

Screening Statement for Appropriate Assessment

Lucan Public Realm

Village Green & Main Street

Doherty Environmental

17th January 2022

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1.0 INTRODUCTION

South Dublin County Council have commission Doherty Environmental Consultants (DEC) Ltd. to complete a Stage 1 Screening for Appropriate Assessment for proposed public realm enhancement works to the village green and Main Street at Lucan, Co. Dublin. The location of the village green and Main Street is shown on Figure 1.1 below while an aerial image of both locations is shown on Figure 1.2.

This Screening Report 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 Report is to determine if it can or cannot be excluded, on the basis of objective information, that the project, individually or in combination with other plans or projects, will have a significant effect on a European Site. This Screening Report has been prepared to provide information to the competent authority to assist them in their determination as to whether a Stage 2 Appropriate Assessment is required for the project

1.1 LEGISLATIVE CONTEXT

This Screening Report for Appropriate Assessment is being prepared in order to enable the competent authority to comply with Article 6(3) of Council Directive 92/43/EEC (The Habitats Directive). It is prepared to examine whether or not the project alone or in combination with other plans and projects is likely to have a significant effect on any European Site in view of best scientific knowledge and in view of the conservation objectives of the European Sites and specifically on the habitats and species for which the sites have been designated.

1.1.1 Requirement for an Assessment under Article 6 of the Habitats Directive

According to Regulation 42(1) of the European Communities (Birds and Natural Habitats) Regulations 2011 - 2015, the competent Authority has a duty to:

• Determine whether the proposed Project is directly connected to or necessary for the management of one of more European Sites; and, if not,

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• Determine if the Project, either individually or in combination with other plans or projects, would be likely to have a significant effect on the Eurpoean Site(s) in view of best scientific knowledge and the Conservation Objectives of the site(s).

This Report contains information to support a Screening for Appropriate Assessment and is intended to provide information that assists the competent authority when assessing and addressing all issues regarding the construction and operation of the Project and to allow the competent authority to comply with the Habitats Directive. Article 6(3) of the Habitats Directive defines the requirements for assessment of projects and plans for which likely significant effects on European Sites may arise. The European Communities (Birds and Natural Habitats) Regulations, 2011 – 2015 (the Habitats Regulations) transpose into Irish law Directive 2009/147/EC (the Birds Directive) and Council Directive 92/43/EEC (the Habitats Directive) together which list habitats and species that are of international importance for conservation and require protection. The Habitats Regulations requires competent authorities, to carry out a Screening for Appropriate Assessment of plans and projects that, alone or in combination with other plans or projects, would be likely to have significant effects on European Sites in view of best scientific knowledge and the Site's conservation objectives. This requirement is transposed into Irish Law by Part 5 of the Habitats Regulations and Part XAB of the Planning and Development Act, 2000 (as amended).

1.2 SCREENING METHODOLOGY

This Screening Report has been prepared in order to comply with the legislative requirements outlined in Section 1.1 above and aims to establish whether or not the proposed project, alone or in combination with other plans or projects, would be likely to have significant effects on European Sites in view of best scientific knowledge and the Site's conservation objectives. In this context "likely" means a risk or possibility of effects occurring that **cannot** be ruled out based on objective information and "significant" means an effect that would undermine the conservation objectives of the European sites, either alone or in-combination with other plans and projects (Office of the Planning Regulator (OPR), 2021).

The nature of the likely interactions between the Plan and the Conservation Objectives of European Sites will depend upon the:

- the ecological characteristics of the species or habitat, including their structure, function, conservation status and sensitivity to change; *and/or*
- the character, magnitude, duration, consequences and probability of the impacts arising from land use activities associated with the plan, in combination with other plans and projects.

This Screening Report 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; Office of the Planning Regulator – OPR Practice Note PN01: Appropriate Assessment Screening for Development Management, and recent European and National case law. The following guidance documents were also of relevance during the preparation of this Screening Report:

- 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/EEC. European Commission (2021).
- Managing Natura 2000 Sites The provisions of Article 6 of the Habitats Directive 92/43/EEC. European commission (2018).

The EC (2001) guidelines outline the stages involved in undertaking a Screening Report for Appropriate Assessment for projects. The methodology adopted during the preparation of this Screening Report 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 EXTENT OF THE WORKS, MAIN STREET:

All the area from its southern junction at Lucan Road/Griffeen bridge as far as its northern junction at Dispensary Lane/Vesey bridge and from the building line on its western side to the flood wall along the Griffeen river on its eastern side.

2.2 NATURE OF THE WORKS:

- The demolition and removal of the current street finishes consisting of Tarmacadam, concrete and pre-cast paviours, along with the concrete kerbing and sundry street furniture are to be removed. This will be done with great care where the finishes meet the buildings and walls etc., and around the existing trees along the Griffeen river wall.
- 2. The removal of two trees on the western side, one outside the Bank of Ireland at the northern and the other outside AIB at the southern end.
- 3. The overhead power lines are to be removed and rerouted through underground ducting and a new street drainage system is to be installed. New ducting will be provided for public lighting and utilities. Existing manhole covers and services chambers will be reset and levelled. Natural drainage will be installed along the existing tree line beside the Griffeen river where feasible, depending on root conditions and direction.
- 4. Ducting will be provided to the new carparking spaces for their potential conversion to EV charging spaces if required.
- 5. A concrete slab will be placed over the utilities layer and new finishes provided to the finished levels. These finishes will include asphalted areas, stone and paving and will be to 'shared surface' standards, i.e. generally without kerbs or changes in level.
- 6. The reduction of parking spaces from 37 to 26 bays in the Main Street area, the addition of a bus stop.

- 7. The addition of new lighting poles, of benches, bins, and fixed and removable bollards and bicycle parking stands at various locations as shown on the drawings.
- 8. The removal of the stone infill between the piers of the former horses' watering point beside the weir and its replacement with a toughened glass screen.

2.3 DESIGN RATIONALE:

At present this street is predominantly weighted towards car use. It serves primarily as a public carpark and the double line of parking (arguably two-and-a half lines because of the 45° parking on the eastern side) is a deterrent to pedestrian movement across the thoroughfare towards the Griffeen river side. As a result the Green park generally goes unnoticed and there is no amenity incentive to the street.

