Cedar Mount High School

Flood Risk Assessment and Outline Drainage Strategy

Job Number	Report Date	Client
FRA261115	**16th July 2026**	**Bright Futures Educational Trust**

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Ground Investigation | Land Remediation | Project Management

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DOCUMENT QUALITY ASSURANCE

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Job Number	FRA261115
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EXECUTIVE SUMMARY

Scope and Background

This Flood Risk Assessment (FRA) and Outline Drainage Strategy has been undertaken by LKC to support a planning application for the extension development to Cedar Mount High School.

LKC has prepared this FRA in line with the NPPF and Technical Guidance where appropriate.

In considering the proposals the following key principles have therefore been applied:

- Identification of flood risks.
- Protection of users of the new development.
- No increased flood risk to third parties.

Flood Risk

The EA Flood Map for Planning indicates that the site is located within Flood Zone 1 and is therefore considered to be at a low risk of fluvial flooding. An assessment of other potential sources of flooding has also concluded that the site is at a negligible to low risk of flooding from all other sources. Notwithstanding, it is recommended that finished floor levels are raised a minimum of 0.15m above surrounding ground levels to further reduce the potential for the ingress of water. Where level access is required, external ground levels should be graded to slope away from building entrances.

Drainage Strategy

There will be no increase in hardstanding as a result of the proposed development and thus no increase in surface water runoff. The site will continue to drain as per the existing situation via existing drainage infrastructure.

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1. Introduction

1.1 Background

LK Consult Ltd (LKC) were commissioned by Bright Futures Educational Trust to carry out a Flood Risk Assessment (FRA) and Sustainable Drainage Strategy (SuDS) for Cedar Mount High School. The report has been undertaken in support of a planning application for the proposed extension to the existing dining area.

The report will address the vulnerability to flooding from all possible sources and will also consider the impact of the development on surface water runoff accounting for climate change and the potential to increase flood risk elsewhere. The Drainage Assessment in Section 6 will provide an overview of the drainage strategy for the site. The issues of actual flood risk are discussed in Section 4.

Government policy with respect to development in flood risk areas is contained within the Ministry of Housing Communities and Local Government National Planning Policy Framework[i] (NPPF) and accompanying Planning Practice Guidance[ii] (PPG). The guidance on climate change allowances issued by the Environment Agency has also been considered.

LKC has prepared this FRA in line with the NPPF and the PPG where appropriate. The level of detail entered into any flood risk assessment is dependent upon the scale and potential impact of the proposed development, and the vulnerability classification of the proposed land-use

1.2 Site Details

A summary of the general site details is presented in Table 1-1. Figure 1 indicates the site location and boundary.

Location	Within Gorton Education Village, South-west of Wembley Road, Gorton, South-east Manchester, M18 7DT Centred at National Grid Reference 388470E, 394810N.
Area	The development area (hereafter referred to as 'the site') is approximately 0.02ha in size.
Current Site Use	Current Site Use The site comprises an outdoor communal courtyard within the Cedar Mount Academy Grounds with covered shelter-like structure located immediately west of the existing school dining area. Existing site plans are included as Appendix A. Access to the site is provided internally via the existing school building with additional access provided via the wider courtyard. Vehicular access to the wider school site is provided via Wembley Road/Rawsthorne Avenue to the northeast. Surrounding areas The site is located within the wider school setting and is bound immediately to the north and east by existing school buildings. The site is bound to the west by the wider courtyard with sports pitches beyond. The site is bound to the south by an area of soft landscaping.
Proposed Development	The proposed development comprises an extension to existing dining facilities to provide additional dining capacity and kitchen space. The site will continue to be access via the existing school building and adjacent courtyard. The site access will remain as per the existing situation. Proposed development plans are included as Appendix A.

Table 1-1: Summary of site details.

2. Site Setting

2.1 Vulnerability

As an initial phase in identifying whether a site is potentially at risk of flooding, LKC has consulted the EA's Flood Map for Planning. This mapping is based on a combination of local flood model outputs, recorded flood outlines and national flood model information to identify areas that are at risk of fluvial and/or tidal flooding for strategic planning purposes.

The Flood Zones divide the floodplain into three categories of flood risk, and do not take flood defences into account. The PPG (Table 1: Flood Zones, Paragraph 78) defines the Flood Zones as:

- Flood Zone 1 – Very Low Risk, with annual probability of flooding from rivers and the sea of less than 0.1% (1 in 1000).
- Flood Zone 2 – Low Risk, with annual probability of flooding of 0.1 to 1.0% from rivers and 0.1 to 0.5% from the sea.
- Flood Zone 3 – Medium to High risk of flooding with an annual probability of flooding of 1.0% or greater from rivers, and 0.5% or greater from the sea.

A review of the EA Flood Map for Planning indicates the site is located within Flood Zone 1.

In addition to the above, LKC has undertaken a review of the EA Risk of Flooding from Surface Water dataset. This dataset provides an overview of where surface water flooding may occur and is derived from national scale modelling using local topography, rainfall patterns and historical data. The mapping categorises the 'chance' of surface water flooding as per the below:

- High – more than a 3.3% chance of a flood each year;
- Medium – between 1% and 3.3% chance of a flood each year;
- Low – between 0.1% and 1% chance of a flood each year;
- Very Low – Less than 0.1% chance of a flood each year.

A review of the EA Risk of Surface Water Flooding map indicates the site has a very low chance of surface water flooding during the present day and future climate change scenarios. Areas of low chance surface water flooding are shown to occur immediately north and east of the site during the present day and future climate change scenarios. Corresponding depth mapping indicates this flooding is relatively shallow at less than 75mm.

Based on the nature of the proposed scheme, the development will be classified as 'More Vulnerable' development in accordance with Annex 3 of the NPPF.

2.2 The Sequential and Exception Tests

The Sequential Test aims to steer new development to areas at the lowest risk of flooding from all sources taking into account the impacts of climate change. The NPPF identifies that the Sequential Test should be applied to 'Major' and 'Non Major' development proposed in areas at risk of flooding with paragraphs 175 and 176 setting out exemptions from the Test.

Paragraph 175 of the NPPF states that the Sequential Test should be used in areas known to be at risk now or in the future from any form of flooding, except in situations where a site specific flood risk assessment demonstrates that no built development within the site boundary, including access or escape routes, land raising or other potentially vulnerable elements, would be located on an area that would be located in an area that would be at risk of flooding from any source; both now and in the future.

Paragraph 27 of the updated Flood Risk and Coastal Change Planning Practice Guidance (published on 17th September 202)5 states "*in applying paragraph 175 a proportionate approach should be taken. Where a site specific flood risk assessment demonstrates clearly that the proposed layout, design and mitigation measures would ensure that occupiers and users would remain safe from current and future*

surface water flood risk for the lifetime of the development (therefore addressing the risks identified e.g. by Environment Agency flood risk mapping), without increasing flood risk elsewhere, then the Sequential Test need not be applied."

This FRA has demonstrated that the site is located within Flood Zone 1 and is at a negligible to low flood risk from all other sources therefore application of the Sequential Test is not considered to be required. Moreover, the proposed development comprises an extension to the existing school building and thus cannot be reasonably sequentially located elsewhere.

In line with Table 2 of the PPG, More Vulnerable development is considered to be appropriate within Flood Zone 1 without the requirement to apply the Exception Test.

2.3 Environmental Setting

LKC have previously undertaken a Preliminary Risk Assessment for the site[iii] (LKC261292-A1-PRA-Cedar Mount Academy R0, May 2026) and pertinent environmental information for the site is summarised in Table 2-1 below.

Summary of the Environmental Setting			
Geology	Superficial		Till, Devensian
	Bedrock		Chester Formation (sandstone).
	BGS Boreholes		BH Ref: SJ89SE168, 100m southeast of the development area: Filled ground to 1m below ground level (bgl), grey silty clay to 4m bgl, loose peat to 10m bgl, stiff brown boulder clay (silty) to 27m bgl, sand and gravel to 37m bgl, bunter sandstone to 73m bgl. Water was encountered at 25.68m bgl, with a rest water level of 26m bgl.
	Defra Soilscape Mapping		Type 17 – Slowly permeable seasonally wet acid loamy and clayey soils
Hydrogeology	Aquifer Designation	Superficial	Secondary Undifferentiated Aquifer.
		Bedrock	Principal Aquifer.
	Source Protection Zone (SPZ)		Site not within an SPZ.
Hydrology	All adjacent and internal surface water		A review of Ordnance Survey (OS) mapping indicates the following watercourses within the vicinity of the site: • Nico Ditch is located c.120m north of the site at the closest point. • The Secret Lake is located c.250m southeast of the site.

