**Comhairle Contae Chill Dara**
Kildare County Council

Date: 28th July 2026
Our Ref: ED/1362

The K Club,
C/O Rory Kunz
JSA Planning
39 Fitzwilliam Place
Dublin 2.

**RE: Application for a Declaration of Exempted Development under Section 5 of Planning and Development Act 2000 (as amended) for development at The K Club, Straffan, Co Kildare.**

Dear Sir/Madam,

I refer to your correspondence received on 28th May 2026 and 06th July 2026 in connection with the above. Please find enclosed Receipt no. FIN1/0/524800 in relation to fee paid.

Please find attached declaration made under Section 5 of Planning and Development Acts 2000 (as amended) in this regard.

Yours sincerely,

PP

**Senior Executive Officer,**
**Planning Department.**

# Comhairle Contae Chill Dara
Kildare County Council

**Declaration of Development & Exempted Development under Section 5 of the Planning and Development Act 2000 (as amended).**

**ED/1362**

**WHEREAS** a question has arisen as to whether the removal of existing obsolete hydroelectric equipment and the installation/operation of a modern, efficient hydroelectric system including a turbine, associated cabling and works to inlet sluice gates/tail race at The K Club, Straffan, Co Kildare, is exempted development

**AS INDICATED** on the plans and particulars received by the Planning Authority on 28th May 2026 and 06th July 2026

**AND WHEREAS** The K Club requested a declaration on the said question from Kildare County Council,

**AND WHEREAS** Kildare County Council as the Planning Authority, in considering this application for a declaration under Section 5 of the Planning and Development Act 2000 (as amended), had regard to;

(a) Planning and Development Act 2000 (as amended) and
(b) Planning and Development Regulations 2001 (as amended); and
(c) Documentation received on 28th May 2026 and 06th July 2026

**AND WHEREAS** Kildare County Council has concluded that the development comprises works to which the provisions of the following applies:

(a) Section 4 and 57 of the Planning and Development Act 2000 (as amended)
(b) Articles 6 and 9 of the Planning and Development Regulations 2001 (as amended)
(c) The nature, extent and purpose of the works

**NOW THEREFORE** Kildare County Council, in exercise of the powers conferred on it by Section 5(2)(a) of the Planning and Development Act 2000 (as amended), hereby decides that the the removal of existing obsolete hydroelectric equipment and the installation/operation of a modern, efficient hydroelectric system including a turbine, associated cabling and works to inlet sluice gates/tail race at The K Club, Straffan, Co Kildare **Is DEVELOPMENT and IS EXEMPTED development** pursuant to Section 4 and 57 of the Planning and Development Act 2000 (as amended) and Articles 6 and 9 of the Planning and Development Regulations 2001 (as amended)

Please note that any person issued with a declaration under subsection 2(a) of the Planning and Development Act 2000 (as amended) may on payment to the Coimisiún of the prescribed fee, refer a declaration to An Coimisiún Pleanála within 4 weeks of the issuing of the decision.

**28th July 2026**

pp **Senior Executive Officer,**
**Planning Department.**

**KILDARE COUNTY COUNCIL**

**PLANNING & STRATEGIC DEVELOPMENT DEPARTMENT**

**Section 5 referral & declaration on development & exempted development**

**Planning & Development Act 2000 (as amended)**

**Reference No. ED/1362**

| | |
|---|---|
| **Name Of Applicant(s):** | The K Club |
| **Address Of Development:** | The K Club, Straffan, Co Kildare |
| **Development Description:** | The removal of existing obsolete hydroelectric equipment and the installation/operation of a modern, efficient hydroelectric system including a turbine, associated cabling and works to inlet sluice gates/tail race at the K Club |
| **Due date** | 24/07/2026 |

## Introduction

This is a request for a **DECLARATION** under Section 5(1) of the Planning and Development Act 2000 (as amended) to establish whether under Section 5 of the Act the works of the removal of existing obsolete hydroelectric equipment and the installation/operation of a modern, efficient hydroelectric system including a turbine, associated cabling and works to inlet sluice gates/tail race at the K Club, Straffan Co. Kildare is or is not exempted development.

## Site Location

The site is located within the grounds of The K Club demesne (Protected Structure, RPS B14-29 & B14-29B). The existing hydroelectric structure is located on the northern bank of the river Liffey, c.45m upstream from the Straffan Bridge (Protected Structure RPS B14-54). The turbine house is listed within the NIAH (11809031) and is located adjacent to the weir (NIAH 11809022). The surrounding context is a designed and managed parkland associated with The K Club estate.
It must be noted a turbine is indicated in this general location on the historic map dated 1888-1913.

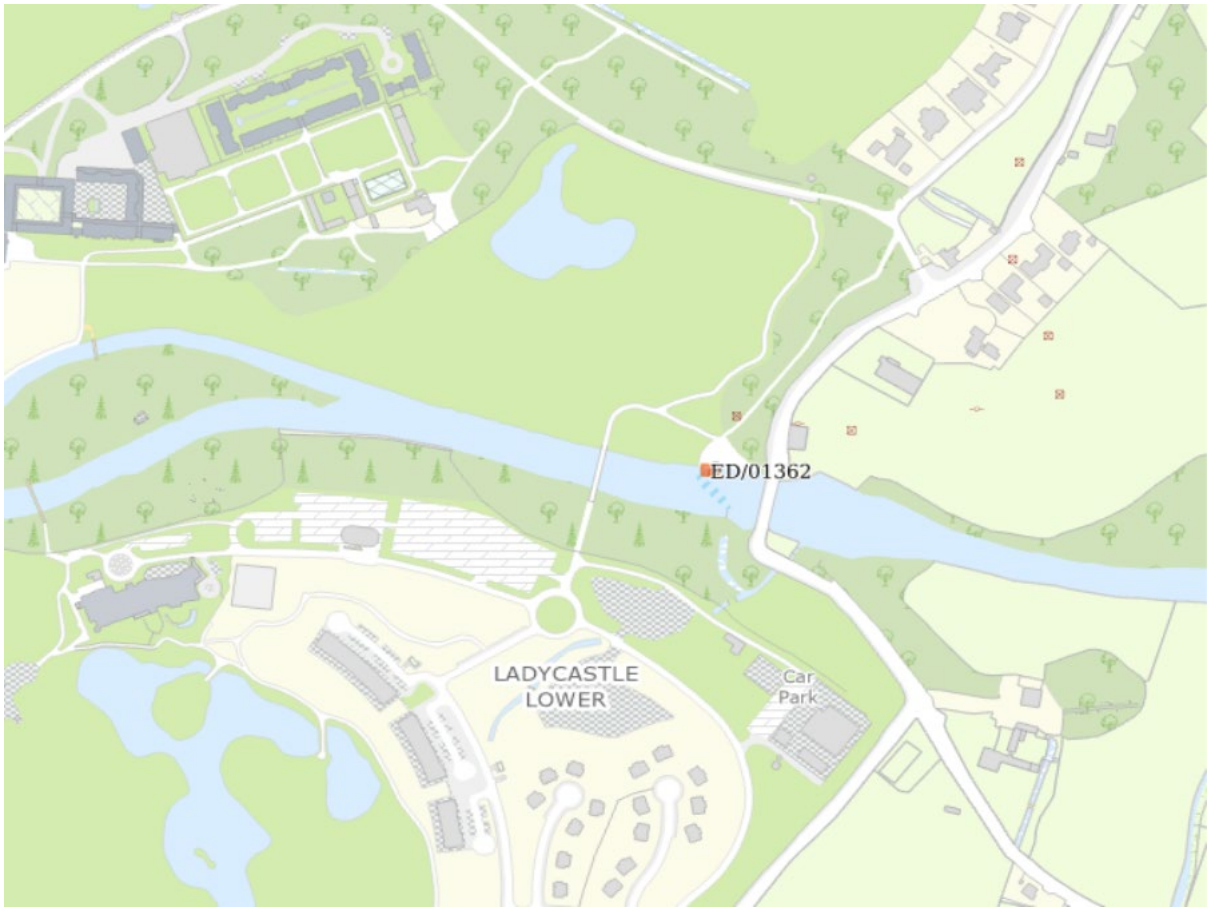



**Fig 1:** Site Location (ED/01362) and context (KCC GIS)



**Fig 2:** Aerial view of subject site outlined in red (KCC GIS)



**Fig. 3:** Interior of the turbine house

The National Built Heritage Services has rated the turbine house as regional importance due to special interests in architecture, history, social and technical.

The description and appraisal are as follows in the National Built Heritage Services "*Detached single-bay single-storey mass-concrete hydro-electric turbine engine house, c.1930, retaining early fenestration. Gable-ended roof with concrete. Mass-concrete walls. Unpainted. Square-headed openings. No sills. Iron swivel windows. Iron double doors approached by flight of concrete steps. Sited on north bank of River Liffey.*

*This hydro-electric turbine engine house is of considerable technical or engineering interest, having been constructed immediately prior to the establishment of the National Electricity Network. The building is of interest for its construction in mass-concrete, an early example of the use of this material in the locality. Viewed from*

*Straffan Bridge to the south-east the presence of the structure has a picturesque effect on the river."*

**Description of Proposed Development**

The development is described as the removal of existing obsolete hydroelectric equipment and the installation/operation of a modern, efficient hydroelectric system including a turbine, associated cabling and works to inlet sluice gates/tail race at the K Club. The applicants planning consultant have described as follows:

*"All repair, replacement and installation works are entirely within the footprint and internal confines of the existing powerhouse building associated intake infrastructure. No new structures are proposed and no extensions, demolition works or alterations to the external appearance of the buildings arises. The external fabric and character of the structure are retained and preserved. In this regard the AHAI confirmed that "all original surviving features will be retained and repaired." and that the works constitute maintenance and upgrading in nature.*

*The works included the temporary installation of a barrier within the existing channel to create a dry working area to facilitate the repair and replacement (maintenance) of the sluice gates and associated infrastructure. Any accumulated debris or material within the channel deposited into the River Liffey at any stage of the works.*
*The repair and renewal (maintenance) of the sluice gate system enable the gates to be raised and lowered as required, preventing unintended water loss and assisting in maintaining appropriate upstream water levels. This will support the continued functioning of the existing weir and fish pass by ensuring a consistent flow regime within the river channel."*

**Planning History**

**94/1351:** Permission **granted** for a 2 storey courtyard development consisting of 28 2 bedroom suite units with ancillary accommodation including general storage/linen storage/boilerhouse

**98/17:** Permission **granted** to retain conversion of two duplex units to one larger apartment at The K Club

**22/0032:** Retention permission was **granted** for of a change of use from use as two dwellings, to use as a single dwelling including external and internal alterations (part of Straffan Demesne, a Protected Structure Ref: B14-29) at 688/689 Garden Courtyard Apartments, The K Club, Straffan.

**22/432:** Retention permission was **granted** for change of use from use as two dwellings, to use as a single dwelling including external and internal alterations (part of Straffan Demesne, a Protected Structure Ref: B14-29).

There are multiple applications within the K Club grounds for extensions/alterations to the dwellings constructed within the demesne, these are not considered relevant to this Section 5 application.

**UD8607**: A warning letter was issued on the 02/04/2025 for:

- re-development and replacement of hydro scheme beside Straffan Weir
- works to the tail race.

**Relevant Legislative Background**

Planning and Development Act 2000 (as amended)

**Section 2(1)**

*'works' includes any act or operation of construction, excavation, demolition, extension, alteration, repair or renewal and, in relation to a protected structure or proposed protected structure, includes any act or operation involving the application or removal of plaster, paint, wallpaper, tiles or other material to or from the surfaces of the interior or exterior of a structure.*

**Section 3(1)**

*In this Act, 'development' means, except where the context otherwise requires, the carrying out of any works on, in, over or under land or the making of any material change in the use of any structures or other land.*

***Section 4(1)***

*The following shall be exempted development for the purposes of the Act-*

*(h) development consisting of the carrying out of works for the maintenance, improvement or other alteration of any structure, being works which affect only the interior of the structure or which do not materially affect the external appearance of the structure so as to render the appearance inconsistent with the character of the structure or of neighbouring structures;*

**Section 5(7) EIA Screening**

The proposed development is not specified in Part 2 of Schedule 5 of the Planning and Development Regulations 2001(as amended). In any event, it is considered, having regard to nature, size and location, the proposed development would not be likely to have significant effects on the environment. Therefore, EIA is not required.

**Section 57(1)**

*"the carrying out of works to a protected structure, or a proposed protected structure, shall be exempted development only if those works would not materially affect the character of— (a) the structure, or (b) any element of the structure which contributes to its special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest."*

Planning and Development Regulations 2001 (as amended)

**Article 6(1)**

Subject to article 9, development of a class specified in column 1 of Part 1 of Schedule 2 shall be exempted development for the purposes of the Act, provided that such

development complies with the conditions and limitations specified in column 2 of the said Part 1 opposite the mention of that class in the said column 1.

**Article 9 (1)(a)(i)**

Restrictions on exemption.

9. (1) Development to which article 6 relates shall not be exempted development for the purposes of the Act—

**Assessment**

***Section 4(1)***
*The following shall be exempted development for the purposes of the Act-*

*(h) development consisting of the carrying out of works for the maintenance, improvement or other alteration of any structure, being works which affect only the interior of the structure or which do not materially affect the external appearance of the structure so as to render the appearance inconsistent with the character of the structure or of neighbouring structures;*

The development as described and carried out on site relates to the maintenance and improvement of the internal engineering components of the turbine house. No material changes have occurred to the exterior of the turbine house. Therefore, the exterior of the structure remains materially unaltered.

**Section 57(1)**
*"the carrying out of works to a protected structure, or a proposed protected structure, shall be exempted development only if those works would not materially affect the character of— (a) the structure, or (b) any element of the structure which contributes to its special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest."*

The turbine house is located within the grounds of a protected structure, the turbine house is not included within the description in the Record of Protected Structures of the K-Club. The turbine house is also listed within the NIAH as regional importance.

Given the nature of the works that took place within the interior of the building and did not materially affect the exterior of the building or the associated landscape surrounding the turbine house, it is considered the development complies with Section 57(1) of the Planning and Development Act 2000 (as amended).

**Article 9 (1)(a)(i)**

Restrictions on exemption.

9. (1) Development to which article 6 relates shall not be exempted development for the purposes of the Act—

(a) if the carrying out of such development would

*(i) contravene a condition attached to a permission under the Act or be inconsistent with any use specified in a permission under the Act.*

Not applicable

*(ii) consist of or comprise the formation, laying out or material widening of a means of access to a public road the surfaced carriageway of which exceeds 4 metres in width,*

Not applicable

*(iii) endanger public safety by reason of traffic hazard or obstruction of road users,*

Not applicable

*(iv) except in the case of a porch to which class 7 specified in column 1 of Part 1 of Schedule 2 applies and which complies with the conditions and limitations specified in column 2 of the said Part 1 opposite the mention of that class in the said column 1, comprise the construction, erection, extension or renewal of a building on any street so as to bring forward the building, or any part of the building, beyond the front wall of the building on either side thereof or beyond a line determined as the building line in a development plan for the area or, pending the variation of a development plan or the making of a new development plan, in the draft variation of the development plan or the draft development plan,*

Not applicable

*(v) consist of or comprise the carrying out under a public road of works other than a connection to a wired broadcast relay service, sewer, water main, gas main or electricity supply line or cable, or any works to which class 25, 26 or 31 (a) specified in column 1 of Part 1 of Schedule 2 applies,*

Not applicable

*(vi) interfere with the character of a landscape, or a view or prospect of special amenity value or special interest, the preservation of which is an objective of a development plan for the area in which the development is proposed or, pending the variation of a development plan or the making of a new development plan, in the draft variation of the development plan or the draft development plan,*

The view from the River Liffey from Straffan Bridge is listed on table 13.7 of the Kildare County Development Plan 2023-2029 as view RL4- view 46.

The development will not impact on the view from Straffan bridge as the exterior of the structure has not been altered.

*(vii) consist of or comprise the excavation alteration or demolition (other than peat*

*extraction) of places, caves, sites, features or other objects of archaeological, geological, historical, scientific or ecological interest, the preservation, conservation or protection of which is an objective of a development plan or local area plan for the area in which the development is proposed or, pending the variation of a development plan or local area plan, or the making of a new development plan or local area plan, in the draft variation of the development plan or the local area plan or the draft development plan or draft local area plan,*
Not applicable

*(viiA) consist of or comprise the excavation, alteration or demolition of any archaeological monument included in the Record of Monuments and Places, pursuant to section 12 (1) of the National Monuments (Amendment) Act 1994, save that this provision shall not apply to any excavation or any works, pursuant to and in accordance with a consent granted under section 14 or a licence granted under section 26 of the National Monuments Act 1930 (No. 2 of 1930) as amended,*

Not applicable

*(viiB) comprise development in relation to which a planning authority or An Bord Pleanála is the competent authority in relation to appropriate assessment and the development would require an appropriate assessment because it would be likely to have a significant effect on the integrity of a European site,*

The site relates to the River Liffey and the River Liffey is hydrologically linked to the Rye Water Valley Carton SAC (European site) c.8.7km). The development may or may not result in the negatively impacting on the volume/flow which may or may not have an adverse impact on the ecology of the river and the Rye Water Valley Carton SAC. The AA screening submitted within this Section 5 is noted, however it does not examine any changes to the volume of water, the removal of existing obsolete hydroelectric equipment and the installation/operation of a modern, efficient hydroelectric system including a turbine, associated cabling and works to inlet sluice gates/tail race would have on this SAC. Further information in this regard will be sought.

*(viiC) consist of or comprise development which would be likely to have an adverse impact on an area designated as a natural heritage area by order made under section 18 of the Wildlife (Amendment) Act 2000.*

The site relates to the River Liffey and the River Liffey is hydrologically linked to the Grand Canal (pNHA) at Sallins. The development may or may not result in the negatively impacting on the volume/flow which may or may not have an adverse impact on the pNHA. Further information in this regard will be sought.

*(viii) consist of or comprise the extension, alteration, repair or renewal of an unauthorised structure or a structure the use of which is an unauthorised use,*

Not applicable

*(ix) consist of the demolition or such alteration of a building or other structure as would preclude or restrict the continuance of an existing use of a building or other structure where it is an objective of the planning authority to ensure that the building or other structure would remain available for such use and such objective has been specified in a development plan for the area or, pending the variation of a development plan or the making of a new development plan, in the draft variation of the development plan or the draft development plan,*

Not applicable

*(x) consist of the fencing or enclosure of any land habitually open to or used by the public during the 10 years preceding such fencing or enclosure for recreational purposes or as a means of access to any seashore, mountain, lakeshore, riverbank or other place of natural beauty or recreational utility,*

Not applicable

*(xi) obstruct any public right of way,*

Not applicable

*(xii) further to the provisions of section 82 of the Act, consist of or comprise the carrying out of works to the exterior of a structure, where the structure concerned is located within an architectural conservation area or an area specified as an architectural conservation area in a development plan for the area or, pending the variation of a development plan or the making of a new development plan, in the draft variation of the development plan or the draft development plan and the development would materially affect the character of the area,*

Not applicable

*(b) in an area to which a special amenity area order relates, if such development would be development*

Not applicable

*(c ) if it is development to which Part 10 applies, unless the development is required by or under any statutory provision (other than the Act or these Regulations) to comply with procedures for the purpose of giving effect to the Council Directive*

Not applicable

*(d) if it consists of the provision of, or modifications to, an establishment, and could have significant repercussions on major accident hazards*

Not applicable

*(2) Sub-article (1)(a)(vi) shall not apply where the development consists of the construction by any electricity undertaking of an overhead line or cable not exceeding 100 metres in length for the purpose of conducting electricity from a distribution or transmission line to any premises*

Not applicable

*(3) For the avoidance of doubt, sub-article (1)(a)(vii) shall not apply to any operation or activity in respect of which a Minister of the Government has granted consent or approval in accordance with the requirements of regulation 31 of the Habitats Regulations 1997, and where regulation 31(5) does not apply*

Not applicable

**FURTHER INFORMATION:**

The following **further information** was requested and the response is as follows:

**1**. Article 9 (vii) (b) & (c) of the Planning and Development Regulations 2001 (as amended) has restrictions on exemptions in relation to development that may require Appropriate Assessment and/or may have an adverse impact on Natural Heritage Areas. Having regard to the foregoing, the Applicant is requested to examine how the potential changes to the volume of water/flow rates, facilitated by the changing the turbine mechanism, may or may not have an adverse impact on the ecology of the River Liffey, therefore potentially impacting on the Rye Water Valley/Carton SAC and the Grand Canal pNHA, which are both hydrologically linked to the River Liffey.

**Applicants response:** The Rye Water Valley/Carton SAC while hydrologically linked to the River Liffey, is located upstream of the confluence between the Rye Water River and the River Liffey. As such there cannot be any possibility of impacts to the Rye Water Valley Carton SAC.

The EIA screening report states that no impacts to either the NHA's or pNHAs are envisaged. The report states:

*"A review of the Natural Heritage Areas within a 15km radius of the subject site identifies one designated NHA and 12 no. Propsoed NHAs (pNHAs). No substantial source –pathway-receptor linkages have been identified which could give rise to effects upon any other Natural Heritage Areas identified. Significant effects upon Natural Heritage Areas arising as a result of the proposed development are not considered likely."*

Notwithstanding this the K Club requested that Ecohydro provides some additional information in relation to the flow rates and a document from Ecohydro is included.

This document outlines that

*"Water has been freely flowing through the existing hydropower unit for approximately one hundred years. Flowrate surveys indicate the existing small hydropower unit indicated a maximum discharge of up to 7m3/s. Upon inspection, water was physically passing through the original system, at approximately 2m3/s."*

The old obsolete system was replaced with smaller, more efficient equipment inside the existing building. The new equipment is of smaller technical design to the original installation.

The repaired unit now ensures that flowrate is prioritised in the fish pass and over the weir. Modern level sensors ensure the correct operation at all times.

Sensors are now positioned above and below he unit which is constantly monitor the level of the river. This means that the new unit inlet gates will automatically close if the depth of the water passing over the weir drops below 25cm. This ensures that the ecological flow is preserved at all times. (this was not previously possible).

When the river is in full flood, the maximum discharge of the updated unit is now 2m3/s, which is less than the original system. The unit can now operate with as little as 0.015m3/s.

Having regard to the above it is respectfully submitted that the proposals will not impact upon the pNHA.

**Planners Appraisal:** The response is noted. Having regard to the same, it is considered the proposal would not have an adverse impact on the Rye Water Valley/Carton SAC of the Grand Canal pNHA.

The proposal may need an abstraction licence from the EPA given the volume of water potentially being abstracted (indicated at a maximum c.1,692,000m3 per day) but this is beyond the scope of the Planning Authority.

**Section 5(7) EIA Screening**

The development is not specified in Part 2 of Schedule 5 of the Planning and Development Regulations 2001(as amended). In any event, it is considered, having regard to nature, size and location, the proposed development would not be likely to have significant effects on the environment. Therefore, EIA is not required.

**Appropriate Assessment Screening**

A screening for Appropriate Assessment accompanies this report.

**Conclusion**

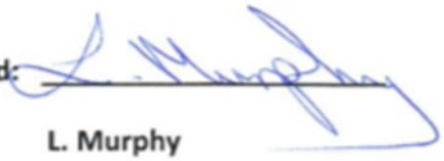
Having regard to:

- Sections 4 and 57 of the Planning and Development Act 2000 (as amended);
- Articles 6 and 9 of the Planning and Development Regulations 2001 (as amended); and
- The nature, extent and purpose of the works;

it is considered that the proposed works **constitutes development** as defined in Section 3(1) of the Planning and Development Act 2000 (as amended) and **is exempted development** as defined by the Planning and Development Act 2000 (as amended) and the Planning and Development Regulations 2001 (as amended).

**Recommendation**

It is recommended that the applicant be advised that the development as described in the application is development and is exempted development.

Signed: 

L. Murphy

Executive Planner

**Date: 20/07/2026**

Carroll Melia

_____

Carroll Melia

Senior Executive Planner

24th July 2026

**Declaration of Development & Exempted Development under Section 5 of the Planning and Development Act 2000 (as amended)**

**WHEREAS** a question has arisen as to whether the removal of existing obsolete hydroelectric equipment and the installation/operation of a modern, efficient hydroelectric system including a turbine, associated cabling and works to inlet sluice gates/tail race at the K Club, Straffan Co. Kildare is or is not development and is or is not exempted development

**AS INDICATED** on the plans and particulars received by the Planning Authority on 28th March 2026 and the 6th of July 2026.

**AND WHEREAS** The K Club requested a declaration on the said question from Kildare County Council,

**AND WHEREAS** Kildare County Council as the Planning Authority, in considering this application for a declaration under Section 5 of the Planning and Development Act 2000 (as amended), had regard to;

(a) Planning and Development Act 2000 (as amended); and
(b) Planning and Development Regulations 2001 (as amended);

**AND WHEREAS** Kildare County Council has concluded that the proposal comprises of development to which the provisions of the following applies:

(a) Sections 4, and 57 of the Planning and Development Act 2000 (as amended);
(b) Article 6 and 9 of the Planning and Development Regulations 2001 (as amended)
(c) The nature, extent and purpose of the works,

**NOW THEREFORE** Kildare County Council, in exercise of the powers conferred on it by Section 5(2)(a) of the Planning and Development Act 2000 (as amended), hereby decides that -

the removal of existing obsolete hydroelectric equipment and the installation/operation of a modern, efficient hydroelectric system including a turbine, associated cabling and works to inlet sluice gates/tail race at the K Club, Straffan Co. Kildare

***IS DEVELOPMENT and IS EXEMPTED development pursuant to Sections 4 and 57 of the Planning and Development Act 2000 (as amended) and Articles 6 and 9 of the Planning and Development Regulations 2001 (as amended).***

Please note that any person issued with a declaration under Section 5 of the Planning and Development Act 2000 (as amended) may on payment to An Coimisiún of the prescribed fee, refer a declaration to An Coimisiún Pleanála within 4 weeks of the issuing of the decision.

Signed: _____

**Date: 20/07/2026**

**Appendix 1: Appropriate Assessment Screening**

**APPROPRIATE ASSESSMENT SCREENING REPORT**
**AND**
**DETERMINATION**

| **(A) Project Details** | |
|---|---|
| **Planning File Ref** | ED1362 |
| **Applicant name** | The K Club |
| **Development Location** | The K Club, Straffan, Co Kildare |
| **Site size** | Unknown |
| **Application accompanied by an EIAR (Yes/NO)** | N/A |
| **Distance from Natura 2000 site in km** | The site is c.9km southwest of Rye Water Valley/Carton SAC.<br>The site is c.10km northeast Ballynafagh Bog SAC and c.11km northeast Ballynafagh Lake SAC.<br>Red Bog SAC c.13km southeast of the site.<br><br>South Dublin Bay SAC is c.27km east of the application site and is beyond the zone of influence. |
| **Description of the project/proposed development –**<br>The removal of existing obsolete hydroelectric equipment and the installation/operation of a modern, efficient hydroelectric system including a turbine, associated cabling and works to inlet sluice gates/tail race at the K Club | |

| **(B) Identification of Natura 2000 sites which may be impacted by the proposed development** | |
|---|---|
| | **Yes/No**<br>**If answer is yes, identify list name of Natura 2000 site likely to be impacted.** |

| | | | |
|---|---|---|---|
| **1** | **Impacts on sites designated for freshwater habitats or species.**<br><br><u>Sites to consider</u>: River Barrow and Nore, Rye Water/Carton Valley, Pollardstown Fen, Ballynafagh lake | *Is the development within a Special Area of Conservation whose qualifying interests include freshwater habitats and/or species, or in the catchment (upstream or downstream) of same?* | **N/A** |
| **2** | **Impacts on sites designated for wetland habitats - bogs, fens, marshes and heath.**<br><u>Sites to consider</u>: River Barrow and Nore, Rye Water/Carton Valley, Pollardstown Fen, Mouds Bog, Ballynafagh Bog, Red Bog, Ballynafagh Lake | *Is the development within a Special Area of Conservation whose qualifying interests include wetland habitats (bog, marsh, fen or heath), or within 1 km of same?* | **N/A** |
| **3** | **Impacts on designated terrestrial habitats.**<br><u>Sites to consider</u>: River Barrow and Nore, Rye Water/Carton Valley, Pollardstown Fen, Ballynafagh Lake | *Is the development within a Special Area of Conservation whose qualifying interests include woodlands, dunes or grasslands, or within 100m of same?* | **N/A** |
| **4** | **Impacts on birds in SPAs**<br><u>Sites to consider:</u><br>Poulaphouca Reservoir | *Is the development within a Special Protection Area, or within 5 km of same?* | **N/A** |

**Conclusion:**
If the answer to all of the above is **No**, significant impacts can be ruled out for habitats and bird species.
No further assessment in relation to habitats or birds is required.
If the answer is **Yes** refer to the relevant sections of **C**.

| **(G) SCREENING CONCLUSION STATEMENT**<br>*Selected relevant category for project assessed by ticking box.* | | |
|---|---|---|
| **1** | AA is not required because the project is directly connected with/necessary to the conservation management of the site | |
| **2** | No potential significant affects/AA is not required | X |
| **3** | Significant effects are certain, likely or uncertain.<br>Seek a Natura Impact Statement<br>Reject proposal. (Reject if potentially damaging/inappropriate) | |

| **Justify why it falls into relevant category above (based on information in above tables)** | |
|---|---|
| Based on the information provided, the development would not have a significant impact on the qualifying interest of a European site. | |
| **Name:** | L. Murphy |
| **Position:** | Executive Planner |
| **Date:** | 20th July 2026 |

# COMHAIRLE CONTAE CHILL DARA

# KILDARE COUNTY COUNCIL

## Director of Services Order

I, Alan Dunney, Director of Services of Planning, Enterprise & Economic Development, by the powers conferred on the Chief Executive of Kildare County Council under Section 151 of the Local Government Act 2001, as amended by the Local Government Reform Act 2014, and which powers are delegated to me pursuant to Section 154 of the Local Government Act 2001 (as amended ) by Chief Executive's Order number: CE63325, do hereby make the following Order:

**ORDER NO:** DO66979 **Section:** Planning

**SUBJECT:** ED/1362
The K Club, Straffan Co Kildare. C/O Rory Kunz, JSA Planning, 39 Fitzwilliam Place, Dublin 2. Exempt Development Application whether the removal of existing obsolete hydroelectric equipment and the installation/operation of a modern, efficient hydroelectric system including a turbine, associated cabling and works to inlet sluice gates/tail race is or is not exempt Development.

**SUBMITTED:** File Ref. ED1362 with recommendation from the Senior Executive Planner and reports from the Council's Technical Officers.

**ORDER:** **I hereby order the following** Kildare County Council, in exercise of the powers conferred on it by Section 5(2)(a) of the Planning and Development Act 2000 (as amended) hereby decides that the proposed development is development and is exempted development.

MADE THIS 28th DAY

OF July YEAR 2026

SIGNED: Alan Dunney

**DIRECTOR OF SERVICES**

JSA PLANNING

39 Fitzwilliam Place, Dublin 2, D02 ND61

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info@jsaplanning.ie
jsaplanning.ie

Kildare County Council
Planning Department
06 JUL 2026
RECEIVED

Kildare County Council,
Aras Chill Dara,
Devoy Park,
Naas,
Co Kildare
W91 X77F

Date: 3rd July 2026
Ref.: 26106/RK/JT

**Re: ED/1362 Further Information Response to Request from Kildare County Council in respect of proposals at the K Club, Straffan, Co Kildare**

Dear Sir / Madam,

## 1.0 INTRODUCTION

On behalf of the applicant the K Club, Straffan, Co. Kildare, we hereby submit this further information response in respect of the request made by Kildare County Council on the 18th of May 2026 in respect of ED/1362.

## 2.0 FURTHER INFORMATION RESPONSE

The request from Kildare County Council seeks the following clarifications:

*"Article 9 (vii) (b) & (c) of the Planning and Development Regulations 2001 (as amended) has restrictions on exemptions in relation to development that may require Appropriate Assessment and/or may have an adverse impact on Natural Heritage Areas. Having regard to the foregoing, the Applicant is requested to examine how the potential changes to the volume of water/flow rates, facilitated by the changing the turbine mechanism, may or may not have an adverse impact on the ecology of the River Liffey, therefore potentially impacting on the Rye Water Valley/Carton SAC and the Grand Canal pNHA, which are both hydrologically linked to the River Liffey."*

Natura 2000 Sites

Article 9 (vii) (b) of the Planning and Development Regulations states:

*"(viiB) comprise development in relation to which a planning authority or An Bord Pleanála is the competent authority in relation to appropriate assessment and the development would require an appropriate assessment because it would be likely to have a significant effect on the integrity of a European site,"*

We would note that the ORS AA screening states:

*"There are no Natura 2000 designated sites (SACs or SPAs) located within the ZoI of the proposed site (**Figure 5.1**). The closest site, the Rye Water Valley/Carton SAC, lies ca. 8.71 km northeast of the site, which is too far for potential S-P-R linkage given the nature and scale of the development (**Table 4.2**). The closest downstream Natura 2000 site, South Dublin Bay SAC, is ca. 27.0 km east, which is far beyond any plausible impact given the Zone of Influence."*

We would also highlight that the Rye Water Valley/Carton SAC, while hydrologically linked to the River Liffey, is located upstream of the confluence between the Rye Water River and the River Liffey. As such there cannot be any possibility of impacts to the Rye Water Valley/Carton SAC.