The design intent is to make this end of Main Street a better place for all of its users. This means reducing the number of car journeys and reducing the number of carparking spaces so that more space can be provided for pedestrians and cyclists. The reduced number of car spaces can have a higher turnover by reducing the staying time so that the nett loss in space numbers will be compensated. Additional spaces are being proposed within a minute's walk of the area, as per the wider parking map provided with this submission.

By eliminating overparking and through rationalizing street furniture, lighting and services, the street can be largely decluttered. This will encourage more pedestrian interaction with the wider urban environment and will make the street feel safer, particularly for the elderly, small children etc.

By proposing a shared surface to eliminate kerbs and abrupt changes to levels and surfaces we can make the street more universally accessible, for wheelchair users, for the seeing-impaired and for those of reduced mobility. By providing the same surface for all users, drivers, pedestrians, cyclists and so on, there is a shared sense of responsibility towards safely inhabiting a shared space, where no user group has the upper hand and all have equal status.

2.4 EXTENT OF THE WORKS, VILLAGE GREEN:

All of the current area of the Green between the Griffeen river, Lucan Road and Dispensary Lane including the footpath to the Lucan Road on its southern end and the footpath at the Vesey bridge/Dispensary Lane junction at its northern end.

2.5 NATURE OF THE WORKS:

The removal of 7 no. existing trees, the retention of 2 no. existing trees (one of which - the Christmas tree - is to be replanted) and the addition of 5 no. new trees along with approx. 45m of new flowering hedge along Dispensary Lane, and new planting throughout, including an area of wildflower meadow and an area of reinforced grass.

The excavation to a maximum depth of approx. 1.8m of new amphitheater steps and seating providing access to the Griffeen river. The retention of the existing bankside on the river side of the amphitheatre footprint or other such barrier until all substantive excavation works and amphitheatre installation works are implemented. The retention of such a barrier between the footprint of the amphitheatre excavations and installation works will eliminate the potential for interactions between these works and the Griffeen River.

The excavation to approx. 1.2m of a new seating area beside the Griffeen river facing Vesey weir and bridge.

The widening of the footpath at the southern end of the Green with new steps into the Park.

The construction of a metal frame bandstand structure capable of taking a temporary roof covering.

The rerouting of the footpath on Dispensary Lane through the Green by means of a ramped path running inside the planted boundary and connecting to the extended footpath on the southern end.

The replacement of the metal guarding and handrail along the Griffeen River edge with a glass and metal guarding, including the protection of the amphitheater seating ends.

The removal of the rubble stone wall and capping forming the boundary to the southern end of the Green and its reconstruction in a changed configuration to form a new western boundary to the widened footpath under these proposals, as well as stone retaining walls to the new amphitheatre seating within the park.

2.6 DESIGN RATIONALE

This pocket park known as Lucan's Village Green is currently isolated in the middle of some very trafficked thoroughfares with little sense of connection to its surroundings. Its most immediate urban counterpoint on the far side of the Griffeen river, Main Street, is cut off from it visually through two lines of trees, and two rows of parking. On the Dispensary Lane side and towards Lucan road on the southern end the park level is lower and a boundary wall and planted borders serve to further isolate it physically and visually from these surroundings. The footpath on the Dispensary Lane side is narrow and feels unsafe in heavy traffic. On the southern end the footpath is a bit wider and the park is visible but no direct access is possible. From the Main Street side, even when standing along the flood wall between the trees, the Green is obscured by a mix of planting and trees, mostly unplanned which further removes it from any connection to the environment of Main Street. Within the park itself, the pergola with its Wisteria overgrowth tends to create a further barrier both visual and physical. The Green's strengths are those qualities that have become obscured in recent times: its continuous frontage to the river Griffeen and Main Street; its sense of openness towards Vesey bridge and its sunken sense of intimacy with its back turned to the traffic.

The design proposals seek to restore the Green's more direct relationship to Main Street. This separation started with the need for parking followed more recently by the requirement for flood defences. To overcome these barriers to connection the design proposes first to encourage people to cross Main Street to be closer to the Green and the river and then to provide opportunities for those on the park side to engage with the river. The activities of one group can be observed by the other, and the Green's rediscovered presence and proximity will encourage those using the Centra to bring their sandwich to the river's edge or those on Main Street to lean on the flood wall while watching the ducks in the park.

In the interests of increasing the visual connections between both elements it is proposed to remove a number of trees which currently screen the park from Main Street. These trees are a mature weeping willow and a semi-mature Chestnut at the southern end, and along the river bank, a young Sycamore and a number of relatively young birches. A mature Birch is being retained and the Coniferous 'Christmas tree' is being moved to a new location a few metres away. In lieu of these it is proposed to plant a Sweetgum, a Hawthorn and a number of Wild Plum trees. These are trees that change appearance and colours throughout the year, adding a strong seasonal flavour to the Green.

The Green will become a necessary route for pedestrians from Sarsfield Park or the upper end of Main Street because of the displacing of the footpath on the western side of Dispensary Lane. The widening of the footpath on the southern end just beside Griffeen bridge will provide a welcoming platform for entry to the park as well as a gateway arrival point to Lucan village for cyclists and for public transport. Figure 3.1 provide an illustration of the extent of the works at Main St. while Figure 3.2 provides a section of the amphitheatre seating.



Figure 2.1: View of village green and Main Street public realm enhancements



Figure 2.2: Section of the proposed amphitheatre at the village green

3.0 BASELINE DESCRIPTION

The village green and Main Street is comprised of artificial man-made surfaces. The Village Green area includes artificial surfaces in the form of paved areas, amenity grassland, treelines, scattered trees and landscaped verges and flower beds. Both Mains St and the Village Green are of low ecological value and nature conservation importance. The Griffeen River that flows through this site is of local ecological value and nature conservation importance. This watercourse is an important linear habitat corridor. It is known to function as a commuting corridor for otters between the River Liffey and the Grand Canal to the south. The river supports salmonids as well as the Annex 2 species white-clawed crayfish. A range of bat species are support by the Griffeen River corridor upstream of Lucan town centre. Birds, and particularly mallard, rely on the section of the river at village green and Main Street. The river drains into the River Liffey to the north which is of national nature conservation value and is listed as a proposed Natural Heritage Area.

