HOP
CONSULTING CIVIL AND STRUCTURAL ENGINEERS

IMBERHORNE LOWER SCHOOL, EAST GRINSTEAD

FOUL SEWAGE & SURFACE WATER DRAINAGE ASSESSMENT

JULY 2026

Ref: 14392/03/HOP/RPT/02

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Client : Imberhorne Lower School
11 Windmill Lane
East Grinstead
RH19 2DT

Prepared by	Checked by	Approved by	Status	Revision
Izzy Al-Shimmeri	**Andrew Keen**	**Andrew Keen**	**S0**	**P01 10.07.2026**

1.0 INTRODUCTION

1.1 HOP Consulting Ltd (HOP) has been instructed by Imberhorne School to undertake a Sustainable Drainage (SuDS) Strategy report for the proposed SEND/Leadership building development on the site of Imberhorne Lower School, Windmill Lane, East Grinstead, RH19 2DT.

1.2 The development proposal is for the removal of a smaller existing modular classroom and replacement with a modern modular accommodation located within a courtyard at the school.

1.3 The site is located within the West Sussex County Council (WSCC) area, which acts as the Lead Local Flood Authority (LLFA). The LLFA have been consulted at the pre-application stage for general guidance for the SuDS approach at the site in line with the National Standards for SuDS (NSfS).

1.4 This report also uses guidance from the National Planning Policy Framework (NPPF) and associated Planning Practice Guidance (PPG) for Development and Flood Risk; the CIRIA SuDS Manual (CIRIA 753); data from the Environment Agency (EA) flood maps; and information provided within the local authority's Strategic Flood Risk Assessment (SFRA).

1.5 Site investigation work has been undertaken at the site including topographic and sub-surface services surveys, a CCTV drainage survey and infiltration testing.

1.6 Details of the development have been provided by Philips Surveyors LLP and its agents to indicate the extent of the proposals. Reference should be made to the additional details submitted by others for a comprehensive overview of the scheme. This report focuses on the sustainable management of surface water at the site and its content and conclusions reflect the scale of the development.

1.7 Information in this report has been received from a number of external parties and HOP does not accept liability for the accuracy of this information. Should there be material change in the development proposals, this report will need to be revised accordingly.

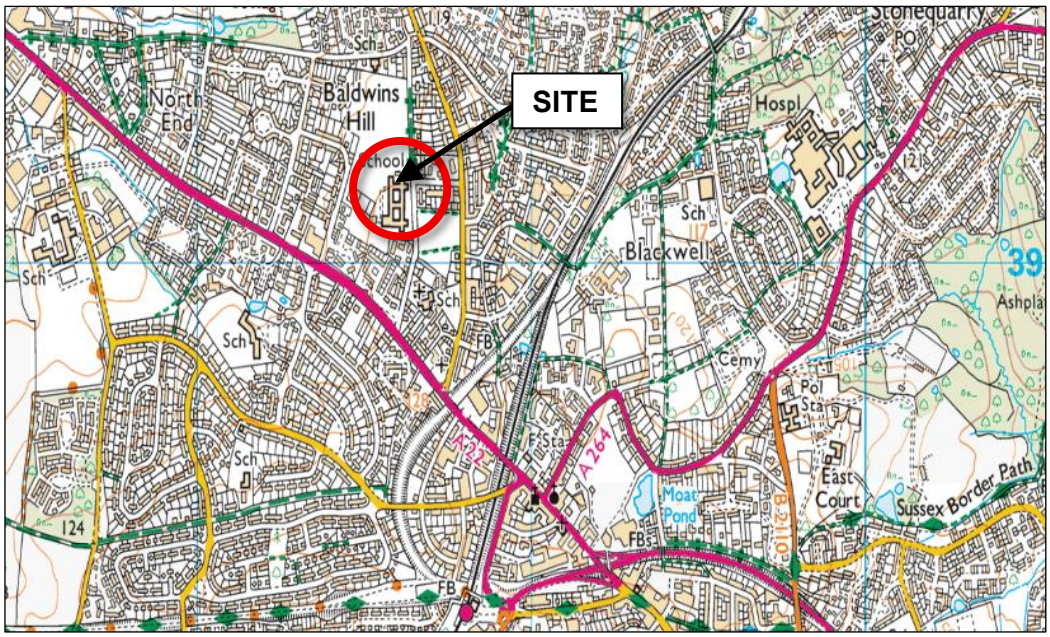


Figure 1.1 Location map

2.0 SITE SETTING AND LOCATION

2.1 As can be seen in the location map in Figure 1.1, Imberhorne Lower School is located north of East Grinstead town centre, approximately 1km north of the mainline train station. The school is set in extensive grounds and playing fields and is bounded on all sides by predominantly residential properties which characterise this part of the town.

2.2 Vehicular and pedestrian access is gained off Windmill Lane which runs adjacent the eastern boundary of the school. This road leads onto the A22 trunk road which is located approximately 250m to the south.

2.3 The wider school site is located on generally flat terrain with a slight fall across the site towards the north. The proposed new accommodation is located within an existing car park area with buildings and trees surrounding all four sides. Topographic survey data for this car park indicates that the ground level slopes upwards towards the south from approximately 125.00 to 25.60m above Ordnance Datum (AOD). An aerial image of the car park where the replacement building is proposed is shown in Figure 2.1 for context. Topographic and sub-surface survey information is included in Appendix A.

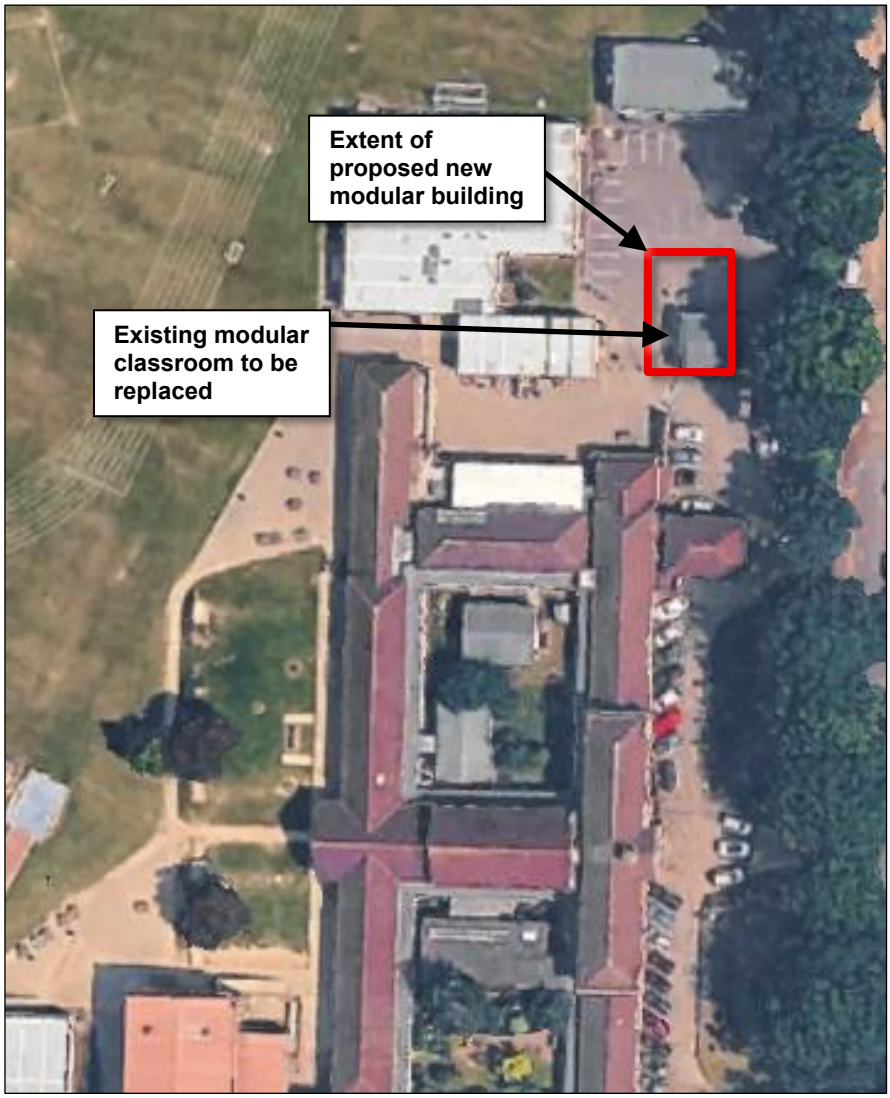


Figure 2.1 Aerial image of replacement classroom location

2.4 As can be seen in Figure 2.1, the existing building is located in the car park area on impermeable hardstanding in the northeastern corner of the site and over the footprint of an existing temporary classroom that is due to be removed as part of the development. The new building will be installed over an already 100% impermeable surfaced area.

2.5 Survey data indicates that the existing classroom has no foul drainage discharging directly from the building and that the surface water appears to discharge roof runoff via downpipes into gullies, from where it is conveyed to the wider surface water drainage network. Data from the CCTV drainage survey (Appendix B) indicates the routes of the below ground drainage and states that the surface water pipework has poor serviceability in a number of areas and therefore needs jetting and to be maintained. Existing surface water runoff management is discussed further in Section 4.

2.6 Ground investigation works have been undertaken by Ashdown Site Investigation and indicate that the underlying bedrock geology is of the Tunbridge Wells Sand formation, with no superficial deposits recorded in the intrusive investigation trial pits and window samples. The Tunbridge Wells Sand formation is shown to be present as clay or very clayey fine to medium sand down to a minimum of 2.20m below ground level. Trial pit WS01 was excavated in the playground area and indicates 150mm thick surface cover of asphalt over 450mm layer of made ground, then 100mm of made ground/reworked over 1.70m of clay.

2.7 Infiltration testing was carried out in other trial pit locations at the school site and returned the results as shown in Table 2.1. This information has been extracted from the Ashdown Site Investigation *Geotechnical and Ground Contamination Risk Assessment Report* (report ref: R17152) which is included in Appendix C.

Table 2.1 Calculated Infiltration Rates (taken from Table 7 of Ashdown Site Investigation Report)

Exploratory Hole	Top of Response Zone (m bgl)	Bottom of Response Zone (m bgl)	Stratum	Infiltration Rate (f) (m/sec)	Calculation Based on Head of Water as % of Initial Head)
TP01	0.40	0.98	Upper Tunbridge Wells Sand	Negligible	n/a
TP03	0.40	1.09	Upper Tunbridge Wells Sand	1.86×10^{-6}	100-80*

Notes: * Not calculated in accordance with BRE365 which requires infiltration rates to be calculated for between 75%-25% head of water of the initial head.

2.8 It can be seen that infiltration potential at the Imberhorne School site is negligible to poor, with the rate recorded in TP03 not calculated in accordance with the BRE 365 methodology. Given these results, it is considered that infiltration SuDS methods in the car park area are not suitable for the management of surface water runoff.

3.0 DEVELOPMENT PROPOSALS

3.1 The proposals are to remove the existing classroom and replace with a larger modular unit. Full plans have been submitted by Philips Surveyors LLP and should be referred to for a comprehensive overview of the development proposals. An extract of the site plan is shown in Figure 3.1 with further scheme drawings included in Appendix D.

3.2 As can be seen, the new building is detached from the surrounding school buildings and extends over the existing car park resulting in no change in impermeable areas within the northeastern corner of the site.

3.3 The existing classroom has a roof area of approximately 66m^2, surrounded by approximately 1,735 m^2 of asphalt hardstanding.

3.4 The proposed modular accommodation unit has a roof area of approximately 487m^2, providing an increase in roof area however, the existing impermeable area will remain the same within the car park.

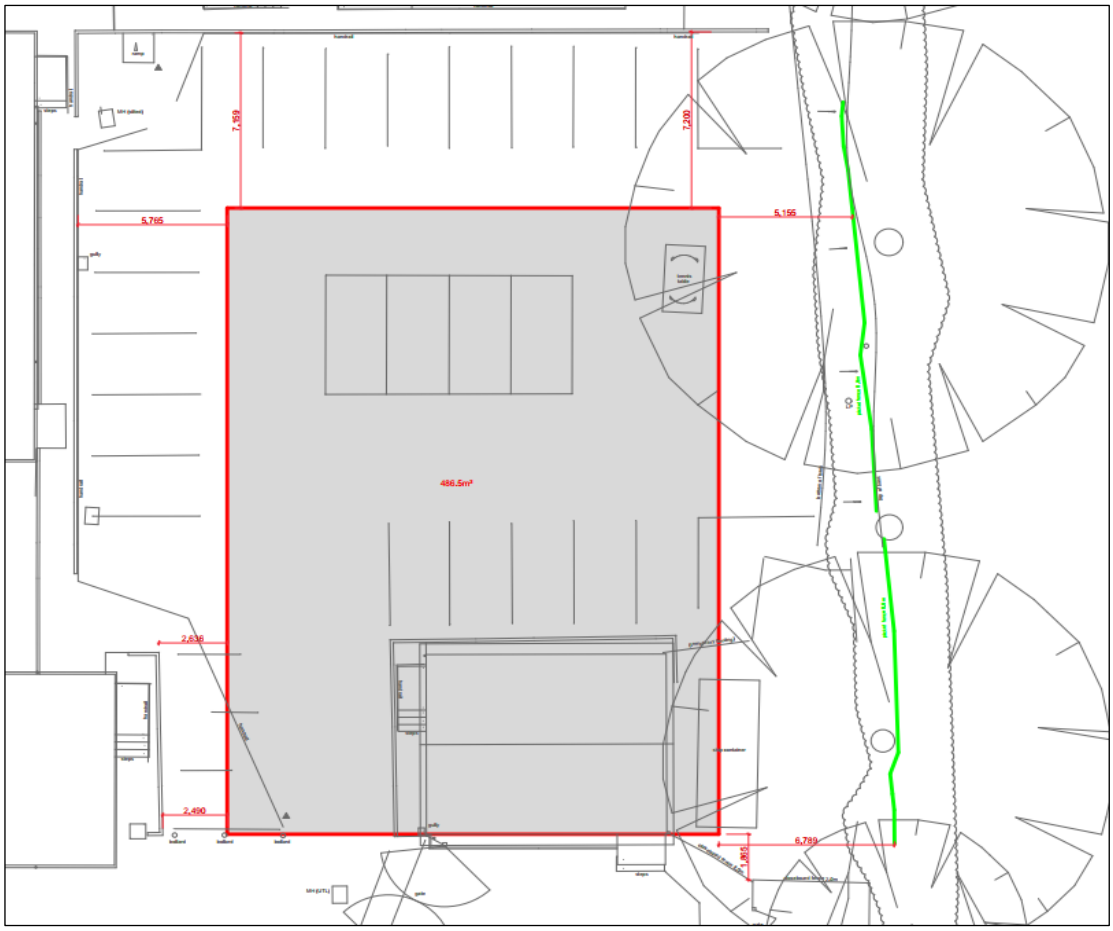


Figure 3.1 Extract of proposed site plan layout (Philips Surveyors)

4.0 DRAINAGE STRATEGY

SURFACE WATER - Existing

4.1 The existing classroom and associated external hardstanding discharges surface water directly to the below ground drainage network via gullies. Existing runoff rates from the 487m^2 contributing catchment are considered impractical to model accurately using industry standard hydraulic modelling software and therefore existing runoff rates have been indicated for a range of storm intensities, as indicated in Table 4.1.

Table 4.1 Existing runoff rates for range of storm intensities prior to mitigation

Rainfall intensity (mm/hour)	*10*	*30*	*50*	*75*	*100*
Runoff rate (litres/second)	**1.37**	**4.09**	**6.82**	**10.23**	**13.64**

4.2 This runoff flows directly into the existing below ground pipework and is assumed to discharge off-site to the public sewer system. No existing SuDS features (e.g. attenuation tanks or flow limiting devices) have been identified as serving the surface water drainage system at the school.

SURFACE WATER - Proposed

4.3 The scale of the proposed development, and the like-for-like replacement of existing impermeable areas due to the scheme, have been considered in the SuDS approach to manage surface water runoff from the new modular building. The primary strategy is to install bespoke SuDS Planters below rainwater downpipes to intercept the runoff prior to discharging into the existing piped drainage network.

4.4 There are several examples of SuDS Planters available as proprietary products that would suit the Imberhorne School application. For referencing purposes, the Meristem Design systems are considered to be a suitable option. These systems operate by intercepting runoff directly from rainwater downpipes and directing the flow into the raised planter unit. The water then infiltrates into the soil and growing material, as well as into storage medium located at the base of the unit, before discharging via an outlet to the downstream drainage network. Figure 4.1 provides an illustration of how the SuDS Planter system operates. Figure 4.2 shows an image of a SuDS Planter installation.

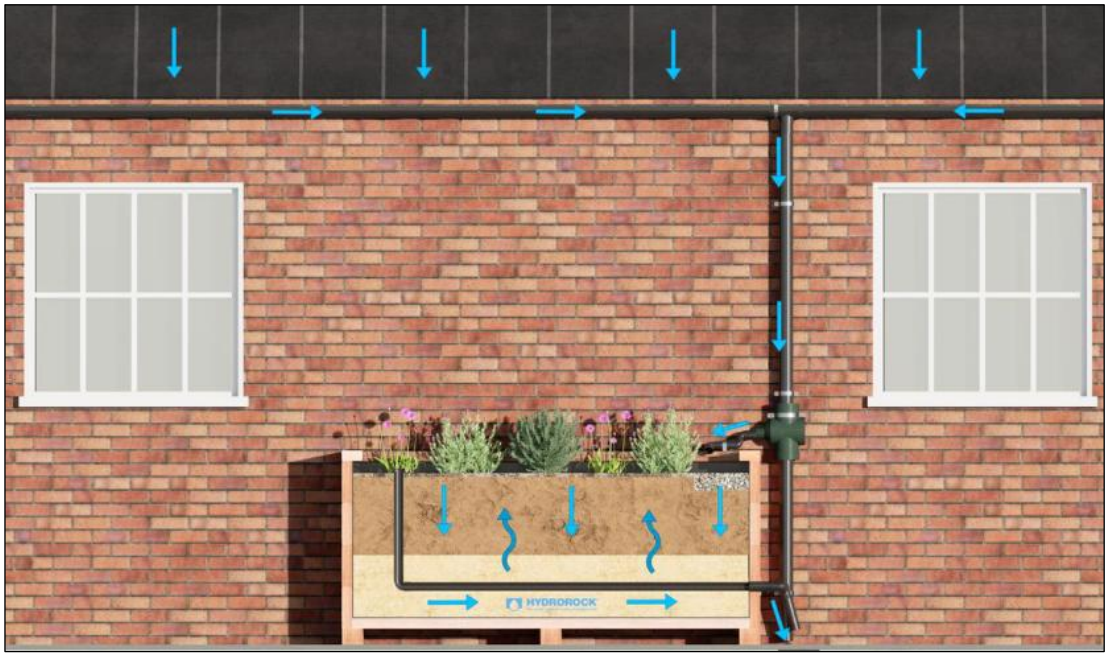


Figure 4.1 SuDS Planter diagrammatic section (Meristem Design 2026)

Figure 4.2 SuDS Planter installation (Meristem Design 2026)

4.5 The system is available in modular units of varying sizes, with the largest standard planter unit being able to provide 800 litres of rainwater storage. However, bespoke planter sizes are also available and these are proposed for the new modular building at the Imberhorne School site. This is partly necessitated by the need to convey water above ground initially to allow a gravity connection to the existing surface water drainage infrastructure from the ultimate SuDS planter discharge points.

4.6 The arrangement of these planters adjacent the new building, along with the additional new drainage infrastructure required to serve the scheme, are shown in drainage layout drawings included in Appendix E.

4.7 This strategy has been developed from consideration of the site constraints and the suitability of available SuDS options. Pre-application discussions with the LLFA were favourable to the acceptance of such an approach, as it was acknowledged that there was to be no increase in the impermeable area of the site post-development.

4.8 With regard to the Standards as set out in the NSfS, the following sections provide a brief description of how these are addressed at the site.

Standard 1: runoff destinations

4.9 As demonstrated in Section 2.0, infiltration opportunities are restricted by the clayey ground conditions and cannot be pursued. The existing arrangement is for surface water to discharge to the below ground drainage network and this strategy is to be retained for the developed site for the runoff destination.

Standard 2: management of everyday rainfall (interception)

4.10 The introduction of SuDS Planters provides interception to the first 5mm of rainfall with flows prevented from entering the downstream piped network by diverting runoff into the soil and attenuation medium.

Standard 3: management of extreme rainfall and flooding

4.11 Flow rates to the downstream piped network are greatly reduced through the use of SuDS Planters, as these act as above ground attenuation features that capture and slow the flow prior to discharge to the existing system.

4.12 With attenuation storage potential of 800 litres available to be accommodated in one unit, it can be seen that this provides significant betterment over the existing drainage arrangement where runoff from the impermeable surfacing at the site is discharged directly into the below ground system with no SuDS features present.

4.13 The Meristem Design SuDS Planters can be designed to bespoke sizes with flow restricting orifice plates on the outlet pipes. This means that the rate of flow from the roof runoff can be slowed down and limited for a specific range of storm events resulting in a reduction of the hydraulic load on the downstream piped drainage network.

4.14 Detailed hydraulic calculations are outside the scope of this strategy report, however, it is considered that a 30% reduction of runoff rates could be achieved for up to a storm intensity of 50mm/hour, with more intense storms subject to a 10% reduction up to the 1 in 100-year event. Table 4.2 indicates the reduced runoff rate that could potentially be introduced through SuDS Planter mitigation.

Table 4.2 Reduced runoff rates for range of storm intensities after SuDS Planter mitigation

Rainfall intensity (mm/hour)	*10*	*30*	*50*	*75*	*100*
Runoff rate (litres/second)	**0.96**	**2.86**	**4.77**	**7.16**	**9.55**
Reduction from existing (litres/second)	***-0.41***	***-1.23***	***-2.05***	***-3.07***	***-4.09***

4.15 This is considered to be a betterment over the existing situation and also over the general assumption that replacing like-for-like impermeable catchment areas with new development does not have an adverse effect on the overall drainage arrangement. It can be seen that the introduction of SuDS Planters will have a beneficial impact on the school site and downstream public sewer network in terms of drainage capacity, despite the small-scale nature of the works.

Standard 4: water quality

4.16 Runoff from small, non-industrial roofs and pedestrian hardstanding areas is considered in the SuDS Manual to be at low risk of containing potential contaminants and minimal intervention is needed to improve the quality of discharge to downstream receptors. As with Standard 3, the introduction of SuDS Planters provides the opportunity to significantly improve the runoff treatment through filtration to a better standard than via a direct connection to the below ground drainage.

Standard 5: amenity

4.17 The development of the existing car park area presents an opportunity to add educational and recreational value to the external spaces. The SuDS Planters are particularly suited to a school environment with many products available featuring interactive features and information boards that explain the benefits of SuDS and the importance of the rainwater resource. These add to the amenity of the courtyard space and the new accommodation.

Standard 6: biodiversity

4.18 It can also be seen how biodiversity is enhanced through the additional planting and habitat created from the proposed SuDS features.

Standard 7: design of drainage for construction, operation, maintenance, decommissioning and structural integrity

4.19 Proprietary planter units are installed and maintained to the manufacturer's guidance, which will be made available to the school facilities management team. The anticipated routine inspections will focus on the unobstructed conveyance of runoff through the system with the removal of any blockages, siltation, litter and other debris conducted monthly and after periods of heavy rainfall.

4.20 The plants and growing medium should be inspected as required to ensure plant health. This is envisaged to be incorporated into the existing landscape management schedule and maintenance programme, with the school responsible for the maintenance and management of the SuDS features for their operational lifetime.

4.21 With the planters being stand-alone above ground features, it is considered that the installation and decommissioning of these units can be achieved independently of the wider construction requirements of the SEND/Leadership building.

FOUL WATER – Existing

4.22 There is currently no requirement for the existing accommodation to be served by a foul water drainage, as there are no sanitary disposal units within the building. The CCTV drainage survey indicates that the nearest feasible foul water drainage infrastructure to connect to is located to the south of the proposed installation. This drain flows off-site towards the east and is assumed to discharge to the public sewer within the adjacent highway.

FOUL WATER - Proposed

4.23 The new building requires foul waste connections from internal sinks and toilets. It is not possible for the foul water to be drained entirely by gravity; therefore, it is proposed to drain to a package pump station and subsequently discharged via a rising main to a break chamber connected to the existing foul drainage system to the south. The foul drainage is then discharged off-site to the public foul water sewer located in the adjacent highway.

4.24 The overall occupancy across the school site is not anticipated to increase due to the new facilities, and therefore, there is no anticipated increase in foul water flows discharging to the public sewer.

5.0 FLOOD RISK

5.1 A Flood Risk Assessment is not required for the development as the scale of the project is less than one hectare and is located wholly within Flood Zone 1, as indicated by the EA online flood maps for planning. Additional sources of flood risk have been reviewed and the risk of flooding from all sources, including surface water flood risk, is considered to be low.

6.0 CONCLUSIONS

6.1 This Foul Sewage and Surface Water Drainage Assessment has been prepared in support of the proposed modular SEND/Leadership accommodation development at Imberhorne Lower School, East Grinstead. The proposals comprise the removal of the existing temporary classroom and replacement with a larger modular unit however, the impermeable area will stay the same.

6.2 Site investigations, drainage surveys and infiltration testing have been undertaken to inform the drainage strategy. The investigation findings confirm that infiltration opportunities at the site are limited and therefore infiltration-based SuDS techniques are not considered feasible for this development.

6.3 The proposed development represents no increase in existing impermeable areas. Surface water runoff from the proposed building roof will continue to discharge to the existing drainage network, however, the proposed strategy introduces SuDS Planters to provide interception, attenuation and treatment of runoff prior to discharge.

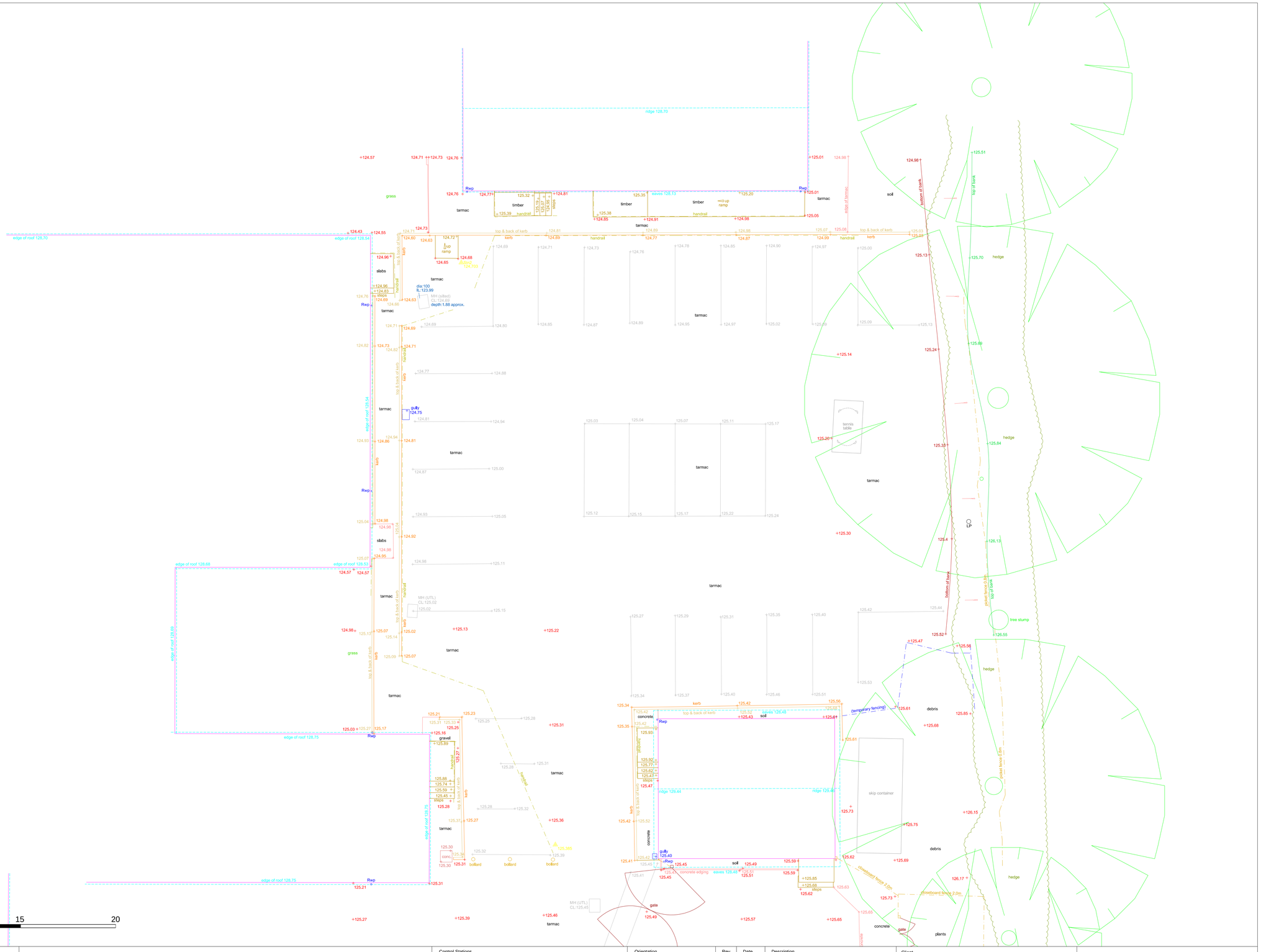
6.4 SuDS measures proposed for the scheme are considered appropriate and proportionate to the scale and nature of the development and provide an overall betterment compared with the existing drainage arrangement.

6.5 The strategy aims to reduce and slow runoff entering the downstream drainage network through interception and attenuation. The planters are considered to improve surface water runoff and contribute to enhancing biodiversity, amenity and educational benefits within the school environment.

6.6 Foul water proposals have been considered and it has been demonstrated that a pump chamber is required to convey wastewater to the on-site drainage network and downstream via gravity to the public sewer.

6.7 The drainage strategy detailed within this report is considered to be compliant with the principles of the NSfS, the NPPF and CIRIA SuDS guidance. The site is located wholly within Flood Zone 1 and is considered to be at low risk of flooding from rivers and the sea, surface water or other sources. The development is therefore considered acceptable in flood risk and drainage terms and this report is considered to be suitable to support the proposed development at Imberhorne Lower School.

APPENDIX A – TOPOGRAPHIC & SUB-SURFACE SURVEYS



Scale Bar (meters)

0 5 10 15 20

NOTES
SURVEY IS BASED ON OS GRID SYSTEM
ORIGINATING FROM STATION 1
@ E 538615.024, N 139198.807, RL 125.385

Every effort has been made to survey the area as indicated. Where detail is inaccessible or obscured from view it has been deemed unable to survey.