**Figure 1: River Liffey and Rye Water Confluence**

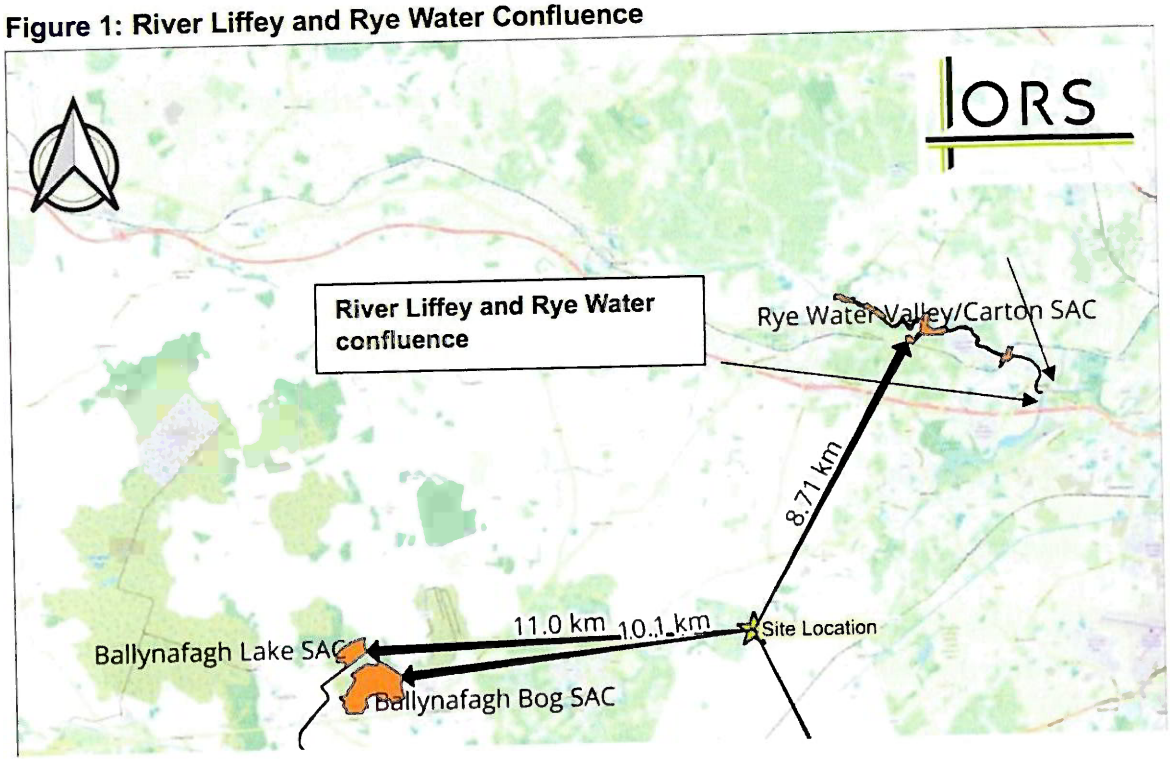
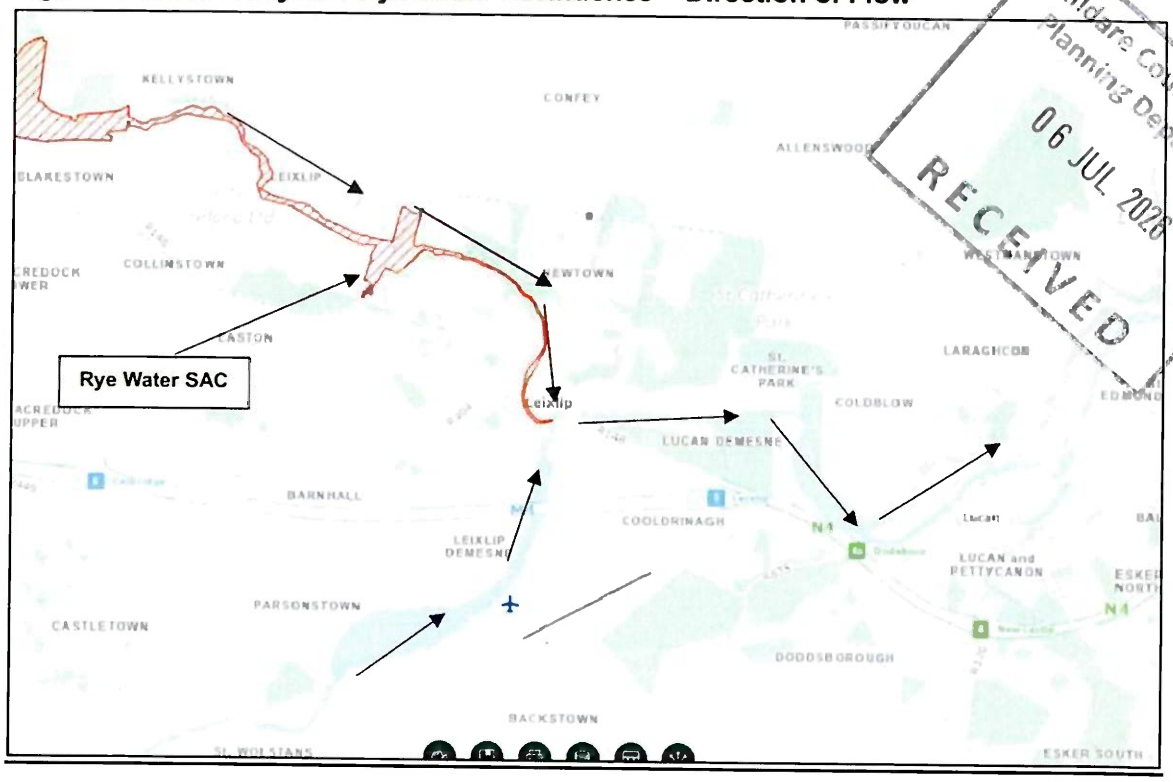


**Figure 2: River Liffey and Rye Water Confluence – Direction of Flow**




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Natural Heritage Area

Article 9 (vii) (b) of the Planning and Development Regulations states:

*"(viiC) consist of or comprise development which would be likely to have an adverse impact on an area designated as a natural heritage area by order made under section 18 of the Wildlife (Amendment) Act 2000."*

Section 18 of the Wildlife Act states:

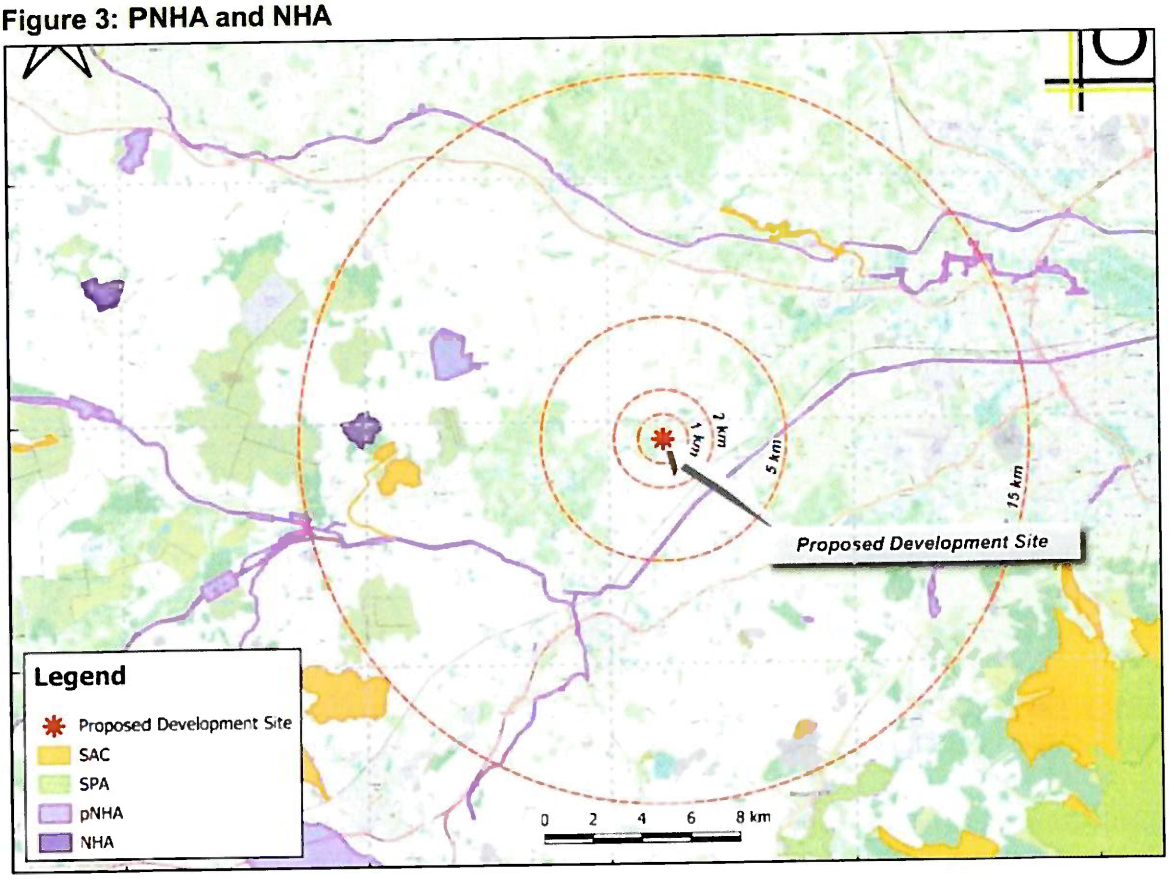
***18.**—(1) The Minister shall, after considering any objections duly made in relation to the notice served under subsection (2)(b) of section 16 or pursuant to any amendment to such notice and if the Minister thinks fit, make in relation to the land specified in the notice published pursuant to that section or any part of such land, an order (in this Act referred to as a "natural heritage area order") designating that land, or any part thereof, a natural heritage area and the order may include such provisions as the Minister thinks fit which relate to protective measures so specified.*

With reference to the above we would note that the Article above relates to Natural Heritage Areas and note that the Grand Canal is a pHNA, which does not have the same level of protection. This is confirmed in Section 18 above, which references natural heritage area. Nevertheless, as set out in the ORS EIA screening report, no impacts to either NHAs or pNHAs are envisaged stating:

*"A review of Natural Heritage Areas within a 15 km radius of the subject site identifies one designated NHA and 12 no. proposed NHAs (pNHAs).* ***No substantial source-pathway-***

***receptor linkages have been identified which could give rise to effects upon any other Natural Heritage Areas identified**. Significant effects upon Natural Heritage Areas arising as a result of the proposed development are not considered likely."* (JSA emphasis added).

**Figure 3: PNHA and NHA**




Notwithstanding this the K Club requested that Ecohydro provide some additional information in relation to the flow rates and a document from Ecohydro is included (see Appendix A).

The document outlines that

*"Water has been freely flowing through the existing hydropower unit for approximately one hundred years. Flowrate surveys inside the existing small hydropower unit indicated a maximum discharge of up to 7 m3/s. Upon inspection, water was physically passing through the original system at approximately 2 m3/s."*

The old obsolete system was replaced with smaller, more efficient equipment inside the existing building. The new equipment is of a similar technical design to the original installation

The repaired unit now ensures that flowrate is prioritised in the fish pass and over the weir. Modern level sensors ensure the correct operation at all times.

Sensors are now positioned above and below the unit which constantly monitor the level of the river. This means that the new unit inlet gates will **automatically close** if the depth of water passing over the weir drops below 25cm. This ensures that the ecological flow is preserved at all times. (this was not previously possible)

When the river is in full flood, the maximum discharge of the updated unit is now 2 m3/s, which is less that the original system. The unit can now operate with as little as 0.015 m3/s.

Having regard to the above it is respectfully submitted that the proposals will not impact upon the pNHA.

## 3.0 SUMMARY AND CONCLUSIONS

We trust that the information contained in this response are acceptable to Kildare County Council.

Having regard to the above, it is respectfully requested that Kildare County Council issues a Section 5 Declaration to the following effect or similar:

*"In considering this application for a Section 5 Declaration, the Planning Authority had regard to the following in particular:*

*(a) The plans and particulars submitted;*
*(b) The John Greene Architectural Heritage Report,*
*(c) The Kildare County Development Plan 2023-2029;*
*(d) EIA and AA Screening Reports by ORS;*
*(e) The Architectural Heritage Guidelines for Planning Authorities 2004 and 2011;*
*(f) Section 4(1)(h) of the Planning and Development Act 2000 as amended And the Planning Authority concluded that:*

*The following works are considered to be "development" and exempted development pursuant to Section 4(1)(h) of the Development Act 2000 as amended:*

*"that the removal of existing obsolete hydroelectric equipment and the installation/operation of a modern, efficient hydroelectric system including a turbine, associated cabling and works to inlet sluice gates/tail race at the K Club, Straffan, Co. Kildare."*

Please do not hesitate to contact the undersigned should you require any further information in relation to this Section 5 Declaration.

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Yours sincerely,

JSA Planning

**JSA Planning**

JSA

## APPENDIX A – ECOHYDRO RESPONSE

ECO HYDRO

June 2026

## Flowrate of the River Liffey at K Club Small Hydroelectric System

Summary of onsite repairs works:

- No buildings of any kind were constructed
- No structures were extended
- No buildings were demolished
- No buildings underwent a change of use
- No buildings were painted or coated externally
- Built heritage was preserved
- Repair works were carried out within the footprint of the existing building
- No materials or debris of any kind was deposited dumped into the river.

**RIVER LIFFEY FLOWRATE**

The long-term mean flowrate of the River Liffey is recorded at 18 cubic meters per second ($m^3/s$), and ranges up to approximately 30 $m^3/s$ during winter months.

The flowrate of the River Liffey within County Kildare is controlled by State operated hydroelectric systems located at:

Upstream of K Club:

- Poulaphouca Hydroelectric Dam (maximum discharge 80 $m^3/s$)
- Golden Falls Hydroelectric Dam (maximum discharge 30 $m^3/s$)

Downstream of K Club:

- Leixlip Hydroelectric Dam (maximum discharge 30 $m^3/s$)

These hydroelectric systems are operated by ESB, which control the discharged flowrates depending on immediate generation requirements and river conditions.

https://esb.ie/what-we-do/generation-and-trading/hydrometric-information

These ESB installations span the entire breadth of the River Liffey and control flow and levels of the river in County Kildare.

NOTE:
The existing small hydropower system at K Club does not alter the flowrate or levels of the River Liffey upstream or downstream of Straffan Weir.

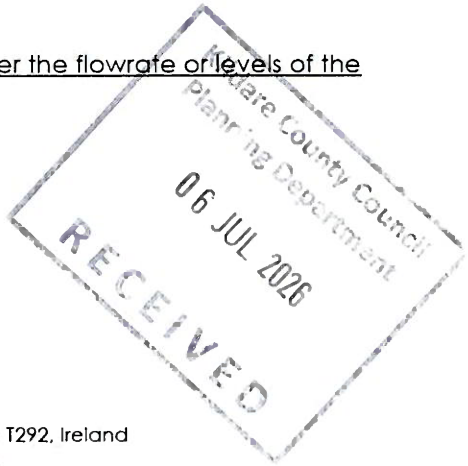




*fig 1: Poulaphouca Hydroelectric Dam located upstream of K Club*

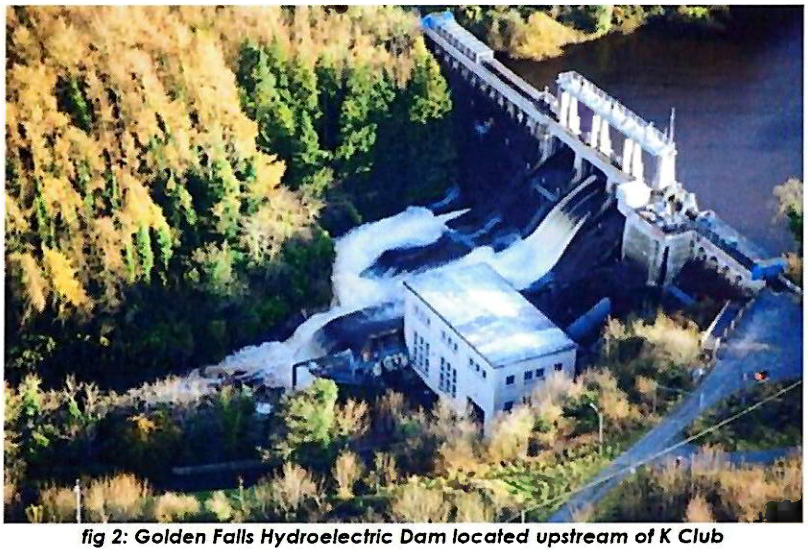


*fig 2: Golden Falls Hydroelectric Dam located upstream of K Club*

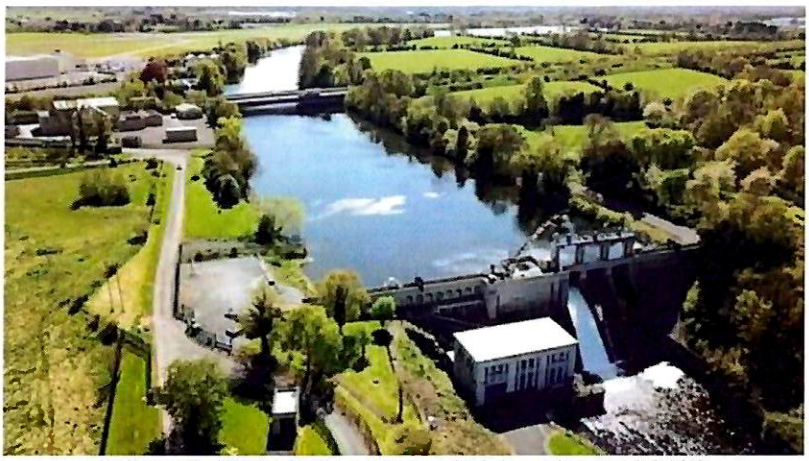


*fig 3: Leixlip Hydroelectric Dam located downstream of K Club*

ECO HYDRO

## SITE INSPECTION AND FLOWRATE ANALYSIS

The existing hydroelectric system at the K Club was installed in circa 1925. The system provided renewable energy for Straffan Estate and the streetlights in Straffan Village. During the 1980s the system was upgraded with new electronic equipment and fuseboards.

Upon initial inspection of the location, Straffan Weir was completely dry and no water was flowing through the existing fish pass. This was caused due to water escaping and jetting through the broken boards in all three sluice gates which are positioned on the southern bank of the weir.



***fig 4: Before Repair: Straffan Weir and fish pass completely dry due to water jetting through the broken sluice gates on the southern bank.***

This caused the river to fall below the level of the existing fish pass. The result of which meant that there was no water flowing over the weir or through the fish pass.

Due to the pressure of water passing through the broken sluice gates, the dry fish ladder, and the cumulation of debris, the conditions made it impossible for aquatic life to migrate upstream or downstream.

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*fig 5: Before Repair: Straffan Weir and fish pass dry due to water jetting through the broken sluice gates on the southern bank. (Note the small size of the existing generator shed)*

The broken sluice gates was repaired (see below) and water is now flowing correctly through the fish pass and over the weir. These repairs ensure that water constantly flows through the fish pass and over the weir, even during drought conditions.

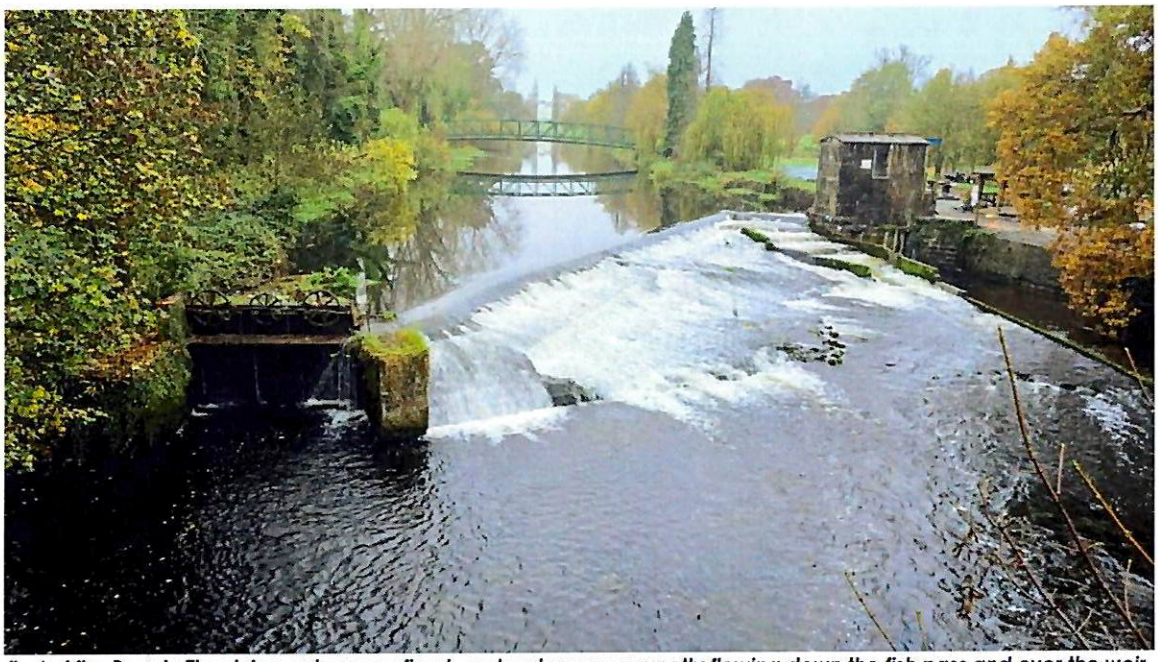


*fig 6: After Repair: The sluice gates were fixed, and water now correctly flowing down the fish pass and over the weir.*

ECO HYDRO

Water has been freely flowing through the existing hydropower unit for approximately one hundred years. Flowrate surveys inside the existing small hydropower unit indicated a maximum discharge of up to 7 $m^3/s$. Upon inspection, water was physically passing through the original system at approximately 2 $m^3/s$.

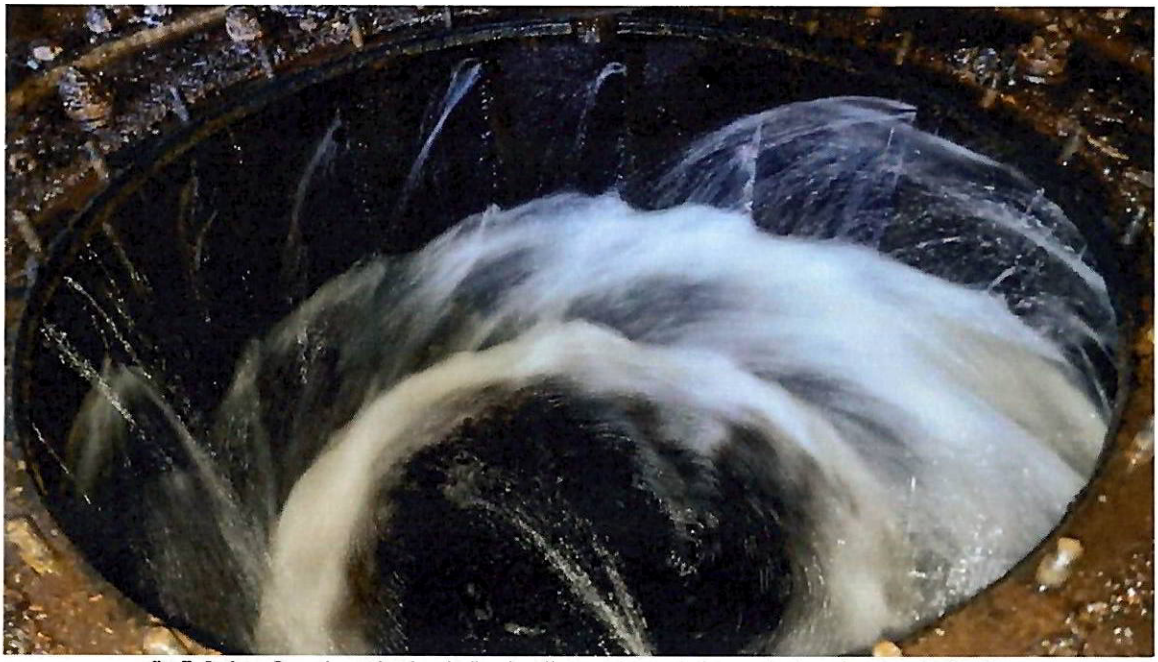


***fig 7: Before Repair: water freely flowing though the existing unit at a rate of up to 2 $m^3/s$***

Note:
The flowrate through the existing unit was uncontrollable in its state of disrepair.



***fig 8: Before Repair: water freely flowing though the existing unit at a rate of up to 2 $m^3/s$.***

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The old obsolete system was replaced with smaller, more efficient equipment inside the existing building. The new equipment is of a similar technical design to the original installation.

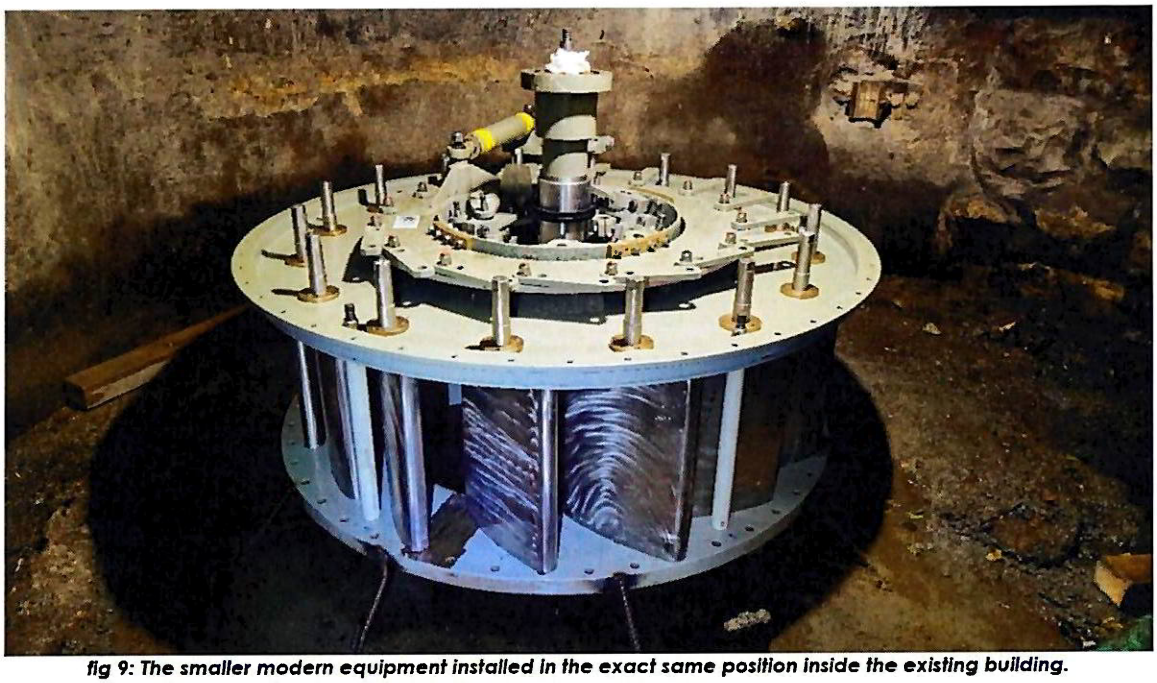


***fig 9: The smaller modern equipment installed in the exact same position inside the existing building.***

**FLOWRATE CONTROL**

The repaired unit now ensures that flowrate is prioritised in the fish pass and over the weir. Modern level sensors ensure the correct operation at all times.

Sensors are now positioned above and below the unit which constantly monitor the level of the river. This means that the new unit inlet gates will **automatically close** if the depth of water passing over the weir drops below 25cm. This ensures that the ecological flow is preserved at all times. (this was not previously possible)

The modern unit is smaller in size compared to the original and has a lower discharge flowrate. Even if the river is in high flood, the flowrate into the unit is limited. In low water conditions, the unit automatically shuts down.

The direction of water flow is not diverted in any way compared to the original system.

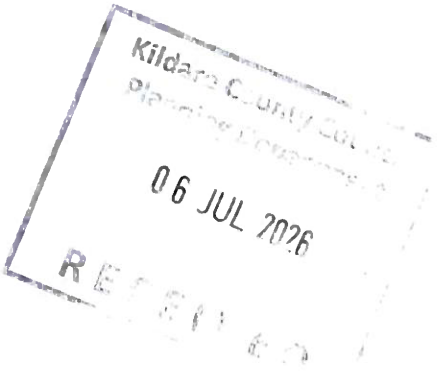
The original upstream trash rack which was in place is reused onsite. The original trash rack which was in situ has vertical bars with a separation of approximately 50mm. Eco Hydro is cognisant of the guidelines for small hydropower systems published by Inland Fisheries Ireland in 2004. An updated seasonal smolt screen is currently being prepared for the hydro intake and will soon be installed at the K Club system.

When the river is in full flood, the maximum discharge of the updated unit is now 2 $m^3/s$, which is less that the original system. The unit can now operate with as little as 0.015 $m^3/s$.

ECO HYDRO

CONCLUSION:

- The small hydropower unit located at Straffan Weir in the K Club does not affect the flowrate of the River Liffey, upstream or downstream.
- Ecological flow has been restored into the existing fish pass and weir.
- The repaired unit now automatically responds to river conditions, and will shut off in low water conditions to prioritise flow in the fish pass and over the weir.
- The fish pass and weir now have a permanent flow, where previously it was dry.
- The maximum discharge of the modern unit is 2 $m^3/s$, which is less than then old system.
- The conditions for bi-directional fish migration are greatly improved, supporting the regeneration of native species.
- No structures of any kind were built.
- No existing structures underwent a change of use.
- All hydroelectric repair works were completed inside the footprint of the existing powerhouse building.
- The repaired unit is in the same position as the old.
- The external walls of the existing shed were not changed or painted.
- No debris or rocks of any kind were deposited into the river.
- Any silt or mud which was removed from within the existing hydropower chamber was deposited on the riverbank.
- Debris and blockages in the fish pass and tail race were removed by hand.
- A build-up of blocks/stones were pushed aside to facilitate an improved flow for fish migration.
- The sluice gate on the southern bank is repaired.
- New smolts screens are to be used over the existing trash rack.
- The maximum discharge of the modern repaired unit is 2 $m^3/s$ during flood conditions.



**Comhairle Contae Chill Dara**
Kildare County Council

Date: 18th June 2026.
Our Ref: ED/1362.

The K Club,
C/O Rory Kunz
JSA Planning
39 Fitzwilliam Place
Dublin 2.

**RE: Application for a Declaration of Exempted Development under Section 5 of the Planning and Development Act 2000 (as amended) at The K Club, Straffan, Co Kildare.**

Dear Sir/Madam,

I refer to your application for a Section 5 Declaration received on 28th May 2026. The following further information is required to properly assess your application.

Article 9 (vii) (b) & (c) of the Planning and Development Regulations 2001 (as amended) has restrictions on exemptions in relation to development that may require Appropriate Assessment and/or may have an adverse impact on Natural Heritage Areas. Having regard to the foregoing, the Applicant is requested to examine how the potential changes to the volume of water/flow rates, facilitated by the changing the turbine mechanism, may or may not have an adverse impact on the ecology of the River Liffey, therefore potentially impacting on the Rye Water Valley/Carton SAC and the Grand Canal pNHA, which are both hydrologically linked to the River Liffey.

The time period for the Council's determination shall commence upon receipt of the above information.

Yours sincerely,

PP
**Senior Executive Officer**
**Planning Department**

**KILDARE COUNTY COUNCIL**

**PLANNING & STRATEGIC DEVELOPMENT DEPARTMENT**

**Section 5 referral & declaration on development & exempted development**

**Planning & Development Act 2000 (as amended)**

**Reference No. ED/1362**

| | |
|---|---|
| **Name Of Applicant(s):** | The K Club |
| **Address Of Development:** | The K Club, Straffan, Co Kildare |
| **Development Description:** | The removal of existing obsolete hydroelectric equipment and the installation/operation of a modern, efficient hydroelectric system including a turbine, associated cabling and works to inlet sluice gates/tail race at the K Club |
| **Due date** | 25/06/2026 |

## Introduction

This is a request for a **DECLARATION** under Section 5(1) of the Planning and Development Act 2000 (as amended) to establish whether under Section 5 of the Act the works the removal of existing obsolete hydroelectric equipment and the installation/operation of a modern, efficient hydroelectric system including a turbine, associated cabling and works to inlet sluice gates/tail race at the K Club, Straffan Co. Kildare is or is not exempted development.

## Site Location

The site is located within the grounds of The K Club demesne (Protected Structure, RPS B14-29 & B14-29B). The existing hydroelectric structure is located on the northern bank of the river Liffey, c.45m upstream from the Straffan Bridge (Protected Structure RPS B14-54). The turbine house is listed within the NIAH (11809031) and is located adjacent to the weir (NIAH 11809022). The surrounding context is a designed and managed parkland associated with The K Club estate.
It must be noted a turbine is indicated in this general location on the historic map dated 1888-1913.