3.1.1 Review of Historical Maps

The Taylor South historical map of 1816 depicts the presence of the Village Green, with an area of land along the right-hand bankside of the Griffeen River, bounded to the east and south by roads (which are now the R120 and the R835 respectively. Rocque's historical map from 1760 does not depict the presence of the village green.

3.1.2 Geology Overview

The bedrock underlying the site is a mix of limestone and shale. The subsoils are dominated by alluvium derived from the River Liffey while the existing land cover is dominated by artificial made ground. The village green and Main Street is situated in an area of extreme groundwater vulnerability.

3.1.3 Hydrology

The Griffeen River forms the western boundary of the Village Green.

3.1.4 Designated Conservation Areas

There are no European Sites (SACs or SPAs) or Natural Heritage Areas (NHAs) occurring in the vicinity of the Village Green and the Liffey Valley pNHA is located approximately 130m to the north. The Griffeen River forms a pathway connecting the village green and Main Street to the pNHA and the River Liffey.

4.0 IS THE PROJECT NECESSARY FOR THE CONSERVATION MANAGEMENT OF EUROPEAN SITES

The project has been described in Section 2 of this Screening Report and it is clear from the description provided that the project is not directly connected with or necessary for the future conservation management of any European Sites.

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

Current guidance informing the approach to screening for Appropriate Assessment defines the zone of influence of a proposed development as the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. It is recommended that this is established on a case-by-case basis using the Source-Pathway-Receptor (SPR) framework.

As a first step in identifying the European Sites that could be connected to the project via SPR pathways all European Sites occurring in the wider surrounding area were identified. Figure 5.1 shows the European Sites occurring in the wider area surrounding the project site. As can be seen in Figures 5.1 no European Sites occur in close vicinity to the project site, with the nearest site being the Rye Water Valley SAC located approximately 2.7km to the west, or 3.5km upstream, of the project site. The Griffeen flowing through the project site and the River and the River Liffey downstream, link the project location to Dublin Bay, where four European Sites are located. These are the North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay & Tolka Estuary SPA. These European Sites at Dublin Bay are located approximately 23Km downstream from the project.

All other European Sites are located at a remote distance from the project site and are not connected to it via any SPR pathways. As such the remainder of this screening exercise focuses on the four European Sites at Dublin Bay (hereafter jointly referred to as the Dublin Bay European Sites) and the Rye Water Valley SAC.

Using the SPR framework the project, as described in Section 2 of this Screening Report, represents the source of potential impacts to European Sites. During the works associated within new projects, such as those associated with the public realm works, the potential can exist for the following emissions to occur:

Emissions to surface water

Emissions to groundwater

Noise and vibration emissions

Emissions to air

Light emissions; and

Visual emissions

Projects that are located outside of European Sites can also result in impacts to mobile qualifying species of European Sites in the event that such species rely on habitats occurring within the project site. For the purposes of this screening report this impact is referred to as a "mobile species impact".

Given that all surface water generated at the project site will eventually drain to the River Liffey there is a potential hydrological pathway connecting the project site to Dublin Bay where European Sites are located while the Rye Water Valley SAC is located upstream along the River Liffey and its tributary the Rye Water River.

The project site is located within a separate groundwater body to these European Sites and as such no groundwater pathways are considered to connect the project site to any of the four European Sites and Dublin Bay or the Rye Water Valley SAC upstream.

The project is located at a significant distance from the nearest European Sites and so will not have the potential to result in noise, air, light, or visual emissions that could function as a pathway connecting the project site to these European Sites.

With respect to the five European Sites occurring along the River Liffey pathway, only the North Bull Island SPA and the South Dublin Bay & Tolka Estuary SPA support mobile species in the form of bird species. The project site is located approximately 15km from the nearest point of these two SPAs. Guidance on assessing the connectivity of projects to SPAs and their special conservation interests has been published by Nature Scotland (see SNH, 2016). This guidance is used to facilitate the identification or otherwise of SPAs within the zone of influence of projects by establishing the foraging range of a variety of special conservation interest bird species from SPAs during the winter and breeding season. For the majority of the species listed as special conservation interest bird species listed as special conservation interest for both Dublin Bay & Tolka Estuary SPA the project is considered to lie outside their foraging range. However brent geese which is listed as a special conservation interest for both SPAs are known to range up to 20km from their core SPA grounds. As such there is potential for the mobile species pathway to function as a pathway connecting the project sites to these SPAs.

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 hydrological pathways establish a link between the project and the European Site.

Table 5.1 provides a evaluation as to whether the Rye Water Valley SAC and the Dublin Bay European Sites occur within the project's zone of influence. This evaluation has been undertaken in line with the following questions:

Is there a Hydrological Pathway and does it have the potential to function as an Impact Pathway?

Is there a mobile species pathway and does it have the potential to function as an impact pathway?



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Table 5.1: Examination of Pathways

European Sites	Distance from Project Site	Is there a Hydrological Pathway and does it have the potential to function as an Impact Pathway	Do the Project have the potential to interact with Mobile Species	Do European Sites occur within the Projects Zone of Influence?
Rye Water Valley SAC	2.5km upstream to the west	No. This SAC is located within a separate surface water sub- catchment to the project .	No. No mobile species are listed as qualifying features of interest for this SAC.	No. This SAC is located at a remote distance upstream from the project site and there are no pathways connecting the project to this SAC and its qualifying features of interest.
South Dublin Bay SAC	22km downstream to the east	This SAC is located at Dublin Bay to the south of the South Wall. This SAC is designated for the presence of coastal Annex 1 habitats. Surface water from the project site will eventually discharge to the River Liffey catchment and as shown on Figure 5.1, the River Liffey forms a hydrological pathway between the project site Dublin Bay where this SAC is located. However the River Liffey does not function as a hydrological pathway between the project site and this SAC. 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	No. No Annex 2 species are listed as qualifying features of interest for this SAC.	No. This SAC is located at a remote distance upstream from the project site and there are no pathways connecting the project to this SAC and its qualifying features of interest.

