



## Suir Island Gardens

# Screening Statement in Support of Appropriate Assessment

Doherty Environmental Consultants Ltd.

July 2022

## Suir Island Garden

### Screening Statement for Appropriate Assessment

Document Stage	Document Version	Prepared by
Final	1	Pat Doherty MSc, MCIEEM

This report has been prepared by Doherty Environmental Consultants Ltd. with all reasonable skill, care and diligence. Information report herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

This report is prepared for Tipperary County Council and we accept no responsibility to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

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## 1.0 INTRODUCTION

Tipperary County Council has commissioned Doherty Environmental Consultants Ltd. to complete a Stage 1 Screening for Appropriate Assessment for the proposed development of gardens at Suir Island, Clonmel, Co. Tipperary.

The locations of the Suir Island gardens are shown on Figure 1.1.

This Screening Report for Appropriate Assessment forms Stage 1 of the Habitats Directive Assessment process and is being undertaken in order to comply with the requirements of the Habitats Directive Article 6(3). The function of this Screening Report is to identify the potential for the project to result in likely significant effects to European Sites and to provide information so that the competent authority can determine whether a Stage 2 Appropriate Assessment is required for the project.

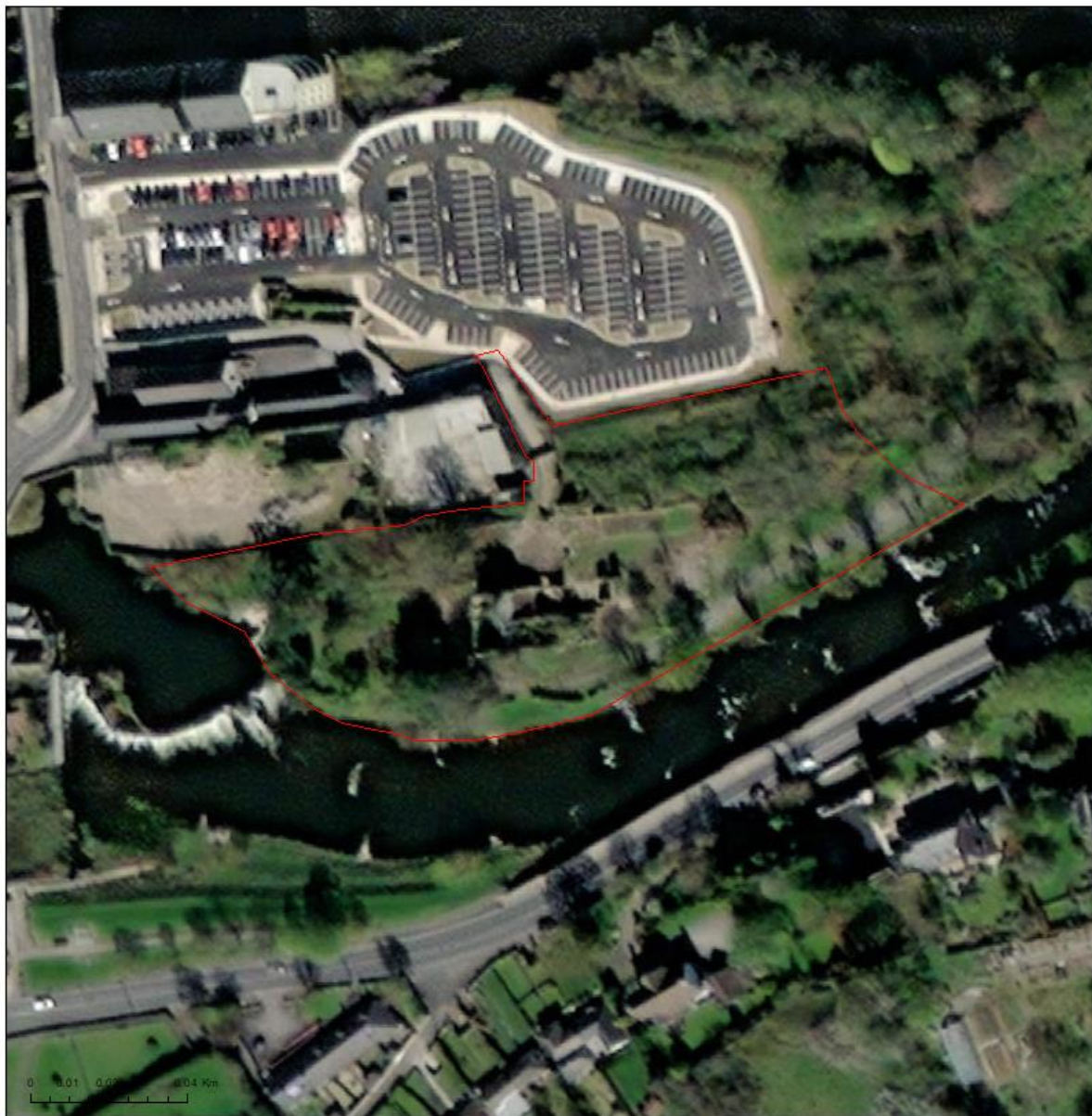
### 1.1 LEGISLATIVE CONTEXT

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

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

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

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



### Suir Island Gardens

Figure 1.1

#### Site Location

 Site Boundary



Drawn By	PD
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Data Source	Bing

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

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

## 1.2 SCREENING METHODOLOGY

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

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

- the ecological characteristics of the species or habitat, including their structure, function, conservation status and sensitivity to change; *and/or*

- the character, magnitude, duration, consequences and probability of the impacts arising from land use activities associated with the plan, in combination with other plans and projects.

This Screening Report for Appropriate Assessment has been undertaken with reference to respective National and European guidance documents: Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities (DEHLG 2010) and *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites – Methodological Guidance of the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*; Office of the Planning Regulator – OPR Practice Note PN01: *Appropriate Assessment Screening for Development Management*, and recent European and National case law. The following guidance documents were also of relevance during the preparation of this Screening Report:

- A guide for competent authorities. Environment and Heritage Service, Sept 2002. Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities (2010). DEHLG.
- Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites – Methodological Guidance of the Provisions of Article 6(3) and (4) of the Habitats Directive 92/42/EEC. European Commission (2001).
- Managing Natura 2000 Sites – The provisions of Article 6 of the Habitats Directive 92/43/EEC. European commission (2018).