Table 2-1: Summary of the Environmental Setting.

2.4 Site Topography

A Topographical and Utility Survey of the site was undertaken by ACAD Designs & Surveys (drawing no: AC30992/02) and is included as Appendix B. The Topographic Survey indicates ground levels fall in a generally south westerly direction from a level of approximately 64.54m Above Ordnance Datum (m AOD) in the northeastern corner to a level of 63.95m AOD in the southwestern area.

2.5 Existing Site Drainage

The Topographical and Utility Survey indicates the site benefits from existing private drainage infrastructure which is described below:

- Two 150mm diameter surface water sewers are shown to extend from the northeastern corner of the site, draining into a 300mm diameter surface water sewer that flows in a westerly direction. The manhole at this point indicates a cover level of 64.35m AOD and an invert level of 62.23m AOD with a depth of 2.12m.
- A surface water manhole is indicated to the southwest of the site. This is indicated to have a cover level of 63.98m AOD and invert level of 62.42m AOD with a depth of 1.56m. This is shown as an assumed route of drainage and intersects with the 300mm diameter surface water sewer to at the northern area of the development area. The manhole at this location is shown to have a cover level of 63.98m AOD and an invert level of 62.09m AOD with a depth of 1.89m. The assumed route of drainage is indicated to continue to the north.
- A 150mm diameter foul sewer is shown in the northeastern corner of the site. The manhole at this location is shown to have a cover level of 64.32m AOD and an invert level of 63.63m AOD with a depth of 0.69m. The sewer is shown to flow in a westerly direction before

turning northwards. The foul manhole located to the west of the site is shown to have a cover level of 64.24m AOD and invert level of 63.37m AOD with a depth of 0.87m.

3. Consultation

Source	Details	
Environment Agency (EA)	The Flood Map for Planning indicates the site is located within Flood Zone 1.	
	Records of Flooding	The site is not shown to have been impacted by any historic, recorded flood events.
	Records of Flood Warning Service	The site is not shown to be located within a flood warning or flood alert area.
	Surface Water Flooding	The EA Risk of Flooding from Surface Water dataset indicates the site has a very low chance of surface water flooding during the present day and 2050s climate change scenario as shown in Figure 2. Areas of low to high chance surface water flooding are shown to occur immediately north and east of the site during present day and the future climate change scenarios.
	Flooding from reservoirs	A review of the EA Long Term Reservoir Flood map indicates the site is located within an area that is not shown to be impacted by flooding in the event of reservoir failure.
United Utilities (UU)	Sewer Records	Consultation has been undertaken with UU to obtain sewer records for the site area. The plans, included as Appendix C, indicate the following sewers: • A 225mm diameter public surface water sewer beneath Bratton Drive, c. 110m to the west of the site. The sewer is shown to flow in a northerly direction before continuing west. Node: 3703 is shown to have a cover level of 64.12m AOD and an invert level of 62.69m AOD with a depth of 1.43m. • A further 225mm diameter public surface water sewer beneath Bratton Drive c. 112m to the west of the site. The sewer is shown to flow in a westerly direction before continuing north beneath Barret Avenue. Node 3701 is shown to have a cover level of 64.20m AOD and an invert level of 62.57m AOD with a depth of 1.63m. • A 150mm diameter public foul sewer located beneath Bratton Drive, c. 112m to the west of the site. The sewer is shown to flow in a northerly direction before continuing west. Node 3806 is shown to have a cover level of 63.69m AOD and an invert level of 61.95m AOD with a depth of 1.74m. • A 300mm diameter public combined sewer is shown to be located beneath Wembley Road c.120m northeast of the site. The sewer is shown to flow in a northerly direction. Node 5901 is shown to have a cover level of 64.05m AOD and an invert level of 62.26m AOD with a depth of 1.79m.
Greater Manchester Level 1 Strategic Flood Risk Assessment Update (SFRA) [iv]	The 2019 SFRA includes information about sewer flooding within the region, however, this information is presented at a broad, strategic scale and is spatially removed from the site. As a result, the mapping is too coarse and generalised to provide meaningful insight into localised flood risk.	

Table 3-1: Summary consultee information.

4. Assessment of Flood Risk

4.1 Sources of Flooding

Fluvial Flooding

The Flood Zone mapping indicates the site to be Flood Zone 1 during both the present day and future climate change scenario. Therefore, the flood risk associated with this source is considered low.

Tidal Flooding

The site is remote from tidally influenced watercourses therefore the overall risk of tidal flooding is considered negligible.

Surface Water (Pluvial) Flooding

According to the EA's Risk of Flooding from Surface Water (RoFSW) dataset (included as Figure 2), the site is shown to have a very low chance of surface water flooding during the present day and future climate change scenarios. Areas of low chance surface water flooding are shown to occur immediately north and east of the site during the future climate change scenarios; however, these areas correlate to the existing school building. The EA mapping "infills" building footprints where a proportion of the external walls and property area are shown to be "wet" in the event of surface water flooding. As such, the extent of surface water flooding immediately adjacent to the site is likely to represent a potential overestimation of the potential extent of flooding.

However, the EA mapping infills building footprints based on the proportion of external walls and property area considered to be affected by flooding. As such, this represents a potential overestimation of the extent impacted by surface water flooding.

There will be no increase in hardstanding as a result of the proposed development which will be constructed upon an area of existing hardstanding. Notwithstanding, surface water runoff generated by the proposed development will be restricted to a rate of 1.0l/s during all events up to and including the 1 in 100 year plus climate change event which will provide betterment over the current brownfield rates.

Based on the above, the overall risk of surface water flooding is considered to be low.

Groundwater Flooding

According to the BGS borehole database, the nearest available borehole record mapped within the same geological strata as the site is located approximately 10m southeast (±10m) of the site (borehole ref: SJ89SE168). The borehole record indicates made ground to 1.00m bgl and clay to 4.00m bgl groundwater was struck at 25.68m bgl.

The depth of the groundwater is likely to reduce the possibility of ground water emergence within the site. The borehole appears to have been excavated in February 1992 and thus during the winter period when groundwater levels are typically at their highest.

Additionally, given much of the site area (existing and proposed) comprises hardstanding, the potential for groundwater emergence at the surface via permeable pathways would be significantly constrained.

Based on the above, the overall risk of groundwater flooding to the development is considered low.

Flooding from Sewers

Sewer records obtained from UU, summarised in Table 3-1 indicates the presence of public sewers which are located c.100m west of the site. Based on the relative distance to the site and given sewers are located at a lower elevation, it is unlikely that the site would be impacted in the event of sewer flooding.

Section 2.5 indicates the location of on site foul and surface water drainage infrastructure. These have depths ranging from 0.69m to 2.12m. The relative shallow depth of the sewer indicates a greater

likelihood of surcharge and impact to the site. Nonetheless, sewer flooding would be anticipated to be relatively shallow and of short duration given the limited extent of the upstream network. Therefore, the overall risk of sewer flooding is considered to be low.

Flooding from Artificial Sources

The EA Long Term Flood Maps indicate the site is located within an area that is not at risk of flooding in the event of reservoir failure.

There are no canals within the vicinity of the site, therefore the overall risk associated with canal flooding is considered to be low.

Based on the above the overall risk of flooding from artificial sources is considered to be low.

4.2 Summary of Flood Risk

A summary of the risk of flooding from all sources is provided in Table 4-1.

Source of Flooding	Risk Assessment Level
Fluvial	Low
Tidal	Negligible
Surface Water	Low
Groundwater	Low
Sewers	Low
Artificial Sources	Low

Table 4-1: Summary of Existing Risk Level.

5. Mitigation Measures

5.1 Proposed Site Levels and Development Level

The proposed development comprises the extension of an existing dining hall to increase dining capacity and provide additional kitchen space. In accordance with Table 2 of the Planning Practice Guidance (PPG) to the National Planning Policy Framework (NPPF), the development is classified as 'More Vulnerable' to flooding.