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		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 (Dowly & Bedri, 2007; Bedri et al., 2012; Camp, Dresser & McKee, 2012). As such there is no surface water pathway between the project site and this SAC.		
North Dublin Bay SAC	22km downstream to the east	Yes, surface waters will drain from the project site to the River Liffey which in turn drains to Dublin Bay and are dispersed over this SAC.	No. This SAC supports a population of the liverwort <i>Petalophyllum ralfsii</i> . This is a sedentary species, reliant on terrestrial dune slack habitats occurring on Bull Island and	Yes. The potential for the hydrological pathway, linking the project site to this SAC, to function as an impact pathway requires further examination to establish
		As such there is a hydrological connection between the project site and this SAC.	there is no potential for the project to interact with this species.	whether or not the project could result in downstream effects to this SAC.

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22km	Yes, surface waters will drain from the project site to the River	This SPA is designated for its role in	Yes. The potential for the hydrological
downstream	Liffey which in turn drains to Dublin Bay and are dispersed over	supporting a number of wetland bird	pathway, linking the project site to this
to the east	this SPA.	species. The project site is located outside	SPA, to function as an impact pathway
		the foraging range for the majority of the	requires further examination to establish
	As such there is a hydrological connection between the project	species that this SPA is designated. For	whether or not the project could result in
	site and this SAC.	those species, such as light-bellied brent	downstream effects to this SPA.
		geese, that are known to range at distances	
		within which the project occurs there is no	
		suitable at the Liffey Promenade or the	
		Demesne Park Entrance to support these	
		species. As such there is no function mobile	
		species pathway connecting the project site	
		to this SPA.	
22km	Yes, surface waters will drain from the project site to the River	This SPA is designated for its role in	Yes. The potential for the hydrological
downstream	Liffey which in turn drains to Dublin Bay and are dispersed over	supporting a number of wetland bird	pathway, linking the project site to this
to the east	this SPA.	species. The project site is located outside	SPA, to function as an impact pathway
		the foraging range for the majority of the	requires further examination to establish
	As such there is a hydrological connection between the project	species that this SPA is designated. For	whether or not the project could result in
	site and this SAC.	those species, such as light-bellied brent	downstream effects to this SPA.
		geese, that are known to range at distances	
		within which the project occurs there is no	
		suitable at the Liffey Promenade or the	
	downstream to the east 22km downstream	downstream to the eastLiffey which in turn drains to Dublin Bay and are dispersed over this SPA.As such there is a hydrological connection between the project site and this SAC.22km downstream to the eastYes, surface waters will drain from the project site to the River Liffey which in turn drains to Dublin Bay and are dispersed over this SPA.As such there is a hydrological connection between the project site and this SAC.	downstream to the eastLiffey which in turn drains to Dublin Bay and are dispersed over this SPA.supporting a number of wetland bird species. The project site is located outside the foraging range for the majority of the species that this SPA is designated. For those species, such as light-bellied brent geese, that are known to range at distances within which the project occurs there is no suitable at the Liffey Promenade or the Demesne Park Entrance to support these species pathway connecting the project site to this SPA.22km downstream to the eastYes, surface waters will drain from the project site to the River this SPA.This SPA is designated for its role in supporting a number of wetland bird species pathway connecting the project site to this SPA.22km downstream to the eastYes, surface waters will drain from the project site to the River this SPA.This SPA is designated for its role in supporting a number of wetland bird species. The project site is located outside the foraging range for the majority of the species, such as light-bellied brent geese, that are known to range at distances within which the project site is no supporting a number of wetland bird species. The project site is located outside the foraging range for the majority of the species, such as light-bellied brent geese, that are known to range at distances within which the project occurs there is no

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	Demesne Park Entrance to support these	
	species. As such there is no function mobile	
	species pathway connecting the project site	
	to this SPA.	

Table 5.1 above outlines the relationship between the project site and the European Sites occurring within the zone of influence. Of the five European Sites occurring within this zone, three have been identified as requiring further examination to ascertain whether there is potential for impact pathways connecting the project site to these European Sites.

The remainder of this Screening aims to identify whether the project will have the potential to result in likely significant effects to these three European Sites, namely:

- 1. South Dublin Bay River Tolka Estuary SPA;
- 2. North Dublin Bay SAC; and
- 3. North Bull Island SPA.

5.1 EUROPEAN SITES OCCURRING WITHIN THE ZONE OF INFLUENCE

The following sub-sections provide an overview of the three European Sites occurring within the zone of influence of the project.

5.1.1 South Dublin Bay River Tolka Estuary SPA

The South Dublin Bay and River Tolka Estuary SPA comprises a substantial part of Dublin Bay. It includes the intertidal area between the River Liffey and Dun Laoghaire, and the estuary of the River Tolka to the north of the River Liffey, as well as Booterstown Marsh. A portion of the shallow marine waters of the bay is also included.

The site is a Special Protection Area (SPA) designated under the EU Birds Directive, of special conservation interest for the following species over-wintering species: Light-bellied Brent Goose, Oystercatcher, Ringed Plover, Grey Plover, Knot, Sanderling, Dunlin, Bar-tailed Godwit, Curlew, Redshank, and Black-headed Gull.

This SPA is also designated for its role in supporting breeding colonies of the following species: Roseate Tern, Common Tern and Artic Tern. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds. The qualifying features for which this site has been designated as a SPA are listed in Table 5.2 below. The threats and pressures to this SAC have been documented in the Standard Natura 2000 Data Form for the site (NPWS, 2017b). The documented threats and pressures to this SPA are as follows:

- Walking, horseriding and non-motorised vehicles
- Reclamation of land from sea, estuary or marsh
- Discharges
- Roads, motorways
- Industrial or commercial areas

Table 5.2 lists each of the qualifying features of interest for this SAC and their conservation status.

