

DETECTION SURVEY REPORT

CONNECTIVITY SURVEY

All drainage connectivity was carried out in accordance with PAS 128:2022 (Publicly Available Specification from BSI). Quality levels are determined by the detection methodology. Please refer to PAS 128:2022 Quality Level Guide for details.

TARGETED CCTV SURVEY

Drainage was lifted with pipe sizes and invert levels recorded. Wherever possible the chamber sizes have been recorded and positioned on the drawing. If the drain / sewer has been CCTV surveyed, saddle connections and line deviations are indicative and not positioned via Ground penetrating radar (GPR) or Electromagnetic locator (EML). All connections from gullies, external rainwater pipes and external soil stacks should be treated as assumed, unless proven with a CCTV Survey. Where a saddle connection / line deviation is present the position is assumed only until proven to QB2 or above. In instances where other detection methods were unsuccessful connections between manholes have been assumed to be straight and labelled as QB4. All sub surface drainage positions should be cross checked in critical areas by EML, GPR survey or hand dug trial holes (verification survey type A). Attempts have been made to carry out CCTV surveys of all sewers within the scope of work at the 2 no. areas highlighted by the client. As pre-cleaning via high pressure water jetting has not taken place, surveys may have been abandoned due to a build up of silt/debris and any other obstruction/obstacle. In other cases, structural defects within the system may prevent completion of CCTV surveys between assets.

Information regarding the drainage system has been added to the drawing. For all information regarding the CCTV survey, please refer to TV260608 CCTV Report.

Nouthern Culvert

128700 N

128600 N

515500 E

515600 E

128700 N

128600 N

515500 E

515600 E

Southern Culvert

127700 N

127600 N

515100 E

515200 E

127700 N

127600 N

- Notes :
1. DRAINAGE INFORMATION ADDED TO TOPOGRAPHICAL SURVEY PRODUCED BY MK SURVEYS. JOB No. 25205, R1. DATE FEBRUARY 2022. NO SITE VERIFICATION CARRIED OUT BY MK SURVEYS, INCLUDING COVER LEVELS. ANY ADDITIONAL FEATURES SURVEYED BY MK SURVEYS HAVE BEEN ADDED RELATIVE TO THE PROVIDED TOPOGRAPHICAL SURVEY.
 2. DRAINAGE INFORMATION HAS BEEN DETERMINED WITHOUT MAN ENTRY INTO CHAMBERS AND WHILST EVERY EFFORT HAS BEEN MADE TO CORRECTLY IDENTIFY THIS INFORMATION, IT SHOULD ALWAYS BE CHECKED IN AREAS THAT ARE CRITICAL TO THE FUTURE PROPOSAL.
 3. ALL SEWERS ARE PRESUMED TO BE STRAIGHT BETWEEN CHAMBERS, WITH ROUTES / CONNECTIVITY OBTAINED USING ACOUSTIC METHODS ONLY. THESE ARE TO BE CONSIDERED ASSUMED AND SHOULD BE INVESTIGATED FURTHER IN CRITICAL AREAS. KINKS AND DEVIATIONS ARE INDICATIVE AND UNLESS SPECIFIED HAVE NOT BEEN ACCURATELY POSITIONED VIA ELECTROMAGNETIC LOCATOR (EML), GROUND PENETRATING RADAR (GPR). ALL SUB SURFACE DRAINAGE POSITIONS SHOULD BE CROSS CHECKED IN CRITICAL AREAS BY EML OR GPR SURVEY OR HAND DIG TRIAL HOLES.
 4. CONNECTIONS FROM RAIN WATER PIPES, GULLIES, KERB OUTLETS, SOIL PIPES ETC SHOULD BE TREATED AS ASSUMED ONLY, UNLESS PROVEN WITH A CCTV SURVEY.
 5. SURVEY TO BE READ IN CONJUNCTION WITH TV260608 CCTV REPORT.

