Figure 1: Screening matrix

Brief description of the project or plan:

The Draft Masterplan

The Draft O Devaney Gardens Regeneration Masterplan is a guidance document prepared to co-ordinate and deliver the rejuvenation of a 5.6ha social housing estate located at O Devaney Gardens Dublin 7.

The social housing flat complex on O Devaney Gardens was constructed in the 1950's and formerly contained thirteen four storey apartment blocks. A total of 203 flat units existed on this site when it was in full occupancy. Four apartment blocks and a two storey commercial block have been demolished as part of the regeneration project. There are currently 93 units occupied.

The site is zoned Z13 under the 2005-2011 Dublin City Development Plan which seeks the social, economic and physical rejuvenation of an area.

The Site is zoned Z14 under the Draft 2011-2017 Dublin City Development Plan to seek the social, economic and physical development and/or rejuvenation of an area with mixed use, of which residential and Z6 would be the predominant uses.

Previous rejuvenation proposals were prepared under the Public Private Partnership model but subsequently collapsed causing delay in starting the regeneration programme.

In December 2008, the City Council committed itself to a new programme for the site's rejuvenation. The preparation of a plans guided by a masterplan process was agreed with the councillors and local community.

The masterplan sets a vision for the site and will ensure the delivery of the zoning objective to improve the quality of life for existing residents of the estate and to help regenerate the local neighbourhood.

The preparation of such plans or design briefs by the local authority for particularly important, sensitive or large scale development sites are advocated under Section 3.8 of the DoEHLG Guidelines Sustainable Residential Development in Urban Areas (May 2009).

The masterplan is a document prepared internally by Dublin City Council in consultation with the local community. It provides an in depth site analysis of the existing location and site character, identifies the opportunities for improvement and opportunities to create a positive synergy and connection with the adjoining city area.

To ensure that the social and economic issues are properly addressed, the masterplan provides an analysis of the population profile both for the immediate area and the wider neighbourhood adjoining. Community facility audits were carried out to ascertain the extent of social infrastructure, its capacity and interactions with residential areas in the north city centre. Opportunities for the site to deliver new and improved social infrastructure were identified through these audits.

The site is located adjoining historic housing areas with Victorian era terraces to the north (North Circular Road) and terraced cottages located to the north east and west boundaries. These streets are zoned as Residential Conservation Areas (Z2 zoning). An important historic institution, St Bricin's Military Hospital, adjoins the site to the east. Exploring ways to reconnect the site positively with the residential neighbourhood adjoining it is assessed within the masterplan.

The physical redevelopment of the site is envisaged across two main phases over a ten year period. The masterplan provides guidance across all these phases including infrastructure

provision, traffic and movement, height strategy, landuse, open space and urban design.

Proposed Projects Arising from the Masterplan

Dublin City Council will seek planning permission through Article 175 of the Planning and Development Act 2000 (as amended by the 2006 Strategic Infrastructure Act) for the Phase 1A development for mixed tenure housing), a neighbourhood park and infrastructural work.

The works proposed as part of Phase 1A will prepare a development site on Phase 1B which is envisaged within the masterplan as a mixed use neighbourhood centre inclusive of a retail supermarket, local shops and offices and community facilities at first floor level.

The remainder of Phase 1B may be developed as a residential scheme (such as a scheme for the elderly).

The site of Phase 1B will be developed privately in accordance with a building agreement and the masterplan. Although Phase 1B will require its own separate planning application, Phase 1A will include a detailed assessment of how it is designed at a masterplan level to ensure that both phases are developed in a coherent manner.

Phase 2 is to the south of Phase 1. The four existing apartment blocks on this part of the site will remain occupied while Phase 1A and Phase 1B are under construction. When completed, the remaining residents on site will be re-housed to Phase 1 and the four remaining blocks will be demolished.

Phase 2 will be developed privately in accordance with a building agreement and the masterplan. A residential scheme or part residential/part commercial scheme with accompanying open space is envisaged for Phase 2. The scale, design, land uses and movement strategy of Phase 2, as set out by the masterplan, will ensure optimal integration with Phase 1.

An EIS will be prepared for Phase 1A to ensure a robust cumulative assessment of Phase 1A in the context of all other phases as outlined in the masterplan. The Phase 1A planning application and EIS will be submitted to An Bord Pleanala for approval.

The first application is proposed at the northern end of the site correlating with both the cleared area of site at the north west corner and the site of existing apartment blocks (to be demolished prior to commencement of development) at the north east corner (in total c1.8ha).

Phase 1A will consist of :

110 residential units in four blocks (A-D) of which:

- 51 No. 3 bed units
- 47 No. 2 bed units.
- 12 No. 1 bed units.

The unit types include:

- 43 No. apartments.
- 31 No. 2 storey houses.
- 23 No. 3 storey houses.
- 7 No. 2 storey duplex.
- 6 No. Live Work Units.

Neighbourhood Park : 4,680 sq.m.

Phase 1B will consist of the mixed use neighbourhood centre and residential units. The masterplan sets out a vision for this area which will be the subject of a separate planning application for the detail. At masterplan level, Phase 1B is envisaged as the following:

Mixed Use Neighbourhood Centre

- 1,090 m² retail supermarket at ground floor.
- 790m² other commercial uses at ground floor.
- 1,280m² mixed community and office space at first floor of which c 585m² is potentially office based uses and 695m² community uses.

Other residential with Phase 1B: 48 residential units of which:

- 27 no: senior citizen units
- 6 no: end of terrace housing units
- 10 no: new terraced houses
- 5 no: live work units

Phase 2 is a site of 2.7ha and is envisaged as a residential site primarily with some scope for commercial uses (professional services and other office uses) intermixed. The masterplan sets out a vision for this area which will be the subject of a separate planning application for the detail. At masterplan level, Phase 2 is envisaged as the following:

240 residential units of mixed typology (similar to Phase 1)

Or

120 residential units and 8,000 m² commercial/office use.

Public open space of c 1,100 m² will accompany either option.

The overall indicative timescale to deliver the masterplan is ten years.

It is important to note that the proposed masterplan sits within a hierarchy of land-use plans and that the intention of the plan to provide an area-specific planning framework to deliver social, economic and physical rejuvenation in accordance with the site zoning objective under the 2005-2011 Dublin City Development Plan. The preparation of such plans and briefs for particularly important, sensitive or large scale development sites are advocated by the DoEHLG.

At a higher level, the emerging plan strategy accords with the Regional Planning Guidelines for the Greater Dublin Area 2004-2016 and the National Spatial Strategy 2002-2020. All of these policy documents support intensification, efficient use of land and sustainable mixed-use development within the Metropolitan Area.

Brief description of the Natura 2000 site:

Brief description of the Natura 2000 site:

There are no Natura 2000 sites within the boundary of the proposed masterplan.

Table A1 in Appendix 1 attached to this report lists the Natura 2000 sites that are within 15km of the plan area. Map A1 in Appendix 1 shows their locations in relation to the project site area. The qualifying features for each site have been obtained through a review of the site synopses available from the NPWS website (www.nwps.ie). The sites listed in the table include Special Areas of Conservation (SAC) under the EU Habitats Directive (92/43/EEC) and Special Protection Areas (SPA) under the EU Birds Directive (79/409/EEC).

The purpose of this project is to implement a development in accordance with the zoning objective policies set out for the project site under the Draft Dublin City Development Plan 2011-2017. The masterplan guiding this project falls directly within the tier of higher order plans including the overall city plan which has underwent an Appropriate Assessment process.

Stage 1 screening of the Draft Dublin City Development Plan 2011-2017 focused on which Natura 2000 sites are likely to be receivers of any impacts potentially of the City Development Plan and its policies. Impacts can be direct, indirect and/or cumulative. As a result of the screening of all twenty one Natura 2000 sites, it was found that the Development Plan could potentially impact, either directly or indirectly, on the following seven Natura 2000 sites within a 15km radius of the plan boundary:

1. Balydoyle Bay SAC
2. North Dublin Bay SAC
3. South Dublin Bay SAC
4. Glenasmole Valley SAC
5. North Bull Island SPA
6. Baldoyle Bay SPA
7. South Dublin Bay and River Tolka Estuary SPA

The Draft O Devaney Gardens Regeneration Masterplan guides urban development on a specific regeneration project site within the city centre. The guiding principles of the masterplan are derived directly from the City Development Plan and its policies. The masterplan is placed therefore within a tier of plans to deliver a specific project at a local level in accordance with the policies of a higher order plan within the hierarchy (the City Development Plan).

The Appropriate Assessment undertaken for the Draft Dublin City Development Plan 2011-2017 and the Natura 2000 sites identified within it after a screening process are considered relevant for this AA Screening Matrix report.

