



An
Bord
Pleanála

Inspector's Report ABP316031-23

Development	Construction of a house with proprietary wastewater treatment system and percolation area together with ancillary site works.
Location	Toormore, Ruan, County Clare.
Planning Authority	Clare County Council.
Planning Authority Reg. Ref.	22519.
Applicant	Michael Curtis.
Type of Application	Outline permission.
Planning Authority Decision	Refusal of outline permission.
Type of Appeal	First Party
Appellant	Michael Curtis.
Observer(s)	None.
Date of Site Inspection	29 th October 2023.
Inspector	Derek Daly.

1.0 Site Location and Description

- 1.1. The proposed site is located at the southwest fringe of the village of Ruan approximately 400 metres from the centre of the village in the east of County Clare. The site which is irregular in configuration has a narrow road side frontage and this road defines the site's southeastern boundary. The eastern boundary adjoins farmland with a gateway providing access to these lands. The lands to south west adjoins an existing dwelling and further to the southwest is a residential development of twenty semi-detached dwellings served by a service road. The lands to the rear (northwest) of the site are open lands with farm buildings and the lands immediately to the northeast in the direction of the village are open lands and then there is continuous housing into the village.
- 1.2. There is a footpath from the village core to the site and this footpath continues south westwards to the existing residential development of twenty semi-detached dwellings served by a service road. The site has a stated area of 0.262 hectares.

2.0 Proposed Development

The proposed development is for outline planning permission for a dwellinghouse with proprietary wastewater treatment system and percolation area together with ancillary site works.

- 2.1. The proposed dwelling is indicated as being in the northern area of the site with the proprietary wastewater treatment system located between the dwelling and the public road. A site characterisation report was submitted with the application which recommended tertiary treatment with a horizontal flow reed bed followed by UV light disinfection based on a required depth of sub soil.
- 2.2. It is proposed to connect to a public mains water supply.
- 2.3. Further information was received by the planning authority on the 24th January 2023 which including a letter from Uisce Eireann indicating that connection to wastewater facilities is not feasible. A revised site characteristic report is submitted and based on the findings a raised bed intermittent soil filter system designed in accordance with section 8.1.1 and sized in accordance table 10.1 of the EPA CoP.

3.0 Planning Authority Decision

3.1. Decision

The decision of the planning authority was to refuse planning permission. One reason was stated which refers to prejudicial to public health having regard to ground conditions on site and the location of the site within a regionally important aquifer with a groundwater vulnerability of extreme; the proposal is to excavate into fractured bedrock and that it has not been demonstrated to the planning authority that the proposed percolation area can provide a minimum depth of 1.2 metres of suitable sub soil and the proposal does not comply with EPA Code of Practice. The reason also makes reference to the proposal as premature pending the provision of public wastewater facilities to serve the site.

3.2. Planning Authority Reports

3.2.1. Planning Reports

The planning report dated the 26th July 2022 refers to the provisions of the current County Development Plan and that the site is located within the village on lands zoned low density residential and acceptable in principle but there were issues in particular in particular to wastewater treatment. Further information was requested in relation to the issue of wastewater treatment.

The Planning Report dated the 16th February 2023 refers to the further information and recommends refusal of outline planning permission.

3.2.2. Other Reports

Environment Report 12th July 2022 refers to the location of the site within a regionally important aquifer with a groundwater vulnerability of extreme and the requirements as set out in the EPA Code of Practice for Domestic Wastewater Treatment Systems P.E.<10. The report requested further information.

Environment Report 13th February 2023 refers to the further information submitted and indicated that the revised proposals as submitted in the further information does not comply with the EPA Code of Practice for Domestic Wastewater Treatment Systems P.E.<10.

4.0 Planning History

P.A. Ref. No. 22518. Outline permission granted for three dwellings on lands to the east (these dwellings are indicated as sites A, B and C on the site location map submitted with the planning application).

