



B A Y N H A M M E I K L E
partnership limited

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Reference: JH / 12690 – 09.08.2021

LLFA Objection – Condition 2

Reference: RE: 6/2021/0505/COND – H R Owen. Mosquito Way, Hatfield, AL10 9WN

Date of Objection: 09.07.2021

Condition 2 States:

Development must not commence until a detailed surface water drainage scheme for the site based on the approved drainage strategy and sustainable drainage principles, has been submitted to and approved in writing by the local planning authority. The scheme must subsequently be implemented in accordance with the approved details before the development is completed.

The Scheme must include:

- a. Demonstrate an appropriate SuDS management and treatment train and inclusion of above ground features reducing the requirement for any underground storage. Blue roofs, permeable paving areas and above ground storage structures should be considered within the development;*
- b. Detailed modelling to demonstrate how the system operates during up to an including the 1 in 100-year critical duration storm event including an allowance for climate change. This should include half drain down times for all storage features;*
- c. Final drainage layout plan showing pipe networks. The plan should show any pipe 'node numbers' that have been referred to in network calculations and it should also show invert and cover levels of manholes. Total storage volume provided within each storage structure should be identified;*
- d. Detailed engineered drawings of the proposed SuDS features including cross section drawings, their size, volume, depth and any inlet and outlet features including any connecting pipe runs;*
- e. Final detailed management plan to include arrangements for adoption an any other arrangements to secure the operation of the scheme throughout its lifetime.*

Reason: To prevent the increased risk of flooding, both on and off site in accordance with the Nation Planning Policy Framework.

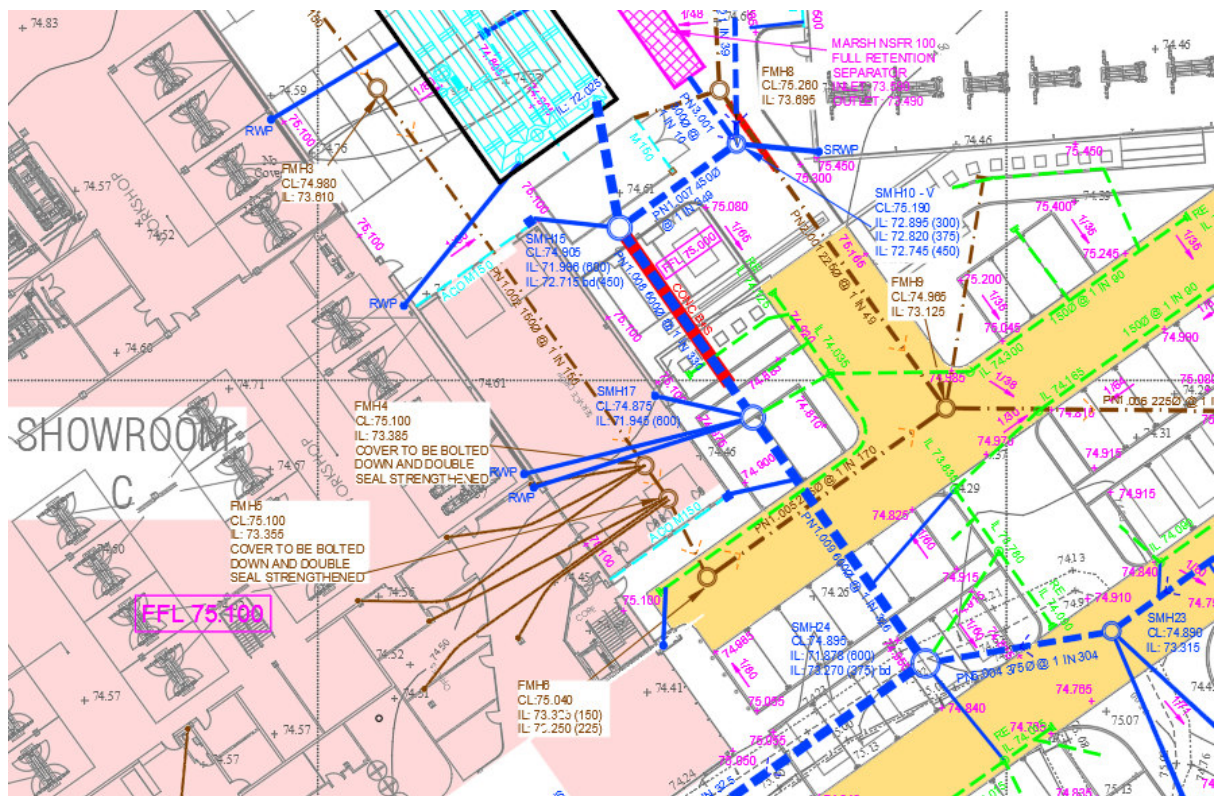
We advise the LPA that the information submitted in support of condition 2 in relation to surface water does not comply with the requirements set out in condition 2. Therefore, we recommend to the LPA not to discharge condition 2.



