



**Comhairle Cathrach Chorcaí
Cork City Council**

**APPROPRIATE ASSESSMENT
SCREENING REPORT
&
SCREENING DETERMINATION**

**MacCurtain Street Public Transport
Improvement Scheme**

July 2020

APPROPRIATE ASSESSMENT SCREENING REPORT

Cork City Council

Section 177 of the Planning and Development Act 2000 (as amended)

Article 6(3) and 6(4) EU Habitats Directive (92/43/EEC)

Due to the specific context of Cork City relative to the location of the European sites identified below a combined appropriate assessment screening report is used to assess potential impacts on both sites.

1. EUROPEAN SITE DATA

Great Island Channel candidate Special Area Of Conservation (site code 001058)	
Conservation objective	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.
Qualifying interests	Annex I listed habitats: mudflats, sandflats not covered by seawater at low tide, estuaries, spartina swards, Atlantic salt meadows.
References and further information	<i>Conservation Objectives for Great Island Channel SAC [001058]</i> (NPWS), <i>Natura 2000 Standard Data Form</i> (NPWS), <i>Site Synopsis Great Island Channel Site Code 001058</i> (NPWS) (see www.npws.ie for further details)

Cork Harbour Special Protection Area (site code 004030)	
Conservation objective	To maintain or restore the favourable conservation condition of the bird species listed as special conservation interests for this SPA.
Qualifying interests	Annex I-listed bird species: bar-tailed godwit, common tern (breeding), golden plover, ruff, whooper swan. Other birds of special conservation interest include black-headed gull, black-tailed godwit, common gull, curlew, dunlin, great crested grebe, grey heron, grey plover, lapwing, lesser black-backed gull, little grebe, oystercatcher, pintail, red-breasted merganser, redshank, shelduck, shoveler, teal, and widgeon. This site is an internationally important wetland site supporting > 20,000 wintering waterfowl.
References and further information	<i>Conservation Objectives for Cork Harbour SPA [004030]</i> (NPWS), <i>Natura 2000 Standard Data Form</i> (NPWS), <i>Site Synopsis Cork Harbour SPA Site Code 004030</i> (NPWS) (see www.npws.ie for further details)

2. DETAILS OF PROPOSED DEVELOPMENT

Reference no.	MacCurtain Street Public Transport Improvement Scheme
Development consent type	Local authority own development (Part 8 Planning Development Regulations 2001)
Development location	MacCurtain Street, Coburg Street, Bridge Street, St Patrick's Quay, Merchant Quay, Lavitt's Quay, Cathedral Walk, Anderson's Quay Lower Glanmire Road and adjoining streets, Cork City
Distance from cSAC	8.2km (9.5km downstream)
Distance from SPA	2.6km (4.3km downstream)
Description of development	<p>Cork City Council plans to carry out road network and public realm improvement works on MacCurtain Street and a number of existing roads & streets in Cork City Centre. Construction work is focused on upgrading traffic signals, public lighting and improved public realm including new footpaths and paved areas and provision of trees. In conjunction with the implementation the planned traffic management changes some routine maintenance of road surfaces will be undertaken in advance of relining of carriageways. The construction works for the various streets include;</p> <ul style="list-style-type: none"> ❖ Coburg Street and Bridge Street <ul style="list-style-type: none"> • Convert Coburg Street from two eastbound general traffic lanes to one new westbound general traffic lane and one eastbound bus lane (24 hour); • Provide two new bus stops on Coburg Street with associated bus shelters; • Upgrade the southern footpath along Coburg Street to include the relocation of the public bike share scheme within the same area; • Upgrade the northern footpath along Coburg Street;

- Provide set down spaces and loading bay on Coburg Street;
- Introduce a bus priority signalised junction at the junction of Bridge Street with Coburg Street;
- Provide new paving and enhanced pedestrian provision through the junction of Bridge Street and Coburg Street;
- Introduce a new southbound bus only lane (24 hour) on Bridge Street to replace one general northbound traffic lane;
- Upgrade the footpaths along Bridge Street to include the provision of a pedestrian ramp adjacent to the steps at the junction of Bridge Street and St Patrick's Quay;
- Provide loading bay on Bridge Street;
- Upgrade all existing traffic signals along Coburg Street and Bridge Street to include the provision of CCTV at the junctions;
- Provide enhanced public realm to include ancillary street furniture, cycle parking and trees;
- Upgrade the existing public lighting network along the streets;
- Coburg Street and Bridge Street will be resurfaced and new road markings presenting the revised traffic management along both streets will be installed.

❖ **St Patrick's Hill, St Patrick's Place and Wellington Road.**

- Reverse the section of St Patrick's Hill between MacCurtain Street and St. Patrick's Place from southbound currently to northbound traffic flow;
- Relocate the existing on-street parking from the western side of the street to the eastern side of the street;
- Provide enhanced pedestrian facilities to include new pedestrian signalised crossings on St Patrick's Place and Wellington Road and a raised pedestrian table at the junction of Sidney Hill;
- Modify the existing parking in the vicinity of Sidney Hill to include the provision of set down spaces and a coach parking area.

❖ **MacCurtain Street and Harley's Street**

- Convert MacCurtain Street from one way eastbound to two-way traffic;
- Provide enhanced public realm to include, wider footpaths, a spill out area, trees, cycle parking, disabled parking spaces and the provision of set down spaces which can be temporarily converted to outdoor sitting areas under license;
- Provide a paved shared surface area within a central position along MacCurtain Street to include its junction with Harley's Street;
- Pedestrianisation of Harley's Street with service access retained for premises directly accessed from Harley's Street;
- Provide two new bus stops on MacCurtain Street with associated bus shelters to the east of Harley's Street;
- Upgrade existing traffic signals to include provision of CCTV at the junctions;
- Upgrade the existing public lighting network along the street;
- Provide night time taxi rank.

❖ **Brian Boru Bridge and Brian Boru Street**

- Convert one lane of Brian Boru Street from southbound traffic flow to northbound traffic flow;
- Convert a section of the central southbound traffic lane to a northbound right turn bus lane on Brian Boru Street;
- Convert one lane of Brian Boru Bridge from southbound traffic flow to northbound traffic flow.

❖ **St Patrick's Quay**

- Provide a new two-way cycle track on the southern side of the Quay;
- Relocate some of the existing coach parking facilities to Anderson's Quay, Lower Glanmire Road and Alfred Street;
- Provide set down spaces on the western side of Mary Elmes Bridge and relocate loading and disabled parking bays from the northern side of the street to the southern side;
- Upgrade the traffic signals at the junction of St Patrick's Quay/Bridge Street and St Patrick's Quay/ Brian Boru Bridge;
- Upgrade the existing footpaths and public lighting network along the street.

❖ **Camden Quay, North Link Road and Mulgrave Road**

- Provide a new footpath and a new two-way cycle track to replace the existing southern footpath on Camden Quay;
- Remove the eastbound contra flow bus lane along the northern side of Camden Quay;
- Provide right turn lanes and ghost island road markings along the central median on the North Link Road within the scheme area;
- Provide new pedestrian gateway at the junction of Popes Quay and Mulgrave Road;
- Upgrade the junction of Camden Quay/Christy Ring Bridge to provide for enhanced pedestrian and cycle crossing on the bridge and revised traffic movements at the junction. The junction upgrade will include for the provision of CCTV and new traffic signals and bus priority measures;
- Provide new bus stop on Mulgrave Road and a new bus stop on Camden Quay;
- Replace a section of the existing northbound cycle lane with a new two way off road cycle track between Christy Ring Bridge and Popes Quay.

❖ **Leitrim Street**

- Provide an inbound cycle lane;
- Provide an outbound cycle track between Hardwick Street and the North Link Road;
- Provide set down spaces, on-street parking and loading bays along the western side of the street;
- Reduce two southbound traffic lanes to one southbound traffic lane;
- Upgrade the existing public lighting network along the street;
- Upgrade all existing traffic signals along the street.

❖ **Cathedral Walk**

- Convert Cathedral Walk from its junction with Watercourse Road to North Link Road (N20) from two eastbound traffic lanes to one east bound traffic lane and one westbound bus lane (24 hour);
- Provide a new signalised junction at the intersection of Watercourse Road, Cathedral Walk and Upper John Street;
- Provide bus priority at the junction of Cathedral walk and North Link Road (N20).

❖ **Lower Glanmire Road**

- Provide coach set down bays with associated shelters along the northern side of the existing bus only lane;
- Provide a new bus stop on the northern side of Lower Glanmire Road to include an enhanced waiting area for passengers;
- Upgrade Footpaths on north side of the Lower Glanmire Road.

