



An
Bord
Pleanála

Inspector's Report ABP-315047-22

Development	Construction of 3 storey nursing home, single storey ancillary services building, vehicular access, parking, sewage treatment plant, private borehole well supply and all associated site development works.
Location	Garrandarragh, Mullinavat, Co. Kilkenny.
Planning Authority	Kilkenny County Council
Planning Authority Reg. Ref.	21866
Applicant(s)	Peter Purcell
Type of Application	Permission
Planning Authority Decision	Refuse Permission
Type of Appeal	First Party
Appellant(s)	Peter Purcell
Observer(s)	None on file
Date of Site Inspection	13 th January 2024
Inspector	Sarah Moran

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1.0 Site Location and Description

- 1.1. The development site is located in the townland of Garrandaragh, within the settlement boundary of the village of Mullinavat, Co. Kilkenny. The site comprises undeveloped lands at the eastern edge of the village, between the Dublin - Waterford railway line and the M9 motorway. It fronts onto the R704 Mullinavat - New Ross road, which connects Mullinavat to the M9 at junction 11. There is a level crossing nearby to the west of the site, where the R704 intersects with the railway line. There are currently no pedestrian or cycle facilities or connections along the R704 to connect the area to the centre of Mullinavat. A speed limit of 50 kph applies at this stretch of the R704.
- 1.2. The site has a stated area of 1.25 ha and has an existing access to the R704. There are an area of hardstanding and the remains of several demolished outbuildings at the centre of the site, along with some associated piles of rubble. The site slopes gently from northeast to southwest and is traversed by an overhead electricity line. There are some mature trees and hedgerows at site boundaries. There is a house and farm complex to the immediate west of the site and undeveloped lands to the east, between the site and the M9 motorway.

2.0 Proposed Development

- 2.1. The proposed development comprises a three storey nursing home, stated area 4,247 sq.m., to be accessed from the R704. The development also includes a single storey ancillary services building, car parking and circulation areas, an on-site wastewater treatment plant with associated percolation area and a private borehole.

3.0 Planning Authority Decision

3.1. Further Information Request and Clarification of FI Request

- 3.1.1. Kilkenny County Council (KCC) issued a further information request on 9th December 2021 in relation to the following matters:
 - Details of footpath linkage between the development site and the core of Mullinavat village along the R704;

- Applicant to engage with Irish Water / Uisce Éireann through submission of a Pre-Connection Enquiry and to submit Confirmation of Feasibility;
- Applicant to address concerns regarding the proposed private wastewater treatment system including design and location, potential discharge of effluent to the surface car park, availability of adequate water capacity at the proposed borehole, well yield and water quality;
- Details of screen and amenity planting, landscaping and boundary treatments, also screening and / or noise mitigation measures for attenuation of noise from the M9;
- Confirmation of demolition of existing structures at the site, demolition waste management plan and environmental operational waste management plan;
- Proposals to relocate the overhead service line at the site.

The applicant submitted a response to the above request on 7th July 2022, which was deemed significant by KCC and was readvertised.

3.1.2. KCC requested clarification of further information on 3rd August 2022 in relation to the following matters:

- Applicant to demonstrate and clarify in an evidence-based manner what interventions can be developed to ensure a satisfactory reduction in the risk to groundwater pollution ... the presence of another large scale temporary on-site wastewater treatment system for the proposed motorway service station under ref. 18/647 and 17/456 is one of a number of factors in assessing risk. A connection to the public water supply may be considered but will not obviate the need to address the level of nitrates.
- Details of ongoing operation, maintenance and monitoring of any proposed private wastewater treatment system, consent to a condition requiring a form of security and bonding to ensure same.

The applicant submitted a response to KCC on 13th September 2022.

3.2. Decision

3.2.1. KCC issued a notification of a decision to refuse permission on 10th October 2022, for the following stated reasons:

1. *The proposed development is considered premature pending the upgrade of the Mullinavat Wastewater Treatment System to cater for the PE (Population Equivalent) requirements for the proposed nursing home, existing population connection requirements and the future development of Mullinavat. The Pre-Connection Enquiry response from Irish Water (dated 26th February 2022, lodged as part of the further information), states that Mullinavat wastewater treatment plant currently has insufficient capacity to accommodate this development, and Irish Water does not currently have plans in place to carry out the required upgrades. The proposed development is therefore considered contrary to the proper planning, environmental and sustainable development of the area.*
2. *Having regard to:*
 - *Ground water testing carried out which showed evidence of Nitrate contamination levels above the recommended EPA Intervention Level of 25 mg/l;*
 - *Provision of on-site well(s) to serve the water supply for proposed development;*
 - *Proposed polishing filter for the nursing home less than 40 meters upgradient of an existing domestic well (ref. PPW);*
 - *The level of ongoing maintenance, repair and concerns around responsibility that such a large-scale complex wastewater system with multiple pumps and chambers would require in the medium to long-term associated with proposed nursing home development; and*
 - *Insufficient capacity in the existing public waste water treatment plant to accommodate proposed development;*
 - *The policies set out in Section 10.1.6 and 10.18 of the Kilkenny City and County Development Plan 2021-2027*

The Planning Authority is not satisfied that the effluent from the proposed development can be discharged at the site without risk to public health or the environment. A reduction in nitrate levels by dilution as indicated by the applicant cannot be confirmed to a reasonable scientific degree of certainty. It is considered that the proposed development is therefore contrary to proper planning, policy provisions of the Kilkenny City and County Development Plan 2021-2027, protection of the environment and sustainable development of the area.

3.3. Planning Authority Reports

3.3.1. Planning Reports

- KCC Executive Planner report, 12th December 2021. Recommends further information request for the issues set out above.
- KCC Executive Planner report, 2nd August 2022 recommends refusal. Accompanying note by Acting Director of Services, also dated 2nd August 2022, recommends clarification of further information as set out above.
- KCC Executive Planner report, 6th October 2022, recommends refusal for the reasons set out above.

3.3.2. KCC Road Design

KCC Senior Executive Engineer (SEE) Road Design, 2nd December 2021:

- The provision of a footpath connection to Mullinavat was a key element of the permission granted at the adjoining site ref. 17/456, also a shared entrance at the development site. The current application seeks to provide a separate entrance, there is no objection to same. However the development will not have any footpath connection to Mullinavat if the development permitted under reg. ref. 17/456 does not proceed.
- Issues relating to visibility at the access, signage and public lighting may be resolved by conditions.

- Recommends a further information request for details of footpath linkage to Mullinavat and revised car parking / internal roads layout to address issues raised.

KCC SEE Road Design second report in response to further information submitted on 7th July 2022, dated 15th July 2022:

- Notes that the development will not be occupied until the footpath link from the entrance of the development site is permitted as envisaged under reg. ref. 17/456, which is to be agreed as compliance with that permission. This is an acceptable solution.
- Proposed amendments to roads and pedestrian layouts are acceptable.
- Recommends permission subject to conditions.

3.3.3. KCC Environment Section

KCC Executive Engineer Environment Section, 7th December 2021:

- Not in favour of a private wastewater treatment system given the size, extent and potential occupancy of the development.
- The location of the wastewater treatment system adjacent to a cut slope down to the car park has the potential to lead to the leaching of waste from the base of the polishing filter through the cut slope with potential for discharge of effluent to the surface water drainage network for the car park.
- The applicant has failed to demonstrate that there would be sufficient capacity and volume of water for the development within any proposed borehole. Ground investigation has not been undertaken to adequately assess potential well yields and water quality.
- Recommends refusal for the following reasons:
 1. *We consider that the development is premature pending upgrade of the Mullinavat Wastewater Treatment System. The provision of a large scale on-site wastewater treatment system to cater for the proposed high occupancy development presents an inherent potential risk to public health and the environment, based on past experience of similar type systems installed to cater for housing developments in County Kilkenny. The human aspect in terms of*

ongoing maintenance and repair versus the expected high daily demand and discharge requirements from the proposed nursing home is of particular concern.