We acknowledge the applicant has provided a drainage strategy based on 122 l/s discharge, but with slightly updated network. Detailed modelling has been submitted to support the latest design. **Noted**

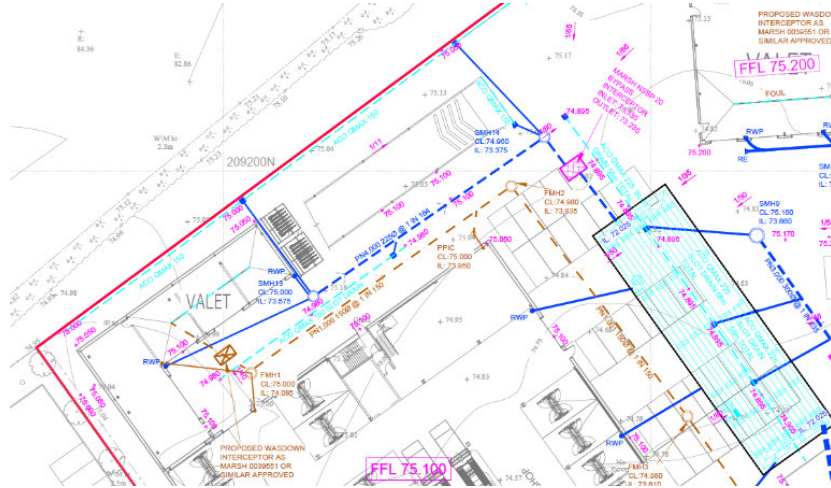
We are pleased with the proposed use of permeable paving for the roads and proximal to the parking spaces. However, we would still be concerned with the road gullies at the access road draining directly into the surface water network and subsequently discharge with no SuDS management and treatment. Treatment should be provided through the use of above-ground SuDS such as permeable paving or filter drains etc. Gully outlets have been amended to discharge into the permeable paving rather than SMH23. This will offer treatment to the 250m² drained by the gullies prior to entering the storm network.

We would like to remind that no surface water drainage should be provided beneath a building. The applicant had clarified this and states that the storm run between SMH15 and SMH17 is not under a building, however the Landscape General Arrangement Plan indicates a form of structure/building here. Please could this be clarified. The drainage run between SMH15 and SMH17 is not beneath the building. The extent of building is shown in a pink hatch within the below screenshot.





In addition, in the north western part of the site we have noticed that rainwater pipes are proposed to discharge at flood level. We would like to advise that appropriate connections into the wider network should be provided. No discharge to impermeable surface will be allowed. This is an old reference and is not shown on the latest drainage plan. No roof water is discharging to floor level. Screen shot shown below.



The applicant refers to the latest drainage plan which may resolve the above query, as well as our previous questions regarding SMH26. However, this latest drainage plan does not appear available on the planning portal. Latest plan is to be uploaded onto the planning portal.

An updated maintenance plan should be provided to include the latest proposal of Tubosider storage structure. SuDS maintenance plan attached which has been updated to suit Tubosider storage tank as opposed to cellular tank.

We would like to remind that all updates should be appropriately indicated in the drainage modelling and on the drainage layout. Half drain down times have not been submitted in support of the strategy in the latest calculations. Please note they should not exceed 24 hours. Worst case half drain times are shown within the calculations, the below screen shot highlights an example of this. 1 year shown on page 11, 30 year shown on page 14 and 100 year + CC% shown on page 17.

PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap. (l/s)	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
1.000	SMH1	75.418	1.028	7.994	0.87			57.1	FLOOD
1.001	SMH2	75.410	1.135	0.341	1.02			65.0	FLOOD
1.002	SMH3	75.356	1.161	0.000	1.46			97.1	FLOOD RISK
2.000	SMH4	75.117	0.517	0.000	0.02			3.5	SURCHARGED
1.003	SMH5	75.118	1.053	0.000	1.33			90.2	SURCHARGED
3.000	ACO 900	75.036	-0.329	0.000	0.02			23.9	OK
1.004	SMH6	75.036	1.181	0.000	1.39			91.1	SURCHARGED
1.005	SMH7	74.999	1.259	0.000	2.14			128.9	SURCHARGED
1.006	SMH8	74.917	1.237	0.000	1.42			148.5	SURCHARGED
4.000	SMH9	74.843	0.883	0.000	0.63			35.1	SURCHARGED
4.001	INTERCEPTOR	74.835	0.945	0.000	0.47			70.4	SURCHARGED
1.007	SMH10	74.826	1.296	0.000	0.57			241.9	SURCHARGED
5.000	SMH13	74.763	0.963	0.000	0.35			13.4	SURCHARGED
5.001	SMH14	74.755	1.155	0.000	0.31			31.8	SURCHARGED
5.002	TANK	74.739	2.114	0.000	0.64			89.3	SURCHARGED
1.008	SMH15	74.734	2.138	0.000	0.45			122.8	SURCHARGED
1.009	SMH17	74.721	2.176	0.000	0.42			123.3	SURCHARGED
6.000	SMH18	74.741	0.591	0.000	0.33			11.6	SURCHARGED

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