

# Inspector's Report ABP-300304-17.

**Development** Arklow Flood Relief Scheme.

Case Type EIA Direction.

**Local Authority** Wicklow County Council

**Date of Site Inspection** 25<sup>th</sup> January 2018.

**Inspector** Mairead Kenny.

## 1.0 Introduction

- 1.1. Wicklow County Council is seeking a direction from An Bord Pleanála as to whether or not the proposed Arklow Flood Relief Scheme would require an EIA. The scheme is being promoted by Wicklow Co Council and the Office of Public Works. The application would involve development which would require a foreshore licence. It is the preliminary view of Wicklow County Council that an EIA is required.
- 1.2. Wicklow County Council has also raised queries in relation to whether section 226 of the Planning and Development Act 2000 as amended is the appropriate legislative provision for the making of the application.
- 1.3. There is an interface between the proposed Arklow Flood Relief Scheme and the Arklow Wastewater Treatment project, in relation to which there are ongoing preapplication consultations with the Board (PC0202 refers).

# 2.0 Site Location and Description

- 2.1. The application site comprises an extensive piece of land in Arklow including a length of the Avoca River and an area of backland adjacent the northern entry route into Arklow town at Ferrybank. Ferrybank is separated from the traditional main street and commercial core of Arklow by the Arklow Bridge. The area contains large amounts of open space but has also emerged in recent years as an important part of the town's retail offer with the opening of the Bridgewater Centre.
- 2.2. The character of the north and southern parts of the town at this location close to the river is defined by a diverse range of buildings and structures. The northern side (Ferrybank) contains a range of modern commercial and residential development as well as industrial and port related uses adjacent the coast. The Old Wallboard site is very widely visible this is the site of the proposed wastewater treatment plant upgrade. There is an existing coastal revetment at this site and along by the coastline to the north. There are large areas of open space and recreational assets at Ferrybank. The southern side of the town in the vicinity of the river is made up of smaller industrial and marine related uses as well as terraced two-storey residential development.

- 2.3. Arklow Bridge is a wide and ancient stone arch bridge, which is widely visible and an attractive element in the expansive river views from both sides of the river. There is a small roundabout which regulates traffic at the junction of the bridge and the eastern side of Ferrybank. A one-way system operates at the southern side of the town.
- 2.4. The wide mouth of the river is defined on both sides by solid quay walls. These in themselves do not have the appearance of being particularly old or historic although there are a few significant features at both quays. These would include a slipway which appears to have been associated with a historic boatyard, which is commemorated in an information notice. There are two small docks for boats, one at either side of the river. Upstream of the bridge there is a tiny wooded island and the Town Marsh proposed Natural Heritage Area (pNHA) is visible from the bridge.
- 2.5. It is clear from the available historic mapping that the riverside and Ferrybank area have been extensively modified over the centuries through the build-up of lands.
  The source of some of this material would be the Avoca mines.
- 2.6. At the time of inspection in mid-afternoon I noted moderate traffic flows across the bridge. I also noted that the south docklands area and the river attracted a wide range of birds. This included Cormorants, Gulls and a small flock of Oystercatchers scavenging on the lands close to the southern dock.
- 2.7. Photographs of the site and surrounding area which were taken by me at the time of inspection are attached.

# 3.0 Proposed Development

- 3.1. The proposed development comprises the Arklow Flood Relief Scheme, which would be undertaken to alleviate flooding which affects the low-lying areas of the town. The source of flooding is tidal flooding by way of the harbour mouth and Avoca estuary and fluvial flooding from the Avoca River.
- 3.2. The scheme would comprise a mixture of direct flood defences and conveyance measures in the river channel and would comprise the following elements:
  - flood defence walls along the River Walk and South Quay

- widening of the river channel downstream of Arklow Bridge including works to the quays and slipway
- dredging of the river channel upstream and downstream
- provision of debris trap and gravel trap upstream of Arklow Bridge
- lowering of floor of Arklow Bridge, underpinning of bridge piers and abutments and scour protection
- provision of flood embankment on the north side of river channel.
- 3.3. There is a physical and geographical overlap between the proposed flood scheme and the wastewater treatment plant project. That arises at the South Quay and River Walk. At that location an interceptor sewer (associated with the planned wastewater treatment system) is to be installed and it is proposed to undertake river widening and to construct a flood wall as part of the proposed development. The submission of the local authority is that the full extent of the integrated works is yet to be finalised. There are planning construction and cumulative effects associated with both schemes.
- 3.4. Figure 1 of the applicant's submission indicates that the works include an upgrade of the existing revetments adjacent the Old Wallboard site. This is not further described in the written submission.

