

Proposed Development, Sovereign Distillery

Flood Risk Assessment

784-B029681

First Issue

Network Space

January 2022

Prepared on Behalf of Tetra Tech Limited. Registered in England number:
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INTRODUCTION

1.1 PURPOSE OF THIS REPORT

Tetra Tech Ltd have been appointed by Network Space (the 'Client') to prepare a Flood Risk Assessment (FRA) in support of a full Planning Application for proposed development of the Sovereign Distillery site, Wilson Road, Huyton, L36 6AD, located within the Knowsley Borough Council (KBC) District.

1.2 PROPOSED DEVELOPMENT

Network Space has recently acquired approximately 11.5ha of land at the Sovereign Distillery site which it intends to redevelop through part refurbishment, part demolition and new build to provide a range of urban logistic units suitable for commerce and distribution. The application site is approximately 4.2ha.

Appendix A includes an indicative masterplan for the development site. Unit G1, which replaces an existing building is 3,096m² in addition to parking and access areas adjacent to the building. Unit G2 is an entirely new development on an undeveloped plot of land taking up 2,340m² of space in addition to the parking and access hardstanding areas. Units F1 – F6 are new developments with associated parking and access. Unit C replaces an existing building with an area of 8,122m² with additional area required for parking and access.

1.3 REQUIREMENT FOR THIS REPORT

A planning application will be required for the proposed development works. This assessment is a high-level desktop appraisal of the flood risk at the site and can be used to support the planning application.

The assessment is undertaken with respect to the National Planning Policy Framework (NPPF) (Chapter 14), Planning Practice Guidance (PPG) (Flood Risk and Coastal Change), Environment Agency guidance and KBC guidance as the Lead Local Flood Authority (LLFA).

1.4 SCOPE OF THIS REPORT

The FRA will consider all potential sources of flood risk including Main Rivers, Ordinary Watercourses (not shown on the Environment Agency's flood maps), surface water and overland flow routes, groundwater, sewers, and reservoirs.

1.5 LIMITATIONS OF THE REPORT

This report has been prepared by Tetra Tech Ltd on behalf of the Client in connection with the scope of the report as described in Section 1.4 above and taking into account the particular instructions and requirements

set out in Tetra Tech's fee proposal and the Client's acceptance. It is not intended for and should not be relied on by any third party and no responsibility is undertaken to any third party.

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SITE DESCRIPTION

2.1 EXISTING SITE

The existing site is located at the Sovereign Distillery, Wilson Road, Huyton, L36 6A (SJ 45664 89639) just off the M57/M62 intersection which provides easy access to Liverpool. The application site, highlighted in Fig. 1 below, covers an area of approximately 4.2 ha.



Figure 1 – Current Site Extents

The previous owners still occupy half of the site through a lease back agreement. Network Space will redevelop the other half of the site with a combination of new warehouses and office spaces alongside replacement of existing buildings with new units (Appendix A). The development will take place across existing hardstanding areas and greenfield areas on the site.

2.2 SITE TOPOGRAPHY

A topographical survey, included as Appendix B has been conducted for the site and should be reviewed in conjunction with this section of the report.

At the most northeast corner of the development site the topography starts at 27.22mOD, gently increasing south along the perimeter of the site until it reaches 27.52mOD at the most northern entrance to the site from Wilson Road. From here it slopes downward gently until it reaches 23.77mOD at the perimeter of the development site. It gently slopes upward west of here until it reaches 24.15mOD at the existing warehouse.

From the northeast corner to the northwest corner the topography slopes gently upwards to 28.43mOD. It then decreases south along the west perimeter until it reaches 23.89mOD at the development boundary.

2.3 EXISTING DRAINAGE

2.3.1 Main Rivers

There are no Main Rivers that run through the site itself, but a review of the Main River Map provided by the Environment Agency (Fig. 2) shows that the Longwood Mill Brook runs to the east of the site. The river runs parallel along Stretton Way before crossing underneath the M57 and continuing to flow south of M62/M57 intersection. It continues south, joining other tributaries and eventually discharging into the River Mersey at Widnes.

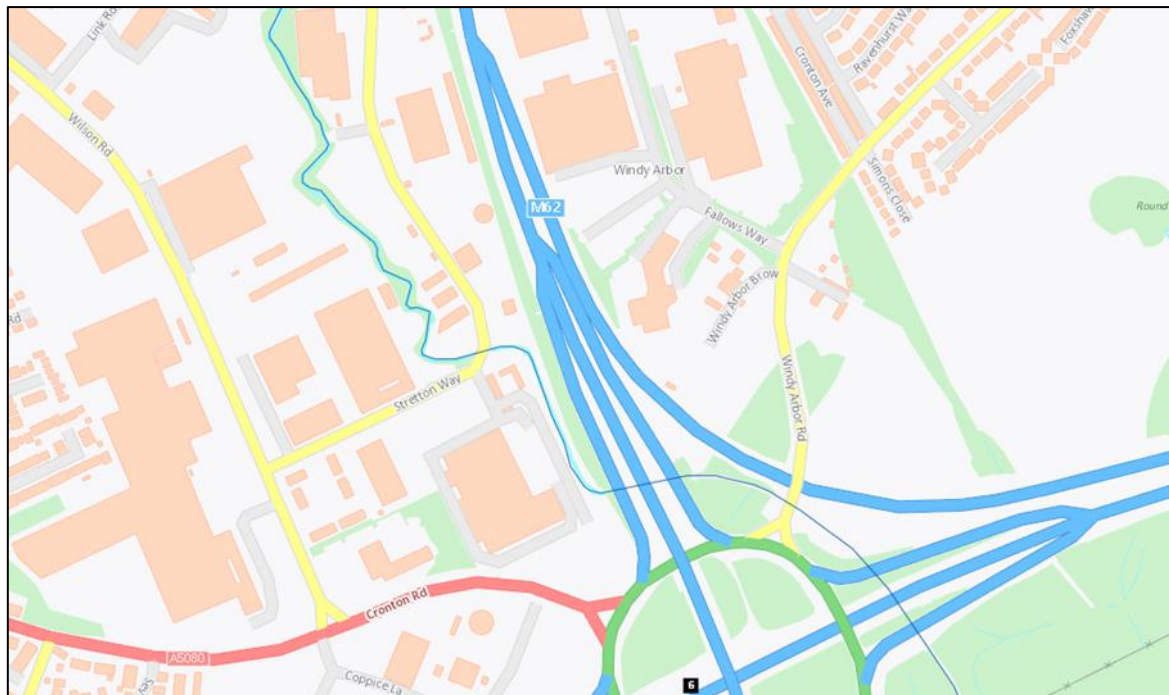


Figure 2 – Main River Map

A review of the watercourse using the FEH Web Service shows that the site does not form part of the catchment for this watercourse (Fig. 3).

