**An Bord Pleanála**

**Inspector's Report - ADDENDUM**

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| **Appeal Ref. No:** | PL27.244861 |
| **Proposed Development:** | Gaelic football pitch, juvenile pitch, handball alley, running track, outdoor gym, a rebounding fence, hurling wall, dressing rooms/toilet facilities, car parking, netting and WWTS. |
| **Location:** | Ballyfree West, Glenealy, County Wicklow. |
| **Applicants:** | Glenealy GAA Club. |
| **Planning Authority Reg. Ref:** | 14/2171 |
| **Planning Authority:** | Wicklow County Council |
| **P.A. Decision:** | Grant with Conditions |
| **Appeal Type:** | Third Party vs Grant |
| **Appellants:** | Luigi Centeleghe |
| **Observers:** | None |
| **Date of Site Inspection:** | 16th July 2015 and 18th February 2016 |
| **Inspector:** | Hugh Mannion |

1. **INTRODUCTION**

This is an **addendum report** which will consider the additional information submitted to the Board subsequent to my original report dated 30th July 2016. I have also carried out a further site inspection and taken additional photographs.

2. **ADDITIONAL INFORMATION REQUESTED**

The Board requested additional information as follows;

1. A more comprehensive design for the proposed wastewater treatment system, and in particular the sizing and design of the percolation area which can demonstrate compliance with the Wastewater Treatment Manual for Small Communities, Leisure Centres and Hotels (EPA) which can cater for the maximum numbers of persons likely to be using the overall facility at any one time and which can demonstrate adequate separation distances to the nearby stream/watercourse so as to ensure that there will be no effluent flows into that stream.

2. A report, prepared by a qualified ecologist, which will involve the following:-

- Description of the project, the site and landholding, and the wider area characteristics;

- Identification of the relevant European sites, with particular reference to the Murrough Wetlands SAC (site code 002249) and the Murrough SPA (site code 0041860), which have the potential to be affected by the proposed development and compilation of information on their qualifying interests and conservation objectives;

- Assessment of the likely significant effects of the development on such European sites, including direct, indirect and cumulative;

- Production of a Stage 1 Habitats Directive screening statement, and, if the conclusions of such screening is that significant effects cannot be excluded, production of a Stage 2 Natura Impact Statement.

## 3. ADDITIONAL INFORMATION SUBMITTED

In response to the request for additional information the applicant submitted an AA screening report and additional material on the effluent disposal characteristics of the site.

The site characterisation form, revised loading calculations and redesigned percolation area concludes that a proprietary treatment system discharging to ground water will adequately treat foul effluent arising within the site.

The AA screening report concluded that the wastewater drainage system was well thought out and designed and, provided they function as intended, will not have a significant negative effect on any of the habitats or species for which the SAC or SPA have been designated.

## 4. APPELLANT'S COMMENTS

The appellant commented on the additional information stating that;

- The design population for the proposed WWTP remains unclear.
- The development is too close to the public sewage holding tank adjoining the site.
- The site has a high water table and is unsuitable for the disposal of effluent.
- The AA screening report is reliant on out of date documentation and has not considered the impact on red kites.

## 5. APPLICANT'S COMMENTS

The applicant commented on the appellant's final submission as follows;

- The more recent published material in relation to the Natura 2000 sites does not differ materially from the material previously relied upon. The conclusion that the development will not impact on the Natura 2000 remains valid.

- Water has ponded previously on the site but this has been remedied because there have been periods of above average rainfall and since the drain was cleared out this problem has been overcome.

## 6. ASSESSMENT.

## 7. ON SITE EFFLUENT DISPOSAL.

**7.01** The applicant (see especially Ian Heffernan's submission received on 27th October 2015) sets out an explanation for the expected hydraulic loading to which the system will be subject. This has evolved from combining figures for the number of people using the facility, the percolation values arising from the trial hole tests and the typical loadings for the proposed use derived from table 3 of the Wastewater Treatment Manual for Small Communities, Business, Leisure Centres and Hotels (EPA).

**7.02** The figure for pe is 42 which accounts for a maximum 'underage blitz' event of 240 persons, running track in use 30 persons, 1 staff member for a total hydraulic flow of 7,560 ls. Dividing this by 180[1] gives a pe of 42. Notwithstanding the submissions from the appellant and having regard to the applicant's submissions I accept this as a reasonable figure for pe.

**7.03** In sizing the percolation area the applicant states that he is using the figures set out in Table 10.1 of the EPA code of practice for Wastewater Treatment and Disposal Systems Serving Single Houses[2]. It is not clear to me that the figures set out in Table 10.1 of EPA code of practice have been correctly transposed into the applicant's submission. The applicant makes the point that dividing 75.5m$^2$ by 15 gives an average per person requirement for polishing filter area of 15.1 and multiplying that by a pe of 42 gives a polishing filter size of 634m$^2$. It appears to me, however, following on Table 10.1 of the EPA code of practice that a site with a P value between 21 and 40 requires a percolation area of ≥ 90m$^2$ for five persons and therefore 756m$^2$ for a pe of 42 (the calculation would be 90/5X42). I note the drawings numbered 2015-001 submitted with the additional information on the 27th October 2015 and that they provide for a percolation area sized in accordance with the applicant's calculations and show separation distances in accordance with Table 4 'Recommended Minimum Distances from Treatment Systems' of the Wastewater Treatment Manual for Small Communities, Business, Leisure Centres and Hotels (EPA) and Table 6.1 of the EPA code of practice for Wastewater Treatment and Disposal Systems Serving Single Houses.

[1] This is a standard figure for dry weather flow given in section 4.1.1 of the The Wastewater Treatment Manual for Small Communities, Business, Leisure Centres and Hotels

[2] There appears to be a typographical error in the submission at this point – paragraph 4.0 of the submission.

