



# APPROPRIATE ASSESSMENT SCREENING REPORT

FOR

VICAR STREET IMPROVEMENT  
SCHEME

AT

VICAR STREET, KILKENNY,  
CO.KILKENNY

March 2020

ON BEHALF OF

KILKENNY COUNTY COUNCIL

Prepared by  
Enviroguide Consulting

 *Dublin*  
3D Core C, Block 71, The Plaza,  
Park West, Dublin 12

 *Kerry*  
19 Henry Street  
Kenmare, Co. Kerry

 *Wexford*  
Unit 11 Floor B  
Westpoint Business Park  
Clonard Road, Wexford

 [www.enviroguide.ie](http://www.enviroguide.ie)  
 [info@enviroguide.ie](mailto:info@enviroguide.ie)  
 +353 1 565 4730



## DOCUMENT CONTROL SHEET

<b>Client</b>	Kilkenny County Council
<b>Project Title</b>	Vicar Street Improvement Scheme
<b>Document Title</b>	Appropriate Assessment Screening Report

Revision	Status	Author(s)	Reviewed	Approved	Issue Date
1.0	Draft for internal Review	Deborah D'Arcy <i>Ecologist</i>	Jim Dowdall <i>Director</i>	-	27/02/2020
2.0	Draft for Client	Deborah D'Arcy <i>Ecologist</i>	Jim Dowdall <i>Director</i>	Jim Dowdall <i>Director</i>	04/03/2020
3.0	Final Rev 1.0	Deborah D'Arcy <i>Ecologist</i>	Jim Dowdall <i>Director</i>	Jim Dowdall <i>Director</i>	10/03/2020
4.0	Client Info	Deborah D'Arcy <i>Ecologist</i>	Jim Dowdall <i>Director</i>	Jim Dowdall <i>Director</i>	13/03/2020

**TABLE OF CONTENTS**

**LIST OF TABLES .....3**

**LIST OF FIGURES.....3**

**1 INTRODUCTION .....1**

1.1 BACKGROUND ..... 1

1.2 LEGISLATIVE BACKGROUND ..... 1

    1.2.1 *Legislative Context* ..... 1

    1.2.2 *Stages of AA*..... 2

**2 METHODOLOGY .....3**

2.1 SCREENING STEPS ..... 3

2.2 DESK STUDY..... 3

2.3 FIELD SURVEYS..... 4

    2.3.1 *Constraints* ..... 4

2.4 ASSESSMENT OF IMPACTS ..... 4

**3 STAGE 1 SCREENING .....5**

3.1 MANAGEMENT OF NATURA 2000 SITES..... 5

3.2 DESCRIPTION OF PROPOSED DEVELOPMENT ..... 5

    3.2.1 *Site location* ..... 5

    3.2.2 *Brief Description of Development* ..... 8

    3.2.3 *Construction methodology*..... 8

3.3 EXISTING ENVIRONMENT ..... 10

    3.3.1 *Habitats* ..... 10

    3.3.2 *Invasive plant species*..... 11

    3.3.3 *Fauna* ..... 11

    3.3.4 *Water quality*..... 11

3.4 IDENTIFICATION OF RELEVANT NATURA 2000 SITES..... 12

    3.4.1 *Description of the Natura 2000 sites* ..... 15

3.5 CONSERVATION OBJECTIVES ..... 16

3.6 IDENTIFICATION OF POTENTIAL IMPACTS ..... 17

3.7 ASSESSMENT OF POTENTIAL IMPACTS ..... 17

    3.7.1 *Habitat Loss and Alteration* ..... 17

    3.7.2 *Habitat / Species Fragmentation* ..... 17

    3.7.3 *Disturbance and / or Displacement of Species*..... 18

    3.7.4 *Changes in Population Density* ..... 18

    3.7.5 *Changes in Water Quality and Resource*..... 18

    3.7.6 *Spread of invasive plant species* ..... 19

3.8 POTENTIAL FOR IN-COMBINATION EFFECTS ..... 24

**4 APPROPRIATE ASSESSMENT SCREENING CONCLUSION .....25**

**5 REFERENCES .....26**

**APPENDIX I - SITE LAYOUT MAP .....27**

**APPENDIX II NATURA 2000 NPWS SITE SYNOPSES .....28**

## LIST OF TABLES

Table 1. Notable records within 2km grid square S55D .....	12
Table 2. Natura 2000 sites within the Zone of Influence.....	13
Table 3. Identification of potential impacts on relevant Natura 2000 sites .....	19
Table 4. Appropriate assessment screening of the potential effects on the feature of interests of the River Barrow and Nore SAC .....	20

## LIST OF FIGURES

Figure 1. The four stages of the Appropriate Assessment Process (DEHLG, 2010). .....	2
Figure 2. Site Location .....	6
Figure 3. Site Layout .....	7
Figure 4. Natura 2000 Sites within 15km of Proposed Development .....	14

# 1 INTRODUCTION

## 1.1 Background

Enviroguide Consulting were commissioned by Kilkenny County Council to carry out an Appropriate Assessment Screening Report in relation to the Vicar Street Improvement Scheme, in Kilkenny City. This report contains information to enable the competent authority (Kilkenny County Council) to undertake Stage 1 Appropriate Assessment screening in respect of the proposed works.

## 1.2 Legislative Background

The Habitats Directive (92/43/EEC) seeks to conserve natural habitats and wild fauna and flora by the designation of SACs and the Birds Directive (79/409/EEC) seeks to protect birds of special importance by the designation of SPAs. It is the responsibility of each member state to designate SPAs and SACs, both of which will form part of Natura 2000, a network of protected sites throughout the European Community.

Member States are required to designate Special Areas of Conservation (SACs) and Special Protected Areas (SPAs) under the EU Habitats and Birds Directives, respectively. SACs and SPAs are collectively known as Natura 2000 sites. An 'Appropriate Assessment' (AA) is a required assessment to determine the likelihood of significant impacts, based on best scientific knowledge, of any plans or projects on Natura 2000 sites. A screening for AA determines whether a plan or project, either alone or in combination with other plans and projects, is likely to have significant effects on a Natura 2000 site, in view of its conservation objectives.

This AA Screening has been undertaken to determine the potential for significant impacts on relevant Natura 2000 sites. The purpose of this assessment is to determine, the appropriateness, or otherwise, of the proposed development in the context of the conservation objectives of such sites.

### 1.2.1 Legislative Context

An Appropriate Assessment is required under Article 6 of the Habitats Directive where a project or plan may give rise to significant effects upon a Natura 2000 Site, and paragraphs 3 and 4 state that:

*“6(3) 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.*

*6(4) 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 a 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.”*

This AA Screening Report was conducted within this legislative framework and the published Department of Environment, Heritage and Local Government 2009 guidelines - “Appropriate Assessment of Plans & Projects - Guidance for Planning Authorities”. The directives are transposed into Irish legislation by the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended).

As outlined in these, it is the responsibility of the proponent of the project to provide a comprehensive and objective Screening for Appropriate Assessment, which can then be used by the competent authority in order to conduct the Appropriate Assessment (DEHLG, 2009).

### 1.2.2 Stages of AA

This Appropriate Assessment Screening Report (the “**Screening Report**”) has been prepared by Enviroguide Consulting. It considers whether the proposed application is likely to have a significant effect on a Natura 2000 site and whether a Stage 2 Appropriate Assessment is required.

The AA process is a four-stage process, with issues and tests at each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required.

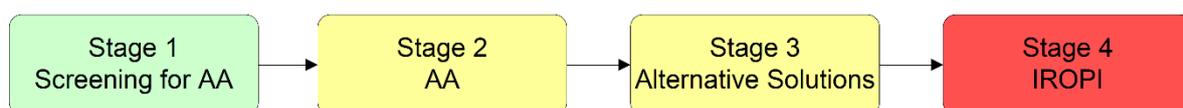


FIGURE 1. THE FOUR STAGES OF THE APPROPRIATE ASSESSMENT PROCESS (DEHLG, 2010).

