PD/1208/18

SOUTH DUBLIN DISTRICT HEATING PILOT PROJECT

Appropriate Assessment (AA) Screening Determination

Planning and Development Act 2000 (Part XAB) (as amended)

Planning and Development Regulations, 2001 (Part 8) (as amended)

Pursuant to the requirements of the above, South Dublin County Council is proposing to develop the South Dublin District Heating Pilot Project.

Having regard to Article 6(3) of the Habitats Directive and Part XAB of the Planning and Development Acts 2000 (as amended), the guidance contained in the Department of Housing Planning, Community and Local Governments "*Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities*" (2010) following an examination, analysis and evaluation of the objective information provided in the "*Screening Statement in support of Appropriate Assessment of District Heating Centre and associated works*" prepared by Doherty Environmental, South Dublin County Council, as the Competent Authority determines that the proposed South Dublin District Heating Pilot Project, will not have a significant negative effect on European Sites and will not negatively affect their conservation objectives or integrity. The principal reasons supporting this determination include:

- During the Screening of the proposed project it was found that eleven European Sites occur within a 15km radius of the project site. The nearest European Site to the project site, Glenasmole Valley SAC, is located at a remote distance from the project site, approximately 3.4km to the south.
- All of these European Sites (and their associated qualifying features of interest/special conservation interests) are not connected to the project area via impact pathways and are located outside the zone of influence of all activities associated with the proposed project. No impact pathways were identified linking the wider project area to these surrounding European Sites.

Therefore a Stage 2: Appropriate Assessment will not be required to inform the project either alone or in combination with other plans & projects, with respect to any Natura 2000 site and its conservation objectives.

Bian Keaney

Senior Planner

Order: That South Dublin County Council as the Competent Authority, having considered the AA Screening Report, prepared by Doherty Environmental, makes a determination that a Stage 2 Appropriate Assessment will not be required to inform the South Dublin District Heating Pilot Project, either alone or in combination with other plans or projects, with respect to any Natura 2000 site and its conservation objectives.

Date: 17/10/18

Director of Services

Land Use, Planning and Transportation

District Heating Centre & Associated Works

Tallaght, Co. Dublin

Screening Statement in support of Appropriate Assessment

Doherty Environmental

September 2018

District Heating Centre & Associated Works

Screening Statement in support of Appropriate Assessment

Document Stage	Document Version	Prepared by
Final	2	Pat Doherty MSc, MCIEEM

For and on behalf of

Doherty Environmental

Prepared By: Pat Doherty

Signed: 

This report has been prepared by Doherty Environmental with all reasonable skill, care and diligence. Information report herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

This report is prepared for South Dublin County Council and we accept no responsibility to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

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1.0 INTRODUCTION

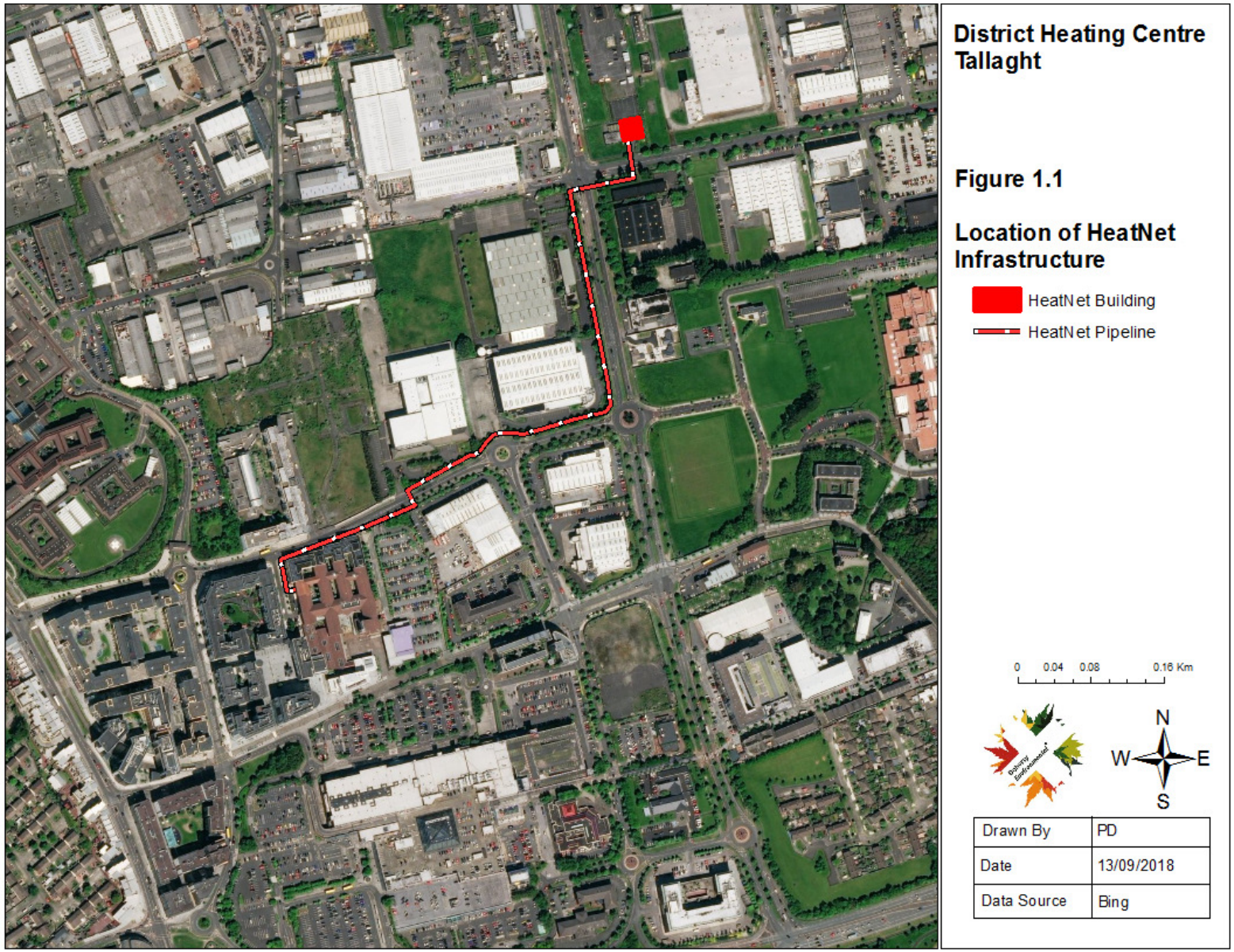
Doherty Environmental Consultants (DEC) Ltd have been commissioned by South Dublin County Council to undertake a Habitats Directive Stage 1 Screening for Appropriate Assessment for a proposed District Heating Centre and Associated Works at Tallaght, Co. Dublin (see Figure 1.1 for project area location).

