

Inspector's Report ABP-307746-20

Development Flood alleviation works along a section

of Whitechurch stream.

Location Whitechurch Road, Rathfarnham,

Dublin 16

Local Authority South Dublin County Council

Type of Application Application for approval made under

Section 177(AE) of the Planning and

Development Act, 2000 (local authority development requiring

appropriate assessment)

Prescribed Bodies DCH&G

IFI

An Taisce

Observer(s) South Dublin Conservation Society

Ballyboden Tidy Towns Group

Environment Trust Ireland

Cllr Yvonne Collins

Roisin Mc Aleer & Laure Duez

Brid Reason

Joan Moloney

Susan F Tollemache

Angela O'Donoghue

Ciaran Ahern & Others

Manuel Doyle

Date of Site Inspection 9th October 2020

Inspector Karla Mc Bride

1.0 Introduction

- 1.1. South Dublin County Council is seeking approval from An Bord Pleanála to undertake flood alleviation works along a section of the Whitechurch Stream between St Enda's Park and its confluence with the Owendoher River at Ballyboden Road. This watercourse drains to the Dodder River which ultimately discharges to Dublin Bay that is covered by several European site designations. There are several other designated European sites in the wider area although most do not have a direct connection to the proposed works. A Natura Impact Statement (NIS) and application under Section 177AE was lodged by the Local Authority on the basis of the proposed development's likely significant effect on a European site.
- 1.2. Section 177AE of the Planning and Development act 2000 (as amended) requires that where an appropriate assessment is required in respect of development by a local authority the authority shall prepare an NIS and the development shall not be carried out unless the Board has approved the development with or without modifications. Furthermore, Section 177V of the Planning and Development Act 2000 (as amended) requires that the appropriate assessment shall include a determination by the Board as to whether or not the proposed development would adversely affect the integrity of a European site and the appropriate assessment shall be carried out by the Board before consent is given for the proposed development.

2.0 Site and Location

- 2.1. The linear site occupies a suburban location to the SW of Rathfarnham Village in S County Dublin and the surrounding area comprises a mix of open space, woodland, residential and commercial uses. The section of the Whitechurch Stream affected by the proposed works flows S from St Enda's Park to its confluence with the Owendoher River to the N at the junction of Ballyboden Road with Willbrook Road.
- 2.2. The stream flows along the W side of St. Enda's Park which runs parallel to the E side of Whitechurch Road, and this section, which is crossed by several footbridges, is characterised by woodland and riparian vegetation. As it exits St. Enda's Park, the stream flows under Sarah Cullen Road and then to the rear of several houses before crossing under Whitechurch Avenue to flow parallel and to the W of this road as far

as its junction with Ballyboden Road and Willbrook Road. It then flows under Whitechurch Road and Willbrook Road to join the Owendoher River. This section of Whitechurch Stream is also mainly characterised by trees and riparian vegetation, although it is culverted under number of commercial and residential open space sites, including the Rathfarnham Ford Garage and Willbrook Lawn. It is crossed by several vehicular and pedestrian bridges which provide access to the surrounding residential and commercial properties. The roadside boundaries are mainly tree-lined although some sections of the stream are very overgrown with trees growing out from the embankments.

- 2.3. The Whitechurch Stream and its environs are not covered by any sensitive natural heritage designations. However, the watercourse ultimately discharges to Dublin Bay which is covered by several European site designations (via the Owendoher, Dodder & Liffey rivers) and the stream may be important for mobile species from other further afield European sites. There are several features of historic and cultural heritage interest in the vicinity of the stream including features in St. Enda's Park.
- 2.4. Photographs & maps in Appendix 1 describe the site & surroundings in more detail.

3.0 Proposed Development

South Dublin County Council proposes to undertake flood alleviation works along a c.1.5km section of the Whitechurch Stream where there is evidence of flooding related to low stream banks/overtopping of existing defences or insufficient channel/floodplain capacity. The proposed scheme would protect public infrastructure and private property, improve conveyance of flood waters and protect public safety. It would comprise new hard defence measures which would include raising banks, riverbank improvement (including removal of trees and vegetation), building new walls and/or reinforcing existing ones, increasing existing wall heights, replacement of low bridges, and provision of trash screens and debris traps.

The works would be undertaken at 8 x site specific areas running from Taylors Lane/St. Endas Park (S) to Willbrook Road (N) in the vicinity the Willbrook Road and Ballyboden Road junction, and at the confluence of the Owendoher River and Whitehurch Stream. The works would take place over a c.12month period.

Area 1: Downstream of Taylor's Lane & within St Enda's Park

No works proposed.

Area 2: Between St Enda's Park & Sarah Curran Bridge

- Removal of trees & vegetation.
- Localised bank raising & erosion protection along left back (c.50m).
- Debris trap & slipway upstream of Sarah Curran Bridge.
- Woodland planting on left back in St Enda's Park.

Area 3: Downstream of Sarah Curran Bridge to Whitechurch Road Bridge

- Tree removal along left bank (to reduce blockage at bridge).
- Bank protection on left bank.
- Replace wooden bridge.

Area 4: Whitechurch Road Bridge to St Gatiens Culvert

- Removal of trees & vegetation on right bank (to reduce blockage risk & accommodate new flood walls).
- Bank protection & underpinning on left bank.
- New flood wall on right bank tying to existing stone wall.
- New head wall at culvert inlet with return wall on left bank.
- New flood wall on right bank (1.1m to 1.3m high).
- Sheet piling underneath new walls at St Gatiens culvert inlet (c.30m).
- Tree, bulb & grass planting on Whitechurch Rd.

Area 5: St Gatiens Culvert to Ford Garage Culvert:

- Removal of trees & vegetation on right bank.
- New head wall at St Gatiens culvert outlet & new return wall on left bank.
- New flood wall on right bank (1.2m to 1.9m high).
- Sheet piling underneath new walls at St Gatiens culvert outlet (c.30m).
- New head wall at St Gatiens culvert inlet tying into existing left bank wall.

- New flood wall on right bank tying to new head wall at Garage Culvert inlet.
- Sheet piling underneath new wall at Garage Culvert inlet (c.30m).
- Staged Trash Screen at Garage Culvert inlet.
- Tree, bulb & grass planting on Whitechurch Rd (N of St Gatiens Court).

Area 6: Ford Garage Culvert to Willbrook Lawn Twin Culvert:

- Removal of trees & vegetation from both sides of stream.
- Increase concrete plinth around culvert opening & new railing.
- New head wall to culvert outlet tied into flood walls on left & right bank
 (c.1.2m) & right bank wall tied into existing downstream wall.
- Sheet piling underneath new walls at Garage Culvert outlet (c.30m).
- Retain existing right bank walls downstream of bridge (Capri site).
- New Beech hedgerow upstream of Willbrook Lawn twin culvert.
- Replace metal railing at car park with low level defence wall (400m) & railing.
- Replace metal railing along left bank with low level defence wall (600m) & railing, tied into bridge parapet & railing.

Area 7: Willbrook Lawn Twin Culvert to Whitechurch Road Bridge:

- Removal of trees & vegetation from both sides of stream.
- Return wall around dual culvert inlet tied into bridge parapet & wall.
- Tree planting S of junction of Whitechurch Rd & Willbrook Lawn.
- Localised left bank raising/erosion protection, permanent supports to decking.
- Left bank wire mesh fence panels (c.1.2m high)
- Beech hedgerow along left bank fence.
- New right bank railing above existing wall (c.1.2m high).
- Staged Trash Screen upstream of bridge/culvert face.
- Planting in open spaces adjacent to car park.

Area 8: Whitechurch Road Bridge to Willbrook Culvert (Owendoher River):

 Tree & bankside vegetation management (to reduce blockage risk to culvert discharging to Owendoher River).

3.1. Accompanying documents

The application was accompanied by the following documents:

- Natural Impact Statement (NIS)
- Screening for EIA report
- Planning report
- Environment report
- Engineering Services report
- Arboriculture report
- Landscape & Visual Impact Assessment report
- Ecological Impact Assessment report

4.0 **Planning History**

4.1. Several historic and current residential and commercial planning cases in the vicinity but none of particular relevance to the project site.

