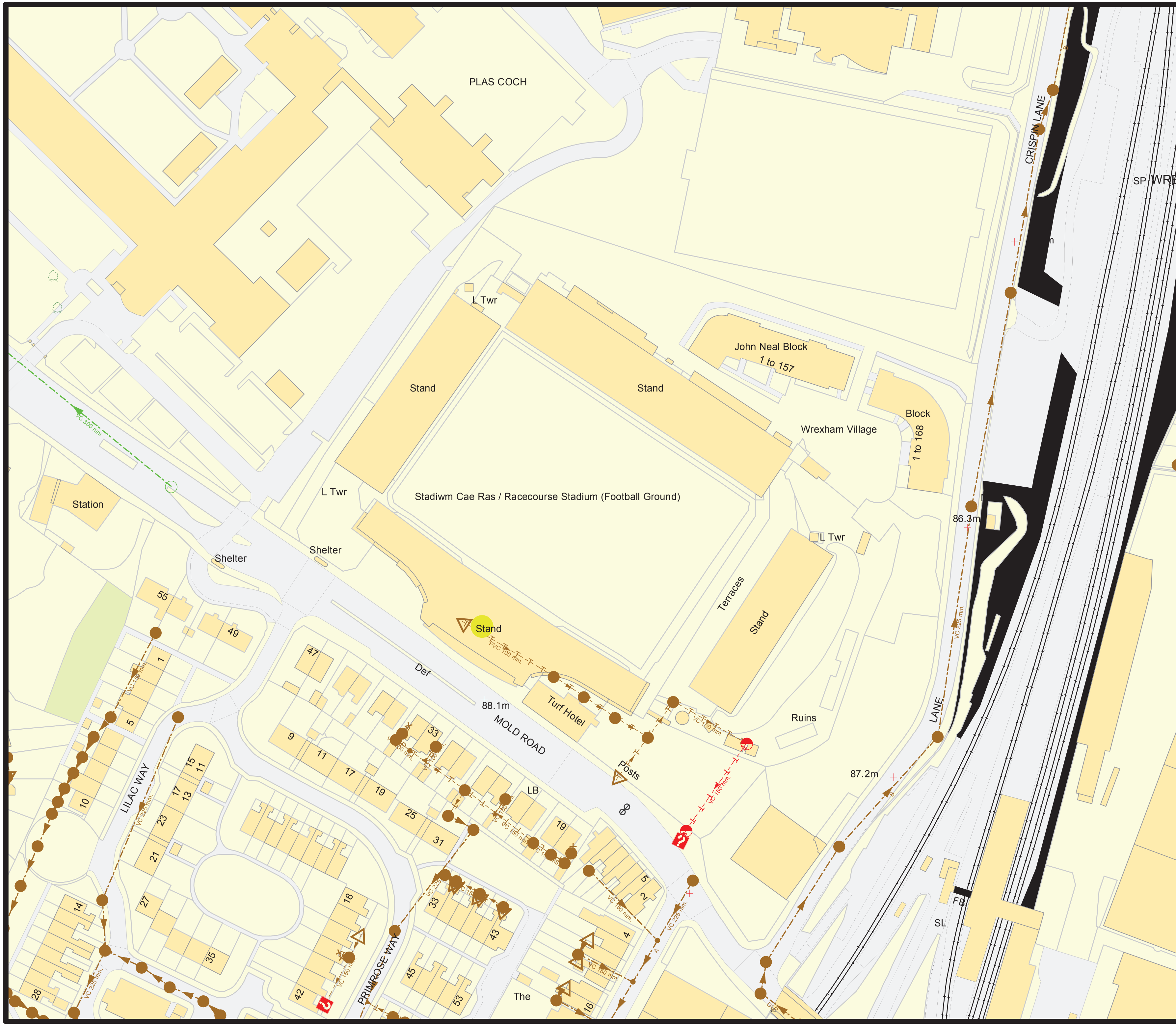
16. Both Poplar and Willow trees have extensive root systems and should not be planted within 12 metres of a sewer, water main or other HD Apparatus.

