

Cork City Council

**Togher Public Realm
Enhancement**

**Report for Screening for Appropriate
Assessment**

234335-00

Issue 1 1 | 24 September 2019

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 234335-00

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1 Introduction

1.1 Introduction

This report contains information required for Cork City Council to undertake screening for Appropriate Assessment (AA) for the proposed Togher Public Realm Enhancement scheme in Togher, County Cork (hereafter referred to as the ‘Proposed Development’).

The aims of this report are to:

- Provide information on, and assess the potential for the proposed development to significantly impact on Natura 2000 Sites (also known as European sites);
- Determine whether the proposed development is directly connected with, or necessary to, the conservation management of any Natura 2000 sites; and
- Determine whether the proposed development, alone or in combination with other projects, is likely to have significant effects on Natura 2000 sites in view of their conservation objectives.

Figures 1 and 2 below show the approximate location of the proposed development.

This report for screening for AA was undertaken by an Arup ecologist on behalf of Cork City Council.

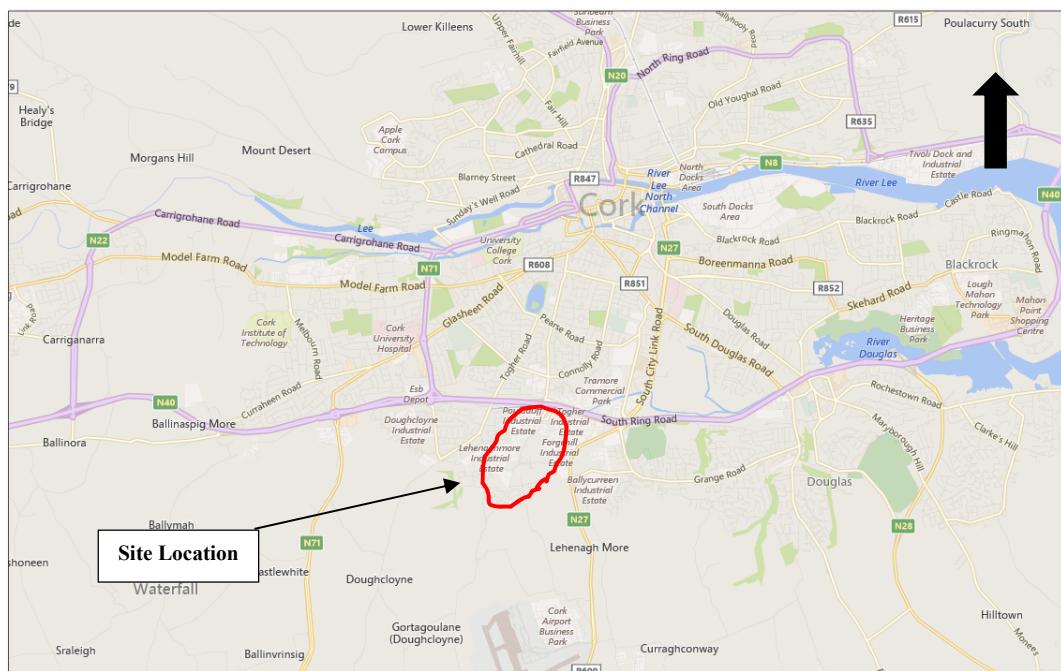


Figure 1 Site location (Source Bing mapping) (not to scale)



Figure 2 Site location showing Togher Road in detail (Source Bing mapping) (not to scale)

1.2 Layout of Report

This report contains information required for the competent authority, Cork City Council, to undertake screening for Appropriate Assessment (AA) for the proposed Togher Public Realm Enhancement in Togher, County Cork.

This report is based on a desk study. The screening information presented in this report is as follows:

- Overview of the proposed development and receiving environment, refer to Section 2;
- Ecological Overview (refer to Section 3) and identification of relevant Natura 2000 sites (European sites) within the zone of influence of the proposed development, refer to Section 4;
- Assessment of likely significant effects on Natura 2000 Sites, refer to Section 5; and
- Conclusions and Screening Statement, refer to Section 6.

1.3 Guidance and Data Sources

This report has been prepared with regard to the following guidance documents, where relevant:

- *Managing Natura 2000 Sites: The Provision of Article 6 of the Habitats Directive 92/43/EEC* (EC Environment Directorate-General, 2000, updated 2018); [hereafter referred to as MN 2018];
- *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodical Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (European Commission Environment Directorate-General, 2001);
- *Guidance Document on Article 6(4) of the Habitats Directive 92/43/EEC*. (European Commission, 2007);
- *Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities* (Department of Environment, Heritage and Local Government, 2010 revision);
- *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 and PSSP 2/10*; and
- *Guidelines for Good Practice Appropriate Assessment of Plans under Article 6(3) Habitats Directive* (International Workshop on Assessment of Plans under the Habitats Directive, 2011).

Sources of information that were used to collect data on the Natura 2000 network of sites and on the existing ecological environment are listed below:

- Ordnance Survey of Ireland mapping and aerial photography (www.osi.ie) (viewed on 17 Sept 2019);
- Bing aerial photography (viewed on 17 Sept 2019);
- National Parks and Wildlife Service online data on European Sites and (www.npws.ie) (viewed on 17 Sept 2019);
- National Parks and Wildlife Service online data on protected flora and fauna (viewed on 17 Sept 2019);

- Information on environmental quality data available from www.epa.ie (EPA Online Environmental Map Viewer) (viewed on 17 Sept 2019);
- Information on environmental water quality data available from (EPA, www.catchments.ie)
- Cork City Council *Cork City Development Plan 2015 - 2021; and*
- Cork City Council *Cork City Biodiversity Plan 2009-2014*

Guidance which has assisted in determining whether impacts are likely to be significant include:

- *Guidelines on the Information to be Contained in Environmental Impact Statements* (Environmental Protection Agency, 2002);
- *Revised Guidelines on the Information to be contained in Environmental Impact Assessment Reports* (Draft EPA August 2017);
- *Advice Notes on Current Practice (in the preparation of Environmental Impact Statements)* (EPA, 2003);
- *Draft Advice Notes for preparing Environmental Impact Statements* (EPA September 2015) and;
- *Guidelines for Ecological Impact Assessment in the Britain and Ireland, Marine and Coastal* (Institute of Ecology and Environmental Assessment, 2010).