5.0 Legislative and Policy Context

- 5.1. The EU Habitats Directive (92/43/EEC): This Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) and 6(4) require an appropriate assessment of the likely significant effects of a proposed development on its own and in combination with other plans and projects which may have an effect on a European Site (SAC or SPA).
- 5.2. European Communities (Birds and Natural Habitats) Regulations 2011: These Regulations consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010, as well as addressing transposition

failures identified in CJEU judgements. The Regulations in particular require in Reg 42(21) that where an appropriate assessment has already been carried out by a 'first' public authority for the same project (under a separate code of legislation) then a 'second' public authority considering that project for appropriate assessment under its own code of legislation is required to take account of the appropriate assessment of the first authority.

- 5.3. National nature conservation designations: The Department of Culture, Heritage and the Gaeltacht and the National Parks and Wildlife Service are responsible for the designation of conservation sites throughout the country. The three main types of designation are Natural Heritage Areas (NHA), Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) and the latter two form part of the European Natura 2000 Network.
- 5.4. European sites located within the Zone of Influence of the subject site include:
 - South Dublin Bay SAC (Site code: 000210)
 - North Dublin Bay SAC (Site code: 000206)
 - South Dublin Bay & River Tolka Estuary spa (Site code: 004024)
 - North Bull Island SPA (Site code: 004006)
 - Wicklow Mountains SAC (Site code:002122)
- 5.5. Planning and Development Acts 2000 (as amended): Part XAB of the Planning and Development Acts 2000-2017 sets out the requirements for the appropriate assessment of developments which could have an effect on a European site or its conservation objectives.
 - 177(AE) sets out the requirements for the appropriate assessment of developments carried out by or on behalf of local authorities.
 - Section 177(AE) (1) requires a local authority to prepare, or cause to be prepared, a Natura impact statement in respect of the proposed development.
 - Section 177(AE) (2) states that a proposed development in respect of which an appropriate assessment is required shall not be carried out unless the Board has approved it with or without modifications.

- Section 177(AE) (3) states that where a Natura impact assessment has been prepared pursuant to subsection (1), the local authority shall apply to the Board for approval and the provisions of Part XAB shall apply to the carrying out of the appropriate assessment.
- Section 177(V) (3) states that a competent authority shall give consent for a
 proposed development only after having determined that the proposed
 development shall not adversely affect the integrity of a European site.
- Section 177AE (6) (a) states that before making a decision in respect of a proposed development the Board shall consider the NIS, any submissions or observations received and any other information relating to:

The likely effects on the environment.

The likely consequences for the proper planning and sustainable development of the area.

The likely significant effects on a European site.

5.6. **Planning policy**

Project Ireland 2040: National Planning Framework:

National Strategic Outcome 9: seeks to co-ordinate EU Flood Directive and Water Framework Directive implementation and statutory plans across the planning hierarchy, including national guidance on the relationship between the planning system and river basin management. Local authorities, DHPLG, OPW and other relevant Departments and agencies working together to implement the recommendations of the CFRAM programme will ensure that flood risk management policies and infrastructure are progressively implemented.

Climate Action Plan 2019:

This plan identifies several risks to Ireland as result of climate change including: - rising sea-levels that threaten habitable land & coastal infrastructure; extreme weather, including more intense storms & rainfall affecting our land, coastline & seas; further pressure on our water resources & food production systems with associated impacts on fluvial & coastal ecosystems; and increased chance & scale of river & coastal flooding.

Eastern & Midland Regional Economic & Spatial Strategy 2019 - 2031:

Regional Policy Obj. 7.13: states that EMRA will work with local authorities, OPW and other relevant departments and agencies to implement the recommendations of the CFRAM programme to ensure that flood risk management policies and infrastructure are progressively implemented.

Regional Policy Obj. 7.14: states that local authorities shall take account of and incorporate into the development of local planning policy and decision making the recommendations of the Flood Risk Management Plans (FRMPs), including planned investment measures for managing and reducing flood risk.

Regional Policy Obj. 7.15: states that Local authorities shall take opportunities to enhance biodiversity and amenities and to ensure the protection of environmentally sensitive sites and habitats, including where flood risk management measures are planned.

The Planning System and Flood Risk Management, 2009:

These Guidelines seeks to avoid inappropriate development in areas at risk of flooding and avoid new developments increasing flood risk elsewhere and they advocate a sequential approach to risk assessment and a justification test.

River Basin Management Plan for Ireland, 2018 – 2021:

This plan seeks to protect waterbodies and improve water quality in rivers, lakes, estuaries and coastal waters. It acknowledges that the physical condition of waterbodies can be significantly impacted by flood relief schemes and recommends several measures to mitigate such impacts including improved assessment methods, water and planning guidance for local authorities and increased participation by Inland Fisheries Ireland.

Dodder River CFRAM:

This study sought to identify viable structural and non-structural options for managing flood risk within the Dodder catchment as a whole and for localised high-risk areas. It described the Whitechurch Stream as being heavily modified with a large number of bridges, culverts and weirs, and noted that flooding along this stretch of river can be mainly attributed to low stream

banks/overtopping of existing defences or in-sufficient channel/floodplain capacity. The study recommended the installation of hard defences with improvement of channel conveyance between St. Enda's Pak and Tara Hill.

South Dublin County Development Plan, 2016 - 2022:

Zoning: the stream traverse lands covered by the following zoning objectives:

RES: seeks to protect and/or improve residential amenity.

OS: seeks to preserve and provide for open space and recreational amenities.

<u>Flood risk</u>: the Strategic FRA contains a Fluvial Flood Zone Map which identifies existing housing around the stream as being highly vulnerable.

IE Pol 3: incorporate Flood Risk Planning into spatial planning.

IE3 Obj.1: support & corporate with the OPW in delivering Catchment-Based Flood Risk Assessment & Management Programme and in particular the Eastern District CFRAMS and associated Flood Risk Management Plan, the River Dodder CFRAMS and Associated FRMP.

IE3 Obj.1: support delivery of flood alleviation schemes including Whitechurch Stream Flood Alleviation Scheme (Rathfarnham); part of Dodder CFRAM.

<u>Watercourses:</u> promote their natural, historical & amenity value, address long-term management & protection of corridors, and strengthen regional links

Pol.G3 Obj.1: promote the natural, historical & amenity value of watercourses

Pol.G3 Obj.2: maintain a 10m biodiversity zone from the top bank of streams.

Pol.G3 Obj.3: ensure the protection/restoration of riverine floodplains & promote strategic measures to accommodate flooding at appropriate locations

Landscaping: ensure that existing site features such as specimen trees, stands of mature trees, hedgerows, rock outcrops and water features are properly identified & retained and new planting & landscaping should be appropriate to the character of the area.

Pol.G2 Obj.9: preserve, protect & augment trees, woodlands & hedgerows.

HLC15 Obj.3: protect existing trees, hedgerows & woodlands which are of amenity or biodiversity value and/or contribute to landscape character.

Built heritage: protect built heritage including ACAs & Protected structures.

ACA: the site borders the Whitechurch Road & Taylor's Lane ACA.

PS & NIAH: there are 3 PSs and 2 NIAH features recorded nearby (Folly, Roseville House, Willbrook House & Mill House).

HCL 3 Obj.1: ensure the protection of all Protected structures.

<u>HCL 3 Obj.1</u>: ensure that all development proposals that affect Protected Structures are sympathetic to their special character and integrity.