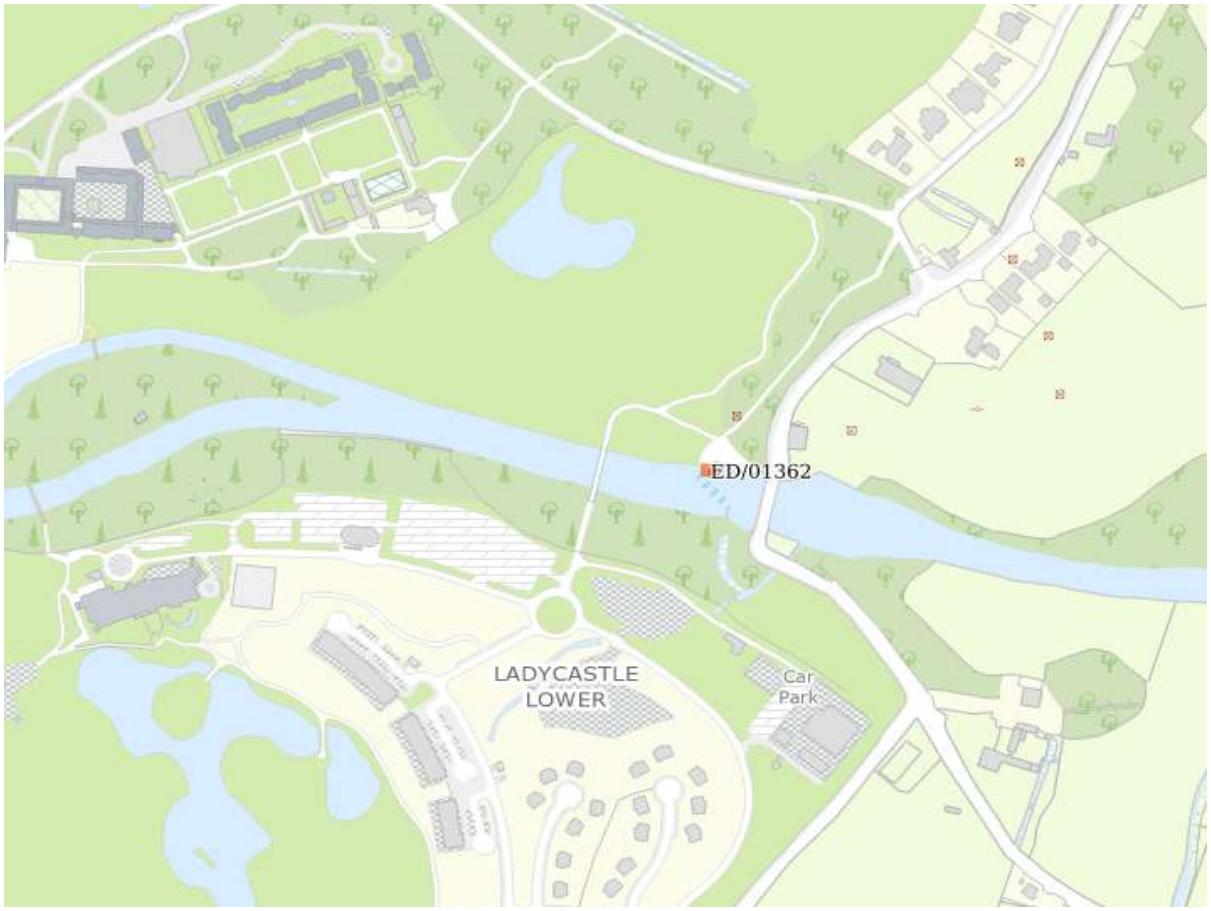


**Fig 1:** Site Location (ED/01362) and context (KCC GIS)


**Fig 2:** Aerial view of subject site outlined in red (KCC GIS)



**Fig. 3:** Interior of the turbine house

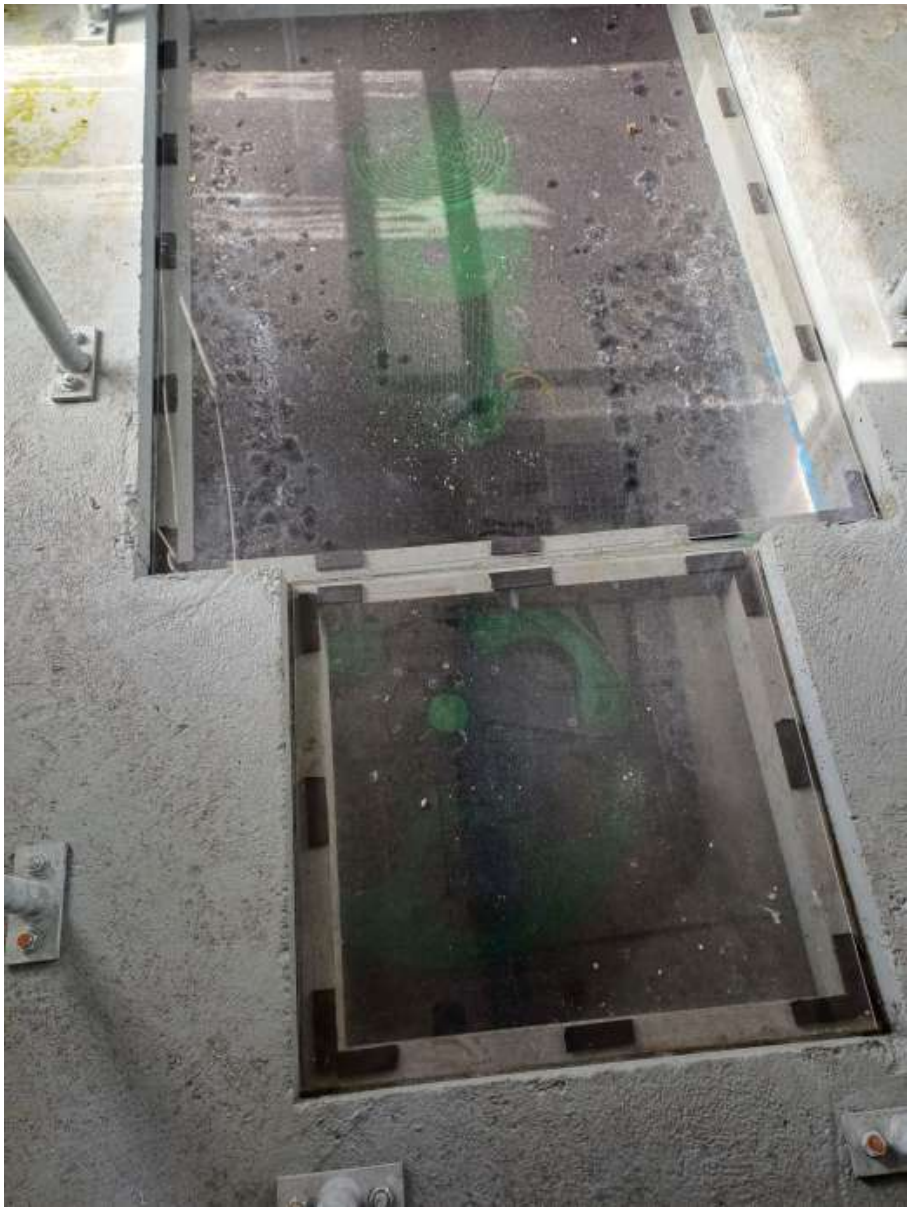


**Fig. 4:** Interior of the turbine house



**Fig. 4:** Exterior of the turbine house



**Fig 5:** Exterior of the turbine house

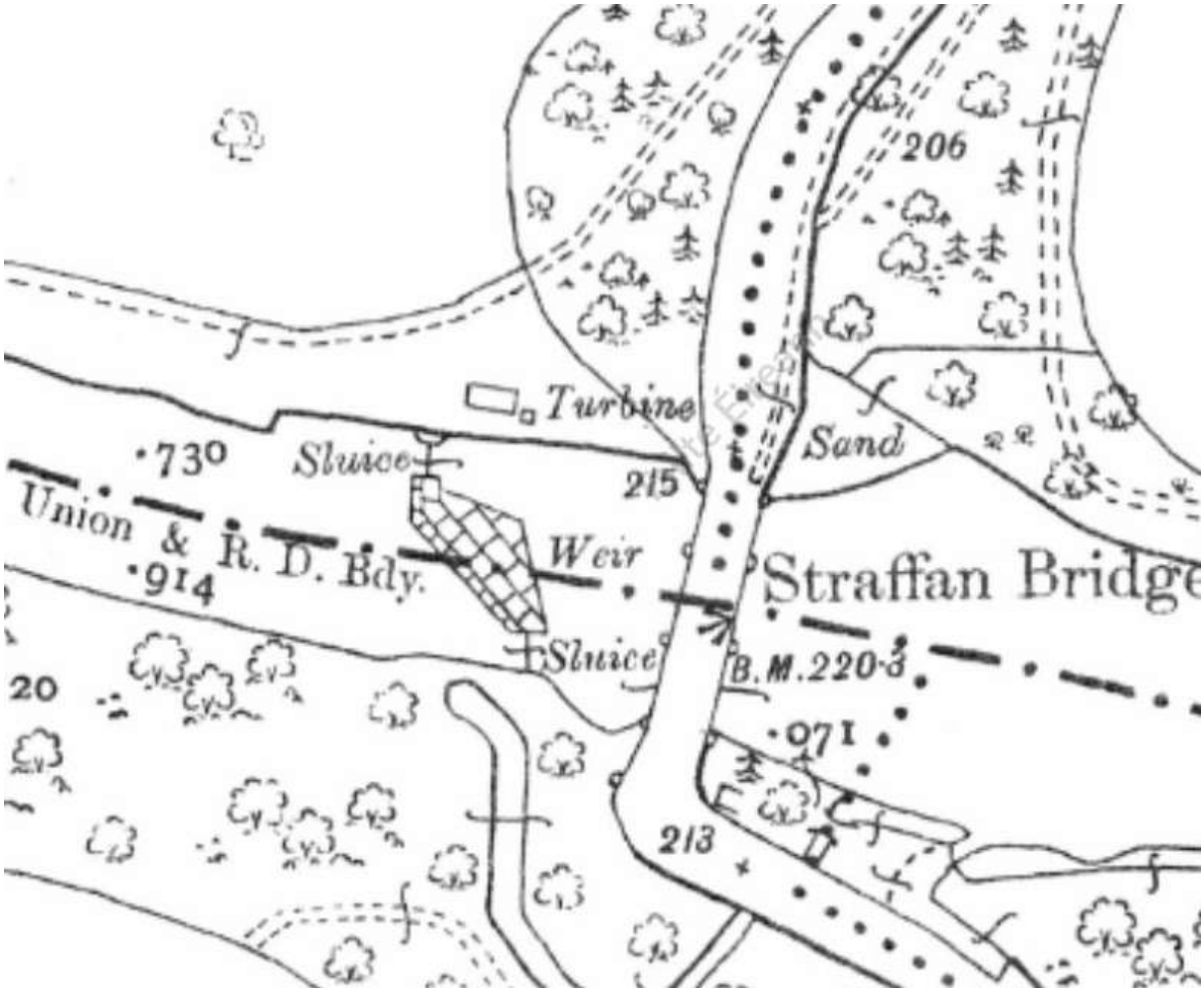



**Fig 6:** Extract from 1888-1913 map (KCC GIS)

The National Built Heritage Services has rated the turbine house as regional importance due to special interests in architecture, history, social and technical.

The description and appraisal are as follows in the National Built Heritage Services "*Detached single-bay single-storey mass-concrete hydro-electric turbine engine house, c.1930, retaining early fenestration. Gable-ended roof with concrete. Mass-concrete walls. Unpainted. Square-headed openings. No sills. Iron swivel windows. Iron double doors approached by flight of concrete steps. Sited on north bank of River Liffey.*

*This hydro-electric turbine engine house is of considerable technical or engineering interest, having been constructed immediately prior to the establishment of the National Electricity Network. The building is of interest for its construction in mass-concrete, an early example of the use of this material in the locality. Viewed from Straffan Bridge to the south-east the presence of the structure has a picturesque effect on the river."*

**Description of Proposed Development**

The development is described as the removal of existing obsolete hydroelectric equipment and the installation/operation of a modern, efficient hydroelectric system

including a turbine, associated cabling and works to inlet sluice gates/tail race at the K Club. The applicants planning consultant have described as follows:
*"All repair, replacement and installation works are entirely within the footprint and internal confines of the existing powerhouse building associated intake infrastructure. No new structures are proposed and no extensions, demolition works or alterations to the external appearance of the buildings arises. The external fabric and character of the structure are retained and preserved. In this regard the AHAI confirmed that "all original surviving features will be retained and repaired." and that the works constitute maintenance and upgrading in nature.*

*The works included the temporary installation of a barrier within the existing channel to create a dry working area to facilitate the repair and replacement (maintenance) of the sluice gates and associated infrastructure. Any accumulated debris or material within the channel deposited into the River Liffey at any stage of the works.*
*The repair and renewal (maintenance) of the sluice gate system enable the gates to be raised and lowered as required, preventing unintended water loss and assisting in maintaining appropriate upstream water levels. This will support the continued functioning of the existing weir and fish pass by ensuring a consistent flow regime within the river channel."*

## Planning History

**94/1351:** Permission **granted** for a 2 storey courtyard development consisting of 28 2 bedroom suite units with ancillary accommodation including general storage/linen storage/boilerhouse

**98/17:** Permission **granted** to retain conversion of two duplex units to one larger apartment at The K Club

**22/0032:** Retention permission was **granted** for of a change of use from use as two dwellings, to use as a single dwelling including external and internal alterations (part of Straffan Demesne, a Protected Structure Ref: B14-29) at 688/689 Garden Courtyard Apartments, The K Club, Straffan.

**22/432:** Retention permission was **granted** for change of use from use as two dwellings, to use as a single dwelling including external and internal alterations (part of Straffan Demesne, a Protected Structure Ref: B14-29).

There are multiple applications within the K Club grounds for extensions/alterations to the dwellings constructed within the demesne, these are not considered relevant to this Section 5 application.

**UD8607**: A warning letter was issued on the 02/04/2025 for:

- re-development and replacement of hydro scheme beside Straffan Weir
- works to the tail race.

**Relevant Legislative Background**

Planning and Development Act 2000 (as amended)

**Section 2(1)**

*'works' includes any act or operation of construction, excavation, demolition, extension, alteration, repair or renewal and, in relation to a protected structure or proposed protected structure, includes any act or operation involving the application or removal of plaster, paint, wallpaper, tiles or other material to or from the surfaces of the interior or exterior of a structure.*

**Section 3(1)**

*In this Act, 'development' means, except where the context otherwise requires, the carrying out of any works on, in, over or under land or the making of any material change in the use of any structures or other land.*

***Section 4(1)***

*The following shall be exempted development for the purposes of the Act-*

*(h) development consisting of the carrying out of works for the maintenance, improvement or other alteration of any structure, being works which affect only the interior of the structure or which do not materially affect the external appearance of the structure so as to render the appearance inconsistent with the character of the structure or of neighbouring structures;*

**Section 5(7) EIA Screening**

The proposed development is not specified in Part 2 of Schedule 5 of the Planning and Development Regulations 2001(as amended). In any event, it is considered, having regard to nature, size and location, the proposed development would not be likely to have significant effects on the environment. Therefore, EIA is not required.

**Section 57(1)**

*"the carrying out of works to a protected structure, or a proposed protected structure, shall be exempted development only if those works would not materially affect the character of— (a) the structure, or (b) any element of the structure which contributes to its special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest."*

Planning and Development Regulations 2001 (as amended)

**Article 6(1)**

Subject to article 9, development of a class specified in column 1 of Part 1 of Schedule 2 shall be exempted development for the purposes of the Act, provided that such development complies with the conditions and limitations specified in column 2 of the said Part 1 opposite the mention of that class in the said column 1.

**Article 9 (1)(a)(i)**

Restrictions on exemption.

9. (1) Development to which article 6 relates shall not be exempted development for the purposes of the Act—

**Assessment**

***Section 4(1)***
*The following shall be exempted development for the purposes of the Act-*

*(h) development consisting of the carrying out of works for the maintenance, improvement or other alteration of any structure, being works which affect only the interior of the structure or which do not materially affect the external appearance of the structure so as to render the appearance inconsistent with the character of the structure or of neighbouring structures;*

The development as described and carried out on site relates to the maintenance and improvement of the internal engineering components of the turbine house. No material changes have occurred to the exterior of the turbine house. Therefore, the exterior of the structure remains materially unaltered.

**Section 57(1)**
*"the carrying out of works to a protected structure, or a proposed protected structure, shall be exempted development only if those works would not materially affect the character of— (a) the structure, or (b) any element of the structure which contributes to its special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest."*

The turbine house is located within the grounds of a protected structure, the turbine house is not included within the description in the Record of Protected Structures of the K-Club. The turbine house is also listed within the NIAH as regional importance.

Given the nature of the works that took place within the interior of the building and did not materially affect the exterior of the building or the associated landscape surrounding the turbine house, it is considered the development complies with Section 57(1) of the Planning and Development Act 2000 (as amended).

**Article 9 (1)(a)(i)**

Restrictions on exemption.

9. (1) Development to which article 6 relates shall not be exempted development for the purposes of the Act—

(a) if the carrying out of such development would

*(i) contravene a condition attached to a permission under the Act or be inconsistent with any use specified in a permission under the Act.*

Not applicable

*(ii) consist of or comprise the formation, laying out or material widening of a means of access to a public road the surfaced carriageway of which exceeds 4 metres in width,*

Not applicable

*(iii) endanger public safety by reason of traffic hazard or obstruction of road users,*

Not applicable

*(iv) except in the case of a porch to which class 7 specified in column 1 of Part 1 of Schedule 2 applies and which complies with the conditions and limitations specified in column 2 of the said Part 1 opposite the mention of that class in the said column 1, comprise the construction, erection, extension or renewal of a building on any street so as to bring forward the building, or any part of the building, beyond the front wall of the building on either side thereof or beyond a line determined as the building line in a development plan for the area or, pending the variation of a development plan or the making of a new development plan, in the draft variation of the development plan or the draft development plan,*

Not applicable

*(v) consist of or comprise the carrying out under a public road of works other than a connection to a wired broadcast relay service, sewer, water main, gas main or electricity supply line or cable, or any works to which class 25, 26 or 31 (a) specified in column 1 of Part 1 of Schedule 2 applies,*

Not applicable

*(vi) interfere with the character of a landscape, or a view or prospect of special amenity value or special interest, the preservation of which is an objective of a development plan for the area in which the development is proposed or, pending the variation of a development plan or the making of a new development plan, in the draft variation of the development plan or the draft development plan,*

The view from the River Liffey from Straffan Bridge is listed on table 13.7 of the Kildare County Development Plan 2023-2029 as view RL4- view 46.

The development will not impact on the view from Straffan bridge as the exterior of the structure has not been altered.

*(vii) consist of or comprise the excavation alteration or demolition (other than peat extraction) of places, caves, sites, features or other objects of archaeological, geological, historical, scientific or ecological interest, the preservation, conservation or protection of which is an objective of a development plan or local area plan for the area in which the development is proposed or, pending the variation of a development plan or local area plan, or the making of a new development plan or local area plan, in the draft variation of the development plan or the local area plan or the draft development plan or draft local area plan,*

Not applicable

*(viiA) consist of or comprise the excavation, alteration or demolition of any archaeological monument included in the Record of Monuments and Places, pursuant to section 12 (1) of the National Monuments (Amendment) Act 1994, save that this provision shall not apply to any excavation or any works, pursuant to and in accordance with a consent granted under section 14 or a licence granted under section 26 of the National Monuments Act 1930 (No. 2 of 1930) as amended,*

Not applicable

*(viiB) comprise development in relation to which a planning authority or An Bord Pleanála is the competent authority in relation to appropriate assessment and the development would require an appropriate assessment because it would be likely to have a significant effect on the integrity of a European site,*

The site relates to the River Liffey and the River Liffey is hydrologically linked to the Rye Water Valley Carton SAC (European site) c.8.7km). The development may or may not result in the negatively impacting on the volume/flow which may or may not have an adverse impact on the ecology of the river and the Rye Water Valley Carton SAC. The AA screening submitted within this Section 5 is noted, however it does not examine any changes to the volume of water, the removal of existing obsolete hydroelectric equipment and the installation/operation of a modern, efficient hydroelectric system including a turbine, associated cabling and works to inlet sluice gates/tail race would have on this SAC. Further information in this regard will be sought.

*(viiC) consist of or comprise development which would be likely to have an adverse impact on an area designated as a natural heritage area by order made under section 18 of the Wildlife (Amendment) Act 2000.*

The site relates to the River Liffey and the River Liffey is hydrologically linked to the Grand Canal (pNHA) at Sallins. The development may or may not result in the negatively impacting on the volume/flow which may or may not have an adverse impact on the pNHA. Further information in this regard will be sought.

*(viii) consist of or comprise the extension, alteration, repair or renewal of an unauthorised structure or a structure the use of which is an unauthorised use,*

Not applicable

*(ix) consist of the demolition or such alteration of a building or other structure as would preclude or restrict the continuance of an existing use of a building or other structure where it is an objective of the planning authority to ensure that the building or other structure would remain available for such use and such objective has been specified in a development plan for the area or, pending the variation of a development plan or*

*the making of a new development plan, in the draft variation of the development plan or the draft development plan,*

Not applicable

*(x) consist of the fencing or enclosure of any land habitually open to or used by the public during the 10 years preceding such fencing or enclosure for recreational purposes or as a means of access to any seashore, mountain, lakeshore, riverbank or other place of natural beauty or recreational utility,*

Not applicable

*(xi) obstruct any public right of way,*

Not applicable

*(xii) further to the provisions of section 82 of the Act, consist of or comprise the carrying out of works to the exterior of a structure, where the structure concerned is located within an architectural conservation area or an area specified as an architectural conservation area in a development plan for the area or, pending the variation of a development plan or the making of a new development plan, in the draft variation of the development plan or the draft development plan and the development would materially affect the character of the area,*

Not applicable

*(b) in an area to which a special amenity area order relates, if such development would be development*

Not applicable

*(c ) if it is development to which Part 10 applies, unless the development is required by or under any statutory provision (other than the Act or these Regulations) to comply with procedures for the purpose of giving effect to the Council Directive*

Not applicable

*(d) if it consists of the provision of, or modifications to, an establishment, and could have significant repercussions on major accident hazards*

Not applicable

*(2) Sub-article (1)(a)(vi) shall not apply where the development consists of the construction by any electricity undertaking of an overhead line or cable not exceeding 100 metres in length for the purpose of conducting electricity from a distribution or transmission line to any premises*

Not applicable

*(3) For the avoidance of doubt, sub-article (1)(a)(vii) shall not apply to any operation or activity in respect of which a Minister of the Government has granted consent or approval in accordance with the requirements of regulation 31 of the Habitats Regulations 1997, and where regulation 31(5) does not apply*

Not applicable

**RECOMMENDATION:**

The following **further information** is requested:

**1**. Article 9 (vii) (b) & (c) of the Planning and Development Regulations 2001 (as amended) has restrictions on exemptions in relation to development that may require Appropriate Assessment and/or may have an adverse impact on Natural Heritage Areas. Having regard to the foregoing, the Applicant is requested to examine how the potential changes to the volume of water/flow rates, facilitated by the changing the turbine mechanism, may or may not have an adverse impact on the ecology of the River Liffey, therefore potentially impacting on the Rye Water Valley/Carton SAC and the Grand Canal pNHA, which are both hydrologically linked to the River Liffey.

Signed: _____

L. Murphy

Executive Planner

**Date: 15/06/2026**

Carroll Melia

_____

Carroll Melia

Senior Executive Planner

17th June 2026

**Appendix 1: Appropriate Assessment Screening**

| | |
|---|---|
| | **APPROPRIATE ASSESSMENT SCREENING REPORT AND DETERMINATION** |

| **(A) Project Details** | |
|---|---|
| **Planning File Ref** | ED1362 |
| **Applicant name** | The K Club |
| **Development Location** | The K Club, Straffan, Co Kildare |
| **Site size** | Unknown |
| **Application accompanied by an EIAR (Yes/NO)** | N/A |
| **Distance from Natura 2000 site in km** | The site is c.9km southwest of Rye Water Valley/Carton SAC.<br>The site is c.10km northeast Ballynafagh Bog SAC and c.11km northeast Ballynafagh Lake SAC.<br>Red Bog SAC c.13km southeast of the site.<br><br>South Dublin Bay SAC is c.27km east of the application site and is beyond the zone of influence. |
| **Description of the project/proposed development –**<br>The removal of existing obsolete hydroelectric equipment and the installation/operation of a modern, efficient hydroelectric system including a turbine, associated cabling and works to inlet sluice gates/tail race at the K Club | |

| **(B) Identification of Natura 2000 sites which may be impacted by the proposed development** | | | |
|---|---|---|---|
| | | | **Yes/No**<br>**If answer is yes, identify list name of Natura 2000 site likely to be impacted.** |
| **1** | **Impacts on sites designated for freshwater habitats or species.** | *Is the development within a Special Area of Conservation whose* | **N/A** |

| | | | |
|---|---|---|---|
| | Sites to consider: River Barrow and Nore, Rye Water/Carton Valley, Pollardstown Fen, Ballynafagh lake | *qualifying interests include freshwater habitats and/or species, or in the catchment (upstream or downstream) of same?* | |
| **2** | **Impacts on sites designated for wetland habitats - bogs, fens, marshes and heath.** Sites to consider: River Barrow and Nore, Rye Water/Carton Valley, Pollardstown Fen, Mouds Bog, Ballynafagh Bog, Red Bog, Ballynafagh Lake | *Is the development within a Special Area of Conservation whose qualifying interests include wetland habitats (bog, marsh, fen or heath), or within 1 km of same?* | **N/A** |
| **3** | **Impacts on designated terrestrial habitats.** Sites to consider: River Barrow and Nore, Rye Water/Carton Valley, Pollardstown Fen, Ballynafagh Lake | *Is the development within a Special Area of Conservation whose qualifying interests include woodlands, dunes or grasslands, or within 100m of same?* | **N/A** |
| **4** | **Impacts on birds in SPAs** Sites to consider: Poulaphouca Reservoir | *Is the development within a Special Protection Area, or within 5 km of same?* | **N/A** |

**Conclusion:**
If the answer to all of the above is **No**, significant impacts can be ruled out for habitats and bird species.
No further assessment in relation to habitats or birds is required.
If the answer is **Yes** refer to the relevant sections of **C**.

| **(G) SCREENING CONCLUSION STATEMENT** *Selected relevant category for project assessed by ticking box.* | | |
|---|---|---|
| **1** | AA is not required because the project is directly connected with/necessary to the conservation management of the site | |
| **2** | No potential significant affects/AA is not required | |
| **3** | Significant effects are certain, likely or uncertain.<br>Seek a Natura Impact Statement<br>Reject proposal. (Reject if potentially damaging/inappropriate) | **X** |
| **Justify why it falls into relevant category above (based on information in above tables)** | | |

| | |
|---|---|
| The potential for changes to the flow rates/volume of water may or may not impact on the Rye Water Valley Carton SAC, further examination of same is required. | |
| **Name:** | L. Murphy |
| **Position:** | Executive Planner |
| **Date:** | 15th June 2026 |

Comhairle Contae Chill Dara
Kildare County Council

Date: 28th May 2026.
Our Ref: ED/1362.

The K Club,
C/O Rory Kunz
JSA Planning
39 Fitzwilliam Place
Dublin 2.

**RE: Application for a Declaration of Exempted Development under Section 5 of Planning and Development Act 2000 (as amended) for development at The K Club, Straffan, Co. Kildare.**

Dear Sir/Madam,

I acknowledge receipt of your application for a Declaration of Exempted Development under Section 5 of Planning and Development Act 2000 (as amended) received on 28th May 2026 in connection with the above.

Please find enclosed Receipt no. FIN1/0/524800 for €80 application fee.

Yours sincerely,

**Senior Executive Officer,**
**Planning Department.**

**Kildare County Council**

**Declaration of Exempt Development under Section 5,**

**of the Planning and Development Act 2000**

**Incomplete application forms will be deemed invalid and returned**

**All responses must be in block letters**

| Section 1 | Details of Applicants |
|---|---|

1. Name of Applicant(s) A. Surname The K Club Forenames.....
Phone No. [redacted] Fax No.....
2. Address The K Club, Straffan, Co. Kildare

| Section 2 | Person/Agent acting on behalf of applicant (if applicable) |
|---|---|

1. Name of Person/Agent: Surname Kunz Forenames Rory
Phone No. [redacted] Fax No.....
2. Address JSA Planning, 39 Fitswilliam Place, Dublin 2

| Section 3 | Company Details (if applicable) |
|---|---|

1. Name of Company The K Club
Phone No. [redacted] Fax No.....
2. Company Reg. No. 145951
3. Address The K Club, Straffan, Co. Kildare

| Section 4 | Details of Site |
|---|---|

1. Planning History of Site See JSA Planning Report
2. Location of Proposed Development The K Club, Straffan, Co. Kildare
3. Ordnance Survey Sheet No. 3323-C
4. Please state the Applicants interest in the site Owner
5. Please state the extent of the proposed development See JSA Planning Report

**6.** Under what Section of the Planning and Development 2000 and/or what provision of the Planning and Development Regulations 2001 is exemption sought *(specific details required)*.....

See JSA Planning Report

**7.** Please give a detailed description of the Proposed Development (*Use separate page if necessary*).....

See JSA Planning Report

| **Section 5** | **The following must be submitted for a valid application** |
|---|---|

**(Please Tick)**

| | | |
|---|---|---|
| 1. | Site Location Map (1:2500 Rural Areas) (1:1000 Urban Areas) | X |
| 2. | A Site Layout Plan (Scale 1:500) in full compliance with Article 23 of Planning and Development Regulations 2001 | X |
| 3. | Drawings of the development (Scale 1:50) in full compliance with Article 23 of Planning and Development Regulations 2001 | X |
| 4. | All drawings to differentiate between the original building, all extensions and proposed development | X |
| 5. | Fee of 80 Euro | X |

| **Section 6** | **Declaration** |
|---|---|

I, Rory Kunz certify that all of the above information is correct and I have submitted all the required documents as outlined at Section 6 above.

Signature: Rory Kunz Date: 26/5/2026

JSA PLANNING

39 Fitzwilliam Place, Dublin 2, D02 ND61

+353 1662 5803
info@jsaplanning.ie
jsaplanning.ie

Kildare County Council,
Aras Chill Dara,
Devoy Park,
Naas,
Co Kildare
W91 X77F

Kildare County Council
Planning Department
28 MAY 2026
RECEIVED

Date: 26th May 2026
Ref.: 26106/RK/JT

**Re: Request for a section 5 declaration in respect of proposals at the K Club, Straffan, Co Kildare**

Dear Sir / Madam,

## 1.0 INTRODUCTION

On behalf of the applicant the K Club, Straffan, Co. Kildare, we hereby request a Section 5 Declaration from Kildare County Council in respect of the following:

*"Whether works comprising the removal of existing obsolete hydroelectric equipment and the installation/operation of a modern, efficient hydroelectric system including a turbine, associated cabling and inlet sluice gates/tail race at the K Club, Straffan, Co. Kildare, is or is not exempted development."*

We enclose the following information with this Section 5 application:

- Statutory fee of €80.
- Completed Section 5 Declaration Application Form.
- 1 no. copy of this cover letter.
- 1 no. copy of Architectural and built heritage assessment, prepared by John Greene Grade 1 Conservation Architect.
- 1 no. copy of Environmental Impact Assessment Screening Report and Appropriate Assessment Screening Report prepared by ORS
- 1 no. copy of the following drawings prepared by Ward Architects:
  - Site Location Plan.
  - Floor Plans.
  - Elevations.
  - Sections.

The submitted drawings and supporting documentation indicate the works at the K Club, Straffan, Co. Kildare. The proposals comprise the removal of existing obsolete hydroelectric equipment and the installation of a modern, efficient hydroelectric system, including a

turbine, associated cabling and inlet sluice gates. All works are confined to the interior of the existing hydroelectric infrastructure and does not result in any external alterations to the structure or its appearance. This Section 5 application relates to these works and seeks determination that they constitute exempted development. Supporting documentation submitted with the application includes a Conservation Report, prepared by John Greene, as well as an Appropriate Assessment Screening Report and Environmental Impact Assessment Screening Report, prepared by ORS.

This Section 5 application is submitted further to pre-application correspondence with Kildare County Council in respect of the works at The K Club, Straffan, Co. Kildare. The nature and extent of the works were outlined to the Planning Authority, and it was advised that a formal Section 5 Declaration would be appropriate in order to determine whether the works constitute exempted development. This section 5 application is therefore lodged having regard to that correspondence and seeks a formal determination from the Planning Authority in this regard.

