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RS 28 August, 2019

[19/00257/FULES](#) | Development of 310 residential dwellings (including affordable housing) and associated infrastructure and engineering works, creation of new access from A191 Rake Lane, creation of SuDS and open space. EIA submitted. (Additional information July and August 2019, revised plans July 2019 and amended description) | Land Adjacent To Rake House Farm Rake Lane North Shields Tyne And Wear

This objection concerns the effect on flooding downstream of the Rake Lane surface water sewer. This version (dated 28 August, 2019) supersedes the version submitted on 2nd April, 2019.

The report, FLOOD RISK ASSESSMENT AND DRAINAGE STRATEGY 610065 states that the surface water from the site “flows directly to the coast” (page 21 paragraph 10.10) via the Rake Lane surface water sewer. It does not. The water flows to the lake in Marden Quarry Park but nowhere is there a reference to this in the many documents listed in the application.

Marden Quarry Park is an asset owned by North Tyneside Council (NTC) following its transfer from the Duke of Northumberland in 1972 for ‘leisure and recreation’ since when it has been developed using investments from a variety of sources.

The Briar Vale flood prevention scheme submitted in an application by NTC uses a storage basin of 4500 m³ (changed from 6500 m³ as summarised in planning application [16/001956/FUL](#)). The scheme uses the same surface water sewer that feeds water into the lake. NTC have described the lake as a “balancing pond” but this function has been further undermined by the outlet sluice gate (a penstock weir gate) having been raised by an estimated 5 cm in September, 2017 **and jammed in that position**.

NTC has failed to maintain the sluice gate in working order and failed to keep the lake outlet entrance clear of the floating debris (largely vegetation) responsible for frequent blockages of the outlet. As a result, the lake has too often flooded the lake boundary even without storm water, as it has done in earlier years (before the sluice gate was raised).

Following a formal complaint about the flooding of the boundary of the lake, in a letter, dated 1 November, 2016, written on behalf of the NTC Head of Law and Governance, the following statement was made: -

“The Council has been working closely with Northumbrian Water as they have undertaken their considerable investment in upgrading the sewerage system serving North Cullercoats. As part of our partnership working, consultants commissioned by Northumbrian Water have provided the Council with a repair solution. This involves replacement of the outfall structure. Construction of this is now in the process of being procured via the Council's asset management team.”

Earlier, on the 1st June, 2016, the following statement was included in a report by an NTC Senior Manager dealing with the formal complaint: -

“There have been difficulties with the operation of the sluice gate in recent years culminating in the mechanism becoming fully jammed. It is clear that the sluice gate has reached the end of its serviceable life. Work was undertaken in Autumn 2015 to partially free the mechanism as a temporary solution. As part of the Burnside Road Flood Relief Scheme the intentions are to replace the structure with one that is new and more fit for purpose. This work will be undertaken in June/July 2016. This update addresses Recommendation 3 in my response of 1 February where I suggested that an update on the future of the sluice gate be provided.”

Additional, related information has been provided in [an application to discharge the planning conditions for the Briar Vale flood prevention scheme](#) made **after the scheme was completed**. This is referred to in my response sent to the NTC Planning Manager in May, 2019 in the form of two documents, [Marden Quarry Lake Drainage](#) and [Comments on discharge of conditions](#). Links to the two documents are also to be found at the bottom of the webpage that provides some additional information about [flooding in Marden Quarry this year](#), in a posting updated most recently on 23 July.

As Marden Quarry Park is also a **designated nature reserve** the NTC Local Plan policy **DM5.2, Protection of Green Infrastructure**, applies, but is not referred to in the planning application.

As the park is NTC's asset, it should take the required measures to protect the park from flooding. This would not only require the replacement of the outlet structure but the raising of the boundary by at least 30 cm, an increase in the balancing pond capacity to cope with **the present and foreseen flow** from the whole of the Rake Lane surface water sewer catchment.

At the time of submitting this updated objection full details on the compliance with the 15 conditions imposed on the Briar Vale scheme planning application have **not** been provided in response to a Freedom of Information request, yet the scheme was announced as being completed in February of this year.

In August 2017 an application was made on behalf of the Murton Gap Consortium comprising Persimmon Homes, Northumberland Estates and Bellway Homes (prospective developers of the Murton Gap site) to NTC for an Environmental Impact Assessment Scoping opinion, summarised thus:-

“[17/01250/EIASCO](#) | Request for an EIA scoping opinion for development proposals for up to 3,300 residential dwellings, up to 1,100m² of convenience retail space and a new metro station as well as associated infrastructure, highway works and new areas of open space and landscaping | Land Surrounding Track Adjacent To Murton Steads Farm Murton NEWCASTLE UPON TYNE “

The response was in the form of a Scoping Opinion report dated 9 October, 2017. This included section 6, covering drainage, and includes the statements:-

“The ES should contain a Flood Risk Assessment to demonstrate how surface water will be managed and how surface water would be attenuated to prevent flood risk using a sustainable drainage approach.”

and

*“It will also need to include details of how the development can be built to ensure that flood risk is not increased **at the site and elsewhere**”*

The applicant's Flood Risk Assess and Drainage Report refers to the “Broad Scale Flood Risk Assessment and Drainage Strategy” report produced by Capita for NTC in 2015. This earlier report divided the Murton Gap site into two parts, the Primary Catchment (northern) and Secondary Catchment (southern) and provided storage basin (pond) estimates to limit the flows to surface water sewers owned by Northumbrian Water Limited (NWL) to 340 lps and 169 lps respectively. The strategy described is summarised in two paragraphs from the section of the report with the title, “Summary and Flood Risk Mitigation – Recommendations” and are reproduced below:-

*“A drainage strategy was developed for the site that took the planned flood risk mitigation scheme into account. To reduce surface water runoff generated from the site surface water attenuation features were sized based on restricting **post-developed flows** to less-than-Greenfield runoff rates. This approach restricted the allowable discharge rate from the Primary Catchment to 340 lps and the Secondary Catchment 169 lps, a reduction in runoff rate over Greenfield conditions by 42% and 50% respectively.”*

*“The sizing of attenuation features was undertaken based upon managing surface water runoff from the site up to a **1 in 100 year return period (plus climate change) event**. In accordance with these criteria, an attenuation storage volume of 40,500 m3 for the Primary Catchment and 24,000 m3 for the Secondary Catchment.” #*

Thus the flow to NWL's Rake Lane sewer would be somehow restricted to 169 lps. An explanation needs to be provided as to how the surface water drainage from the whole of the Secondary Catchment of the Murton Gap site plus that from the catchment area to the south of the boundary with Rake Lane can be accommodated by the balancing pond in Marden Quarry, **without flooding its boundary**.

Missing from the current planning application is a drainage assessment for all three prospective housing developments for the requirement for the whole Murton Gap site. The current planning application refers to a site area of 15.9 Ha with a developed area of 12.5 Ha whereas the Secondary Catchment area is 90 Ha. It should be possible to make an appropriate estimate of the developed area for both Primary and Secondary Catchment areas even before the expected further planning applications are made by the other Murton Gap Consortium members. Thus the requirement for surface water drainage may be anticipated with the aid of NWL, bearing in mind that discussions have been taking place between the Consortium and NWL for more than 5 years now!

See MURTON POND STORAGE CALCULATIONS in [15/02056/FUL](#)