An examination of the documents associated with this application indicates similar issues arose in the assessment of the application including issues in relation to the assessment of wastewater treatment.

5.0 Policy and Context

5.1. Development Plan

5.1.1. The relevant plan is the Clare County Development Plan 2023-2029.

5.1.2. The village of Ruan is identified in the settlement hierarchy and defined as a small village. There is also plan for the village in volume 3d of the Clare County Development Plan. The site is within the development boundary of the village and is within the mixed use zoning and between areas zoned existing residential to the north east and southwest.

It is indicated that Ruan has a public water supply but is not served by a public wastewater system limiting development to small-scale proposals. The strategy for Ruan is to encourage small-scale incremental residential growth that will be reflective of the rural nature of the settlement. Also, proposals for any suitably scaled and appropriate commercial or employment generating development will be encouraged subject to the provision of a suitable wastewater treatment facility.

5.1.3. In relation to wastewater management Chapter 11 of volume 2 refers to Physical Infrastructure, Environment and Energy and section 11.4.3 Wastewater Management and that developments in unserved areas must demonstrate that the on-site wastewater treatment system can safely and adequately dispose of effluent in accordance with the relevant EPA Code of Practice. In unserved areas, where developments require private wastewater treatment and disposal, calculations should be submitted at application stage which demonstrate that the site is of sufficient size to safely assimilate the effluent from the development.

5.2. **National Guidance.**

EPA Code of Practice Domestic Waste Water Treatment Systems (Population Equivalent ≤ 10) 2021 provides guidance on domestic waste water treatment systems (DWWTSs) for single houses or equivalent developments with a population equivalent (PE) of less than or equal to 10 and sets out a methodology for site assessment and selection, installation and maintenance of an appropriate DWWTS.

The CoP in the various chapters sets out in detail requirements and guidance on site characterisation, site suitability assessment, determining site suitability and the appropriate design solution in relation to an appropriate DWWDT. It also refers to designing an on-site DWWTS to treat and dispose of the waste water addressing can the soil and/or subsoil accommodate the waste water volumes, can the soil and/or subsoil treat the waste water sufficiently and can all minimum separation distances be met.

8.1.1 of the CoP addresses Intermittent Soil Filter Systems which arise in the assessment of this appeal and tertiary treatment systems are addressed in section 10 including in 10.1 Tertiary Soil Polishing Filters.

5.3. **Natural Heritage Designations**

None relevant.

5.4. **EIA Screening**

5.5. The proposed development is not one to which Schedule 5 of the Planning and Development Regulations, 2001, as amended, applies and therefore, the requirement for submission of an EIAR and carrying out of an EIA may be set aside at a preliminary stage.

6.0 **The Appeal**

6.1. **Grounds of Appeal**

6.2. The main grounds of appeal can be summarised as follows:

- Reference is made to the planning and environment reports of the planning authority.

- It is submitted that the decision to refuse planning permission has no merit essentially it boils down to the interpretation of what is bedrock and what is loose rock above bedrock.
- The proposal as submitted in the RFI response proposed a secondary treatment system with pumped discharge to a raised bed soil filter designed in accordance with section 8.1.1 and sized in accordance with Table 10.1 (option 2) of the EPA CoP. It was proposed that the area of the raised bed filter would be excavated to a depth of 1.0m (solid bedrock as per trial hole analysis) and the area filled with lightly compacted subsoil creating a 200mm raised mound to ensure a depth of 1.2m unsaturated subsoil between the point of infiltration and the bedrock.
- The environment report refers to bedrock encountered at a depth of 700mm and this is accepted but could a condition not have been attached to a grant of permission requiring a simple adjustment of the design of the raised bed soil filter and that the raised soil bed filter start at 700mm below ground level and be raised to 500mm above ground level. Such a requirement would have required the importation of only an additional 300mm of soil and would have complied with the EPA CoP.
- Reference is made to a number of recent decisions where adjustments in the design of treatment systems were applied.

