

# Screening Report for Appropriate Assessment of a proposed development at Leopardstown Road, Dublin 18

Compiled by OPENFIELD Ecological Services

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## Introduction

Biodiversity is a contraction of the words 'biological diversity' and describes the enormous variability in species, habitats and genes that exist on Earth. It provides food, building materials, fuel and clothing while maintaining clean air, water, soil fertility and the pollination of crops. A study by the Department of Environment, Heritage and Local Government placed the economic value of biodiversity to Ireland at €2.6 billion annually (Bullock et al., 2008) for these 'ecosystem services'.

All life depends on biodiversity and its current global decline is a major challenge facing humanity. In 1992, at the Rio Earth Summit, this challenge was recognised by the United Nations through the Convention on Biological Diversity which has since been ratified by 193 countries, including Ireland. Its goal to significantly slow down the rate of biodiversity loss on Earth has been echoed by the European Union, which set a target date of 2010 for *halting* the decline, however this was not achieved. In 2010 in Nagoya, Japan, governments from around the world set about redoubling their efforts and issued a strategy for 2020 called 'Living in Harmony with Nature' however none of these targets were achieved. In December 2022, the Kunming-Montreal Global biodiversity framework was agreed with the headline of 'living in harmony with nature'. This has set ambitious goals to not only protect, but restore, nature, including by protecting 30% of land and sea by 2030.

In 2023 the Irish Government is expected to incorporate the goals set out in this framework, along with its commitments to the conservation of biodiversity under national and EU law, in the fourth national biodiversity action plan.

The main policy instruments for conserving biodiversity in Ireland have been the Birds Directive of 1979 and the Habitats Directive of 1992. Among other things, these require member states to designate areas of their territory that contain important bird populations in the case of the former; or a representative sample of important or endangered habitats and species in the case of the latter. These areas are known as Special Protection Areas (SPA) and Special Areas of Conservation (SAC) respectively. Collectively they form a network of sites across the European Union known as Natura 2000. A report into the economic benefits of the Natura 2000 network concluded that "there is a new evidence base that conserving and investing in our biodiversity makes sense for climate challenges, for saving money, for jobs, for food, water and physical security, for cultural identity, health, science and learning, and of course for biodiversity itself" (EC, 2013).

Unlike traditional nature reserves or national parks, Natura 2000 sites are not 'fenced-off' from human activity and are frequently in private ownership. It is the responsibility of the competent national authority to ensure that 'good conservation status' exists for their SPAs and SACs and specifically that Article 6(3) of the Habitats Directive is met. Article 6(3) states:

*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. In the 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.*

Sections 177U and 177V of the Planning and Development Act 2000 sets out the purpose of AA Screening is as follows:

*A screening for appropriate assessment shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that proposed development, individually or in combination with another plan or project is likely to have a significant effect on the European site.*

The test at stage 1 AA Screening is that:

*The competent authority shall determine that an appropriate assessment of a proposed development is required if it cannot be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site.*

The test at stage 2 (Appropriate Assessment) is:

*Whether or not the proposed development, individually or in-combination with other plans or projects would adversely affect the integrity of a European site.*

However, where this is not the case, a preliminary screening must first be carried out to determine whether or not a full AA is required. This screening is carried out by the competent authority, in this case Dun Laoghaire Rathdown County Council.

### Screening for Appropriate Assessment

Article 6(3) of the Habitats Directive states:

*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. In the 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.*

The purpose of Stage 1 Screening for Appropriate Assessment is to determine whether it is necessary to carry out a Stage 2 full Appropriate Assessment (AA). Section 177U(1) provides that a screening for appropriate assessment of a proposed development shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that proposed development, individually or in combination with another plan or project is likely to have a significant effect on the European site.

Section 177U(4) provides that the competent authority shall determine that an appropriate assessment of a proposed development is required if it cannot be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site.

The Council's determination as to whether an Appropriate Assessment is required must be made on the basis of objective information and must be recorded.

Where an Appropriate Assessment is required, an applicant for planning permission must prepare and submit a Natura Impact Statement.