17. The following trees and those of similar size, be they deciduous or evergreen, should not be planted within 6 metres of a sewer, water main or other HD Apparatus. E.g. Ash, Beech, Birch, most Conifers, Elm, Horse Chestnut, Lime, Oak, Sycamore, Apple and Pear. Asset Protection Statements Updated May 2014

18. HD personnel require a clear path to conduct surveys etc. No shrubs or bushes should be planted within 2 metre of the centre line of a sewer, water main or other HD Apparatus.

19. In certain circumstances, both HD and landowners may wish to plant shrubs/bushes in close proximity to a sewer, water main of other HD Apparatus for screening purposes. The following are shallow rooting and are suitable for this purpose: Blackthorn, Broom, Cotoneaster, Elder, Hazel, Laurel, Privet, Quickthorn, Snowberry, and most ornamental flowering shrubs.

Drainage



[redacted]

SP WREXHAM AFC RACECOURCE GROUND MOLD ROAD
WREXHAM LL11 2AH

[redacted]

LEGEND(Representative of most common features)

[redacted]

Notes:

Whilst every reasonable effort has been taken to correctly record the pipe material of DCWW assets, there is a possibility that in some cases pipe material (other than Asbestos Cement or Pitch Fibre) may be found to be asbestos cement (AC) or Pitch Fibre (PF) . It is therefore advisable that the possible presence of AC or PF pipes be anticipated and considered as part of any risk assessment prior to excavation

Dŵr Cymru Cyfyngedig ('the Company') gives this information as to the position of its underground apparatus by way of general guidance only and on the strict understanding that it is based on the best information available and no warranty as to its correctness is relied upon in the event of excavations or other works made in the vicinity of the company's apparatus. The onus of locating apparatus before carrying out any excavations rests entirely on you. The information which is supplied by the Company, is done so in accordance with statutory requirements of sections 198 and 199 of the Water Industry Act 1991 which is based upon the best Information available and, in particular, but without prejudice to the generality of the foregoing, it should be noted that the records that are available to the Company may not disclose the existence of a water main, service pipe, sewer, lateral drain or disposal main and any associated apparatus laid before 1 September 1989, or, if they do, the particulars thereof including their position underground may not be accurate. It must be understood that the furnishing of this information is entirely without prejudice to the provision of the New Roads and Street Works Act 1991 and the Company's right to be compensated for any damage to its apparatus.

Service pipes are not generally shown but their presence should be anticipated.

EXACT LOCATIONS OF ALL APPARATUS TO BE DETERMINED ON SITE.

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Map Ref:	332818,350987
Map scale:	1:1250
Printed by:	Zara Howells
Printed on:	24 Sep 2021

Gas

Company Address
Wales and West Utilities Ltd,
Wales and West House,
Spooner Close, Celtic,
Springs, Coedkernew,
Newport, NP10 8FZ

Our Ref: 23301736 Wrexham AFC

Friday, 17 September 2021

Paul Hodgson
Towpath Cottage Top Lane Braithwaite
Doncaster
South Yorkshire
DN7 5SX

Dear Paul Hodgson

Thank you for contacting us regarding Wales & West Utilities equipment at the above site.

I enclose an extract from our mains records of the area covered by your proposals together with a comprehensive list of General Conditions for your guidance. This information is given as a general guide and its accuracy cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc., are not shown but their presence should be anticipated.

No liability of any kind whatsoever is accepted by Wales and West Utilities (WWU), its agents or servants for any error or omission. Please note that all WWU equipment on site should be assumed to be LIVE until proven otherwise.

Safe digging practices, in accordance with HS(G)47, Avoiding Danger from underground services must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. Safe working procedures should be defined and practiced.

WWU reserves its position completely to enforce the terms of any existing 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.

Wales & West Utilities have no planning objections to these proposals, although it should be noted that Wales & West's apparatus is held pursuant to easements and it has other private law rights in relation to the use of the land in the vicinity of its apparatus. Wales & West's private law land rights are not material planning considerations and therefore no comment is made in relation to those rights and they have no impact on whether or not planning permission should be granted, or whether, if permission is granted, it can lawfully be implemented. It should also be noted that Wales & West's apparatus may be at risk during construction works and should the planning application be approved, then we require the promoter of these works to contact us directly to discuss our requirements in detail. Should diversion works be required these will be fully chargeable.