This Screening for Appropriate Assessment forms Stage 1 of the Habitats Directive Assessment process and is being undertaken in order to comply with the requirements of the Habitats Directive Article 6(3). The function of this Screening Exercise is to identify the potential for the project to result in likely significant effects to European Sites and to provide information so that the competent authority can determine whether a Stage 2 Appropriate Assessment is required for the project.

1.1 STAGE 1 SCREENING METHOD

The function of the Screening exercise is to identify whether or not the proposal will have a likely significant effect on European Sites. In this context "likely" refers to the presence of doubt with regard to the absence of significant effects (ECJ case C-127/02) and "significant" means not trivial or inconsequential but an effect that has the potential to undermine the European Site's conservation objectives (English Nature, 1999; ECJ case C-127/02). In other words any effect that compromises the conservation objectives of a European Site and interferes with achieving the conservation objectives for the site would constitute a significant effect.

The nature of the likely interactions between the project and the conservation objectives of European Sites will depend upon the sensitivity of these sites and their reasons for designation to potential impacts arising from the project; the current conservation status of the features for which European Sites have been designated; and any likely changes to key environmental indicators (e.g. habitat structure; vegetation community) that underpin the conservation status of European Sites, in combination with other plans and projects.


District Heating Centre
Tallaght
Figure 1.1
Location of HeatNet Infrastructure
HeatNet Building
HeatNet Pipeline
0 0.04 0.08 0.16 Km
N
W
E
S
Drawn By PD
Date 13/09/2018
Data Source Bing

This Screening for Appropriate Assessment has been undertaken with reference to respective National and European guidance documents: Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities (DEHLG 2010) and *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites – Methodological Guidance of the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC* and recent European and National case law. The following guidance documents were also of relevance during this Screening Assessment:

- A guide for competent authorities. Environment and Heritage Service, Sept 2002. Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities (2010). DEHLG.

- Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites – Methodological Guidance of the Provisions of Article 6(3) and (4) of the Habitats Directive 92/42/EED. European Commission (2001).

- Managing Natura 2000 Sites – The provisions of Article 6 of the Habitats Directive 92/43/EEC. European commission (2000). (To be referred to as MN 2000).

The EC (2001) guidelines outline the stages involved in undertaking a Screening exercise of a project that has the potential to have likely significant effects on European Sites. The methodology adopted for this Screening exercise is informed by these guidelines and was undertaken in the following stages:

1. Describe the project and determine whether it is necessary for the conservation management of European Sites;

2. Identify European Sites that could be influenced by the project;

3. Where European Sites are identified as occurring within the zone of influence of the project identify potential effects arising from the project and screen the potential for such effects to negatively affect European Sites identified under Point 2 above; and

4. Identify other plans or projects that, in combination with the project, have the potential to affect European Sites.

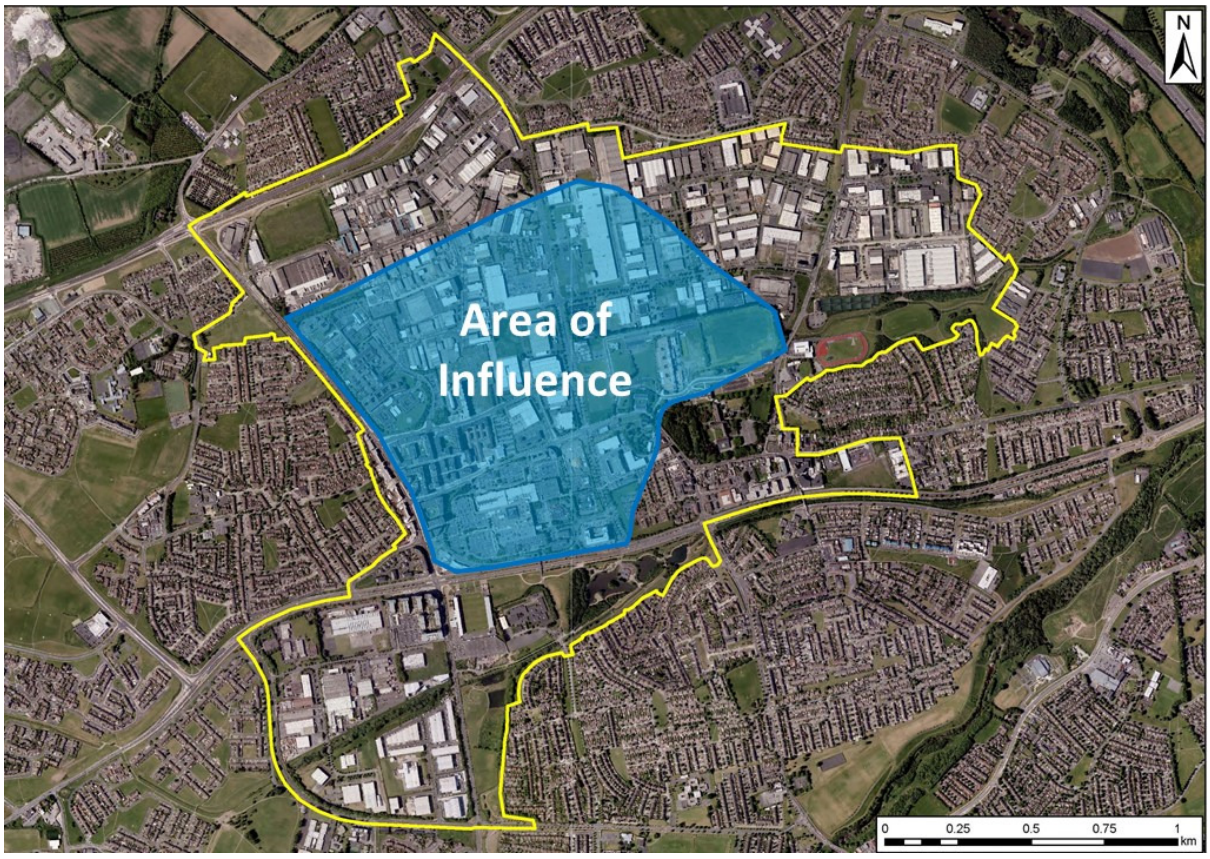
2.0 PROJECT DESCRIPTION

2.1 BACKGROUND

In partnership with the Codema – Dublin's Energy Agency, SDCC is leading a project to develop South Dublin County's first district-heating network. With partners across 5 EU states, the HeatNet project will link waste heat from a local data centre in Tallaght town centre to the South Dublin County Council complex, to form the core and phase one of a local authority led district-heating network. When operational the scheme is expected to save almost 1,900 tonnes CO_2 per year after 5 years. The wider HeatNet project will run until 2020.