6.0 Consultations

6.1. Prescribed Bodies:

The application was circulated to the following prescribed bodies:

Department of Culture, Heritage & the Gaeltacht (DAU):

- Archaeology: no objections subject to implementation of mitigation measures.
- Nature conservation: loss of trees & scrub will result in temporary loss of
 cover for wildlife until landscaping matures; note recorded presence of otter
 but absence of active holts, but also notes successful use of an artificial holt
 along the Dodder at Ballsbridge. No objections subject to implementation of
 mitigation measures including a preconstruction survey for Otter and
 recommend the installation of 2 x artificial holts within and downstream of St.
 Enda's Park.
- Inland Fisheries Ireland: no objections subject to implementation of
 mitigation measures. A detailed site-specific CEMP should include measures
 to prevent & control the introduction of pollutants & deleterious matter to
 surface water and measures to minimise the generation of sediment & silt.
 Detailed Method Statements should be agreed in relation to construction
 /removal of bridges, & culverts, and ancillary & temporary works.

An Taisce: acknowledges the necessity of flood relief works which should be carried out in an ecologically sensitive manner that takes account of biodiversity as well as climate change. No reference to consideration of alternatives in documentation. Note that traditional approaches to flood management have had localised benefits but

destructive impacts on river ecosystems & water quality whist exacerbating downstream flooding. Need to mitigate the underlying cause of flooding. Note the presence of upstream green areas that could be considered for temporary flood retention & the use of natural measures as in Corkagh Park with the Camac River.

Environmental Protection Agency: No response.

Irish Water: No response.

6.2. Public Submissions:

A total of 10 responses were received from an elected representative, interest groups and members of the public. The concerns raised are summarised below.

Cllr Yvonne Collins:

- Acknowledge the need for flood relief works which should be proportionate to the risk, and notes the occurrence of only 4 flood events in 33 years.
- Concerned about the removal of bankside vegetation & trees and would prefer tree maintenance rather than tree removal.
- New flood wall will extend above the footpath with resultant loss of habitats.
- Request consideration of ecologically friendly alternatives to hard defences.
 Including dredging after Japanese knotweed has been removed.
- Request good quality finish to floodwalls and heightening of footpaths.
- Existing ecological & rural landscape character should be protected.

South Dublin Conservation Society:

Biodiversity:

- Adverse impacts on biodiversity & riparian zone in the absence of mitigation.
- Inadequate survey work which does not reflect the area's ecological character
- More detailed, extensive & seasonal surveys required which take account of habitats and species including bats, otters, fisheries & invertebrates.
- Adverse impact of trash screens on culverts on fish migration & otter mobility,
 and ABP should require regular monitoring & cleaning to prevent blockages.
- No details for trash screens & effects on otter mobility, further studies required
- Conflicting details about the presence of an otter holt at Sarah Curran Bridge.

- Otter ledges may be required to aid otter mobility along the culverted sections.
- A DCC study (Triturus Environmental Ltd) recorded otter in the Whitechurch Stream and noted the suitability of the overgrown wooded areas for foraging, the removal of trees & scrub will make the habitat less desirable for otter.
- The study found copious signs of otter activity in the Whitechurch, Owendoher
 & Dodder watercourses, although weirs could form barriers to movement.
- Significant loss of mature trees will have an adverse impact on wildlife, trees should be planted at Willbrook Grove as well as shrubs.
- The loss of trees will disturb the Carbon balance and replacement trees should be planted nearby to restore storage capacity.

Natura 2000 sites:

 Surface water run-off could affect water quality with resultant adverse effects on the 3 downstream European sites at Dublin Bay (South Dublin Bay SAC, North Bull Island SAC & South Dublin Bay & Tolka Estuary SPA).

Cultural heritage:

- Adverse impacts on several water features of cultural heritage interest i.
- A detailed pre-construction historical/archaeological survey is required.
- The watercourse was historically utilised by several mills, the pipe networks,
 millraces & other features are present and/or active, but not recorded.
- Query the extend to which the relationship between mill streams and flooding have been examined, as most have been culverted (maps attached on file).
- The need for further work was noted in the Engineering Services report.
- The Stream is not the sole cause of downstream flooding, and the lack of investigation/management of known water features, inappropriate planning permissions & housing in the natural floodplain have also contributed.

Natural flood management.

- Lack of consideration of natural flood management techniques, which would retain, store or slow down water in floodplains with benefits for biodiversity.
- Excessive flood alleviation works have had adverse impacts on floodplains, biodiversity & landscapes.
- Rivers by Design (Rethinking development & river restoration) attached.

Conclusion:

- Implications for the proper planning & sustainable development of the area.
- It will likely have effects on the immediate environment.
- It will have likely significant effects on European sites in Dublin Bay, which is a UNESCO designated Biosphere of European & international importance.

Ballyboden Tidy Towns Group:

Context:

- The biodiversity along the 2 rivers and historic rural roads (Whitechurch & Ballyboden) contribute to the unique rural character of the area.
- Acknowledge the need for the works, but the scheme may not properly balance flood risk protection, hard relief works & excessive removal of trees.
- Suggest alternative flood relief measures which would protect the high quality physical & natural environment of the area.

Demonstration of need:

- Need appears to arise from a number of flood events that occurred in 2007 & 2008 caused by "low stream banks/overtopping of defences or insufficient channel/floodplain capacity".
- Query SDCC's preparation of flood risk assessment & question whether an objective analysis of these problems has been carried out.
- Difficult to link the proposed measures to an accurate & objective analysis of problems in the area, and also to assess each of the proposed measures (which are not clearly explained) and their impact on flood risk in the area.
- Therefore, difficult to assess whether the balance between alleviating flood risk, avoiding hard engineering solutions and the impact on local landscape & character have been properly considered, and FI may be required.

Character of Whitechurch Road:

- This road has retained its rural character in relation to mature trees on both sides, narrow width & stone boundary walls, and it is not heavily trafficked.
- The works will have an adverse impact on the semi-rural character of this road, the bollards, extensive tree removal, boundary walls & landscaped areas will make it more suburban in character.

- Adverse impact on river ecology (birds, bats & fish) with resultant adverse impacts on residential amenity which is protected by the zoning objective.
- Adverse impact on river flow rates as a result of the introduction of barriers and upstream measures should be considered before the removal of habitat.

Tree removal:

- Note the stated intention to retain as many trees as possible & plant new trees although a large number of trees will be removed.
- Need for removal is not always stated and various reasons are provided (reduce blockage risk, accommodate new flood wall & facilitate works).
- Query whether tree removal is necessary to avoid flood risk or to facilitate access for machinery to implement the works, if the latter then query the consideration of alternative measures to provide access & protect trees.
- Tree survey report does not describe the quality of each tree to be removed &
 it is not linked to the trees indicated for removal, therefore it is not possible to
 determine the actual condition of trees to be removed.

River catchment:

- Whitechurch Stream is connected to the Owendoher River although the implications of this connection are not made clear in the planning report.
- Query whether any upstream measures can be undertaken to reduce the scale of the works required within the study area, such as catching branches.
- A more integrated & holistic approach to the stream in its wider catchment should be considered.

Environment Trust Ireland:

- Significant visual impacts related to the removal of trees & footbridges,
 provision of trash screens, and replacement of hedges with walls.
- Lack of integration with surrounding natural environment & inadequate EIA.
- No consideration of cumulative/in-combination impacts including past works in the Dodder catchment and upstream reservoirs at Borenabreena & spillways.
- An EIAR should have been submitted as the stream is almost 2km long and an assessment of climate change impacts should have been required.
- Failure to provide/consider alternatives as per EIA Directive 2014/52/EU.

- Alternatives to the environmental effects of habitat loss not considered.
- Works have a direct aquatic link to European sites at Dublin Bay.
- No proper consideration of impacts on habitats, protected species (otter, badger & hedgehog), and no surveys (otter, badger & amphibians).
- Inadequate EIA Screening & NIS, no proper account of the environmental sensitivity of the area, the presence of otters & proximity to Dublin Bay SAC.

Residents Associations:

The concerns raised by Ciaran Ahern on behalf of several local Residents
Associations and Groups (Glendoher & District, Palmer Park & Pearse Brothers,
Fonthill, Willbrook Downes & Willbrook Estate, Willbrook Grove, Whitecliff &
Silveracre) along with a number of residents at St. Gatien Court, Whitechurch Road
and Sarah Curran Avenue, are summarised below.