2. *The applicant has failed to demonstrate that there is sufficient quantity and quality of potable water from a bored well to cater for the development pending future connection to the public mains.*

KCC Assistant Engineer, Environment Section second report in response to further information submitted on 7th July 2022, dated 28th July 2022:

- The proposed development will generate wastewater hydraulic load of an estimated 244 PE, equivalent to c. 40 dwellings. Also notes that a separate wastewater treatment system is permitted for the adjoining service station, which will be located up-gradient of the nursing home. Both developments will generate an estimated combined discharge of 264 PE or equivalent to approx. 60 dwellings.
- The upgrade to the municipal WWTP in Mullinavat has been proposed for 450 PE, with an estimated loading of 296 PE in 2025. The projected load generated by the combined service station and nursing home, along with the estimated population of Mullinavat, would result in a total load on the new WWTP of 560 PE, a deficit of 110 PE from the capacity of the proposed upgraded WWTP.
- Notes that information provided on existing water quality indicates elevated nitrate levels recorded upstream, which exceeded the intervention level of 25 mg/l as set by the EPA.
- The proposed polishing filter for the nursing home is located < 40m upgradient of an existing domestic well. Also a new shallow monitoring borehole is < 10m from the proposed polishing filter. These distances are not in compliance with the Code of Practice for Domestic Waste Water Treatment Systems and a large scale polishing filter is therefore not considered suitable in this instance.
- The proposed complex wastewater treatment system will require ongoing maintenance and surveillance. Also concern about the number of pumps required.
- Recommends refusal for the following reason:

We consider that the development is premature pending upgrade of the Mullinavat Wastewater Treatment System. The provision of a large-scale on-site wastewater treatment system to cater for the proposed high occupancy development presents an inherent potential risk to public health and the environment. There is also the risk to groundwater in the area given that some of the testing carried out was above the EPA Intervention Level of 25 mg/l for Nitrate. It must also be considered that there will also be another large-scale on-site waste water treatment system in the proposed adjacent motorway service station. There are also concerns over the level of ongoing maintenance and repair that such a large-scale system will require and the responsibility of where this lies.

KCC Executive Engineer Environment Section third report in response to clarification of further information submitted on 13th September 2022, dated 27th September 2022:

- Acknowledges that additional sampling results submitted indicate Nitrate levels below 25 mg/l, this confirms the variable nature of nitrate levels in the locality. Notes elevated nitrate levels > 25 mg/l as recorded at various locations in the information submitted. The development site is located in a Pollution Impact Potential (PIP) Rank 2 Area as per nitrate maps for groundwater provided by the EPA. Locations ranked 1, 2 or 3 present a high pollution impact potential related to nitrates.
- The surface and sub-surface ground conditions indicate fast percolation at 13.6 and 15.6, as recorded on the Site Characterisation Map, confirming the presence of existing permeable soils below ground level (BGL). The proposed polishing filter system is partially above and partially below ground level. Concerns that potential risk to groundwater has not been addressed, noting the proposal to provide an on-site well for the nursing home, also proximity of adjacent wells.
- Notes applicant's proposals to provide an annual cash payment to KCC and to carry out annual testing of wastewater treatment effluent discharge. Several concerns relating to lack of capacity provision in IW proposals to upgrade Mullinavat WWTP, proposal doesn't address issue of raised nitrates, lack of clarity around maintenance costs and responsibility for ongoing maintenance.

- Recommends refusal on this basis, for the same reason as stated in the report of 28th July 2022.

3.4. Prescribed Bodies

3.4.1. Uisce Éireann (formerly Irish Water)

Submission to KCC dated 16th November 2021. Request further information comprising:

The applicant is to engage with Irish Water through the submission of a Pre-Connection Enquiry (PCE) in order to determine the feasibility of connection to the public water / waste water infrastructure. The Confirmation of Feasibility (COF) must be submitted to the planning department as the response to the further information request.

Please note that where Irish Water does not have water / waste water infrastructure within the public road fronting the proposed development a mains/ sewer extension will be required to cater for the proposed development. At this time a mains/ sewer extension is not on the current Irish Water Capital Investment plan.

3.5. Third Party Observations

3.5.1. None on file.

4.0 Planning History

4.1. Development Site

4.1.1. Reg. Ref. 18/184

- 4.1.2. Permission granted by KCC to Peter Purcell (the current applicant) to demolish nine no. agricultural buildings (stated total GFA 1,427 sq.m.), on a site with a stated area of 0.74 ha at part of the current development site.

4.2. Adjoining Lands to East Adjacent to M9 Motorway

4.2.1. Reg. Ref. P17/456 ABP-300424-17

Relating to lands to the immediate east of the development site, adjacent to the R704/ M9 interchange. Permission sought by Peter Purcell for the development of a

24 hour Motorway Service Area to include a vehicle fuelling station with a HGV fuelling station; single storey services building including convenience store, food court, indoor play area, offices and reception with tourist information and associated services and facilities; single storey roofed enclosure and yard for storage and services; external facilities and works including picnic, play, amenity and rest areas, bicycle, car and HGV parking and EV charging points; upgrading of existing vehicular entrance from the R704; signage; on site waste water treatment system, including percolation area and all associated site development works. A grant of permission by KCC was appealed by several third parties, however the appeals were subsequently withdrawn. The permitted development is to use the existing vehicular access to the current development site from the R704. I note that this permission was due to expire on 14th December 2022, and that construction had not commenced on the permitted development when the subject site was inspected on 13th January 2024.

4.2.2. Reg. Ref. 18/647

4.2.3. Permission granted to Peter Purcell for a temporary on-site wastewater treatment system, including percolation area, and all associated works, to serve the motorway service area development permitted under reg. ref. 17/456. This permission was due to expire on 12th December 2023.

4.2.4. Reg. Ref. 23/77 ABP-319229-24

Application lodged by Peter Purcell to KCC on 31st March 2023. Permission sought for a 24 hour Service Area and EV charging hub, including an amenity/services building (c. 1,028 sq.m. GFA) with a retail convenience store, food outlets and associated services and facilities, also car, cycle and coach parking areas and signage. Provision of on-site temporary foul treatment system and percolation area as granted on the site under reg. ref. 18/647. Realigned access road and new pedestrian path linking back to the existing footpath network in Mullinavat Village (as previously conditioned under reg. ref. 17/456). Other associated works include the provision of an ESB sub-station (28sq.m); regrading of existing site levels; and all other ancillary site development, utilities, landscaping, lighting, roof mounted PV panels and boundary works.

KCC issued a request for further information on 24th May 2023 for various matters including details of the proposed pedestrian connection to Mullinavat and related entrance layout; also lighting proposals; ground levels and retaining walls at the M9; construction management; lighting and signage details and traffic issues. The request notes that the permission granted for a wastewater treatment system under reg. ref. 18/647 was due to expire on 27th December 2023, also that 17/456 has expired. The applicant was requested to submit a proposal for a new wastewater treatment system including site suitability assessment, proposals for ongoing management and maintenance and revised public notices, noting that the subject application shows an increase to c.70+ employees from the previously granted planning permission, also to clarify details of the proposed surface water drainage design and underground fuel and blue storage tanks, including demonstration that the existing public surface water drainage network can provide sufficient capacity for the additional load for the proposed development and details of proposed private on-site well to service the development and details of when a connection to the mains water supply by Irish Water / Uisce Eireann is envisaged, including written correspondence from same.

KCC issued a notification of a decision to refuse permission on 9th February 2024, for the following stated reasons:

1. *The Planning Authority is not satisfied that effluent from the proposed development can be discharged at the site without risk to public health or the environment having regard to:*
 - a. *The level of Nitrates levels on the adjacent site, which are above the EPA's 25 mg/l intervention threshold for nitrate and which is down gradient of the proposed wastewater treatment system on site. The additional wastewater discharge to groundwater which could lead to a further increase in levels of nitrate in the groundwater.*
 - b. *The absence of a Tier 3 risk assessment for a discharge of wastewater to groundwater for the proposed development. The risk assessment will require a decision from An Bord Pleanála on the adjacent development before any risk assessment can be carried out for this proposed development.*

Accordingly, it is considered that the proposed development would be injurious to public health and contrary to the proper planning and sustainable development of the area.

This decision is the subject of a current appeal lodged with ABP on 7th March 2024, ref. ABP-319229-24.

4.3. Mullinavat Wastewater Treatment System

4.3.1. Reg. Ref. 17/127

Permission granted to Irish Water / Uisce Éireann (IW/ UÉ) for a new WWTP at Deerpark, Mullinavat including outfall pipe to the River Blackwater and a new pumping station in the townland of Mullinavat, also decommissioning and demolition of existing WWTP in the townland of Mullinavat. The permission expired on 25th March 2023, with no works carried out.

5.0 Policy Context

5.1. Kilkenny City and County Development Plan 2021-2027

- 5.1.1. The site is within the development boundary of Mullinavat as identified in the Kilkenny County Development Plan 2021-2027. Mullinavat is identified as a ‘rural town/ village’ on the third tier of the county settlement hierarchy. Development plan section 4.6 relates to such settlements and states in relation to the settlement boundaries of such settlements:

These settlement boundaries define an area within which development will be encouraged. Proposed development in these settlements will however have to have regard to the availability of infrastructure capacity of each respective settlement over the lifetime of the Plan. Accordingly, development proposals within the boundary will be considered on their merits against the policies and objectives contained in this core strategy and the Development Plan generally.

- 5.1.2. Development plan section 6.16.2 sets out policy on nursing home facilities and states:

In the light of an increasing ageing population, it is anticipated there will be increasing investment in developing a range of facilities for the elderly. Nursing

homes and residential care homes should be integrated wherever possible into the residential areas of towns and villages where residents and staff can avail of reasonable access to local services. The Council recognises that nursing homes should not only be provided in established urban areas but also in appropriate rural areas. In rural areas it is preferable that nursing homes be located within the existing network of smaller towns and villages within the county to serve rural demand.