Full descriptions of these Natura 2000 sites are provided in Appendix 2 attached to this report. A synopsis of these sites is provided below.
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Table 1: Special Areas of Conservation (SAC)

Site Code	**Site Name**	**List of Annex I Habitats /Annex II Species**	**Distance from Project Site**
000199	Baldoyle Bay SAC	**Annex I Habitats:** Salicornia and other Annuals Colinizing Mud and Sand, Mediterranean salt meadows, Atlantic salt meadows, Mudflats and Sandflats not covered by	c13.4km

		seawater at low tide and Spartina Swards.	
000206	North Dublin Bay SAC	**Annex I Habitats :** Tidal mudflats and sandflats, Atlantic salt meadows, Spartina swards, Mediterranean salt meadows, Salicornia mud, Marram dunes, fixed dunes, Embryonic shifting dunes and annual vegetation of drift lines. **Annex II Species**: Petalwort.	c7.4km
000210	South Dublin Bay SAC	**Annex I Habitats :** Tidal mudflats and sandflats **Annex II Species:** Petalwort.	c7.6km
001209	Glenasmole Valley SAC	**Annex I Habitats :** Calcareous Fen, Petrifying Springs.	c13.35km

Table 2: Special Protection Areas

Site Code	**Site Name**	**Annex I Species**	**Distance from Project Site**
004006	North Bull Island SPA	Light bellied Brent Goose, Shelduck, Pintail, Shoveler, Oystercatcher, Grey Plover, Knot, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Redshank, Turnstone and 20,000 wintering waterbirds. Additional Special Conservation Interests include: Teal, Ringed Plover, Golden Plover, Sanderling, Curlew, Black-headed gull, wetland and water birds.	c4.3 km
004016	Baldoyle Bay SPA	Light bellied Brent Goose, Ringed Plover and Bar-tailed Godwit. Additional Special Conservation Interests include: Shelduck, Golden Plover, Grey Plover, Dunlin, Black Headed Gull and Wetland and Waterbirds.	c11.7km
004024	South Dublin Bay and River Tolka Estuary SPA	Light bellied Brent Goose, Knot, Sanderling, Bar-tailed Godwit, Redshank, Roseate Tern, Common Tern and Artic Tern. Additional Special Conservation Interests include: Oystercatcher, Ringed Plover, Golden Plover, Grey Plover, Dunlin, Black Headed Gull and wetland and waterbirds.	c7.6km

The closest Natura 2000 site is North Bull Island SPA(c4.3km) followed by North Dublin Bay SAC (c 7.4 km), South Dublin Bay SAC and South Dublin Bay and River Tolka Estuary SPA (both c 7.6 km).

Assessment criteria

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 Natura 2000 site:

Impacts can occur as individual and direct, as indirect and cumulatively.

The proposals seek to continue demolition of apartment blocks that have a poor standard of residential amenity. A replacement development of new buildings will provide residential units, community buildings, commercial units and a public park in addition to a new street layout and other ancillary works.

These works are proposed on a city centre site with an established precedent of development (residential and commercial buildings some of which are already demolished). The project seeks to significantly improve the quality of the estate including its architecture, residential amenity for residents, its activities (commercial and community uses) and improve the quality of public open space (a new neighbourhood park is proposed).

None of these works are considered likely to create a direct individual impact on a Natura 2000 site. The project site is physically separated from the closest designated site (North Bull Island SPA) by a distance of c4.3km.

However, notwithstanding physical separation, indirect impacts could occur for any project if aspects of the construction and operation stage of the project are not addressed correctly with respect to minimising potential to impact on a conservation site. Indirect impacts could transfer to a conservation site through water or by air if the appropriate mitigation measures are not put in place.

To minimize the potential for indirect impacts, effective mitigation measures will be put in place in the project design, verified by planning conditions and implemented at construction stage by contractors. An EIS is being carried out for the Phase 1A planning application and mititigation measures will derive from this process. This will provide a series of robust mitigation measures which will be implemented where appropriate.

The following are examples of potential mitigation measures through an EIS process (it is important to note that these measures are examples of what an EIS process can recommend. These measures in themselves are not part of the AA Screening and do not alter conclusions arising from the screening matrix):

- To minimize any possible contamination of surface watercourses in the vicinity, which would ultimately discharge into the Liffey, a settlement pond and interceptor trenches will be constructed along the south boundary (lowest contour level) of the site.

- Where it is necessary to store diesel or oil fuels on site, they should be stored in appropriate containers in bunded storage areas.

- Surface water collecting in excavations, should be directed to on site settlement ponds, where silt removal will be facilitated prior to discharge into the sewer system to further reduce the possibility of contaminants entering the local water system.

- Dust limit values will be set and dust will be suppressed at source to reduce the risk of dust spreading off site. Such measures will include sprinklers, wheel washing measures, dust nets above site hoarding etc.

The operation stage of the project will not involve any process that would cause a direct impact on a Natura 2000 site. The uses proposed (residential, community, commercial and public open space) will replace an existing social housing scheme with a higher quality mixed use scheme. The character of development proposed is in accordance with Development Plan policy for this location and will integrate well with established character. In particular, the project will enable higher standards in design to be used including best practice in sustainable design and green technology.

All plant equipment, heating and ventilation systems and connections to the water and drainage network will be in accordance with best practice and appropriate mitigation measures. The design in particular will provide highly energy efficient buildings which will minimize energy waste and lessen reliance on fossil fuels.

Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 site by virtue of the following:

Size and scale

The masterplan provides a framework for the re-development of a 5.6ha brownfield site in a residential area close to the city centre. The masterplan will ensure a careful co-ordination of the appropriate form of development to integrate the new scheme successfully with the existing streets adjoining it. The quantum of development is not significant insofar as the scale of buildings proposed will respect the scale and character of buildings adjoining the site (2/3/4 storey development). The residential character proposed is to create high density low scaled family housing in a city centre context. Own door terraced housing units are provided as the predominant housing type.

The increase in population (1,810 potential based on bed space provision) is not significant for a site close to the city centre. The new development will replace 203 units which formerly occupied the site and provide a higher quality living environment for existing and future residents. The project facilitates the sustainable regeneration of the estate.

Land-take

The masterplan co-ordinates development over 5.6ha of brownfield land which is characterised by low quality housing and underused land. The project will facilitate an improvement in the living environment and physical environment of the site. It promotes the sustainable re-use of existing zoned and serviced urban land.

Distance from the Natura 2000 site or key features of the site

The nearest Natura 2000 site is North Bull Island SPA which is c4.3km distant from the proposed masterplan boundary. The masterplan is not predicted to have any likely impact on the key features or the conservation function of any Natura 2000 sites.

Resource requirements (water abstraction etc.)

Resource supply, including potable water, will be provided from existing municipal infrastructure. In this regard, it is relevant to note that the potential development capacity of the development sites (c400 residential units and c10, 500m² commercial potential) and the consequent additional demand for water supply, is relatively minor in the context of city-wide and regional demands and particularly so, with regard to the likely implementation over a ten year period.

In addition, the planned capital projects for water production facilities at a regional level include the extension of the Ballymore Eustace and Leixlip Water Treatment Works scheduled for completion by 2011. Any potential indirect or secondary impact on the conservation function of any Natura 2000 site as a result increased population equivalent (P.E) demand for potable water supply will be subject to a separate higher level Appropriate Assessment / Strategic Environmental Assessment (SEA) at a regional level or strategic level in the case of the utilization of new water sources, namely the Shannon.

Emissions (disposal to land, water or air)

No predicted likely direct impact on the conservation function of any Natura 2000 site is predicted as a result of the implementation of the development strategy of the masterplan, which accords with the zoning objective for Z13 sites as set out in the 2005-2011 Dublin City Development Plan.

The project proposes an appropriate form of urban development and landuses that are expected to occur in a city centre context. Both the construction and operation stages of the plan will be guided by robust mitigation measures derived from the planning and EIS process which can be placed on planning conditions and as requirements for the building contractor. Appropriate measures including the use of interceptors, filters and suppression/filtering of emissions at source will minimize the potential for impacts.

There are no watercourses on site, the nearest being the River Liffey (c390 meters south of the site). Discharge of surface water into the water drainage system will be appropriately intercepted to trap potentially harmful pollutants.

The bedrock geology of the area is of the Lower Carboniferous period, a mostly limestone bedrock. The development lands are within a “Locally Important Aquifer” and the bedrock is “Moderately Productive only in Local Zones” (Source :GSI).

During the construction stages, excavation requirements are not significant owing to existing site levels. Potential to impact on groundwater from spills and leaks will be minimized through effective mitigation measures including the use of interceptors. A particular mitigation that will be sought through the planning and EIS process will be:

- In the event that groundwater is encountered during the construction phase, mitigation measures will include dewatering by pumping to an appropriate treatment facility prior to discharge. Other measures would include excluding contaminated materials such as fuels and hydrocarbons from sensitive parts of the site i.e highly vulnerable groundwater areas.