6.3. Planning Authority Response

The response of the planning authority in summary noted the grounds of appeal and the Environment section response is submitted which is summarised as;

- The site characteristic report (SCR) submitted on the 10th June stated that bedrock was encountered at 700mm.
- This led to a further information request and the further information submitted was examined.
- Based on the information submitted given the site has karstified bedrock due to groundwater vulnerability 1.2m of adequate suitable subsoil is required beneath the invert of the polishing filter.

- The further information was incorrect in referring to a trial hole depth of 1.0m in the SCR when bedrock was encountered at 700mm.
- The revised proposal was to install a mechanical secondary system excavate to 1.0m despite bedrock at a depth of 700mm and creating a 200mm mound over ground.
- The submitted details were required to demonstrate that a minimum depth of adequate suitable sub soil is between the point of infiltration and the bedrock and it was stated that it will be possible to excavate into the fractured bedrock and this does not comply with EPA CoP.
- The Further information submitted on the 24th January 2023 did not comply with EPA CoP.

7.0 **Assessment**

7.1. The main issues in this appeal are those raised in the planning authority's reason for refusal. Appropriate Assessment also needs to be considered. I am satisfied that no other substantive issues arise.

The issues are addressed under the following headings:

- Principle of the development.
- The reason for refusal.
- Archaeology
- Appropriate Assessment

7.2. **Principle of the development.**

7.2.1. The site is located within the development boundary of the village of Ruan and the CDP provisions which indicates that Ruan is not served by a public wastewater system limiting development to small-scale proposals and the overall strategy for Ruan is to encourage small-scale incremental residential growth that will be reflective of the rural nature of the settlement and proposals for any suitably scaled and appropriate commercial or employment generating development will be encouraged subject to the provision of a suitable wastewater treatment facility.

- 7.2.2. The site is located between an existing dwelling to the southwest and a residential development further to the southwest and on the lands to the north east permission has been granted for residential development. There is also a continuous footpath from the village core to the site.
- 7.2.3. Given the site's location within the village I would have no objection to a dwelling. As it is an outline application there are no details submitted in relation to the design of the dwelling but I would have no objection to a two storied, dormer or single storied design of dwelling.
- 7.2.4. The primary issue to consider is whether the site can accommodate the provision of a suitable wastewater treatment facility in the absence of public wastewater system for the village.

7.3. **Wastewater treatment/reason for refusal**

- 7.3.1. The decision of the planning authority was to refuse planning permission and one reason was stated which refers to prejudicial to public health on the basis that having regard to ground conditions on site and the location of the site within a regionally important aquifer with a groundwater vulnerability of extreme and based on the details submitted the proposal is to excavate into fractured bedrock encountered at 700mm and that it has not been demonstrated to the planning authority that the proposed percolation area can provide a minimum depth of 1.2 metres of suitable sub soil and as such the proposal does not comply with EPA Code of Practice. The reason also makes reference to the proposal as premature pending the provision of public wastewater facilities to serve the site.
- 7.3.2. I wish to initially in summary outline the main issues which arose in relation to the assessment of this aspect of the development from the initial submission to the appeal responses.
- 7.3.3. In relation to the method and proposal of wastewater treatment the initial Site Characteristic Report (SCR) received on the 10th June 2022 identified a groundwater response of R2² and that where a secondary treatment system is installed 1.2 metres of adequate sub-soil is required below the invert of the polishing filter (minimum thickness 0.9m) which in addition to the polishing filter would also include unsaturated soil/subsoil (minimum thickness 0.3m). It was also indicated that due to shallow soils to err on caution a tertiary treatment be introduced and that introducing

a horizontal flow reed bed and UV light disinfection reduces the required depth of subsoil to 0.9m and that it will be possible to excavate at least to this level. Drawings and cross sections were submitted in relation to this.

