



An  
Bord  
Pleanála

## Inspector's Report

### ABP-312631-22

<b>Development</b>	Construction of two boreholes in milk processing plant. Natura Impact Statement submitted with the planning application. The Glanbia Ireland DAC facility has an Industrial Emissions Licence granted by the EPA
<b>Location</b>	IDA Science & Technology Park, Gorteens Port Road, Slieverue, Co. Kilkenny.
<b>Planning Authority</b>	Kilkenny County Council
<b>Planning Authority Reg. Ref.</b>	2144
<b>Applicant(s)</b>	Glanbia Ireland DAC
<b>Type of Application</b>	Permission
<b>Planning Authority Decision</b>	Grant with Conditions
<b>Type of Appeal</b>	Third Party
<b>Appellant(s)</b>	Bellevue Residents Association
<b>Observer(s)</b>	David & Roseanne Halpin
<b>Date of Site Inspection</b>	23 <sup>rd</sup> November 2023
<b>Inspector</b>	Mary Crowley

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## 1.0 Declaration

- 1.1. 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.

## 2.0 Site Location and Description

- 2.1. The appeal site with a stated area of 1.03 ha is located within the established Glanbia facility which is c20.6ha in size and is itself located in the IDA Ireland Science and Technology Park in Belview, 3km east of Waterford City. The appeal site is accessed from the N29 via the L3412 local road. The River Suir is ca 660m to the south. The Irish Water wastewater treatment plant serving Waterford is located adjacent to the River Suir, south of the site. The Glanbia facility operates under an Industrial Emissions (IE) License, Register No P0963-02 issued by the EPA. A set of photographs of the site and its environs taken during my site inspection is attached. I also refer to the site photos available to view on the appeal file. These serve to describe the site and location in further detail.

## 3.0 Proposed Development

- 3.1. Glanbia Ireland intend to develop two boreholes and associated works for the purpose of water abstraction for use in the Milk Processing Plant in the IDA Ireland Science and Technology Park at Gorteens, Slieverue, Co Kilkenny. The development will comprise amendments to previously approved development (Planning Ref 12/324; An Bord Pleanála Ref PL10.241077 and Planning Ref 17/153). The application also seeks permission for the continued use of the existing construction compound for the duration of the works. It is stated that there is currently an agreement in place between Kilkenny County Council and Glanbia Ireland for the purchase of a maximum daily allowance of 2,200m<sup>3</sup> of water from the public supply.
- 3.2. The associated works will include:
  - Two lined boreholes drilled into the underlying aquifer
  - Submersible pumps and associated pipework and cabling

- Surface features including cabinets containing the well heads, valves and pipework and the electrical services and controls for the pumps
  - Gated security fencing around each cabinet enclosure
  - Delivery pipes from the wells to the existing water treatment facilities on the site and associated connections.
  - Ducts and cables from the existing site services to the existing water treatment plant on the Glanbia site.
  - All associated earthworks and surface finishes.
- 3.3. The water supply will be treated in the existing water treatment plant prior to use in the manufacturing process. The maximum combined volume to be extracted from both wells will be 2,200 cubic metres per day.
- 3.4. The application was accompanied the following documents:
- Planning Report
  - Natura Impact Statement
  - Hydrogeological Report
  - EIA Screening Report
- 3.5. A 3-month **time extension** was granted to 23<sup>rd</sup> December 2021.
- 3.6. **Further information** was submitted on 2<sup>nd</sup> December 2021 by Malone O'Regan on behalf of the applicant and may be summarised as follows:
1. The location and number of wells external to the site to be included in the requested monitoring programme were agreed in advance with the Council.
  2. **Hydrogeological / Hydrological Monitoring**
    - The monitoring period coincided with an exceptionally dry period and this enabled the monitoring to be completed using a worst-case scenario. There was no evidence of the development of a significant cone of depression beyond the Glanbia site. There was no discernible effect on the groundwater contours, as a result of this pumping.
    - All accessible and suitable private domestic water supply wells and the production wells on the Glanbia site were sampled on four occasions. The water quality values remained consistent throughout the monitoring period.

There was no evidence that the pumping at PW2 and PW3 resulted in any impact on the surrounding groundwater quality.

- PW2 and PW3 underwent step testing during the commissioning phase. The data compiled from the monitoring wells, confirmed that there was no noticeable influence from variation in the pumping rates on the water levels in the surrounding wells.
- Based on the outcome of the testing it was deemed not to be necessary to revise the original ZOC presented as part of the planning application. This ZOC was prepared in accordance with GSI guidelines that suggest a single ZOC for close-by wells
- The EPA is the statutory body who determine whether a review of an IE License would be warranted not the license holder. Glanbia therefore cannot make this determination. Subject to the works obtaining the necessary planning consent, Glanbia will submit a “Request for Approval” to the EPA in advance of the works commencing.
- Legislative changes resulted in the maximum residual limits of chlorates in ready to eat food being set at 100ppb. Customers of Glanbia were seeking more stringent limits than this legislative limit. There were two sources of Chlorates in the production process, namely milk and the mains water supply. Therefore the focus was to seek options to reduce the chlorate concentration in the water supply. The results of significant testing clearly illustrated that the chlorate concentration in the groundwater met the required standards when compared to the mains water.
- There is a slight upward trend in chloride concentration in PW2 and PW3 which was determined to be the result of a dry period in the summer of 2021, where the lack of rainfall resulted in less dilution in the aquifer. There was no evidence of any saline intrusion.
- The water quality of the Rathpatrick stream is good, although minor exceedances in ammonia which is attributed to land use activities in the upper catchment area of the stream (e.g intensive agriculture). In the Gorteen stream minor exceedances in ammonia and molybdate reactive phosphorous were

reported during the sampling rounds. This attributed to land use activities in the upper catchment area of the stream (e.g., intensive agriculture)

### 3. Timing / Phasing of Works

- There is no current proposal to decommission wells PW2 and PW3. They will remain in place for any potential future testing that may be sought by either the Council or the EPA. They will be used as monitoring wells during the step tests (commissioning phase). They will then be utilised as future monitoring wells (abstraction phase).

### 4. Area of Construction Compound

- The use of this construction compound was authorised under Reg Ref P17/153. Permission is being sought to use this compound during the installation and commissioning of this proposed development as it makes practical sense given the proximity of this compound to the proposed development.

3.6.1. The submission was accompanied by the following:

- Well Survey, Water Level Monitoring & Analysis and Water Sampling & Analysis Report
- Well Survey and Monitoring Points Drawings & Water Level Monitoring Graphs

## 4.0 Planning Authority Decision

### 4.1. Decision

4.1.1. Kilkenny County Council issued notification to decision to grant permission subject to 7 no conditions summarised as follows:

1.	Compliance with documents lodged on 29 <sup>th</sup> January 2021 as amended by further information on 2 <sup>nd</sup> December 2021
2.	a) The applicant shall identify and monitor at least 4 adjacent homeowner wells for a minimum period of 3 years during the operational phase b) Where the applicants ongoing water abstraction is having a negative impact upon adjacent homeowner wells, the applicant shall provide a replacement potable water supply to the homeowners.

	<p>c) The applicant shall maintain a log of all water related complaints received from homeowners along with corrective actions.</p> <p>d) Wells on-site which are not being used for groundwater abstraction shall be promptly decommissioned. A time frame shall be agreed.</p>
<b>3.</b>	During construction all tank and drum areas shall be rendered impervious to the materials stored therein and storage areas shall be bunded. Drainage from the bunded area shall be diverted for collection and safe disposal.
<b>4.</b>	All works shall be carried out in a manner such that noise does not result in significant impairment of, or significant interference with amenities or the environment beyond the site.
<b>5.</b>	The developer shall be required by Kilkenny County Council, to carry any other such investigation and monitoring / continued monitoring as may be deemed necessary.
<b>6.</b>	During construction and operational phases, the applicant including contractors shall ensure that all environmental mitigation measures contained in the NIS shall be strictly adhered to.
<b>7.</b>	Temporary construction compound authorised under Reg Ref P17/153 may be continued for the duration of the proposed works but no more than three years from the date of this permission whichever comes earlier

## 4.2. Planning Authority Reports

### 4.2.1. Planning Reports

4.2.2. The Case Planner in their first report and having considered the application recommended that further information be sought in relation to:

- (1) Water quality testing as per the requirements of the KCC Environment Section
- (2) Timing / phasing of works in respect to decommissioning of the two wells on site.
- (3) Time frame required to reinstate the area of the construction compound as conditioned under Reg Ref P17/153.