This Appropriate Assessment Screening Report (AASR) has been prepared in accordance with the provisions of Article 6(3) of the Habitats Directive and Section 177U of the 2000 Act.

### The Purpose of this document

This document provides for the screening for Appropriate Assessment (AA) of a proposed housing development on lands at Leopardstown Road, Dublin 18, to enable the competent authority to determine whether or not it is likely to have significant effects on any European sites, individually or in combination with other plans and project, having regard to the site's conservation objectives.

Under the Planning and Development Acts, the Local Authority cannot grant planning permission where significant effects may arise to a Natura 2000 site. In order to make that decision the development must be screened for AA. This report provides the necessary information to allow Dun Laoghaire Rathdown County Council to carry out this screening.

### About OPENFIELD Ecological Services

OPENFIELD Ecological Services is headed by Pádraic Fogarty who has worked for 25 years in the environmental field and in 2007 was awarded an MSc from Sligo Institute of Technology for research into Ecological Impact Assessment (EclA) in Ireland. Since its inception in 2007 OPENFIELD has carried out numerous EclAs for Environmental Impact Assessment (EIA), Appropriate Assessment in accordance with the EU Habitats Directive, as well

as individual planning applications. Pádraic is a full member of the Institute of Environmental Management and Assessment (IEMA).

### Guidance

This AA Screening Report has been undertaken in accordance with the following guidance:

- *Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities*. (Department of Environment, Heritage and Local Government, 2010 revision);
- *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities*. Circular NPW 1/10 & PSSP 2/10;
- *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* (European Commission, 2001);
- *Communication from the Commission on the precautionary principle* (European Commission, 2000); and,
- *Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC* (European Commission, 2019).
- *Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (European Commission, 2021).

### Methodology

The steps followed for this screening statement are set out in a document prepared for the Environment DG of the European Commission entitled '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' (Oxford Brookes University, 2001). Chapter 3, part 1, of this document deals specifically with screening while Annex 2 provides the template for the screening/finding of no significant effects report matrices to be used.

In accordance with this guidance, the following methodology has been used to produce this screening statement:

#### **Step 1: Management of the Site**

This determines whether the project is necessary for the conservation management of the site in question.

#### **Step 2: Description of the Project**

This step describes the aspects of the project that may have an impact on the Natura 2000 site.

### **Step 3: Characteristics of the Site**

This process identifies the conservation aspects of the site and determines whether negative impacts can be expected as a result of the plan. This is done through a literature survey and consultation with relevant stakeholders – particularly the National Parks and Wildlife Service (NPWS). All potential effects are identified including those that may act alone or in combination with other projects or plans.

Using the precautionary principle, and through consultation and a review of published data, it is normally possible to conclude at this point whether potential impacts are likely. Deficiencies in available data are also highlighted at this stage.

### **Step 4: Assessment of Significance**

Assessing whether an effect is significant or not must be measured against the conservation objectives for the Natura 2000 site in question.

If this analysis shows that significant effects are likely then a full AA will be required.

The steps are compiled into a screening matrix, a template of which is provided in Appendix II of the EU methodology.

Mitigation measures cannot be taken into account in an AA screening assessment.

A full list of literature sources that have been consulted for this study is given in the References section to this report while individual references are cited within the text where relevant.

#### Screening Template as per Annex 2 of EU methodology:

This plan is not necessary for the management of the site and so Step 1 as outlined above is not relevant.

### **Brief description of the project**

The project is described here, as per the planning application:

*The development will consist of 80 no. residential units together with associated infrastructure including open space and car/cycle parking and is a mixture of duplexes and apartments in 2 no. blocks ranging in height from three to six storeys.*

The development site location is shown in figures 1 and 2 while the proposed layout is given in figure 3.