❖ **Merchant's Quay**

- Replace one westbound general traffic lane with an eastbound general traffic lane;
- Replace a section of an existing eastbound cycle lane with a new two way off road cycle track;
- Relocate the existing pedestrian crossing on the street;
- Retain the existing loading bay on the southern side of Merchant's Quay;
- Upgrade all existing traffic signals along the street to include provision of CCTV;
- Install a right turn restriction for all traffic except for buses travelling between Merchant's Quay and St Patrick's Quay;
- Upgrade and modify the footpaths on both sides of the street to accommodate the new traffic management arrangements;
- Upgrade the traffic signals at the junction of Merchant's Quay/St Patrick's Street to accommodate new traffic arrangements.

❖ **Anderson Quay and surrounding streets**

- On Anderson's Quay replace the westbound traffic lane with an eastbound traffic lane from its junction with Clontarf Street to Custom House Street;
- Provide a new coach parking area along the northern side of Anderson's Quay;
- Upgrade the public realm in the vicinity of the new coach parking area to include upgrades to the public lighting along the street;
- Upgrade of the junction of Anderson's Quay and Clontarf Street.

❖ **Penrose Quay**

- Modify the northern footpath on approach to its junction with Brian Boru Street.

❖ **Summerhill North**

- Provide a bus only right turn lane from Summerhill North to MacCurtain Street.

❖ **Devonshire Street and Pine Street**

- Replace the existing eastbound lane with a westbound general traffic lane on Devonshire Street;
- Provide a westbound bus lane (24 hour) on Devonshire Street;
- Upgrade the existing footpaths and public lighting system;
- Provide a new signalised junction at the intersection of North Link Road and Devonshire Street;
- Provide additional on street parking and loading bay on Pine Street.

	<p style="text-align: center;">❖ Christy Ring Bridge and Lavitt's Quay</p> <ul style="list-style-type: none"> • Provide two eastbound general trafficlanes on Lavitt's Quay; • Install a right turn restriction for all traffic, except for buses travelling from Lavitt's Quay to Christy Ring Bridge; • Upgrade all trafficsignals along the quay to include provision of CCTV; • Provide set down spaces and a loading bay on Lavitt's Quay west of Emmet Place; • Provide a new two-way cycle track on the eastern side of Christy Ring Bridge to replace one existing northbound traffic lane.
Relevant strategies or policies	City Development Plan, City Centre Movement Strategy, Cork Metropolitan Area Transport strategy.
EIS submitted?	no
Screening report/NIS submitted?	yes

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
Comments or notes	
<ul style="list-style-type: none"> • All development activity will take place within the site works boundary and is within the footprint of existing carriageways and footpaths. No works will take place within any Natura 2000 site. No material or spoil from the works will be deposited in any Natura 2000 site. There will be no encroachment on the habitats or species of any Natura 2000 site. • 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 or soil during construction or operation. There will also be no significant noise emissions during the construction or operational phase. • In addition to the proposed development, other relevant proposed or permitted projects in the surrounding areas of Cork City have been considered. Due to the nature and short-term duration of the works and the location of the proposed development in relation to any Natura 2000 Sites, there is unlikely to be any significant impacts as a result of cumulative or in-combination effects with the proposed development. 	

4. SCREENING CONCLUSION STATEMENT

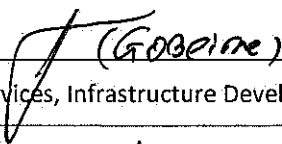
In view of the above it is considered that (tick one box only):

- Appropriate Assessment is not required**
The proposed development is directly connected / necessary to the conservation management of a site.
- Appropriate Assessment is not required** It can be excluded through screening that the proposed development will have No significant effects on the sites.
- Further information is required**
Potential impacts have been identified through initial screening and/or there is insufficient information to enable the planning authority to screen out impacts, but on balance it is determined that the issues could be resolved through minor modifications to the proposed development or by appropriate conditions. The information required is specified below.
- Appropriate Assessment is required**
Significant issues have been identified and/or significant effects are certain, likely or uncertain, and the submission of a Natura Impact Statement (NIS) is required, or the proposed development must be rejected.

Further information required / Comments or Notes

Please refer to attached report in appendix A for screening for appropriate assessment as prepared by Arup Environmental team on behalf of Cork City Council.

- 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.

Name:	
Position:	Director of Services, Infrastructure Development on behalf of Cork City Council.
Date:	10 th July 2020

Appendix A

**Screening report for Appropriate Assessment
prepared by Arup**

Cork City Council

**MacCurtain Street Public
Transport Improvement Scheme**

Report for Screening for Appropriate
Assessment

Issue 3 | 9 July 2020

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 262931-00

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1 Introduction

1.1 Overview

This report contains the information required for the competent authority, Cork City Council (CCC) to undertake screening for Appropriate Assessment (AA) for the proposed MacCurtain Street Public Transport Improvement Scheme.

This report has been prepared by Arup on behalf of Cork City Council and contains the information required for Cork City Council to undertake screening for Appropriate Assessment (AA) for 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 project is directly connected with, or necessary to, the conservation management of any Natura 2000 Sites; and
- Determine whether the project, alone or in combination with other projects, is likely to have significant effects on Natura 2000 sites in view of their conservation objectives.

The screening information presented in this report is as follows:

- Legislative Background, refer to **Section 2.3**;
- Ecological Overview, refer to **Section 3**;
- Overview of the proposed development, refer to **Section 1**;
- Identification of relevant Natura 2000 sites (European sites) within the zone of influence and assessment of likely significant effects on Natura 2000 Sites, refer to **Section 5**;
- Assessment of Significance, refer to **Section 6**; and
- Conclusions, refer to **Section 7**.

1.2 Background

The ‘MacCurtain Street Public Transport Improvement Scheme’ (hereafter referred to as the proposed development) includes for changes in the management of traffic in the City Centre to improve the environment for pedestrians, particularly along MacCurtain Street, provide additional infrastructure to support improved access by bike into the city centre and enhancements to the public transport network to provide both improved journey times and reliability while maintaining access to the city centre off-street car parks.

The proposed development includes the following key measures.

- Enhanced pedestrian environment to include public realm improvements along MacCurtain Street/Coburg Street and Bridge Street;

- The provision of a two-way cycle facility along St Patrick's Quay and Camden Quay; and
- The provision of bus priority measures along Devonshire Street, Coburg Street and Bridge Street;
- The provision of a contra-flow bus lane along Cathedral Walk between Leirim Street and Watercourse Road;
- The provision of two-way traffic movements along MacCurtain Street; and
- The reallocation of traffic lanes along Lavitt's Quay/Merchant's Quay and Anderson's Quay to improve capacity travelling eastbound.

The proposed works will include reconfiguration of traffic movements in the wider city centre to facilitate improved pedestrian, cyclist and bus accessibility. This traffic management plan includes the re-direction of all eastbound traffic towards Lavitt's Quay, Merchant's Quay while westbound traffic will be accommodated along St Patrick's Quay and Camden Quay. In addition, there will be public realm improvements along MacCurtain Street, Bridge Street and Coburg Street.

The proposed development will seek to reinforce and enhance the different uses and characteristics of MacCurtain Street, Bridge Street and Coburg Street particularly in terms of the layout of the street (footpath and roadway widths); the extent of provision for vehicles (traffic management, parking and loading); the rationalisation of street clutter (regulatory and directional signage in particular) and road markings; the introduction of appropriate streetscape elements (including surfaces, lighting, furniture and street trees). The upgrade or replacement of underground services may also be required.

In addition, other smaller scale construction works on Leirim Street, Wellington Road, St Patrick's Hill, Merchant's Quay, Anderson's Quay, Penrose Quay, Brian Boru Street, Brian Boru Bridge, Devonshire Street, Cathedral Walk, North Link Road, Lavitt's Quay will be required, the majority of these works include footpath re-construction, changes to traffic signals and some pavement reinstatement. **(Figure 1 and 2).**

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



Figure 1: The proposed development in the context of the wider Cork City area (indicated by pink star) | Background Mapping © Google Maps