The most likely potential indirect or secondary impact on a Natura 2000 site is by way of effluent discharge from the Ringsend Waste Water Treatment Plant which serves the entire Dublin Region to Dublin Bay. The potential population increases arising from re-development of the entire masterplan is circa 1,810 persons which would be a relatively modest increase with regard to the existing population of the city centre and with regard also to population forecasts of the Regional Planning Guidelines for the Greater Dublin Area (563,512 persons in Dublin City by 2016 and 1.98m in the GDA region in the same period).

Notwithstanding the above, the development management process, by way of conditions for

grant of permissions, is a mechanism to ensure that all new urban development as a result of the masterplan strategy will be preceded by adequate provision of wastewater treatment capacity.

As an EIS is being prepared to accompany the Phase 1A local authority proposal and in its brief will include a cumulative assessment of all aspects of the masterplan including infrastructure requirements and environmental impacts, the process will ensure no potential indirect or secondary impact on the conservation function of any Natura 2000 site.

The provision of adequate wastewater treatment capacity is a regional issue which is being addressed by way of the Greater Dublin Strategic Drainage Study (GDSDS) and accompanying SEA. The GDSDS identifies population numbers for the region and sets out a capital investment programme for the delivery of major drainage infrastructure provision. The capital investment programme includes provision for the Ringsend Treatment Plant Upgrade and a 22km Orbital Sewer for a new North County Treatment Plant.

The Ringsend Treatment Plant Upgrade or extension will cater for increases in loading from domestic and non-domestic sources and is scheduled for completion by 2015. In addition, the provision of the Orbital Sewer and North County Treatment Plant will cater for the wastewater treatment needs of South Dublin County Council, which is presently served by the Ringsend Plant. The delivery of this infrastructure, for which a Draft SEA has been carried out to date, will re-direct the drainage from South Dublin County Council and free up significant capacity at the Ringsend Plant. These regional works are scheduled for completion by 2018.

The Ringsend Treatment Plant currently serves the Dublin Region with a population of circa 1.6 million. Accordingly, the potential population increase of circa 1,810 persons over a ten - year period due to redevelopment and intensification of the key in-fill sites identified under the plan strategy, are relatively minor and insignificant in the context of the Region.

The issue of drainage infrastructure provision at a city-wide and regional level is also addressed within the Draft 2011-2017 Dublin City Development Plan.

Excavation requirements

Basement level excavation is not required for the majority of new development on site. The housing typologies proposed envisage high density terraced housing as the predominant house type. There are opportunities within the design to incorporate parking within garden designs or on street. An exception may be the provision of basement car parking to accompany the Phase 1B neighbourhood centre (a site of c0.5ha). This car park area would not be extensive and would serve the neighbourhood uses solely (maximum 100 cars potentially).

Ground condition surveys have been undertaken and tested. No impact on groundwater tables are anticipated. Effective mitigation measures can be placed on each phase through the planning and EIS process to reduce the risk of direct and indirect impacts during construction and operation stages on hydrogeology.

The planning process will ensure that such works are acceptable and are fully assessed with respect to direct and indirect impacts.

Transportation requirements

The site is located in a city centre context with close access to a wide range of city centre amenities. The site is within walking distance of Heuston Station. The main road through the estate, connecting the North Circular Road with Infirmary Road via Montpelier Gardens, is a route for Dublin Bus Services (No 46A). The redevelopment of the estate envisages a

realignment of the main route to create an attractive boulevard fronted by quality housing. Bus services would be retained along this new route with a bus stop facility positioned to interact with the new park and neighbourhood centre.

The street design for the scheme promotes home zones to enhance the residential environment and reduce through traffic. Pedestrian and cyclist routes connecting with the residential streets east of the site (connecting with Stoneybatter and Grangegorman) are promoted.

Car parking provision will comply with Development Plan policy. Residential parking will be provided in assigned spaces as part of house design (garages, front garden parking) and on street as part of the street design. The mixed use services included within the neighbourhood centre will benefit from shared parking at either basement or roof level.

Duration of construction, operation, decommissioning etc

The masterplan proposes two phases over a ten year period. Demolition of apartment blocks at the north end of the site will proceed, following a Part 8 planning process, once they become vacant to remove buildings that could attract vandalism and anti social behavior. It is envisaged that the site of Phase 1A and Phase 1B will be a cleared site once development commences post planning permission in 2011/2012. Once Phase 1 is completed, residents will relocated to new homes and the four remaining blocks on the site of Phase 2 will be demolished. Phase 2 will be completed over the period 2014-2017.

Other.

Non applicable

Describe any likely changes to the site arising as a result of:

- **reduction of habitat area:**

  Not Applicable.

- **disturbance to key species;**

  Not Applicable.

- **habitat or species fragmentation;**

  Not Applicable.

- **reduction in species density;**

  Not Applicable.

- **changes in key indicators of conservation value (water quality etc.);**

  Not Applicable (Development Control Mitigation Measures)

- **climate change.**

  Not Applicable.

Describe any likely impacts on the Natura 2000 site as a whole in terms of:

- **interference with the key relationships that define the structure of the site;**

  No predicted likely impact on the conservation function of any Natura 2000 sites.

- **interference with key relationships that define the function of the site.**

  No predicted likely impact on the conservation function of any Natura 2000 sites.

Provide indicators of significance as a result of the identification of effects set out above in terms of:

- **loss;**

  Not Applicable.

- **fragmentation;**

  Not Applicable.

- **disruption;**

  Not Applicable.

- **disturbance;**

  Not Applicable.

- **change to key elements of the site (e.g. water quality etc.).**

  Not Applicable (Development Control Mitigation Measures)

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:

No predicted likely impact on the conservation function of any Natura 2000 Site.

Figure 2: Finding of no significant effects report

Name of project or plan:

The Draft O Devaney Gardens Regeneration Masterplan.

The masterplan is prepared to guide developments and achieve the site zoning objective to seek social, economic and physical rejuvenation of an area.

The preparation of such plans or design briefs by the local authority for particularly important, sensitive or large scale development sites are advocated under Section 3.8 of the DoEHLG Guidelines Sustainable Residential Development in Urban Areas (May 2009).

Name and location of Natura 2000 site:

No Natura 2000 sites are located in the masterplan area.

Description of the project or plan:

As per description in Section 1.

Is the project or plan directly connected with or necessary to the management of the site (provide details)?

No

Are there other projects or plans that together with the project or plan being assessed could affect the site (provide details)?

No

The assessment of significance of effects

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

No predicted likely impact on the conservation function of any Natura 2000 sites.

Explain why these effects are not considered significant:

The masterplan seeks to guide the re-use of brownfield land in a city centre context. The ethos of using brownfield land efficiently in an existing city centre context is sustainable in principal and advocated by city, regional and national policy.

The regeneration project is significant for its potential to improve the image of this estate and provide a high quality environment for residents of the site and its surroundings.

The impact of the masterplan is beneficial for both the site, the local area and the city overall in the long term.

The site is designated as a Strategic Development and Regeneration Area under the Draft 2011-2017 Development Plan for example.

The planning application process, in particular the Phase 1A local authority development which includes an EIS, is robust and will ensure that the appropriate form of development proceeds with each phase with no negative impacts on the environment including sites with an important conservation value.

Whilst important for the potential benefits the project will deliver to the local area, the site of the masterplan (5.6ha) is modest with respect to the potential population and other activities generated on it. The new scheme will replace 203 social housing units with a higher quality mixed tenure neighbourhood inclusive of a park and local scale facilities. The increased density will ensure a sustainable mix of new house types and tenure. The facilities will attract interaction between residents in the wider locality and residents from the site itself to promote integration. Physical infrastructure works will improve the capacity of the site and modernise it to accommodate a higher density of development than the previous occupancy (203 units).

The closest Natura 2000 site is North Bull Island SPA which is c4.3 km distant and is considered sufficiently removed to create any direct impacts. The planning process will ensure that no indirect impacts arise, in particular associated with landuses and infrastructure requirements.

List of agencies consulted: provide contact name and telephone or e-mail address:

The Manager, Development Applications Unit,
Department of Environment, Heritage and Local Government, Dun Sceine, Harcourt Lane, Dublin 2. (Telephone: 01 833 3190)

Mr. John Wynne, Co-Ordination Unit, Department of Communications, Marine & Natural Resources, Leeson Lane, Dublin 2 (Telephone: 01 678 3051)

Mr. Tadhg O'Mahony, Environmental Protection Agency, Regional Inspectorate, Inniscarra, County Cork (Telephone: 021 487 5540)

Response to consultation:

Awaiting Response to AA Screening Referral

Data collected to carry out the assessment

Who carried out assessment?