1.4 Legislative Background

According to the EU Habitats Directive (92/43/EEC) and the EU Birds Directive (79/409/EEC), Member States are required to establish a Natura 2000 network of sites of highest biodiversity importance for rare and threatened habitats and species across the EU. In Ireland, the Natura 2000 network of European sites includes Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

SACs are selected for the conservation of Annex I habitats (including priority types which are in danger of disappearance) and Annex II species (other than birds). SPAs are selected for the conservation of Annex I birds and all migratory birds and their habitats. The Annex habitats and species, for which each site is selected, are the *qualifying interests* (QI) of the site. *Conservation objectives* for the site are defined for these qualifying interests.

A key requirement of the Directives is that the effects of any plan or project, alone, or in combination with, other plans or projects, on the Natura 2000 site network, should be assessed before any decision is made to allow that plan or project to proceed. This process is known as Appropriate Assessment (AA). The obligation to undertake an Appropriate Assessment derives from Article 6(3) and 6(4) of the Habitats Directive (92/43/EEC), and both involve a number of steps and tests that need to be applied in sequential order.

Article 6(3) is concerned with the strict protection of sites, while Article 6(4) is the procedure for allowing derogation from this strict protection in certain restricted circumstances.

Article 6(3) of the Habitats Directive states:

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

Article 6(4) states:

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

Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.”

The competent authority is required to carry out Appropriate Assessment, as required by Article 6(3) and 6(4) of the Habitats Directive, as follows:

- **Stage 1 - Screening for Appropriate Assessment** – to assess, in view of best scientific knowledge, if the plan or project, individually or in combination with another plan or project is likely to have a significant effect on the Natura 2000 site.
- **Stage 2 - Appropriate Assessment** – This is required if it cannot be excluded, on the basis of objective information, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a Natura 2000 site. The appropriate assessment must include a final determination by the competent authority as to whether or not a proposed plan or project would adversely affect the integrity of a Natura 2000 site. In order to reach a final determination, the competent authority must undertake examination, analysis and evaluation, followed by findings, conclusions and a final determination. The appropriate assessment must contain complete, precise and definitive findings and conclusions, and may not have lacunae or gaps.
- **Stage 3 – Assessment of alternative solutions**- the process which examines alternative ways of achieving the objectives of the plan or project that avoid adverse impacts on the integrity of the Natura 2000 site.
- **Stage 4 - Assessment where no alternative solutions exist and where adverse impacts remain** - an assessment of compensatory measures where, in

the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

If, based upon the currently available information, there are aspects of the proposed development that could have a significant effect on any Natura 2000 sites, then further analysis in the form of an Appropriate Assessment is required.

If the outcome of the screening exercise is that there are no significant impacts predicted, then an Appropriate Assessment is not required.

2 Description of the Proposed Development

2.1 Background - Douglas Flood Relief Scheme (including Togher culvert)

It is intended that the Togher Public Realm Enhancement works will be carried out in conjunction with the Douglas Flood Relief Scheme (main contract works) in place of reinstating the existing built environment. Therefore, the following paragraphs provide information on the proposed flood relief scheme in order to give some context to the Togher Public Realm Enhancement scheme.

In May 2017, Cork County Council submitted an application for approval to An Bord Pleanála under section 175 of the Planning and Development Act 2000, as amended, in accordance with plans and particulars, including an Environmental Impact Statement in May 2017 for the proposed Douglas Flood Relief Scheme:

“Douglas Flood Relief Scheme (including Togher Culvert) consisting of flood defence walls and embankments, new culverts, replacement, widening and extension of existing culverts, channel widening, deepening, realignment and regrading, channel maintenance, bank stabilisation, removal of existing trash screens and construction of new trash screens, bridge removal, bridge replacement, road regrading, underground pumping stations, service diversions, relocation of two number ESB substations/kiosks, tree felling, tree planting and landscaping, and all associated and ancillary works, all located in the townlands of Ardarrig, Ballybrack, Castletreasure, Douglas and Grange in the electoral division of Douglas; the townland of Doughcloyne in the electoral division of Inniskenny and the townland of Lehenagh More in the electoral division of Lehenagh, County Cork and the electoral divisions of Togher A and Tramore C, Cork City”.

At the time the application was submitted, Togher was under the remit of Cork County Council. Approval for the proposed Douglas Flood Relief Scheme (including Togher culvert) was granted by An Bord Pleanála in October 2017. In May 2019, the city boundary was extended to include the Togher area and therefore is now under the remit of Cork City Council.

The proposed flood relief scheme consists of flood relief works along and/or adjacent to and/or in the vicinity of a number of watercourses including the Ballybrack and Grange Streams in Douglas and the Tramore River in Togher and Douglas. The flood relief works along the Tramore River in Togher will be carried out over a length of approximately 810 metres. This area comprises the Tramore River between Lehenaghmore Industrial Estate and Greenwood Estate in Togher, refer to **Figure 3**. The surrounding area is mixed residential and industrial development. The residential area of Brook Avenue is located adjacent to Lehenaghmore Industrial Estate whilst Greenwood Estate is located off the Togher Road south of the N40. There are a number of residential, educational, commercial and religious facilities adjacent to or in the vicinity of the Togher road. The area has a typical suburban form; open and with low-density settlement patterns. Refer to **Figure 3**.

