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Issued to : SewerAdoptions@uuplc.co.uk

21 December 2023

Our Ref : 314405/LA/JR

To whom it may concern,

Proposal	To vary conditions of planning permission ref. 20/00418/FUL - Erection of 2 no. semi-detached and 4 no. detached dwellings following demolition of existing vacant care home and garages, together with provision of associated hard surfaces, footways, and drainage infrastructure - to allow for minor material amendments (larger houses) to the development
Location	Bowlacre Home Stockport Road Hyde Tameside SK14 5E
Application No.	21/01113/FUL

You were recently consulted by Tameside Metropolitan Borough Council (Tameside MBC) on a planning discharge of condition application reference 22/00064/PLCOND in relation to Bowl acre home in Hyde. The application sought approval to discharge Condition 4 on planning permission ref. 21/01113/FUL in relation to drainage matters. The wording of the condition is as stated below.

The applicant's submissions included the Drainage Strategy produced by Delta-Simons (dated July 2022 Project No: 22-1179.01).. Whilst condition 4. i. was approved insofar as it discounted the use of SuDS on the site, discussions between the applicant, the council and United Utilities (UU) has so far failed to discharge Condition 4 ii (rate of discharge to the public sewer).

Consultation to Date

Condition 4 states:

4. *Other than demolition works hereby approved by this permission, the development hereby approved shall not commence until a surface water drainage scheme, including for all carriageways and footways, shall be submitted to, and approved in writing by, the local planning authority. The drainage scheme must include:*

   i. *An investigation of the hierarchy of drainage options in the National Planning Practice Guidance (or any subsequent amendment thereof). The investigation shall include evidence of an assessment of ground conditions and the potential for infiltration of surface water; and,*

ii. *a restricted rate of discharge of surface water to be agreed with the local planning authority (if it is agreed that infiltration is discounted by the investigations).*

The approved scheme shall have regard to the Non-Statutory Technical Standards for Sustainable Drainage Systems (March 2015) or any subsequent replacement national standards. The development hereby approved shall be carried out only in accordance with the approved drainage scheme.

In response to the application and Condition 4 United Utilities provided the following commentary recommending that Condition 4 was not discharged on the 4th of October 2023:

"Further to our review of the submitted Drainage Strategy (ref 22-1179.01, issued July 2022) United Utilities recommends that condition 4 is not discharged. This is because we have doubts about the existing runoff rate calculated and do not agree with the proposed rate of 10.5 l/s. Regardless, all sites should aspire to meet greenfield runoff rates and we therefore request surface water is restricted to 5 l/s."

Tameside MBC provided further commentary on the 23rd of November 2023 concluding that condition 4 i has been discharged, however agreement on Condition 4 ii is still to be agreed.

Condition 4 The investigation of the hierarchy of drainage options, included in the Drainage Strategy - Delta-Simons Project No: 22-1179.01, which rules out SuDs and soakaways is accepted. The condition is therefore hereby discharged partially in so far as it relates to an investigation of the hierarchy of drainage options [provision (i) of the condition]. Full discharge of the condition will then depend upon an agreement being reached in respect of the rate of discharge of run off.

Mabbett response

With regards Condition 4 ii and the proposed discharge rate, the planning permission decision notice states; *'The approved scheme shall have regard to the Non-Statutory Technical Standards for Sustainable Drainage Systems (March 2015) or any subsequent replacement national standards. The development hereby approved shall be carried out only in accordance with the approved drainage scheme.'* We are advised by the applicant's planning agent, that adherence to the condition is the requirement and reference to any other document or standard not referred to in the wording of the condition, is not mandatory.

The Non-statutory technical standards for sustainable drainage systems March 2015 states: *"S3 For developments which were previously developed, the peak runoff rate from the development to any drain, sewer or surface water body for the 1 in 1 year rainfall event and the 1 in 100 year rainfall event must be as close as reasonably practicable to the greenfield runoff rate from the development for the same rainfall event, but should never exceed the rate of discharge from the development prior to redevelopment for that event."*

Within the Tameside Metropolitan Borough Council Tameside Level 1 Update and Level 2 Strategic Flood Risk Assessment (March 2011), the latest version of the SFRA, Paragraph 8.4.4 states*: 'For developments on brownfield sites outside of CDAs, runoff rates should be reduced by 30%.*

In order to move the development forward and discharge Condition 4ii we propose to restrict the discharge rate to 5l/s. This can be achieved by amending the drainage strategy for the site, with the resultant expectation that UU will agree the condition.