The Planning Department, Dublin City Council in consultation with an EIS Team working on a Phase 1 planning application within the Masterplan Area (led by John Spain and Associates Planning Consultants and ecologist Niamh Roche MIEEM)

Sources of data:

Existing NPWS Data, Census Data, Plan Preparation Process

Information / Data from the Environment & Engineering Department (Strategic Planning & Project Management Division).

Level of assessment completed:

Desktop Study

Where can the full results the assessment be accessed and viewed?

This document contains the full results of the Appropriate Assessment Screening exercise. A screening statement will be included in the publication of the masterplan document and on public display at the time of consultations on the draft plan. A screening statement will also be placed on the City Council's web site accompanying the masterplan.

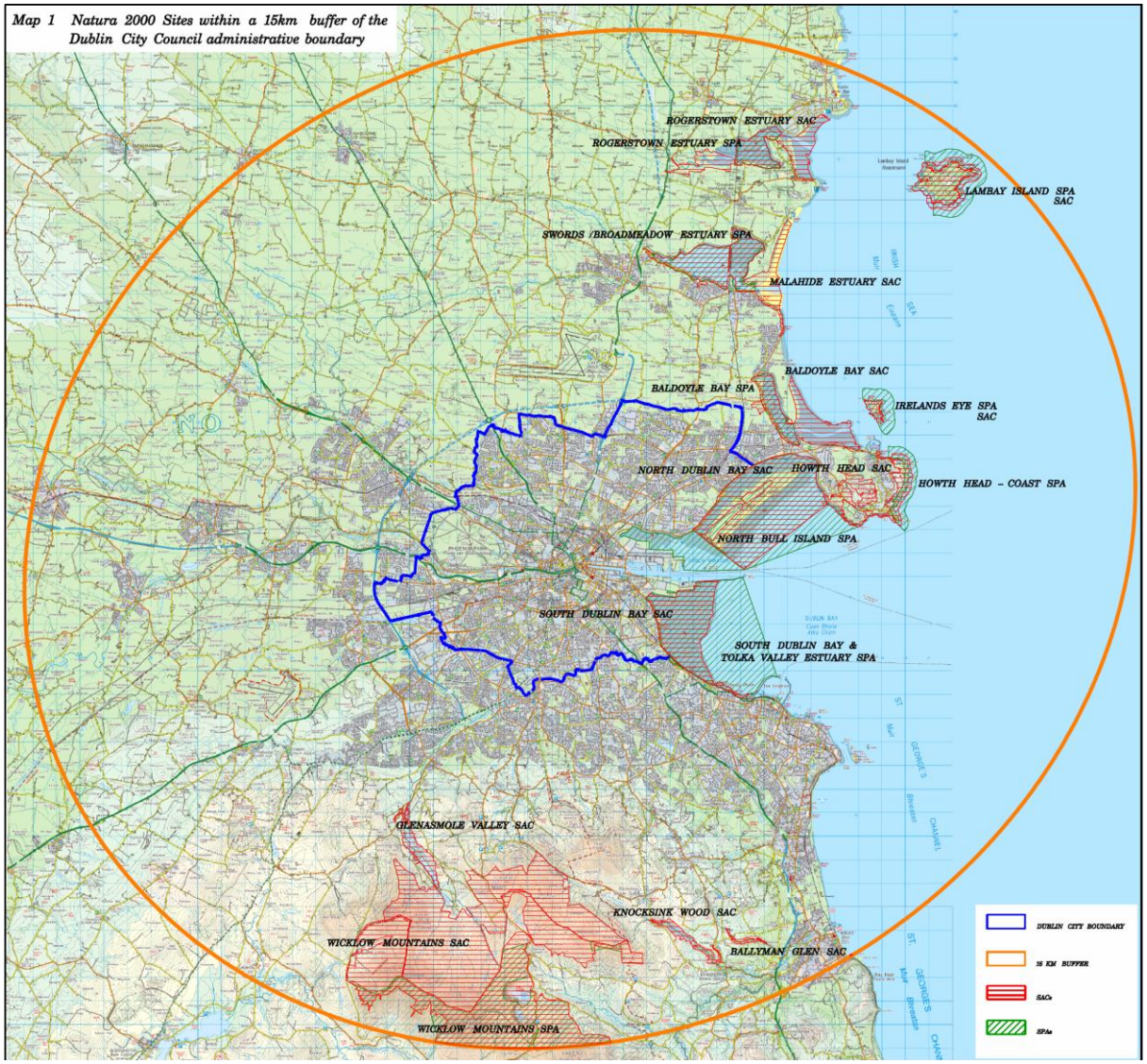
Appendix A1: Natura 2000 Sites within a 15kn Radius of the DCC Boundary (Source: Appropriate Assessment of the Draft Dublin City Development Plan).

Site Code	Site Name	Qualifying Feature
000199	**Baldoyle Bay SAC**	habitats listed on Annex I: Salicornia and other Annuals Colonizing Mud and Sand, Mediterranean salt meadows, Atlantic salt meadows, Mudflats and Sandflats not covered by seawater at low tide and *Spartina* Swards.
000202	**Howth Head SAC**	habitats listed under Annex I: Vegetated Sea Cliffs of the Atlantic and Baltic Coasts and European Dry Heaths.
000204	**Lambay Island SAC**	habitats listed under Annex I: Vegetated sea cliffs of the Atlantic and Baltic Coasts. species listed under Annex II: Grey Seal
000205	**Malahide Estuary SAC**	habitats listed on Annex I: Fixed Coastal Dunes with Herbaceous Vegetation (Grey Dunes), Mudflats & Sand flats not covered by seawater at low tide, Atlantic Salt Meadows, Spartina Swards, Mediterranean Salt Meadows, Salicornia & other annuals colonising mud and sand and Shifting Dunnes along the shore line with *Ammophila arenaria* (White Dunes).
000206	**North Dublin Bay SAC**	habitats listed on Annex I: Tidal mudflats and sandflats, Atlantic salt meadows, *Spartina* swards, Mediterranean salt meadows, *Salicornia* mud, Marram dunes, fixed dunes, Embryonic shifting dunes and annual vegetation of drift lines. Annex II: Petalwort
000208	**Rogerstown Estuary SAC**	habitats listed on Annex I: Mudflats and Sandflats not covered by sea water at low tide, Estuaries, *Spartina* Swards, Atlantic Salt Meadows, Mediterranean Salt Meadows, Shifting Dunes along the Shoreline with *Ammophila arenaria*, Fixed Coastal Dunes with Herbaceous Vegetation (Grey Dunes)* and Salicornia and other Annuals Colonizing Mud and Sand.
000210	**South Dublin Bay SAC**	habitats listed on Annex I: Tidal mudflats and sandflats. Annex II: Petalwort
000713	**Ballyman Glen SAC**	habitats listed on Annex I: alkaline fen and petrifying spring/seepage areas.
000725	**Knocksink Wood SAC**	habitats listed on Annex I: petrifying springs and wet alluvial forest.
001209	**Glenasmole Valley SAC**	habitats listed on Annex I: calcareous fen, petrifying springs and one other habitat.
002121	**Wicklow Mountains SAC**	habitats listed on Annex I: • Blanket bog; • Species-rich *Nardus* grasslands on siliceous substrates in mountain areas (and submountain areas in continental Europe);

Site Code	Site Name	Qualifying Feature
		• Old oak woods with *Ilex* and *Blechnum* in the British Isles; • Northern Atlantic wet heaths with *Erica tetralix;* • Dry heaths; • Alpine and boreal heaths; • Siliceous scree of the montane to snow levels (*Androsacetalia alpinae* and *Galeopsetalia ladani*); • Siliceous rocky slopes with chasmophytic vegetation; • Calcareous rocky slopes with chasmophytic vegetation; • Oligotrophic to mesotrophic standing waters with the vegetation of the *Littorelletalia uniflorarae* and/or *Isoete-Nanojuncetea* status; • Dystrophic lakes Annex II: Otter
002193	**Ireland's Eye SAC**	habitats listed on Annex I: Vegetated Sea Cliffs of the Atlantic and Baltic Coasts and Perennial Vegetation of Stony Banks.
004006	**North Bull Island SPA**	species: Light-bellied Brent Goose, Shelduck, Pintail, Shoveler, Oystercatcher, Grey Plover, Knot, Dunlin, Black-tailed Godwit, Bar-tailed Godwit Redshank, Turnstone and 20,000 wintering waterbirds. Additional Special Conservation Interests include: Teal, Ringed Plover, Golden Plover, Sanderling, Curlew, Black-headed Gull and wetland & waterbirds.
004015	**Rogerstown Estuary SPA**	species: Light-bellied, Brent Goose, Shelduck, Oystercatcher, Ringed Plover and Knot. Additional Special Conservation Interests include: Greylag Goose, Shoveler, Grey Plover, Dunlin, Black-tailed Godwit, Redshank and Wetland & Waterbirds.
004016	**Baldoyle Bay SPA**	species: Light-bellied Brent Goose, Ringed Plover and Bar-tailed Godwit. Additional Special Conservation Interests include: Shelduck, Golden Plover, Grey Plover and Wetland & Waterbirds.
004024	**South Dublin Bay And River Tolka Estuary SPA**	species: Light-bellied Brent Goose, Knot, Sanderling, Bar-tailed Godwit, Redshank, Roseate Tern, Common Tern and Artic Tern. Additional Special Conservation Interests include: Oystercatcher, Ringed Plover, Golden Plover, Grey Plover, Dunlin, Black-headed Gull and Wetland & waterbirds.
004025	**Broadmeadow/Swords Estuary SPA**	species: Light-bellied Brent Goose, Goldeneye and Black-tailed Godwit. Additional Special Conservation Interests include: Great Crested Grebe, Shelduck, Pintail, Red Breasted Merganser, Oystercatcher, Golden Plover, Grey Plover, Knot, Dunlin, Bar-tailed Godwit, Redshank and Wetland & Waterbirds
004069	**Lambay Island SPA**	species: Cormorant, Shag, Lesser Black-backed Gull, Herring Gull, Kittiwake and Guillemot. Additional Special Conservation Interests include: Razorbill, Fulmar, Greylag Goose and Puffin.
004113	**Howth Head Coast SPA**	species: Kittiwake