# 4.0 Legislation and Guidelines

#### 4.1. Planning and Development Act 2000 (as amended)

Section 172(1) states that an EIA shall be carried out in respect of certain applications for consent for proposed development. This includes applications for 'sub threshold' developments namely those which are of a Class specified in Part 2 of Schedule 5 of the Planning and Development Regulations 2001 but do not exceed the relevant quantity, area or other limit specified <u>and</u> the competent authority determines that the proposed development would be likely to have significant effects on the environment.

Section 172(1A) specifies that the above is relevant to development that may be carried out by the local authority under Part X and to consent to development on the foreshore under Part XV.

## 4.2. Planning and Development Regulations 2001 (as amended)

Article 120(3)(a) sets out the requirement in certain circumstances for the submission by a local authority of an EIS to accompany an application for development which would be likely to have significant effects on the environment.

Article 120(3)(b) states that any person may apply to the Board for a determination as to whether a development would be likely to have such significant effects.

Article 120(3) (c) indicates that such applications for determination shall be accompanied by a statement of the reasons for the forming of the view that the development would be likely to have significant effects on the environment and shall indicate the class in Schedule 5 within which the development is considered to fall.

Schedule 5 – Development for the purposes of Part 10

Part 1 – Development classes subject to EIA.

Part 2 – Development classes subject to EIA where they exceed a certain threshold in terms of scale or where the development would give rise to significant effects on the environment.

Under Part 2 the heading of *Infrastructure Projects* the following is relevant to this case:

(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.

Schedule 7 – Criteria for determining whether a development would or would not be likely to have significant effects on the environment, under three headings-

- (a) Characteristics of the Proposed Development.
- (b) Location of the Proposed Development.
- (c) Characteristics of Potential Impacts.

The Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development published by the Department of Environment, Heritage and Local Government 2003 refers to Schedule 7 in terms of the criteria for deciding whether or not a proposed development is likely to have significant effects on the Environment.

## 4.3. Arklow and Environs Development Plan 2011-2017

The marsh is the principle wetland habitat in the area which provides an important flood control ole and supports a variety of species in particular reed species and bird life. The marsh is a proposed Natural Heritage Area and a designated 'Conservation Zone'.

Arklow Bridge is a protected structure. There is a zone of archaeological potential on the south side of the town near the bridge.

Flood mapping indicates that a large part of the Ferrybank lands, the marsh and much of the south docklands are within Flood Zone A.

#### **Draft Arklow and Environs LAP 2018-2024**

Adoption of the plan is anticipated in February 2018.

# 4.4. Natural Heritage Designations

The Town Marsh is a proposed Natural Heritage Area.

The Buckrony-Brittas Dunes and Fen SAC is over 5km to the north and the Kilpatrick Sandhills SAC is almost 7km to the south of the town centre.

## 4.5. National Inventory of Architectural Heritage

There are a number of buildings and structures listed in Arklow including Arklow Bridge and a beacon at the North Quay beside the marina.

# 5.0 Position of Wicklow County Council

- 5.1. The applicant identifies the following as relevant to the question before the Board:
  - Direct impact on Arklow Bridge, which is a protected structure
  - Potential impact on pNHA due to embankment construction
  - In-river works which may give rise to significant effects
  - Potential to encounter contaminated materials
  - Geographical and possibly temporal overlap with the wastewater plant project

The proposed development is considered to have the potential for significant environmental effects.

## 6.0 **Assessment**

6.1. Having regard to the legislative context and the Departmental guidance I will consider this application under the headings set out in Schedule 7 of the PDR 2001 as amended.

#### 6.2. Class of Development

6.2.1. I am satisfied that the proposed development is of a Class which is listed in Schedule 5 specifically

Canalisation and flood relief works, where the immediate contributing subcatchment 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.