The four stages of an AA, can be summarised as follows:

- Stage 1 Screening addresses:
  - whether a plan or project is directly connected to or necessary for the management of the site, or
  - whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a Natura 2000 site in view of its conservation objectives.
- Stage 2: *Natura Impact Statement (NIS)*. The second stage of the AA process assesses the impact of the project or plan (either alone or in combination with other projects or plans) on the integrity of the Natura 2000 site, with respect to the conservation objectives of the site and its ecological structure and function. A Natura Impact Statement containing a professional scientific examination of the project or plan is required and includes any mitigation measures to avoid, reduce significant negative impacts.
- Stage 3: *Assessment of alternative solutions*. If the outcome of Stage 2 is negative i.e. adverse impacts to the sites cannot be scientifically ruled out, despite mitigation, the

plan or project should proceed to Stage 3 or be abandoned. This stage examines alternative solutions to the proposal.

- *Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain.* The final stage is the main derogation process examining whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project to adversely affect a Natura 2000 site, where no less damaging solution exists.

The purpose of Stage 1, the Screening Stage is to determine the necessity or otherwise for a NIS. Screening for AA examines the likely effects of a project or plan alone, and in combination with other projects or plans, upon a Natura 2000 site, and considers whether it can be objectively concluded that these effects will not be significant.

The need to apply the precautionary principle in making any key decisions in relation to the tests of AA has been confirmed by European Court of Justice case law. Therefore, where significant effects are likely, uncertain or unknown at screening stage, AA will be required.

If it is determined during screening stage that the proposal has the potential to have a significant effect on a Natura 2000 site, then a NIS will need to be required.

## **2 METHODOLOGY**

### **2.1 Screening Steps**

This AA Screening Report has been undertaken in accordance with the European Commission Methodological Guidance on the provision of Article 6(3) and 6(4) of the 'Habitats' Directive 92/43/EEC (EC, 2001) and the European Commission Guidance 'Managing Natura 2000 sites' (EC, 2018). Screening for AA involves the following:

- Establish whether the plan is directly connected with or necessary for the management of a Natura 2000 site;
- Description of the plan or project and the description and characterisation of other projects or plans that in combination have the potential for having significant effects on the Natura 2000 site;
- Identification of Natura 2000 sites potentially affected;
- Identification and description of potential effects on the Natura 2000 site;
- Assessment of the likely significance of the impacts identified on the Natura 2000 site; and
- Exclusion of sites where it can be objectively concluded that there will be no significant effects.

This AA Screening Report examines whether any potential effects upon a Natura 2000 site will be significant and determines whether the AA process for the Vicar Street Improvement Scheme alone, and in combination with other plans and projects in the area, requires to proceed to a Stage 2 Appropriate Assessment.

### **2.2 Desk Study**

A desktop study was carried out to collate and review available information, datasets and documentation sources relevant for the completion of this Screening Report. The desktop study, completed in February 2020, relied on the following sources:

- Information on the network of Natura 2000 sites, boundaries, qualifying interests and conservation objectives, obtained from the National Parks and Wildlife Service (NPWS) at [www.npws.ie](http://www.npws.ie);
- Text summaries of the relevant Natura 2000 sites taken from the respective Standard Data Forms and Site Synopses available at [www.npws.ie](http://www.npws.ie);
- Information on species records and distributions, obtained from the National Biodiversity Data Centre (NBDC) at [maps.biodiversityireland.ie](http://maps.biodiversityireland.ie);
- Information on waterbodies, catchment areas and hydrological connections obtained from the Environmental Protection Agency (EPA) at [gis.epa.ie](http://gis.epa.ie);
- Information on bedrock, groundwater, aquifers and their statuses, obtained from Geological Survey Ireland (GSI) at [www.gsi.ie](http://www.gsi.ie);
- Satellite imagery and mapping obtained from various sources and dates including Google, Digital Globe, Bing and Ordnance Survey Ireland;
- Information on the existence of permitted developments, or developments awaiting decision, in the vicinity of the proposed development from Kilkenny County Council available at: <http://planning.kilkennycoco.ie>.

For a complete list of the specific documents consulted as part of this assessment, see *Section 5 References*.

## 2.3 Field surveys

An ecological field survey of the site of works and surrounding areas including the location of the outfall pipe to the Breaghagh River within the adjacent Brewery site was carried out on 25.02.2020. Account was taken of the general ecology of the site and particular attention was paid to evaluating the potential for disturbance from the works to the habitats/ species associated with the River Barrow and Nore SAC and The River Nore SPA.

A 200 section of the River Nore under the new bridge where accessible was subject to a walkover survey to detect the presence of otter spraints and holts.

The site of works and adjacent areas and the River Breaghagh were surveyed for the presence of high impact invasive plant species listed on Schedule III of the Birds and Habitats Regulations.

### 2.3.1 Constraints

Due to the ecological survey being carried out in February it would not be possible to detect the invasive plant species Himalayan balsam (*Impatiens glandulifera*) as it is an annual species and there would be no evident growth in February.

## 2.4 Assessment of Impacts

The potential for significant impacts that may arise from the proposal were considered through the use of key indicators,

- Habitat loss or alteration;
- Habitat/species fragmentation;
- Disturbance and/or displacement of species;
- Changes in population density; and

- Changes in water quality and resource.
- The potential for spread of invasive plant species

and consideration of the information pertaining to the conservation objectives of the Natura sites, the ecology of the designated habitats and species and known or perceived sensitivities of the habitats and species.

### **3 STAGE 1 SCREENING**

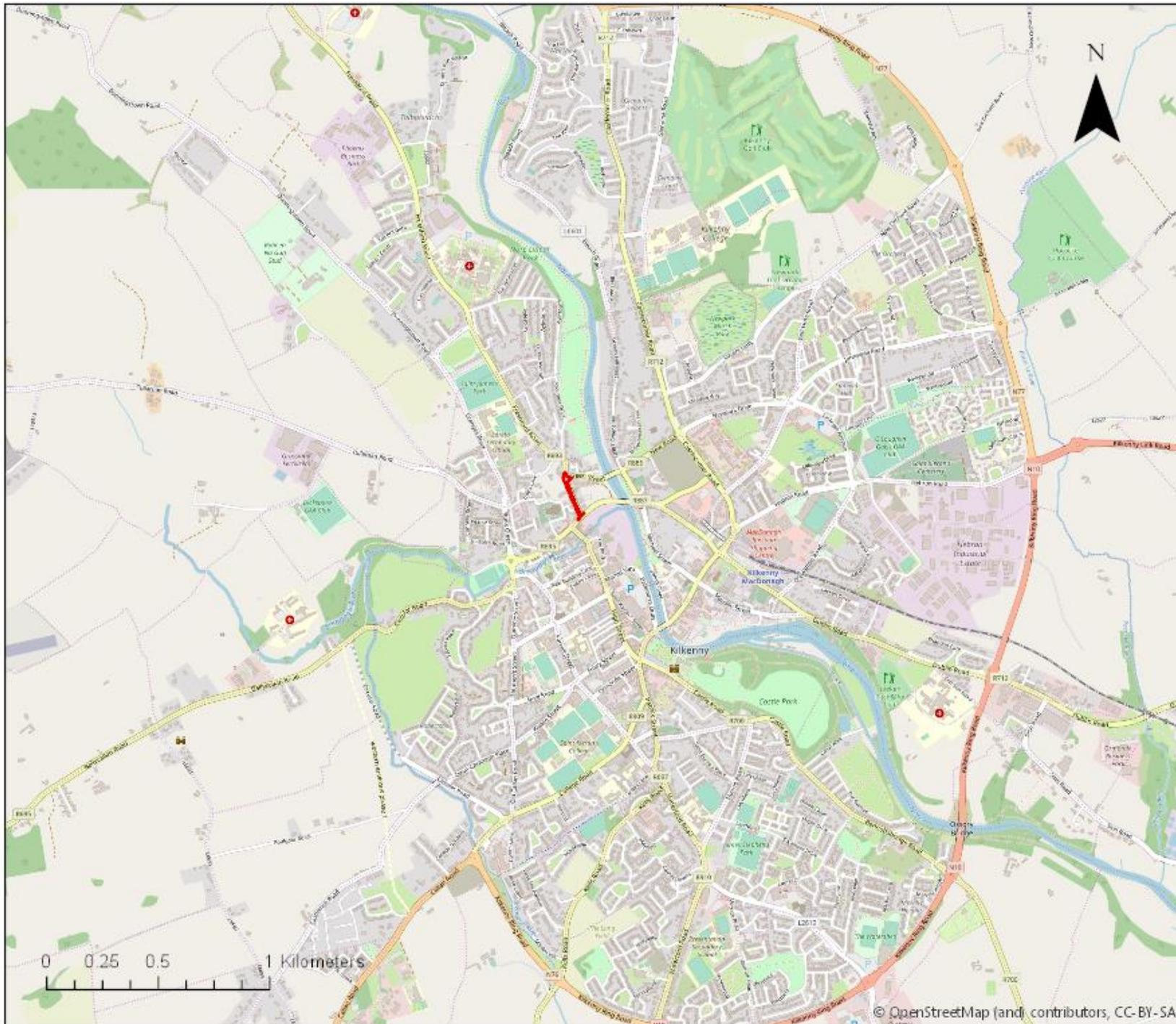
#### **3.1 Management of Natura 2000 Sites**

