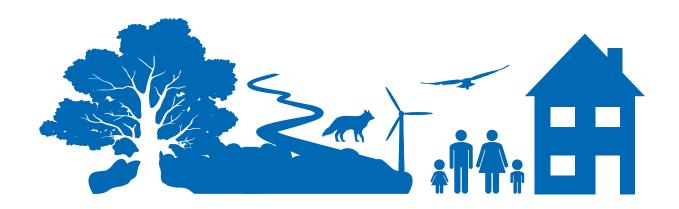


# Rivermeade

# Draft Local Area Plan February 2018

## Screening for Appropriate Assessment Report



Fingal Development Plan 2017 - 2023

www.fingal.ie





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#### 1 INTRODUCTION

#### 1.1 BACKGROUND

This report comprises information in support of screening for an Appropriate Assessment in line with the requirements of Article 6(3) of the EU Habitats Directive (Directive 92/43/EEC) of the Local Area Plan (LAP) for Rivermeade in Fingal zoned 'RV' (Rural Village) and 'OS' (Open Space) in the 2017-2023 Fingal County Development Plan.

The report has taken into consideration the European Commission publication- Assessment of plans and projects significantly affecting Natura 2000 sites - Methodological guidance on the provisions of Articles 6 (3) and (4) of the Habitats Directive 92/43/EEC, Circular Letter SEA 1/08 & NPWS 1/08 from the Department of the Environment, Heritage and Local Government, the Planning and Development Act, 2000 (as amended) and Appropriate Assessment of Plans and Project in Ireland – Guidance for Planning Authorities (2010) from the Department of the Environment, Heritage and Local Government, and is cognisant of recent case law.

#### 1.2 RIVERMEADE LOCAL AREA PLAN

Fingal County Council is preparing a draft Local Area Plan for Rivermeade, which is located within a rural area of Fingal, to the west of Swords and north of Dublin Airport. The LAP boundary is illustrated in red in **Figure 1-1**. The village is zoned 'RV' and 'OS' in the 2017-2023 County Development Plan.

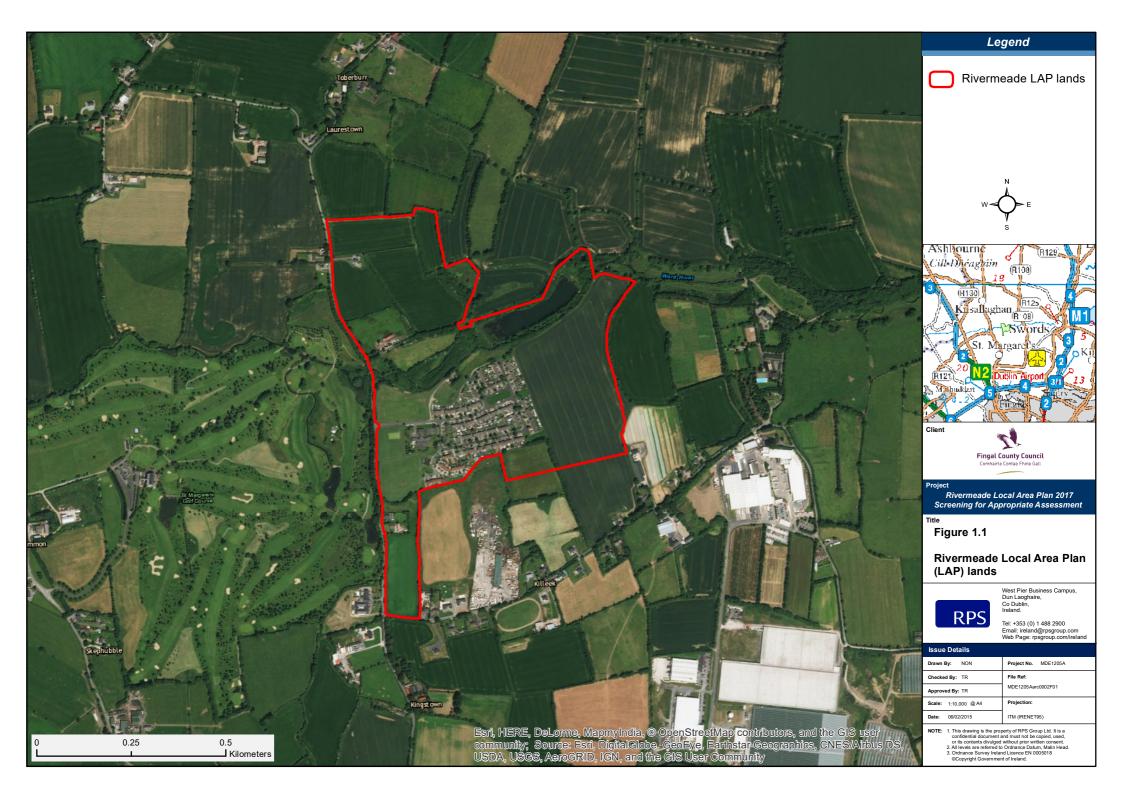
The 'RV' zoning objective seeks to: "Protect and promote the character of the Rural Village and promote a vibrant Community in accordance with an approved Local Area Plan, and the availability of physical and community infrastructure".

The 'OS' zoning objective seeks to: "Preserve and provide for open space and recreational amenities".

The development of this rural village is based on providing for the development of a sustainable rural community by focusing on the inherent development potential of the village and on strengthening the village. The strengthening of the village will also provide a viable housing alternative to the demand for housing in the open countryside for members of the rural community.

The purpose of the LAP is to set out the optimal development strategy for the proper planning and sustainable development of these 'RV' and 'OS' zoned lands. It includes measures for the protection of the environment and the economic and social development of the village. The LAP sets out the development framework for future development within the Plan Area. It sets out the parameters for future development on these lands in relation to: housing, design, natural heritage, employment opportunities, retail/ commercial, public open space and recreation, community and social facilities, vehicular and pedestrian access and infrastructural requirements.