- Acknowledge the need for works but concerned about the degree of overengineering relative to the scale of the problem along the Stream (Glin River).
- Adverse impact on biodiversity, tree canopies, habitats, protected species & historic character of the area & no consideration of alternatives.
- Main issue relates to surface water management, poor maintenance of drains and inadequate provision for recent developments, rather than flooding
- Past flood events in 2007 & 2011 were related to council roadworks at Taylor's Lane & in St. Enda's Park and poor construction management, and no local recollection of the stream ever breaking its banks.
- Significant planning infringements both upstream & along this section have contributed to flood risk (unauthorised interference with banks & culverting).
- Scheme's fragmented approach is contrary to the WFD and the sustainable management of watercourse catchments, and will give rise to more flooding.
- Inadequate LIDAR surveys of river bed from source to Dublin Bay European sites therefore modelling of 1/100 events is flawed.
- No consideration of upstream catchment works in adjoining local authority
 (DRCC) to address the risk flooding, by installing ponds in green areas.

- Inadequate assessment of impacts on historic & rural character of the area (including several protected structures, historic millraces & industrial heritage) and aquatic relationship between the stream and the millraces.
- Adverse impacts on heritage features in St. Enda's Park including a National Monument & Protected Structure by introduction of bollards & bank removal.
- Contrary to EU Habitats Directive, Water Framework Directive & Birds
 Directive in relation to the protection of species (including otters, bats & kingfishers) & NIS mitigation measures do not comply with Habitats Directive.
- Excessive tree/hedgerow removal to accommodate access for machinery, and additional planting is required (e.g. Willbrook Grove & St Gatien's Court) and many trees screen poorly constructed boundary walls from view.
- Adverse impacts on pedestrian safety by tree removal along sections of footpath, and all footpaths should be repaired & made universally accessible, and speed reduction measures are required for vehicles.
- Inadequate assessment of impacts on the Owendoher River or resultant impacts on biodiversity, Dodder fisheries nursery & European sites, and tree removal will exacerbate flooding & disrupt ecosystems.
- Inadequate public participation & contrary to Aarhus Convention as ability to study the submitted plans was badly affected by Covid-19 restrictions, and inadequate provision & maintenance of site notices.
- Request that the application be either re-advertised or declared invalid in order to allow for reasonable public consultation.

Members of the public:

The collective concerns raised by Roisin McAleer & Laure Duez, Brid Reason, Joan Moloney, Susan F Tollemache, Angela O'Donoghue and Manuel Doyle are summarised below.

- Inadequate justification for the scheme and query need for scale of works based on the anecdotal nature & cause of past flood events.
- No consideration of alternatives, including upstream attenuation, localised initiatives, proper storm water management and stream maintenance.

- Flooding caused by unauthorised culverting under commercial properties, with no attempt by SDCC to address non-compliance with planning conditions.
- No assessment of relationship with Owendoher River & downstream impacts.
- Adverse impacts on the rural, historic & ecological character of the area, including the original granite walls along the river, and visual amenity.
- Trees contribute to flood management & carbon storage, and felled trees should be replaced with mature specimens.
- Adverse impact on protected structures & built heritage should protected.
- Contrary to Habitats Directive, Water Framework Directive & Birds Directive.
- Adverse impacts on protected species (including fisheries, otter, birds, bats & snails) & inadequate NIS mitigation measures.
- No cumulative assessment of Bus Connect impacts along Whitechurch Road.
- Query whether this is a flood alleviation or road improvement scheme (works at St. Gatien's Court to St. Enda's Drive will remove a stand of Lime trees).
- Inadequate public participation as a result of by Covid-19 restrictions (contrary to concept of public participation & Aarhus Convention).

7.0 Assessment

7.1. The likely consequences for the proper planning and sustainable development of the area:

The proposed flood alleviation works would comply with national, regional and local policy in respect of climate change, the alleviation of flood risk, and the protection of residential amenity, cultural and natural heritage, and the environment.

The site and surrounding area which comprises a mix of residential and commercial uses has been affected by flooding to varying extents in recent years. This problem is more severe in the N section of the site in the vicinity of St Enda's Drive, Grange Road and Willbrook Lawn which lie within the 1% AEP floodplain, and where the potential risk to public infrastructure and private property is greater. The Council states, that in line with OPW criteria and standards, a cost benefit analysis shows that there is a financial justification for carrying out the flood relief works in order to protect public roads and private properties.

The submissions received from Prescribed Bodies, environment groups, residents' associations and local residents are summarised in section 6.0 above. The main concerns raised relate to: - the loss of trees and woodland vegetation with resultant adverse impacts on residential and visual amenity, biodiversity and cultural heritage; and the need for the scheme, its potential effectiveness, and lack of consideration of the wider drainage network and more holistic alternatives.

Design and layout:

The location and design the proposed flood relief works along Whitechurch stream are described in detail in sections 2.0 and 3.0 above. They would affect a c.1.5km section of the stream that flows N through St. Enda's park and parallel to Whitechurch Road to its junction with Ballyboden Road and the stream's confluence with the Owendoher River. The proposed works would mainly take place along the Whitechurch Road section with a small element in the N section of St. Enda's Park immediately upstream of Sarah Curran Bridge at a point where the stream exits the park. The proposed works would mainly comprise changes to some sections of the river bank to prevent erosion, replacement and construction of flood walls and bridges, and the installation of trash screens at bridges and culverts. The works

would also require the removal of trees and riparian vegetation at certain locations which would be replaced with a variety of new trees, hedges and landscaping.

Residential & visual amenity:

Whitechurch Road and the surrounding area is characterised by a mix of mainly residential and commercial uses. Whitechurch Stream mainly flows parallel to Whitechurch Road through St Enda's Park, under Sarah Curran Avenue and alongside the road, except for where is culverted at two main locations under Rathfarnham Ford Garage and Willbrook Lawn. The tree-lined road is not covered by any sensitive heritage or conservation designations, although the N section runs adjacent to an ACA to the E, and none of the trees have Tree Preservation Orders.

Whitechurch stream and the adjoining Whitechurch Road and public footpath are defined by wooded areas, trees of mixed species in various stages of maturity and riparian vegetation, all of which contributes to the overall semi-rural character of the area. However, based on my assessment of the area, some sections are very overgrown, trees have self-seeded and grow from the river banks and flood walls, and several have fallen across the stream. The N section at Willbrook Grove where the footpath is separated from Whitechurch Road by a wooded area is not universally accessible.

In terms of general residential amenity, the proposed works would not overlook, overshadow, result in a loss of privacy or otherwise adversely affect the amenity of any nearby dwelling houses to any significant extent. However, the proposed removal of wooded areas, trees and riparian vegetation would have an adverse impact on the visual amenities and sylvan character of the area in the short term. This would be more evident in the vicinity of the central and N sections where the scale of removal would be more pronounced, but where the potential flood risk is more acute, and where the risk has been exacerbated by the extent to which the riparian corridor has become overgrown.

Notwithstanding these concerns, it is proposed to plant new trees and hedges at a functional distance from the river channel and to provide landscaped areas along Whitechurch Road. Therefore, the proposed works will not give rise to an adverse visual impact on the character of the area or the amenities of nearby houses in the long term. However, semi-mature native species replacement trees should be

planted along the route, including at the proposed landscaped areas, in the interests of protecting biodiversity, visual and residential amenity, and the character of the area. This concern could be addressed by way of a planning condition.

The contents of the applicant's Landscape and Visual Impact Assessment Report is noted and I am satisfied that it provides an accurate description of the short and long terms impacts on the proposed works on the visual amenities of the area. The contents of the applicant's Arboricultural Assessment are also noted. I am satisfied that a correlation between trees identified for removal and their condition is not necessary, given that their removal will enable the proper functioning of the flood relief works which seeks to protect public infrastructure and private property.

