

**NORTH YORKSHIRE COUNCIL**

**BUSINESS and ENVIRONMENTAL SERVICES**

**LEAD LOCAL FLOOD AUTHORITY**

**CONSIDERATIONS and RECOMMENDATION**



<b>Application No:</b>	<b>FL/NY/2025/0030/ENV</b>		
<b>Proposed Development:</b>	PLANNING APPLICATION ACCOMPANIED BY AN ENVIRONMENTAL STATEMENT FOR Construction of a temporary wellsite for the appraisal of gas, including drilling operation, proppant squeeze and flow testing operation and site restoration		
<b>Location:</b>	AT Land East of the Mill Yard, Burniston Mill, Coastal Road, Burniston, Scarborough, YO13 0DB		
<b>Applicant:</b>			
<b>District/Borough:</b>	County Application		
<b>FRM Engineer:</b>	Mark Watson	<b>LPA Case Officer:</b>	Amy Taylor

<b>Date:</b>	17 March 2025	<b>Approved by:</b>	Meirion Jones LLFA Team Leader
<b>FAO:</b>	Amy Taylor		
<b>Issued by:</b>	Mark Watson		

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Note to the Planning Officer:

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

The following documents are noted:

- Flood Risk Assessment & Surface Water Drainage Strategy, Hafren Water, Reference 3729/FRA, Revision F1, Dated 17/12/2024.
- Title of drawing/report, Author/Company, Reference XX, Revision XX, Dated XX.

In assessing the submitted proposals and reaching its recommendation the Authority would like to make the following comments:

1. Runoff Destinations

It is proposed that surface water runoff will be contained on site via an impermeable layer under the site and captured by perimeter ditches. These will be pumped to an onsite storage tanker for later disposal.

Although this appears to be acceptable, a full drainage layout is required and details of the pumped rate are required. It is noted that soakaways are not practical for this site and should be discounted.

The LLFA require additional details to understand how much storage is required in a 1 in 30 year and 1 in 100 year (plus climate change) event for a 6hr event, to understand if the pumped outfall and storage can also prevent flooding during these design events. **Further information is requested.**

2. Flood Risk

The risk is located within Flood Zone 1 and considered to have a low flood risk.

3. Peak Flow Control

Details of the proposed pump rate are required to confirm that the pumped rate can control flows within the proposed ditches without runoff overspilling the perimeter ditches.

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 climate change, must not exceed the peak greenfield runoff rate from the site for the same event.

We would also suggest the applicant reviews their drainage calculations and applies the following parameters:

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Design Consideration	Design Parameter
Minimum Slope	1:500
Roughness Value (K) – manning “n” should only be used for open channels.	0.6mm
Minimum System Velocity	1.0 m/s
Climate change	<a href="https://data.gov.uk">Climate change allowances for England (data.gov.uk)</a>
Additional Flows - Urban Creep (Where Applicable)	10%
Maximum Drained Area for Gullies	150m <sup>2</sup>
Highway Drains Minimum Cover	1.2m
Minimum Pipe Diameter	150mm
Volumetric Runoff Coefficient Cv (Summer/Winter)	1.0 For both summer and winter. (In accordance with HR Wallingford recommendations and Sewers for Adoption)
Percentage Impermeable Area (PIMP)	100% for compliance with SfA
Margin for Flood Risk Warning	300mm
Area Reduction Factor	1
Time of Entry	3-8 minutes
Return Period	1, 30, 100 as a minimum

**Further information is required.**

**4. Volume Control**

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

**5. Pollution Control**

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.

**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 fail or are exceeded, 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

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designed to hold or convey water) for all events up to a 1 in 30 year event. The design of the site must ensure that flows resulting from rainfall in excess of a 1 in 100 year rainfall event are managed in exceedance routes that avoid risk to people and property both on and off site.

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.

**The scheme to be submitted shall demonstrate that the surface water drainage system(s) are designed in accordance with the standards detailed in North Yorkshire County Council SuDS Design Guidance (or any subsequent update or replacement for that document).**

**Please note that at discharge of conditions stage, should the requirements not have been approved as part of a planning application, the applicant is exposed to the risk of being unable to discharge the relevant planning condition.**

Recommendation to the Local Planning Authority:

The submitted documents are limited and the LLFA recommends that the applicant provides further information before any planning permission is granted by the LPA. The following should be submitted and approved by the Local Planning Authority;

- No detailed designs to go alongside the submitted calculations have been provided showing all locations, dimensions and freeboard of every element of the proposed mitigation & drainage system (e.g storage areas) including details of a proposed pipe network (pipe numbers, gradients, sizes, locations, manhole details etc.). **Further information is required.**
- No detailed information has been provided to show that there will be no flooding on the site for a 1 in 30 year rainfall event. **Further information is required.**
- Details of the pumped rate for the site and confirmation that the proposed perimeter ditches have sufficient capacity to contain the anticipated runoff.
- There is currently no information on exceedance routes of the drainage scheme in a flood event greater than 1 in 100 year (plus climate change) event. **Further information is required.**
- A construction phase surface water management plan for ensuring that the SuDS features will function post development has not been provided.