The suitability of any development will be considered on the quality and compatibility of the proposed development with the primary objective of protecting and enhancing the physical and social character of Rivermeade village.





#### 1.3 LEGISLATIVE CONTEXT

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, better known as "The Habitats Directive", provides legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as Natura 2000. These are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/ECC).

The Habitats Directive is implemented in Ireland by a multitude of legislative instruments, but principally by the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended). Insofar as adoption of land use planning is concerned, Part XAB of the Planning and Development Act 2000, as amended, transposes certain aspects of Article 6(3) and 6(4) of Habitats Directive 92/43/EEC in respect of a local authority conducting appropriate assessment prior to adopting a Local Area Plan.

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect Natura 2000 sites. Natura 2000 sites are referred to in this report as **European Sites**, as defined in Part XAB, Section 177R of the Planning and Development Act 2000, as amended.

Article 6(3) of Directive 92/43/EEC establishes the requirement for Appropriate Assessment (AA):

Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subjected to appropriate assessment of its implications for the site in view of the site's conservation objectives. In light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.

#### Article 6(4) states:

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

#### 1.4 STAGES OF ASSESSMENT

This Screening for Appropriate Assessment report has been prepared in accordance with the European Commission DG Environment guidance document Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3)



and (4) of the Habitats Directive 92/43/EEC. The guidance within this document provides a methodology for carrying out assessments required under Article 6(3) and 6(4) of the Habitats Directive, and is viewed as an interpretation of the EU Commission's document "Managing Natura 2000 sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC".

This exercise has also taken into consideration the Department of the Environment, Heritage and Local Government publication *Appropriate Assessment of Plans and Project in Ireland – Guidance for Planning Authorities* (2010).

#### 1.5 GUIDING PRINCIPLES AND CASE LAW

Over time legal interpretation has been sought on the practical application of the legislation concerning AA as some terminology has been found to be unclear. European and National case law has clarified a number of issues and some aspects of the published guidance documents have been superseded by case law. Case law has been considered in the preparation of the screening of the Plan.

In complying with the obligations under Article 6(3) and following the EC guidelines, this Screening for Appropriate Assessment report has been structured as follows:

- Description of the Plan
- Identification of European Sites potentially affected
- Screening the Plan for Likely Significant Effects
- Exclusion of sites where Likely Significant Effects can be discounted
- Screening conclusion

#### 1.6 INFORMATION SOURCES CONSULTED

The following sources of information have been consulted:

- Fingal County Development Plan 2017-2023
- Rivermeade Local Area Plan
- Draft Village Development Framework Plan and Design Guidance [VDFP]
- Department of Housing, Planning and Local Government online land use mapping www.myplan.ie/en/index.html;
- GeoHive Online mapping http://map.geohive.ie/mapviewer.html;
- Ordnance Survey of Ireland Online mapping and Aerial photography www.osi.ie;
- National Parks and Wildlife Service Online European Site information www.npws.ie;
- National Parks and Wildlife Service Information on the status of EU protected habitats in Ireland (NPWS 2013a & 2013b);
- Environmental Protection Agency Envision maps www.epa.ie;
- Information on River Basin Districts www.wfdireland.ie; and
- Geological Survey of Ireland Geology, soils and hydrogeology www.gsi.ie.



#### 2 SCREENING FOR APPROPRIATE ASSESSMENT

#### 2.1 DESCRIPTION OF THE PLAN

Fingal County Council is reviewing the Rivermeade LAP in accordance with commitments in the 2017-2023 Fingal Development Plan and in particular Objective RF01 [at p149] which states as follows:

'Review the Rivermeade Local Area Plan before end of 2017. This Plan will reassess the potential for higher densities which will help in the delivery of necessary physical and social infrastructure, particularly road improvements, expanded recreational facilities and local services for the benefit of existing and future residents in Rivermeade'.

Rivermeade is located within a rural area of Fingal, to the west of Swords and north of Dublin Airport. The village is approx. 7 km to the west of Swords, approximately 3 km north of St. Margaret's and approximately 8 Km north of Finglas.

The LAP sets out the optimal development strategy for the future development of an area of approximately 42 hectares, which has 175 existing houses and a population of circa 600.

The Vision Statement for the Village is as follows:

'To promote the renewal of Rivermeade as an attractive and vibrant village, ensuring its sustainable expansion and development at a level appropriate to and integrated with the existing settlement, to meet the housing ,socio-economic and civic aspirations of the community, whilst at the same time affording maximum environmental protection and developing the village's distinctive character, amenity and local identity.'

There are currently 175 existing houses within the village boundary, all located on the southern side of the Ward River. In addition to the residential development there is a primary school (including a school hall) and a community facility serving mainly Rivermeade as well as its rural hinterland. There is also a playground and small football pitch serving the settlement. Development of the LAP lands could potentially yield in the long term approximately 276 additional residential units and a projected additional population of approximately 745 persons, increasing the population of Rivermeade in the long term to approximately 1,345 persons.

The quantum of development described above is unlikely to be realised over the lifetime of this LAP (6 years or any extended period) but the plan outlines the optimal sustainable development strategy for the village over a longer time period in tandem with the timely delivery of the necessary physical infrastructure, in particular improvements to water services and roads.

A draft Village Development Framework Plan and Design Guidance (VDFP) for Rivermeade has been prepared and will form part of the LAP. All development proposals shall have regard to the guidelines set out in the VDFP. The VDFP forms the blueprint for the future development of the LAP lands. The framework plan represents a long term strategy to achieve the sustainable development of the village, with a diversity of uses whilst ensuring a balance between the protection and development of the natural and built environment.