The Vicar Street Improvement Scheme is not directly connected with or necessary to the management of any Natura 2000 sites.

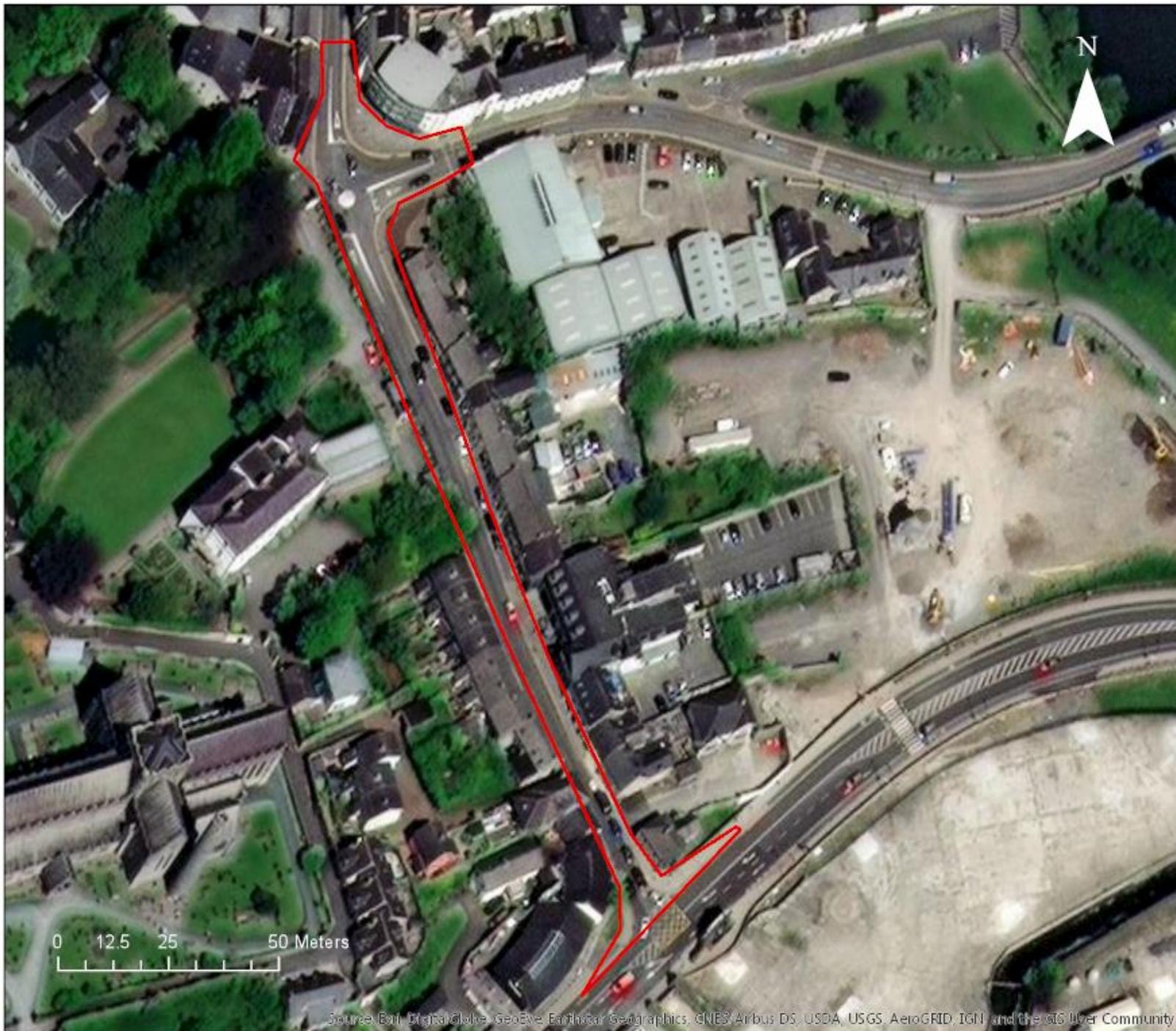
#### **3.2 Description of Proposed Development**

##### **3.2.1 Site location**

The site of the proposed works is located along a 200 m stretch of Vicar Street in Kilkenny City approximately 130m west of the River Nore which is designated as the River Barrow and Nore SAC and the River Nore SPA.



<b>Legend</b>	
 Site Outline	
 <p>At: here Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community</p>	
<b>Project</b>	
Vicar Street Improvement Scheme	
<b>Client</b>	
Kilkenny County Council	
<b>Title</b>	
Figure 2: Site Location	
 <p>30 Carrigrohane Road, Carrigrohane, Co. Wick        01570 81111        www.enviroguide.ie        info@enviroguide.ie        1-855-101-988-5735</p>	
Drawn by: LG	Projection: IRENET95 Irish Transverse Mercator
Checked: JD	Scale: 1:22,743 @A4
<b>Notes:</b> Site boundaries shown are for illustration purposes only and do not represent legal or exact boundaries.	



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend	
	Site Outline
<p>© OpenStreetMap (and contributors), CC-BY-SA</p>	
Project	
Vicar Street Improvement Scheme	
Client	
Kilkenny County Council	
Title	
Figure 3: Site Layout	
<p>30 Carrigrohane, Block 11, The Plaza Park West, Dublin 12 D12 P2W1 www.enviroguide.ie info@enviroguide.ie +353 (0)1 566 6791</p>	
Drawn by: LG	Projection: IRENET95 Irish Transverse Mercator
Checked: JD	Scale: 1:1,156 @A4
Date: 02/03/2020	
<b>Notes:</b> Site boundaries shown are for illustration purposes only and do not represent legal or exact boundaries.	

### **3.2.2 Brief Description of Development**

The site has an overall area of 0.610 acres. The site is located on Vicar Street in Kilkenny, Co. Kilkenny.

Kilkenny County Council proposes the improvement of Vicar Street by changing it from a two-way carriageway to a one-way carriageway. The proposed development comprises of the upgrading of the existing pavement surfaces and realignment of existing road gullies. The development will also include the construction of a new cycle lane and widening of the existing footways. A site layout drawing of the scheme is provided in Appendix I.

An outline Construction Environmental Management Plan (CEMP) has been prepared by Kilgallen & Partners Consulting Engineers with the aim of ensuring that the impact of the construction stage generally is minimised and in particular, ensuring that there will not be any adverse impact on the environment during the construction stage. The CEMP report outlines the construction & waste management approach to the carriageway and site infrastructure services for the project, and proposes a waste management programme to be considered for planning stage.

According to the CEMP provided by Kilgallen and Partners, the Outline Construction Environmental Management Plan has been prepared for inclusion with the documents to be submitted in support of the Planning Application for the subject development and will thus become a requirement of the Planning Permission to carry out the Development.

### **3.2.3 Construction methodology**

The works will include:

- Planing off the existing road surface;
- Realigning the existing road gullies to suit the new alignment of the carriageway;
- Construction of new footways;
- Ancillary civil works.