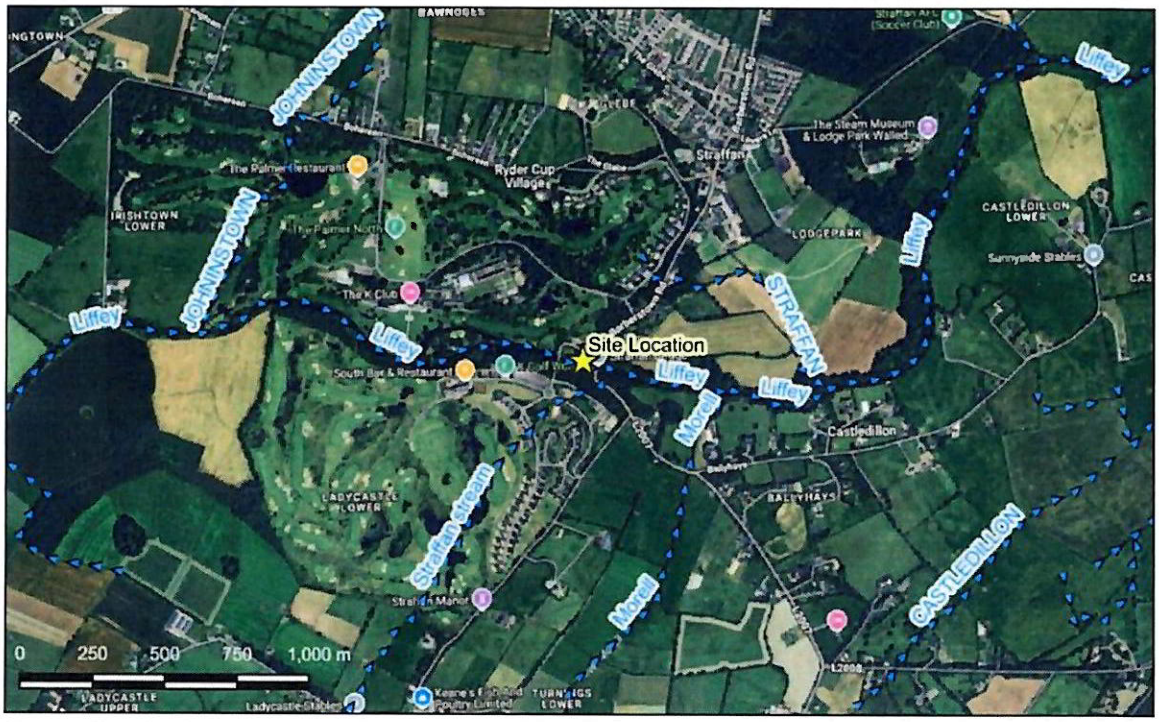
## 2.0 SITE LOCATION AND DESCRIPTION

The subject lands are located within the townlands of Ladycastle Lower and Straffan Demesne, Co. Kildare (ITM Coordinates: 292291, 229226), within the ground of The K Club estate. The site comprises an existing historic hydroelectric installation situated along the southern bank of the River Liffey, approximately 45 metres upstream of Straffan Bridge. The surrounding lands form part of the wider demesne landscape associated with The K Club, which includes a hotel complex, championship golf courses, landscaped parkland, mature tree planting and internal estate access routes.

The immediate context of the site is characterised by managed riverside landscape features including maintained lawns, pathways and established vegetation typical of a historic demesne setting. Golf course lands are located to the west, while the River Liffey flows west to east through the estate and represents a defining natural and visual feature of the area. Beyond the estate boundaries, the wider landscape is predominantly rural in character, comprising agricultural lands interspersed with individual dwellings and small clusters of development. The village of Straffan is located approximately 1 kilometre to the north of the site and is accessed via the R403 regional road.

While the turbine house and tail race are located within the wider Straffan Demesne, they themselves are not identified as protected structures in the Kildare County Development Plan 2023-2029 as amended.

**Figure 1: Aerial view of the subject site with the approximate site area outlined in red**




Source: Google Maps

## 3.0 PLANNING HISTORY

The Kildare County Council online planning register and An Coimisiún Pleanála online case search function was examined to determine a recent planning history for the subject site. There is no recent relevant planning history for the subject site.

## 3.1 ADJACENT SITES

A number of recent planning applications have been submitted within the grounds of the K Club. Applications within the last 5 years are summarised below.

### 3.1.1 REG. REF.: 2561320

*924 Ladycastle, The K Club, Straffan, Co. Kildare.*

Kildare County Council granted retention on 2nd March 2026 for development consisting of:

*"for the conversion of the ground level garage to a bedroom with an ensuite bathroom."*

### 3.1.2 REG. REF.: 2561191

*9 Churchfield, The K Club, Straffan, Co. Kildare.*

Kildare County Council granted retention on 23rd January 2026 for development consisting of:

*"of a 3 car detached garage, 2 site entrance pillars, and all associated site works."*

**3.1.3 REG. REF.: 2561173**

*10A Churchfileds, The K Club, Straffan, Co. Kildare.*

Kildare County Council granted permission on 8th December 2025 for development consisting of:

*"single storey garden room in grounds of two storey detached dwelling together with associated siteworks."*

**3.1.4 REG. REF.: 2461383**

*18 Churchfield, The K Club, Straffan, Co. Kildare.*

Kildare County Council granted permission on 4th April 2025 for development consisting of:

*"for minor alterations to the existing dwelling, to include: The addition of a new garage structure (31.36 sq. m.) to the front of the dwelling; A 'privacy wall' extending from the existing dwelling to the new garage structure; The addition of a new side door to the west-facing elevation; Ground floor rear extension (31.07sq. m.) with expanded first-floor terrace above (33.17sq. m.); All associated engineering works, landscaping, and ancillary development."*

**3.1.5 REG. REF.: 2461236**

*15 Churchfield's, The K Club, Straffan, Co. Kildare.*

Kildare County Council granted permission on 6th March 2025 for development consisting of:

*"for modifications and extensions to the existing dwelling house namely: a) construction of a double garage with utility and store room b) construction of a new entrance porch, c) demolition of the existing roof lantern on the main dwelling roof d) alterations to internal site layout and all associated site works."*

**3.1.6 REG. REF.: 22432**

*685 and 686, The Garden Courtyard Apartments, The K Club, Straffan, Co.Kildare. ,W23 WK51 and W23 Y402.*

Kildare County Council granted retention on 21st July 2022 for development consisting of:

*"for development at 685 and 686, The Garden Courtyard Apartments, The K Club, Straffan, Co. Kildare (Eircode W23 WK51 and W23 Y402) part of Straffan Demesne, a Protected Structure Ref: B14-29. The development consists of the retention of a change of use from use as two dwellings, to use as a single dwelling including external and internal alterations."*

**3.1.7 REG. REF.: 2232**

*688/689 Garden Courtyard Apartments, The K Club, Straffan, Co. Kildare W23 XP73.*

Kildare County Council granted retention on 20th April 2022 for development consisting of:

*"The development consists of the retention of a change of use from use as two dwellings, to use as a single dwelling including external and internal alterations (part of Straffan Demesne, a Protected Structure Ref: B14-29)."*

**3.1.8 REG. REF.: 21721**

*12A Churchfields, K Club ,Straffan, Co. Kildare.*

Kildare County Council granted permission on 7th September 2021 for development consisting of:

*"the demolition of single storey rear kitchen dining area, and construction at ground level of single storey kitchen living dining open plan room, infill bedroom/ensuite corner extensions under existing roof, two bay windows to front elevation. First floor east gable bedroom extension over existing, various internal changes, thermal upgrading/whole house refurbishment including new timber windows/external doors, new slate roof and low pitch metal roof to extension, new internal services, render/external finish, new entrance gate, landscaping and all related ancillary works".*

## 4.0 PROPOSALS AND EXEMPTED DEVELOPMENT

The works to which this Section 5 application relates are described below and illustrated in the accompanying drawings and supporting documentation submitted with the application, including the Conservation Report, Appropriate Assessment Screening Report and Environmental Impact Assessment Screening Report.

This Section 5 application relates to the following:

*"Whether works comprising "that the removal of existing obsolete hydroelectric equipment and the installation/operation of a modern, efficient hydroelectric system including a turbine, associated cabling and works to inlet sluice gates/tail race at the K Club, Straffan, Co. Kildare is or is not exempted development."*

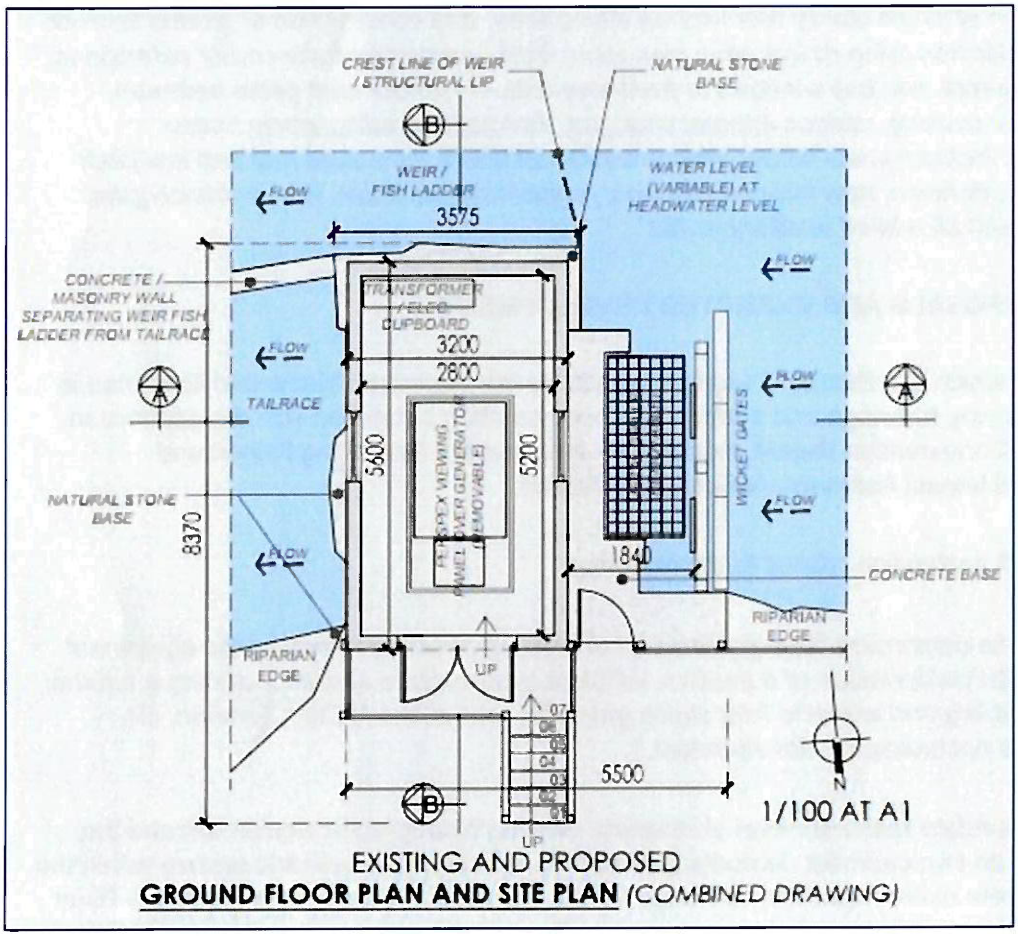
The proposals relate to the removal of obsolete existing hydroelectric equipment and the installation of an improvement comprising a modern, efficient hydroelectric system within the existing concrete hydroelectric powerhouse building located at Straffan Bridge on the River Liffey. The replacement installation consists of a fully automated double-regulated Kaplan turbine system, and the repair and renewal of inlet sluice gates and trash racks. The modernised system is more compact and would operate more quietly than the existing equipment, with an installed generating capacity of approximately 50kW.

The existing hydroelectric installation dates from the 1920s, with the powerhouse structure constructed in the 1930s as part of the formation of the water channel supplying the system.

As noted in the Architectural Heritage Impact Assessment, the turbine house and associated weir are of significance as they *"represent early hydroelectric power generation in Ireland"* and are of *"considerable technical or engineering interest"* . The current proposals seek to renew and repair and improve the internal workings of the system to ensure its continued safe and efficient operation, while respecting this historic function, and in particular the external appearance. It is important to note that the Turbine House is not a protected structure.

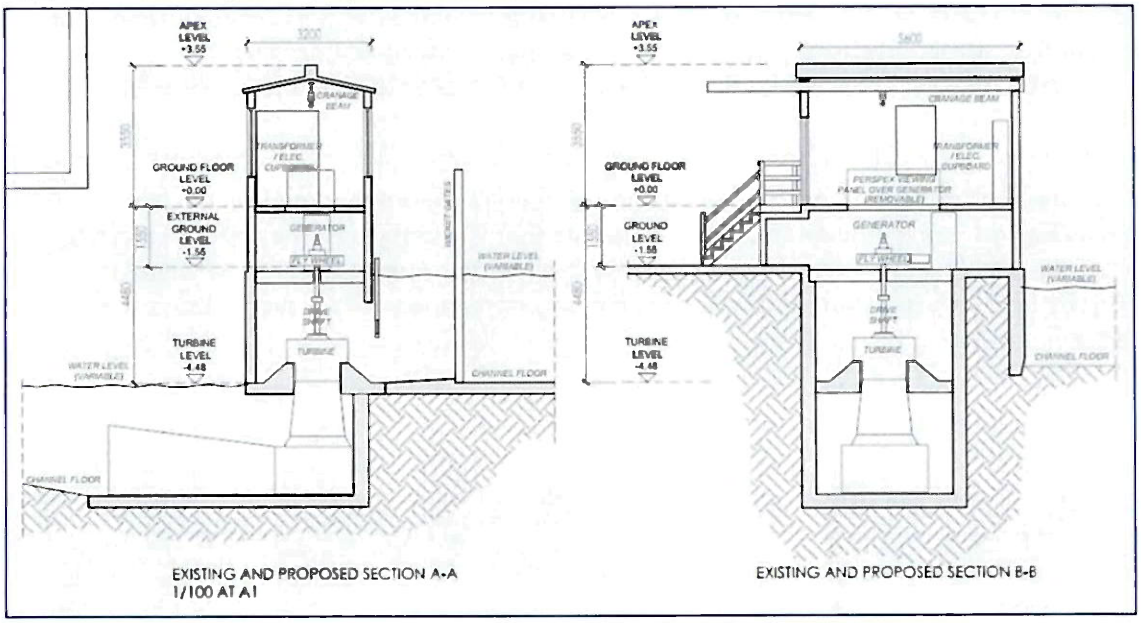
All repair, replacement and installation works are entirely within the footprint and internal confines of the existing powerhouse building and associated intake infrastructure. No new structures are proposed and no extensions, demolition works or alterations to the external appearance of the buildings arises. The external fabric and character of the structure are retained and preserved. In this regard, the AHAI confirms that *"all original surviving features will be retained and repaired"* and that the works constitute maintenance and upgrading in nature .

**Figure 2: Ground Floor Plan and Site Plan**




Source: Ward Architects

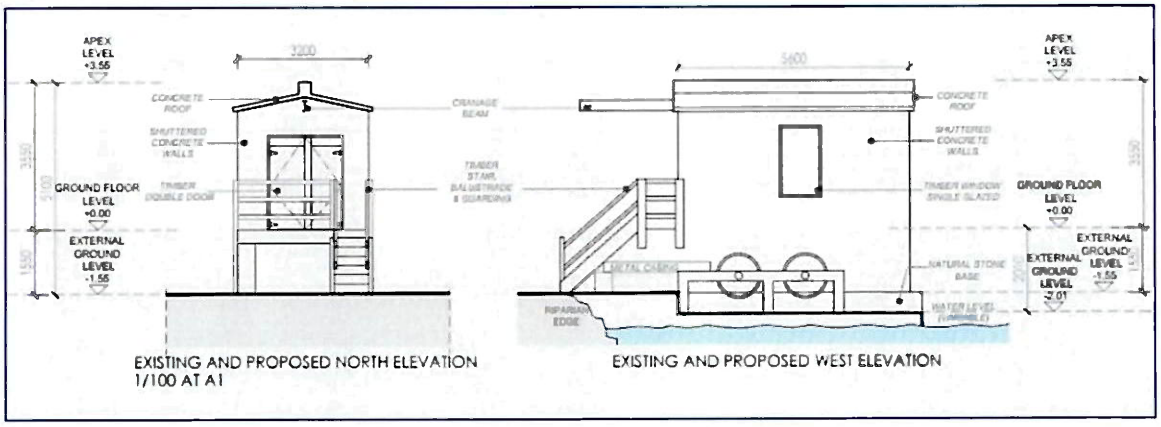
**Figure 3: Existing and Proposed Section**




Source: Ward Architects

The works included the temporary installation of a barrier within the existing channel to create a dry working area to facilitate the repair and replacement (maintenance) of the sluice gates and associated infrastructure. Any accumulated debris or material within the channel were removed as part of general maintenance and no materials were discharged or deposited into the River Liffey at any stage of the works.

**Figure 4: Existing and Proposed Elevation**




Source: Ward Architects

The repair and renewal (maintenance) of the sluice gate system enable the gates to be raised and lowered as required, preventing unintended water loss and assisting in maintaining appropriate upstream water levels. This will support the continued functioning of the existing weir and fish pass by ensuring a consistent flow regime within the river channel.

The improved/modernised hydroelectric system will operate in accordance with established best practice guidance, including the recommendations set out in the document entitled *"Guidelines on the Construction and Operation of Small-Scale Hydroelectric Schemes and*

*Fisheries"* (June 2005), prepared by the Central and Regional Fisheries Boards and the Department of Communications, Marine and Natural Resources. This includes provision for appropriate flow management and screening measures to facilitate the free and uninterrupted migration of fish and to prevent entry of fish or smolt into the headrace or tailrace.

Overall, the Architectural Heritage Impact Assessment, prepared by prepared by John Greene Grade 1 Conservation Architect concludes that the proposals are *"minor"* in nature and will have a *"Positive Impact on the building itself and a Neutral Impact on Protected Structures in the vicinity"*, further supporting the appropriateness of the proposals in this location.

## 5.0 POLICY CONTEXT

### 5.1 ARCHITECTURAL HERITAGE PROTECTION: GUIDELINES FOR PLANNING AUTHORITIES (2004)

These Guidelines were adopted by the Department of the Environment, Heritage and Local Government in November 2004. The introduction to the Guidelines states that: *"our architectural heritage is a unique resource, an irreplaceable expression of the richness and diversity of our past"*. It further states that: *"Sympathetic maintenance, adaptation and re-use can allow the architectural heritage to yield aesthetic, environmental and economic benefits even where the original use may no longer be viable"*.

Notwithstanding that the proposal does not relate to a protected structure, the proposal complies with best practice as set out in the Architectural Heritage Guidelines and represents an appropriate approach to the proposed works.

### 5.2 KILDARE COUNTY DEVELOPMENT PLAN 2023-2029 (AS VARIED)

According to the CDP, the aim in regard to Built and Cultural Heritage is *"to protect, conserve and sensitively manage the built and cultural heritage of County Kildare and to encourage sensitive sustainable development so as to ensure its survival and maintenance for future generations"*.

We take note of the following policies and objectives:

- **AH P1:** *"Recognise the value and opportunity of Kildare's unique heritage resource and to manage, conserve, promote and protect it, for present and future generations."*
- **AH 07:**"Contribute towards the protection and preservation of the archaeological value of underwater or archaeological sites associated with rivers and associated features."
- **AH P6:** *"Protect, conserve and manage the archaeological and architectural heritage of the county and to encourage sensitive sustainable development in order to ensure its survival, protection and maintenance for future generations."*
- **AH 037:** *"Promote the use of energy upgrade materials and technologies that follow good conservation practice and are compatible with the character and vapour permeable construction of traditionally built structures."*
- **AH O39:** *"Promote the maintenance and appropriate re-use of buildings of architectural, cultural, historic and aesthetic merit which make a positive contribution to the character, appearance and quality of the streetscape or landscape and the sustainable development of the county. Any works associated with the re-use of such buildings should be carried out in accordance with best conservation practice."*
- **AH 044:** *"Co-operate with Waterways Ireland in the management, maintenance and enhancement of the Royal Canal and Grand Canal and associated structures/features. Such projects shall be subject to an AA Screening Report, and where applicable, Stage 2 AA. They shall have a regard for any hydrological connection shared with a European Site and their qualifying interest species. The project shall account for any potential likely significant effects and provide mitigation and monitoring where appropriate."*

The proposed hydroelectric installation is fully consistent with the Built and Cultural Heritage objectives of the Kildare County Development Plan, introducing a low-impact renewable energy upgrade within The K Club estate while safeguarding all designated heritage assets

in the wider area. The site lies in proximity to Straffan Bridge (Protected Structure, RPS B14-54)(NIAH Ref. 11809023) and the K Club Hotel / Straffan House (NIAH Ref. 11809027), as well as the Straffan Gates and Gate Lodge (RPS B14-28). Although these structures contribute significantly to the cultural landscape of Straffan Demesne, the proposed development is entirely separate from them and involves no works, interventions, or alterations to any protected structure or its curtilage.

While the hydroelectric installation is not listed as a protected structure in the Kildare County Development Plan (Appendix 6), both the Turbine House (NIAH Ref. 11809031) and the associated weir (NIAH Ref. 11809022) are recorded in the National Inventory of Architectural Heritage as being of considerable Architectural, Historical, Social and Technical interest. The project has therefore been carefully designed to respect and retain the character of these historic hydropower features, ensuring that all works are conservation-led and sympathetic to their established form and function and in particular their external appearance.

All interventions are confined to previously modified ground and to the existing hydroelectric building and its immediate environs. The works are fully reversible, maintain the integrity of the Turbine House and weir, and align with County Development Plan policies promoting the sensitive management of heritage assets, the appropriate reuse of existing infrastructure, and the integration of sustainable technologies in a manner that preserves Kildare's built and cultural heritage.

## 6.0 LEGISLATIVE FRAMEWORK

**Planning and Development Act 2000 (as amended)**

Section 2(1) of the Planning and Development Act outlines the following definitions which are relevant to this submission:

*"structure means – 'any building structure excavation or other thing constructed or made on in or under any land, a part of any structure so defined and (a) where the context so admits, includes the land on, in or under which the structure is situate …' "*

*"exempted development" has the meaning specified in section 4 (of the Act)*

The Planning and Development Act 2000, as amended, at Section 3(1) provides a definition of development for the purposes of the Act. Section 3(1) reads as follows:

*"In this Act, "development" means, except where the context otherwise requires, the carrying out of any works on, in, over or under land or the making of any material change in the use of any structures or other land*".

Section 2 of the 2000 Act, as amended, describes, *inter alia,* that:

*"works" includes any act or operation of construction, excavation, demolition, extension, alteration, repair or renewal and, in relation to a protected structure or proposed protected structure, includes any act or operation involving the application or removal of plaster, paint, wallpaper, tiles or other material to or from the surfaces of the interior or exterior of a structure.*

*"protected structure" means— (a) a structure, or (b) a specified part of a structure, which is included in a record of protected structures, and, where that record so indicates, includes any specified feature which is within the attendant grounds of the structure and which would not otherwise be included in this definition;*

*"protection", in relation to a structure or part of a structure, includes conservation, preservation and improvement compatible with maintaining the character and interest of the structure or part;*

*"development" has the meaning assigned to it by section 3, and "develop" shall be construed accordingly;"*

Section 4(1)(h) of the Planning and Development Act 2000, as amended, states that the following works shall be exempted development for the purposes of the Act:

*"(h) development consisting of the carrying out of works for the maintenance, improvement or other alteration of any structure, being works which affect only the interior of the structure or which do not materially affect the external appearance of the structure so as*

*to render the appearance inconsistent with the character of the structure or of neighbouring structures".* (emphasis added)

Section 57(1) of the Act states that *"Notwithstanding section 4(1)(h), the carrying out of works to a protected structure, or a proposed protected structure, shall be exempted development only if those works would not materially affect the character of— (a) the structure, or (b) any element of the structure which contributes to its special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest.*

With reference to the above, the proposals relate to the removal of the obsolete hydro generation equipment internally within a structure, which is not a protected structure but nevertheless is on the NIAH list. The proposals are considered to represent a standard improvement which would normally take place over the course of events, as older equipment becomes inefficient and requires replacement and improvement. The key point is that the external appearance of the turbine house remains unchanged and its legibility within the wider context is maintained. It is further considered that the external appearance and its identification of the structure as an historic turbine house is what contributes to its special significance. As the external structure is being maintained, the proposals are considered exempt having regard to Section 4(1)(h) of the Act and that the provisions of S. 57(1) of the Act to not apply to the internal elements of the structure.

The Act also states that where either an EIA or an Appropriate Assessment is required then development shall not be exempt.

*(1B) Development referred to in paragraph (a), (d), (e) or (g) of subsection (1A) shall not be exempted development if an environmental impact assessment of the development is required.*

*(1C) Development referred to in paragraph (a), (d), (e) or (g) of subsection (1A) shall not be exempted development if an appropriate assessment of the development is required.]*

The works consist of the removal of existing obsolete hydroelectric equipment and the installation of an improvement comprising a modern, efficient hydroelectric system within the existing powerhouse structure at The K Club, Straffan, Co Kildare.

The works are entirely internal in nature and include the installation of a new automated turbine system, associated cabling, and the repair and renewal (maintenance) of inlet sluice gates and intake infrastructure. The proposals do not involve the construction of any new external structures, extensions or demolition works and does not result in any alteration to the external appearance or character of the existing building or surrounding structures.

As demonstrated in the drawings and supporting documentation submitted with this Section 5 application, the works are confined to the interior of the existing hydroelectric powerhouse and associated intake infrastructure. The modernisation/improvement works do not materially affect the external appearance, form or character of the building. No alterations to the external elevations, roof structure or external fabric of the powerhouse are proposed.

The works represent repair, renewal and improvement of an established hydroelectric installation in order to improve its operational efficiency and long-term functionality. The

works do not alter the visual character of the structure or its setting within the demesne landscape and do not give rise to any visual or landscape impacts on the surrounding estate lands, the River Liffey corridor or nearby structures.

The works are therefore considered to constitute exempted development in accordance with Section 4(1)(h) of the Planning and Development Act 2000 as they are 'works' for the '*maintenance, improvement or other alteration'* of the building which '*do not materially affect the external appearance of the structure'.*

**Planning and Development Regulations (2001 as amended)**

Section 9 of the Planning & Development Regulations sets out restrictions on exemptions. These are addressed in turn below.

*9. Restrictions on Exemption*

1. *Development to which article 6 relates shall not be exempted development for the purposes of the Act—*

*(a) if the carrying out of such development would*

*i. Contravenes a condition attached to a permission under the Act or be inconsistent with any use specified in a permission under the Act.*

The works do not contravene any condition attached to a permission granted under the Planning and Development Act 2000, as amended, nor are they be inconsistent with any use specified in an existing permission relating to the site. The works comprise the repair, renewal and modernisation/improvement of an established hydroelectric installation within the existing powerhouse structure at The K Club, Straffan, Co. Kildare. The proposals do not alter the established use of the structure or the wider estate and are limited to internal upgrading works to improve the operational efficiency and continued functioning of the existing hydroelectric system.

*ii. Consist of or comprise the formation, laying out or material widening of a means of access to a public road the surfaced carriageway of which exceeds 4 metres in width.*

The works do not involve the formation, laying out or material widening of a means of access to a public road. All works were confined to the internal areas of the existing buildings and did not interact with the surrounding road network.

*iii. Endanger public safety by reason of traffic hazard or obstruction of road users.*

The works do not endanger public safety by reason of traffic hazard or obstruction of road users. As the works are wholly internal to the existing buildings, with no interaction with vehicular or pedestrian movements on surrounding streets.

iv. *Except in the case of a porch to which class 7 specified in column 1 of Part 1 of Schedule 2 applies and which complies with the conditions and limitations specified in column 2 of the said Part 1 opposite the mention of that class in the said column 1, comprise the construction, erection, extension or renewal of a building on any street so as to bring forward the building, or any part of the building, beyond the front wall of the building on either side thereof or beyond a line determined as the building line in a development plan for the area or, pending the variation of a development plan or the making of a new development plan, in the draft variation of the development plan or the draft development plan.*

The works do not involve the construction, extension or renewal of any part of the buildings externally. No changes to the building line are proposed as all works were internal in nature.

v. *Consist of or comprise the carrying out under a public road of works other than a connection to a wired broadcast relay service, sewer, water main, gas main or electricity supply line or cable, or any works to which class 25, 26 or 31 (a) specified in column 1 of Part 1 of Schedule 2 applies.*

Not applicable to the proposals. The proposals did not involve any works under a public road.

vi. *Interfere with the character of a landscape, or a view or prospect of special amenity value or special interest, the preservation of which is an objective of a development plan for the area in which the development is proposed or, pending the variation of a development plan or the making of a new development plan, in the draft* variation *of the development plan or the draft development plan.*

The proposals do not interfere with the character of a landscape or with any view or prospect of special amenity value or special interest. As the works are entirely internal to the buildings and do not alter the external appearance of either structure, there is no visual impact on the surrounding area.

vii. *Consist of or comprise the excavation, alteration or demolition (other than peat extraction) of places, caves, sites, features or other objects of archaeological, geological, historical, scientific or ecological interest, the preservation, conservation or protection of which is an objective of a development plan or local area plan for the area in which the development is proposed or, pending the variation of a development plan or local area plan, or the making of a new development plan or local area plan, in the draft variation of the development plan or the local area plan or the draft development plan or draft local area plan.*

The works have no effect on any caves, sites, features or other objects of archaeological, geological, historical, scientific or lands of ecological interest.

viii. *Consist of or comprise the excavation, alteration or demolition of any archaeological monument included in the Record of Monuments and Places, pursuant to section 12 (1) of the National Monuments (Amendment) Act 1994, save that this provision shall not apply to any excavation or any works, pursuant to and in accordance with a*

*consent granted under section 14 or a licence granted under section 26 of the National Monuments Act 1930 (No. 2 of 1930) as amended.*

The works do not require the excavation, alteration, or demolition of any archaeological monuments.

ix. *Comprise development in relation to which a planning authority or An Bord Pleanála is the competent authority in relation to appropriate assessment and the development would require an appropriate assessment because it would be likely to have a significant effect on the integrity of a European site.*

The works do not have a significant effect on the integrity of a European site as confirmed in the ORS AA Screening Report.

x. *Consist of or comprise development which would be likely to have an adverse impact on an area designated as a natural heritage area by order made under section 18 of the Wildlife (Amendment) Act 2000.*

The works will not have any adverse impacts on an area designated as a natural heritage area by order made under section 18 of the Wildlife (Amendment) Act 2000.

xi. *Consist of or comprise the extension, alteration, repair or renewal of an unauthorised structure or a structure the use of which is an unauthorised use,*

The works do not comprise the extension, alteration, repair or renewal of an unauthorised structure.

xii. *Consist of the demolition or such alteration of a building or other structure as would preclude or restrict the continuance of an existing use of a building or other structure where it is an objective of the planning authority to ensure that the building or other structure would remain available for such use and such objective has been specified in a development plan for the area or, pending the variation of a development plan or the making of a new development plan.*

The works do not require the demolition or such alteration of any building or structure in a manner that would preclude or restrict the continuance of an existing use. The proposals comprise the repair, renewal (maintenance) and modernisation (improvement) of an existing hydroelectric installation within the established powerhouse structure at The K Club, Straffan, Co. Kildare. The works support and enhance the continued operation of the hydroelectric system and will not interfere with its established use or the wider use of the estate.

xiii. *Consist of the fencing or enclosure of any land habitually open to or used by the public during the 10 years preceding such fencing or enclosure for recreational purposes or as a means of access to any seashore, mountain, lakeshore, riverbank or other place of natural beauty or recreational utility.*

The works do not impede public access to any seashore, mountain, lakeshore, riverbank or other place of natural beauty or recreational utility.

*xiv. Obstruct any public right of way.*

There is no obstruction to any public right of way as a result of the works.

*xv. Further to the provisions of section 82 of the Act, consist of or comprise the carrying out of works to the exterior of a structure, where the structure concerned is located within an architectural conservation area or an area specified as an architectural conservation area in a development plan for the area or, pending the variation of a development plan or the making of a new development plan, in the draft variation of the development plan or the draft development plan and the development would materially affect the character of the area.*

The site is not located in an architectural conservation area.

*(b) in an area to which a special amenity area order relates, if such development would be development:*

*i. Of class 1, 3, 11, 16, 21, 22, 27, 28, 29, 31, (other than paragraph (a) thereof), 33 (c) (including the laying out and use of land for golf or pitch and putt or sports involving the use of motor vehicles, aircraft, or firearms), 39, 44 or 50(a) specified in column 1 of Part 1 of Schedule 2.*

Not applicable.

*ii. Consisting of the use of a structure or other land for the exhibition of advertisements of class 1, 4, 6, 11, 16 or 17 specified in column 1 of Part 2 of the said Schedule or the erection of an advertisement structure for the exhibition of any advertisement of any of the said classes.*

Not applicable.

iii. *Of class 3, 5, 6, 7, 8, 9, 10, 11, 12 or 13 specified in column 1 of Part 3 of the said Schedule, or (iv) of any class of Parts 1, 2 or 3 of Schedule 2 not referred to in subparagraphs (i), (ii) and (iii) where it is stated in the order made under 37 section 202 of the Act that such development shall be prevented or limited.*

Not applicable.

*(c) If it is development to which Part 10 applies, unless the development is required by or under any statutory provision (other than the Act or these Regulations) to comply with procedures for the purpose of giving effect to the Council Directive.*

Not applicable.

*(d) If it consists of the provision of, or modifications to, an establishment, and could have significant repercussions on major accident hazards.*

Not applicable.