#### 2.1.1 Key Elements of the Plan

Key elements in the development strategy for the subject lands are illustrated in **Figure 2-1**, and are as follows:

- Development areas: providing for 11 Development areas;
- Village Development Framework Plan and Design Guidance [VDFP]: requiring that all development proposals shall have regard to the guidelines set out in the VDFP;
- Local services: providing for a new village centre which will accommodate local retail and other services including new businesses;
- Existing residential amenities: ensuring the protection of the residential amenities of existing housing by minimising visual intrusion, overlooking and overshadowing;
- Public open space and recreation: providing for extended public open space areas and improved recreational facilities;
- Trees and hedgerows: promoting biodiversity by conserving existing indigenous hedgerows and trees and by providing for additional strategic planting in the village;
- Road improvements: providing for improvements in the road network serving Rivermeade in conjunction with new development;
- Low Carbon Community: promoting the development of this village as a Low Carbon Community;
- Foul drainage: Irish Water propose to decommission the existing waste water treatment plant (WWTP) and construct a pumping station on the site of the WWTP and pipe all effluent from Rivermeade to Swords WWTP. The pump station has been through preliminary design and planning consent process. The Swords WWTP has been expanded and now has a capacity of 90,000 p.e. (p.e. is population equivalent, a metric used to describe the treatment capacity of a wastewater installation); and
- Surface Water Drainage: requiring the LAP lands to be developed in accordance with SUDS principles and in compliance with the 'Greater Dublin Strategic Drainage Study' [GDSDS].

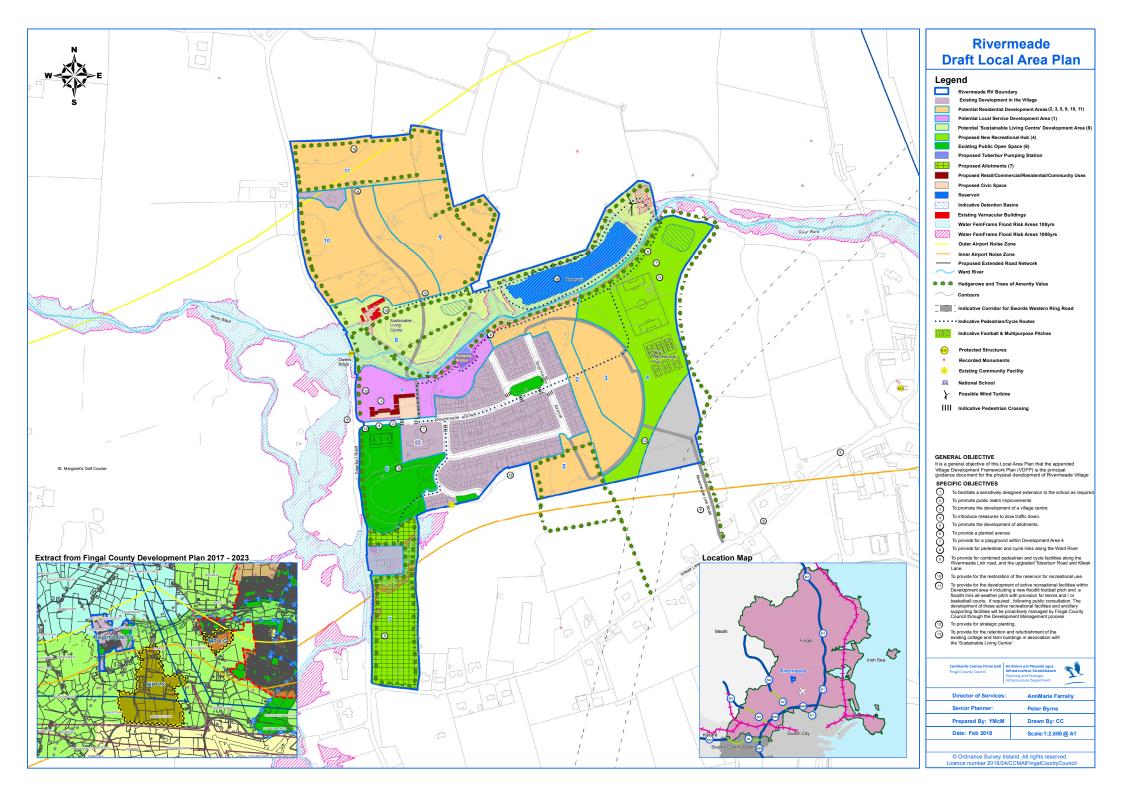
#### 2.1.2 Adjacent Zonings

'GB' [Green Belt] and 'HA' [High Amenity] zones separate Rivermeade from Swords to the east. The lands to the north of the LAP lands are zoned 'RU' [Rural] where it is the objective to: 'Protect and promote in a balanced way, the development of agriculture and rural-related enterprise, biodiversity, the rural landscape, and the built and cultural heritage'.

Lands adjacent to the south of the LAP lands are zoned 'FP' [Food Park] where it is the objective to 'Provide for and facilitate the development of a Food Industry Park'.

#### 2.1.3 Existing Environment at the LAP lands

The LAP lands are located within the designated 'Rolling hills' Character type in the County Development Plan. The Ward River crosses through the LAP lands and divides the subject lands into two parts, as illustrated in **Figure 2-1**. The undulating nature of countryside together with trees and the Ward river valley help create a rich landscape both visually and ecologically.





The LAP includes objectives to protect existing trees/ hedgerows and to provide for appropriate strategic planting, ensuring that new development will be 'absorbed' within this landscape and with the intention of limiting the visual impact of development in the landscape.

