District: Cherwell
Application No: 20/01164/DISC
Proposal: Discharge of condition 10 (Drainage) of 14/01932/OUT
Location: OS Parcel 7400 Adjoining And South Of, Salt Way, Banbury

Lead Local Flood Authority

Recommendation:

Objection

Key issues:

- Submitted information is not aligned with Local or National Standards
- Submitted information to be fully updated and re-submitted to conform to Local and National Standards
- Climate Change allowance is incorrect in its application.

Legal agreement required to secure:

Conditions:

Informatives:

Condition 10 should not be discharged unless Condition 11 is included in the discharge request as the two conditions are intrinsically linked.

Detailed comments:

Calculations:
All calculation files to be re-run using 40% Upper Thames Catchment Climate Change allowance.
FEH methodology to be used for calculation files.

1. CV values of 0.95 for roofs and 0.9 for paved areas are applied. The designer must justify where a Cv of less than 0.9 has been used.

2. Calculations should be undertaken for all relevant return periods and identify the critical duration used.
3. Whole Catchment Analysis to be demonstrated. Including mitigation for downstream impacts.
4. Confirmation required for half drain down times, for example any attenuation features on site.
5. Fully detailed drawing including pipe numbers for comparison with MicroDrainage calculations required, including also final point of discharge and rate of discharge.
6. Urban Creep application within calculations needs to be justified. It is unclear as to whether 10% Urban Creep has been included in the final impermeable area allowance.
7. Provided calculations show flood on certain parts of the pipe network. This will have impacts on upstream manholes and should be addressed.
8. Final discharge for entirety of site to be maintained at Qmed.

Design:

- Evidence of Source Control required.
- Green space on site should be maximised for inclusion of SuDS techniques.
- Blue/Green roofs to be utilised.
- Water to be kept at or as close to the surface as possible.
- Over the edge, filter strip to swale or attenuation method advocated for all impermeable surfaces and roads.
- 1:5 slopes to swales to be revised to recommended standard of 1:3.
- Freeboard for all attenuation features to be fully detailed and defined on drawings and within Strategy.

- Source control and SuDS opportunities for on the surface mitigation have been missed. All opportunities must to be further explored, demonstrated or justified why they have not been used. Full list of all SuDS features employed on site to be submitted.

- Sacrificial areas in the event of exceedance must be considered.
- Treatment and Management train needs to be demonstrated.
- All hardstanding must be of a permeable construction, where this is not considered practical full explanatory justification to be provided.

- Conveyance routing – to be kept on the surface and detailed on drawing.
- Dispersed (cascading) site storage and conveyance routing to be clearly identified on drawing.

Other requirements:

- Phasing – to be detailed on plan including descriptive methodology as to how surface water will be managed during construction, the mobilisation of sediments and any contaminants.
- WFD – justification as to how water quality from site will be improved

- Exceedence – justification as to how surface water will be managed on site in event of failure or exceedance event.
- Cross sectional drawings of all drainage features to be provided.
- Management and Maintenance Plan to be submitted as standalone document clearly identifying the chosen contractor responsible for the works.
- Pre and Post development overland surface water flow plan required.
- Safe ingress/egress needs to be demonstrated.

- As built plans to be submitted in both .pdf and .shp files. On completion photographs of all drainage features on site to be submitted to the LLFA

Fully updated Surface Water Management Strategy, associated calculation files, drawings, Management and Maintenance Plan to be submitted for technical assessment, in compliance with Local Standards.

Officer's Name: Adam Littler
Officer's Title: Drainage Engineer
Date: 09 June 2020