



COMPULSORY ACQUISITION OF LANDS AND RIGHTS OVER LAND

WICKLOW COUNTY COUNCIL COMPULSORY PURCHASE NO 2 ORDER, 2021.
ARKLOW FLOOD RELIEF SCHEME

ENGINEERS REPORT

Date: 25th May 2021

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The Scheme underlying the proposed Compulsory Purchase Order

The Need for the Scheme

The town of Arklow and the Ferrybank area have, for many years, experienced recurring flooding problems that have caused widespread damage to public and private property. The largest flood event recorded was in August 1986 resulting from extreme meteorological conditions commonly referred to as "Hurricane Charlie." Further recent flooding events occurred in December 1989, November 2000, February 2002 and in October 2004, October 2005, January 2010, January 2013 and December 2015.

Main Objectives

The main objectives of the project are as follows: -

- To provide flood relief measures along the Avoca River and estuary to alleviate flooding for all events up to the 1% Annual Exceedance Probability fluvial flood event and 0.5% Annual Exceedance Probability coastal flood event.
- To protect residential and non-residential properties from flooding and consequent damage.
- To protect infrastructural utility services from flood damage.
- To improve the health and safety of the population living in high flood risk areas through direct protection from flooding and through reduction in stress and anxiety.
- To reduce disruption and disturbance caused by flood events such as evacuations and traffic diversions.
- To reduce the risk of environmental pollution due to flood events such as runoff of hydrocarbons from flooded areas.
- To provide the basis for the appropriate maintenance of the Avoca River to manage future flood risk.
- To facilitate improved public realm amenities along the Avoca River.

Description of the Scheme

The proposed flood relief works will be located in Arklow Town north and south of the Avoca River and in Arklow Town Marsh. Overall, the proposed scheme comprises measures to facilitate a significant increase in the conveyance capacity of the Avoca River including lowering the floor of Arklow Bridge, local channel alterations, channel deepening and the introduction of a debris trap and a gravel trap, the construction of direct flood defences, (i.e. flood walls and an embankment) for the Ferrybank, River Walk/Main Street and South Quay and Harbour (Dock) areas of Arklow and a drainage system to cater for stormwater run-off.

To the south of the Avoca River, works will take place from Main Street car park along River Walk, at Arklow Bridge (a protected structure: RPS A26), along South Quay and around Arklow Dock. To the north of the Avoca River, works will take place along the eastern side of Arklow Marsh adjacent to the Avoca River and to the rear of properties fronting onto Ferrybank and the Dublin Road. Works will take place at Arklow Bridge and in the Avoca River. Ancillary associated works will take place on adjacent roads.

The proposed works are located in the townlands of Arklow, Tinahask Lower, Marsh, Ferrybank and Tiknock.

Overall, the proposed development will comprise of the following elements:

- Works at Arklow Bridge, a protected structure (RPS A26), including the underpinning of the piers and southern abutment, removal of existing scour slab and lowering the floor of Arklow Bridge by approximately 1m, construction of new scour protection and remedial works to bridge masonry;
- River dredging works to improve channel capacity, comprising dredging of the river channel from approximately 320m upstream of Arklow Bridge to approximately 520m downstream of Arklow Bridge, including removal of in- river sandbanks and vegetated islands north of Arklow Bridge and trimming of vegetation along the north bank between the debris trap and Arklow Bridge that lies within the river channel and below the design flood level;
- Extension to north river bank upstream of Arklow Bridge;
- Installation of 3 no roosting platforms for birds upstream of Arklow Bridge;
- Construction of debris and gravel traps and a permanent river access ramp on the south bank for their maintenance;
- Flood defences on the south bank of the Avoca River including:
 - Demolition of existing walls and river access and provision of approximately 325m of flood defence concrete finish wall founded on sheet piles and concrete foundations, with intermittent glass panels, upstream of Arklow Bridge on River Walk;
 - Demolition of some existing walls and unused slipway (referred to as Coal Quay slip), provision of approximately 655m of flood defence concrete finish wall founded on sheet piles and concrete foundations, with intermittent glass panels, and modifications to approximately 20m of existing wall downstream of Arklow Bridge on the south bank (South Quay / the Dock);
 - Construction of stormwater drainage system including 3no. pumping stations along the south bank and adjoining streets; and
 - At the Dock, in the Harbour area, installation of demountable flood barriers, which will normally be maintained in a closed position.
- Flood defences on the north bank of the Avoca River including an approximately 545m flood defence earthen embankment with adjoining maintenance track and approximately 155m sheet-piled wall with concrete cap, to be constructed upstream of Arklow Bridge on the north bank (east of Arklow Marsh), a maintenance track and a permanent access road from Dublin Road to maintenance track.
- Removal of existing public realm at River Walk and South Quay, including demolition of the river access at the junction of River Lane and River Walk, the Coal Quay Slip on South Quay, existing footpaths, street and decorative lighting, parking spaces and seating. Provision of new public realm at River Walk and South Quay, including parking spaces, footpaths, amenity/viewing area, public lighting, planters and floating pontoon. Provision of additional urban space approximately 6m into the river on South Quay immediately south of the Arklow Bridge for a length of approximately 260m. The proposed works include road reconstruction, road regrading, traffic calming measures, provision of sections of interconnector sewer for the Arklow Wastewater Treatment Plant (WwTP) for Irish Water, diversion of utilities, including a section of the canal and electricity cables in Arklow Marsh, tree felling, tree trimming, tree planting, landscaping,

installation of roosting platforms upstream of Arklow Bridge and all associated and ancillary works.

- Temporary works including establishing site compounds northeast of the Marsh, on lands between the running track and Mill Road, on land between the river and the roundabout located at the junction of Arklow Bridge, Ferrybank and North Quay, on part of the Main Street car park, on lands between the eastern end of North Quay and North Pier, and on lands between Arklow Golf Club and South Beach. River access will take place at North Quay, South Quay, River Walk and north-west of Arklow Bridge. These site compounds will operate for the duration of the works and will facilitate the archaeological examination and stockpiling of excavated and dredged material.

Scheme Design Background & History

Following the flood event in 1986 as a result of "Hurricane Charlie.", PH McCarthy Consulting Engineers, who became WYG Ireland Engineering Ltd (WYG) and are now Byrne Looby & Partners, were commissioned by Arklow Town Council (now Wicklow County Council) to prepare a Flood Study Report for the Arklow area.

The report was issued in 1989 and contained a number of short- and long-term recommendations for future flood alleviation measures. The recommended long-term measures generally consisted of increasing the waterway area of the Arklow Bridge and providing a levee embankment and flood defence walls to prevent flood ingress into the Ferrybank, Condrons Lane and South Quay areas of Arklow. None of these measures were implemented.

After the flood events in 1989 and 2000, Arklow Town Council engaged WYG (now Byrne Looby & Partners) to review and update their report. The updated report was issued in June 2002 and the recommendations contained therein were generally in line with those outlined in the 1989 report but also included two additional recommendations. These were the lowering of the floor of Arklow Bridge to improve flow capacity and the refinement of the towns flood warning system.

In 2005 Byrne Looby were appointed by Arklow Town Council to prepare a new report, based on an OPW brief, to augment the work of the "Arklow Flood Study." This report was titled "Avoca River (Arklow) Flood Relief Scheme Feasibility Study."

The OPW brief also required that an assessment of the environmental constraints and impacts of possible scheme options be undertaken independently of the engineering work.

Therefore, the OPW commissioned Arup Consulting Engineers (Arup) to assess the potential environmental impacts arising from a flood relief scheme. Arup undertook their initial studies and consulted with the public during a public information day and issued a "Constraints Report" in May 2007.