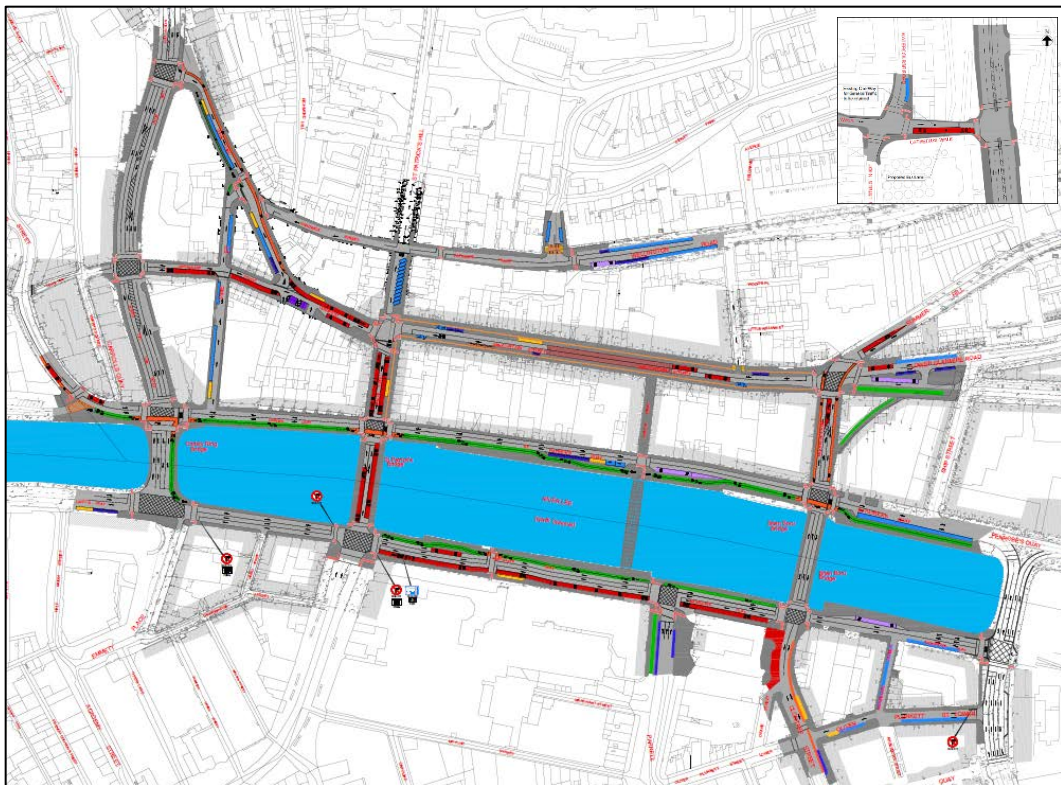


Figure 2: Indicative development boundary of the proposed development

2 Methodology

This section provides details on the adopted methodology and the information gathered to inform the overall assessment process. The ecological baseline of the site and surrounding area is described in **Section 3**. The proposed development is described in **Section 4**. Both sections provide the detail for informing the Stage 1 Screening for Appropriate Assessment.

2.1 Guidance and Data Sources

- 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);
- Communication from the Commission on the precautionary principle. European Commission (2000).
- Fossitt (2007) A guide to Habitats in Ireland. The Heritage Council of Ireland

2.2 Assessment Methodology

A desk study was carried out. Sources of information utilised for this report and accessed during March 2020 include the following:

- Ordnance Survey Ireland OSI mapping and aerial photography – www.osi.ie
- Bing aerial photography – www.bing.com/maps
- Google aerial photography – www.googlemaps.com
- National Parks & Wildlife Service (NPWS) - www.npws.ie
- National Parks and Wildlife Service online data on protected flora and fauna
- Environmental Protection Agency (EPA) – www.epa.ie (EPA Online Environmental Map Viewer)

- Information on environmental water quality data available from (EPA, www.catchments.ie)
- National Biodiversity Data Centre – www.biodiversityireland.ie
- BirdWatch Ireland - www.birdwatchireland.ie/
- Google Earth aerial photography
- Fossit (2000) *A Guide to Habitats in Ireland*. The Heritage Council
- Cork City Development Plan 2015 – 2021.
- Arup (2019) Cork Docklands to City Centre Road Network Improvement Scheme *Report for Screening for Appropriate Assessment*.

2.3 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 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 and 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 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 development, 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 development, 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 development 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 project or plan 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.

3 Ecological Overview

3.1 Overview

The entirety of the proposed development area is currently hardstanding and no works will be carried out within the River Lee or the River Bride. There are a number of trees along the footpath of St Patrick's Quay and some younger trees along the riverside of Merchant's Quay. Five of these trees will be removed from St Patrick's Quay as part of the installation of a new cycle lane. A number of new trees will be planted along MacCurtain street as part of an improved public realm. The proposed works along the quays will include kerb relocation, new footpath construction and tree removal and no works are required along any of the quay walls or bridge parapets. Overall, there is unlikely to be any significant impact on the habitats present within the development boundary of the proposed development. Refer to **Section 4** below for further details on the proposed development.

3.2 Ecological Baseline

The proposed development site includes MacCurtain Street, Leirim Street, Wellington Road, Coburg Street, Cathedral Walk, St Patrick's Quay, Camden Place, Carroll's Quay, Merchant's Quay, Anderson's Quay, Lavitt's Quay.

The River Lee, which runs adjacent to the development boundary, is influenced by the tide at this location. The north channel merges with the south channel downstream of the proposed development area, the River Lee then flows east into Cork Harbour approximately 5km downstream of the proposed development.

Downstream of the site, both sides of the River Lee are bound by quay walls, there is no natural riparian habitat along this part of the River Lee. No instream works are required. The proposed development footprint covers a large area and is surrounded by a variety of retail, residential and commercial areas.

The River Bride is a small stream that runs under Cathedral Walk, adjacent to the North City Link Road and discharges into the River Lee approx. 530m south of the proposed works. The River Bride is mainly culverted and is overall of low ecological value. The works on Cathedral Walk will be located near an open canalised section of the River Bride which runs parallel to the North City Link Road and eventually discharges into the River Lee.

The proposed development footprint passes through a variety of retail, commercial and residential streets. There are some decorative trees planted within the proposed development area along the footpaths of Merchant's Quay, St Patrick's Quay and Anderson's Quay.

All of the proposed development area is of low ecological value and can be classified as "*Buildings and artificial surfaces*" (BL3) according to Fossit (2007).

3.3 Records of Protected and Invasive Species

The National Biodiversity Data Centre (NBDC) website (www.biodiversity.ie) contains a mapping tool that indicates known records of legally protected species within a selected OS 10km Grid Square. The site is located within the 10km grid square W67 and data on this square was downloaded from the website in October 2019. It is noted that this list is not exhaustive, and an absence of records does not imply that they are not present within the given area. It is also noted that these squares include many aquatic habitats/fauna found in the River Lee and the habitats within the proposed development area will not support those species.

The following protected species have been recorded in this 10km grid square - Common Dolphin (*Delphinus delphis*), European Otter (*Lutra lutra*), Common Frog (*Rana temporaria*), Barn Swallow (*Hirundo rustica*), House Martin (*Delichon urbicum*), Black-headed Gull (*Larus ridibundus*), Sand Martin (*Riparia riparia*), Kingfisher (*Alcedo atthis*), Common Seal (*Phoca vitulina*) and Eurasian Red Squirrel (*Sciurus vulgaris*). A number of bat species have also been recorded here: Daubentons Bat (*Myotis daubentonii*), Brown Long-Eared Bat (*Plecotus auritus*), Lesser Noctule (*Nyctalus leisleri*), Natterer's Bat (*Myotis nattereri*), Pipistrelle (*Pipistrellus pipistrellus sensu lato*) and Soprano Pipistrelle (*Pipistrellus pygmaeus*).

The following invasive species have been recorded in this 10km grid square - Butterfly-bush (*Buddleja davidii*), Japanese Knotweed (*Fallopia japonica*), Narrow-leaved Ragwort (*Senecio inaequidens*), Sycamore (*Acer pseudoplatanus*), Greater White-toothed Shrew (*Crocidura russula*), European Rabbit (*Oryctolagus cuniculus*), House Mouse (*Mus musculus*).

3.4 Habitats

The habitats in the development area (according to Fossitt 2000) are considered to be of low ecological importance and consists of Built and Artificial Surfaces (BL3). There are some decorative trees along St Patrick's Quay, Anderson's Quay and Merchant's Quay. Approximately five trees will be removed on St Patrick's Quay as part of the works to facilitate the addition of a cycle lane and upgrade to footpath. These trees are relatively small and juvenile, are located on busy streets and are unlikely to support any nesting habitats for birds or bats.

3.5 Fish

The River Lee is a designated salmonid watercourse under S.I. No. 293/1988 – European Communities (Quality of Salmonid Waters) Regulations, 1988. Atlantic salmon is listed on Annex II of the EU Habitats Directive. No spawning potential for fish is present along the section of the river in proximity to proposed development area. Fish using the area include salmon and lamprey moving upstream and downstream. Numerous estuarine species are known to occur. There will be no instream works within the river.

The risk status of the River Lee is classified as ‘at risk’ according to the Transitional Waterbodies Risk, while it has a ‘moderate’ Transitional Waterbody WFD Status 2010-2015. The River Bride also has a River Waterbodies Risk status of “at risk”.

3.6 Birds

The proposed development area consists mainly of roads, streets and road bridges and is not an important habitat for bird species. Birds species within the proposed development area are expected to be typical of garden habitats and those already accustomed to a busy urban environment. Feeding Grey Heron (*Ardea cinerea*) has been observed upstream along the River Lee. Dipper (*Cinclus hibernicus*), Sand Martin (*Riparia riparia*) and Grey Wagtail (*Motacilla cinerea*) are also known to occur on the River Lee. However, the proposed development area (BL3) is not of significant importance for these species and is not of importance for any Annex 1 bird species.