The Environment Agency Flood Map for Planning indicates that the site is located within Flood Zone 1. An assessment of other potential sources of flooding has also concluded that the site is at a negligible to low risk of flooding from all other sources. Notwithstanding, it is recommended that finished floor levels are raised a minimum of 0.15m above surrounding ground levels to further reduce the potential for the ingress of water. Where level access is required, external ground levels should be graded to slope away from building entrances.

5.2 Safe Access and Egress

Wembley Road provides access onto Holmcroft Road to the northeast of the site. Both roads are shown to be located within Flood Zone 1.

The junction of Holmcroft Road and Wembley Road are shown to be low to high chance of surface water flooding during both the present day and climate change scenario. However, surface water flooding would be anticipated to be relatively shallow (up to 0.3m in depth) and of short duration therefore access and egress would only be temporarily impeded. In the event that access and egress is impeded, safe refuge would be available onsite.

6. Drainage Assessment

The National Planning Policy Framework (NPPF) recognises that flood risk and other environmental damage can be managed by minimising changes in the volume and rate of surface run-off from development sites.

6.1 Existing Surface Water Drainage

As noted in Section 2.5, the existing site is positively drained by existing surface water drainage infrastructure comprising:

- Two 150mm diameter surface water sewers are shown to extend from the northeastern corner of the site, draining into a 300mm diameter surface water sewer that flows in a westerly direction. The manhole at this point indicates a cover level of 64.35m AOD and an invert level of 62.23m AOD with a depth of 2.12m.
- A surface water manhole is indicated to the southwest of the site. This is indicated to have a cover level of 63.98m AOD and invert level of 62.42m AOD with a depth of 1.56m. This is shown as an assumed route of drainage and intersects with the 300mm diameter surface water sewer to at the northern area of the development area. The manhole at this location is shown to have a cover level of 63.98m AOD and an invert level of 62.09m AOD with a depth of 1.89m. The assumed route of drainage is indicated to continue to the north.
- A 150mm diameter foul sewer is shown in the northeastern corner of the site. The manhole at this location is shown to have a cover level of 64.32m AOD and an invert level of 63.63m AOD with a depth of 0.69m. The sewer is shown to flow in a westerly direction before turning northwards. The foul manhole located to the west of the site is shown to have a cover level of 64.24m AOD and invert level of 63.37m AOD with a depth of 0.87m.

6.2 Surface Water Drainage

The proposed development comprises the construction of an extension to the existing school dining facilities. The extension will be constructed on an area that is already entirely formed by hardstanding surfaces and will remain hardstanding post development. Whilst the changes may result in some minor re-routing of existing drainage, the reality is there will no increase in hardstanding surfaces draining into the existing drainage network and as such discharge rates will remain as per those existing at the site in its current form.

It is considered that the removal of existing drainage and installation of a new drainage system and attenuation features is not sustainable or proportionate to the development at the site as it would require significant civil engineering work to install such features in in a site that is already hardstanding and positively drained.

7. Conclusions

The proposed development is an extension development to Cedar Mount High School to provide additional capacity.

The EA Flood Map for Planning indicates that the site is located within Flood Zone 1 and is therefore considered to be at a low risk of fluvial flooding. An assessment of other potential sources of flooding has also concluded that the site is at a negligible to low risk of flooding from all other sources. Notwithstanding, it is recommended that finished floor levels are raised a minimum of 0.15m above surrounding ground levels to further reduce the potential for the ingress of water. Where level access is required, external ground levels should be graded to slope away from building entrances.

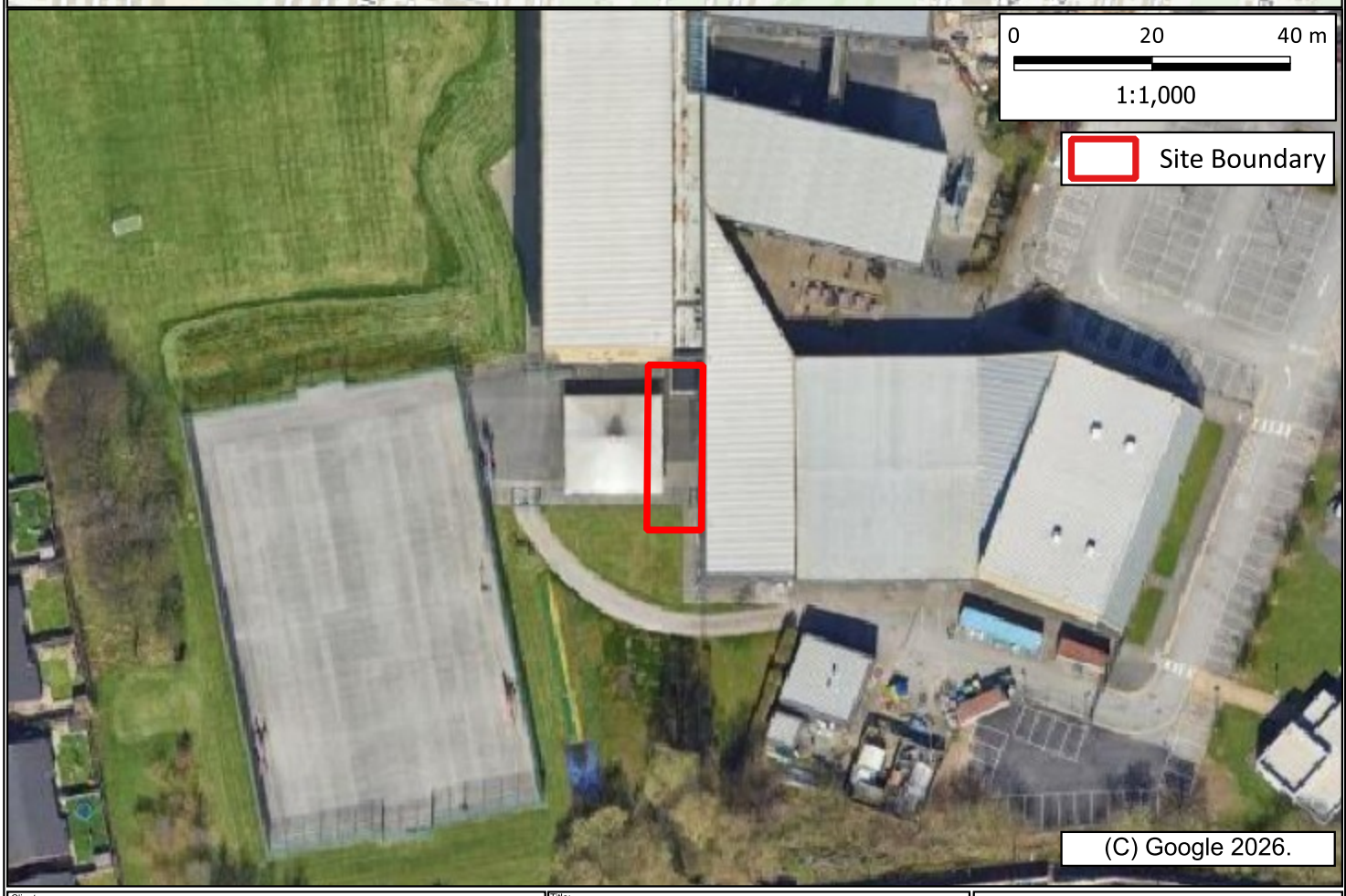
Based on the nature of the proposed development and given the risk of flooding from all sources, application of the Sequential Test is not considered to be required.

There will be no increase in hardstanding as a result of the proposed development and thus no increase in surface water runoff. The site will continue to drain as per the existing situation via existing drainage infrastructure.