The extent of the development site in the context of the wider area is set out in Figure 2.1 below.

Figure 2.1: Subject Lands within Tallaght



The principal elements of the project are as follows:

- Construction of a dedicated District Heating Building (See building description in Section 2.1.1) on the Belgard Road and facing Airton Road.
- Laying of pipes to transfer waste heat from adjacent Data Centre to the building and transfer onwards via Belgard Road to SDCC County Hall. The recommended pipe route passes inside the eastern and southern boundary of the new residential (Marlet) site that will allow for provision of district heating infrastructure to the proposed residential development therein. The estimated length of the pipeline is approximately 850m
- The River Poddle is culverted for this part of the route so will require crossing of the culvert as part of the works.

2.1.1 Dedicated District Heating Building

The building is primarily single-storey with a mezzanine containing expansion vessels and other mechanical/electrical equipment. It measures 491 metres sq and is designed to be constructed as a steel frame structure with infill wall panels of 225 mm solid concrete blockwork and clad externally both walls and roof in Rhein-Zink metal cladding sheets. Windows , doors and feature panels will be in powder-coated aluminium. Ground floor slabs will be cast-in-situ on radon, dpm and insulation with service troughs front and rear to accommodate pipe-turns and connection to pumping systems. The proposal at its highest point will be 10.00 metres in height.

The building will contain when fully commissioned will include:

- 3 x pumps linked to data-centre waste-heat collection including water-quality monitoring system linked to
- 3 x heat exchangers linked to
- 3 x 0.7MW electrically powered heat pumps in sequence linked to
- 3 x boilers natural-gas-powered boilers totalling 15 MW as back-up to heat-pumps during extreme weather and/or waste-heat stoppages from data-centre. (boilers will be 3MW, 5MW, and 7MW individually) linked to
- 3 x pumps connected to district-heating network via

- 2 x steel water storage tanks to optimise low-cost off-peak electricity and address supply stoppages during servicing of systems. These tanks will *at maximum* be 5.0 metres in diameter and 10.00 metres in height .

- The building will require medium voltage substation/transformer which is included in design to ESBN standard requirements.

- External illuminated information panel setting out energy –generated from waste-heat and carbon-saved across heat-network.

The site will be secured by steel railings designed to complement the Data-centre external railings. Car-parking for service vehicles will be included onsite.

2.1.2 Ground excavation and pipe laying

These DH trench cross sections assume battering of the sides of the trench at 45° (this will vary depending on the soil type on site and it's associated angle of repose but unless the ground is extremely gravelly, this is a shallow as the slope is likely to be), giving a trench width at ground level of between 2.95 m and 3.65 m based on the possible min (DN150) and max (DN250) pipe size required respectively.

This trench width can be reduced if necessary through the use of shoring to support the sides of the trench, in this case the main factor in sizing the trench is having the room to carry out the welding of the steel carrier pipe and jointing the HDPE outer casing. The shored trenches would likely be in the region of 1.5m to 2m.

2.1.2.1 Minimum Distances for District Heating Pipes

In the absence of Irish specific standards, the SDCC DH system will use the best-practice Danish standards DS 475 (2012) for minimum distances. The purpose of the distances is to protect other service pipes and cables from mainly impact of heat from the DH pipes that may add to the heat already produced from i.e. power cables. District heating pipes may also affect gas mains and by heating reduce the normal flow in the gas pipe. The set-back distances should be the same as those used for sewerage pipelines.

As the River Poddle is culverted beneath the Belgard Road a minimum distance for drain/water crossings under the Danish standards is 0.2mm.

In order to connect to the South Dublin District Heating system, the proposed Belgard Gardens site will require the following infrastructure;

- A branch connection pipeline from the DH distribution mains, sized based on the Belgard Gardens design heat demand, to connect heat supply to each block
- Block level thermal substation (heat exchanger) with meter, which separates the DH system from the buildings own internal heating system and where the DH company will read heat consumption. From the thermal substation, heat is distributed to the individual units.

2.1.3 Transport and Movement

Car-parking for service vehicles will be included onsite.

Transport associated with construction activities will be confined mostly to delivery of materials and construction machines.

2.1.4 Surface Water and discharges

Surface water run off will be attenuated on-site and foul and surface will be connected to adjoining Council main sewers.

2.1.5 Lighting

Lighting will be LED and electrical systems will be supported by a solar PV array on building roof.

2.1.6 Noise and Vibration

Due to the nature of the activities undertaken on a there is potential for noise generation. The flow of vehicular traffic to and from a construction site is also a potential source of noise levels

The potential for vibration at neighbouring sensitive locations during construction is typically limited to excavation for pipe laying and lorry movements on and off site associated with the building construction.

Excavations are required to comply with BS5228 (2009): *Code of practice for noise and vibration control on construction and open sites- Part 2: Vibration*: Noise control on construction and open sites, which offers detailed guidance on the control of noise & vibration from demolition and construction activities.

2.1.7 Construction sequence

The structure of the proposed works will be constructed in the following sequence.

- Transmission Pipeline Constructed
- Energy Centre Constructed
- Prepare SDCC Building Connections
- System Testing and Commissioning
- Connection to ADSIL Ph.1 and Begin O&M

The duration of the work is estimated to be 18 months.

2.2 BEST PRACTICE CONSTRUCTION APPROACH

All construction works, relating to the activities and construction sequence outlined in Section 2.1 above, will be undertaken in accordance with the following:

Inland Fisheries Ireland's *Requirements for the Protection of Fisheries Habitat during Construction and Development Works.*

CIRIA (Construction Industry Research and Information Association) Guidance Documents

- Control of water pollution from construction sites (C532)
- Control of water pollution from linear construction projects: Technical Guidance (C648)
- Control of water pollution from linear construction projects: Site Guide (C649)
- Environmental Good Practice on Site (C692)

