

NORTH YORKSHIRE COUNTY COUNCIL
BUSINESS and ENVIRONMENTAL SERVICES
LEAD LOCAL FLOOD AUTHORITY
CONSIDERATIONS and RECOMMENDATION



Application No:	NYM/2018/0375/FL		
Proposed Development:	construction of warehouse and plant room extensions together with extension to and resurfacing of existing car park, internal access roadway and turning head, reinforced skip area and associated regrading of land and associated landscaping works together with installation of 2 no. flues to existing building		
Location:	Whitby Seafoods Ltd, Fairfield Way, Whitby		
Applicant:	Whitby Seafoods Ltd		
District/Borough:	Scarborough		
FRM Engineer:	Gareth Roberts	LPA Case Officer:	Mrs H Saunders

Note to the Planning Officer:

Thank you for consulting the Lead Local Flood Authority on the planning application referenced above.

NPPF FLOOD RISK AND RUNOFF CONSULTATION

The Lead Local Flood Authority requires additional information to be submitted to the Local Planning Authority before an informed decision can be made.

The LLFA have the following comments:

A Drainage Impact Assessment is requested.

Ensure appropriate easements are applied to attenuation features for any drainage network developed.

It is requested that the following details are submitted to the LPA: Surface Water Management –Existing surface water regime, Potential impact of proposed development, Principles for surface water management strategy and Proposed strategy.

Date:	25/06/18	Approved by:	Emily Mellalieu Flood Risk Management Team Leader
FAO:	Mrs H Saunders		
Issued by:	Gareth Roberts		

NYMNPA

25/06/2018

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When the applicant has finalised the drainage layout drawings it requested that these are submitted to LPA with agreed drainage outfalls, peak flow rates, required attenuation storage and finished floor levels. Any updated/finalised Micro Drainage Calculations must be submitted for approval. Micro Drainage calculations of the designed drainage system using the calculated peak flow rate and necessary attenuation.

1. Flood Risk

The site is in flood zone 1 with a low risk of surfacewater flooding.

Although North Yorkshire County Council in its capacity as Lead Local Flood Authority does not hold any records of surface water flooding at the site, it should be noted that this does not mean flooding has not occurred. It should be demonstrated within detailed design that the development does not increase flood risk both on and off site, and aims to improve flood risk wherever possible.

2. Runoff Destinations

Further details are requested on the pre and post development drainage strategy including runoff destination and any consequential impacts.

It is suggested that permeable paving will be used. Infiltration rates would need to be evaluated to establish suitability through investigative works carried out in accordance with BRE 365 Digest. Should infiltration rates prove unfavourable, the associated areas would need to be positively drained.

3. Peak Flow Control (Pre and Post Development)

It is necessary to demonstrate pre and post development rates, as the systems will be integrated, so it is vital to ensure there is capacity.

Peak flow control has not been addressed. Peak runoff rate from the developed site, for the 1 in 1, 1 in 30 and 1 in 100 year rainfall events to include for urban creep where required and climate change, must not exceed the peak greenfield runoff rate from the site for the same event.

For a whole or part brownfield site; greenfield runoff rate and/or 70% of demonstrable existing positively drained runoff rate for those rainfall events will be permitted however greenfield runoff rate should be achieved where possible.

Greenfield runoff rate is maximum 1.4 l/s/ha unless modelling conclusively demonstrates Greenfield runoff to be greater than this (**This can be conditioned**).

4. Volume Control (Pre and Post Development)

It is necessary to demonstrate pre and post development rates, as the systems will be integrated, so it is vital to ensure there is capacity.

Micro Drainage calculations are requested to confirm the required Surface water attenuation volume.

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The proposed SuDS attenuation features should be able to provide the 1 in 100 year design flood event plus with an allowance for climate change and for urban creep. This should be incorporated into the detail drainage design.

This is an additional measure to the peak flow control, as the additional volume of surface water generated by the development needs to be controlled so that the volume of surface water runoff post development does not adversely affect the receiving system. Measures should be proposed to reduce or remove the volume from the site via infiltration, long term storage, receiving proposed SuDS features or harvested for use within the development site.

Reducing to the pre-development QMED/QBAR greenfield runoff peak flow rates is usually sufficient to achieve Volume control for the 1 in 100 year 6 hour storm event on sites with the necessary attenuation storage provided.

For Brownfield sites it must also be demonstrated that the designed surface water attenuation also controls the volume of runoff to the greenfield runoff volume for a 1 in 100 year 6 hour storm event **(This can be conditioned)**.

5. Pollution Control

SuDS design must ensure that the quality of any receiving water body is not adversely affected and preferably enhanced.

Pollution from surface water runoff from the development from parking areas and hardstanding areas should be mitigated against by the use of oil interceptors, road side gullies, reedbeds or alternative treatment systems.

The use of petrol interceptors will only need to be used for sites that require 30 or more car park spaces or equivalent area of hardstanding, otherwise, road side gulleys are a sufficient measure for smaller sites for pollution control from highways **(This can be conditioned)**.

6. Designing for Exceedance

An exceedance plan is required to show overland flow during an extreme flood event, exceeding the capacity of the proposed drainage system. Mitigation measures should be proposed to minimise the risk of flooding to these properties.

Site design must be such that when SuDS features are exceeded due to failure caused by blockages or collapsed pipes or when the system is overwhelmed by excessive flood flows, the exceedance flows do not cause flooding of properties on or off site. This is achieved by designing suitable ground exceedance or flood pathways.

Runoff must be completely contained within the drainage system (including areas designed to hold or convey water) for all events up to a 1 in 30 year event, with no flooding anywhere on site.

Rainfall in excess of a 1 in 100 year rainfall that exceeds the designed SuDS scheme must not flood any properties or essential infrastructure (pumping station, junction boxes, etc.) and any exceedance flows are managed within the site that avoid risk to people and property both on and off site, with the design of the site mindful of the topographic levels and highway requirements (cross fall, dropped kerbs) as to not cause flooding to properties from exceedance flood flows **(This can be conditioned)**.

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7. Climate Change

An allowance of at least 40% must be made in SuDS design for increased amounts of rainfall as a result of Climate Change.

8. Highway Drainage

Consult with Highways.

9. Construction

Temporary flood risk measures during the construction phase should be submitted to the Local Planning Authority to mitigate the impact of flooding during the construction of the site.

Damage caused during the construction phase has the potential to prevent SuDS functioning as required, for example contamination by sediments generated during construction. As such appropriate planning must be applied to surface water management during the construction phase. Temporary mitigation measures should be proposed to control surface water flows from the development during the construction phase.

10. Maintenance

Arrangements for the maintenance of the proposed SuDS surface water runoff attenuation features should be submitted to the Local Planning Authority for approval, this may be subject to a Section 38 agreement with the NYCC Highways department and additionally a Section 104 agreement with Yorkshire Water (**This can be conditioned**).

Dependent upon the complexity of the site and development proposals, additional information may be requested for Full and Reserved Matters applications as part of a planning condition and are required for later discharge of conditions. However, it is preferable that all information is submitted as early as possible for consideration as to reduce the risk of being unable to discharge the relevant planning conditions.