*(2) Sub-article (1)(a)(vi) shall not apply where the development consists of the construction by any electricity undertaking of an overhead line or cable not exceeding 100 metres in length for the purpose of conducting electricity from a distribution or transmission line to any premises.*

Not applicable.

*(3) For the avoidance of doubt, sub-article (1)(a)(vii) shall not apply to any operation or activity in respect of which a Minister of the Government has granted consent or approval in accordance with the requirements of regulation 31 of the Habitats Regulations 1997, and where regulation 31(5) does not apply.*

Not applicable.

## 7.0 SUMMARY AND CONCLUSIONS

This application for a Section 5 Declaration is made on behalf of the applicant, The K Club, Straffan, Co. Kildare, and seeks a declaration in respect to the following:

*"Whether works comprising the removal of existing obsolete hydroelectric equipment and the installation/operation of a modern, efficient hydroelectric system including a turbine, associated cabling and inlet sluice gates/tail race at the K Club, Straffan, Co. Kildare, is or is not exempted development."*

As demonstrated in the accompanying drawings and supporting documentation prepared for this Section 5 application, the works are confined to the existing hydroelectric powerhouse and associated intake infrastructure located within The K Club estate. The works comprise the removal of outdated equipment and the installation of a modern, fully automated hydroelectric system, together with the repair and renewal of associated sluice gates and intake elements.

The proposals consist solely of internal alterations and upgrading works within the existing structure and infrastructure. The development does not involve the construction of new structures, extensions or demolition works and will not result in any external alterations to the powerhouse building or its surrounding context. The proposals are intended to improve the operational efficiency, reliability and environmental performance of the existing hydroelectric system while maintaining its established function. As all works are confined internally, the external appearance, form and character of the structure will remain unchanged.

As set out in this cover letter, it is respectfully submitted that the works constitute exempted development under Section 4(1)(h) of the Planning and Development Act 2000, as amended. The works represent maintenance, repair and improvement works to the interior of an

existing structure which do not materially affect its external appearance. Accordingly, the proposals fall within the scope of exempted development.

The proposals relate to the removal of the obsolete hydro generation equipment internally within a structure, which is not a protected structure but nevertheless is on the NIAH list. The proposals are considered to represent a standard improvement which would normally take place over the course of events, as older equipment becomes inefficient and requires replacement and improvement.

The key point is that the external appearance of the turbine house remains unchanged and its legibility within the wider context is maintained. It is further considered that the external appearance and its identification of the structure as an historic turbine house is what contributes to its special significance. As the external structure is being maintained, the proposals are considered exempt having regard to Section 4(1)(h) of the Act and that the provisions of S. 57(1) of the Act to not apply to the internal elements of the structure.

These interventions represent maintenance, and improvement works that do not materially impact the elements of the structure contributing to its significance. Accordingly, the proposal may be considered exempted development under Section 4(1)(h) as the works maintain and enhance the function of the structure without altering its essential character.

It is evident from the submitted documentation that the works are confined to the existing hydroelectric infrastructure and will not alter the external appearance or setting of the structure within the wider demesne landscape. The proposals are therefore appropriate in the context of the site and will facilitate the continued use and long-term viability of the hydroelectric installation without impacting on the character of the surrounding environment.

Having regard to the above, it is respectfully requested that Kildare County Council issues a Section 5 Declaration to the following effect or similar:

*"In considering this application for a Section 5 Declaration, the Planning Authority had regard to the following in particular:*

*(a) The plans and particulars submitted;*
*(b) The John Greene Architectural Heritage Report,*
*(c) The Kildare County Development Plan 2023-2029;*
*(d) EIA and AA Screening Reports by ORS;*
*(e) The Architectural Heritage Guidelines for Planning Authorities 2004 and 2011;*
*(f) Section 4(1)(h) of the Planning and Development Act 2000 as amended And the Planning Authority concluded that:*

*The following works are considered to be "development" and exempted development pursuant to Section 4(1)(h) of the Development Act 2000 as amended:*

*"that the removal of existing obsolete hydroelectric equipment and the installation/operation of a modern, efficient hydroelectric system including a turbine, associated cabling and works to inlet sluice gates/tail race at the K Club, Straffan, Co. Kildare."*

Please do not hesitate to contact the undersigned should you require any further information in relation to this Section 5 Declaration.

Yours sincerely,

JSA Planning

**JSA Planning**

Kildare County Council
Planning Department
28 MAY 2026
RECEIVED

# Turbine House and Straffan Weir, KClub, Straffan, Co Kildare. A Protected Structure.

## Architectural and built heritage assessment of the impact of its proposed development.



***Figure 1**: Straffan Weir with the tail race in the foreground and the Turbine house to the right. (1935).*

Prepared by:

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Email: john.greenearchitect@gmail.com

Commissioned by: Ward Architects.

On behalf of the Kclub.

September 2025.

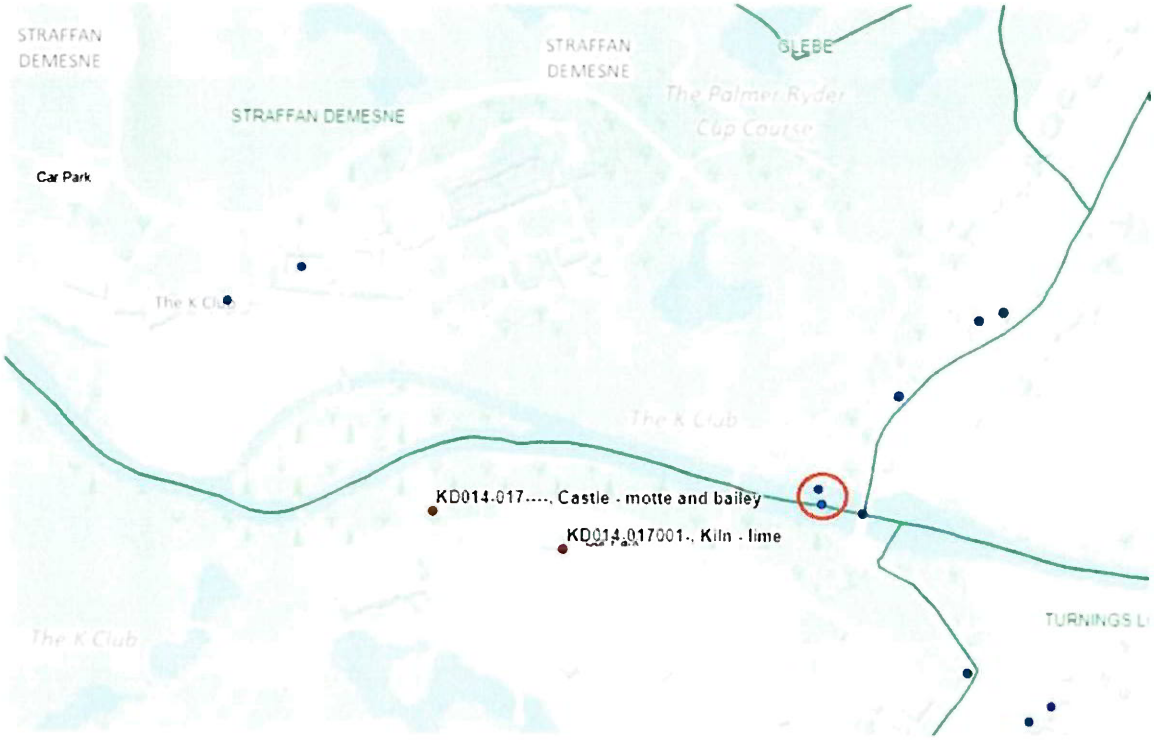
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# 1. Introduction

This architectural heritage impact assessment examines the implications of maintenance works on the Turbine House and Straffan Weir. Located on the north bank of the River Liffey in Straffan, County Kildare, these structures are significant as they represent early hydroelectric power generation in Ireland. They were built just before the introduction of the national electricity network. They initially provided power to the nearby Straffan House, which is now the centrepiece of the K Club resort. The structures' simple mass-concrete design and functional features highlight a blend of utility and aesthetic value, particularly when viewed from Straffan Bridge.



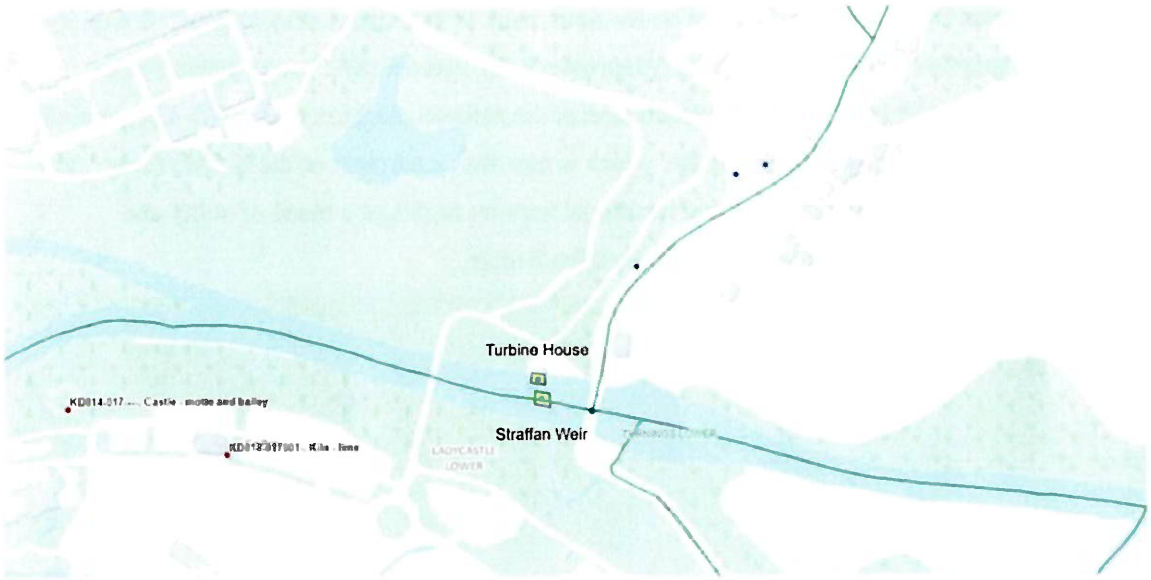

***Map 1:*** Extract from the *Historic Environment Map* for the Area.
*The area has been surveyed by the NIAH. Blur dots represent buildings considered important by the NIAH. Red dots represent Recorded Monuments.*
*The position of the site is outlined in red.* (Source: Archaeology.ie)

The report has been prepared by John Greene B. Arch. MUBC. FRIAI. Grade 1 Conservation Architect, commissioned by Commissioned by: Ward Architects on behalf of the KClub.

The development is described in the Executive summary.
This Architectural Heritage Impact Assessment has been prepared at the request of Kildare County Council to clarify the extent of maintenance work and its impact on the Protected Structure and is to be used solely for that purpose.

Acknowledgements:

I would like to thank Barry Ward of Ward Architects and the staff of the Irish Architectural Archive.



# 2. Methodology

This report is based on a programme of desktop research, site inspection and desk-based assessment. A desktop study assessment has been carried out in order to identify all designated architectural heritage structures within the study area. The Record of Protected Structures (RPS) and the National Inventory of Architectural Heritage (NIAH) were the main sources consulted for assessing the recorded architectural heritage resource.

In addition, the following sources were consulted as part of the desktop study:

- *Cartographic Sources* - The cartographic sources examined for the study areas include the 1st edition of the 6-inch Ordnance Survey (OS) maps (surveyed and published in the 1830s-40s), and the 25-inch OS map (surveyed and published 1887-1913) OS maps Kildare 1908, 1939, and 1970 and the Historic Environment Map, which highlights recorded monuments.

- *Development Plan* - The local authority development plan relevant to the study area was consulted as part of this assessment. These plans outline the local authorities' policies for the conservation of the archaeological and architectural heritage resource and include the Record of Protected Structures (RPS). The relevant development plan for the study area is the *Kildare County Development Plan 2023 – 2029.*

- *National Inventory of Architectural Heritage* - The function of the National Inventory of Architectural Heritage ('NIAH') is to record built heritage structures within the Republic of Ireland and to advise local authorities in relation to structures of interest within their areas. The NIAH commissions surveys of sites of architectural significance to assist in evaluating structures to be included in the RPS. Listing on the NIAH does not necessarily carry any statutory protection but does highlight the culturally significant aspects of the structure which ought to be conserved.

**ASSESSMENT**

The report includes an assessment of the likely impacts throughout two zones, as follows:

- Impact on the architectural heritage of the site.
- Impact on the Protected Structures in the vicinity of the site.

Terms used to describe the quality of the impacts are as follows:

**Positive Impact:** A change that improves the quality of the environment.
**Neutral Impact:** A change that does not affect the quality of the environment.
**Negative Impact:** A change that reduces the quality of the environment.

**Survey**

A site inspection was carried out on Wednesday 20th August 2025. The study area was assessed in terms of historic architectural heritage features. No difficulties were encountered during the survey. The results of the site inspection are detailed below, and photographs are presented throughout the report.

# 3. Executive Summary

## Setting

Straffan Weir is located about 25 km upstream from Dublin on the River Liffey, the turbine house is on the north bank of river beside the weir and Straffan Bridge. Constructed around 1930 (though an earlier weir existed by the early 19th century) to regulate the River Liffey for industrial purposes; it has become a notable feature in events like the Liffey Descent races since 1960.
Turbine House: A hydroelectric facility built circa 1930 on the Straffan estate, originally generating power for the house; recently restored but temporarily deactivated in 2025 due to local concerns.

## Description of the turbine house

The National Inventory of Architectural Heritage has described and appraised the building as follows.

*Detached single-bay single-storey mass-concrete hydro-electric turbine engine house, c.1930, retaining early fenestration. Gable-ended roof with concrete. Mass-concrete walls. Unpainted. Square-headed openings. No sills. Iron swivel windows. Iron double doors approached by flight of concrete steps. Sited on north bank of River Liffey.*

*This hydro-electric turbine engine house is of considerable technical or engineering interest, having been constructed immediately prior to the establishment of the National Electricity Network. The building is of interest for its construction in mass-concrete, an early example of the use of this material in the locality. Viewed from Straffan Bridge to the south-east the presence of the structure has a picturesque effect on the river.*

The NIAH have rated the building of Regional Importance for the Architectural, Historical, Social, and Technical Categories of Special Interest.

## Statement of Significance and Assessment of the hydro-electric turbine engine house.

**The hydro-electric turbine engine house is protected being within the curtilage of Straffan Demesne a Protected Structure (KCC RPS ref: B14-29). It has been surveyed by the NIAH and rated of Regional Importance by them because of its Architectural, Historical, Social, and Technical Categories of Special Interest:**

## Condition of the building.

The building is in reasonable condition, but it reached the stage of requiring repair and maintenance, which was carried out.

## Description of the proposed development.

The proposed development can be seen in detail on the architects' drawings and is in summary as follows:

The development proposes to carry out maintenance and upgrade the building.

## Statement of Significance and Assessment of Turbine House and Straffan Weir

**This hydro-electric turbine engine house is of considerable technical or engineering interest, having been constructed immediately prior to the establishment of the National Electricity Network. The building is of interest for its construction in mass-concrete, an early example of the use of this material in the locality. Viewed from Straffan Bridge to the south-east the presence of the structure has a picturesque effect on the river.**

## Assessment of the impact of the proposed development.

The proposed development is minor; all original surviving features will be retained and repaired. It is considered to have a **Positive Impact** on the building itself and a **Neutral Impact** on Protected Structures in the vicinity.

# 4. Context

## SUMMARY

Straffan, located about 25 km upstream from Dublin on the River Liffey, has a rich history tied to its natural setting and estate developments. The village's origins appear in ancient records like the Book of Leinster, highlighting its early ecclesiastical or residential significance. Over centuries, the area transitioned from baronial lands to a hub of affluent estates, with the River Liffey playing a central role in its industrial and recreational evolution.

The K Club, centred on the historic Straffan House, represents the pinnacle of this heritage. Built in the Renaissance Revival style. Nearby, Straffan Weir and Turbine House exemplify early 20th-century engineering, initially for estate self-sufficiency and now symbolizing sustainable energy efforts.

## Historical Background

*The Turbine House at Straffan Weir, part of the K Club's history, was built in the mid-1930s by the Barton family to provide electricity to Straffan House, the original estate. Located along the River Liffey, this structure houses a turbine and generator, a testament to early 20th-century engineering, which has recently been restored by Eco Hydro to make the K Club Ireland's first hydro powered five-star hotel.*

*Origins of the Turbine House*

*Purpose:*

*In the 1930s, the Barton family, owners of the Straffan estate (now The K Club), built the turbine house and a weir on the River Liffey to generate electricity.*

*Significance:*

*This development enabled the estate to become one of the first large Irish houses to have its kitchen run on electricity.*

*The Straffan Weir*

*Construction:*

*The weir was constructed across the River Liffey at Straffan Weir to harness the river's flow.*

*Engineering:*

*The structure included a turbine and a generator, which, despite being disused for many years, were found to be in excellent condition.*

*Recent Developments*

*Restoration:*

*The original turbine, gearbox, and generator have been restored and brought back into operation by Eco Hydro.*

*Sustainability:*

*This reactivation has transformed The K Club into Ireland's first hydro powered five-star hotel, demonstrating a commitment to sustainability and heritage.*

*Legacy:*

*The Turbine House is now seen as a physical piece of Ireland's hydroelectric history, providing a sustainable energy source for the luxury hotel complex.*

(Source: www.google.com)

***Early History of Straffan Village and Lands***

*Straffan, known in Irish as "Teach Srafáin," translates to "the house or church of Straffan," indicating its origins as an ecclesiastical or residential site. The village first appears in ancient Irish lore within the Dindsenchas, a collection of place-name stories transcribed into the 12th-century Book of Leinster (Kildare County Archives & Local Studies). Situated on the banks of the River Liffey, approximately 25 km upstream from Dublin, Straffan lies in a low-lying valley that has supported human activity since at least the 6th century. Following the Anglo-Norman invasion in the late 12th century, the lands were granted by Strongbow to Maurice Fitzgerald, marking the beginning of baronial control. Ownership passed through families like the Gaydons and Talbots before entering a phase of prosperous estate building in the 18th and 19th centuries. (Wikipedia)*

*By the early 18th century, Dublin banker Hugh Henry acquired Straffan House for £2,200 in 1731, constructing a bridge over the Liffey around the same time. This period saw the area transform into a demesne—a landscaped estate—reflecting the Georgian era's emphasis on grandeur and utility. A key feature is that the River Liffey was increasingly modified for practical uses, setting the stage for later developments like weirs and hydroelectric systems.* (Ardclough Community Council)



***Figure 2**: Historical Image of Exterior on Postcard, The K Club, 1832, Member of Historic Hotels Worldwide, in Straffan, County Kildare, Ireland.* (Historic Hotels Worldwide)

***The Rise of Straffan House and the Barton Family Era***

*The core of modern Straffan history revolves around Straffan House, built in 1832 by Hugh Barton, a prominent wine merchant from Barton & Guestier (Curious Ireland ). Barton, who fled France during the Reign of Terror but amassed wealth in the Bordeaux wine trade, designed the four-storey mansion in the Renaissance Revival style, modelled after the Château de Louveciennes near Paris. The house featured a seven-bay entrance front with a central breakfront, Italianate towers added later, and expansive grounds including a large island (Inismore) in the Liffey. The Barton family, descended from Lancashire immigrants who arrived in Ireland during the Elizabethan era, owned the estate for over a century and maintained a vineyard in St. Julien, France.* (Ardclough Community Council)

*During their tenure (1832–1949), the Bartons enhanced the property with French-inspired modifications, such as raising chimney stacks in the 1850s* (Kildare County Archives & Local Studies). *The estate symbolised Anglo-Irish ascendancy, with family members like Joseph Henry (born 1736 at Straffan) contributing to banking and linen industries. In 1830, Hugh and Anna Barton founded a private family church, consecrated in 1838, further embedding the site's social and religious significance. The grounds also included early industrial elements, such as a weir visible on 19th-century maps, used for regulating water flow.* (Inland Fisheries Ireland)



***Figure 3**: River Liffey, Straffan, Co. Kildare.* **(National Library of Ireland)**

***Development of Straffan Weir and Turbine House in the 20th Century***

*In the 20th century, Straffan saw major engineering progress with the construction of Straffan Weir and Turbine House around 1930. While a weir had existed since the early 1800s, the current 50-meter diagonal structure with cast-iron sluice and hydraulic dam was built to regulate water for a mill pond, shaping both the industrial heritage and scenic views of the River Liffey. Since 1960, it has also served as a backdrop for the Liffey Descent canoe race. On the north bank, the Turbine House,*

*an early mass-concrete hydroelectric station, produced up to 45 kW and powered Straffan House for over 60 years, reflecting estate self-sufficiency.* (Historic Hotels Worldwide)

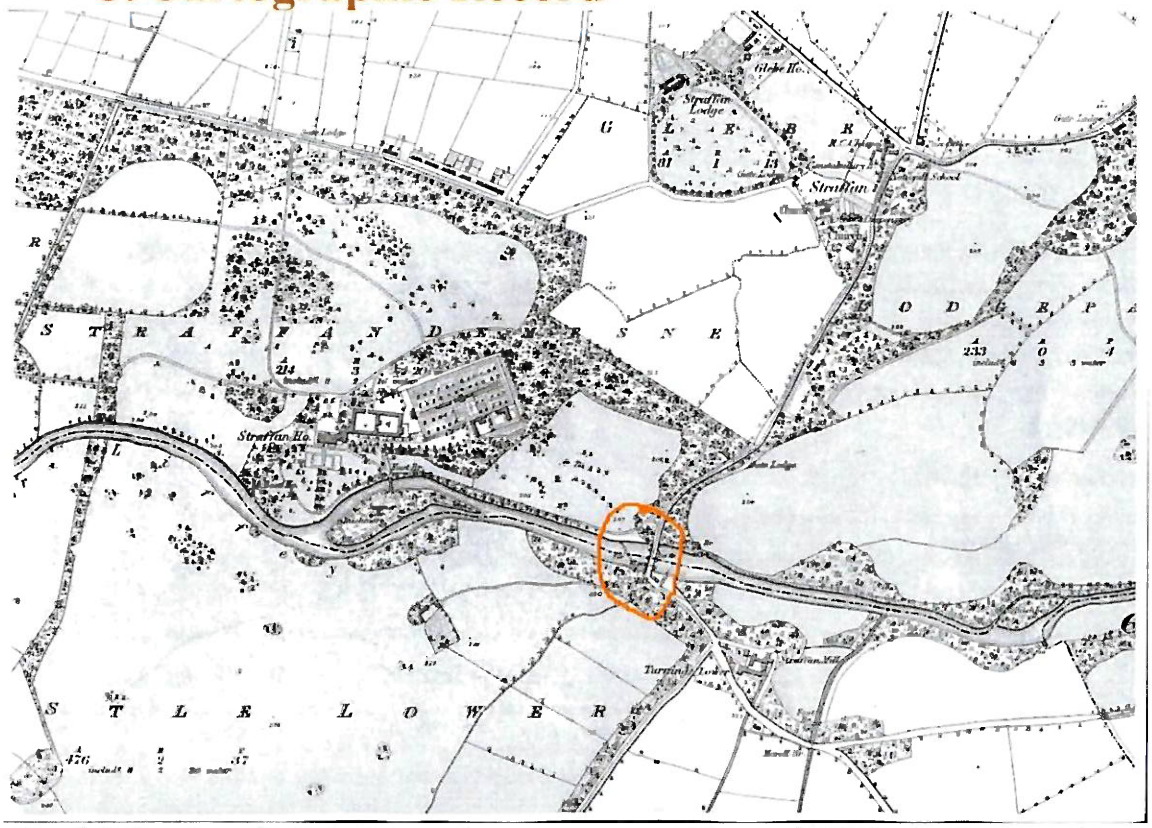
*After 1949, the estate changed hands until the Jefferson Smurfit Group acquired it in 1988, renaming it "The K Club." Opening in 1991 as Ireland's first AA five-Red-Star hotel, it combined the historic house with modern amenities. Arnold Palmer designed two golf courses, with the Palmer North hosting the 2006 Ryder Cup. Today, the 550-acre resort offers a spa, tennis, and falconry, welcoming guests including U.S. Presidents Clinton and Bush.* (kildarenow)

*Michael Smurfit became sole owner in 2012, preserving Barton family heritage, before selling to Michael Fetherston in 2020. He modernized the hydro system with Eco Hydro, installing a 90 kW unit that supplied over 70% of hotel energy, while keeping the original turbine on display. However, operations were suspended in May 2025. Despite ecological impacts on fish migration, the estate's sustainability efforts earned the 2024 Historic Hotels Worldwide Sustainability Champion award.* (kildarenow)

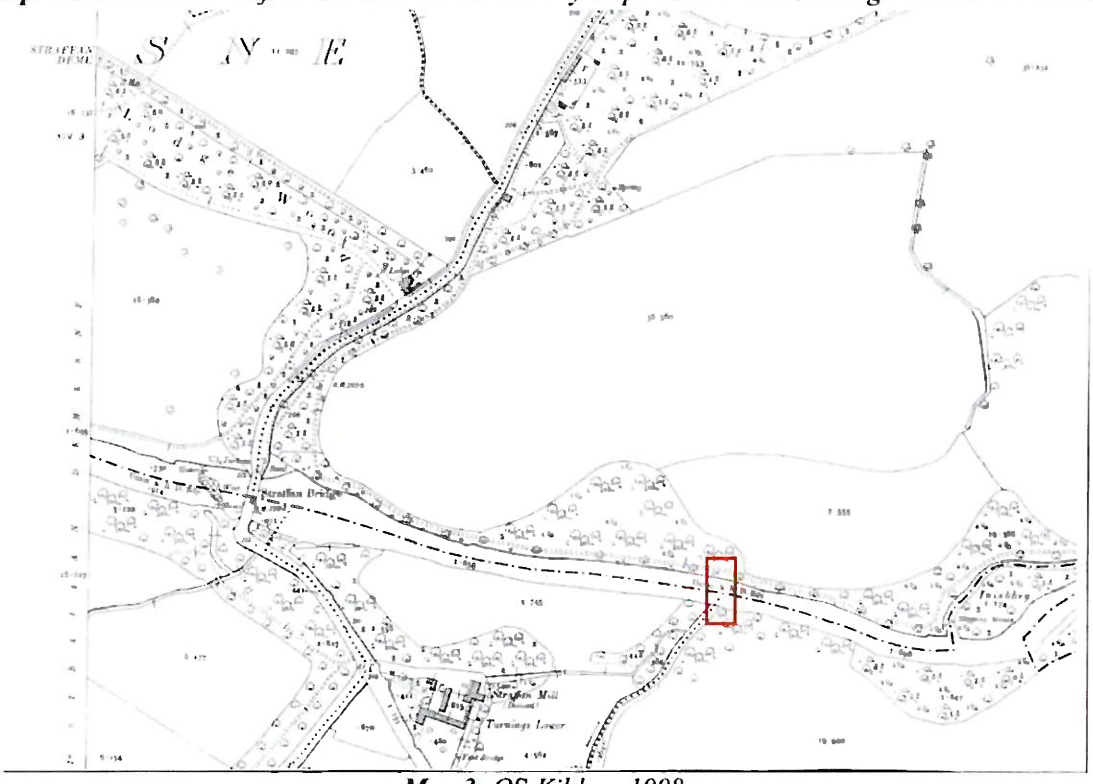
***Timeline of Key Events***

| ***Year/Period*** | ***Event*** | ***Details*** |
|---|---|---|
| *6th Century* | *Early Settlement* | *Land developed by local noblemen; origins of Straffan as a site.* |
| *12th Century* | *Anglo-Norman Grant* | *Lands awarded to Maurice Fitzgerald by Strongbow.* |
| *1731* | *Henry Acquisition* | *Hugh Henry buys Straffan House; Liffey bridge built.* |
| *1832* | *Straffan House Built* | *Hugh Barton constructs the mansion in French-Italianate style.* |
| *1838* | *Family Church Consecrated* | *Private church founded by Hugh and Anna Barton.* |
| *c.1930* | *Weir and Turbine House* | *Modern weir and hydroelectric facility constructed for estate power.* |
| *1949* | *Barton Sale* | *Family departs; property changes hands multiple times.* |
| *1960* | *Liffey Descent Begins* | *Weir becomes iconic in annual canoe races.* |
| *1988* | *Smurfit Purchase* | *Jefferson Smurfit Group acquires and plans resort conversion.* |
| *1991* | *K Club Opens* | *Becomes Ireland's first AA five-Red-Star hotel with golf courses.* |
| *2006* | *Ryder Cup Hosted* | *Palmer-designed course hosts prestigious golf event.* |
| *2020* | *New Ownership* | *Michael Fetherston takes over; hydroelectric restoration begins.* |
| *2024* | *Sustainability Award* | *Recognized for green initiatives, including hydro power upgrade.* |
| *2025* | *Generator Deactivated* | *Hydro system switched off.* |