DRAINAGE KEY			
ABBREVIATIONS			
(AG)	ABOVE GROUND	OU	OUTFALL
(AR)	ASSUMED ROUTE	PF	PITCH FIBRE
BD	BACKDROP LEVEL	PP	POLYPROPYLENE
Bd	BASE DEPTH	POW	PIPE ON WALL
BK	BRICK	PT	P-TRAP
BL	BASE LEVEL	PTG	PIPE TO GROUND
CI	CAST IRON	PTS	PIPE TO SURFACE
CL	COVER LEVEL	PVC	POLYVINYL CHLORIDE
CO	CONCRETE	PVC-U	ULTRA RIB (PVC)
CP	CULVERT	(R)	ROUTE FROM RECORDS
CP	CATCHPIT	RE	RODDING EYE
CWL	CROWN LEVEL	RM	RAIN MAIN
CW	COMBINED WATER	RWP	RAIN WATER PIPE
DCH	DRAINAGE CHANNEL	SD	SILT DEPTH
DI	DUCTILE IRON	SL	SILT LEVEL
DI	FILTER DRAIN	SO	SOAKAWAY
FW	FOUL WATER	SOF	SOFFIT OF BISCUIT
GY	GULLY	SP	SOIL PIPE
IC	INSPECTION COVER	SVP	SOIL VENT PIPE
ID	INVERT DEPTH	SW	SURFACE WATER
IL	INVERT LEVEL	TOW	TOP OF WALL
INT	INTERCEPTOR	TW	TRADE EFFLUENT WATER
IT	INLET	UTL	UNABLE TO LOCATE
KO	KERB OUTLET	UTR	UNABLE TO RAISE
LH	LAMP HOLE	UTS	UNABLE TO SURVEY
MH	MANHOLE	VC	VITRIFIED CLAY
NP	NO PIPES VISIBLE	VP	VENT PIPE
OL	OUTLET	WL	WATER LEVEL
LEGEND			
COMBINED SEWER		P-TRAP	
FOUL SEWER		BACK DROP (EXTERNAL)	
SURFACE SEWER		BACK DROP (INTERNAL)	
TRADE EFFLUENT SEWER		UNABLE TO CCTV SURVEY	
UNIDENTIFIED SEWER		UNABLE TO RAISE	
RISING MAIN		UNABLE TO SURVEY	
MANHOLE		VITRIFIED CLAY	
UNDERGROUND CHAMBER		VENT PIPE	
		WATER LEVEL	
		ELECTRONICALLY DERIVED DEPTH	

PAS 128:2022 Quality Level Guide		
Quality Level	Description	Accuracy
QB4 (QL-B4)	A utility is expected to exist but cannot be detected - (AR), (R), (V)	Undefined
QB3 (QL-B3) QB3P (QL-B3P)	Horizontal location only using one geophysical technique. No depth information - NDI	+/- 500mm Horizontal Undefined Vertical
QB2 (QL-B2) QB2P (QL-B2P)	Horizontal and vertical location only using one geophysical technique.	+/- 250mm or +/- 40% of depth whichever is greater
QB1 (QL-B1) QB1P (QL-B1P)	Horizontal and vertical location only using two geophysical techniques.	+/- 150mm or +/- 15% of depth whichever is greater
QA (QL-A)	Service verified in an open excavation, inside an inspection chamber / draw pit, or at the point the service enters / exits the ground.	+/- 50mm Horizontal +/- 50mm Vertical

Revision	Description	Surv. by	Check. by	Appr. by	Date						
m	5	10	15	20	25	30	35	40	45	50	55

Drainage and CCTV Survey

Berkeley

Southwater
Horsham
West Sussex

Scale:	Sheet Size:		Sheet Number:	Date:
1:500	A1		1	June 2026
Project Number:	Rev:	Surveyed by:	Checked by:	Approved by:
38205	-	RG	CP	CP

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