Where diversions to WWU apparatus are needed to allow change to occur on site, the cost of these alterations may be charged to the persons responsible for the works.

If you have requested a new connection the WWU connections team will where necessary prepare detailed proposals and provide a quotation for any necessary alterations and/or development of our equipment on the site.

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

Yours sincerely,

Company Address
Wales and West Utilities Ltd,
Wales and West House,
Spooner Close, Celtic,
Springs, Coedkernew,
Newport, NP10 8FZ

WWU Dig Team

Gas Emergency Number:
In an emergency call 0800 111 999, 24 hours a day.

Mapping Enquiries:
If you have an enquiry relating to this letter or the attached map plan, please contact us using the following information:

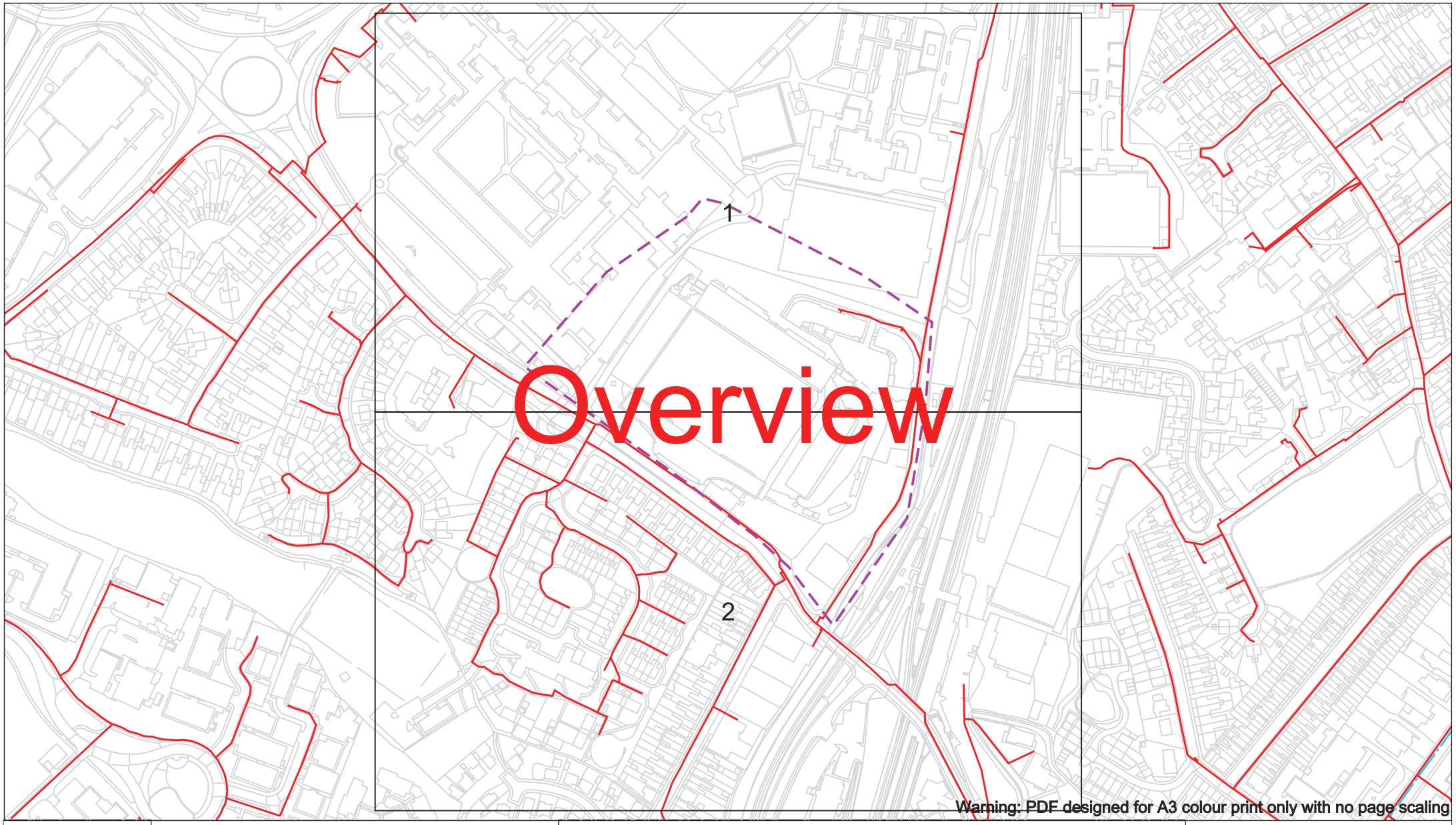
Telephone	02920 278912
Email	dig@wwutilities.co.uk