Section 6.16.2.1 states the following criteria for consideration of proposed new build nursing home developments:

- Compliance with the standards as laid down in Health Act 2007 (Care and Welfare of Residents in Designated Centres for Older People) Regulations 2009 and the Health Act 2007 (Care and Welfare of Residents in Designated Centres for Older People) (Amendment) Regulations 2010 (or any such other relevant standards and legislation that may be enacted);
- The proximity to local services and facilities;
- The effect on the amenities of adjoining properties;
- Whether such a use would not give rise to a traffic hazard;
- Adequate visitor and employee car parking spaces and turning areas;
- Adequate access and turning areas for emergency vehicles;
- Adequate provision of private open space;
- Pedestrian linkages to existing social and community facilities within the settlement;
- Facilities to cater for a range of occupants ranging from those seeking semi-dependant living accommodation to those requiring a high level of care;
- Whether the size and scale are appropriate to the area.

5.1.3. Development plan section 10.1.6 states in relation to wastewater treatment:

There are currently 34 public wastewater treatment plants (WWTPs) in Kilkenny county. Irish Water and Kilkenny County Council are continually progressing sewer rehabilitation activities, capital maintenance activities, etc, and the Council will continue to work with Irish Water to monitor the performance of the networks and to

advance and realise capital expansions and upgrades of wastewater infrastructure for the continued sustainable growth of the County. A Drainage Area Plan is being progressed for the wastewater network in Kilkenny City. The Drainage Area Plan (DAPs) will assess in detail the performance of the wastewater networks in the City which will inform future investment requirements for the City network.

Section 10.1.7 refers to the Small Towns and Village Investment programme, whereby IW / UÉ and KCC have identified smaller settlements within the county that are eligible for investment to address wastewater deficiencies. Mullinavat is not on the list of eight settlements identified. Section 10.1.7 also states:

Kilkenny County Council will require that development in all main settlements connect to public waste water treatment facilities, subject to sufficient capacity being available which does not interfere with the Council's ability to meet the requirements of the Water Framework Directive and the Habitats Directive.

- 5.1.4. Development plan section 10.1.8 refers to water quality in the context of the Water Framework Directive (WFD) and states the following objectives:

10B To implement the measures of the River Basin Management Plan, including continuing to work with communities through the Local Authority Waters Programme to restore and improve water quality in the identified areas of action.

10C To complete the mapping of source protection areas and to map Source Protection Areas for any new public water supply schemes as appropriate.

10D To ensure that Source Protection Areas are identified for any multiple unit housing developments with private water supplies.

Section 10.1.8.5 sets out the following water quality development management requirements:

- To assess all new applications for single houses in accordance with the EPA manual entitled Code of Practice: Domestic Waste Water Treatment Systems (Population Equivalent ≤ 10) or any subsequent revisions or replacement. The person carrying out the assessment will be suitably qualified and in the local authority's opinion, be competent to do so.
- To ensure that all industrial development is appropriately located, and to seek effluent reduction and 'clean production' where feasible, and require that waste

water treatment facilities are adequate, and that effluents are treated and discharged in a satisfactory manner.

- To have regard to the Groundwater Protection Scheme and to comply with the Water Services Acts 2007 as amended in decision-making on the location, nature and control of developments and activities in order to protect groundwater.

5.2. Natural Heritage Designations

5.2.1. The development site has the following distances to designated sites within 15 km:

- c. 6.5 km from Hugginstown Fen SAC (000404)
- c. 7.2 km from the River Barrow and Nore SAC (002162)
- c. 10.3 km from the Lower River Suir SAC (0021437)
- c 13 km from the River Nore SPA (004233)

5.3. EIA Screening

5.3.1. Having regard to the nature and relatively modest scale of the proposed development, its location on zoned land adjoining a built-up area and the likely emissions therefrom, it is possible to conclude that the proposed development is not likely to give rise to significant environmental impacts and 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 First Party Appeal

6.1.1. The first party appeal comprises several submissions, which may be summarised separately as follows.

6.1.2. First Party Appeal Planning Comment

- Permission was granted under reg. ref. 17/467 for a motorway service station on the adjoining site on the basis that it would connect to the existing public sewer network which was due to be upgraded under reg. ref. 17/127. Permission for on-

site temporary wastewater treatment was withheld from 17/467 as it was thought that IW/ UÉ would have upgraded the existing public WWTP at Mullinavat within a reasonable timeframe. Permission was also granted for temporary on-site wastewater treatment to serve the motorway services area under 18/647 as it was expected that the public system would be upgraded. There is therefore precedent for granting permission for on-site temporary wastewater treatment in an advance of an upgrade of the public WWTP, with a precise timeframe for same.

- The permission for the motorway services area is not expected to proceed and there would be no net increase in on-site wastewater treatment if the subject development were permitted / carried out.
- Refusal of permission for the subject development is unreasonable and unsustainable so long as IW/ UÉ has no current plans or planning permission to upgrade the public WWTP serving the village. The development plan has identified a requirement for nursing homes and residential care homes to be located within settlements to serve local rural need demand arising from the existing ageing population and this need is also referred to in the KCC planning report on the subject application. There is no nursing home in the Mullinavat area and the nearest services available are at Ferrybank, Mooncoin, Owing and New Ross, all outside the Mullinavat catchment. The owner of existing private nursing homes at New Ross and Ferrybank has confirmed that they are at capacity and it is understood that the Mooncoin nursing home is also at capacity. Owing has a retirement village but no nursing home.
- It is submitted that the proposed development could meet the development plan objective to meet rural need for nursing homes while protecting groundwater sources from contamination by complying with EPA standards, subject to a Waste Water Discharge Licence / Certificate of Authorisation as may be issued by the Environment Section of KCC, pending upgrade of the public WWTP by IW/ UÉ.
- If a nursing home is not permitted at the current development site within the settlement boundary of Mullinavat, the alternative to meet local need would be to locate a home in a rural area, where it would be permanently serviced by on-site

wastewater treatment and a well instead of the proposed temporary solutions at the development site, pending a more sustainable permanent connection to the public services.

- The remainder of the planning comment refers to technical and legal issues as summarised separately below.

6.1.3. First Party Appeal Technical Comment

The following summary is based on technical comments in the grounds of appeal and on the applicant's Environmental Report (undated) submitted with the grounds of appeal:

- Refusal reason no. 2 refers to the EPA recommended intervention level of 25 mg/l for groundwater nitrate contamination. This was an Interim Guidance Value (IGV) level introduced under EPA guidelines in 2002. The IGVs are used to characterise the groundwater rather than as a regulatory concentration limit. The 2002 IGV was superseded under the European Union Environmental Objectives (Groundwater) (Amendment) Regulations 2016 (SI No. 366 of 2016) which provide for a nitrate threshold value of 37.5 mg/l. All of the samples taken were significantly below this threshold.
- The PIP maps referred to in the KCC Environment Section comment on file are for the management of water in the landscape and are not groundwater risk maps. They are not designed or suitable to be used on their own as a basis for decisions at field scale. They are also designed for agricultural loading of the ground surface with fertilisers and untreated animal manure and are not designed as a planning tool for urban discharges to ground. The proposed use of the site for a nursing home will prevent it being used for animal stock or for slurry spreading which will reduce the volume of raw organic waste being put across the whole land area.
- EPA groundwater mapping does not identify a groundwater risk to the aquifer around Mullinavat. Groundwater vulnerability is classified at the site as Moderate and the aquifer is classified as Locally Important (LI), indicating that mapped subsoil depths of >5m (borehole drilling has proven subsoil depths of up to 7m) provides a good natural protection over bedrock to attenuate pollution and that the aquifer does not have substantial groundwater pathways – which would

increase the risk of nitrogen losses. The Groundwater Protection Scheme Guidelines indicate that a site with Moderate vulnerability over a Locally Important aquifer would be acceptable for land spreading or domestic wastewater disposal with a R1 Response, subject to normal good practice.

- The site suitability report for reg. ref. 18/647 at the current development site yielded a T value of 15.64 minutes per 25mm which was considered acceptable by KCC Environment Section and was in compliance with the EPA Code of Practice 2021.
- The projected percolation rates at the site are more than adequate to allow the volume of water that would be discharged by the proposed on-site wastewater treatment system, especially when distributed across a wide area of polishing filters. The fact that the proposed polishing filter is part over and part underground has no bearing on its ability to filter and purify treated effluent. Its design and siting on the site with regard to the adjacent break in slope to the car park and distance to nearby wells are in accordance with the EPA Code of Practice.
- The borehole at the site is a site investigation 50mm diameter borehole for monitoring and does not represent a well or potential drinking water supply and therefore its proximity within 10m of the treatment plant does not conflict with EPA guidance.
- The Environmental Report refers to earlier samples that were laboratory tested and to the result of samples taken in August 2022, which together identified an average nitrate concentration of 22.06 mg/l.
- A specialist hydrogeology report, dated 22nd June 2022, was submitted to KCC as further information, following EPA guidelines on the assessment of discharges to groundwater. The report states that nitrates do not pose a long term pollution risk for the site and will comply with the Groundwater Regulations and Drinking Water Regulations.
- The further information submitted to KCC provided details of on-site testing and found that the proposed well would be more than capable to supply demand

generated by the nursing home, also that pumping at the well had little or no effect on the two nearest residential water supplies.