It is proposed (in the Outline CEMP prepared by Kilgallen and Partners) that in advance of commencement of any construction works, a Site-specific Construction Environmental Management Plan will be prepared in full for agreement with Kilkenny County Council.

The Contractor appointed to undertake the construction works will ensure that a suitable Construction Environmental Management Plan is put in place for the duration of the construction works, to include demolition and construction phase waste management programmes.

It is anticipated the normal working hours within the site shall be Monday to Friday between 0800 hrs and 1800 hrs and Saturday between 0830 hrs and 1400 hrs, with no working on Sundays or Public Holidays unless under exceptional circumstances. Best practical means to minimise noise shall be employed and shall comply generally with the recommendations in BS5228: Noise Control on Construction and Open Sites.

The outline CEMP provides for the following environmental protection and controls:

### **Control of noise**

All vehicles and mechanical plant used on the works shall be fitted with effective exhaust silencers and shall be maintained in good and efficient working order for the duration of the works in compliance with BS 5228. Machines in intermittent use shall be shut down in the periods between work or throttled down to a minimum. All compressors shall be “sound reduced” models fitted with properly lined and sealed acoustic covers shall be kept closed whenever the machines are in use and all ancillary pneumatic percussion tools shall be fitted with mufflers or silencers of the type recommended by the manufacturers. Pumps and mechanical static plant shall be enclosed by acoustic shields or screens. Any plant such as generators and pumps which is required to work outside of normal working hours shall be surrounded by an acoustic enclosure which shall restrict the noise level to not less than 5 dB (A) Leq (1 Hr.)

### **Control of debris, dust and mud**

Footways, roadways and other paved areas used by or adjoining construction traffic shall be inspected on a daily basis and swept as necessary to ensure they are free of debris, dust and mud.

All disturbed areas shall be stabilised as soon as practicable to prevent or minimise windblown dust;

- Trafficable areas shall be clearly defined by guide posts or other suitable barriers to prevent unnecessary vehicle movement onto other areas and avoid any accidental damage to adjacent areas;
- A water tanker will be employed as required to dampen work areas and exposed soils to prevent the emission of excessive dust from the site;
- Trucks transporting material from the site shall be covered immediately after loading to prevent wind-blown dust emissions and spillages. The covering must be maintained until immediately before unloading the trucks;
- The tailgates of all trucks leaving the premises must be securely fixed prior to loading or immediately after unloading to prevent loss of materials;
- Subcontractors will maintain all construction equipment to ensure exhaust emissions comply with the relevant Air Regulations;

### **Protection of ground and surface water**

The Contractor is to take measure to ensure that no construction material will contaminate any local groundwater sources.

All existing gully connections will be suitably sealed during the construction works to ensure no construction material will enter the existing surface water and combined networks.

### **Hazardous materials**

Any hazardous materials used during the course of construction process will require careful handling. Oils, paints, adhesives and chemicals will be kept in a separate contained storage area which will be locked when not in use. Lids will be kept on containers in order to avoid spillage or waste by evaporation. Waste oils, paints and chemicals will require careful handling

and disposal. This includes the containers and will be stored in containment trays. These wastes will be disposed of by suitably licensed private contractors or facilities as they arise.

Hazardous wastes will be identified, removed and kept separate from other C&D waste materials in order to avoid further contamination prior to disposal to a licensed facility. Before undertaking any works giving rise to Hazardous Waste, a detailed methodology shall be prepared for dealing with the material.

It is anticipated that waste materials will have to be moved off site.

### **Housekeeping and waste management**

The outline CEMP provides for the efficient use of materials and to reduce or eliminate waste including but not limited to the following practices particularly relevant to this AA screening assessment

- In-situ materials such as in-situ cast concrete, blockwork, rendering materials etc. will be ordered only as required and only sufficient mixes will be produced each day to suit daily requirements, thus eliminating daily surplus waste.
- Materials will be securely stored on site and handled correctly to reduce damage to a minimum. Materials will remain packaged until they are ready to be used.
- Concrete waste, masonry, wood, plastics and other C&D waste materials will be collected in receptacles with mixed C&D waste materials, for subsequent separation and recovery at a source will be applied to waste materials.

According to the outline CEMP provided by Kilgallen and Partners, it is anticipated that the main contractor appointed to construct the Project will have the appropriate authorisations for the collection and movement of waste off-site and disposal to facilities which have the appropriately Licenses, Permits and / or certificates of Registration in line with current legislation. If this is not the case, the main contractor will engage specialist waste service contractors who do possess the requisite authorisations.

## **3.3 Existing Environment**

### **3.3.1 Habitats**

Vicar Street is surrounded by built land (BL3) composed of buildings and roads. The west side of the road and pavement is bordered by a tall concrete wall (BL3) delineating the Heritage Council property. The wall supports occasional vegetation including navelwort (*Umbilicus sylvestris*) and polypody fern (*Polypodium* sp.) There is a line of townhouses along the east side of the street. There are two small flower beds (BC4) at the north and south end of the Vicar Street.

The surface water from Vicar Street discharges to the existing box-shore that discharges to the Breagagh via a 500mm pipe, which is fitted with a no-return flap valve.

The Breagagh River is located approximately 65m to the south of the site. The Breagagh is a lowland freshwater course (FW2) and a tributary of the River Nore. At the time of survey, the river was in spate with a fast turbulent flow following heavy rain. The water colour appeared

brown and laden with sediment. The river is bordered by retaining walls on both sides constructed of concrete at the site of the outfall from the storm water discharge pipe but constructed of stone upstream.

There is marginal vegetation composed of reed canary grass (*Phalaris arundinacea*) and fool's water parsley (*Apium nodiflorum*). Other marginal terrestrial plants which were submerged during the heavy flow included dock (*Rumex* sp.), creeping buttercup (*Ranunculus repens*), cow parsley (*Anthriscus sylvestris*) and common nettle (*Urtica dioica*).

The River Nore located 130m to the east of the site of works is a lowland freshwater course (FW2) and is approximately 40 m wide at this point.

### 3.3.2 Invasive plant species

No high impact invasive plant species were recorded during the walkover ecological survey in February 2020. As noted above as a constraint it would be difficult to detect the invasive plant species Himalayan balsam in February due to the fact that they are annual species. Himalayan balsam was recorded on the Breaghagh River at Blackmill Street (NBDC records) upstream of the outfall pipe location at the Brewery. The record indicates "Many plants found along the river banks. many of them in flower". Himalayan balsam spreads readily by seed and therefore it likely that Himalayan balsam occurs at various locations along the River Breaghagh and the River Nore. There is suitable habitat observed along the silted margins of the River Breaghagh at the outfall location where other marginal vegetation was observed during the survey.

There is a record for Giant Hogweed (4 plants) recorded in 2019 along the Breaghagh River near the Brewery Site but the record appears to be a grid reference error. The record indicates "the site adjacent to abstraction point for Clomantagh Killashulan Group Water Scheme" which would not be located at the brewery site in Kilkenny City. For this reason the record has been omitted from Table 1.

There are several plants of the medium impact invasive plant species *Buddleia davidii* present in the Brewery Site and one plant also noted at the northern end of Vicar Street where it is growing in the garden of an adjacent house.

### 3.3.3 Fauna

No signs of otter were detected along the River Breaghagh or the stretch of the River Nore beneath the bridge over the Nore. However there are several recorded sightings of otter on the River Nore (NBDC records database) and therefore otter are presumed to be active along the River Nore in Kilkenny City.

Kingfisher occurs along the River Nore in Kilkenny (within 2km) as evidenced by records for the species available on the NBDC database The Breaghagh River is bordered by retaining walls and does not provide suitable nesting habitat for Kingfisher or for the location of otter holts.

### 3.3.4 Water quality

The site is situated within the Nore River Catchment (15\_01). Latest water quality data from 2016 (<https://gis.epa.ie/EPAMaps/>) shows that water quality for the Breaghagh River (station code: RS15B020350) is poor (Q value score =3) and has a WFD Status of "At Risk". Water quality of the River Nore upstream of the site and 1 km upstream of Green's Bridge (station

code: RS15N011800) is good (Q value =4). Water quality downstream of the site at Fennessy's Mill (Ossory Bridge) (station code: RS15N011950 is also good (Q value= 4). WFD status for the River Nore is under review.

