

Note / Memo

HaskoningDHV UK Ltd.
Climate Resilience - Flood Risk

To: Junaid Ahmad
From: Eleanor Hall, Sophie Isaacs
Date: 18 July 2023
Our reference: 6657-AEA-ZZ-XX-RP-Z-2000
Classification: Project related
Checked by: Steven Brown

Subject: Addendum Letter

Project: 6657_Ahmad_Manchester

Project Type: Addendum Letter

To support the progression of the development proposals for the above site an addendum letter has been produced for 12 Omer Drive, M19 2JN.

It is understood that the proposed development is for the for the demolition of the garage to build a side extension to an existing residential dwelling to provide greater habitable space.

This document sets out the updated assessment as requested by Manchester Council, it has been provided as an addendum letter, to focus on the specific questions raised.

Upon submission of the Flood Risk Assessment to Manchester Council, the following comments have been received:

"No development shall commence until the flood risk assessment (ref: 6657) has been updated and re-submitted to and approved in writing by the local planning authority. The updated assessment must include an assessment of the risks from flooding from Willow Brook which is located adjacent to the proposed side extension.

The development shall be implemented in accordance with any measures identified as being required in the revised flood risk assessment.

Reason - To ensure that the development is not at an increased risk of flooding (from various sources) and that the appropriate flood resilience and resistance measures have been implemented on site where required; pursuant with policies DM1 and EN14 of the Core Strategy and saved policy DC1 of the Unitary Development Plan for the City of Manchester."

Policies DM1 and EN14:

DM1 (development Management) states 'All development should have regard to the following specific issues for which more detailed guidance may be given within a supplementary planning document'

*EN14 sates 'The City of Manchester contains many sections of rivers which are culverted or 'hidden'; **where these are indicated in the SFRA beneath the proposed development site**, further investigation will be required and the development proposal should take this into account; where feasible and appropriate development should seek to open up culverted/hidden rivers to reduce the associated flood risk and danger of collapse, taking advantage of opportunities to enhance biodiversity and Green Infrastructure.'*

The Willow Brook is identified as an Ordinary Watercourse, and this watercourse is not included in the Environment Agency's existing flood model outputs. The flood model data (Product 4) provided by the Environment Agency and included in the Appendices of the Flood Risk Assessment. As Willow Brook is not identified as an Environment Agency Main River, there is no readily available modelled flood level information to support analysis of this watercourse.

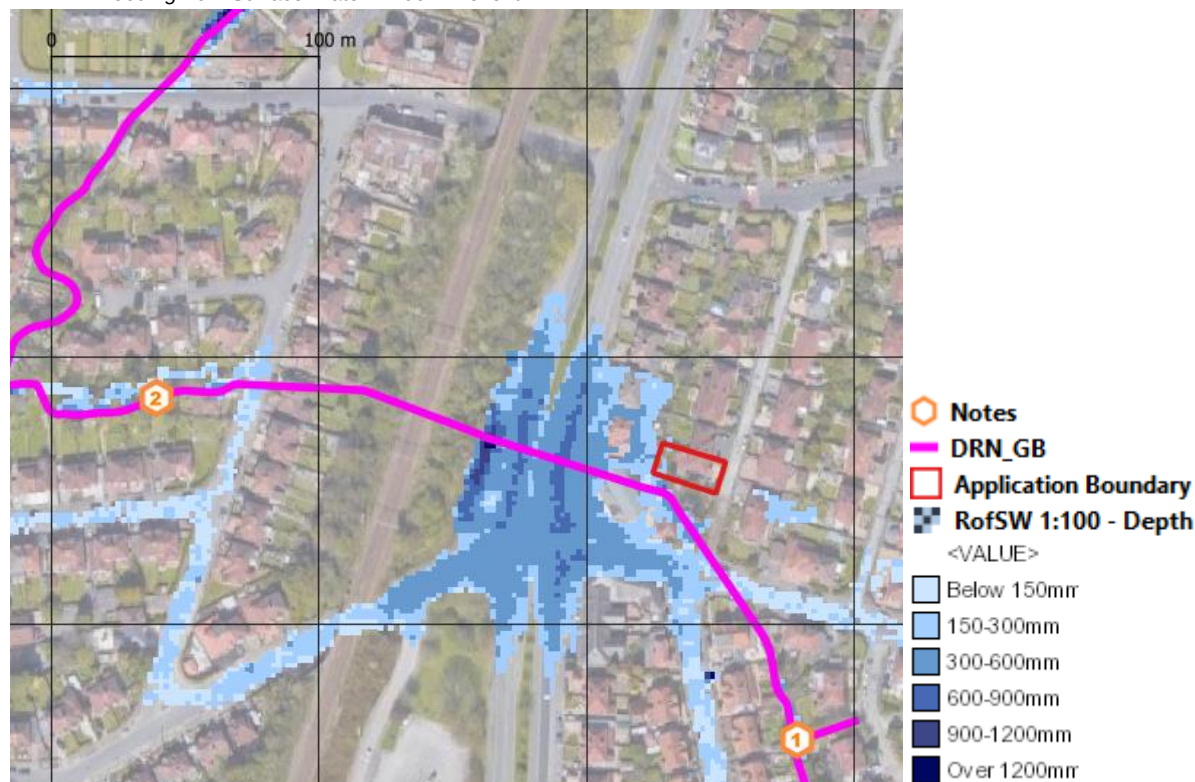
Aerial imagery indicates that Willow Brook is a culverted watercourse (See Figure 1). Between the points 1 and 2 on Figure 1, Google Streetview and aerial imagery has been reviewed, and it is concluded that the Willow Brook is culverted between the two sections for approximately 300m. According to the Detailed River Network information (shown in Purple on Figure 1), the alignment of the Willow Brook is outside of the Application Boundary, therefore Policy EN14 does not apply, unless the Council can produce evidence that the Willow Brook is within the Application Boundary. The SFRA mapping is at too large a scale to be able to determine which properties are affected by the watercourses, and so the Detailed River Network has been used as a better source of data.