The EC (2001) guidelines outline the stages involved in undertaking a Screening Report for Appropriate Assessment for projects. The methodology adopted during the preparation of this Screening Report is informed by these guidelines and was undertaken in the following stages:

1. Describe the project and determine whether it is necessary for the conservation management of European Sites;
2. Identify European Sites that could be influenced by the project;
3. Where European Sites are identified as occurring within the zone of influence of the project identify potential effects arising from the project and screen the potential for such effects to negatively affect European Sites identified under Point 2 above; and

4. Identify other plans or projects that, in combination with the project, have the potential to affect European Sites.

### 1.3 FIELD SURVEYS

Field surveys have been completed to inform this screening report. These surveys include:

- otter field surveys to identify the presence or absence of holts, couches and otter field signs at or in the vicinity of the the proposed garden, the works associated with its implementation and its future use. This involved a search of the bankside of the River Suir along the entire southern bank of Suir Island, as well as a search of woodland habitat backing the southern bankside to the east of the proposed garden area. This search involved a survey for field signs indicating the presence of otters or other protected non-volant mammal species such as Irish stoat and badgers. This survey was undertaken during the daytime and particular attention was given to habitat features normally associated with otters. Any mammal field signs typical of otter activity were recorded during the surveys. These field signs, as described in Neal & Cheeseman <sup>(1)</sup> and Bang & Dahlstrom <sup>(2)</sup>, include:
  - mammal breeding and resting places, such as setts, holts, couches, lairs;
  - pathways;
  - prints;
  - spraints and faecal deposits;
  - latrines (and dung pits used as territorial markers);
  - prey remains and feeding signs (snuffle holes);
  - hair; and

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(1) Neal, E., & Cheeseman, C., (1996). 'Badgers'. Poyser Natural History, London.

(2) Bang, P., & Dahlstrom, P., 'Animal Tracks and Signs'. Oxford University Press, Oxford.



- scratch marks.
  
- habitat surveys to identify the presence of habitats and habitats with links to Annex 1 qualifying habitats of the Lower River Suir SAC at or in the vicinity of the proposed garden. This involved a search of the bankside of the River Suir along the entire southern bank of Suir Island;
  
- non-native invasive plant species surveys to identify the presence or absence of such invasive species at or in the vicinity of the proposed garden.

Field survey have been completed at Suir Island during November 2020; April 2021; May 2021; June 2021; July 2021; and October 2021.

## 2.0 PROJECT DESCRIPTION

The project represents an urban realm enhancement project within the Suir Island gardens. The footprint of the project is approximately 0.9 Ha in size. The main elements of the project are detailed in landscape plan prepared for the project, which is provided under separate cover as drawing No Ti.02-DR-2001 Site Layout Plan. The elements of the project are shown in the Site Layout Plan and described in the accompanying Design Rationale – Landscape Architecture report (prepared by DFLA and provided under separate cover) and the Engineering Planning Report (prepared by Punch Consulting Engineers and provided under separate cover). Drawing No Ti.02-DR-2001 Site Layout Plan is reproduced below for indicative purposes as Figure 2.1. The elements of the project as shown on the Site Layout Plan and described in the Design Rationale include:

**The provision of a water mains connection:** A 50mm diameter watermain is proposed to serve the proposed development based on the above calculated demand. The proposed

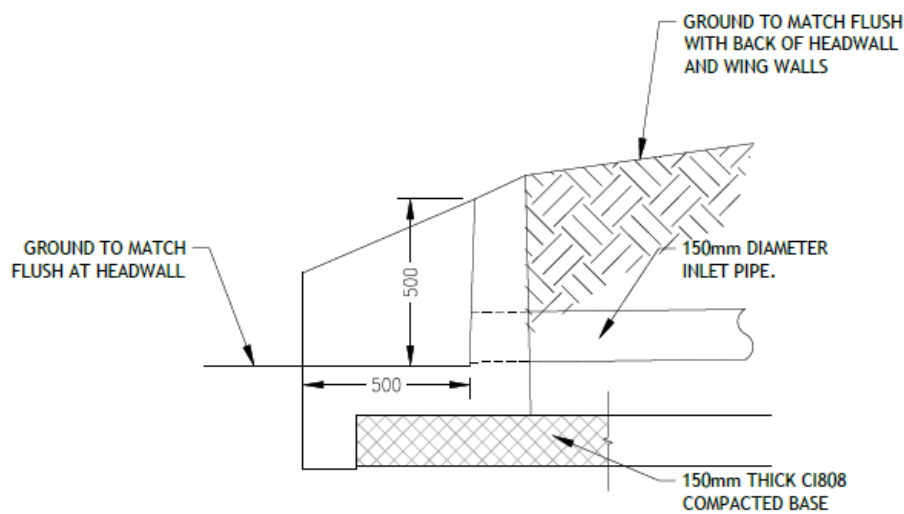


watermain will connect to the existing (50mm) watermain north of the site. Proposed watermain are to be limited in depth to 0.6m maximum.

**The provision of stormwater drainage:** A new surface water sewer network shall be provided for the proposed development. All surface water run-off from hardstanding areas are designed to be collected by a gravity pipe network. Stormwater from the seating areas, main play and path areas will be collected in filter drains, discharged via headwalls into the River Suir to the south of the site.

There is one No. headwall within the SAC, along with a short branch of drainage run. A typical headwall detail is provided as Figure 2.2 below.

**Figure 2.2: Typical Headwall Section**



## **PRECAST CONCRETE HEADWALL - SECTION**

SCALE 1:20

Storm water attenuation is not proposed. Drainage depth is proposed to be limited to 600mm where possible, with a maximum depth of 1.1m proposed. A precast headwall will be provided to support the stormwater pipe opening at the river bank. Figure 2.2 provides a typical schematic design of the headwall to be used at surface water pipe outfall. The precast headwall will accommodate the 150mm pipe through the back of the headwall. Minimal disturbance to the river bank will be required during the installation of the headwall. Excavation works will be carried out using a mini-excavator. The surface turve shall be removed first and put aside while the remaining excavated material will be loaded directly into a mini dumper for disposal off site. Excavations will be carried out to the appropriate depth and 150mm of well compacted free draining granular fill shall be put in place. The headwall shall be lifted into place using the mini-excavator and the cast in lifting anchors. The headwall shall be backfilled in layers around it ensuring it is well compacted and the surface turve replaced immediately following installation, and bankside reinstatements completed. All works will be completed over 1 working day.