Groundwater vulnerability in the area is classed as High. The ground waterbody WFD status (2013-2018 for Kilkenny-Ballynagill Gravels is good and classified as "not at risk" (<https://gis.epa.ie/EPAMaps/>)

The proposed development is located within the 2km square S55D. Notable records of relevance to this assessment are shown in Table 1 below.

**TABLE 1. NOTABLE SPECIES RECORDED WITHIN 2KM GRID SQUARE S55D (NBDC)**

Species Name	Date of last record	Designation
<b>Birds</b>		
Common Kingfisher ( <i>Alcedo atthis</i> )	08/05/2014	Annex I – Habitats Directive
<b>MAMMALS</b>		
European Otter ( <i>Lutra lutra</i> )	11/11/2013	Annex II – Habitats Directive
<b>INVASIVE PLANT SPECIES (HIGH IMPACT)</b>		
Himalayan balsam ( <i>Impatiens glandulifera</i> )	08/07/2015	Invasive Species >> Regulation S.I. 477 (Ireland)

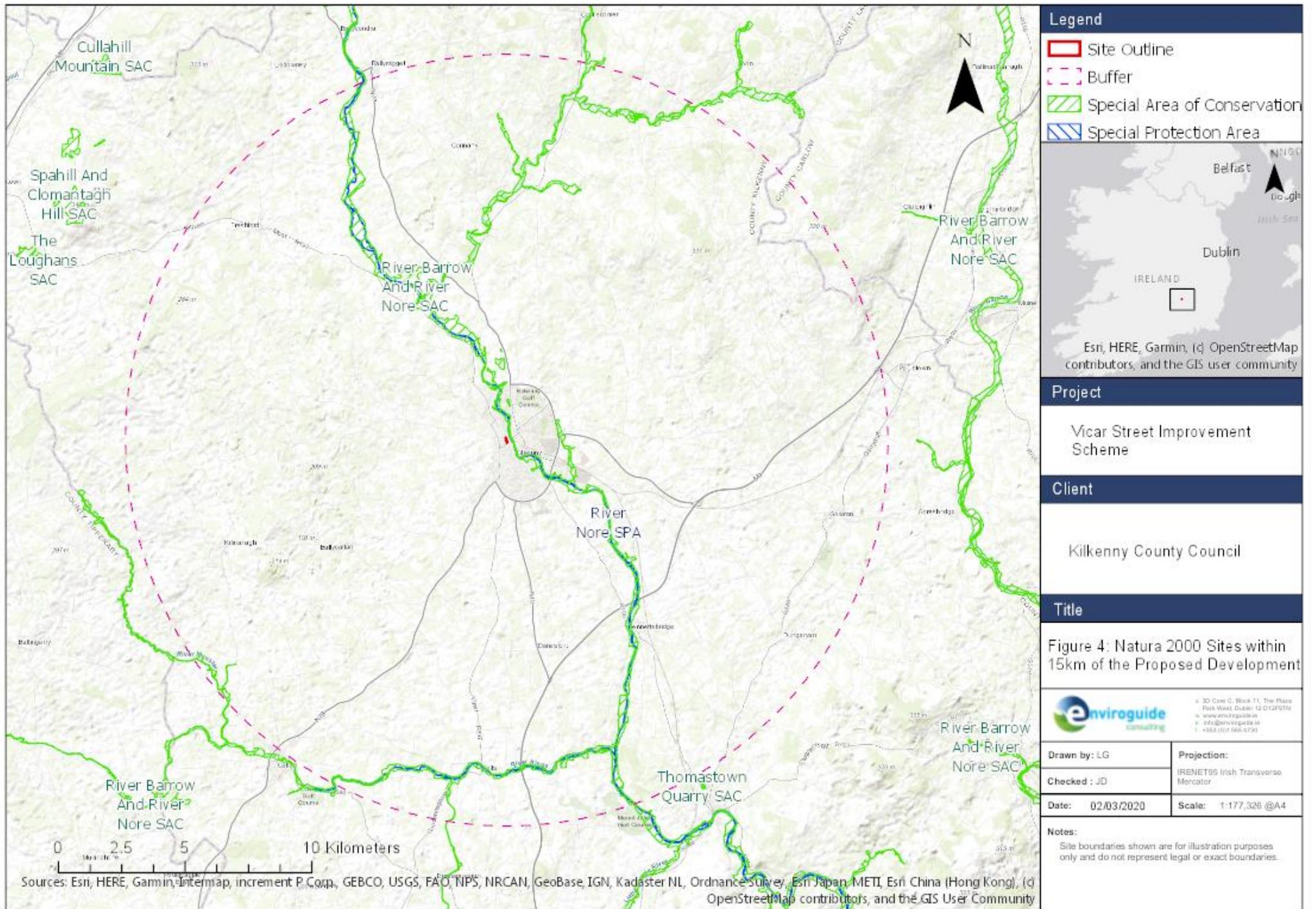
### 3.4 Identification of Relevant Natura 2000 Sites

In order to identify potentially affected Natura 2000 sites, and adopting the precautionary principle, all SPAs and SACs within a 15km distance radius of the proposed development were considered with regard to whether they were within the zone of influence of the proposed works (Fig. 3). Natura 2000 sites outside of this 15km radius were also considered but none were considered to be within the zone of influence (ZOI) of this small scale project as they are either; (a) located a considerable physical distance from the site of works; or (b) located within different surface water catchment zones and therefore there is no pathway for effects to these sites.

The result of this preliminary screening concluded that The River Barrow and Nore SAC and The River Nore SPA are located within the ZOI of the proposed development site as these sites are located approximately 130 m from the site boundary. The qualifying interests of both these Natura sites are detailed in Table 2 below. The distances to each site listed below are taken from the nearest possible point of the proposed development site boundary to nearest possible point of each Natura 2000 site.

**TABLE 2. NATURA 2000 SITES WITHIN 15KM OF THE PROPOSED DEVELOPMENT**

Site Code	Site Name	Qualifying Interests form= priority habitats)	Distance to Site
<b>Special Areas of Conservation (SAC)</b>			
002162	River Barrow and River Nore SAC	<ul style="list-style-type: none"> <li>- [1130] Estuaries</li> <li>- [1140] Tidal Mudflats and Sandflats</li> <li>- [1170] Reefs</li> <li>- [1310] Salicornia Mud</li> <li>- [1330] Atlantic Salt Meadows</li> <li>- [1410] Mediterranean Salt Meadows</li> <li>- [3260] Floating River Vegetation</li> <li>- [4030] Dry Heath</li> <li>- [6430] Hydrophilous Tall Herb Communities</li> <li>- [7220] Petrifying Springs*</li> <li>- [91A0] Old Oak Woodlands</li> <li>- [91E0] Alluvial Forests*</li> <li>- [1016] Desmoulin's Whorl Snail (<i>Vertigo moulinsiana</i>)</li> <li>- [1029] Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>)</li> <li>- [1092] White-clawed Crayfish (<i>Austropotamobius pal-lipes</i>)</li> <li>- [1095] Sea Lamprey (<i>Petromyzon marinus</i>)</li> <li>- [1096] Brook Lamprey (<i>Lampetra planeri</i>)</li> <li>- [1099] River Lamprey (<i>Lampetra fluviatilis</i>)</li> <li>- [1103] Twaite Shad (<i>Alosa fallax</i>)</li> <li>- [1106] Atlantic Salmon (<i>Salmo salar</i>)</li> <li>- [1355] Otter (<i>Lutra lutra</i>)</li> <li>- [1421] Killarney Fern (<i>Trichomanes speciosum</i>)</li> <li>- [1990] Nore Freshwater Pearl Mussel (<i>Margaritifera durrovensis</i>)</li> </ul>	130m
<b>Special Protected Area (SPA)</b>			
004233	River Nore SPA	<ul style="list-style-type: none"> <li>- [A229] Kingfisher (<i>Alcedo atthis</i>)</li> </ul>	130m