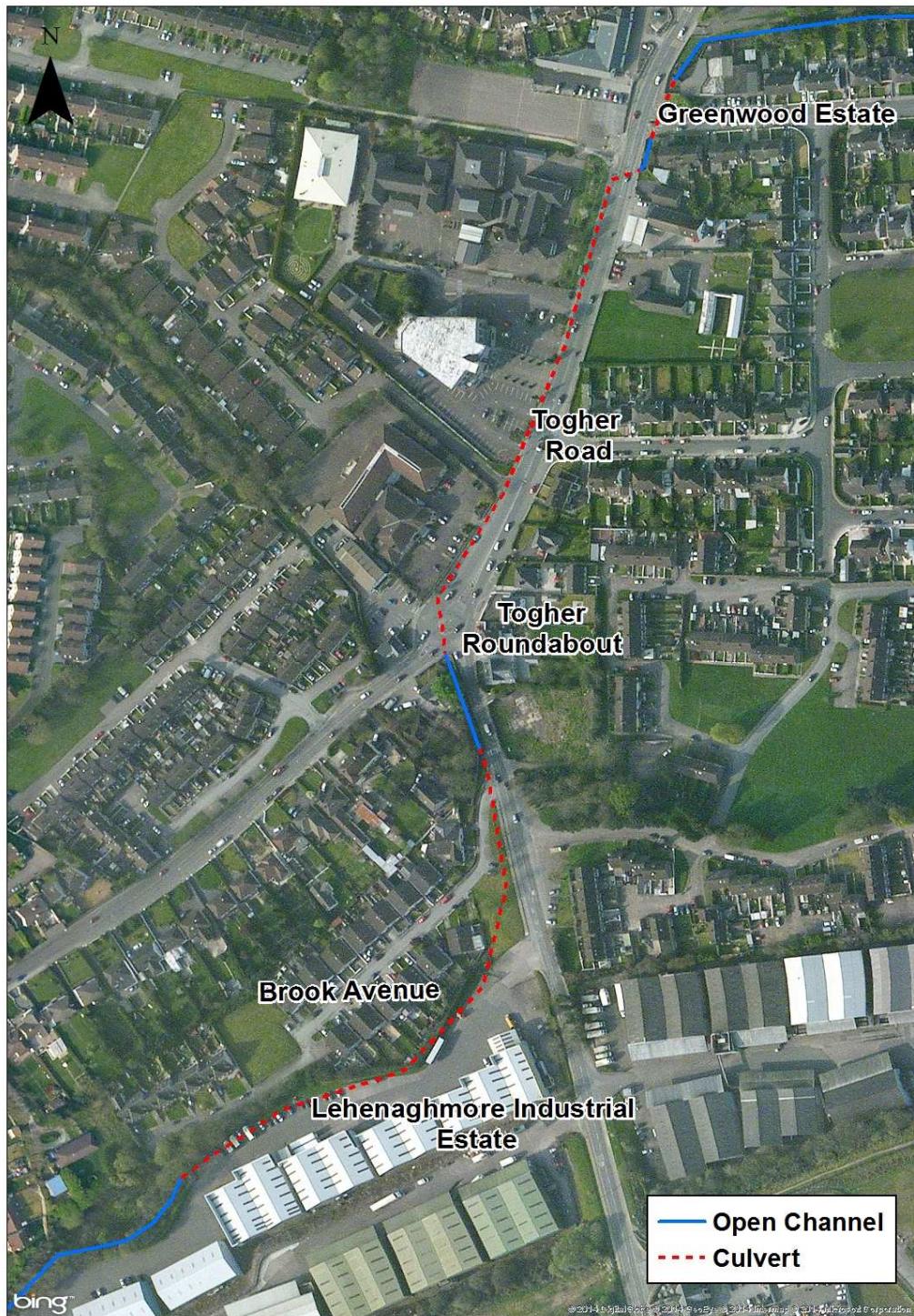


Figure 3 Tramore River (existing scenario showing open channel and culvert sections) along Togher Road (Source: bing maps Not to scale)

The majority of the Tramore River is culverted in this area and extends from the Lehenaghmore Industrial Estate to Greenwood Estate. Refer to **Figure 3**. The culvert consists of three lengths of culvert (approximately 300m and 263m and 30m long respectively). There are two open sections between the culvert lengths; the first (approximately 50m in length) is south of Brook Avenue, parallel to the road as far as the Togher Cross roundabout and the second (approximately 15m in length) is just upstream of

Greenwood Estate, parallel to the Togher Road. The Tramore River exits the culvert at Greenwood Estate, just south of the N40. From here, it flows westwards along an open channel, parallel to the N40. There is a trash screen located just upstream of the culvert at Lehenaghmore Industrial Estate. Refer to **Figure 3**.

The main aspects of the proposed flood relief scheme in Togher will entail the following:

- Replacement of existing trash screen with new trash screen at Lehenaghmore Industrial Estate
- Realignment of a section of river channel immediately upstream of the proposed new trash screen to facilitate tie-in with new culvert.
- Replacement and extension of existing culvert with new culvert between Lehenaghmore Industrial Estate and downstream of Greenwood Estate.
- Regrading of Lehenaghmore Road to divert overland flow towards the Tramore River.
- Localised regrading of the existing footpath and ramp in the vicinity of the entrance to the Greenwood Estate to divert overland flow towards the Tramore River.
- Local diversion of services where necessary to facilitate construction.

Approval for the proposed Douglas Flood Relief Scheme (including Togher culvert) was granted by An Bord Pleanála in October 2017. The following information in relation to AA Screening and Environmental Impact Assessment for the Flood Relief Scheme is extracted from the Board Order 04JA0038:

“Appropriate Assessment Screening:

The Board noted that the proposed development is not directly connected with or necessary for the management of a European Site. The Board considered the nature, scale and location of the proposed development, the appropriate assessment screening report submitted with the application, the submissions made on file and the report of the inspector appointed by the Board. The Board undertook an appropriate assessment screening exercise in relation to the potential direct and indirect effects of the proposed development on European Sites. In completing the screening exercise, the Board adopted the report of the inspector and concluded that the proposed development, by itself or in combination with other development in the vicinity, would not be likely to have a significant effect on any European Sites, including the Cork Harbour Special Protection Area (site code: 004030) and the Great Island Channel Special Area of Conservation (site code: 001058). A Stage 2 Appropriate Assessment (and submission of a Natura impact statement) is not, therefore, required.

Environmental Impact Assessment:

The Board considered the nature, scale and location of the proposed development, the documentation submitted with the application, including the environmental impact statement, the submissions made on file, the mitigation measures proposed, and the report, assessment and conclusions of the inspector appointed by the Board. It is considered that this information was adequate in identifying and describing the direct and indirect effects of the proposed development. The Board completed an environmental impact assessment in relation to the proposed development, by itself and in cumulation with other development in the vicinity and concluded that, subject to the mitigation measures proposed, and the conditions set out below, the effects of the proposed development on the environment would be acceptable. In doing so, the Board adopted the report of the inspector appointed by the Board”

Cork City Council intend to commence construction of the Douglas Flood Relief Scheme (main contract works) in Togher under the main contract works in May 2020. The works will be carried out in a linear fashion along the length of the existing culvert.

