

**Survey Notes**  
 Grid: Local, plane metric connected to OS Grid  
 Levels: OS Datum from GNSS positioning, connected using the National Geoid Model OSGM15.

**Notes**

**Topographical Survey Legend**

BUILDINGS AND WALLS		GENERAL INFORMATION	
Building	Rectangular	Petrol Pump	PP
Open Space	Diagonal	Basement Light	BL
Footbridge	Line with height	Footbridge	FB
Passage	Line with height	Dish Type Channel	DC
Wall with Height	Line with height	Slat Type Channel	SC
Retaining Wall	Line with height	Grass Trench Channel	GTC
		Grass Trench Channel	GTC
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		Grass Trench Channel	GTC

**UNDERGROUND SERVICES KEY**

Green line	British Telecom	AR	Assumed Route	GPR	Ground Penetrating Radar
Red line	Electricity Cables	BD	Backdrop	PE	Polyethylene Pipe
Blue line	Gas Pipes	BLK	Blocked Pipe	UTS	Unable To Survey
Purple line	Sewer Combined	CR	Cable Riser	UR	Unable To Root
Yellow line	Water Pipes	d	Depth	UTNS	Unable To Trace
Cyan line	Sewer Surface Water	PR	Pipe Riser	(No signal detected)	(No signal detected)
Magenta line	Traffic Light Cables	RS	Reducing Slab (Drainage)	NVP	No Visible Pipes
Black line	End of trace	VR	Vapour Recovery Point	VC	Verified Clay
Grey line	Services survey boundary	UTL	Unable To Lift	CO	Concrete
Red dashed line	Area of No Access	LS	Lost Signal		

**DISCLAIMER**

Electromagnetic and ground penetrating radar techniques have been used in the location of underground services shown on this survey plan. These are interpretive procedures and we recommend that trial excavations should be undertaken to confirm identification, location and depth of services where these are critical.

Please note that not all buried pipes, cable and ducts can be detected and mapped in consideration of their depth, location, material type, geology and proximity to other utilities.

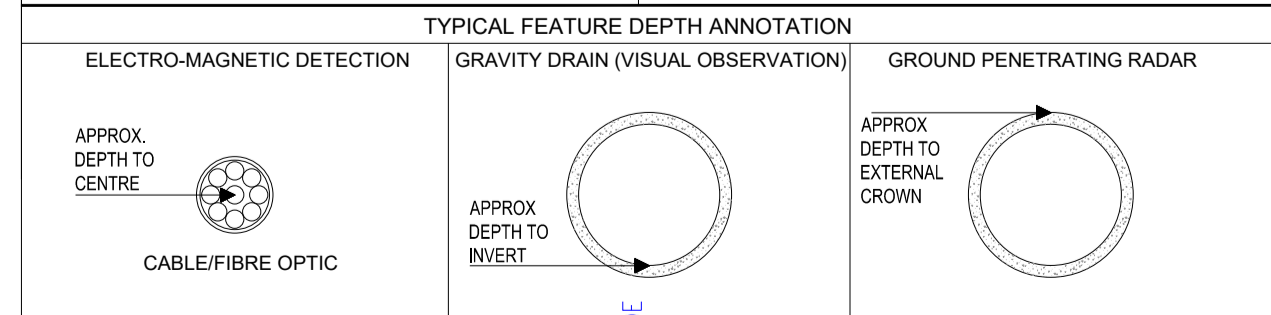
All reasonable effort and care has been made in searching available record drawings. The completeness of the underground service information supplied to and by us cannot be guaranteed.

**BSI PAS128:2014 QUALITY LEVELS**

(A) = Verified by Inspection-trial pit, vacuum Excavation, Inspection Chamber/Manhole  
 (B1) = Detected with GPR & EML-High confidence position and depth  
 (B2) = Detected with either GPR or EML-Medium confidence position and depth  
 (B3) = Detected with GPR or EML (no depth - poor signal)  
 (B4-AR) = Assumed route - Not detected - interpreted route  
 (C) = Record data located to Street Furniture - not detected  
 (B4-TFR) = Record data not located-not detected  
 (F) = Post processed  
 NB. QL(A) is inferred at all MF's IC's etc. unless otherwise stated.

**NOTES**

Where services are non-metallic or not proven on site, positions are taken from records, trench scars & surface detail.  
 Where stated, depth estimations are typically to the centre or top of the service. Depths to gravity sewers and drains are typically to invert levels, unless otherwise stated.  
 Where Ground Penetrating Radar (GPR) is quoted the depth is recorded to the assumed external crown of the feature.  
 The diagram below describes the depth information in more detail.  
 Where the precise position or depths of these features are critical to the design or siteworks they must be verified by the use of trial excavations.  
 Pipe sizes which cannot be obtained by visual survey are taken from utilities record drawings or marker plates where available.  
 Services shown as Taken From Records have not been proven on site.  
 The CAD layering may contain further information.  
 All data collected using GPR has been post-processed.  
 All utilities inspected and measured at IC's or MF's are considered to be QL(A) for a radius up to 5m from the chamber wall



Rev.	Date	Description
A	12/10/23	Drainage added from clients previous survey

**Accreditations**

**Client**  
 Luton Borough Council  
 Property & Infrastructure, Town Hall  
 George Street, Luton, LU1 2BQ

**Project**  
 Building 6  
 Passenger Transport Unit, Central Depot  
 Luton, LU4 8AU

**Drawing Title**  
 Utility Survey

**Drawn By** IV 05/06/23    **Survey Date** May 2023  
**Checked by** DJ 05/06/23    **Scale** 1:200@A1

**Drawing No** 60296\_UG1    **Revision** A