#### 2.1.4 Foul Sewerage and Water Services

#### 2.1.4.1 Water Supply

The water supply for the majority of the Fingal area including Swords is supplied from the Leixlip water treatment plant. A trunk water main traverses the LAP lands and the permanent wayleave in respect of this water main is 10 metres each side of the water main. There are no particular constraints in terms of supplying water to future development within the LAP lands.

#### 2.1.4.2 Foul Drainage

The existing WWTP serving Rivermeade is operating at its design capacity and has no spare capacity. The treatment plant caters for preliminary treatment, secondary treatment; surface aeration and sludge draw off. The treated effluent from the WWTP discharges into the Ward River.

Irish Water proposes to:

- decommission the existing WWTP;
- construct a pumping Station on the site of the WWTP; and
- to pipe all effluent to Swords WWTP.

The pumping station has been through preliminary design and the planning consent process. Construction time is due to tie in with Swords WWTP upgrade works.

The Swords Waste Water Treatment Plant has been expanded and now has a capacity of 90,000 p.e.

New housing and other forms of development shall proceed within the LAP lands following the completion of the Toberburr pumping station and pipe connection to Swords WWTP.

#### 2.1.4.3 Surface Water and Flooding

In 2017, Fingal County Council completed a <u>Strategic Flood Risk Assessment</u> (SFRA) for the County (FCC, 2017), and **Figure 2-1** shows lands liable to flooding. The SFRA has been prepared in accordance with the requirements of The Planning System and Flood Risk Assessment Guidelines for Planning Authorities (2009) and Circular PL02/2014 (August 2014). The SFRA provides an assessment of all types of flood risk within the County to assist the Council in making informed strategic land-use planning decisions.

The flood zone maps in the SFRA are largely derived from the <u>Eastern CFRAM</u>, <u>Fingal East Meath</u> (<u>FEM</u>) <u>FRAM</u> and the <u>Tolka Flooding Study</u> mapping. These maps are the most comprehensive flood maps produced for Fingal since the introduction of the Guidelines and the Floods Directive. The



flood zone mapping is based on the best currently available data and only a more detailed, site specific FRA may indicate further variations in localised flood extent predictions.

All development proposals within flood risk areas should be supported by an appropriately detailed Flood Risk Assessment (FRA). The level of detail within the FRA will depend on the risks identified and the proposed land use. Applications should demonstrate the use of the sequential approach in terms of the site layout and design and, in satisfying the Justification Test (where this is required), proposals will demonstrate that appropriate mitigation and management measures are put in place.

The SFRA recommends that any highly vulnerable development should be avoided in the Flood Zones A and B with less vulnerable development subject to a detailed FRA. A FRA of appropriate detail should accompany all applications for new development within the Flood zones to demonstrate that they would not have adverse flood risk impacts. These proposals should follow best practice in the management of health and safety for users and residents of the proposal.

The same approach shall be adopted for the Rivermeade LAP. The River Ward crosses through the LAP lands and divides the subject lands into two parts. A Stage 2 FRA has been completed by Fingal County Council and concludes that the proposed developed will be located outside of the 1 in 100 year floodplain as determined by the FEM FRAM study. It is recommended that proposed developments adjoining the flood plain should include a commensurate flood risk assessment with the planning application to ensure that flood risks have been considered.

In order to reduce surface water run-off and to minimise the risk of flooding, the LAP lands shall be required to be developed in accordance with SUDS principles in compliance with the 'Greater Dublin Strategic Drainage Study'. This approach using Sustainable Drainage Systems (SuDS) can best be summarised as offering a "total" solution to rainwater management. Water is either infiltrated or conveyed more slowly to the drainage system and ultimately to watercourses using for example permeable paving, swales, infiltration trench/blanket, soakways, green roofs, rain water harvesting, detention basins, ponds and wetlands. These facilities are designed to prevent pollution of streams and rivers and to slow down runoff from sites, thereby helping to prevent downstream flooding and improve water quality. A "treatment train" approach is required to mimic natural catchment processes as closely as possible. This strategy shall comprise of a series of features which incrementally reduce pollution, flow rates and volumes of runoff.

#### 2.1.4.4 Water Quality

The Council is responsible for maintaining, improving and enhancing the environmental and ecological quality of our waters by implementation of pollution control measures, licensing of effluent discharges, implementing and monitoring compliance with environmental legislation.

The Water Framework Directive (WFD), which became effective in 2000, established a framework for community action in the field of water policy. The ultimate objective of the Directive is to prevent deterioration in the status of any waters and achieve at least 'good status'.

The 2<sup>nd</sup> Cycle River Basin Management Plan (2015-2021) is at an advanced draft stage and will be in place for the period 2018 to 2021.



The Ward River flows through the LAP lands. This river flows eastwards into the Broadmeadow Estuary east of Swords. The proposed development lands at Rivermeade are located within the Broadmeadow Water Management Unit [WMU]. The section of the Ward River that is at Rivermeade has been assigned 'poor' status by the EPA under the WFD.

A key priority for the Council is the need to ensure that there is no significant deterioration in water quality of the Ward River. The proposed replacement of the existing WWTP with a pump house which will pump sewage to the Swords WWTP will result in a major improvement to the water quality in the Ward River downstream of the present discharge point.

The LAP includes objectives for the protection and improvement of water quality.

#### 2.2 EUROPEAN SITES POTENTIALLY AFFECTED

#### 2.2.1 Establishing an impact pathway

Before turning to the European sites to be considered in this analysis, we must first consider how likely significant effects might arise. The likely significance of effects on any European site from the proposed development has been assessed using a source-pathway-receptor model.