NRA Guidance Documents

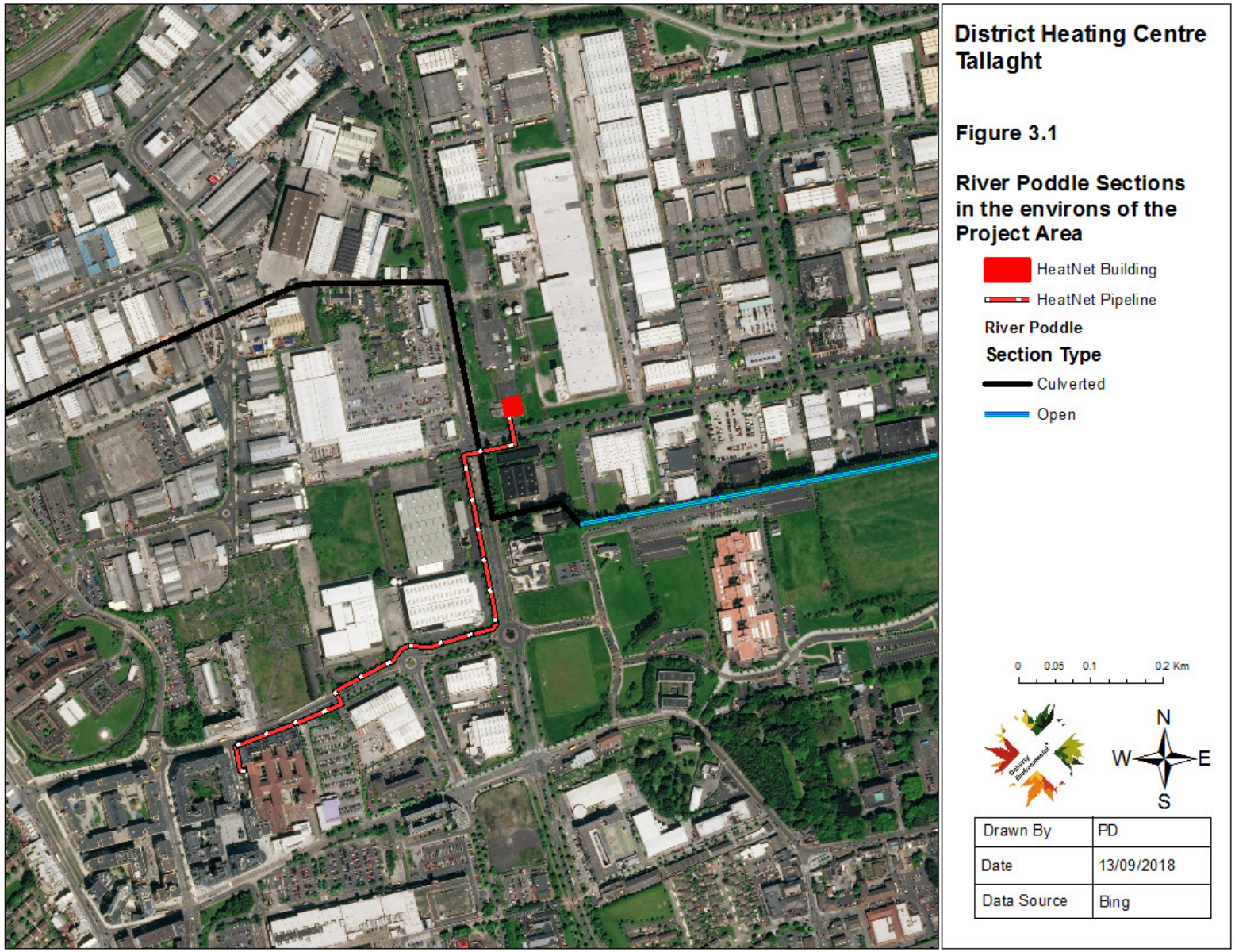
- Guidelines for the Crossing of Watercourses during the Construction of National Road Schemes
- Guidelines for the Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads
- Guidelines for the Protection and Preservation of Trees, Hedgerows and Scrub Prior to, during and Post Construction of National Road Schemes.

3.0 DESCRIPTION OF THE PROJECT AREA

The project area is characterised by urban land use with artificial surfaces and built land in the form of industrial, commercial and residential building and road surfaces dominating the land cover. The habitats occurring within the project area are of low nature conservation value and do not provide important habitat for flora or fauna species.

The project area is not subject to any statutory nature conservation designations. It is located within the surface water catchment of the River Poddle. The River Poddle rises to the west of the project area and is culverted along and under the Belgard Road adjacent to the proposed HeatNet building and northern section of the pipeline before surfacing as an open channel to the south of the proposed HeatNet building and the east of the Belgard Road. Figure 3.1 shows the culverted and open sections of the River Poddle with respect to the proposed HeatNet building and pipeline. In effect this watercourse is culverted within the environs of the project area.

Surface water status is classified under the WFD from 'high' to 'bad' status. In measuring this status both ecological and chemical parameters are measured and the overall status is determined by the lower threshold achieved for both ecological and chemical parameters. The latest information from the catchments.ie website shows the overall WFD status of the River Dodder to be Moderate (Q3-4).


District Heating Centre Tallaght
Figure 3.1
River Poddle Sections in the environs of the Project Area
HeatNet Building
HeatNet Pipeline
River Poddle
Section Type
Culverted
Open
0 0.05 0.1 0.2 Km
N
W E
S
Drawn By PD
Date 13/09/2018
Data Source Bing

The bedrock underlying the project site is characterised by extensive limestone. The Geological Survey of Ireland's Groundwater Vulnerability Mapping shows the groundwater vulnerability for the project area within a catchment where groundwater vulnerability is considered Low to moderate; with an area in the northern part of the plan area identified as being of extreme vulnerability. The groundwater quality of the area is classified as good.

4.0 EUROPEAN SITES OCCURRING WITHIN THE ZONE OF INFLUENCE OF THE PROJECT

Current guidance recommends that all European Sites occurring within 15km of project sites should be identified at the outset of an impact assessment process. A total of eleven European Sites have been identified in the surrounding 15km area. Table 4.1 lists these European Sites and the spatial relationship between each of these sites and the project area is shown on Figure 4.1 and 4.2. Appendix 1 lists the qualifying features of interest/special conservation interests for each of these European Sites.

In addition to the European Sites occurring within a 15km area of the project site the DEHLG 2010 guidelines on Appropriate Assessment of Plans and Projects in Ireland also advise that where the potential exists for a hydrological pathway to occur between the project site and European Sites beyond the 15km distance, then these sites should also be included as part of the Screening Assessment. However as there are no hydrological pathway connecting the project area to other European Sites beyond a 15km radius of the project area, the European Sites to be screened as part of this assessment are restricted to those occurring within the 15km radius.

The next step of the Screening Assessment is to identify which, if any of these European Sites, occur within the zone of influence of the project. As the nearest European Site (Glenasmole Valley SAC) is located at a remote distance (approximately 3.4km) from the project site, the project will not have the potential to result in direct impacts to European Sites. Thus this Screening exercise focuses on investigating whether the project will have the potential to result in indirect effects to European Sites or affect mobile species associated with European Sites beyond the boundaries of their designated conservation areas.