The installation of filter drains is proposed to facilitate the storm water drainage from the play area and hard standing areas. The works shall involve the excavation of a 300mm wide trench, with depths limited to 600mm where possible, with a maximum depth of 1.1m proposed. Works shall be completed by a mini excavator to ensure minimal disturbance. The surface turve shall be removed first and put aside while the remaining excavated material will be loaded directly into a mini dumper for disposal off site. The trench shall be lined with permeable geotextile membrane before an appropriate layer of granular bedding material is placed at the base of the trench, followed by the 150mm perforated pipe and followed by CL 505 drainage stone and topped with the original surface turve. These works shall be carried out in stages, with all open trenches completed and backfilled on one day.

**The provision of a play area:** The opportunities for play at Suir Island Gardens will be integrated into the entire scheme both naturally as well as by design. The proposals include the use of water in play such as water taps, dams and a water mill to recognise the island's history. Water play is essential to creating a playful exploration of Suir Island Gardens which will engender an understanding of the site's heritage. A limited number of robust, easily maintainable play elements that emphasise the importance and playful quality of water is proposed. A number of small play elements spread across the entire site, using natural materials to create climbing, swinging and balancing play complementary to the natural materials on the

site. The proposed location for destination play is positioned centrally from the river's edge with additional open space for children to be able to run freely and explore the gardens in a secure setting while being passively monitored. The main destination for the play area is located to the east of the Suir Island House (Protected Structure) offset either side from the River Suir and the tailrace. Furthermore, a trail of natural play is proposed in the woodland area, with equipment integrated into grass / bark areas. Play equipment includes climbing structures, trails of timber logs and balancing equipment. Figure 20 of the DFLA Design Rationale – Landscape Plan shows the proposed location of the play areas.

**The provision of a picnic area:** A-frame picnic tables will be provided to the north of the open lawn area to the west of Suir Island House (Protected Structure)

**The provision of lawns:** The location of the proposed open lawns is determined by the existing stone walls, Suir Island House (Protected Structure), proposed pedestrian routes around the island, views and flooding history. The landscape elements are arranged in such a way as to utilise as much of the space as possible. A soft meandering footpath is proposed to the north of the open lawn with a number of seating nodes, taking advantage of the south facing aspect. The soft meandering footpath meets the hard standing pedestrian route situated along the south of the site.

**The provision of landscape planting:** An emphasis has been placed on maximising tree retention across the site as well as encouraging and facilitating, where appropriate, the emergence of native vegetation. Emergent vegetation has colonised areas of previously bare ground as a result of active management of the garden area in the past. Native tree species associated with the emergent vegetation are proposed to be retained where possible and non-native species removed or retained in the short-term and then removed. In addition it is proposed to retain small areas of woodland habitat that has emerged on the site. Refer to the DFLA Design Rationale – Landscape Architecture Report and drawing No Ti.02-DR-2300 *Proposed Tree Retention and Removal Plan* provided under separate cover for details of trees to be retained and removed.

**In terms of landscape planting a significant band of tree planting** is proposed along the former headrace and will continue to the north side of the house at the entrance which will form a dense green canopy to the approach of the northern boundary. The management of the lawn areas, with carefully selected areas left unmown during summer months will create a series of

sub-spaces that will have seasonal effect. The riverbank vegetation will be protected and managed to maximise biodiversity and prevent disturbance of vegetation and fauna.

A total of 40 new individual trees are proposed in order to compensate for the removal of 8 of the existing trees on site. They will also improve the species mix on site. The proposed tree species are selected for longevity, suitability to local soil conditions and microclimate and biodiversity (native species). Proposed tree sizes range from semi-mature (35-40cm girth) specimen trees to multi-stemmed tree planting.

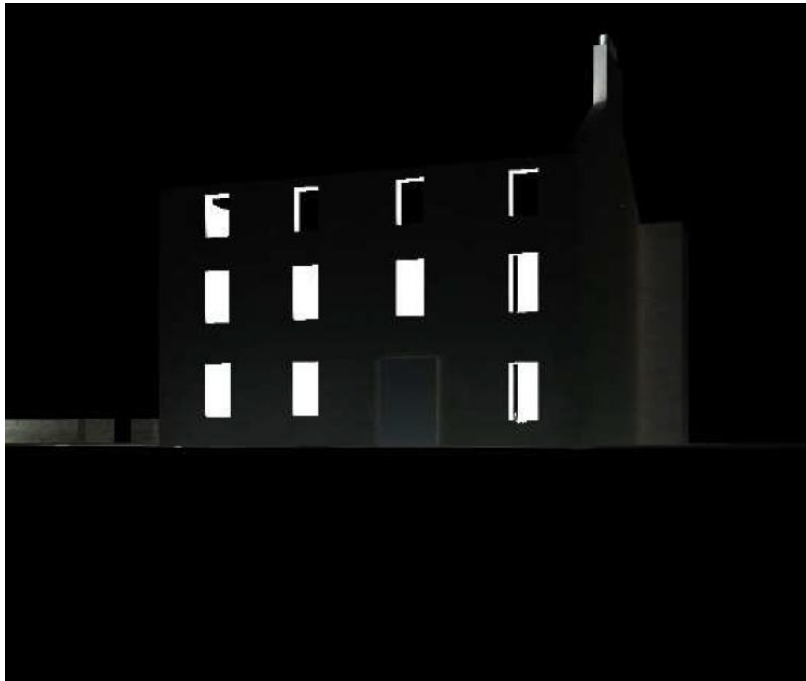
**The provision of works to make secure Suir Island House:** Suir Island House (Protected Structure) is currently in ruin with decorative steel plate panels (with laser cut interpretive text and graphics) proposed to all ground floor openings.

**The provision of an entrance gate at the northern boundary:** A single hinged gate is proposed for the entrance gate. Further details of the entrance gate are provided under separate cover in drawing Ti.02-DR-2401 *Entrance Gate Elevation*. Additionally, flood gates can be fitted when necessary to the existing entrance. The proposals for the entrance to the Gardens is to match the character of the existing stone walls seen throughout the gardens, creating the immediate threshold and distinction of the island.