LAYER INFORMATION

0	EMPTY
Bank	Downhill bank arrows
Bottom of Bank	Bottom of bank / slope
BT	Telecom box and manholes
Building	Building outline
Edge of Concrete	Edge of concrete surface
Edge of Road	Edge of road surface
External Steps	External Step lines
Fenceline	Boundaries, fence and Boundary lines
Floor	Floor outline / floor
Footpath	Edge of footpath or surface changes
Gardenline	Edge of lawns,flower beds and garden surface changes
Gate	Gate and swing lines
GF	Ground floor
Hedgeline	Edges of significant hedges
Kerbline	Front kerbline
Lamp Post	Lamp pots and lighting
Manhole	Manholes and utility covers
Overhead Cables	Telecom, electric and utility poles
Plant	Significant ventilation and external plant
Road Markings	Significant road markings
Rooflines	Ridges, eaves, hips and valley lines
Scrubline	Edges of dense or overgrown foliage
Street Signs	Road and street signs
Spotlevels	Point elevations
Spotlevels text	Point elevations text
Survey Stations	GPS referance survey stations
Text	Notes text
Top and Back of Kerb	Top and back line of kerb
Top of Bank	Top line of bank
Tree	Tree bore and spread
Unclassified Structure	Other structures
Wall	Walls

Line types and Symbols

Building Lines		Garden Line	
Rooflines	100.40	Scrub Line	Scrub
Top & Back of Kerb	100.40	Gullies / Waste Water	Gully 100.19, SVP, SWP, RWP
Edge of Surface / Footpath	100.40	Man holes & Flow	dia:80, MH CL:100.40 IL:99.40, dia:100
Edge of Road	100.40	Trees	
Edge of Concrete	100.40	Spot Levels	100.40
Top of bank	100.40	Road Markings	
Bottom of bank	100.40	Hedge Line	Hedge
Fence / Handrail		Walls	tw 100.40, pier ht 100.40
Overhead Cables		Steps	100.20, 100.20, 100.20
		Plant	Plant
		Gates	Gate

Control Stations

Co-ordinates in OSGB

Point Number	Easting	Northing	Elevation	Description
Sin1	538615.024	139198.807	125.385	HILTI NAIL
Sin2	538610.079	139229.404	124.703	HILTI NAIL
Sin3	538584.069	139076.128	126.607	HILTI NAIL
Sin4	538618.237	139070.548	126.727	HILTI NAIL
Sin5	538632.864	139089.579	126.757	HILTI NAIL

Orientation

North

Rev.	Date	Description

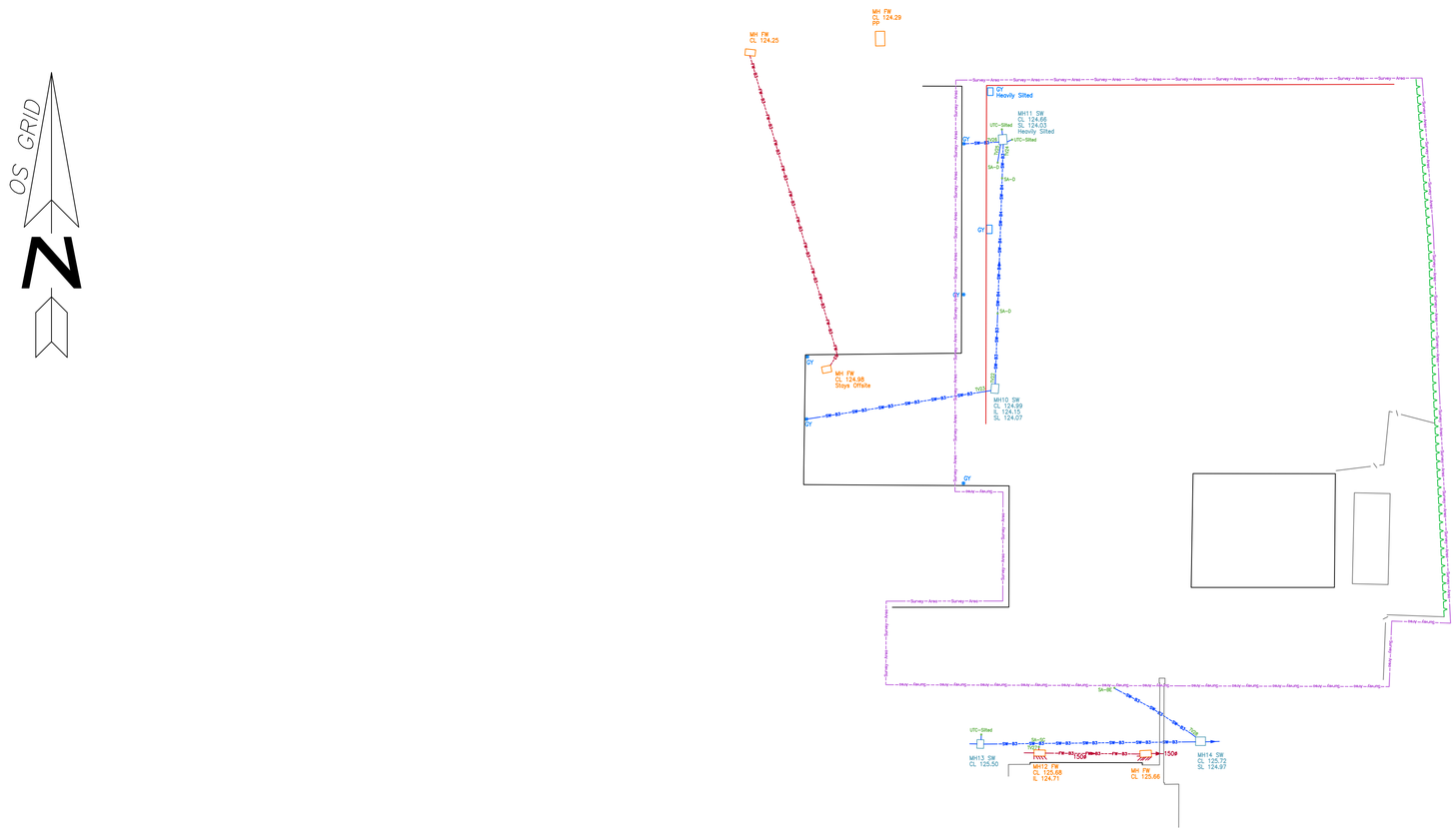
Client
Philips Surveyors

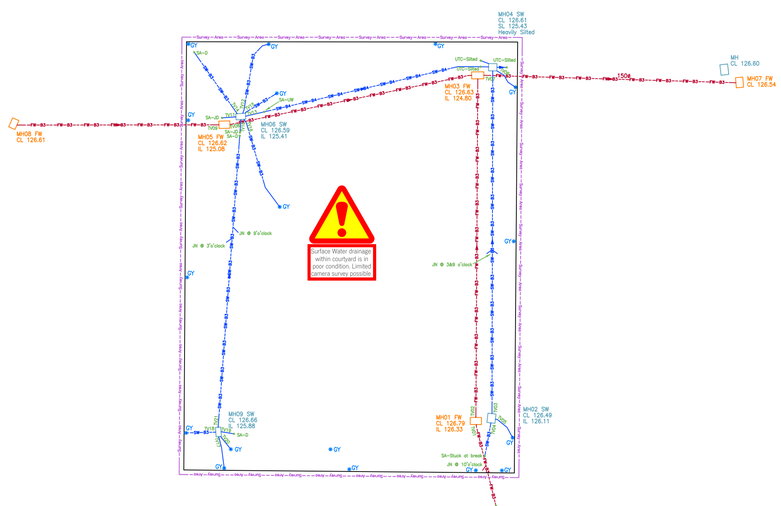
SeSurveying

Drawing Title
Topographical Survey P1/4

Job Title
Imberhorne Lower School, East Grinstead

Scale	Date	Drawn	Job No.	Drawing No.	Rev.
1:100 @ A1	23/02/26	CH,DH,MF,TP	002 02 26	001	-
	Surveyed by: AR	Checked: SE			





PAS 128:2022 Quality level of Survey Outputs; (referred to as 'Table 1')						
	Survey Type	*Quality level (Practitioner to determine post-survey)*	*Post-processing (GPR data analysis)*	*Location accuracy*		*Supporting Data*
				Horizontal	*Vertical*	
D	*Desktop Utility Records Search*	*QL-D*	–	*Undefined*	*Undefined*	–
C	*Site Reconnaissance*	*QL-C*	–	*Undefined*	*Undefined*	*A Segment of Utility whose location is demonstrated by visual reference to street furniture, topographical features or evidence of previous street works (reinstatement scar).*
B	*Detection*	*QL-B4*	*No*	*Undefined*	*Undefined*	*A Utility Segement which is suspected to exist but has not been detected and is therefore shown as an assumed route.*
		QL-B3	*No*	*±500mm*	*Undefined (No reliable depth measurement possible)*	*Horizontal location only of the Utility detected by one of the geophysical techniques used.*
		QL-B3P	*Yes*			
		QL-B2	*No*	*±250mm or ±40% of detected depth whichever is greater*	*±40% of detected depth*	*Horizontal and Vertical location of the Utility detected by one of the geophysical techniques used.*
		QL-B2P	*Yes*			
		QL-B1	*No*	*±150mm or ±15% of detected depth whichever is greater*	*±15% of detected depth*	*Horizontal and Vertical location of the Utility detected by multiple geophysical techniques used.*
		QL-B1P	*Yes*			
A	*Verification*	*QL-A*	–	*±50mm*	*±25mm*	*Horizontal and vertical location of the top and/or bottom of the utility. Additional attribution is recorded as specified in 9.2.5.*

Underground Utility Notes;

1) No utility mapping survey can be considered a 100% accurate depiction of the sub-surface environment, the use of these drawings does not remove the requirement for the use of safe digging techniques, in line with the requirements of HSG47 and CDM regulations.

2) The data presented in this drawing has been collected using a combination of the following; consultation of utility asset information, visual survey, electromagnetic location, and ground penetrating radar (GPR). These techniques have been deployed in accordance with PAS128:2022 Underground utility detection, verification and location – Specification.

3) Unless otherwise stated, all utilities shown on this plan have been surveyed using approved detectors and the connections between inspection chambers, if unable to be detected, are assumed to be direct unless there are indications to the contrary.

4) The detection confidence (quality level) for each utility segment is depicted within the object line style (e.g. –B2). Information depicted as –C are based on site reconnaissance with records and –D is based on utility records only, and neither can be guaranteed.

5) The utility routes depicted may reflect the routes of multiple cables or pipes. It is not always possible to differentiate between buried construction features, utilities and other subsurface features therefore some features shown may not be utility related. Due to the limitations of techniques employed all utility identifications should be treated with caution and verified prior to design/build works.

6) The material and ground conditions surrounding and particularly above buried utilities can lead to inferior data resolution when using ground penetrating radar, e.g. reinforced concrete, standing ground water, saturated ground, soil types, and changes in feature material.

7) Small gullys and downpipes that go straight into the ground can not always be traced due to restrictive access.

8) Note that not all buried utilities can be detected and mapped due to (but not limited to) their depth, location, material, geology and proximity to other utilities. Even an appropriate and professionally executed survey may not be able to achieve a 100% detection rate.

CCTV Cables
Drainage Combined
Drainage Foul
Drainage Storm
Drainage Unidentified
Electric – High Voltage
Electric – Low Voltage
Electric – Street Lighting
Electric – Undefined
Empty Duct
Gas
GPR Linear Feature*
Telecoms – BT
Telecoms – Fibre Optic
Telecoms – General
Traffic Signals
Unidentified Cable
Unidentified Pipe
Unidentified Service
Virgin Media
Vodafone
Water
Survey Area Boundary

* All GPR data is post processed unless specified otherwise.

No GPR Survey Undertaken (Overgrown/Ground Conditions/Obstructions)

Limited GPR Survey Undertaken (Ground Conditions/Obstructions)

LASER SURVEYS.

LAND, BUILDING, PAS128 - UTILITY DETECTION, CCTV DRAINAGE & UAV SURVEYS.
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OLD DAIRY, STUBBERS FARM, MOUNTNESSING ROAD, BLACKMORE, CM4 0NX
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DATUM NOTES

CO-ORDINATES USED ARE BASED ON ORDNANCE SURVEY NATIONAL GRID, OBTAINED USING THE ACTIVE GPS NETWORK.

LEVELS ARE RELATED TO :- ORDNANCE SURVEY ACTIVE GPS NETWORK.

ABBREVIATIONS (where applicable)

(A)	Assumed/Approx.	I/R	Iron Railings	S/C	Surcharged
A/C	Assumed Connection	JB	Junction Box	SD	Silt Depth
A/R	Assumed Route	JN	Junction	SK	Soakaway
A	Arch Height	KO	Kerb Outlet	SL	Silt Level
AC	Air-Con Unit	LB	Litter Bin	SP	Spring Height
AG	Above Ground	LP	Lamp Post	SPT	Septic Tank
AV	Air Valve Cover	LU	Line Up	ST	Silt Trap
B	Beam Ht	MC	Material Change	SV	Stop Valve Cover
BIL	Backdrop Invert Level	MG	Multi Girth Tree	SVC	Security Video Camera
BK	Brick	MH	Manhole Cover	SW	Storm Water
BL	Bollard	MK	Marker	TCB	Telephone Call Box
BS	Bus Stop	NDP	No Depths Possible	THL	Threshold Level
BSU	Beam Slopes Up	NPV	No Pipes Visible	TL	Traffic Light
BT	British Telecom Cover	NOPV	No Other Pipes Visible	TK	Tank
C	Ceiling Height	NVV	No Valve Visible	TP	Telegraph Pole
C/B	Close Boarded	OH	Overhead	TVxx	Item Number in CCTV Report
C/F	Coverfast	-C-	Overhead Cables	UG	Underground
CL	Cover Level	-E-	Overhead Electric	UTC-	Unable to Camera-
CLK	Chainlink	-T-	Overhead Telecoms	-A	-No Access
CN	Connection	PAV	Paving	-D	-Debris
CO	Column	PB	Post Box	-DRP	-Drop Pipe
Conc	Concrete	PD	Pit Depth	-F	-Flow/Water Level
CP	Catch Pit	PE	Pipe	-RT	-Roots
CPS	Concrete Paving Slabs	PL	Pit Level	-S/C	-Surcharged
CSU	Ceiling Slopes Up	PM	Parking Meter	UTF	Unable to Trace Further
CATV	Cable Television Cover	PP	Pump Pit	UTL	Unable to Locate
CTV	Cable Television Cover	P/R	Post and Rail	UTR	Unable to Raise
CW	Combined Water	PSC	Pipe Size Change	UTT	Unable to Trace
DC	Drainage Channel	PT	Post	VP	Vent Pipe
D	Depth of Utility	P/W	Post and Wire	WL	Water Level
D	Door Ht (Building)	RE	Rodding Eye	WM	Water Meter Cover
DP	Drain Pipe	RET	Retaining	WO	Wash Out Cover
EP	Electricity Pole	RS	Road Sign	WPR	Wooden Post & Rail
ER	Earthing Rod	RSI	Road Sign Illuminated		
FC	False Ceiling Ht	RSJ	Rolled Steel Joist		
FB	Flower Bed	S	Sill Height		
FE	Fence	SA-	Survey Abandoned-		
FH	Fire Hydrant Cover	-BE	-Stuck at Bend		
FL	Floor Level	-CXI	-Intruding Connection		
FP	Flag Pole	-DA	-Debris Attached		
FW	Foul Water	-DS	-Debris Settled		
GP	Gate Post	-JD	-Joint Displaced		
GV	Gas Valve Cover	-LT	-Loss of Traction		
GY/G	Gully	-OB	-Obstruction		
H	Head Height	-OL	-Operating Limit		
HIL	High Level Invert	-RT	-Roots		
HT	Height	-SDP	-Small Diameter Pipe		
IC	Inspection Cover	-ST	-Camera Stuck		
IL	Invert Level	-UW	-Under Water		
IN/INT	Interceptor	SC	Pipe Size Change		

NOTES

- Drainage pipe sizes (where shown) have been gauged from the surface for safety reasons and should be regarded as approximate only.
- Drainage pipe sizes are 100Ø unless stated otherwise along the length.
- Tree species (where shown) should be treated with caution and expert identification is advised.
- Although this is a digital survey the accuracy and amount of detail shown is only commensurate with the graphical scale of mapping as specified. Care should be exercised when working to larger scales.
- Visible features in the vicinity of the boundaries as shown above, may not represent the extent of legally conveyed ownership.
- Whilst every effort has been made to achieve accuracy on this plan, CRUCIAL clearance dimensions, levels and invert levels should be checked prior to design and construction.
- Kerb levels have been taken in the bottom of the channel.

SHEET LAYOUT
(NOT TO SCALE)

IMBERHORNE LOWER SCHOOL, WINDMILL LANE, EAST GRINSTEAD, RH19 2DT

CCTV DRAINAGE SURVEY

CLIENT:	PHILIPS SURVEYORS	DRAWN BY:	RH
SURVEY DATE:	FEB 2026	CHECKED BY:	CW
SHEET NUMBER	N 3004/1	Revision 0	
DRAWING TITLE	CCTV DRAINAGE		
SCALE	1 : 200 (@A1)		
SEE ALSO DRAWING NOS.			
SHEET	1 of 1		
JOB NUMBER	N 3004		

REVISION INFORMATION

NO.	DATE	NOTES

APPENDIX B – CCTV DRAINAGE SURVEY REPORT

Laser Surveys Ltd.
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Project Information

Project Name	Project Number	Project Date
N3004-Imberhorne Lower School		20/02/2026

Client

Company: Philips Surveyors
Contact: Will Court
Email: will@philips-surveyors.co.uk

Site

Company: Imberhorne Lower School
Description: CCTV Drainage Survey
Contact: Paul Humphrey
Street: Windmill Lane
Town or City: East Grinstead
County: West Sussex
Post Code: RH19 2DT

Contractor

Company: Laser Surveys Ltd.
Department: Open Space
Street: Leigh Sinton Road
Town or City: Malvern
County: Worcestershire
Post Code: WR14 1UT
Phone: 01886 833173
Email: worcester@lasersurveys.com

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Section Inspection - BuildingX

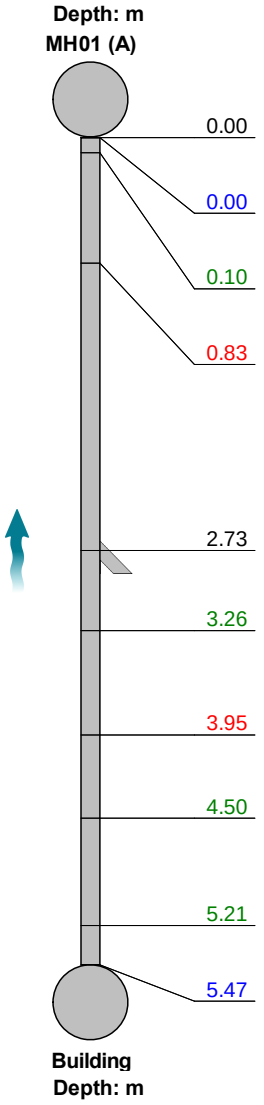
Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
1	1		Not Specified	Not Specified	No	BUILDINGX
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

Town or Village:	East Grinstead	**Inspection Direction:**	Upstream	**Upstream Node:**	BUILDING
Road:	Imberhorne Lower School	**Inspected Length:**	5.47 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	5.47 m	**Downstream Node:**	MH01 (A)
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Foul	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Video N3004-Vid001 starts @ 00 00 00
Recommendations:

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: MH01 (A)	00:00:00		
0.00	WL	Water level, 0% of the vertical dimension	00:00:02		
0.10	LL	Line deviates left: Slight Left	00:00:12		
0.83	JDL	Joint displaced, large	00:00:15	1	
2.73	JN	Junction at 10 o'clock, 100mm dia	00:00:20		
3.26	DES	Settled deposits, fine, 5% cross-sectional area loss	00:00:22		
3.95	JDM	Joint displaced, medium	00:00:28	2	
4.50	OBZ	Other obstacles from 12 o'clock to 12 o'clock, 80% cross-sectional area loss: Tennis Ball	00:00:29		
5.21	LU	Line deviates up	00:00:35		
5.47	REM	General remark: Survey Finished at Line Up	00:00:52		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

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Section Pictures - BuildingX

Item No.	Inspection Direction	PLR	Client`s Job Ref	Contractor`s Job Ref
1	Upstream	BUILDINGX		N3004

1, 00:00:15, 0.83 m
Joint displaced, large

2, 00:00:28, 3.95 m
Joint displaced, medium

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Section Inspection - MH01 (X)X

Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
2	1		Not Specified	Not Specified	No	MH01 (X)X
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

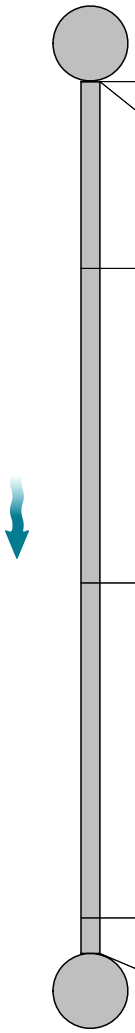
Town or Village:	East Grinstead	**Inspection Direction:**	Downstream	**Upstream Node:**	MH01 (X)
Road:	Imberhorne Lower School	**Inspected Length:**	22.37 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	22.37 m	**Downstream Node:**	MH03
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Foul	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 01 16
Recommendations:

Scale: 1:194

Depth: m
MH01 (X)



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: MH01 (X)	00:00:00		
0.00	WL	Water level, 0% of the vertical dimension	00:00:00		
4.80	JDM	Joint displaced, medium	00:00:25	1	1 / 3
12.88	JDM	Joint displaced, medium	00:00:52	2	1 / 3
21.47	WL	Water level, 5% of the vertical dimension	00:01:16		
22.37	MHF	Finish node, manhole, reference: MH03	00:01:19		

MH03
Depth: m

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
2	1.0	0.1	2.0	1.0	2	2.0	0.2	4.0	3.0

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Section Pictures - MH01 (X)X

Item No.	Inspection Direction	PLR	Client`s Job Ref	Contractor`s Job Ref
2	Downstream	MH01 (X)X		N3004

1, 00:00:25, 4.80 m
Joint displaced, medium

2, 00:00:52, 12.88 m
Joint displaced, medium

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Section Inspection - MH02 (X)X

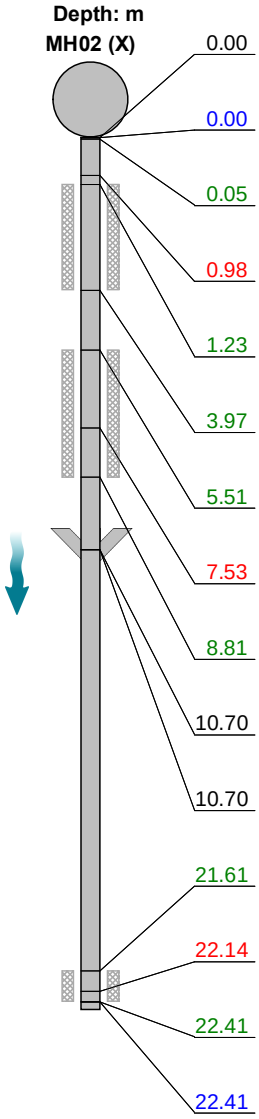
Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
3	1		Not Specified	Not Specified	No	MH02 (X)X
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

Town or Village:	East Grinstead	**Inspection Direction:**	Downstream	**Upstream Node:**	MH02 (X)
Road:	Imberhorne Lower School	**Inspected Length:**	22.80 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	22.80 m	**Downstream Node:**	MH04
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 02 41
Recommendations:

Scale: 1:196



Position [m]		Code	Observation	MPEG	Photo	Grade
0.00		MH	Start node, manhole, reference: MH02 (X)	00:00:00		
0.00		WL	Water level, 5% of the vertical dimension	00:00:00		
0.05		DEEJ	Attached deposits, encrustation at joint from 8 o'clock to 4 o'clock, 10% cross-sectional area loss	00:00:12		3
0.98		JDM	Joint displaced, medium	00:00:15	1	1 / 3
1.23	S01	DES	Settled deposits, fine, 15% cross-sectional area loss, start	00:00:16		
3.97	F01	DES	Settled deposits, fine, 15% cross-sectional area loss, finish	00:00:25		3
5.51	S02	DER	Settled deposits, coarse, 15% cross-sectional area loss, start	00:00:29		
7.53		BJ	Broken pipe at joint at 10 o'clock	00:00:39	2	4
8.81	F02	DER	Settled deposits, coarse, 15% cross-sectional area loss, finish	00:00:44		3
10.70		JN	Junction at 9 o'clock, 100mm dia	00:00:48		
10.70		JN	Junction at 3 o'clock, 100mm dia	00:00:48		
21.61	S03	DES	Settled deposits, fine, 5% cross-sectional area loss, start	00:01:29		
22.14		OJM	Open joint, medium	00:01:30	3	1
22.41	F03	DES	Settled deposits, fine, 5% cross-sectional area loss, finish	00:01:34		3
22.41		WL	Water level, 50% of the vertical dimension	00:01:34		

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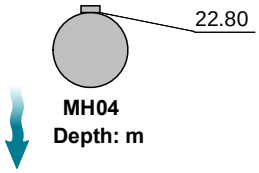
Section Inspection - MH02 (X)X

Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
3	1		Not Specified	Not Specified	No	MH02 (X)X
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

Scale: 1:196	Position [m]	Code	Observation	MPEG	Photo	Grade
	22.80	MHF	Finish node, manhole, reference: MH04	00:02:09		



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
3	80.0	3.6	82.0	4.0	5	4.0	0.9	20.0	3.0

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Section Pictures - MH02 (X)X

Item No.	Inspection Direction	PLR	Client`s Job Ref	Contractor`s Job Ref
3	Downstream	MH02 (X)X		N3004

1, 00:00:15, 0.98 m
Joint displaced, medium

2, 00:00:39, 7.53 m
Broken pipe at joint at 10 o'clock

3, 00:01:30, 22.14 m
Open joint, medium

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Section Inspection - GullyX

Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
4	1		Not Specified	Not Specified	No	GULLYX
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

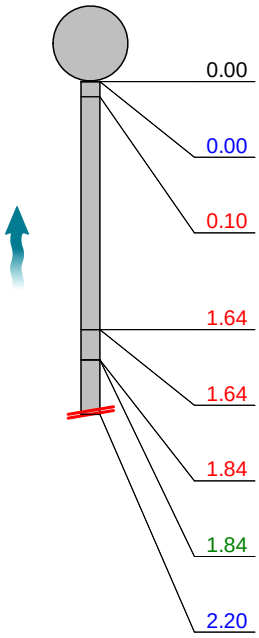
Town or Village:	East Grinstead	**Inspection Direction:**	Upstream	**Upstream Node:**	GULLY
Road:	Imberhorne Lower School	**Inspected Length:**	2.20 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	2.20 m	**Downstream Node:**	MH02 (A)
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 04 58
Recommendations:

Scale: 1:50

Depth: m
MH02 (A)



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: MH02 (A)	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:10		
0.10	JDM	Joint displaced, medium	00:00:12	1	1 / 3
1.64	D	Deformed sewer or drain, 5%	00:00:16		2 / 2
1.64	B	Broken pipe from 5 o'clock to 7 o'clock	00:00:16	2	4
1.84	B	Broken pipe from 9 o'clock to 4 o'clock	00:00:17	3	4
1.84	OBM	Other obstacles, pipe material in invert from 4 o'clock to 7 o'clock, 40% cross-sectional area loss	00:00:17		5
2.20	SA	Survey abandoned: Stuck at break	00:00:20		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
4	100.0	82.3	181.0	4.0	3	10.0	5.9	13.0	5.0

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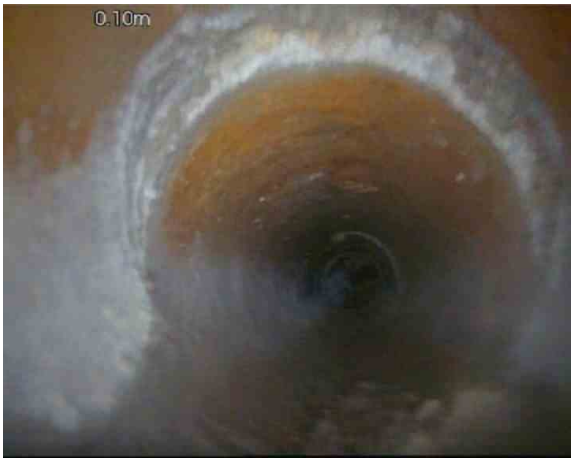
Section Pictures - GullyX

Item No.	Inspection Direction	PLR	Client`s Job Ref	Contractor`s Job Ref
4	Upstream	GULLYX		N3004



1, 00:00:12, 0.10 m
Joint displaced, medium

2, 00:00:16, 1.64 m
Broken pipe from 5 o'clock to 7 o'clock

3, 00:00:17, 1.84 m
Broken pipe from 9 o'clock to 4 o'clock

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Section Inspection - GullyX

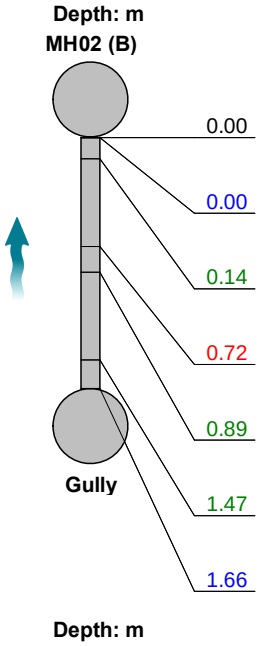
Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
5	1		Not Specified	Not Specified	No	GULLYX
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

Town or Village:	East Grinstead	**Inspection Direction:**	Upstream	**Upstream Node:**	GULLY
Road:	Imberhorne Lower School	**Inspected Length:**	1.66 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	1.66 m	**Downstream Node:**	MH02 (B)
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 05 24
Recommendations:

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: MH02 (B)	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
0.14	LR	Line deviates right: Slight Right	00:00:13		
0.72	JDL	Joint displaced, large	00:00:15	1	
0.89	LR	Line deviates right	00:00:16		
1.47	LD	Line deviates down	00:00:19		
1.66	REM	General remark: Survey Finished at Trap	00:00:25		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

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Section Pictures - GullyX

Item No.	Inspection Direction	PLR	Client`s Job Ref	Contractor`s Job Ref
5	Upstream	GULLYX		N3004

1, 00:00:15, 0.72 m
Joint displaced, large

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Section Inspection - GullyX

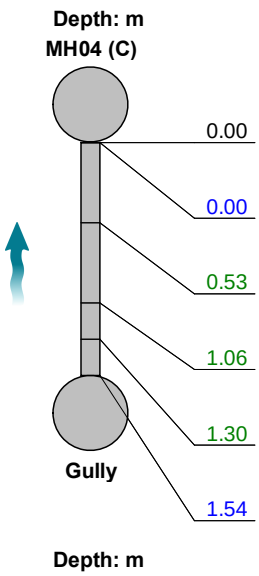
Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
6	1		Not Specified	Not Specified	No	GULLYX
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

Town or Village:	East Grinstead	**Inspection Direction:**	Upstream	**Upstream Node:**	GULLY
Road:	Imberhorne Lower School	**Inspected Length:**	1.54 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	1.54 m	**Downstream Node:**	MH04 (C)
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 05 53
Recommendations:

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: MH04 (C)	00:00:00		
0.00	WL	Water level, 0% of the vertical dimension	00:00:00		
0.53	LR	Line deviates right	00:00:15		
1.06	LL	Line deviates left: Slight Left	00:00:28		
1.30	LU	Line deviates up	00:00:30		
1.54	REM	General remark: Survey Finished at Line Up	00:00:31		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

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Section Inspection - MH03 (X)X

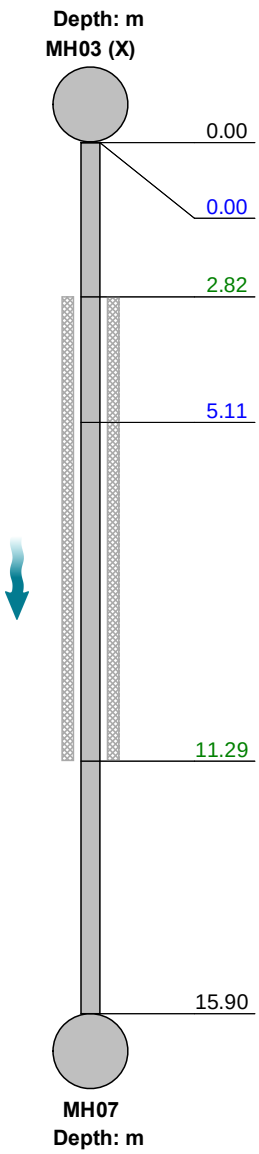
Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
7	1		Not Specified	Not Specified	No	MH03 (X)X
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

Town or Village:	East Grinstead	**Inspection Direction:**	Downstream	**Upstream Node:**	MH03 (X)
Road:	Imberhorne Lower School	**Inspected Length:**	15.90 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	15.90 m	**Downstream Node:**	MH07
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Foul	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	150 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 06 29
Recommendations:

Scale: 1:138



Position [m]		Code	Observation	MPEG	Photo	Grade
0.00		MH	Start node, manhole, reference: MH03 (X)	00:00:00		
0.00		WL	Water level, 10% of the vertical dimension	00:00:00		
2.82	S01	DEE	Attached deposits, encrustation from 8 o'clock to 4 o'clock, 5% cross-sectional area loss, start	00:00:22		
5.11		WL	Water level, 5% of the vertical dimension	00:00:28		
11.29	F01	DEE	Attached deposits, encrustation from 8 o'clock to 4 o'clock, 5% cross-sectional area loss, finish	00:00:49		3
15.90		MHF	Finish node, manhole, reference: MH07	00:01:04		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
0	0.0	0.0	0.0	1.0	1	2.0	1.1	18.0	3.0

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Section Inspection - MH05 (X)X

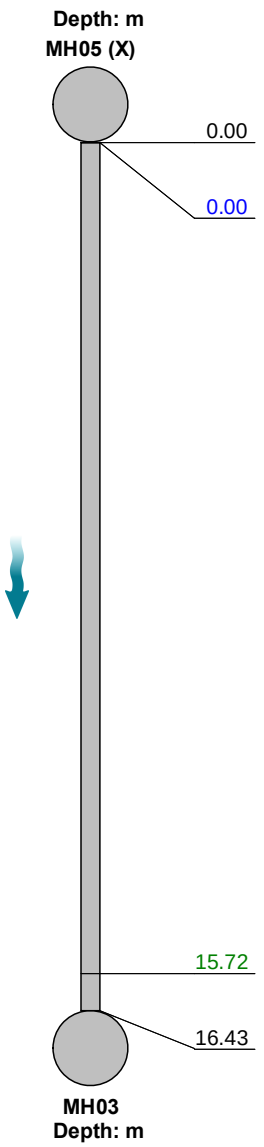
Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
8	1		Not Specified	Not Specified	No	MH05 (X)X
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

Town or Village:	East Grinstead	**Inspection Direction:**	Downstream	**Upstream Node:**	MH05 (X)
Road:	Imberhorne Lower School	**Inspected Length:**	16.43 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	16.43 m	**Downstream Node:**	MH03
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Foul	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 07 38
Recommendations:

Scale: 1:143



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: MH05 (X)	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
15.72	LR	Line deviates right	00:01:11		
16.43	MHF	Finish node, manhole, reference: MH03	00:01:13		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

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Section Inspection - MH08X

Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
9	1		Not Specified	Not Specified	No	MH08X

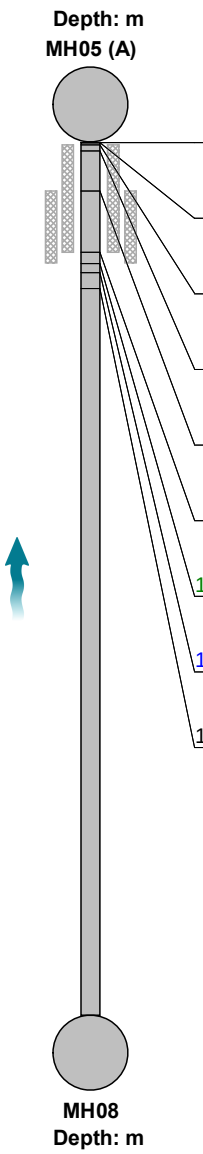
Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
Becky	5	Camera 2	Not Specified	Not Specified	Not Specified

Town or Village:	East Grinstead	**Inspection Direction:**	Upstream	**Upstream Node:**	MH08
Road:	Imberhorne Lower School	**Inspected Length:**	13.23 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	79.00 m	**Downstream Node:**	MH05 (A)
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Foul	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 08 56
Recommendations:

Scale: 1:684



Position [m]		Code	Observation	MPEG	Photo	Grade
0.00		MH	Start node, manhole, reference: MH05 (A)	00:00:00		
0.00		WL	Water level, 20% of the vertical dimension	00:00:10		
0.22	S01	CUW	Loss of vision, camera under water, start	00:00:12		
0.79		WL	Water level, 50% of the vertical dimension	00:00:13		
4.39	S02	DEE	Attached deposits, encrustation from 9 o'clock to 3 o'clock, 5% cross-sectional area loss, start	00:00:19		
9.97	F01	CUW	Loss of vision, camera under water, finish	00:00:54		
10.95	F02	DEE	Attached deposits, encrustation from 9 o'clock to 3 o'clock, 5% cross-sectional area loss, finish	00:00:58		3
11.83		WL	Water level, 10% of the vertical dimension	00:01:01		
13.23		MHF	Finish node, manhole, reference: MH08	00:01:08		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	1	2.0	0.2	14.0	3.0

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Section Inspection - MH09X

Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
10	1		Not Specified	Not Specified	No	MH09X

Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
Becky	5	Camera 2	Not Specified	Not Specified	Not Specified

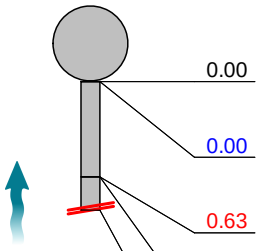
Town or Village:	East Grinstead	**Inspection Direction:**	Upstream	**Upstream Node:**	MH09
Road:	Imberhorne Lower School	**Inspected Length:**	0.85 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	0.85 m	**Downstream Node:**	MH06 (A)
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 10 09
Recommendations:

Scale: 1:50

Depth: m
MH06 (A)



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: MH06 (A)	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
0.63	JDL	Joint displaced, large	00:00:19		1 / 4
0.63	B	Broken pipe from 8 o'clock to 11 o'clock	00:00:19	1	4
0.85	SA	Survey abandoned: Stuck at Displaced Joint	00:00:23		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
2	82.0	96.5	82.0	4.0	1	5.0	5.9	5.0	5.0

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Section Pictures - MH09X

Item No.	Inspection Direction	PLR	Client`s Job Ref	Contractor`s Job Ref
10	Upstream	MH09X		N3004

1, 00:00:19, 0.63 m
Broken pipe from 8 o'clock to 11 o'clock

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Section Inspection - GullyX

Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
11	1		Not Specified	Not Specified	No	GULLYX
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

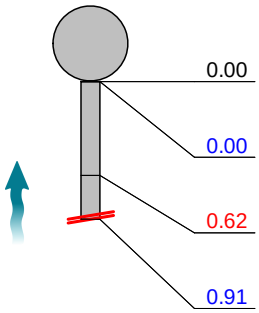
Town or Village:	East Grinstead	**Inspection Direction:**	Upstream	**Upstream Node:**	GULLY
Road:	Imberhorne Lower School	**Inspected Length:**	0.91 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	0.91 m	**Downstream Node:**	MH06 (B)
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 10 39
Recommendations:

Scale: 1:50

Depth: m
MH06 (B)



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: MH06 (B)	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:10		
0.62	JDL	Joint displaced, large	00:00:14	1	1 / 4
0.91	SA	Survey abandoned: Stuck at Displaced Joint	00:00:16		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
1	2.0	2.2	2.0	1.0	1	5.0	5.5	5.0	5.0

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Section Pictures - GullyX

Item No.	Inspection Direction	PLR	Client`s Job Ref	Contractor`s Job Ref
11	Upstream	GULLYX		N3004

1, 00:00:14, 0.62 m
Joint displaced, large

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Section Inspection - GullyX

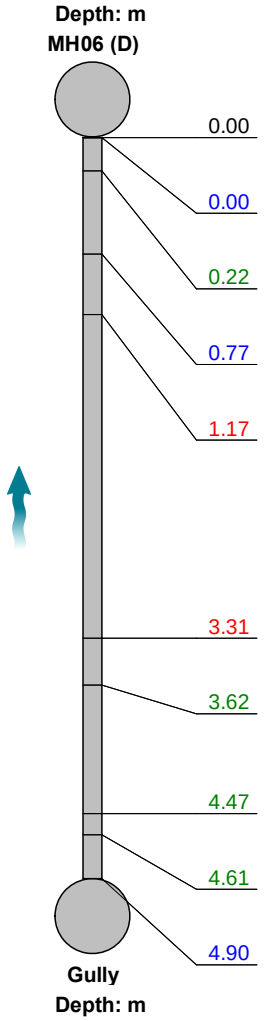
Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
12	1		Not Specified	Not Specified	No	GULLYX
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

Town or Village:	East Grinstead	**Inspection Direction:**	Upstream	**Upstream Node:**	GULLY
Road:	Imberhorne Lower School	**Inspected Length:**	4.90 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	4.90 m	**Downstream Node:**	MH06 (D)
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 11 01
Recommendations:

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: MH06 (D)	00:00:00		
0.00	WL	Water level, 0% of the vertical dimension	00:00:00		
0.22	LL	Line deviates left: Slight Left	00:00:14		
0.77	WL	Water level, 5% of the vertical dimension	00:00:16		
1.17	JDM	Joint displaced, medium	00:00:18	1	
3.31	JDL	Joint displaced, large	00:00:22	2	
3.62	LR	Line deviates right	00:00:23		
4.47	LR	Line deviates right	00:00:26		
4.61	LD	Line deviates down	00:00:28		
4.90	REM	General remark: Survey Finished at Trap	00:00:29		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

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Section Pictures - GullyX

Item No.	Inspection Direction	PLR	Client`s Job Ref	Contractor`s Job Ref
12	Upstream	GULLYX		N3004

1, 00:00:18, 1.17 m
Joint displaced, medium

2, 00:00:22, 3.31 m
Joint displaced, large

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Section Inspection - MH06 (X)X

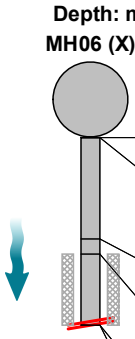
Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
13	1		Not Specified	Not Specified	No	MH06 (X)X
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

Town or Village:	East Grinstead	**Inspection Direction:**	Downstream	**Upstream Node:**	MH06 (X)
Road:	Imberhorne Lower School	**Inspected Length:**	1.24 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	1.24 m	**Downstream Node:**	MH04
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 11 35
Recommendations:

Scale: 1:50



Position [m]		Code	Observation	MPEG	Photo	Grade
0.00		MH	Start node, manhole, reference: MH06 (X)	00:00:00		
0.00		WL	Water level, 60% of the vertical dimension	00:00:00		
0.67		WL	Water level, 80% of the vertical dimension	00:00:14		
0.77	S01	CUW	Loss of vision, camera under water, start	00:00:14		
1.24	F01	CUW	Loss of vision, camera under water, finish	00:00:20		
1.24		SA	Survey abandoned: Under Water	00:00:20		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

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Section Inspection - GullyX

Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
14	1		Not Specified	Not Specified	No	GULLYX
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

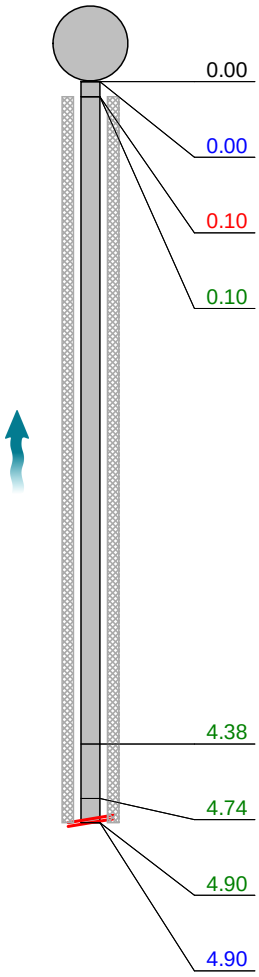
Town or Village:	East Grinstead	**Inspection Direction:**	Upstream	**Upstream Node:**	GULLY
Road:	Imberhorne Lower School	**Inspected Length:**	4.90 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	4.90 m	**Downstream Node:**	MH06 (C)
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 12 00
Recommendations:

Scale: 1:50

Depth: m
MH06 (C)



Position [m]		Code	Observation	MPEG	Photo	Grade
0.00		MH	Start node, manhole, reference: MH06 (C)	00:00:00		
0.00		WL	Water level, 0% of the vertical dimension	00:00:12		
0.10		JDM	Joint displaced, medium	00:00:11	1	1 / 3
0.10	S01	DES	Settled deposits, fine, 5% cross-sectional area loss, start	00:00:13		
4.38	C01	DES	Settled deposits, fine, 15% cross-sectional area loss, change	00:00:32		
4.74	C01	DES	Settled deposits, fine, 70% cross-sectional area loss, change	00:00:35		
4.90	F01	DES	Settled deposits, fine, 70% cross-sectional area loss, finish	00:00:37		3
4.90		SA	Survey abandoned: Stuck at Debris	00:00:37		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
1	1.0	0.2	1.0	1.0	2	4.0	2.4	12.0	3.0

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Section Pictures - GullyX

Item No.	Inspection Direction	PLR	Client`s Job Ref	Contractor`s Job Ref
14	Upstream	GULLYX		N3004

1, 00:00:11, 0.10 m
Joint displaced, medium

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Section Inspection - GullyX

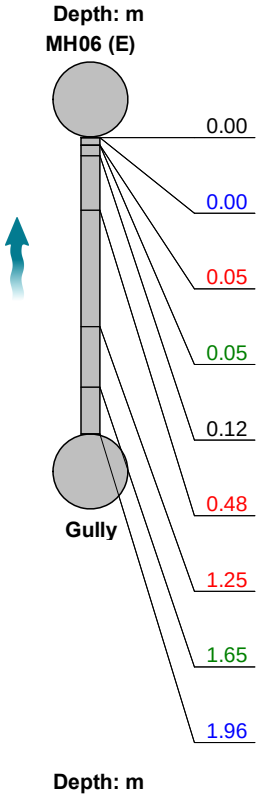
Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
15	1		Not Specified	Not Specified	No	GULLYX
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

Town or Village:	East Grinstead	**Inspection Direction:**	Upstream	**Upstream Node:**	GULLY
Road:	Imberhorne Lower School	**Inspected Length:**	1.96 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	1.96 m	**Downstream Node:**	MH06 (E)
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 12 42
Recommendations:

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: MH06 (E)	00:00:00		
0.00	WL	Water level, 0% of the vertical dimension	00:00:10		
0.05	JDL	Joint displaced, large	00:00:12		
0.05	LR	Line deviates right: Slight Right	00:00:13		
0.12	SC	Pipe size changes, new size(s), 75mm high	00:00:13		
0.48	JDM	Joint displaced, medium	00:00:19		
1.25	JDL	Joint displaced, large	00:00:21	1	
1.65	LD	Line deviates down	00:00:22		
1.96	REM	General remark: Survey Finished at Trap	00:00:23		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

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Section Pictures - GullyX

Item No.	Inspection Direction	PLR	Client`s Job Ref	Contractor`s Job Ref
15	Upstream	GULLYX		N3004

1, 00:00:21, 1.25 m
Joint displaced, large

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Section Inspection - GullyX

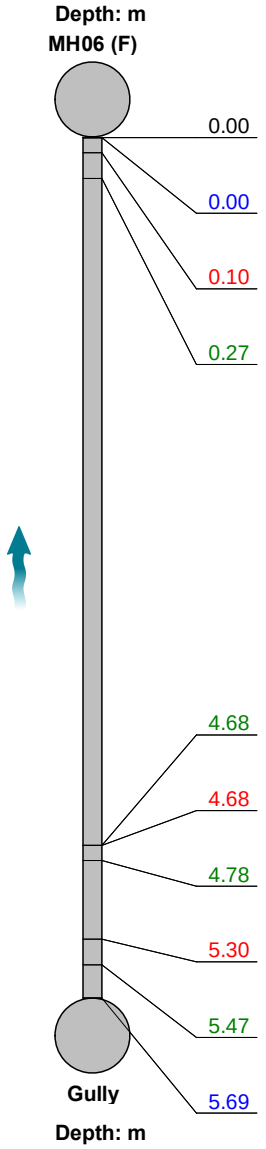
Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
16	1		Not Specified	Not Specified	No	GULLYX
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

Town or Village:	East Grinstead	**Inspection Direction:**	Upstream	**Upstream Node:**	GULLY
Road:	Imberhorne Lower School	**Inspected Length:**	5.69 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	5.69 m	**Downstream Node:**	MH06 (F)
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 13 09
Recommendations:

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: MH06 (F)	00:00:00		
0.00	WL	Water level, 0% of the vertical dimension	00:00:00		
0.10	JDM	Joint displaced, medium	00:00:11	1	
0.27	LR	Line deviates right: Slight Right	00:00:14		
4.68	LL	Line deviates left: Slight Left	00:00:32		
4.68	JDM	Joint displaced, medium	00:00:32	2	
4.78	DES	Settled deposits, fine, 5% cross-sectional area loss	00:00:32		
5.30	JDM	Joint displaced, medium	00:00:34	3	
5.47	LD	Line deviates down	00:00:35		
5.69	REM	General remark: Survey Finished at Trap	00:00:36		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

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Section Pictures - GullyX

Item No.	Inspection Direction	PLR	Client`s Job Ref	Contractor`s Job Ref
16	Upstream	GULLYX		N3004

1, 00:00:11, 0.10 m
Joint displaced, medium

2, 00:00:32, 4.68 m
Joint displaced, medium

3, 00:00:34, 5.30 m
Joint displaced, medium

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Section Inspection - GullyX

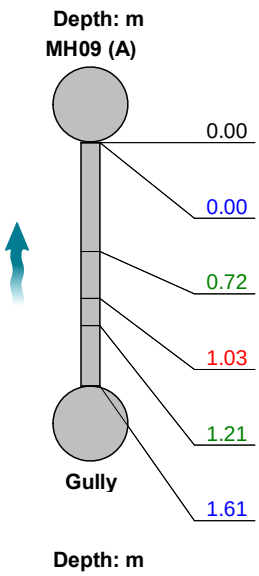
Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
17	1		Not Specified	Not Specified	No	GULLYX
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

Town or Village:	East Grinstead	**Inspection Direction:**	Upstream	**Upstream Node:**	GULLY
Road:	Imberhorne Lower School	**Inspected Length:**	1.61 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	1.61 m	**Downstream Node:**	MH09 (A)
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 13 50
Recommendations:

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: MH09 (A)	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
0.72	LL	Line deviates left: Slight Left	00:00:14		
1.03	JDL	Joint displaced, large	00:00:15	1	
1.21	LU	Line deviates up	00:00:16		
1.61	REM	General remark: Survey Finished at Line Up	00:00:18		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

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Section Pictures - GullyX

Item No.	Inspection Direction	PLR	Client`s Job Ref	Contractor`s Job Ref
17	Upstream	GULLYX		N3004

1, 00:00:15, 1.03 m
Joint displaced, large

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Section Inspection - GullyX

Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
18	1		Not Specified	Not Specified	No	GULLYX
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

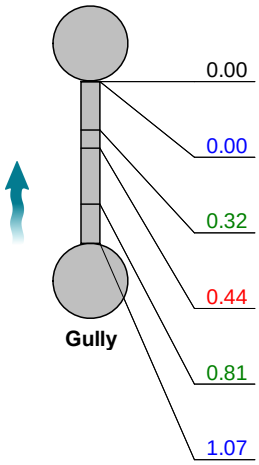
Town or Village:	East Grinstead	**Inspection Direction:**	Upstream	**Upstream Node:**	GULLY
Road:	Imberhorne Lower School	**Inspected Length:**	1.07 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	1.07 m	**Downstream Node:**	MH09 (B)
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 14 12
Recommendations:

Scale: 1:50

Depth: m
MH09 (B)



Depth: m

Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: MH09 (B)	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
0.32	OBB	Other obstacles, brick or masonry in invert at 6 o'clock, 10% cross-sectional area loss	00:00:15		
0.44	JDL	Joint displaced, large	00:00:15	1	
0.81	LU	Line deviates up	00:00:16		
1.07	REM	General remark: Survey Finished at Line Up	00:00:19		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

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Section Pictures - GullyX

Item No.	Inspection Direction	PLR	Client`s Job Ref	Contractor`s Job Ref
18	Upstream	GULLYX		N3004

1, 00:00:15, 0.44 m
Joint displaced, large

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Section Inspection - GullyX

Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
19	1		Not Specified	Not Specified	No	GULLYX
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

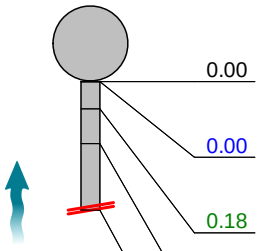
Town or Village:	East Grinstead	**Inspection Direction:**	Upstream	**Upstream Node:**	GULLY
Road:	Imberhorne Lower School	**Inspected Length:**	0.85 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	0.85 m	**Downstream Node:**	MH09 (C)
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time@ 00 14 35
Recommendations:

Scale: 1:50

Depth: m
MH09 (C)



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: MH09 (C)	00:00:00		
0.00	WL	Water level, 0% of the vertical dimension	00:00:10		
0.18	DES	Settled deposits, fine, 5% cross-sectional area loss	00:00:12		3
0.41	DES	Settled deposits, fine, 50% cross-sectional area loss	00:00:14		4
0.85	SA	Survey abandoned: Stuck at Debris	00:00:20		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
0	0.0	0.0	0.0	1.0	2	8.0	11.8	10.0	5.0

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Section Inspection - GullyX

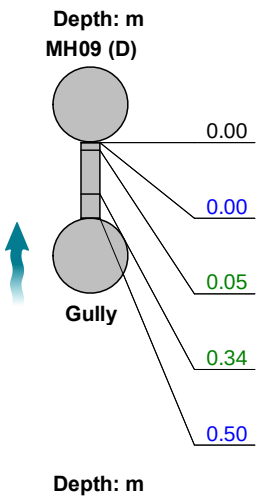
Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
20	1		Not Specified	Not Specified	No	GULLYX
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

Town or Village:	East Grinstead	**Inspection Direction:**	Upstream	**Upstream Node:**	GULLY
Road:	Imberhorne Lower School	**Inspected Length:**	0.50 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	0.50 m	**Downstream Node:**	MH09 (D)
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 15 00
Recommendations:

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: MH09 (D)	00:00:00		
0.00	WL	Water level, 0% of the vertical dimension	00:00:10		
0.05	LL	Line deviates left	00:00:12		
0.34	LD	Line deviates down	00:00:19		
0.50	REM	General remark: Survey Finished at Trap	00:00:22		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

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Section Inspection - MH09 (X)X

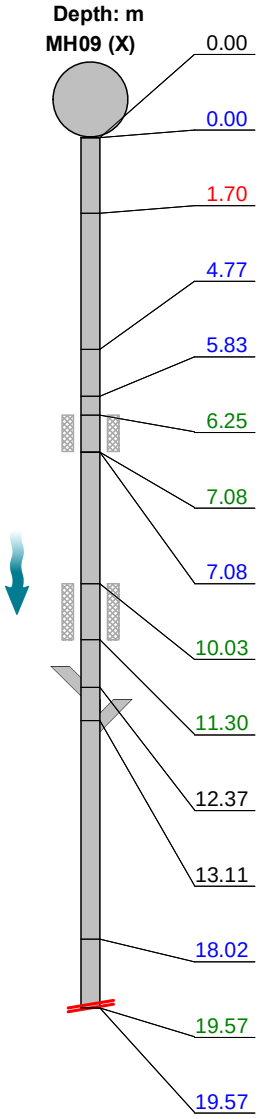
Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
21	1		Not Specified	Not Specified	No	MH09 (X)X
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

Town or Village:	East Grinstead	**Inspection Direction:**	Downstream	**Upstream Node:**	MH09 (X)
Road:	Imberhorne Lower School	**Inspected Length:**	19.57 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	19.57 m	**Downstream Node:**	MH06
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 15 27
Recommendations:

Scale: 1:170



Position [m]		Code	Observation	MPEG	Photo	Grade
0.00		MH	Start node, manhole, reference: MH09 (X)	00:00:00		
0.00		WL	Water level, 0% of the vertical dimension	00:00:00		
1.70		JDM	Joint displaced, medium	00:00:19	1	1 / 3
4.77		WL	Water level, 5% of the vertical dimension	00:00:27		
5.83		WL	Water level, 10% of the vertical dimension	00:00:30		
6.25	S01	DES	Settled deposits, fine, 5% cross-sectional area loss, start	00:00:31		
7.08	F01	DES	Settled deposits, fine, 5% cross-sectional area loss, finish	00:00:33		3
7.08		WL	Water level, 5% of the vertical dimension	00:00:33		
10.03	S02	DES	Settled deposits, fine, 5% cross-sectional area loss, start	00:00:44		
11.30	F02	DES	Settled deposits, fine, 5% cross-sectional area loss, finish	00:00:47		3
12.37		JN	Junction at 3 o'clock, 100mm dia	00:00:49		
13.11		JN	Junction at 9 o'clock, 100mm dia	00:00:51		
18.02		WL	Water level, 10% of the vertical dimension	00:01:04		
19.57		DES	Settled deposits, fine, 20% cross-sectional area loss	00:01:09		4
19.57		SA	Survey abandoned: Stuck at Debris	00:01:11		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
1	1.0	0.1	1.0	1.0	4	5.0	0.7	13.0	4.0

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Section Pictures - MH09 (X)X

Item No.	Inspection Direction	PLR	Client`s Job Ref	Contractor`s Job Ref
21	Downstream	MH09 (X)X		N3004

1, 00:00:19, 1.70 m
Joint displaced, medium

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Section Inspection - MH10 (X)X

Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
22	1		Not Specified	Not Specified	No	MH10 (X)X
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

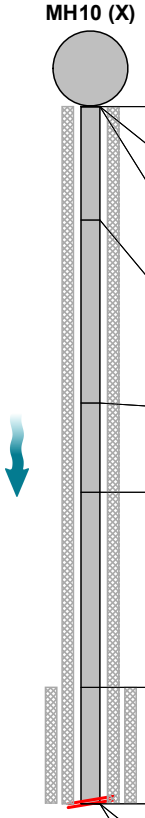
Town or Village:	East Grinstead	**Inspection Direction:**	Downstream	**Upstream Node:**	MH10 (X)
Road:	Imberhorne Lower School	**Inspected Length:**	4.61 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	4.61 m	**Downstream Node:**	MH11
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Polyvinyl chloride
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 16 43
Recommendations:

Scale: 1:50

Depth: m
MH10 (X)



Position [m]		Code	Observation	MPEG	Photo	Grade
0.00		MH	Start node, manhole, reference: MH10 (X)	00:00:00		
0.00		WL	Water level, 5% of the vertical dimension	00:00:10		
0.00	S01	DES	Settled deposits, fine, 5% cross-sectional area loss, start	00:00:10		
0.75	C01	DES	Settled deposits, fine, 10% cross-sectional area loss, change	00:00:14		
1.96	C01	DES	Settled deposits, fine, 15% cross-sectional area loss, change	00:00:18		
2.55	C01	DES	Settled deposits, fine, 20% cross-sectional area loss, change	00:00:24		
3.84	S02	CUD	Loss of vision, silt, start	00:00:33		
4.61	F01	DES	Settled deposits, fine, 20% cross-sectional area loss, finish	00:00:41		3
4.61	F02	CUD	Loss of vision, silt, finish	00:00:41		
4.61		SA	Survey abandoned: Loss of vision	00:00:41		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
0	0.0	0.0	0.0	1.0	1	2.0	2.2	10.0	3.0

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Section Inspection - GullyX

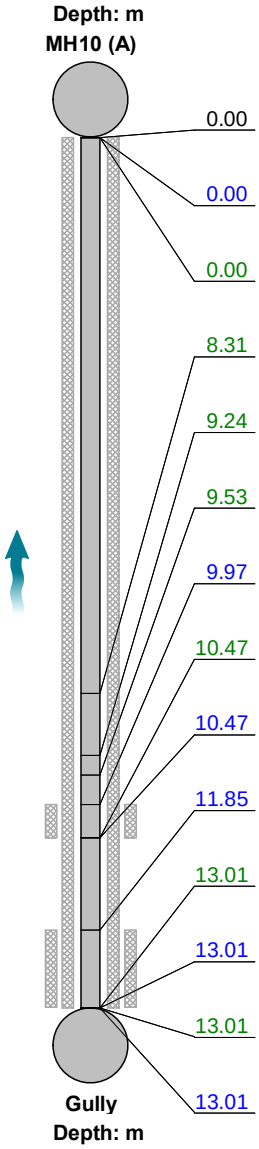
Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
23	1		Not Specified	Not Specified	No	GULLYX
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

Town or Village:	East Grinstead	**Inspection Direction:**	Upstream	**Upstream Node:**	GULLY
Road:	Imberhorne Lower School	**Inspected Length:**	13.01 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	13.01 m	**Downstream Node:**	MH10 (A)
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Polyvinyl chloride
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 17 28
Recommendations:

Scale: 1:113



Position [m]		Code	Observation	MPEG	Photo	Grade
0.00		MH	Start node, manhole, reference: MH10 (A)	00:00:00		
0.00		WL	Water level, 5% of the vertical dimension	00:00:00		
0.00	S01	DES	Settled deposits, fine, 5% cross-sectional area loss, start	00:00:00		
8.31	C01	DES	Settled deposits, fine, 10% cross-sectional area loss, change	00:00:42		
9.24		OBZ	Other obstacles from 6 o'clock to 7 o'clock, 10% cross-sectional area loss: Plastic Bottle	00:00:50		
9.53		OBZ	Other obstacles from 4 o'clock to 6 o'clock, 20% cross-sectional area loss: Plastic	00:00:52		
9.97	S02	CUZ	Loss of vision, other, start: Obstacle	00:00:55		
10.47	C01	DES	Settled deposits, fine, 10% cross-sectional area loss, change	00:01:04		
10.47	F02	CUZ	Loss of vision, other, finish: Obstacle	00:01:06		
11.85	S03	CUZ	Loss of vision, other, start: Plastic Bottle	00:01:16		
13.01		LU	Line deviates up	00:01:30		
13.01	F03	CUZ	Loss of vision, other, finish: Plastic Bottle	00:01:30		
13.01	F01	DES	Settled deposits, fine, 10% cross-sectional area loss, finish	00:01:38		
13.01		REM	General remark: Survey Finished at Line Up	00:01:38		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0

