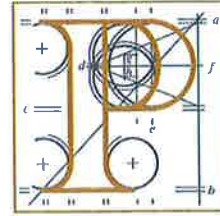


**Our Case Number:** ABP-313763-22

**Your Ref:** Cork County Council



**An  
Bord  
Pleanála**

TJ O'Connor & Associates  
Corrig House  
Corrig Road  
Sandyford  
Dublin 18

**Date:** 22nd August 2022

**Re:** Proposed Fermoy Weir remedial works and fish bypass on the River Blackwater.  
Fermoy Weir (Protected Structure), Fermoy, Co. Cork.

Dear Sir / Madam,

Enclosed for your information are two copies of a submission received by the Board in relation to the above-mentioned proposed development.

**Submission enclosed** – Transport Infrastructure Ireland.

Please ensure that one copy of this submission is made available for public inspection at the offices of Cork County Council.

If you have any queries in relation to the matter please contact the undersigned officer of the Board.

Please quote the above-mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

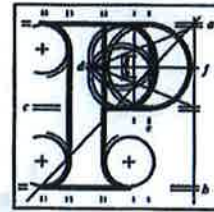
Yours faithfully,

Doina Chiforescu  
Executive Officer  
Direct Line: 01-8737133

AA07

Teil	Tel	(01) 858 8100
Glao Áitiúil	LoCall	1890 275 175
Facs	Fax	(01) 872 2684
Láithreán Gréasáin	Website	<a href="http://www.pleanala.ie">www.pleanala.ie</a>
Ríomhphost	Email	<a href="mailto:bord@pleanala.ie">bord@pleanala.ie</a>

64 Sráid Maoilbhríde	64 Marlborough Street
Baile Átha Cliath 1	Dublin 1
D01 V902	D01 V902



Alban Mills  
Transport Infrastructure Ireland  
Parkgate Business Centre  
Parkgate Street  
Dublin 8  
D08 DK10

**Date:** 8th July 2022

**Re:** Proposed Fermoy Weir remedial works and fish bypass on the River Blackwater.  
Fermoy Weir (Protected Structure), Fermoy, Co. Cork.

Dear Sir,

An Bord Pleanála has received your recent submission in relation to the above mentioned proposed development and will take it into consideration in its determination of the matter.

Please note that the proposed development shall not be carried out unless the Board has approved it with or without modifications.

If you have any queries in relation to the matter please contact the undersigned officer of the Board. Please quote the above mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,

Kieran Somers  
Executive Officer  
Direct Line: 01-873 7250

AA02

Tel	Tel	(01) 858 8100
Glaó Áitlúil	LoCall	1890 275 175
Facs	Fax	(01) 872 2684
Láithreán Gréasáin	Website	www.pleanala.ie
Ríomhphost	Email	bord@pleanala.ie

64 Sráid Maoilbhríde	64 Marlborough Street
Baile Átha Cliath 1	Dublin 1
D01 V902	D01 V902

SIDS / LAPS Section  
An Bord Pleanála  
64 Marlborough Street  
Dublin 1  
D01 V902

**AN BORD PLEANÁLA**

LDG- \_\_\_\_\_  
ABP- \_\_\_\_\_

07 JUL 2022

Fee: € \_\_\_\_\_ Type: \_\_\_\_\_  
Time: \_\_\_\_\_ By: *Post*

Dáta | Date  
5 July 2022

Ár dTag | Our Ref.  
TII22-119006

Bhur dTag | Your Ref.  
P04.313763

RE: **Fermoy Weir remediation and fish bypass works on the River Blackwater.**

A Chara,

Transport Infrastructure Ireland (TII) has received referral of the above local authority development.

TII has reviewed the document and wishes to advise of serious concerns regarding the proposal. TII advises that the proposal, if implemented, is likely to present a significant risk to the stability of the Fermoy Bridge and public safety.

The Fermoy Bridge is a multi-span masonry arch structure dating from 1865. Masonry arches are typically constructed on shallow foundations and are particularly vulnerable to scour. The foundation level of Fermoy Bridge is not known.

In managing the bridge stock at this location, TII have implemented special underwater inspections, and hydraulic and hydrological assessment of structures and riverbeds, to identify potential scour at structures, including the Fermoy Bridge. TII advises that the stonework piers and abutments have suffered mortar loss and minor scour is present at one of the piers.

Scour is defined as the erosion of riverbed material and when it occurs at or near a bridge substructure, it can weaken or has the potential to undermine a bridge's foundations. Scour is also the most critical defect and most common failure mode for bridges. It is therefore important that rivers are managed to prevent scour of the riverbed at or near such structures.

The current proposals include for:

- dredging the river immediately adjacent to the upstream side of the bridge; and
- the construction of a new embankment and fish passage at the bridge.

Both of these works are likely to expose the bridge piers to scour and create risk to the stability of the Fermoy Bridge. TII therefore is unable to support this proposal, as the works proposed do not demonstrate that they address the requirement of maintaining the structural integrity of the Fermoy Bridge and therefore meet the requirements for public safety.

TII advises that prior to making any decision, a revised approach to this proposal should be undertaken in consultation with TII's Structures Section, which would include for the following:

1. The designer will be required to arrange for a structural investigations company to undertake structural investigations at the structure to evaluate the foundation level.
2. The implications for the bridge of a new embankment and fish passage adjacent to the structure needs to be investigated, to identify the future hydraulic effects of changing riverbed levels and river flows at the bridge substructure. The designer is advised to refer and implement UK Standard BD 97/12 'The assessment of scour and other hydraulic actions at bridges', and other relevant standards to identify how the proposals will affect the bridge substructure.
3. The designer shall investigate alternative mitigation treatments such as piling or underpinning the bridge, to secure it against the effects of scour, which the works are likely to cause. The effects of changing river flows and changing riverbed levels proposed by the works shall be modelled and calculated to ensure that mitigating bridge works are sufficient to prevent future bridge damage due to scour.
4. TII advise that these treatments would involve significant works to the Fermoy Bridge and a geotechnical investigation of the substrata beneath the bridge would be required in order to design the piling or underpinning solution.

Finally, by way of information, the planning authority is reminded of the requirements of the TII Standard: 'Technical Approval of Road Structures on Motorways and Other National Roads for structures' (TII, 2009, DN-STR-03001). This Standard specifies the procedures to be followed, in order to obtain Technical Acceptance for structures on motorway and other national road schemes and for the submission of as built records. The procedures cover the design of all road structures, including bridges, tunnels, subways, culverts, buried corrugated steel structures, retaining walls, reinforced earth structures, gantries, environmental noise barriers and temporary structures under or over motorways or other roads carrying public traffic.

The Technical Acceptance requirements for the assessment, alteration, modification, strengthening and repair of all road structures shall be agreed with the Structures Engineering and Asset Management Section of TII.

I hope that this information is of assistance to you.

Is mise le meas,



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**Alban Mills**  
**Senior Regulatory and Administration Executive**