Site Code	Site Name	Qualifying Feature
004117	**Ireland's Eye**	species: Cormorant. Additional Special Conservation Interests include: Herring Gull, Kittiwake, Guillemot and Razorbill
004040	**Wicklow Mountains SPA**	species Merlin and Peregrine.

Appendix A2: Natura 2000 Sites within a 15KM Radius of DCC Boundary (Source: Appropriate Assessment of the Draft Dublin City Development Plan 2011-2017).



Appendix 2: Full Description of Nature 2000 Sites (source Appropriate Assessment of the Draft Dublin City Development Plan 2011-2017: Appendix II Baseline Data of Natura 2000 Sites).

Description of the Natura 2000 Sites		
Name	Natura 2000 Designation	Basis
Baldoyle Bay SAC	Special Area of Conservation (IE0000199)	EU Habitats Directive (92/43/EEC)
Site Description	Baldoyle Bay SAC Baldoyle Bay extends from just below Portmarnock village to the west pier at Howth, Co. Dublin. It is a tidal estuarine bay protected from the open sea by a large sand dune system. Two small rivers, the Mayne and the Sluice, flow into the bay. The site contains four habitats listed on Annex I of the EU Habitats directive: *Salicornia* mud, Mediterranean salt meadows, Atlantic salt meadows and Tidal mudflats. Large areas of intertidal flats are exposed at low tide. These are mostly sands but grade to muds in the inner sheltered parts of the estuary. Extensive areas of Common Cord-grass (*Spartina anglica*) occur in the inner estuary. Both the Narrow-leaved Eelgrass (*Zostera angustifolia*) and the Dwarf Eelgrass (*Z. noltii*) are also found here. During summer, the sandflats of the sheltered areas are covered by mats of green algae (*Enteromorpha* spp. and *Ulva lactuca*). The sediments have a typical macrofauna, with Lugworm (*Arenicola marina*) dominating the sandy flats. The tubeworm *Lanice conchilega* is present in high densities at the low tide mark and the small gastropod *Hydrobia ulvae* occurs in the muddy areas, along with the crustacean *Corophium volutator*. Areas of saltmarsh occur near Portmarnock Bridge and at Portmarnock Point, with narrow strips along other parts of the estuary. Species such as Glasswort (*Salicornia* spp.), Sea-purslane (*Halimione portulacoides*), Sea Plantain (*Plantago maritima*) and Sea Rush (*Juncus maritimus*) are found here. Portmarnock Spit formerly had a welldeveloped sand dune system but this has been largely replaced by golf courses and is mostly excluded from the site. A few dune hills are still intact at Portmarnock Point, and there are small dune hills east of Cush Point and below the Claremont Hotel. These are mostly dominated by Marram (*Ammophila arenaria*), though Lyme-grass (*Leymus arenarius*) is also found. The site includes a brackish marsh along the Mayne River. Soils here have a high organic content and are poorly drained, and some pools occur. Rushes (*Juncus* spp.) and salt tolerant species such as Common Scurvygrass (*Cochleria officinalis*) and Greater Sea-spurrey (*Spergularia media*) are typical of this area. Knotted Hedgeparsley (*Torilis nodosa*), a scarce plant in eastern Ireland, has been recorded here, along with Brackish Water-crowfoot	

	(*Ranunculus baudotti*), a species of brackish pools and ditches which has declined in most places due to habitat loss. Two plant species, legally protected under the Flora (Protection) Order, 1999, occur in the Mayne marsh: Borrer's Saltmarsh-grass (*Puccinellia fasciculata*) and Meadow Barley (*Hordeum secalinum*). Baldoyle Bay is an important bird site for wintering waterfowl and the inner part of the estuary is a Special Protection Area under the EU Birds Directive as well as being a Statutory Nature Reserve. Internationally important numbers of Pale-bellied Brent Geese (418) and nationally important numbers of two Annex I Birds Directive species - Golden Pover (1,900) and Bar-tailed Godwit (283) - have been recorded. Four other species also reached nationally important numbers: Shelduck (147), Pintail (26), Grey Plover (148) and Ringed Plover (218) - all figures are average peaks for four winters 1994/95 to 1997/1998. Breeding wetland birds at the site include Shelduck, Mallard and Ringed Plover. Small numbers of Little Tern, a species listed on Annex I of the EU Birds Directive, have bred on a few occasions at Portmarnock Point but not since 1991. Because the area surrounding Baldoyle Bay is densely populated, the main threats to the site include visitor pressure, disturbance to wildfowl and dumping. In particular, the dumping of spoil onto the foreshore presents a threat to the value of the site. Baldoyle Bay is a fine example of an estuarine system. It contains four habitats listed on Annex I of the EU Habitats Directive and has two legally protected plant species. The site is also an important bird area and part of it is a Special Protection Area under the EU Birds Directive, as well as being a Statutory Nature Reserve. It supports internationally important numbers of Brent Geese and nationally important numbers of six other species including two Annex I Birds Directive species.	
Qualifying Interests (Species)	Species	Basis
	N/A	Annex II, EU Habitats Directive
Qualifying Interests (Habitats)	Habitat types (as in Annex I of the EU Habitats Directive), (Codes)	
	Salicornia and other Annuals Colonizing Mud and Sand Mediterranean salt meadows Atlantic salt meadows Mudflats and Sandflats not covered by seawater at low tide *Spartina* Swards	1310 1410 1330 1140 1320
Conservation Objectives	**Objective 1:** To maintain the Annex I habitats for which	

	the cSAC has been selected at favourable conservation status: Salicornia and other Annuals Colonizing Mud and Sand, Mediterranean Salt Meadows, Atlantic Salt Meadows, Mudflats and Sandflats not covered by seawater at low tide, *Spartina* Swards. **Objective 2:** To maintain the extent, species richness and biodiversity of the entire site **Objective 3:** To establish effective liaison and cooperation with landowners, legal users and relevant authorities.

Description of the Natura 2000 Sites		
Name	Natura 2000 Designation	Basis
North Dublin Bay SAC	Special Area of Conservation (IE0000206)	EU Habitats Directive (92/43/EEC)
Site Description	North Dublin Bay 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. The island is a sandy spit which formed after the building of the South Wall and Bull Wall in the 18th and 19th centuries. It now extends for about 5 km in length and is up to 1 km wide in places. A well-developed and dynamic dune system stretches along the seaward side of the island. Various types of dunes occur, from fixed dune grassland to pioneer communities on foredunes. Marram Grass (Ammophila arenaria) is dominant on the outer dune ridges, with Lyme Grass (Leymus arenarius) and Sea Couchgrass (Elymus farctus) on the foredunes. Behind the first dune ridge, plant diversity increases with the appearance of such species as Wild Pansy (Viola tricolor), Kidney Vetch (Anthyllis vulneraria), Bird's-foot Trefoil (Lotus corniculatus), Rest Harrow (Ononis repens), Yellow Rattle (Rhinanthus minor) and Pyramidal Orchid (Anacamptis pyramidalis). In these grassy areas and slacks, the scarce Bee Orchid (Ophrys apifera) occurs. About 1 km from the tip of the island, a large dune slack with a rich flora occurs, usually referred to as the 'Alder Marsh' because of the presence of Alder trees (Alnus spp). The water table is very near the surface and is only slightly brackish. Saltmarsh Rush (Juncus maritimus) is the dominant species, with Meadow Sweet (Filipendula ulmaria) and Devil's-bit (Succisa pratensis) being frequent. The orchid flora is notable and includes Marsh Helleborine (Epipactis palustris), Common Twayblade (Listera ovata), Autumn Lady's-tresses (Spiranthes spiralis) and Marsh orchids (Dactylorhiza spp.). Saltmarsh extends along the length of the landward side of the island. The edge of the marsh is marked by an eroding edge which varies from 20 cm to 60 cm high. The marsh can be zoned into different levels according to the vegetation types present. Towards the tip of the island, the saltmarsh grades naturally into fixed dune vegetation.	