The Togher Public Realm Enhancement works will be carried out in conjunction with the Douglas Flood Relief Scheme (main contract works) in place of reinstating the existing built environment, and therefore where relevant the works will be carried out with the same environmental considerations as outlined in the ‘Environmental Impact Statement (EIS) for the Douglas Flood Relief Scheme (including Togher Culvert)’. The proposed Togher Public Realm Enhancement scheme is presented on **Drawing Numbers T0100-01 and T0100-02**.

2.2 Description of the proposed Togher Public Realm Enhancement works during the operational phase

2.2.1 Scheme Objectives

The overall goal of the Togher Public Realm Enhancement works is to produce a combined streetscape/traffic design proposal in a manner that helps achieve the vision of Cork City Council and the following is a list of the project objectives which guided the preliminary design. The design should create:

- Attractive, welcoming and increasingly accessible public spaces that serve as public gathering spaces and complement the diversity of surrounding land uses;
- Streetscape and public space design that fosters an active pedestrian environment and serves a diversity of uses;
- Functional streetscapes that preserve and highlight the quality of the area;
- Streetscape designs, including simplicity of associated materials that can easily be kept clean and maintained over time;
- Sustainable design methods and practices that reflect a commitment to principles of environmental stewardship;
- A plan that can be implemented cost-effectively and in phases, if necessary;
- A reduction of both vehicular speeds and congestion, particularly at Togher Cross Roundabout; and
- Consideration for the implementation of the objectives outlined for the route within the Cork Cycle Network Plan.

2.2.2 Major scheme proposals

During the design development of the proposed Togher Public Realm Enhancement scheme, cognisance was taken of the following documents:

- Design Manual for Urban Roads and Streets (DMURS);
- National Cycle Manual;
- Traffic Management Guidelines – DoELG, DoT and DTO, 2003;
- Design Manual for Roads and Bridges (DMRB) – NRA, July 2015; and

- Traffic Signs Manual.

Taking into account the main scheme objectives and criteria, it was deemed that the proposals should include:

- Applying a design speed of 30 km/hr to the study area to reflect the village nature of the area;
- Improving pedestrian facilities throughout by widening of footpaths throughout to a minimum width of 2m and providing safe raised crossing points at each junction with Togher Road and at strategic crossing points along Togher road, while in turn narrowing the roadway with a desirable width of 6m minimum;
- Addressing the congestion issues apparent along the route, both through design of the Togher Cross roundabout and addressing the informal on-street parking and setting down;
- The creation of a consistent and legible landscape strategy along the route; and
- The formalisation of the soft mode connection between the existing greenway, the schools, and the route through to the residential areas to the west.

2.2.3 Proposed Togher Public Realm Enhancement Scheme

The main features of the proposed Togher Public Realm Enhancement scheme are listed below and shown in **Drawing Numbers T0100-01 and T0100-02**:

- On the Lehenaghmore Road arm of the Togher Cross roundabout:
 - the existing footpaths alongside the residential units will be widened to a minimum width of 2m, removing the existing pinch point;
 - the current open channel is to be filled in as part of the Douglas Flood Relief Scheme works (permission granted by An Bord Pleanála in 2017), and this area will now be used to create a wide pedestrian space;
 - the existing pedestrian crossing has been observed to be unsafe for pedestrians due to an apparent lack of legibility of the crossing, and therefore it is proposed to be formalised into a raised crossing giving further priority to pedestrians.
- On the Spur Hill arm of the Togher Cross roundabout:
 - the existing footpaths on both sides of the road will be widened to a minimum width of 2m;
 - the existing bus stop on the northbound lane will be reoriented to an inline bus stop;
 - turning radii on the entrance to the Sandown Crest estate will be tightened to 3m along with widening of the footpaths.
- At the Togher Cross roundabout:
 - the roundabout geometry will be tightened to increase the deflection for vehicles traversing the roundabout and to create opportunities for larger pedestrian areas and landscaping in the vicinity, as well as reducing

crossing widths for pedestrians crossing the arms. Due to the HGV traffic using the roundabout, an over-run area will be required in the central island;

- in order to facilitate the HGV movements from the Lehenaghmore Road arm to the Spur Hill arm in a safe manner for all road users, it is proposed to compulsorily purchase approximately 3.7m² of the existing property to the south of the roundabout (in addition to the land take proposed as part of the main Douglas Flood Relief Scheme (permission granted by An Bord Pleanála in 2017), included the relocation and reconstruction of a 4.5m long section of the existing boundary wall. This will enable a 2m wide footpath be constructed around the corner as well as the provision of an over-run area for HGVs;
- a raised pedestrian crossing will be provided at each arm, with a median island on the Togher Road arm to provide a resting place for vulnerable road users when crossing;
- the existing access to Centra will be maintained as existing with a dropped kerb;
- existing local accesses to the residential and retail units on the east side of the roundabout will be maintained with a dropped kerb;
- soft landscaping will be provided both on the central island and at the roundabout edges as part of the landscaping strategy, and will be provided in such a manner so as not to affect visibility.

- Along Togher Road:
 - consistently along the roadway the road width will be reduced to a minimum of 6m, footpaths will be widened to a minimum of 2m on the east side of the road, and on the west side of the road a 3.5m wide mixed facility will be created with a landscaped buffer along the road edge. The footpaths will be constructed with a high-quality concrete finish;
 - raised pedestrian crossings will be provided across each minor junction and at vehicular accesses for increased pedestrian safety;
 - raised pedestrian crossings will be provided at three key locations across Togher Road for increased pedestrian permeability and safety;
 - formal parking (including 1 no. designated space to match existing) will be provided on the east side of the road opposite O'Connell Court;
 - an off-street raised set-down area will be provided in front of the Church in conjunction with a raised table to cater for Church uses;
 - an off-street designated set-down area will be provided in front of Togher National Boys School to cater for school uses;
 - the existing one-way in and out access/egress arrangements for the two zones of the Church car park are to be consolidated into two single access/egress points in order to reduce the number of conflict points between road users and to create a more legible access arrangement;

- the current open channel adjacent to the existing signalised crossing is to be filled in as part of the Douglas Flood Relief Scheme works (permission granted by An Bord Pleanála in 2017), and this area will now be used to create a new public space with associated street furniture and seating area;
- a new 3.5m wide mixed facility will be provided connecting the existing Togher Greenway to the north to the existing shared route alongside the two schools, via the existing signalised pedestrian crossing;
- opportunities will be created throughout to enable a consistent and high-quality landscape strategy along the street.