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Section Inspection - MH10X

Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
24	1		Not Specified	Not Specified	No	MH10X

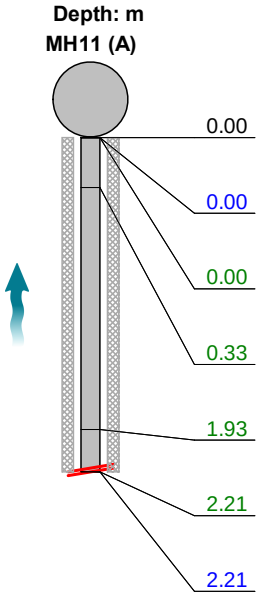
Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
Becky	5	Camera 2	Not Specified	Not Specified	Not Specified

Town or Village:	East Grinstead	**Inspection Direction:**	Upstream	**Upstream Node:**	MH10
Road:	Imberhorne Lower School	**Inspected Length:**	2.21 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	2.21 m	**Downstream Node:**	MH11 (A)
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Polyvinyl chloride
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 19 09
Recommendations:

Scale: 1:50



Position [m]		Code	Observation	MPEG	Photo	Grade
0.00		MH	Start node, manhole, reference: MH11 (A)	00:00:00		
0.00		WL	Water level, 5% of the vertical dimension	00:00:10		
0.00	S01	DES	Settled deposits, fine, 20% cross-sectional area loss, start	00:00:10		
0.33		OBZ	Other obstacles from 5 o'clock to 7 o'clock, 20% cross-sectional area loss: Plastic	00:00:15		5
1.93	C01	DES	Settled deposits, fine, 100% cross-sectional area loss, change	00:00:24		
2.21	F01	DES	Settled deposits, fine, 100% cross-sectional area loss, finish	00:00:30		4
2.21		SA	Survey abandoned: Stuck at Debris	00:00:30		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
0	0.0	0.0	0.0	1.0	2	15.0	11.3	25.0	5.0

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Section Inspection - GullyX

Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
25	1		Not Specified	Not Specified	No	GULLYX

Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
Becky	5	Camera 2	Not Specified	Not Specified	Not Specified

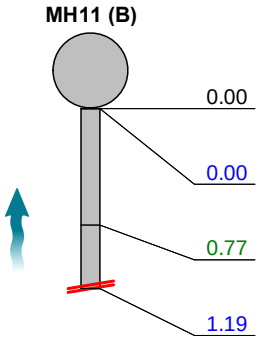
Town or Village:	East Grinstead	**Inspection Direction:**	Upstream	**Upstream Node:**	GULLY
Road:	Imberhorne Lower School	**Inspected Length:**	1.19 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	1.19 m	**Downstream Node:**	MH11 (B)
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Polyvinyl chloride
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 19 43
Recommendations:

Scale: 1:50

Depth: m
MH11 (B)



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: MH11 (B)	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:09		
0.77	DES	Settled deposits, fine, 80% cross-sectional area loss	00:00:12		5
1.19	SA	Survey abandoned: Stuck at Debris	00:00:16		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
0	0.0	0.0	0.0	1.0	1	10.0	8.4	10.0	5.0

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Section Inspection - GullyX

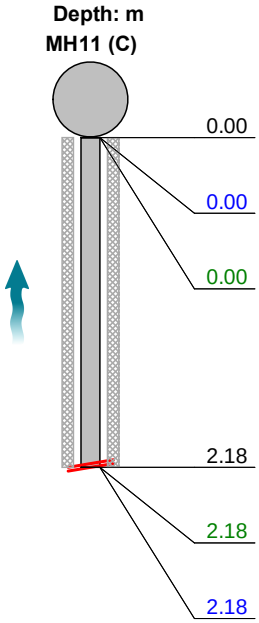
Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
26	1		Not Specified	Not Specified	No	GULLYX
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

Town or Village:	East Grinstead	**Inspection Direction:**	Upstream	**Upstream Node:**	GULLY
Road:	Imberhorne Lower School	**Inspected Length:**	2.18 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	2.18 m	**Downstream Node:**	MH11 (C)
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Polyvinyl chloride
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 20 03
Recommendations:

Scale: 1:50



Position [m]		Code	Observation	MPEG	Photo	Grade
0.00		MH	Start node, manhole, reference: MH11 (C)	00:00:00		
0.00		WL	Water level, 0% of the vertical dimension	00:00:10		
0.00	S01	DES	Settled deposits, fine, 5% cross-sectional area loss, start	00:00:10		
2.18		SC	Pipe size changes, new size(s), 50mm high	00:00:33		
2.18	F01	DES	Settled deposits, fine, 5% cross-sectional area loss, finish	00:00:51		3
2.18		SA	Survey abandoned: Pipe size change	00:00:51		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
0	0.0	0.0	0.0	1.0	1	2.0	2.8	6.0	4.0

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Section Inspection - UTFX

Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
27	1		Not Specified	Not Specified	No	UTFX

Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
Becky	5	Camera 2	Not Specified	Not Specified	Not Specified

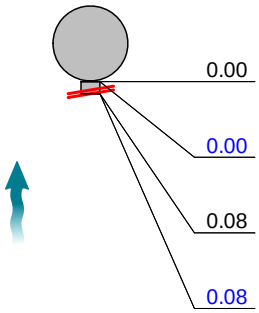
Town or Village:	East Grinstead	**Inspection Direction:**	Upstream	**Upstream Node:**	UTF
Road:	Imberhorne Lower School	**Inspected Length:**	0.08 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	0.08 m	**Downstream Node:**	MH12 (B)
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Foul	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 20 58
Recommendations:

Scale: 1:50

Depth: m
MH12 (B)



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: MH12 (B)	00:00:00		
0.00	WL	Water level, 0% of the vertical dimension	00:00:10		
0.08	SC	Pipe size changes, new size(s), 50mm high	00:00:12		
0.08	SA	Survey abandoned: Pipe size change	00:00:17		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	**STR Peak**	**STR Mean**	**STR Total**	**STR Grade**	**SER No. Def**	**SER Peak**	**SER Mean**	**SER Total**	**SER Grade**
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

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Section Inspection - UTFX

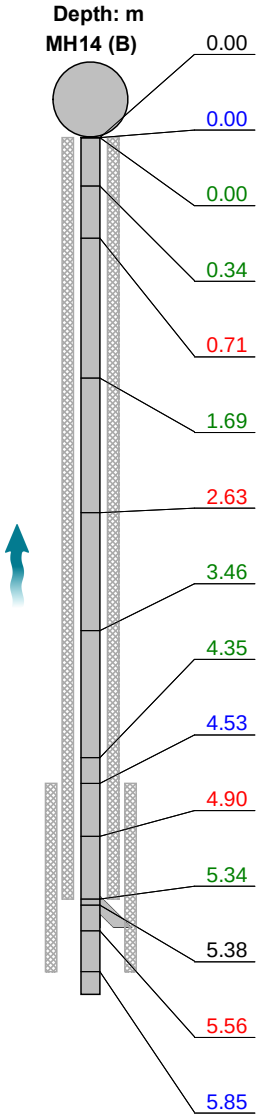
Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
28	1		Not Specified	Not Specified	No	UTFX
Operator		**Vehicle**	**Camera**	**Preset Length**	**Legal Status**	**Alternative ID**
Becky		5	Camera 2	Not Specified	Not Specified	Not Specified

Town or Village:	East Grinstead	**Inspection Direction:**	Upstream	**Upstream Node:**	UTF
Road:	Imberhorne Lower School	**Inspected Length:**	6.21 m	**Upstream Pipe Depth:**	
Location:		**Total Length:**	6.21 m	**Downstream Node:**	MH14 (B)
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:		**Dia/Height:**	100 mm
Flow Control:		**Material:**	Vitrified clay
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Routine inspection	**Lining Material:**	No Lining

Comments: Time @ 00 21 19. Vidoe N3004-Vid001 ends @ 00 24 02
Recommendations:

Scale: 1:53



Position [m]		Code	Observation	MPEG	Photo	Grade
0.00		MH	Start node, manhole, reference: MH14 (B)	00:00:00		
0.00		WL	Water level, 0% of the vertical dimension	00:00:00		
0.00	S01	DES	Settled deposits, fine, 10% cross-sectional area loss, start	00:00:00		
0.34		LL	Line deviates left: Slight left	00:00:17		
0.71		JDM	Joint displaced, medium	00:00:19	1	1 / 3
1.69	C01	DES	Settled deposits, fine, 5% cross-sectional area loss, change	00:00:24		
2.63		JDL	Joint displaced, large	00:00:27	2	1 / 4
3.46		LL	Line deviates left: Slight Left	00:00:30		
4.35		OBZ	Other obstacles from 12 o'clock to 12 o'clock, 80% cross-sectional area loss: Plastic	00:00:34		5
4.53	S02	CUZ	Loss of vision, other, start: Plastic	00:00:36		
4.90		JDL	Joint displaced, large	00:00:41	3	1 / 4
5.34	F01	DES	Settled deposits, fine, 5% cross-sectional area loss, finish	00:00:51		3
5.38		JN	Junction at 9 o'clock, 100mm dia	00:00:56		
5.56		JDL	Joint displaced, large	00:01:02	4	1 / 4
5.85	F02	CUZ	Loss of vision, other, finish: Plastic	00:01:22		

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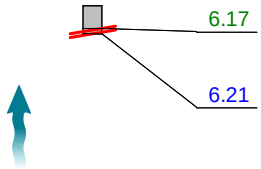
Section Inspection - UTFX

Item No.	Insp. No.	Date	Client`s Job Ref	Weather	Pre Cleaned	PLR
28	1		Not Specified	Not Specified	No	UTFX

Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
Becky	5	Camera 2	Not Specified	Not Specified	Not Specified

Scale: 1:53



Position [m]	Code	Observation	MPEG	Photo	Grade
6.17	LR	Line deviates right	00:02:00		
6.21	SA	Survey abandoned: Stuck at Bend	00:02:39		

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
4	2.0	1.1	7.0	1.0	6	12.0	6.3	39.0	5.0

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Section Pictures - UTFX

Item No.	Inspection Direction	PLR	Client`s Job Ref	Contractor`s Job Ref
28	Upstream	UTFX		N3004

1, 00:00:19, 0.71 m
Joint displaced, medium

2, 00:00:27, 2.63 m
Joint displaced, large

3, 00:00:41, 4.90 m
Joint displaced, large

4, 00:01:02, 5.56 m
Joint displaced, large

APPENDIX C – ASHDOWN SITE INVESTIGATION REPORT

ASHDOWN
SITE INVESTIGATION

GEOTECHNICAL AND GROUND CONTAMINATION RISK ASSESSMENT REPORT

IMBERHORNE LOWER SCHOOL WINDMILL LANE EAST GRINSTEAD WEST SUSSEX

PROJECT REFERENCE: P17617

REPORT REFERENCE: R17152

Report Beneficiary: Imberhorne Lower School

Document Control				
Issue No.	**Status**	**Issue Date**	**Notes**	
1	Final	25th March 2026		
Report Section			**Prepared By**	**Approved By**
Factual Section			Tom Hughes BA MA	Steven McSwiney BA Mod. Geol. MSc FGS
Geotechnical Assessment			Adam Cormack HNC FGS	Steven McSwiney BA Mod. Geol. MSc FGS
Quantitative Ground Contamination Risk Assessment			Stuart Card BA (Hons)	Alex Minchell-Bewick BSc MSc DIC MIEnvSc CEnv

Limitations

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This report is not intended to be either an ecological, archaeological or flood risk assessment. An appropriate specialist should be consulted about any concerns that may arise in this regard.

EXECUTIVE SUMMARY

The following presents a summary of the main findings of the report. It is emphasised that no reliance should be placed on any individual point until the whole of the report has been read as other sections of the report may put into context the information contained herein.

It is proposed to construct two modular buildings at Imberhorne Lower School, Windmill Lane, East Grinstead. One of the buildings will be located within an existing courtyard and the other on an area of playground to the north-east of the main building.

The southern location, within the courtyard, is largely occupied by an existing classroom building surrounded by grass. The northern area comprises part of an asphalt surface playground, adjacent to other modular classroom buildings.

Reference to geological datasets indicates that the site is expected to be underlain by the Upper Tunbridge Wells Sand. The ground investigation confirmed the underlying soils to comprise a shallow thickness of made ground, overlying Upper Tunbridge Wells Sand deposits.

The site does not lie within a groundwater source protection zone. Although the results of the groundwater monitoring are et available, during the intrusive works groundwater was encountered at a depth of around 1.0m in one of the boreholes and a seepage was noted at the base of a shallow trial pit.

Precautions against shrinkage and heave for any new foundation system should assume a medium volume change potential for the fine-grained Upper Tunbridge Wells Sand.

A net allowable bearing capacity of 150kN/m^2 may be assumed for spread (pad or strip) foundations up to 1.00m across bearing within the Upper Tunbridge Wells Sand soils of at least very stiff consistency or very dense relative density.

A DS-1 Design Sulfate Class and an AC-2z ACEC classification should be assumed as a minimum for the design of concrete in contact with the ground.

Infiltration testing within trial pit TP03 and within the Upper Tunbridge Wells Sand soils recorded an infiltration rate of 1.86 x 10^{-6}. Negligible infiltration was recorded during testing conducted in trial pit TP01.

The preliminary contamination risk assessment prepared for the proposed did not identify any potential pollutant linkages with regard to either proposed end users of the site or controlled waters.

The ground investigation did not record any contaminants to be present at concentrations considered to pose an unacceptable risk to either end users of the site or controlled waters beneath the site. No remedial measures or further contamination risk assessment works are considered to be necessary.

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FIGURES AND APPENDICES

FIGURES

Figure 1 Site Location Plan
Figure 2 Site Plan

APPENDIX A

Explanatory Notes
Exploratory Hole Records
DPSH-B Dynamic Probe Records

APPENDIX B

Geotechnical Laboratory Test Results
Contamination Laboratory Test Results

APPENDIX C

Aggressivity To Concrete Assessment
Trial Pit In Situ Infiltration Test Results

APPENDIX D

Preliminary Conceptual Model

APPENDIX E

Classification of Probability, Consequence and Risk

APPENDIX F

Quantitative Conceptual Model

APPENDIX G

HazWasteOnline Output Sheets

1. INTRODUCTION

It is proposed to construct two modular buildings at Imberhorne Lower School, Windmill Lane, East Grinstead. One of the buildings will be located within an existing courtyard and the other on an area of playground to the north-east of the main building.

Ashdown Site Investigation Ltd was requested to undertake a ground investigation to provide advice to assist with the structural design and assess the ground contamination risk for the proposed development works.

The scope of the works covered by this report, and the terms and conditions under which they were undertaken, were set out within the offer letter Q16144, dated 23rd January 2026. The instruction to proceed was received on behalf of the client.

The specific objectives of the works were to:

a) Establish the expected geology and hydrogeology at the site;
b) Investigate the shallow ground and groundwater conditions in the area of the proposed development;
c) Provide advice/parameters to assist others in undertaking design of spread foundations and ground floors, and to assist with the preliminary design of the stormwater drainage system;
d) Test for the presence of contaminants identified by the preliminary conceptual model;
e) Develop a quantitative conceptual model of the site, refining the preliminary model to identify any pollutant linkages that may be present; and
f) Provide an indicative assessment of the waste classification of the materials tested.

This report should be read in conjunction with the Preliminary Ground Contamination Risk Assessment Report prepared by Ashdown Site Investigation Ltd[1].

[1] Ashdown Site Investigation Ltd Project Ref: P17617, Report Ref: R17085, dated 25th March 2026.

2. SITE CONTEXT

2.1 Site Description

The site is located at within the grounds of Imberhorne Lower School, Windmill Lane, East Grinstead and is centred on the approximate Ordnance Survey national grid reference 538598, 139159. A site location plan and site plan are presented as Figure 1 and Figure 2, respectively.

The courtyard area currently contains two wooden classroom buildings with the remaining area largely surfaced with grass.

The playground to the north-east is surfaced with asphalt and has further pre-fabricated classrooms; one located immediately to the south and others further to the north and west.

2.2 Geological and Hydrogeological Setting

A summary of the pertinent geological and hydrogeological data is presented below. Further information in this regard is presented within the preliminary ground contamination risk assessment.

2.2.1 Expected Geology and Aquifer Designation

The stratigraphic unit that may be expected to underlie the site has been established by reference to British Geological Survey (BGS) mapping and the BGS Lexicon of Named Rock Units. The expected stratigraphy is presented in the following table.

Table 1. Expected Strata and Aquifer Designation

Type	Stratum	Aquifer Designation
Bedrock	Upper Tunbridge Wells Sand	Secondary A Aquifer

The Tunbridge Wells Sand Formation predominantly comprises repeating sequences of fine to medium grained sandstone, siltstone and silty sand with finely-bedded mudstones and thin limestones. In the western High Weald (between Haywards Heath and Tunbridge Wells) the formation can be divided into three, the informally named Lower and Upper Tunbridge Wells Sand and the intervening Grinstead Clay Member. The succession commences with rhythmically bedded sandstones, siltstones and mudstones of the lower part of the Lower Tunbridge Wells Sand which pass up into the massive sandstones of the Ardingly Sandstone Member. These are overlain by the finely bedded mudstones, mudstones and silty mudstones with subordinate clay ironstones and shelly limestones of the Grinstead Clay Member. This clay member is itself locally divided into upper and lower parts by the cross-bedded fine sandstone of the Cuckfield Stone Bed. Above the Grinstead Clay Member, the Upper Tunbridge Wells Sand comprises a generally more argillaceous rhythmic succession, including mudstones, siltstones and silty sandstones. Outside the western High Weald the Grinstead Clay Member is not recognisable, and the succession is mapped as undivided Tunbridge Wells Sand Formation.

2.2.2 Mining Hazards

The geological units of the Wealden Group, including the Upper Tunbridge Wells Sand, were locally mined for iron during the early Roman period, the Medieval period and significantly between the 15th and 18th centuries. The mining activities were associated with hammer and furnace ponds, and forges. The

locations of many of the workings are unknown, the works mostly having been dismantled and sites overgrown with woodland. Many of the old ponds in the Weald may be representative of old hammer or furnace ponds.

The historical extraction was mostly from open pits excavated from surface, but during the Medieval period, extraction in the eastern Weald was increasingly from mine pits. These mine pits were typically five metres in diameter and up to twelve metres deep. The pits were worked in sequence with spoil from one pit used to in-fill the one before. In the western part of the Weald, the principal method of extracting iron ore was also the mine pit but smaller in scale; the pits consisted of a vertical shaft up to 2.5 metres in diameter and the base of the shaft would have been widened out.

The British Geological Survey GeoIndex Onshore viewer records the presence of several ceased mines and quarries the closest of which are Baldwins Hill Clay Pit some 200m to the north and St Mararet's Brick Works some 400m to the south-east. A search of the Wealden Iron Research Group database (www.wirgdata.org) revealed no records of iron workings within 1km of the site. The risk posed to the development is considered to be very low.

Further assessment of the natural ground and mining hazards can be undertaken, if required, to provide more detailed comment specific to the site.

2.2.3 Radon

Table 2. Radon

Section	Groundsure Comment
Radon Affected Areas	The site is reported to be within an area where less than 1% of properties are at or above the action level requiring radon gas protection measures to be installed in new buildings.
Radon Protection Measures	No radon protection measures are reported by the British Geological Survey to be necessary in the construction of new dwellings or extensions.

2.2.4 Groundwater Source Protection Zones (SPZ)

The Environment Agency defines SPZs as those areas where groundwater supplies are at risk from potentially polluting activities and accidental releases of pollutants. SPZs are primarily a policy tool used to control activities close to water supplies intended for human consumption.

The site does not lie within a SPZ.

3. SITE WORKS

3.1 Introduction

The intrusive site works comprised the drilling of a series of dynamic sampler boreholes, the mechanical excavation of trial pits and the drilling of a single hand augered borehole, together with accompanying in-situ geotechnical testing. The intrusive work was carried out between 19th February 2026 and 20th February 2026. The exploratory hole locations are shown on Figure 2.

Descriptions of the strata encountered and comments on groundwater conditions are shown in the exploratory hole records given in Appendix A, which also includes explanatory notes to assist in their interpretation.

3.2 Exploratory Holes

The following table summarises the intrusive works undertaken at the site.

Table 3. Summary of Intrusive Works Undertaken

Designation	Depth (m bgl)	Method
WS01	2.50	Dynamic Sampler Borehole
WS02	3.00	Dynamic Sampler Borehole
TP01	0.98	Mechanically Excavated Pit
TP02	1.20	Hand Auger Borehole
TP03	1.09	Mechanically Excavated Pit

3.3 Sampling

Samples of soil were taken from the exploratory holes at the depths shown in the exploratory hole records. The types of samples taken are indicated on the exploratory hole records. Details on the sample types are provided in the explanatory notes.

Where appropriate, samples were stored in cool boxes with cooling blocks to maintain temperatures below 4°C until transferred to refrigerators upon return to the office and subsequently forwarded to the external accredited chemical testing laboratory.

3.4 In Situ Strength Testing

The types and depths of in situ testing, together with the test results, are either given on the exploratory hole records or are summarised separately in Appendix A. Further details on the in situ testing methods are provided in the explanatory notes.

3.5 In Situ Infiltration Testing

In situ infiltration testing was undertaken in the two mechanically excavated trial pits in general accordance with the test methodology given by BRE guidance[2], other than the pits were filled only once rather than the three times suggested by the digest due to the slow infiltration of water into the surrounding soils. The results of the testing along with the infiltration rate calculations are included in Appendix C.

3.6 Installations

Groundwater monitoring standpipes were installed to the full depths of both dynamic sampler boreholes. Descriptions of the installations are shown on the exploratory hole records.

Groundwater data loggers were installed within the standpipes on 19th February 2026. The data loggers were programmed to collect readings at hourly intervals and are scheduled to be collected on completion of a 6-week monitoring period. The results of the groundwater monitoring will be issued under separate cover.

3.7 Laboratory Testing

Laboratory testing was scheduled by Ashdown Site Investigation Ltd.

Geotechnical testing was undertaken by Ashdown Site Investigation Ltd.

Chemical testing was undertaken by a laboratory with recognised (UKAS and MCERTS) accreditation for quality control.

Results from the laboratory tests are provided in Appendix B.

[2] Section 3.2.3 of Building Research Establishment (BRE) Digest 365, 2016.

4. GROUND CONDITIONS

4.1 Stratigraphy

4.1.1 Surface Covering

Except for borehole WS01, which was excavated through a 150mm thick surface cover of asphalt, each of the exploratory holes was excavated through an initial surface cover of topsoil up to 500mm in thickness.

4.1.2 Made Ground

Underlying the surfacing materials at the positions of exploratory holes WS01, TP02, and TP03, made ground/reworked soils, generally comprising silty clay which was at times noted as being slightly sandy/slightly gravelly, were recorded extending to depths of between 0.40m and 0.90m below ground level. The gravel fraction comprised variable quantities of flint, brick and ironstone.

Additionally, directly underlying the asphalt surfacing within borehole WS01, a layer of asphalt, brick and flint gravel was recorded between depths of 0.15m and 0.60m depth.

No made ground/reworked soils were recorded underlying the topsoil surfacing within exploratory holes WS02 and TP01.

4.1.3 Upper Tunbridge Wells Sand

Underlying the surfacing and made ground soils, the ground investigation progressed into undisturbed very stiff silty clay deposits which were at times noted as being slightly gravelly and/or slightly sandy. The gravel fraction comprised subangular to subrounded fine to coarse sandstone and ironstone.

Additionally, beneath the clay deposits encountered within borehole WS02, slightly gravelly very clayey sand deposits were encountered below a depth of 2.20m below ground level.

These interbedded clay and sand deposits continued to the full depth of the ground investigation and are considered to represent the Upper Tunbridge Wells Sand deposits indicated to underlie the site on BGS geological maps.

4.2 Stability

Each of the exploratory holes was recorded to remain stable during the course of drilling/excavation.

4.3 Groundwater Conditions

Groundwater was recorded within borehole WS02 at a depth of around 1.01m depth, after installation of the standpipe. A groundwater seepage was also noted at the base of trial pit TP01. The other exploratory holes remained dry during the intrusive site investigation works.

5. GEOTECHNICAL ASSESSMENT

At the time of preparation of this report no specific development proposal for the site had been finalised. It is however understood that two modular buildings are to be constructed; one of the buildings will be located within an existing courtyard and the other on an area of playground to the north-east of the main building.

At the time of writing, no details were available concerning the specific loads likely to be applied to the foundations.

5.1 Foundations

5.1.1 Soil Shrinkage/Heave Potential

The fine-grained soils of the Upper Tunbridge Wells Sand have been classified as clays, and with modified plasticity indices in the range of 7% to 23%, the soils may be expected to exhibit a negligible to medium volume change potential.

It is recommended that the design of precautions against shrinkage and heave for any new foundation system (spread footings and ground beams etc.) should assume a medium volume change potential for the fine-grained Upper Tunbridge Wells Sand soils and take into account current guidance such as that given by the Building Research Establishment (BRE)[3] or the National House Builders Council (NHBC)[4].

Whilst this report has been prepared to provide advice to assist designers in undertaking detailed design, the report itself does not represent a detailed design statement. Detailed foundation design, including assessment of foundation type, minimum founding depths for spread foundations, and requirements for placement of void formers et cetera, should take into account the findings of this report and the presence of trees (previous, present and proposed). In connection with the latter, it is recommended that an arboricultural survey of the site that identifies the species and maturity of the existing or recently felled trees in the areas of the proposed new buildings should be provided to engineers responsible for the foundation design. Information on proposed planting schemes that may affect foundation design should also be provided.

5.1.2 Spread Foundations

5.1.2.1 Foundation Depths for Spread Foundations

Foundations should be constructed to bear below soils that are likely to be affected by significant soil volume changes caused by seasonal changes in moisture content to avoid damage to foundations that could otherwise arise. In addition, all made ground and any soils disturbed by the construction or removal of any previously existing foundations or services should be regarded as being variable in nature and state of compaction and, as such, unsuitable as a founding medium for shallow footings. New footings should be constructed so as to bear below made ground/disturbed natural soils and soil subject to seasonal soil volume changes, whichever is the deeper, and onto undisturbed, competent, natural deposits.

[3] www.bre.co.uk : BRE Digests 240, 241 and 242, Low rise buildings on shrinkable clay soils, parts 1, 2 and 3; and BRE Digest 298 , The influence of trees on house foundations in clay soils and BRE Digest 412, Desiccation in clay soils.
[4] http://www.nhbc.co.uk/ : NHBC Standards, Chapter 4.2.

Summary guidance on suitable minimum foundation depths to protect against the effects of seasonal soil volume changes is presented in the table below but designers undertaking detailed design of foundations should follow the detailed guidance such as that provided within Chapter 4.2 of the NHBC Standards.

Table 4. Indicative Minimum Foundation Depths

Tree Type	Water Demand of Tree	Tree Distance to Tree Height Ratio (D/H)									
		0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.25
		Minimum Foundation Depth Required in Medium Volume Change Potential Soils (m)									
Broad Leaf	High	†			2.50	2.35	2.20	2.00	1.70	1.35	0.90*
	Moderate	2.00	1.85	1.70	1.60	1.45	1.30	1.15	0.90*	0.90*	0.90*
	Low	1.50	1.40	1.30	1.15	1.05	0.90*	0.90*	0.90*	0.90*	0.90*
Coniferous	High	†		2.30	1.95	1.60	1.25	0.90*	0.90*	0.90*	0.90*
	Moderate	2.00	1.70	1.40	1.10	0.90*	0.90*	0.90*	0.90*	0.90*	0.90*

* Minimum foundation depth required to protect against soil volume changes.
† Foundations deeper than 2.50m require specialist design to protect against soil volume changes.

Where specialist foundation design is required (foundation depths exceeding the maximum permitted by the guidance) then piled foundations are likely to be needed, though commercial considerations may also dictate that piled foundations may be more economic even in comparison with conventional spread foundations constructed to depths less than the maximum permitted by guidance. Further works including deep boreholes would be required if structural engineers or quantity surveyors decide that piled foundations should be adopted.

Details on the water demand and mature height of common trees is given within Table 3 of Chapter 4.2 of the NHBC standards which should be referred to when assessing minimum foundation depths required for the proposed development. A summary is provided in the table below.

Table 5. Indicative Summary of Water Demand and Mature Height of Common Trees

Tree Type	High Water Demand		Moderate Water Demand		Low Water Demand	
	Tree	Height (m)	Tree	Height (m)	Tree	Height (m)
Broad Leaf	Elm	18 – 24*	Acacia	18	Birch	14
	Oak	16 – 24*	Alder	18	Elder	10
	Poplar	15 – 28*	Apple	10	Fig	8
	Willow	16 – 24*	Ash	11 – 23*	Hazel	8
	Eucalyptus	18	Laurel	10	Holly	12
	Hawthorn	10	Beech	20	Honey Locust	14
			Blackthorn	8	Hornbeam	17
			Cherry	8 – 17*	Laburnum	12
			Chestnut	20 – 24*	Magnolia	9
			Lime	22	Mulberry	9

Tree Type	High Water Demand		Moderate Water Demand		Low Water Demand	
			Maple	8 – 18*	Tulip Tree	20
			Pear	12		
			Plane	26		
			Plum	10		
			Sycamore	22		
			Tree of Heaven	20		
			Walnut	18		
			Whitebeam	12		
Coniferous	Cypress	18 – 20*	Cedar	20		
			Douglas Fir	20		
			Larch	20		
			Monkey Puzzle	18		
			Pine	20		
			Spruce	18		
			Wellingtonia	30		
			Yew	12		

* Dependent on particular species.

5.1.2.2 Bearing Capacity for Spread Foundations

For design purposes, a net allowable bearing capacity of 150kN/m^2 may be assumed for spread (pad or strip) foundations up to 1.00m across bearing within the Upper Tunbridge Wells Sand soils of at least very stiff consistency or very dense relative density. The quoted bearing capacity is expected to limit settlement to less than 25mm.

Attention is drawn to the presence of interbedded fine-grained soils and coarse-grained soils beneath the site. As there is the potential for mixed soil conditions to be present beneath footings, designers should consider the need for foundations to be reinforced due to the potential for differential cracking to develop as a result of coarse-grained and fine-grained soils settling at different rates under loading.

In view of the risk associated with the underlying geology at the site for potential mining hazards, it is recommended that as a minimum all stripped formation levels should be inspected by a suitably qualified person for evidence of historical backfilled shafts/chambers as a precaution, and the inspections should be appropriately documented.