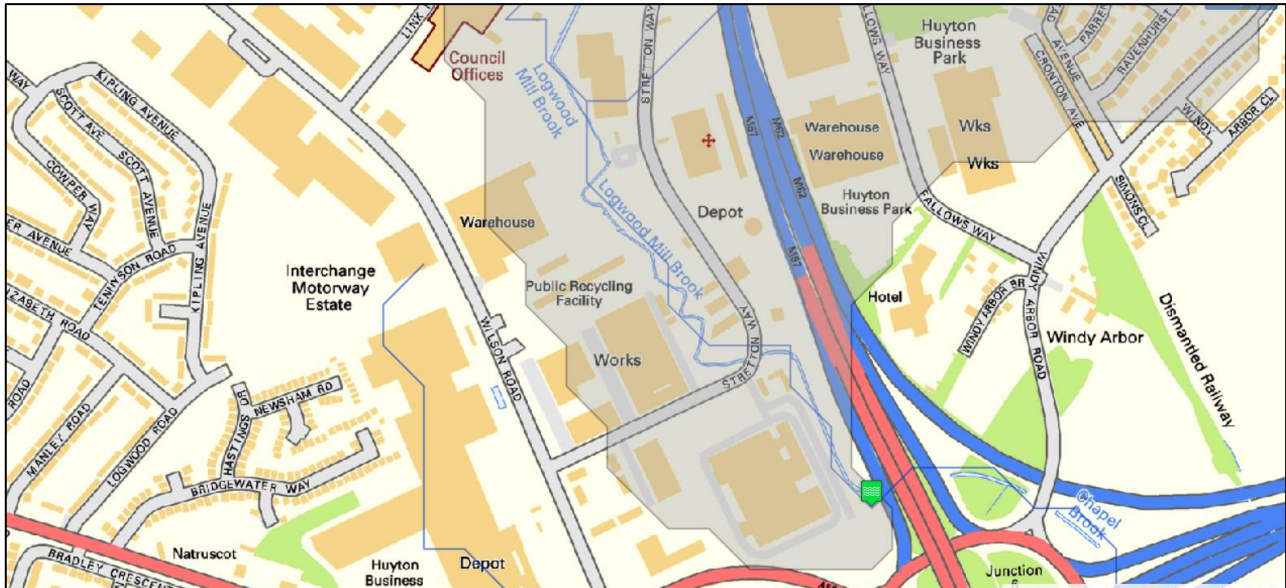


Figure 3 – Longwood Mill Brook Catchment

2.3.2 Ordinary & Manmade Watercourses

A review of online mapping and resources supplied by the client do not indicate the presence of any ordinary watercourse on the site, but a walkover survey may be required to confirm this.

2.4 SEWERS

A review of the FEH Web Service (Fig. 4) indicates that there is a drainage system underneath the site that discharges into the Chapel Brook, just downstream of Logwood Mill Brook.

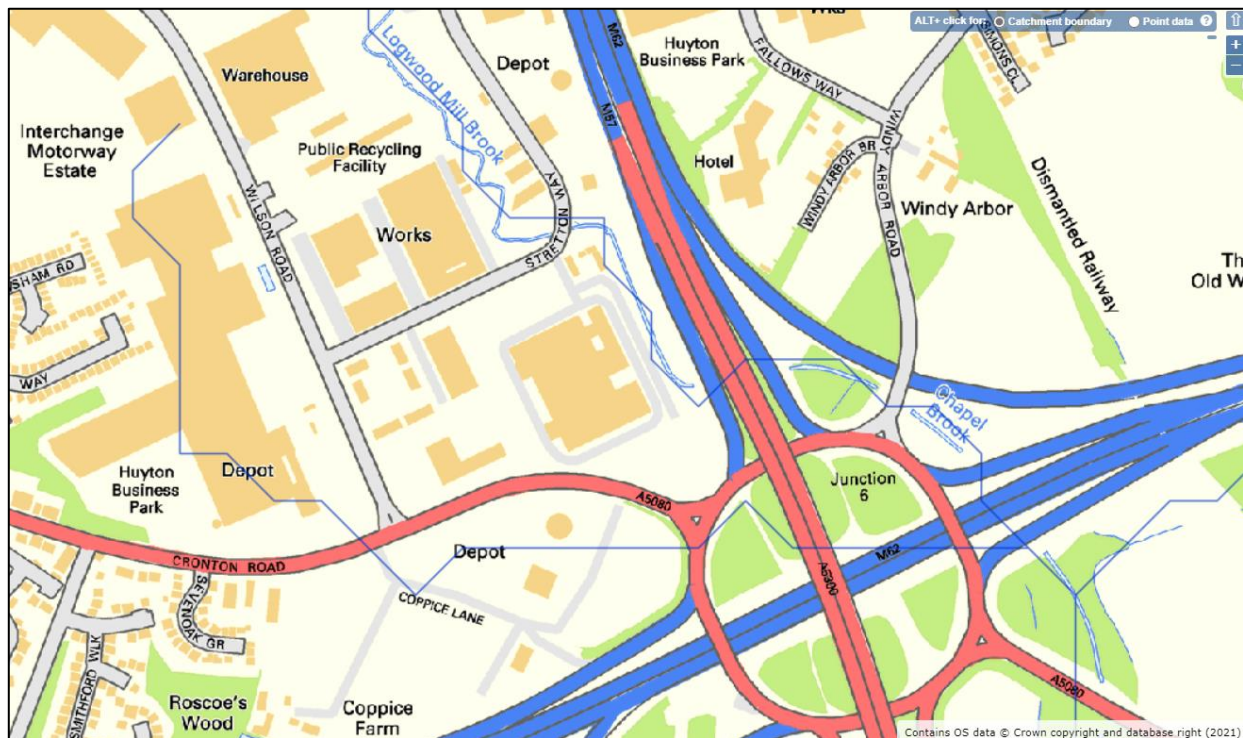


Figure 4 – Drainage Network on Site

The drainage network is highlighted in more detail in the Underground Utility Survey included as Appendix C which should be reviewed along with this section. This survey highlights private foul, surface and combined drainage networks running through the development site.

A copy of the United Utility Sewer records is also included as Appendix D. It highlights public combined and abandoned sewers running underneath the site and the where the private drainage of the site connects to the public surface water drainage routes.

These maps show that the assumed drainage route on the FEH Web Service is not accurate but useful to determine that the surface water eventually drains to Chapel Brook as no information is not available in the resources provided.

2.5 GROUND CONDITIONS

2.5.1 Geology

Based on a review of British Geological Survey (BGS) online geological mapping, the site is underlain by Pennine Lower and Middle Coal Measure formations which consist of mudstone, siltstone and sandstone. This is overlain by a Devensian Till which is essentially a layer of unsorted rock types and sizes deposited by glaciers in the last glacial period.

The two closest BGS borehole records are outside of the site. One is located on Coppice Lane on the opposite side of Cronton Road which bounds the south perimeter of the site (SJ48NE30), and the second is located adjacent to the northern end of the site on the opposite side of Wilson Road (SJ48NE463), the details of which are summarised in Table 1 below.

Borehole ID	Geological Strata	Strata Level (m bgl)
SJ48NE30	Drift (glacial material)	0.0 – 2.75
	Sandstone	2.75 – 4.88
	Coal fragments	4.88 – 5.18
	Seatearth (coal seam)	5.18 – 6.4
	Sandstone	6.4 – 6.71
	Coal	6.71 – 7.32
	Mudstone	7.32 – 7.62
	Seatearth	7.62 – 8.23
	Sandstone	8.23 – 8.84
	Mudstone	8.84 – 9.45
SJ48NE463	Made Ground	0.0 – 2.8
	Clay (silty with fine gravel)	2.8 – 2.9

Table 1 – Borehole Record Summary

SJ48NE463 mentions that no water table was encountered, and no water table was detailed on record SJ48NE30.