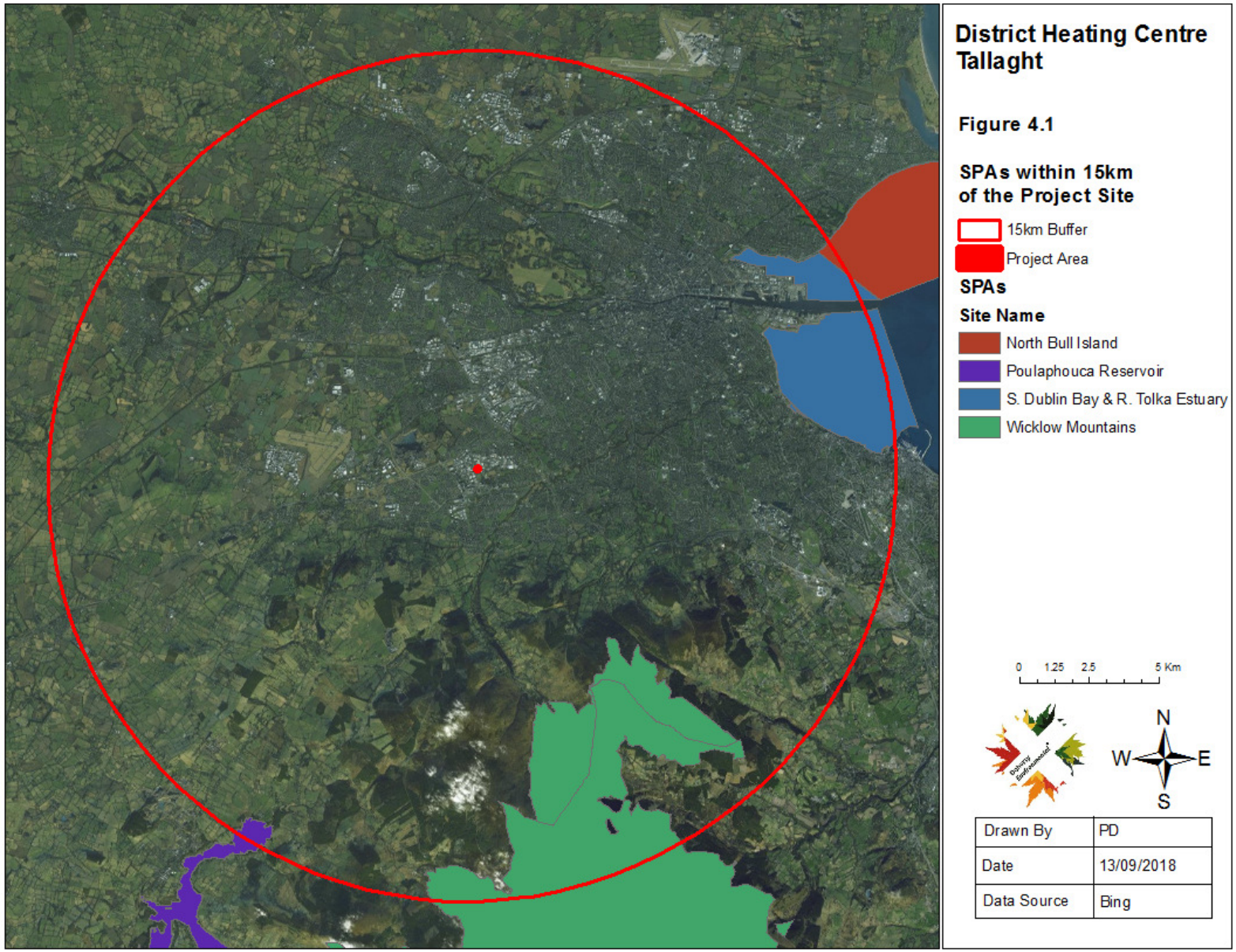
A source-pathway-receptor model has been used to establish which European Sites could occur within the zone of influence of potential indirect impacts. Under such a model the project, as described above, represents the source.

Potential impact pathways are restricted to hydrological and aerial pathways as these represent the principal emissions generated by activities at the project site. The potential for mobile qualifying species of surrounding European Sites to interact with the project site and immediate surrounding area is also included as a potential impact pathway.

The receptors represent European Sites and their associated qualifying features of interest.

European Sites and their associated qualifying features are likely to occur in the zone of influence of the project only where the above pathways establish a link between the study area and European Sites or where the project site is likely to play an important role in supporting populations of mobile species that are listed as special conservation interests/qualifying species for surrounding European Sites. Table 4.1 provides a determination as to whether each European Site within a 15km buffer distance of the project site occur within the zone of influence of the project. This determination has been undertaken in line with the following assessment questions:

- Is there a hydrological pathway linking the Project site to European Sites and does this pathway have the potential to function as an impact pathway?
- Are Annex I qualifying habitats of these European Sites at risk of experiencing impacts as a result of the project?
- Does the project site have the potential to interact with or support Annex II qualifying species/special conservation interest bird species of these European Sites?


District Heating Centre Tallaght
Figure 4.1
SPAs within 15km of the Project Site
15km Buffer
Project Area
SPAs
Site Name
North Bull Island
Poulaphouca Reservoir
S. Dublin Bay & R. Tolka Estuary
Wicklow Mountains
0 1.25 2.5 5 Km
N
W
E
S
Drawn By PD
Date 13/09/2018
Data Source Bing

