N

DO NOT SCALE

NOTES

Grid: Ordnance Survey Grid (OSTN15) Inc. OS Scale Factors
Datum: Ordnance survey datum (OSGM 15)
Survey using Trimble GNSS and Total Station equipment.
Survey control installed using GNSS equipment

LEGEND

- UG Electricity QL-B2
- UG Electricity QL-B3
- Gas QL-B2
- Gas QL-B3
- Gas QL-B4
- UG HV QL-B2
- UG HV QL-B3
- Sewer foul
- Sewer surface water QL-B2
- UG Telecomms QL-B2
- Water QL-B2
- Ut GPR QL-B2
- Ut Trace QL-B2
- Ut Trace QL-B3

PAS 128 QUALITY LEVELS

QL - B4
A UTILITY SEGMENT WHICH IS SUSPECTED TO EXIST BUT HAS NOT BEING DETECTED AND IS THEREFORE SHOWN AS AN ASSUMED ROUTE.
HORIZONTAL ACCURACY - UNDEFINED.
VERTICAL ACCURACY - UNDEFINED.

QL-B3
HORIZONTAL LOCATION ONLY OF THE UTILITY DETECTED BY ONE OF THE GEOPHYSICAL TECHNIQUES USED.
HORIZONTAL ACCURACY - +/- 500mm.
VERTICAL ACCURACY - UNDEFINED.

QL-B2
HORIZONTAL AND VERTICAL LOCATION OF THE UTILITY DETECTED BY ONE OF THE GEOPHYSICAL TECHNIQUES USED.
HORIZONTAL ACCURACY - +/- 250mm or +/- 40% OF DETECTED DEPTH WHICHEVER IS GREATER.
VERTICAL ACCURACY - +/- 40% OF DETECTED DEPTH.

QL-B1
HORIZONTAL AND VERTICAL LOCATION OF THE UTILITY DETECTED BY MULTIPLE GEOPHYSICAL TECHNIQUES USED.
HORIZONTAL ACCURACY - +/- 150mm or +/- 15% OF DETECTED DEPTH WHICHEVER IS GREATER.
VERTICAL ACCURACY - +/- 15% OF DETECTED DEPTH.

SERVICE LOCATION

ELECTROMETECTION AND/OR GROUND PROBING RADAR (GPR) TECHNIQUES HAVE BEEN USED TO LOCATE UNDERGROUND SERVICES SHOWN ON THIS PLAN. THESE ARE INTERPRETIVE PROCESSES AND THE ACCURACY OF LOCATION AND DEPTH OF EXCAVATIONS OF SIMILAR ARE CARRIED OUT TO CONFIRM IDENTIFICATION, LOCATION AND DEPTH OF SERVICES. ALL REASONABLE CARE HAS BEEN TAKEN AND EFFORT MADE IN PREPARING THIS PLAN BUT NO RESPONSIBILITY CAN BE ACCEPTED FOR THE COMPLETENESS OF INFORMATION SUPPLIED TO AND BY WSP CANNOT BE GUARANTEED.

IT SHOULD BE NOTED THAT NOT ALL SERVICES, SUCH AS PLASTIC OR CONCRETE PIPES, ARE READILY DETECTABLE AND THAT ACCESS TO THE INSIDE OF THE PIPE ARE NOT TRACEABLE BY CONVENTIONAL ELECTRODETECTION METHODS) FOR THE LOCATION OF THESE SERVICES, EITHER RECORDS DRAWINGS SHOULD BE SOUGHT OR AN ALTERNATIVE MEANS OF OBTAINING THE INFORMATION USED.

DEPTHS OBTAINED USING GEOPHYSICAL TECHNIQUES SUCH AS GROUND PROBING RADAR ARE AFFECTED BY GROUND CONDITIONS THEREFORE MUST BE VIEWED AS INDICATIVE ONLY.

NUMBERS OF CABLES IN RUNS ARE NOT DETERMINED UNLESS SPECIFICALLY STATED. PIPE RUNS SHOWN BETWEEN DRAWPITS ARE ASSUMED STRAIGHT UNLESS OTHERWISE SHOWN.

DEPTHS TO TRACED METALLIC PIPEWORK TYPICALLY REFERS TO PIPE CENTRE.
DEPTHS TO GRAVITY SEWER PIPEWORK TYPICALLY REFERS TO PIPE INVERT LEVEL.
DEPTHS TO TRACED UTILITIES FOUND WITH GROUND PENETRATING RADER TYPICALLY REFER TO PIPE CENTRE.