5.2 Groundwater

Groundwater was recorded within borehole WS02 at a depth of around 1.01m below ground level, after installation of the standpipe. Groundwater seepage was also noted at the base of trial pit TP01. The other exploratory holes remained dry during the intrusive site investigation works. It should be noted that water levels within the exploratory holes may not have equilibrated with the groundwater table at the time the observations were made and that groundwater levels should be expected to fluctuate seasonally.

Groundwater monitoring is currently ongoing, and the results will be issued under separate cover.

Where excavations are proposed to extend below the groundwater table, particularly within coarse-grained soils, groundwater control will be required to maintain adequately dry working conditions and excavation stability. In such circumstances it is recommended that trial pumping from proposed formation depths should be undertaken in advance of detailed design to fully establish requirements for groundwater control at this site.

For excavation above the water table, ingress of perched groundwater or surface water run-off into excavations during heavy precipitation events would be expected to be adequately managed by either pumping from sumps or natural drainage, or a combination of the two.

5.3 Stability of Excavations

All made ground and coarse-grained soils exposed in excavations should be assumed to be unstable, even in the short term. Whilst the fine-grained natural soils may remain stable for a short period of time if not subjected to surcharge loads (such as may be imposed by existing foundations, traffic or storage of materials), the stability of these deposits if left unsupported should be assumed to have the potential to deteriorate. All excavations should be suitably supported.

All excavations requiring human entry must be shored as necessary to conform to current best practice, as accepted by the Health and Safety Executive (HSE)[5]. Current legislation requires that where personnel access is required into any excavation a competent person must inspect excavation supports or battering of slopes at the start of the working shift and at other specified times. No work should take place until the excavation is safe. Excavations should also be inspected after any event that may have affected their stability, such as a significant weather event, changes in surcharge loadings imposed by temporary storage of materials or changes in site traffic plans or alteration of support systems. Inspections should be formally recorded and any faults that are found should be corrected immediately.

Particular attention must be paid to ensuring the stability of nearby structures and services.

5.4 Aggressivity to Concrete

The aggressivity of the soils to concrete has been assessed in accordance with guidance published by the BRE[6]. The results of the chemical laboratory testing together with a summary of the characteristic values is included in Appendix C.

In consideration of the soils encountered beneath the site it is considered that 'natural ground conditions' may be assumed for the purpose of assessing the aggressivity of the chemical environment for concrete classification (ACEC class). Given the occurrence of groundwater, 'mobile groundwater' conditions should be assumed.

The following table summarises the characteristic values indicated from the chemical analysis of the soils present beneath the site.

[5] Relevant guidance is given on the HSE website, www.hse.gov.uk
[6] BRE Special Digest 1:2005 Concrete in Aggressive Ground.

Table 6. Assessment of the Chemical Analysis of the Soil

	Characteristic Value	Design Sulfate Class	ACEC Classification
pH	5.3	-	-
Water Soluble Sulphate (mg/l as SO4) *	<100	DS-1	AC-2z

Notes: * Characteristic value rounded to nearest 100.

In accordance with the guidance, a DS-1 Design Sulfate Class and an AC-2z ACEC classification should be assumed for the design of concrete in contact with the ground.

5.5 Stormwater Infiltration Systems

In-situ infiltration testing[7] was carried out in trial pits TP01 and TP03. From the test results, calculations were made to determine the infiltration rate that could be expected for infiltration systems constructed into the underlying Upper Tunbridge Wells Sand soils.

During the testing conducted in TP03 the water level only fell 140mm in 210 minutes and as such the head of water expressed as a percentage of the initial head did not fall below 80%. Calculation of the soil infiltration rate using the calculation method set out within the BRE digest was not possible, as the calculation method requires the time taken for the water level to fall to 25% of the initial head to be known. To assist preliminary design a soil infiltration rate has therefore been calculated by dividing the volume of water lost during the test by the product of the average surface area of the trial pit in contact with water during the test period and the test duration in seconds.

During the testing conducted in trial pit TP01, no fall in water level was recorded over a period of 210 minutes, indicating a negligible infiltration rate.

The infiltration rate calculated for the test conducted in trial pit TP03, together with the fall in head of water expressed as a percentage of the initial head over which the calculation of the infiltration rate was based, and the results of the testing conducted in trial pit TP01 are summarised in the following table.

Table 7. Calculated Infiltration Rates

Exploratory Hole	Top of Response Zone (m bgl)	Bottom of Response Zone (m bgl)	Stratum	Infiltration Rate (f) (m/sec)	Calculation Based on Head of Water as % of Initial Head)
TP01	0.40	0.98	Upper Tunbridge Wells Sand	Negligible	n/a
TP03	0.40	1.09	Upper Tunbridge Wells Sand	1.86×10^{-6}	100-80*

Notes: * Not calculated in accordance with BRE365 which requires infiltration rates to be calculated for between 75%-25% head of water of the initial head.

[7] Conducted in general accordance with the requirements of BRE 365, Soakaway Design.

The value 'f' is equivalent to the soil infiltration coefficient 'q' quoted in the Construction Industry Research and Information Association (CIRIA) Report 156.

The results from the infiltration tests should be provided to engineers responsible for the design of the drainage system.

To comply with building regulations[8], point discharging infiltration systems (conventional ring or trench soakaways) are required to be constructed a minimum of 5.0m away from proposed or existing buildings.

The infiltration testing conducted in the trial pits is intended to provide calculated soil infiltration rates to assist in the preliminary design of infiltration systems at the site. Preliminary infiltration testing in full accordance with the BRE365 guidance was not achievable due to the slow drainage rate of the soils encountered and the testing being restricted to a single shift. It should also be noted that the guidance states the testing should be carried out at the locations and depths of the proposed soakaways, which often will not be known until preliminary drainage design has been undertaken.

Monitoring of groundwater levels during the worst annual case (winter period) is often a requirement of Local Authorities and the BRE365 guidance suggests this should be undertaken prior to finalising design of infiltration systems. The results of the groundwater monitoring will be issued under separate cover.

[8] The Building Regulations 2010; Part H; Drainage and Waste Disposal

6. QUANTITATIVE CONTAMINATION ASSESSMENT

6.1 Introduction

No potential sources of contamination were identified by the preliminary ground contamination risk assessment. A copy of the preliminary conceptual model, confirming the absence of any potential pollutant linkages, is presented in Appendix D.

In line with the scope of works requested by the client, samples of the shallow soils from the development areas (WS01 and TP02) were tested for a range of commonly occurring contaminants – heavy metals, polycyclic aromatic hydrocarbon (PAH) compounds, petroleum hydrocarbons and asbestos, to assist with the classification of the material for removal from site (see Section 7). The samples were also tested for their compliance with waste acceptance criteria (WAC) in this regard. A sample of topsoil from WS02 was also tested for the same range of contaminants.

The results of the testing have been compared with published human health screening values to provide an assessment of the level of risk posed.

6.2 Analysis of Contamination Test Results

6.2.1 Method of Assessment

Comparison of the results of the laboratory testing has been made against published soil screening values (SSV) comprising the 'Suitable For Use Levels' (S4UL)[9] or, in lieu of an S4UL being developed for lead, the Category 4 Screening Level (C4SL)[10].

There are no generic assessment criteria for a school land use. Therefore, to provide an initial conservative assessment, the SSV used for comparison are those calculated for the generic "Residential without homegrown produce" land use.

For the assessment of risk to controlled waters a qualitative assessment has been undertaken based upon the concentrations of contaminants recorded within the soil samples and the information obtained about the sensitivity of the underlying strata or nearby surface water receptors.

6.2.2 Heavy Metals & Polycyclic Aromatic Hydrocarbon (PAH) Compounds

The following table summarises the SSV for heavy metals and PAH compounds alongside the results of the testing.

[9] Nathanail, C.P, et al., The LQM/CIEH S4ULs for Human Health Risk Assessment, 2015, Land Quality Press, Nottingham. Copyright Land Quality Management Limited reproduced with permission; Publication Number S4UL3071.
[10] SP1010: Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination. Final Project Report, published by DEFRA, 2014.

Table 8. Summary of Test Results – Heavy Metals and PAH Compounds

Contaminant	SSV (mg/kg)	Sample			No of exceedances
		WS01 0.50m	TP02 0.10m	WS02 0.05m	
Arsenic	0.2	9.5	6.5	6.2	0
Water Soluble Boron	0.2	0.5	0.5	0.5	0
Cadmium	0.1	< 0.1	0.1	0.1	0
Chromium	0.15	21	12	12	0
Hexavalent Chromium	1	< 1.0	< 1.0	< 1.0	0
Copper	0.2	23	19	12	0
Lead	0.3	56	50	33	0
Mercury	0.05	0.08	0.37	0.12	0
Nickel	1	9.7	6.7	6.0	0
Selenium	0.5	< 0.5	< 0.5	< 0.5	0
Zinc	1	42	82	37	0
Naphthalene	0.03	0.05	< 0.03	< 0.03	0
Acenaphthylene	0.03	< 0.03	< 0.03	< 0.03	0
Acenaphthene	0.03	0.09	< 0.03	< 0.03	0
Fluorene	0.03	0.12	< 0.03	< 0.03	0
Phenanthrene	0.03	0.72	0.09	0.06	0
Anthracene	0.03	0.20	< 0.03	< 0.03	0
Fluoranthene	0.03	1.0	0.20	0.24	0
Pyrene	0.03	0.85	0.17	0.23	0
Benzo(a)anthracene	0.03	0.32	0.06	0.10	0
Chrysene	0.03	0.27	0.06	0.10	0
Benzo(b)fluoranthene	0.03	0.31	0.07	0.16	0
Benzo(k)fluoranthene	0.03	0.12	< 0.03	0.06	0
Benzo(a)pyrene	0.03	0.25	0.05	0.11	0
Indeno(1,2,3-c,d)pyrene	0.03	0.08	< 0.03	0.06	0
Dibenzo(a,h)anthracene	0.03	< 0.03	< 0.03	< 0.03	0
Benzo(g,h,i)perylene	0.03	0.11	< 0.03	0.08	0

None of the samples of recorded concentrations of heavy metals or PAH compounds above their respective SSV.

6.2.3 Asbestos

No suspected asbestos materials were noted within any of the exploratory holes undertaken at the site. None of the samples recorded the presence of any asbestos materials.

6.2.4 Petroleum Hydrocarbons

No detectable concentrations of petroleum hydrocarbons were recorded in the samples tested.

6.2.5 Conclusions

Testing of the shallow soil samples did not identify any concentrations of contaminants above highly conservative screening values. No unacceptable risks to end users or controlled waters are considered to be present.

6.3 Quantitative Contamination Risk Assessment

The risk assessment for the site considers the sources of contamination identified, the receptors that may be present in view of the development proposals and the contaminant pathways by which these may be linked.

A complete pollutant linkage is only deemed to exist where all three are present and a site is considered suitable for use where no complete pollutant linkages are identified.

Where a complete pollutant linkage is considered to be present, an assessment of the level of risk associated with the pollutant linkage has been carried out in line with published guidance[11].

The level of risk is determined using the risk matrix presented in the following table. Classifications of probability, consequence and risk are presented in Appendix E.

Table 9. Risk Assessment Matrix

		Probability			
		Very Low	**Low**	**Moderate**	**High**
Consequence	**Very Minor**	Negligible	Very Low	Low	Low/Moderate
	Minor	Very Low	Low	Low/Moderate	Moderate
	Moderate	Low	Low/Moderate	Moderate	High
	Severe	Low/Moderate	Moderate	High	Very High

6.3.1 Contaminant Pathways Identified

The development is to comprise new modular classroom buildings. No new areas of soft landscaping are understood to be being provided.

[11] Contaminated Land Risk Assessment: A guide to good practice, CIRIA C552, 2001.

Pathways associated with gas and vapour intrusion into new buildings may be present. But direct contact and dust related pathways, and pathways associated with the consumption of home-grown produce are not present.

The site is underlain by the Upper Tunbridge Wells Sand which is classed as a Secondary A Aquifer. Although the site is not located within a SPZ, and is located within an urban area, pathways relating to controlled waters may be reasonably considered to be present.

Should the proposed development plans be altered, a revised risk assessment may be required.

6.3.2 Contamination Sources Identified

No sources of contamination have been identified by the quantitative contamination risk assessment:

6.3.3 Quantitative Conceptual Model

The quantitative conceptual model for the proposed development is presented in Appendix F.

In the absence of any complete pollutant linkages being identified, no remedial measures or further contamination risk assessment works are considered to be necessary.

6.4 Risks to Other Potential Receptors

All construction workers must undertake their own risk assessment, based upon the works to be carried out and the proposed method by which this will be achieved, in accordance with current health and safety legislation. Their assessment should take into account all available information about the site, including that present within this report.

Appropriate working procedures and PPE should be adopted to ensure the health and safety of the site operatives. Instruction should be given in the recognition of potentially hazardous materials. All site personnel should be appropriately briefed on the discovery strategy, presented below, and what actions they must take in the event that further evidence of contamination is identified or suspected.

6.5 Discovery Strategy

If, during the course of the site clearance and development works, any materials not previously identified by the investigation that are suspected of being 'contaminants' are encountered, then the following procedure will apply:

- All works in that area are to cease and the site manager informed.
- Advice sought from suitably qualified and experienced personnel as to whether any further site inspection, sampling, testing and/or assessment is deemed necessary.
- If required, the conclusions of any assessment and any proposed remedial works (if required) are to be agreed by the local authority.
- If necessary, full details of any remedial works are to be included in the verification report for the site.

Suspected 'contamination' may take the following form, though it is noted that this list is not exhaustive and site operatives should ask if they are at all unsure of any findings:

- Soil or water looks oily and/or has an oily odour
- Soil or water has a solvent type of odour
- Significant quantities of man-made materials within fill such as paint cans, car parts, glass fragments
- Suspected asbestos containing materials (insulating boards, cement, loose fibres etc.)
- Significant volumes of clinker like or ashy material
- Sand bags, and/or subsurface concrete structures
- Animal carcasses or evidence of animal burial pits

7. HANDLING AND DISPOSAL OF WASTE

7.1 Waste Management – Legislative Framework

"A material is waste if the holder has discarded it…Assessment of whether a material has been discarded is based on the actions of the holder. A holder may unintentionally, involuntarily or accidentally discard a material. They may also be required to discard it" [12].

Soils excavated during construction works are generally considered to be waste (examples of this have been given by previous Environment Agency guidance).

Soils may also be used as a non-waste (on the same site or another site) in accordance with the CL:AIRE code of practice[13], but only if the soils meet the four principles for use of materials as a non-waste.

Soils and other materials taken for disposal should be handled, transferred and disposed of as controlled waste in accordance with current waste management[14,15] and duty of care regulations[16] and comply with current codes of practice[17]. Waste transfer notes detailing the site address, the waste type, details of the haulage contractor and full details of the disposal site must be kept by the waste producer.

The disposal of any asbestos containing materials (where encountered) should be undertaken by appropriately trained personnel. The disposal of such material and other hazardous waste should be undertaken in accordance with the Hazardous Waste Regulations 2005[18].

It is a legal requirement to correctly assess and classify waste[19]. Classification of waste requires analysis of total contaminant concentrations within the soils, as specified in WM3[20]: The guidance notes that "*Landfill WAC analysis (specifically leaching test results) must **not** be used for waste classification and hazardous waste assessment purposes.*"

7.2 Analysis of Laboratory Test Results

Characterisation of the waste in full accordance with current guidance[21] was beyond the scope of this assessment. However, analysis of the results of the laboratory testing has been undertaken using the HazWasteOnline™[22] tool. HazWasteOnline classifies waste as either hazardous or non-hazardous based on its chemical composition, related legislation and the rules and data defined in the current UK and/or EU technical guidance. The HazWasteOnline output sheets generated by the tool are presented in Appendix G.

The following table summarises the classification of soils tested, the appropriate code from the List of Wastes (LoW) and, where undertaken, the findings of the WAC testing.

[12] Environment Agency, Check if your material is waste, Updated 6th January 2022
[13] CL:AIRE Definition of Waste: Development Industry Code of Practice, Version 2, March 2011
[14] The Waste (England and Wales) Regulation 2011
[15] Section 34, Environmental Protection Act 1990
[16] The Environmental Protection (Duty of Care) Regulations 1991
[17] Waste Duty of Care: Code of Practice, Updated 26th November 2018
[18] Hazardous Waste (England and Wales) Regulations 2005
[19] Environment Agency, Disposal of waste to landfill, Published 30th January 2020
[20] Technical Guidance WM3: Waste Classification – Guidance on the assessment of waste, 1st Edition v1.2.GB, Oct 2021
[21] As discussed in BS EN 14899:2005 Characterisation of waste
[22] https://www.hazwasteonline.com/

Table 10. Summary of Classification of Samples from HazWasteOnline Analysis

Exploratory Hole Location	Sample Depth (m bgl)	Strata	Classification	Code from LoW	WAC Test Results (where testing undertaken)
WS01	0.50	Made Ground	Non Hazardous	17 05 04	Does not meet inert WAC
TP02	0.10	Topsoil	Non Hazardous	17 05 04	Does not meet inert WAC
WS02	0.05	Topsoil	Non Hazardous	17 05 04	-

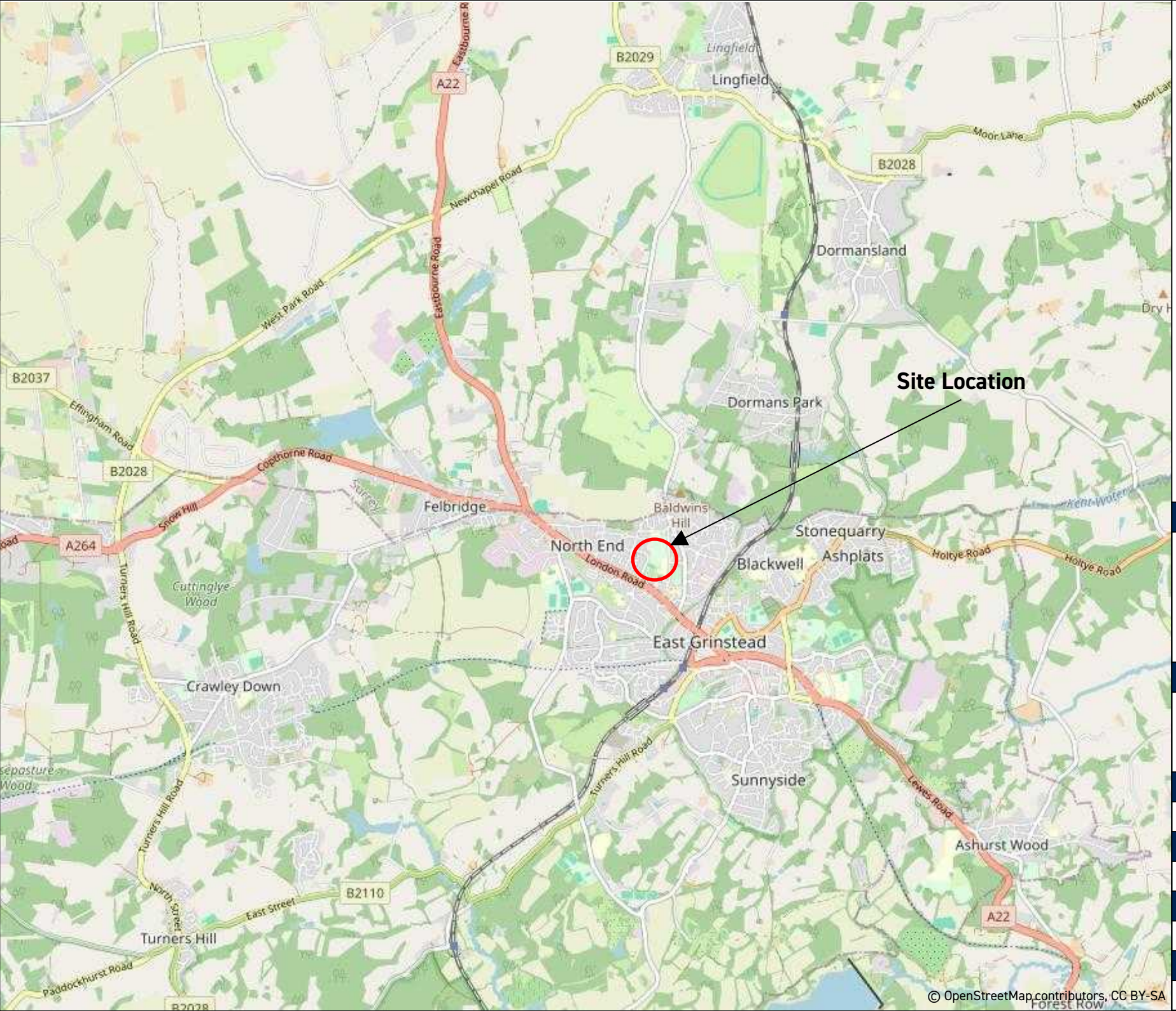
Each of the samples of tested have been classified as non-hazardous construction and demolition waste, with a code from the List of Wastes (LoW) of 17-05-04.

However, the samples do not meet the inert WAC and therefore based on their chemical properties would not be suitable for disposal at an inert landfill. If they are to be disposed of to landfill, it would need to be a non-hazardous landfill.

It is noted that the disposal site has the final decision on whether to accept any materials and we would recommend that all of the testing and classification information be provided to them at the earliest opportunity.

FIGURES

Figure 1 Site Location Plan
Figure 2 Site Plan



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N

ASHDOWN SITE INVESTIGATION

Head Office

Unit 3
The Old Grain Store
Ditchling Common Business Park
Ditchling
East Sussex
BN6 8SG
contact@ashdownsi.co.uk

Site

Imberhorne Lower School
Windmill Lane
East Grinstead
West Sussex

Project Ref

P17617

Figure No

1

Drawing Title

Site Location Plan

Scale

Not To Scale

ASHDOWN
SITE INVESTIGATION

Head Office

Unit 3
The Old Grain Store
Ditchling Common Business Park
Ditchling
East Sussex
BN6 8SG
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Site

Imberhorne Lower School
Windmill Lane
East Grinstead
West Sussex

Project Ref

P17617

Figure No

2

Drawing Title

Site Plan

Scale

Not To Scale

APPENDIX A

Explanatory Notes
Exploratory Hole Records
DPSH-B Dynamic Probe Records

ASHDOWN SITE INVESTIGATION

EXPLANATORY NOTES

Symbols and abbreviations on Exploratory Hole Records

Samples

U	'Undisturbed' Sample: - 100mm diameter by 450mm long. The number of blows to drive in the sampling tube is shown after the test index letter in the SPT column.
L	Liner sample cut to length indicated.
D	Disturbed Sample
B	Bulk Disturbed Sample
W	Water Sample
ES	Environmental Suite (on older records may be referenced J T)

In Situ Testing

SPT	Standard penetration test (SPT): Using the split spoon sampler.
SPT(C)	Standard Penetration Test (SPT): Using a solid cone instead of the sampler – conducted usually in coarse grained soils or weak rocks.
HV	Shear Vane Test: Undrained shear strength (cohesion).
PP	Hand penetrometer Test: Undrained shear strength (cohesion).
P	Perth Penetrometer Test: Number of blows for 300mm penetration shown under remarks section.

Excavation Method

CP	Cable Percussion Borehole
RC/RO	Rotary Cored Borehole/Rotary Open Hole Borehole
WLS	Dynamic Sampler Borehole using windowless sampler tubes
WS	Dynamic Sampler Borehole using window sampler tubes
TP	Trial Pit excavated using mechanic excavator
HP	Trial Pit excavated using hand tools
HA	Hand Auger borehole

Soil Description

Description and classification of soils has been carried out using as a general basis the British Standard Geotechnical investigation and testing – Identification and classification of soil, Part 1 Identification and description (BS EN ISO 14688-1) and Part 2 Principles of classification (BS EN 14688-2) as well as the BS5930 code of Practice for Ground Investigations.

Rock Description

Description and classification of rocks has been carried out using as a general basis the British Standard Geotechnical investigation and testing – Identification and classification of rock, Part 1 Identification and classification (BS EN ISO 14689-1) as well as the BS5930 code of Practice for Ground Investigations. TCR – Total Core Recovery, SCR – Solid Core Recovery, RQD – Rock Quality Designation, NI – Non Intact, If – indicative fracture spacing (min/ave/max), FI – Fracture Index.

Chalk Description

Chalk description is based on BS EN ISO 14688, BS EN ISO 14689 and BS5930. The classification of chalk generally follows the guidance offered by the Construction Industry Research and Information Association (CIRIA) C574, 'Engineering in Chalk'. This is based on assessment of chalk density, discontinuity and aperture spacing, and the proportion of intact chalk to silt of chalk.

In Situ Strength Testing (where undertaken)

Standard penetration testing (SPT) carried out in accordance with BS EN ISO 22476-3:2005.

Continuous dynamic probe testing conducted using a super heavy DPSH-B (As defined by BS EN ISO 22476-2:2005) probing geometry. The DPSH-B configuration is similar to that of the standard penetration test (SPT); the main differences being that the tip comprises a 90° cone, the driving rods are lighter than those used for SPT testing and the blow counts are recorded over 100mm increments rather than 300mm, as is the case for the SPT.

Perth penetrometer tests carried out in accordance with Australian Standard AS 1289:6.3.3-1997, Method of Testing Soils for Engineering Purposes; no equivalent European or British Standard having been published to date.

Undrained shear strength determinations made in-situ using a Geonor hand shear vane or a hand penetrometer.

Testing to determine the in-situ California Bearing Ratio (CBR) of soils conducted at shallow depths using a hand-held Transport Research Laboratory (TRL) cone penetrometer.

Dynamic (Windowless) Sampler

WS01

Hole Type	Easting	Northing	Ground Level (m)	Scale
WLS				1:25

Project Name	Project No.	Start Date	End Date
Imberhorne Lower School, East Grinstead	P17617	2026-02-19	2026-02-19

Client | **Consultant** | **Contractor**

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
						(0.15) 0.15		Asphalt.
		0.20	ES					MADE GROUND: Dark brown sandy subangular to subrounded fine to coarse gravel of asphalt, brick and flint.
						(0.45)		
		0.50	ES					
						0.60 (0.10) 0.70		MADE GROUND/REWORKED: Yellow brown and orange brown clay with occasional dark brown staining.
						(0.10) 0.80		Very stiff yellow brown, orange brown and grey mottled slightly sandy silty CLAY. [Upper Tunbridge Wells Sand]
		0.90	PP	175 (kPa)				
		0.90	D					
		1.00	HV	>130 (kPa)				
								Very stiff orange brown slightly sandy silty CLAY with occasional gravel of ironstone and iron staining. [Upper Tunbridge Wells Sand]
		1.30	PP	>225 (kPa)				
		1.50	D					
						(1.70)		
		2.00	HV	>130 (kPa)				
		2.10	PP	>225 (kPa)				
		2.30	D					
		2.50	HV	>130 (kPa)		2.50		*End of Borehole at 2.50m*

Remarks

No further progress below 2.50m depth - too hard/dense.
Borehole dry on completion, after installation of standpipe.
Standpipe installed to 2.50m depth; 2.50m to 1.50m slotted pipe withi gravel surround; 1.50m to ground level plain pipe with bentonite seal; completed with end cap and security cover concreted flush with ground surface.

Method, Plant, Stability, Dimensions

0.00 - 2.50m WLS
Borehole stable on completion.

Logger
AW

Dynamic (Windowless) Sampler

WS02

Hole Type	Easting	Northing	Ground Level (m)	Scale
WLS				1:25

Project Name	Project No.	Start Date	End Date
Imberhorne Lower School, East Grinstead	P17617	2026-02-19	2026-02-19

Client | **Consultant** | **Contractor**

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
		0.05	ES			(0.50)		Topsoil
		0.60	ES			0.50		Very stiff orange brown and light grey mottled slightly sandy silty CLAY with occasional gravel of ironstone and iron staining. [Upper Tunbridge Wells Sand]
								with occasional iron stainng at 0.90m depth. (0.90m)
		1.00	HV	>130 (kPa)				
		1.10	PP	160 (kPa)				
		1.10	D					
		1.25	PP	200 (kPa)				*becoming brown and orange brown mottled below 1.20m depth. (1.20m)*
						(1.70)		
		1.50	PP	>225 (kPa)				
		1.80	PP	>225 (kPa)				
		1.80	D					
		2.00	HV	>130 (kPa)				
		2.10	PP	>225 (kPa)				
		2.20	D			2.20		Very dense light brown slightly gravelly very clayey fine to medium SAND. [Upper Tunbridge Wells Sand]
								with occasional iron staining at 2.50m depth. (2.50m)
						(0.80)		
		2.80	D					*with occasional black speckling below 2.70m depth. (2.70m)*
						3.00		*End of Borehole at 3.00m*

Remarks

No further progress below 3.00m depth - too hard/dense.
Groundwater recorded at 1.01m depth on completion, after installation of standpipe.
Standpipe installed to 3.00m depth; 3.00m to 2.000m slotted pipe withi gravel surround; 2.00m to ground level plain pipe with bentonite seal; completed with end cap and security cover concreted flush with ground surface.

Method, Plant, Stability, Dimensions

0.00 - 3.00m WLS
Borehole stable on completion.

Logger
AW

Trial Pit

TP01

Sheet 1 of 1

Hole Type	Easting	Northing	Ground Level (m)	Scale
TP				1:25

Project Name	Project No.	Start Date	End Date
Imberhorne Lower School, East Grinstead	P17617	2026-02-20	2026-02-20

Client | **Consultant** | **Contractor**

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
		0.20	ES			(0.30) 0.30		Topsoil.
		0.50	D			(0.68)		Light brown and orange brown mottled slightly gravelly sandy silty CLAY. Gravel is subangular to subrounded fine to coarse ironstone. [Upper Tunbridge Wells Sand]
		0.80	D			0.98		*End of Trial Pit at 0.98m*

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0

Remarks
Trial pit dry on completion.

Method, Plant, Stability, Dimensions
0.00 - 0.98m TP
Trial pit stable on completion.
L = 1.03m
W = 0.34m

Logger
FL

Created using Pebble Geo

Hand Pit

TP02

Hole Type	Easting	Northing	Ground Level (m)	Scale
HA				1:25

Project Name	Project No.	Start Date	End Date
Imberhorne Lower School, East Grinstead	P17617	2026-02-19	2026-02-19

Client **Consultant** **Contractor**

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
		0.10	ES					Topsoil.
		0.15-0.45	P	Blows: 14		(0.30)		
						0.30		MADE GROUND/REWORKED: Orange brown slightly sandy silty clay.
		0.45-0.75	P	Blows: 17				
		0.50	D					
						(0.60)		
		0.75-1.05	P	Blows: 25				
						0.90		Stiff light grey, orange brown and yellow brown mottled silty CLAY. [Upper Tunbridge Wells Sand]
		1.05-1.35	P	Blows: 43		(0.30)		
		1.20	D			1.20		*End of Trial Pit at 1.20m*
		1.35-1.40	P*	Blows: 9				

Remarks
No further progress below 1.20m depth - too hard/dense for hand held tools.
Exploratory hole dry on completion.
P* - blow count for 50mm penetration only.

Method, Plant, Stability, Dimensions
0.00 - 1.20m HA
Exploratory hole stable on completion.