	The island shelters two intertidal lagoons which are divided by a solid causeway. The sediments of the lagoons are mainly sands with a small and varying mixture of silt and clay. The north lagoon has an area known as the "Salicornia flat", which is dominated by Salicornia dolichostachya, a pioneer Glasswort species, and covers about 25 ha. Tassel Weed (Ruppia maritima) occurs in this area, along with some Eelgrass (Zostera angustifolia). Eelgrass (Z. noltii) also occurs in Sutton Creek. Cordgrass (Spartina anglica) occurs in places but its growth is controlled by management. Three Rare plant species legally protected under the Flora Protection Order 1987 have been recorded on the North Bull Island. These are Lesser Centaury (Centaurium pulchellum), Hemp Nettle (Galeopsis angustifolia) and Meadow Saxifrage (Saxifraga granulata). Two further species listed as threatened in the Red Data Book, Wild Sage (Salvia verbenaca) and Spring Vetch (Vicia lathyroides), have also been recorded. A rare liverwort, Petalophyllum ralfsii, was first recorded from the North Bull Island in 1874 and has recently been confirmed as being still present there. This species is of high conservation value as it is listed on Annex II of the E.U. Habitats Directive. The North Bull is the only known extant site for the species in Ireland away from the western seaboard. North Dublin Bay is of international importance for waterfowl, the following species occurred in internationally important numbers: Brent Geese; Knot ; Bar-tailed Godwit. A further 14 species occurred in nationally important concentrations - Shelduck; Wigeon; Teal; Pintail; Shoveler; Oystercatcher; Ringed Plover; Grey Plover; Sanderling; Dunlin; Blacktailed Godwit; Curlew; Turnstone and Redshank. Some of these species frequent South Dublin Bay and the River Tolka Estuary for feeding and/or roosting purposes . The tip of the North Bull Island is a traditional nesting site for Little Tern. However, nesting attempts have not been successful since the early 1990s. Ringed Plover, Shelduck, Mallard, Skylark, Meadow Pipit and Stonechat also nest. A well-known population of Irish Hare is resident on the island. The invertebrates of the North Bull Island have been studied and the island has been shown to contain at least seven species of regional or national importance in Ireland (Orders Diptera, Hymenoptera, Hemiptera). The main landuses of this site are amenity activities and nature conservation. The North Bull Island is the main recreational beach in Co Dublin and is used throughout the year. Much of the land surface of the island is taken up by two golf courses. Two separate Statutory Nature Reserves cover much of the island east of the Bull Wall and the surrrounding intertidal flats. The site is used regularly for educational purposes. North Bull Island has been designated a Special Protection Area under the E.U. Birds Directive and it is also a

	statutory Wildfowl Sanctuary, a Ramsar Convention site, a Biogenetic Reserve, a Biosphere Reserve and a Special Area Amenity Order site. This site is an excellent example of a coastal site with all the main habitats represented. The holds good examples of ten habitats that are listed on Annex I of the E.U. Habitats Directive; one of these is listed with priority status. Several of the wintering bird species have populations of international importance, while some of the invertebrates are of national importance. The site contains a numbers of rare and scarce plants including some which are legally protected. Its proximity to the capital city makes North Dublin Bay an excellent site for educational studies and research.	
Qualifying Interests (Species)	Species	Basis
North Dublin Bay	Petalwort (Petalophyllum ralfsii)	Annex II EU Habitats Directive
Qualifying Interests (Habitats)	Habitat types (as in Annex 1 of the Habitats Directive), (Codes)	
	Fixed dunes Marram dunes Embryonic shifting dunes Dune slack Vegetation Drift lines Salicornia mud Atlantic salt meadows Mediterranean salt meadows Tidal mudflats	2130* 2120 2110 2190 1210 1310 1330 1410 1140 *indicates priority Habitat
Conservation Objectives	**Objective 1:** To maintain the Annex I habitats for which the cSAC has been selected at favourable conservation status: Mudflats and sandflats not covered by seawater at low tide; Annual vegetation of drift lines; Salicornia and other annuals colonizing mud and sand; Atlantic salt meadows (Glauco-Puccinellietalia maritimae); Mediterranean salt meadows (Juncetalia maritimi); Embryonic shifting dunes; Shifting dunes along the shoreline with Ammophila arenaria (white dunes); Fixed coastal dunes with herbaceous vegetation (grey dunes); Humid dune slacks. **Objective 2:** To maintain the Annex II species for which the cSAC has been selected at favourable conservation status: Petalophyllum ralfsii. **Objective 3:** To maintain the extent, species richness and biodiversity of the entire site **Objective 4:** To establish effective liaison and cooperation with landowners, legal users and relevant authorities.	

Description of the Natura 2000 Sites		
Name	Natura 2000 Designation	Basis
South Dublin Bay SAC	Special Area of Conservation (SAC 000210)	EU Habitats Directive (92/43/EEC)
Site Description	South Dublin Bay This site lies south of the River Liffey and extends from the South Wall to the west pier at Dun Laoghaire. It is an intertidal site with extensive areas of sand and mudflats, a habitat listed on Annex I of the E.U. Habitats Directive. The sediments are predominantly sands but grade to sandy muds near the shore at Merrion gates. The main channel which drains the area is Cockle Lake. There is a bed of Eelgrass (Zostera noltii) below Merrion Gates which is the largest stand on the east coast. Green algae (Enteromorpha spp. and Ulva lactuca) are distributed throughout the area at a low density. Fucoid algae occur on the rocky shore in the Maretimo to Dún Laoghaire area. Several small, sandy beaches with incipient dune formation occur in the northern and western sectors of the site, notably at Poolbeg, Irishtown and Merrion/Booterstown. The formation at Booterstown is very recent. Driftline vegetation occurs in association with the embryonic and incipient fore dunes. Typically drift lines occur in a band approximately 5 m wide, though at Booterstown this zone is wider in places. The habitat occurs just above the High Water Mark and below the area of embryonic dune. A small area of pioneer salt marsh now occurs in the lee of an embryonic sand dune just north of Booterstown Station. This early stage of salt marsh development is here characterised by the presence of pioneer stands of Glasswort (Salicornia spp.) occurring below an area of drift line vegetation. As this is of very recent origin, it covers a small area but ample areas of substrate and shelter are available for the further development of this habitat. South Dublin Bay is an important site for waterfowl. Although birds regularly commute between the south bay and the north bay, recent studies have shown that certain populations which occur in the south bay spend most of their time there. The principal species are Oystercatcher, Ringed Plover, Sanderling and Dunlin, Redshank. Up to 100 Turnstones are usual in the south bay during winter. Brent Geese regularly occur in numbers of international importance. Bar-tailed Godwit, a species listed on Annex I of the EU Birds Directive, also occur. Large numbers of gulls roost in South Dublin Bay. It is also an important tern roost in the autumn, regularly holding 2000-3000 terns including Roseate Terns, a species listed on Annex I of the E.U. Birds Directive. South Dublin Bay is largely protected as a Special Protection Area. At low tide the inner parts of the south bay are used for amenity purposes. Baitdigging is a regular activity on the sandy flats. At high tide some areas have windsurfing and jet-skiing. This site is a fine example of a coastal system	

	with extensive sand and mudflats, a habitat listed on Annex I of the E.U. Habitats Directive. South Dublin Bay is also an internationally important bird site.	
Qualifying Interests (Species)	Species	Basis
	Petalwort (Petalophyllum ralfsii)	Annex II, EU Habitats Directive
Qualifying Interests (Habitats)	Habitat types (as in Annex 1 of the Habitats Directive), (Codes)	
	Mudflats and Sandflats not covered by seawater at low tide	1140
Conservation Objectives	**Objective 1:** To maintain the Annex I habitat for which the cSAC has been selected at favourable conservation status: Mudflats and sandflats not covered by seawater at low tide. **Objective 2:** To maintain the extent, species richness and biodiversity of the entire site. **Objective 3:** To establish effective liaison and cooperation with landowners, legal users and relevant authorities.	

