

Essex County Council
**Development and Flood Risk
Environment and Climate Action,**
C426 County Hall
Chelmsford
Essex CM1 1QH



Cuma Ahmet
Epping Forest District Council
Planning Services

Date: 4th April 2022
Our Ref: SUDS-002713
Your Ref: EPF/1182/18

Dear Mr Ahmet,

Consultation Response –EPF/1182/18– Land west of Froghall Lane, Chigwell, Essex.

Thank you for your email received on 31/03/2022 which provides this Council with the opportunity to assess and advise on the proposed surface water drainage strategy for the above mentioned planning application.

As the Lead Local Flood Authority (LLFA) this Council provides advice on SuDS schemes for major developments. We have been statutory consultee on surface water since the 15th April 2015.

In providing advice this Council looks to ensure sustainable drainage proposals comply with the required standards as set out in the following documents:

- Non-statutory technical standards for sustainable drainage systems
- Essex County Council's (ECC's) adopted Sustainable Drainage Systems Design Guide
- The CIRIA SuDS Manual (C753)
- BS8582 Code of practice for surface water management for development sites.

Lead Local Flood Authority position

Having reviewed the Surface Water Drainage Strategy and the associated documents which accompanied the planning application, we do not object to the granting of planning permission based on the following:

Condition 1

No works except demolition shall take place until a detailed surface water drainage scheme for the site, based on sustainable drainage principles and an assessment of the hydrological and hydro geological context of the development, has been submitted to and approved in writing by the local planning authority. The scheme should include but not be limited to:

- Verification of the suitability of infiltration of surface water for the development. This should be based on infiltration tests that have been undertaken in accordance with BRE 365 testing procedure and the infiltration testing methods found in chapter 25.3 of The CIRIA SuDS Manual C753.

- Limiting discharge rates to 1:1 Greenfield runoff rates for all storm events up to and including the 1 in 100 year rate plus 40% allowance for climate change. All relevant permissions to discharge from the site into any outfall should be demonstrated.
- Provide sufficient storage to ensure no off site flooding as a result of the development during all storm events up to and including the 1 in 100 year plus 40% climate change event.
- Inclusion of 10% urban creep allowance in storage calculations
- Demonstrate that all storage features can half empty within 24 hours for the 1 in 30 plus 40% climate change critical storm event. Where half drain time exceeds 24 hours, it should be demonstrated that features are able to accommodate a 1 in 10 year storm events within 24 hours of a 1 in 30 year event plus climate change
- Final modelling and calculations for all areas of the drainage system.
- The appropriate level of treatment for all runoff leaving the site, in line with the Simple Index Approach in chapter 26 of the CIRIA SuDS Manual C753.
- Detailed engineering drawings of each component of the drainage scheme.
- A final drainage plan which details exceedance and conveyance routes, FFL and ground levels, and location and sizing of any drainage features.
- An updated drainage strategy incorporating all of the above bullet points including matters already approved and highlighting any changes to the previously approved strategy.

The scheme shall subsequently be implemented prior to occupation.

Reason

- To prevent flooding by ensuring the satisfactory storage of/disposal of surface water from the site.
- To ensure the effective operation of SuDS features over the lifetime of the development.
- To provide mitigation of any environmental harm which may be caused to the local water environment
- Failure to provide the above required information before commencement of works may result in a system being installed that is not sufficient to deal with surface water occurring during rainfall events and may lead to increased flood risk and pollution hazard from the site.

Condition 2

No works shall take place until a scheme to minimise the risk of offsite flooding caused by surface water run-off and groundwater during construction works and prevent pollution has been submitted to, and approved in writing by, the local planning authority. The scheme shall subsequently be implemented as approved.

Reason

The National Planning Policy Framework paragraph 167 and paragraph 174 state that local planning authorities should ensure development does not increase flood risk elsewhere and does not contribute to water pollution.

Construction may lead to excess water being discharged from the site. If dewatering takes place to allow for construction to take place below groundwater level, this will cause additional water to be discharged. Furthermore the removal of topsoils during construction may limit the ability of the site to intercept rainfall and may lead to increased runoff rates. To mitigate increased flood risk to the surrounding area during construction there needs to be satisfactory storage of/disposal of surface water and groundwater which needs to be agreed before commencement of the development.

Construction may also lead to polluted water being allowed to leave the site. Methods for preventing or mitigating this should be proposed.

Condition 3

Prior to occupation a maintenance plan detailing the maintenance arrangements including who is responsible for different elements of the surface water drainage system and the maintenance activities/frequencies, has been submitted to and agreed, in writing, by the Local Planning Authority.

Should any part be maintainable by a maintenance company, details of long term funding arrangements should be provided.

Reason

To ensure appropriate maintenance arrangements are put in place to enable the surface water drainage system to function as intended to ensure mitigation against flood risk.

Failure to provide the above required information prior to occupation may result in the installation of a system that is not properly maintained and may increase flood risk or pollution hazard from the site.