Logger
AW/FL

Trial Pit

TP03

Sheet 1 of 1

Hole Type	Easting	Northing	Ground Level (m)	Scale
TP				1:25

Project Name	Project No.	Start Date	End Date
Imberhorne Lower School, East Grinstead	P17617	2026-02-20	2026-02-20

Client | **Consultant** | **Contractor**

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Type/ Ref	Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Description
						(0.40)		Topsoil over, MADE GROUND: Dark brown slightly gravelly silty clay. Gravel is subangular to subrounded fine to coarse brick and ironstone.
		0.30	ES			0.40		
		0.60	D			(0.45)		Light brown and yellow brown gravelly very clayey fine to medium SAND. Gravel is subangular to subrounded fine to coarse sandstone and rare ironstone. With occasional cobbles of sandstone. [Upper Tunbridge Wells Sand]
		0.90	D			0.85		
						(0.24)		Light brown, yellow brown and light grey mottled slightly gravelly sandy silty CLAY. Gravel is subangular to subrounded fine to coarse sandstone. [Upper Tunbridge Wells Sand]
						1.09		

End of Trial Pit at 1.09m

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0

Remarks
Groundwater seepage noted atbase of pit.

Method, Plant, Stability, Dimensions
0.00 - 1.09m TP
Trial pit stable on completion.
L = 1.05m
W = 0.33m

Logger
FL

ASHDOWN SITE INVESTIGATION

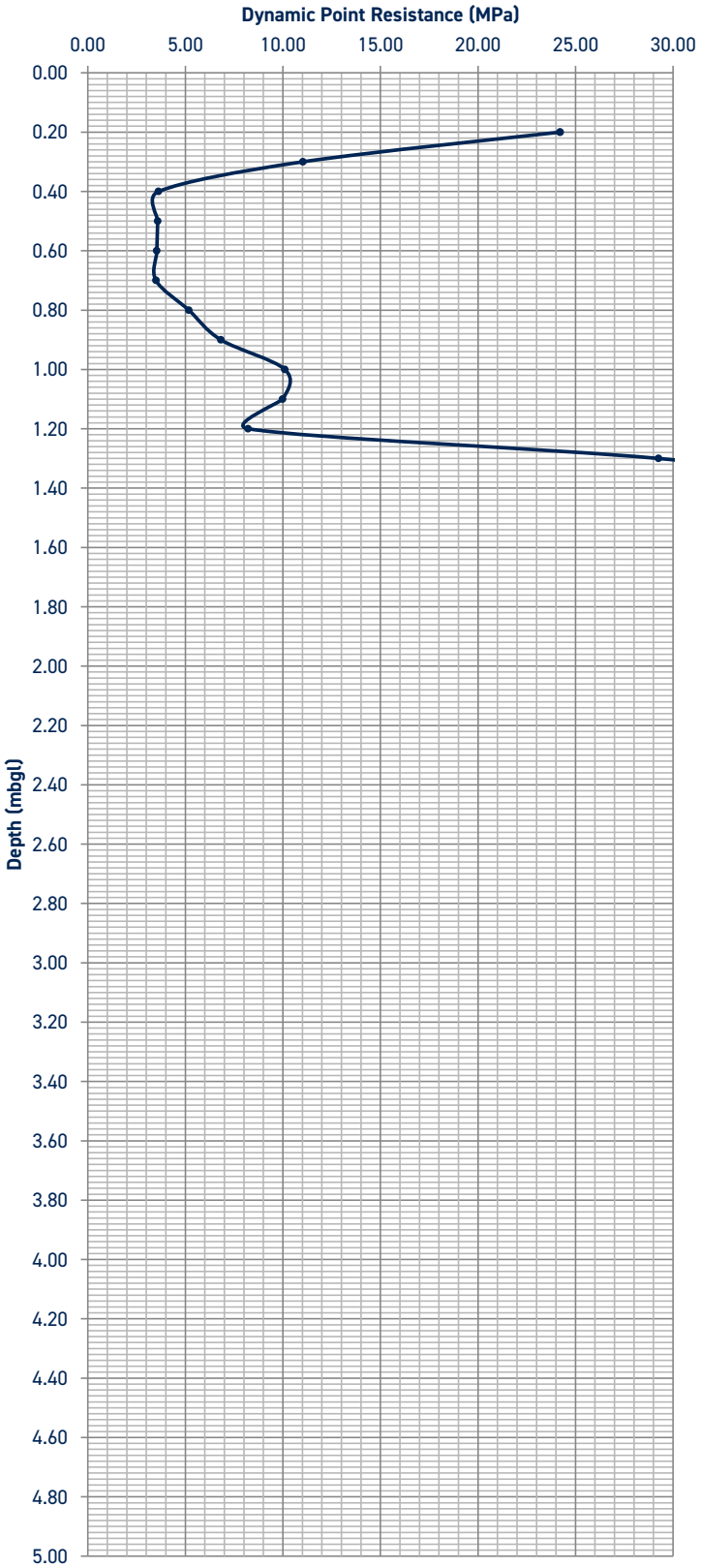
DPSH-B DYNAMIC PROBE RECORD

Site: Imberhorne Lower School, Windmill Lane, East Grinstead, West Sussex

Project Ref: P17617

Test Location Reference	WS01

Depth (mbgl)	Blows (per 100mm)	Average Penetration per Blow (m)	Unit Point Resistance (MPa)	Dynamic Point Resistance (MPa)
0.10				
0.20	13	0.01	25.27	24.21
0.30	6	0.02	11.66	11.03
0.40	2	0.05	3.89	3.63
0.50	2	0.05	3.89	3.58
0.60	2	0.05	3.89	3.54
0.70	2	0.05	3.89	3.49
0.80	3	0.03	5.83	5.18
0.90	4	0.03	7.77	6.82
1.00	6	0.02	11.66	10.10
1.10	6	0.02	11.66	9.98
1.20	5	0.02	9.72	8.22
1.30	18	0.01	34.98	29.26
1.40	26	0.00	50.53	41.78
1.50	22	0.00	42.76	34.95
1.60	23	0.00	44.70	36.13
1.70	29	0.00	56.36	45.06
1.80	29	0.00	56.36	44.56
1.90	30	0.00	58.31	45.60
2.00				
2.10				
2.20				
2.30				
2.40				
2.50				
2.60				
2.70				
2.80				
2.90				
3.00				
3.10				
3.20				
3.30				
3.40				
3.50				
3.60				
3.70				
3.80				
3.90				
4.00				
4.10				
4.20				
4.30				
4.40				
4.50				
4.60				
4.70				
4.80				
4.90				
5.00				



Notes:

No further progress below 1.90m depth - Hammer bouncing.

Hammer Mass	63.5	kg
Fall Height	0.76	m
Cone Area	0.0019	m^2
E_{theor}	473	J
Energy Ratio	0.78	
Anvil Mass	1	kg
Rod Mass	8.79	kg/m

ASHDOWN SITE INVESTIGATION

DPSH-B DYNAMIC PROBE RECORD

Site: Imberhorne Lower School, Windmill Lane, East Grinstead, West Sussex

Project Ref: P17617

Test Location Reference	WS02

Depth (mbgl)	Blows (per 100mm)	Average Penetration per Blow (m)	Unit Point Resistance (MPa)	Dynamic Point Resistance (MPa)
0.10	1	0.10	1.94	1.89
0.20	0.5	0.20	0.97	0.93
0.30	0.5	0.20	0.97	0.92
0.40	1	0.10	1.94	1.81
0.50	1	0.10	1.94	1.79
0.60	2	0.05	3.89	3.54
0.70	2	0.05	3.89	3.49
0.80	6	0.02	11.66	10.35
0.90	7	0.01	13.60	11.93
1.00	7	0.01	13.60	11.79
1.10	7	0.01	13.60	11.65
1.20	7	0.01	13.60	11.51
1.30	6	0.02	11.66	9.75
1.40	4	0.03	7.77	6.43
1.50	4	0.03	7.77	6.36
1.60	3	0.03	5.83	4.71
1.70	3	0.03	5.83	4.66
1.80	3	0.03	5.83	4.61
1.90	4	0.03	7.77	6.08
2.00	5	0.02	9.72	7.52
2.10	7	0.01	13.60	10.42
2.20	11	0.01	21.38	16.19
2.30	11	0.01	21.38	16.03
2.40	11	0.01	21.38	15.86
2.50	19	0.01	36.93	27.12
2.60	30	0.00	58.31	42.39
2.70				
2.80				
2.90				
3.00				
3.10				
3.20				
3.30				
3.40				
3.50				
3.60				
3.70				
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4.00				
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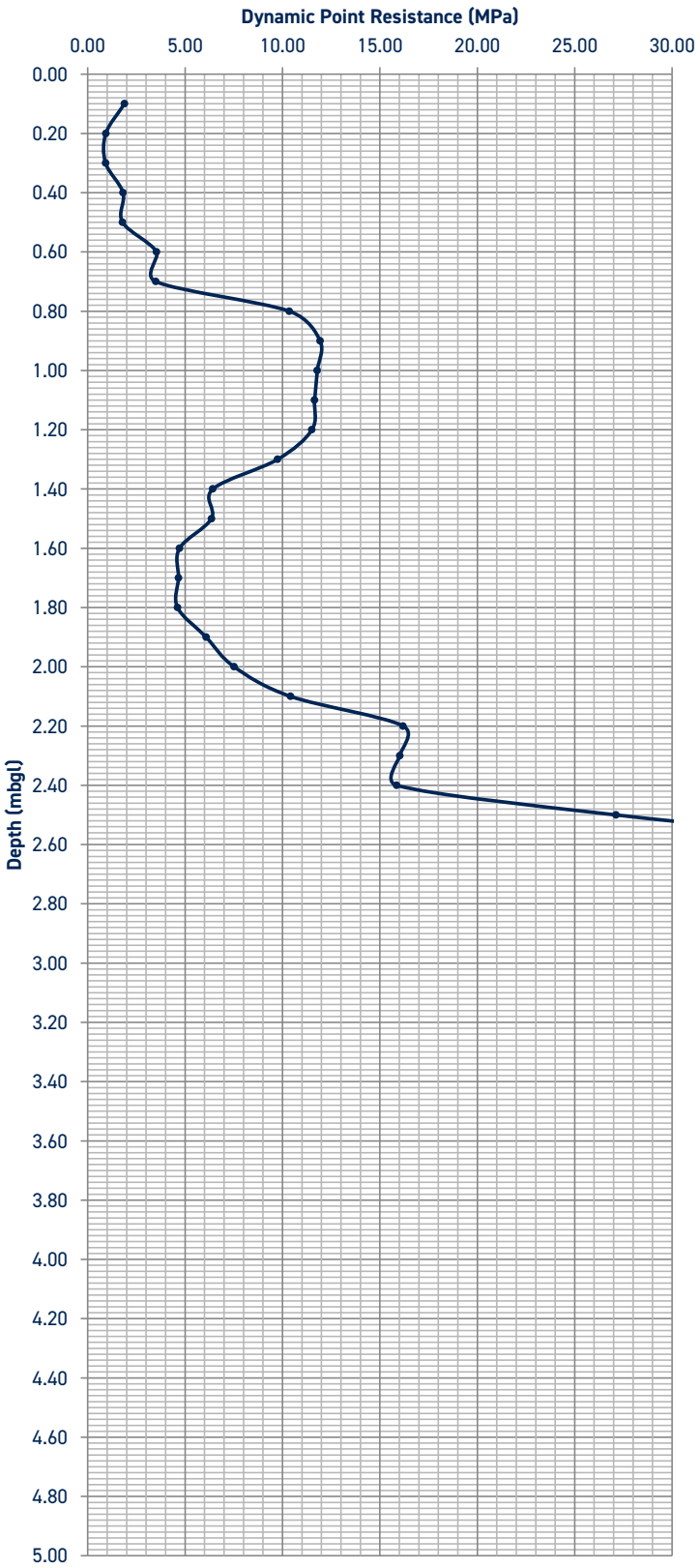
4.60				
4.70				
4.80				
4.90				
5.00				



Notes:

No further progress below 2.60m depth - Hammer bouncing.

Hammer Mass	63.5	kg
Fall Height	0.76	m
Cone Area	0.0019	m^2
E_{theor}	473	J
Energy Ratio	0.78	
Anvil Mass	1	kg
Rod Mass	8.79	kg/m

APPENDIX B

Geotechnical Laboratory Test Results
Contamination Laboratory Test Results

ASHDOWN SITE INVESTIGATION

SOIL CLASSIFICATION SUMMARY

Site: Imberhorne Lower School, Windmill Lane, East Grinstead, West Sussex **Project Ref:** P17617

BH/TP No.	Depth (m)	Nat. Moist. Cont. (w %)	Equiv. Moist. Cont. (w_a %)	Atterberg Limits			Class'n	Cons. Index (I_c)	% passing 425 µm sieve	Visual Description of Sample
				W_l %	W_p %	I_p %				
WS01	0.90	21		48	25	23	ClM	1.17*	100	Very stiff orange brown slightly sandy silty CLAY.
WS01	2.30	21		32	23	9	ClL	1.22*	~85	Very stiff orange brown slightly gravelly slightly sandy silty CLAY.
TP02	1.20	27		43	23	20	ClM	0.80*	100	Stiff light grey, orange brown and yellow brown mottled silty CLAY.
WS02	1.10	18		29	21	8	ClL	1.38*	~85	Very stiff orange brown and light grey mottled slightly gravelly slightly sandy silty CLAY.
WS02	2.80	16					N			Light brown slightly gravelly very clayey SAND.

Test Method: Classification Tests BS1377: Part 2: 1990: Method 4.4, 5.3 and 5.4

~ % passing the 425µm estimated, likely based on proportion of gravel fraction only.

* Consistency index based on natural moisture content and not the equivalent moisture content.

Sheet No. 1

Certificate of Analysis

Certificate Number 26-04475 *Issued:* 09-Mar-26

Client Ashdown Site Investigations Ltd
Unit 3 The Grain Store
Ditchling Common Business Park
Ditchling Common
West Sussex
BN6 8SG

Our Reference 26-04475

Client Reference ~ P17617_3271

Order No ~ 12713

Contract Title ~ Imberhorne Lower School, Windmill Lane, East Grinstead, West S

Description 6 Soil samples, 2 Leachate prepared by DETS samples.

Date Received 25-Feb-26

Date Started 25-Feb-26

Date Completed 09-Mar-26

Test Procedures Identified by prefix DETSn (details on request).

Notes Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By

Reyhan Irfan
Operations Manager

2139

Summary of Chemical Analysis
Soil Samples

Our Ref 26-04475
Client Ref ~ P17617_3271
Contract Title ~ Imberhorne Lower School, Windmill Lane, East Grinstead, West Sussex

			Lab No	2646900	2646901	2646902	2646903	2646904	2646905
			Sample ID ~	WS01	WS01	TP02	TP02	WS02	WS02
			Depth ~	1.50	0.50	0.50	0.10	2.20	0.05
			Other ID ~						
			Sample Type ~	D	SOIL	D	SOIL	D	SOIL
			Sampling Date ~	19/02/2026	19/02/2026	19/02/2026	19/02/2026	19/02/2026	19/02/2026
			Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**						
Preparation									
Moisture Content	DETSC 1004	0.1	%		13		26		
Metals									
Arsenic	DETSC 2301#	0.2	mg/kg		9.5		6.5		6.2
Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg		0.5		0.5		0.5
Cadmium	DETSC 2301#	0.1	mg/kg		< 0.1		0.1		0.1
Chromium	DETSC 2301#	0.15	mg/kg		21		12		12
Chromium, Hexavalent	DETSC 2204*	1	mg/kg		< 1.0		< 1.0		< 1.0
Copper	DETSC 2301#	0.2	mg/kg		23		19		12
Lead	DETSC 2301#	0.3	mg/kg		56		50		33
Mercury	DETSC 2325#	0.05	mg/kg		0.08		0.37		0.12
Nickel	DETSC 2301#	1	mg/kg		9.7		6.7		6.0
Selenium	DETSC 2301#	0.5	mg/kg		< 0.5		< 0.5		< 0.5
Zinc	DETSC 2301#	1	mg/kg		42		82		37
Inorganics									
pH	DETSC 2008#		pH	5.6	8.2	7.3	7.0	5.3	7.3
Organic matter	DETSC 2002#	0.1	%		1.8		7.1		3.5
Sulphate Aqueous Extract as SO4 (2:1)	DETSC 2076#	10	mg/l	15		17		18	
Sulphate as SO4, Total	DETSC 2321#	0.01	%		0.06		0.05		0.05
Petroleum Hydrocarbons									
VPH (C8-C10): HS_1D_Total	DETSC 3321*	0.1	mg/kg		< 0.1		< 0.1		< 0.1
EPH (C10-C12): EH_1D_Total	DETSC 3311	10	mg/kg		< 10		< 10		< 10
EPH (C12-C16): EH_1D_Total	DETSC 3311	10	mg/kg		< 10		< 10		< 10
EPH (C16-C21): EH_1D_Total	DETSC 3311	10	mg/kg		< 10		< 10		< 10
EPH (C21-C40): EH_1D_Total	DETSC 3311	10	mg/kg		< 10		< 10		< 10
TPH (C8-C40): HS_1D_Total	DETSC 3311*	10	mg/kg		< 10		< 10		< 10
PAHs									
Naphthalene	DETSC 3303#	0.03	mg/kg		0.05		< 0.03		< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg		< 0.03		< 0.03		< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg		0.09		< 0.03		< 0.03
Fluorene	DETSC 3303	0.03	mg/kg		0.12		< 0.03		< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg		0.72		0.09		0.06
Anthracene	DETSC 3303	0.03	mg/kg		0.20		< 0.03		< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg		1.0		0.20		0.24
Pyrene	DETSC 3303#	0.03	mg/kg		0.85		0.17		0.23
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg		0.32		0.06		0.10
Chrysene	DETSC 3303	0.03	mg/kg		0.27		0.06		0.10
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg		0.31		0.07		0.16
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg		0.12		< 0.03		0.06
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg		0.25		0.05		0.11
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg		0.08		< 0.03		0.06
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg		< 0.03		< 0.03		< 0.03

Summary of Chemical Analysis
Soil Samples

Our Ref 26-04475
Client Ref ~ P17617_3271
Contract Title ~ Imberhorne Lower School, Windmill Lane, East Grinstead, West Sussex

			Lab No	2646900	2646901	2646902	2646903	2646904	2646905
			Sample ID ~	WS01	WS01	TP02	TP02	WS02	WS02
			Depth ~	1.50	0.50	0.50	0.10	2.20	0.05
			Other ID ~						
			Sample Type ~	D	SOIL	D	SOIL	D	SOIL
			Sampling Date ~	19/02/2026	19/02/2026	19/02/2026	19/02/2026	19/02/2026	19/02/2026
			Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**						
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg		0.11		< 0.03		0.08
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg		4.5		0.71		1.2

Symbol key at end of report

Summary of Asbestos Analysis
Soil Samples

Our Ref 26-04475
Client Ref ~ P17617_3271
Contract Title ~ Imberhorne Lower School, Windmill Lane, East Grinstead, West Sussex

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
2646901	WS01 0.50	SOIL	NAD	none	James Heath
2646903	TP02 0.10	SOIL	NAD	none	James Heath
2646905	WS02 0.05	SOIL	NAD	none	James Heath

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'. Key: * -not included in laboratory scope of accreditation.

WASTE ACCEPTANCE CRITERIA TESTING
v20.25.02.03

Our Ref 26-04475
Client Ref P17617_3271
Contract Title Imberhorne Lower School, Windmill Lane, East Grinstead, West Sussex
Sample Id WS01 0.50
Sample Numbers 2646901 2646906
Date Analysed 09/03/2026

Test Results On Waste

Determinand and Method Reference	Units	Result	WAC Limit Values: Inert Waste	SNRHW	Hazardous Waste
DETSC 2084# Total Organic Carbon	%	1.5	3	5	6
DETSC 2003# Loss On Ignition	%	3.9	n/a	n/a	10
DETSC 3321# BTEX	mg/kg	< 0.04	6	n/a	n/a
DETSC 3401# PCBs (7 congeners)	mg/kg	< 0.01	1	n/a	n/a
DETSC 3311* Mineral Oil (C10 - C40)	mg/kg	< 10	500	n/a	n/a
DETSC 3301 PAHs	mg/kg	9.2	100	n/a	n/a
DETSC 2008# pH	pH Units	8.2	n/a	>6	n/a
DETSC 2073* Acid Neutralisation Capacity (pH4)	mol/kg	< 1.0	n/a	TBE	TBE
DETSC 2073* Acid Neutralisation Capacity (pH7)	mol/kg	< 1.0	n/a	TBE	TBE

Test Results On Leachate

Determinand and Method Reference	Conc in Eluate ug/l 10:1	Amount Leached mg/kg LS10	WAC Limit Values (Limit values for LS10 Leachate): Inert Waste	SNRHW	Hazardous Waste
DETSC 2306 Arsenic as As	1.513	0.02	0.5	2	25
DETSC 2306 Barium as Ba	12.02	0.1	20	100	300
DETSC 2306 Cadmium as Cd	< 0.0300	< 0.02	0.04	1	5
DETSC 2306 Chromium as Cr	6.182	< 0.1	0.5	10	70
DETSC 2306 Copper as Cu	3.469	0.03	2	50	100
DETSC 2306 Mercury as Hg	1.391	0.014	0.01	0.2	2
DETSC 2306 Molybdenum as Mo	10.87	0.1	0.5	10	30
DETSC 2306 Nickel as Ni	1.114	< 0.1	0.4	10	40
DETSC 2306 Lead as Pb	1.362	< 0.05	0.5	10	50
DETSC 2306 Antimony as Sb	2.305	< 0.05	0.06	0.7	5
DETSC 2306 Selenium as Se	0.7761	< 0.03	0.1	0.5	7
DETSC 2306 Zinc as Zn	5.42	0.05	4	50	200
DETSC 2055 Chloride as Cl	52000	520	800	15,000	25,000
DETSC 2055* Fluoride as F	260	2.6	10	150	500
DETSC 2055 Sulphate as SO4	26000	260	1000	20,000	50,000
DETSC 2009* Total Dissolved Solids	130000	1300	4000	60,000	100,000
DETSC 2130 Phenol Index	< 100	< 1	1	n/a	n/a
DETSC 2085 Dissolved Organic Carbon	7400	74	500	800	1000

TBE - To Be Evaluated
SNRHW - Stable Non-Reactive Hazardous Waste

Additional Information

DETSC 2008 pH	8.3
DETSC 2009 Conductivity uS/cm	183.0
* Temperature*	17.0

Mass of Sample Kg	0.103
Mass of dry Sample Kg	0.090

Stage 1

Volume of Leachant L2	0.887
Volume of Eluate VE1	0

Disclaimer: *The WAC limit values are provided for guidance only. Normec DETS does not accept responsibility for errors or omissions. Values are correct at time of issue.*

V.2.07

WASTE ACCEPTANCE CRITERIA TESTING
v20.25.02.03

Our Ref 26-04475
Client Ref P17617_3271
Contract Title Imberhorne Lower School, Windmill Lane, East Grinstead, West Sussex
Sample Id TP02 0.10
Sample Numbers 2646903 2646907
Date Analysed 09/03/2026

Test Results On Waste

Determinand and Method Reference	Units	Result	WAC Limit Values Inert Waste	SNRHW	Hazardous Waste
DETSC 2084# Total Organic Carbon	%	4.2	3	5	6
DETSC 2003# Loss On Ignition	%	15.0	n/a	n/a	10
DETSC 3321# BTEX	mg/kg	< 0.04	6	n/a	n/a
DETSC 3401# PCBs (7 congeners)	mg/kg	< 0.01	1	n/a	n/a
DETSC 3311* Mineral Oil (C10 - C40)	mg/kg	< 10	500	n/a	n/a
DETSC 3301 PAHs	mg/kg	9.7	100	n/a	n/a
DETSC 2008# pH	pH Units	7.0	n/a	>6	n/a
DETSC 2073* Acid Neutralisation Capacity (pH4)	mol/kg	< 1.0	n/a	TBE	TBE
DETSC 2073* Acid Neutralisation Capacity (pH7)	mol/kg	< 1.0	n/a	TBE	TBE

Test Results On Leachate

Determinand and Method Reference	Conc in Eluate ug/l 10:1	Amount Leached mg/kg LS10	WAC Limit Values (Limit values for LS10 Leachate) Inert Waste	SNRHW	Hazardous Waste
DETSC 2306 Arsenic as As	2.39	0.02	0.5	2	25
DETSC 2306 Barium as Ba	10.74	0.1	20	100	300
DETSC 2306 Cadmium as Cd	0.0311	< 0.02	0.04	1	5
DETSC 2306 Chromium as Cr	3.556	< 0.1	0.5	10	70
DETSC 2306 Copper as Cu	11	0.11	2	50	100
DETSC 2306 Mercury as Hg	0.4097	0.004	0.01	0.2	2
DETSC 2306 Molybdenum as Mo	3.2	< 0.1	0.5	10	30
DETSC 2306 Nickel as Ni	3.123	< 0.1	0.4	10	40
DETSC 2306 Lead as Pb	4.573	< 0.05	0.5	10	50
DETSC 2306 Antimony as Sb	0.6287	< 0.05	0.06	0.7	5
DETSC 2306 Selenium as Se	0.7179	< 0.03	0.1	0.5	7
DETSC 2306 Zinc as Zn	19.27	0.19	4	50	200
DETSC 2055 Chloride as Cl	5800	< 100	800	15,000	25,000
DETSC 2055* Fluoride as F	230	2.3	10	150	500
DETSC 2055 Sulphate as SO4	6600	< 100	1000	20,000	50,000
DETSC 2009* Total Dissolved Solids	62000	620	4000	60,000	100,000
DETSC 2130 Phenol Index	< 100	< 1	1	n/a	n/a
DETSC 2085 Dissolved Organic Carbon	11000	110	500	800	1000

TBE - To Be Evaluated
SNRHW - Stable Non-Reactive Hazardous Waste

Additional Information

DETSC 2008 pH	7.7
DETSC 2009 Conductivity uS/cm	88.3
* Temperature*	18.0

Mass of Sample Kg	0.122
Mass of dry Sample Kg	0.090

Stage 1

Volume of Leachant L2	0.868
Volume of Eluate VE1	0

Disclaimer: *The WAC limit values are provided for guidance only. Normec DETS does not accept responsibility for errors or omissions. Values are correct at time of issue.*

V.2.07

Information in Support of the Analytical Results

Our Ref 26-04475
Client Ref ~ P17617_3271
Contract ~ Imberhorne Lower School, Windmill Lane, East Grinstead, West Sussex

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Incorrect container for tests
2646900	WS01 1.50 SOIL	19/02/26	PG		
2646901	WS01 0.50 SOIL	19/02/26	GJ 250ml, GJ 60ml, PT 1L x2		
2646902	TP02 0.50 SOIL	19/02/26	PG		
2646903	TP02 0.10 SOIL	19/02/26	GJ 250ml, GJ 60ml, PT 1L x2		
2646904	WS02 2.20 SOIL	19/02/26	PG		
2646905	WS02 0.05 SOIL	19/02/26	GJ 250ml, GJ 60ml, PT 1L x2		
2646906	WS01 0.50 LEACHATE	19/02/26	GJ 250ml, GJ 60ml, PT 1L x2		
2646907	TP02 0.10 LEACHATE	19/02/26	GJ 250ml, GJ 60ml, PT 1L x2		

Lab No	Sample ID	Comments
2646906	WS01 0.50 LEACH	Insufficient sample 1782g (<2kg) Sample received
2646907	TP02 0.10 LEACHA	Insufficient sample 1017g (<2kg) Sample received

Key: P-Plastic G-Bag G-Glass J-Jar T-Tub

Normec DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 250µm sieve
Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.
The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-
Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

Information in Support of the Analytical Results

List of HWOL Acronyms and Operators

Acronym	Description
HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total

Det	Acronym
VPH (C8-C10)	HS_1D_Total
EPH (C10-C12)	EH_1D_Total
EPH (C12-C16)	EH_1D_Total
EPH (C16-C21)	EH_1D_Total
EPH (C21-C40)	EH_1D_Total
Mineral Oil (C10-C40) + Clean Up	EH_CU_1D_Total
TPH (C8-C40)	HS_1D_Total

Key:

~ Sample details are provided by the client and can affect the validity of the results
***** -not accredited.
# -MCERTS (accreditation only applies if report carries the MCERTS logo).
$ -subcontracted.
n/s -not supplied.
I/S -insufficient sample.
U/S -unsuitable sample.
t/f -to follow.
nd -not detected.

End of Report Ver 25.10.03

APPENDIX C

Aggressivity To Concrete Assessment
Trial Pit In Situ Infiltration Test Results

ASHDOWN SITE INVESTIGATION

AGGRESSIVITY TO CONCRETE ASSESSMENT

Site: Imberhorne Lower School, Windmill Lane, East Grinstead, West Sussex **Project Ref:** P17617

Chemical Laboratory Test Results

Sample Location	Sample Depth (m)	pH Value (Units)	Total Sulphate (AS % as SO_4)	Total Sulphur (TS % as S)	Water Soluble Sulphate (mg/l as SO_4)	Water Soluble Chloride (mg/l)	Water Soluble Nitrate (mg/l)	Water Soluble Magnesium (mg/l)
WS01	1.50	5.6			15			
TP02	0.50	7.3			17			
WS02	2.20	5.3			18			

Notes: Chemical testing was undertaken by an external laboratory with recognised (UKAS and MCERTS) accreditation for quality control. Testing scheduled in line with the BRE Special Digest 1:2005 Concrete in Aggressive Ground Suites A-D and as such some determinands were not required to be tested.

Assessment of the Chemical Analysis of the Soil

Ground Condition	Natural Ground Conditions
Groundwater Condition	Mobile Groundwater Conditions
Pyrite Soil Condition	Soils present beneath the site are not expected to contain pyrite

	Characteristic Value	Design Sulfate Class	ACEC Classification
pH	5.3	-	-
Water Soluble Sulphate (mg/l as SO4) *	<100	DS-1	AC-2z
Total Potential Sulphate (TPS % SO4)	N/A - Non Pyrite Soil Present	-	-
Magnesium (mg/l) *	N/A - Natural Ground Conditions	-	-
Water Soluble Sulphate including mineral acids (mg/l as SO4) *	N/A - Natural Ground Conditions	-	-

Notes: * Characteristic value rounded to nearest 100.
The aggressivity of the soils to concrete has been assessed in accordance with guidance published by the BRE Special Digest 1:2005 Concrete in Aggressive Ground.