- 7.3.4. The initial environment report dated 11th July 2022 having examined the details submitted in the Site Characteristic Report (SCR) indicated due to groundwater vulnerability 1.2 metres of adequate sub-soil is required below the invert of the polishing filter. The use of UV was not considered a sustainable option and further information was requested in relation to testing of the sub surface soil and also in relation to further details of the reed bed design.
- 7.3.5. The applicant submitted further information submitted on the 24th January 2023 revising the wastewater treatment system. The revised SCR detailed a trial hole excavated to a depth of 1.0m with loose bedrock from 700mm. Based on the testing a raised bed intermittent soil filter system designed in accordance with section 8.1.1 and sized in accordance table 10.1 of the EPA CoP and the area of the soil filter was proposed to be excavated to a depth of 1.0m and filled with existing and imported soil and a 200mm mound above ground level was also proposed. The raised bed intermittent soil filter system replaced the reed bed initially proposed.
- 7.3.6. The environment report dated 13th February 2023 having examined the further information details submitted and indicated that the revised proposals as submitted in the further information does not comply with the EPA Code of Practice for Domestic Wastewater Treatment Systems P.E.<10. In concluding this the report refers to bedrock was reached at 700mm and the proposal to excavate to a depth of 1.0m into fractured bedrock and this does not comply with the CoP as it needs to be demonstrated that a minimum of 1.2m of adequate suitable subsoil is required.
- 7.3.7. In the grounds of appeal, it is essentially contended that matters raised in the reason for refusal could have been addressed by way of condition rather than a refusal of the development requiring a simple adjustment of the design of the raised bed soil filter and that the raised soil bed filter start at 700mm below ground level and be raised to 500mm above ground level. Such a requirement would have required the importation of only an additional 300mm of soil and would have complied with the EPA CoP.

- 7.3.8. In the planning authority response from the environment department, it outlines a chronology of the assessment of the application to the decision but it has no specific comment on the grounds of appeal and the suggested solution to address the reason for refusal.
- 7.3.9. In considering this aspect of the appeal there is no dispute that the site presents issues in relation to the satisfactory provision of a wastewater treatment system which addresses the location of the site within a regionally important aquifer with a groundwater vulnerability of extreme.
- 7.3.10. The applicant in recognising this issue proposed an engineered solution where a secondary treatment system is installed 1.2 metres of adequate sub-soil is required and following an initial proposal it was amended by way of further information following initial observations by the planning authority and for the purpose of this assessment it is proposed to assess the revised proposal.
- 7.3.11. The precautionary approach of the planning authority is reasonable given that the site has a karstified bedrock which gives rise to a vulnerability to groundwater due to its porosity.
- 7.3.12. The approach taken by the appellant also recognised this issue of vulnerability and the documentation submitted reflects this and complies with Table 6.3 of the CoP: Minimum unsaturated soil and/or subsoil depth requirements as they relate to a groundwater protection response for R2².
- 7.3.13. The primary issue to consider is whether the grounds of appeal and the solution suggested has addressed the reason for refusal.
- 7.3.14. The EPA Code of Practice Domestic Waste Water Treatment Systems (Population Equivalent ≤ 10) 2021 purpose is to provide guidance on domestic waste water treatment systems (DWWTSs) for single houses or equivalent developments with a population equivalent (PE) of less than or equal to 10. It sets out a methodology for site assessment and selection, installation and maintenance of an appropriate DWWTS and the key messages of the CoP are the importance of proper site assessment taking account of not only local conditions specific to the proposed site but also receptors at risk and the need for design of DWWTSs specific to the local conditions.