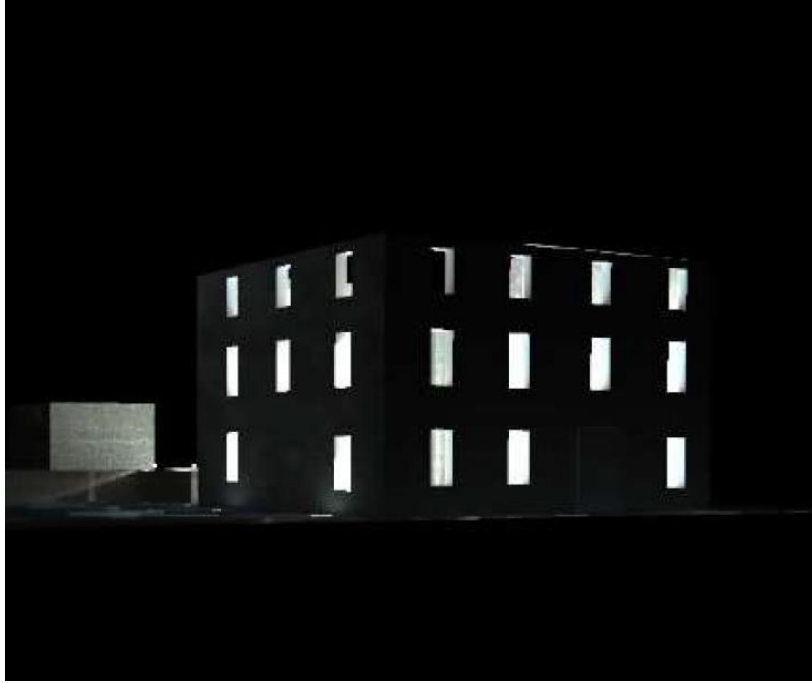
**The treatment and/or retention of boundaries to the garden:** The landscape design includes for both new proposed boundaries and the retention of existing boundaries. Details of the boundary treatment are provided in Drawing No.Ti.02-DR-2003 *Proposed Site Boundaries* (prepared by DFLA and provided under separate cover). The boundary treatment involves the retention of existing boundaries where possible and their modification to render them more appropriate to the proposed use. The northern boundary will be retained as existing with the exception of the entrance to the island which will have a notable change in appearance to match the character of the existing stone walls seen throughout the gardens, creating the immediate threshold and distinction of the island. The eastern boundary is proposed to be retained as existing, with management of vegetation as required. The southern boundary adjoining the River Suir is proposed to retain all existing trees where possible. The existing stone boundary wall directly south of Suir Island house (approximately 19m in length, in poor condition) shall be taken down by hand and rebuilt in a new location. The western boundary will be retained as the formal access and egress point to the River Suir, comprised of a concrete landing area, steps and boulders.

**The provision of decorative lighting:** The lighting will be provided as feature lighting in the form of wall mounted lighting within the ruin of Suir Island House (Protected Structure) and wall mounted lighting on existing external walls. The location of the proposed wall mounted lighting fixtures is provided under separate cover as part of the lighting design and drawing 2081-SS50-01 prepared by Fallon M & E Design Engineering. The decorative lighting of Suir Island House (Protected Structure) will aim to achieve the results seen in Plate 2.1 and 2.2 below. The proposed lighting design has been prepared in line with the following design principles:

**Plate 2-1: View of lighting objectives for southern elevation of Suir Island House (Protected Structure) with lighting**



**Plate 2-2: View of lighting objectives for southeastern elevation of Suir Island House (Protected Structure) with lighting**



- To provide adequate illumination to highlight the entrance at dusk and dawn, the park will be closed to the public at night.
- Minimise lighting pollution on surrounding areas and neighbours
- Reduce glare on pedestrians and other users of the access areas
- Use of efficient artificial lighting to reduce energy consumption
- The selection of light fittings and their locations will be designed and selected to minimize the impact on the local ecology and wildlife.

**The provision of hard landscape materials and finishes:** Paving materials where practical are proposed to be constructed in a way which is sensitively integrated with lawn and soft landscape, in order to minimise the impact of hard landscape surfaces. Primary pedestrian routes are proposed as a durable, limited range of neutral materials with robust construction. Secondary pedestrian routes are proposed to be of ‘flexible’ construction and in some cases a mix of paving and lawn.



**The provision of pathways within the garden area:** Paths within the garden will comprise both hard surface paved/decorative concrete/resin bonded paths and soft paths. The hard surface paths will be located to the south, southwest and southeast of Suir Island House (Protected Structure). The path will be largely bounded to the south by existing natural stone walls that will be retained. The path overlays areas of previous hard surface within the garden area. The soft paths will meander along an existing informal path that runs parallel to the river in the western area of the garden. The soft paths are set back from the river bank by approximately 5m. Soft paths will also meander through the woodland to the north of the garden area.

**The provision of signage:** Interpretative signage will be provided throughout the site.

### ***2.1.1 Description of the Elements of the Project within the Lower River Suir SAC***

The extent of the Suir Island Gardens and the areas of the proposed garden refurbishment occurring within the SAC are indicated on Appendix 1. A blend of decorative concrete finishes and natural stone paving is proposed for the footpath to the southern side of Suir Island. Where these works are within the SAC, all excavations (expected to be of minimal depth 250mm – 300mm) and removal of excess spoil shall be done with a mini excavator and mini dumper to minimise disturbances. The importation of granular sub base material shall be by mini dumper while the importation of concrete to the SAC zone if required shall be done by wheelbarrow to minimise the risk of overspill/introduction of excess concrete. Any and all concrete spillages shall be dealt with immediately and removed from the area, with no concrete or “wash down water” run off allowed into the River Suir. Wash down operations shall be conducted in the site depot, far removed from the SAC area.

A small area of resin bonded surface material is proposed around the large oak tree at the western end of the island. As per the previous description, all excavations shall be kept to a minimum, with minimum disturbance via the use of a mini excavator and mini dumper. The importation of the resin material shall be carried out in accordance with the relevant Safety Data Sheet (SDS) and shall be contained within the works area, with the appropriate processes in place for any spills as per the SDS.

The installation of the street furniture may require the mixing and importation of concrete. As detailed above, any mixing shall be done in the site compound and importation to the SAC zone shall be by wheelbarrow to minimise spillage. Any and all concrete spillages shall be dealt with

immediately and removed from the area, with no concrete or “wash down water” run off allowed into the River Suir. Wash down operations shall be conducted in the site depot, far removed from the SAC area.