4.2.3. Further information was requested on the 24<sup>th</sup> March 2021



4.2.4. The Case Planner in their second report and having considered the further information recommended that permission be granted subject to conditions. The notification of decision to grant permission issued by Kilkenny County Council reflects this recommendation.

4.2.5. **Other Technical Reports**

- **Road Design** – No objection subject to the requirement to reinstate the area of the construction compound as conditioned under Reg Ref 17/153 be applied on completion of the proposed development and that construction traffic only access and access the site via the N29 Port Road.
- **Environment Section** – Requested further information in relation to
  - 1) Sampling, water quality testing and water level information from groundwater monitoring boreholes / wells (locations not currently being used for abstraction by Glanbia) within or adjacent to the proposed site boundary for a minimum 3-month period.
  - 2) Sampling, water quality testing and level information at private wells within 800m of the proposed Glanbia abstraction boreholes for a minimum 3 month period.
  - 3) Additional hydraulic analysis during the period to monitoring identified in items 1 and 2 above including step testing.
  - 4) Reassess the potential hydrogeological impact of the proposed abstraction of groundwater having regard to seasonality influences and the long term sustainability in terms of climate change.
  - 5) Confirm intention to seek a review of the IPC License with the EPA with particular attention to the proposed level of groundwater abstraction.
  - 6) Evidence of engagement with IW in the EIA and the alternative options considered and the reasons for elimination of said options.
  - 7) Water quality testing results undertaken to date at PW1, PW2, PW3 & MW1
  - 8) Analysis of potential conductivity between ground waters (hydrogeology) and adjacent surface waters (hydrology) in the vicinity of the site.

- **Environment Section** - Having considered the further information there is no objection subject to conditions relating to monitoring of adjacent homeowners wells for 3 months, decommissioning of wells, tank and drum storage, noise and continued monitoring. Conditions No 2, 3, 4 and 5 of the notification of decision to grant permission issued by Kilkenny County Council refer.

#### 4.3. **Prescribed Bodies**

- 4.3.1. **Irish Water** – No objection subject to conditions relating to signing a connection agreement, compliance with Irish Water Standards Codes and Practises, written approval required to divert or build over water services and separation distances.

#### 4.4. **Third Party Observations**

- 4.4.1. There are 4 no observation recorded on the planning file from (1) David & Rose Anne Halpin, (2) R & R Doherty, (3) Bellevue Residents Association and (4) An Taisce.
- 4.4.2. The issues raised relate to the application being in contravention of local polices, scheme a threat to local private water wells, Glanbia operation of 2 borewells without planning permission, application is an affront to the planning process, precedent for future industrial developments which will threaten local wells and that previous planning applications associated with water abstraction are not referenced in the application.
- 4.4.3. Further Kilkenny County Council have not honoured their written commitment to the local residents that no industrial abstraction well would be permitted in the vicinity of IDA developed lands. Development may require a revised EIA for continued operation of the plan as well as a new NIA. The burden of proof is on the applicant to demonstrate that their activities will not impact on domestic well levels.

### 5.0 **Planning History**

- 5.1. There has been several developments on these IDA landholdings in recent years reflected in the planning history listed below. All these permissions relate to the Glanbia lands immediately east and south of the proposed site.
- 5.2. Planning applications associated with **water abstraction** are referenced below:

- **ABP 219649 (Reg Ref 06/6363)** – IDA granted borehole to supply 12,000 gallons / day
- **Reg Ref 071633** – Waterford City Council granted permission for borehole water supply
- **Reg Ref 0367** – IDA granted permission borehole water supply
- **Reg Ref 071633** - Waterford City Council granted permission for borehole water supply
- **Reg Ref 1996** – Belview Water Supply Exploration Well

5.3. Planning applications associated with **Glanbia** development are referenced below:

- **ABP PL10.241077 (Reg Ref 12/324)** – Glanbia Ingredients (Ballyragget) Ltd were granted permission in January 2013 for a new dairy processing and manufacturing facility for the manufacture and development of dairy products subject to 10 no generally standard conditions.
- **Reg Ref 14/19** – Glanbia Ingredients Ireland DAC were granted permission in April 2014 for amendments to the previously approved development (Planning Ref.12/324 and An Bord Pleanála Ref: 241077.
- **Reg Ref 14/482** – Glanbia Ingredients Ireland DAC were granted permission in January 2015 for amendments to two previous permissions; ABP PL10.241077 (Reg Ref 12/324) and Reg Ref 14/19.
- **Reg Ref 17/77** – Glanbia Ingredients Ireland DAC were granted permission in June 2017 for an extension to the existing milk powder processing plant, extensions to the existing Administration Building and site works including roads and car parking. It is stated in the current appeal that this development has not commenced.
- **Reg Ref 17/153** – Glanbia Ingredients Ireland DAC were granted permission in July 2017 for extensions to the existing Dairy Processing Facility.
- **Reg Ref 17/775** – Glanbia Ingredients Ireland DAC were granted permission in March 2018 for a screening berm at the existing Dairy Processing Facility.
- **Reg Ref 19/378** - Glanbia Ingredients Ireland DAC were granted permission and retention permission in August 2019 for various developments and amendments to permission Reg Ref 17/153.

- **ABP-306136-19 (Reg Ref 19668)** - JHOK Ltd were granted permission on appeal for a continental cheese manufacturing plant together with retention of and alterations to the existing construction compound which will be removed on completion of the works. EIAR and a NIS submitted with planning application. A judicial review was taken on the decision of the Board to the High Court and later appeal to the Supreme Court. The decision of the Board to grant permission was upheld.

5.4. It is noted from the Case Planners report that an **Enforcement Notice** was issued to Glanbia as follows:

- **Enforcement ENF 20076** – Warning letter issued to Glanbia in relation to drilling 2 no industrial borehole wells and associated pumps for the purposes of water abstraction on the Glanbia site at the IDA Science and Technology Park.

## 6.0 Policy Context

### 6.1. Development Plan

- 6.1.1. The operative plan for the area is the **Kilkenny City and County Development Plan 2021-2027**. Section 5.5.1 Belview Port states that the *Port has a significant industrial hinterland including the IDA's 55 ha Strategic Industrial landbank and that one of the main priorities for expansion in the Belview area is the attraction of FDI. The Belview area is dealt with in detail in the current Ferrybank/Belview Local Area Plan 2017. It is further stated that Kilkenny County Council will work with Irish Water to ensure an adequate wastewater treatment plant and distribution network to service the employment lands at Belview.*
- 6.1.2. Section 12.8.1 Belview states that *the IDA Ireland owns a Strategic Site in the Belview industrial area, which is suitable for large-scale projects. During the course of the last Development Plan the Council along with the IDA and Department of Environment Community and Local Government invested significantly in upgrading water services at Belview. With improvements to the Belview Strategic Water Supply Scheme and the Gorteens Waste Water Treatment Plant, the Port can now cater for expansion in suitable employment enterprises, as set out in the LAP and in Chapter 5.*
- 6.1.3. Section 5.2.3 Manufacturing sets out the following objective for Belview:

**Objective 5B** - *To ensure that there is sufficient quantity of zoned land available and serviced at suitable locations within the City and County to maximise the potential for employment and Foreign Direct Investment in the County.*

- 6.1.4. The **Ferrybank Belview Local Area Plan 2017** makes direct reference to the IDA Science and Technology Park and provides support for the further development of the area:

*“The Industrial Development Agency (IDA) own a strategic site in Belview, which comprises 18 hectares of land, see Figure 5.1 Belview.*

*In 2013, Glanbia were granted permission for a new dairy processing and manufacturing facility, which opened in 2015. Glanbia now own their site. As part of the IDA strategy for the Belview area and building on the successful development of Glanbia Ingredients the Plan augments the IDA land bank in the area by zoning an additional 27 hectares of land as Industrial Technology Park adjacent to the Glanbia facility.*

- 6.1.5. Further to this, it contains the Zoning Objective for the Ferrybank – Belview area. The application site is zoned **ITP Industrial / Technology Park**, with the following objective:

*“To provide for industry, technology and the expansion of Belview Port”*

- 6.1.6. The permissible uses encompassed within the Zoning Objective includes car park, **industry (general industrial use)** and ancillary office, industrial (light) silos and storage areas, storage tanks including bulk liquid storage and general warehousing. (emphasis added).