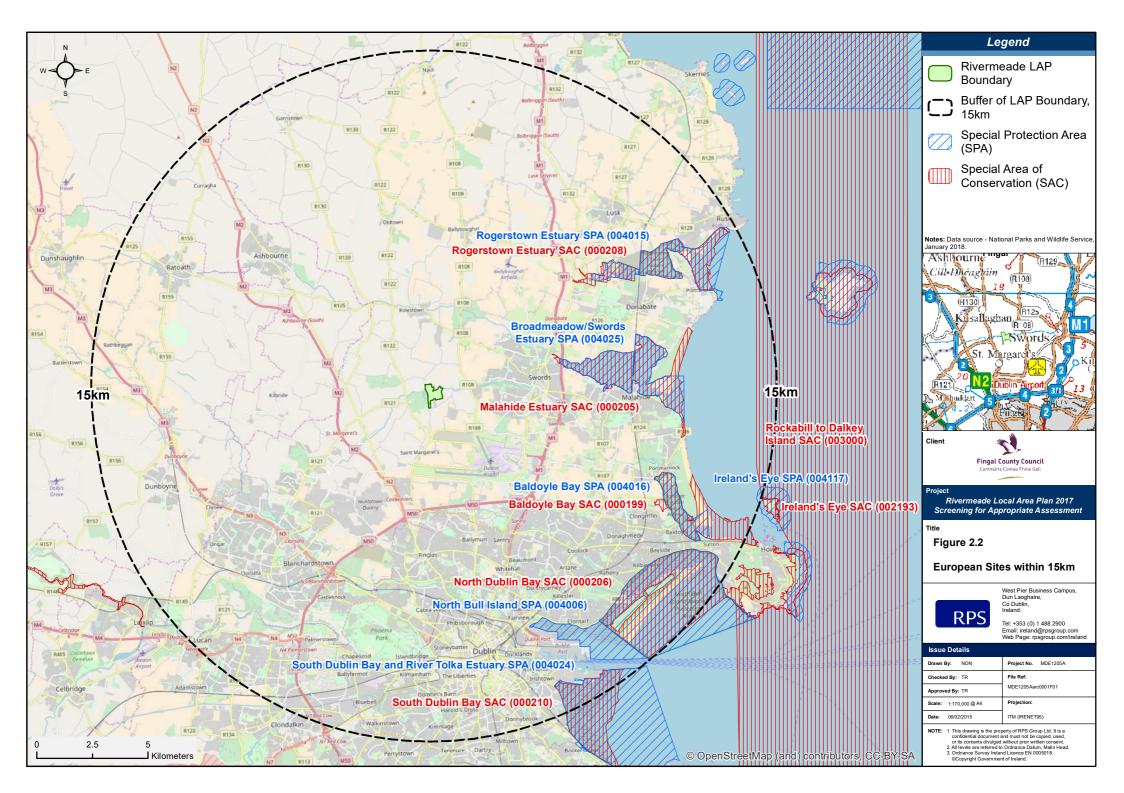
- A 'source' is defined as the individual element of the proposed works that has the potential to impact on a European site, its qualifying features and its conservation objectives.
- A 'pathway' is defined as the means or route by which a source can affect the ecological receptor.
- A 'receptor' is defined as the Special Conservation Interests (of SPAs) or Qualifying Interests (of SACs) for which conservation objectives have been set for the European sites being screened.

Each element can exist independently, however an effect is created when there is a linkage between the source, pathway and receptor. As noted previously in **Section 2.1**, the Ward River flows through the LAP lands. The gateway to downstream European Sites is via the Ward River and the Malahide Estuary. Malahide Estuary SAC and SPA occurs 7km downstream of Rivermeade, where the Ward River flows into the estuary at Lissenhall and Seatown.

There is a significant aggregation of designated sites in and around Dublin Bay and the County Dublin coastline, including European Sites (SACs and SPAs), NHAs and pNHAs, Ramsar sites, IBAs, Nature Reserves and a UNESCO Biosphere Reserve. This screening exercise is restricted to European Sites, and in this instance, the only European Sites that occur within 15km of the Plan are located in marine or coastal habitats.

All marine or coastal European Sites which may be hydrologically connected to the Rivermeade LAP lands, including Malahide Estuary SAC and SPA and which are within a 15km radius of the Plan Area are illustrated in **Figure 2-2**.

This screening exercise firstly turns its focus to the qualifying interests and conservation objectives of Malahide Estuary SAC; and special conservation interests and conservation objectives of Malahide Estuary SPA.





#### 2.2.2 Conservation Objectives

**Table 2.1** lists the special conservation interests and conservation objectives Malahide Estuary SPA; and **Table 2.2** lists the qualifying interests and conservation objectives of Malahide Estuary SAC as these sites are within the downstream zone of influence of the proposed LAP. The spatial boundary data for the European Sites was the most recent available accessed on <a href="www.npws.ie">www.npws.ie</a> (January 2018).

Table 2.1: Conservation Objectives and Targets for Malahide Estuary SPA

Conservation Objectives (published 16/08/2013)	<ul> <li>To maintain the favourable conservation condition of the overwintering populations of feature species in Malahide Estuary SPA, as measured by the following targets</li> <li>To maintain the favourable conservation condition of the wetland habitat in Malahide Estuary SPA as a resource for the regularly-occurring migratory waterbirds that utilise it, as measured by the following targets</li> </ul>
Special Conservation Interest	Conservation Objective Targets
Overwintering populations [A005], [A046], [A048], [A054] [A067], [A069], [A130], [A140] [A141], [A143], [A149], [A156] [A157], [A162]	<ul> <li>Long term population trend stable or increasing</li> <li>No significant decrease in the range, timing or intensity of use of areas by the overwintering population, other than that occurring from natural patterns of variation</li> </ul>
[A999] Wetlands & Waterbirds	<ul> <li>The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 765 hectares, other than that occurring from natural patterns of variation</li> </ul>