### 3.4.1 Description of the Natura 2000 sites

#### 3.4.1.1 The River Barrow and River Nore SAC (002162)

*“This site consists of the freshwater stretches of the Barrow and Nore River catchments as far upstream as the Slieve Bloom Mountains, and it also includes the tidal elements and estuary as far downstream as Creadun Head in Waterford.*

*Good examples of alluvial forest (a priority habitat on Annex I of the E.U. Habitats Directive) are seen at Rathsnagadan, Murphy’s of the River, in Abbeyleix estate and along other shorter stretches of both the tidal and freshwater elements of the site. A good example of petrifying springs with tufa formations occurs at Dysart Wood along the Nore. This is a rare habitat in Ireland and one listed with priority status on Annex I of the E.U. Habitats Directive.*

*Abbeyleix Woods is a large tract of mixed deciduous woodland which is one of the only remaining true ancient woodlands in Ireland. It supports a variety of woodland habitats and an exceptional diversity of species including 22 native trees, 44 bryophytes and 92 lichens.*

*Dry heath at the site occurs in pockets along the steep valley sides of the rivers especially in the Barrow Valley and along the Barrow tributaries where they occur in the foothills of the Blackstairs Mountains. At Ballyhack a small area of dry heath is interspersed with patches of lowland dry grassland. These support a number of clover species, including the legally protected Clustered Clover (*Trifolium glomeratum*) - a species known from only one other site in Ireland.*

*Salt meadows occur at the southern section of the site in old meadows where the embankment has been breached, along the tidal stretches of in-flowing rivers below Stokestown House, in a narrow band on the channel side of Common Reed (*Phragmites australis*) beds and in narrow fragmented strips along the open shoreline.*

*Seventeen Red Data Book plant species have been recorded within the site, most in the recent past. These are Killarney Fern (*Trichomanes speciosum*), Divided Sedge, Clustered Clover, Basil Thyme (*Acinos arvensis*), Red Hemp-nettle (*Galeopsis angustifolia*), Borrer’s Saltmarsh-grass, Meadow Barley, Opposite-leaved Pondweed (*Groenlandia densa*), Meadow Saf-fron/Autumn Crocus (*Colchicum autumnale*), Wild Clary/Sage, Nettle-leaved Bellflower, Saw-wort (*Serratula tinctoria*), Bird Cherry Version (*Prunus padus*), Blue Fleabane (*Erigeron acer*), Fly Orchid (*Ophrys insectifera*), Ivy Broomrape (*Orobanche hederæ*) and Greater Broomrape. Of these, the first nine are protected under the Flora (Protection) Order, 2015. Divided Sedge was thought to be extinct but has been found in a few locations in the site since 1990. Six rare lichens, indicators of ancient woodland, are found including *Lobaria laetevirens* and *L. pulmonaria*. The rare moss *Leucodon sciuroides* also occurs.*

*The site is very important for the presence of a number of E.U. Habitats Directive Annex II animal species including Freshwater Pearl Mussel (both *Margaritifera* and *M. m. durrovensis*), White-clawed Crayfish, Salmon, Twaite Shad, three lamprey species – Sea Lamprey, Brook Lamprey and River Lamprey, the tiny whorl snail *Vertigo moulinsiana* and Otter. This is the only site in the world for the hard water form of the Freshwater Pearl Mussel, *M. m. durrovensis*, and one of only a handful of spawning grounds in the country for Twaite Shad. The freshwater stretches of the River Nore main channel is a designated salmonid river. The site*

supports many other important animal species. Those which are listed in the Irish Red Data Book include Daubenton's Bat, Badger, Irish Hare and Common Frog. The rare Red Data Book fish species Smelt (*Osmerus eperlanus*) occurs in estuarine stretches of the site.

Three rare invertebrates have been recorded in alluvial woodland at Murphy's of the River. These are: *Neoascia obliqua* (Order Diptera: Syrphidae), *Tetanocera freyi* (Order Diptera: Sciomyzidae) and *Dictya umbrarum* (Order Diptera: Sciomyzidae). The rare invertebrate, *Mitostoma chrysomelas* (Order Arachnida), occurs in the old oak woodland at Abbeyleix and only two other sites in the country. Two flies (Order Diptera) *Chrysogaster virescens* and *Hybomitra muhlfeldi* also occur at this woodland.

The site is of ornithological importance for a number of E.U. Birds Directive Annex I species, including Greenland White-fronted Goose, Whooper Swan, Bewick's Swan, Bar-tailed Godwit, Peregrine and Kingfisher. Nationally important numbers of Golden Plover and Bar-tailed Godwit are found during the winter."

#### **3.4.1.2 The River Nore SPA (004233)**

"The River Nore SPA is a long, linear site that includes the following river sections: the River Nore from the bridge at Townparks, (north-west of Borris in Ossory) to Coolnamuck (approximately 3 km south of Inistioge) in Co. Kilkenny; the Delour River from its junction with the River Nore to Derrynaseera bridge (west of Castletown) in Co. Laois; the Erkina River from its junction with the River Nore at Durrow Mills to Boston Bridge in Co. Laois; a 1.5 km stretch of the River Goul upstream of its junction with the Erkina River; the Kings River from its junction with the River Nore to a bridge at Mill Island, Co. Kilkenny. The site includes the river channel and marginal vegetation.

The River Nore SPA is of high ornithological importance as it supports a nationally important population of Kingfisher, a species that is listed on Annex I of the E.U. Birds Directive."

### **3.5 Conservation objectives**

The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. These habitats and species are listed in the Habitats and Birds Directives and Special Areas of Conservation and Special Protection Areas are designated to afford protection to the most vulnerable of them.

Site specific conservation objectives (SSCO) have been compiled for the River Barrow and Nore SAC (NPWS, 2011a accessed 26.02.2020). A site-specific conservation objective aims to define favourable conservation condition for a particular habitat or species at that site.

Only generic conservation objectives are available for the Rive Nore SPA (site code 004233) (NPWS 2018).

The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and

- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable.
- The favourable conservation status of a species is achieved when:
- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

### **3.6 Identification of Potential Impacts**

The conservation objectives of the Natura 2000 sites within the zone of influence was reviewed and assessed in order to establish whether the construction and operation of the proposal has the potential to have a negative impact on any of the qualifying interests and/or conservation objectives of the Natura 2000 sites within the zone of influence of the project.

The assessment framework is taken from the best practice guidelines issued by the European Commission, i.e. "Assessment of plans and projects significantly affecting Natura 2000 sites – Methodological guidance".

### **3.7 Assessment of Potential Impacts**

The potential for significant impacts resulting from the proposed development during the construction and operational phases was determined based on a range of indicators, including:

- Habitat loss or alteration;
- Habitat/species fragmentation;
- Disturbance and/or displacement of species;
- Changes in population density; and
- Changes in water quality and resource;
- Potential for the spread of invasive plant species

#### **3.7.1 Habitat Loss and Alteration**

The subject site is not located within or adjacent to any Natura 2000 site. Therefore there will no direct loss or direct disturbance of habitat as a result of the proposed works.

#### **3.7.2 Habitat / Species Fragmentation**

Habitat fragmentation has been defined as the 'reduction and isolation of patches of natural environment' (Hall et al., 1997 cited in Franklin et al., 2002) usually due to an external disturbance such that an alteration of the spatial composition of a habitat occurs that alters the habitat and 'create[s] isolated or tenuously connected patches of the original habitat' (Wiens, 1989 cited in Franklin et al., 2002). This results in spatial separation of habitat units which had previously been in a state of greater continuity.

Deterioration in water quality could create habitat fragmentation or species isolation due to unsuitable habitat quality. The CEMP provides for appropriate controls to minimise the risk of

a deterioration of water quality as a result of construction works. Therefore there it is considered that there is no significant risk of a negative impact on water quality and consequently no significant risk of a negative direct or indirect impact on species dependent on water quality. Therefore it is not considered that habitat fragmentation will arise from the proposed development.