## 6.2. Natural Heritage Designations

- 6.2.1. The development is not located within or directly adjacent to any Natura 200 sites, however 6 no Natura 2000 designated sites (SAC x 4 & SPA x 2) were identified within 15km of the site as follows:

- 1) Lower River Suir SAC
- 2) River Barrow & River Nore SAC
- 3) Tramore Dunes & Backstrand SAC
- 4) Bannow Bay SAC

- 5) Tramore Back Strand SPA
- 6) Bannow Bay SPA

### 6.3. EIA Screening

- 6.3.1. I refer to the EIA Screening Report submitted with the application (January 2021). The Glanbia facility in Belview currently has an Environmental Protection Agency (EPA) Industrial emissions License (IEL) (Reg No P0963-01) which was reviewed, and a new License (Reg No P0963-02) issued to the Glanbia facility in March 2019. The proposed water abstraction annual volumes at 803,000 m<sup>3</sup> is well below the thresholds required for EIAR under Schedule 5 Part 1 (11), Part 2 2(e) and Part 10(l) of the Planning and Development Regulations 2001 (as amended). The proposed application will not result in increase in floor area over that already permitted on site.
- 6.3.2. Having regard to the nature and scale of the proposed development, there is no real likelihood of significant effects on the environment. The need for Environmental Impact Assessment can, therefore, be excluded at preliminary examination and a screening determination is not required.

## 7.0 The Appeal

### 7.1. Grounds of Appeal

- 7.1.1. The third-party appeal was prepared and submitted by the Bellevue Residents Association and may be summarised as follows:
  - **Introduction** – Residents are totally reliant on individual borehole wells of varying types, age, depths and pumping capacity for their water supply. Kilkenny County Council gave a commitment in writing to the residents that no industrial activity would be allowed within the IDA Science & Technology Park until a public sewer water supply connection was available to it.
  - **Planning History** – There is a long and established planning history regarding applications for industrial / commercial water abstraction quantities at the Glanbia site. The original “parent” site was purchased by the IDA and developed into the current IDA Science & Technology Park (Reg Ref 0368). There were several

subsequent planning applications relating to water abstraction for industrial purposes within the overall “parent” site – details as follows:

- 1) 0367 IDA application for boreholes (2003)
- 2) 06636 IDA application for boreholes (2006)
- 3) 071633 Waterford City Council (2007)

Reg Ref 06636 was granted as a temporary permission subject to 7 no conditions (ABP PL10.219649) including the monitoring of water levels and quality in relevant private wells and removal of all boreholes and pumping infrastructure from the site once public water supply was connected to the site (for industrial and commercial use only – not for local residential uses) in 2010. However, the boreholes and infrastructure installed under planning Reg Ref 06636 were never removed as required by the planning conditions.

- **Current Application and event History (Reg Ref 21/44)** – The applicant proceeded to drill two large capacity abstraction wells on their site (part of original “parent” site) in November 2019 and February 2020 to extract water for dairy processing. It is only when a local residential well failed (ran dry) in October 2020 as a direct consequence of the excessive industrial pumping from the new boreholes by Glanbia that this information became public. The applicants have referred throughout the current application that the two wells (PW2 & PW3) as exploratory wells, yet these two wells have continued to supply 100% of their process water requirements since 2019. It is only after receiving the “warning” letter from Kilkenny County Council that Glanbia (the applicant) and their advisors were forced into making a formal planning application (Reg Ref 2144) for the two wells including amendments to the previous planning condition No 24 (Reg Ref 12324). During all this time frame and to the current date Glanbia have continued to abstract water at alarming rates for their process with little regard to the local residential water supplies and the planning process.
- **Request for Further Information (RFI)** – This RFI included a request for a location survey and monitoring of private wells within 800m of the Glanbia abstraction wells. The RFI response failed to include much of the information that was initially requested by the planning authority. Details as outlined below:

- 1) No comprehensive survey of all local residential wells within the 800m radius
  - 2) All the relevant residents within the 800m radius were not contacted / surveyed regarding their water installations. This is contrary to the RFI response
  - 3) Historical information regarding previous monitoring of local private water supplies was not included as requested despite being readily available.
  - 4) These two wells should be marked as redundant on all submitted information.
- **Conclusion** – Individual residences have indicated a significant decrease in water levels when compared to the 2006 records and this information has not been recorded and submitted to the planning department. Submitted that many more private water supplies will dry up in future months and years (especially a small number of shallow vulnerable wells within the 800m radius) and residents will be forced to drill new wells at great expense and disruption.

## 7.2. Applicant Response

7.2.1. The first party response to the appeal has been prepared and submitted by Malone O'Regan on behalf of Glanbia Ireland DAC and may be summarised as follows:

- The key point of the appeal is that the proposed abstraction of groundwater from new abstraction boreholes to be installed on the Glanbia facility will have a significant negative impact on domestic abstraction wells located in the immediate vicinity of the Glanbia site. This is supported with no scientific or factual evidence. On the other hand, the applicant has commissioned extensive hydrological testing dating back to September 2019 (IE Consultants Reports dated January 2021 and November 2021 refer). The findings of this work clearly confirm, based on scientific facts, that the proposed onsite abstraction of groundwater will have no impact on surrounding domestic wells.
- The proposed development will entail the abstraction of a maximum of 2,300 m<sup>3</sup>/day from the combined groundwater abstraction wells. This volume is also consistent with the agreement currently in place between Kilkenny County Council and Glanbia for the purchase of a maximum daily allowance of 2,200m<sup>3</sup> of water from the public supply.



- It is submitted that the planning application documents demonstrate that the abstraction of groundwater can be obtained in a sustainable manner with no impacts on the surrounding private abstraction wells. These findings are further reaffirmed by the fact that the investigation that took place coincided with an exceptionally dry period that enabled the monitoring to be completed using a worst case scenario.
- There was no evidence of the development of a significant cone of depression beyond the Glanbia site, from the pumping at the test wells. Therefore, the overall magnitude of the impact of pumping the test wells (PW2 and PW3) on the monitored private wells (neighbouring wells) was deemed imperceptible. Furthermore, there was no evidence of any significant response on water levels in domestic wells from changed in the pumping rate at PW2 and PW3 during the testing period. Hence the future abstraction from the two proposed borewells will also have an imperceptible impact on the neighbouring wells. There was also no evidence of any impacts on water quality in the area as a result of the pumping on the Glanbia site.
- Submitted that the appellants have not presented any grounds for the decision of Kilkenny County Council to be overturned. It is therefore requested that the Board dismiss the appeal and grant planning permission for the proposed development in accordance with the conditions attached to the notification of decision to grant permission issued by Kilkenny County Council.

7.2.2. The appeal response was accompanied by the following:

- Appendix A - Communications with the Council (incl drawing)
- Appendix B - Example of documentation sent to the residents to agree monitoring (including items 1(a) and 1(b) of the request for further information and drawing of wells proposed for monitoring)
- Appendix C - Location of map of monitoring wells
- Appendix D - Example of documentation sent to the residents in regards to water quality reports

### **7.3. Planning Authority Response**

- 7.3.1. It is considered that monitoring of wells relating to the locations identified in the submission were assessed as part of the planning application and enforcement procedures. It is the councils view that it would not have been possible for monitoring to have occurred had some of the wells been dried up.
- 7.3.2. The planning permission imposes strict environmental conditions which deal with monitoring, management and ongoing water quality testing of adjacent homeowners wells in order to protect public health and protection of existing groundwater supply in the locality. Kilkenny County Council considers that ongoing monitoring and protection of supply is adequately covered in conditions of the planning permission.

### **7.4. Observations**

- 7.4.1. There is one observation recorded on the appeal file from David & Roseanne Halpin, who lives near the Glanbia Processing Plant and whose family has resided here for the past 75 years. The issues raised relate to the impact on domestic borewell water supplies, not all residents residing within 800m radius were surveyed, some of the older borewells are quite shallow and vulnerable to the reducing water levels caused by Glanbia, the applicant has carried out water abstraction without planning permission, Kilkenny County Council have reneged on a previous written agreement with the residents that no industrial development would be allowed without a connection to the public supply, Kilkenny County Council should have taken into consideration previous planning applications with regard to industrial water abstraction and that the applicant and their agents have been accommodated by , Kilkenny County Council planning officials regarding meetings in contrast the residents were not allowed direct contact with officials other than making initial submissions early on in the process.