During the initial stages of the study, Arup and Byrne Looby, in consultation with the OPW, identified a range of potential flood relief measures that could be included as part of an overall flood relief scheme. These were also partially informed by the "Hydrology and Hydraulics Report" (Byrne Looby, 2007). A number of these measures were subsequently discounted following the environmental review and also on technical and economic grounds.

A Flood Relief Feasibility Study was initially compiled in 2013 to consider flood relief measures that were identified by Arup, Byrne Looby, and the OPW. At that time, three separate 'do something' options were developed using different combinations of the flood relief measures. These options were considered from an environmental, technical and economic viewpoint.

In early 2015, further measures were examined and modelled. This included consideration of combinations of measures. These were considered in the “Hydraulic Modelling Options Report”, June 2015. A screening exercise to confirm the decisions made, with regard to measures to be retained for further consideration, was undertaken in 2015 and described in the EIAR. This was followed by a Multi-Criteria Assessment (MCA) workshop in 2016. A Feasibility Study was subsequently finalised in 2017 identifying and assessing viable flood relief measures for the Emerging Preferred Scheme.

Following public consultation and design development, a number of studies were undertaken to develop the Emerging Preferred Scheme. Informal EIA scoping consultation and other non-statutory consultation took place with key stakeholders in relation to development of the proposed scheme. The design has also evolved to respond to this consultation, and some design changes were made the description of the proposed scheme has been described above.

Statutory Processes

In preparing the EIAR, regard has been had to the following overarching EIA related guidance:

- Department of Housing, Planning and Local Government (2018) Circular PL 05/2018 - Transposition into Planning Law of Directive 2014/52/EU amending Directive 2011/92/EU on the effects of certain public and private projects on the environment (the EIA Directive) And Revised Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment;
- Department of Housing, Planning, Community and Local Government (2017) Key Issues Consultation Paper on the Transposition of 2014 EIA Directive (2014/52/EU) in the Land Use Planning and EPA Licencing Systems;
- Department of Housing, Planning, Community and Local Government (2017) Circular PL 1/2017 - Implementation of Directive 2014/52/EU on the effects of certain public and private projects on the environment (EIA Directive): Advice on the Administrative Provisions in Advance of Transposition;
- Department of the Environment, Community and Local Government (2013) Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment;
- Environmental Protection Agency (2017) Draft Guidelines on the Information to be contained in Environmental Impact Assessment Reports (Draft August 2017);
- Environmental Protection Agency (2003) Advice Notes on Current Practice in the preparation of EIS;
- European Commission (2017) Environmental Impact Assessment of Projects: Guidance on the preparation of the Environmental Impact Assessment Report;
- European Commission (2012) Interpretation suggested by the Commission as regards the application of the EIA Directive to ancillary/associated works;
- European Commission (1999) Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions;
- European Union (2013) Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment;
- Government of Ireland (2018) Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (August 2018).

EIA Legislation

A European Directive for EIA has been in force since 1985 since the adoption of Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment.

The EIA Directive of 1985 has been amended three times by Council Directives 97/11/EC, 2003/35/EC and 2009/31/EC. It was ultimately codified and repealed by Council Directive 2011/92/EU on 13 December 2011. Directive 2011/92/EU has now been amended in 2014 by Directive 2014/52/EU.

In Ireland, the requirements for EIA in relation to planning consents are specified in Part X of the Planning and Development Act, 2000, as amended and in Part 10 of the Planning and Development Regulations, 2001, as amended. The European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018) transpose the requirements of the 2014 EIA Directive into existing planning consent procedures.

The definition of EIA provides for a clear distinction between the process of environmental impact assessment to be carried out by the competent authority (in this case (An Bord Pleanála) and the preparation by the developer (in this case Wicklow County Council WCC) of an Environmental Impact Assessment Report (EIAR). This EIAR accompanies the application for the proposed development which has been submitted to An Bord Pleanála. The EIA for the purposes of planning consent will be undertaken by An Bord Pleanála.