- The applicant also requests that the Board consider a proposal to connect to an existing public watermain passing the site as far as the R704 / R448 junction. This can be connected to the existing mains and taken in charge by IW/ UÉ. The applicant is willing to accept a condition requiring connection to the public water main prior to occupation of the nursing home.
- Refusal reason no. 2 refers to the proposed polishing filter being <40m upgradient of an existing domestic well. The well referred to serves the applicant's own dwelling to the west of the site. This well can be relocated or decommissioned if required with connection to a new bored well serving the nursing home or to the public mains. This issue could be addressed by condition.
- The proposed wastewater treatment system would require a standard level of care and maintenance and would be maintained by the operator of the nursing home. Care, maintenance and repair can be regulated and enforced through planning conditions similar to conditions nos. 3-6 of reg. ref. 18/647.
- Permission for the development would not hinder the upgrading of Mullinavat WWTP in accordance with development plan paragraph 10.1.6. With reference to 10.1.8, the documentation submitted by the applicant confirms that the discharge of treated effluent to groundwater would not cause an increase in nitrates and that the groundwater environment would not deteriorate and would continue to meet the requirements of the WFD and relevant groundwater and drinking water regulation limits.

6.1.4. First Party Appeal Legal Comment

The following summary is based on legal comment submitted with the first party appeal. It is submitted that refusal reason no. 1 is ultra vires for the following reasons:

- Reason 1 states that Irish Water does not currently have plans in place to carry out the required upgrades. If there are no plans in place, it cannot be premature to do something for which there are no plans. There is no policy in the current development plan setting out a timeframe for upgrade of the WWTP and no

policy prohibiting private WWTPs and it is therefore unreasonable and *ultra vires* to deem the proposed development to be premature.

- The Nitrate and Groundwater Directives as transposed set out systems for nitrate reduction in Ireland and how they should be reduced. The planning authority has no power to rely on stricter standards than those prescribed by legislation.
- There is nothing in planning policy justifying refusing permission for private wastewater treatment systems, including development plan section 10.1.8. Such systems are essential where Irish Water does not have resources to provide public schemes. The plan to deal with nitrates from domestic wastewater treatment systems set out in Project Ireland is to enforce regulatory controls over them and not to ban them. They are to be regulated as per Objective 9.4 in compliance with emission standards, which are met or exceeded in this case.

It is submitted that refusal reason no. 2 is ill founded and not a proper refusal reason for the following reasons:

- The developer has proposed reasonable solutions widely comparable with what the EPA requires in some IPC licences to meet concerns relating to the proper functioning and maintenance of the WWTP. He has agreed to provide security for the proper functioning of the plant which is considered outside the legal jurisdiction of the planning authority to require. There are many legal remedies that can enforce failures in maintenance and operation.
- The fact that there is insufficient capacity in the public WWTP is the reason for the development, not a reason to refuse permission for it.
- Development plan section 10.6 is irrelevant to the development and section 10.8 requires compliance with the European Union (Environmental Objectives) (Groundwater) (Amendment) Regulations 2016. The proposed development will meet this requirement. The reason for refusal is therefore wrong and unsupported by any reasons contrary to the requirement of section 34 of the Planning and Development Act 2000 (as amended).
- The proposed development will require a pollution licence for the required discharge, which will prescribe emission standards. The planning authority is entitled to assume that the WWTP will be properly regulated and can only justify

a refusal of planning permission on groundwater percolation grounds if it considers that the proposed development is incapable of complying with any effluent discharge licence.

- The development will not result in any substantial increase in existing emissions and would not drive any substantial increased nitrate production in the region as many of the workers and inhabitants of the nursing home would be from the same catchment. The emission standard for nitrates in the public wastewater system is less strict than the standard that would be achieved by the proposed development.

6.2. Planning Authority Response

6.2.1. The main points made may be summarised as follows:

- Regarding the issue of the 25 mg/l nitrate level referred to, the Board is requested to note section 3.1.1 of the Fifth Nitrates Action Plan 2022-2025 (Programme) dealing with Nitrogen issues, which states that *“Almost one quarter (24%) of groundwater monitoring sites have high (>25mg/l NO3) nitrate concentrations, and three sites exceed the drinking water standard (50 mg/l NO3)”*.
- An EPA report 2020 (referred to but not submitted) states that *“A quarter of groundwater sites has mean nitrate concentrations greater than 25 mg/l NO3 in 2020. There has been a net increase of more than 1.5 mg/l NO3 at almost half (42%) of all groundwater sites since 2013.”*
- Having regard to these matters, it would not be appropriate for KCC to apply limits in excess of the >25 mg/l limit under the Nitrates Action Plan. The planning authority is satisfied that the continued application of the >25 mg/l limit as an intervention level is consistent with the objectives and requirements of the Nitrates Action Plan. This limit is also consistent with the criteria applied by the EPA in reporting on the assessment of nitrogen in groundwater sources in accordance with the EPA publication ‘Water quality monitoring report on nitrogen and phosphorus concentrations in Irish waters 2020’.

- KCC has a responsibility to implement the Fifth Nitrates Action Plan 2022-2025 and to carry out monitoring and surveillance of groundwater. It considers that the application of an intervention level of 25 mg/l is reasonable and consistent with the approach applied to other planning applications within the county in recent years.
- Groundwater testing carried out at the development site showed evidence of nitrate contamination levels above the recommended EPA intervention level of 25 mg/l. The planning authority is not satisfied that effluent from the development can be discharged at the site without risk to public health or the environment.
- Development plan section 10.1.7 requires that all development in small towns and settlements connects to public wastewater treatment facilities subject to sufficient capacity being available which does not interfere with the Council's ability to meet the requirements of the WFD and the Habitats Directive. There is limited nursing home accommodation available in the settlements listed in section 10.1.7. Mullinavat is not one of the villages / small towns for Waste Water Infrastructure Investment Funding over the period of the plan. The planning authority therefore considers that there are more suitable towns and villages including the main scheduled district towns of Thomastown, Callan, Graiguenamanagh and Castlecomer with sufficient existing or planned wastewater capacity infrastructure to accommodate a nursing home of this scale.
- IW/ UÉ have confirmed that the current wastewater treatment plant (WWTP) serving Mullinavat village does not have sufficient capacity to accommodate the proposed development through a pre-connection enquiry. There are no current plans for an upgrade of the Mullinavat WWTP that could take in the nursing home, the adjacent service area and additional connections for existing and proposed development within Mullinavat, i.e. no capacity provision is built into IW/ UÉ upgrade proposals or plans.
- The proposed development is considered premature pending any future upgrade of the Mullinavat Wastewater Treatment System to take in the PE requirements for the proposed nursing home, existing population connection requirements and future development of Mullinavat.

6.3. Observations

6.3.1. None on file.

6.4. Further Responses

6.4.1. None on file.

7.0 Comment of ABP Scientist

7.1. The subject case was referred to Emmet Smyth, ABP Scientist. The following points of his comment dated 14th March 2024 are noted:

- Notes the geological and groundwater characteristics of the site, including that the subsoil is mapped as having moderate permeability with the aquifer being moderately vulnerable as such the site is assigned a groundwater protection response of R1, acceptable subject to normal good practice. The area has an average effective rainfall of 850mm/year and an average recharge rate of 190mm/year which is an indication of impeded drainage at the site, this is based on the fact that the subsoil is moderately drained and overlain by a poorly drained gley soils. Diffuse recharge likely occurs via rain percolating through subsoils and rock outcrops. Due to the low permeability much recharge will discharge to surface water features.
- Notes distances to designated sites. The groundwater body is the Mullinavat and its status under the site is good and not deemed at risk. The nearest watercourse to the site is the c.400m to the west the Blackwater (Kilmacow)_010, which is of good status and not deemed at risk, with the Blackwater (Kilmacow)_020, c.350metres to the south which is of moderate status and risk status presently under review.
- The applicant has monitored groundwater wells for the purposes of assessing the background nitrate as NO₃ levels which they refer to as marginally elevated when compared against the EPA IGV of 25mg/L, but as stated this value does not place limits on the usage of such resources as a drinking water supply. The European Union (Drinking Water) Regulations 2023, Schedule 1 shows the minimum requirements for parametric values used to assess the quality of Water

intended for human consumption nitrates as NO₃ as 50mg/L. The limit designated for ammonium (NH₄) in the EU drinking water directive is 0.50mg/l. Therefore, any result above this level is an exceedance for ammonium, the calculations as submitted would show that the ammonium NH₄ will be well below the threshold at a 0.17mg/L.