### **7.5. Further Responses**

- 7.5.1. The appeal was referred to the Environmental Protection Agency (EPA) for comment. No response was received. There are no other responses recorded on the appeal file.

## 8.0 Assessment

8.1. This assessment is based on the plans and particulars submitted with the planning application on the 29<sup>th</sup> January 2021, as amended by further plans and particulars submitted by way of further information on the 2<sup>nd</sup> December 2021 together with details, plans and particulars submitted throughout the appeal process.

8.2. Having regard to the information presented by the parties to the appeal and in the course of the planning application and my inspection of the appeal site, I consider the key planning issues relating to the assessment of the appeal can be considered under the following general headings:

- Principle
- Impact on adjoining private domestic abstraction wells
- Other Issues
- Appropriate Assessment

### 8.3. Principle

8.3.1. Glanbia Ireland intend to develop two boreholes and associated works for the purpose of water abstraction for use in the Milk Processing Plant in the IDA Ireland Science and Technology Park at Gorteens, Slieverue, Co Kilkenny. The facility operates under an Industrial Emissions (IE) License, Register No P0963-02 issued by the EPA. The proposed development is located on a ca. 1.03 ha site within the existing Glanbia facility, which is ca 20.6 ha in size and produces a number of milk products.

8.3.2. The plant is supplied with water from the Irish Water mains network. An agreement is currently in place between Kilkenny County Council and Glanbia for the purchase of a maximum daily allowance of 2,200 m<sup>3</sup> of water from the public supply. It is Glanbia's stated intention to continue to use this public water supply even when the proposed abstraction wells are operational. The proposed development will entail the abstraction of maximum of 2,200m<sup>3</sup>/day from the groundwater abstraction wells. This volume is consistent with the agreement currently in place between Kilkenny County Council and Glanbia Ireland.

8.3.3. The key driver for the abstraction wells was legislative changes that resulted in the maximum residual limits of chlorates in ready to eat food being set at 100ppb.

European Food Safety authority recommendations and customer requirements for residual levels of chlorates in dairy products have placed stringent criteria on the quality of water that can be used in the production of infant formulae. This has warranted a water supply of a quality significantly better than potable water standards.

8.3.4. Glanbia actively engaged with Irish Water to establish if this quality issue could be addressed by them without success. Several alternative options were then explored between Glanbia and Irish Water including:

- 1) IW would use chlorine gas to treat their water supply as this would not cause chlorates. However, for health and safety reasons, IW have a policy of switching all of their plants to hypochlorite.
- 2) An option was explored to provide Belview with a dedicated untreated water supply from the IW abstraction wells. This option would have required the installation of a water main over a length of approx. 8km with all of the associated environmental, engineering, legal and financial implications.
- 3) Installation of additional water treatment measures to remove the chlorates such as Reverse Osmosis. However, such tertiary treatments are very expensive to both install and operate given their energy demands. They also generate a hazardous waste that needs disposal.

8.3.5. The results of significant testing illustrated that the chlorate concentrations in the groundwater met the required standards when compared to the mains water. Therefore, it was concluded that the optimum solution to meeting the requirements was determined to be groundwater abstraction as *“the Irish Water supply is simply not adequate”*. I accept the findings outlined.

8.3.6. The appeal site is located within the IDA lands adjoining Belview Port and is zoned ITP Industrial / Technology Park, where the objective is *to provide for industry, technology and the expansion of Belview Port*. The permissible uses encompassed within the zoning objective include industry (general industrial use). Taken together with the established Glanbia facility at this site, the stringent legislative water quality requirements for the production of infant formulae and the inadequate provision of such by Irish Water it is considered that the proposed scheme is acceptable in principle subject to the acceptance or otherwise of site specifics / other policies within the development plan and government guidance.

#### **8.4. Impact on adjoining private domestic abstraction wells**

- 8.4.1. The appellants submit that the residents in the Bellevue and surrounding area have expressed concerns for many years regarding any proposed ground source water abstraction for industrial purposes within the IDA Science & Technology Park. As there is no public water supply in the area the residents are totally reliant on individual borehole wells of varying types, age, depths and pumping capacity for their water supply. Concern is raised that by reason of excessive industrial pumping from the new boreholes that the water levels in the domestic wells in the area will drop and may run dry whereby residents will be forced to drill new wells at significant expense. It is further submitted that Kilkenny County Council gave a commitment in writing to the residents that no industrial activity would be allowed within the IDA Science & Technology.
- 8.4.2. As documented the existing public supply has certain water quality issues, that conflicts with the food grade objectives of products manufactured at the plant. To this end Glanbia have investigated the feasibility of developing a groundwater supply at the site to supplement the existing public water supply from Irish Water. Following a detailed appraisal, the preferred option was deemed to be the installation of onsite abstraction wells as the quality of the groundwater met the required specification. Thence the next step was to determine whether a sustainable supply of groundwater could be abstracted from onsite monitoring wells. To this end I refer to the Hydrogeological Reports and further information on file outlining additional investigative works undertaken.
- 8.4.3. Desk based studies were initially undertaken and 36 no properties were identified within 800m that may have their own domestic supply wells. It was agreed with the Council to undertake water level monitoring and testing at a representative number of locations which would provide a sufficiently robust data base to address all of the Council queries. It was agreed with the householders that any information (water level and quality) gathered would be shared with the householders in a transparent way.
- 8.4.4. The findings of these investigative works are summarised as follows:
- A total of 9 wells were identified for groundwater level monitoring within approximately 850m of the Glanbia Belview facility over June, July and August 2021. A total of 405 water level measurements for each borehole were collected

across the monitoring network. 7 of the monitoring wells were private, domestic water supply wells. 2 of the wells monitored measured static water levels, which were not subject to pumping.

- All wells monitored returned water level data, except MW3 which experienced instrumentation issues
- The monthly rainfall for June 2021 was 36% of the LTA; July 2021 was 108% of the LTA; while August 2021 was 72% of the LTA. Overall, the rainfall data shows that the monitored period (June – August 2021) was an exceptionally dry period, with rainfall levels reported at 77% of the long-term average expected rainfall.
- There was no evidence of the development of a significant cone of depression beyond the Glanbia site, from the pumping of PW2 and PW3. There was no significant evidence of a negative impact on the monitored, private domestic water supply wells.
- The pumping rate at PW2 and PW3 was varied between 1489 m<sup>3</sup>/d to 1936 m<sup>3</sup>/d over the monitoring period to simulate a pseudo step test. In total, the pumping rate was varied on 8 major occasions throughout the monitoring period. There was no evidence of any significant response on water levels in domestic wells, from changes in the pumping rate at PW2 and PW3.
- Water level monitoring has shown that the overall magnitude of the impact of PW2 and PW3 on the monitored wells was negligible
- All private, domestic water supply wells were sampled on four occasions throughout the monitoring period. There were no impacts evident on water quality in the area as a result of the pumping on the Glanbia site.
- Microbiological analysis was conducted on all water samples collected from private households. All households reported counts of total coliforms throughout the monitoring period, which is expected as the water is raw and not disinfected prior to consumption.
- Water samples were collected from PW2 and PW3, which demonstrated the groundwater quality in the production wells, is good. There was no evidence of saline intrusion as a result of pumping. Stated that the safe guards built into the design of the test wells are working to protect the Regionally Important Aquifer and private domestic wells from saline intrusions

- The zone of contribution for each proposed well has been delineated, with a 50% factor of safety to account for future impacts from climate change.
- The water quality results from PW2 and PW3 from their commissioning stages were generally consistent with the water quality results from the monitoring period in 2021. There was a slight upward trend in chloride in PW2 and PW3; however, this is explained by the dry period in the summer of 2021, where the lack of rainfall resulted in less dilution in the aquifer
- There was no requirement to provide alternative supplies (e.g. new boreholes) and associated ancillary works for private residential water supplies as the environmental impacts from PW2 and PW3 were deemed to be negligible

8.4.5. In summary, there was no evidence of the development of a significant cone of depression beyond the Glanbia site, from the pumping at the test wells. Therefore, the overall magnitude of the impact of pumping the test wells (PW2 and PW3) on the monitored private wells (neighbouring wells) was deemed imperceptible. Furthermore, there was no evidence of any significant response on water levels in domestic wells changed in the pumping rate at PW2 and PW3 during the testing period. Hence the future abstraction from the two proposed borewells will also have an imperceptible impact on the neighbouring wells. There was also no evidence of any impacts on water quality on the area because of the pumping on the Glanbia site.