A key objective of the 2014 amendments to the EIA Directive has been to improve the quality of EIA, including with respect to the collection and assessment of environmental information and to the EIA Report's (EIAR) content.

Statutory Requirement for EIA

The prescribed classes of development and thresholds that trigger a mandatory Environmental Impact Assessment (EIA) are set out in Schedule 5 of the Planning and Development Regulations, 2001, as amended.

A review of the classes of development (requiring EIA) was carried out to determine whether the proposed development falls into any of the development classes contained therein.

The most relevant criterion is Class 10 of Part 2 of Schedule 5 which states:

10. Infrastructure projects (f) (ii) *Canalisation and flood relief works, where the immediate contributing sub-catchment of the proposed works (i.e. the difference between the contributing catchments at the upper and lower extent of the works) would exceed 100 hectares or where more than 2 hectares of wetland would be affected or where the length of river channel on which works are proposed would be greater than 2 kilometres.*

In the case of the proposed scheme, the length of river channel on which works are proposed is under than 2 kilometres and the contributing sub-catchment of the proposed works is less than 100 hectares. Additionally, less than 2 hectares of wetland at Arklow Town Marsh will be affected by the proposed scheme.

The proposed scheme is therefore below the thresholds for mandatory EIA. An examination was made as to whether the proposed scheme would or would not, individually and in combination with other developments, be likely to have significant effects on the environment. Having regard to:

- the criteria set out in Schedule 7 of the Planning and Development Regulations 2001, as amended,
- the nature and scale of the development,
- the location of the development in the Avoca River and in Arklow Town Marsh pNHA,
- the works required to protected structure (RPS A26), Arklow Bridge (listed on the National Inventory of Architectural Heritage – Reference: 16322046).
- the potential for significant effects on the environment it was considered that the proposed development was likely to have significant effects on the environment and that the preparation and submission of an Environmental Impact Assessment Report (EIAR) was required.

The need for an EIAR was confirmed by An Bord Pleanála on 1 May 2018 when formal direction was provided to Wicklow County Council regarding the same. In their letter, An Bord Pleanála instructed Wicklow County Council to prepare an EIAR on the basis that the proposed scheme has the potential for significant effects on the environment, see attached letter from ABP Portal.

Overview of the Approval Process and EIA

Planning Approval

Given that part of the proposed development is to be carried out on the foreshore by virtue of Section 226 of the Planning and Development Act, 2000, as amended, Wicklow County Council is obliged to make an application to An Bord Pleanála (ABP) for approval of the proposed development. An Bord Pleanála will carry out an EIA of the proposed development as required under the Planning and Development legislation.

Foreshore Consent

The Foreshore Act 1933, as amended, requires that a lease or licence must be obtained from the Minister for the Housing, Planning and Local Government (currently referred to as Department of Housing, Local Government and Heritage) for the carrying out of works or placing structures or material on, or for the occupation of or removal of material from the bed and shore, below the line of high water of ordinary or medium tides, of the sea and of every tidal river and tidal estuary and of every channel, creek, and bay of the sea or of any such river or estuary (i.e. the foreshore).

A lease is generally issued for a development that requires exclusive occupation of the foreshore whilst a licence is generally issued for a development that does not require exclusive occupation of the foreshore.

Given that part of the proposed development is located on the foreshore, foreshore consent is required from the Minister.

Foreshore consent application(s) for the proposed development are being submitted to the Department of Housing, Planning and Local Government in parallel to the application for consent that is being submitted to An Bord Pleanála. A pre-application consultation meeting was held with the Foreshore Unit in the Department of Housing, Planning and Local Government on May 9th 2019 and 30th April 2021.

The Need for the Lands and the Need to compulsorily acquire them.

The lands described in the Schedule to the proposed CPO are needed to facilitate the elements of the Arklow Flood Relief Scheme, namely gravel and debris trap, bridge works (underpinning & lowering scour slab), dredging, flood defences (walls and embankments), stormwater drainage system, roots etc. including all enabling and associated ancillary works.