Table 5.2: South Dublin Bay River Tolka Estuary SPA qualifying features of interest, and conservation status

Special conservation interests	Conservation Status
Light-bellied Brent Goose (Branta bernicla hrota)	Amber listed species- Species of medium conservation concern
Oystercatcher (Haematopus ostralegus)	Amber listed species- Species of medium conservation concern
Ringed Plover (Charadrius hiaticula)	Amber listed species- Species of medium conservation concern
Grey Plover (Pluvialis squatarola)	Amber listed species- Species of medium conservation concern

Special conservation interests	Conservation Status
Knot (Calidris canutus)	Red listed species – Species of high conservation concern [†]
Sanderling (Calidris alba)	Green listed species – Species not threatened
Dunlin (<i>Calidris alpina</i>)	Amber listed species- Species of medium conservation concern
Bar-tailed Godwit (<i>Limosa</i> lapponica)	Amber listed species- Species of medium conservation concern
Redshank (Tringa totanus)	Red listed species – Species of high conservation concern
Black-headed Gull (Croicocephalus ridibundus)	Red listed species – Species of high conservation concern
Roseate Tern (Sterna dougallii)	Green listed species – Species not threatened
Common Tern (Sterna hirundo)	Amber listed species- Species of medium conservation concern
Arctic Tern (Sterna paradisaea)	Amber listed species- Species of medium conservation concern
Wetlands & Waterbirds	

5.1.2 North Dublin Bay SAC

This site covers the inner part of north Dublin Bay, the seaward boundary extending from the Bull Wall lighthouse across to the Martello Tower at Howth Head. The North Bull Island is the focal point of this site. Qualifying features for which this site has been designated as a SAC are listed in Table 5.3 below. The distribution of the habitats associated with this SAC are outlined in the Conservation Objectives for this SAC (see NPWS, 2013).

The threats and pressures to this SAC have been documented in the Standard Natura 2000 Data Form for the site (NPWS, 2017). The documented threats and pressures to this SAC are as follows:

- Urbanised areas, human habitation
- Walking, horseriding and non-motorised vehicles
- Golf course
- Industrial or commercial areas
- Discharges

Table 5.3 lists each of the qualifying features of interest for this SAC and their conservation status.

Table 5.3: North Dublin Bay SAC qualifying features of interest and conservation status

Qualifying Annex Feature	Conservation Status (Site- Level)	Conservation Status (National-Level)
Mudflats and sandflats not covered by seawater at low tide	Favourable	Inadequate
Annual vegetation of drift lines	Not established	Inadequate

Qualifying Annex Feature	Conservation Status (Site- Level)	Conservation Status (National-Level)
Salicornia and other annuals colonizing mud and sand	Unfavourable	Favourable
Atlantic salt meadows (Glauco- Puccinellietalia maritimae)	Favourable	Inadequate
Petalwort (Petalophyllum ralfsii)	Not established	Inadequate
Mediterranean salt meadows (Juncetalia maritimi)	Favourable	Inadequate
Embryonic shifting dunes Shifting dunes along the shoreline with Ammophila arenaria (white dunes)	Unfavourable-inadequate	Inadequate
Fixed coastal dunes with herbaceous vegetation (grey dunes)	Unfavourable-Bad	Bad
Humid dune slacks	Unfavourable-inadeqaute	Inadequate

5.1.3 North Bull Island SPA

This site covers all of the inner part of north Dublin Bay, with the seaward boundary extending from the Bull Wall lighthouse across to Drumleck Point at Howth Head. The site is a Special Protection Area (SPA) under the EU Birds Directive, of special conservation interest for the

following species: Light-bellied Brent Goose, Shelduck, Teal, Pintail, Shoveler, Oystercatcher, Ringed Plover, Golden Plover, Grey Plover, Knot, Sanderling, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Turnstone and Black-headed Gull. The site is also of special conservation interest for holding an assemblage of over 20,000 wintering waterbirds. The EU Birds Directive provides for attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

The qualifying features for which this site has been designated as a SPA are listed in Table 5.4 below. The threats and pressures to this SPA have been documented in the Standard Natura 2000 Data Form for the site (NPWS, 2017a). The documented threats and pressures to this SPA are as follows:

- Disposal of household / recreational facility waste
- Golf Course
- Industrial or commercial areas
- Walking, horseriding and non-motorised vehicles
- Bridge, viaduct
- Roads, motorways
- Discharges

Table 5.4 lists each of the qualifying features of interest for this SAC and their conservation status.

Special Conservation Interests	Conservation Status
Light-bellied Brent Goose (Branta bernicla hrota)	Amber listed species- Species of medium conservation concern
Shelduck (Tadorna tadorna)	Amber listed species- Species of medium conservation concern
Teal (Anas crecca)	Amber listed species- Species of medium conservation concern
Pintail (Anas acuta)	Red listed species – Species of high conservation concern [†]
Shoveler (Anas clypeata)	Red listed species – Species of high conservation concern [†]
Oystercatcher (Haematopus ostralegus)	Amber listed species- Species of medium conservation concern
Golden Plover (Pluvialis apricaria)	Red listed species – Species of high conservation concern
Grey Plover (Pluvialis squatarola)	Amber listed species- Species of medium conservation concern
Knot (<i>Calidris canutus</i>)	Red listed species – Species of high conservation concern [†]
Sanderling (Calidris alba)	Green listed species – Species not threatened

Dunlin (<i>Calidris alpina</i>)	Amber listed species- Species of medium conservation concern	
Black-tailed Godwit (<i>Limosa limosa</i>)	Amber listed species- Species of medium conservation concern	
Bar-tailed Godwit (<i>Limosa</i> lapponica)	Amber listed species- Species of medium conservation concern	
Curlew (Numenius arquata)	Red listed species – Species of high conservation concern	
Redshank (Tringa totanus)	Red listed species – Species of high conservation concern	
Turnstone (Arenaria interpres)	Green listed species – Species not threatened	
Black-headed Gull (<i>Larus</i> ridibundus)	Red listed species – Species of high conservation concern	
Wetlands & Waterbirds		

5.2 QUALIFYING FEATURES OF INTEREST/SPECIAL CONSERVATION INTERESTS CONNECTED TO THE PROJECT VIA HYDROLOGICAL PATHWAY

Table 5.5 below lists the qualifying features of interest/special conservation interests of the four European Sites that are hydrologically connected to the project site and identifies the interest features of these four European Sites that are influenced by transitional/coastal waters.