- 7.3.15. In this regard given the site conditions the proposed solution on the site incorporating a raised bed intermittent soil filter system designed in accordance with section 8.1.1 and sized in accordance table 10.1 of the EPA CoP is to adhere to the CoP which provides for a tertiary level of treatment.
- 7.3.16. The primary issue of contention which arise in the assessment of this issue is not the provision of a 1.2 metres subsoil required to meet the provisions of the CoP but whether the existing soil can be excavated to a depth of 1.0m or whether excavation to a depth of 700mm is more appropriate. Initially the appellant has raised the issue of the bedrock and what can be interpreted as the depth of bedrock contending that bedrock is encountered at 1.0m overlain by fractured bedrock of a depth of 300mm. The planning authority view is that bedrock is encountered at a depth of 700mm. The bedrock depth is of importance as given the R2² classification a minimum of 1200mm is desired/required. The appellant in the grounds of appeal has indicated that if 700mm depth to bedrock is applied it was possible to condition excavation to a depth of 700mm and that the raised soil bed filter start at 700mm below ground level and that it can be raised to 500mm above ground level. Such a requirement would have required the importation of only an additional 300mm of soil and a condition can be applied to provide this.
- 7.3.17. An examination of the CoP and in particular table 6.3, the requirements in relation to assessment and interpretation as outlined in section 8.1.1 and sized in accordance with Table 10.1 (option 2) would indicate that the details submitted in the revised proposals and outlined in detail in section 5 of the SCR comply with the CoP and there is nothing to suggest that this technical design solution would not operate satisfactorily from a depth of 700mm and the mound above ground level being increased by 300mm to provide the 1200mm soil depth with an appropriate sand filter medium below the invert level in a detailed bespoke design of the pumped distribution system as provided for in the CoP.
- 7.3.18. This would involve having an increased raised mound above ground level but I would note that in the adjoining planning application where outline planning permission was granted for three dwellings in P.A. Ref. No. 22518 which had similar issues of R2² classification and a raised mound above ground level varying between 500mm and 550mm was permitted to provide the 1200mm soil depth with an appropriate sand filter medium and existing soil below the invert level.

7.3.19. Having regard to this I consider that the grounds of appeal indicating that the matter could have been addressed by condition is reasonable and that a condition reflecting this be included in a grant of outline planning permission. Any subsequent application for permission made arising from the grant of outline planning permission would require details of the method of treatment from the wastewater treatment system contingent on details being submitted which fully comply with the requirements of the CoP.

7.4. Archaeology

7.4.1. It is noted that the planning authority referred to application to the Department of Housing, Local Government and Heritage owing to the site being within the zone of notification of Toormore Enclosure CL 025-061 and no response was received from the DAU. Given the presence of archaeological features in relatively close proximity any grant of outline planning permission should include a condition in relation to protection of archaeological heritage.

7.5. Appropriate Assessment Screening

7.6. Having regard to the nature and scale of the proposed development, the nature of the foreseeable emissions therefrom/to the absence of emissions therefrom, the nature of receiving environment as a built up urban area and the distance from any European site/the absence of a pathway between the application site and any European site it is possible to screen out the requirement for the submission of an NIS and carrying out of an EIA at an initial stage.

8.0 Recommendation

8.1. I recommend that outline permission be granted.

9.0 Reasons and Considerations

Having regard to the location of the site within the development boundary of the village of Ruan and the pattern of existing and permitted development in the vicinity it is considered that the proposed development would be in accordance with the stated provisions of the current Clare County Development Plan 2023-2029. It is also considered that, subject to compliance with the following conditions, the proposed

development would not adversely impact the character of the area or be seriously injurious to the visual or residential amenities of the area. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

10.0 Conditions

1.	<p>The development shall be carried out and completed in accordance with the plans and particulars lodged with the application on the 14th June 2022 and 16th March 2023 except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.</p> <p>Reason: In the interest of clarity.</p>
2.	<p>An application for permission consequent to this grant of outline planning permission shall be made not later than 3 years beginning on the date of the grant of this grant of outline permission</p> <p>Reason: In the interest of clarity</p>
3.	<p>The plans and particulars to be submitted by way of a separate application for permission consequent shall include the following:</p> <ul style="list-style-type: none"> (a) Details of the proposed dwelling (b) A site layout plan to a scale of not less than 1:500 showing the layout of the house, driveways, entrance, and wastewater treatment system, (c) The finished ground floor level of the house by reference to existing site levels and road level at the proposed entrance, (d) Proposals for the landscaping of the site (including planting) and boundary finishes and (e) Details of external finishes. <p>Reason: To enable the application for permission consequent to be fully assessed.</p>