General Enquiries:
If you have a general enquiry, please call us on the following number

All areas	0800 912 29 99

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@linesearchbeforeudig.co.uk
Website	www.linesearchbeforeudig.co.uk



Warning: PDF designed for A3 colour print only with no page scaling

Contact Us
Mapping Enquiries: 02920 278 912
General Enquiries: 0800 912 2999

Date Requested: 17/09/2021
Job Reference: 23301736
Site Location: 332826 350985
Requested by:
Mr Paul Hodgson
Your Scheme/Reference:
Wrexham AFC

Scale: 1:2562 (When plotted at A3)

IMPORTANT NOTICES

- This information is given as a guide only and its accuracy cannot be guaranteed
- The plan only shows those pipes owned by Wales & West Utilities (WWU) as its role as a licensed Gas Transporter
- Service pipes, valves, syphons, stub connections etc. may not be shown but their presence should be anticipated
- You must use safe digging practices in accordance with HS(G)47 to establish the actual position of mains, services and other apparatus before any mechanical excavation is used
- It is your responsibility to ensure this information is provided to all persons working near our plant
- If in doubt call the WWU dig team on 02920 278912

In case of an emergency call 0800 111 999

Dig Sites — Area: — Line:

- Low Pressure (LP) 21mbar – 75mbar
- Medium Pressure (MP) 350mbar – 2bar
- Intermediate Pressure (IP) 2bar – 7bar
- High Pressure (HP) >7bar

- Line/Fire Valve
- Governor Station
- Change of Diameter
- End Cap
- Depth of cover

WALES&WEST UTILITIES

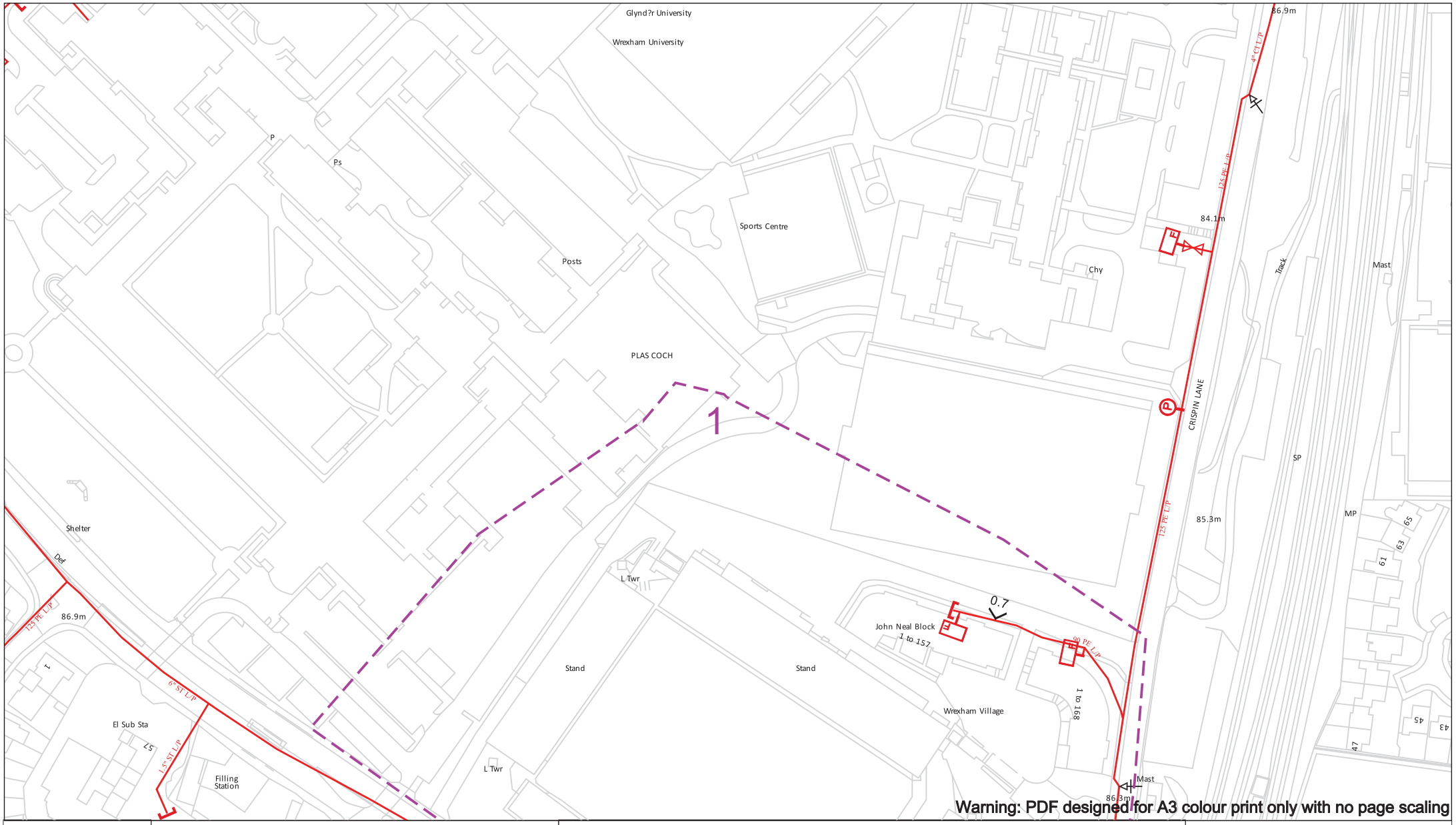
Smell gas? Call the Gas Emergency Service on 0800 111 999.