Description of the Natura 2000 Sites		
Name	Natura 2000 Designation	Basis
Glenasmole Valley SAC	Special Area of Conservation (IE0001209)	EU Habitats Directive (92/43/EEC)
Site Description	Glenasmole SAC Glenasmole Valley in south Co. Dublin lies on the edge of the Wicklow uplands, approximately 5 km from Tallaght. The River Dodder flows through the valley and has been impounded here to form two reservoirs which supply water to south Dublin. The non-calcareous bedrock of the Glenasmole Valley has been overlain by deep drift deposits which now line the valley sides. They are partly covered by scrub and woodland, and on the less precipitous parts, by a herb-rich grassland. There is much seepage through the deposits, which brings to the surface water rich in bases, which induces local patches of calcareous fen and, in places, petrifying springs, a priority habitat listed on Annex I of the EU Habitats Directive. Examples of calcareous fen and flush areas occur between the two reservoirs, where sedges (*Carex flacca* and *Carex panicea*) are joined by such species as Grass-ofparnassus	

	(*Parnassia palustris*), Few-flowered Spike-rush (*Eleocharis quinqueflora*), Zig-zag clover (*Trifolium medium*) and the scarce Fen Bedstraw (*Galium uliginosum*). Orchid-rich grassland occurs in the drier parts of this site and in places grades into *Molinia* meadow, both of these habitats are listed on Annex I of the EU Habitats Directive. Species recorded in these habitats include Frog Orchid (*Coeloglossum viride*), Northern Marsh-orchid (*Dactylorhiza purpurella*), Fragrant Orchid (*Gymnadenia conopsea*), Marsh Helleborine (*Epipactis palustris*), Early-purple Orchid (*Orchis mascula*) and Greater Butterfly Orchid (*Platanthera chlorantha*). Two Red Data Book species have also been found here, Green-winged Orchid (*Orchis morio*) and Small-white Orchid (*Pseudorchis albida*). The sward includes Sweet Vernal-grass (*Anthoxanthum odoratum*), Creeping Bent (*Agrostis stolonifera*) and Crested Dog's-tail (*Cynosurus cristatus*). Other species which occur are Common Bird's-foot-trefoil (*Lotus corniculatus*), Kidney Vetch (*Anthyllis vulneraria*), Common Restharrow (*Ononis repens*), Yellow-wort (*Blackstonia perfoliata*) and Autumn Gentian (*Gentianella amarella*). Woodland occurs in patches around the site. On the east side of the valley, below the northern lake, a Hazel (*Corylus avellana*) wood has developed on the unstable calcareous slopes and includes Ash (*Fraxinus excelsior*), Downy Birch (*Betula pubescens*), Goat Willow (*Salix caprea*) and (Irish) Whitebeam (*Sorbus hibernica*). Spring Wood-rush (*Luzula pilosa*), Wood Speedwell (*Veronica montana*) and Brambles (*Rubus fruticosus* agg.) are included in the ground flora. Wet semi-natural broad-leaved woodland is also found around the reservoirs and includes Alder (*Alnus glutinosa*) and Willow (*Salix* spp.) with Yellow Iris (*Iris pseudacorus*), Horsetail (*Equisetum* spp.), Brambles and localised patches of Japanese Knotweed (*Reynoutria japonica*), an introduced species. The lake shore vegetation is not well developed, which is typical of a reservoir. There are occasional patches of Canary-grass (*Phalaris arundinacea*) and Purple-loosestrife (*Lythrum salicaria*), which are more extensive around the western shore of the northern lake, along with Common Marsh-bedstraw (*Galium palustre*) and Water Mint (*Mentha aquatica*). Other vegetation includes Shoreweed (*Littorella uniflora*) and the scarce Water Sedge (*Carex aquatilis*). As well as the Green-winged Orchid and Small-white Orchid, two other threatened species which are listed in the Irish Red Data Book also occur in the site, Yellow Archangel (*Lamiastrum galeobdolon*) and Yellow Bird's-nest (*Monotropa hypopitys*). The site provides excellent habitat for bat species, with at least four species recorded: Pipistrelle, Leisler's, Daubenton's and Brown Long-eared Bat. Otter occurs along the river and reservoirs. These habitats also support Kingfisher, an Annex I species under the EU Birds Directive.

	Glenasmole Valley contains a high diversity of habitats and plant communities, including three habitats listed on Annex I of the EU Habitats Directive. The presence of four Red Data Book plant species further enhances the value of the site as does the presence of populations of several mammal and bird species of conservation interest.	
Qualifying Interests (Species)	Species	Basis
	N/A	Annex II, EU Habitats Directive
Qualifying Interests (Habitats)	Habitat types (as in Annex I of the EU Habitats Directive), (Codes)	
	Semi-Natural Dry Grassland and Scrubland Facies on Calcareous Substrates* Molinia meadows on calcareous, peaty or clavey-silt-laden soils (Molinion caeruleae) Petrifying springs with tufa formation (Cratoneurion)*	6210* 6410 7220* *Indicates Priority Habitat
Conservation Objectives	**Objective 1:** To maintain the Annex I habitats for which the cSAC has been selected at favourable conservation status: Semi-Natural Dry Grassland and Scrubland Facies on Calcareous Substrates; Molinia meadows on calcareous, peaty or clavey-silt-laden soils (Molinion caeruleae); Petrifying springs with tufa formation (Cratoneurion). **Objective 2:** To maintain the extent, species richness and biodiversity of the entire site **Objective 3:** To establish effective liaison and cooperation with landowners, legal users and relevant authorities.	

Description of the Natura 2000 Sites		
Name	Natura 2000 Designation	Basis
North Bull Island SPA	Special Protection Area (SPA 004006)	EU Birds Directive (79/409/EEC)
Site Description	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 North Bull Island sand spit is a relatively recent depositional feature, formed as a result of improvements to Dublin Port during the 18th and 19th centuries. It is almost 5 km long and 1 km wide and runs parallel to the coast between Clontarf and Sutton. Part of the interior of the island has been converted to golf courses. A well-developed and dynamic dune system stretches along the seaward side of the island. Various types of dunes occur,	

	from fixed dune grassland to pioneer communities on foredunes. Marram Grass (Ammophila arenaria) is dominant on the outer dune ridges. A feature of the dune system is a large dune slack with a rich flora, usually referred to as the 'Alder Marsh' because of the presence of Alder (Alnus glutinosa) trees. The water table is very near the surface and is only slightly brackish. Sea Rush (Juncus maritimus) is the dominant species, with Meadowsweet (Filipendula ulmaria) and Devil's-bit Scabious (Succisa pratensis) being frequent. The orchid flora is notably diverse in this area. Saltmarsh extends along the length of the landward side of the island and provides the main roost site for wintering birds in Dublin Bay. The island shelters two intertidal lagoons which are divided by a solid causeway. These lagoons provide the main feeding grounds for the wintering waterfowl. The sediments of the lagoons are mainly sands with a small and varying mixture of silt and clay. Tasselweed (Ruppia maritima) and small amounts of Eelgrass (Zostera spp.) are found in the lagoons. Common Cord-grass (Spartina anglica) occurs in places. Green algal mats (Enteromorpha spp., Ulva lactuca) are a feature of the flats during summer. These sediments have a rich macro-invertebrate fauna, with high densities of Lugworm (Arenicola marina) and Ragworm (Hediste diversicolor). The North Bull Island SPA is of international importance for waterfowl on the basis that it regularly supports in excess of 20,000 waterfowl. It also qualifies for international importance as the numbers of two species exceed the international threshold – Brent Goose and Bar-tailed Godwit. A further 15 species have populations of national importance – Shelduck, Teal, Pintail, Shoveler, Oystercatcher, Ringed Plover, Golden Plover, Grey Plover, Knot, Sanderling, Dunlin, Black-tailed Godwit, Curlew, Redshank and Turnstone. The island is also regular wintering site for Short-eared Owl. The site has five Red Data Book vascular plant species, four rare bryophyte species, and is nationally important for three insect species. The rare liverwort, Petalophyllum ralfsii, was first recorded from the North Bull Island in 1874 and its presence here has recently been re-confirmed. This species is of high conservation value as it is listed on Annex II of the E.U. Habitats Directive. A well-known population of Irish Hare is resident on the island. The main land uses of this site are amenity activities and nature conservation. The North Bull Island is the main recreational beach in Co. Dublin and is used throughout the year. Two separate Statutory Nature Reserves cover much of the island east of the Bull Wall and the surrounding intertidal flats. North Bull Island is also a Wildfowl Sanctuary, a Ramsar Convention site, a Biogenetic Reserve, a Biosphere Reserve and a Special Area Amenity Order site. Much of the SPA is also a candidate Special Area for Conservation. The site is used regularly for educational purposes and there is a manned interpretative centre on the island.