3.7 Mammals

The development area (BL3) is not a habitat of significant importance for any mammal species. The River Lee, which is adjacent to the development area, is known as an important habitat for Otter (*Lutra lutra*), which are protected under Annex II & IV of the EU Habitats Directive (92/43/EEC). The proposed development site does not impact any potential otter habitat.

According to the National Biodiversity Data Centre there are records for Common Pipistrelle (*Pipistrellus pipistrellus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*), Daubenton’s Bat (*Myotis daubentoni*), Leisler’s Bat (*Nyctalus leisleri*), Natterer’s Bat (*Myotis nattereri*) and Brown Long-eared Bat (*Plecotus auritus*) in grid square W67, in which the development site is located. However, there is no suitable habitat for bats found within the works footprint.

There are records for Harbour Seal (*Phoca vitulina*) and Grey Seal (*Halichoerus grypus*) and Common Dolphin (*Delphinus delphis*) within this grid square (W67), however, the proposed development will have no impact on habitat of significance for these species. Badger (*Meles meles*), Irish Stoat (*Mustela erminea*), Fox (*Vulpes Vulpes*), Red Squirrel (*Sciurus vulgaris*), Eurasian Pygmy Shrew (*Sorex minutus*) and Irish Hare (*Lepus timidus*) within Cork City, however, the proposed development area has limited habitat suitability for these species and they will not be affected as a result of the proposed works.

4 Characteristics of the Proposed Development

4.1 Operational Phase

The proposed development includes the following key proposals:

- Enhanced pedestrian environment to include public realm improvements along MacCurtain Street/Coburg Street and Bridge Street;
- The provision of a two-way cycle facility along St Patrick's Quay and Camden Quay; and
- The provision of bus priority measures along Devonshire Street, Coburg Street and Bridge Street;
- The provision of a contra-flow bus lane along Cathedral Walk between Leirim Street and Watercourse Road;
- The provision of two-way traffic movements along MacCurtain Street; and
- The reallocation of traffic lanes along Lavitt's Quay/Merchant's Quay and Anderson's Quay to improve capacity travelling eastbound.

Following construction there will be a reduction in public transport waiting times as a result of the bus priority measures put in place, improved facilities for pedestrians and cyclists by means of the improved footpaths and introduction of cycle lanes, increased safety for vulnerable road users and an improved public realm including trees and street furniture.

During the operational phase, there will be an increase in traffic along some routes where there will be a reconfiguration of the road. Possible effects on sensitive receptors due to emissions from changes in traffic flows were analysed in those reconfigured routes where there are residential dwellings, such as MacCurtain Street, Carroll's Quay, Coburg Street, Watercourse Road, Wellington Road and Leirim Street.

Once the development is operational there will be a benefit to street traders on MacCurtain Street, Coburg Street and Bridge Street. A new public realm will encourage business in the various shops and restaurants in this area. Currently, the heavy traffic flow on MacCurtain Street and Coburg Street, makes it a noisy and unpleasant place for pedestrians and road users and a reduction in the volume of traffic passing through aims to improve this issue.

During operation, surface and storm water drainage systems will operate as they do currently via side street gullies with surface water collected flowing into the River Lee. Some gullies will be relocated as part of the proposed works and the works will be carried out over a phased duration.

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4.2 Description of the Proposed Development during the Construction Phase

Construction works within the proposed development area will include excavation of the street surfacing and sub base, removal of existing surface materials, installation of new utilities, build-up of the street, repaving the street to include installation of new high quality public realm, planting trees and other decorative plants, and installation of new street furniture, street lighting and artworks. No demolition works will be required to facilitate the proposed development.

The works are to be undertaken on a phased basis, with an estimated length of time for all construction works to be completed is 12 months, with an anticipated start date of Q1 2021.

It is envisaged that the maximum depth of excavation will be 1m below the existing surface level, with the majority of the excavations approximately 500mm below the existing surface level. The exact location of trees and structural supports for e.g. street lighting will be determined as part of the detailed design process, in order to locate foundations such that they do not impact on services or other underground structures.

Barriers and hoardings will be installed to restrict access and to provide safety measures for workers and passers-by. Excavation works will be carried out on a phased basis to limit the impact on the activity of the street. This phasing will be set out in detail in an agreed Construction & Environmental Management Plan (CEMP) and Traffic Management Plan (TMP), which will be implemented for the duration of the construction phase.

Access to the city centre and the properties where construction works are proposed will be maintained at all times during the construction phase. This may require night works for final surfacing, utility installation in the vicinity of property entrances, etc. Details of this scheduling will be confirmed as part of the CEMP and TMP.

The scale of construction proposed for the North Link Road, Lavitt's Quay, Merchant's Quay, Cathedral Walk, Anderson's Quay will require the temporary closure of a traffic lane to facilitate a safe working area.

The management of the construction works will enable the retention of at least one lane of traffic on MacCurtain Street and Coburg Street at all times and it will be necessary to divert some of the through traffic onto Lavitt's Quay and Merchant's Quay to manage the flow of traffic through the city during construction.

Existing bus routes will be maintained through the city centre. Temporary relocation of bus stops will be required to facilitate construction works at their existing locations, and the reliability of cross-city services may be temporarily impacted by the construction works. Bus services currently utilising the Camden Quay contraflow bus lane will need to divert during the course of the construction works.

The number of construction staff on site will vary throughout the works. It is possible that multiple crews would be on site in different areas of the city at any one time. Typically, crews would have 4-5 members, plus the operator of an excavator and/or mini-excavator. For resurfacing of asphalt, a typical crew would consist of 12-15 members plus associated plant, and delivery trucks. At any one time on a typical day, no more than 20-25 staff would be on site.

The Contractors Traffic Management Plan will include construction site offices, the location of which will be agreed with CCC. Staff parking arrangements will need to form part of the Contractor's Traffic Management Plan and this will also be subject to agreement with CCC. Construction vehicles will require access to works areas for delivery and removal of materials, but it is anticipated that these will require parking for a short duration only for loading and unloading of material.

The Contractor will ensure that the proposed works are carried out in accordance with the Safety, Health and Welfare at Work (Construction) Regulations 2013 (S.I. No. 291 of 2013). There is a low probability that accidents or pollution spillages will occur as the construction works are standard in nature and are minor (such as footpath replacement, road resurfacing and service excavations). This type of work is frequently carried out throughout Cork city and other cities throughout Ireland on a regular basis. Therefore, significant effects on Natura 2000 sites will not arise.

Some localised dust and noise emissions may be generated as a result of the construction works listed above. However, these will not be significant due to the short duration of the works, the low level of construction vehicles/plant and construction staff required to carry out the works, the nature of the works proposed and the narrow construction footprint along busy trafficked roads. It is expected that the noisier activities will need to be phased and planned to ensure that the nearest noise sensitive receptors such as residential buildings and schools, do not experience significant disturbance. Any birds or mammals which do inhabit the area are already habituated to a noisy environment as this area is exposed to a high level of traffic noise. Therefore, any noise as a result of the proposed development will have no significant impact on any QI species.

4.2.1 Construction Methodology adjacent to River Lee

Works will take place along the footpaths adjacent to the River Lee and the River Bride, however there will be no instream works. Surface water run-off will be managed as is currently the norm. Construction run off will drain through the stormwater drainage system into the River Lee where it is diluted. The extent of the works within a highly urbanised area are relatively small and are unlikely to have any significant impact on water quality within the River Lee or River Bride.

4.3 Proposed Development Details

4.3.1 Coburg Street and Bridge Street

The Public Realm proposals for Coburg Street and Bridge Street are presented in **Figure 3** below and include the following key proposals:

- Convert Coburg Street from two eastbound general traffic lanes to one new westbound general traffic lane and one eastbound bus lane (24 hour);
- Provide two new bus stops on Coburg Street with associated bus shelters;
- Upgrade the southern footpath along Coburg Street to include the relocation of the public bike share scheme within the same area;
- Upgrade the northern footpath along Coburg Street;
- Provide set down spaces and loading bay on Coburg Street;
- Introduce a bus priority signalised junction at the junction of Bridge Street with Coburg Street;
- Provide new paving and enhanced pedestrian provision through the junction of Bridge Street and Coburg Street;
- Introduce a new southbound bus only lane (24 hour) on Bridge Street to replace one general northbound traffic lane;
- Upgrade the footpaths along Bridge Street to include the provision of a pedestrian ramp adjacent to the steps at the junction of Bridge Street and St Patrick's Quay;
- Provide loading bay on Bridge Street;
- Upgrade all existing traffic signals along Coburg Street and Bridge Street to include the provision of CCTV at the junctions;
- Provide enhanced public realm to include ancillary street furniture, cycle parking and trees;
- Upgrade the existing public lighting network along the streets;
- Coburg Street and Bridge Street will be resurfaced and new road markings presenting the revised traffic management along both streets will be installed.