- The Site Characterisation Report trial hole log was examined 20 hours after it was opened. The EPA 2021 Code of Practice requires that the trial hole remains open for 48 hours prior to examination. The water table was not encountered after 20 hours, with bedrock not observed in the soil profile. The EPA Code of Practice 2021 requires presoaks to be carried out 4-24 hours prior to the commencement of percolation tests, this step mimics the worst precipitative conditions, and it would appear that this step was carried out correctly. However, the subsurface percolation tests would appear to have calculative anomalies which would alter the final percolation value and call into question the validity of the percolation values. Hole 3 of the surface percolation test shows incorrect calculations, subsurface hole 1 also show incorrect calculations. The reason that this is an issue is that at when percolation value exceeds 20 the surface area required per person doubles meaning a larger surface area for the distribution layer will be required, approximately double the size as proposed.
- The applicant is proposing a secondary wastewater treatment system (244 PE hydraulic) which is adequately sized to accommodate the proposed development, this effluent is to be sterilised prior to disposal to the polishing filters. The tertiary filters proposed are 17No. 15 PE modules more than adequate to deal with the hydraulic load. However there remains questions over the sizing proposal for the distribution pad.
- Based on the information to hand, the report is not satisfied that the site assessment has been carried out in accordance with the requirements of the EPA 2021, Code of Practice with specific regard to the percolation tests. However, the soil conditions on site would allow for the adequate attenuation and disposal of the effluents generated.

8.0 Assessment

8.1. I have read through the file documentation and the relevant provisions of the current Kilkenny City and County Development Plan 2021-2027. I have also had regard to other relevant local/ regional /national policies and guidance and have carried out a site inspection. The main issues are those raised in the planning and technical reports on file and in the grounds of appeal. I consider that the principal issues that arise are in relation to the provision of wastewater treatment, the related issue of potential impacts on groundwater quality, the provision of a water supply at the development site and the provision of a pedestrian connection between the development site and the centre of Mullinavat. I note in this regard that the technical reports on file do not raise any other issues in relation to the design or layout of the development and that there are no third party submissions or observations on file. I therefore consider that the main issues on this appeal are as follows:

- Principle of development and availability of public water / wastewater treatment infrastructure
- Assessment of the proposed wastewater treatment system and potential impacts on groundwater quality
- Water supply for proposed development
- Pedestrian connection to Mullinavat
- Appropriate Assessment

These issues may be considered separately as follows.

8.2. Principle of Development and Availability of Public Infrastructure

8.2.1. Refusal reason no. 1 states that the proposed development is considered premature pending the upgrade of the Mullinavat Wastewater Treatment Plant (WWTP) to cater for the PE (Population Equivalent) requirements for the proposed nursing home, existing population connection requirements and the future development of Mullinavat. The Pre-Connection Enquiry response from Irish Water (dated 26th February 2022, lodged with KCC as part of the further information), states that Mullinavat WWTP currently has insufficient capacity to accommodate the proposed development, and Irish Water / Uisce Éireann (IW / UÉ) does not currently have

plans in place to carry out the required upgrades, therefore connection to the IW / UÉ wastewater network is “Not Feasible”. The grounds of the first party appeal note that permission was previously granted for an on-site wastewater treatment system for a motorway service station at the adjacent site to the east under reg. ref. 18/647, in advance of any future upgrade of Mullinavat WWTP. It is submitted that there is therefore precedent for granting permission for on-site temporary wastewater treatment in an advance of an upgrade of the public WWTP.

- 8.2.2. The development site is within the settlement boundary of Mullinavat as identified in the Kilkenny County Development Plan 2021-2027. The grounds of appeal submit that a nursing home should be provided at the development site as the development plan has identified a requirement for nursing homes and residential care homes to be located within settlements to serve local rural need, as per development plan section 6.16.2, which sets out policy on nursing home facilities. It is submitted that there is a need in the area for a nursing home that is not currently served by existing facilities and that, if such a facility is not permitted at the development site, the alternative would be to provide one at an unserved site in a rural area.
- 8.2.3. Development plan section 4.6 states that development will be considered within settlement boundaries with regard to the availability of infrastructure capacity at each settlement over the lifetime of the plan. Development plan section 10.1.7 lists small towns and villages that are to be subject to an investment programme by IW / UÉ and Kilkenny County Council (KCC) as eligible for investment to address wastewater deficiencies. Mullinavat is not on the list of eight settlements identified. Section 10.1.7 also states that KCC will require that development in all main settlements to connect to public wastewater treatment facilities, subject to sufficient capacity being available which does not interfere with the Council’s ability to meet the requirements of the Water Framework Directive and the Habitats Directive. Development plan section 6.16.2, which specifically relates to nursing homes, recognises that nursing homes should be provided in appropriate rural areas and states that in rural areas it is preferable that nursing homes be located within the existing network of smaller towns and villages within the county to serve rural demand.
- 8.2.4. The submission of IW / UÉ on file in relation to the subject application to KCC, dated 16th November 2021, states that the applicant is to make a pre-connection enquiry and to submit Confirmation of Feasibility for connection to the public water /

wastewater network. The applicant's further information response includes a Confirmation of Feasibility from IW / UÉ, dated 26th February 2022. The following points of same are noted:

- The IW /UÉ network will have to be extended by a length of c. 240m to connect to the public water network. This cost will have to be borne by the applicant.
- The Mullinavat WWTP currently has insufficient capacity to serve the development. IW /UÉ does not currently have plans in place to carry out the required upgrades.

I assume on this basis that there may be capacity in the public water supply for the development, subject to the provision of a new connection to same as detailed by IW / UÉ, and this matter is considered further in relation to water supply below.

8.2.5. Returning to the matter of wastewater treatment, I also note the report on file of KCC Environment Section, dated 28th July 2022, which states that the development would generate a wastewater hydraulic load of an estimated 244 PE, equivalent to c. 40 dwellings. This load, along with the wastewater hydraulic load generated by the development permitted at the adjoining site under reg. ref. 17/456 ABP-300424-17 (now expired), would result in an estimated combined discharge of 264 PE or equivalent to approx. 60 dwellings. The report refers to a proposed upgrade to the Mullinavat municipal WWTP for 450 PE, with an estimated loading of 296 PE in 2025. KCC Environment Section states that the combined service station and nursing home development, along with the estimated population of Mullinavat, would result in a total load on the new WWTP of 560 PE, a deficit of 110 PE from the capacity of the proposed upgraded WWTP. Refusal is recommended on this basis.

8.2.6. I have perused the publicly available documents on the current application file reg. ref. 23/77 relating to the adjoining site to the immediate east of the development site, in order to obtain more up to date information on public wastewater capacity in the area. These documents include a submission to KCC by IW / UÉ, dated 8th February 2024, which states that there is insufficient capacity in the UÉ network to accommodate that development at the present time. I assume on this basis that there would not be any public wastewater capacity to serve the subject site either and I note that KCC recently issued a notification of a decision to refuse permission for 37/77 on 9th February 2024, for one reason relating to unsatisfactory wastewater

treatment and potential adverse impacts on groundwater, as set out above. That decision is currently under appeal, ref. ABP-319229-24.

8.2.7. The KCC response to the subject first party appeal, dated 6th December 2022, refers to the settlements listed in development plan section 10.1.7, as set out above, and comments that there is limited nursing home accommodation available in the settlements listed. As Mullinavat is not one of the villages / small towns listed for investment in wastewater infrastructure during the plan period, the planning authority considers that nursing home facilities should be provided in more suitable towns and villages, including the main scheduled district towns of Thomastown, Callan, Graiguenamanagh and Castlecomer, which have sufficient existing or planned wastewater capacity infrastructure to accommodate a nursing home of this scale. This point is considered reasonable, noting also the stated preference to locate nursing homes within the existing network of smaller towns and villages within the county to serve rural demand as per development plan section 6.16.2.

8.2.8. I note the legal comment on file regarding the issue of prematurity, as summarised above. I accept that there are apparently no short or medium term plans to upgrade the public wastewater treatment infrastructure in the area such that it would have capacity to cater for the proposed development. However, notwithstanding same, I consider that the development would contravene development plan section 10.1.7 which requires developments in all main settlements to connect to public wastewater treatment facilities, subject to sufficient capacity being available which does not interfere with the Council's ability to meet the requirements of the Water Framework Directive and the Habitats Directive, having regard to the current lack of capacity in IW / UÉ wastewater infrastructure.