- 6.2.2. This development would comprise a flood relief scheme. As discussed below the relevant sizes or limits set down for which EIA is a requirement are <u>not</u> met based on the information presented by the applicant.
  - Area of contributing subcatchments
- 6.2.3. The section of river which would be dredged and subject of other works as part of the Scheme is identified on the website wfdireland.ie as the Avoca Estuary, a transitional waterbody type. Due to the built-up nature of the contributing catchment together with the history of very significant disturbance of the natural water regime arising from significant infill works in the past, I am not in a position to estimate whether the limit of 100 hectares is exceeded. In the absence of information to the contrary I accept the position of Wicklow County Council's that the immediate contributing catchment is less than 100ha.

Area of wetland affected

- 6.2.4. The second size limit specified in the Schedule relates to the area of wetland which would be affected by the proposed development. The local authority's submission is that while the area that would be affected is anticipated to be less than 2 hectares, confirmation on this matter would require further hydrological study. The information available on this criteria is thus incomplete but it is the best available information.
  - Length of river channel affected
- 6.2.5. The final criteria which would trigger a requirement for EIA is if the proposed development would affect a river channel of 2 kilometers. I estimate that the length of river which would be affected is approximately 1.1km based on Figure 1 of the applicant's submission. I note that the applicant's statement is that the length of river channel on which works are proposed is 'marginally less' than 2km. The basis for that quantification is not clear to me but both are below the relevant 2km threshold.
- 6.2.6. Based on the information presented it is not possible to conclude that a requirement for EIA arises on the basis that the thresholds specified are exceeded. In this circumstance I will proceed to consider this application for determination under the provisions for sub-threshold EIA. The proposed development therefore falls to be considered under the criteria for of Schedule 7 of PDR 2001 as amended.

#### 6.3. Sub threshold assessment

6.4. Characteristics of proposed development.

Size of the proposed development

- 6.4.1. The development is relatively large when considered in terms of its absolute scale in the environment in the town of Arklow. The proposed development concerns a small part of the Avoca catchment.
- 6.4.2. I do not have the sufficient information to conclude that the proposed development would be close to the statutory threshold which would result in a requirement for EIA.
  Cumulation with other proposed development
- 6.4.3. The project would have a physical interface with the proposed wastewater treatment plant to be constructed nearby (subject to consent). The planning of the two projects is ongoing. There may also be a temporal overlap of the construction phases of the developments, which could give rise to significant cumulative effects in relation to air emissions, water quality impacts, impacts on human beings and on ecology. No other significant cumulative impacts are anticipated.

Nature of any associated demolition works, Production of Waste, Pollution and Nuisances

- 6.4.4. The development will involve dredging of the river bed, which due to the nature of the geology in the area and the industrial history of the area including the mines upstream, is likely to result in a need to handle, transport and dispose of contaminated materials.
- 6.4.5. Works to Arklow Bridge, a protected structure involve underpinning and lowering of the floor. Similarly there is likely to be a requirement to remove parts of the quay walls. Both raise the possibility of encountering polluted materials.
- 6.4.6. An embankment is to be constructed adjacent the marsh. This and all other working in the aquatic environment could give rise to emissions of silt and sediment.
- 6.4.7. Works to the quay walls are likely to be have the potential to impact on water quality, ecology and cultural heritage.
- 6.4.8. Works to Arklow Bridge are likely to give rise to significant effects on the architectural heritage of the area.

- 6.4.9. There is potential for significant effects arising from the in-river works and the associated waste if not properly handled and disposed of could give rise to significant effects on the natural environment and human beings.
- 6.4.10. In-river works could have a long-term impact on river / estuary flow patterns. The proposed embankment to be constructed adjacent the Town Marsh is likely to alter the hydrology of that wetland, which is potentially a significant effect on its ecology.
  Use of natural resources
- 6.4.11. Not significant.

# 6.5. **2. Location of proposed development**

- 6.5.1. The proposed development would not materially impact on existing land uses except for a temporary period. The sensitivity of the receiving environment in terms of the potential for impacts on human beings is heightened by the presence of a residential population and the harbour related activities. Arklow Bridge is a critical piece of infrastructure in the town being the only bridge. The Ferrybank side of town includes commercial development which would be very dependent on that connectivity and highly sensitive to closure or traffic management. Construction phase impacts would thus have the potential to significantly affect existing land use and human beings.
- 6.5.2. The works would take place in an environment which would be described as sensitive in terms of biodiversity and due to the estuarine environment and the proximity to the marsh.
- 6.5.3. The alteration of the flow regime of part of the Town Marsh is potentially significant in terms of the likely effects on the area of the characteristic habitat and dependent species, which are likely to rely for their existence on the established hydrological patterns.
- 6.5.4. Disturbance of existing pollutants which are likely to be present in the Avoca river bed gives rise to the potential to adversely affect the estuary and the coastal zone. While the estuary is some distance from the European Sites (see attached map) the potential for adverse effects arising from the in-river works would have to be examined.