Table 5.5: Identification of Qualifying Features of Interest/Special Conservation InterestsInfluenced Transitional/Coastal Waters

European Site	Qualifying Interest	Is the qualifying feature of interest/special conservation interest Influenced by Transitional/Coastal Waters
North Dublin Bay SAC	Mudflats and sandflats not covered by seawater at low tide	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
	Annual vegetation of drift lines	No. This habitat is not influenced by surface waters and lotic processes.
	Salicornia and other annuals colonizing mud and sand	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
	Spartina swards (Spartinion maritimae)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
	Petalwort (Petalophyllum ralfsii)	No. This species is reliant on humid dune slacks occurring within the terrestrial environment. This dune slacks will not be influenced by hydrological emissions.

	Mediterranean salt meadows (Juncetalia maritimi)	No. Examples of this habitat are restricted to the northwestern end of Bull Island and are considered to lie outside the influence of the hydrological pathway established by the River Liffey.
	Embryonic shifting dunes Shifting dunes along the shoreline with Ammophila arenaria (white dunes)	No. This is a terrestrial habitat that will not be influence by hydrological emissions.
	Fixed coastal dunes with herbaceous vegetation (grey dunes)	No. This is a terrestrial habitat that will not be influence by hydrological emissions.
	Humid dune slacks	No. This is a terrestrial habitat that will not be influence by hydrological emissions.
North Dublin Bay SPA	Light-bellied Brent Goose (Branta bernicla hrota)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
	Shelduck (Tadorna tadorna)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
	Teal (Anas crecca)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.

	Pintail (Anas acuta)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
	Shoveler (Anas clypeata)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
	Oystercatcher (Haematopus ostralegus)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
	Golden Plover (<i>Pluvialis</i> apricaria)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
	Grey Plover (Pluvialis squatarola)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
	Knot (<i>Calidris canutus</i>)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
	Sanderling (Calidris alba)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
Dunlin (<i>Calidris alpina</i>)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.	
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Black-tailed Godwit (<i>Limosa limosa</i>)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.	
Bar-tailed Godwit (<i>Limosa lapponica</i>)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.	
Curlew (Numenius arquata)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.	
Redshank (Tringa totanus)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.	
Turnstone (Arenaria interpres)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.	
Black-headed Gull (<i>Larus ridibundus</i>)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.	

	Wetlands & Waterbirds	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
South Dublin Bay River Tolka Estuary SPA	Light-bellied Brent Goose (Branta bernicla hrota)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
	Oystercatcher (Haematopus ostralegus)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
	Ringed Plover (Charadrius hiaticula)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
	Grey Plover (Pluvialis squatarola)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
	Knot (<i>Calidris canutus</i>)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
	Sanderling (Calidris alba)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.

Dunlin (<i>Calidris alpina</i>)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
Bar-tailed Godwit (<i>Limosa lapponica</i>)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
Redshank (Tringa totanus)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
Black-headed Gull (Croicocephalus ridibundus)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
Roseate Tern (<i>Sterna</i> dougallii)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
Common Tern (Sterna hirundo)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.
Arctic Tern (Sterna paradisaea)	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.

Wetlands & Waterbirds	Yes. Hydrological pathways in the form of surface water discharges to the River Liffey will have the potential to link the project to this qualifying habitat.

Following on from Table 5.5 above, Table 5.6 provides a summary of the qualifying features of interest that can be influenced by transitional/coastal waters and their associated water quality. The qualifying features of interest are grouped into broader groups that will be referred to in the assessment sections below.

Table 5.6: Summary of qualifying features of interest/special conservation interests occurring within the Zone Of Influence of the Project

Qualifying feature Group	Qualifying feature of interest	Associated European Site
Coastal/Littoral Habitats	Mudflats and sandflats not covered by seawater at low tide	North Bull Island SAC
	Salicornia and other annuals colonising mud and sand	North Bull Island SAC
	Spartina swards (Spartinion maritimae)	North Bull Island SAC
	Atlantic salt meadows (Glauco- Puccinellietalia maritimae)	North Bull Island SAC
Coastal/Littoral Bird Species	Special conservation interests wetland bird species	South Dublin Bay River Tolka Estuary SPA & North Dublin Bay SPA

6.0 EXAMINATION OF LIKELY SIGNIFICANT EFFECTS TO FEATURES OF INTEREST WITHIN THE ZONE OF INFLUENCE

The consideration of likely significant effects to European Sites as a result of the project relates to an examination of the project's potential to result in contamination to local surface waters, with consequent negative indirect effects downstream at Dublin Bay to transitional/coastal waters influencing the features of interest listed in Table 5.6 above.

The local surface water that could receive contaminated surface water in the event of a release of pollutants to the aquatic environment is the River Liffey. Whether the project will have the potential to result in negative effects to the European Sites at Dublin Bay downstream is dependent on the capacity of the hydrological pathway between the project site and Dublin Bay to function as an effective impact pathway. An assessment of the hydrological pathway and its potential to function as an impact pathway is provided in the following sub-section.

6.1 EXAMINATION OF EFFECTS

6.1.1 Surface Water Pathway

The nearest point of the three Dublin Bay European Sites to the project site is approximately 23km downstream along the River Liffey and the Liffey Estuary. The surface water that will be generated at both project site's and the volumes discharging from them to the River Liffey and the Liffey Estuary represent a minor fraction of the overall volume of freshwater draining into the Liffey estuary and Dublin Bay. This will eliminate the potential for the project, even in the event of the release of contaminated surface water as a result of the project to the River Liffey, from having an effect on the conservation status of European Sites downstream at Dublin Bay. Further details supporting this evaluation of an absence of a functional impact pathway established by the hydrological pathway between the project site and the Dublin Bay European Sites are as follows:

• The works required at the village green and Main Street are not considered to have the potential to result in the generation of contaminated surface water runoff with potential to undermine the water quality of the Griffeen River or the River Liffey downstream. The works associated with the project will not result in instream works or interactions with the river. The installation of the amphitheatre within the village green which

represents the principal element of the public realm works will be installed in isolation of the river and will only be connect to the river and its bankside subsequent to installation. This approach will avoid the potential for interaction with the Griffeen River during the installation works associated with the amphitheatre. Other elements of the project are considered to be small in scale and will not pose a risk to the water quality of the Griffeen River or the River Liffey downstream.