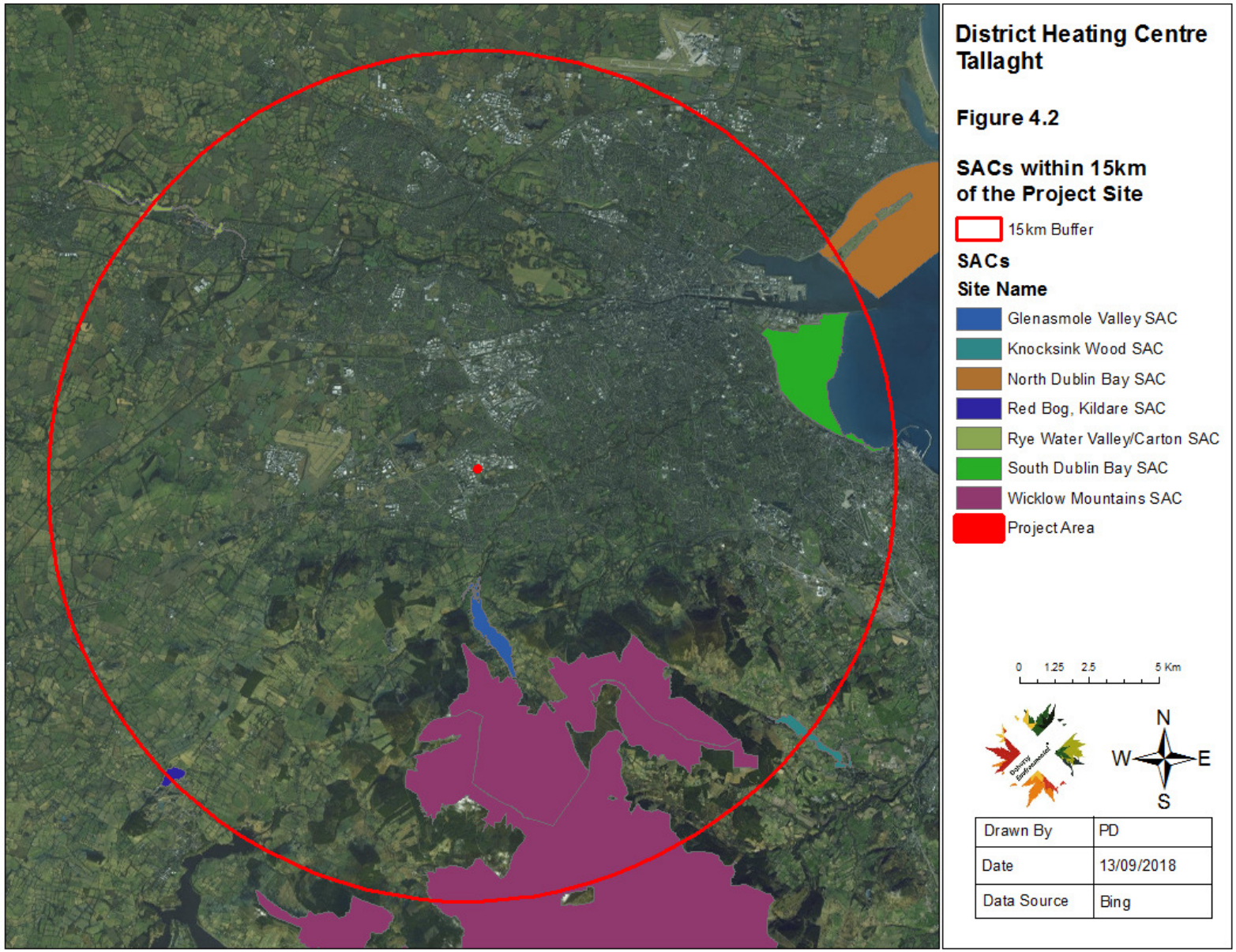

District Heating Centre
Tallaght
Figure 4.2
SACs within 15km
of the Project Site
15km Buffer
SACs
Site Name
Glenasmole Valley SAC
Knocksink Wood SAC
North Dublin Bay SAC
Red Bog, Kildare SAC
Rye Water Valley/Carton SAC
South Dublin Bay SAC
Wicklow Mountains SAC
Project Area
0 1.25 2.5 5 Km
N
W E
S
Drawn By PD
Date 13/09/2018
Data Source Bing

Table 4.1: **Assessment to Determine whether European Sites occur within the Projects Zone of Influence**

European Sites	**Distance from Project Site**	**Is there a Hydrological Pathway and does it have the potential to function as an Impact Pathway?**	**Does the Project have the potential to interact with Mobile Qualifying Habitats of European Sites?**	**Does the Project have the potential to interact with Mobile Qualifying Species of European Sites?**	**Do European Sites occur within the Projects Zone of Influence?**
Glenasmole Valley SAC Site code: 001209	3.4km	No. This SAC is located within a separate surface water catchment to the project area and is not connected to it via a potential impact pathway.	No. The nearest example of a Annex 1 qualifying habitats to the project area is within this SAC, located approximately 3.4km to the south. There are no pathways that link the project area to this habitat	No. No Annex qualifying species are listed as qualifying features of interest for this SAC.	No.
Knocksink Woods SAC Site Code: 000725	13.5km to the southeast	No. This SAC is located within a separate surface water catchment to the project area.	No. The Annex 1 qualifying habitats for which this SAC is designated are located at a remote distance from the project area and are not connected to it via any potential impact pathways.	No. No Annex qualifying species are listed as qualifying features of interest for this SAC.	No.
Rye Water	11.3km to	No. This SAC is located within a	No. The Annex 1 qualifying habitats	No. This SAC is designated for its	No. No potential impact

Valley SAC Site code: 001398	the northwest	separate surface water catchment to the project area and is not connected to it via a potential impact pathway.	for which this SAC is designated are located at a remote distance from the project area and are not connected to it via any potential impact pathways.	role in supporting populations of the Annex II species Vertigo moulinsiana. This is a largely sedantary species and is reliant on wetland habitats. The populations of this species supported by the SAC are located at significant distance from the project area and are not connected to it via any potential impact pathways.	pathways link the project site to this SAC.
Red Bog SAC Site Code: 000397	14.4 to the northwest	No. This SAC is located within a separate surface water catchment to the project area and is not connected to it via a potential impact pathway.	No. The Annex 1 qualifying habitats for which this SAC is designated are located at a remote distance from the project area and are not connected to it via any potential impact pathways.	No. No Annex II species are listed as qualifying features of interest for this SAC.	No. No potential impact pathways link the project site to this SAC.
Wicklow Mountain SAC Site Code	5.8km to the south	No. This SAC is located within a separate surface water catchment to the project area and is not connected to it via a potential impact pathway.	No. The Annex 1 qualifying habitats for which this SAC is designated are located at a remote distance from the project area and are not connected to it	No. This SAC is designated for its role is supporting a population of otters. No suitable habitat for otters occurs in the vicinity of the project area and there are no surface	No. No potential impact pathways link the project site to this SAC.

002122			via any potential impact pathways.	hydrological pathways linking the project area to catchment within which this SAC and its otter population rely.	
Wicklow Mountain SPA Site Code: 004040	5.8km to the south	No. This SPA is located within a separate surface water catchment to the project area and is not connected to it via a potential impact pathway.	No. While no habitats are listed as a special conservation interest for this SPA, the upland mountain habitats of heath and blanket bog are important for the preserving the conservation status of the species for which this SPA is designated. There is not potential impact pathway connecting the project area to these upland mountain habitats.	No. There is no suitable habitat for Merlin within or surrounding the project area. Peregrine falcon are known to occur in urban areas where high rise buildings provide nesting and perching opportunities. There are no such buildings in the vicinity of the project and there are no record of peregrine in the surrounding area. There is no potential for the project to interact with either merlin or Peregrine populations of this SPA.	No. No potential impact pathways link the project site to this SPA.
Poulaphouca Reservoir SPA Site Code:	14.5km to the southwest	No. The wetland habitats associated with this SPA are located at a remote distance from the project area and no hydrological pathway connects the project area to the wetland habitats of	No. The wetland habitats for which this SPA is designated are located at a remote distance from the project area and are not connected to it via any	No. This SPA is designated for its role in supporting populations of greylag goose and lesser black-backed gull. Surveys at the project site during the 2017/2018 winter	No. No potential impact pathways link the project site to this SPA.