2.5.2 Hydrogeology

Defra's online 'Magic' mapping indicates that the superficial deposits are classified as Secondary (Undifferentiated) Aquifers. Secondary undifferentiated are aquifers have rock types with variable characteristics. The bedrock is classified as secondary A which means it contains permeable layers that can support local water supplies and for an important source of flow to rivers.

FLOOD RISK

3.1 FLUVIAL RISK

A floodplain is the area that would naturally be affected by flooding if a river rises above its banks or is inundated by the sea (coastal or tidal flooding). In England, floodplains are divided into flood zones for planning purposes. They are divided as follows, as defined by the Environment Agency:

- Flood Zone 1 is land assessed as having a less than 1 in 1000 (<0.1%) annual probability of river flooding. The risk of flooding is low.
- Flood Zone 2 is land assessed as having between a 1 in 1000 (0.1%) and 1 in 100 (1%) annual probability of river flooding. The risk of flooding is medium.
- Flood Zone 3 is land assessed as having a 1 in 100 or greater (>1%) annual probability of river flooding. The risk of flooding is high.

The Environment Agency's Flood Map for Planning (Fig. 5) indicates that the site is located within Flood Zone 1 and therefore at low risk of fluvial flooding from the Longwood Mill Brook.

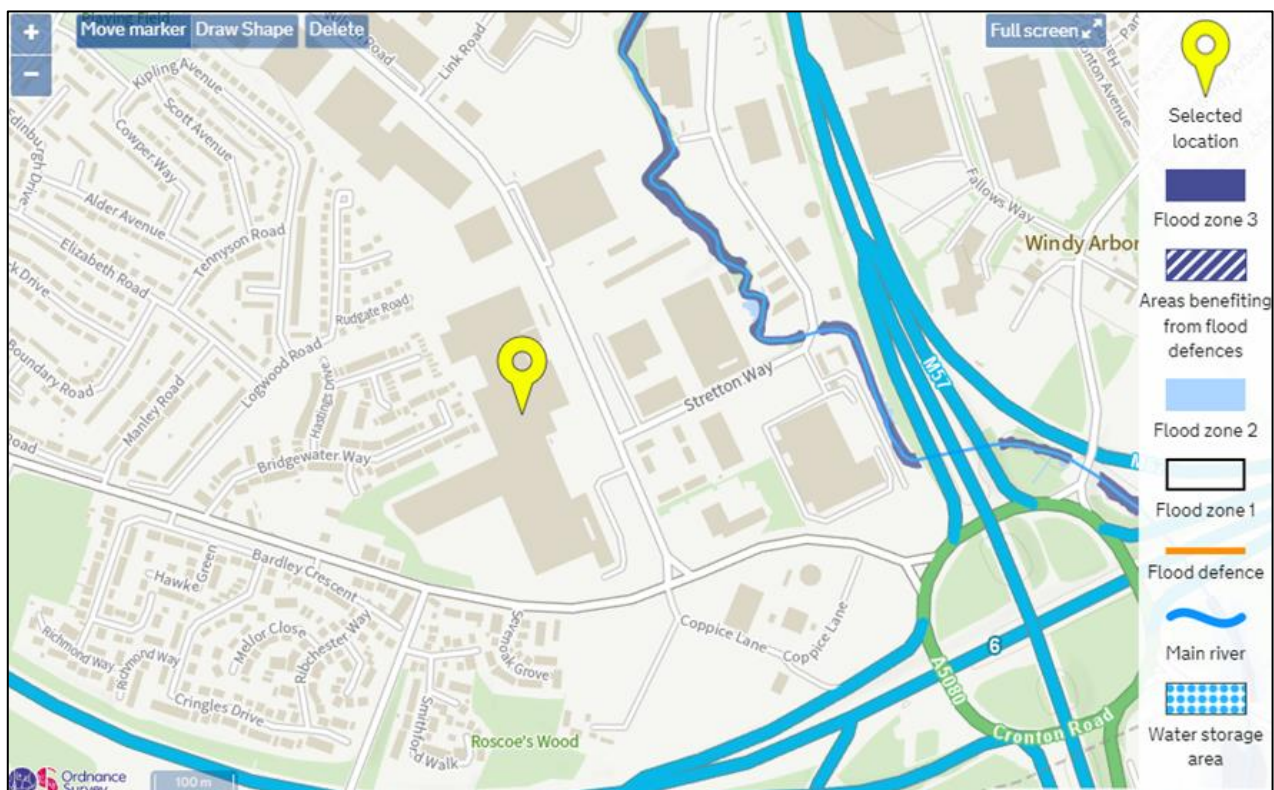


Figure 5 – Flood Map for Planning

3.2 SURFACE WATER

Surface water flooding can occur during high intensity rainfall events as runoff from fields or developed areas. It is particularly prevalent in areas with significant hardstanding or poorly permeable soils (i.e. clay). This is because the grounds capacity for infiltration is reduced. In addition, the inability to enter local drainage systems also contributes to risk from this source. The risk of surface water flooding is divided as follows, as defined by the Environment Agency:

- Very low risk means that the annual probability of flooding is less than 1 in 1000 (<0.1%).
- Low risk means that the annual probability of flooding is between 1 in 1000 (0.1%) and 1 in 100 (1%).
- Medium risk means that the annual probability of flooding is between 1 in 100 (1%) and 1 in 30 (3.3%).
- High risk means that the annual probability of flooding is greater than 1 in 30 (3.3%).

The Environment Agency's Surface Water Flood Map (Fig. 6) indicates that while there are areas within the site where there is a high risk of surface water flooding, within the areas where development is proposed the highest risk is medium.

