

Memo

To: LLFA

From: Curtins

Subject: MSCP Drainage Condition Discharge

Reference: 20200-CUR-MSCP-EX-MM-D-7501

Date: 14/03/22

Following the initial submission of the drainage design for the MSCP the following queries have been returned from the LLFA:

- A catchments drawing should be presented alongside the hydraulic model for the carrier drainage, highlighting the areas (m2) which will drain to the proposed drainage within the highway as shown on DWG: 20200-CUR-MSCP-EX-DR-D-7501 & 20200-CUR-MSCP-EX-DR-D-7502. The hydraulic model does not match that of DWG: NMGH CUR ZZ XX DR D 72102 P01 & NMGH CUR ZZ XX DR D 72101 P01 or the proposed drainage layout (DWGs: 20200-CUR-MSCP-EX-DR-D-7502 & 20200-CUR-MSCP-EX-DR-D-7501). It needs to be clearly demonstrated by a corresponding proposed drainage layout and hydraulic model that the proposed drainage system within the highway can attenuate the flows from future plots.
- As the existing drainage connects indirectly to the UU sewer, agreement in principle from United Utilities is required to confirm that the proposed flows are acceptable for a temporary connection and that if the masterplan drainage cannot connect to the river then permeant connection is also acceptable.

1: Catchment drawing NMGH CUR ZZ XX DR D 72101/72102 shows the overall areas that will contribute to the drain. The inductive drainage shown on this drawing has been updated in drawing 20200-CUR-MSCP-EX-DR-D-7501 and 7502.

The drainage design to be installed as part of the MSCP works includes temporary storage to mitigate the impact of the first stage of works during events up to and including 1 in 100 + 40% climate change.

Further works are required during the future stage to increase the volume of storage on the network. Due to the position of the current Diabetes and Endocrinology Centre, the proposed location of the masterplan storage is not available during this phase.

The model results shown in 20200-CUR-MSCP-EX-CA-D-7502-P01_Future Carrier Drain calculations show that additional storage is required, and the flow/capacity is less than 1. In this scenario, as there is a proposed future increase in storage, the important point to rise is the flow/cap ratio show that there is sufficient capacity in the network to carry the required flows when the future areas are taken into consideration.

The total storage required is being taken into consideration as the masterplan develops.

2: The proposed connection has S106 indirect connection approval.