Figures

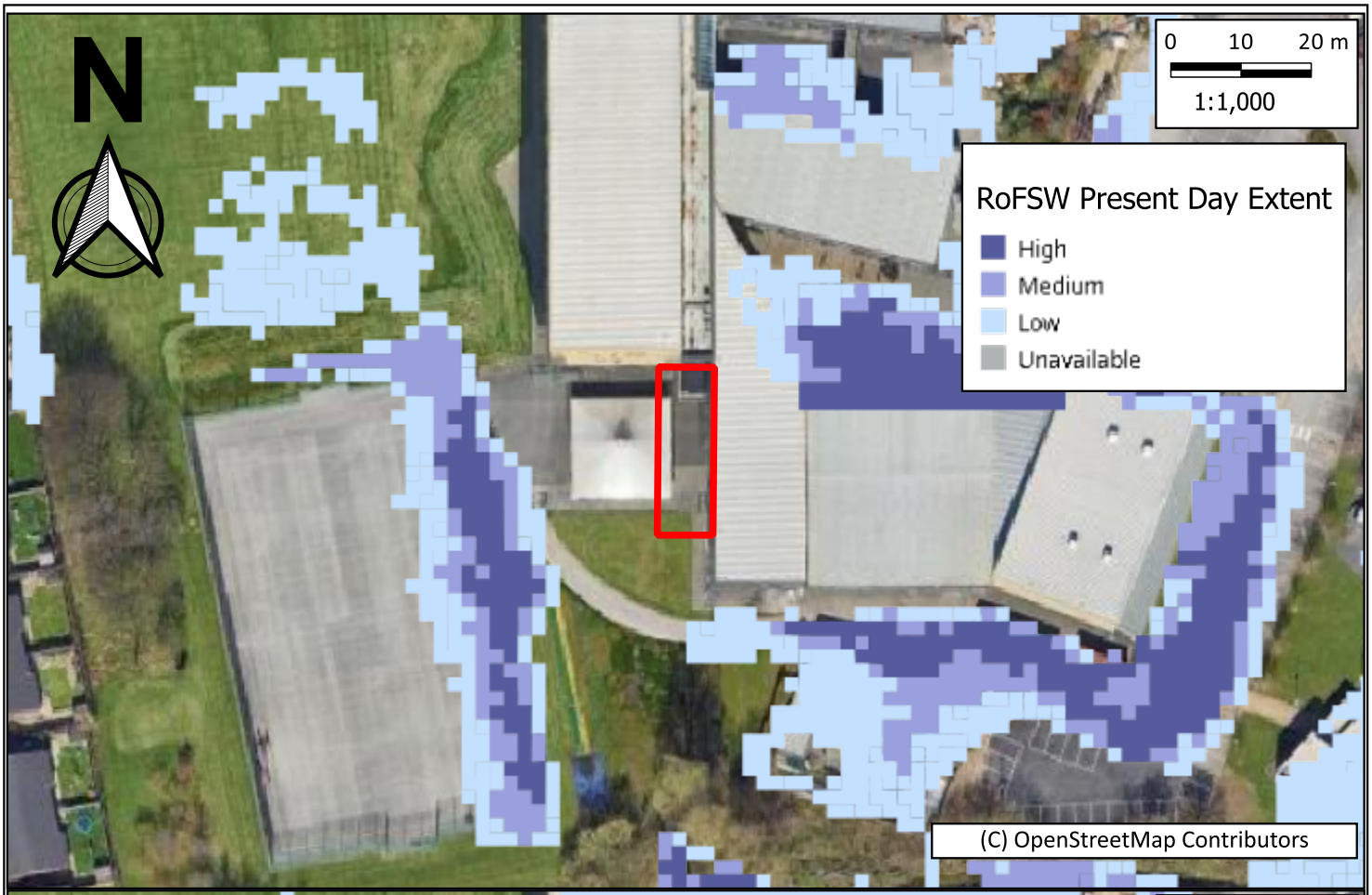
Figure 1 – Site Location and Boundary Plan

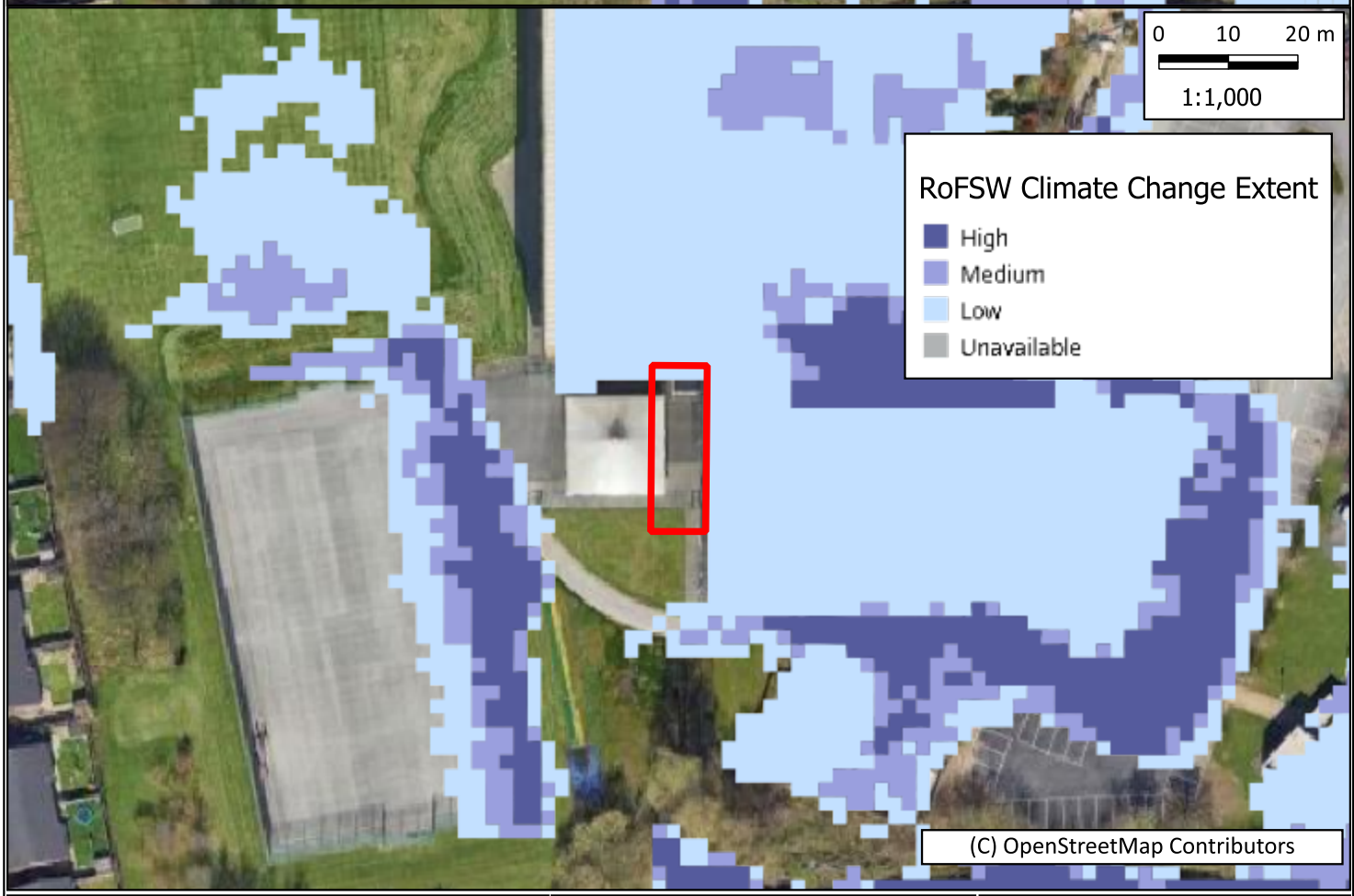




Client: Bright Futures Educational Trust				Title: Site Location & Boundary Plan	LK GROUP
Site: Cedar Mount High School				Scale (see scale bar): 1:10,000 & 1:1000 @A4	Figure: 1
Job No.: FRA261115	Drawn By: AY	Checked By: DP	Drawn: June 2026		Revision: 0