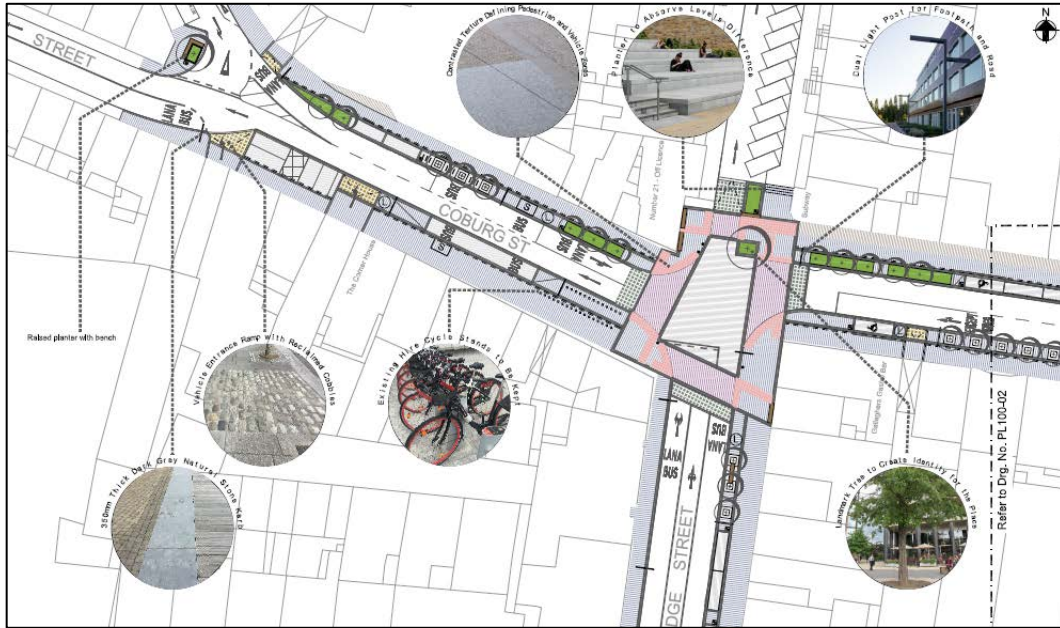


Figure 3: Public realm proposals for Coburg Street and Bridge Street | Not to Scale

4.3.2 St Patrick's Hill, St Patrick's Place and Wellington Road

- Reverse the section of St Patrick's Hill between MacCurtain Street and St. Patrick's Place from southbound currently to northbound traffic flow;
- Relocate the existing on-street parking from the western side of the street to the eastern side of the street;
- Provide enhanced pedestrian facilities to include new pedestrian signalled crossings on St Patrick's Place and Wellington Road and a raised pedestrian table at the junction of Sidney Hill;
- Modify the existing parking in the vicinity of Sidney Hill to include the provision of set down spaces and a coach parking area.

4.3.3 MacCurtain Street and Harley's Street

The Public Realm proposals for MacCurtain Street are presented in the **Figures 4 and 5** below and include the following key proposals:

- Convert MacCurtain Street from one way eastbound to two-way traffic;
- Provide enhanced public realm to include, wider footpaths, a spill out area, trees, cycle parking, disabled parking spaces and the provision of set down spaces which can be temporarily converted to outdoor sitting areas under licence;
- Provide a paved shared surface area within a central position along MacCurtain Street to include its junction with Harley's Street;
- Pedestrianisation of Harley's Street with service access retained for premises directly accessed from Harley's Street;

4.3.4 Brian Boru Bridge and Brian Boru Street

- Convert one lane of Brian Boru Street from southbound traffic flow to northbound traffic flow;
- Convert a section of the central southbound traffic lane to a northbound right turn bus lane on Brian Boru Street;
- Convert one lane of Brian Boru Bridge from southbound traffic flow to northbound traffic flow.

4.3.5 St Patrick’s Quay

The street improvement works along St Patrick’s Quay are presented in Figure 6 below and include for the following:

- Provide a new two-way cycle track on the southern side of the Quay;
- Relocate some of the existing coach parking facilities to Anderson’s Quay, Lower Glanmire Road and Alfred Street;
- Provide set down spaces on the western side of Mary Elmes Bridge and relocate loading and disabled parking bays from the northern side of the street to the southern side;
- Upgrade the traffic signals at the junction of St Patrick’s Quay/Bridge Street and St Patrick’s Quay/ Brian Boru Bridge;
- Upgrade the existing footpaths and public lighting network along the street.

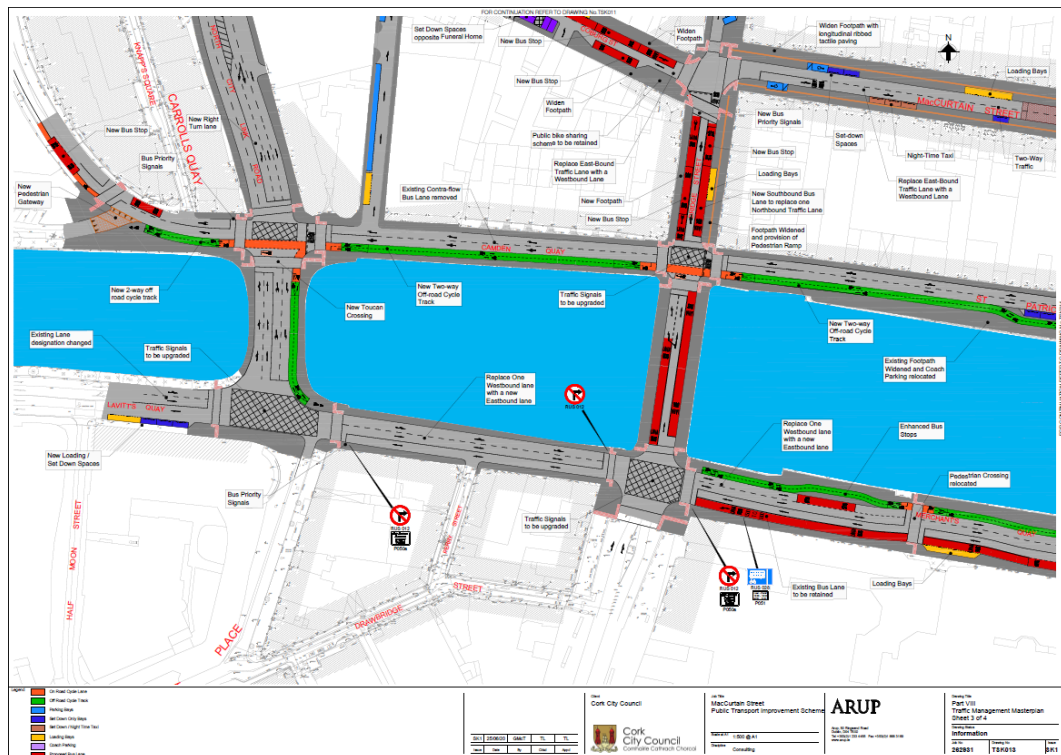


Figure 6: Street improvement works – Sheet 1 of 4 | Not to Scale

4.3.6 Camden Quay and North Link Road and Mulgrave Road

- Provide a new footpath and a new two-way cycle track to replace the existing southern footpath on Camden Quay;
- Remove the eastbound contra flow bus lane along the northern side of Camden Quay;
- Provide right turn lanes and ghost island road markings along the central median on the North Link Road within the scheme area;
- Provide new pedestrian gateway at the junction of Popes Quay and Mulgrave Road;
- Upgrade the junction of Camden Quay/Christy Ring Bridge to provide for enhanced pedestrian and cycle crossing on the bridge and revised traffic movements at the junction. The junction upgrade will include for the provision of CCTV and new traffic signals and bus priority measures;
- Provide new bus stop on Mulgrave Road and a new bus stop on Camden Quay;
- Replace a section of the existing northbound cycle lane with a new two way off road cycle track between Christy Ring Bridge and Popes Quay.