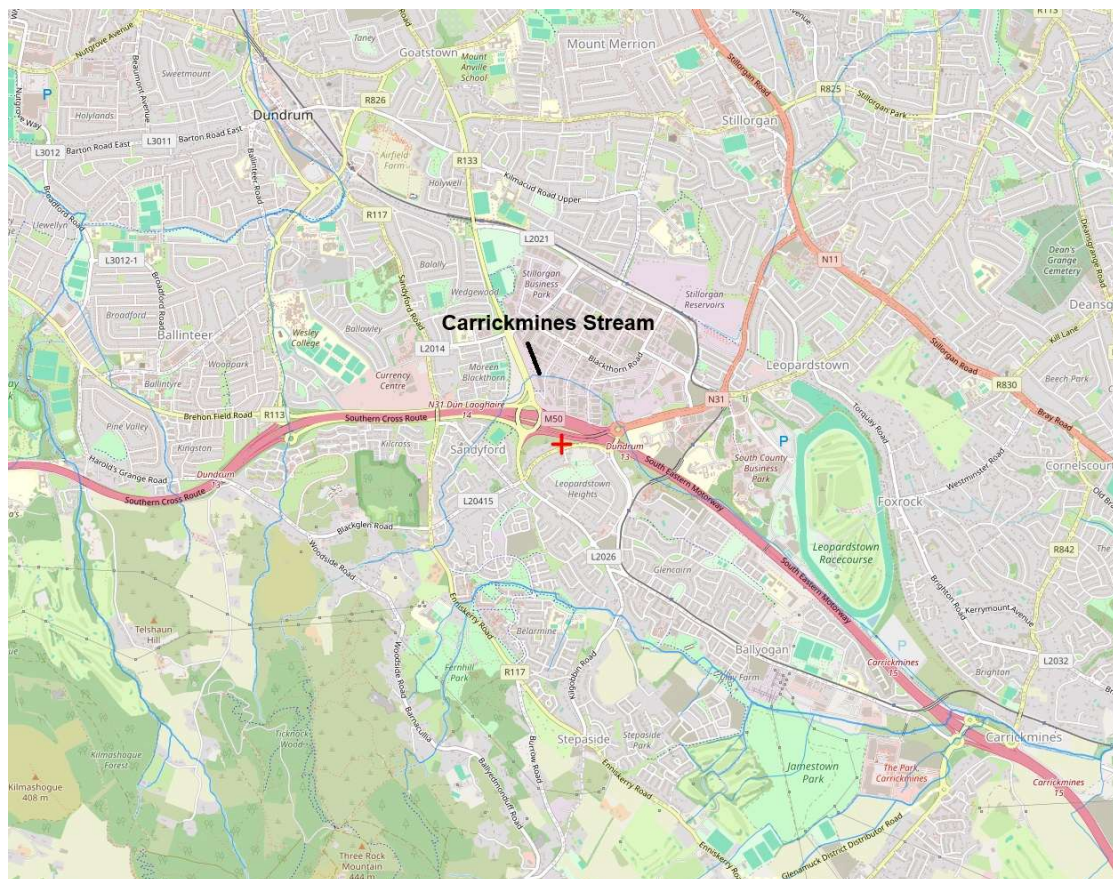
It is planned to construct a development on the site on Leopardstown Road, Dublin 18 as previously described. This will include site clearance works and demolition of existing buildings, a construction phase to include new surface

water drainage infrastructure and connection to electricity and wastewater networks.

The main phases of the project include:

- site clearance and preparation including demolition of existing buildings.
- A construction phase using standard building materials.
- Construction will include a new surface water drainage infrastructure and connection to electricity, gas and wastewater networks.
- An operation phase whereby the development will be occupied.

The development site is not located within or directly adjacent to any Natura 2000 site (SAC or SPA). This part of south Dublin is a residential zone with significant areas of built development and areas of hard standing. It is close to the village of Sandyford, which is located between the M50 motorway and the lower slopes of the Dublin Mountains. Mapping from the Environmental Protection Agency (EPA) shows that the Carrickmines Stream runs close to the development site. This is a short water course which rises in the Dublin Mountains to the west and is heavily modified as it passes through urban areas. It joins the Shanganagh Stream and together they discharge into Killiney Bay at Loughlinstown.



**Figure 1 – Site location (red cross) showing local water courses (from [www.epa.ie](http://www.epa.ie)). There are no Natura 2000 sites in this view.**

Rainwater falling on the development site currently percolates to the soil or enters local surface sewers.