2.3 Description of the Togher Public Realm Enhancement works during the construction phase

The Togher Public Realm Enhancement works will be carried out in conjunction with the Douglas Flood Relief Scheme (main contract works) in place of reinstating the existing built environment, and therefore where relevant the works will be carried out with the same environmental considerations as outlined in the ‘Environmental Impact Statement (EIS) for the Douglas Flood Relief Scheme (including Togher Culvert)’.

2.3.1 Enabling Works and Site Clearance

The main contract works involved a considerable level site clearance in a suburban development, excavations, and enabling works within a large portion of the red line boundary of the works described herein. It is therefore assumed that a minimal level of additional enabling works and/or site clearance will be required to carry out the Public Realm Enhancement works described herein.

The proposed construction works will be limited to the areas outlined in red on the drawings. In the case that temporary access routes and site accesses is required at certain locations so that construction workers and construction vehicles can access certain areas, and where landscaping and reinstatement works for landowners may take place outside these areas with their agreement, enabling works will be required as detailed below:

- Construction of the temporary site access.
- Once access is achieved the Contractor will install secure hoarding approximately 2.4m high around each of the working areas that will remain in-situ during the construction of the works in each area.
- Vegetation, tree and topsoil removal to take place as necessary.

2.3.2 Duration, Phasing and Employment

As noted, these works are proposed to be carried out in place of the reinstatement works for the Douglas Flood Relief Scheme, and therefore the construction program is inherently reliant to the program of the main contract works.

The main contract works are due to commence in May 2020 and will be a linear development along the length of the existing culvert. The reinstatement works will therefore be carried out in a similar linear manner in line with the culvert construction. It is

estimated that the culvert will be fully constructed by January 2021, and that the full Togher Public Realm Enhancement works will then be completed by March 2021.

The northern section of the works, from the culvert outfall at the northern end of the scheme to the entrance to the national schools, will be carried out during the school holidays. A full road closure will likely be required where the culvert crosses the road at the entrance to Greenwood Estate, again this will be carried out during the summer months.

As mentioned previously, it is assumed that a minimal level of additional enabling works and/or site clearance will be required to carry out the Public Realm Enhancement works. However, if vegetation removal is required for the public realm enhancement works, to avoid impacting on bird nesting sites, the vegetation removal within the defined working area will not be carried out during the peak bird nesting season of March to August (inclusive) prior to the commencement of works.

Christmas non-working time is from the beginning of the second week of December to the end of the first week of January to avoid impacts on residents/businesses in the vicinity. However off-road works may continue during this period.

The timing of construction activities, core working hours and the rate of progress of construction works are a balance between efficiency of construction and minimising the impact on the operations of neighbouring facilities, residents and road users.

The co-ordination of people and materials on site will be one of the key activities throughout the construction phase. In order to ensure that construction workers do not create undue disruption, there will be a requirement that the Contractor provide adequate site supervision to co-ordinate, monitor and implement site regulations.

The permissible noise levels are detailed in herein where “daytime” noise limits are defined as 7am to 7pm, and lower permissible noise levels are stipulated outside these hours.

The removal of waste material off site by road and regular deliveries to site will be generally confined to daytime hours but outside of peak traffic hours, from 10am to 4pm.

Normal construction working hours will be observed. These are 08.00 – 19.00 Monday to Friday; 09.00 – 16.00 on Saturday. It may be necessary in exceptional circumstances to undertake certain types of activities outside of normal construction core working hours. Heavy or noisy construction activities will be avoided outside normal hours and the amount of work outside normal hours will be strictly controlled. Approval from Cork City Council will be obtained for works outside normal hours. The planning of such works will have regard to nearby sensitive receptors.

2.3.3 Construction Site Layout

The construction site layout including construction access, compounds, and traffic will be in line with the considerations outlined within Section 4.5 of the EIS ¹ issued for the main contract works. Where variations may be required to carry out the Togher Public Realm Enhancement works, a construction site plan will be developed as necessary.

¹ Douglas Flood Relief Scheme (including Togher culvert) Environmental Impact Statement, May 2017. An Bord Pleanála approved the proposed development in October 2017 (planning ref 04.JA0038)
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The type of construction work involved in the public realm enhancement works is well understood and there will be no significant emissions to air, soil or water during construction. Further, the bulk of the flood scheme works (site clearance, culvert replacement, etc) will be carried out before the public realm enhancement works commence. Finally, the site area is of low ecological importance (see section 3 below).

3 Ecological Overview

The ecological environment at the site and its surrounding area was determined by a desk study and site walkover.

The habitats along Togher road are of low ecological value, consisting primarily of Buildings and artificial surfaces (BL3), small areas of amenity grassland (GA2) and a small number of semi-mature trees. The Tramore River runs along Togher Road but is culverted for most of its length (Refer to **Figure 3**). The area is not of high value for mammals, reptiles, amphibians, birds or invertebrates.

The Tramore River is a small river, approximately 7.5km in length, which discharges to Cork Harbour via the Douglas River estuary, approximately 200m east of Douglas. The Douglas Estuary forms part of the Cork Harbour SPA (site code 004030). The Great Island Channel SAC (site code 001058) is located further to the west within Cork Harbour and also overlaps with the SPA. Refer to **Figure 4**. Most of the Tramore River catchment area lies within urban/suburban areas on the outskirts of Cork City. Due to its urban location, water quality issues have occurred in the past with respect to the Tramore River.

Water Framework Directive

The Water Framework Directive (WFD) is a key initiative aimed at improving water quality throughout the EU. It applies to rivers, lakes, groundwater, and coastal waters. The Directive requires an integrated approach to managing water quality on a river basin basis; with the aim of maintaining and improving water quality. The Directive requires that management plans be prepared on a river basin basis and specifies a structured approach to developing those plans. It requires that a programme of measures for improving water quality be brought into effect.