8.3. Proposed Wastewater Treatment System and Potential Impacts on Groundwater Quality

8.3.1. Refusal reason no. 2 relates to the proposed on-site wastewater treatment system and potential impacts on groundwater quality related to same. It refers to testing results showing evidence of nitrate contamination levels above the recommended EPA Intervention Level of 25 mg/l; provision of on-site well(s) to serve the water supply for proposed development; proposed polishing filter for the nursing home <40 m upgradient of an existing domestic well and the level of ongoing maintenance,

repair and concerns around responsibility that such a large-scale complex wastewater system with multiple pumps and chambers would require in the medium to long-term associated with proposed nursing home development, all in the context of insufficient capacity at the Mullinavat WWTP. The issues raised in refusal reason no. 2 may be considered as follows, with regard to the applicant's Engineering Report and Site Characterisation Report submitted with the original application; the revised design for and further details of the proposed wastewater treatment system and the Groundwater Assessment submitted to KCC as further information on 7th July 2022 and the clarification of further information submitted to KCC on 13th September 2022, as well as the reports of KCC Environment Section dated 7th December 2021 and 28th July 2022 and the report of the ABP Scientist dated 14th March 2024, as summarised above, in addition to the technical report and comments included in the grounds of appeal.

8.3.2. Design and Layout of Proposed Wastewater Treatment System

The Engineering Report submitted with the original application to KCC on 20th October 2021 details that the development site is served by existing foul and surface water sewers. It is proposed to connect to the surface water sewer and drainage and attenuation details and calculations are provided for same in the Engineering Report. It is proposed to provide wastewater treatment on site, in lieu of connection to the public WWTP. This is described in the Engineering Report as a temporary arrangement however, as discussed above, connection to the public WWTP will not be available for the foreseeable future. The proposed on site wastewater treatment system as lodged with the original application has a capacity of 219 PE. It comprises a 150mm diameter foul sewer pipe, which discharges via gravity flow to a pumping station adjoining the car park. The wastewater is then to be pumped to the wastewater treatment system with a polishing filter and then to discharge to groundwater via a percolation area, located at the southeastern side of the site.

The applicant submitted further details of proposed wastewater treatment to KCC on 7th July 2022, in response to the further information request. This included a revised design for a Sequential Batch Reactor wastewater treatment system specifically designed to cater for the proposed nursing home (244 PE) with detailed specifications including certification for specific discharge values. It is submitted that this type of system can accommodate wide variations in flow rate including

concentrated loads over a short number of hours per day, as is likely to be generated by the nursing home use. It is submitted that the proposed type of wastewater treatment system has been installed and operates successfully in similar nursing home facilities throughout the country. Details of same are provided in Appendix B of the further information submission, including several hotels, motorway service stations and nursing homes. The proposed treatment system discharges via a polishing filter >100m away from and laterally down gradient of all groundwater wells to the west of the site (i.e. towards the centre of Mullinavat).

8.3.3. Existing Site Conditions and Potential Impacts on Groundwater Quality

The Site Characterisation Report submitted with the application details that the site overlies a locally important aquifer, moderate vulnerability category, groundwater response R1 acceptable subject to normal good practice. The site slopes gently from northeast to southwest and is traversed by an overhead electricity line. There are no surface water features at or in the vicinity of the site. It appears to be free draining with sandy, silty subsoils to a depth of 2.3m with no bedrock encountered. The trial hole resulted in a T value of 15.6, within the acceptable range of 1-50 and a P value of 13.6, within the acceptable range of 1-75.

The Groundwater Assessment dated 4th July 2022, submitted to KCC as further information, considers potential impacts of discharge from the proposed treatment system on groundwater quality in the local aquifer. It is based on ground investigations at the site in the form of one borewell and one shallow monitoring borehole at the site, also monitoring of wells / boreholes in the vicinity, including two no. domestic wells at adjacent residential properties. The site investigations found that the depth of soil at the site supports the GSI classification for the site as being 'Moderate Vulnerability', also that subsoil would be c. 6 m deep below the proposed percolation area. The borewell generated a yield of c. >400 cu.m. of ground water per day during a three day pump test with site monitoring indicating little effect on the wider groundwater table level or on adjacent wells. Groundwater samples were also taken at several locations (the well and borehole at the subject site, a well and borehole at the site to the immediate east and two no. adjacent domestic wells) during the pump test on February 17th 2022 and on 12th May 2022. Details of analysis of the groundwater quality are provided. The concentrations of the proposed discharge parameters of BOD, TSS and Ammonium-Nitrogen were all low being at

or below the laboratory detection limit. Slightly elevated nitrate concentrations above the EPA Interim Guidance Value (IGV) of 25 mg/l were found at one adjacent domestic well, at the borehole at the subject site and at the well at the site to the east. The nitrate levels at the two other sample locations were below the EPA IGV. It is submitted the overall sampling results, with an average nitrate value of c. 22 mg/l, are below the Groundwater Regulations Standard of 37.5 mg/l and less than half the required EU Drinking Water standard value of 50 mg/l. The Groundwater Assessment attributes the elevated nitrate levels to likely association with long term agricultural activity in the area. The Groundwater Assessment includes a Groundwater Risk Assessment in accordance with the EPA Guidance on the Authorisation of Discharges to Groundwater (EPA 2011). The following conclusions of same are noted:

- Based on the available information it is considered that the treated wastewater from the development poses a low risk to the underlying aquifer and local environment
- The nearest domestic well, to the west of the development site, is above the recommended minimum separation distance from the percolation area. There is considered to be a moderate risk to this abstraction due to its location down gradient of the percolation area and to the high volume of treated effluent discharge from the development.

Further details and analysis of groundwater chemical status are provided in a Tier 3 Dilution Assessment, which comprises Appendix O of the Groundwater Assessment. The overall Groundwater Assessment report concludes that proper design, installation, operation and management of the proposed treatment system and polishing filter percolation area, discharging to a thick (>5m) sequence of naturally occurring permeable glacial tills, will help ensure that the wastewater discharge from the development will not pond on the surface or pose a risk to the receiving groundwater, nearby wells or the local environment. The applicant's response to the KCC request for clarification of further information, submitted on 13th September 2022, refers back to the detailed Groundwater Assessment submitted as further information.

The reports of KCC Environment Section in response to the further information and clarification of further information submissions, dated 28th July and 27th September 2022, note the elevated nitrate levels recorded, also that the development site is located in a Pollution Impact Potential (PIP) Rank 2 Area as per nitrate maps for groundwater provided by the EPA. Locations ranked 1, 2 or 3 present a high pollution impact potential related to Nitrates, also that the Site Characterisation Report indicates permeable soils and fast percolation ground conditions, with the proposed polishing filter system being partially above and partially below ground level. The Environment Section continues to have concerns about potential risks to groundwater, noting the proposal to provide an on-site well for the nursing home and the proximity of adjacent wells, with the proposed polishing filter located <40m upgradient of an existing domestic well and < 10m from the existing shallow monitoring borehole. These distances are not in compliance with the EPA Code of Practice for Domestic Waste Water Treatment Systems (2020).

The grounds of the first party contend that the proposed wastewater treatment system can serve the nursing home while protecting groundwater sources from contamination by complying with EPA standards, subject to a Waste Water Discharge Licence / Certificate of Authorisation as may be issued by the Environment Section of KCC. The appeal also comments that the EPA recommended EPA IGV level of 25 mg/l was an interim guidance value (IGV) level introduced under EPA guidelines in 2002. The interim guidance values are used to characterise the groundwater rather than as a regulatory concentration limit. The 2002 IGV was superseded under the European Union Environmental Objectives (Groundwater) (Amendment) Regulations 2016 (SI No. 366 of 2016) which provide for a Nitrate threshold value of 37.5 mg/l. All of the samples taken were significantly below this threshold. It is submitted that the PIP maps referred by KCC Environment Section are for the management of water in the landscape and are not groundwater risk maps, they are not designed or suitable to be used on their own as a basis for decisions at field scale. They are also designed for agricultural loading of the ground surface with fertilisers and untreated animal manure and are not designed as a planning tool for urban discharges to ground. The proposed use of the site for a nursing home will prevent it being used for animal stock or for slurry spreading which will reduce the volume of raw organic waste being put across the whole land area.

EPA groundwater mapping does not identify a groundwater risk to the aquifer around Mullinavat and indicates that the aquifer does not have substantial groundwater pathways, which would increase the risk of nitrogen losses. The Site Characterisation Report details that the site is located in an area with Moderate groundwater vulnerability over a locally important aquifer, which would be acceptable for land spreading or domestic wastewater disposal with a R1 Response, subject to normal good practice. Borehole drilling at the site indicates subsoil depths of up to 7 m. The Site Characterisation Report also found a T value of 15.64 minutes per 25mm, in compliance with the EPA Code of Practice 2021. The appeal also submits that the fact that the proposed polishing filter is part over and part underground has no bearing on its ability to filter and purify treated effluent. Its design and siting on the site with regard to the adjacent break in slope to the car park and distance to nearby wells are in accordance with the EPA Code of Practice. The borehole at the site is a site investigation 50mm diameter borehole for monitoring and does not represent a well or potential drinking water supply and therefore its proximity within 10m of the treatment plant does not conflict with EPA guidance. While refusal reason no.2 refers to the proposed polishing filter being <40m upgradient of an existing domestic well, the well referred to serves the applicant's own dwelling to the west of the site and can be relocated or decommissioned if required with connection to a new bored well serving the nursing home or to the public mains. This issue could be addressed by condition.