Site visits were carried out on the 31<sup>st</sup> of July and the 19<sup>th</sup> of September 2024. The site was surveyed at these times in accordance with the Heritage Council's Best Practice Guidance for Habitat Survey and Mapping (Smith et al., 2010). Habitats were identified in accordance with Fossitt's Guide to Habitats in Ireland (Fossitt, 2000).

The site surveys showed that an open area to the east is composed of **amenity grassland – GA2** which is regularly mowed. Species here include Hawkweed *Hieracium sp.*, Docks *Rumex sp.*, Clovers *Trifolium sp.*, Meadow Buttercup *Ranunculus acris* and Perennial Rye *Lolium perenne*. The roadside boundary of this area is composed of a wire fence with occasional Bramble *Rubus fruticosus agg.*, Butterfly-bush *Buddleia davidii*, Gorse *Ulex europaeus* and saplings of Sycamore *Acer pseudoplatanus*.

The western portion is made up of **buildings and artificial surfaces – BL3** which includes a home and garden surrounds. Garden vegetation is entirely non-native and is highly modified with a grass lawn and horticultural shrubs and trees including New Zealand Holly *Olearia macrodonta*, Palm *Palmus sp.*, Laural *Prunus sp.* etc. Boundary **hedgerows – WL1** are entirely non-native Privet *Ligustrum vulgare* or New Zealand Broadleaf *Grisilinia littoralis* while scattered trees include Sycamore, Cypress *Cuprocyparis sp.*, Cherry *Prunus sp.* and Copper Beech *Fagus sylvatica*.

A band of **scrub – WS1** vegetation passes along the northern boundary and develops into a **treeline – WL2** in places. To the north of this lies the M50 motorway. It is composed of Sycamore, Gorse, Grey Willow *Salix cinerea*, Field Maple *Acer campestre*, Ash *Fraxinus sylvestris*, Scots Pine *Pinus sylvestris*, Elder *Sambucus nigra*. These habitats are largely outside the development site boundary however it includes an area to the north of 'Wild Rock', as shown in figure 2.

Elsewhere, the lands are surrounded by roads or other artificial land uses to the south, west and east while the M50 motorway passes to the north.

There are no plant species growing on the development site which are listed as alien invasive species as listed on SI No. 477 of 2011. There are no water courses, ditches, bodies of open water or habitats that could be classified as wetlands.

Any inert construction and demolition waste will be removed by a licenced contractor and disposed of in accordance with the Waste Management Act.





**Figure 2 – Site location and habitats**

Currently there is no attenuation of rain run-off and this is likely to soak to ground or enter public sewers. In accordance with the Greater Dublin Strategic Drainage Study the proposed project incorporates sustainable drainage systems (SUDS) that will appreciably reduce the current run-off rate.

The following Sustainable Urban Drainage Systems have been incorporated:

- (a) Green roof (interception storage)
- (b) Blue roof (attenuation storage)
- (c) Permeable surface (reduced run-off)
- (d) Aco-Drains (surface water drainage)
- (e) Tree Pits (attenuation storage)
- (f) Soakaway (absorption & attenuation)
- (g) Petrol Interceptor (environmental)
- (h) French Drain (infiltration & transportation)

Green Blue roofs have been incorporated following the 'Green & Blue Roof Guide 2021'.

SUDS are standard measures in all new developments and are not included here to avoid or reduce an effect to a Natura 2000 site. This is confirmed in the judgment recently issued from the ECJU (Case C-721/21, Eco Advocacy CLG v An Bord Pleanála) which confirms that where standard measures are included in the application they cannot be considered as mitigation in an AA context.

Foul wastewater from the proposed development will be sent to the wastewater treatment plant at Shanganagh in Dublin. Emissions from the plant were in full compliance with the Urban Wastewater Treatment Directive for 2023 (the most



### Brief description of Natura 2000 sites

In assessing the zone of influence of this project upon Natura 2000 sites the following factors must be considered:

- Potential impacts arising from the project
- The location and nature of Natura 2000 sites
- Pathways between the development and the Natura 2000 network

This is referred to as the source-pathway-receptor model. Following the pathway analysis, the following Natura 2000 sites are assessed in greater detail:

**Rockabill to Dalkey Island SAC (site code: 0300).** This is a recently designated off-shore (i.e. marine) SAC. It has two qualifying interests which are reefs and Harbour Porpoise *Phocoena phocoena*. Conservation objectives for this SAC have been published to maintain or restore the area of habitat and status of the population to 'favourable conservation status'.