4.	<p>1. (a) The treatment plant and polishing filter shall be located, constructed and maintained in accordance with the details submitted to the planning authority on the 14th day of June, 2022 and as revised by details submitted to the planning authority on the 16th day of March 2023, and in accordance with the requirements of the document entitled "Code of Practice - Wastewater Treatment and Disposal Systems Serving Single Houses (p.e. ≤ 10)" – Environmental Protection Agency, 2021 subject to the following amendment as specified in (b).</p> <p>(b) The percolation system shall provide for a 1200mm soil depth with an appropriate sand filter medium below the invert level and the percolation area shall not be excavated below a depth of 700mm of the existing ground level and shall be installed in accordance with a secondary treatment system with pumped discharge to a raised bed soil filter designed in an accordance with section 8.1.1 and sized in accordance with Table 10.1 (option 2) of the EPA Code of Practice.</p> <p>(c) No system other than the type proposed in the submissions shall be installed unless agreed in writing with the planning authority.</p> <p>(d) Certification by the system manufacturer that the system has been properly installed shall be submitted to the planning authority within four weeks of the installation of the system.</p> <p>(e) A maintenance contract for the treatment system shall be entered into and paid in advance for a minimum period of five years from the first occupancy of the dwellinghouse and thereafter shall be kept in place at all times. Signed and dated copies of the contract shall be submitted to, and agreed in writing with, the planning authority within four weeks of the installation.</p> <p>(f) Surface water soakways shall be located such that the drainage from the dwelling and paved areas of the site shall be diverted away from the location of the polishing filter.</p> <p>(g) Within three months of the first occupation of the dwelling, the developer shall submit a report from a suitably qualified person with</p>
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	<p>professional indemnity insurance certifying that the proprietary effluent treatment system has been installed and commissioned in accordance with the approved details and is working in a satisfactory manner and that the polishing filter is constructed in accordance with the standards set out in the EPA document.</p> <p>2.Details to comply with the requirements of this condition shall be submitted in a permission consequent to this grant of outline planning permission.</p> <p>Reason: In the interest of public health.</p>
5	<p>The developer shall enter into a water connection agreement with Uisce Éireann.</p> <p>Reason: In the interest of public health.</p>
6	<p>Surface water drainage arrangements shall comply with the requirements of the planning authority for such services and works.</p> <p>(a) All surface water generated within the site boundaries shall be collected and disposed of within the curtilage of the site. No surface water from roofs, paved areas or otherwise shall discharge onto the public road or adjoining properties.</p> <p>(b) The access driveway to the proposed development shall be provided with adequately sized pipes or ducts to ensure that no interference will be caused to existing roadside drainage.</p> <p>Reason: In the interest of public health and traffic safety.</p>
7	<p>All service cables associated with the proposed development (such as electrical, telecommunications and communal television) shall be located underground. Ducting shall be provided to facilitate the provision of broadband infrastructure within the proposed development.</p> <p>Reason: In the interests of visual and residential amenity.</p>
8	<p>Site development and building works shall be carried out only between the hours of 0800 to 1900 Mondays to Fridays inclusive, between 0800 to 1400 hours on Saturdays and not at all on Sundays and public holidays.</p>

	<p>Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority.</p> <p>Reason: In order to safeguard the [residential] amenities of property in the vicinity</p>
9	<p>The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard, the developer shall</p> <ul style="list-style-type: none"> (a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development, (b) employ a suitably-qualified archaeologist who shall monitor all site investigations and other excavation works, and (c) provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove. <p>In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.</p> <p>Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.</p>
10	<p>The applicant/developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed</p>

between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

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.

. Derek Daly
Planning Inspector

6th October 2023