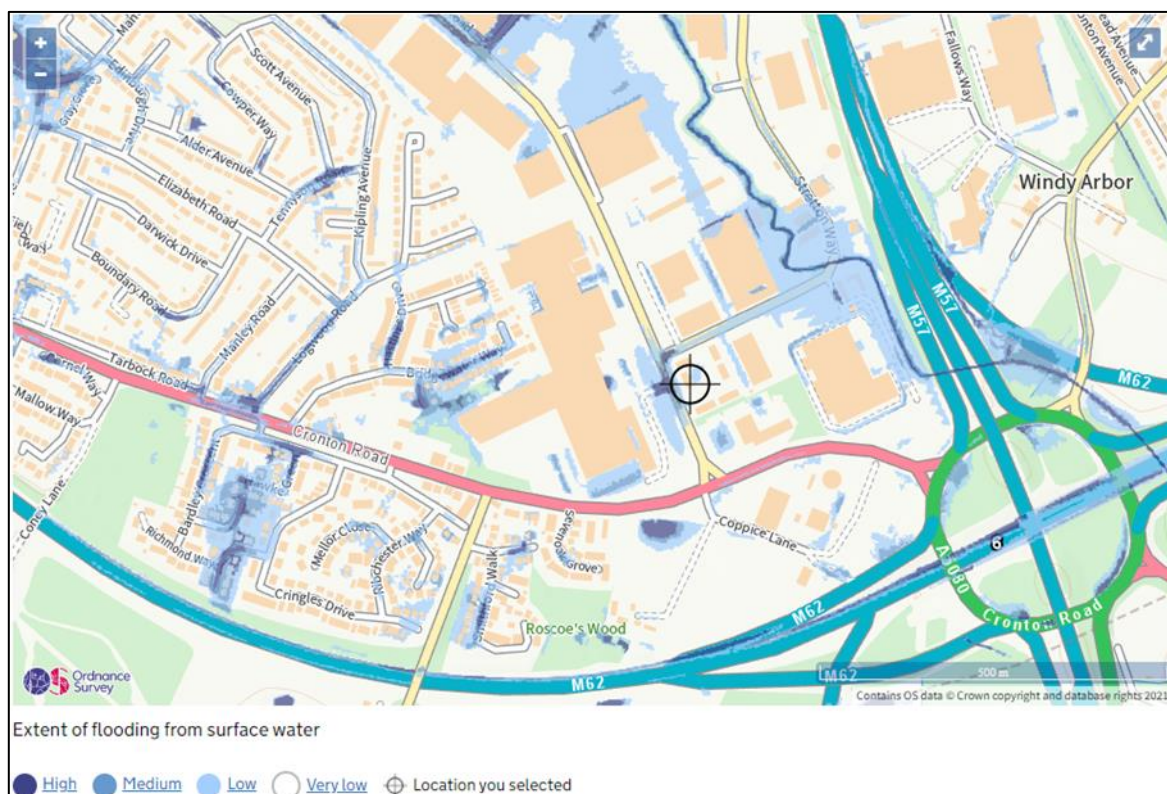


Figure 6 – Flooding from Surface Water

3.3 GROUNDWATER FLOODING

Groundwater flooding occurs when groundwater emerges at the surface under conditions where the 'normal' range of groundwater levels and groundwater flows is exceeded.

The KBC local flood risk strategy, published in 2017, indicates that there is a lack of historical information available in relation to groundwater flooding in the district. Groundwater models covering the Knowlsey Borough district indicate that groundwater level rise will be minimal, but groundwater levels are rising in the Mersey catchment due to a decline in water abstractions resulting in an increase in risk in low lying areas.

The borehole records reviewed did not provide any indication of the groundwater levels in the proximity of the site. The hydrogeology review shows that the site is in an area with a permeable aquifer so it might be at higher risk of groundwater flooding than areas where the aquifer is impermeable. This does not indicate overall likelihood of groundwater flooding however.

3.4 SEWER FLOODING

Sewer flooding occurs when intense rainfall overloads the sewer system capacity and/or when sewers cannot discharge properly to watercourses due to high water levels. Sewer flooding can also be caused when problems such as blockages, collapses or equipment failure occur in the sewerage system.

United Utilities have surface water drains and combined sewers that are potentially a source of flood risk using modelling. The Environment Agency's Flood Map for Surface Water generally lines up with the results that these models have produced as highlighted by the KBC Local Flood Risk Management Strategy (LFRMS).

The KBC LFRMS also highlights historical flooding from surface water and combined sewers in the Huyton area however it does not provide information on the specific locations where this flooding occurred. A review of EA historic flood maps does not indicate any historical flood on or in the vicinity of the site.

A history of flooding does not necessarily indicate current risk as sewers condition could deteriorate over time leading to an increased but unrecorded risk of flooding. Conversely, areas which have experienced significant sewer flooding may have been the subject of remediation work which subsequently reduces the risk of flooding from this source.

3.5 RESERVOIR FLOODING

The probability of a catastrophic dam failure is considered to be extremely low. All large reservoirs must be regularly inspected and supervised by reservoir panel engineers under the Environment Agency's enforcement of the Reservoirs Act 1975 in England.

The Environment Agency's Maximum Extent of Flooding from Reservoirs Map (Fig. 7) indicates that the site is located in an area where reservoir flooding may occur if the rivers are also flooding during a dam failure. Although this area predominately falls outside of the where the development is proposed.

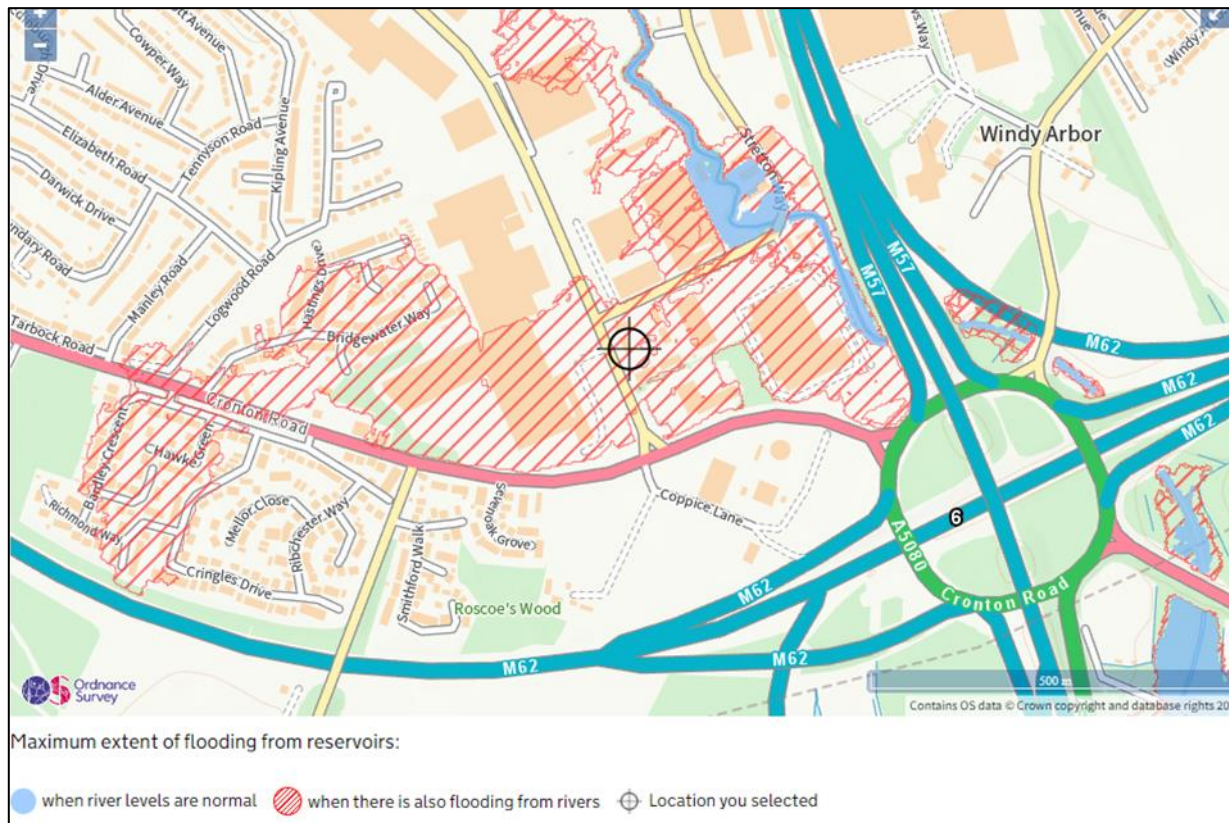


Figure 7 – Maximum Extent of Flooding from Reservoirs

The closest dam to the site is Mizzy Dam (SJ4570093700) to the north of the site.

3.6 SUMMARY OF FLOOD RISK

Overall, the risk to the site from all sources of flooding is considered to be medium. It will be essential to ensure that development of the site does not increase the risk of flooding elsewhere.

FLOOD RISK MANAGEMENT & MITIGATION

4.1 NATIONAL PLANNING POLICY FRAMEWORK

The NPPF requires that awarding permission to proposed development factors in the type and distribution of flooding likely to impact the area and the vulnerability of different types of development. This is achieved through a sequential, risk-based approach.