Table 2.2: Conservation Objectives and Targets for Malahide Estuary SAC

Conservation Objectives (published 27/05/2013)	<ul> <li>To maintain the favourable conservation condition of the qualifying interest habitats in Malahide Estuary SAC, as measured by the following targets</li> </ul>	
Qualifying Interest	Conservation Objective Targets	
Mudflats & Sandflats [1140]	<ul> <li>The permanent habitat area is stable or increasing, subject to natural processes</li> <li>Maintain the extent of the Zostera-dominated community and the Mytilus edulis dominated community complex, subject to natural processes</li> <li>Conserve the high quality of the Zostera-dominated community, subject to natural processes</li> <li>Conserve the high quality of the Mytilus edulis dominated community, subject to natural processes</li> <li>Conserve the following community types in a natural condition:         <ul> <li>Fine sand with oligochaetes, amphipods, bivalves and polychaetes community complex</li> <li>Estuarine sandy mud with Chironomidae and Hediste diversicolor community complex</li> <li>Sand to muddy sand with Peringia ulvae, Tubificoides benedii and Cerastoderma edule community complex</li> </ul> </li> </ul>	
Salicornia & other annuals [1310]	<ul> <li>Area stable or increasing, subject to natural processes, including erosion and succession</li> <li>No decline, or change in habitat distribution, subject to natural processes</li> <li>Maintain, or where necessary restore, natural circulation of sediments and organic matter, without any physical obstructions</li> <li>Maintain creek and pan structure, subject to natural processes, including erosion and</li> </ul>	



Conservation Objectives (published 27/05/2013)	<ul> <li>To maintain the favourable conservation condition of the qualifying interest habitats in Malahide Estuary SAC, as measured by the following targets</li> </ul>
Qualifying Interest	Conservation Objective Targets
[1320] Spartina swards	<ul> <li>Succession</li> <li>Maintain natural tidal regime</li> <li>Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession</li> <li>Maintain structural variation within sward</li> <li>Maintain more than 90% of area outside creeks vegetated</li> <li>Maintain the presence of species-poor communities listed in Saltmarsh Monitoring Project 2007-2008</li> <li>No significant expansion of common cordgrass Spartina anglica. No new sites for this species and an annual spread of less than 1% where it is already known to occur</li> <li>A conservation objective has not been prepared for this habitat. It is not necessary to assess the likely effects of plans or projects against this Annex I habitat at this site</li> </ul>
[1330] Atlantic Salt Meadows [1410]	<ul> <li>Area stable or increasing, subject to natural processes, including erosion and succession</li> <li>No decline or change in habitat distribution, subject to natural processes</li> <li>Maintain natural circulation of sediments and organic matter, without any physical obstructions</li> </ul>
Mediterranean Salt Meadows	<ul> <li>Allow creek and pan structure to develop, subject to natural processes, including erosion and succession</li> <li>Maintain natural tidal regime</li> <li>Maintain range of coastal habitats including transitional zones, subject to natural processes including erosion and succession</li> <li>Maintain structural variation within sward</li> <li>Maintain more than 90% area outside creeks vegetated</li> <li>Maintain range of sub-communities with typical (for Atlantic type) and characteristic (for Mediterranean type) species listed in Saltmarsh Monitoring Project 2007-2008</li> </ul>
[2120] White dunes	<ul> <li>No significant expansion of common cordgrass Spartina anglica, with an annual spread of less than 1% where it is known to occur</li> <li>Area stable or increasing, subject to natural processes including erosion and succession</li> <li>No decline, or change in habitat distribution, subject to natural processes</li> <li>Maintain the natural circulation of sediment and organic matter, without any physical</li> </ul>
	<ul> <li>obstructions</li> <li>Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession</li> <li>95% of marram grass Ammophila arenaria and/or lyme-grass Leymus arenarius should be healthy (i.e. green plant parts above ground and flowering heads present)</li> <li>Maintain the presence of species-poor communities dominated by marram grass Ammophila arenaria and/or lyme-grass Leymus arenarius</li> <li>Negative indicator species (including non-natives) to represent less than 5% cover</li> </ul>
[2130] Grey dunes * Priority Habitat	<ul> <li>Area stable or increasing, subject to natural processes including erosion and succession</li> <li>No decline, or change in habitat distribution, subject to natural processes</li> <li>Maintain the natural circulation of sediment and organic matter, without any physical obstructions</li> <li>Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession</li> <li>Bare ground should not exceed 10% of fixed dune habitat, subject to natural processes</li> <li>Maintain structural variation within sward</li> <li>Maintain range of sub-communities with typical species listed in Coastal Monitoring Project 2004-2006</li> </ul>
	<ul> <li>Negative indicator species (including non-natives) to represent less than 5% cover</li> <li>No more than 5% cover of scrub/trees or that it be under control</li> </ul>



The Conservation Objective (CO) concept appears in the eighth recital of Directive 92/43/EEC which reads: "whereas it is appropriate, in each area designated, to implement the necessary measures having regard to the conservation objectives pursued". Article 1 then explains that "conservation means a series of measures required to maintain or restore the natural habitats and the populations of species of wild fauna and flora at a favourable status".

NPWS publish COs for European Sites on their website. NPWS advise in the general introductory notes of their Site Specific Conservation Objective (SSCO) series publications that an appropriate assessment based on their "published conservation objectives will remain valid even if the CO targets are subsequently updated, providing they were the most recent objectives available when the assessment was carried out". NPWS advise that to assist in that regard, it is essential that the date and version are included when objectives are cited. **Tables 2.1** and **2.2** specify the dates of publication of the conservation objectives used in this exercise.