### **3.7.3 Disturbance and / or Displacement of Species**

Otter could potentially be disturbed by significant increases in noise or human activity along the River Nore. Otter are known to occur along the River Nore within Kilkenny City. There are several records (NBDC database) for live sightings of otters near Green Bridge latest record in 2013. Due to the distance of the subject site from the River Barrow and Nore SAC of 130 metres and the small scale nature of the works coupled with noise control measures provided for in the CEMP it is not considered that the proposed construction works will lead to any disturbance and/ or displacement of otter from the River Nore habitat due to an increase noise. No disturbance impact from an increase in human activity at the site (i.e. construction work personnel) is anticipated at 130 m from the River Nore.

No significant change from baseline operational activity (i.e. traffic volumes) is anticipated as a result of the works therefore there will be no negative impact anticipated from the operational phase.

Similarly kingfisher (*Alcedo atthis*) have been recorded within 1 km of Green bridge along the River Nore at Kilkenny, There is no suitable Kingfisher habitat present in and around the site of works composed primarily of built land and as a result it is not considered that the proposed development will cause any disturbance and/ or displacement of this special conservation interest species of the River Nore SPA.

### **3.7.4 Changes in Population Density**

As there will be no deterioration in water quality or significant disturbance as a result of the proposed works, it is not expected that the proposed development will cause any reduction in the baseline population of species associated with any Natura 2000 site.

### **3.7.5 Changes in Water Quality and Resource**

No deterioration in water quality of surface or groundwater is anticipated as a result of the works. Appropriate controls are incorporated in the outline CEMP to avoid any significant pollution or sedimentation reaching the River Nore or its tributary the River Breagagh. The appointed contractor will be required to draw up a site specific construction management plan to include measures to avoid any contamination of surface or groundwaters during construction.

Storm water drainage will be realigned to accommodate the proposed Vicar Street Improvement Scheme and storm water will discharge to an existing outfall pipe to the Breagagh River. No change from the baseline situation with regard to storm water volume or contamination is anticipated once the improvement works are complete as there will be no significant change in the area of impermeable surfaces. There will be no significant change in the volume of runoff and therefore no significant alteration of hydrology of the River Nore.

Due to the small scale nature of the works and the implementation of a site specific construction management, it is considered that there is no significant potential for contamination or adverse effects to water quality of the River Nore SAC or the River Nore SPA.

### 3.7.6 Spread of invasive plant species

As noted above it is anticipated that Himalayan balsam occur on the silty margins of the Breagagh River. The spread of Himalayan balsam can lead to proliferation of the species along river banks outcompeting native vegetation and leading to an increase in river bank susceptibility to erosion.

As no works are proposed to the existing outfall to the Breagagh River it is considered that there is no increased risk of the spread of this invasive plant species from the proposed Vicar Street Renewal Scheme and consequently no risk of negative impact from the spread of this species (or any other invasive plant species) as a result of the works.

*Buddleia davidii* was recorded in a garden adjacent to the site of works. The works will not interact with this plant and therefore there is no potential for increasing the risk of spread of this medium impact invasive plant species which is not subject to legal control under the Birds and Habitats Regulations.

A summary of the potential impacts considered on the features of interest and special conservation interest species of the Natura sites is outlined in Table 3.

Screening of the potential impacts with reference to the features of interest, known sensitivities and conservation targets of the River Barrow and Nore SAC and The Rive Nore SPA is summarised in Table 4.

**TABLE 3. IDENTIFICATION OF POTENTIAL IMPACTS ON RELEVANT NATURA 2000 SITES**

Natura 2000 site	Potential for significant impacts on Natura 2000 site
<b>Special Areas of Conservation (SAC)</b>	
River Barrow and River Nore SAC	<p><b>No impacts on SAC during construction and operational phases envisaged due to:</b></p> <ul style="list-style-type: none"> <li>- The small scale and nature of the application outside the boundary of the SAC- no direct habitat loss.</li> <li>- No potential for disturbance impacts to otter or any QI species</li> <li>- Appropriate control measures as detailed in the CEMP to prevent any deterioration in water quality of surface water or groundwater in the vicinity of the site therefore no indirect impact on habitats or species dependent on good water quality.</li> <li>- Appropriate housekeeping of the construction site to control any sediment run off therefore no increase in sedimentation of the River Nore</li> <li>- No increased risk of the spread of high impact invasive plant species as a result of the proposed works.</li> </ul>
<b>Special Protected Areas (SPA)</b>	
River Nore SPA	<p><b>No impacts on SPA envisaged due to:</b></p> <ul style="list-style-type: none"> <li>- the lack of Kingfisher habitat within the subject site</li> <li>- the distance (130m) involved between the subject site and the SPA therefore no disturbance of kingfisher or its nesting sites;</li> <li>- Appropriate control measures as detailed in the CEMP to prevent any deterioration in water quality of surface watercourses. .</li> </ul>

**TABLE 4. APPROPRIATE ASSESSMENT SCREENING OF THE POTENTIAL EFFECTS ON THE FEATURE OF INTERESTS OF THE RIVER BARROW AND NORE SAC**

Feature of interest	Sensitive receptor	Screening of potential effects	Screening result
<b>River Barrow and Nore SAC</b>			
[1130] Estuaries	Yes	Habitat is remote from the site of works. Construction methodology will avoid any pollution or sedimentation of the River Nore eliminating any pathway for contamination to reach the habitat.	No negative impact anticipated
[1140] Tidal Mudflats and Sandflats	Yes	Habitat is remote from the site of works. Construction methodology will avoid any pollution or sedimentation of the River Nore eliminating any pathway for contamination to reach the habitat.	No negative impact anticipated
[1170] Reefs	Yes	Habitat is remote from the site of works. Construction methodology will avoid any pollution or sedimentation of the River Nore eliminating any pathway for contamination to reach the habitat.	No negative impact anticipated
[1310] Salicornia mudflats	Yes	Habitat is remote from the site of works. Construction methodology will avoid any pollution or sedimentation of the River Nore eliminating any pathway for contamination to reach the habitat.	No negative impact anticipated
[1330] Atlantic salt meadows	Yes	Habitat is remote from the site of works. Construction methodology will avoid any pollution or sedimentation of the River Nore eliminating any pathway for contamination to reach the habitat.	No negative impact anticipated
[1410] Mediterranean salt meadows	Yes	Habitat is remote from the site of works. Construction methodology will avoid any pollution or sedimentation of the River Nore eliminating any pathway for contamination to reach the habitat.	No negative impact anticipated
[3260] Floating river vegetation	Yes	Construction methodology will avoid any pollution of River Nore. No significant risk of damage to habitat from pollution. No increase risk of spread of invasive plant species	No negative impact anticipated

Feature of interest	Sensitive receptor	Screening of potential effects	Screening result
<b>River Barrow and Nore SAC</b>			
[4030] European dry heaths	No	Not considered to be within the within the zone of influence of the project. No pathway for effects to this habitat	No negative impact anticipated
[6430] Hydrophilous tall herb fringe communities	Yes	Current extent of the habitat is unknown in SAC. Usually associated with freshwater stretches of the river. No Annex I hydrophilous tall herb habitat identified at outfall location. Construction methodology will avoid any pollution of River Nore. No significant risk of damage to habitat from pollution. No change in hydrological regime of river from works. No risk of the spread of invasive plant species associated with the works.	No negative impact anticipated
[7220] Petrifying springs with tufa formation	No	Current extent of habitat is unknown. Known areas of habitat at Thomastown are remote from site and not potentially impacted. Habitat sensitive to groundwater changes. No change to groundwater supply or quality as a result of this project therefore no risk of impact.	No negative impact anticipated
[91A0] Old sessile oak woods	No	Not considered a sensitive receptor from this project. No significant risk of invasive plant species spread from this project.	No negative impact anticipated
[91E0] Alluvial forests	Yes	Hydrologically linked but no significant risk of pollution due to CEMP methodology. No change in storm water volume therefore there will be no change to the hydrological regime of the River Nore. No risk of the spread of invasive plant species associated with the works.	No negative impact anticipated
<b>Species</b>			
[1016] Desmoulin's Whorl Snail ( <i>Ver-tigo moulinsiana</i> )	No	Known population is upstream of the works site (NPWS CO dataset). Other populations may exist in SAC but no significant risk of pollution due to CEMP methodology. No change in storm water discharge volume therefore no change to the hydrological regime of the River Nore	No negative impact anticipated