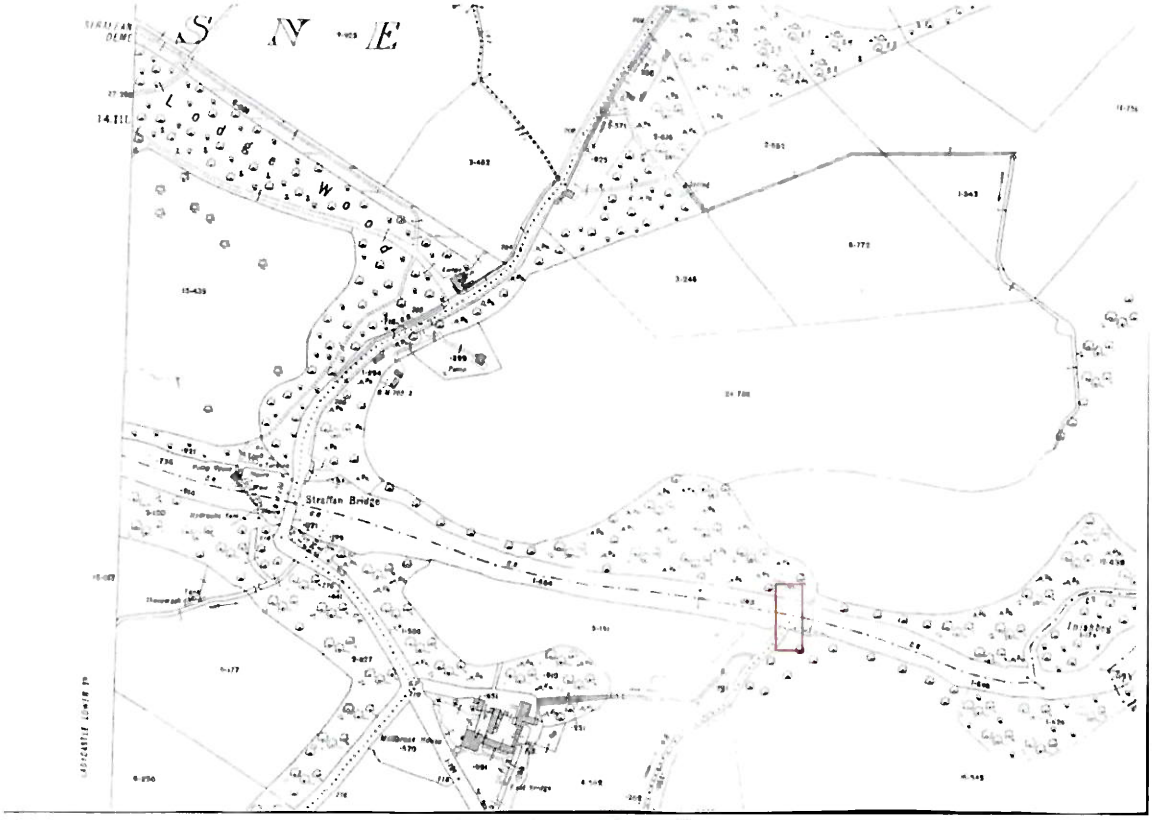
# 5. Cartographic Record



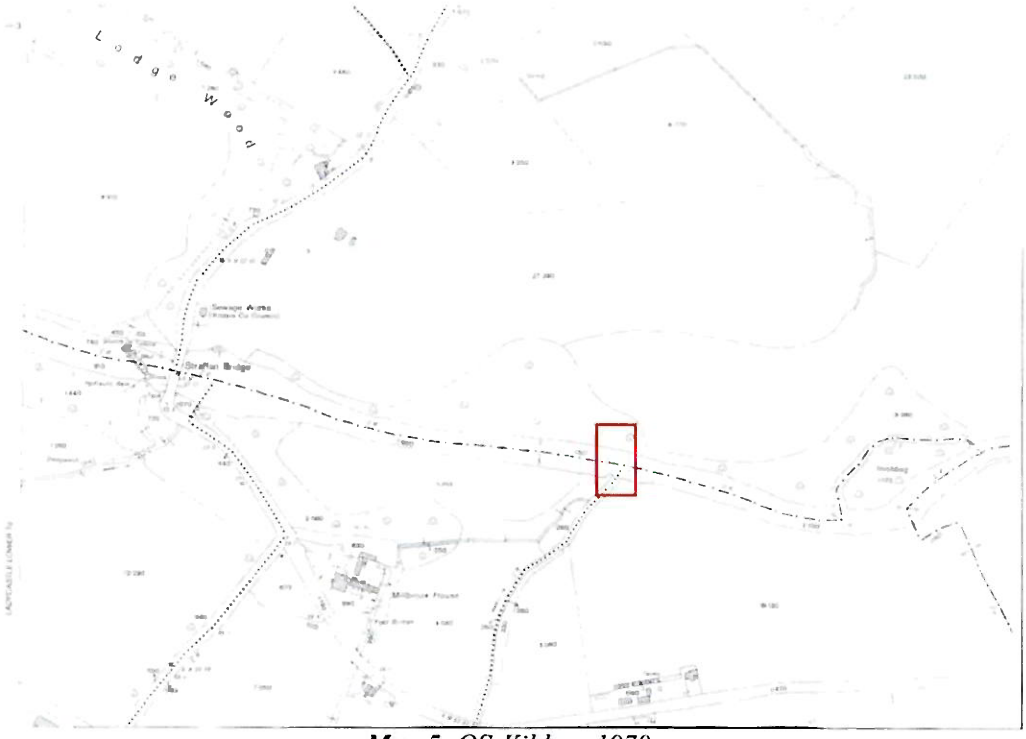

***Map 2:*** Extract from the *first edition ordnance survey map Kildare c. 1840-Original in Nat Archives.*



***Map 3:*** *OS-Kildare 1908*




***Map 4:*** *OS-Kildare 1939*



***Map 5:*** *OS-Kildare 1970*

# 6.Photographic record.



***Figure 4:*** *Straffan Weir with the Road Bridge in the background and the tail race in the foreground. (1936)*



***Figure 5:*** *The Sluice gates and River Liffey approaching the weir. (1937)*



***Figure 6:*** *The Turbine House, weir and tail race. (1946)*

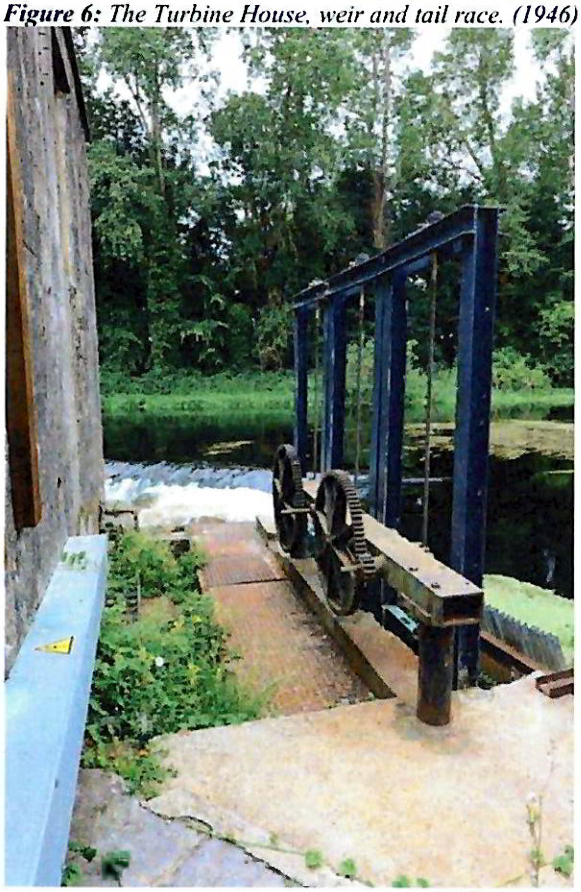


***Figure 7:*** *4r. The Sluice gates. (1947)*

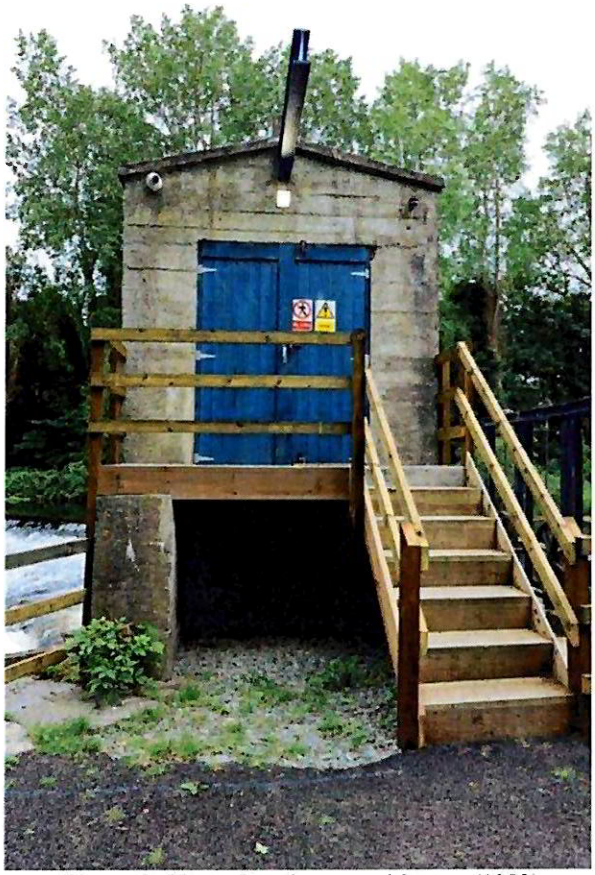


***Figure 8:*** *The turbine house and Stairs. (1952)*

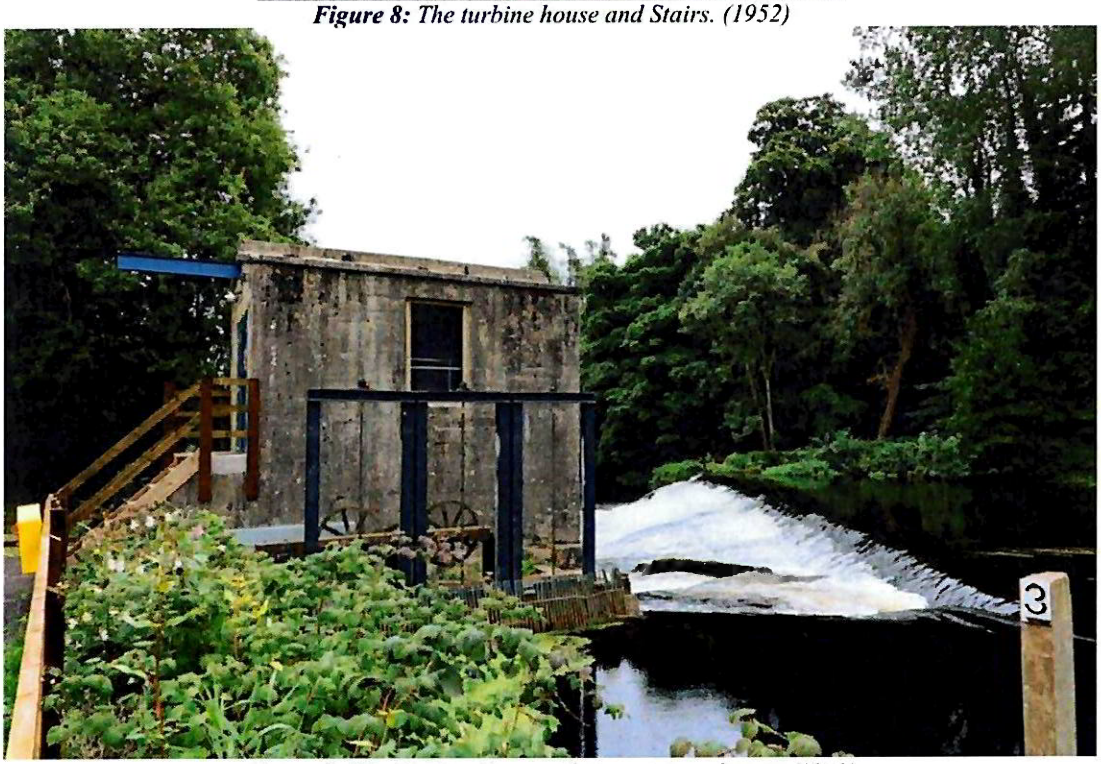



***Figure 9:*** *The Turbine House, Sluice gates and weir. (1949)*



***Figure 10:*** *The upper Floor of the Turbine house. (1938)*

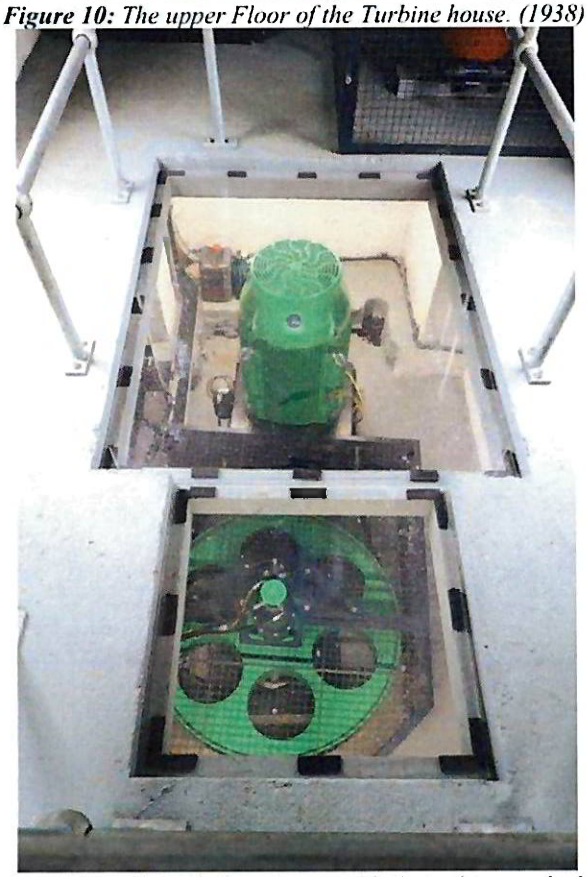


***Figure 11:*** *The upper Floor of the Turbine house with the turbine on the lower level. (1939)*



***Figure 12:*** *A view of the upper Floor of the Turbine house facing the entrance door. (1941)*

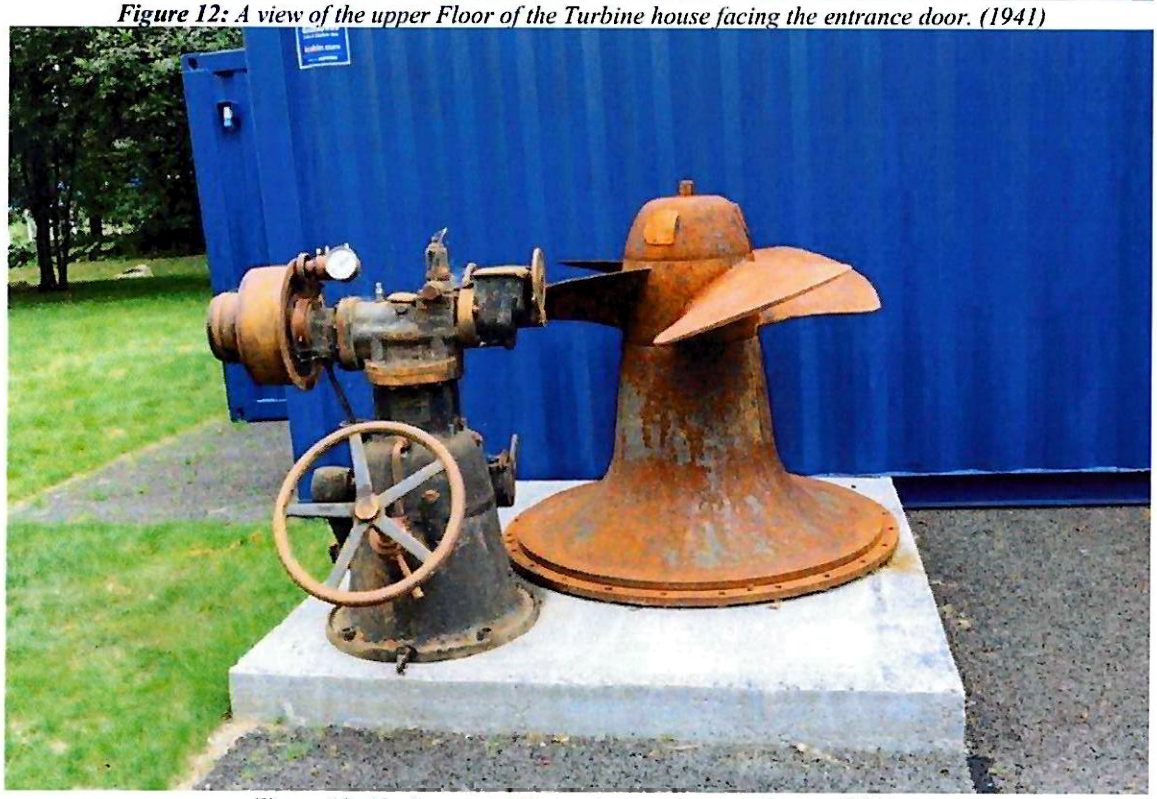


***Figure 13:*** *The former turbine and equipment on display (1948)*

# 7. Assessment of the impact of the proposed development on the Protected Structure.

The Turbine House is a small, functional industrial building, it is single-storey at first floor level with a basement that houses the turbine. The building dates from c. 1930 considered as of Record Only Importance. The interior retains very no features of architectural or cultural merit or historic fabric other than its surviving industrial fabric, which has been repaired/replaced in accordance with good conservation practice. The works on the house are considered to be maintenance and upgrading.

Impact on the Architectural Heritage of the site.

The development proposes to upgrade the building to modern day standards. As the proposed development has very few original surviving elements and they have been replaced on a like for like basis it is considered to have a **Neutral Impact** on the Architectural Heritage of the site.

Impact on the Protected Structures within the vicinity of the site.

Although there are a number of Protected Structures in the vicinity of the site as seen on map 2, there will be no alteration to the view to or from them. The proposed development is considered to have a **Neutral Impact** on the Protected Structures within the vicinity of the site.

# References/sources


*Craig, Maurice, 1982.* *The Architecture of Ireland from the Earliest Times to 1880. London.*

*Department of Arts, Heritage, Gaeltacht And the Islands, 2004.* *Architectural Conservation Guidelines for Planning Authorities. DAHGI.*

*Department of Arts, Heritage, Gaeltacht And the Islands, 1998.* *National Inventory of Architectural Heritage Handbook of Criteria and Standards. Dúchas the Heritage*

*Lewis, Samuel, 1837* *A History and Topography of Dublin City and County. Reprinted The Mercier Press Dublin :1980.*

Internet resources

Department of Culture, Heritage and the Gaeltacht's Historic Environment Viewer
http://webgis.archaeology.ie/historicenvironment/

Heritage Map Viewer - various interactive heritage maps
https://heritagemaps.ie/WebApps/HeritageMaps/index.html

Geohive Mapviewer Resource
http://www.geohive.ie/

National Inventory of Architectural Heritage (NIAH)
http://www.buildingsofireland.ie/Surveys/Buildings/

Wikipedia
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Kildare County Archives & Local Studies
https://kildarelibraries.ie/ehistory/history-of-straffan-co-kildare-the-home-of-the-famous-leader-the-earl-of-tyrconnell/

Historic Hotels Worldwide
https://www.historichotels.org/hotels-resorts/the-k-club/history.php

Ardclough Community Council
http://ardclough.wordpress.com/about/ardclough-history/xtras-hinterland-history-celbridge-straffan/straffan-timeline/

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Inland Fisheries Ireland
https://www.fisheriesireland.ie/sites/default/files/2024-03/river-liffey-wfd-iii-barrier-assessment-obstacles-to-fish-passage-and-mitigation-options_0.pdf

kildarenow
https://www.kildarenow.com/news/home/1671072/the-k-club-becomes-irelands-first-hydro-powered-five-star-hotel.html




# Modernisation of hydroelectric system, The K Club, County Kildare – Appropriate Assessment (AA) Screening Report

ORS

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# Modernisation of hydroelectric system, The K Club, County Kildare
## Appropriate Assessment Screening Report

### Document Control Sheet

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|---|---|
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| **Document No:** | 252234-ORS-XX-XX-RP-EN-13d-002 |

| Revision | Status | Author: | Reviewed by: | Approved By: | Issue Date |
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# 1 Introduction

## 1.1 Background

This Appropriate Assessment (AA) Screening Report has been prepared in support of a proposed installation of a modern efficient small hydroelectric system inside the historical hydroelectric powerhouse of the K Club, Straffan, in the townland of Straffan Demesne, Co. Kildare (ITM 692233, 729254). The proposed work will involve installing the hydroelectric system, including turbine, cabling and inlet sluice gates. A full description of the development is provided in **Section 3.1**.

Article 6 of the EU Habitats Directive (Council Directive 92/43/EEC) requires that all plans and projects be screened for potential impacts upon Special Areas of Conservation (SACs) or Special Protection Areas (SPAs). The aim of this screening process is to establish whether Stage II Appropriate Assessment of the proposed plan or project is necessary. A comprehensive assessment of the potential significant effects of the development on designated sites was carried out in September 2025 by Richard Edwards, PhD, of ORS Building Consultants. This report will allow the relevant competent authority to undertake an Appropriate Assessment as required, and determine the appropriateness of the proposed project in the context of the conservation status of the designated sites.

In complying with the obligations set out in Articles 6(3) and 6(4) of the Habitats Directive, and following guidelines in Section 2, this screening statement has been structured as a stage-by-stage approach as follows:

- Description of the proposed project and its potential sources of ecological impact.
- Identification of the Natura 2000 sites within the Zone of Influence to the proposed development.
- Identification and description of any individual and cumulative impacts on the Natura 2000 sites likely to result from the project.
- Assessment of the significance of the impacts identified above on-site integrity.
- Exclusion of sites where it can be objectively concluded that there will be no significant effects.

## 1.2 Statement of Competency

**Lead Author**

This Appropriate Assessment Screening report was authored by Richard Edwards, BSc (Hons), PhD, FHEA, MRSB. Rich is a molecular ecologist with over 20 years' experience working on interdisciplinary projects. A former academic research leader in bioinformatics, genomics, molecular ecology and evolution, Rich is a creative problem solver across a broad range of biodiversity and ecological sciences. He specialises in identifying pragmatic solutions that maximise mutual benefits. Rich recently joined the Environmental Services team at ORS, bringing strengths in large-scale data analysis, automation, and scientific/technical writing. His experience at the forefront of applying genomic techniques to conservation and biodiversity challenges, including non-native invasive species, positions the ORS team to adapt rapidly to changes in technology relating to biodiversity management and biodiversity net gain legislation.

**Reviewer**

This Appropriate Assessment (AA) Screening report was reviewed by Anna Quaid (MSc.) Anna has a bachelor's degree in science – Single Honours Environmental Science from Munster Technological University (MTU) and a Master's degree in Applied Environmental Science from University College Dublin (UCD). Her academic experience has provided fundamental training in the scientific method and a strong knowledge of the theoretical background of biological and ecological processes including the identification and enumeration of aquatic macroinvertebrates to family or genus level using microscopy and established taxonomic keys. Anna has previous experience working in Groundwater Monitoring and as an Ecological Clerk of Works overseeing construction or development projects to ensure that ecological and environmental protection measures are properly implemented. Her recent experience with ORS has involved preparing Appropriate Assessment (AA) screening reports and full Environmental Impact Assessment Reports (EIARs), incorporating ecological data such as macroinvertebrate results, bird surveys, habitat assessments, and preliminary bat and mammal survey findings. She has applied this expertise across projects of varying scales within commercial, industrial, and residential sectors, supporting comprehensive ecological impact assessments.

## 1.3 Development Overview

The proposed development will consist of modernisation of a hydroelectric power system located inside the existing hydroelectric powerhouse building at the K Club, on the River Liffey. The original system dates back to the 1920s and was upgraded in the 1980s. There is an existing old hydro turbine inside, which will be removed and replaced with a modern efficient system.

All system repair works shall be carried out within the footprint of the existing building:

- No buildings of any kind shall be constructed, extended or demolished
- No buildings shall undergo a change of use
- Built heritage shall be preserved, and no buildings shall be painted or coated externally

The repair works shall include a cleanup of any existing trash in the existing fish ladder and installation of a temporary barrier to create a dry space for replacing the sluice gates and trash racks. No debris of any kind shall be deposited in the river. More details can be found in **Appendix A**.

Repair and operation of the hydroelectric system will conform to the recommendations on flowrates and inlet grills from the June 2005 consultation document produced by the Central & Regional Fisheries Boards and the Department of Communications, Marine & Natural Resources, "Guidelines on the construction & operation of small-scale hydro-electric schemes and fisheries". This includes free and uninterrupted migration of fish, and appropriate screens and gratings to prevent fish or smoult entering the headrace or tailrace.

The location of the proposed development is provided in **Figure 1.1**, below. A further assessment of the characteristics of the proposed development and its environs is included in **Sections 4 and 5** of this report.

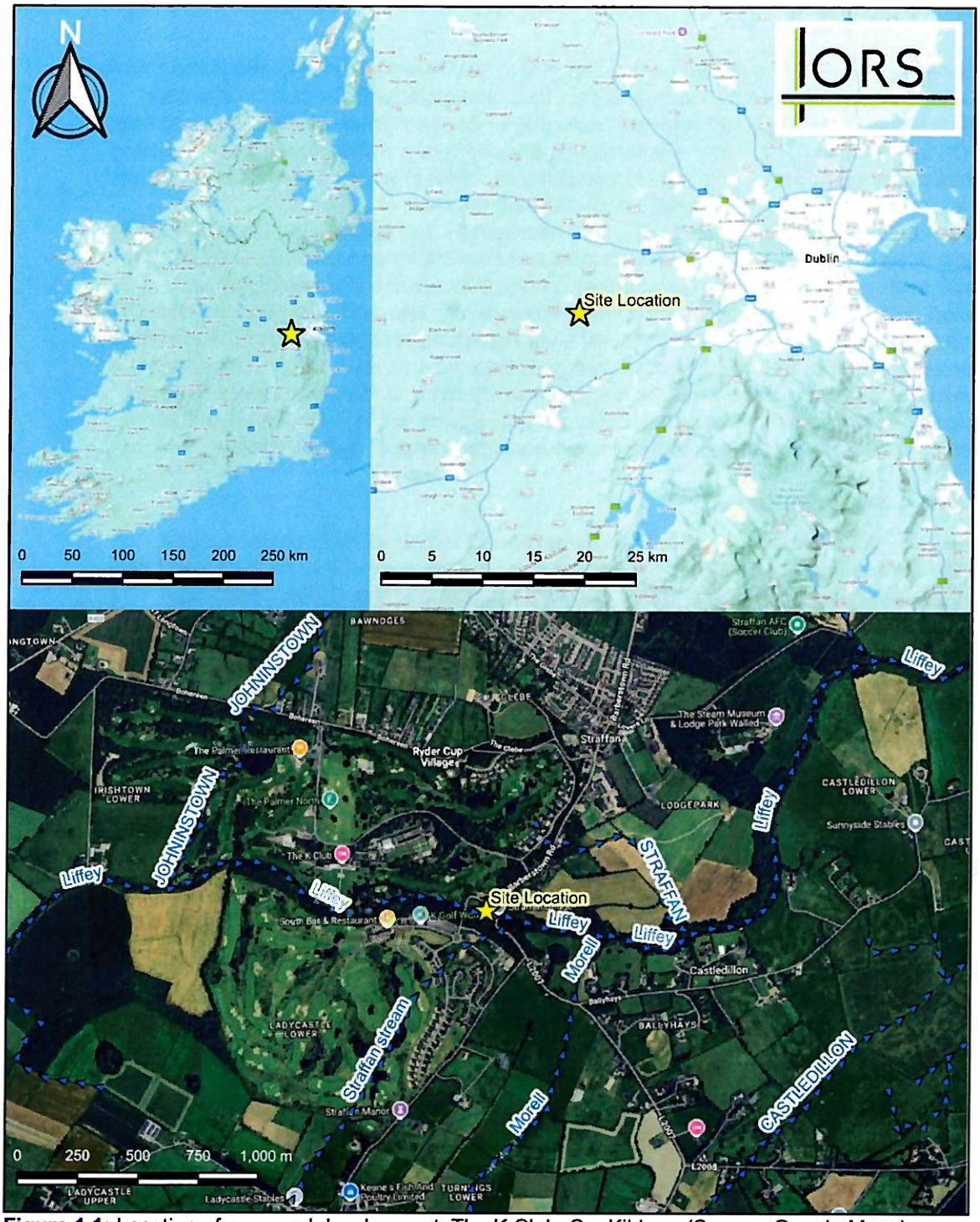



**Figure 1.1:** Location of proposed development, The K Club, Co. Kildare. (Source: Google Maps).

# 2 Regulatory Context

The foundation of ecological protection in Ireland is rooted in European Union legislation, particularly Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora (the 'Habitats Directive') and Council Directive 2009/147/EC (the 'Birds Directive'). These directives establish the Natura 2000 network, a pan-European system of protected sites aimed at safeguarding the most valuable and threatened habitats and species across the EU.

Within this network, two types of designations are used:

- **Special Areas of Conservation (SACs)**, designated under the Habitats Directive, protect habitats, flora and non-avian fauna of European importance.
- **Special Protection Areas (SPAs)**, designated under the Birds Directive, focus on the conservation of rare and migratory bird species and their habitats, including wetlands and coastal zones.

The Birds Directive recognises that certain species of birds should be subject to special conservation measures concerning their habitats. The Directive requires that Member States take measures to classify the most suitable areas as SPAs, selected for the conversation of bird species listed in Annex I of the Birds Directive. These are regularly occurring populations of migratory bird species, species that are particularly threatened, species vulnerable to specific changes in their habitat, and rare species. SPAs are of international importance for these birds.

The Habitats Directive provides legal protection for habitats and species of European importance. Article 2 of the Directive requires the maintenance or restoration of habitats and species of European Community interest, at a favourable conservation status. Articles 3 - 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of the EU-wide Natura 2000 network.

## 2.1 Appropriate Assessment and the Habitats Directive

Articles 6(3) and 6(4) of the Habitats Directive call for the undertaking of an Appropriate Assessment for plans and projects that are likely to have a significant effect on any Natura 2000 sites, but are not directly connected with, or necessary to, their management.

Article 6(3) establishes the requirement for Appropriate Assessment:

"*Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.*"

Article 6(4) deals with the steps that should be taken when it is determined, as a result of appropriate assessment, that a plan/project will adversely affect a European site. Issues dealing with alternative solutions, imperative reasons of overriding public interest and compensatory measures need to be addressed in this case.

Article 6(4) states:

"*If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the member states shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.*

*Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission to other imperative reasons of overriding public interest.*"

## 2.2 The Appropriate Assessment Process

The aim of Appropriate Assessment is to assess the implications of a proposal in respect of a designated site's conservation objectives.

The 'Appropriate Assessment' itself is an assessment which must be carried out by the competent authority which confirms whether the plan or project in combination with other plans and projects will have an adverse impact on the integrity of a European site.

Screening for Appropriate Assessment shall be carried out by the competent authority as set out in Section 177U (1) and (2) of the Planning and Development Act 2000 (as amended) as follows:

1. A screening for appropriate assessment of a draft Land use plan or application for consent for proposed development shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that Land use plan or proposed development, individually or in combination with another plan or project is likely to have a significant effect on the European site.

2. A competent authority shall carry out a screening for appropriate assessment under subsection (1) before -

    a) a Land use plan is made including, where appropriate, before a decision on appeal in relation to a draft strategic development zone is made, or

    b) consent for a proposed development is given.

The competent authority shall determine that an Appropriate Assessment is not required if it can be excluded, that the proposed development, individually or in combination with other plans or project will have a significant effect on a European site. Where the competent authority

cannot exclude the potential for a significant effect on a European site, an Appropriate Assessment shall be deemed required.

Where an Appropriate Assessment is required, the conclusions of the Appropriate Assessment Report (Natura Impact Statement (NIS)) should enable the competent authority to ascertain whether the plan or proposed development would adversely affect the integrity of the European site. If adverse impacts on the integrity of a European site cannot be avoided, then mitigation measures should be applied during the appropriate assessment process to the point where no adverse impacts on the site remain. Under the terms of the Habitats Directive consent can only be granted for a project if, as a result of the appropriate assessment either:

a) it is concluded that the integrity of any European sites will not be adversely affected, or

b) after mitigation, where adverse impacts cannot be excluded, there is shown to be an absence of alternative solutions, and there exists imperative reasons of overriding public interest for the project should go ahead.

Section 177(V) of the Planning and Development Act 2000 (as amended) outlines that the competent authority shall carry out the Appropriate Assessment, taking into account the Natura Impact Statement (amongst any other additional or supplemental information). A determination shall then be made by the competent authority in line with the requirements of Article 6(3) of the Habitats Directive as to whether the plan or proposed development would adversely affect the integrity of a European site, prior to consent being given.

## 2.3 Appropriate Screening Guidelines

This Statement of Screening for Appropriate Assessment (Stage 1) has been prepared with reference to the following:

- *Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC*. European Commission (2018).
- *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC.* European Commission (2021).
- *Nature and Biodiversity Cases: Ruling of the European Court of Justice.* European Commission (2006).
- *Clarification of the Concepts of: Alternative Solution, Imperative Reasons of Overriding Public Interest, Compensatory Measures, Overall Coherence, Opinion of the Commission.* European Commission (2007).
- *Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities*. Department of Environment, Heritage and Local Government (2009).
- *Appropriate Assessment Screening for Development Management, OPR Practice Note PN01, 2021*

### 2.3.1 The Precautionary Principle

The EC Guidance sets out a number of principles as how to approach decision making during the process. The primary one is 'the precautionary principle' which requires that the conservation objectives of Natura 2000 should prevail where there is uncertainty.

When considering the precautionary principle, the emphasis for assessment should be on objectively demonstrating with supporting evidence that:

- There will be no significant effects on a Natura 2000 site.
- There will be no adverse effects on the integrity of a Natura 2000 site.
- There is an absence of alternatives to the project or plan that is likely to have an adverse effect to the integrity of a Natura 2000 site and,
- There are compensation measures that maintain or enhance the overall coherence of Natura 2000.

This translates into a four-stage process to assess the impacts, on a designated site or species, of a policy or proposal.

The EC Guidance states that "each stage determines whether a further stage in the process is required". Consequently, the Council may not need to proceed through all four stages in undertaking the Appropriate Assessment.

The four-stage process involves:

Stage 1: Screening – The process which identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans and considers whether or not these impacts are likely to be significant.

Stage 2: Natura Impact Statement – The consideration of the impact on the integrity of the Natura 2000 site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts.

Stage 3: Assessment of Alternative Solutions – The process which examines alternative ways of achieving objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site.

Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain – An assessment of the compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

### 2.3.2 The Source-Pathway-Receptor Model

The OPR Guidance states that "a European site will only be at risk from likely significant effects where the Source-Pathway-Receptor (S-P-R) link exists between the proposed development and the European site". Determining whether a S-P-R linkage exists between the proposed development and a European site requires identifying the three components of the S-P-R model:

**Source:** "identify characteristics of the proposed development such as the nature, size and location and the types of effects, such as direct emissions or loss of habitat".

**Pathway:** "identify the existence and characteristics of pathways, such as waterbodies or air, that could link European sites and their Qualifying Interests to the proposed development".

**Receptor:** "establish the location, nature and sensitivities of the qualifying species and habitats, the ecological conditions underpinning their survival and the conservation objectives specified to maintain or restore favourable conservation status".

### 2.3.3 Conditions for Requirement of Natura Impact Statement

Plans directly connected to, or necessary to the management of, the conservation objectives of a Natura 2000 site are not subject to AA. All other plans or projects must be screened with respect S-P-R linkage with the Natura 2000 network. A full Natura Impact Statement is required "*if it cannot be excluded, on the basis of objective information, that it will have a significant effect on that site, either individually or in combination with other plans or projects*" (European Commission, 2006). Due to the **precautionary principle**, AA (NIS) is still required **where doubt exists** about the risk of a significant effect (Department of Environment, Heritage and Local Government, 2009).

In this context, a **significant effect** refers to situations where the impacts of a plan or project are likely to undermine the conservation objectives for a Natura 2000 site. For significant effects to arise, there must be a potential impact facilitated by having a source (*i.e.* the proposed development and activities arising out of its construction or operation), a receptor (*i.e.* the European site and its qualifying interests), and a pathway or connectivity between the source and receptor, (*e.g.* a water course). Where it can be shown that the impacts of a plan or project are not relevant to the sensitivities of the Qualifying Interests (QIs) or Special Conservation Interests (SCIs) for a Natura 2000 site (habitats and species), a significant effect can be excluded. Similarly, impacts without a plausible pathway between source and receptor can be excluded. This is influenced by the size of the plan area, the nature and extent of development, and any combined impacts arising from other planning proposals in the area.

# 3 AA Screening Methodology

## 3.1 Desktop Studies & Consultation

Information regarding the site of the proposed development and its environs was studied prior to the completion of this statement. The following data sources were accessed to complete a thorough examination of potential impacts:

- National Parks and Wildlife Service - Aerial photographs and maps of designated sites, information on habitats and species within these sites and information on protected plant or animal species, conservation objectives, site synopses and standard data forms for relevant designated sites.
- NPWS Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities, 10 December 2009 (as revised 11 February 2010).
- Assessment of plans and projects significantly affecting Natura 2000 sites (2001)
- Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive (2018).
- NPWS (2013). The Status of Protected EU Habitats and Species in Ireland.
- Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.
- Environmental Protection Agency (EPA)- Information pertaining to water quality, geology and licensed facilities within the area.
- Myplan.ie – Map-based information.
- National Biodiversity Data Centre (NBDC) – Information pertaining to protected plant and animal species within the study area.
- National Planning Application Database.
- Central and Regional Fisheries Boards & Department of Communications, Marine & Natural Resources (2005) Guidelines on the construction & operation of small-scale hydro-electric schemes and fisheries: Consultation document.
- Kildare County Council
- EPA Online Maps
- Bing maps & Google Street View – High quality aerials and street images.