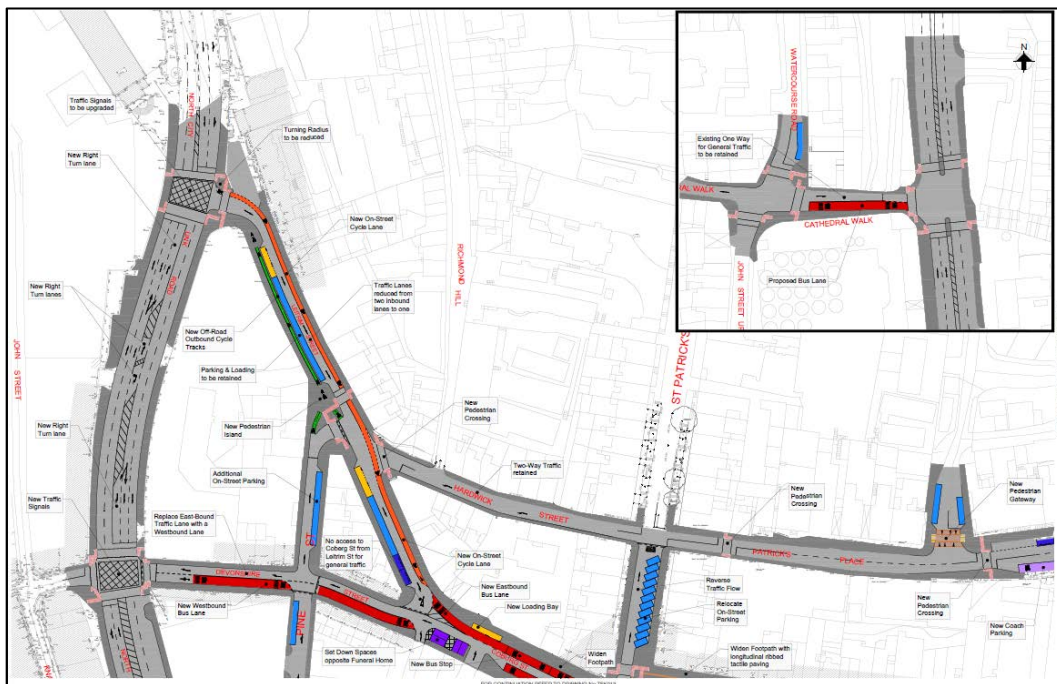


Figure 7: Street improvement works – Sheet 2 of 4 | Not to Scale

4.3.7 Leirim Street

- Provide an inbound cycle lane;
- Provide an outbound cycle track between Hardwick Street and the North Link Road;
- Provide set down spaces, on-street parking and loading bays along the western side of the street;
- Reduce two southbound traffic lanes to one southbound traffic Lane;
- Upgrade the existing public lighting network along the street;
- Upgrade all existing traffic signals along the street.

4.3.8 Cathedral Walk

- Convert Cathedral Walk from its junction with Watercourse Road to North Link Road (N20) from two eastbound traffic lanes to one east bound traffic lane and one westbound bus lane (24 hour);
- Provide a new signalised junction at the intersection of Watercourse Road, Cathedral Walk and Upper John Street;
- Provide bus priority at the junction of Cathedral walk and North Link Road (N20).

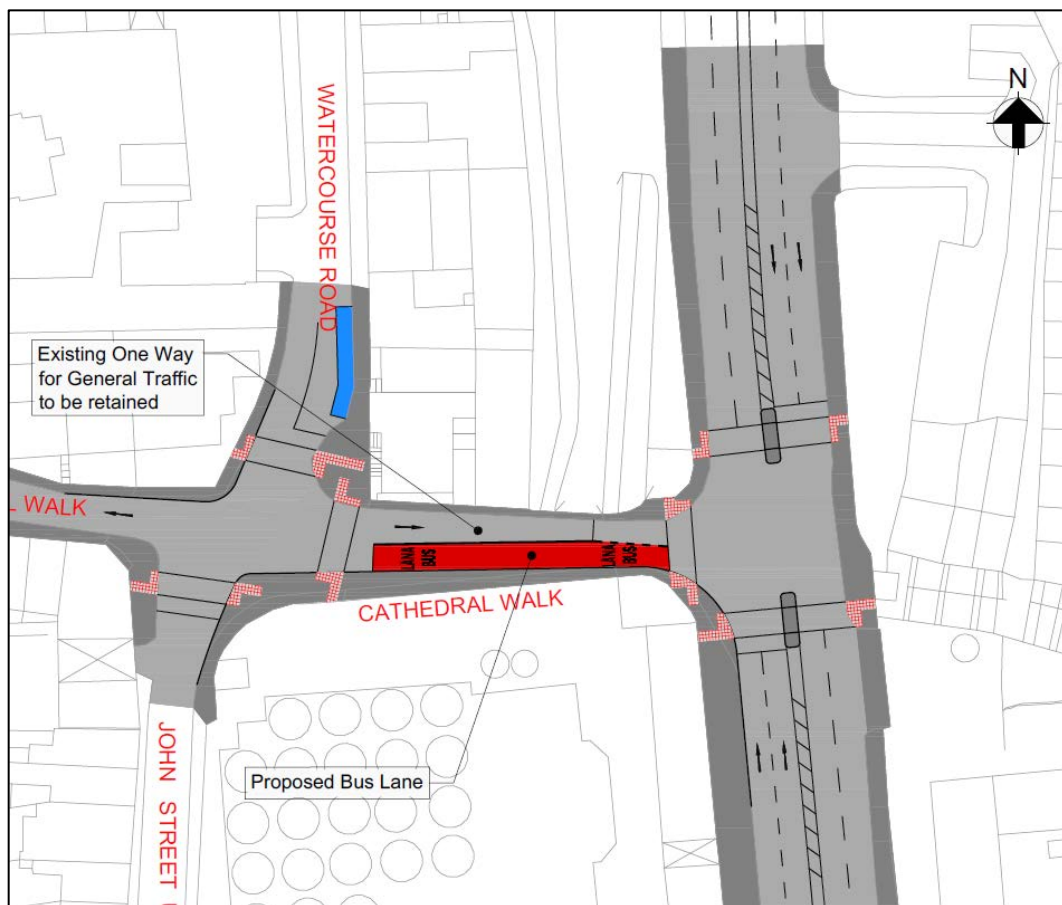


Figure 8: Cathedral Walk improvement works | Not to Scale

4.3.9 Lower Glanmire Road

- Provide coach set down bays with associated shelters along the northern side of the existing bus only lane;
- Provide a new bus stop on the northern side of Lower Glanmire Road to include an enhanced waiting area for passengers;
- Upgrade Footpaths on north side of the Lower Glanmire Road.

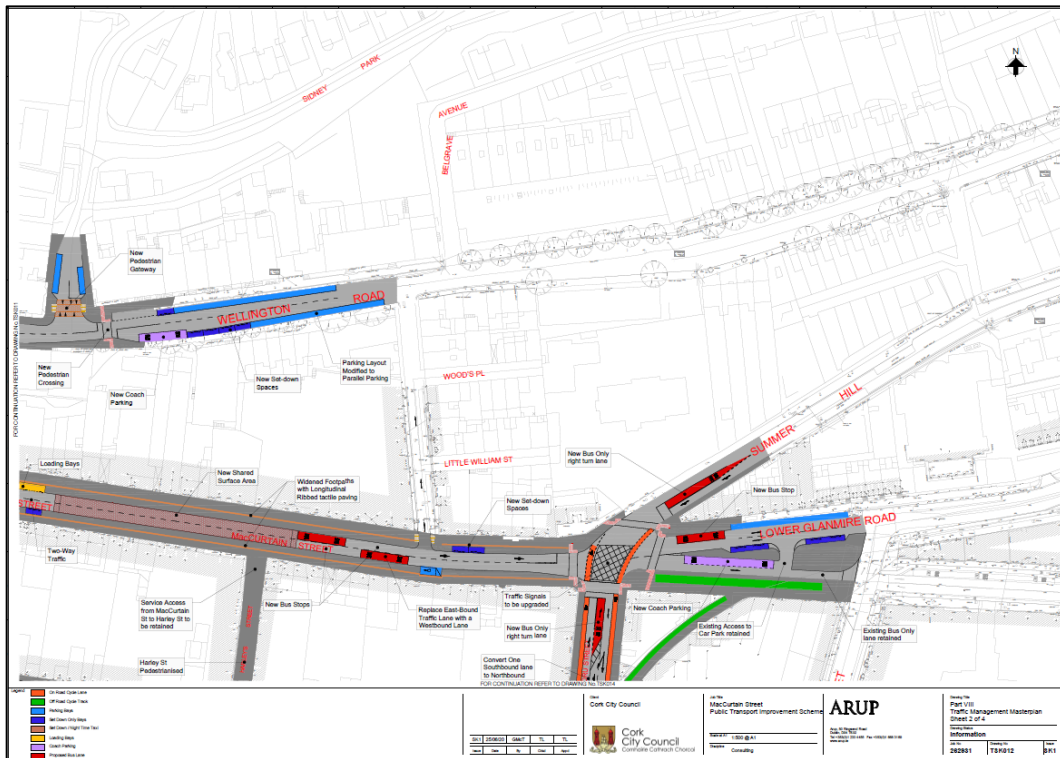


Figure 9: Street improvement works – Sheet 3 of 4 | Not to Scale

4.3.10 Merchant's Quay

- Replace one westbound general traffic lane with an eastbound general traffic lane;
- Replace a section of an existing eastbound cycle lane with a new two way off road cycle track;
- Relocate the existing pedestrian crossing on the street;
- Retain the existing loading bay on the southern side of Merchant's Quay;
- Upgrade all existing traffic signals along the street to include provision of CCTV;
- Install a right turn restriction for all traffic except for buses travelling between Merchant's Quay and St Patrick's Quay;
- Upgrade and modify the footpaths on both sides of the street to accommodate the new traffic management arrangements;

- Provide a westbound bus lane (24 hour) on Devonshire Street;
- Upgrade the existing footpaths and public lighting system;
- Provide a new signalised junction at the intersection of North Link Road and Devonshire Street;
- Provide additional on street parking and loading bay on Pine Street.