Feature of interest	Sensitive receptor	Screening of potential effects	Screening result
<b>River Barrow and Nore SAC</b>			
[1029] Freshwater Pearl Mussel	No	Designated population upstream of Kilkenny City and therefore not within zone of influence of project. Site of works is within catchment of previous records of <i>Margaritifera</i> . No significant risk of pollution or sedimentation due to CEMP methodology. No change in storm water discharge volume therefore no change to the hydrological regime of the River Nore. No risk of the spread of invasive plant species (which could lead to increased bank erosion) associated with the works.	No negative impact anticipated
[1092] White-clawed Crayfish	Yes	No significant risk of pollution or sedimentation due to CEMP methodology. No significant risk of introduction or spread of invasive faunal species associated with the project as no instream works required.	No negative impact anticipated
[1095] Sea lamprey	Yes	No significant risk of pollution or sedimentation due to CEMP methodology. Artificial barriers to upstream migration not relevant to these proposed works; No instream works associated with the project therefore no risk of disturbance of spawning habitat	No negative impact anticipated
[1096] Brook Lamprey	Yes	No significant risk of pollution or sedimentation due to CEMP methodology. Artificial barriers to upstream migration not relevant to these proposed works; No instream works associated with the project therefore no risk of disturbance of spawning habitat	No negative impact anticipated
1099 River lamprey ( <i>Lampetra fluviatilis</i> )	Yes	No significant risk of pollution or sedimentation due to CEMP methodology. Artificial barriers to upstream migration not relevant to these proposed works; No instream works associated with the project therefore no risk of disturbance of spawning habitat	No negative impact anticipated
1103 Twaite shad	Yes	Species range is remote from works. Species range is between Thomastown and the estuary. No significant risk of pollution or sedimentation due to CEMP methodology.	No negative impact anticipated

Feature of interest	Sensitive receptor	Screening of potential effects	Screening result
<b>River Barrow and Nore SAC</b>			
1106 Atlantic salmon	Yes	Construction methodology will avoid any pollution/sedimentation of River Nore. No significant risk of deterioration in water quality. Artificial barriers to upstream migration not relevant to these proposed works; No instream works associated with the project therefore no risk of disturbance of spawning habitat.	No negative impact anticipated
1355 Otter	Yes	No holts identified within 150 m of the construction works. In any case, no significant disturbance to holts anticipated from small scale works located in urban environment with baseline noise levels associated with traffic. Potential disturbance related to noise and construction activity not considered to have a significant effect to commuting/foraging otters on River Nore or River Breaghagh. Otters most active during dawn and dusk when construction activity will not be ongoing. No significant change in baseline noise as site of works is in heavy traffic area. No deterioration in water quality anticipated therefore no indirect impact on feeding resources for otter	No negative impact anticipated
1421] Killarney Fern	Yes	Only one site known for the species on the River Nore. Site is remote but downstream of site of works. No deterioration in water quality or change in hydrological regime of the River Nore as a result of works. No significant risk of spread of invasive plant species associated with works.	No negative impact anticipated
[1990] Nore Fresh-water Pearl Mussel	No	Not within the zone of influence of the project. Designated population is located upstream of the proposed works site.	No negative impact anticipated
<b>River Nore SPA</b>			
Kingfisher	Yes	Site of works does not provide suitable habitat for kingfisher. No deterioration in water quality of River Nore anticipated therefore no indirect impact on feeding resources for kingfisher	No negative impact anticipated

### 3.8 Potential for In-combination Effects

The main potential effects of this project which have been screened out from appropriate assessment are those related to changes in water quality and noise disturbance as a result of the construction works. No significant risk of water pollution or sedimentation is anticipated from this project. No significant disturbance due to noise or increased human activity is anticipated to otter or kingfisher or any other qualifying interest from this small scale project.

The potential for in combination effects with other plans or project occurring concurrently with these works is considered below.

Currently at the time of site survey in February 2020, construction work is ongoing at the Brewery site for the Redevelopment of the Brewhouse Building on the former Smithwicks Brewery Site. The existing building is to be redeveloped to allow for a range of uses including education, research & development and/or office use. The main features include a new extension, renovation works and demolition works.

An appropriate assessment screening report for this project ruled out any significant effects on the River Barrow and Nore SAC and the River Nore SPA. The demolition of buildings which may have generated significant noise disturbance predated the construction and renovation works and therefore have already been completed. The remaining renovation and construction works are unlikely to be a significant source of noise such that significant disturbance to otter or any species of conservation interest would occur in combination with the Vicar Street Improvement Scheme.

Other potentially concurrent projects were identified from planning applications granted within the last 5 years in the vicinity of Vicar Street on the Kilkenny County Council planning register. These included:

**Application: 18309**, Conditional permission granted for the change of use of 2 no. rooms at first floor level from a place of worship to an office at 17 Irishtown, Kilkenny

**Application: 15679**: Conditional permission for change of use of house with integral shop to residential and alterations and single storey rear extensions to create two terraced houses (a one bedroom and a two bedroom house) and all associated works.

**Application 1849**: Conditional permission for subdivision of existing building to provide 1 no. duplex 2 bedroom apartment and 1 no. 1 bedroom apartment, plan and elevational changes, all associated siteworks and carparking at 28 Green Street Kilkenny

It is considered these small scale projects would have no in combination effects with the Vicar Street Improvement Scheme even if they were to occur in concurrently with the Vicar Street Scheme.

Therefore, no projects that could result in significant in combination effects on the River Barrow and Nore SAC or the River Nore SPA were identified

## **4 APPROPRIATE ASSESSMENT SCREENING CONCLUSION**

The Vicar Street Improvement Scheme has been assessed taking into account:

- the nature, size and location of the proposed works and possible impacts arising from the construction works.
- the qualifying interests and conservation objectives of the Natura sites
- the potential for in-combination effects arising from other plans and projects.

It is concluded that based on the project details, proposed scheme drawings and the construction management plan as outlined in the project description there will be no negative effect as a result of project on the conservation objectives or integrity of the River Barrow and Nore SAC or the River Nore SPA within the zone of influence of the project and a Stage 2 Appropriate Assessment (Natura Impact Statement) is not required.

## 5 REFERENCES

**CIEEM (2018)** *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Chartered Institute of Ecology and Environmental Management, Winchester

**Circular L8/08**. Water Services Investment and Rural Water Programmes – Protection of Natural Heritage and National Monuments 2 September 2008.

**Circular NPW 1/10 & PSSP 2/10**. Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities.

**Department of the Environment, Heritage and Local Government (2009)** *Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities*. DEHLG, Dublin.

**European Commission (2007)**. Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC Clarification of the Concepts of: Alternative Solutions, Imperative Reasons of Overriding Public Interest, Compensatory Measures, Overall Coherence. Opinion of the Commission. European Communities, Luxembourg.

**European Commission (2000)** *Managing Natura 2000 Sites: the Provisions of Article 6 of the 'Habitats' Directive 92/43/EEC*. European Communities, Luxembourg.

**European Commission (2002)** *Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*. European Communities, Luxembourg.

**Franklin, A. N. (2002)**. What is Habitat Fragmentation? *Studies in Avian Biology*, 20-29.

**NBDC (2018)**. National Biodiversity Data Centre online mapping [ONLINE] Available at: <http://maps.biodiversityireland.ie/Map.aspx>. [Accessed 26<sup>th</sup> February 2020].

**NPWS (2010)**. Circular NPW 1/10 & PSSP 2/10. Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Department of Environment, Heritage and Local Government.

**NPWS (2016)**. Site Synopsis: River Barrow and River Nore SAC. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

**NPWS (2011a)**. Site Synopsis: River Nore SPA. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

**NPWS (2011b)** Conservation Objectives: River Barrow and River Nore SAC 002162. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht

**NPWS (2018)**. Conservation objectives for River Nore SPA [004233]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

## APPENDIX I - SITE LAYOUT MAP

## APPENDIX II NATURA 2000 NPWS SITE SYNOPSES