Specifically, the WFD aims to: protect/enhance all waters (surface, ground and coastal waters); achieve "good status" for all waters, manage water bodies based on river basins (or catchments); involve the public; and streamline legislation. The WFD assesses the water quality of rivers and ranks their status as follows: High, Good, Moderate, Poor, Bad and Yet To Be Determined. The Water Framework Directive also determines the "Risk" level of a river as follows: 1a – At risk of not achieving Good Status, 1b – Probably at risk of not achieving Good Status, 2a – Expected to achieve Good Status and 2b – strongly expected to achieve Good Status. Relevant data for surface waters within the study area, where available, are given in **Table 1**.

Table 1: WFD data

Watercourse	Status	Risk
Lough Mahon	Good	1a – At risk of not achieving Good Status
SW_Coastalt2_Tramore_1Lower (Includes the lower sections of the Tramore River and the Ballybrack Stream)	Moderate	1a – At risk of not achieving Good Status

(Source: EPA Envision online map database)

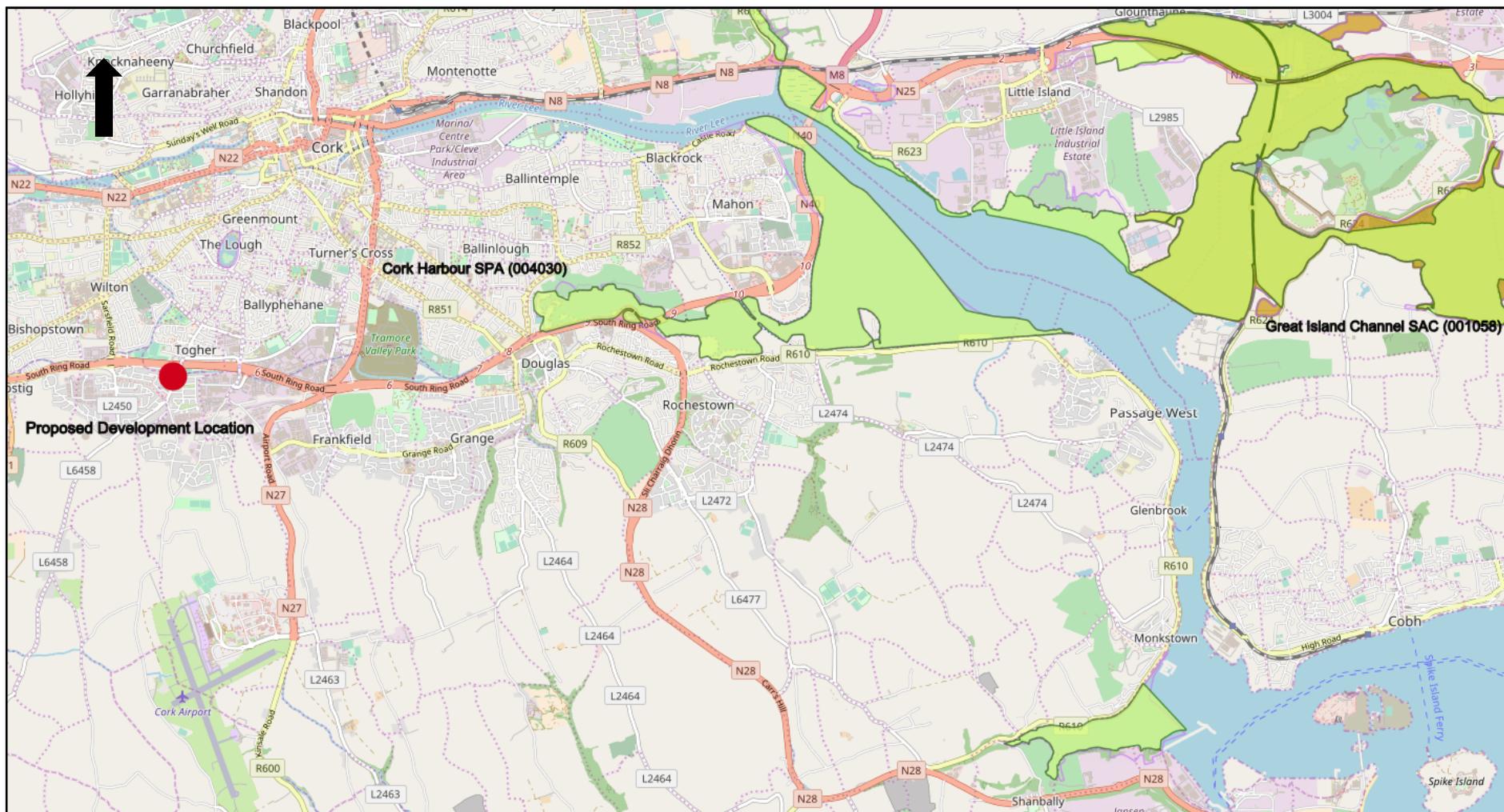


Figure 4 Cork Harbour SPA (004030) and Great Island Channel SAC (001058) (Source: www.gis.epa.ie not to scale)

4 Natura 2000 sites

4.1 Zone of Influence

The zone of influence comprises the area within which the proposed development may potentially affect the conservation objectives or qualifying interests (QI) of a Natura 2000 site. There is no recommended zone of influence, and guidance from the National Parks and Wildlife Service (NPWS) recommends that the distance should be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in-combination effects (cumulative).

Natura 2000 sites (European sites) are only at risk from significant effects where a source-pathway-receptor link exists between a proposed development and a Natura 2000 site(s). This can take the form of a direct impact (e.g. where the proposed development and/or associated construction works are located within the boundary of the Natura 2000 site(s)) or an indirect impact where impacts outside of the Natura 2000 site(s) affect ecological receptors within (e.g. impacts to water quality which can affect riparian habitats at a distance from the impact source). Consideration is therefore given to the source-pathway-receptor linkage and associated risks between the proposed development and Natura 2000 sites.

The identification of risk does not automatically mean that an effect will occur, nor that it will be significant. The identification of these risks means that there is a possibility of environmental or ecological damage occurring. The level and significance of the effect depends upon the nature of the consequence, likelihood of the risk and characteristics of the receptor.