Dial before you dig

Dial — Call 029 2027 8912 before you start work.
Investigate — Before you dig, make sure you know what's below.
Go ahead — Done your research? Now you can dig safely.

We need 10 days' notice

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Date Requested: 17/09/2021
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100m

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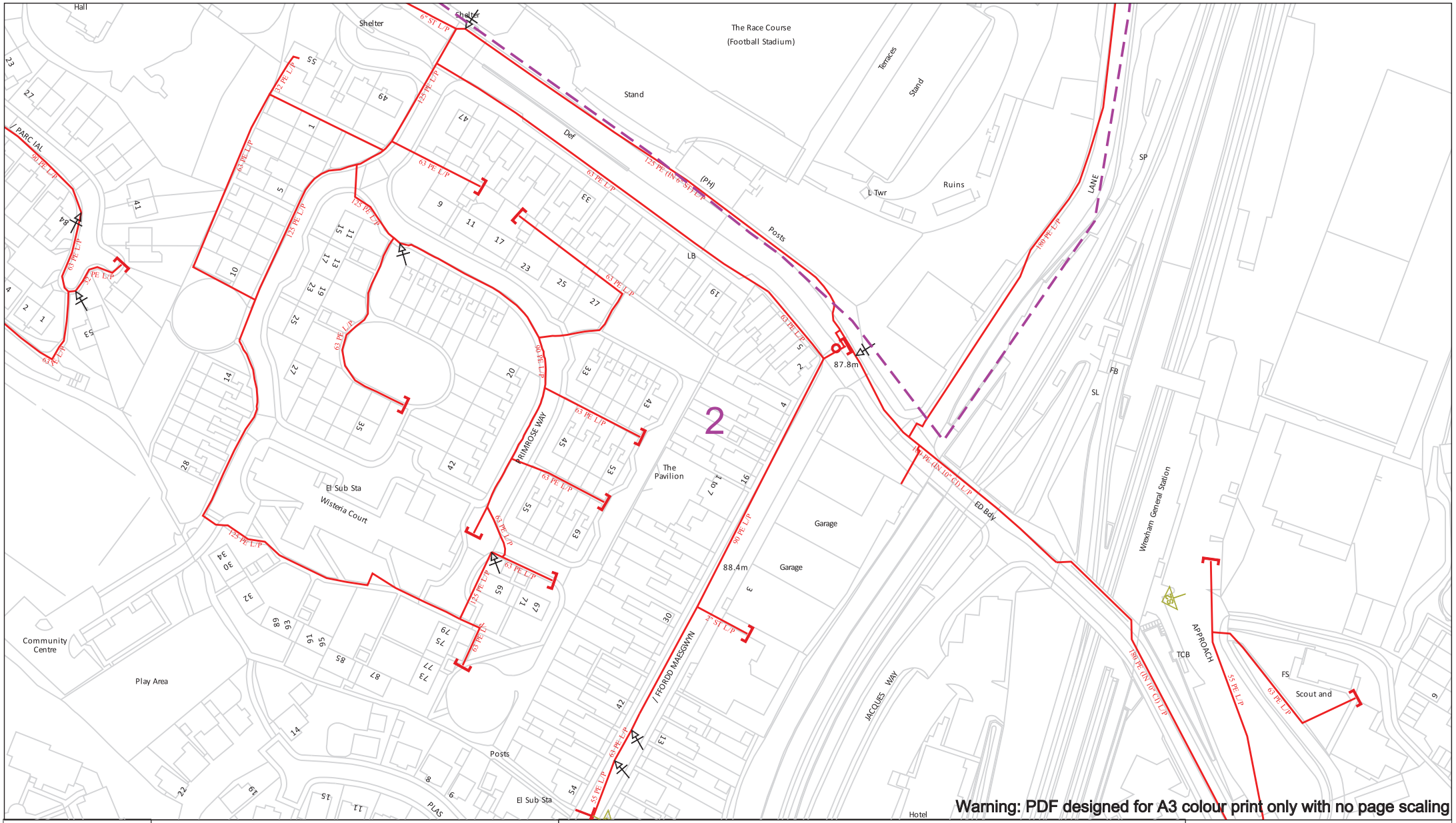
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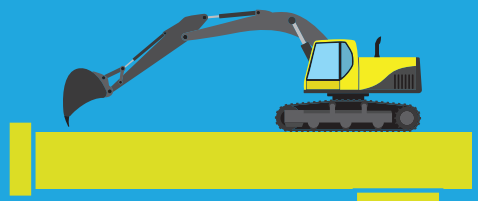
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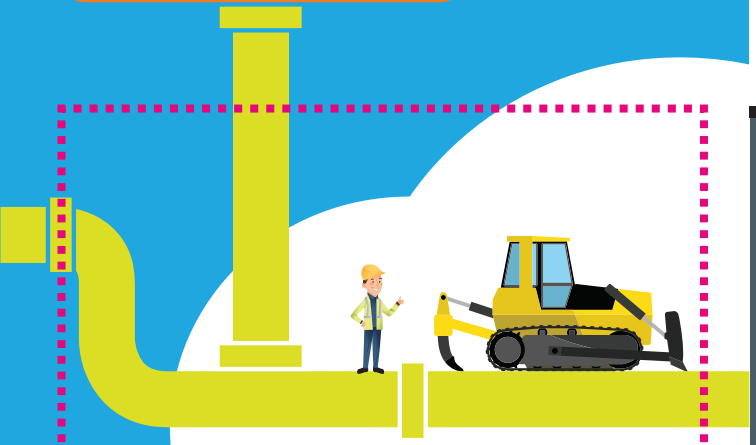
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Every day, underground gas pipes get damaged by people digging without knowing what's below. This can be catastrophic. It might cause serious injury to you and others around you. The costs of repair, fines and fees can be huge. Your project will be delayed and your reputation damaged.

We have designed this leaflet to help you dig safely. And the first thing to do – long before you start work – is call us.

What's the number?
029 2027 8912



CARD POSITION (DO NOT PRINT)

We're here to help

Need help or advice?
Call our **Plant Protection team** on
029 2027 8912
or email **dig@wwutilities.co.uk**

Smell gas?
Call the **Gas Emergency Service** on
0800 111 999.

Dial before you dig

We need **10 days'** notice



dig@wwutilities.co.uk
029 2027 8912
www.wwutilities.co.uk
facebook.com/wwutilities
@WWUtilities

Crystal Mark 21918
Clarity approved by Plain English Campaign

Dial
Investigate
Go ahead

YOUR GAS EMERGENCY AND PIPELINE SERVICE

WALES&WEST UTILITIES