4063		this SPA.	potential impact pathways.	season did not record the presence of either of these species along or surrounding the project site and these species are not considered to rely on habitats in the vicinity of the project site.	
South Dublin Bay SAC Site Code: 000210	11.2km to the east	No. While the project area is located within the Liffey catchment, which drains to the Liffey Estuary and Dublin Bay, no potential hydrological pathway connects the project area to this SAC for the following two reasons: 1. The project area is located within the River Poddle catchment. The section of the River Poddle to be crossed by the proposed project pipeline is culverted in a sealed culvert pipe. The project pipeline will be buffered from this River Poddle sealed culvert pipe section by a minimum of 2mm in accordance with Danish best practice standards. The presence of this buffer and the sealed culvert pipe will	No. For the reasons outlined for the potential impact pathways opposite there will be no connection between the project and the qualifying habitats of this SAC.	No. No Annex 2 species are listed as qualifying features of interest for this SAC.	No. No potential impact pathways link the project site to this SAC.

		function as a barrier between the project pipeline and the River Poddle and will prevent any interactions between the them. 2. Modelling of the Liffey Estuary and Dublin Bay has shown that the waters from the Liffey draining into Dublin Bay are deflected east and north towards Dollymount and Howth. The presence of the South Great Wall in Dublin Bay provides a barrier to the movement of waters towards the south (Bedri et al., 2012; Camp, Dresser & McKee, 2012).			
North Dublin Bay SAC Site Code: 000206	14.8km to the northeast	No. For reason 1 outlined for the South Dublin Bay SAC above no potential impact pathway will connect the project area to this SAC	No. For reason 1 outlined for the South Dublin Bay SAC above no potential impact pathway will connect the project area to qualifying habitats of this SAC.	No. This SAC supports a population of the liverwort Petalophyllum ralfsii. This is a sedentary species and there is no potential for the project to interact with this species.	No. No potential impact pathways link the project site to this SAC.
North Bull	14.5km to	No. For reason 1 outlined for the South	No. For reason 1 outlined for the South	No. the special conservation	No. No potential impact

Island SPA Site Code: 004006	the northeast	Dublin Bay SAC above no potential impact pathway will connect the project area to this SPA	Dublin Bay SAC above no potential impact pathway will connect the project area to wetland habitats of this SPA.	interest bird species of this SPA are coastal and marine bird specis and no suitable habitat for these species occurs in the vicinity of the project area.	pathways link the project site to this SPA.
South Dublin Bay & Tolka Estuary SPA Site Code: 004024	11.2km to the northeast	No. For reason 1 outlined for the South Dublin Bay SAC above no potential impact pathway will connect the project area to this SPA	No. For reason 1 outlined for the South Dublin Bay SAC above no potential impact pathway will connect the project area to wetland habitats of this SPA.	No. the special conservation interest bird species of this SPA are coastal and marine bird specis and no suitable habitat for these species occurs in the vicinity of the project area.	No. No potential impact pathways link the project site to this SPA.

Table 4.1 above outlines the relationship between the project site and the European Sites occurring within the surrounding 15km buffer area. As outlined in this Table there are no impact pathways linking the project site to these European Sites. As such the project will not have the potential to influence the Conservation Objectives of these European Sites or the favourable conservation status of the interest features for which these European Sites have been designated.

5.0 CUMULATIVE EFFECTS

A search was undertaken for recent planning applications within the project area. One recent planning application, Reference No. 18a/094, was identified during this search. This application comprises the demolition of all existing buildings within the site boundary for this planning application. The buildings to be demolished range from one to three storeys in height and the removal of hardstanding throughout. The extent of this site is approximately 6.87 hectares and it is comprised for the following "sub-sites": Belgard House, Belgard Square and the former Uniphar factory. The site is generally bounded to the east by Belgard Road, to the south by Belgard Square North, to the west by vacant land and commercial buildings and to the north by the Belgard Retail Park (Further Information Requested). The proposed development will also include provision of site boundary protection where required and all ancillary site works.

A Screening Statement in support of Appropriate Assessment has been prepared for this planning application (Altemar, 2018) and has found that this project will not have the potential to result in likely significant effects to European Sites. All European Sites occurring in the wider area surrounding this planning application site were screening out during the Screening of this site.

In light of the findings of the Screening for Appropriate Assessment for the above planning application and given the absence of any potential impact pathway connections between the project area and surrounding European Sites, it is concluded that there will be no potential for the current project to combine with this other planning application to result in significant cumulative effects to European Sites.

6.0 CONSERVATION OBJECTIVES

The project will be deemed to have the potential to result in likely significant effects to the European Sites if it has the potential to result in adverse effects to the Site Specific Conservation Objectives (SSCOs) of the features of interest of European Sites occurring within the zone of influence of the project. However as no European Sites or their associated qualifying feature of interest/special conservation interests occur within the zone of influence of the project there will be no potential for the project to undermine the Conservation Objective targets for these features.

7.0 SCREENING MATRIX

A Screening Matrix, in line with European Commission (2001) guidelines is provided below in Table 4.2.

Table 7.1: Screening Matrix for proposed project.

Brief description of the project or plan	The project and associated activities are described in Section 3 above.
Brief description of the European Sites	The European Sites occurring in the wider surrounding area are identified and briefly described in Section 4 above.
Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the European Sites.	No elements of the project will have the potential to give rise to impacts to European Sites. There will be no emissions from the project during the construction phase or operation phase. All surface water will be attenuation on site and all foul and surface water will be connected to the adjoining Council main sewer, where it will be conveyed to the Local Authority muncipal wastewater treatment plant for final treatment prior to release into receiving waters. In light of the above and the remote distances that separate the project area from European Sites, the absence of any connection between the project area and European Sites and the absence

