Queens Avenue - P500, Manchester

# Response to Condition 8

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# Response to Condition 8

Prepared for Casey

Queens Avenue - P500, Manchester

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Alan Johnston Partnership Ltd.

Company No. 13204766

# Queens Avenue - P500, Manchester

# Response to Condition 8

# 1.0 Introduction

This document has been produced in relation to the development of Queens Avenue in Manchester, as approved by Manchester City Council Planning department under the Decision Notice Reference : 135789/FO/2022 It addresses the requirements of Condition 8 and provides evidence to enable discharge of the Condition. The text of the Condition is summarised below:

*Prior to the commencement of the development, a surface water drainage scheme for the site, based on sustainable drainage principles shall be submitted to and approved in writing by the local planning authority.*

*The scheme shall include:*

*-Surface water drainage layout including all components, levels, connectivity and proposed overland flow routes for extreme events.*

*-Evidence of a finalised sewer diversion proposal supported by approval in principle from United Utilities.*

*-Hydraulic calculations to support the drainage proposal including manhole and pipeline schedule printouts for cross-referencing to the drainage layout.*

*-Evidence that the drainage system has been designed (unless an area is designated to hold and/or convey water as part of the design) so that flooding does not occur during a 1 in 100 year rainfall event with allowance for 45% climate change in any part of a building;*

*-Details of how the scheme shall be maintained and managed after completion. -Levels of the proposed drainage systems including proposed ground and finished floor levels in AOD;*

*-Incorporate mitigation measures to manage the risk of sewer surcharge where applicable; and*

*-Foul and surface water shall drain on separate systems.*

*The approved schemes shall also be in accordance with the Non-Statutory Technical Standards for Sustainable Drainage Systems (March 2015) or any subsequent replacement national standards.*

*The approved scheme shall be implemented and be in place prior to the first occupation*

*of the development.*

*Reason - To prevent the increased risk of flooding, to improve and protect water quality*

*and ensure future maintenance of the surface water drainage system pursuant to policy*

*EN17 of the Core Strategy.*

# 2.0 RESPONSE TO CONDITION 8

## Section A - Drainage Scheme

The proposed drainage scheme, shall discharge into the into a local combined sewer, in accordance with the drainage hierarchy, as the suitability of a local watercourse and infiltration to ground has been dismissed.

The Scheme shall have separate S.W & F.W drains, to be privately maintained, prior to combining into the UU Sewer, with the S.W flows controlled via a vortex control to 5l/s for all storm events including the 1:100 year return period and an allowance for Climate Change; utilising an online tank as attenuation for the severe storm events.

Due to the depth of the existing combined sewer crossing the site, the previously suggested option for diversion has been negated by layout amendments, to ensure the proposed dwellings are outside the easement of the existing sewer.

## Section B - Timetable for Implementation

To satisfy the requirements of Section B, it is stated that the maintenance requirements of the SuDs systems shall be implemented immediately on occupation of the buildings, and as stated below in Section B.

## Section C - Details of SuDS components

It is proposed that the surface and foul water drainage systems and Surface water systems will be a private, therefore the drainage system maintenance requirements will be the responsibility of a responsible organisation as nominated by the Client; in accordance with the CIRIA SUDS Manual C753.

The S.W attenuation for the development, shall consist of cellular storage units that shall remain private and therefore be the responsibility of an appointed responsible organisation in accordance with the CIRIA SUDS Manual C753. Accordingly, as stated in the SUDS Manual the operation and maintenance of the attenuation shall be as the modified version of table 21.3 below.

Table 21.3 (modified) : Operation and maintenance requirements for attenuation storage tanks

| Maintenance Schedule | Required Action | Typical Frequency |
|---|---|---|
| Regular Maintenance | Inspect and identify any areas not operating correctly. If required take remedial action | Monthly for 3 months, then annually as minimum |
| | Remove debris from the catchment surface / ACO Channels | Monthly |
| | Remove sediment from upstream catchpit chambers | Annually, or as required |
| Remedial Action | Repair inlets, outlets, vents and cellular storage units | As required |
| Monitoring | Inspect / check all inlets, outlets and vents to ensure they are in good condition and operating as designed | Annually |
| | CCTV Survey inside of cellular system for sedimentation build-up and remove if necessary | Every 5 years minimum or as required |

The remaining drainage systems (Hydrobrake unit) will be maintained in accordance with manufacturer's requirements which will be provided within the O&M manual which will be issued as a compliance requirement to the maintenance contractor on completion of the works.

The shared hard surfaces proposed for the development shall require regular annual sweep and suction brush following leaf fall in autumn. An annual inspection of control chamber, ACO channels and the inspection chambers and catch pit manholes, shall be necessary to remove any silt build up and check the free flow use of the hydrobrake.

The details of the SuDS features can be found in Appendix A.

## 3.0 CONCLUSION

On the basis of the above explanations and information within the Appendices of this document, it is considered that sufficient information has been provided to enable the discharge of Condition 8.