Figure 2 – Surface Water Flood Extent

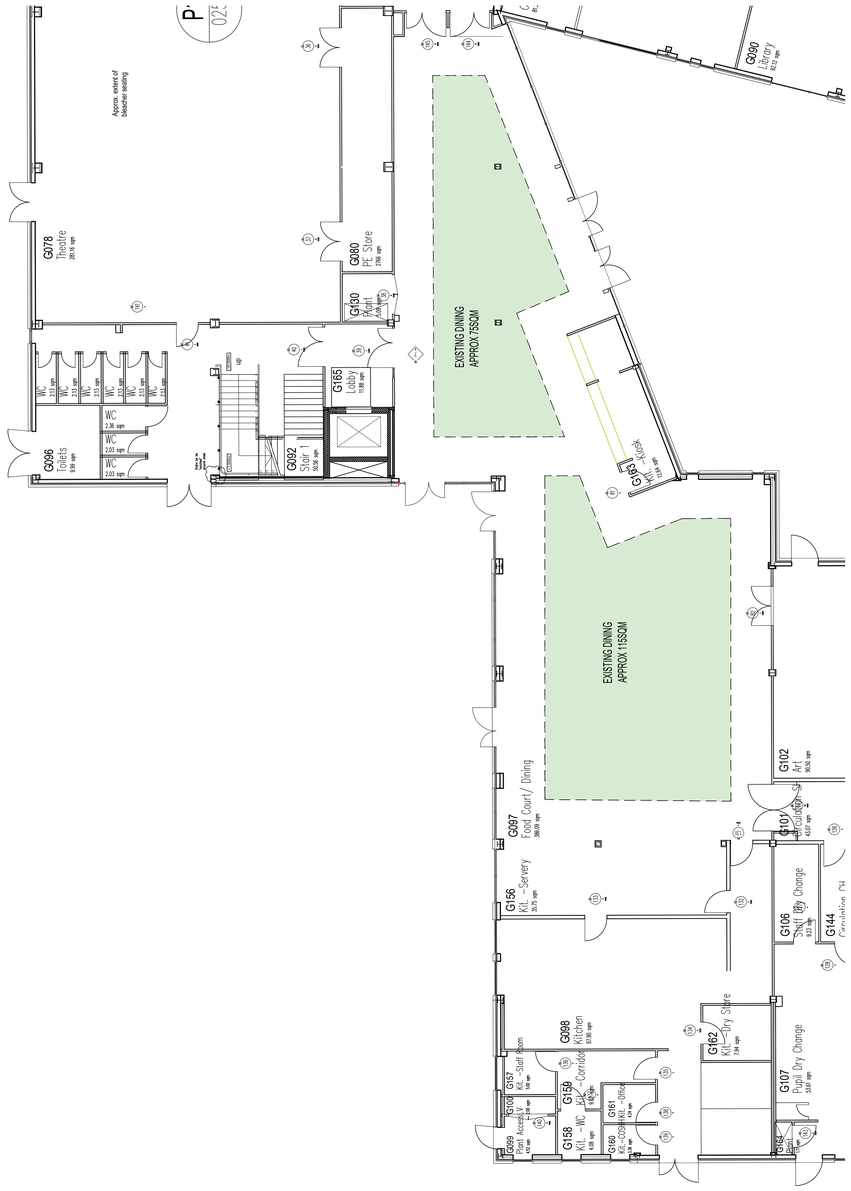




Client: Bright Futures Educational Trust				Title: Risk of Flooding from Surface Water Extents	LK GROUP
Site: Cedar Mount High School				Scale (see scale bar): 1:1000 @ A4	Figure: 2
Job No.: FRA261115	Drawn By: AF	Checked By: DP	Drawn: Feb 2026		Revision:

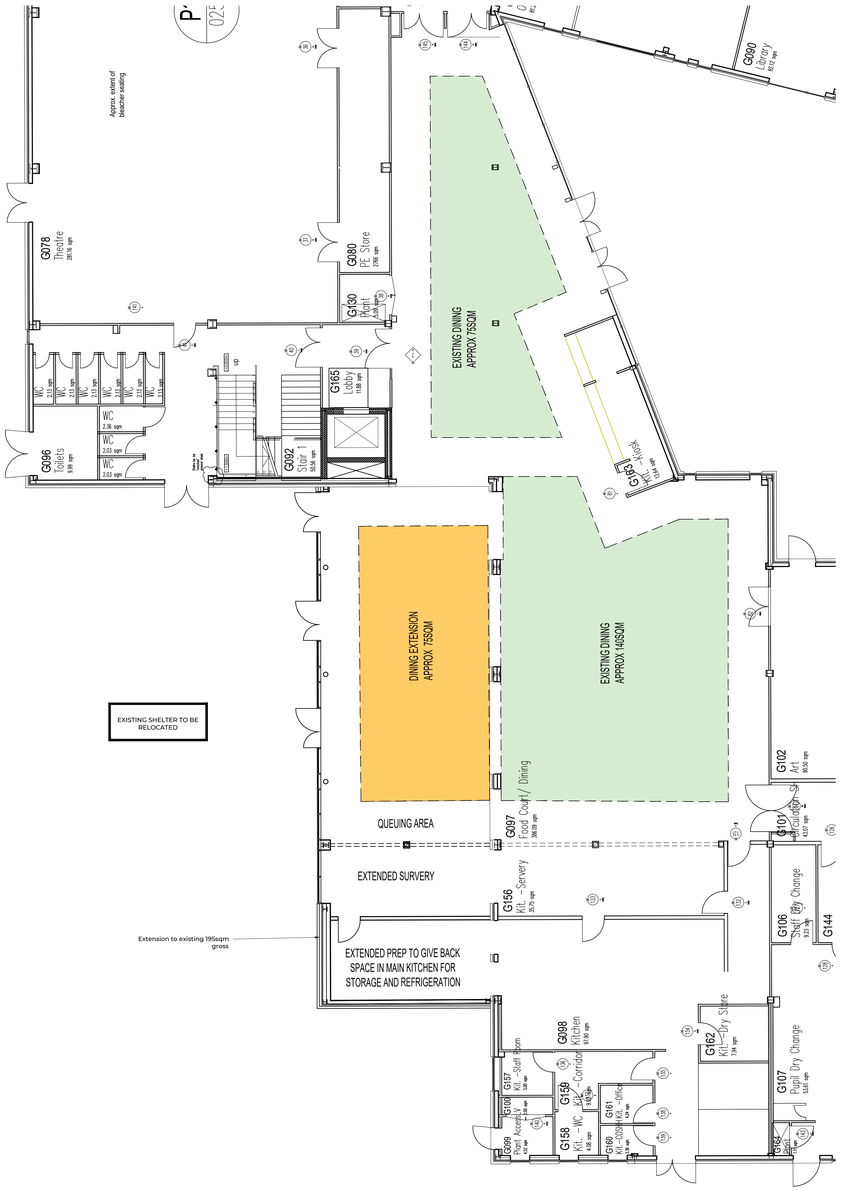
Appendices

Appendix A – Site Information



Existing Dining Plan

Scale 1:100@A0



Proposed Dining Plan

Scale 1:100@A0

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All drawings are to be read in conjunction with all accompanying information. All dimensions must be checked and verified on site before commencing any work or producing drawings.

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Rev	Description	Dr By	Ap By	Date
A	Extension increased to include additional kitchen space	RB	AMcG	24.10.2025

CLIENT NAME
Bright Futures Educational Trust

CONTRACT/PROJECT NAME
GEV
Dining Room Extension

DRAWING TITLE
Existing and Proposed Plans

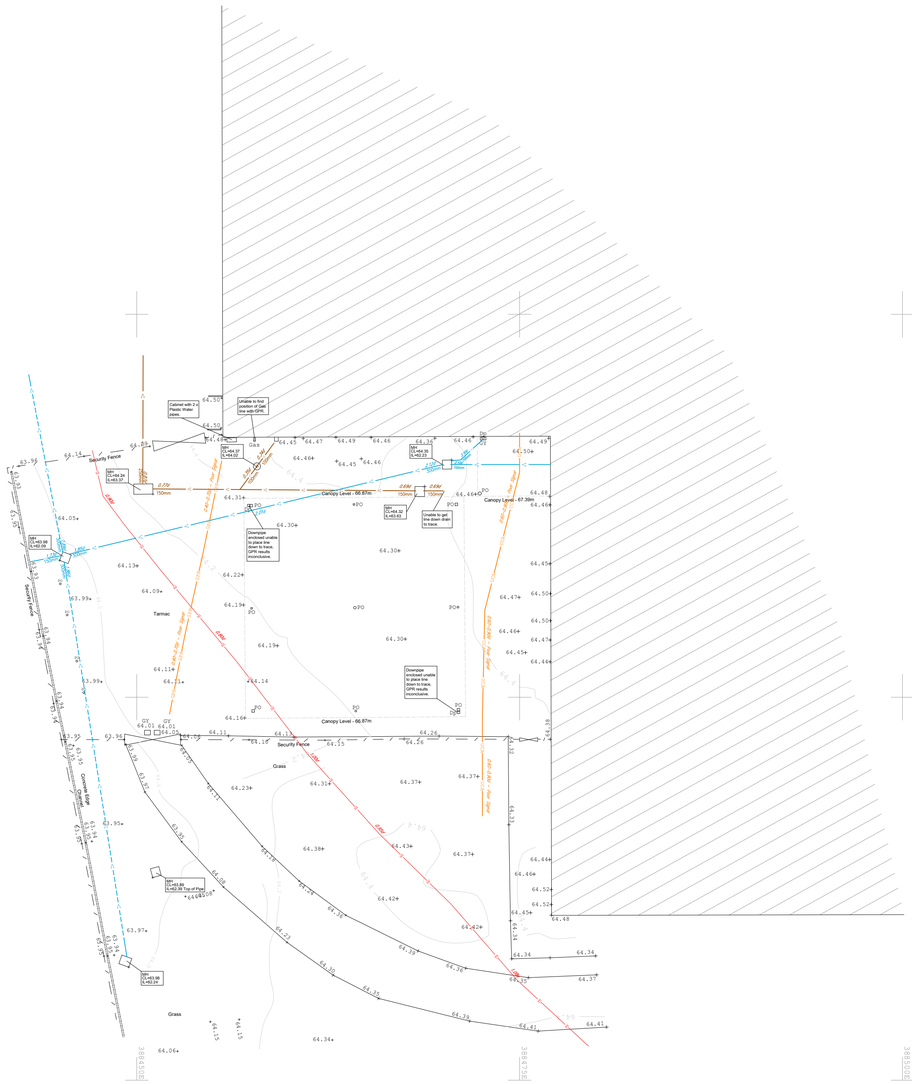
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DRAWING NUMBER	**REVISION**
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ISSUE STATUS	**APPROVED BY**
Comment	AMcG