Biodiversity:

Whitechurch Stream has its source in the Wicklow Mountains and it discharges to Dublin Bay via the Owendoher, Dodder and Liffey rivers. The c.1.5km section of stream which is the subject of the proposed flood relief works flows N through St. Enda's Park and parallel to Whitechurch Road to its confluence with the Owendoher River at the junction of Whitechurch and Ballyboden Roads. This relatively fast flowing section of stream is defined by woodland and riparian vegetation and it provides a habitat, refuse or resting place to a wide variety terrestrial and aquatic animal and species (including otters, birds, bats, fish and invertebrates), which have been described in the submitted documents. This includes a Natural Impact Statement which examined the relationship between Whitechurch Stream and several further afield European sites (refer to section 7.3 below), and Aquatic Ecology Survey and Ecological Impact Assessment reports.

These reports were informed by desk top studies and field surveys of terrestrial and aquatic ecology (including several invasive species), they described the ecological characteristics of the receiving environment, and identified the potential impacts on Europeans Sites and biodiversity. The NIS and Ecology reports contain mitigation measures which have been incorporated into a preliminary Construction and Environmental Management Plan.

No European site QI or SCI species were recorded on or in the vicinity of the site in the desktop studies and field surveys, although there was evidence of Otter activity along the watercourses, and Black-headed gull was recorded flying over the area. The site is outside the favourable reference range for most QI/SCI species and/or does not contain suitable habitat or foraging potential for most of these species.

There is evidence of mammal activity in the wider area (including badger, fox & red squirrel). A wide variety of bird species were recorded in historic and current surveys of the wider area including several rare and threatened species (including Kingfisher) as well as many common species and passerines. St. Enda's Park and the linear wooded area along the stream provide foraging habitat for bats (including Common & Soprano pipistrelle, Leisler's bat & Daubentons bat). Water quality data for the Whitechurch Stream indicates Fair to Good status (Q4/5) and the stream provides suitable spawning habitat for several species of fish (including Brown trout) and potential spawning habitat for Salmon and Lamprey, although the upward migration of Salmon is restricted by downstream weirs in the Dodder River. Several invasive plant species were recorded in historic and current surveys (including Japanese knotweed, Giant rhubarb & Giant hogweed).

The proposed flood relief works and associated removal of trees and riparian vegetation would undoubtedly have an adverse impact on biodiversity during the construction phase, mainly in relation to habitat loss and disturbance to foraging, resting places and refuges. It is proposed to appoint and Ecological Clerk of Works to oversee the works and the mitigation measures contained in the NIS and Ecology report would protect sensitive species (including otter, birds, fish & invertebrates). Works will be conducted in accordance IFI guidance (which has no objections), instream works will be conducted outside the Brown trout spawning season, and the removal of trees and vegetation during the bird breeding season will be prohibited.

The proposed physical works also have the potential to affect water quality and create barriers to species movement, along with general noise and disturbance. However, the mitigation measures contained in the NIS and the Ecological Reports would ensure that appropriate protection measures are in put in place. Such measure includes surface water management during the construction and operational phases (including a Waste Management Plan for spoil & invasive species, no interference with existing drainage infrastructure, 5m buffer around watercourses & drains, no concrete mixing on site, designated storage for waste, protection of all watercourses & drains from contamination and spill kits).

In relation Otter, refer to section 7.13 (4) below for a more detailed assessment of the potential impacts on this QI species for the Wicklow Mountains SAC.

In relation to Invasive Species, it is noted that a Management Plan will deal with the several high and medium impact species that occur along the Whitechurch Stream.

Having regard to all of the above, the predicted impacts on biodiversity would be temporary and short term as most species will return to the area post-construction, and after the riparian vegetation has regenerated and the new trees have matured. It is noted that NPWS and IFI had have no objections to the proposed development subject to pre-construction otter surveys, and the avoidance of works during the bird breeding and fish spawning seasons.

Cultural heritage:

The area surrounding this section of Whitechurch Stream contains a variety of archaeological, architectural, cultural and industrial heritage which has been described in the submitted documents. The proposed development would not adversely affect the character or setting of any Recorded Monuments, Protected Structures, NIAH features of ACAs in the area. However, it is possible that as yet undiscovered artefacts, including those related to the former historic mill related use of the stream, may be uncovered during the works, and archaeological monitoring should be required. This concern could be addressed by way of a planning condition.

Need, effectiveness & alternatives:

The concerns raised by the Observers are noted in relation to the need for the proposed flood relief works, their likely effectiveness and the lack of consideration of other more holistic or environmentally benign solutions to the management of flood risk. I am satisfied that the applicant has provided adequate background information to justify the need for the proposed works which seek to protect public infrastructure and private property. I am satisfied that the proposed works will function effectively subject to the regular monitoring and management of the trash screens at bridges and culverts, which will also serve to protect the downstream Owendoher River from debris. I am also satisfied, on the basis of my examination of the submitted documents and assessment of the watercourse, that the proposed works constitute

an appropriate and proportionate response to the site-specific conditions along this c.1.5km section of the Whitechurch Stream.

Conclusions:

Having regard to the foregoing, I am satisfied that the proposed development is acceptable in principle and that the flood alleviation works are justified having regard to the proximity of local roads and private property to a section of the watercourse that has experienced flooding in recent years.

7.2. The likely effects on the environment

The proposed development is not of a type included in Schedule 5 Part 2 of the Planning and Development Regulations 2001 (as amended) as the works would be less than the 2km length specified under S.10 (f) (ii). Furthermore, it does not meet any of the criteria set out in Schedule 7 of the Regulations for determining whether a sub-threshold development would be likely to have significant effects on the environment, with regard to the characteristics of the proposed development, its location and the characteristics of potential impacts.

Having regard to the nature and scale of the proposed development, which would comprise a c.1.5km long section of flood alleviation works and the characteristics of the receiving environment which is not densely developed or covered by any sensitive ecological, heritage or landscape designations, I am satisfied that the proposed works would not have any significant adverse effects on population and human health, biodiversity, land, soil or water, air and climate, material assets, cultural heritage or the landscape, and the need for environmental impact assessment can, therefore, be excluded.

Notwithstanding this conclusion, it is noted that the surrounding area has a rich cultural heritage which includes the historic use of the stream by the mill industry, and the riparian habitats provide a refuge for foraging opportunities for a range of species (including mammals, fish, birds & bats). As such the Council should ensure that the archaeological and ecological mitigation measures are fully implemented.

7.3. The likely significant effects on a European site:

The areas addressed in this section are as follows:

- Compliance with Articles 6(3) of the EU Habitats Directive
- The Natura Impact Statement
- Appropriate Assessment

7.4. Compliance with Articles 6(3) of the EU Habitats Directive: The Habitats

Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that 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. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site.

7.5. The Natura Impact Statement

The application was accompanied by a Natural Impact Statement (NIS) which scientifically examined the proposed development and the European sites. The application was accompanied by an Aquatic Ecology Survey and Ecological Impact Assessment report which were informed by desk top studies and field surveys, and a preliminary Construction and Environmental Management Plan was provided.

The desk top studies and field surveys described the site and surrounding area. This included details of the aquatic connection between the proposed works and several European sites in Dublin Bay (coastal habitats & birds). The reports also assessed the 3 watercourses (Whitechurch, Owendoher and Dodder) and the surrounding area for mobile species of Qualifying Interest and/or Special Conservation Interest for the Dublin Bay and Wicklow Mountain European sites (Otter & birds). The ecological characteristics of the riparian site, which includes woodland vegetation, were described. No QI or SCI species were recorded on or in the vicinity of the site in the desktop studies and field surveys, although there was evidence of Otter activity along the watercourses and of Black-headed gull and Merlin flying over the site. The site is outside the favourable reference range for most

QI/SCI species and/or does not contain suitable habitat or foraging potential for most of these species. A number of scheduled invasive species were also recorded along the watercourses (including high impact Japanese knotweed, Giant rhubarb, Giant hogweed & Cherry laurel, and medium impact Sycamore & Butterfly bush). Water quality data for the Whitechurch Stream indicates Fair to Good status (Q4/5) although the quality deteriorates slightly downstream in the Owendoher River (Q4) & Dodder River (Q3/4).