Condition 4

The applicant or any successor in title must maintain yearly logs of maintenance which should be carried out in accordance with any approved Maintenance Plan. These must be available for inspection upon a request by the Local Planning Authority.

Reason

To ensure the SuDS are maintained for the lifetime of the development as outlined in any approved Maintenance Plan so that they continue to function as intended to ensure mitigation against flood risk.

However, in the event that more information was supplied by the applicants then the County Council may be in a position to withdraw its objection to the proposal once it has considered the additional clarification/details that are required.

Any questions raised within this response should be directed to the applicant and the response should be provided to the LLFA for further consideration. If you are minded to approve the application contrary to this advice, we request that you contact us to allow further discussion and/or representations from us.

Summary of Flood Risk Responsibilities for your Council

We have not considered the following issues as part of this planning application as they are not within our direct remit; nevertheless these are all very important considerations for managing flood risk for this development, and determining the safety and acceptability of the proposal. Prior to deciding this application you should give due consideration to the issue(s) below. It may be that you need to consult relevant experts outside your planning team.

- Sequential Test in relation to fluvial flood risk;
- Safety of people (including the provision and adequacy of an emergency plan, temporary refuge and rescue or evacuation arrangements);
- Safety of the building;
- Flood recovery measures (including flood proofing and other building level resistance and resilience measures);
- Sustainability of the development.

In all circumstances where warning and emergency response is fundamental to managing flood risk, we advise local planning authorities to formally consider the emergency planning and rescue implications of new development in making their decisions.

Please see Appendix 1 at the end of this letter with more information on the flood risk responsibilities for your council.

INFORMATIVES:

- Essex County Council has a duty to maintain a register and record of assets which have a significant impact on the risk of flooding. In order to capture proposed SuDS which may form part of the future register, a copy of the SuDS assets in a GIS layer should be sent to suds@essex.gov.uk.
- Any drainage features proposed for adoption by Essex County Council should be consulted on with the relevant Highways Development Management Office.
- Changes to existing water courses may require separate consent under the Land Drainage Act before works take place. More information about consenting can be found in the attached standing advice note.
- It is the applicant's responsibility to check that they are complying with common law if the drainage scheme proposes to discharge into an off-site ditch/pipe. The applicant should seek consent where appropriate from other downstream riparian landowners.
- The Ministerial Statement made on 18th December 2014 (ref. HCWS161) states that the final decision regarding the viability and reasonableness of maintenance requirements lies with the LPA. It is not within the scope of the LLFA to comment on the overall viability of a scheme as the decision is based on a range of issues which are outside of this authority's area of expertise.
- We will advise on the acceptability of surface water and the information submitted on all planning applications submitted after the 15th of April 2015 based on the key documents listed within this letter. This includes applications which have been previously submitted as part of an earlier stage of the planning process and granted planning permission based on historic requirements. The Local Planning Authority should use the information submitted within this response in conjunction

with any other relevant information submitted as part of this application or as part of preceding applications to make a balanced decision based on the available information.

Yours sincerely,

Dr Zahida Yousaf,
Senior Development and Flood Risk Officer
Team: Green Infrastructure and Sustainable Drainage
Service: Climate Action and Mitigation
Essex County Council

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Appendix 1 - Flood Risk responsibilities for your Council

The following paragraphs provide guidance to assist you in determining matters which are your responsibility to consider.

- Safety of People (including the provision and adequacy of an emergency plan, temporary refuge and rescue or evacuation arrangements)

You need to be satisfied that the proposed procedures will ensure the safety of future occupants of the development. In all circumstances where warning and emergency response is fundamental to managing flood risk, we advise LPAs formally consider the emergency planning and rescue implications of new development in making their decisions.

We do not normally comment on or approve the adequacy of flood emergency response procedures accompanying development proposals as we do not carry out these roles during a flood.

- Flood recovery measures (including flood proofing and other building level resistance and resilience measures)

We recommend that consideration is given to the use of flood proofing measures to reduce the impact of flooding when it occurs. Both flood resilience and resistance measures can be used for flood proofing.

Flood resilient buildings are designed to reduce the consequences of flooding and speed up recovery from the effects of flooding; flood resistant construction can help prevent or minimise the amount of water entering a building. The National Planning Policy Framework confirms that resilient construction is favoured as it can be achieved more consistently and is less likely to encourage occupants to remain in buildings that could be at risk of rapid inundation.

Flood proofing measures include barriers on ground floor doors, windows and access points and bringing in electrical services into the building at a high level so that plugs are located above possible flood levels. Consultation with your building control

department is recommended when determining if flood proofing measures are effective.

Further information can be found in the Department for Communities and Local Government publications '[Preparing for Floods](#)' and '[Improving the flood performance of new buildings](#)'.

- Sustainability of the development

The purpose of the planning system is to contribute to the achievement of sustainable development. The NPPF recognises the key role that the planning system plays in helping to mitigate and adapt to the impacts of climate change, taking full account of flood risk and coastal change; this includes minimising vulnerability and providing resilience to these impacts. In making your decision on this planning application we advise you consider the sustainability of the development over its lifetime.