

Inspector's Report ABP 314478-22.

Development	Single storey dwelling, with detached garage, on-site sewage treatment system, driveway, landscaping and sight distance improvement works to include replacement of section of existing hedgerow along the R551 with timber stud and tension mesh fence and associated works. Doon East, Ballybunion, Co. Kerry.
Planning Authority	Kerry County Council.
Planning Authority Reg. Ref.	211321
Applicant	Caoimhe Lynch
Type of Application	
Planning Authority Decision	Refuse permission
Type of Appeal	First Party
Appellant	Caoimhe Lynch
Observers	None

Date of Site Inspection

3/5/2023

Inspector

Siobhan Carroll

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1.0 Site Location and Description

- 1.1. The site of the proposed development is located to the north-east of the town of Ballybunion in County Kerry. It lies circa 2.5km from the centre of the town.
- 1.2. The site has a stated area of 0.23 hectares. It has frontage of 41m onto a private road. This road is access off the Regional Road R551. The surrounding area along the R551 is characterised by linear detached houses along its northern side and linear and some in-depth housing along its southern side. The private cul de sac road where the site is situated is also characterised by linear detached houses with a mix of single storey and dormer properties.
- 1.3. The topography of the area rises to the east with Knockanore Mountain situated to the east approximately 3km from the appeal site. Knockanore Mountain has a peak height of 267m.
- 1.4. The site is a relatively flat plot that is fenced. It is enclosed by a ditch to the front along its eastern roadside boundary. The site has panoramic views north and west towards the coastline. There is a single storey dwelling immediately to the south of the site and a dormer dwelling is located on the opposite side of the road from the site.

2.0 **Proposed Development**

2.1. Permission is sought for the construction of a single storey dwelling, with detached garage, on-site sewage treatment system, driveway, landscaping and sight distance improvement works and associated works.

3.0 Planning Authority Decision

3.1. Decision

The Planning Authority refused permission for the following reason.

 Having regard to the soil conditions on site, the Planning Authority is not satisfied on the basis of submissions made in relation to the application, that the effluent arising from the proposed development could be adequately disposed of on site. The proposed development would, therefore, be prejudicial to public health. Therefore, the proposed development would be contrary to the proper planning and sustainable development of the area.

3.2. Planning Authority Reports

- 3.2.1. Planning Reports
- 3.2.2. The Planning Authority sought further information in relation to the following issues;
 - Submit a Landscaping Plan prepared by a suitably qualified landscape identifying screening proposals for the proposed site suitable for this coastal area in order to screen the proposed development from the R551 regional road.
 - The applicant is stated to be currently working in Dublin and has indicated she is awaiting a transfer to University Hospital Kerry. Please submit details of applicants transfer application to University Hospital Kerry.
 - 3. The applicant has indicated works to facilitate sight distance on the R551 which are outside the proposed site. Any works proposed are required to be outlined in red contained within site boundaries on both site layout map and site location map. You are advised to liaise with the Roads Department of Kerry County Council prior to the submission of further information as to necessity to carry out such works on the R551.
 - 4. Regarding the on-site effluent treatment
 - (a) The applicant is required to excavate a new trial hole near the proposed polishing filter, ideally during Winter/early Spring period. The assessor/applicant shall inform the Site Assessment Unit (SAU), Environment Department, Kerry County Council and the Planning Authority in writing when the trial hole has been excavated and is available for inspection. To comply with the requirement of the EPA Code of Practice, the trial hole is required to be left open for at least 48 hours prior to inspection.
 - (b) It would appear that the sub-surface percolation test process extended into a second day. The site assessor is required to comment on this issue in the context of the procedure set out in the EPA Code of Practice.