The AA Screening report identified several European sites located within 15km of the proposed works, characterised the possible implications of the proposed development on these sites, and concluded that significant effects on several sites could not be ruled out and that the preparation of an NIS was required.

The NIS report described the receiving environment and the proposed development. It identified 5 x European sites with the Zone of Influence, listed the QIs and SCIs for each site and described the nature of the connection between the works and the European sites. It characterised the potential effects on these sites including incombination effects in view of the site's conservation objectives. The identified effects related to surface water pollution, discharges resulting in loss/change to habitats & disturbance to commuting/forging territory. The NIS formally concluded that in view of best scientific knowledge and applying the precautionary principle, and in light of the conservation objectives of the relevant European sites, the proposed development, either individually or in-combination with other plans or projects, will not have an adverse effect on the integrity of any of the following European site(s), given the implementation of mitigation measures outlines.

7.6. Having reviewed the NIS and the supporting documentation, I am satisfied that it provides adequate information in respect of the baseline conditions, does clearly identify the potential impacts, and does use best scientific information and knowledge. Details of mitigation measures are provided, and they are summarised in section 7.0 of the NIS. I am satisfied that the information is sufficient to allow for appropriate assessment of the proposed development (see further analysis below).

7.7. Appropriate Assessment

- 7.8. The proposed development, which would comprise the construction of a c.1.5km section of flood relief works along Whitechurch Stream, is not directly connected with or necessary to the management of any European sites in the surrounding area.
- 7.9. Having regard to the information and submissions available, nature, size and location of the proposed development and its likely direct, indirect and cumulative effects, the source pathway receptor principle and sensitivities of the ecological receptors, the following European Sites are considered relevant to include for the purposes of initial screening for the requirement for Stage 2 appropriate assessment on the basis of likely significant effects.
- 7.10. The potential likely significant impacts that could arise during the construction and operational phases of the proposed development on the European site's QI and SCI habitats and species are:
 - Release of sediment & pollutants to surface & ground water during construction.
 - Loss of habitat/resting/foraging places used by QI & SCI species.
 - Noise and disturbance to QI & SCI species during construction.
 - Dispersal of invasive species with resultant impacts on QI & SCI habitats & species during construction.

Stage 1 Screening Assessment.

The European sites within a 15km radius of the proposed works and approximate separation distances are set out below.

European Site	Qualifying Interests	Distance
South Dublin Bay SAC (000210)	Mudflats & sandflats not covered by seawater at low tide	c.12km
North Dublin Bay SAC (000206)	Mudflats & sandflats not covered by seawater at low tide	c.13km
	Annual vegetation of drift lines	

European Site	Qualifying Interests	Distance	
	Salicornia & other annuals (in mud & sand)		
	Atlantic salt meadows		
	Mediterranean salt meadows		
	Embryonic shifting dunes		
	Shifting dunes along shoreline (white dunes)		
	Fixed coastal dunes (grey dunes)		
	Humid dune slacks		
	Petalwort		
Wicklow Mountains	Oligotrophic waters	c.7km	
SAC (002122)	Natural dystrophic lakes & ponds		
	North Atlantic wet heaths with Erica tetralix		
	European dry heaths		
	Alpine & Boreal heaths		
	Calaminarian grasslands		
	Species-rich Nardus grasslands		
	Blanket bogs		
	Siliceous scree of montane to snow levels		
	Calcareous rocky slopes		
	Siliceous rocky slopes		
	Old sessile oak woods		
	Lutra lutra (Otter)		
Glensamole Valley SAC	Semi-natural dry grasslands	c.7km	
(002122)	Molinia meadows		
	Petrifying springs with tufa formation		
Ballyman Glen SAC	Petrifying springs with tufa formation	c.11km	
(000713)	Alkaline fens		
Knocksink Woods SAC	Petrifying springs with tufa formation	c.9km	
(000725)	Old sessile oak woods		
	Alluvial forests		

European Site	Qualifying Interests	Distance
South Dublin Bay & River Tolka Estuary SPA (004024)	Light-bellied Brent Goose	c.12km
	Oystercatcher & Redshank	
	Ringed & Grey Plover	
	Knot, Sanderling & Dunlin	
	Bar-tailed Godwit	
	Black-headed Gull	
	Roseate, Common & Arctic Tern	
	Wetland & Waterbirds	
North Bull Island SPA (004006)	Light-bellied Brent Goose	c.13km
	Shelduck, Teal & Pintail	
	Shoveler & Oystercatcher	
	Golden & Grey Plover	
	Knot, Sanderling & Dunlin	
	Black-tailed & Bar-tailed Godwit	
	Curlew, Redshank & Turnstone	
	Black-headed Gull	
	Wetland and Waterbirds	
Dalkey Island SPA (004172)	Roseate Common & Arctic Tern	c.13km
Wicklow Mountains SPA (004040)	Merlin & Peregrine	c.9km

7.11. Based on my examination of the NIS report and supporting information (including the desktop studies & field surveys), NPWS website, aerial and satellite imagery, the scale of the proposed works and nature of the likely effects, the substantial separation distance and functional relationship between the proposed works and the European sites and their conservation objectives, the site specific characteristics (including tidal & coastal dynamics), and taken in conjunction with my assessment of the subject site and surrounding area, I conclude that a Stage 2 Appropriate Assessment is required for 5 of the European sites referred to above which I

- consider to be within the Zone of Influence by reason of aquatic and/or mobile connections.
- 7.12. It is further noted from the NPWS documentation and accompanying maps that many of the Qualifying Interests habitats and species for the SACs are located a considerable distance downstream of the proposed development. For this reason, combined with their specific site characteristics and the dynamic effects tidal and coastal processes, they will be excluded from any further consideration. The proposed works would be located outside the favourable range of most bird species listed as being of Special Conservation Interest for the SPAs, and the site and environs do not provide suitable nesting or foraging habitat for these birds. However, Black-headed gull was recorded flying over the site during historic and/or current surveys and given that St Enda's Park has resting and/or foraging potential this species will, it will be included in the Stage 2 analysis.

7.13. Stage 2 Appropriate assessment:

The remaining 5 European sites within the Zone of Influence that have an aquatic or mobile connection to the site of the proposed works, and their relevant Qualifying Interests & Special Conservation Interests, including any applicable attributes & targets for these sites, are set out below.

European Site	Relevant Qualifying Interests &	Attributes & targets
(SACs & SPAs)	Special Conservation Interests	
South Dublin Bay	Mudflats & sandflats not covered	Habitat area
(000210)	by seawater at low tide	Community extent, structure & distribution
North Dublin Bay	Mudflats & sandflats not covered	Habitat area & distribution
SAC (000206)	by seawater at low tide Annual vegetation of drift lines	Community extent, structure & distribution
	Salicornia & other annuals (in mud & sand)	Physical structure, functionality & sediment
	Atlantic salt meadows	supply and zonation
	Mediterranean salt meadows	Vegetation structure &
	Embryonic shifting dunes	composition and negative species indicator
	Shifting dunes along shoreline (white dunes)	

European Site	Relevant Qualifying Interests &	Attributes & targets
(SACs & SPAs)	Special Conservation Interests	
South Dublin Bay	Black-headed Gull	Population trend &
& River Tolka	Wetlands & waterbirds	Distribution
Estuary SPA		Habitat area
(004024)		
North Bull Island	Black-headed Gull	Population trend &
SPA (004006)	Wetlands & waterbirds	Distribution
		Habitat area
Wicklow	Otter	Distribution
Mountains SAC (002122)		No decline in extent of terrestrial & freshwater habitats, couching sites & holts, and fish biomass No increase in barriers to
		connectivity

1. South & North Dublin Bay SACs (site codes:000210 & 000206)

Description of European sites: these SACs are located in the inner part of Dublin Bay, they overlap with other designated European sites in the Bay and they extend N and S from the Bull walls. They contain a variety of coastal habitats including mudflats & sandflats, dune systems and salt marshes which support an assortment of rare, protected and threatened plant and animal species including birds, fish and invertebrates.