#### 2.3 SCREENING THE PLAN FOR LIKELY SIGNIFICANT EFFECTS

#### 2.3.1 Malahide Estuary SPA

**Table 2.1** lists the conservation objectives for Malahide Estuary SPA to be:

- maintenance of the favourable conservation condition of feature species in it, as measured by (i)
  a stable or increasing long term population trend; and (ii) no significant decrease in the range,
  timing or intensity of use of areas by the overwintering population, other than that occurring
  from natural patterns of variation.
- maintenance of the favourable conservation condition of the wetland habitat as a resource for the regularly-occurring migratory waterbirds that utilise it, as measured by a permanent area occupied by the wetland habitat remaining stable and not significantly less than the area of 765 hectares, other than that occurring from natural patterns of variation.

Consultation with the Fingal Biodiversity Officer has confirmed that there is no known regularly occurring use of the LAP lands at Rivermeade by Malahide Estuary SPA overwintering bird populations. Thus, there is no possibility of any policies or objectives of the LAP; or key elements in the development strategy for the subject lands at Rivermeade to significantly decrease the range, timing or intensity of use of SPA areas by the overwintering population.

As the LAP lands are located 7km upstream of the estuary, there is no possibility of any policies or objectives of the LAP; or key elements in the development strategy for the subject lands at Rivermeade resulting in a significant reduction in permanent area occupied by the wetland habitat.

The only effect upon conservation objectives of this SPA that must be considered further is the possible deterioration of water quality and any consequential effects that might arise for wetland habitats in the SPA and the overwintering populations of birds that use it. This is discussed further in **Section 2.3.2.4**.



#### 2.3.2 Malahide Estuary SAC

**Table 2.2** lists the conservation objectives for Malahide Estuary SAC to be maintenance of the favourable conservation condition of six qualifying interest habitats in Malahide Estuary SAC, as measured by a range of targets (as outlined in **Table 2.2**).

#### 2.3.2.1 Mudflats and Sandflats

Conservation objective targets for the [1140] habitat type require *inter alia* that the permanent habitat area must remain stable or be increasing, and the extent and quality of *Zostera* and *Mytilus* community (and sub-community) complexes must be maintained.

As the LAP lands are located 7km upstream of the estuary, there is no possibility of any policies or objectives of the LAP; or key elements in the development strategy for the subject lands at Rivermeade resulting in a significant reduction in permanent area or extent of the [1140] habitat type.

The only effect upon conservation objectives of this qualifying interest that must be considered further is the possible deterioration of water quality and any implications that might arise for the extent and quality of *Zostera* and *Mytilus* communities as a result of deterioration of water quality status. This is discussed further in **Section 2.3.2.4**.

#### 2.3.2.2 Saltmarshes, Salicornia and other annuals

Conservation objective targets for the [1310], [1330] and [1410] habitat types require *inter alia* that the habitat areas must remain stable or be increasing, habitat distribution and species-poor communities do not decline, tidal regime and sediment circulation patterns remain natural and unobstructed.

As the LAP lands are located 7km upstream of the estuary, there is no possibility of any policies or objectives of the LAP; or key elements in the development strategy for the subject lands at Rivermeade resulting in a significant effects upon habitat or community areas or distribution, tidal regime or sediment circulation patterns.

The only effect upon conservation objectives of this qualifying interest that must be considered further is the possible deterioration of water quality and any implications that might arise for the structure, extent or quality of the habitats and communities as a result of deterioration of water quality status. This is discussed further in **Section 2.3.2.4**.

#### 2.3.2.3 White and Grey dunes

Conservation objective targets for the [2120]] and [2130] habitat types require *inter alia* that the habitat areas must remain stable or be increasing, habitat distribution and communities must be maintained, and sediment and organic matter circulation patterns remain natural and unobstructed.

As the LAP lands are located 7km upstream of the estuary, there is no possibility of any policies or objectives of the LAP; or key elements in the development strategy for the subject lands at



Rivermeade resulting in a significant effects upon habitat or community areas or distribution, or sediment circulation patterns.

The Greater Dublin Area has a population of 1.9 million people. Many of those people visit the coast as an amenity resource. The anticipated increased visitor pressure on dune systems within European Sites resulting from an additional 276 residential units proposed under the Plan will not increase above a *de minimis* level.

The only effect upon conservation objectives of this qualifying interest that must be considered further is the possible deterioration of water quality and any implications that might arise for the structure, extent or quality of the habitats and communities as a result of deterioration of water quality status. This is discussed further in **Section 2.3.2.4**.

#### 2.3.2.4 Water Quality and Habitat Deterioration

Pollution is a very real threat to the coastal wetland sites downstream of the Ward River. Realisation of development envisaged through policies or objectives of the LAP; or key elements in the development strategy for the subject lands at Rivermeade necessarily involves construction. Construction carries an inherent risk of accidental release of suspended sediments or polluting substances to the downstream estuarine environment. The purpose of the screening assessment is to determine whether or not such risks are likely and significant, or if they can be discounted.

The Fingal Development Plan 2017-2023 contains a number of objectives to protect European Sites.

Table 2.3: Relevant Objectives of the Fingal County Development Plan 2017-2023

Objective	Text
Objective NH09	Support the National Parks and Wildlife Service and the Department of
	Culture, Heritage and the Gaeltacht, in the maintenance and, as
	appropriate, the achievement of favourable conservation status for the
	habitats and species in Fingal to which the Habitats Directive applies.
Objective NH10	Ensure that the Council takes full account of the requirements of the
	Habitats and Birds Directives, as they apply both within and without
	European Sites in the performance of its functions.
Objective NH11	Ensure that the Council, in the performance of its functions, takes full
	account of the objectives and management practices proposed in any
	management or related plans for European Sites in and adjacent to
	Fingal published by the Department of Arts, Heritage and the Gaeltacht.
Objective NH15	Strictly protect areas designated or proposed to be designated as
	Natura 2000 sites (i.e. Special Areas of Conservation (SACs) and Special
	Protection Areas (SPAs); also known as European sites) including any
	areas that may be proposed for designation or designated during the
	period of this Plan.
Objective NH19	Develop Ecological Masterplans for the Rogerstown, Malahide and
	Baldoyle Estuaries focusing on their ecological protection and that of
	their surrounding buffer zones.
Objective NH69	Protect the quality of designated shellfish waters off the Fingal coast.