- No wet cement works will be undertaken at or in close proximity of the Griffeeen River during the public realm works. Only small quantities of hydrocarbons and other construction fluids will be held on site at any one time. These quantities will be held in bunded containers and stored within lock up facilities. There will be no refuelling of plant or equipment in the vicinity of the Griffeen River.
- The volumes of surface water draining the project site represents a miniscule fraction of the volumes discharging to the Liffey Estuary upstream of the Dublin Bay European Sites. This is supported by an examination of the area occupied by the footprint of the project site (i.e. approximately 1 Ha within the Liffey_SC_090 subcatchment (approximately 14,000 Ha in size) in which the project site is located. The project site represents 0.008% of the land surface occurring within this catchment and the runoff generated at the project site will therefore represent a miniscule extent of the runoff draining from lands within this sub-catchment. In the unlikely event that contaminated waters enter the River Liffey, based on the above any associated pollutants will be entirely diluted within the River Liffey and the Liffey estuary downstream such that there will be no potential for them to result in perturbations to coastal water interacting with the Dublin Bay European Sites.
- Further to the fact that the waters draining represent a miniscule fraction of freshwater inputs to the Liffey estuary, it is noted that there are multiple other sources of freshwater (11 in total, some of which include the River Dodder, Royal Canal, River Cammock etc.) entering the Liffey Estuary. These other sources combine with the River Liffey discharges to further dilute freshwater discharging the Liffey Estuary and Dublin Bay. In light of this any discharges to the River Liffey Estuary from the project site will be thoroughly mixed and imperceptible downstream within the Liffey Estuary and will be further diluted by the tidal coastal waters at Dublin Bay.

• Finally, in support of the above, other studies have shown that pollutants in the estuary are rapidly mixed and become diluted within the estuary and Dublin Bay (O'Higgins and Wilson, 2005; Wilson and Jackson, 2011) again indicating that any potential for the release of contaminants to the River Liffey during the project will not have the potential to result in any perceptible effect to water quality downstream at Dublin Bay.

6.2 IN-COMBINATION EFFECTS

Cumulative in-combination effects can arise as a result of projects where they have the potential to generate emissions to the environment, in this instance surface waters, with potential to result in negative impact to the receiving environment. However given the approach to the project works which will not result in interactions with the Griffeen River until all excavation works and the installation of the amphitheatre is complete and given the minor scale of all other works associated with the project the public realm works will pose a negligible risk to the water quality of the Griffeen River. As such it is considered that there will be no potential for the project to combine with other projects in the surrounding area or downstream along the River Liffey to result in negative impacts to European Sites downstream at Dublin Bay.

7.0 ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS IN VIEW OF EUROPEAN SITE CONSERVATION OBJECTIVES

The function of this screening exercise is to determine whether the project is likely to have significant effects on European Sites. The screening is required to be completed in view of the Conservation Objectives for the qualifying features of interest of these European Sites that also occur within the zone of influence of the project.

Site Specific Conservation Objectives (SSCOs) have been formulated for all three European Sites occurring within the zone of influence of the project. The structural and functional elements of a European Site to maintain the favourable conservation status of qualifying features of interest is embedded into the list of SSCOs for each of the site's interest features. As such the SSCOs of a European Site represent the parameters against which an assessment of a project's potential to result in likely significant effects should be undertaken.

SSCOs for the special conservation interests of the South Dublin Bay River Tolka Estuary SPA and the North Bull Island SPA; and the relevant qualifying features of interest of the North

Dublin Bay cSAC occurring within the zone of influence of the project have been published by the NPWS (NPWS, 2013; 2015a; 2015b). Table 7.1 lists the Conservation Objectives attributes and targets for each of these features and provides an assessment of the project's potential to result in likely significant effects to these objectives .

Table 7.1: Assessment of the Project potential to effect the SSCOs of the qualifying feature occurring within its Zone of Influence

Attribute. No.	Attribute	Target	Assessment
Mudflats (I	North Dublin Bay cSAG	C)	
1	Habitat area	The permanent habitat area is stable or increasing, subject to natural processes.	For reasons outlined in Section 6 above the project will not have the potential to undermine the targets for this conservation objective attribute.
2	Community distribution	Conserve the following community types in a natural condition: Intertidal sand with <i>Scolelepis squamata</i> and <i>Pontocrates</i> spp. community; and Intertidal sand to mixed sediment with polychaetes, molluscs and crustaceans community complex.	For reasons outlined in Section 6 above the project will not have the potential to undermine the targets for this conservation objective attribute.
Salicornia	and other annuals color	nising mud (North Dublin Bay cSA(
3	Habitat area	Area stable or increasing, subject to natural processes, including erosion and succession.	For reasons outlined in Section 6 above the project will not have the potential to undermine the targets for this conservation objective attribute.
4	Habitat distribution	No decline or change in habitat distribution, subject to natural processes.	For reasons outlined in Section 6 above the project will not have the potential to undermine the targets for this conservation objective attribute.
5	Physical structure: sediment supply	Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions	For reasons outlined in Section 6 above the project will not have the potential to undermine the targets for this conservation objective attribute.
6	Physical structure: creeks and pans	Maintain creek and pan structure, subject to natural processes, including erosion and succession	For reasons outlined in Section 6 above the project will not have the potential to undermine the targets for this conservation objective attribute.