TRIAL PIT INFILTRATION TEST RESULTS

Site: Imberhorne Lower School, Windmill Lane, East Grinstead, West Sussex **Project Ref:** P17617

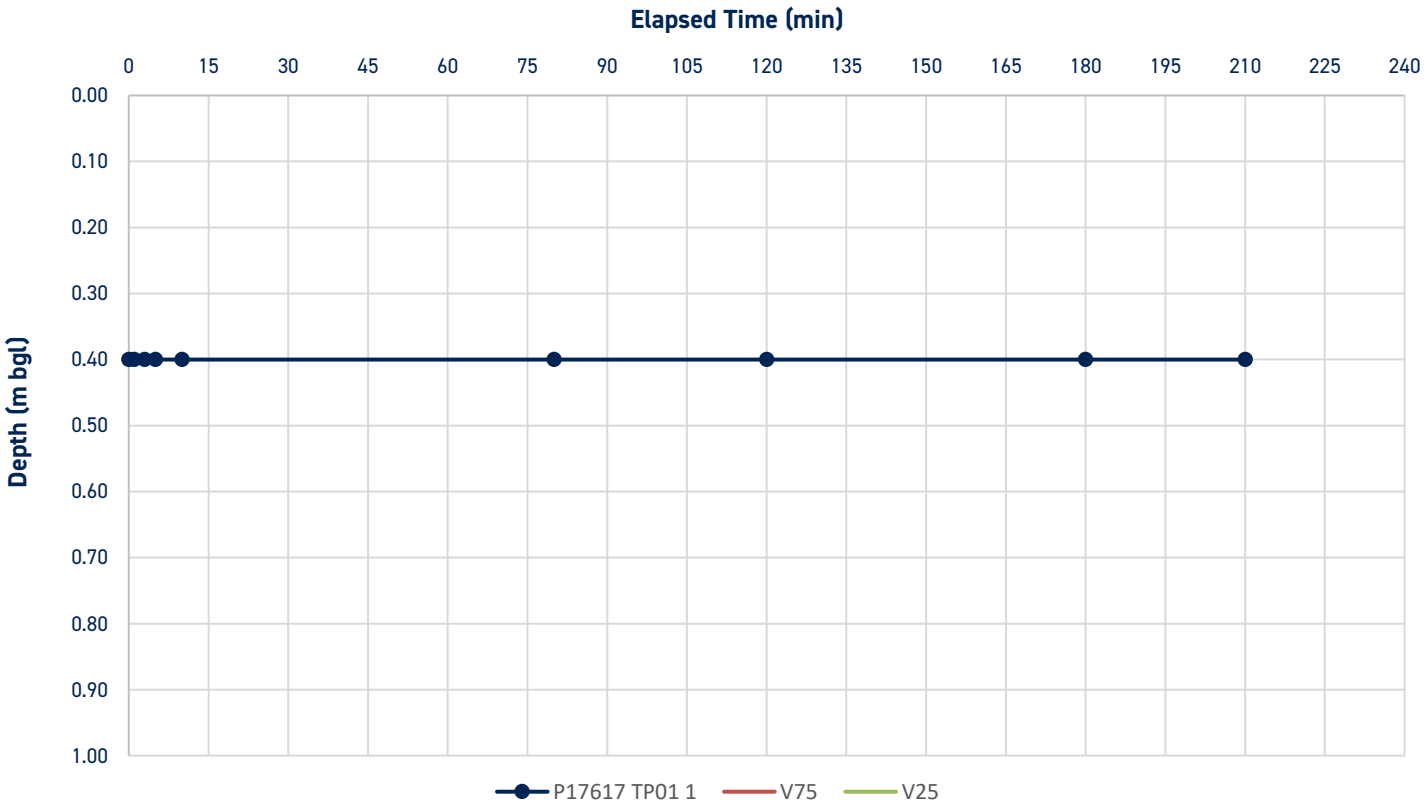
Test Location Reference	**TP01**
Test Number	**1**

Width of Pit	0.34 m	W
Length of Pit	1.03 m	L
Depth of Pit	0.98 m	D
Pit type	Open	

Volume of water introduced into pit	0.203 m^3	
Initial head of water	0.58 m	h_o
Water level at start of test	0.40 m	
Water level at end of test	0.40 m	
Volume of water discharged from pit	0.000 m^3	
Duration of test	210 min	
Average soaked surface area	1.94 m^2	
Time for water level to fall to 75% of initial head	Not reached min	t_{p75}
Time for water level to fall to 25% of initial head	Not reached min	t_{p25}
Depth to water at 75% of initial head	Not reached m	d_{75}
Depth to water at 25% of initial head	Not reached m	d_{25}
Time for the water level to fall from 75% to 25% of initial head	Not reached min	t_{p75-25}
Effective storage volume of water in the soakage trial pit between 75% and 25% of initial head	Not reached m^3	V_{p75-25}
Internal surface area of the soakage trial pit up to 50% of initial head and including the base area	1.14 m^2	a_{s50}

Infiltration rate **Negligible**

Calculation method: Negligible. The water level did not fall over a period of 210 minutes.



TRIAL PIT INFILTRATION TEST RESULTS

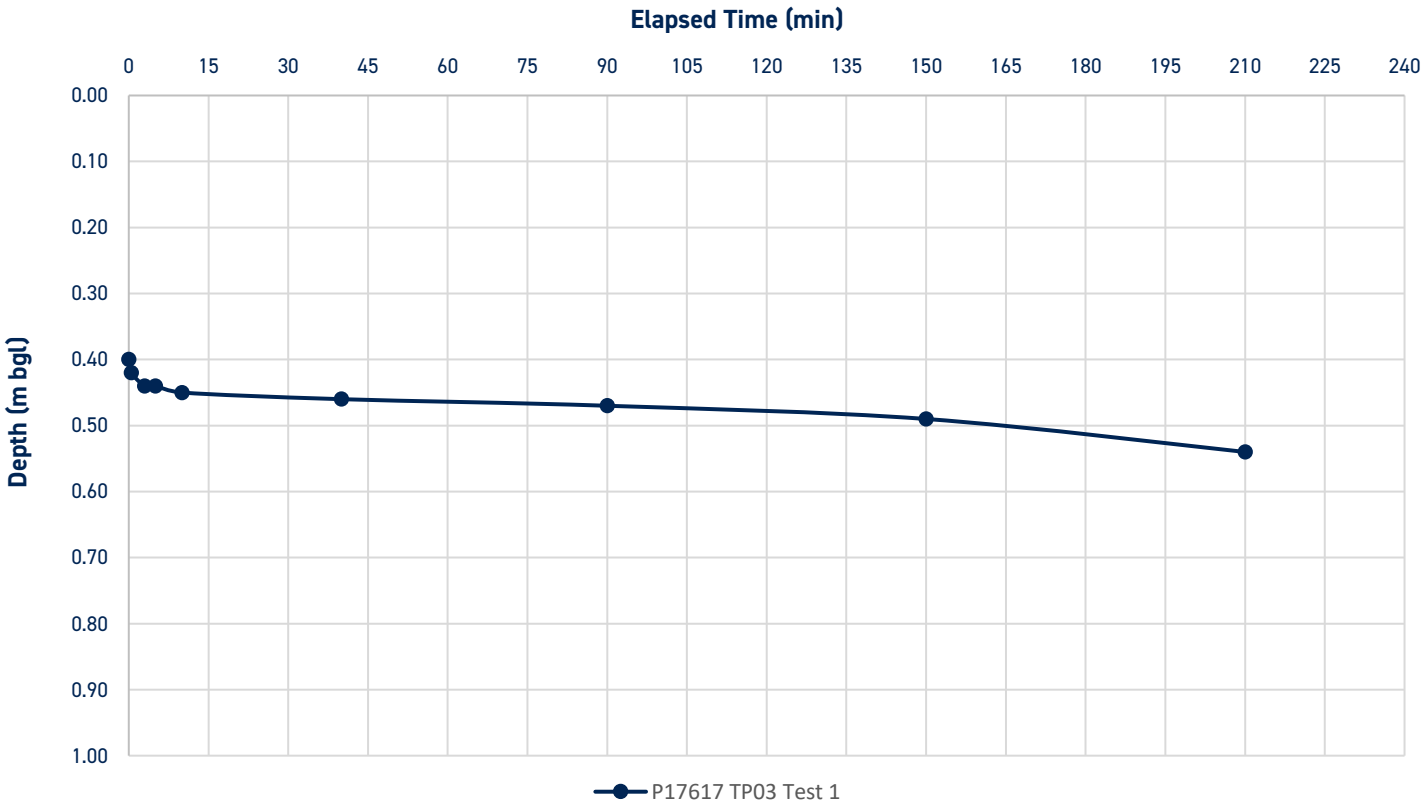
Site: Imberhorne Lower School, Windmill Lane, East Grinstead, West Sussex **Project Ref:** P17617

Test Location Reference	**TP03**
Test Number	**Test 1**

Width of Pit	0.33 m	W
Length of Pit	1.05 m	L
Depth of Pit	1.09 m	D
Pit type	Open	

Volume of water introduced into pit	0.235 m^3	
Initial head of water	0.69 m	h_o
Water level at start of test	0.40 m	
Water level at end of test	0.54 m	
Volume of water discharged from pit	0.048 m^3	
Duration of test	210 min	
Average soaked surface area	2.04 m^2	
Time for water level to fall to 75% of initial head	Not reached min	t_{p75}
Time for water level to fall to 25% of initial head	Not reached min	t_{p25}
Depth to water at 75% of initial head	Not reached m	d_{75}
Depth to water at 25% of initial head	Not reached m	d_{25}
Time for the water level to fall from 75% to 25% of initial head	Not reached min	t_{p75-25}
Effective storage volume of water in the soakage trial pit between 75% and 25% of initial head	Not reached m^3	V_{p75-25}
Internal surface area of the soakage trial pit up to 50% of initial head and including the base area	1.29 m^2	a_{s50}
Infiltration rate	**1.86E-06 m/sec**	**f**

Calculation method: The water level did not fall below 25% of the effective storage depth. 'f' has been calculated by dividing the volume of water lost during the test by the product of the average surface area in contact with water during the test and the test duration.



APPENDIX D

Preliminary Conceptual Model

ASHDOWN SITE INVESTIGATION

PRELIMINARY CONCEPTUAL MODEL

Site: Imberhorne Lower School, Windmill Lane, East Grinstead

Project Ref: P17617

Potential Source	Potential Receptor	Potential Contaminants	Potential Pathway	Complete Linkage Present?	Probability	Consequence	Risk
No potential sources of contamaintion identified	End Users		Dermal contact with soil and dust (indoor & outdoor)	Pathway severed by hard surfacing			N/A
			Ingestion of soil and indoor dust	Pathway severed by hard surfacing			N/A
			Consumption of home-grown produce and attached soil	No private gardens proposed			N/A
			Inhalation of soil dust (indoor and outdoor)	Pathway severed by hard surfacing			N/A
			Inhalation of soil vapours	No potential contaminants identified			N/A
			Inhalation of soil gases/ Risk of explosion	No potential gas source identified			N/A
	End Users (via Water Supply Pipework)		Contamination of incoming services	No potential contaminants identified			N/A
	Groundwater		Migration to groundwater	No contaminants likely to impact groundwater identified			N/A

APPENDIX E

Classification of Probability, Consequence and Risk

ASHDOWN SITE INVESTIGATION

Probability Of Risk Being Realised	
Classification	**Definition**
High	There is a pollution linkage and an event that either appears very likely in the short term and almost inevitable over the long term or there is evidence at the receptor of harm or pollution.
Moderate	There is a pollution linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short term and likely over the long term.
Low	There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such event would take place and is less likely in the shorter term.
Very Low	There is a pollution linkage but circumstances are such that it is improbable that an event would occur even in the very long term.

Consequence Of Risk Being Realised		
Classification	**Category**	**Definition**
Severe	Human Health	Short term (acute) risk to human health likely to result in "significant harm" as defined by the Environment Protection Act 1990, Part IIA.
	Controlled Waters	Short term risk of pollution (note: Water Resources Act contains no scope for considering significance of pollution) of sensitive water resource.
	Property	Catastrophic damage to buildings/property.
	Ecological Systems	A short term risk to a particular ecosystem or organisation forming part of such ecosystem.
Moderate	Human Health	Chronic damage to Human Health.
	Controlled Waters	Pollution of sensitive water resources (note: Water Resources Act contains no scope for considering significance of pollution).
	Ecological System	A significant change in a particular ecosystem or organism forming part of such ecosystem.
Minor	Controlled Waters	Pollution of non-sensitive water resources.
	Property	Significant damage to crops, buildings, structures and services.
	Ecological Systems	Damage to sensitive buildings/structures/services or the environment.
Very Minor	Human Health	Non-permanent health effects to human health (easily prevented by means such as personal protective clothing, etc).
	Property	Easily repairable effects of damage to buildings, structures and services.
	Project	Harm, although not necessarily significant harm, which may result in a financial loss or expenditure to resolve.

ASHDOWN SITE INVESTIGATION

Risk Classification Definitions	
Very High	There is a high probability that severe harm could arise to a designated receptor from an identified hazard, OR, there is evidence that severe harm to a designated receptor is currently happening. This risk, if realised, is likely to result in a substantial liability. Urgent investigation (if not undertaken already) and remediation are likely to be required.
High	Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation (if not undertaken already) is required and remedial works may be necessary in the short term and are likely over the long term.
Moderate	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the longer term.
Low	It is possible that harm could arise to a designated receptor from an identified hazard, but there is a low likelihood of this hazard occurring and if realised, harm would at worst normally be mild.
Very Low	There is a low possibility that harm could arise to a receptor. In the event of such harm being realised, it is not likely to be severe.

APPENDIX F

Quantitative Conceptual Model

ASHDOWN SITE INVESTIGATION

QUANTITATIVE CONCEPTUAL MODEL

Site: Imberhorne Lower School, Windmill Lane, East Grinstead, West Sussex

Project Ref: P17617

Source	Receptor	Contaminants	Pathway	Complete Linkage Present?	Probability	Consequence	Risk
No sources of contamaintion identified	End Users		Dermal contact with soil and dust (indoor & outdoor)	Pathway severed by hard surfacing			N/A
			Ingestion of soil and indoor dust	Pathway severed by hard surfacing			N/A
			Consumption of home-grown produce and attached soil	No private gardens proposed			N/A
			Inhalation of soil dust (indoor and outdoor)	Pathway severed by hard surfacing			N/A
			Inhalation of soil vapours	No contaminants present above SSVs			N/A
			Inhalation of soil gases/ Risk of explosion	No potential gas source identified			N/A
	End Users (via Water Supply Pipework)		Contamination of incoming services	No contaminants present above screening criteria			N/A
	Groundwater		Migration to groundwater	No contaminants present at concentrations posing risk to groundwater			N/A

APPENDIX G

HazWasteOnline Output Sheets

Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

a) understand the origin of the waste
b) select the correct List of Waste code(s)
c) confirm that the list of determinands, results and sampling plan are fit for purpose
d) select and justify the chosen metal species (Appendix B)
e) correctly apply moisture correction and other available corrections
f) add the meta data for their user-defined substances (Appendix A)
g) check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

K924M-0HQCT-ASEY6

Report is invalid if pages are removed.

Job name

P17617 - Imberhorne Lower School, Windmill Lane, East Grinstead, West Sussex

Description/Comments

Project

P17617

Site

Imberhorne Lower School, Windmill Lane, East Grinstead, West Sussex

Classified by

Name:
Stuart Card
Date:
20 Mar 2026 14:03 GMT
Telephone:
01273 483119

Company:
Ashdown Site Investigation Ltd
Unit 3, The Old Grain Store Ditchling Common Business Park
Ditchling
BN6 8SG

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

HazWasteOnline™ Certification: **CERTIFIED**

Course	Date
Hazardous Waste Classification	05 Dec 2013
Most recent 3 year Refresher	02 Dec 2025

Next 3 year Refresher due by Dec 2028

Purpose of classification

2 - Material Characterisation

Address of the waste

Imberhorne Lower School, Windmill Lane, East Grinstead, West Sussex **Post Code** N/A

SIC for the process giving rise to the waste

Description of industry/producer giving rise to the waste

Installation of modular classroom buildings in playground and internal courtyard

Description of the specific process, sub-process and/or activity that created the waste

Soils removed during installation of foundations

Description of the waste

As per Ashdown Site Investgiation Ltd. Report. Project Ref: P17617, Report Ref: 17152

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	WAC Results			Page
					Inert	SNRHW	Hazardous	
1	WS01/0.50/2026-02-19	0.5	Non Hazardous		Fail	Pass	N/A	3
2	TP02/0.10/2026-02-19	0.1	Non Hazardous		Fail	Pass	N/A	6
3	WS02/0.05/2026-02-19	0.05	Non Hazardous		-	-	-	9

Related documents

#	Name	Description
1	26-04475.hwol	DETS North .hwol file used to populate the Job
2	DETS-N	waste stream template used to create this Job

WAC Results

WAC Settings: samples in this Job do not constitute a single population.

WAC limits used to evaluate the samples in this Job: "UK"
The WAC used in this report are the WAC defined for the inert, stable non-reactive hazardous and hazardous classes of landfill in the UK. You should check the actual acceptance criteria when the disposal site is identified as they may differ from the generic WAC used in this report.

Report

Created by: Stuart Card

Created date: 20 Mar 2026 14:03 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	11
Appendix B: Rationale for selection of metal species	12
Appendix C: Version	13

Classification of sample: WS01/0.50/2026-02-19

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS01/0.50/2026-02-19
Sample Depth:
0.5 m
Moisture content:
13%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		asbestos fibres detected (Yes/No)			ACM_FIBRES		No							
2		arsenic { arsenic acid and its salts with the exception of those specified elsewhere in this Annex }	033-005-00-1				9.5	mg/kg	1.895	17.998	mg/kg	0.0018 %		
3		boron { boric acid; [1] boric acid; [2] }	005-007-00-2	233-139-2 [1] 234-343-4 [2]	10043-35-3 [1] 11113-50-1 [2]		0.5	mg/kg	5.719	2.86	mg/kg	0.000286 %		
4		cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		<0.1	mg/kg	1.855	<0.185	mg/kg	<0.0000185 %		**<LOD**
5		chromium in Cr(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		21	mg/kg	1.462	30.693	mg/kg	0.00307 %		
6		chromium in Cr(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				<1	mg/kg	2.27	<2.27	mg/kg	<0.000227 %		**<LOD**
7		copper { copper sulphate pentahydrate }	029-023-00-4	231-847-6	7758-99-8		23	mg/kg	3.929	90.368	mg/kg	0.00904 %		
8		lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	56	mg/kg	1.56	87.35	mg/kg	0.0056 %		
9		mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.08	mg/kg	1.353	0.108	mg/kg	0.0000108 %		
10		nickel { nickel dibromate }	028-053-00-5	238-596-1	14550-87-9		9.7	mg/kg	5.358	51.976	mg/kg	0.0052 %		
11		selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<0.5	mg/kg	2.554	<1.277	mg/kg	<0.000128 %		**<LOD**
12		zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		42	mg/kg	2.774	116.514	mg/kg	0.0117 %		
13		TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		**<LOD**
14		pH			PH		8.2	pH		8.2	pH	8.2 pH		
15		naphthalene	601-052-00-2	202-049-5	91-20-3		0.05	mg/kg		0.05	mg/kg	0.000005 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			205-917-1	208-96-8									
17		acenaphthene				0.09	mg/kg		0.09	mg/kg	0.000009 %		
			201-469-6	83-32-9									
18		fluorene				0.12	mg/kg		0.12	mg/kg	0.000012 %		
			201-695-5	86-73-7									
19		phenanthrene				0.72	mg/kg		0.72	mg/kg	0.000072 %		
			201-581-5	85-01-8									
20		anthracene				0.2	mg/kg		0.2	mg/kg	0.00002 %		
			204-371-1	120-12-7									
21		fluoranthene				1	mg/kg		1	mg/kg	0.0001 %		
			205-912-4	206-44-0									
22		pyrene				0.85	mg/kg		0.85	mg/kg	0.000085 %		
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.32	mg/kg		0.32	mg/kg	0.000032 %		
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.27	mg/kg		0.27	mg/kg	0.000027 %		
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				0.31	mg/kg		0.31	mg/kg	0.000031 %		
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				0.12	mg/kg		0.12	mg/kg	0.000012 %		
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				0.25	mg/kg		0.25	mg/kg	0.000025 %		
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				0.08	mg/kg		0.08	mg/kg	0.000008 %		
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				0.11	mg/kg		0.11	mg/kg	0.000011 %		
			205-883-8	191-24-2									
31		polychlorobiphenyls; PCB				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0371 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

WAC results for sample: WS01/0.50/2026-02-19

WAC Settings: samples in this Job do not constitute a single population.

WAC limits used to evaluate this sample: "UK"
The WAC used in this report are the WAC defined for the inert, stable non-reactive hazardous and hazardous classes of landfill in the UK. You should check the actual acceptance criteria when the disposal site is identified as they may differ from the generic WAC used in this report.

The sample FAILS the Inert (Inert waste landfill) criteria.

The sample PASSES the SNRHW (Stable non-reactive hazardous waste in non-hazardous landfill) criteria.

WAC Determinands

Solid Waste Analysis				Landfill Waste Acceptance Criteria Limits		
#	Determinand Header		User entered data	Inert waste landfill	Stable non-reactive hazardous waste in non-hazardous landfill	Hazardous waste landfill
1	TOC (total organic carbon)	%	1.5	3	5	6
2	LOI (loss on ignition)	%	3.9	-	-	10
3	BTEX (benzene, toluene, ethylbenzene and xylenes)	mg/kg	<0.04	6	-	-
4	PCBs (polychlorinated biphenyls, 7 congeners)	mg/kg	<0.01	1	-	-
5	Mineral oil (C10 to C40)	mg/kg	<10	500	-	-
6	PAHs (polycyclic aromatic hydrocarbons)	mg/kg	9.2	100	-	-
7	pH	pH	8.2	-	>6	-
8	ANC (acid neutralisation capacity)	mol/kg	<1	-	-	-
Eluate Analysis 10:1						
9	arsenic	mg/kg	0.015	0.5	2	25
10	barium	mg/kg	0.12	20	100	300
11	cadmium	mg/kg	<0.02	0.04	1	5
12	chromium	mg/kg	<0.1	0.5	10	70
13	copper	mg/kg	0.035	2	50	100
14	mercury	mg/kg	0.0139	0.01	0.2	2
15	molybdenum	mg/kg	0.11	0.5	10	30
16	nickel	mg/kg	<0.1	0.4	10	40
17	lead	mg/kg	<0.05	0.5	10	50
18	antimony	mg/kg	<0.05	0.06	0.7	5
19	selenium	mg/kg	<0.03	0.1	0.5	7
20	zinc	mg/kg	0.054	4	50	200
21	chloride	mg/kg	520	800	15000	25000
22	fluoride	mg/kg	2.6	10	150	500
23	sulphate	mg/kg	260	1000	20000	50000
24	phenol index	mg/kg	<1	1	-	-
25	DOC (dissolved organic carbon)	mg/kg	74	500	800	1000
26	TDS (total dissolved solids)	mg/kg	1300	4000	60000	100000

Key

	User supplied data
	Not applicable
	Inert WAC criteria fail

Classification of sample: TP02/0.10/2026-02-19

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP02/0.10/2026-02-19
Sample Depth:
0.1 m
Moisture content:
26%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 26% No Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	asbestos fibres detected (Yes/No)			ACM_FIBRES		No							
2	arsenic { arsenic acid and its salts with the exception of those specified elsewhere in this Annex }	033-005-00-1				6.5	mg/kg	1.895	12.314	mg/kg	0.00123 %		
3	boron { boric acid; [1] boric acid; [2] }	005-007-00-2	233-139-2 [1] 234-343-4 [2]	10043-35-3 [1] 11113-50-1 [2]		0.5	mg/kg	5.719	2.86	mg/kg	0.000286 %		
4	cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		0.1	mg/kg	1.855	0.185	mg/kg	0.0000185 %		
5	chromium in Cr(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		12	mg/kg	1.462	17.539	mg/kg	0.00175 %		
6	chromium in Cr(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				<1	mg/kg	2.27	<2.27	mg/kg	<0.000227 %		**<LOD**
7	copper { copper sulphate pentahydrate }	029-023-00-4	231-847-6	7758-99-8		19	mg/kg	3.929	74.652	mg/kg	0.00747 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	50	mg/kg	1.56	77.991	mg/kg	0.005 %		
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.37	mg/kg	1.353	0.501	mg/kg	0.0000501 %		
10	nickel { nickel dibromate }	028-053-00-5	238-596-1	14550-87-9		6.7	mg/kg	5.358	35.901	mg/kg	0.00359 %		
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<0.5	mg/kg	2.554	<1.277	mg/kg	<0.000128 %		**<LOD**
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		82	mg/kg	2.774	227.48	mg/kg	0.0227 %		
13	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		**<LOD**
14	pH			PH		7	pH		7	pH	7pH		
15	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			205-917-1	208-96-8									
17		acenaphthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			201-469-6	83-32-9									
18		fluorene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			201-695-5	86-73-7									
19		phenanthrene				0.09	mg/kg		0.09	mg/kg	0.000009 %		
			201-581-5	85-01-8									
20		anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			204-371-1	120-12-7									
21		fluoranthene				0.2	mg/kg		0.2	mg/kg	0.00002 %		
			205-912-4	206-44-0									
22		pyrene				0.17	mg/kg		0.17	mg/kg	0.000017 %		
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.06	mg/kg		0.06	mg/kg	0.000006 %		
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.06	mg/kg		0.06	mg/kg	0.000006 %		
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				0.07	mg/kg		0.07	mg/kg	0.000007 %		
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				0.05	mg/kg		0.05	mg/kg	0.000005 %		
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			205-883-8	191-24-2									
31		polychlorobiphenyls; PCB				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0422 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

WAC results for sample: TP02/0.10/2026-02-19

WAC Settings: samples in this Job do not constitute a single population.

WAC limits used to evaluate this sample: "UK"
The WAC used in this report are the WAC defined for the inert, stable non-reactive hazardous and hazardous classes of landfill in the UK. You should check the actual acceptance criteria when the disposal site is identified as they may differ from the generic WAC used in this report.

The sample FAILS the Inert (Inert waste landfill) criteria.

The sample PASSES the SNRHW (Stable non-reactive hazardous waste in non-hazardous landfill) criteria.

WAC Determinands

Solid Waste Analysis				Landfill Waste Acceptance Criteria Limits		
#	Determinand Header		User entered data	Inert waste landfill	Stable non-reactive hazardous waste in non-hazardous landfill	Hazardous waste landfill
1	TOC (total organic carbon)	%	4.2	3	5	6
2	LOI (loss on ignition)	%	15	-	-	10
3	BTEX (benzene, toluene, ethylbenzene and xylenes)	mg/kg	<0.04	6	-	-
4	PCBs (polychlorinated biphenyls, 7 congeners)	mg/kg	<0.01	1	-	-
5	Mineral oil (C10 to C40)	mg/kg	<10	500	-	-
6	PAHs (polycyclic aromatic hydrocarbons)	mg/kg	9.7	100	-	-
7	pH	pH	7	-	>6	-
8	ANC (acid neutralisation capacity)	mol/kg	<1	-	-	-
Eluate Analysis 10:1						
9	arsenic	mg/kg	0.024	0.5	2	25
10	barium	mg/kg	0.11	20	100	300
11	cadmium	mg/kg	<0.02	0.04	1	5
12	chromium	mg/kg	<0.1	0.5	10	70
13	copper	mg/kg	0.11	2	50	100
14	mercury	mg/kg	0.0041	0.01	0.2	2
15	molybdenum	mg/kg	<0.1	0.5	10	30
16	nickel	mg/kg	<0.1	0.4	10	40
17	lead	mg/kg	<0.05	0.5	10	50
18	antimony	mg/kg	<0.05	0.06	0.7	5
19	selenium	mg/kg	<0.03	0.1	0.5	7
20	zinc	mg/kg	0.193	4	50	200
21	chloride	mg/kg	<100	800	15000	25000
22	fluoride	mg/kg	2.3	10	150	500
23	sulphate	mg/kg	<100	1000	20000	50000
24	phenol index	mg/kg	<1	1	-	-
25	DOC (dissolved organic carbon)	mg/kg	110	500	800	1000
26	TDS (total dissolved solids)	mg/kg	620	4000	60000	100000

Key

	User supplied data
	Not applicable
	Inert WAC criteria fail

Classification of sample: WS02/0.05/2026-02-19

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS02/0.05/2026-02-19
Sample Depth:
0.05 m

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: None

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		asbestos fibres detected (Yes/No)			ACM_FIBRES		No							
2		arsenic { arsenic acid and its salts with the exception of those specified elsewhere in this Annex }	033-005-00-1				6.2	mg/kg	1.895	11.746	mg/kg	0.00117 %		
3		boron { boric acid; [1] boric acid; [2] }	005-007-00-2	233-139-2 [1] 234-343-4 [2]	10043-35-3 [1] 11113-50-1 [2]		0.5	mg/kg	5.719	2.86	mg/kg	0.000286 %		
4		cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		0.1	mg/kg	1.855	0.185	mg/kg	0.0000185 %		
5		chromium in Cr(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		12	mg/kg	1.462	17.539	mg/kg	0.00175 %		
6		chromium in Cr(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				<1	mg/kg	2.27	<2.27	mg/kg	<0.000227 %		**<LOD**
7		copper { copper sulphate pentahydrate }	029-023-00-4	231-847-6	7758-99-8		12	mg/kg	3.929	47.149	mg/kg	0.00471 %		
8		lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	33	mg/kg	1.56	51.474	mg/kg	0.0033 %		
9		mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.12	mg/kg	1.353	0.162	mg/kg	0.0000162 %		
10		nickel { nickel dibromate }	028-053-00-5	238-596-1	14550-87-9		6	mg/kg	5.358	32.15	mg/kg	0.00321 %		
11		selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<0.5	mg/kg	2.554	<1.277	mg/kg	<0.000128 %		**<LOD**
12		zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		37	mg/kg	2.774	102.643	mg/kg	0.0103 %		
13		TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		**<LOD**
14		pH			PH		7.3	pH		7.3	pH	7.3 pH		
15		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			205-917-1	208-96-8									
17		acenaphthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			201-469-6	83-32-9									
18		fluorene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			201-695-5	86-73-7									
19		phenanthrene				0.06	mg/kg		0.06	mg/kg	0.000006 %		
			201-581-5	85-01-8									
20		anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			204-371-1	120-12-7									
21		fluoranthene				0.24	mg/kg		0.24	mg/kg	0.000024 %		
			205-912-4	206-44-0									
22		pyrene				0.23	mg/kg		0.23	mg/kg	0.000023 %		
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.1	mg/kg		0.1	mg/kg	0.00001 %		
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.1	mg/kg		0.1	mg/kg	0.00001 %		
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				0.16	mg/kg		0.16	mg/kg	0.000016 %		
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				0.06	mg/kg		0.06	mg/kg	0.000006 %		
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				0.11	mg/kg		0.11	mg/kg	0.000011 %		
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				0.06	mg/kg		0.06	mg/kg	0.000006 %		
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				0.08	mg/kg		0.08	mg/kg	0.000008 %		
			205-883-8	191-24-2									
										Total:	0.0249 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non GB MCL determinands

asbestos fibres detected (Yes/No) (CAS Number: ACM_FIBRES)

Description/Comments: not classified, information only
Data source: N/A
Data source date: 15 Jan 2020
Hazard Statements: None.

chromium(III) oxide (worst case) (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H332 , Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Resp. Sens. 1; H334 , Skin Sens. 1; H317 , Repr. 1B; H360FD , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

TPH (C6 to C40) petroleum group (CAS Number: TPH)

Description/Comments: Unknown Oil

Hazard statements taken from WM3 1st Edition 2015
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , STOT RE 2; H373 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 2; H361d , Aquatic Chronic 2; H411