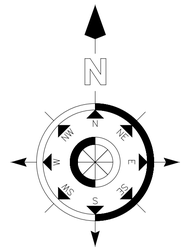
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0 0.5 1m 2m 5m

1:100

Appendix B – Topographic and Utilities Survey





LEGEND

0.50d	Depth below surface in metres	Fibre Optic Cable	FO FO FO	Unknown Cable	U U U	Combined Water Drainage	CW CW CW
500mm	Diameter of Pipe	Fuel Line	F F F	Water	W W W	Foul Water Drainage	FW FW FW
	Air Line	Gas	G G G	Band of Cables (Colour denotes type)		Surface Water Drainage	SW SW SW
	BT Cable	Heating Pipe	H H H			Drainage with Backdrop	
	CCTV Cable	HV Electric Cable	HV HV HV	Assumed Band of Cables (Colour denotes type)		Rising Main	RM RM RM
	Chamber Extents	Kingston Communications	K K K			Assumed Route of Drainage	
	Comms Cable	Oil	O O O	Empty Service Duct	D D D	Overhead Electric Wires	
	CATV Cable	Street Lighting	CTV CTV CTV	Ground Penetrating Radar Detection	GPR GPR GPR	Overhead Telecom Lines	
	Data Cable	Telecoms Cable	T T T	Assumed Route of Service			
	Earth Strap/Tape (With Spike)	Traffic Control Cable	TC TC TC	Assumed Route of Service (Records)			
	Electricity Cable	Unknown Trace	? ? ?	Cable Riser (Colour denotes type)			

KEY

AV	Air Valve	DoB	Depth of Bottom	(BT) IC	Inspection Cover (Initials indicate service)	PZ	Piezometer	TP	Telecoms Pole
BB	Belisha Beacon	DoC	Depth of Cover	KO	Kerb Outlet	RE	Rodding Eye	UC	Unknown Cover
BD	Backdrop	DP	Down Pipe	LO	Lamp Hole	RS(IL)	Road Sign (Illuminated)	UDI	Unreliable Depth Information
BGY	Back Inlet Gully	DT	Depth of Trace	LoS	Lamp Post Signal	RWP	Rain Water Pipe	UPVC	Unplasticised Polyvinyl Chloride
BH	Borehole	ED	Empty Duct	LP	Lone Post	S	Socket	UTR	Unable To Raise
BO(IL)	Bol (Illuminated)	EoT	End of Trace	MDPE	Middle Density Polyethylene	SP(IL)	Sign Post (Illuminated)	VC	Vitrified Clay
BS	Bus Stop	EP	Electricity Pole	MH	Manhole	SPCam	Speed Camera	VP	Vent Pipe
(E)Cab	Cabinet (Initials indicate service)	ER	Earth Rod	Mkr	Marker	ST	Stop Tap	WB	Waste Bin
CL=	Cover Level	FFL=	Finished Floor Level	MP	Marker Post	SV	Sluice Valve	WB=	Window Bottom Level
COL	Column	FH	Fire Hydrant	MW	Monitoring Well	SVP	Soil Vent Pipe	WM	Water Meter
Conc	Concrete	FP	Flag Pole	PB	Pedestrian Beacon	TBox	Telephone Box	WO	Wash Out
CP	Cathodic Protection Point	GP	Gate Post	PBox	Post Box	TDCam	Traffic Density Camera	WT=	Window Top Level
Cut	Disconnected Utility	GV	Gas Valve	PE	Polyethylene	TL	Traffic Light	WV	Water Valve
DC	Drainage Channel	GY	Gully	PGR	Pedestrian Guard Rail	TLC	Traffic Light Control		
DFBin	Dog Foul Bin	HC	Heating Cover	PM	Parking Meter	TOF=	Top of Fence Level		
DI	Ductile Iron	HDPE	High Density Polyethylene	PO	Post	TOW=	Top of Wall Level		

MANUFACTURERS STATED DEPTH POSITIONS

Detected Using Electromagnetic Location Methods
e.g. Any metallic pipe/cable. Accuracy ± 2.5% of depth reading.

Detected Using Electromagnetic Location Methods
eg. Using a Sonde to locate drainage pipework.reading.
Accuracy ± 2.5% of depth reading.

Detected Using Ground Penetrating Radar
e.g. A plastic pipe or service not be located by other means.
Accuracy depends on ground conditions.

CAUTION LIVE SERVICES PRESENT - EXTREME CARE SHOULD BE TAKEN WHEN EXCAVATING

ACAD Design & Surveys, and their agents or partners, are not responsible for any situation, incident or loss resulting from actions or planning resulting from total reliance upon this drawing or accompanying information.The completeness of the underground network information cannot be wholly guaranteed and as such no guarantees or warranties are provided or implied.The location and/or identification of a service will not positively indicate whether it is live or dead. A service indicated from records that has not been located or identified on site does not necessarily imply that it does not exist or is dead, however, its presence should be anticipated.
The results of Electro Magnetic and GPR detection techniques are not infallible and ground proofing for the actual position and depth of services should be established.

If this drawing and any associated drawings should be used in relation to works, we advise that the users of this information follow the principles detailed by the Health and Safety Executive guidance directive HS(G) 47, "Avoiding Danger from Underground Services". Further details of this directive are available at www.hse.gov.uk <http://www.hse.gov.uk/>

NOTES

All survey data established using OSGB15

Rev	Date	Drawn	Chk'd	Rev	Date	Drawn	Chk'd	Rev	Date	Drawn	Chk'd	Rev	Date	Drawn	Chk'd

SHEET LAYOUTS

	INITIALS	DATE
SURVEYED	JW	27/04/2026
DRAWN	JW	13/05/2026
CHECKED	PST JW	13/05/2026
AUTHORISED	PST	13/05/2026

DRAWING TYPE: TOPOGRAPHICAL SURVEY

SHEET 1 OF 2 | SCALE 1:200 | A1

CLIENT: BLACK CAT BUILDING CONSULTANCY

SITE LOCATION: CEDAR MOUNT ACADEMY, GORTON, MANCHESTER, M18 7DT.

DRAWING NUMBER : AC30992/02

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Appendix C – United Utilities Sewer Plans

United Utilities
Water for the North West

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United Utilities Water Limited
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Haweswater House
Lingley Mere Business Park
Great Sankey
Warrington
WA5 3LP

Telephone: 0370 7510101

E-mail: propertysearches@uuplc.co.uk

LKGroup

Unit 29
Eton Hill Road,
Radcliffe,
m26 2zs

FAO:

Your Ref: FRA261115 Cedar Mount High School
Our Ref: UUPS-ORD-732475
Date: 27/05/2026

Dear Sirs

Location: FRA261115 Cedar Mount High School

I acknowledge with thanks your request dated 26/05/2026 for information on the location of our services.