## 3.2 Assessment Methodology

The proposed development was assessed to identify its potential ecological impacts and from this, the Zone of Influence (ZoI) of the proposed development was defined. Based on the potential impacts and their ZoI, the Natura 2000 sites potentially at risk from direct, indirect, or in-combination impacts were identified. The assessment considered all potential impact sources and pathways connecting the proposed development to Natura 2000 sites, in view of the conservation objectives supporting the favourable conservation condition of the site's Qualifying Interests (QIs) or Special Conservation Interests (SCIs).

The conservation objectives relating to each Natura 2000 site and its QIs/SCIs are cited generally for SACs as "*to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or Annex II species for which the SAC has been selected*", and for SPAs

*"to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA".*

As defined in the Habitat's Directive, the favourable conservation status of a habitat is achieved when:

- Its natural range and area it covers within that range is stable or increasing.
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future.

The favourable conservation status of a species is achieved when:

- The population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats.
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future.
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Where site-specific conservation objectives (SSCOs) have been prepared for a European site, these include a series of specific attributes and targets against which effects on conservation condition, or integrity, can be measured. Where potential significant effects are identified, then these SSCOs should be considered in detail.

# 4 Site Details

## 4.1 Project Description

The proposed development will consist of the following work at a building on the River Liffey located in the grounds of the K Club, Co. Kildare:

- Installation of temporary barrier approx. 3 m in front of sluice gates to prevent water flowing through them during repair.
- Installation of temporary barrier approx. 3 m in front of powerhouse to prevent water flowing into the chamber of the building to enable equipment upgrade.
- Removal of obsolete equipment from the building. Equipment shall be manually dissembled on-site using hand tools with controls in place to avoid oil spillage.
- Retained equipment sandblasted and preserved onsite for heritage.
- Cleanup of site and removal of debris. Any silt or mud removed from the hydropower chamber will be deposited on the river bank.
- Cleanup of any existing trash in the river and fish pass.
- Replacement of sluice gates and trash racks, followed by removal of temporary barrier. New smolts screens will be installed over the existing trash rack.
- Installation of modern hydropower equipment inside building.
- Manufacture and installation of a new draft tube. This may require a small quantity of concrete to be poured in the dry chamber.
- Operational flow of water through sluice gates, over weir and fish pass, and through hydroelectric system. The system prioritises the flow first into the fish pass and then over the weir. Repairs to the sluice gates ensure that the fish pass and weir will not run dry.

A diagram of the new equipment to be installed is illustrated in **Figure 4.1,** below. Additional details can be found in the accompanying Scope of Works (**Appendix A**).

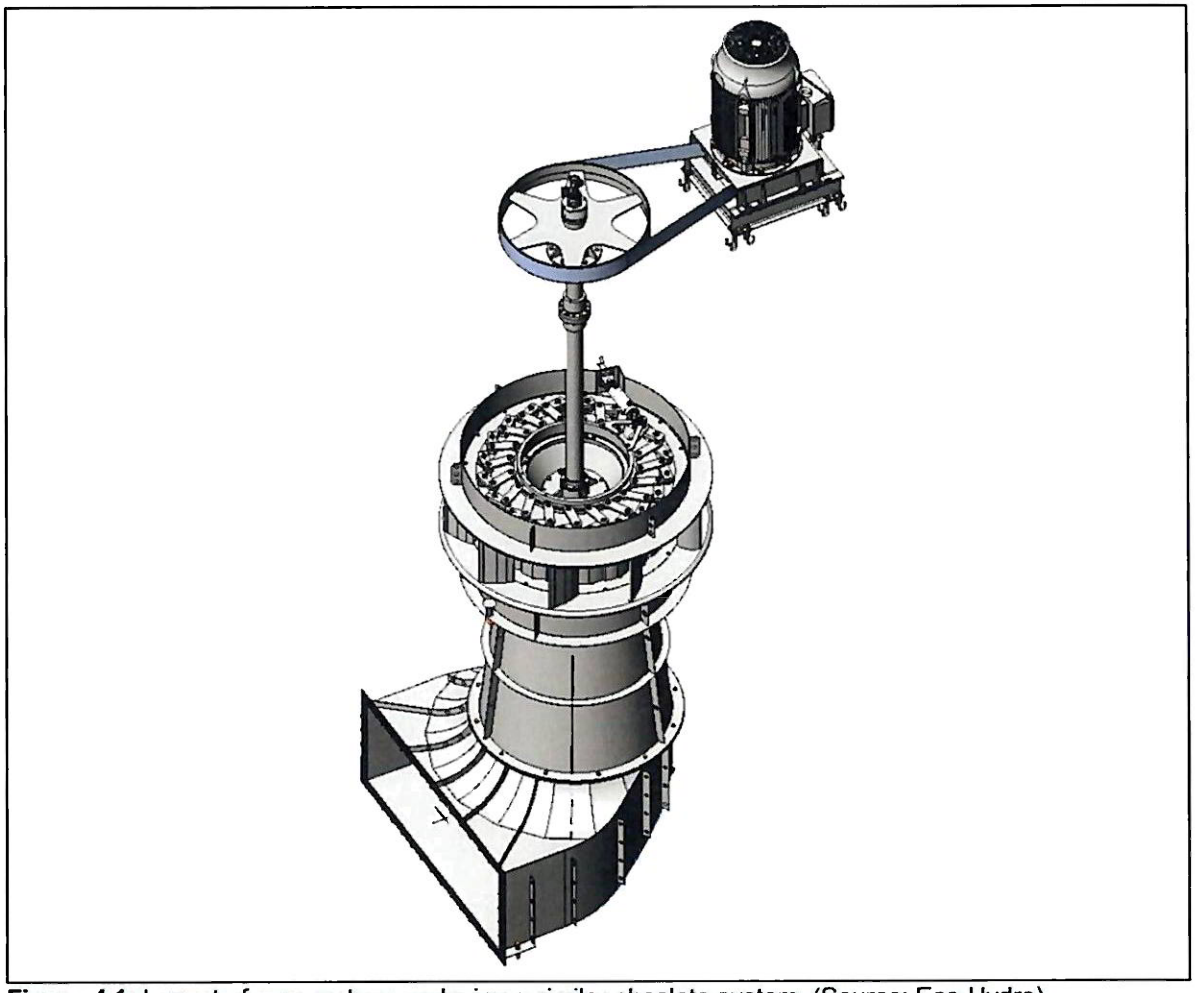


**Figure 4.1:** Layout of new system, replacing a similar obsolete system. (Source: Eco-Hydro)

### 4.1.1 Potential Sources of Ecological Impact

Incorporating best practice in construction and operation (*without* mitigation), the proposed development has the following potential ecological impacts:

**Disturbance (100 m).** Removal of obsolete equipment (*ca.* 20 days), preparation for new equipment (*ca.* 10 days), and installation of new equipment (*ca.* 45 days) will generate low levels of noise and vibration. The modernisation works do not include construction, extension or demolition of any buildings.

**Surface Water Pollution (5 m).** System repair works shall be carried out within the footprint of the existing building. No debris of any kind shall be deposited in the river and the repair works shall include a cleanup of the existing trash in the fish pass. A small amount of in-stream works will be required to install and then remove a temporary barrier approx. 3 m in front of inlet gate to prevent water flowing into the chamber during equipment upgrade (**Figure 4.2**). The risk of a

short-term decrease in water quality is low, with a long-term improvement in water quality anticipated.

**Modified Watercourse (5 m).** Installation of a temporary barrier followed by operational flow of water through the inlet sluice gates and hydroelectric system will have a highly localised disruption with negligible effects on the overall flow of water through the river (**Figure 4.2**). Repairs to the sluice gates will have a localised improvement of flow across the weir and fish pass, improving fish migration along this stretch of the river.

The following sections discuss features of the local environment that will influence the risk of significant ecological impacts occurring.

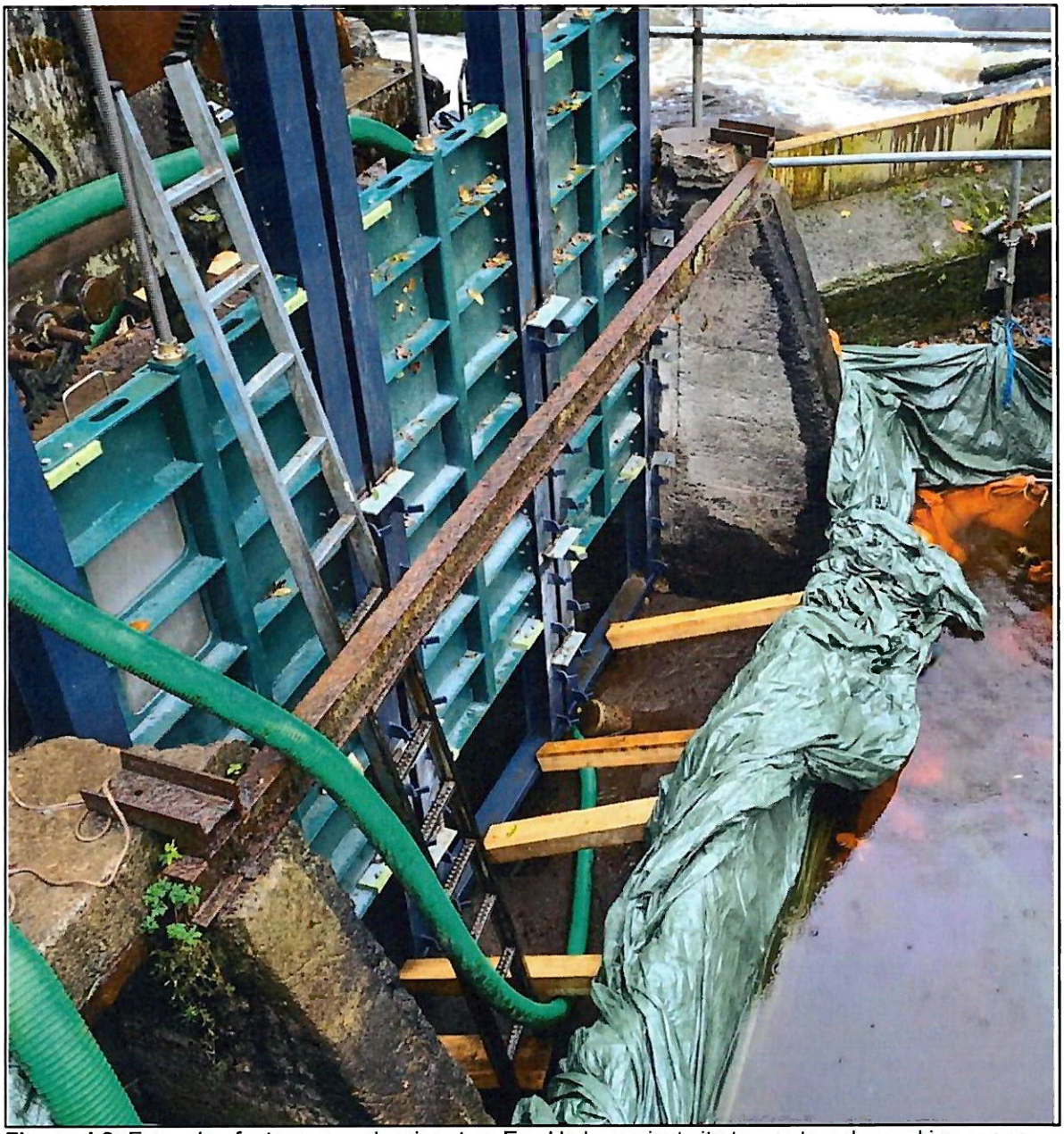


**Figure 4.2**: Example of a temporary barrier at an Eco Hydro project site to create a dry working space for installing new sluice gates. (Source: Eco Hydro)

## 4.2 Site Location, Environs and Environmental Considerations

The proposed works are located southwest of Straffan, County Kildare (ITM 692233, 729254) (**Figure 4.3**). The building is an old hydroelectric powerhouse on the grounds of the K Club, dating back to the 1920s, positioned on the north bank of the River Liffey beside a weir *ca.* 45 m upstream of the Straffan Bridge. The weir features a fish pass for fish migration and is

positioned directly south of the building (**Figure 4.4**). Sluice gates on the south side of the river control flow of water over the weir. The River Liffey flows east to Dublin before discharging into Dublin Bay *ca.* 29 km east of the site. Overall, the site is within an isolated part of the K Club grounds, over 100 m from any other buildings.

The site location and environs are presented

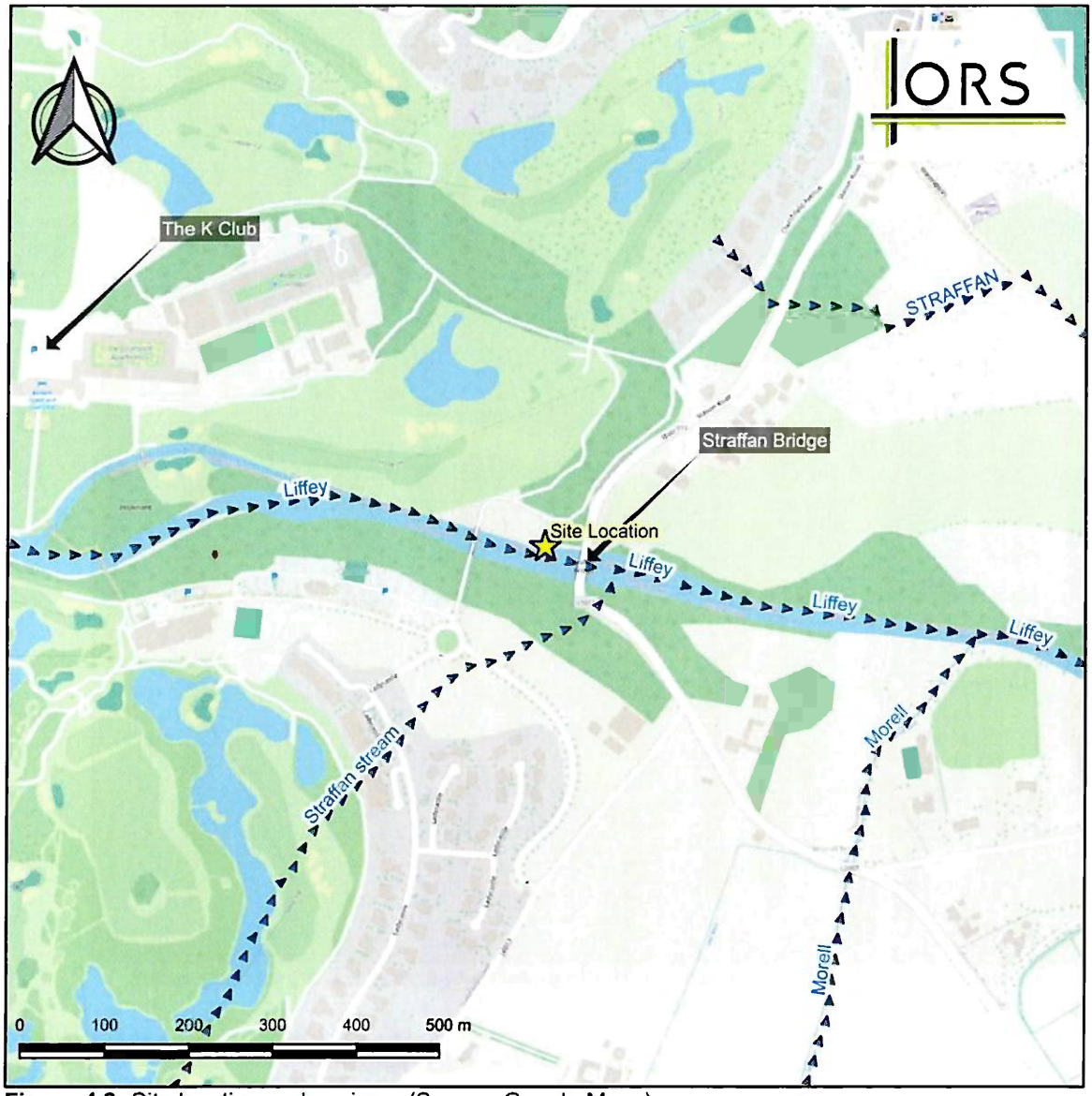



**Figure 4.3:** Site location and environs (Source: Google Maps).

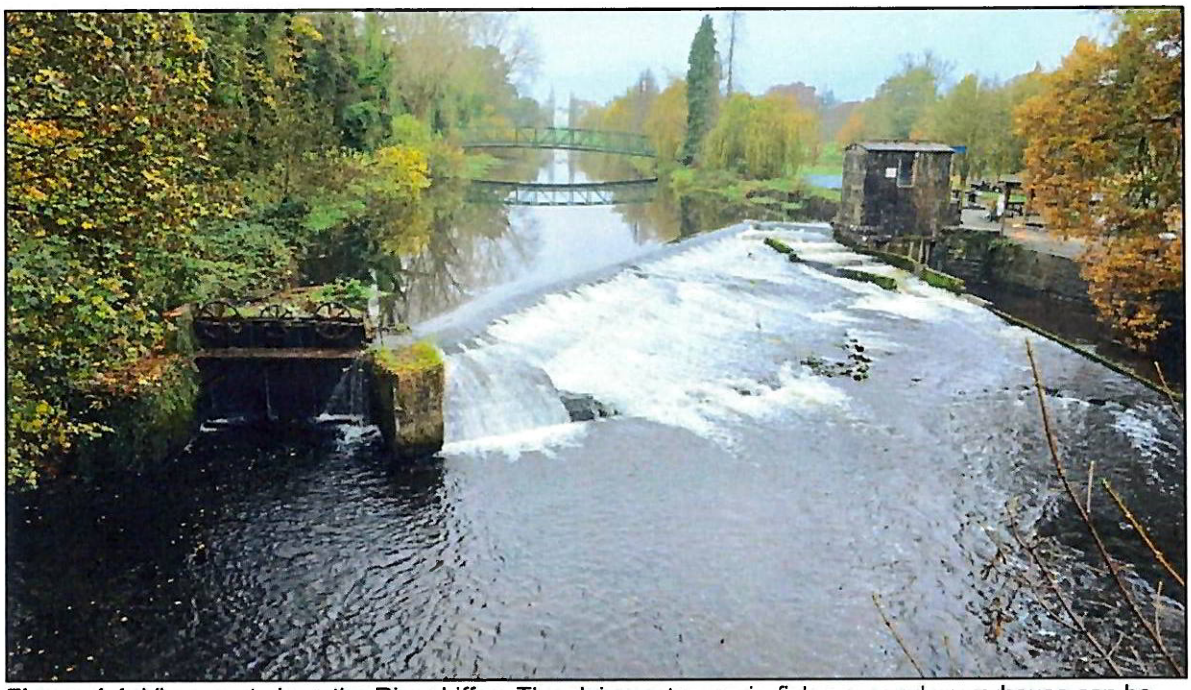


**Figure 4.4:** View west along the River Liffey. The sluice gates, weir, fish pass and powerhouse can be seen, left to right. (Source: Eco Hydro)

### 4.2.1 Topography

All system repair works shall be carried out within the footprint of the existing building. As such, the topography has not been considered for establishing the Zone of Influence.

### 4.2.2 Hydrology

Maps generated by the Environmental Protection Agency (EPA) and featuring data from the EU Water Framework Directive (WFD) were consulted to assess the extent and quality of waterbodies present in the vicinity of the proposed development. The principal hydrological feature in the vicinity of the site is the eastward flowing River Liffey (LIFFEY_130, IE_EA_09L011600), located directly south of the building. The River Liffey flows east until it discharges into Dublin Bay *ca.* 29 km east of the site.

Taking the scale and nature of the proposed development into consideration (**Section 4.1.1**), only hydrologically connected waterbodies, and downstream, were considered as potential impact pathways and were included in this analysis. A summary of the waterbodies with the potential to act as impact pathways can be found in **Table 4.1** below.

| Table 4.1: Waterbodies in Proximity to Proposed Site | | | | |
|---|---|---|---|---|
| Waterbody | WFD Sub-basin Name | Code | Distance & Direction From Site | WFD Status |
| River Liffey | LIFFEY_130 | IE_EA_09L011600 | 0m S | Good |

The WFD runs in 6-year cycles with the most recent data being generated between 2016-2021. The Directive takes rivers, lakes, estuaries, groundwater and coastal waters into consideration and each waterbody can be awarded one of five statuses: High, Good, Moderate, Poor, and Bad. Additionally, waterbodies can be assigned a risk level ("At Risk", "Not at Risk", "Review") which represents the risk of the waterbody of failing its WFD objectives by 2027. According to the EPA maps, the risk level of the River Liffey is "Not At Risk" and possesses a WFD status of "Good".

The site is situated within the LIFFEY_130 Sub-Basin, within Hydrometric Area 09, the Liffey and Dublin Bay Catchment, and the Liffey_SC_050 sub-catchment. The 3rd Liffey and Dublin Bay (HA 09), published in May 2024 and based on data up to 2021, provides a summary of water quality assessments for this catchment. According to the report, the most significant pressures on the catchment are urban run-off, agriculture, hydromorphological pressures, and urban wastewater. The proposed works do not involve any likely exacerbating impacts.

No WFD River Network Routes in the vicinity are designated as Salmonid Waters under *S.I. No. 293/1988 - European Communities (Quality of Salmonid Waters) Regulations 1988*, meaning that adverse impacts on salmonid habitats do not need to be considered.

### 4.2.3 Geology & Hydrogeology

All system repair works shall be carried out within the footprint of the existing building. As such, the geology and hydrogeology has not been considered for establishing the Zone of Influence.

## 4.3 Cumulative Impacts with Other Planning Proposals

Cumulative impacts with other planning proposals were assessed by considering all planning applications from the past 10 years within the 100 m Zone of Influence. No planning applications since 2015 were found on the Kildare County Council planning portal with 100 m of the site.

## 4.4 Cumulative Impacts and Zones of Influence

Taking construction best practices and potential cumulative impacts into consideration, the potential (unmitigated) ecological impacts of the proposed project are summarised in **Table 4.2**.

| Table 4.2: Potential Sources of Ecological Impact from Proposed Project | | | | |
|---|---|---|---|---|
| **Impact** | **Source & Scale [Phase[1]]** | **Zone of Influence** | **Pathways of Concern** | **Key Ecological Receptors** |
| Noise/Vibration | Low levels of noise/vibration during removal of obsolete equipment and installation of new equipment [C]. | 100 m | Proximity | Species of Concern |
| Surface Water Pollution | Installation and removal of temporary barrier in-stream creates a very low risk to any sensitive species or habitats on site [C]. | 5 m | Water features | Species and Habitats of Concern |
| Modified Watercourse | Installation of a temporary barrier followed by operational flow of water through the inlet sluice gates and hydroelectric system will have a highly localised disruption [C][O]. | 5 m | Water features | Aquatic Habitats |

1. **C**: Construction; **O**: Operations.

# 5 Natura 2000 Sites

## 5.1 Natura 2000 Sites Identified

In accordance with the guidelines issued by the Department of the Environment and Local Government, a list of Natura 2000 sites within the vicinity of the proposed development have been identified and described according to their site synopsis, qualifying interests and conservation objectives. In addition, any other sites further than this, but potentially within its zone of influence were also considered. The zone of influence may be determined by an assessment of the connectivity between the application site and the designated areas by virtue of hydrological connectivity, atmospheric emissions, flight paths, ecological corridors, etc. The measurements used here are taken from the closest point along the proposed work area to the SAC / SPA.

An initial screen was performed within the established cumulative ZoI of the site (**Section 4.4**) to identify European Sites that could potentially be affected by the proposed development. After this initial assessment, only those Natura 2000 sites that have any reasonable Source-Pathway-Receptor (S-P-R) connectivity were considered further, in line with OPR best practice guidance.

There are no Natura 2000 designated sites (SACs or SPAs) located within the ZoI of the proposed site (**Figure 5.1**). The closest site, the Rye Water Valley/Carton SAC, lies *ca.* 8.71 km northeast of the site, which is too far for potential S-P-R linkage given the nature and scale of the development (**Table 4.2**). The closest downstream Natura 2000 site, South Dublin Bay SAC, is *ca.* 27.0 km east, which is far beyond any plausible impact given the Zone of Influence.

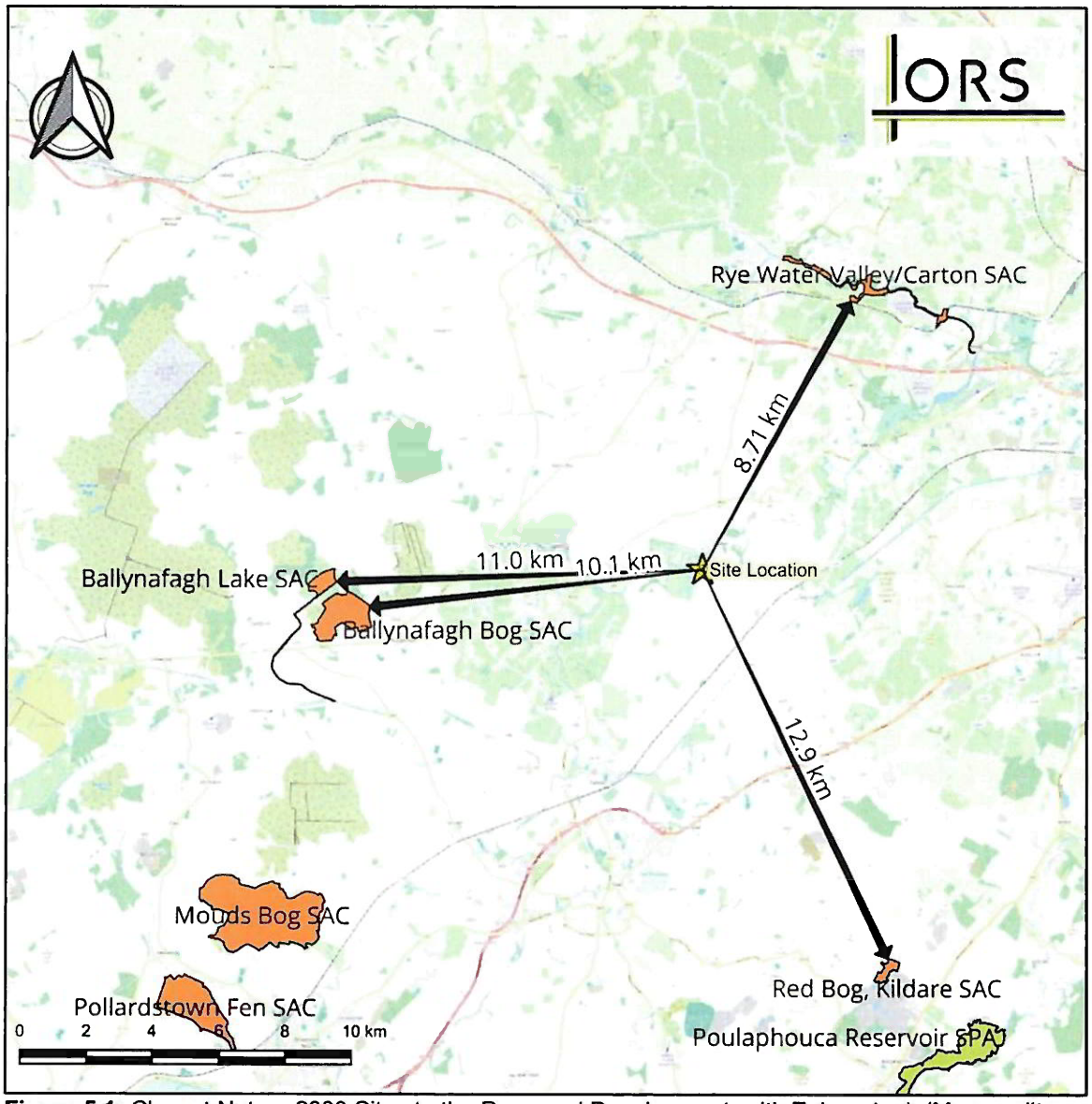



**Figure 5.1:** Closest Natura 2000 Sites to the Proposed Development, with ZoI marked. (Map credit: Open Street Maps)

### 5.1.1 Natura 2000 Sites with Potential Pathways for Impact

No Natura 2000 sites have pathways to the proposed development site that warrant further consideration.

## 5.2 Natura 2000 Impact Assessment

The potential significant effects of the proposed development on the European sites identified are described below in **Table 5.1**.

| Table 5.1: Natura 2000 Threshold Levels |
|---|
| **Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on nearby Natura 2000 sites:** |
| There are no elements of the project that are likely to give rise to impacts on nearby Natura 2000 sites. |
| **Describe any likely direct, indirect, or secondary impacts of the project (either alone or in combination with other plans or projects) on the nearby Natura 2000 sites by virtue of:** |
| **Size and scale:** The proposed works are small in scale and restricted to one building and its immediate upstream environs. The modernisation works do not include construction, extension or demolition of any buildings.<br>**Land-take:** There will be no land-take from any designated site. There will be no interference with the boundaries of any designated site.<br>**Distance from Natura 2000 site or key features of the site:** The closest Natura 2000 site is 8.71 km northeast.<br>**Resource requirements (water abstraction etc.):** No resources will be taken from any European site and there are no resource requirements that will impact upon any designated site.<br>**Emissions:** System repair works shall be carried out within the footprint of the existing building. No debris of any kind shall be deposited in the river and the repair works shall include a cleanup of any existing trash in the channel.<br>**Excavation requirements:** No excavation is required.<br>**Transportation requirements:** All equipment is small and can be moved on/off site without risk of affecting any Natura 2000 sites.<br>**In-Combination / Cumulative Impacts:** No cumulative impacts were identified (see **Section** Error! Reference source not found.).<br>**Duration of construction, operation, decommissioning, etc:** It is estimated that works will be completed within 3 months. |
| **Describe any likely changes to the nearby Natura 2000 sites arising as a result of:** |
| **Reduction of habitat area:** The proposed development lies outside the boundaries of any European sites. It is not foreseen that there will be any reduction of designated habitat area within any SAC or SPA. There will likely be no impacts upon the habitat qualifying interests of any designated site. There will be no interference with the boundaries of any European site.<br>**Disturbance to key species:** In the absence of mitigation, no disturbance to key species is anticipated. Due to improvements in flow over the river pass, fish migration is likely to be improved following the work.<br>**Reduction in species density:** No reduction in species density is anticipated.<br>**Changes in key indicators of conservation value (water quality etc.):** In the absence of mitigation, no significant negative effects on water quality, or other indicators, are anticipated. |
| **Describe any likely impacts on the nearby Natura 2000 sites as a whole in terms of:** |

| |
|---|
| **Interference with the key relationships that define the structure or function of the site:** None likely. |
| **Provide indicators of significance as a result of the identification of effects set out above in terms of:** |
| **Loss - Estimated percentage of lost area of habitat:** None likely.<br>**Fragmentation:** None likely.<br>**Disruption & disturbance:** None likely.<br>**Change to key elements of the site (e.g. water quality etc.):** None likely. |

## 5.3 Finding of No Significant Effects

| Table 5.2: Significant Effects Report Matrix<br>Finding of No Significant Effects Report Matrix | |
|---|---|
| **Name and Description of project** | Modernisation of hydroelectric system at the K Club, on the River Liffey, Straffan, Co. Kildare:<br>• Installation of temporary barrier approx. 3 m in front of sluice gates to prevent water flowing through them during repair.<br>• Installation of temporary barrier approx. 3 m in front of powerhouse to prevent water flowing into the chamber of the building to enable equipment upgrade.<br>• Removal of obsolete equipment from the building. Equipment shall be manually dissembled on-site using hand tools with controls in place to avoid oil spillage.<br>• Retained equipment sandblasted and preserved onsite for heritage.<br>• Cleanup of site and removal of debris. Any silt or mud removed from the hydropower chamber will be deposited on the river bank.<br>• Cleanup of any existing trash in the river and fish pass.<br>• Replacement of sluice gates and trash racks, followed by removal of temporary barrier. New smolts screens will be installed over the existing trash rack.<br>• Installation of modern hydropower equipment inside building.<br>• Manufacture and installation of a new draft tube. This may require a small quantity of concrete to be poured in the dry chamber.<br>• Operational flow of water through sluice gates, over weir and fish pass, and through hydroelectric system. The system prioritises the flow first into the fish pass and then over the weir. Repairs to the sluice gates ensure that the fish pass and weir will not run dry. |

| | |
|---|---|
| **Name and location of Natura 2000 sites** | None within Zone of Influence. |
| **Is the project directly connected with or necessary to the management of the site?** | No |
| **Are there other projects or plans that together with project being assessed could affect the site?** | No |
| **The Assessment of Significance of Effects** | |
| **Describe how the project is likely to affect the Natura 2000 site** | No effects are likely. |
| **Explain why these effects are not considered significant** | No effects are likely. |
| **Describe how the project is likely to affect species designated under Annex II of the Habitats Directive.** | No effects are likely. |
| **Data Collected to Carry out the Assessment** | |
| **Who carried out the assessment** | Richard Edwards, BSc, PhD, Senior Ecological Consultant |
| **Sources of data** | NPWS, EPA, GSI, NBDC, Kildare City Council |
| **Level of assessment completed** | Stage 1 Appropriate Assessment Screening |
| **Where can the full results of the assessment be accessed and viewed** | Full results included |

# 6 Conclusion

In accordance with Article 6(3) and (4) of the Habitats Directive, the relevant case law, established best practice and the precautionary principle, this AA Screening Report has examined the details of the project in relation to the relevant Natura 2000 sites within the Zone of Influence of the application site that may have established S-P-R linkages.