During the design process several scheme designs were examined with the current proposed scheme being considered the most feasible. However, it was determined that certain lands not in the ownership of Wicklow County Council would need to be acquired to secure the carrying out of the works.

The lands are described in the Schedule to the appended Draft "Wicklow County Council Compulsory Purchase (ARKLOW FLOOD RELIEF SCHEME)" No 2 Order 2021" and are depicted on the following proposed Compulsory Purchase Order Drawings:

Drawing Number

- 022021-001,
- 022021-002,
- 022021-003,
- 022021-004,
- 022021-005.

Since March 2019, enquiries have been conducted by the Project Engineer to discuss the scheme design, ownership and purchase of the land with Landowners. Landowners were identified after a property registry search along the length of the proposed scheme. The Project Engineer contacted landowners inviting them to meet and discuss the proposal and any concerns they may have. A variety of meetings, telephone calls, and emails have taken place. In some cases the design was altered to accommodate the concerns of the Landowners. All Landowners were aware of the project prior to contact. This has been considered as constituting reasonable enquiries.

Resources and Alternatives Considered

I am satisfied that sufficient resources are available to finance the proposed acquisition of these lands and the implementation of the Arklow Flood Relief Scheme Project. I am satisfied that all reasonable alternatives as outlined above and in the attached reports have been fully considered and are not demonstrably preferable and that these lands are necessary for the Arklow Flood Relief Scheme Project, are suitable for the purpose for which they are required.

Those outlined in following reports;

- 2017 - Arklow Flood Relief Scheme Feasibility Study
- 2021 - Arklow Flood Relief Scheme EIAR

Regulatory & Public Compliance

As part of the design and Compulsory Purchase Order application process for the Project, Wicklow County Council has taken account of its legislative powers, function and obligations, including those specified Section 10 of the Local Government (No. 2) Act, 1960, as substituted by Section 86 of the Housing Act, 1966 as amended by Section 6 and the Second Schedule to the Roads Act, 2015 and by the Planning and Development Act, 2000 and 2002, and the Local Authority (Works) Act 1949 in particular. Having consulted with the relevant stakeholders and departments within Wicklow County Council and taking into account the Feasibility Report and the Planning Report, I am satisfied that, in

developing the Project and in proposing this Compulsory Purchase Order, full account has been taken of:

- Proper Planning and Sustainable Development as per the Wicklow County Development Plan 2016 –2022.
- Wicklow County Council's Climate Change Adaptation Strategy.
- The Climate Charter signed by Wicklow County Council in 2019.
- The Catchment Flood Risk Management Scheme proposed by the OPW and agreed to by Wicklow County Council in 2018.
- Arklow Flood Relief Scheme - Environmental Impact Assessment Report - Volume 2- Chapter 6-Planning and Policy.

Conclusion

I am satisfied that all reasonable alternatives have been fully considered and the lands and the rights over land are necessary acquisitions for this scheme and suitable for the purpose for which they are required. I am also satisfied that Wicklow County Council requires to exercise the Compulsory Purchase Order procedure for the lands and rights over land required as it is unlikely that all of the affected lands will be acquired by agreement with the relevant Landowners with full title or otherwise in a timely fashion.

Accordingly, it is recommended that Wicklow County Council make the WICKLOW COUNTY COUNCIL COMPULSORY PURCHASE (ARKLOW FLOOF RELIEF SCHEME) NO 2 ORDER, 2021

Dated this day 25th of May 2021

SIGNED: _____

Marc Devereux

Senior Engineer,
Wicklow County Council.

Agreed
BU
DOS,
25/5/2021

Documents Enclosed With This Report

1. Compulsory Purchase Order Drawings: -

- 022021-001,
- 022021-002,
- 022021-003,
- 022021-004,
- 022021-005.

2. Arklow Flood Relief Scheme Planning Report dated [2021]

3. Arklow Flood Relief Scheme EIAR Non Technical Summary