Please find enclosed plans showing the approximate position of United Utilities' apparatus known to be in the vicinity of this site.

The enclosed plans are being provided to you subject to the United Utilities terms and conditions for both the wastewater and water distribution plans which are shown attached.

If you are planning works anywhere in the North West, please read United Utilities' access statement before you start work to check how it will affect our network. http://www.unitedutilities.com/work-near-asset.aspx .

I trust the above meets with your requirements and look forward to hearing from you should you need anything further.

If you have any queries regarding this matter please contact us .

Yours Faithfully,

[redacted]

United Utilities Water Limited
Registered In England & Wales No. 2366678
Registered Office Haweswater House, Lingley Mere Business Park,
Lingley Green Avenue, Great Sankey, Warrington, WA5 3LP

Water for the North West

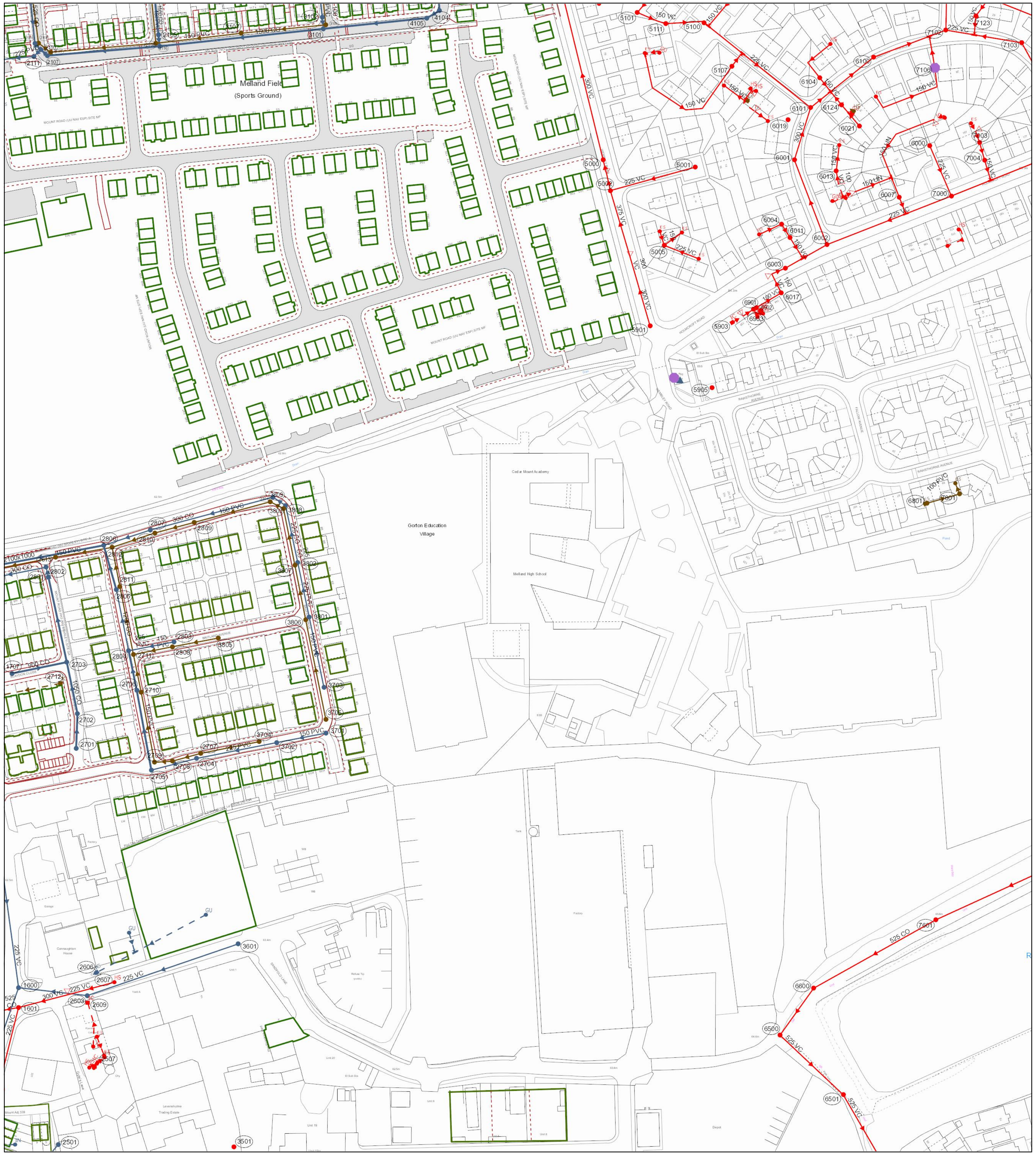
TERMS AND CONDITIONS - WASTEWATER AND WATER DISTRIBUTION PLANS

These provisions apply to the public sewerage, water distribution and telemetry systems (including sewers which are the subject of an agreement under Section 104 of the Water Industry Act 1991 and mains installed in accordance with the agreement for the self construction of water mains) (UUWL apparatus) of United Utilities Water Limited "(UUWL)".

TERMS AND CONDITIONS:

- This Map and any information supplied with it is issued subject to the provisions contained below, to the exclusion of all others and no party relies upon any representation, warranty, collateral contract or other assurance of any person (whether party to this agreement or not) that is not set out in this agreement or the documents referred to in it.
- This Map and any information supplied with it is provided for general guidance only and no representation, undertaking or warranty as to its accuracy, completeness or being up to date is given or implied.
- In particular, the position and depth of any UUWL apparatus shown on the Map are approximate only. UUWL strongly recommends that a comprehensive survey is undertaken in addition to reviewing this Map to determine and ensure the precise location of any UUWL apparatus. The exact location, positions and depths should be obtained by excavation trial holes.
- The location and position of private drains, private sewers and service pipes to properties are not normally shown on this Map but their presence must be anticipated and accounted for and you are strongly advised to carry out your own further enquiries and investigations in order to locate the same.
- The position and depth of UUWL apparatus is subject to change and therefore this Map is issued subject to any removal or change in location of the same. The onus is entirely upon you to confirm whether any changes to the Map have been made subsequent to issue and prior to any works being carried out.
- This Map and any information shown on it or provided with it must not be relied upon in the event of any development, construction or other works (including but not limited to any excavations) in the vicinity of UUWL apparatus or for the purpose of determining the suitability of a point of connection to the sewerage or other distribution systems.
- No person or legal entity, including any company shall be relieved from any liability howsoever and whensoever arising for any damage caused to UUWL apparatus by reason of the actual position and/or depths of UUWL apparatus being different from those shown on the Map and any information supplied with it.
- If any provision contained herein is or becomes legally invalid or unenforceable, it will be taken to be severed from the remaining provisions which shall be unaffected and continue in full force and affect.
- This agreement shall be governed by English law and all parties submit to the exclusive jurisdiction of the English courts, save that nothing will prevent UUWL from bringing proceedings in any other competent jurisdiction, whether concurrently or otherwise.

United Utilities Water Limited
Registered In England & Wales No. 2366678
Registered Office Haweswater House, Lingley Mere Business Park,
Lingley Green Avenue, Great Sankey, Warrington, WA5 3LP