Drainage Strategy Amendments

Surface water runoff generated by the existing Site currently discharges uncontrolled to a 450mm diameter public combined sewer underneath Stockport Road.

Based on the brownfield nature of the Site and the considerable extent of existing hardstanding, existing surface water runoff rates were estimated in the 2022 Drainage Strategy (DS) using the Modified Rational Method (2.78 x Rainfall Intensity (mm) x Impermeable Drainage Area (ha)). The brownfield runoff rates for the existing hardstanding areas (0.25 Ha) using FEH data based on a 6 hour storm duration find the 1 in 1 year return period storm to be 15 l/s.

The 2022 DS proposed a rate of 10.5 l/s, in order to provide a 30% betterment over the existing rate. Given the

above we believe the proposed discharge rate of 30% betterment over the existing brownfield rate is in line with the national guidance and local policy and therefore, approval should have been given.

Nevertheless, as the United Utilities have stated '*all sites should aspire to meet greenfield runoff rates and we therefore request surface water is restricted to 5 l/s'*. This rate has been used in our revised attenuation calculations.

When attenuating for the previous proposed brownfield discharge rate of 10.5 l/s, for the 1 in 100 year +40% CC event, 99.8m^3 of attenuation was required on-site, calculated using MicroDrainage Source Control Calculations for a proposed pipe. Whereas when attenuating for the proposed rate of 5l/s, for the 1 in 100 year +40% CC event, an amount of 110 m^3 of attenuation is required, calculated using Causeway Flow (Appendix A). To accommodate for the additional storage, it is proposed to lengthen the oversized pipe by 5 metres. A proposed Drainage Sketch is included as Appendix B to this document.

Regarding potential SuDS features on-site, permeable surfacing was recommended as part of the drainage strategy and has the potential to accommodate up to 30m^3 of attenuation. In this case, the use of Tegula Priora paving has been approved by the Council for use in the areas shown on the Hard Landscaping Plan ref. (2-)AP001 Rev 12. This attenuation will be additional to the oversized piping. It will be in tandem with the inclusion of 5litre rainwater butts within private gardens for use by the occupants in grey water recycling. This will provide extra rainwater attenuation, which is additional to the above.

All methods of surface water discharge have been assessed in accordance with the drainage hierarchy. Where, as in this case, soakaways are not possible discharge of surface water to the existing combined sewer on-site has been agreed. Therefore the surface water stored within the pipe system will discharge to the existing private combined sewer network, at a reduced flow rate as described

Conclusions

Given the above we believe we have provided sufficient information, in-line with the LPA's and UU's request and welcome the discharge of Condition 4 ii) in its entirety. We seek your confirmation of this to the Council at your earliest opportunity.

Yours sincerely,

MABBETT & ASSOCIATES LTD

BY:

Appendix A – Causeway Flow Calculations

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)		Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)		Minimum Backdrop Height (m)	0.200
Ratio-R		Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)		Enforce best practice design rules	✓

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Easting (m)	Northing (m)	Depth (m)
Storage	0.265	5.00	100.000	0.000	0.000	2.000

Simulation Settings

Rainfall Methodology	FEH-22	Analysis Speed	Normal	Additional Storage (m³/ha)	20.0
Summer CV	0.750	Skip Steady State	x	Check Discharge Rate(s)	x
Winter CV	0.840	Drain Down Time (mins)	240	Check Discharge Volume	x

Storm Durations

15	30	60	120	180	240	360	480	600	720	960	1440

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
100	40	0	0

Node Storage Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	✓	Sump Available	✓
Invert Level (m)	97.500	Product Number	CTL-SHE-0106-5000-1000-5000
Design Depth (m)	1.000	Min Outlet Diameter (m)	0.150
Design Flow (l/s)	5.0	Min Node Diameter (mm)	1200

Node Storage Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	98.000
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	0