Conservation Objectives: To maintain or restore the favourable conservation condition of the Qualifying Interest habitats in South & North Dublin Bay SACs including the following relevant habitats subject to a list of attributes and targets related to habitat area & distribution, community extent & distribution, vegetation structure & composition, and physical structure & sediment supply:

- Mudflats & sandflats not covered by seawater at low tide
- Annual vegetation of drift line
- Salicornia & other annuals colonising mud & sand
- Atlantic salt meadows
- Mediterranean salt meadows
- Embryonic shifting dunes
- Shifting dunes along shoreline (white dunes)

Potential direct effects: No potential for direct effects having regard to the location and scale of the proposed works and to the substantial separation distance between the works and these European sites and QI habitats.

Potential indirect effects: Potential indirect effects relate to possible damage to QI habitats as a result of accidental spillages and sediment run off during the construction phase, which could give rise to pollution and contamination of coastal habitats with resultant impacts on the aforementioned attributes and targets for the QI habitats and their constituent species, in the absence of mitigation. Further potential indirect effects relate to the uncontrolled or poorly managed removal of invasive species during construction which could give rise to the colonisation of coastal habitats by any saline tolerant invasive species, with resultant impacts on the aforementioned attributes and targets for the QI habitats and constituent species, in the absence of mitigation. Notwithstanding this scenario, it is unlikely that the "Mudflats & sandflats not covered by seawater at low tide" QI habitat would be adversely affected given that both the N and S sections are located behind the Bull Walls.

Potential in-combination effects: Potential indirect in-combination effects relate to damage to QI habitats as a result of accidental spillages and sediment run off during construction, and the poorly managed removal of invasive species. This could give rise to pollution, contamination and colonisation by invasive species, having regard to the medium density of development in the immediate area and the various plans or projects in wider area, in the absence of mitigation.

Mitigation measures: Section 7.0 of the NIS contains a full list of mitigation measures related to: - surface water management during the construction and operational phases (including a Waste Management Plan for spoil & invasive species, no interference with existing drainage infrastructure, 5m buffer around watercourses & drains, no concrete mixing on site, designated storage for waste, protection of all watercourses & drains from contamination and spill kits); emergency response & environmental training; the appointment of an Ecological Clerk of Works; and measures to protect sensitive species (including otter). This will include preconstruction surveys for otter and derogation licences will be sought if an active holt is discovered. Works will be conducted in accordance IFI guidance and in-stream works will be conducted outside the Brown trout spawning season. There will also be a prohibition on removal of trees, treelines & hedges during the bird breeding season. CEMP will incorporate all the NIS mitigation measures along with any additional measures recommended in the Ecological Impact Assessment report.

Residual effects: None anticipated post mitigation.

NIS Omissions: None noted.

Suggested conditions: All plant and machinery used during the works should be thoroughly cleaned and washed before delivery to the site to prevent the spread of hazardous invasive species and pathogens.

Conclusion: I am satisfied that the proposed development individually or in combination with other plans or projects would not adversely affect the integrity of these European sites in light of their conservation objectives, subject to the implementation of mitigation measures outlined above.

2. South Dublin Bay & Tolka Estuary SPA (site code:004024)

Description of European site: This estuarine SPA covers most of Dublin Bay and it overlaps with other designated European sites. It contains extensive areas of intertidal flats which support an assortment of rare and protected bird species. This include several overwintering species that are of international (Light bellied brent goose) and national importance, along with a nationally important colony of breeding Common Tern, and it is an internationally important passage/staging site for 3 other tern species. The QI relevant species and habitats include Blackheaded gull and Wetland habitat.

Conservation Objectives

- 1. To maintain the favourable conservation condition of <u>Black-headed Gull</u> in South Dublin Bay and River Tolka Estuary SPA, which is defined by a list of attributes and targets related to population trend which should be stable or increasing, and distribution which should not decrease significantly in the range, timing or intensity of use of areas by black-headed gull other than that occurring from natural patterns of variation.
- 2. To maintain the favourable conservation condition of the <u>wetland habitat</u> in South Dublin Bay and River Tolka Estuary SPA as a resource for the regularly occurring migratory waterbirds that utilise it. This is defined by an attribute and target related to habitat area and stability which should not be less than 2,192 hectares, other than that occurring from natural patterns of variation.

Potential direct effects: No potential for direct effects having regard to the location and scale of the proposed works and to the substantial separation distance between the works and this European site and QI species & habitats.

Potential indirect effects: As for South and North Dublin Bay SACs above in relation to the Wetland habitat. Further potential indirect effects relate to disturbance to Black-headed gull whilst resting or foraging in Enda's Park

during the construction works. However, it is unlikely that any such disturbance would have a resultant effect on the attributes and targets for this species in relation to population trend, distribution and habitat area.

Potential in-combination effects: As for South and North Dublin Bay SACs.

Mitigation measures: As for South and North Dublin Bay SACs above.

Residual effects: None anticipated post mitigation.

NIS Omissions: None noted.

Suggested conditions: As for South and North Dublin Bay SACs above.

Conclusion: I am satisfied that the proposed development individually or in combination with other plans or projects would not adversely affect the integrity of this European site in light of its conservation objectives (subject to the implementation of mitigation measures outlined above).

3. North Bull Island SPA (site code: 004006)

Description of site: This SPA is also located in the inner part of Dublin Bay, it overlaps with other designated European sites and it comprises a sand spit that extends NE from the North Bull wall. It contains a variety of coastal habitats including wetlands and dune systems which support an assortment of rare, and protected bird species of including several overwintering species that are of international importance. The QI species and habitats include **Black-headed gull** and **Wetland habitat**.

Conservation Objectives: As for South Dublin Bay & Tolka Estuary SPA.

Potential direct effects: As for South Dublin Bay & Tolka Estuary SPA above

Potential indirect effects: As for South Dublin Bay & Tolka Estuary SPA above.

Potential in-combination effects: As for South Dublin Bay & Tolka Estuary SPA

Mitigation measures: As for South & North Dublin Bay SACs above.

Residual effects: None anticipated post mitigation.

NIS Omissions: None noted.

Suggested conditions: None

Conclusion: I am satisfied that the proposed development individually or in combination with other plans or projects would not adversely affect the integrity of this European site in light of its conservation objectives (subject to the implementation of mitigation measures outlined above).

4. Wicklow Mountains SAC (Site code: 002122)

Description of European site: This SAC covers an extensive part of the Wicklow uplands and valleys and it overlaps with other designated European sites. It contains a wide variety of habitats along with an assortment of rare, protected and threatened species. This includes the QI species Otter which commutes along watercourses outside of the SAC boundary that ultimately connect with the Whitechurch Stream via the Owendoher & Dodder Rivers.

Conservation Objectives: To maintain the favourable conservation condition of <u>Otter</u> in the Wicklow Mountains SAC, which is defined by a list of attributes and targets related to distribution, no significant decline in the extent of terrestrial & freshwater habitats, couching sites & holts and fish biomass, and no significant increase in barriers to connectivity.

Potential direct effects: No potential for direct effects having regard to the location and scale of the proposed works and to the substantial separation distance between the works and this European site and QI species.

Potential indirect effects: Potential for indirect effects having regard to the mobile nature of this species in relation to its recorded presence in the vicinity of the Whitechurch, Owendoher and Dodder watercourses along which it commutes. The proposed works have the potential to affect some key attributes including those related to holts, fish biomass and connectivity, in the absence of mitigation. Adverse effects could arise as a result of the physical works along the stream which could cause damage to as yet unrecorded holts, create barriers to movement, and the loss of resting and foraging places along commuting routes. The availability of prey species could be affected by a deterioration in water quality as result of the release of sediment and pollutants during construction, as well as general noise and disturbance during the works.