The precautionary principle is applied for the purposes of screening to ensure that consideration and pre-emptive action is undertaken where there is a lack of scientific evidence.

Given the low level of emissions predicted from the proposed development and given that the bulk of the flood scheme works (site clearance, culvert replacement, etc) will be carried out before the public realm enhancement works commence and given the low ecological importance of the area, it was considered that the zone of influence of the proposed development would not extend beyond the site boundary. Nevertheless, the Natura 2000 sites within a 15km radius of the site boundary were examined.

4.2 Natura 2000 sites

Consultation of NPWS online data identified two Natura 2000 sites located within 15km of the site of the proposed development. These are the Cork Harbour SPA, and Great Island Channel SAC. The Cork Harbour SPA also covers various other coastal locations within Cork Harbour. The sites identified are listed below in **Tables 1 and 2** and indicated on **Figures 4 and 5**. The SPA is located at approximately 4.15km and the Great Island Channel SAC is located 10.84km from the location of the proposed development in Togher, as the crow flies, at its closest point. The Tramore River, which will be fully culverted before the public realm enhancement works commence, discharges into the SPA in Douglas. Natural Heritage Areas (NHAs) and Proposed Natural Heritage Areas (pNHAs) can be considered to be ‘stepping stones’ between Natura 2000 sites and are

therefore considered in this assessment. The only relevant pNHA is the Great Island Channel pNHA which overlaps with the Great Island Channel SAC and the Cork Harbour SPA.

Table 1: Relevant Designated Sites identified within 15km of the site (as the crow flies)

Special Areas of Conservation	Site Code	Distance from Site (km)
Great Island Channel SAC	001058	10.84km
Special Protection Areas	Site Code	Distance from Site (km)
Cork Harbour SPA	004030	4.18km
Proposed Natural Heritage Area	Site Code	Distance from Site (km)
Cork Harbour pNHA	001058	4.15km

Table 2: Details of Natura 2000 Sites within 15km of the Proposed Development²

Site Name and Code	Connectivity/Pathway	Qualifying Habitats and Species
Great Island Channel SAC 001058	Tramore River discharges into Douglas Estuary which forms part of Cork Harbour	1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)
		1140 Mudflats and sandflats not covered by seawater at low tide
Cork Harbour SPA 004030	Tramore River discharges into Douglas Estuary which is designated as part of Cork Harbour SPA	A004 Little Grebe <i>Tachybaptus ruficollis</i> ; A005 Great crested grebe <i>Podiceps cristatus</i> ; A017 Cormorant <i>Phalacrocorax carbo</i> ; A028 Grey heron <i>Ardea cinerea</i> ; A048 Shelduck <i>Tadorna tadorna</i> ; A050 Wigeon <i>Anas Penelope</i> ; A052 Teal <i>Anas crecca</i> ; A054 Pintail <i>Anas acuta</i> ; A056 Shoveler <i>Anas clypeata</i> ; A069 Res-breasted Merganser <i>Mergus serrator</i> ; A130 Oystercatcher <i>haematopus ostralegus</i> ; A140 Golden Plover <i>Pluvialis apricaria</i> ; A141 Grey Plover <i>Pluvialis squatarola</i> ; A142 Lapwing <i>Vanellus vanellus</i> ; A149 Dublin <i>Calidris alpina alpina</i> ; A156 Black-tailed Godwit <i>Limosa limosa</i> ; A157 Bar-tailed Godwit <i>Limosa lapponica</i> ; A160 Curlew <i>Numenius arquata</i> ; A162 Redshank <i>Tringa tetanus</i> ; A164 Greyshank <i>Tringa nebularia</i> ; A179 Black-headed Gull <i>Chroicocephalus ridibundus</i> ; A182 Common Gull <i>Larus canus</i> ; A183 Lesser Black-headed Gull <i>Larus fuscus</i> ; A193 Common Tern <i>Sterna hirundo</i> ; A999 Wetlands.

² Refer to NPWS website (www.npws.ie) for full details on the conservation objectives and site synopsis for these Natura 2000 sites

4.3 Potential Impacts on Natura 2000 sites

The proposed development is not directly connected with, or necessary for, the management of any Natura 2000 site. No habitat loss will occur within any Natura 2000 site as a result of this proposed development.

The Tramore River, which will be fully culverted before the public realm enhancement works commence, discharges into the SPA in Douglas.

As stated previously, given the low level of emissions predicted from the proposed development and given that the bulk of the flood scheme works (site clearance, culvert replacement, etc) will be carried out before the public realm enhancement works commence and given the low ecological importance of the area, it was considered that the zone of influence of the proposed development would not extend beyond the site boundary.

None of the Qualifying Interest (QI) bird species, which form part of the Cork Harbour SPA will be directly or indirectly impacted by the proposed development. The site of the proposed development does not host habitats that would typically support the QI bird species and nor do any QI species travel to the site to forage or nest.

None of the Qualifying Interest (QI) habitats, which form part of the Great Island Channel SAC will be directly or indirectly impacted by the proposed development.

In conclusion, there will be no direct or indirect impacts from the proposed development on any Qualifying Interest (QI) habitats and species of these designated sites.

No works will be undertaken within the SAC or SPA. There will be no significant impacts on the qualifying habitats or species (refer to **Table 2**) of these Natura 2000 sites as a result of the construction and operation of the proposed development.

4.4 Cumulative Impacts with other Projects

The Cork City Development Plan 2015 – 2021 and Cork City Council online planning records for the area were consulted (17 September 2019). The only relevant project that could potentially interact with the proposed development is the Douglas Flood Relief scheme however cumulative negative impacts will not arise upon any Natura 2000 site due to the nature of the works proposed.

5 Assessment of Significance

The proposed development will not result in any significant direct, indirect or cumulative impacts on Natura 2000 sites. Refer to **Table 3** below, has been used to determine whether significant impacts are likely.