4.3.15 Christy Ring Bridge and Lavitt's Quay

- Provide two eastbound general traffic lanes on Lavitt's Quay;
- Install a right turn restriction for all traffic, except for buses travelling from Lavitt's Quay to Christy Ring Bridge;
- Upgrade all traffic signals along the quay to include provision of CCTV;
- Provide set down spaces and a loading bay on Lavitt's Quay west of Emmet Place;
- Provide a new two-way cycle track on the eastern side of Christy Ring Bridge to replace one existing northbound traffic lane.

5 Natura 2000 Sites

5.1 Zone of Influence of the Proposed Development

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.

As detailed previously, significant environmental emissions are not predicted due to the nature of the works proposed.

The River Lee runs adjacent to the works, however it is not included in the development footprint. The River Lee is of significance for several faunal species (as detailed in **Sections 3.2-3.7** previously). The presence of these faunal species indicates potential for the species to occur in the main River Lee and to use the channel for migration. In addition, the river provides habitat for Otter (Annex II, Habitats Directive). Although no breeding sites have been identified along the north channel in proximity to the proposed development area, otter do use the North Channel and River Bride for foraging and commuting.

Otter are also a qualifying interest species of the Gearagh SAC which is located in the same river catchment, approx. 30km upstream of the proposed development. The conservation objectives for otter in the Gearagh SAC includes a target that there is sufficient fish biomass available; which would include migratory fish, such as Atlantic salmon, that passes through the lower reaches of the River Lee in the vicinity of the proposed development.

As there are no instream works and minimal emissions (noise, air, water, ground) associated with the proposed development, it is submitted that there will not be any impact on fish travelling upstream of the River Lee, and therefore no indirect impacts on the otter population of the Gearagh SAC.

Works carried out near the quays will be minor and will not result in any water quality issues in the River Lee or Bride. The river at this location is tidal and close to Cork Harbour which is subject to large diurnal tidal flows carrying substantial volumes of sediment. As such any spillages, if they did arise (albeit minor) would be quickly diluted.

As mentioned previously, the existing surface water drainage is managed via side street gullies, some of these will be relocated as part of the design works. During construction, surface water will be managed as it is currently and will be drained to the River Lee via the storm water drainage system where it is diluted. This is a heavily trafficked area with frequent construction works close to the River Lee. The works associated with this development are minor and are unlikely to result in significant impacts on the water quality of the River Lee.

Some noise and air emissions are expected during the construction phase. The main source of noise and dust will be as a result of construction plant and machinery and excavations. This will be minor and of a short duration. Any species in the vicinity of the works will already be accustomed to a certain level of disturbance due to existing traffic noise, construction and the urban nature of the area.

Given the low level of emissions predicted from the proposed development, given the low ecological importance of the proposed works area on land and the nature and duration of the works, it was considered that the zone of influence (ZoI) of the proposed development would not extend further than 500m from the proposed development.

5.2 European Sites within Zone of Influence

As described above, given the low level of emissions predicted from the proposed development and the low ecological importance of the proposed works area on land, it was considered that the zone of influence of the proposed development would not extend further than 500m from the proposed development. There are no Natura 2000 sites within the construction footprint boundary and thus none within the zone of influence. The habitats within the proposed development site (BL3) are not significant foraging or breeding or commuting habitat for any mobile QI species. 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 proposed development area is not of importance for the qualifying interests (QI) species of any Natura 2000 site.

Consultation of NPWS online data identified two designated sites within 15km of the proposed development – one Special Protection Area (SPA) and one Special Area of Conservation (SAC) (Refer to **Figure 11**). These sites along with their qualifying interests and conservation objectives are outlined in **Table 1** below.

The closest European site to the proposed development is Cork Harbour SPA (2.6km to the east as the crow flies or approximately 4.3km downstream). Great Island Channel SAC is located approximately 8.2km as the crow flies to the east of the proposed development with a hydrological distance of approximately 9.1km (Refer to **Figure 12**).

The Natura 2000 sites located within Cork Harbour are indirectly hydrologically linked to the proposed development site via the site drainage system into the River Lee and the River Bride. However, the likelihood of significant loading or pollution (e.g. fuel spill) to the Rivers and further downstream to the Natura 2000 sites is very very low. There are no excavation works or instream works being carried out in the River Lee or the River Bride. Once the site is operational all surface water will drain off the site via side street gullies as it does currently. Overall, the works are standard and works of this kind are frequently carried out throughout Cork city. It is submitted that there will be no significant impact on any nearby Natura 2000 sites.

Furthermore, the hydrological distance between the proposed development works area and the closest downstream Natura 2000 site (4.3km downstream) further reduces the risk of significant effects. This distance, combined with the considerable assimilative capacity of River Lee means that the level of suspended solids/pollutants (albeit from very minor spillages) from the proposed works which could ultimately enter the Lee and downstream will not have a significant effect on the aforementioned Natura 2000 sites. The designated sites downstream are not sensitive to sediment loading and are all located in estuarine/ tidal areas in Cork Harbour, which are subject to large diurnal tidal flows carrying substantial volumes of sediment. Any habitats or species in these areas are subject to varying levels of salinity, flows and suspended solids.

Any mobile QI species using the River Lee near the proposed development area will already be accustomed to a certain level of disturbance due to the existing traffic noise, construction and industry in the area. Thus, disturbance to the QI bird species due to the works is unlikely. The downstream SPA is predominantly used by bird species that are found in coastal habitats including mud flats, sand flats and Atlantic salt meadows in areas of shallow waters. These habitats provide areas suitable for feeding, nesting and feeding in the sheltered shallow waters and organic rich mudflats. These sites are significant for the wintering birds that use the sites.

The area of the proposed development is not an area of significant interest to these bird species for roosting or foraging. Most of the site is in a highly urbanised environment with high volumes of traffic and associated noise, while the existing river channel is highly modified; the flow rates and lack of shallow water is unsuitable for feeding for most Special Conservation Interest (SCI) SPA species. Therefore, there will be no direct or indirect effects on any sites designated as Special Protection Areas or Special Conservation Areas as a result of the proposed development.



Figure 12: Closest Natura 2000 site, Cork Harbour SPA, in relation to the proposed development | Background Mapping © Bing Maps

Table 1: Relevant Natura 2000 Sites within 15km of the proposed development

Special Protection Areas			
Site Name and Code	Qualifying Interests	Conservation Objectives	Distance (km) (as the crow flies)
Cork Harbour SPA (004030)	Little Grebe (<i>Tachybaptus ruficollis</i>) [A004] Great Crested Grebe (<i>Podiceps cristatus</i>) [A005] Cormorant (<i>Phalacrocorax carbo</i>) [A017] Grey Heron (<i>Ardea cinerea</i>) [A028] Shelduck (<i>Tadorna tadorna</i>) [A048] Wigeon (<i>Anas penelope</i>) [A050] Teal (<i>Anas crecca</i>) [A052] Pintail (<i>Anas acuta</i>) [A054] Shoveler (<i>Anas clypeata</i>) [A056] Red-breasted Merganser (<i>Mergus serrator</i>) [A069] Oystercatcher (<i>Haematopus ostralegus</i>) [A130] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Grey Plover (<i>Pluvialis squatarola</i>) [A141] Lapwing (<i>Vanellus vanellus</i>) [A142]	To maintain the favourable conservation condition	2.6km (4.3km downstream)

Special Protection Areas			
Site Name and Code	Qualifying Interests	Conservation Objectives	Distance (km) (as the crow flies)
	Dunlin (<i>Calidris alpina</i>) [A149] Black-tailed Godwit (<i>Limosa limosa</i>) [A156] Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] Curlew (<i>Numenius arquata</i>) [A160] Redshank (<i>Tringa totanus</i>) [A162] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Common Gull (<i>Larus canus</i>) [A182] Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183] Common Tern (<i>Sterna hirundo</i>) [A193] Wetland and Waterbirds [A999]		
Great Island Channel SAC (001058)	Mudflats and sandflats not covered by seawater at low tide [1140] Atlantic salt meadows (<i>Glaucopuccinellietalia maritima</i>) [1330]	[1140] To maintain the favourable conservation condition [1330] To restore the favourable conservation conditions	8.2km (9.1km downstream)

5.3 Other Designated Sites

Proposed Natural Heritage Areas (pNHAs) and Natural Heritage Areas (NHAs) can be considered to be ‘stepping stones’ between Natura 2000 sites. There are no NHAs within 15km of the proposed development. However, there are 17 pNHAs within 15km of the proposed development these are outlined in **Table 2** below along with their respective distances from the proposed development. None of these will be significantly directly nor indirectly impacted by the proposed development.

