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Brunel Road
Theale
Berkshire
RG 7 4AB

Charlotte Atkins
Herefordshire Council
Plough Lane
Hereford
HR4 0LE
16th November 2021

Your Reference:

Dear Ms Atkins,

Please find a response to your ecological comments and Natural England comments for Land at Townsend Farm, East Street, Pembridge, Leominster, Herefordshire HR6 9HA. NRW approach is acceptable so long as WwTW under its permitted volumetric daily flow.

Please find your questions in italics and our answers in red:

This development comprises of a total of TEN new residential dwellings and associated additional foul water flows created (Applicant estimates 6m3 per day)

Correct

The applicant originally advised on their application form and supporting information that Foul water would be managed by a connection to the local mains sewer network (Pembridge Wastewater Treatment Works (WwTW)).

That is correct but the proposal is not allowed to discharge to the foul sewer network because of the ongoing unresolved Phosphate situation that Herefordshire Council have been dealing with for two years without success to date.

There was no technical, legal or physical reason that this connection could not be achieved, and no objection was raised by Welsh Water to the proposed connection.

Herefordshire do not allow additional foul water into the public foul sewers in the River Lugg Catchment because the volume of foul water will increase at the outfall and so will the phosphate amount and Herefordshire have decreed that phosphates must not increase in the River Lugg. Therefore there is an ecological reason that we cannot drain to Welsh Water sewers.

The Pembridge WwTW discharges its outfall directly in to the River Lugg SAC hydrological catchment. This outfall is at P (nutrient) concentration above the conservation status level set for the River Lugg SAC catchment area.

Yes this would appear the case, however the treatment plant is operating legally at or below the pollutant concentrations consent standard set by the Environment Agency which is checked regularly. As Welsh water have agreed that a foul sewer connection can be made the WwTW is also operating at below its daily volumetric consent standard and could take more flow whilst still operating legally.

Additional flows in to the local mains sewer system such as those created by this development will directly generate equivalent additional flows at outfall from the WwTW and thus clearly identified pathways for additional P to enter the Lugg SAC.

We would agree the site will add additional flows if connected to the public sewers. However Welsh Water have confirmed that the proposed development can connect to their system. Welsh Water are only allowed to drain up to the permitted discharge limits within their Environmental Permit to the River Lugg. They are not allowed to drain anymore, if they do, they will be prosecuted by the Environment Agency. Therefore this site discharging to the Welsh Water treatment works will not breach the EA consent.

This is why the foul drainage proposal for the site treats all the flow at site and discharges it into the soil. Natural England have determined that small volumes into the soil with relevant offsets to sensitive features will not result in any increase in phosphates in the water environment. NE have not provided any guidance on how the off-site impact into the water environment changes once the flow from a site increases above 2m³/day.

As the ongoing Phosphate issue has not been resolved by Herefordshire Council, we have proposed a Treatment Works and a Drainage Field that is fully supported by Hydro Logic and The Councils own drainage engineering team at Balfour Beatty. Additionally we designed the solution so that it could be connected to the Welsh Water Sewerage system in 'X' years if the Phosphate issue is ever resolved.

No alternative Nutrient Neutrality option has been proposed that would be needed to offset the additional phosphate loading from this development, be scientifically evidenced and legally secured for the lifetime of the development (in perpetuity). Latest guidance and advice on this issue and a specific 'Phosphate Calculator' is available at:

https://www.herefordshire.gov.uk/downloads/download/2039/development_in_the_river_lugg_catchment

This is not the case.

If you refer to PAGE 75 of our drainage report we have clearly identified having used the council's Phosphate Calculator to determine "The Total amount of phosphorus to mitigate is 0.27 kg/year."

Then referring to Page 22 section 5.5 we Conclude

The key requirement within the Position Statement for this development is to demonstrate neutrality or betterment. As above the planned development replaces existing farmland that has been used for grazing. The P generated by the 0.8 ha would be replaced by P due to human activities plus surface water runoff from the housing area. This would lead to a temporary net increase of 10.83 kg P/year up to 2025, a maximum of 3 years as the housing will not be occupied until at least 2022. This on the assumption there is no mitigation. Please see Appendix F showing

the results of the Phosphate Calculator. However there is mitigation in the form of a drainage mound which effectively negates the houses and drains the phosphates into the ground. This means that the actual increase is 0.27kg/year. This additional 0.27kg/year will be mitigated by the use of the 2 ponds. Please see Appendix F indicating the phosphate calculator

The drainage solution includes ponds with vegetation which will significantly reduce the additional phosphate amount as detailed by Natural England. This is built to Natural England guidance.

Given that the council state they are making good progress in creating wetlands we would expect to be able to obtain credits to offset any impact. See extract for the council's Position Statement April 2021 below.

Strategic Wetlands for Phosphate Mitigation

Herefordshire Council are currently working to develop a number of integrated constructed wetlands within the River Lugg catchment area. These wetlands will help to address both the existing water quality of the river and to deliver mitigation for phosphate from development. Good progress is being made and the Council will provide further updates as these sites develop.

If further specific mitigation is required by the council or HRA process please can this be detailed, and it will be included in the proposed development or applicants other land holdings.