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H330 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Aquatic Chronic 2; H411

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 2; H351 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Skin Irrit. 2; H315

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

indeno[123-cd]pyrene (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2; H351

benzo[ghi]perylene (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

polychlorobiphenyls; PCB (EC Number: 215-648-1, CAS Number: 1336-36-3)

GB MCL index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans;

POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Additional Hazard Statement(s): Carc. 1A; H350
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 1A; H350 hazard statement sourced from:: IARC Group 1 (23, Sup 7, 100C) 2012

Appendix B: Rationale for selection of metal species

arsenic {arsenic acid and its salts with the exception of those specified elsewhere in this Annex}

Worst case CLP species based on hazard statements/molecular weight and conversion factor for arsenic acid H3AsO4. (edit as required)

boron {boric acid; [1] boric acid; [2]}

Reasonable worst case CLP species based on hazard statements/molecular weight and assuming water is or has been present.

cadmium {cadmium sulfate}

Worst case CLP species based on hazard statements/molecular weight.

chromium in Cr(III) compounds {chromium(III) oxide (worst case)}

Reasonable case species based on hazard statements/molecular weights. Industrial sources include: tanning, pigment in paint, inks and glass

chromium in Cr(VI) compounds {chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex}

Worst case species based on hazard statements/molecular weight

copper {copper sulphate pentahydrate}

Worst case CLP species based on hazard statements/molecular weight.

lead {lead chromate}

Worst case CLP species based on hazard statements/molecular weight

mercury {mercury dichloride}

Reasonable worst case CLP species based on hazard statements/molecular weight and assuming no evidence for the use of explosives. (edit as required)

nickel {nickel dibromate}

Worst case CLP species based on hazard statements/molecular weight.

selenium {nickel selenate}

Worst case CLP species based on hazard statements/molecular weight

zinc {zinc chromate}

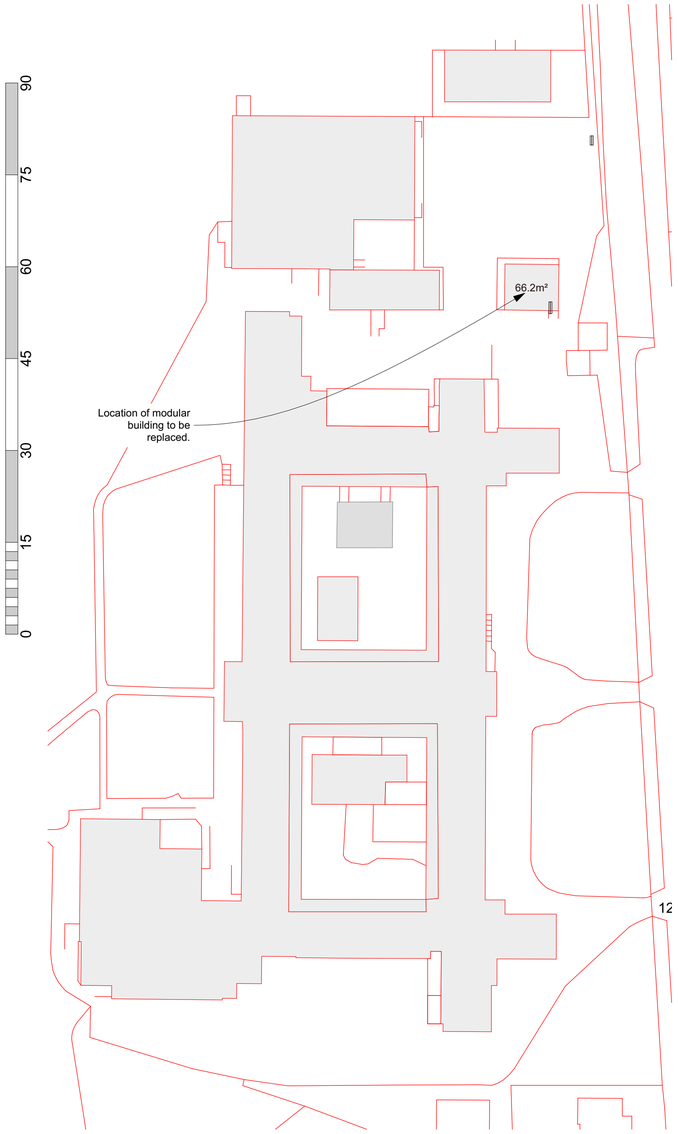
Worst case CLP species based on hazard statements/molecular weight

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.2.GB - Oct 2021
HazWasteOnline Classification Engine Version: 2026.56.7002.12617 (25 Feb 2026)
HazWasteOnline Database: 2026.56.7002.12617 (25 Feb 2026)

This classification utilises the following guidance and legislation:
WM3 v1.2.GB - Waste Classification - 1st Edition v1.2.GB - Oct 2021
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020
The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1540 of 16th December 2020
GB MCL List - version 1.1 of 09 June 2021
GB MCL List v2.0 - version 2.0 of 20th October 2023
GB MCL List v3.0 - version 3.0 of 11th January 2024
GB MCL List v4.0 - version 4.0 of 2nd March 2024
GB MCL List v5.0 - version 5.0 of 26th June 2024
GB MCL List v6.0 - version 6.0 of 15th February 2025
GB MCL List v7.0 - version 7.0 of 23rd September 2025

APPENDIX D – ARCHITECTURAL PROPOSALS



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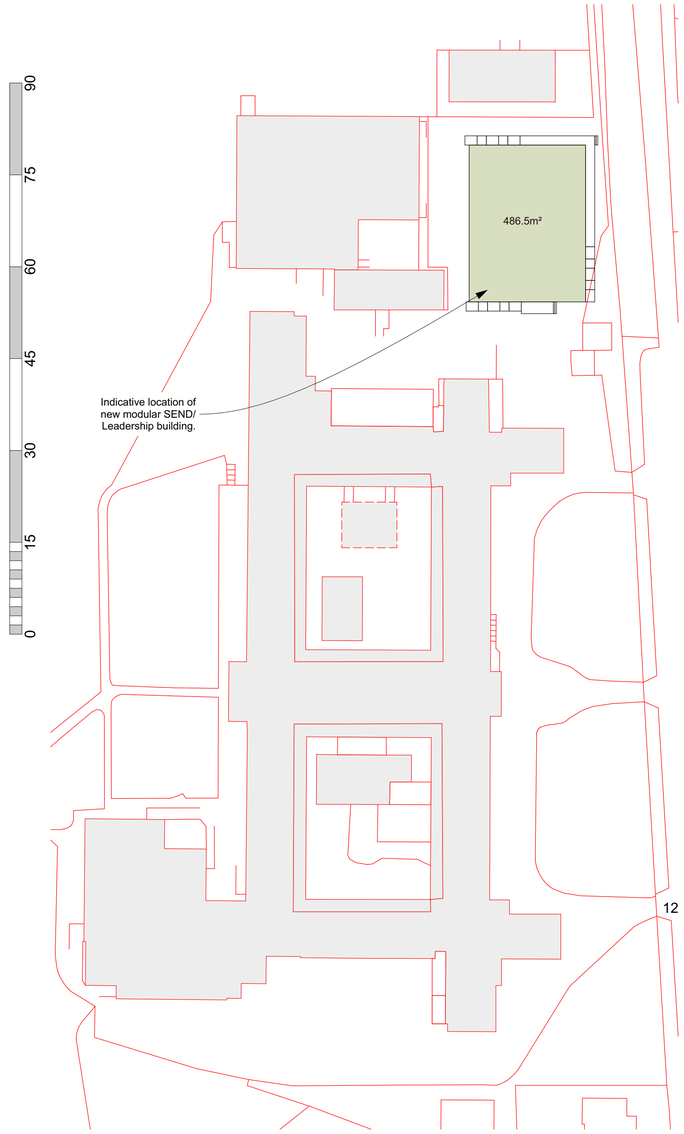

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Proposed SIte

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INDICATES - COMPULSORY INSTRUCTION
INDICATES - FOR INFORMATION
INDICATES - PROHIBITIVE INSTRUCTION

FOR INFORMATION RELATING TO END USE, MAINTENANCE, DEMOLITION ETC. - PLEASE REFER TO THE HEALTH & SAFETY FILE.

IT SHOULD BE ASSUMED THAT ALL WORKS ARE TO BE CARRIED OUT BY A COMPETENT CONTRACTOR AND, WHERE APPLICABLE, TO AN APPROVED METHOD STATEMENT.

Rev.	Amendments	Date	Drw.
B	SCHOOL COMMENTS	02.03.26	GRM
A	SCHOOL COMMENTS	26.02.26	GRM

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E: INFO@PHILIPS-SURVEYORS.CO.UK
W: WWW.PHILIPS-SURVEYORS.CO.UK
RICS

CLIENT:
Imberhorne School, Windmill Lane, East Grinstead, West Sussex. RH19 2DT

PROJECT:
Imberhorne School, Windmill Lane, East Grinstead, West Sussex. RH19 2DT

New Modular SEND/Leadership Building

DRAWING TITLE:
Feasibility

Existing & Proposed Block Plans, Existing Floor Plan

DRAWN:	JOB NO:	SCALE @ A1:
GRM	2745/26	As Shown
CHECKED: WRC	DRAWING NO: BP-01	REV: B
DATE: Feb 26		

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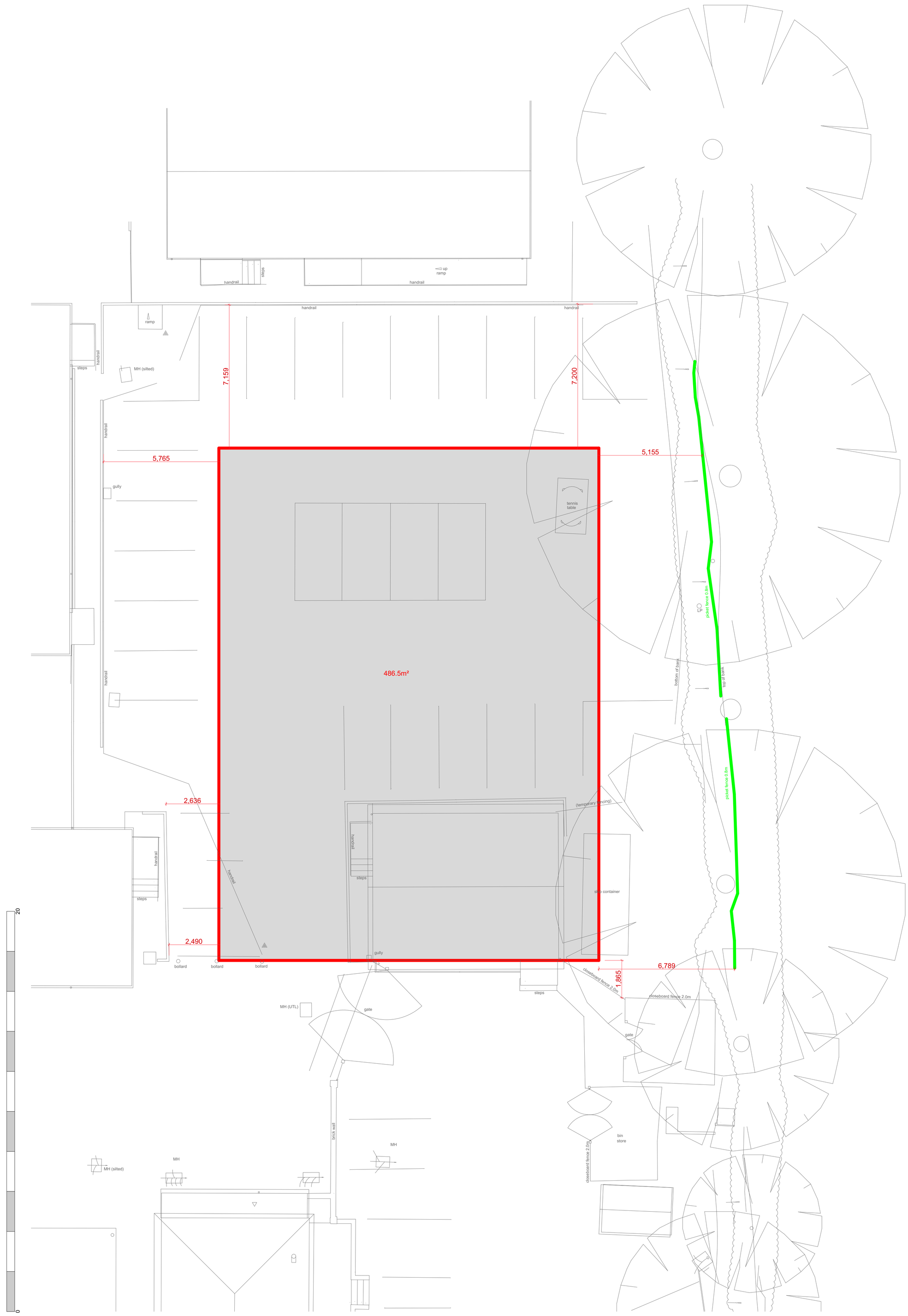

3 1:100
3 TOPO (1)

Rev.	Amendments	Date	Drw.
A	LEVEL & OMIT RAMPS	26.05.26	GRM

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W: WWW.PHILIPS-SURVEYORS.CO.UK
RICS

CLIENT:
#Client Full Name
Imberhorne School, Windmill Lane, East Grinstead, West Sussex. RH19 2DT

PROJECT:
New Modular SEND/Leadership Building
Imberhorne School, Windmill Lane, East Grinstead, West Sussex. RH19 2DT

DRAWING TITLE:
Feasibility
Site Plan

DRAWN:	JOB NO:	SCALE @ A1:
GRM	2745/26	As Shown
CHECKED: WRC	DRAWING NO: SP-01	REV: A
DATE: Feb 26		

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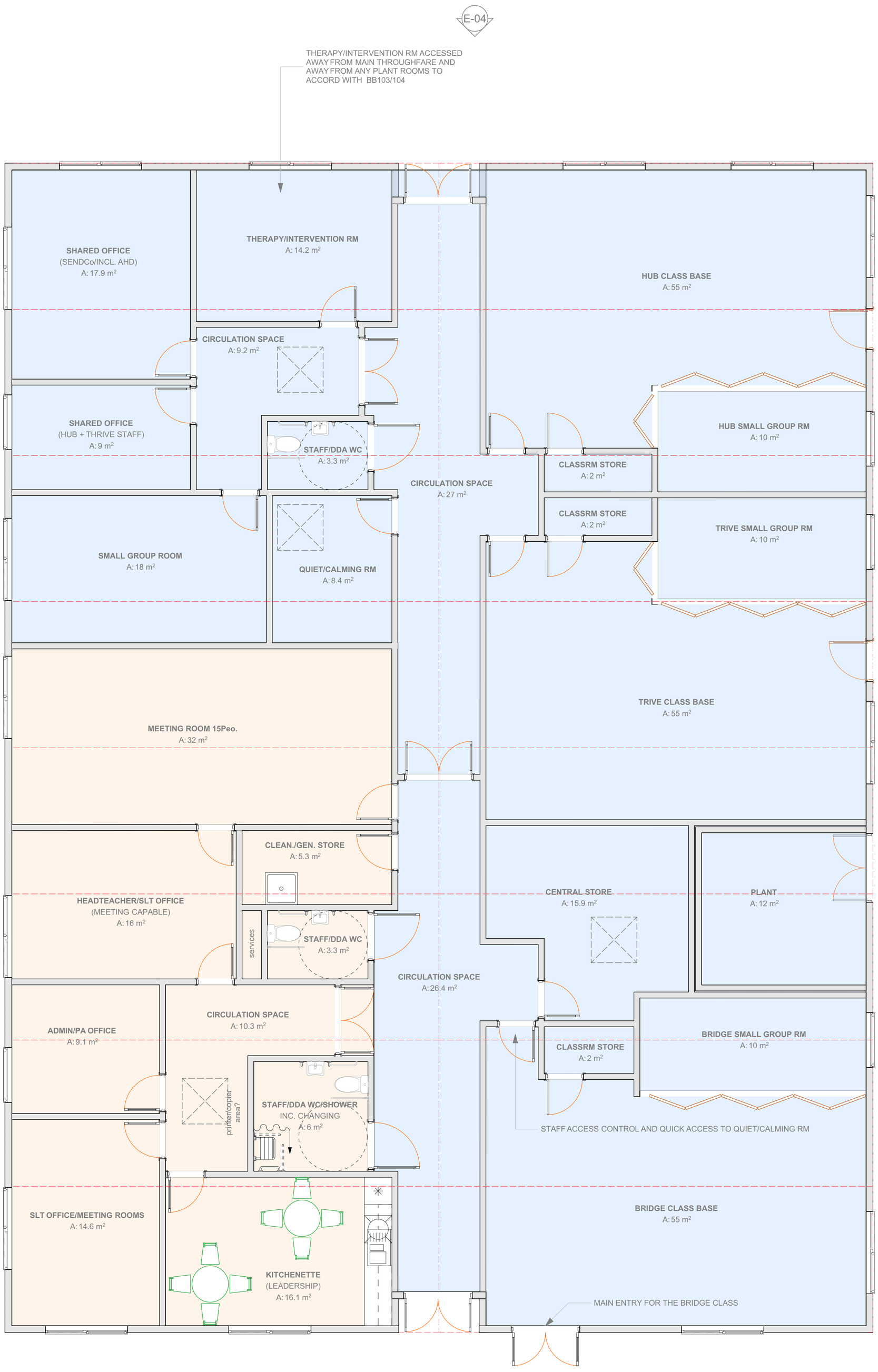

0. GF — 1:50 Ground Floor

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Rev.	Amendments	Date	Drw.
C	LEVEL & OMIT RAMPS	26.05.26	GRM
B	SCHOOL COMMENTS	02.03.26	GRM
A	SCHOOL COMMENTS	26.02.26	GRM

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RICS

CLIENT:
#Client Full Name
Imberhorne School, Windmill Lane, East Grinstead, West Sussex. RH19 2DT

PROJECT:
New Modular SEND/Leadership Building
Imberhorne School, Windmill Lane, East Grinstead, West Sussex. RH19 2DT

DRAWING TITLE:
Feasibility
Proposed Plan

DRAWN:	JOB NO:	SCALE @ A1:
GRM	2745/26	As Shown
CHECKED: WRC	DRAWING NO: FE-01	REV: C
DATE: Feb 26		

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1:50
01 Elevation

1:50
02 Elevation

1:50
03 Elevation

1:50
04 Elevation

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Rev.	Amendments	Date	Drw.
C	LEVEL & OMIT RAMPS	26.05.26	GRM
B	SCHOOL COMMENTS	02.03.26	GRM
A	SCHOOL COMMENTS	26.02.26	GRM

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RICS

CLIENT:
Imberhorne School, Windmill Lane, East Grinstead, West Sussex. RH19 2DT

PROJECT:
Imberhorne School, Windmill Lane, East Grinstead, West Sussex. RH19 2DT

New Modular SEND/Leadership Building

DRAWING TITLE:
Feasibility

Proposed Elevations

DRAWN:	JOB NO:	SCALE @ A1:
GRM	2745/26	As Shown
CHECKED: WRC	DRAWING NO: FE-02	REV: C
DATE: Feb 26		

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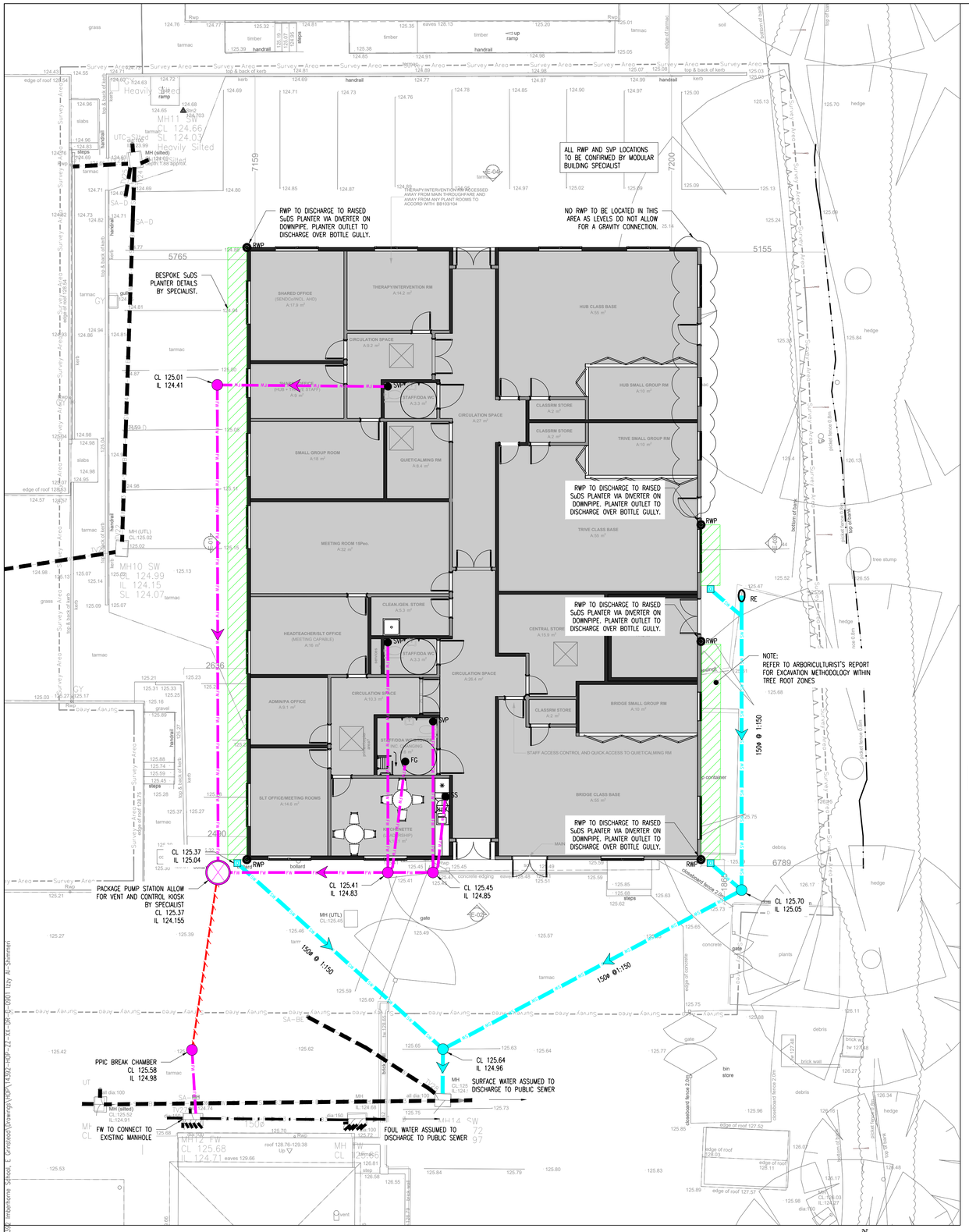
\\192.168.0.6\Company\PCS Current WRC\2. Projects\274525 Imberhorne Lower School [SEND Leadership Building]\1.0 Drawings\2745-25_FE_Imberhorne Lower School_SEND Leadership Building - RevC.pln\2745-25_FE_Imberhorne Lower School_SEND Leadership Building - RevC.pln

APPENDIX E – DRAINAGE LAYOUT DRAWING



DRAINAGE LAYOUT
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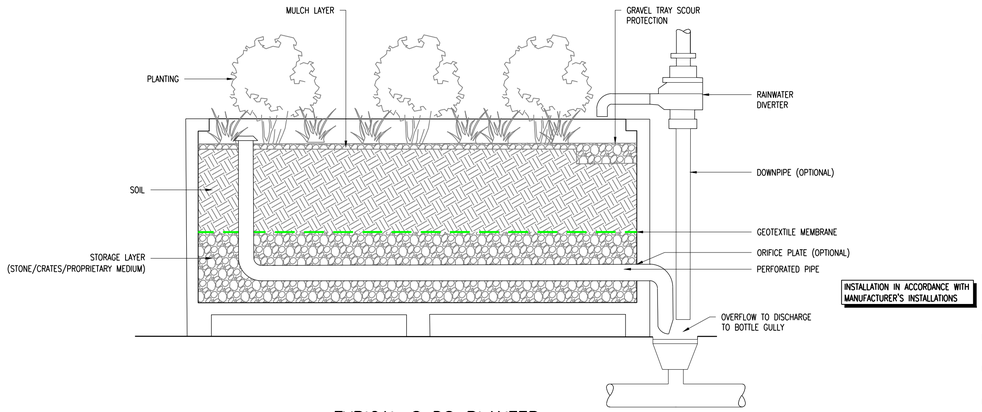
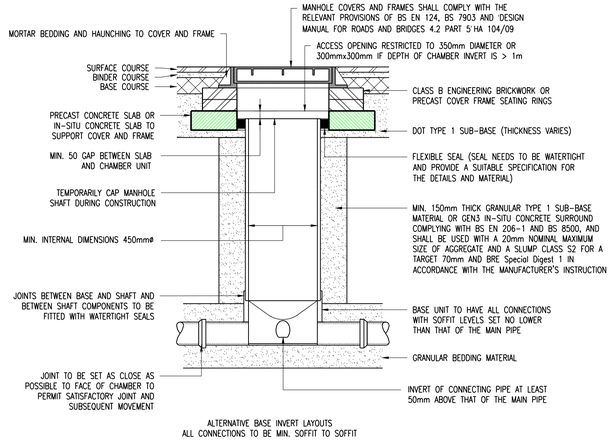
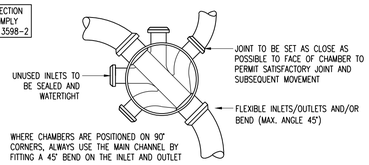


INSTALLATION IN ACCORDANCE WITH MANUFACTURER'S INSTALLATIONS

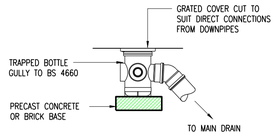
TYPICAL SuDS PLANTER ARRANGEMENT
(1:20)



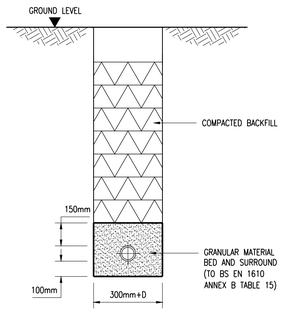
THERMOPLASTICS MANHOLES, INSPECTION CHAMBERS AND RINGS SHALL COMPLY WITH BS EN 13598-1 OR BS EN 13598-2



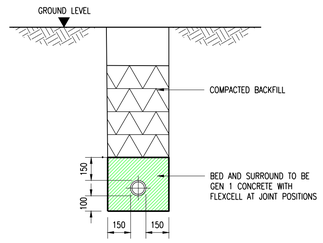
PPIC ACCESS CHAMBER – FLEXIBLE MATERIAL
(SUBJECT TO VEHICLE LOADING, MAX. DEPTH 3m, NON-ENTRY)
(1:20)



BOTTLE GULLY
(1:20)



CLASS S BEDDING
(WHERE COVER >600mm IN LANDSCAPED AREAS OR >900mm IN TRAFFICKED AREAS)
(1:20)



CLASS Z BEDDING
(WHERE COVER <600mm IN LANDSCAPED AREAS OR <900mm IN TRAFFICKED AREAS)
(1:20)

Project/Task No. 14392/03 Scale: AS SHOWN ORIGINAL DRAWING SIZE A1

1. GENERAL

(i) This drawing is not to be scaled, work to figured dimensions only, confirmed on site.

(ii) This drawing is to be read in conjunction with all relevant architectural drawings, detailed specifications where applicable and all associated drawings in this series.

(iii) Any discrepancy on this drawing is to be reported immediately to the partnership for clarification.

(iv) The contractor is responsible for all temporary works and for the stability of the works in progress.

2. DRAINAGE GENERAL

(i) All foul and storm water drains which are not to be adopted as public sewers under a section 104 Agreement must be constructed in accordance with the Building Regulations, BS EN 752 and where appropriate the relevant agreement certificates.

(ii) Manholes, gullies, gully connections, sewers and other sewerage structures intended to convey surface water are to be constructed in accordance with the Water Authorities Association Specification 'Sewers for Adoption' 7th Edition and relevant Council Design Guide.

(iii) All concrete used in drainage works to comply with BRE Digest 363 for Class 2 sulphate conditions.

3. BELOW GROUND DRAINAGE

(i) Pipework to be UPVC-U pipes to BS 4660 : 2000 and Inspection Chambers to BS 7158 : 2001.

(ii) All adoptable drainage to be constructed in accordance with 'Sewers for Adoption' 7th Edition and the relevant Council Design Guide.

(iii) All private surface water sewers to be laid at 1 in 80 unless otherwise stated on the drawing.

(iv) All private foul water sewers to be laid at 1 in 40 at the head of pipe runs and 1 in 80 elsewhere unless otherwise stated.

(v) All private foul sewer pipes to be 100mm diameter unless otherwise stated on the drawing. All private surface water sewer pipes to be 100mm diameter from downpipes and 150mm diameter elsewhere unless otherwise stated on the drawing.

(vi) Allow for rodding access above ground where rainwater downpipes do not have a direct connection to an inspection chamber.

(vii) Existing sewer pipe to be re-used to be surveyed and levelled prior to commencement of the drainage works and refurbished if necessary.

(viii) Connections to an adopted sewer only to be made following approval from the relevant adopting Authority.

(ix) All drains, sewer pipes and manholes to be cleaned and tested for water tightness on completion of construction.

4. MANHOLE COVERS & FRAMES

(i) Manhole covers to be class D400 in highways, class B125 in footways and verges, class C250 in external maintenance vehicle access areas and verges, and class A15 in non-trafficked areas.

(ii) Manhole covers and frames to be bedded and surrounded in 1:3 mortar.

5. PIPES

(i) Plastic pipes shall be of unplasticised polyvinyl chloride (UPVC) complying with the requirements of BS EN 1401-1:2009.

(ii) Concrete pipes shall be spun by a centrifugal process or be vertically pressed. They shall possess self inverting sockets and shall comply with the requirements of and be tested in accordance with BS 5911:2002.

LEGEND

FW	PROPOSED SURFACE WATER DRAIN
FW	PROPOSED FOUL WATER DRAIN
	PROPOSED RISING MAIN
	EXISTING SURFACE WATER DRAIN
	EXISTING FOUL WATER DRAIN
	PROPOSED CONCRETE MANHOLE
	PROPOSED PLASTIC INSPECTION CHAMBER (PPIC)
	HIGHWAY GULLY
	BOTTLE GULLY
SVP	SOIL AND VENT PIPE
RWP	RAIN WATER PIPE
RE	RODDING EYE

1:20
0 0.2m 0.4m 0.6m 0.8m 1.0m

Description	By	Aprvd.	Date	Rev.
ISSUED WITH DRAINAGE STRATEGY	IAS	AK	10.07.26	P1

PRELIMINARY DRAWING
NOT FOR CONSTRUCTION

Title
DRAINAGE LAYOUT AND DETAILS

Project
IMBERHORNE SCHOOL
SEND/LEADERSHIP MODULAR CLASSROOM

Client
IMBERHORNE SCHOOL

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