PIPE RUNS ARE ASSUMED STRAIGHT BETWEEN CHAMBERS UNLESS OTHERWISE INDICATED.
ALL DRAINAGE RUNS ARE TAKEN FROM MANHOLE TO MANHOLE UNLESS OTHERWISE INDICATED

ALL SERVICES ARE UNDERGROUND EXCEPT WHERE INDICATED.
PLEASE NOTE THAT WSP ARE NOT PERMITTED TO INVESTIGATE ANY TELECOMMUNICATIONS APPARATUS, OTHER THAN EXISTING EXPOSED FEATURES. THEREFORE THIS INFORMATION MAY NOT APPEAR ON SURVEY DRAWINGS OR WILL BE TAKEN FROM RECORDS IF AVAILABLE.

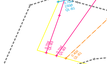
WHERE A COVER HAS BEEN LIFTED ALL MEASURED UTILITIES WILL BE QL-A
INFORMATION SHOWN AS TYR OR QL-B4 HAS NOT BEEN PROVEN ON SITE.
PLEASE NOTE OUR CAD LAYERING CONVENTION CONTAINS FURTHER INFORMATION.

UTILITIES ABBREVIATIONS

Ø	Diameter (mm)	EOS	End of Sonde	NPV	No Pipes Visible
AC	Access Complete	FB	Footway Box	PC	Pipe Centre
AP	Assumed Route	FLG	Flooded	PE	Positively Derived
BL	Bed Level	FOS	Full of Silt	PE	Polyethylene
BP	Bollard	GAS	Gas Marker	PVC	Polyvinylchloride
BRK	Broken	GPR	Ground Penetrating Radar	SD	Soffit Depth
CD	Chamber Depth	IBD	Internal Backdrop	SI	Sewer Inlet
CI	Cast Iron	IC	Inspection Chamber	SL	Soffit Level
CL	Cover Level	IE	Invert Depth	ST	Steel
CO	Clay Outlet	IL	Invert Level	TFR	Taken From Records
CP	Crown Depth	MAR	Man Access Required	UTL	Unable to Lift
D	Depth (Invited)	MH	Manhole	UTS	Unable to Sonde
ESB	Electricity Supply Cable	MI	Manhole Information	VC	Vitrified Clay
EBD	External Backdrop	NFI	No Further Information	VC	Vitrified Clay
EML	Electromagnetic Location	NDV	No Ducts Visible	WD	Water Depth

TYPICAL FEATURE DEPTH ANNOTATION

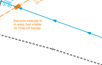
ELECTRO MAGNETIC DETECTION



DRAINAGE



GROUND PENETRATING RADAR



Utility Equipment Information

Equipment	Manufacturer	Model	Serial Number	Date of Calibration
RD8100	RADIODETECTION	8100	10/81PDL-GB-366	
TX10	RADIODETECTION	TX10	10/81-10B-GB-412	
MALA CORE	MALA	CORE	28500008	

Desktop Utility Record Search

Utility Type	Utility Owners	Date of Issue
Drainage		
Water		
Gas	SGN	29/10/2025
Electricity		
Telecom		
CATV	Virgin Media	29/10/2025

Warning Notes

Where cables cannot be detected individually an average depth has been obtained and trial excavations are recommended to confirm number and depths of cables banded together.
Pre-ended, fibre optic and balance HV cables are often difficult to detect and although WSP have made all reasonable efforts to locate these cables we cannot guarantee that all of these cables are present or that all cables have been located. All reasonable efforts have been made to locate these using both EML and GPR.
Within close proximity of electric substations, metallic structure,buildings and under overhead power cables EML survey results may become restricted. All reasonable efforts have been made to verify our results using GPR wherever conditions permitted.
Manhole chambers should not be entered without confined space entry into the chamber.
When surveying drainage WSP will have tried all avenues to locate the route of the sewer. Issues such as blockages, surcharging, flooding, sedimentation, sewer collapse, root ingress, excessive depth, obstructions or heavy traffic flow may have affected WSP's ability to complete the survey.If such a case should occur recommendations have been made to help occur further information.
Pipe / duct sizes where possible have been recorded from surface inspection or taken from record information. Pipe sizes have been recorded in millimetres and depths in metres, except in instances where otherwise stated. Levels are relative to Ordnance Datum Newlyn.
All utilities detected should be considered live and WSP cannot confirm when utilities are redundant unless there is visual or record evidence to indicate this. When available, the survey investigations will have been cross referenced with record information. If a utility shown on the records cannot be detected on site, the information has been added to the drawing and indicated as QB4 (R). However it should be noted that the accuracy of the records cannot be guaranteed.

REV	DATE	BY	DESCRIPTION	CHK	APP

2 London Square, Cross Lanes, Guildford, GU1 1UN, UK
T+44 (0) 1483 528400
wsp.com

CLIENT:

WSP

PROJECT / DRAWING TITLE:

Bulford Utility Survey

DRAWING NAME:

Bulford Utility Survey

SCALE:	SIZE:	DATE:
1:200	A0	21/11/2025
DRAWN BY: AT	CHECKED BY: OS	APPROVED BY: ?/NAME

DRAWING No: UK0038589.3630-WSP-DRG-0001-A0 REV: 0

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