One of the aims of NPPF is to steer development away from zones of high flood risk towards Flood Zone 1. Given that the development area of the site is entirely in Flood Zone 1, the proposed development is acceptable on fluvial flood risk terms.

The National Planning Policy Guidance for flood risk and coastal change indicates that the site is considered to be 'Less Vulnerable' as it will be used for offices, general industry, storage and distribution.

As the development is located in Flood Zone 1 and is classified as 'Less Vulnerable', the guidance indicates that development at this site would be appropriate.

4.2 KNOWSELY BOROUGH COUNCIL LOCAL FLOOD RISK MANAGEMENT STRATEGY 2017

The KBC LFRMS was published in October 2020, to assess the local flood risk and set objectives to manage flooding under the Flood and Water Management Act 2010. As part of this strategy the council has set out six key objectives for management of flood risk in the KBC district.

The main objectives that will apply to any planning application for the site at Sovereign Distillery are summarised below:

Objective 2: To work in partnership with other risk management authorities, key stakeholders, partners, organisations, and the community, to reduce the risk of flooding to communities, the economy, and the environment from all sources.

- Develop an effective local governance framework for managing flood risk, including engagement with Senior Officer and Elected Members to support prompt decision making and to steer local flood risk management in Knowsley.
- Set up, lead, and deliver regular operational flood meetings for Knowsley to provide a local forum in which flooding issues can be discussed with RMAs and other partners.

Objective 3: To support the delivery of flood-appropriate sustainable development and ensure that the guiding principles for sustainable development are applied and inappropriate development is avoided in existing and future areas at risk of flooding.

- Develop a formalised process for responding to planning application consultations.
- Develop best-practice drainage guidance to assist developers in reducing flood risk to and from their schemes.
- Adopt a consistent and proportionate approach to assessing development proposals.
- Work in partnership with other RMAs in the planning process to ensure a consistent approach is taken when commenting on planning applications in our consultee roles.
- Agree common principles and refer to each other consents and permits as and when needed in planning consultation responses.
- Work with the local planning authority and the planning committee to build knowledge and understanding in relation to the role and responsibility of each RMA in the different areas of flood risk management and the risks associated with flooding in Knowsley so that informed planning decisions can be made.

4.3 DRAINAGE STRATEGY AND MAINTENANCE STRATEGY PLAN

In addition to this Flood Risk Assessment, Tetra Tech has prepared a Phase 1 Drainage Strategy and Maintenance Strategy Plan for submission alongside this report in support of a planning application for the proposed development.

The drainage strategy is informed by and should be read in conjunction with the FRA. The strategy will establish constraints and design requirements and assess the potential for Sustainable Drainage Systems (SuDS) at the site in accordance with the Knowsley Council planning advisory note for surface water drainage and flood risk management.

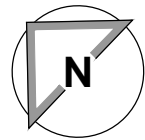
CONCLUSIONS

This report has identified the following conclusions:

- A partial redevelopment of the Sovereign Distillery site is being proposed which includes a combination of refurbishment, demolition, and new building works.
- The development is proposed to take place on both hardstanding and greenfield areas.
- The nearest watercourse is Longwood Mill Brook which runs parallel to Stretton Way on the opposite side of Wilson Road to the site.
- The application site is shown on the EA flood maps for Planning as being entirely within Flood Zone 1.
- The proposed development components are classified as '*Less Vulnerable*'.
- Development would be considered appropriate at the site.
- The site is not considered to be at significant risk of flooding from fluvial floods or from reservoir failure.
- There are locations on the site within the development area where the risk from surface water flooding is considered medium.
- There is no available information to indicate that there has been historical sewer flooding on site. The KBC strategy indicates that surface water flooding is a good indicator of areas at risk from sewer flooding in the area, so it is assumed that there are some parts of the site where the risk is medium.
- There is no information to indicate there has been historical groundwater flooding on site. The geological conditions indicate a permeable aquifer, conditions which might allow groundwater flooding, but no water table was identified in the borehole records reviewed and risk from this source is generally considered to be low.
- A Phase 1 Drainage Strategy and Maintenance Strategy Plan, informed by this document, is included in the planning application, alongside this document and should be read in conjunction with this Flood Risk Assessment.

APPENDICES

APPENDIX A – PROPOSED DEVELOPMENT LAYOUT



0 10 20 30 40 50m
Scale 1:1250

NOTES AEWTP033B

- All dimensions and levels are to be checked on site.
- Any discrepancies are to be reported to the architect before any work commences.
- This drawing shall not be scaled to ascertain any dimensions. Work to figured dimensions only.
- This drawing shall not be reproduced without express written permission from AEW.
- Title overlay drawings and ownership boundaries are produced using all reasonable endeavors. AEW cannot be responsible for the accuracy or scale discrepancy of base plans supplied to them.
- All works are to be undertaken in accordance with Building Regulations and the latest British Standards.
- All proprietary materials and products are to be used strictly in accordance with the manufacturers recommendations.