The legal comment submitted with the appeal submits that the Nitrate and Groundwater Directives as transposed set out systems for nitrate reduction in Ireland and how they should be reduced. The planning authority has no power to rely on stricter standards than those prescribed by legislation. The legal comments also refer to Objective 9.4 of Project Ireland in this context. It is submitted that refusal reason no. 2 is ill founded and not a proper refusal reason for the following reasons:

- The developer has proposed reasonable solutions widely comparable with what the EPA requires in some IPC licences to meet concerns relating to the proper functioning and maintenance of the WWTP. He has agreed to provide security for the proper functioning of the plant which is considered outside the legal jurisdiction of the planning authority to require. There are many legal remedies that can enforce failures in maintenance and operation.

- Development plan section 10.6 is irrelevant to the development and section 10.8 requires compliance with the European Union (Environmental Objectives) (Groundwater) (Amendment) Regulations 2016. The proposed development will meet this requirement. The reason for refusal is therefore wrong and unsupported by any reasons contrary to the requirement of section 34 of the Planning and Development Act 2000 (as amended).
- The proposed development will require a pollution licence for the required discharge, which will prescribe emission standards. The planning authority is entitled to assume that the WWTP will be properly regulated and can only justify a refusal of planning permission on groundwater percolation grounds if it considers that the proposed development is incapable of complying with any effluent discharge licence.
- The development will not result in any substantial increase in existing emissions and would not drive any substantial increased nitrate production in the region as many of the workers and inhabitants of the nursing home would be from the same catchment. The emission standard for nitrates in the public wastewater system is less strict than the standard that would be achieved by the proposed development.

The subject case was referred to Emmet Smyth, ABP Scientist, whose comments are summarised above. I note that his report concludes that the Site Characterisation Report indicates that the percolation tests carried out at the site were not in accordance with the EPA Code of Practice 2021 and the subsurface percolation tests would appear to have calculative anomalies which would alter the final percolation value and call into question the validity of the percolation values. It is therefore possible that a larger surface area for the distribution layer will be required, approximately double the size as proposed. The report also comments that (i) the soil conditions on site would allow for the adequate attenuation and disposal of the effluents generated; (ii) the proposed secondary wastewater treatment system (244 PE) is adequately sized to accommodate the proposed development and (iii) that the proposed tertiary polishing filters are more than adequate to deal with the potential hydraulic load. However, it concludes that it is not satisfied that the site assessment has been carried out in accordance with the requirements of the EPA 2021, Code of

Practice with specific regard to the percolation tests. Therefore, there remains questions over the sizing proposal for the distribution pad.

8.3.4. Assessment of Potential Impacts

I note with regard to the existing ground conditions and to the guidance provided in the EPA Code of Practice for Domestic Waste Water Treatment Systems (2021) that the site is not located in or adjacent to any sensitive area, e.g. designated site, archaeological features, surface water features or drinking water sources, also that the submitted Site Characterisation Report indicates a groundwater response of R1 acceptable subject to normal good practice with T and P values within acceptable parameters. There is subsoil to a depth of at least 7m, which is acceptable for on site wastewater treatment, noting also that the proposed treatment system includes a polishing filter. The site is not steeply sloping. The applicant has proposed to install a site specific wastewater treatment system, which has been designed to cater for the proposed nursing home use, including the high nutrient value and intermittent nature of the loading associated with such a use. The proposed system includes secondary treatment and a polishing filter. I therefore consider that the provision of a site and development specific wastewater treatment system would generally be acceptable at this location in terms of groundwater impacts, noting also the general conclusions of the ABP scientist regarding ground conditions and the proposed wastewater treatment system, notwithstanding other issues raised in same, as discussed below.

In addition, while I note the concerns of KCC regarding the ongoing management and maintenance of an on-site wastewater treatment system, I accept the point of the applicant that the proposed system would be maintained in the context of the ongoing management of the nursing home as a going concern, in compliance with EPA standards and subject to a Waste Water Discharge Licence / Certificate of Authorisation as may be issued by the Environment Section of KCC, as per the detailed specification submitted to KCC on 7th July 2022. It is proposed that the nursing home management company will appoint a specialist facilities management company to monitor, maintain and report on the wastewater treatment system, including regular inspections and 24 hour remote monitoring. The documentation submitted with the further information request includes a Draft Maintenance Contract for the proposed treatment system. It is submitted that a written legal undertaking can be provided by the nursing home owners / operators / management company to

confirm the operator's obligations to service, maintain and test the treatment system for its duration, with this information to be made available to KCC. I am satisfied on this basis that the applicant has made adequate provision for the ongoing maintenance of the proposed wastewater treatment system. The points made in the legal comment submitted with the appeal are also noted in this regard, i.e. that there are many legal remedies that can enforce failures in maintenance and operation.

Having regard to all of the above, I conclude that the ground conditions at the site appear to be generally suitable for wastewater treatment and that the proposed wastewater treatment system is generally acceptable with regard to the issue of ongoing maintenance. However, as per the conclusion of Emmet Smyth, ABP Scientist, the Board cannot be fully satisfied given the compromised nature of the information submitted in the Site Characterisation Form, in particular given that a larger distribution area may be required for the proposed wastewater treatment system.

8.3.5. Consistency with Development Plan Sections 10.1.6 and 10.1.8

Refusal reason no. 2 refers to policies set out in development plan sections 10.1.6 and 10.18.

Development plan section 10.1.6 relates to wastewater networks and treatment, noting that there are currently 34 public WWTPs in Kilkenny county. It states KCC Council will continue to work with IW/ UÉ to monitor the performance of the networks and to advance and realise capital expansions and upgrades of wastewater infrastructure for the continued sustainable growth of the County. I do not consider that any aspect of the proposed development materially contravenes this section of the development plan.

There is no development plan section 10.18 and it is assumed that refusal reason no. 2 refers to development plan section 10.1.8, which relates to water quality. This refers to the Water Framework Directive (WFD) and measures currently being carried out by KCC to improve water quality including implementation of the current and subsequent National River Basin Management Plan 2018-2021 and implementation of pollution control measures, licensing of effluent discharges, implementing and monitoring compliance with environmental legislation, pollution contingency measures, development control and forward planning, with related

development plan objective 10B. Section 10.1.8.3 specifically relates to groundwater and refers to the GSI Groundwater Protection Scheme for County Kilkenny and Source Protection Areas, also the Irish Water Irish Water Drinking Water Safety Plans (DWSPs), with related objectives 10C and 10D. Development plan section 10.1.8.5 provides water quality development management measures, as set out above. The first two points of section 10.1.8.5 relate to single houses and industrial development and are not relevant in this instance. The last point is to have regard to the Groundwater Protection Scheme and to comply with the Water Services Acts 2007 as amended in decision-making on the location, nature and control of developments and activities in order to protect groundwater. I consider that the development is generally in accordance with this objective given that the site is not located in an sensitive area and is subject to groundwater response R1 acceptable subject to normal good practice, as per the Site Characterisation Report (noting however the limitations of same).

To conclude, therefore, I concur with the view put forward in the grounds of appeal that the development will not materially contravene development plan sections 10.1.6 and 10.18 as referred to in refusal reason no. 2, however noting my conclusion above that it contravenes other aspects of development plan policy as discussed above.

8.4. Water Supply

- 8.4.1. The refusal reasons do not refer to the issue of water supply, however the matter has been raised in the grounds of appeal. There are two options for providing a water supply to the proposed development, namely (i) connection to the public water supply and (ii) a well bored at the site.
- 8.4.2. The Engineering Report submitted with the application details that the site is served by an existing watermain and the IW / UÉ response to the applicant's pre-connection enquiry, dated 26th February 2022, states that connection to the public water network is feasible with a new network connection of c. 240m. The further information response submitted to KCC on 7th July 2022 states that the applicant is willing to fund a connection of 240m to the IW / UÉ network. The applicant has already installed a new watermain from the site to the immediate east of the development site (location of recent application/ current appeal reg. ref. 23/77 ABP-319229-24), to

the R448 to the west at the centre of Mullinavat. This watermain terminates c. 10m from an existing watermain in the R448, as per the IW / UÉ Confirmation of Feasibility. It had not been taken in charge by IW / UÉ and had not been commissioned as of July 2022. The grounds of the subject appeal also request that the Board consider a proposal to connect to the existing public watermain, as per the comment of IW / UÉ. The applicant is willing to accept a condition requiring connection to the public water main prior to occupation of the nursing home.