Potential in-combination effects: Potential indirect in-combination effects relate to damage to riparian habitats as a result of accidental spillages and sediment run off during construction, and the poorly managed removal of invasive species. This could give rise to pollution, contamination and colonisation by invasive species with resultant impacts on water quality and the availability of prey species, having regard to the medium density of development in the immediate area and the various plans or projects in wider area, in the absence of mitigation.

Mitigation measures: The flood relief works have been designed to ensure the protection of commuting routes along the watercourse. Section 7.0 of the NIS contains a full list of mitigation measures which will be incorporated into the CEMP along with any additional measures recommended in the Ecological Impact Assessment report. The mitigation measures of relevance to QI species Otter relate to surface water management during the construction and operational phases, emergency response and environmental training, the appointment of an Ecological Clerk of Works and measures to protect sensitive species (including otters & aquatic ecology). The measures will include pre-construction surveys for otter and a derogation licence will be sought if an active holt is discovered during the works and requires relocation. Works will be conducted in accordance Inland Fisheries Ireland guidance to ensure that there will be no long term effects on the availability of prey species for Otter, and in-stream works will be conducted outside the Brown trout spawning season. The Department of Culture, Heritage &

the Gaeltacht had no objections to the proposed development subject to the implementation of mitigation measures, including pre-construction surveys. It noted the recorded presence of Otter activity along Whitechurch stream but the absence of active holts. It also noted the successful use of an artificial holt along the River Dodder at Ballsbridge, and recommended the installation of 2 x artificial holts along the c.1.5km stretch of the Whitechurch stream affected by the proposed flood relief works, within and downstream of St. Enda's Park. This recommendation could be addressed by way of a planning condition.

Residual effects: None anticipated post mitigation.

NIS Omissions: None noted.

Suggested conditions: Install 2 x artificial Otter holts along Whitechurch Stream within and downstream of St. Enda's Park.

Conclusion: I am satisfied that the proposed development individually or in combination with other plans or projects would not adversely affect the integrity of this European site in light of its conservation objectives (subject to the implementation of mitigation measures outlined above).

7.14. Appropriate Assessment Conclusions:

Having regard to the foregoing I consider that it is reasonable to conclude on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans and projects would not adversely affect the integrity of the European site nos. 000210, 000206, 004024, 004006 or 002122 or any other European site, in view of the site's Conservation Objectives.

8.0 Recommendation

On the basis of the above assessment, I recommend that the Board approve the proposed development subject to the reasons and considerations below and subject to conditions including those requiring compliance with the submitted details and with the mitigation measures as set out in the NIS.

Reasons and Considerations

In coming to its decision, the Board had regard to the following:

- (a) the EU Habitats Directive (92/43/EEC),
- (b) the European Union (Birds and Natural Habitats) Regulations 2011-2015,
- (c) the Government of Ireland Climate Action Plan, 2019,
- (d) the Regional Economic & Spatial Strategy, 2019-2031,
- (e) the likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the likely significant effects of the proposed development on a European Site,
- (f) the conservation objectives, qualifying interests and special conservation interests for the South Dublin Bay SAC (site code: 000210), North Dublin Bay SAC (site code: 000206), South Dublin Bay & Tolka Estuary SPA (site code: 004024), North Bull Island SPA (site code: 004006) and Wicklow Mountains SAC (site code: 002122),
- (g) the policies and objectives of the South Dublin County Development Plan 2016 to 2022.
- (h) the nature and extent of the proposed works as set out in the application for approval,
- (i) the information submitted in relation to the potential impacts on habitats, flora and fauna, including the Natura Impact Statement, and
- (j) the report and recommendation of the person appointed by the Board to make a report and recommendation on the matter.

Appropriate Assessment:

The Board agreed with and adopted the screening assessment and conclusion carried out in the Inspector's report that the South Dublin Bay SAC (site code: 000210), North Dublin Bay SAC (site code: 000206), South Dublin Bay & Tolka Estuary SPA (site code: 004024), North Bull Island SPA (site code: 004006) and Wicklow Mountains SAC (site code: 002122), are the only European Sites in respect of which the proposed development has the potential to have a significant effect.

The Board considered the Natura Impact Statement and associated documentation submitted with the application for approval, the mitigation measures contained therein, the submissions and observations on file, and the Inspector's assessment. The Board completed an appropriate assessment of the implications of the proposed development for the affected European Sites, namely the South Dublin Bay SAC (site code: 000210), North Dublin Bay SAC (site code: 000206), South Dublin Bay & Tolka Estuary SPA (site code: 004024), North Bull Island SPA (site code: 004006) and Wicklow Mountains SAC (site code: 002122), in view of the site's conservation objectives. The Board considered that the information before it was adequate to allow the carrying out of an appropriate assessment. In completing the appropriate assessment, the Board considered, in particular, the following:

- the likely direct and indirect impacts arising from the proposed development both individually or in combination with other plans or projects,
- ii. the mitigation measures which are included as part of the current proposal, and
- iii. the conservation objectives for the European Sites.

In completing the appropriate assessment, the Board accepted and adopted the appropriate assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the integrity of the aforementioned European Sites, having regard to the site's conservation objectives.

In overall conclusion, the Board was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European Sites, in view of the site's conservation objectives.

Proper Planning and Sustainable Development and Likely effects on the environment:

It is considered that, subject to compliance with the conditions set out below, the proposed development would not have significant negative effects on the environment or the community in the vicinity, would not give rise to a risk of pollution, would not be detrimental to the visual or landscape amenities of the area, would not seriously injure the amenities of property in the vicinity, would not adversely impact on the cultural, archaeological and built heritage of the area and would not interfere with the existing land uses in the area. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area and it would not give rise to likely effects on the environment.

Conditions

- The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, except as may otherwise be required in order to comply with the following conditions.
 Reason: In the interest of clarity.
- 2. The mitigation and monitoring measures outlined in the plans and particulars relating to the proposed development or as may be required in order to comply with the following conditions shall be implemented. Prior to the commencement of development, details of a time schedule for implementation of mitigation measures and associated monitoring shall be prepared by the local authority and placed on file and retained as part of the public record.

Reason: In the interest of protecting the environment and European Sites.

- 3. Prior to the commencement of development, the local authority, or any agent acting on its behalf, shall prepare in consultation with the relevant statutory agencies, a Construction Environmental Management Plan (CEMP), incorporating all mitigation measures indicated in the Natura Impact Statement and Ecological Impact Assessment Report, and demonstration of proposals to adhere to best practice and protocols.
 Reason: In the interest of protecting the European Sites and biodiversity.
- 4. The County Council and any agent acting on its behalf shall ensure that two artificial Otter holts are provided along the section of Whitechurch Stream affected by the proposed works, and the holts shall be located within and downstream of St. Enda's Park.

Reason: In the interest of protecting otter species and the European sites.

5. The County Council and any agent acting on its behalf shall ensure that all replacement trees shall be semi-mature native species, and the proposed landscaped areas along Whitechurch Road shall also be planted with semimature native species trees.

Reason: In the interest of biodiversity, residential and visual amenity, and to protect the landscape character of the area.

6. The County Council and any agent acting on its behalf shall ensure that all plant and machinery used during the works should be thoroughly cleaned and washed before delivery to the site to prevent the spread of hazardous invasive species and pathogens.

Reason: In the interest of the proper planning and sustainable development of the area and to ensure the protection of the European sites.

7. A suitably qualified ecologist shall be retained by the local authority to oversee the site set up and construction of the proposed development and implementation of mitigation measures relating to ecology. The ecologist shall be present during site construction works. Upon completion of works, an ecological report of the site works shall be prepared by the appointed ecologist to be kept on file as part of the public record.

Reason: In the interest of nature conservation and the protection of biodiversity.

8. The County Council and any agent acting on its behalf shall facilitate the preservation, recording, protection or removal of archaeological materials or features that may exist within the site. A suitably qualified archaeologist shall be appointed by the County Council to oversee the site set-up and construction of the proposed development and the archaeologist shall be present on-site during construction works.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

Karla Mc Bride Senior Planning Inspector 30th October 2020