- (c) The site assessor is required to confirm that sizing of the gravel distribution layer underlying the proposed sand polishing filter is in accordance with the design methodology set out in table 10.1 of the EPA Code of Practice (2021).
- (d) The site characterisation form submitted appears to be the version from the previous Code of Practice. The applicant is required to arrange submission of the relevant information on the current site characterisation form (2021).
- 3.2.3. Planning Report dated 3/8/2022: Following submission of a response to the further information request the Planning Authority considered that the issues were satisfactorily addressed aside from the matter of the suitability of the site for on-site effluent treatment. A refusal of permission was recommended on the basis of the further report received from the SAU, Environment Department dated 3/8/2022.
- 3.2.4. Other Technical Reports

Roads Department – No objection subject to conditions.

Environment Department, SAU: Report dated 17/1/2022 – further information requested.

Environment Department, SAU: Report dated 3/8/2022 – The inspection of the trial hole identified potential issues with the water table level on-site. In particular, there appeared to be evidence of mottling at a shallow depth which would be indicative of possible seasonal fluctuations in the water table level. This issue, in combination with the relatively poor visual indicators on-site (e.g. rush growth) suggests that discharge of wastewater to ground could be potentially problematic with a risk of ponding. It is a requirement of the EPA Code of Practice that a sufficient depth of suitable unsaturated soil should be available on a site. It is not clear from the information obtained during the trial hole inspection that this is the case with this particular site. Given the above the SAU are of the opinion that the proposed development could potentially pose a risk of environmental pollution. In particular that there would be a risk of ponding of effluent were the development to proceed as proposed. On that basis, they consider that the application should be refused.

3.3. Prescribed Bodies

Uisce Éireann – no objection

3.4. Third Party Observations

3.4.1. The Planning Authority did not receive any submissions/observations in relation to the application.

4.0 **Planning History**

None

5.0 Policy Context

5.1. Kerry County Development Plan 2022 – 2028

- 5.1.1. Ballybunion is a regional town within the Plan's settlement hierarchy.
- 5.1.2. The site is located outside the settlement area.
- 5.1.3. As indicated on Map 5.1 the site at Doon East, Ballybunion, Co. Kerry is located in a rural area under significant urban influence.

5.2. Natural Heritage Designations

- 5.2.1. The site is not within a designated area. Designated sites in the vicinity include:
 - Lower River Shannon SAC (Site Code 002165) 1.1km to the west
 - River Shannon and River Fergus Estuaries SPA (Site Code 004077) within
 4.5km to the north of the site
 - Kerry Head SPA (Site Code004189) within 7.3km to the southwest.
 - Loop Head SPA (Site Code 004119) 17.8km to the northwest.

5.3. EIA Screening

5.3.1. Having regard to the limited nature and scale of the proposed development, there is no real likelihood of significant effects on the environment arising from the proposed

development. The need for environmental assessment can therefore be excluded at preliminary examination.

6.0 The Appeal

6.1. Grounds of Appeal

A first party appeal was submitted by Leahy Planning Ltd. on behalf of the applicant Caoimhe Lynch. The issues raised are as follows;

- In relation to rural housing policy the Planning Authority considered that the applicant qualified under the relevant provisions of the Kerry County Development Plan 2022-2028.
- It is highlighted that the report of the Planning Officer concluded that the proposed development was generally acceptable in principle.
- Further information was sought in relation to a number of matters including the proposed vehicular access design and landscaping proposals. The Planning Authority were satisfied with the further details provided in respect of those issues.
- The main issue in relation to the application refers to the disposal of foul water.
- The appeal includes a report from a qualified site assessor which responds to the report from the Site Assessment Unit (SAU) dated 3rd of August 2022.
- The report from the SAU referred to "potential issues" and that there "appeared" to be evidence of mottling at a shallow level which could be evidence of possible seasonal fluctuations in water level.
- It is stated that given the lengthy period which the trial hole was opened due to the delay in the SAU inspecting the site that this could have resulted in the possibility of mottling.
- It is submitted that the detailed site assessment report did not identify any sign of mottling. The report prepared by the assessor provides a rebuff of the reason for refusal.