### **3.0 DESCRIPTION OF THE PROJECT SITE**

Suir Island Gardens are located in the centre of Clonmel. The ruins of Suir Island House (Protected Structure) are located at the southwestern corner of the island and centrally within the subject site. The site is replete with remnants of industrial and architectural heritage such as walls, steps, paving slab details, gate piers and other fragments, all of which enhance the site’s character. Industry at Suir Island dates back to the 18th Century with mills, factories, warehouses and other structures occupying a significant portion of the island. Today remnants of these structures contribute to the island’s particular and unique character. Suir Island House (Protected Structure) is listed on the National Inventory of Archaeological Heritage. The project site at the west of Suir Island is prone to flooding, while the eastern end of the island, to the east of the project site, experiences regular flooding and under more extreme conditions the Suir Island Gardens site can be submerged.

The site has been recently cleared to facilitate conservation works. The headrace and tailrace are partially watered with vegetation re-colonising on the drier areas following the site clearance. The watered areas of the headrace and tailrace are subject to prolonged periods of dry conditions. The habitat within the garden area is representative of recolonising bare ground and buildings and artificial surfaces. Scattered trees also occur throughout the garden site. A tree survey of Suir Island was completed in 2017 and notable trees within the site for the proposed Suir Island Gardens include a mature lime and a mature oak. Selective removal has occurred for conservation and maintenance works since the tree survey was completed.

The garden is bounded to the south by the Lower River Suir SAC. The SAC boundary also overlaps a section of the garden area along the millrace to the west of the gardens. The habitats occurring along the bankside support stands of species-poor herb vegetation that is not representative of the Annex 1 habitat hydrophilous tall herb fringe. The species include native hydrophilous species such as *Valeriana officinalis*, *Ranunculus flammula*, *Lotus corniculatus*, *Eupatorium cannabinum* along with *Urtica dioica*, *Scrophularia nodosa* and a range of non-native (non-invasive) ornamental herbs and shrubs.

Non-native invasive plant species are known to occur to the east and outside the boundary of the project site. These species include Japanese Knotweed and Giant Hogweed both of which are categorised as high-impact invasive species. Winter heliotrope, ranked as a low-impact invasive species and traveller's joy and Himalayan honeysuckle, both of which are ranked as medium-invasive species are present on the island and within the footprint of the garden. Tipperary County Council have implemented a non-native invasive plant species eradication programme and treatment of these stands was recorded during 2021 and will continue throughout the 2022 growing season.

No evidence of otter holts, couches or field signs were noted within the garden area during surveys. Otters have previously been recorded at the eastern point of Suir Island, approximately 280m to the east of the project site's eastern boundary. The millrace features within the garden area dry out for extended periods of time and do not support populations of white-clawed crayfish.

#### **4.0 IS THE PROJECT DIRECTLY CONNECTED WITH OR NECESSARY FOR THE CONSERVATION MANAGEMENT OF EUROPEAN SITES?**

Given the description of the proposed project in Section 3.0 above it is clear that the project is not directly connected with or necessary for the management of any European Sites.

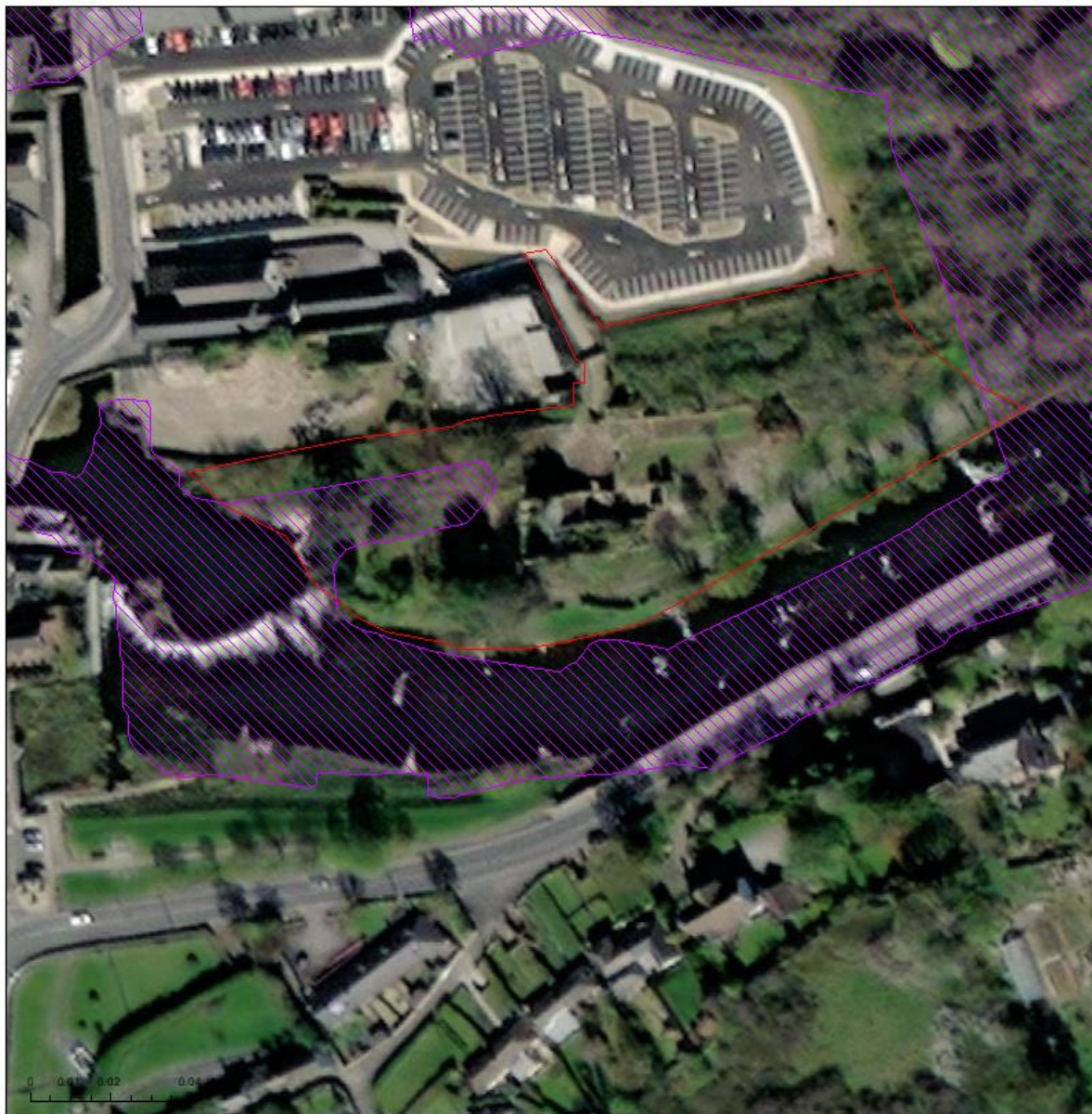
#### **5.0 IDENTIFY EUROPEAN SITES LIKELY TO BE INFLUENCED BY THE PROJECT**

Current guidance (OPR, 2021) informing the approach to screening for Appropriate Assessment defines the zone of influence of a proposed development as the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. It is recommended that this is established on a case-by-case basis using the Source-Pathway-Receptor (SPR) framework.