Refno	Cover	Func	Invert	Size x	Size y	Shape	Matl	Length	Grad
1601	61.6	CO	59.12	525			CO	11.18034	
5005		CO		225			VC	12.14535	
6011		CO		150			VC	13.54379	
3807	63.35	FO	61.71	150			PVC	31.92157	1 in 152
1600	61.69	SW	59.96	225			VC	93.30059	1 in 36
1601	61.6	CO	59.29	225			VC	83.65328	1 in 80
6001	65.04	CO	62.79	300			VC	30.36445	1 in 190
2704	63.52	SW	61.91	225			PVC	25.93241	1 in 12
2705	63.17	SW	59.76	1200			CO	44.86559	1 in 408
2802	61.79	SW	59.64	300			CO	41.16405	1 in 217
2706	62.9	SW	59.65	1200			CO	22.47576	1 in 375
6004		CO		150			VC	8.746092	
2812	62.07	FO	59.16	150			PVC	31.85879	1 in 114
3809	62.87	FO	61.3	150			PVC	43.69028	1 in 175
5107		CO		150			VC	9.334159	
5101		CO		150			VC	16.91749	
3803	62.95	SW	61.38	300			CO	8.316709	1 in 119
2702	62.82	SW	60.12	1050			CO	29.16862	1 in 94
6902		CO		100			VC	15.88437	
2811	62.31	FO	60.09	150			PVC	22.07128	1 in 24
6003	63.19	CO	61.85	225			VC	26.41984	1 in 20
6501		CO	0	525			VC	43.88218	
2711	62.67	FO	61.28	150			PVC	38.50072	1 in 101
6901		CO		100			VC	1.884004	
5002	63.99	CO	61.53	375			VC	9.219544	1 in 461
3801	63.69	SW	62.22	225			PVC	31.02247	1 in 72
2808	62.87	FO	61.5	150			PVC	22.07128	1 in 100
3705	64.31	FO	62.7	150			PVC	56.3085	1 in 75
5901	64.05	CO	62.26	300			VC	39.56008	1 in 110
7601		CO	0	525			CO	77.64117	
3802	63.34	SW	61.38	225			CO	32.29188	1 in 461
2806	62.12	SW	59.45	2100			CO	72.17326	1 in 481
2805	62.36	SW	59.51	1200			CO	25.53729	1 in 426
2603		SW		225			VC	38.29968	
2708	63.29	FO	61.94	150			PVC	9.954555	1 in 100
3701	64.2	SW	62.57	150			PVC	27.76901	1 in 139
6017		CO		150			VC	11.75268	
2809	62.44	FO	61.05	150			PVC	22.70819	1 in 162
3808	62.96	FO	61.5	150			PVC	8.25737	1 in 41
5001	64.18	CO	62.1	225			VC	48.76474	1 in 89
3806	63.69	FO	61.95	150			PVC	30.94765	1 in 129
2707	63.49	FO	62.11	150			PVC	16.23184	1 in 95
5100	64.79	CO	63.2	225			VC	75.43288	1 in 137
2813	61.72	FO	58.88	150			PVC	46.89928	1 in 167
2804	62.28	SW	59.59	1200			CO	34.60471	1 in 433
3804	62.28	SW	61.31	300			CO	70.32761	1 in 147
1707	62.05	SW	60.01	900			CO	30.95931	1 in 155
2803	62.87	SW	60.69	225			PVC	25.69173	1 in 23
2807	62.27	SW	60.83	300			CO	27.32159	1 in 20
7000	65.92	CO	64.32	225			VC	74.09454	1 in 63
6000	65.53	CO	64.35	225			VC	30.46309	1 in 1015
3805	63.09	FO	61.87	150			PVC	25.74823	1 in 70
3704	63.87	FO	62.4	150			PVC	32.96908	1 in 114
3703	64.12	SW	62.69	225			PVC	39.82538	1 in 85
2810	62.29	FO	60.91	150			PVC	24.92125	1 in 14
7106		CO		150			VC	17.77743	
3702	62.37	SW	62.37	225			PVC	45.28201	1 in 98
6500		CO	0	525			VC	48.19573	
7003		CO		150			VC	10.25219	
6600		CO	0	525			VC	32.02514	
3601		SW		225			VC	88.34573	
7004		CO		150			VC	11.56357	
2710	62.89	FO	61.45	150			PVC	21.33656	1 in 126
5111		CO		150			VC	21.55609	
2701	63.04	SW	60.33	1050			CO	19.24863	1 in 92
2709	63.19	FO	61.84	150			PVC	39.58665	1 in 102
6002	65.03	CO	63.13	300			VC	50.32892	1 in 157
6013		CO		150			VC	14.42779	
7102	66.18	CO	62.13	300			VC	53.00943	1 in 196
2105	63.54	SW	60.78	1500			CO	6.425222	1 in 161
6007		CO		150			UN	9.911098	
7801		FO		100			PVC	6.31418	
7123		CO		150			VC	10.43508	
6100	65.64	CO	62.35	300			VC	42.72002	1 in 203
2801	61.89	SW		0			UN	0.2672856	
3102	63.7	SW	62.21	300			PVC	6.563215	1 in 5
7103	66.44	CO	64.54	225			VC	42.57934	1 in 89
2117	63.43	FO	59.82	150			PVC	8.386252	1 in 120
2118	63.58	FO	59.75	150			PVC	24.55624	1 in 123
4104	63.8	SW	61.13	1500			CO	8.091914	1 in 405
6124		CO		150			VC	9.604103	
6101	65.23	CO	62.61	300			VC	14.21072	
2110	63.53	SW		0			UN	0.2884044	
4105	63.86	SW	61.11	1500			CO	57.71676	1 in 412
5000	64.06	CO	61.4	300			VC	96.77293	1 in 161
2109	63.56	SW	60.87	525			CO	4.69934	1 in 16
3101	63.72	SW	60.97	1500			CO	91.27817	1 in 397
6104		CO		150			VC	9.846372	
2106	63.56	SW	60.74	1500			CO	62.36923	1 in 416
2703	62.5	SW	59.81	1050			CO	48.33538	1 in 403
3107	63.79	FO	60.8	150			PVC	47.56498	1 in 91
6801		FO		100			PVC	18.88604	
2116	63.58	FO	60.28	150			PVC	58.57069	1 in 127
2107	63.45	SW	60.59	1500			CO	4.979982	1 in 498
2111	63.65	SW	60.56	225			PVC	17.90232	1 in 224
3106	63.74	FO	61.19	150			PVC	47.10796	1 in 121
6021		CO		150			VC	15.27571	

Refno	Cover	Func	Invert	Size x	Size y	Shape	Matl	Length	Grad

The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown.

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LEGEND

Abandoned | Foul | Surface Water | Combined

- Public Sewer
- Private Sewer
- Section 104
- Rising Main
- Sludge Main
- Overflow
- Water Course
- Highway Drain

All point assets follow the standard colour convention:
red - combined blue - surface water
brown - foul purple - overflow

- Manhole
- Head of System
- Extent of Survey
- Rodding Eye
- Inlet
- Discharge Point
- Vortex
- Penstock
- Washout Chamber
- Valve
- Air Valve
- Non Return Valve
- Soakaway
- Gully
- Cascade
- Flow Meter
- Hatch Box
- Oil Interceptor
- Summit
- Drop Shaft
- Orifice Plate
- Side Entry Manhole
- Outfall
- Screen Chamber
- Inspection Chamber
- Bifurcation Chamber
- Lamp Hole
- T Junction / Saddle
- Catchpit
- Valve Chamber
- Vent Column
- Vortex Chamber
- Penstock Chamber
- Network Storage Tank
- Sewer Overflow
- Ww Treatment Works
- Ww Pumping Station
- Septic Tank
- Control Kiosk
- DNM Network Monitoring Point
- Change of Characteristic

MANHOLE FUNCTION

FO Foul
SW Surface Water
CO Combined
OV Overflow

SEWER SHAPE

CI Circular TR Trapezoidal
EG Egg AR Arch
OV Oval BA Barrel
FT Flat Top HO HorseShoe
RE Rectangular UN Unspecified
SQ Square

SEWER MATERIAL

AC Asbestos Cement
BR Brick
PE Polyethylene
RP Reinforced Plastic Matrix
CO Concrete
CSB Concrete Segment Bolted
CSU Concrete Segment Unbolted
CC Concrete Box Culverted
PSC Plastic / Steel Composite
GRC Glass Reinforecd Plastic
DI Ductile Iron
PVC Polyvinyl Chloride
CI Cast Iron
SI Spun Iron
ST Steel
VC Vitrified Clay
PP Polypropylene
PF Pitch Fibre
MAC Masonry, Coursed
MAR Masonry, Random
U Unspecified

Address or Site Reference:

FRA261115 Cedar Mount High School,

Scale: 1:1250 **Date:** 27/05/2026

Sheet: 1 of 1

Printed by: Property Searches

SEWER RECORDS

United Utilities
Water for the North West

Appendix D – References

[i] Ministry of Housing, Communities and Local Government, December 2024, “National Planning Policy Framework”.
[ii] Ministry of Housing Communities and Local Government. “Planning Practice Guidance” Ministry of Housing, Communities and Local Government, February 2024, “Planning practice guidance”.
[iii] LKC, May 2018, “Preliminary Risk Assessment”
[iv] JBA Consulting, 2019, Greater Manchester Combined Authority “Level 1 Strategic Flood Risk Assessment Update”.

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