- The report from the SAU referred to "the relatively poor indicators on site including rush growth to conclude that the discharging of wastewater on the site could be problematic.
- In response to this matter, it is stated that the site has not been cultivated or maintained over the last 30 years and therefore it is considered reasonable that wild grasses have grown on the site.
- In response to the further information request, a new trial hole was opened on the 6th of April. The trial hole was inspected by the SAU on the 13th of April. It is highlighted that where a trial hole is left open for such a lengthy period of time that water ingress from rainwater and adjacent surface runoff is likely to have presented an inaccurate picture.
- The site assessor prepared a further detailed report with photographs which indicate that mottling was not present. The submission from Noel Lynch stated that the Site Characterisation report for the site was carried out over the three days from 21st July 2021 to 23rd July 2021. The sub-surface percolation value was 77.22 and the surface percolation value was 38.33. It was concluded that the site is suitable for the installation of an effluent treatment system. The trial hole was excavated to a depth of 2.1m. After 48 hours there was no visible water ingress in the trial hole. There was no sign of mottling on the surface of the trial hole. The site is 5.4m below the level of the public road. The ground water will naturally flow from the site to lower levels. Therefore, it was stated that mottling could not result or be present.
- Regarding ground indicators it is stated that the site is dry with wild grasses, briars, weeds and rushes present. The site was bought by the applicant's grandfather circa 30 years ago and it has not been used for cultivation. The adjoining farmland to the east and west is rich pasture land with no indication of water lodging. It is stated that the adjoining sites to the north, south and east have no issues with water lodging or standing water.
- In relation to the request to reopen the trial holes, the Council requested that they be reopened as part of the further information. The site assessor stated that he contacted the SAU to ask when it would be suitable to have the trial hole inspected. They advised that it could be done on Friday 8th of April. The

SAU representative inspected the trial hole on Tuesday 19th of April. The reopened holes were left exposed for approximately 13 days before they were inspected by the SAU. The area experienced extensive rainfall over this time period which would have resulted in some surface water runoff infiltrating the hole. It is considered that these factors could have caused a discrepancy between the initial site assessment and the visual inspection completed by the SAU where the presence of mottling was observed. The site assessor confirms that the submitted photos indicate that there is no indication of mottling.

- The submitted photographs also show the surrounding lands where there the conditions were dry. While it is acknowledged that the presence of some rushes represent a visual indicator of wet drainage conditions it does not provide a substitute for a proper assessment.
- It is concluded that the proposed development is in accordance with planning policy and there are no difficulties with the proposal in respect of technical or environmental matters.
- It is requested that the Board grant permission for the proposed development.

6.2. Planning Authority Response

• None received.

7.0 Assessment

The main issues in this appeal are those raised in the grounds of the appeal and it is considered that no other substantive issues arise. Appropriate Assessment also needs to be addressed. The issues can be dealt with under the following headings:

- Effluent treatment and disposal
- Appropriate Assessment

7.1. Effluent treatment and disposal

- 7.1.1. The proposed development comprises the construction of dwelling with a floor area 170sq m and the installation a new effluent treatment system with sand polishing filter and all associated site works.
- 7.1.2. It is proposed to install a Tricel Novo wastewater treatment plant with a Sandscel sand polishing filter which provides primary treatment and secondary treatment. It is proposed to dispose of treated effluent via a polishing filter to groundwater. It is proposed that the treated effluent from the Tricel treatment unit will be pumped to the Sandscel tertiary treatment system Sandcel 1200 where it will be evenly distributed over the surface of the stratified layers of certified sands according to the EPA Code of Practice. The treated effluent from the Sandcel system will be discharged by gravity via distribution gravel to a soil polishing filter situated immediately underlying the Sandcel system. The area of the polishing filter required is 150sq m.
- 7.1.3. It is necessary to review the available information in order to ascertain if the subject site is suitable for the disposal of treated effluent to ground. The EPA 2021 Code of Practice Domestic Waste Water Treatment Systems, (Population Equivalent ≤10) provides guidance on the site characterization, design, operation and maintenance of domestic waste water treatment systems.
- 7.1.4. The polishing filter as indicated on the Site Layout Plan is located to the east of the dwelling and uphill. Regarding water supply it is proposed to connect to the public mains. Table 6.2 of the EPA Code of Practice Domestic Waste Water Treatment Systems sets out the minimum separation distances required from the entire domestic waste water treatment system (DWWTS). The minimum distance from a watercourse or stream to is stated as 10m and the minimum distance from a road is stated as 4m. In relation to this, I note that the DWWTS would be located a minimum of 10m from the road to east. Regarding the proximity of watercourses as detailed on the site characterisation form, I note that there are none within 250m.
- 7.1.5. The site is located in an area identified with a "Moderate" vulnerability classification in the GSI Groundwater maps and is located within area defined "Locally Important" Aquifer category, representing a Groundwater Protection Response of R1 under the EPA Code of Practice Waste Water Treatment Systems (Population Equivalent ≤ 10) (2021) (Annex E). Category R1 of Groundwater Protection provides that the