Given the nature of the proposed garden works which are small in scale, local in their extent, being restricted to Suir Island it is considered that the only European Sites that requires consideration in respect of the potential for these works to result in likely significant effects is the Lower River Suir SAC.

The extent of the proposed garden works with respect to the overall extent of this SAC is shown on Figure 5.1 below, while Figure 5.2 shows the garden site boundary with respect to the SAC boundary. As can be seen on Figure 5.2 the Suir Island Garden site overlaps the boundary of the Sac and a small section of the garden is located within the SAC boundary. Appendix 1 provides a drawing figure showing the proposed garden and associated elements with respect to the SAC boundary.





### Suir Island Gardens

Figure 5.2

#### Project Site & Lower River Suir SAC boundary

- Site Boundary
- Lower River Suir SAC



Drawn By	PD
Date	02/05/2022
Data Source	Bing

## 5.1 LOWER RIVER SUIR SAC

The Lower River Suir SAC consists of the freshwater stretches of the River Suir immediately south of Thurles, the tidal stretches as far as the confluence with the Barrow/Nore immediately east of Cheekpoint in Co. Waterford, and many tributaries including the Clodiagh in Co. Waterford, the Lingaun, Anner, Nier, Tar, Aherlow, Multeen and Clodiagh in Co. Tipperary. The Suir and its tributaries flow through the counties of Tipperary, Kilkenny and Waterford. The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (\* = priority; numbers in brackets are Natura 2000 codes):

[1330] Atlantic Salt Meadows

[1410] Mediterranean Salt Meadows

[3260] Vegetation of flowing waters

[6430] Hydrophilous Tall Herb Communities

[91A0] Old Oak Woodlands

[91E0] Alluvial Woodland\*

[91J0] Yew Woodlands\*

[1029] Freshwater Pearl Mussel (*Margaritifera margaritifera*)

[1092] White-clawed Crayfish (*Austropotamobius pallipes*)

[1095] Sea Lamprey (*Petromyzon marinus*)

[1096] Brook Lamprey (*Lampetra planeri*)

[1099] River Lamprey (*Lampetra fluviatilis*)

[1103] Twaite Shad (*Alosa fallax*)

[1106] Atlantic Salmon (*Salmo salar*)

[1355] Otter (*Lutra lutra*)

A review of the NPWS site-specific conservation objective published for the SAC does not indicate the presence of any Annex 1 habitat within the section of the SAC occurring at Suir Island. The extent of the Annex 1 habitat vegetation of flowing waters has not been mapped by the NPWS. The freshwater sections of the River Suir adjacent to Suir Island have the potential to support the Annex 1 habitat vegetation of flowing waters.

The presence of the Annex 1 habitat hydrophilous tall herb fringe has not been mapped by the NPWS as occurring along the river bankside surrounding Suir Island. The mapped location of this habitat, as published in the site-specific conservation objectives for the Lower River Suir SAC is located at a remote distance from Suir Island. The Article 17 2019 reporting by the NPWS has mapped the national distribution of this habitat in Ireland. All hectads known to support this habitat have been mapped. The nearest hectad supporting this habitat to Suir Island is approximately 20km to the east.

The NPWS conservation objectives have mapped the extent of alluvial woodland occurring within the SAC and these areas are located at a remote distance from the project site. Wet woodland habitat occurs to the east of the proposed garden on Suir Island and this habitat has links to the qualifying habitat alluvial wet woodland. However, the representativeness of this wet woodland as an example of alluvial wet woodland qualifying habitat of the SAC is undermined by the presence of a high number of negative indicator species for this habitat type.

The section of the River Suir adjacent to Suir Island is known to support populations of otter and white-clawed crayfish. The freshwater fish species of this SAC are also known to occur along this stretch of the River Suir.

Freshwater pearl mussels populations are a qualifying features of interest of the SAC. The conservation objectives for the SAC target the mussel population of the Clodiagh sub-catchment, which is located in a separate sub-catchment to Suir Island (which is located in the Suir\_SC\_140 sub-catchments). The conservation objectives targets for the freshwater pearl



mussel of the SAC are restricted to the Clodiagh sub-catchment. However, records of freshwater pearl mussel are held by the NPWS (1987 to 2006 records) for the main channel of the River Suir to the south of Marlfield approximately 3km upstream from Suir Island.

## 5.2 CONSERVATION OBJECTIVES

Site-specific conservation objectives for the Lower River Suir SAC have been published and are available at:

[https://www.npws.ie/sites/default/files/protected-sites/conservation\\_objectives/CO002137.pdf](https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002137.pdf)

## 6.0 EXAMINATION OF IMPACTS

Table 6.1 lists the qualifying features of interest of the Lower River Suir SAC and identifies the qualifying features of interest of the SAC that occur in the vicinity of Suir Island and the proposed garden and provides an examination as to whether the proposed garden will have the potential to result in likely significant effects to these qualifying features of interest and their associated conservation objectives.

Given the small-scale works associated with the proposed garden and the short duration of the works to complete the development of the gardens there will be no potential for the proposed garden to combine with other plans, projects or existing land uses in the vicinity of Suir Island to result in cumulative negative effects to the Lower River Suir SAC.