8.4.6. Having regard to the information made available with the appeal file I am satisfied that the abstraction of groundwater can be obtained in a sustainable manner with no impacts on the surrounding private abstraction wells. However in the unlikely event that there is a drop in the water levels in any domestic bore well adjoining the site by reason of the pumping or abstraction of water at the appeal site it would have a significant detrimental impact on residences.

8.4.7. To this end I refer to the report of the Kilkenny County Council Environment Section, where, having considered the further information submitted recommended that several conditions be attached relating to monitoring of adjacent homeowners wells for 3 months, decommissioning of wells, tank and drum storage, noise and continued monitoring. Conditions No 2, 3, 4 and 5 of the notification of decision to grant permission issued by Kilkenny County Council refer. I would draw the Boards attention in particular to the requirement that where it has been determined that the applicants

ongoing water abstraction is having a negative impact upon adjacent homeowner wells, the applicant shall be required to agree and provide a replacement potable water supply to the homeowner(s) in question. This is a similar condition to No 3 of the Boards previous decision at this location for a borewell in 2007; PL10.219649 (Reg Ref 06/636 refers). This previous Board condition stated:

*The developer shall make provisions as necessary to counter any adverse impacts to other water supply sources in the area, in the event that they area affected by the use of the proposed well. The full cost of such measures shall be borne by the developer.*

**Reason:** *To ensure the maintenance of continuous adequate potable water supply, in the interest of public health.*

- 8.4.8. I agree with this approach and recommend that should the Board be minded to grant permission that a similar condition be attached to prevent existing domestic ground water supply in the area.

## 8.5. Other Issues

- 8.5.1. **Development Contributions** – Kilkenny County Council has adopted a Development Contribution Scheme under Section 48 of the Planning and Development Act 2000 (as amended). The proposed development does not fall under either the exemptions or reductions listed in the Scheme. It is recommended that should the Board be minded to grant permission that a similar suitably worded condition be attached requiring the payment of a Section 48 Development Contribution in accordance with the Planning and Development Act 2000.
- 8.5.2. **NOTE:** Kilkenny County Council did not apply a Development Contribution condition in their notification of decision to grant permission. Therefore should the Board be minded to grant permission they may wish to seek the views of relevant parties prior to issuing a decision.
- 8.5.3. **Unauthorised Development** – I note the concerns raised by the appellant regarding water abstraction without the benefit of planning permission. This is not a matter for An Bord Pleanála. The Planning Acts provide for a planning enforcement mechanism whereby any development works which require permission and does not have that permission is unauthorised development. The planning system is operated by local



planning authorities who are responsible for Ireland's planning enforcement system. Accordingly, it is my view that any such concerns should be dealt with at local authority level. These comments are without prejudice regarding the planning status of the water abstraction wells on site.

#### **8.6. Appropriate Assessment**

8.7. Having reviewed the documents and submissions on file including the Natura Impact Statement submitted with the Planning Application I am satisfied that the information available allows for a complete examination and identification of any potential significant effects of the development, alone, or in combination with other plans and projects on European sites.

8.7.1. I refer to the Natura Impact Assessment (NIS) submitted with the application. A description of the site is provided in Section 1.0 Site Location and Description of this report above. As documented the proposed development will consist of the installation of 2 no groundwater abstraction wells and associated works for the purpose of water abstraction to serve the existing Glanbia Milk Processing Plant. The proposed development will include the following elements:

- 2 lined boreholes drilled to required depth
- Submersible pumps and associated pipework and cabling
- Surface features including cabinets containing the well heads, valves and pipework and the electrical services and controls for the pumps
- Gated security fencing around each cabinet enclosure
- Delivery pipes from the wells to the existing water treatment facilities on the site and associated connections
- Ducts and cables from the existing Water Treatment Plant and
- All associated earthworks, landscaping and paving

8.7.2. The 2 existing groundwater abstraction wells will be decommissioned and abandoned following the industry best practise guidelines namely "Good Practise for Decommissioning Redundant Boreholes and Wells" (2010).

8.7.3. A small volume of soil will be generated during the drilling process and will be used to backfill service trenches to match existing levels and finishes, where appropriate. Any

surplus soils will be removed to a suitably permitted or licensed facility. During the well installation, any groundwater at the surface will be discharged to existing drainage network within the Glanbia facility via sediment traps.

- 8.7.4. Surface features including cabinets containing the well heads, valves, pipework and the electrical services / controls for the pumps will be installed at each location once drilling is completed. An existing power supply from the established Glanbia facility will be used to power the electricity required for the pump at each groundwater abstraction well.
- 8.7.5. During the commissioning phase, a one day step test will be conducted on each of the newly installed groundwater abstraction wells to help confirm the yield of the aquifer at this location and to obtain samples for laboratory analysis. It is submitted that previous sampling of the groundwater in this area determined that the quality was good, with no parameters of significant concern. I refer to the Hydrological Assessment Report submitted with the planning application.
- 8.7.6. During the operational phase the proposed development will entail the abstraction of a maximum of 2,200m<sup>3</sup>/day from the groundwater abstraction wells. It is stated that the volume of groundwater abstraction at the site has been determined to be sustainable. This volume is also consistent with the agreement currently in place between Kilkenny County Council and Glanbia for the purchases of a maximum daily allowance of 2,200m<sup>3</sup> of water from the public supply.
- 8.7.7. The facility operates under an Industrial Emissions (IE) License, Register No P0963-02 issued by the EPA. Both abstraction wells will be registered with the EPA in accordance with the EU (Water Policy) (Abstraction regulations) Regulations 2018 (S.I. No 261 of 2018).

During the construction phase, the methods of working will comply with all relevant legislation and best practise guidelines in reducing the environmental adverse effects of the works. It is stated that a detailed Method Statement will be prepared in advance of works and will include all mitigation measures outlined in the NIS report. An Ecological Clerk of Works (ECoW) will inspect the sites in advance of works commencing and will undertake site inspections as required during the works, to ensure that they will be completed in line with the mitigation measures detailed within

the NIS. The proposed development will utilise an existing and established construction compound for the duration of the works.

## 8.8. Stage 1 Screening for Appropriate Assessment

8.8.1. As stated the application included a Natura Impact Statement to evaluate the potential impacts(s) of the proposed development on European Sites located within 15km radius. While 15km is not a statutory requirement I am satisfied that it is a reasonable parameter and that the sites identified in Stage 1 of the AA are acceptable. The development is not located within or directly adjacent to any Natura 200 sites, however 6 no Natura 2000 designated sites (SAC x 4 & SPA x 2) were identified within 15km of the site as follows:

Site Name	Site Code	Distance (km)	Direction from Site
Lower River Suir SAC	002137	850m	South
River Barrow & River Nore SAC	002162	3.1km	North East
Tramore Dunes & Backstrand SAC	000671	10.5km	South
Bannow Bay SAC	000697	14.6km	South East
Tramore Back Strand SPA	004027	10.5km	South
Bannow Bay SPA	004033	15km	South East

8.8.2. Given the distance, the intervening lands and lack of impact pathways between the site and the Tramore Dunes & Backstrand SAC, Bannow Bay SAC, Tramore Back Strand SPA and Bannow Bay SPA, these Natura 2000 sites have been screened out from further investigation.

8.8.3. However, the boundary of the Lower River Suir SAC is located within 1km of the site and in turn is hydrologically connected to the River Barrow & River Nore SAC downstream. Therefore, further consideration will be given to these 2 sites to assess potential adverse effects resulting from the development. Further details of these 2 sites are provided below.