installation of a DWWTS is acceptable subject to good practice (i.e. system selection, construction, operation and maintenance in accordance with the EPA Code of Practice)

- 7.1.6. The trial hole had a depth of 2.1m and the assessment submitted by the applicant indicates that bedrock was not encountered. The watertable was encountered at a depth of 2.1m.
- 7.1.7. The submitted site characterisation records provides details of the testing carried out on site. Subsurface percolation testing was carried out and a T-test value of 77.22 was recorded. Surface percolation testing was also carried out and a P value of 38.33 was recorded. As detailed in the site characterisation form the results indicate that the site is not suitable for a conventional septic tank system but is suitable for the development of a secondary/tertiary treatment system discharging to groundwater.
- 7.1.8. In relation to the P-test it is detailed in the site characterisation form that the results with a P value of less than 50 indicates that the site is suitable for secondary effluent treatment. Table 6.4 of the EPA Manual advises that where the P value is greater than 3 and less than 75 then the site is suitable for secondary treatment system and soil polishing filter. Accordingly, the percolation test results are in line with the provisions of Table 6.4 of the EPA Manual.
- 7.1.9. As part of the assessment of the planning application the Planning Authority sought further information in relation to a number of issues. The further information sought in respect the proposed effluent treatment system required the excavation a new trial hole near the proposed polishing filter for the Site Assessment Unit from the Environment Department of the Council to inspect. It was noted that the sub-surface percolation test process extended into a second day, they required that this was commented on. It was required that the site assessor confirm that sizing of the gravel distribution layer underlying the proposed sand polishing filter is in accordance with the design methodology set out in table 10.1 of the EPA Code of Practice (2021). The Planning Authority noted that the site characterisation form submitted appears to be the version from the previous Code of Practice. The applicant was required to submit of the relevant information on the current site characterisation form (2021).

- 7.1.10. In response to these matters the site assessor confirmed that they informed the SAU of the newly opened trial hole and that they had inspected it. Regarding the length of time of testing it was stated that each of the sub-surface percolation tests took in excess of 300 minutes. The second test was completed at approximately 9.15am. If the testing were continued, then it would have taken until 3.00am. Therefore, the third test began the following morning. Revised plans showing the ground distribution layer underlying the sand polishing filter in accordance with table 10.1 of the EPA Code of Practice (2021) was submitted and a current site characterisation form was also submitted to the Planning Authority.
- 7.1.11. The Planning Authority refused permission on the basis that regarding to the soil conditions on site, they were not satisfied on the basis of submissions made in relation to the application, that the effluent arising from the proposed development could be adequately disposed of on-site and therefore the proposed development would be public health.
- 7.1.12. The appeal refers to the report from the Site Assessment Unit dated 3rd August 2022. The report referred to "potential issues" and that there "appeared" to be evidence of mottling which could be evidence of possible seasonal fluctuations in water level. It is stated in the appeal that that given the lengthy period which the trial hole was opened due to the delay in the SAU inspecting the site that this could have resulted in the possibility of mottling.
- 7.1.13. The site assessor for the applicant sets out in the appeal that, a new trial hole was opened on the 6th of April 2022. This was done in response to the further information requested the Planning Authority. The trial hole was inspected by the SAU on the 13th of April 2022. Therefore, the argument is made that where the trial hole is left open for a lengthy period of time that water ingress from rainwater and adjacent surface runoff is likely to have presented an inaccurate picture in terms of the presence of mottling. It is submitted that the detailed site assessment report did not identify any sign of mottling within the trial hole and that the site assessor confirms that the submitted photos indicate that there is no indication of mottling.
- 7.1.14. In relation to matter of ground indicators the report of the SAU dated 3rd August 2022 refers to the relatively poor visual indicators on-site including rush growth which suggests that discharge of wastewater to ground could be potentially problematic