Furthermore, the sewer asset records clearly show a private sewer connecting the two open sections of watercourse mentioned above (see Appendix A for sewer asset plans). The alignment of this culvert does not encroach on the Site. Therefore, it is concluded that Policy EN14 is not applicable.

From review of Streetview imagery obtainable from google, there are limited inspection chambers that appear to be connected to drainage infrastructure, and none in the vicinity of the Application Site. Consequently, should the Willow Brook surcharge, it is most likely to occur at the inlet to the culvert (Position 1) or at inspection chambers, should a change in Hydraulic Capacity occur.

Should the volume of water within the open upstream section of the Willow Brook exceed the carrying capacity of the culverted section, overland flows would gravitate towards the low points on the ground terrain. The Environment Agency Risk of Flooding from Surface Water indicates that flow routes would be along the highway network, with the edge of the flood encroaching onto the southwestern corner of the Application Site, away from the existing dwelling and proposed extension to the dwelling.

Figure 1: Aerial Mapping, EA Detailed River Network and Upstream and Downstream Opening Markers, and the Risk of Flooding from Surface Water 1:100 RP event



Environment Agency standing advice states “Make sure the floor levels are either no lower than existing floor levels or 300 millimetres (mm) above the estimated flood level. You will also need to use flood resistant materials up to at least 300mm above the estimated flood level.”¹ It has been recommended in the flood risk assessment that the proposed development is built to the same level as the finished floor level of the existing residential dwelling following Standing Advice.

Overall, the development proposals are classified as a minor extension and EA Standing advice should be applied. No modelled flood level data is available for Willow Brook; however mapping and sewer asset records indicates that the watercourse is located outside of the Site boundary and is open channel to the south of the property (See figure 1). Flood Resilient techniques have been recommended for the development proposal and these measures should be incorporated into the design.

Ambiental (RHDHV), Telecom House, 125-135 Preston Road, Brighton, BN1 6AF, **Consultancy Team** + 44 (0) 1273 006 900

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¹ [Preparing a flood risk assessment: standing advice - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/standing-advice/advice-on-flood-risk-assessment)

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Royal HaskoningDHV

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**Your Ref: 6657 12 Omer Drive
Our Ref: UUPS-ORD-502213
Date: 14/07/2023**

Dear Sirs

Location: 12 OMER DRIVE, MANCHESTER, M19 2JN

I acknowledge with thanks your request dated 13/07/2023 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

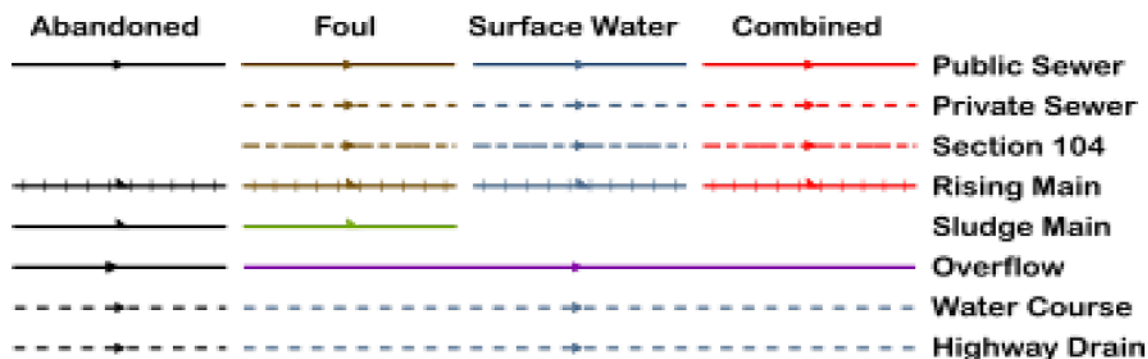
TERMS AND CONDITIONS - WASTEWATER AND WATER DISTRIBUTION PLANS

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:

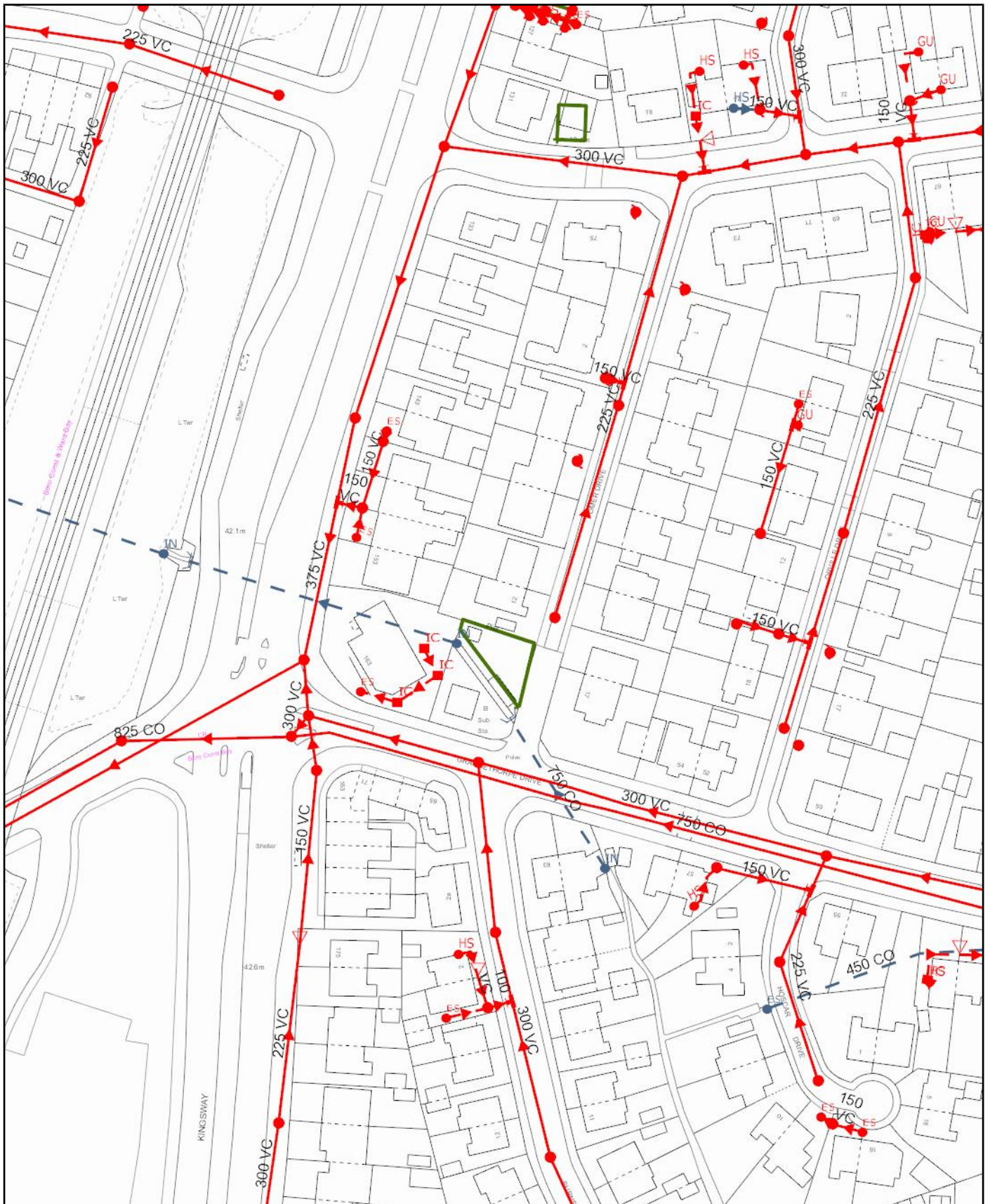
- This Map and any information supplied with it is issued subject to the provisions contained below, to the exclusion of all others and no party relies upon any representation, warranty, collateral contract or other assurance of any person (whether party to this agreement or not) that is not set out 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	



Scale: 1:1250
Date: 14/07/2023

SEWER RECORDS



Water for the North West

Address or Site Reference: 12 OMER DRIVE, MANCHESTER, M19 2JN

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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