These provisions provide a sufficiently robust operating framework to ensure that project level development consented in the future by competent authorities shall be designed or conditioned to not result in any adverse effects upon site integrity of downstream European Sites.

Thus, it is not likely that future project level development will result in significant risks of suspended sediments and / or contaminants escaping into the estuarine environment to provide a hydrological pathway of effect leading to a deterioration of wetland, estuarine or coastal habitats of Malahide Estuary with respect to their water quality and favourable conservation condition.

At operational phase of development, residential and commercial units will lead to increased demand for potable water and increased pressure on existing and future waste water treatment systems. Water for Rivermeade village comes from a trunk main and this is capable of catering for future developments in the area. There are no constraints to future supply of clean water to future development within the LAP lands.

**Section 2.1** notes that "development of the LAP lands could potentially yield in the long term approximately 276 additional residential units and a projected additional population of circa 745 persons, increasing the population of Rivermeade in the long term to circa 1,345 persons".

Increased development will lead to greater demands on wastewater infrastructure. Treated effluent from Rivermeade village WWTP discharges to the Ward River and will flow downstream to the Malahide Estuary European sites. Irish Water proposes to decommission the existing WWTP, construct a new pumping station on the site of the WWTP and pipe all effluent from Rivermeade to Swords WWTP. This facility has a capacity of 90,000 p.e. and is sufficient to meet future wastewater demands in Rivermeade. New housing and other forms of development shall proceed within the LAP lands only when the completion of the Toberburr pumping station and pipe connection to Swords WWTP is operating.

The proposed replacement of the existing WWTP with a pumping station which will pump sewage to the Swords WWTP will result in a significant improvement to the water quality in the Ward River downstream of the present discharge point.

Thus, there is no possibility of future wastewater pressure resulting in any nutrient loading of surface waters to provide a hydrological pathway of effect sufficiently significant to bring about deterioration in water quality of the estuarine habitats of Malahide Estuary.

#### 2.3.3 In-Combination Effects

Article 6(3) of the Habitats Directive requires that in-combination effects with other plans or projects are considered. On this basis, a range of other Plans were considered in terms of their potential to have in-combination effects with the proposed LAP. Those plans include the following:

- Eastern River Basin Management Plan and 2<sup>nd</sup> Cycle RBMP;
- Fingal County Development Plan 2017-2023;
- Water Services Investment Programme;
- Groundwater Pollution Reduction Programmes;
- Surface Water Pollution Reduction Programmes;



- Shellfish Waters Pollution Reduction Plan;
- OPW led Flood Risk Management Plans;
- Garristown Village LAP;
- Oldtown Village LAP;
- The Naul LAP;
- Balscadden LAP (currently expired);
- Fosterstown LAP (expired 31<sup>st</sup> December 2017);
- Ashbourne Flood Relief scheme upstream on Ward river;
- Dublin Airport LAP (in prep);
- Greater Dublin Drainage Scheme; and
- Proposal to Change Permitted Operations at Dublin Airport (in prep).

Many of these Plans contain provisions specifically designed to safeguard European Sites. The water related plans and programmes are intended to result in beneficial effects on water quality. As there are no Likely Significant Effects as a result of the LAP alone, there is no pathway of additive effect between the proposed LAP and the plans listed above for significant cumulative or in-combination effects which can be considered to significantly affect the QIs, SCIs or conservation objectives of the European Sites considered in this exercise.

## 2.4 EXCLUSION OF SITES WHERE LIKELY SIGNIFICANT EFFECTS CAN BE DISCOUNTED

As there are no hydrological pathways of effect for Likely Significant Effects on the conservation objectives of the Malahide Estuary European sites, then it follows that there cannot be any hydrological pathway likely to result in a significant effect upon any other coastal or marine European Site beyond the Malahide Estuary. In this regard, no likely significant effect is also predicted for the following European Sites within the Zone of Influence, or others just outside the ZOI:

- Rogerstown Estuary SAC (000208)
- Baldoyle Bay SAC (000199)
- Ireland's Eye SAC (002193)
- Rockabill to Dalkey Island SAC (003000)
- Howth Head SAC (000202)
- North Dublin Bay SAC (000206)
- South Dublin Bay SAC (000210)
- Lambay Island SAC (000204)
- Rogerstown Estuary SPA (004915)
- Baldoyle Bay SPA (004016)
- Ireland's Eye SPA (004117)
- Lambay Island SPA (004069)
- Howth Head Coast SPA (004113)
- North Bull Island SPA (004006)
- South Dublin Bay and River Tolka Estuary SPA (004024)



#### 3 SCREENING CONCLUSION

The Screening exercise was completed in compliance with the relevant European Commission and national guidelines to determine whether or not Likely Significant Effects on any European Site could be discounted as a result of the adoption of the Rivermeade Local Area Plan.

From the findings of the Screening exercise, the possibility of Likely Significant Effects upon all European Sites considered can be discounted, in light of their Qualifying Interests, Special Conservation Interests and Conservation Objectives.

Having regard to the methodology employed and the findings of the screening stage exercise, it is concluded that a Natura Impact Report (NIR) need not be prepared to document an appropriate assessment of the implications of the LAP for European Sites in view of their conservation objectives and in combination with any other relevant plans or projects.