CDM 2015

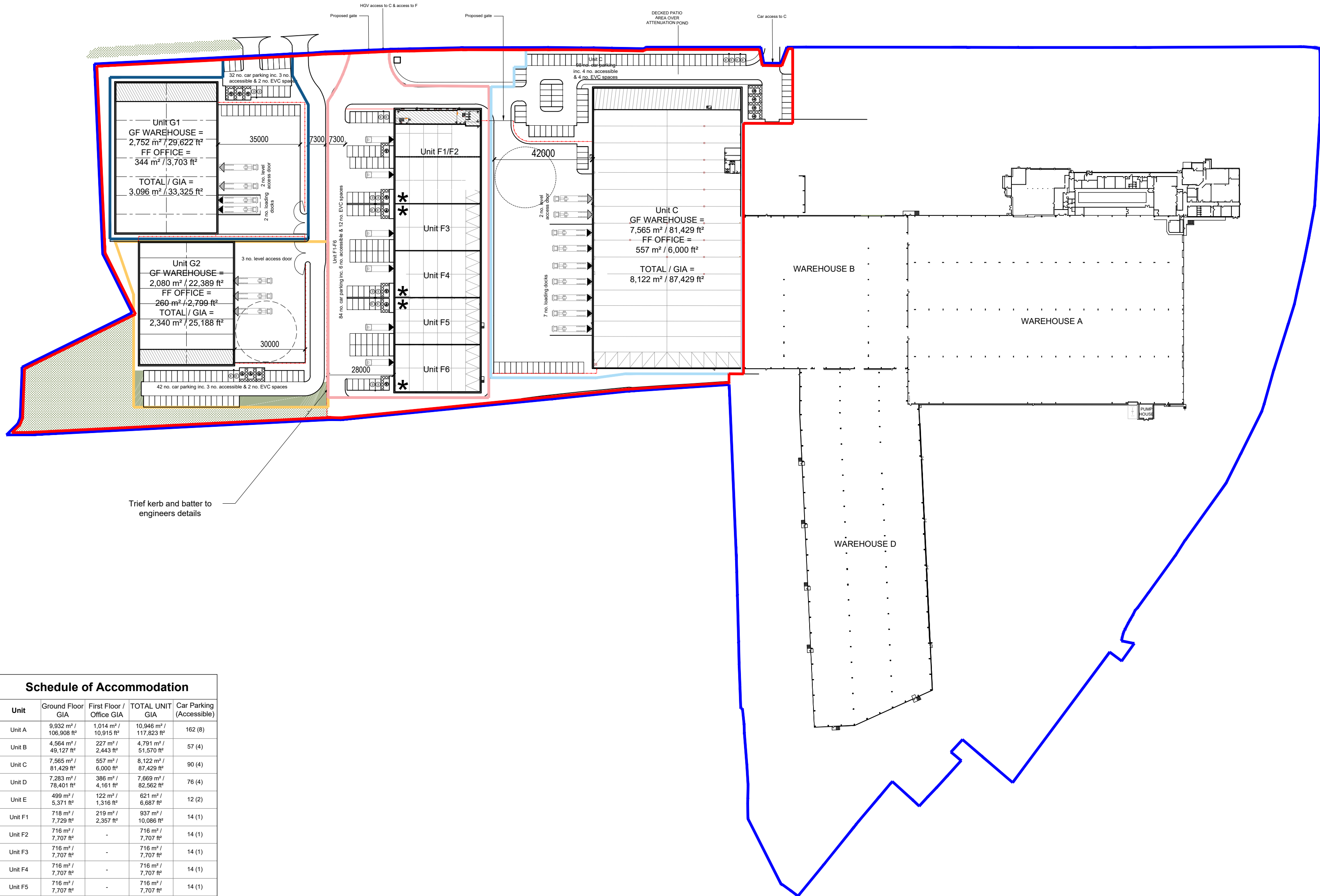
Client notified of duties: 12/10/21

Principal Designer: Client

Unless noted below, all known hazards have been highlighted on the drawing.

- Blue line ownership boundary (TBC)
26.72acres / 10.81ha
- Red line site boundary (TBC):
10.60acres / 4.29ha

* Location for office / welfare block



Schedule of Accommodation

Unit	Ground Floor GIA	First Floor / Office GIA	TOTAL UNIT GIA	Car Parking (Accessible)
Unit A	9,932 m² / 106,908 ft²	1,014 m² / 10,915 ft²	10,946 m² / 117,823 ft²	162 (8)
Unit B	4,564 m² / 49,127 ft²	227 m² / 2,443 ft²	4,791 m² / 51,570 ft²	57 (4)
Unit C	7,565 m² / 81,429 ft²	557 m² / 6,000 ft²	8,122 m² / 87,429 ft²	90 (4)
Unit D	7,283 m² / 78,401 ft²	386 m² / 4,161 ft²	7,669 m² / 82,562 ft²	76 (4)
Unit E	499 m² / 5,371 ft²	122 m² / 1,316 ft²	621 m² / 6,687 ft²	12 (2)
Unit F1	718 m² / 7,729 ft²	219 m² / 2,357 ft²	937 m² / 10,086 ft²	14 (1)
Unit F2	716 m² / 7,707 ft²	-	716 m² / 7,707 ft²	14 (1)
Unit F3	716 m² / 7,707 ft²	-	716 m² / 7,707 ft²	14 (1)
Unit F4	716 m² / 7,707 ft²	-	716 m² / 7,707 ft²	14 (1)
Unit F5	716 m² / 7,707 ft²	-	716 m² / 7,707 ft²	14 (1)
Unit F6	724 m² / 7,793 ft²	-	724 m² / 7,793 ft²	14 (1)
G1	2,752 m² / 29,622 ft²	344 m² / 3,703 ft²	3,096 m² / 33,325 ft²	40 (3)
G2	2,080 m² / 22,389 ft²	260 m² / 2,799 ft²	2,340 m² / 25,188 ft²	42 (3)
TOTAL SITE GIA			42,110 m² / 453,291 ft²	563 (33)

P03	18/01/22	DJS	DS
Amendment to G2 layout			
P02	14/01/22	DJS	DS
Updated estimates following survey			
P01	23/10/21	EF	DS
Initial Issue			
REV	Date	Drawn by:-	Checked by:-
S2		For Information	
drawing stage Feasibility			
client Sovereign Distillery			
project Huyton, Sovereign Distillery			
drawing title Feasibility Site Layout Option 6			
date	20/12/21	drawn	EF
scale/A0	1:500	checked	DS

APPENDIX B – SITE TOPOGRAPHY



OS Note:
Some services may have been omitted due to parked vehicles.
The Ordnance Survey tile is to be used as a guide only.

OS Buildings Surveyed Buildings

This survey has been orientated to the Ordnance Survey (O.S.) National Grid OSGB36(15) via Global Navigational Satel

Systems (GNSS) and the O.S. Active Network (OS Net). A true OSGB36 coordinate has been established near to the site centre via a transformation using the OSTN15GB & OSGM15GB transformation models. The survey has been correlated to this point and a further one or more OSGB36 (15) points established to create a true O.S. bearing for angle orientation.

No scale factor has been applied to the survey therefore the coordinates shown are arbitrary & not true O.S. Coordinates which have a scale factor applied.

Please refer to Survey Station Table to enable establishment of the on-site grid and datum.

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Rev	Date	Description	Drawn	Q. Rev



24 Riverside Studios
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CLIENT **AEW Architects**

PROJECT
Sovereign Distillery
Huyton Business Park
Liverpool

Topographical Survey

SCALE A1@ 1: 500	DATE 10.6.21
DRAWN JT	QUALITY REF

Level datum	See Notes
Grid orientation	See Notes

Job number	40493
Drawing No.	Rev.

Comments

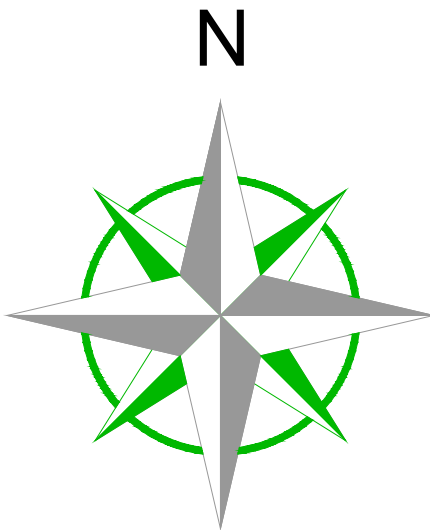
This plan should only be used for its original purpose. Greenhatch Group accepts no responsibility for this plan if supplied to any party other than the original client.

All dimensions should be checked on site prior to design and construction.

Drainage information (where applicable) has been visually inspected from the surface and therefore should be treated as approximate only.

Notes:

APPENDIX C – UNDERGROUND UTILITY SURVEY



NOTES;
Only BT & Gas records available at time of survey.
Unable to locate all Water supplies within the survey area, limited signals gained on site.
Some of the drainage routes cannot be fully surveyed on site due to limited access. We would recommend CCTV Camera Survey is carried out to prove the route of any drainage which cannot be safely surveyed at present.