Table 2: pNHAs within 15km of the proposed development

Proposed Natural Heritage Areas (pNHAs)	Site Code	Distance (km)
Lee Valley	000094	3.36
Shournagh Valley	000103	6.79
Blarney Castle Woods	001039	6.93
Douglas River Estuary	001046	2.54
Glanmire Wood	001054	4.37
Great Island Channel	001058	7.62
Lough Beg (Cork)	001066	12.41
Rockfarm (Quarry), Little Island	001074	7.38
Cork Lough	001081	1.49
Dunkettle Shore	001082	4.38

Proposed Natural Heritage Areas (pNHAs)	Site Code	Distance (km)
Ballincollig Cave	001249	8.96
Blarney Lake	001798	6.92
Ardamadane Wood	001799	6.97
Blarney Bog	001857	4.87
Monkstown Creek	001979	9.83
Cuskinny Marsh	001987	13.43
Owenboy River	001990	10.7

5.4 Cumulative Effects

The Cork City Council online planning records for the area were consulted in March 2020.

In addition to the proposed development, other relevant proposed or permitted projects in the surrounding areas of Cork City have been considered. These include:

Metropole Hotel Re-Development (17/37497) – Permission has been granted to MacCurtain Street Hoteliers Ltd for a development. The proposed development will comprise of the part demolition of the existing structures on the site of 546sqm, the construction of a part 5, part 6, part 7 and part 8 storey over basement guest accommodation facility with an overall area of 1949sqm, the provision of a public bar facility on the ground floor with an external courtyard and all necessary site works not limited to but including ancillary works.

Parnell Place Hotel Development (18/38009) – Permission has been granted for the Parnell Place Hotel Development. The proposed development will consist of the partial demolition, redevelopment and extension of 7/8 and 9 Parnell Street: the demolition of existing structures to the rear of 7/8 and 9 Parnell Place on Deane Street, Cork, excluding a red brick chimney; and the demolition of existing structures on Deane Street, Cork, including the demolition of a habitable house, to facilitate a hotel- development of 165 no. bedrooms of between 3-7 storeys plus rooftop plant, principally accessed from Deane Street, as well as Parnell Place, with ground floor reception area, restaurant/bar, retail unit, food hall and café/retail unit. The proposed development includes a new skylight the roof of 7/8 Parnell Place: a link bridge on 3 levels connecting 7/8 Parnell Place to the new building fronting Deane Street; green roofs; rooftop plant enclosures; signage; bin stores; ESB substation; and all associated ancillary services. The proposed development also includes the re-opening of an historic laneway connecting Parnell place with Deane Street, a set down area on Deane Street and all associated site development, elevation treatment and landscaping works.

Woods Place Apartment Development (17/37657) – The proposed development will comprise of: (1) the part demolition of the existing structures on the site of 546.07sqm; (2) the construction of a part 5, part 6, part 7 and part 8 storey over basement guest accommodation facility (of 73 rooms providing 90 bedspaces) with an overall area of 1,949m²; (3) the provision of a public bar facility on the ground floor with an external courtyard, and (4) all necessary site works, not limited but including ancillary works

Prism Office Development (18/37894) – Permission has been granted for the construction of an office building which will comprise of 15 storeys above ground level and a gross floor area of circa 5,985sqm on a triangular site which is bounded by Clontarf Street, Deane Street and Oliver Plunkett Street Lower in Cork City. The proposed ground floor use will comprise of lobby, office rooms and building services and the first to fourteenth floors will comprise of office use and building services. A rooftop terrace will be provided for staff above the fourteenth floor and will include a canopy structure that will oversail the public footpath adjoining Clontarf Street. A glass canopy oversails Deane Street at the third-floor level. From the third floor up to the up to the roof terrace the proposed building will overhang the public footpaths along Clontarf street and Oliver Plunkett Street Lower by approximately 2 meters. The proposed development will also include a double basement with ancillary plant and equipment and a water tank. The main pedestrian access to the building will be via Clontarf Street and existing electricity sub-station will be relocated within a secure room on the ground floor of the proposed building with secure access from Deane Street.

Horgans Quay Development (17/37563) – Permission was granted for this development in April 2018. The development is currently under construction and consists of a mixed use residential, office, hotel and retail development with ancillary creche, landscaping and public realm works resulting in the creation of 4 no. public spaces with an area of 5,080 m², services and site development works. The proposed development makes provision for the conservation, refurbishment, alteration and change of use of the Old Railway Station (Station Master's Building), Carriage Shed and the Goods Shed which are Protected Structures to facilitate their integration into the proposed development and for the demolition of structures, including the existing wall to Horgan's Quay which forms part of their curtilage. Construction commenced in August 2018 and it is anticipated that they will be complete in December 2022.

Custom House Tower – 19/38589 - Planning permission is sought by Tower Development Properties Ltd for: Redevelopment of the Custom House site at North Custom House Quay and South Custom House Quay, Custom House Street, Cork City to provide a 240-bedroom hotel, 25 no. hotel serviced suites, and a range of commercial uses including retail, office, food and beverage, distillery, tourism and leisure. The redevelopment will have a gross floor area of approximately 31,604m². The proposed development consists of the carrying out of works to Protected Structures PS060, PS818 and PS163. An Environmental Impact Assessment Report has been submitted to the Planning Authority with the application. A Natura Impact Statement has been submitted to the Planning Authority with the application.

Albert Quay Build -to-Rent Scheme – ABP 305779 – Planning permission has been granted Build-to-Rent Strategic Housing Development consisting of 201no. 1 (93), 2 (104) and 3 (4) bed apartments in a building that ranges in height from 8, 11 to 24 storeys over ground floor. The project will consist of resident support facilities (concierge, management facilities, post and parcel areas, and laundry and waste management facilities) and resident services and amenities (lounge area, library, workspace, meeting rooms, coffee dock, games room, cinema room, dining area, gym, 2no. rooftop terraces and an internal amenity area on Level 24). The proposed development will also comprise a ground floor cafe; public plaza; rooftop plant; canopies; two basement levels, to include 402no. cycle spaces, 62no. car parking spaces and plant/services, as well as an additional storage area; and all associated site development, ancillary development, including 2no. ESB substations, and landscaping and public realm works. The total above ground gross floor area proposed is 21,220m² (including existing buildings). The development involves the demolition of the former Sextant pub and the retention and refurbishment of listed buildings also on the site. An NIS was prepared as part of the planning application for this development.

Due to the nature and short-term duration of the works and the location of the proposed development in relation to any Natura 2000 Sites, there will be no impacts on any designated sites, therefore the proposed development will not act in-combination with any other plans or projects.

6 Assessment of Significance

The proposed development will not result in any significant direct, indirect or cumulative impacts on Natura 2000 sites. **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 works boundary. No works will take place within any Natura 2000 site. No material or spoil from the works will be deposited in any Natura 2000 site. There will be no encroachment on the habitats or species of any Natura 2000 site.
- 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 or soil during construction or operation. There will also be no significant noise emissions during the construction or operational phase.

7 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*

A1 Finding of No Significant Effects Report

Name of Project:

MacCurtain Street - Public Transport Improvement Scheme

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

There will be no direct or indirect significant negative effects on any Natura 2000 sites as a result of the proposed development. However, listed below are the two Natura 2000 sites within 15km of the proposed development with which there is an indirect hydrological pathway.

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

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 works boundary. No works will take place within any Natura 2000 site. No material or spoil from the works will be deposited in any Natura 2000 site. There will be no encroachment on the habitats or species of any Natura 2000 site.
- 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 or soil during construction or operation. There will also be no significant noise emissions during the construction or operational phase.

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); and

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 March 2020)

Google aerial photography (viewed March 2020)

National Parks and Wildlife Service online data on European Sites and (www.npws.ie) (viewed March 2020)

National Parks and Wildlife Service online data on protected flora and fauna (viewed March 2020)

EPA Envision Mapping (Viewed March 2020)

Cork City Development Plan 2015 – 2021.

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 preparation of Environmental Impact Statements) (EPA, 2003);

Draft Advice Notes for preparing Environmental Impact Statements (EPA October 2015) and;

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 effects 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.