**Table 6.1: Examination of likely significant effects to the qualifying features of interest of the Lower River Suir SAC**

Qualifying feature of interest	Examination of likely significant effects
Atlantic salt meadows ( <i>Glaucopuccinellietalia maritimae</i> ) [1330]	This qualifying habitat is located at a remote distance from Suir Island and there will be no potential for the proposed garden, the works associated with its implementation and its future use to interact with this qualifying habitat and the attributes and associated targets that underpin the favourable conservation status of this habitat. Potential for

	likely significant effects to this habitat are screened out from further consideration.
Mediterranean salt meadows (Juncetalia maritimi) [1410]	This qualifying habitat is located at a remote distance from Suir Island and there will be no potential for the proposed garden, the works associated with its implementation and its future use to interact with this qualifying habitat and the attributes and associated targets that underpin the favourable conservation status of this habitat. Potential for likely significant effects to this habitat are screened out from further consideration.
Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation [3260]	The extent of this habitat within the SAC has not been mapped as part of the site-specific conservation objective publication for the Lower River Suir SAC. Visual surveys of the section of the River Suir surrounding and downstream of Suir Island during field surveys did not identify the presence of this habitat in the vicinity of the island. In addition given that the proposed garden, the works associated with its implementation and its future use will be small in scale, will not result in instream works and will not result in the emissions of contaminated surface water runoff to the River Suir there will be no potential for the project to result in disturbance to this qualifying habitat or the attributes and associated targets that underpin the favourable conservation status of this qualifying habitat. As such likely significant effects to this qualifying habitat are screened out.
Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]	The extent of this habitat within the SAC has not been mapped as part of the site-specific conservation objective publication for the Lower River Suir SAC. As noted above the Article 17 (2019) national distribution mapping for this qualifying habitat indicates the closest examples of this habitat to Suir Island are located approximately 20km to the east. No examples of this habitat occur within the footprint of the proposed garden or the works proposed by the gardens. In addition given that the proposed garden and associated works will not result in any perceptible change or disturbance to the bankside along the River Suir there will be no potential for the project to result in disturbance to fringing bankside vegetation. It is further noted that the fringing bankside vegetation occurring along the southern

	<p>bank of the island is not representative of this Annex 1 qualifying habitat.</p> <p>In view of this there will be no potential for the proposed garden, the works associated with its implementation and its future use to result in disturbance to this qualifying habitat and the attribute and associated targets that underpin the favourable conservation status of this habitat.</p> <p>As such likely significant effects to this qualifying habitat are screened out.</p>
<p>Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]</p>	<p>This qualifying habitat is located at a remote distance from Suir Island and there will be no potential for the proposed garden, the works associated with its implementation and its future use to interact with this qualifying habitat and the attributes and associated targets that underpin the favourable conservation status of this habitat. Potential for likely significant effects to this habitat are screened out from further consideration.</p>
<p>Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]</p>	<p>The woodland habitat to the east of Suir Island has links to this qualifying habitat. This woodland habitat is not identified as part of the alluvial wet woodland habitat of the SAC as mapped in the conservation objectives mapping for the SAC. The example of wet woodland habitat occurring to the west of Suir Island House (Protected Structure) and in the vicinity of the millrace are not representative of this Annex 1 qualifying habitat. Notwithstanding this it is noted that the proposed garden, the works associated with its implementation and its future use will not result in any loss of the extent of these examples of non-qualifying wet woodland habitat.</p>
<p>Taxus baccata woods of the British Isles [91J0]</p>	<p>This qualifying habitat is located at a remote distance from Suir Island and there will be no potential for the proposed garden, the works associated with its implementation and its future use to interact with this qualifying habitat and the attributes and associated targets that underpin the favourable conservation status of this habitat. Potential for likely significant effects to this habitat are screened out from further consideration.</p>

<p>Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]</p>	<p>The freshwater pearl mussel populations for which the Lower River Suir SAC is designated is located in a separate sub-catchment to Suir Island. In addition, given that the works will be small in scale and will not result in instream works or the generation of contaminating surface water runoff there will be no potential for the proposed garden, the works associated with its implementation and its future use to negatively affect water quality and habitats upon which this species relies. In light of this there will be no potential for the proposed garden, the works associated with its implementation and its future use to undermine the attributes and associated targets that underpin the favourable conservation status of this species and the potential for likely significant effects is screened out.</p>
<p>Austropotamobius pallipes (White-clawed Crayfish) [1092]</p>	<p>White-clawed crayfish are known to occur along the River Suir surrounding Suir Island. However, given that the works will be small in scale and will not result in instream works or the generation of contaminating surface water runoff there will be no potential for the proposed garden, the works associated with its implementation and its future use to negatively affect water quality and habitats upon which this species relies.</p>
<p>Petromyzon marinus (Sea Lamprey) [1095]</p>	<p>Sea lamprey are known to occur along the River Suir surrounding Suir Island. However, given that the works will be small in scale, of a short duration and will not result in instream works or the generation of contaminating surface water runoff there will be no potential for the proposed garden, the works associated with its implementation and its future use to negatively affect water quality and habitats upon which this species relies. In light of the above there will be no potential for the proposed garden, the works associated with its implementation and its future use to undermine the attributes and associated targets that underpin the favourable conservation status of this species and the potential for likely significant effects is screened out.</p>
<p>Lampetra planeri (Brook Lamprey) [1096]</p>	<p>Brook lamprey are known to occur along the River Suir surrounding Suir Island. However, given that the works will be small in scale, of a short duration and will not result</p>

	<p>in instream works or the generation of contaminating surface water runoff there will be no potential for the proposed garden, the works associated with its implementation and its future use to negatively affect water quality and habitats upon which this species relies. In light of the above there will be no potential for the proposed garden, the works associated with its implementation and its future use to undermine the attributes and associated targets that underpin the favourable conservation status of this species and the potential for likely significant effects is screened out.</p>
<p>Lampetra fluviatilis (River Lamprey) [1099]</p>	<p>River lamprey are known to occur along the River Suir surrounding Suir Island. However, given that the works will be small in scale, of a short duration and will not result in instream works or the generation of contaminating surface water runoff there will be not potential for the proposed garden, the works associated with its implementation and its future use to negatively affect water quality and habitats upon which this species relies. In light of the above there will be no potential for the proposed garden, the works associated with its implementation and its future use to undermine the attributes and associated targets that underpin the favourable conservation status of this species and the potential for likely significant effects is screened out.</p>
<p>Alosa fallax fallax (Twaite Shad) [1103]</p>	<p>The freshwater habitats that this species relies upon are located at a remote distance downstream from Suir Island and there will be no potential for the proposed garden, the works associated with its implementation and its future use to interact with this qualifying species and the attributes and associated targets that underpin the favourable conservation status of this species. Potential for likely significant effects to this species are screened out from further consideration.</p>
<p>Salmo salar (Salmon) [1106]</p>	<p>Atlantic salmon are known to occur along the River Suir surrounding Suir Island. However, given that the works will be small in scale, of a short duration and will not result in instream works or the generation of contaminating surface water runoff there will be no potential for the proposed garden, the works associated with its</p>