8.4.3. Separately to the above, the applicant has also submitted details of a borehole well drilled at the site, which may be used for a water supply to the development. The distance between the proposed well and the percolation area serving the proposed on-site wastewater treatment system is stated as 113.79m, also the distance to the existing well serving the dwelling to the west of the site is stated as 47m. These distances are acceptable with regard to EPA guidance. The report on file of KCC Executive Environment Section, dated 7th December 2021, states concerns that the applicant has not demonstrated that there would be sufficient capacity, volume or quality of water for the development within the proposed borehole and recommends refusal on this basis. The Groundwater Assessment submitted to KCC with the applicant's response to the further information request on 7th July 2022 states that the borewell drilled at the site generated a yield of c. >400 cu.m. of ground water per day when tested. This is considered adequate to meet the potential water demand generated by the development, which is estimated at 46 cu.m. per day. It is also submitted that the nursing home management company will appoint a specialist facilities management company to monitor, maintain and report on the proposed water supply and wastewater treatment, including regular inspections and 24 hour remote monitoring. I note that subsequent reports of KCC Environment Section, dated 28th July 2022 and 27th September 2022 do not state any concerns specifically in relation to water supply.

8.4.4. I consider that both of the above solutions are reasonable. However, connection to the public water supply is feasible as per the Confirmation of Feasibility issued by IW / UÉ and is preferable to a well drilled at the site for reasons relating to certainty of supply and water quality, also noting that this is the applicant's preferred method and the uncertainty around the necessary size of the wastewater distribution area. I therefore recommend that a condition be imposed requiring connection to the public

water supply to the satisfaction of IW / UÉ, if the Board is minded to grant permission, noting however that I am recommending refusal in relation to other issues.

8.5. Pedestrian Connection to Mullinavat

- 8.5.1. The motorway service station development permitted at the adjoining site to the east under reg. ref. 17/456 included a pedestrian connection along the R704 between that site, the development site and the R446 at the centre of Mullinavat. Details of same are submitted with the subject application. The report of KCC Road Design, dated 2nd December 2021, notes that the development will not have any connection to Mullinavat if that permission is not carried out. The permission granted under reg. ref. 17/456 has now expired and another proposal at that site has recently been refused under reg. ref. 23/77 and is the subject of current appeal ref. ABP-319229-24. The applicant submitted a revised design for a footpath along the R704 as further information on 7th July 2022, ref. drawing no. P722. The current applicant owns both the site to the east and the lands to the west of the development site and is therefore in a position to implement the footpath if permission is granted. The applicant is also willing to accept a condition the proposed development cannot be occupied until the footpath link is constructed as proposed. This is considered reasonable and I note that the second report of KCC Roads, dated 15th July 2022, states no objection to same. I therefore consider that the issue may be resolved by condition as suggested by the applicant, notwithstanding the current uncertainty around the outcome of ABP-319229-24, if the Board is minded to grant permission, noting however that I am recommending refusal in relation to other issues.

8.6. Appropriate Assessment

- 8.6.1. The site is c. 6.5 km from Hugginstown Fen SAC (000404), c. 7.2 km from the River Barrow and Nore SAC (002162), c. 10.3 km from the Lower River Suir SAC (0021437) and c 13 km from the River Nore SPA (004233). Having regard to the nature and scale of the proposed development being the construction of a three storey nursing home building within the settlement boundary of Mullinavat, and the separation distances to the European sites from the subject site, I do not consider that the proposal would be likely to significantly impact the qualifying interests of the European Sites during either the construction or operational phases of development.

As such, I consider that no Appropriate Assessment issues arise. In conclusion, I do not consider 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.

8.7. Planning Assessment Conclusion

- 8.7.1. Having regard to the above assessment, I concur with the assessment of the planning authority that the proposed development would materially contravene development plan section 6.12.6, which states a preference that nursing homes be located within the existing network of smaller towns and villages within the county to serve rural demand, and policy and section 10.1.7, which states that development in all main settlements is required to connect to public wastewater treatment facilities subject to sufficient capacity being available, having regard to the current lack of capacity in IW / UÉ wastewater infrastructure.
- 8.7.2. I consider that the site is generally suitable for on site wastewater treatment and that the development would not contravene development plans sections 10.1.6 and 10.18 in relation to this matter. However, given the deficiencies in the Site Characterisation Report as identified in the comment of the ABP Scientist, and noting that his comment is not satisfied that the site assessment has been carried out in accordance with the requirements of the EPA 2021, Code of Practice with specific regard to the percolation tests, and that it is therefore possible that a larger surface area for the distribution layer may be required, it is therefore not possible to be certain that the proposed development will not have adverse impacts on groundwater quality.

9.0 Recommendation

- 9.1. Refusal is recommended for the reasons set out below.

10.0 Reasons and Considerations

1. The proposed development would contravene development plan section 6.16.2, which states that in rural areas it is preferable that nursing homes be located within the existing network of smaller towns and villages within the county to serve rural demand and development plan section 10.1.7, which

states that development in all main settlements is required to connect to public wastewater treatment facilities subject to sufficient capacity being available, having regard to the current lack of capacity in IW / UÉ wastewater infrastructure. The proposed development is therefore considered contrary to the proper planning, environmental and sustainable development of the area.

2. The Board is not satisfied on the basis of the information submitted, in particular the Site Characterisation Report, which is based on a site assessment that has not been carried out in accordance with the requirements of the EPA 2021, Code of Practice with specific regard to the percolation tests, that the proposed development would not have any adverse impacts on groundwater quality. The proposed development is therefore contrary to the proper planning, environmental and sustainable development of the area.

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.

Sarah Moran
Senior Planning Inspector

12th April 2024

Appendix 1 - Form 1

EIA Pre-Screening

An Bord Pleanála Case Reference	ABP-315047-22			
Proposed Development Summary	Construction of 3 storey nursing home, single storey ancillary services building, vehicular access, parking, sewage treatment plant, private borehole well supply and all associated site development works.			
Development Address	Garrandarragh, Mullinavat, Co. Kilkenny.			
1. Does the proposed development come within the definition of a 'project' for the purposes of EIA? (that is involving construction works, demolition, or interventions in the natural surroundings)		Yes	X	
		No	No further action required	
2. Is the proposed development of a class specified in Part 1 or Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended) and does it equal or exceed any relevant quantity, area or limit where specified for that class?				
Yes		Class.....	EIA Mandatory EIAR required	
No	X		Proceed to Q.3	
3. Is the proposed development of a class specified in Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended) but does not equal or exceed a relevant quantity, area or other limit specified [sub-threshold development]?				
		Threshold	Comment (if relevant)	Conclusion
No		N/A		No EIAR or Preliminary Examination required
Yes	X	Class/Threshold.....		Proceed to Q.4

4. Has Schedule 7A information been submitted?

No	X	Preliminary Examination required
Yes		Screening Determination required

Inspector: _____**Date:** _____

Appendix 2 - Form 2

EIA Preliminary Examination

An Bord Pleanála Case Reference	ABP-315047-22	
Proposed Development Summary	Construction of 3 storey nursing home, single storey ancillary services building, vehicular access, parking, sewage treatment plant, private borehole well supply and all associated site development works.	
Development Address	Garrandarragh, Mullinavat, Co. Kilkenny.	
The Board carries out a preliminary examination [Ref. Art. 109(2)(a), Planning and Development Regulations 2001 (as amended)] of, at least, the nature, size or location of the proposed development having regard to the criteria set out in Schedule 7 of the Regulations.		
	Examination	Yes/No/ Uncertain
Nature of the Development Is the nature of the proposed development exceptional in the context of the existing environment?	The proposed development comprises the construction of a 3 storey nursing home, single storey ancillary services building, vehicular access, parking, sewage treatment plant, private borehole well supply and all associated site development works within the settlement of Mullinavat. Accordingly, it is not exceptional in this context.	No
Will the development result in the production of any significant waste, emissions or pollutants?	No significant emissions resultant.	No
Size of the Development Is the size of the proposed development exceptional in the context of the existing environment?	No, the proposed three storey nursing home is not exceptional in the context of the existing settlement of Mullinavat.	No
Are there significant cumulative considerations having regard to other existing and/or permitted projects?	No significant emissions resultant of this project combined with any existing or permitted.	No
Location of the Development Is the proposed	The development is not adjoining or adjacent to any ecologically sensitive or designated sites.	No

<p>development located on, in, adjoining or does it have the potential to significantly impact on an ecologically sensitive site or location?</p> <p>Does the proposed development have the potential to significantly affect other significant environmental sensitivities in the area?</p>	<p>Having regard to the nature and scale of the development and to its location within the settlement of Mullinavat it does not have the potential to significantly affect other significant environmental sensitivities in the area.</p>	<p>No</p>
<p>Conclusion</p>		
<p>There is no real likelihood of significant effects on the environment.</p> <p>EIA not required.</p>		

Inspector:

Date:

DP/ADP: _____

Date: _____

(only where Schedule 7A information or EIAR required)