## 8.9. Lower River Suir SAC (Site Code 002137)

- 8.9.1. The Lower River Suir SAC, is an extensive site, which covers the freshwater stretches of the River Suir from south of Thurles, Co Tipperary to the Barrow Suir confluence east of Cheekpoint, Co Waterford. The SAC is comprised of a number of Annex 1 habitats, including the priority habitats Alluvial Forest and Yew Woodland. Other habitats within the SAC include wet and dry grassland, marsh, reed swamp, improved grassland, tidal river, deciduous woodlands and mudflats.
- 8.9.2. The SAC is of conservation interest for the presence of a number of Annex I species including Freshwater Pearl Mussel, Otter, White-clawed Crayfish, Salmon, Twaite Shad and three species of Lampreys- Sea, Brook and River Lamprey. The site is one of only three known spawning grounds in the country for Twaite Shad. The site is also of ornithological importance for the number of Annex I bird species, E.U. Birds Directive including Golden Plover, Whooper Swan and Kingfisher.
- 8.9.3. The overall aim of the Habitats Directive is *to maintain or restore the favourable conservation status of habitats and species of community interest*. The site specific conservation objectives are to **maintain** the favourable conservation condition of:
- Water courses of plain to montane levels
  - Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
  - White-clawed Crayfish
  - Otter
- 8.9.4. And to **restore** the favourable conservation condition of
- Atlantic salt meadows
  - Mediterranean salt meadows
  - Old sessile oak woods
  - Alluvial forests
  - Taxus Baccata woods
  - Freshwater Pearl Mussel
  - Sea Lamprey
  - Brook Lamprey

- River Lamprey
- Twaite Shad

8.9.5. Intensive agriculture is the primary land use along the banks of the river. The widespread use of fertiliser and slurry pose the greatest threats to the conservation status of the SAC due to the related impairment in water quality. Furthermore, there are multiple industrial developments, which border the SAC, and discharge into the river. Fishing is the primary tourism attraction along the stretches of the Suir, including both commercial and leisure fishing with numerous Angler Associations (NPWS, 2013).

#### 8.10. River Barrow and River Nore SAC (Site Code: 002162)

8.10.1. The River Barrow and River Nore SAC consists of the freshwater stretches of the Barrow and Nore River catchments extending from the Slieve Bloom Mountains to the estuary and tidal elements in Creadun Head, Watertord. Species rich habitats (Annex I of the EU Habitats Directive) including estuaries, alluvial forests, petrifying springs, and intertidal mudflats and sandflats can be found within this SAC.

8.10.2. This SAC is of considerable conservation significance for multiple reasons:

- *Ornithological importance:* This SAC supports Kingfisher, a nationally important bird population listed in Annex I of the EU Birds Directive. One SPA (River Nore), designated under the EU Birds Directive, is also located within the SAC; and,
- This SAC supports multiple species listed on Annex II of the EU Habitats Directive, including Otter, River Lamprey and Salmon.

8.10.3. Land use within the SAC is primarily agricultural, principally grazing and silage production. Fishing is also a main tourist attraction along stretches of the main rivers and their tributaries. Other recreational activities such as boating, golfing, and walking also occur within the SAC.

8.10.4. The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. The site specific conservation objectives are to **maintain** the favourable conservation condition of:

- Desmoulin's whorl snail

- White-clawed crayfish
- Estuaries
- Mudflats & Sandflat's not covered by seawater at low tide
- Salicornia and other annuals colonizing mud and sand
- Killarney fern
- Water courses of plain to montane levels
- European Dry Heaths
- Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
- Petrifying springs with tufa formation

8.10.5. And to **restore** the favourable conservation condition of

- Sea Lamprey
- Brook Lamprey
- River Lamprey
- Twaite Shad
- Atlantic Salmon
- Atlantic salt meadows
- Otter
- Mediterranean salt meadows
- Nore freshwater pearl mussel
- Old sessile oak woods
- Alluvial forests

8.10.6. The main threats to the SAC and current damaging activities include high inputs of nutrients into the river system from agricultural run-off and sewage plants, along with over-grazing, invasion of non-native species and land reclamation (NPWS, 2011).

8.10.7. The qualifying interests that could be affected in the **Lower River Suir SAC** are summarised as follows:

<b>Lower River Suir SAC</b>
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<b>Qualifying Interests / Baseline</b>	<b>Potential Adverse Effects Arising from the Proposed Development</b>	<b>Screening Rational</b>	<b>Screening Conclusion</b>
Atlantic Salt Meadows	Adverse effect on water quality through groundwater contamination during construction	Given the intervening land. topography of the site and lack of a direct hydrological connection to this habitat, it is considered highly unlikely that adverse effects during construction such as siltation and pollution will affect the Atlantic Salt Meadows	Screened Out
Mediterranean Salt Meadows	Adverse effect on water quality through groundwater contamination during construction	As per Atlantic Salt Meadows above	Screened Out
Water courses of plain to montane level with Ranunculion fluitantis and Callitricho – Batrachian vegetation	None – This habitat is not present within the potentially affected area	N/A	Screened Out
Old Sessile Oak Woods with Ilex and Blechnum in British Isles	None – This habitat is not present within the potentially affected area	N/A	Screened Out
Alluvial Forests with Alnus glutinosa and Fraxinus excelsior	None – This habitat is not present within the potentially affected area	N/A	Screened Out
Hydrophilous tall herb fringe communities of plans and of the mountain to alpine levels	None – This habitat is not present within the potentially affected area	N/A	Screened Out
Otter	Noise disturbance / displaced during construction Adverse effects on water quality through groundwater contamination during construction / operational procedures	Otters are known to occur within the area, however due to absence of suitable habitats for the construction of holts on site or within close proximity to the site, it is unlikely that the habitats within this immediate area of the proposed works are of significant importance for the Otter. It is considered that the risk to the species resulting from the proposed construction work is very low.	<b>Screened In</b>

		To ensure that no adverse effects occur on otter that may occasionally use the area within the vicinity of the site, further consideration will be given to this species and in addition to the standard pollution prevention guidance, site specific mitigation will be incorporated into the proposed works. Further assessment will be required.	
Atlantic Salmon	Adverse effects on water quality through groundwater contamination during the construction.  Adverse effects associated with groundwater abstraction i.e. brackish water being drawn from the estuary back into the aquifer during the operational phase	This species is known to be present within the estuary during parts of its life cycle. Whilst considered highly unlikely, to ensure that no adverse effects occur a precautionary approach has been adopted and further consideration will be given to this species.  In addition to the standard pollution prevention guidance, site specific mitigation will be incorporated into the proposed construction works.  Therefore, further assessment will be given to potential adverse effects on water during the construction works.	<b>Screened In</b>
Sea Lamprey	Sea above as per Atlantic Salmon	Sea above as per Atlantic Salmon	<b>Screened In</b>
Brook Lamprey	Sea above as per Atlantic Salmon	Sea above as per Atlantic Salmon	<b>Screened In</b>
River Lamprey	Sea above as per Atlantic Salmon	Sea above as per Atlantic Salmon	<b>Screened In</b>
Twaite Shad	Sea above as per Atlantic Salmon	Sea above as per Atlantic Salmon	<b>Screened In</b>
Freshwater Pearl Mussel	None – No records of this species being present within the potentially affected area	N/A	Screened Out
White Clawed Crayfish	None – No records of this species being present within the potentially affected area	N/A	Screened Out

8.10.8. The qualifying interests that could be affected in the **River Barrow and River Nore SAC** are summarised as follows:

<b>River Barrow and River Nore SAC</b>			
<b>Qualifying Interests / Baseline</b>	<b>Potential Adverse Effects Arising from the Proposed Development</b>	<b>Screening Rational</b>	<b>Screening Conclusion</b>



Estuaries	Adverse effects on water quality through groundwater contamination during construction / operational procedures	Given the intervening land. topography of the site and lack of a direct hydrological connection to this habitat, it is considered highly unlikely that adverse effects during construction such as siltation and pollution will affect the Estuaries	Screened Out
Reefs	None – This habitat is not present within the potentially affected area	N/A	Screened Out
Mudflats & Sandflats not covered by seawater at low tide	None – Adverse effects during construction such as siltation and pollution are not likely to affect this habitat	N/A	Screened Out
Salicornia & other annual colonizing mud and sand	None – This habitat is not present within the potentially affected area	N/A	Screened Out
Atlantic salt meadows	None – This habitat is not present within the potentially affected area	N/A	Screened Out
Mediterranean salt meadows	None – This habitat is not present within the potentially affected area	N/A	Screened Out
Watercourses of plain to montane level with the Ranunculus Fluitantis and Callitriche – Batrachian vegetation	None – This habitat is not present within the potentially affected area	N/A	Screened Out
European Dry Heaths	None – This habitat is not present within the potentially affected area	N/A	Screened Out
Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	None – This habitat is not present within the potentially affected area	N/A	Screened Out
Petrifying spings with tufa formation	None – This habitat is not present within the potentially affected area	N/A	Screened Out
Old sessile oak woods with Ilex and Blechnum in the British Isles	None – This habitat is not present within the potentially affected area	N/A	Screened Out

Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i>	None – This habitat is not present within the potentially affected area	N/A	Screened Out
Otter	<p>Main / Possible threats include:</p> <ul style="list-style-type: none"> <li>Noise disturbance / displaced during construction.</li> </ul> <p>Adverse effects on water quality through groundwater contamination during construction / operational procedures</p>	<p>Otters are known to occur within the area, however, due to the absence of suitable habitats for the construction of holts onsite or within close proximity to the Site, it is unlikely that the habitats within this immediate area of the proposed works are of significant importance for the Otter. It is considered that the risk to the species resulting from the proposed construction works is very low.</p> <p>To ensure that no adverse effects occur on otter that may occasionally use the area within the vicinity of the Site, further consideration will be given to this species and, in addition to the standard pollution prevention guidance, Site specific mitigation will be incorporated into the proposed works.</p> <p>Further assessment will be required.</p>	<b>Screened In</b>
Freshwater Pearl Mussel	None – Freshwater species, no suitable habitat present within the potentially affected area of the SAC	N/A	Screened Out
Nore Freshwater Pearl Mussel	None – Freshwater species, no suitable habitat present within the potentially affected area of the SAC	N/A	Screened Out
Desmoulines Whorl Snail	None – No suitable habitat present within the potentially affected area of the SAC	N/A	Screened Out
White clawed Crayfish	None – Freshwater species, no suitable habitat present within the potentially affected area of the SAC	N/A	Screened Out
Atlantic Salmon	<p>Adverse effects on water quality through groundwater contamination during the construction.</p> <p>Adverse effects associated with groundwater abstraction i.e.. brackish water being</p>	<p>This species is known to be present within the estuary during parts of its life cycle. Whilst considered highly unlikely, to ensure that no adverse effects occur a precautionary approach has been adopted and further consideration will be given to this species.</p>	<b>Screened In</b>

	drawn from the estuary back into the aquifer during the operational phase	In addition to the standard pollution prevention guidance, site specific mitigation will be incorporated into the proposed construction works. Therefore, further assessment will be given to potential adverse effects on water during the construction works.	
Sea Lamprey	As per Atlantic Salmon above	As per Atlantic Salmon above	<b>Screened In</b>
Brook Lamprey	As per Atlantic Salmon above	As per Atlantic Salmon above	<b>Screened In</b>
River Lamprey	As per Atlantic Salmon above	As per Atlantic Salmon above	<b>Screened In</b>
Twaite Shad	As per Atlantic Salmon above	As per Atlantic Salmon above	<b>Screened In</b>
Killarney Fern	None – Not present on site or within close proximity to the site.	N/A	Screened Out

### 8.11. Stage 2 Appropriate Assessment

8.12. The Screening process above has examined the potential for the proposed development to cause adverse effects on Natura 2000 European Sites and qualifying features of interest. A number of species have been identified which require to be brought forward for further consideration due to the following effects:

- Loss of, or disturbance to habitats during construction phase;
- Potential noise adverse effects to designated species during construction phase; and,
- Potential impairment of water quality during construction phase.

### 8.13. Loss of, or disturbance to habitats during construction phase

8.13.1. It is considered that the construction phase of the proposed development will not result in any direct or indirect loss or disturbance to any of the Annex I habitats or Annex I or II species for which the Natura 2000 sites within 15km of the site have been designated. This assumption is based on the location of the site within the overall Glanbia facility and the lack of impact pathways to Natura 2000 sites in the vicinity.

- 8.13.2. The Annex I habitats for which both the SACs are designated are not present onsite and there is only one habitat within the vicinity of the proposed development. According to the NPWS (2017), potential Atlantic Salt Meadows are located c. 885m south of the site boundary. However, given the intervening land and lack of a direct hydrological connection through surface water to this habitat, it is considered highly unlikely that the potential Atlantic Salt Meadow habitats will be affected by the development.
- 8.13.3. The habitats onsite are not considered suitable for the Annex II species for which the Natura 2000 sites are designated, as there are no aquatic habitats present. The only designated species for both SACs that could potentially disperse from the nearby watercourses is Otter. However, there are no records of Otter within 1km of the site and local roads around the site boundary act as a significant buffer between the site and the Gorteens Stream and Rathpatrick Stream, subsequently discouraging otter dispersal into the site.
- 8.13.4. The construction works will follow best practice guidelines, pipelines will be laid in sections and backfilled and, in order to avoid the egress of any terrestrial mammals (including otters) that may find their way onsite, the trenches will be covered at night.
- 8.13.5. Any adverse effects, through potential groundwater contamination during the construction and operational phase, on designated habitats and aquatic species is dealt with below.

#### **8.14. Potential adverse noise effects during construction**

- 8.14.1. Construction noise can result in adverse effects on species such as Otter for which the SAC is designated. Potential adverse effects can include disturbance, behavioural impacts, stress and displacement from feeding grounds.
- 8.14.2. Given that there will be no in-river works, effects of fish species associated with noise can be set aside. There is, however, some potential for adverse effects on otter, which are known to occur within a 2km radius of the site and could be using the Rathpatrick Stream (ca. 55m from the site), given that it is a tributary off the Lower River Suir - a designated SAC for the species. The following protective mitigation measures will be implemented during the construction phase:

- Construction will be limited to daylight hours in order to minimise adverse effects on crepuscular / nocturnal fauna; and,
- All plant items will comply with the European Communities (Construction Plant and Equipment) (Permissible Noise Levels) Regulations 1996 (EC, 1996).

8.14.3. Otters are most active at dusk or after dark. Therefore the higher level of noise associated with the construction works is unlikely to cause any disruption to otters within the area as the construction works are confined to daylight hours. . Also, given the location of the proposed development within the existing Glanbia facility, the industrial and built-up nature of the surroundings and the high levels of human activity, any otters or other notable species utilising the area are likely to be habituated to elevated noise levels or will avoid this area.

#### 8.15. **Potential impairment of water quality during construction**

8.15.1. The Rathpatrick and the Gorteens streams are the closest hydrological features in the vicinity of the site. As the River Suir is considered 'at risk,' should run-off of potential pollutants enter the surrounding watercourses or groundwater, this could adversely affect the water quality within the Lower River Suir SAC and further downstream in the River Barrow and Barrow Suir Nore Estuary SAC subsequently affecting the protected species for which these Natura 2000 sites are designated, for example: Atlantic Salmon, Sea Lamprey, Brook Lamprey and Twaite Shad.

8.15.2. The abstraction wells are located within an area of managed grassland, that is 55m away from the nearest watercourse. Furthermore, there is no direct hydrological connection to the watercourse and the ground surrounding the proposed well heads slopes towards the construction compound area, meaning it is very unlikely that any run-off / pollutants from the construction works could enter surface water directly.

8.15.3. The following protective mitigation measures will be put in place, which are based on Inland Fisheries Ireland (IFI, 2016) and the Transport Infrastructure Ireland (TII), (NRA, 2005) guidance documents, to ensure that water quality (surface and ground) is protected within the vicinity of the site:

- Construction stage works will be undertaken in line with the contractor's Method Statement;

- Prior to any works commencing, all equipment will be checked to ensure that they are mechanically sound, to avoid leaks of oil, fuel, hydraulic fluids and grease;
- All materials, chemicals and oils shall be stored at the main contractor compound and transported to the works zone immediately prior to construction;
- Adequate spill kits including absorbent booms and other absorbent material will be maintained on-site;
- All contractor workers will be appropriately trained in the use of spill kits;
- Weather conditions will be considered when planning construction to minimise risk of runoff from Site;
- Any pouring of concrete will only be carried out in dry weather. Washout of concrete trucks will not be permitted on the Site;
- Any spillage of cementitious materials will be cleaned-up immediately;
- Any sediments impacted by contamination will be excavated and stored in appropriate sealed containers for disposal offsite in accordance with all relevant waste management legislation;
- Fuels, lubricants and hydraulic fluids for equipment used in the construction phase will be carefully handled to avoid spillage, properly secured against unauthorised access or vandalism, and provided with spill containment according to current best practice;
- No vehicle or equipment maintenance work will be carried out onsite.
- During the drilling works for the installation of the wells, sandbags will be installed around the working area. Any water collected in this area will be diverted to newly installed sediment traps before discharging to the existing drainage network within the IE Licenced Glanbia facility.
- During the step test, the groundwater generated by this activity will be discharged to the existing drainage within the I Licenced GI facility.

8.15.4. In addition, as previously mentioned, an Ecological Clerk of works (CoW) will be appointed to the project to ensure that the mitigation and best practice measures will be fully implemented.