UTILITY KEY	
	ELECTRIC CABLE
	TELECOMS CABLE
	WATER PIPE
	FOUL DRAINAGE
	SURFACE DRAINAGE
	COMBINED DRAINAGE
	FUEL PIPE
	VENT PIPE
	OFFSET F&L PIPE
	GAUGE LINE
	VAPOUR RECOVERY
	SERVICE DUCTS
	UNIDENTIFIED
	END OF TRACE

ABBREVIATIONS	
AR	ASSUMED ROUTE
BD	BACKDROP
CP	CATCHPIT
CL	CORNER LEVEL
CR	CABLE RISER
DP	DOWN PIPE
EP	ELECTRICITY POLE
Exc	EDGE OF CANOPY
EXT	END OF TRACE
G	GULLY
GV	GAS VALVE
HL	HIGH LEVEL
IC	INSPECTION CHAMBER
I	INVERT LEVEL
LH	LAMP HOUSE
LP	LAMP POST
MH	MANHOLE
NEV	NO EXIT VISIBLE
SWS	SURFACE WATER SEWER
FWS	FOUL WATER SEWER
CWS	COMBINED WATER SEWER
NL	NOT LOCATED
CSA	OFF SURVEY AREA
PR	PIPE RISER
RE	ROADSIDE EYE
RWP	RAINWATER PIPE
SA	SOAKAWAY
SV	STOP VALVE
SVP	SOIL VENT PIPE
TE	TRAPPED EXIT
TP	TELEGRAPH POLE
TR	TAKEN FROM RECORDS
UTL	UNABLE TO FIND
UTL	UNABLE TO LIFT
UTS	UNABLE TO SURVEY
VP	VENT PIPE
VR	VAPOUR RECOVERY
WL	WATER LEVEL
WM	WATER METER
WV	WASH OUT VALVE
WP	WASTE PIPE

DISCLAIMER
ELECTRO-MAGNETIC TECHNIQUES AND/OR GROUND PENETRATING RADAR HAVE BEEN USED IN THE LOCATION OF UNDERGROUND SERVICES. THE RESULTS OF SUCH SURVEYS ARE NOT INFALLIBLE AND TOTAL EXPLANATIONS SHOULD BE OBTAINED FROM THE APPROPRIATE AUTHORITIES. PARTICULARLY IN DEPTHS WHERE THESE ARE CRITICAL. ALTHOUGH ALL REASONABLE EFFORT HAS BEEN MADE IN SEARCHING AVAILABLE RECORDS, THE COMPLETENESS OF THE UNDERGROUND SERVICES INFORMATION CANNOT BE GUARANTEED. THE METHOD OF SURVEY DOES NOT DIFFERENTIATE BETWEEN LIVE AND DEAD SERVICES AND AS SUCH ALL SERVICES SHOULD BE TREATED AS LIVE.
WHERE SERVICES ARE NON-METALLIC POSITIONS MAY BE TAKEN FROM RECORDS, TYPICAL SCALES & SURFACE DETAIL WHERE QUOTED. DEPTH ESTIMATIONS ARE GENERALLY TO THE CENTRE OF THE SERVICE, DEPTHS TO GRAVITY SERVICES AND DRAINAGE ARE GENERALLY TO INVERT LEVELS UNLESS OTHERWISE STATED.
PIPE DEPTHS WHICH CANNOT BE OBTAINED BY VISUAL SURVEY ARE TAKEN FROM RECORD DRAWINGS OR MANHOLE PLATES WHERE AVAILABLE.
WHERE GROUND PENETRATING RADAR HAS BEEN USED IT WILL PRIMARILY HAVE BEEN TO IDENTIFY UNDERGROUND UTILITIES. IT IS POSSIBLE THAT IT WILL ALSO IDENTIFY OTHER UNDERGROUND STRUCTURES. HOWEVER, THE USE OF RADAR CAN BE LIMITED BOTH BY SURFACE CONDITIONS AND ALSO BY SOIL TYPES. DEPTH ESTIMATES WOULD NOT NORMALLY BE PROVIDED FOR SERVICES LOCATED WITH GPR.

Rev	Date	Description	Drawn	C. Rev
☐ Topographical Surveys ☐ Measured Building Surveys ☐ Site Engineering ☐ 3D Laser Scanning ☐ Utility / CCTV Surveys ☐ Rent & BHM Models				
Rowan House Duffield Road Little Eaton Derby DE21 5DR Tel (01332) 830044 Fax (01332) 830055 admin@greenhatch-group.co.uk www.greenhatch-group.co.uk				
St Albans Unit B, The Courtyard Alban Park St Albans Hertfordshire AL4 6LA t. (01727) 854483	Newcastle 24 Riverside Studios Armistead Road Newcastle Bus Park Newcastle U.T. Zone NE4 7YL t. (01912) 796391	Poland ul. Papiewnicka 91 40-701 Katowice Poland t. 0048 33 202 2292 www.greenhatch.pl		

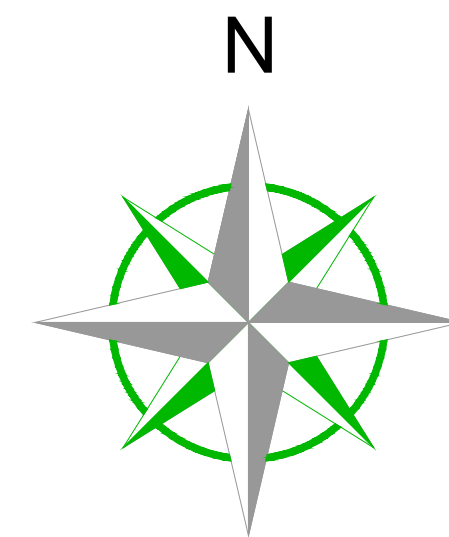
CLIENT
AEW Architects

PROJECT
**Sovereign Distillery
Huyton Business Park
Liverpool**

TITLE	
Underground Utility Survey	
SCALE A0@ 1: 500	DATE 14-25/06/21
DRAWN SLD.OT	QUALITY REF 14396

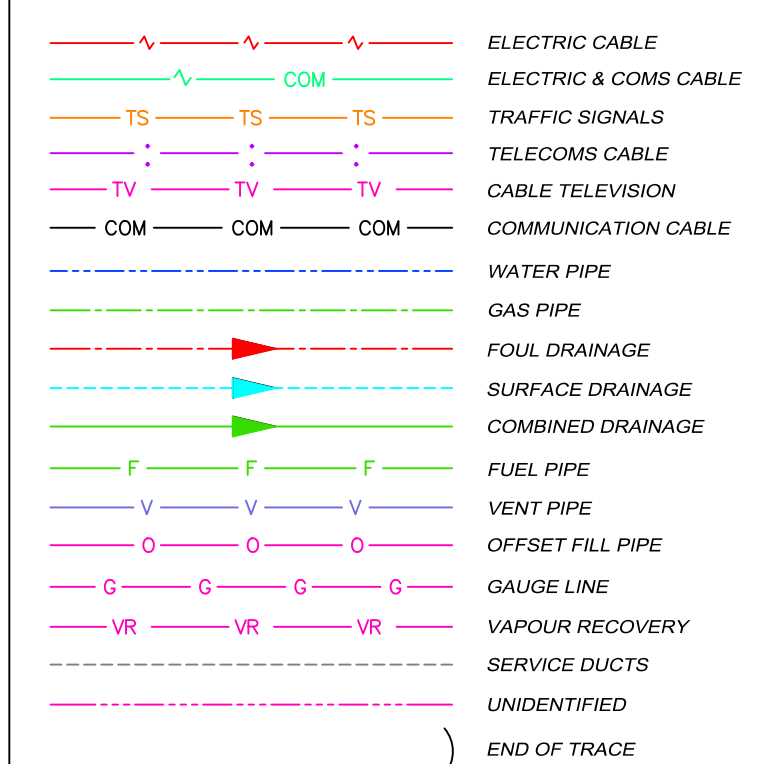
Level datum Grid orientation	See OS Note See OS Note
Job number 40493	Rev. 0
Drawing No. 40493_UG_1	

Comments
This plan should only be used for its original purpose. Greenhatch Group accepts no responsibility for this plan if supplied to any party other than the original client.
All dimensions should be checked on site prior to design and construction.
Drainage information (where applicable) has been visually inspected from the surface and therefore should be treated as approximate only.
Notes:



NOTES:
Only BT & Gas records available at time of survey.
Unable to locate all Water supplies within the survey area, limited signals gained on site.
Some of the drainage routes cannot be fully surveyed on site due to limited access. We would recommend CCTV Camera Survey is carried out to prove the route of any drainage which cannot be safely surveyed at present.