	of any potential for interactions with qualifying habitats or qualifying species of European Sites in the wider surrounding area.
Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the European Sites site by virtue of: • size and scale; • land-take; • distance from the Natura 2000 site or key features of the site; • resource requirements (water abstraction etc.); • emissions (disposal to land, water or air); • excavation requirements; • transportation requirements; • duration of construction, operation, decommissioning, etc.;	The project will not have the potential to result in direct, indirect or secondary impacts to European Sites. As the project is not linked via impact pathways to surrounding European Sites and will not result in the emission of potentially polluting substances to the surrounding environment it will not have the potential to combine with other projects in the surrounding area to result in cumulative significant effects to the local environment or European Sites occurring in the wider surrounding area.
Describe any likely changes to the site arising as a result of: • reduction of habitat area: • disturbance to key species; • habitat or species fragmentation; • reduction in species density; • changes in key indicators of conservation value • (water quality etc.); • climate change.	Due to the absence of any impact pahways the project will not have the potential to result in changes to qualifying habitats or qualifying species of European Sites occurring in the wider surrounding area.
Describe any likely impacts on the European Sites site as a whole in terms of: interference with the key relationships that define the structure of the site; interference with key relationships that define the function of the site	For reasons set out above the project will not have the potential to interfere with key relationships that define the structure and function of European Sites.
Provide indicators of significance as a result of the identification of effects set out above in terms of: • loss; • fragmentation; • disruption;	For reasons set out above the project will not have the potential to result in such effects to European Sites.

• disturbance; • change to key elements of the site (e.g. water quality etc.).	
Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is not known.	The project will not have the potential to result in likely significant effects to European Sites.

8.0 SCREENING STATEMENT CONCLUSION: FINDING OF NO SIGNIFICANT EFFECTS

During the Screening of the proposed project it was found that eleven European Sites occur within a 15km radius of the project site. The nearest European Site to the project site, Glenasmole Valley SAC, is located at a remote distance from the project site, approximately 3.4km to the south. All of these European Sites (and their associated qualifying features of interest/special conservation interests) are not connected to the project area via impact pathways and are located outside the zone of influence of all activities associated with the proposed project. No impact pathways were identified linking the wider project area to these surrounding European Sites.

In light of the findings of this Screening for Appropriate Assessment it is concluded that the project will not have a significant negative effect on European Sites and will not negatively affect their conservation objectives or integrity.

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NPWS (2015b) Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2017) Conservation Objectives: Wicklow Mountains SAC 002122. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

APPENDIX 1: QUALIFYING FEATURES OF INTEREST OF EUROPEAN SITES OCCURRING WITHIN THE WIDER SURROUNDING AREA

A total of seven European Sites were identified as occurring within a 15km radius of the project site and an addition four European Sites were identified as occurring downstream of the project site at Dublin Bay. Table A1.1 below lists the qualifying features of interest of each of these European Sites.

Table A1.1: Qualifying Features of Interest European Sites occurring within 15km of the Project

European Sites	Qualifying features of interest
Glenasmole Valley SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210]
	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]
	Petrifying springs with tufa formation (Cratoneurion) [7220]
Knocksink Wood SAC	Petrifying springs with tufa formation (Cratoneurion) [7220]
	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]
Rye Water Valley/Carton SAC	Petrifying springs with tufa formation (Cratoneurion) [7220]
	Vertigo angustior (Narrow-mouthed Whorl Snail) [1014]
	Vertigo moulinsiana (Desmoulin's Whorl Snail)

	[1016]
Red Bog SAC	Transition mires and quaking bogs [7140]
Wicklow Mountain SAC	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110]
	Natural dystrophic lakes and ponds [3160]
	Northern Atlantic wet heaths with Erica tetralix [4010]
	European dry heaths [4030]
	Alpine and Boreal heaths [4060]
	Calaminarian grasslands of the Violetalia calaminariae [6130]
	Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230]
	Blanket bogs (* if active bog) [7130]
	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110]
	Calcareous rocky slopes with chasmophytic vegetation [8210]
	Siliceous rocky slopes with chasmophytic vegetation [8220]

	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]
	Lutra lutra (Otter) [1355]
Wicklow Mountain SPA	Merlin (Falco columbarius) [A098]
	Peregrine (Falco peregrinus) [A103]
Poulaphouca Reservoir SPA	Greylag Goose (Anser anser) [A043]
	Lesser Black-backed Gull (Larus fuscus) [A183]
South Dublin Bay SAC	Mudflats and sandflats not covered by seawater at low tide [1140]
	Annual vegetation of drift lines [1210]
	Salicornia and other annuals colonising mud and sand [1310]
	Embryonic shifting dunes [2110]
North Dublin Bay SAC	Mudflats and sandflats not covered by seawater at low tide [1140]
	Annual vegetation of drift lines [1210]
	Salicornia and other annuals colonising mud and sand [1310]
	Atlantic salt meadows (Glauco-Puccinellietalia

	maritimae) [1330]
	Mediterranean salt meadows (Juncetalia maritimi) [1410]
	Embryonic shifting dunes [2110]
	Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120]
	Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]
	Humid dune slacks [2190]
	Petalophyllum ralfsii (Petalwort) [1395]
North Bull Island SPA	Light-bellied Brent Goose (Branta bernicla hrota) [A046]
	Shelduck (Tadorna tadorna) [A048]
	Teal (Anas crecca) [A052]
	Pintail (Anas acuta) [A054]
	Shoveler (Anas clypeata) [A056]
	Oystercatcher (Haematopus ostralegus) [A130]
	Golden Plover (Pluvialis apricaria) [A140]

	Grey Plover (Pluvialis squatarola) [A141]
	Knot (Calidris canutus) [A143]
	Sanderling (Calidris alba) [A144]
	Dunlin (Calidris alpina) [A149]
	Black-tailed Godwit (Limosa limosa) [A156]
	Bar-tailed Godwit (Limosa lapponica) [A157]
	Curlew (Numenius arquata) [A160]
	Redshank (Tringa totanus) [A162]
	Turnstone (Arenaria interpres) [A169]
	Black-headed Gull (Chroicocephalus ridibundus) [A179]
	Wetland and Waterbirds [A999]
South Dublin Bay & Tolka Estuary SPA	Light-bellied Brent Goose (Branta bernicla hrota) [A046]
	Oystercatcher (Haematopus ostralegus) [A130]
	Ringed Plover (Charadrius hiaticula) [A137]

	Grey Plover (Pluvialis squatarola) [A141]
	Knot (Calidris canutus) [A143]
	Sanderling (Calidris alba) [A144]
	Dunlin (Calidris alpina) [A149]
	Bar-tailed Godwit (Limosa lapponica) [A157]
	Redshank (Tringa totanus) [A162]
	Black-headed Gull (Chroicocephalus ridibundus) [A179]
	Roseate Tern (Sterna dougallii) [A192]
	Common Tern (Sterna hirundo) [A193]
	Arctic Tern (Sterna paradisaea) [A194]
	Wetland and Waterbirds [A999]