- Reefs can be intertidal or subtidal features and are characterised by hard or rocky substrates. The main pressures that have been identified by the NPWS are commercial fishing, aquaculture, water pollution and commercial/recreational uses of the marine environment. Nationally their status is assessed as 'bad' (NPWS, 2013a).
- Harbour porpoise This is the smallest cetacean species regularly occurring in Irish waters. It is commonly found in residential pods close to the shore and it is not considered threatened in Irish waters. Its status nationally is 'good'.

Specific conservation objectives are provided for this SAC (NPWS, 2013) and are summarised as:

#### **Reefs (code: 1170)**

The permanent habitat area and distribution of the habitat are stable or increasing; the biological composition is conserved.

#### **Harbour Porpoise (code: 1351)**

Species range within the site should not be restricted by artificial barriers to site use; Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site.

**Dalkey Islands SPA** (site code: 4172) is protected for its breeding colonies of three tern species and is found approximately 4.3km south east of the West Pier at Dun Laoghaire.

- **Roseate Tern.** This tern breeds at only a few stations along Ireland's east coast. Most of these are in decline although at Dublin their colony is increasing.
- **Common Tern.** This summer visitor nests along the coast and on islands in the largest lakes. Its breeding range has halved in Ireland since the 1968-1972 period.
- **Arctic Tern.** These long-distance travellers predominantly breed in coastal areas of Ireland. They have suffered from predation by invasive mink and are declining in much of their range.

Generic conservation objectives only are available for this SAC (NPWS, 2022).

### **Poulaphouca Reservoir SPA (site code: 4063)**

At its nearest point this SPA is located approximately 29km from the site of the proposed development. Its 'features of interest' include the Greylag Goose *Anser anser* and the Lesser Black-backed Gull *Chroicocephalus ridibundus*.

- **Greylag Goose.** Wintering Greylag Geese are very scattered in Ireland and occur on both coastal in inland sites. Their population has expanded greatly in their more northerly ranges (Iceland and Scotland) and this has coincided with losses elsewhere.
- **Black-headed Gull.** Widespread and abundant in winter these gulls are nevertheless considered to be in decline. The reasons behind this are unclear but may relate to the loss of safe nesting sites, drainage, food depletion and increase predation.

### **Data collected to carry out the assessment**

The development site is not associated any species or habitats which are qualifying interests for Natura 2000 sites.

The EU's Water Framework Directive (WFD) stipulates that all water bodies must attain 'good ecological status' by 2015, or, with some exceptions, by 2027 at the latest. The Carrickmines Stream and its tributaries (water body code: IE\_EA\_10C040350) is assessed as 'good status' while the coastal waters of the Southwestern Irish Sea - Killiney Bay (HA10) (water body code: IE\_EA\_100\_0000) is 'high status'.

There is no up-to-date data on the status of bird species at the Poulaphouca Reservoir SPA or the Dalkey Islands SPA.

## **The Assessment of Significance of Effects**

*Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 site.*

In order for an effect to occur there must be a pathway between the source (the development site) and the receptor (the SAC or SPA). Where a pathway does not exist an impact cannot occur.

### **Habitat Loss**

The development site is not located within, or adjacent to, any SAC or SPA. Because of this significant separation distance to the nearest Natura 2000 site, there is no pathway for loss or disturbance of habitats associated with any such area or other semi-natural habitats that may act as ecological corridors for important species associated with the qualifying interests of the Natura 2000 sites.

### **Habitat disturbance**

The development site is located in an urbanised environment close to noise and artificial light sources such as roads. This development cannot contribute to potential disturbance impacts to species or habitats for which Natura 2000 sites have been designated. The habitats on the site are not suitable for populations of wintering/wetland/wading birds which may be associated with Natura 2000 sites in Dublin Bay. No ex-situ impacts can arise.