UTILITY KEY



ABBREVIATIONS

AR	ASSUMED ROUTE	NL	NOT LOCATED
BD	BACKDROP	OS	OFF SURVEY AREA
CP	CATCHPIT	PR	PIPE RISER
CL	CORNER LEVEL	RE	ROADSIDE EYE
CR	CABLE RISER	RWP	RAINWATER PIPE
DP	DOWN PIPE	SA	SOAKAWAY
EP	ELECTRICITY POLE	SV	STOP VALVE
EV	EDGE OF CANOPY	SVP	SOIL VENT PIPE
ET	END OF TRACE	TE	TRAPPED EXIT
FI	FIRE HYDRANT	TP	TELEGRAPH POLE
GV	GAS VALVE	TR	TAKEN FROM RECORDS
HL	HIGH LEVEL	UT	UNABLE TO FIND
IC	INSPECTION CHAMBER	UL	UNABLE TO LIFT
IP	INVERT LEVEL	US	UNABLE TO SURVEY
LH	LAMP HOUSE	VR	VAPOUR RECOVERY
LP	LAMP POST	WL	WATER LEVEL
MH	MANHOLE	WM	WATER METER
NEV	NO EXIT VISIBLE	WO	WASH OUT VALVE
		WP	WASTE PIPE
SWS	SURFACE WATER SEWER		
FWS	FULL WATER SEWER		
CWS	COMBINED WATER SEWER		

DISCLAIMER

ELECTRO-MAGNETIC TECHNIQUES AND/OR GROUND PENETRATING RADAR HAVE BEEN USED IN THE LOCATION OF UNDERGROUND SERVICES. THE RESULTS ARE NOT INFALLIBLE AND TOTAL LOCATION SHOULD BE OBTAINED TO CONFIRM. PARTICULARLY DEPTHS WHERE THESE ARE CRITICAL. ALTHOUGH ALL REASONABLE EFFORT HAS BEEN MADE IN SEARCHING AVAILABLE RECORD DRAWINGS, THE COMPLETENESS OF THE UNDERGROUND SERVICES INFORMATION CANNOT BE GUARANTEED. THE METHOD OF SURVEY DOES NOT DIFFERENTIATE BETWEEN LIVE AND DEAD SERVICES AND AS SUCH ALL SERVICES SHOULD BE TREATED AS LIVE.

WHERE SERVICES ARE NON-METALLIC POSITIONS MAY BE TAKEN FROM RECORDS, TRENCH SCALES & SURFACE DETAIL. WHERE QUOTED, DEPTH ESTIMATIONS ARE GENERALLY TO THE CENTRE OF THE SERVICE, DEPTHS TO GRAVITY SERVICES AND DRAINAGE ARE GENERALLY TO INVERT LEVELS UNLESS OTHERWISE STATED.

PIPE DEPTHS WHICH CANNOT BE OBTAINED BY VISUAL SURVEY ARE TAKEN FROM RECORD DRAWINGS OR MANHOLE PLATES WHERE AVAILABLE.

WHERE GROUND PENETRATING RADAR HAS BEEN USED IT WILL PRIMARILY HAVE BEEN TO IDENTIFY UNDERGROUND UTILITIES IF POSSIBLE, AND WILL ALSO IDENTIFY PROHIBITED STRUCTURES. THE USE OF RADAR CAN BE LIMITED BOTH BY SURFACE CONDITIONS AND ALSO BY SOIL TYPE. DEPTH ESTIMATES WOULD NOT NORMALLY BE PROVIDED FOR SERVICES LOCATED WITH GPR.

Rev	Date	Description	Drawn	C. Rev
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CLIENT
AEW Architects

PROJECT
Sovereign Distillery
Huyton Business Park
Liverpool

TITLE
Underground Utility Survey

SCALE	DATE
A0@ 1: 500	14-25/06/21
DRAWN	QUALITY REF
S.L.D.O.T	14396

Level datum	See OS Note
Grid orientation	See OS Note
Job number	40493
Drawing No.	40493_UG_2
Rev.	0

Comments:
This plan should only be used for its original purpose. Greenhatch Group accepts no responsibility for this plan if supplied to any party other than the original client.
All dimensions should be checked on site prior to design and construction.
Drainage information (where applicable) has been visually inspected from the surface and therefore should be treated as approximate only.
Notes:

APPENDIX D - UNITED UTILITY SEWER RECORDS

Graham Mawdsley

**Quay West at Media City Uk
Trafford Wharf Road,
Manchester,
M17 1HH**

FAO:

How to contact us:

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

Telephone: 0370 7510101

E-mail: propertysearches@uuplc.co.uk

**Your Ref: B029681-Sewer Plans
Our Ref: UUPS-ORD-298068
Date: 15/06/2021**

Dear Sirs

Location: Sovereign Distillery Sovereign Distillery Wilson Road, Huyton, L36 6AD

I acknowledge with thanks your request dated 15/06/2021 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,



Karen McCormack
Property Searches Manager

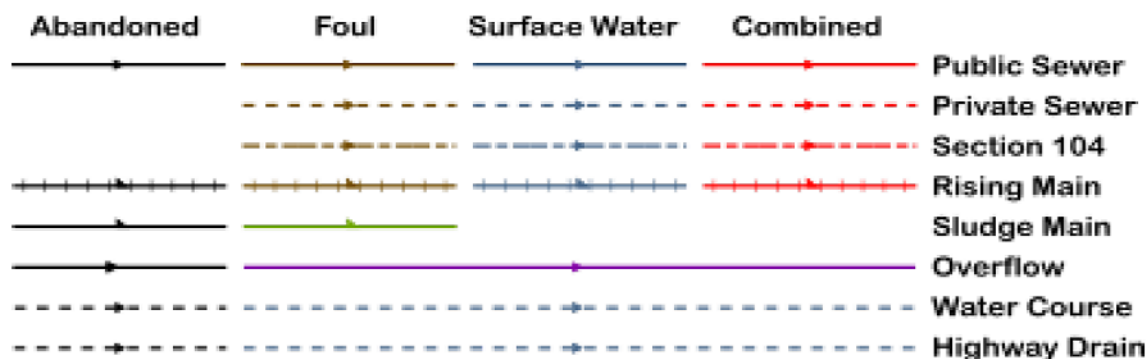
TERMS AND CONDITIONS - WASTEWATER AND WATER DISTRIBUTION PLANS

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.

Wastewater Symbolology



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

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



Water for the North West

SEWER RECORDS

Address or Site Reference

Sovereign Distillery Sovereign
Distillery Wilson Road,
Huyton,
L36 6AD

Scale: 1:2500
Date: 15/06/2021

Printed by: Property Searches

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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