Table 3: Significant Impacts Checklist

Does the project have the potential to	Yes or No
Reduce the area of key habitats?	No
Reduce the population of key species?	No
Change the balance between key species?	No
Reduce diversity of the site?	No
Result in disturbance that could affect population size or density or the balance between key species?	No
Result in fragmentation?	No
Result in loss or reduction of key features (e.g. tree cover, tidal exposure, annual flooding, etc.)?	No
Cause delays in progress towards achieving the conservation objectives of the site	No
Interrupt progress towards achieving the conservation objectives of the site?	No
Disrupt those factors that help to maintain the favourable conditions of the site	No
Interfere with the balance, distribution and density of key species that are the indicators of the favourable condition of the site?	No
Cause changes to the vital defining aspects (e.g. nutrient balance) that determine how the site functions as a habitat or ecosystem?	No
Change the dynamics of the relationships (between, for example, soil and water or plants and animals) that define the structure and/or function of the site?	No
Interfere with predicted or expected natural changes to the site (such as water dynamics or chemical composition)?	No

In addition, this judgement has been arrived at on the following basis:

- All development activity will take place within the site boundary. No works will take place within the SAC or SPA. No material or spoil from the works will be deposited in the SAC or SPA. There will be no encroachment on the habitats or species of the SAC or SPA.
- There will be no loss of Natura 2000 site habitat area, no fragmentation of the habitats of Natura 2000 sites, no disturbance to the qualifying species of the Natura 2000 sites, no impacts on population density of these species, no impacts on water resources and no impacts on water quality of the Natura 2000 sites.
- There will be no significant emissions to air, soil or water during construction.
- Thus significant impacts on the receiving environment and in particular the Tramore River which discharges into the Great Island Channel SAC and Cork Harbour SPA are not predicted to occur.

6 Screening Statement and Conclusions

The aims of this report were as follows:

- Provide information on, and assess the potential for the proposed development to significantly impact on Natura 2000 Sites (also known as European sites).
- Determine whether the proposed development is directly connected with, or necessary to the conservation management of any Natura 2000 sites.
- Determine whether the proposed development, alone or in combination with other projects, is likely to have significant effects on Natura 2000 sites in view of their conservation objectives.

It has been objectively concluded by Arup that:

- There is no potential for the proposed development to significantly impact on Natura 2000 Sites.
- The proposed development is not directly connected with, or necessary to the conservation management of any Natura 2000 sites.
- The proposed development, alone or in combination with other projects, is not likely to have significant effects on Natura 2000 sites in view of their conservation objectives.

It has been determined by Arup that it is possible to rule out likely significant impacts on any Natura 2000 sites. It is the view of Arup that it is not necessary to undertake any further stage of the Appropriate Assessment process.

Refer to **Appendix A** *Finding of No Significant Effects Report*.

Appendix A

Finding of No Significant Effects Report

A1 Finding of No Significant Effects Report

Name of Project:

Togher Public Realm Enhancement Scheme

Names of Natura 2000 Sites of relevance to the proposed development:

Site Name	Site Code
Great Island Channel SAC	001058
Cork Harbour SPA	004030

Is the project or plan directly connected with or necessary to the management of the site?

No

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

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.

It has been determined by Arup that it is possible to rule out likely significant impacts on any Natura 2000 sites.

Explain why these effects are not considered significant.

- All development activity will take place within the site boundary. No works will take place within the SAC or SPA. No material or spoil from the works will be deposited in the SAC or SPA. There will be no encroachment on the habitats or species of the SAC or SPA.
- There will be no loss of Natura 2000 site habitat area, no fragmentation of the habitats of Natura 2000 sites, no disturbance to the qualifying species of the Natura 2000 sites, no impacts on population density of these species, no impacts on water resources and no impacts on water quality of the Natura 2000 sites.
- There will be no significant emissions to air, soil or water during construction.
- Thus significant impacts on the receiving environment and in particular the Tramore River which discharges into the Great Island Channel SAC and Cork Harbour SPA are not predicted to occur.

DATA COLLECTED TO CARRY OUT THE ASSESSMENT

Who carried out the assessment?

The assessment was carried out by Fiona Patterson, the Arup in house ecologist.

Sources of Data -

This report has been prepared with regard to the following guidance documents, where relevant:

- *Managing Natura 2000 Sites: The Provision of Article 6 of the Habitats Directive 92/43/EEC* (EC Environment Directorate-General, 2018); [hereafter referred to as MN 2018];
- *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodical Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (European Commission Environment Directorate-General, 2001);
- *Guidance Document on Article 6(4) of the Habitats Directive 92/43/EEC* (European Commission, 2007);
- *Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities* (Department of Environment, Heritage and Local Government, 2010 revision);
- *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 and PSSP 2/10*;
- *Guidelines for Good Practice Appropriate Assessment of Plans under Article 6(3) Habitats Directive* (International Workshop on Assessment of Plans under the Habitats Directive, 2011)

Sources of information that were used to collect data on the Natura 2000 network of sites and on the existing ecological environment are listed below:

- Ordnance Survey of Ireland mapping and aerial photography (www.osi.ie) (viewed on 17 September 2019);
- Bing aerial photography (viewed on 17 September 2019);
- National Parks and Wildlife Service online data on European Sites and (www.npws.ie) (viewed on 17 September 2019);
- National Parks and Wildlife Service online data on protected flora and fauna (viewed on 17 September 2019);
- Information on environmental quality data available from www.epa.ie (EPA Online Environmental Map Viewer) (viewed on 17 September 2019);
- Information on environmental water quality data available from (EPA, www.catchments.ie)
- Cork City Council *Cork City Development Plan 2015-2021*; and
- Cork City Council *Cork City Biodiversity Plan 2009-2014*

Guidance which has assisted in determining whether impacts are likely to be significant include:

- *Guidelines on the Information to be Contained in Environmental Impact Statements* (Environmental Protection Agency, 2002);
- *Revised Guidelines on the Information to be contained in Environmental Impact Assessment Reports* (Draft EPA August 2017);
- *Advice Notes on Current Practice (in the preparation of Environmental Impact Statements)* (EPA, 2003);
- *Draft Advice Notes for preparing Environmental Impact Statements* (EPA September 2015) and;
- *Guidelines for Ecological Impact Assessment in the Britain and Ireland, Terrestrial* (Institute of Ecology and Environmental Assessment, 2018).

OVERALL CONCLUSIONS

Based on the information provided above, and by applying the precautionary principle, it has been determined by Arup that it is possible to rule out likely significant impacts on any Natura 2000 sites and therefore it is the view of Arup that it is not necessary to undertake any further stage of the Appropriate Assessment process.