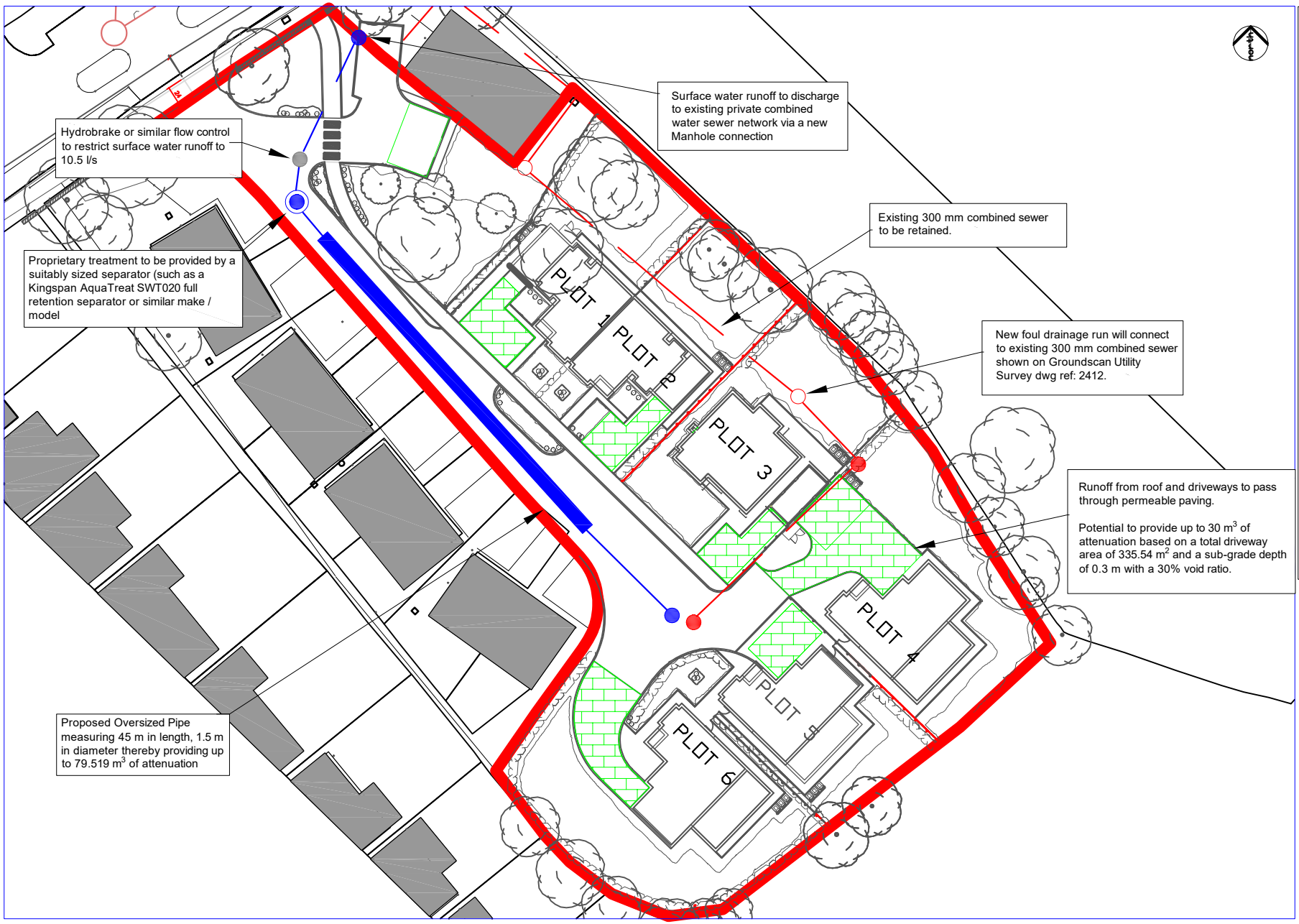
Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	231.5	0.0	1.000	231.5	0.0	1.001	0.0	0.0

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 96.74%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	Storage	118	98.494	0.493	49.6	109.9514	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	Outflow (l/s)	Discharge Vol (m³)
120 minute winter	Storage	Hydro-Brake®	5.0	98.8

Appendix B – Drainage Sketch



Legend

- **Proposed Oversized Pipe** 45m in length, 1.5m in diameter providing 79.519m^3 of attenuation
- **Proposed Porous Paving Area** 335.54m^2 with a subgrade depth of 0.3m and a void ratio of 30% providing approx. 30m^3 of attenuation
- Indicative Route of Proposed Surface Water Sewer
- Approximate Route of Proposed Foul Sewer
- Approximate Route of Existing Private Combined Sewer
- Approximate Route of Existing Public Combined Sewer
- Existing Combined Sewer Manhole
- Existing Private Combined Sewer Manhole
- Proposed Foul Water Manhole
- Proposed Surface Water Manhole
- Proposed Flow Control Device (Hydrobrake or similar)
- Proposed Proprietary Separator such as Kingspan AquaTreat SWT020 full retention separator or similar make/model

Rev. Description Drawn Date

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Project
Bowlacre Home, Stockport Road

Drawing
Conceptual Drainage Sketch

Status
SKETCH

Scale 1:100 Sheet A1

Drawn LA Check JR Date 01/02/24

Drawing No: 314405 _001 Rev 1