with a risk of ponding. In response this, it is stated in the appeal that the site is dry with wild grasses, briars, weeds and rushes present. It is noted in the appeal that the site was bought by the applicant's grandfather approximately 30 years ago and that it has not been used for cultivation. Regarding the issue of surrounding ground conditions, it is stated in the appeal that the adjoining farmland to the east and west is rich pasture land with no indication of water lodging. It is also stated that the adjoining sites to the north, south and east have no issues with water lodging or standing water.

- 7.1.15. On inspection of the site, I observed the presence of rushes growing on the site. Section 5.4.1 of the EPA 2021 Code of Practice – Domestic Waste Water Treatment Systems refers to Visual Assessment and regarding vegetation indicators refers to rushes and identifies them as an indication of poor percolation characteristics or high water table levels.
- 7.1.16. Having regard to the presence of rushes on site it is evident that there are poor percolation conditions, notwithstanding the percolation test results provided with the application. The report of the Site Assessment Unit of the Environment Department dated the 3rd of August 2022 raised concerns in relation to the water table level onsite due to mottling at a shallow depth. The presence of a mottling band at a shallow depth was considered by the SAU to be indicative of possible seasonal fluctuations in the water table level. In response the first party made the case that this mottling could have been caused by the trial hole being left open for a longer period than 48 hours. While I would note this argument, there is then the matter of the presence of rushes on the site. The report of the SAU also cites the presence of rush growth on site as a visual indicator of poor percolation characteristics. Therefore, the SAU concluded in their report that the discharge of wastewater to ground could be potentially problematic with a risk of ponding. In relation to the appeal, I would note that further percolation tests were not carried out.
- 7.1.17. The report of the SAU stated that it is a requirement of the EPA Code of Practice that a sufficient depth of suitable unsaturated soil should be available on site and that it is not clear from the information obtained during the trial hole inspection that this is the case with this particular site.

7.1.18. Taking a precautionary approach and having regard to the report of the SAU, I would conclude that it has not been satisfactorily demonstrated that the site conditions are suitable percolation rate to provide for the proposed on-site effluent treatment. Furthermore, I note the sensitivity of the groundwater resource which is identified with a "Moderate" vulnerability classification in the GSI Groundwater maps. Accordingly, on the basis of the submissions made in connection with the application and appeal I am not satisfied that the applicant has demonstrated that effluent from the development can be satisfactorily treated and disposed of on site, notwithstanding the proposed use of a proprietary wastewater treatment system. Therefore, I am not satisfied that the proposed development would not pose an unacceptable risk of pollution of groundwater and surface water resources.

7.2. Appropriate Assessment

7.2.1. Having regard to the nature and scale of the development and distance from a European site, no appropriate assessment issues arise and it is not considered that the proposed development would be likely to have a significant effect individually or in combination with other plans or projects on a European site.

8.0 Recommendation

8.1. I recommend that permission is refused for the proposed development.

9.0 **Reasons and Considerations**

 Having regard to the conditions pertaining on site, Board is not satisfied, on the basis of the submissions made in connection with the application and appeal, that the proprietary effluent treatment system and raised polishing filter proposed to serve the proposed dwelling is adequate to treat effluent arising from the proposed development in a manner that would not give rise to the risk of pollution to surface water and/or ground water. The proposed development would, therefore, be prejudicial to public health. I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

Siobhan Carroll Planning Inspector

13th of October 2023