At this stage of the AA process, it is for the competent authority, *i.e.*, Kildare City Council, to carry out the screening for AA and to reach one of the following determinations:

1. AA of the proposed development is required if it cannot be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any European sites;

2. AA of the proposed development is not required if it can be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any European sites.

On the basis of objective information provided in this report, a significant effect of the proposed development on any European sites, individually or in combination with other plans or projects, **can be excluded**. It is therefore the opinion of the author that Stage II (Natura Impact Statement) of the proposed development is **not required**.

# 7 References

**Central and Regional Fisheries Boards & Department of Communications, Marine & Natural Resources (2005)** Guidelines on the construction & operation of small-scale hydro-electric schemes and fisheries: Consultation document.

**CIEEM (2018)** Good Practice Guidance for Habitats and Species. Chartered Institute of Ecology and Environmental Management (CIEEM).

**CIEEM (2018)** Guidelines for Ecological Impact Assessment in the UK and Ireland. Chartered Institute of Ecology and Environmental Management (CIEEM).

**CIEEM (2024)** Guidelines for Ecological Impact Assessment in the UK and Ireland - Terrestrial, Freshwater, Coastal and Marine, v1.3. Chartered Institute of Ecology and Environmental Management (CIEEM).

**Council of the European Communities (1992)** Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

**Department of Housing, Local Government and Heritage (2009)** Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities

**Department of Housing, Local Government and Heritage (2024)** Ireland's 4th National Biodiversity Action Plan 2023–2030.

**EPA (2022)** Guidelines on the information to be contained in Environmental Impact Assessment Reports. Environmental Protection Agency (EPA).

**European Parliament and Council (2009)** Directive 2009/147/EC of 30 November 2009 on the conservation of wild birds.

**European Union (2017)** Environmental Impact Assessment of Projects - Guidance on Screening.

**Government of Ireland (2011)** European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011).

**Government of Ireland (2024)** European Union (Invasive Alien Species) Regulations 2024 (S.I. No. 374 of 2024).

**Scott Wilson, Levett-Therivel Sustainability Consultants, Treweek Environmental Consultants and Land Use Consultants (2006)** Appropriate Assessment of Plans.

# Appendix A: Scope of Works – K Club

Please see the attached Scope of Works for the project, which provides additional details on the site, installation process and timescale.

ECO HYDRO

April 8rd 2025

re: Statement Regarding Repair Works at K Club Hydroelectric System

To Whom It May Concern:

Summary:

- No buildings of any kind were constructed
- No structures were extended
- No buildings were demolished
- No buildings underwent a change of use
- No buildings were painted or coated externally
- Built heritage was preserved
- System repair works were carried out within the footprint of the existing building
- No materials or debris of any kind was 'dumped into the river'.

The existing hydroelectric system at the K Club was installed in circa 1925. The system provided renewable energy for Straffan Estate and the street lights in Straffan Village. During the 1980s the system was upgraded with new electronic equipment and fuseboards.

Eco Hydro is contracted by the K Club to repair, upgrade and maintain the hydropower equipment in order to supply the hotel with 100% carbon free renewable energy.

Upon initial inspection of the location, water was escaping through the broken boards in all three sluice gates which were positioned on the southern bank. This caused the river level to significantly drop below the level of the weir and existing fish ladder. The result of which meant that there was no water flowing over the weir or through the fish pass.

The existing fish pass was running dry and contained a significant amount of debris, including tree stumps, branches, ropes, cans, cement blocks, plastic waste, fishing line, broken bottles and more.

Due to the pressure of water passing through the broken sluice gates, the dry fish ladder, and the cumulation of debris, the existing conditions made it impossible for fish life to migrate upstream or downstream.



*fig 1: Straffan Weir completely dry due to water jetting through broken boards in all three sluice gates on the southern bank. This caused the river level to drop below the height weir and the fish pass.*

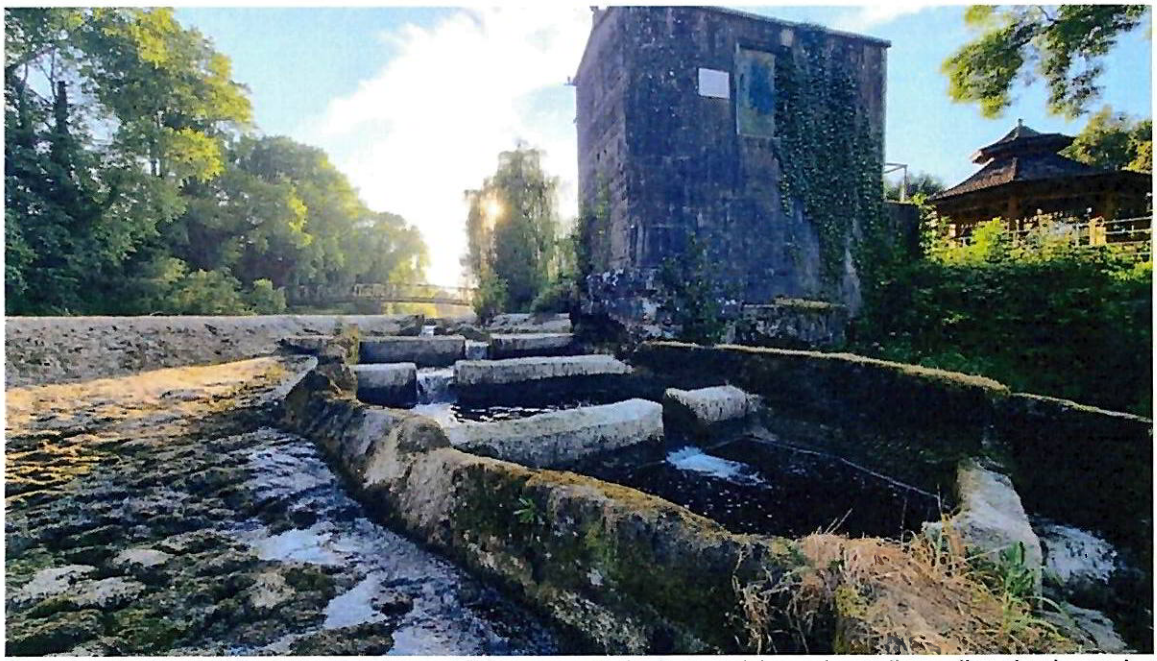


*fig 2: Water barely trickling down the fish pass. This was due to the broken sluice gates on the southern bank, causing the river level to drop below the height weir and the fish pass.*
*(image taken after the fish pass was cleared of debris by hand)*



*fig 3: Broken sluice gates. Water escaping and jetting through the broken sluice gates which caused the river to drop below the level of the weir and fish pass.*

Each of the three broken sluice gates were repaired and can now be raised and lowered if required. The new gates have stopped water from escaping and the river level has returned to the correct height. This means that the fish pass and the weir will never again be dry.

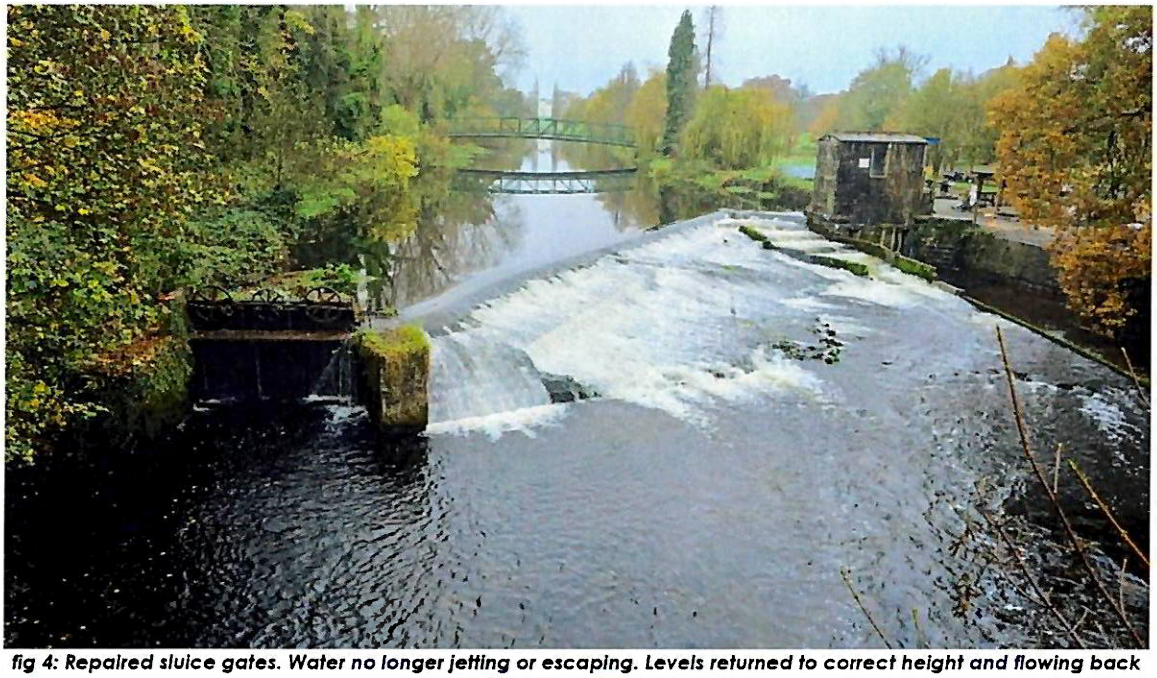


*fig 4: Repaired sluice gates. Water no longer jetting or escaping. Levels returned to correct height and flowing back into the fish pass and over the weir.*

Water has been freely flowing through the existing hydropower building for approximately 100 years.



*fig 5: The original hydropower system within the existing building in disrepair.*

The old runner and equipment which were installed inside the building were removed, and are now positioned outside to powerhouse to preserve built heritage.



*fig 6: The old runner being lifted up inside the existing building.*

The old obsolete system was replaced with smaller, more efficient equipment inside the existing building. The new equipment is of a similar technical design to the original installation.

The repaired system uses modern automation and regulation technology. Water flowing over the weir and into the existing fish pass is prioritised. New sophisticated level sensors are positioned above and below the power house. This means that the system will automatically stop if the depth of water passing over the weir drops below 10cm. The wicket gates will automatically close which stops water from passing through.

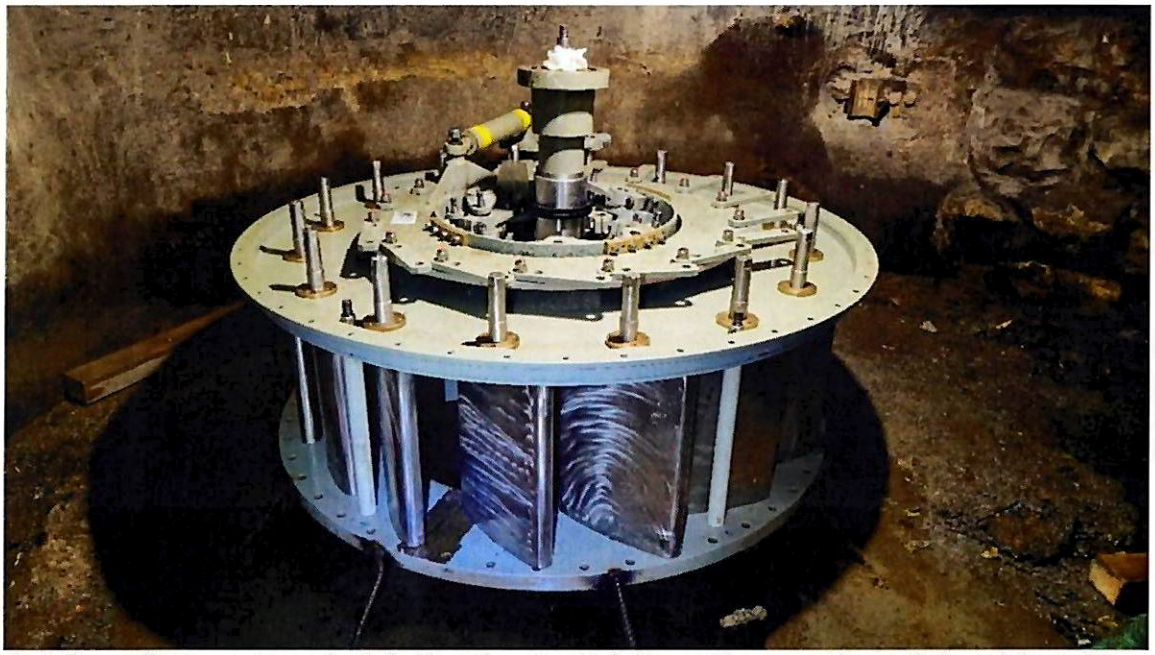


***fig 7: The smaller new equipment installed to replace the old, in the exact same position inside the existing building.***

The newly installed runner is a double regulated Kaplan, which has a slower rotational speed compared to Francis or Pelton runners. The system is designed for a flowrate of 1m3 per second. Even if the river is in high flood, the flow rate is limited. In very low water conditions, the flow is always prioritised over the weir and into the fish pass.

| | |
|---|---|
| Type: | Double Regulated Vertical Kaplan |
| Dimensions: | 1 meter |
| Material: | Carbon steel & stainless steel |
| Rated Flow: | 1 meter cubed per second |

The water flow is not changed or diverted in any way compared to the original system.

The original upstream trash rack which was in place is reused onsite. The original trash rack which was in situ has vertical bars with a separation of approximately 50mm. Eco Hydro is cognisant of the guidelines for small hydropower systems published by Inland Fisheries Ireland in 2004. An updated seasonal smolt screen is currently being prepared for the hydro intake and will soon be installed at the K Club system.

During the onsite repair process, representatives from Inland Fisheries Ireland visited the site on two occasions and no concerns or requests regarding the works were raised.

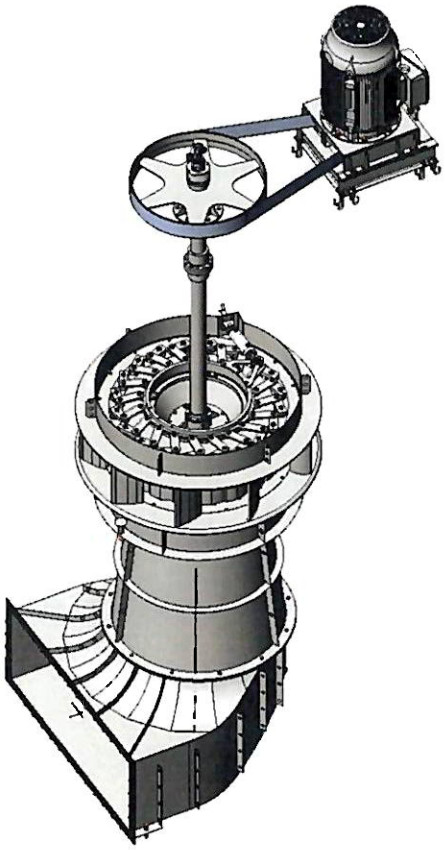


***fig 8: Full layout of the smaller new equipment. The technical design is similar to the original system. This was installed in place of the old system.***

Contrary to misinformation shared or published by biased individuals, the repairs at the K Club have greatly improved the conditions for fish migration, and has resulted in improved the water flow which supports the regeneration of fish species.

To confirm:

- No structures of any kind were built.
- No existing structures underwent a change of use.
- All hydroelectric repair works were completed inside the footprint of the existing powerhouse building.
- The modernised equipment was installed in the same position as the old.
- The external walls of the existing powerhouse were not changed or painted.
- No debris or rocks of any kind were dumped into the river. This is completely false.
- Any silt or mud which was removed from within the existing hydropower chamber was deposited on the river bank. This can be viewed.
- Debris and blockages in the fish pass were removed. A build-up of blocks/stones were pushed aside to facilitate an improved flow for fish migration.
- The southern sluice gate has been repaired and the river is now at the correct level.
- New smolts screens will be installed over the existing trash rack.
- The modern system prioritises the flow first into the fish pass and then over the weir.
- These onsite repairs ensure that the fish pass and weir will never again run dry.
- The water flow through the overall site has been greatly improved which is beneficial for fish migration.



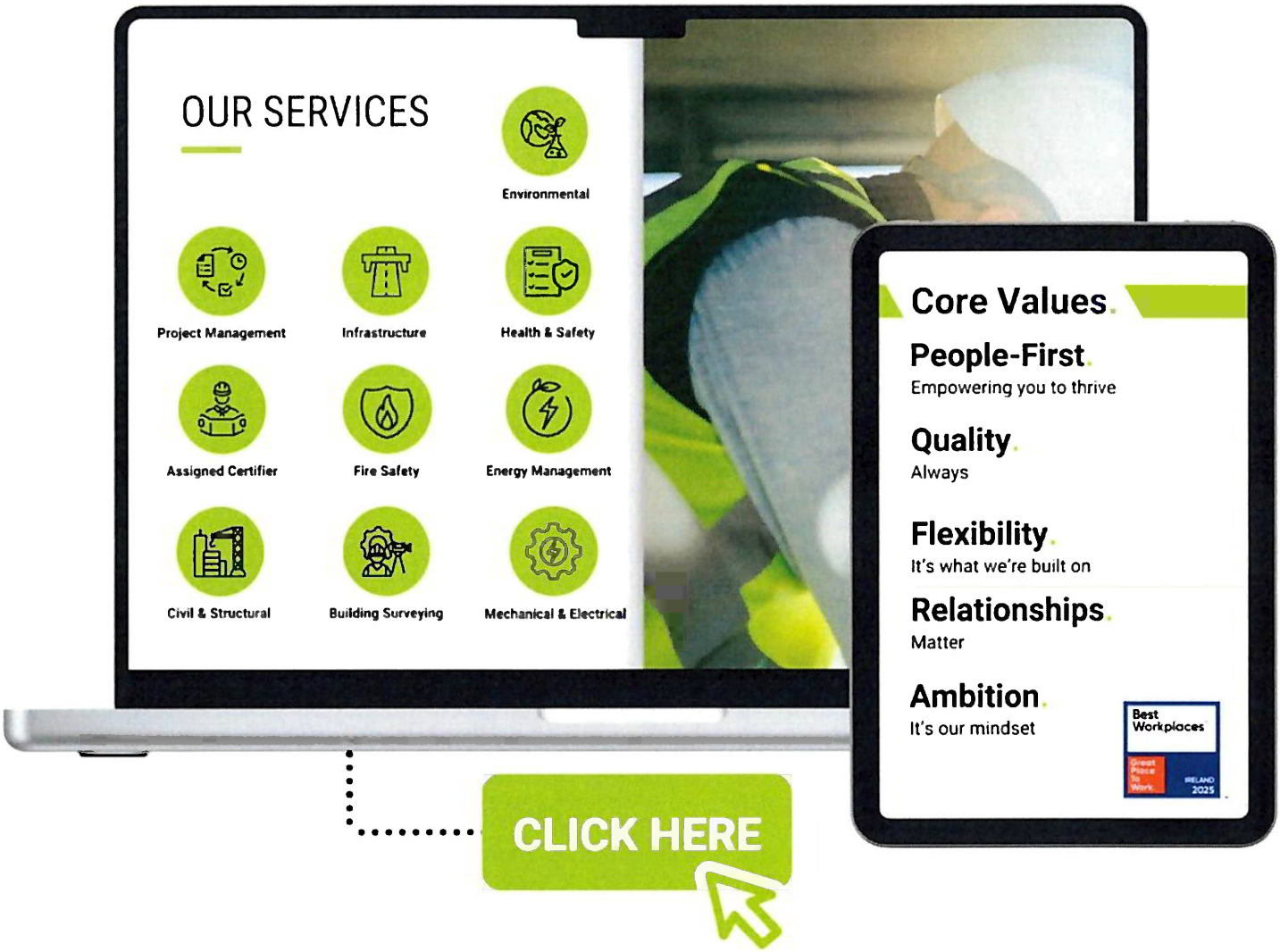
*fig 9: Internal repairs of the existing hydroelectric building. Before and after.*

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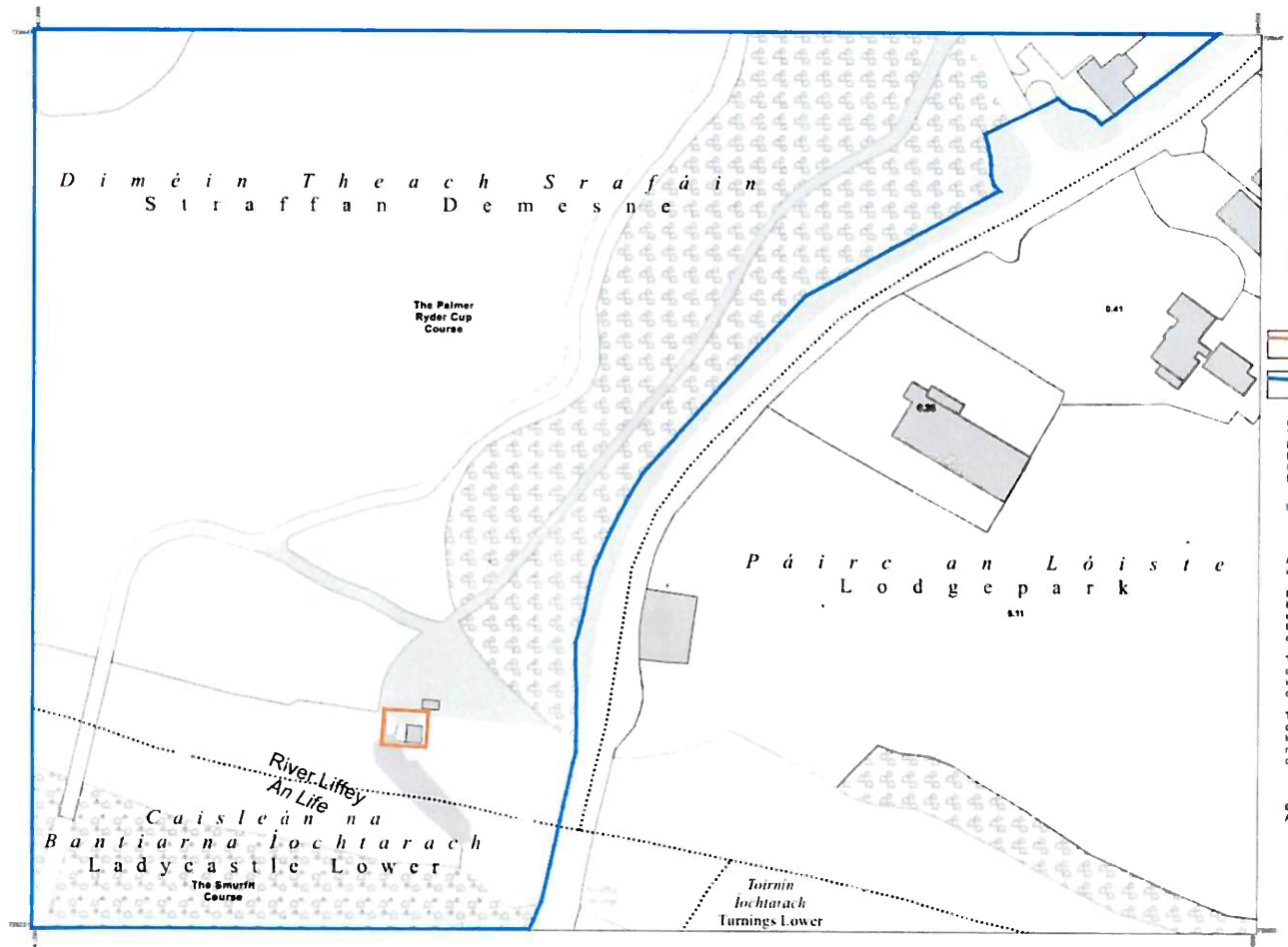
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## Planning Pack Map




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**PUBLISHED:** 18/05/2026

**ORDER NO.:** 80538840_1

**MAP SERIES:** 1:2,500

**MAP SHEETS:** 3323-C

LANDS FORMING PART OF THE SECTION 5 APPLICATION

LANDS NOT FORMING PART OF THE SECTION 5 APPLICATION BUT UNDER THE OWNERSHIP AND CONTROL OF THE APPLICANT

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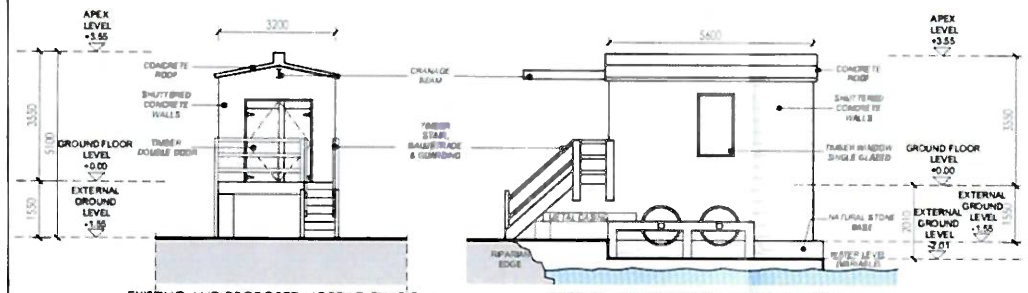
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**OUTPUT SCALE:** 1:1,000

**CAPTURE RESOLUTION**
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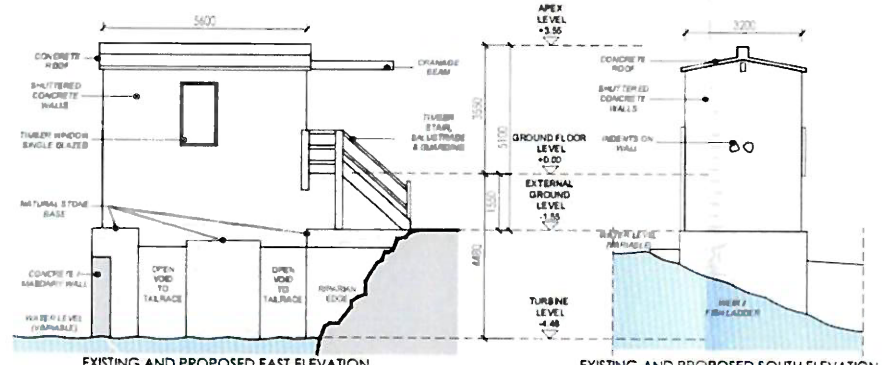
**LEGEND**
To view the agreed road names symbols and search for Large Scale Legend

N



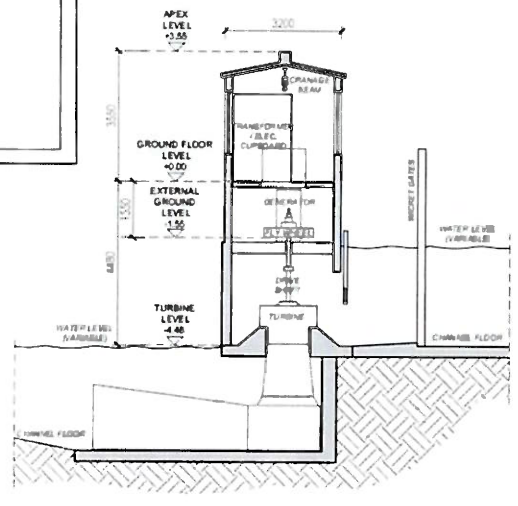

EXISTING AND PROPOSED NORTH ELEVATION
1/100 AT A1

EXISTING AND PROPOSED WEST ELEVATION

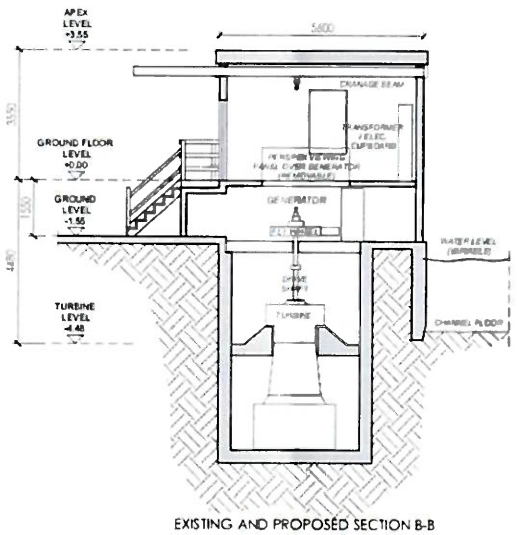



EXISTING AND PROPOSED EAST ELEVATION
1/100 AT A1

EXISTING AND PROPOSED SOUTH ELEVATION



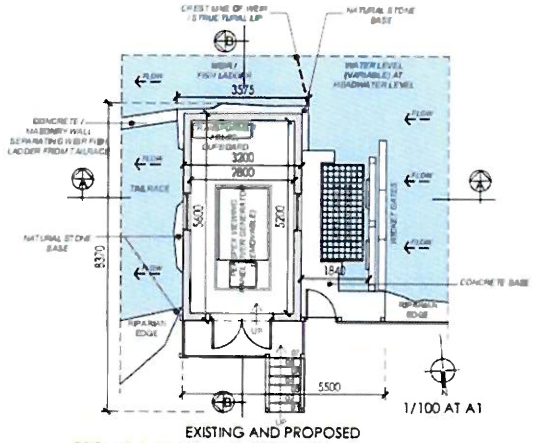

EXISTING AND PROPOSED SECTION A-A
1/100 AT A1




EXISTING AND PROPOSED SECTION B-B



PHOTO ABOVE -
INTERNAL PHOTOGRAPH FROM ENTRANCE DOOR LOCATION. WIDEANGLE LENS / PANORAMIC VIEW




EXISTING AND PROPOSED
**GROUND FLOOR PLAN AND SITE PLAN** *(COMBINED DRAWING)*

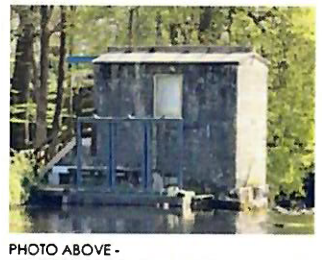


PHOTO ABOVE -
VIEW OF TURBINE HOUSE FROM SOUTH WEST FROM BRIDGE WITHIN THE K CLUB DEMESNE

PHOTO BELOW-
VIEW FROM NORTH EAST LOOKING AT WEIR / FISHLADDER IN BACKGROUND AND TAILRACE IN FOREGROUND

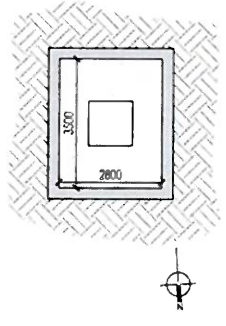


PHOTO BELOW-
VIEW FROM NORTH LOOKING AT ENTRANCE DOOR

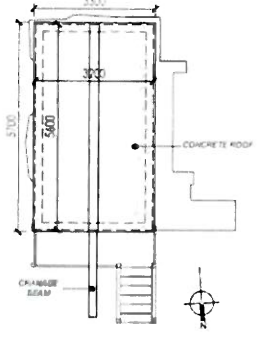


PHOTO BELOW-
VIEW FROM NORTH WEST LOOKING AT ENTRANCE DOOR AND CRANAGE BEAM






EXISTING AND PROPOSED
LOWER GROUND FLOOR / TURBINE LEVEL
1/100 AT A1




EXISTING AND PROPOSED
ROOF PLAN

NOTES:

1. Local Level bench mark set at finished floor level of existing Turbine House at +/- 0.00
2. This drawing is Copyright and the Design shall only be used for development on this site as identified in the drawing title block below.

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28 MAY 2026
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ward architects
27 MADELLA GREEN, CLAREVIEW, DUBLIN 11, D11 DX24

PROJECT TITLE:
SECTION 5 APPLICATION -
TURBINE HOUSE AT STRAFFAN WEIR.

CLIENT:
THE K CLUB
STRAFFAN, CO. KILDARE.
W23 YX53

DRAWING TITLE:
SITE LOCATION MAP; EXISTING & PROPOSED SITE PLAN; FLOOR PLANS, ELEVATIONS, SECTIONS AND CONTEXT PHOTOGRAPHS

THIS DRAWING SHOULD NOT BE SCALED. ALL DIMENSIONS SHOULD BE CHECKED ON SITE.

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Co. Kildare
28/05/2026 11:40:24

Receipt No. : FIN1/0/524800

The K Club

| | |
|---|---|
| PLANNING EXEMPT DEVELOP FEES | 80.00 |
| GOODS 80.00 | |
| VAT Exempt/Non-vatable | |

Total : 80.00 EUR

Tendered :
Cheque 80.00

Change : 0.00

Issued By : Sally Pallister Finance Section
From : Financial Lodgement Area
Vat reg No.0440571C

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