## 8.16. Analysis of 'In-Combination' Effects

- 8.16.1. Due to the large size of the Lower River Suir SAC and River Barrow and River Nore SAC, there are numerous projects and activities which have the potential to affect the conservation interests of these sites. Potential sources of pollutants include, but are not limited to farming practices, waste from the manufacturing industry, construction industry, point source effluents, wastewater discharges, forestry and aquaculture. The characteristics of existing, proposed or other approved projects, which may result in in-combination effects with the proposed development and potentially affect a European Site, were assessed. The project alone is unlikely to have any direct or indirect significant effects on the identified Natura 2000 sites given the small-scale nature of the proposed development within a zoned industrial environment and the best practice procedures and specific mitigation measures that will be implemented during both the construction and operational phase of the development.
- 8.16.2. Within the Glanbia complex, JHOK Ltd were granted permission for a continental cheese manufacturing plant together with retention of and alterations to the existing construction compound which will be removed on completion of the works (ABP-306136-19 (Reg Ref 19668)). An EIAR and a NIS were submitted with this planning application. These documents outlined the appropriate design and proposed mitigation measures for the proposed development to ensure no adverse effects would occur to the Lower River Suir SAC, the River Barrow and River Nore SAC or any other Natura 2000 site either alone or in-combination with other projects. As no groundwater abstraction is proposed as part of the Continental Cheese manufacturing plant, it is considered highly unlikely that there is any potential for cumulative impacts.
- 8.16.3. While it is considered highly unlikely that there is any potential for cumulative impacts, the implementation of the above mitigation measure will ensure that there is no potential for adverse effects on Natura 2000 sites. Therefore, it is concluded that there will not be any significant in-combination contribution by the proposed development to possible adverse effects on the Lower River Suir SAC and the River Barrow and River Nore SAC.

## 8.17. Conclusions

- 8.17.1. In the absence of mitigation, the potential significant impacts on the Lower River Suir SAC and the River Barrow & River Nore SAC are potential impairment of water quality, disturbance to habitats / aquatic species and potential noise adverse effects during construction stage. Of these the impact on ground water / water quality supply arising from proposed development and qualifying interests of the SAC is the main environmental threat.
- 8.17.2. A number of mitigation measures are identified under Section 7.3 of the NIS and follow Inland Fisheries Ireland and National Roads Authority guidance documents to ensure water quality (surface and ground) is protected within the vicinity of the site and which follows best practice. The nearest surface water features are Rathpatrick and Gorteen streams located 55 meters away. The proposed location for the two wells slope back towards the facility and construction compound and this reduces the potential for run off pollutants from the construction works.
- 8.17.3. I am satisfied that a full examination of the potential impacts has been analysed and evaluated using the best scientific knowledge. The potential for significant effects on the Lower River Suir SAC and the River Barrow & River Nore SAC was identified. Appropriate Assessment has demonstrated that where potential adverse effects were identified in view of the conservation objectives of this site, key design features and detailed mitigation measures have been prescribed to remove risks to the integrity of the European sites. I am satisfied based on the information available that if the key design features and mitigation measures are undertaken, maintained and monitored as detailed in the NIS, adverse effects on the integrity of the Lower River Suir SAC and the River Barrow & River Nore SAC will be avoided
- 8.17.4. I consider it reasonable to conclude on the basis of the information on the file, which I consider adequate in order to carry out Appropriate Assessment, that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the Lower River Suir SAC and the River Barrow & River Nore SAC or any other European site, in view of the site's Conservation Objectives. This conclusion is based on a complete assessment of all aspects of the proposed project and there is no reasonable doubt as to the absence of adverse effects.



## 9.0 Recommendation

9.1. It is recommended that permission be **GRANTED** subject to conditions for the reasons and considerations set out below.

## 10.0 Reasons and Considerations

10.1.1. Having regard to:

- a) The written submissions made in respect of the application
- b) The established nature of the existing Glanbia Development on the adjoining site, the detailed nature, scale and form of the development and its location relative to nearby sensitive receptors,
- c) The specific operational water supply considerations at the site
- d) Mitigation measures which are proposed for the construction and operation phases of the development,
- e) The provisions of the Kilkenny City and County Development Plan 2021 – 2027 and the Ferrybank/Belview Local Area Plan 2017 including the zoning of the subject lands under the latter plan for Industrial / Technology Park (ITP)
- f) The planning history on the Glanbia site and the pattern of development in the area including the proximity to the existing Glanbia facility and the separation distance of the site from existing dwellings,
- g) The documentation submitted with the application, including the Natura Impact Statement

It is considered that, subject to compliance with the condition set out below, the proposed development would be in accordance with the Development Plan policies, would not seriously impact on borewells in the vicinity of the site and would not be prejudicial to public health. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

## 11.0 Conditions

1.	The development shall be carried out and completed in accordance with the plans and particulars lodged with the application as amended by the further
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	<p>plans and particulars submitted on the 2<sup>nd</sup> day of December 2021 and by the further plans and particulars received by An Bord Pleanála, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.</p> <p><b>Reason:</b> In the interest of clarity</p>
2.	<p>The temporary construction compound authorised under Reg Ref P17/153 may be continued for the duration of the proposed works but no more than three years from the date of this permission, whichever comes earlier.</p> <p><b>Reason:</b> In the interests of visual amenity, protection of the environment and proper planning and sustainable development of the area.</p>
3.	<p>a) The applicant shall identify and monitor at least 4 adjacent homeowner wells for a minimum period of 3 years during the operational phase of the development. The monitoring locations shall be agreed with the Planning Authority prior to the commencement of the development. The monitoring shall be undertaken at least quarterly and shall include water level and water quality testing. An end of year report shall be submitted in Year 1, Year 2 and Year 3 unless requested or agreed otherwise by the Planning Authority. The Planning Authority may amend or add additional locations for monitoring at any time during the 3-year period. The end of year reports shall assess the impact of the ongoing abstraction of groundwater on the adjacent wells.</p> <p>b) Where it has been determined at 2(a) above or by the Planning Authority that the developers ongoing water abstraction is having a negative impact upon adjacent homeowner wells, the applicant shall be required to agree and provide a replacement potable water supply to the affected homeowners. The full cost of such measures shall be borne by the developer.</p>

	<p>c) The applicant shall maintain a log of all water related complaints received from homeowners along with corrective actions. The Planning Authority may request a copy of the log at any time during the operational phase of the development.</p> <p>d) Wells on-site which are not being used for groundwater abstraction shall be promptly decommissioned and closed in an environmentally safe manner. Details of same together with a time frame for decommissioning for the purposes of production shall be agreed with the Planning Authority prior to commencement of development.</p> <p><b>Reason:</b> In the interest of public health and to provide for the protection of existing groundwater supply in the locality</p>
4.	<p>The construction of the development shall be managed in accordance with a Construction Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.</p> <p>The plan shall include measures for monitoring dust, noise, groundwater and surface water and shall include a proposal for periodic reporting to the planning authority.</p> <p>A record of daily checks that the works are being undertaken in accordance with the Construction Management Plan and monitoring results as appropriate shall be kept for inspection by the planning authority.</p> <p><b>Reason:</b> In the interest of amenities, environmental protection, public health and safety.</p>
5.	<p>During the construction all tank and drum areas shall be rendered impervious to the materials stored therein. In addition tank and drum storage areas shall be bunded either locally or remotely to a volume not less than 110% of the capacity of the largest tank or drum within the bunded area. Drainage from the bunded area shall be diverted for collection and safe disposal.</p> <p><b>Reason:</b> To provide for the protection of the environment.</p>

6.	<p>All of the environmental, construction and ecological mitigation measures, as set out in the Natura Impact Report and associated documentation submitted with the application, shall be implemented by the developer in conjunction with the timelines set out therein, except as may otherwise be required in order to comply with the conditions of this order.</p> <p><b>Reason:</b> In the interest of clarity and of the protection of the environment during the construction and operational phases of the development.</p>
7.	<p>Monitoring of the construction phase shall be carried out by a suitably qualified competent person to ensure that all environmental mitigation measures contained in the documentation which accompany the application are fully implemented. A designated member of the applicant's staff shall interface with the Planning Authority or members of the public in the event of complaints or queries in relation to environmental emissions. Details of the name and contact details and the relationship to the developer of this person shall be available at all times to the Planning Authority on request whether requested in writing or by a member of staff of the Planning Authority at the site.</p> <p><b>Reason:</b> To safeguard the amenities of the area.</p>
8.	<p>The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.</p>

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

**Senior Planning Inspector**

**20<sup>th</sup> March 2023**