	The North Bull Island SPA is an excellent example of an estuarine complex and is one the top sites in Ireland for wintering waterfowl. It is of international importance on account of both the total number of waterfowl and the individual populations of Brent Goose and Bar-tailed Godwit that use it. Also of significance is the regular presence of several species listed on Annex I of the E.U. Birds Directive, notably Golden Plover and Bartailed Godwit but also Ruff and Short-eared Owl.	
Qualifying Interests (Species)	Species	Basis
Site is selected for:	Light-bellied Brent Goose Shelduck Pintail Shoveler Oystercatcher Grey Plover Knot Dunlin Black-tailed Godwit Bar-tailed Godwit Redshank Turnstone 20,000 wintering waterbirds	EU Birds Directive
Additional Special Conservation Interests	Teal Ringed Plover Golden Plover Sanderling Curlew Black-headed Gull Wetland & Waterbirds	EU Birds Directive
Conservation Objectives	To maintain the special conservation interests for this SPA at favourable conservation status: Light-bellied Brent Goose, Shelduck, Pintail, Shoveler, Oystercatcher, Grey Plover, Knot, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Redshank, Turnstone, 20,000 wintering waterbirds, Teal, Ringed Plover, Golden Plover, Sanderling, Curlew, Black-headed Gull, Wetland & Waterbirds.	

Description of the Natura 2000 Sites		
Name	Natura 2000 Designation	Basis
Baldoyle Bay SPA	Special Protection Area (IE0004016)	EU Birds Directive (79/409/EEC)
Site Description	Baldoyle Bay SPA Baldoyle Bay extends from just below Portmarnock village to the west pier at Howth, Co. Dublin. It is a tidal estuarine bay protected from the open sea by a large sanddune system. Two small rivers, the Mayne and the Sluice, flow into the inner part of the estuary. Large areas of intertidal flats are exposed at low tide. These	

	are mostly sands but grade to muds in the inner sheltered parts of the estuary. Extensive areas of Common Cord-grass (*Spartina anglica*) occur in the inner estuary. Both the Narrow-leaved Eelgrass (*Zostera angustifolia*) and the Dwarf Eelgrass (*Z. noltii*) are also found here. During summer, the sandflats of the sheltered areas are covered by mats of green algae (*Enteromorpha* spp. and *Ulva lactuca*). The sediments have a typical macrofauna, with Lugworm (*Arenicola marina*) dominating the sandy flats. The tubeworm *Lanice conchilega* is present in high densities at the low tide mark and the small gastropod Laver Spire-shell (*Hydrobia ulvae*) occurs in the muddy areas, along with the crustacean *Corophium volutator*. Areas of saltmarsh occur near Portmarnock Bridge and at Portmarnock Point, with narrow strips along other parts of the estuary. Species such as Glasswort (*Salicornia* spp.), Sea-purslane (*Halimione portulacoides*), Sea Plantain (*Plantago maritima*) and Sea Rush (*Juncus maritimus*) are found here. Baldoyle Bay is of high ornithological importance for wintering waterfowl, providing good quality feeding areas and roost sites for an excellent diversity of waterfowl species. It supports an internationally important population of Pale-bellied Brent Geese (726), and has a further seven species with nationally important populations (all figures are average peaks for the five winters 1995/96 to 1999/2000): Great Crested Grebe (42), Shelduck (147), Pintail (22), Ringed Plover (221), Golden Plover (1810), Grey Plover (200) and Bar-tailed Godwit (353). The occurrence of Golden Plover and Bar-tailed Godwit is of particular note as these species are listed on Annex I of the E.U. Birds Directive. Other species which occur in significant numbers include Teal (124), Mallard (48), Common Scoter (61), Oystercatcher (531), Lapwing (480), Knot (115), Dunlin 879), Black-tailed Godwit (72), Curlew (96), Redshank (224), Greenshank (11) and Turnstone (43). ***Regular breeding birds include Shelduck, Mallard and Ringed Plover. In autumn, passage migrants such as Curlew Sandpiper, Spotted Redshank and Green Sandpiper are regular in small numbers.*** Baldoyle Bay SPA is of high conservation importance, with an internationally important population of Brent Geese and nationally important populations of a further seven species, including two which are listed on Annex I of the E.U. Birds Directive. The inner estuarine section is a Statutory Nature Reserve and is also designated as a wetland of international importance under the Ramsar Convention. The site is a candidate Special Area of Conservation under the E.U. Habitats Directive. The main threat to the birds is disturbance as it is located in a densely populated area.	
Qualifying Interests (Species)	Species	Basis
Site is selected for:	Light-bellied Brent Goose Ringed Plover Bar-tailed Godwit	EU Birds Directive
Additional Special Conservation Interests	Shelduck Golden Plover	EU Birds Directive

	Grey Plover Wetland & Waterbirds	
Conservation Objectives	To maintain the special conservation interests for this SPA at favourable conservation status: Light-bellied Brent Goose, Ringed Plover, Bar-tailed Godwit, Shelduck, Golden Plover, Grey Plover, Wetland & Waterbirds	

Description of the Natura 2000 Sites		
Name	Natura 2000 Designation	Basis
South Dublin Bay and River Tolka Estuary SPA	Special Protection Area (IE0004024)	EU Birds Directive (79/409/EEC)
Site Description	South Dublin Bay and River Tolka Estuary SPA This site comprises a substantial part of Dublin Bay. It includes virtually all of the intertidal area in the south bay, as well as much of the estuary of the River Tolka to the north of the River Liffey. A portion of the shallow ***marine waters of the bay is also included.*** In the south bay, the intertidal flats extend for almost 3 km at their widest. The sediments are predominantly well-aerated sands. Several permanent channels exist, the largest being Cockle Lake. A small sandy beach occurs at Merrion Gates, while some bedrock shore occurs near Dun Laoghaire. The landward boundary is now almost entirely artificially embanked. There is a bed of Dwarf Eelgrass (Zostera noltii) below Merrion Gates which is the largest stand on the east coast. Green algae (Enteromorpha spp. and Ulva lactuca) are distributed throughout the area at a low density. The macroinvertebrate fauna is well-developed, and is characterized by annelids such as Lugworm (Arenicola marina), Nephthys spp. and Sand Mason (Lanice conchilega), and bivalves, especially Cockle (Cerastoderma edule) and Baltic Tellin (Macoma balthica). The small gastropod Spire Shell (Hydrobia ulvae) occurs on the muddy sands off Merrion Gates, along with the crustacean Corophium volutator. The site is an important site for wintering waterfowl, being an integral part of the internationally important Dublin Bay complex. Although birds regularly commute between the south bay and the north bay, recent studies have shown that certain populations which occur in the south bay spend most of their time there. An internationally important population of Brent Goose occurs regularly and newly arrived birds in the autumn feed on the eelgrass bed at Merrion. The site supports nationally important numbers of a further six species: Oystercatcher Ringed Plover, Knot , Sanderling, Dunlin and Bar-tailed Godwit. Other species which occur in smaller numbers include Great Crested Grebe, Grey Plover, Curlew, Redshank and Turnstone. South Dublin Bay is an important site for wintering gulls, especially Black-headed Gull, Common Gull and Herring Gull. It is also the premier site in Ireland for Mediterranean Gull, with up to 20 birds present at times. These occur through much of the year,	

	but especially in late-winter/spring and again in late summer into winter. The south bay is an important tern roost in the autumn (mostly late July to September). The wintering birds within this site are now well-monitored. The main threat to this site is further reclamation for industrial and/or infra-structural purposes. The intertidal areas receive water that is somewhat polluted though there are no apparent impacts on the associated flora and fauna. Owing to its location in Dublin Bay, pollution such as oil spillages from Dublin Port and shipping is a threat. Commercial bait digging may be a problem - this causes disturbance to wintering birds. Disturbance to birds is also caused by walkers and dogs. Sandymount Strand/Tolka Estuary SPA is of high ornithological importance, being of international importance for Brent Goose and of national importance for six waterfowl species. As an autumn tern roost, it is also classified as of international importance. All of the tern species using the site are listed on Annex I of the E.U. Birds Directive, as are Bar-tailed Godwit and Mediterranean Gull.	
Qualifying Interests (Species)	Species	Basis
Site is selected for:	Light-bellied Brent Goose Knot Sanderling Bar-tailed Godwit Redshank Roseate Tern Common Tern Arctic Tern	EU Birds Directive
Additional Special Conservation Interests	Oystercatcher Ringed Plover Golden Plover Grey Plover Dunlin Black-headed Gull Wetland & Waterbirds	EU Birds Directive
Conservation Objectives	To maintain the special conservation interests for this SPA at favourable conservation status: Light-bellied Brent Goose, Knot, Sanderling, Bar-tailed Godwit, Redshank, Roseate Tern, Common Tern, Arctic Tern, Oystercatcher, Ringed Plover, Golden Plover, Grey Plover, Dunlin, Blackheaded Gull, Wetland & Waterbirds.	