6.5.5. I consider that there is little likelihood that there would be significant consequences to the coastal environs. The coastal zone in the immediate vicinity would not appear to be especially sensitive due to presence of a large revetment to the north of the estuary.

#### 6.6. 3. Characteristics of potential impacts

- 6.6.1. The likelihood is that the *extent of the impact* would be relatively localised.
- 6.6.2. The nature of the environment in which the works would take place gives rise to some *complexity* in terms of the measures to investigate the baseline environment and to mitigate the likely effects. Due to the small scale of the area however, there is opportunity to control emissions subject to appropriate methods and specialist inputs.
- 6.6.3. There appears to be a high *probability* of significant permanent effects on part of the Town Marsh pNHA. The area of the overall wetland which might be affected is under 2 hectares (of a total area of about 70 hectares). The potential impacts may be the permanent and irreversible loss of natural river environment upstream of Arklow Bridge and loss of wetlands which are designated as a pNHA.
- 6.6.4. There appears to be a high probability of encountering chemical contaminants during the works, which gives rise to complexity in relation to the methods of handling, removal and ultimate disposal of riverine deposits.
- 6.6.5. There is some potential for deterioration of water quality of the Avoca or the coastal waters.
- 6.6.6. The development is likely to result in a permanent impact on architectural heritage.
- 6.6.7. Short term impacts may affect human beings in particular arising from construction phase impacts but may also affect ecology of the area.
- 6.6.8. The *duration of impact* would be partly restricted to the construction phase.

  However, there are also likely permanent impacts on architectural heritage and the pNHA.

#### 6.7. EIA Directive 2014 and other matters

- 6.7.1. I have had regard to Annex III of the Environmental Impact Assessment (EIA) Directive (2014/52/EU), which sets out the criteria to determine whether projects listed in Annex II should be subject to EIA. This largely reflects existing national legislation but it does contains additional matters which are not covered by Schedule 7. I am satisfied that my recommendation would not be altered by further consideration of the criteria listed in Annex III.
- 6.7.2. I note that the application includes a query in relation to the appropriate legal mechanism under which an application should be made. Having regard to the recommendation below that EIA should be undertaken, the provisions of s.172 of the Act, which require an application for development consent to be made to An Bord Pleanála shall apply. Other matters raised by Wicklow Co Council such as consent to carry out development on the foreshore are a matter for the local authority and beyond the scope of this determination under A.120 of the Planning and Development Regulations.

#### 7.0 Recommendation

- 7.1. I have had regard to all of the information presented by Wicklow County Council and consider that due to its nature and the characteristics of the receiving environment, the proposed development is likely to have significant impacts on the environment and therefore an Environmental Impact Assessment should be carried out.
- 7.2. I therefore recommend that Wicklow Council be advised to undertake an Environmental Impact Assessment for the reasons and conditions below.

#### 8.0 Reasons and Considerations

Having regard to:

(i) The environmental and cultural heritage sensitivities of the receiving environment in the vicinity of the proposed Arklow Flood Relief Scheme with particular reference to the potential for changes to the hydrology of Arklow Marsh proposed Natural Heritage Area, works to Arklow Bridge which is a protected structure and the potential to encounter contaminated

- materials as well as for cumulative impacts arising from the construction of the Arklow wastewater treatment plant
- (ii) Schedule 7 of the Planning and Development Regulations 2001 as amended
- (iii) The submission of the local authority
- (iv) The guidance contained in Environmental Impact (EIA) Guidance for Consent Authorities regarding Sub-threshold Development' issued by the Department of Environment, Heritage and Local Government in August, 2003

It is considered that the proposed development would be likely to have significant effects on the environment and that an Environmental Impact Assessment should be undertaken.

Mairead Kenny Senior Planning Inspector

29th January 2018