7	Physical structure:	Maintain natural tidal regime	For reasons outlined in Section 6 above the
	flooding regime		project will not have the potential to undermine
			the targets for this conservation objective
			attribute.
8	Vegetation structure:	Maintain the range of coastal	For reasons outlined in Section 6 above the
	zonation	habitats including transitional	project will not have the potential to undermine
		zones, subject to natural processes	the targets for this conservation objective
		including erosion and succession	attribute.
9	Vegetation structure:	Maintain structural variation	For reasons outlined in Section 6 above the
	vegetation height	within sward	project will not have the potential to undermine
			the targets for this conservation objective
			attribute.
10	Vegetation structure:	Maintain more than 90% of the	For reasons outlined in Section 6 above the
	vegetation cover	saltmarsh area vegetated	project will not have the potential to undermine
			the targets for this conservation objective
			attribute.
11	Vegetation	Maintain range of sub-	For reasons outlined in Section 6 above the
	composition: typical	communities with typical species	project will not have the potential to undermine
	species and sub-	listed in Saltmarsh Monitoring	the targets for this conservation objective
	communities	Project (McCorry and Ryle, 2009)	attribute.
12	Vegetation structure:	No significant expansion of	For reasons outlined in Section 6 above the
	negative indicator	common cordgrass (Spartina	project will not have the potential to undermine
	species- Spartina	anglica), with an annual spread of	the targets for this conservation objective
	anglica	less than 1%	attribute.
Special co	Special conservation interest bird species (South Dublin Bay River Tolka Estuary SPA & North Bull Island S		
22	Population trend	lation trend Long term population trend stable or increasing	For reasons outlined in Section 6 above the
			project will not have the potential to undermine
			the targets for this conservation objective
			attribute.
23	Distribution	There should be no significant	For reasons outlined in Section 6 above the
		decrease in the range, timing or	project will not have the potential to undermine
		intensity of use of areas by special	the targets for this conservation objective
		conservation interest bird species	attribute.
		of the SPA occurring within the	
		zone of influence other than that	
		occurring from natural patterns of	
		variation	

24	Wetland habitat area	The permanent area occupied by	For reasons outlined in Section 6 above the
		the wetland habitat should be	project will not have the potential to undermine
		stable and not significantly less	the targets for this conservation objective
		than the area of 32,261ha, other	attribute.
		than that occurring from natural	
		patterns of variation	

8.0 CONCLUSION

During the examination of the project it was found that 5 no. European Sites occur along the River Liffey adjacent to which the project sites are located. The nearest European Sites to the project site (i.e. the Rye Water Valley SAC) is located approximately 2.7km to the west. Of the 5 no. European Sites occurring within the wider area along the River Liffey, the potential for a pathway was discounted between two, namely the Rye Water Valley SAC and the South Dublin Bay SAC. This is dues to the location of the Rye Water Valley SAC approximately 3.5km upstream of the nearest point of the project site and the absence of interactions between the River Liffey and the South Dublin Bay SAC. the potential for the River Liffey to function as an impact pathway between the project site and the remaining three European Sites was examined further as part of this screening exercise. This examination was completed by considering all aspects of the proposed project that could result in the emission of potentially polluting material to the River Liffey.

The potential for the River Liffey to function as impact pathway between the project and these three European Sites was examined as part of this screening exercise. This examination was completed by considering all aspects of the proposed project that could result in the emission of potentially polluting material to the River Liffey.

This examination found that the project and the associated works at the village green and Main Street will pose a negligible risk to the water quality of the River Griffeen and the River Liffey locally in the vicinity of the project site works or downstream along the river. The examination also found that, even in the unlikely event that the project were to result in the emission of contaminants to the River Liffey, such contaminants will become entirely diluted and dispersed within the river thereby eliminating the potential for perturbations to coastal waters that interact with the three European Sites located downstream at Dublin Bay.

The absence of a functional surface water hydrological impact pathway between the project site and the Dublin Bay European Sites will ensure that the project will not have the potential to result in likely significant effects to the future conservation status of qualifying features of interest and special conservation interests for which these European Sites are designated and will not undermine the achievement of their site-specific conservation objectives. It addition, given the absence of a functional hydrological pathway connecting the project site to the three European Sites at Dublin Bay and the negligible risk posed by the project to the water quality of the River Liffey it was found that the project will not have the potential to combine with other projects to result in cumulative negative effects to the European Sites at Dublin Bay.

In light of the findings of this report it is the considered view of the authors of this Screening Report for Appropriate Assessment that it can be concluded by South Dublin County Council that the project is not likely, alone or in-combination with other plans or projects, to have a significant effect on any European Sites in view of their Conservation Objectives and on the basis of best scientific evidence and there is no reasonable scientific doubt as to that conclusion.

Accordingly, the competent authority is enabled to determine that it can be excluded, on the basis of objective information, that the project, individually or in combination with other plans or projects, will have a significant effect on any European Site.

REFERENCES

Bedri, Z., O'Sullivan, J., Bruen, M., (2012) An environmental consequence for Dublin Bay of a shift from hydro-carbon to other energy production methods. IWA World Congress on Water, Climate and Energy Dublin, Ireland, 14th – 18th May, 2012.

Camp, Dresser & McKee, (2012). Ringend Wastewater Treatment Works Extension Environmental Impact Statement. Report for Dublin City Council.

Department of the Environment Heritage and Local Government (DEHLG) (2010). Appropriate Assessment of Plans and Projects. Guidance for Local Authorities.

DHI (2018). Ringsend WwTP – EIAR Modelling Services: Water Qaulity Modelling. Report prepared for the Ringsend WWTP Upgrade Project.

Dowly, A. & Bedri, Z. (2007) *Modelling of Ringsend Discharge*. Report commissioned by EPA in association with IPPC licencing for Ringsend WwTW. Available online at: http://www.epa.ie/licences/lic_eDMS/090151b280269ef8.pdf

English Nature (1999). Habitats regulations guidance note no. 3 (HRGN No. 3). Determination of Likely Significant Effect under The Conservation (Natural Habitats &c) Regulations 1994.

EPA (2021). Ringsend Wastewater Treatment Plant Site Visit Report. See: http://www.epa.ie/licences/lic_eDMS/090151b2807a0a61.pdf

European Commission (2000). *Managing Natura 2000 sites*. *The provisions of Article 6 of the Habitats Directive 92/43/EEC*. Luxembourg.

European Communities (2001). 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. Luxembourg.

European Commission (1992). EU Habitats Directive.

Irish Water (2017). Annual Environmental Report 2017 for Ringsend Agglomeration.

Irish Water (2020). Annual Environmental Report 2019 for Ringsend Agglomeration.

NPWS (2015a) Conservation Objectives: North Bull Island SPA 004006. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

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 (2017a). South Dublin Bay River Tolka Estuary SPA: Natura 2000: Standard Data Form.

NPWS (2017a). North Bull Island SPA: Natura 2000: Standard Data Form.

O'Higgins T.G. and Wilson J.G. (2005). *Impact of the River Liffey discharge on nutrient and chlorophyll concentrations in the Liffey Estuary and Dublin Bay (Irish Sea)*. Estuarine and Coastal, Shelf Science, 64, 323-334.