**7.04** Leaving aside my differences with the applicant's figures for size of percolation area the fundamental question is - what can be concluded from the material submitted with the application, the additional material submitted on foot of the Board's request for additional information and on-site observations?

**7.05** The site is unsuitable for the safe disposal of foul effluent because at least for part of the year the watertable is too high within the site to provide sufficient distance between the invert of any percolation pipe and the watertable to ensure adequate residence time in unsaturated soil for the treatment of contaminants. Mottling and the T and P tests carried out by the applicant and set out in the site suitability assessment submitted with the application demonstrate this conclusion.

**7.06** The solution offered in the planning application to this unsuitability is to install a treatment system which includes a polishing filter. The objective of this polishing filter is to provide sufficient residence time in an unsaturated medium to allow for the treatment of contaminants. Notwithstanding the particular nature/design of the filter systems it remains a requirement that there be an unsaturated layer between the polishing filter and water table – chapter 8 of the EPA Code of Practice offers a variety of examples of this solution with varying depths for this unsaturated layer.

**7.07** In the present case much discussion has revolved around ponding on site. The significance of this is that where ponding occurs there is essentially no unsaturated layer into which treated effluent from the polishing filter can infiltrate since the watertable has risen into the topsoil. In the present case I have carried out site inspections in July 2015 and February 2016. In Ireland it can be expected that the watertable will lower in summer/late summer than in late winter/spring. I can confirm that in February 2016 the area of the site proposed for the percolation area contained standing water and that this surface water was flowing by way of a shallow drain constructed since my previous site inspection in July 2015 into the deeper drain/stream which flows northeast out of the site.

**7.08** Having regard to the foregoing I conclude as follows; at least for part of the year, there will be no unsaturated soil layer below the polishing filter/percolation area and treated effluent/partially treated effluent will flow as surface water into the drain/stream on site. Therefore the proposed development gives rise to a risk of water pollution and would be prejudicial to public health.

## 8. MUNICIPAL WASTEWATER TREATMENT

**8.01** As I understand it there are in fact four public wastewater treatment systems in Glenealy. One provides some effluent treatment and three are emptied regularly by tanker. As I understand it the wastewater holding tank adjoining this application site is emptied twice per week by tanker.

**8.02** The County Development Plan does not provide for any upgrade of the WWTSs in Glenealy. Irish Water's "Consultation Document on the Emerging Investment Plan for 2017-2021" distinguishes between 'national investment programmes' and 'projects including major projects'. National investment programmes are further divided into water and wastewater. None of the actions under national investment wastewater programmes specify works to the public wastewater systems in Glenealy. The listed 'projects including major projects' include MWWTPs in Donegal, Mayo, Cork, Dublin and elsewhere but a new MWWTP for Arklow is the only named project for County Wicklow.

**8.03** I conclude therefore that there is no reasonable prospect of a MWWTP in Glenealy with capacity to take effluent from the proposed development within the lifetime of a planning permission.

## 9. APPROPRIATE ASSESSMENT - SCREENING

**9.01** On foot of the Board's request for further information the applicant submitted an AA screening report specifically in relation to the Murrough SPA (site code 004186) and the Murrough cSAC (002249). The screening report concludes that;

> "the wastewater and drainage systems for the project have been well thought out and designed so as to absorb any potential ecological effects on the stream habitat. Provided they function as intended the proposed development will not have a significant negative effect on any of the habitats listed as special conservation interest for the Murrough Wetlands cSAC or on any of the bird for which the SPA is designated. Neither will any of their conservation objectives be compromised.
>
> This being the case there is no likelihood of cumulative effects despite the presence of other developments around Glenealy and Board Lough".

**9.02** The test for AA screening is "is the project likely to have a significant effect, either individually or in combination with other plans and projects, on a European site in view of the site's conservation status". This conclusion must be reached on the basis of objective scientific information and where this test cannot be answered in the negative a Natura Impact Assessment must be provided to the planning authority.

**9.03** In relation to the **Murrough SPA (site code 004186),** and having regard to the material submitted in relation to the application and appeal including the additional information, my site inspections, the material published by the NPWS, the nature and quantity of emissions likely to be produced by the proposed development and the site's conservation objectives I conclude that the proposed development is not likely to have a significant effect either individually or in combination with other plans or projects on this European site.

**9.04** In relation to the **Murrough cSAC (002249)** and having regard to;

- My conclusions in relation to the wastewater treatment system set out above which differ from the conclusion set out in the AA screening report submitted as additional information,

- The potential for untreated or partially treated effluent arising from the on-site WWTS (source) to flow overland (a pathway) enter the stream (receptor) and from there it may enter the cSAC,

- The absence from the AA screening report of consideration of in combination effects with other projects specifically any public WWTPs or wastewater storage tanks within the catchment of the stream which drains the site, drains the wider area and the area of Rathnew village before it reaches the cSAC,

- The statement in the submitted AA screening report that the stream having passed through constructed wetland at Ballymanus Lower enters Broad Lough "cannot have an impact on the more sensitive fen and marsh habitats further north in the Murrough system" when compared to the NPWS site synopsis which states that "saltmarsh is present within the site is two distinct areas. At the southern end of the site is found Broad Lough … (which) has a well-developed salt marsh community…"

I conclude that there is insufficient objective scientific information provided in the AA screening report to rule out likely significant effects arising either individually from this project or in combination with other plans or projects on the Murrough cSAC (002249). In the absence of a Natura Impact Statement the Board cannot be satisfied that the proposed development individually, or in combination with other plans or projects would not be likely to have a significant effect on the Murrough cSAC (002249) in view of the site's conservation objectives. In such circumstances the Board is precluded from granting approval/permission.

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Hugh Mannion
Planning Inspector
25th February 2016.