National guidance and advice including (e.g. .Gov and Environment Agency), the council's Core Strategy Policy SD4 and previous local case precedence advises and confirms that where a physical connection to the local mains sewer network can be achieved (10 houses is mains sewer within 300m as applies in this case) then this

We agree with this statement however Herefordshire Council and the HRA process do not allow foul drainage to enter the public sewer system so we can't connect to the public sewer. If we are allowed to, we are very happy to connect to the public sewer and offset any impact with council wetlands.

However Herefordshire Council have not provided a solution to overcome connecting to the public sewers. It is believed that a planning application has been made by the council for a reed bed in Luston and we are happy to buy credits. Please condition this and we will comply.

The potential and priority to connect to the local mains sewer system has been acknowledged and highlighted by the Council's drainage consultants in their formal response updated 14-09-2021

Yes however there is not a Phosphate Credit scheme yet implemented by Herefordshire Council so this is not viable as we cannot discharge to the foul sewer because it increases phosphates in the River Lugg and fails the HRA.

So instead the proposed development is draining all foul flows into the ground. The Council's drainage consultants have also liaised at length with Hydro-Logic and agree to the proposed Treatment Works and Drainage Field.

The current Lugg SAC phosphate scenario is not a reason of overriding public interest as defined within the Habitat Regulations to suggest that other constraints, advice and guidance detailed should not be followed in consideration of this 'in-combination' application.

We understand fully that the Building Regulations require a connection to a public sewer, however this fails the HRA process. Taking the comment above does that mean that the site foul drainage should connect to the public sewer and mitigate for the impact via council wetlands.

If the Building Regulations can be ignored, then the SAC can be protected via the well-engineered Private Treatment works and a drainage field which has already been signed off by your drainage consultants. This option means all phosphate will drain to ground and vegetation. It complies with the 7 criteria in the advice on Phosphates.

Please decide which option you would prefer.

The Environment Agency have advised the LPA at recent meetings that their discharge consent system does not include any HRA process that considers nutrient level discharges and effects on designated habitats as part of their assessment and subsequently the LPA cannot rely on this process within their own required HRA appropriate assessment.

We have provided a Well-Engineered foul treatment and disposal solution and would expect to see a planning Condition to ensure we have a 'Permit to Discharge' before the dwellings are occupied.

A private foul water treatment system proposed by the applicant (drainage report: by Hydro-Logic Services L0286A_FRA_SWMP_Pembridge_Rev4-Issue 25-05-2021) as the alternative to the achievable mains sewer connection is not considered as a relevant or appropriate alternative for the HRA process.

Why is this the case? Are you saying we must connect to the Mains Sewerage which Welsh Water agree to and the applicant would prefer to do so. Then mitigate the impact with off-site solutions – such as the council's well progressed wetland schemes.

Or if we cannot connect because Herefordshire Council have not resolved the ongoing Phosphate Issue, therefore we will drain to the ground.

If neither of these are advisable please can you state a viable solution on how to overcome the foul drainage issues?

A mains sewer system operated by a statutory provider can provide the greatest long-term 'in perpetuity' security and scientific certainty of satisfactorily managing the foul water created by the development. This can be achieved by a legally and scientifically demonstrated Nutrient Neutrality scheme proposed by the applicant or through a future 'Nutrients Credit' type scheme currently in development.

Ok, if this is the case, please provide the Councils detailed action plan for wetland creation and credit purchasing options, with timescales to enable this to happen.

Even if considered relevant the proposed private treatment scheme has not supplied specific and detailed scientific and legally certain evidence of how nutrient neutrality will be secured. The '6 criteria' referred to in the supplied drainage report that have been agreed between Natural England and Herefordshire Council are only applicable to 'small scale private foul water treatment systems' – specifically schemes that fall under the current General Binding Rule threshold of under 2m³/day flows to discharge to ground at outfall.

The council's drainage consultants have agreed with the proposed solution. The extensive Hydro Logic 76 page report details all flow fully treated and discharged into the soil. Hence could you

please give a clear description of what additional information you require that we have not delivered to date. Please also detail where we can locate the scientific evidence about how flows in excess of 2m³/day differ significantly in impact to the water environment from those below the 2m³ limit when all fully treated effluent from a modern package treatment plant enters the soil. Our understanding is that Natural England data is based on less than 20 septic tanks around the UK, none of which are in Herefordshire or the River Lugg Catchment. Are the council intending to undertake additional local testing on modern systems required by Building Regulations and British Standards.

Conclusion

The Ecology comments made by the LPA appear to be inconsistent, on one hand they tell us that we need to drain into the main sewer on the other they say we cannot. If we drain to the ground this is also not allowed. Please can the council provide sensible guidance (like other council's and Wales) that can overcome the phosphate issue which we agree needs to be solved.

In regards to the Natural England letter, it states

Should the developer wish to explore options for avoiding or mitigating the effects described above, we advise they speak to the council in the first instance.

Within this letter we have detailed that we wish to buy credits from the council in relation to their well advanced wetlands, to mitigate any impact from this development whether it connects to a Welsh Water sewer or drains into the soil. Please advise on the credit purchase process and likely timescales.

Given that the council themselves are constructing and managing the wetlands we expect that this mitigation has specific and detailed scientific and legal certainty of implementation.

If you wish to discuss this with me, please call me on 07786912617.

Yours sincerely,



Charles Townsend
Principal Consultant Flood Risk, Hydro-Logic Services