### **Pollution during operation – wastewater**

The Shanganagh wastewater treatment plant is operating to a high standard, with no reported exceedences of emission limit standards and sufficient excess capacity to adequately treat effluent from the proposed development. The Annual Environmental Report for 2023 (the most recent available) states that the discharge from this plant was having 'no observable effect' to the receiving waters.

The proposed development will slightly increase the loading to the Shanganagh WWTP. Additional loading to this plant arising from the operation of the project are not significant as there is no evidence that discharges are affecting the conservation objectives of any of the Natura 2000 sites the Irish Sea.

No significant effects are likely to arise to any Natura 2000 site from this source.

### **Pollution during operation - surface water**

Because SUDS measures have been incorporated into the project design, there can be no negative impact from this development to the quantity or quality of surface water leaving the site. New attenuation measures as part of the scheme will ensure that the net impact of the project will be neutral on the drainage character of the site. These are standard measures which are included in all development projects and are not included to reduce or avoid any effect to a Natura 2000 site. They are not mitigation in an AA context.

### **Pollution during the construction phase**

During the demolition and construction phases it is not likely that sediment will enter water courses as there are no water courses in this vicinity. This effect is not significant given its temporary nature of this phase and given that there are no pathways to Natura 2000 sites.

No significant effects to Natura 2000 sites are likely to arise during this phase of works.

During the construction phase it can be expected that some dust emission will occur. It is difficult to quantify this but is likely to be localised and temporary in nature. Dust deposition can impact upon ecosystems through blocking the stomata of leaves, thus retarding plant growth. Research has found however that this impact is localised in nature and typically occurs where there are significant dust emissions (Bell & Treeshow, 2002). Given the distance to Natura 2000 sites, no significant effects to Natura 2000 sites are likely to occur from this source.

### **Abstraction**

Evidence suggests that abstraction is not affecting the conservation objectives for Greylag Geese or Black-headed Gulls at the Poulaphouca Reservoir. Nationally the Greylag Goose has undergone a significant increase over 30 years in its wintering population in Ireland. The Bird Atlas 2007-11 shows that there has been a decrease in the Poulaphouca numbers however. This source suggests that the decline, which also occurred in a number of other sites in Ireland, “may be linked with a northerly redistribution of the Icelandic wintering population” (Balmer et al., 2013).

No effects are likely to arise to the Poulaphouca Reservoir SPA arising from this project.

*Are there other projects or plans that together with the project or plan being assessed could affect the site?*

Implementation of the WFD will ensure that improvements to water quality in the Irish Sea and Carrickmines river system are maintained. Environmental water quality can be impacted by the effects of surface water run-off from areas of hard standing. These impacts are particularly pronounced in urban areas and can include pollution from particulate matter and hydrocarbon residues, and downstream erosion from accelerated flows during flood events. In this case there will be no negative impacts to surface water quality/quantity due to the SUDS measures which are incorporated in the project design. These are not mitigation measures in an AA context.

In March 2005 the Greater Dublin Drainage Study (GDDS) was published as a policy document designed to provide for future drainage infrastructure. The implementation of this policy will see broad compliance with environmental and planning requirements in an integrated manner. This is likely to result in a long-

term improvement to the quality and quantity of storm water run-off in the capital. This project is fully compliant with SUDS principles.

There are no plans or projects which can act in combination with the proposed development which can give rise to significant effect to Natura 2000 sites within the zone of influence.

#### Conclusion and Finding of No Significant Effects

In carrying out this AA screening, mitigation measures have not been taken into account. Standard best practice construction measures have not been taken into account where these are to be implemented for the purposes of mitigating any effects on the environment which could have a potential impact on any Natura 2000 sites.

On the basis of the screening exercise carried out above, it was concluded that the possibility of any significant impacts on any Natura 2000 site, whether arising from the project itself or in combination with other plans and projects, can be excluded beyond a reasonable scientific doubt on the basis of the best scientific knowledge available. In reaching that conclusion, it was not necessary to consider any measures to avoid or reduce the impact of the proposed development.

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