	<p>implementation and its future use to negatively affect water quality and habitats upon which this species relies. In light of the above there will be no potential for the proposed garden, the works associated with its implementation and its future use to undermine the attributes and associated targets that underpin the favourable conservation status of this species and the potential for likely significant effects is screened out.</p>
<p>Lutra lutra (Otter) [1355]</p>	<p>As noted in Section 3 above there are no otter holts or couches at or in the immediate vicinity of the proposed garden, the works associated with its implementation and its future use. Given the absence of such features in the immediate vicinity of the works as well as the small scale and short duration of the works there will be no potential for the proposed garden, the works associated with its implementation and its future use to result in disturbance to otters.</p> <p>It is further noted that the NPWS Threat Response Plan for otters (NPWS, 2009) states that “little evidence has come to light in recent studies to suggest that disturbance by recreation is a significant pressure” for otters. This statement is also supported by Chanin’s (2003) review of a number of studies that found otters were not significantly disturbed by human activity (Jefferies, 1987; Durbin 1993; Green &amp; Green, 1997). Based on these and other studies Chanin concluded that the recovery of the otter population in the UK was not being impeded by human disturbance. Otters have also been shown to demonstrate high levels of plasticity to the presence of humans in areas supporting high value foraging resources (MacDonald &amp; Mason, 1992), such as those supported by the River Suir.</p> <p>The Irish Wildlife Manual 23 reported that no significance difference was found between sites with and without</p>

	<p>recreational disturbance and stated that the lowest percentage occurrence was found at the sites with the lowest recorded disturbance.</p> <p>Based on the scientific evidence cited above that has investigated the potential for recreational activity to disturb otters, it is predicted that the operation phase of the proposed Suir Island gardens will not have the potential to result in significant ongoing disturbance to this species.</p> <p>In light of this it is considered that there will no potential for the proposed garden, the works associated with its implementation and its future use to undermine the attribute and associated targets that underpin the favourable conservation status</p>
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Table 6.1 provides an examination of the potential for likely significant effects to arise to the qualifying features of interest of the Lower River Suir SAC as a result of the proposed garden, the works associated with its implementation and its future use. As outlined in Table 6.1 there will be no potential for the works associated with the proposed garden, the works associated with its implementation and its future use to result in likely significant effects to the qualifying features of interest of the Lower River Suir SAC and their associated conservation objectives.

A Screening Matrix of the proposed garden, the works associated with its implementation and its future use, in line with European Commission (2001) guidelines is provided below in Table 6.2.

**Table 6.2: Screening Matrix for proposed project.**

Brief description of the project or plan	The proposed garden, the works associated with its implementation and its future use are described in Section 2 above.
Brief description of the European Sites	The Lower River Suir SAC is the only European Sites occurring in the wider surrounding area of the proposed

	<p>garden, the works associated with its implementation and its future use and is briefly described in Section 5 above.</p>
<p>Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the European Sites.</p>	<p>The project works involve localised public realm works that will be completed over a short-term duration that will not have the potential to interact with other projects or land uses in the surrounding area. Given the localised and short-term nature of the elements of work required for the delivery of the public realm enhancement there will be no potential for these works to combine with other land uses in the vicinity of the Suir Island gardens to result in cumulative negative impacts to the Lower River Suir SAC. It is further noted that the project will not result in works that will lead to direct or indirect impacts to qualifying habitat of the SAC or the water quality of the River Suir. The avoidance of instream works, the location of all elements of the project, aside from the small stormwater pipework and headwalls back from the River Suir bankside will also eliminate the potential for negative impacts to aquatic qualifying species of the SAC such as qualifying fish species and white-clawed crayfish. The works associated with the installation of the stormwater pipework will be small in scale and of a brief duration (to be completed within 3 – 5 working days). The headwalls for the pipes will be precast and will be small in size.</p> <p>The installation of the headwalls will be completed at the bankside in line with the methods described in section 2 above. The works associated with this will be completed within one working day. Precast headwalls will be inserted at the outfall of the surface water pipe drains. A schematic design drawing of the typical headwall to be used is provided as Figure 2.2</p>
<p>Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the European Sites site by virtue of:</p>	<p>The project is small in scale and of a short duration. The works associated with the provision of the gardens and associated elements will not result in the loss of any qualifying habitats of the SAC. There will be no permanent land take of any</p>



<ul style="list-style-type: none"><li>• size and scale;</li><li>• land-take;</li><li>• distance from the Natura 2000 site or key features of the site;</li><li>• resource requirements (water abstraction etc.);</li><li>• emissions (disposal to land, water or air);</li><li>• excavation requirements;</li><li>• transportation requirements;</li><li>• duration of construction, operation, decommissioning, etc.;</li></ul>	<p>Annex 1 habitats of the SAC. The proposed garden and their use will not result in the temporary disturbance to any qualifying habitats of the SAC. The proposed garden and its future use will not result in any disturbance to qualifying species of the SAC. No resting place for otters occurs or in the immediate vicinity of the proposed gardens and there will be no potential for disturbance to otter breeding or resting places. The project will not result in any instream works and will not pose a risk to the water quality of the River Suir. As such there will be no risk to instream habitats and the habitats that freshwater aquatic species of the SAC rely upon. Furthermore there will be no risk to the potential for the river to function as a foraging resource for otter and fish prey species.</p> <p>The presence of non-native invasive plant species has been identified on Suir Island and in the wider vicinity of Suir Island. These infestations currently do not occur within the footprint of the proposed garden area. The previously identified infestations are currently being chemically treated by Tipperary County Council in order to eradicate the infestation. The distance between the proposed garden is sufficiently buffered from the maximum root spread of non-native invasive plant species and will not have the potential to result in the spread of such species within or adjacent to the SAC.</p> <p>The excavations required for the proposed garden will be minor in size amounting to minor trenches for the installation of small perforated drainage pipes approximately 150mm in diameter. These excavations will be made perpendicular to proposed path surfaces and parallel to the path surfaces. The pipes will drain clean surface water runoff from the path to the River Suir. The pipe outfalls will be positioned at the River Suir bankside. The works associated with the installation of</p>
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	<p>the pipes and headwalls at the bankside will be minor in scale and will not have the potential to result negative impacts to the water quality of the river. The surface turve removed to accommodate the pipes parallel to the proposed paths and at the outfall will be re-laid subsequent to the installation of the drainage pipe. The pipes and headwalls will be installed in line with the approach described in Section 2 above. The works required for the headwall installations at the bankside will be brief and will be completed in 1 working day.</p> <p>There will be minimal transportation movements associated with works required for the provision of the garden.</p> <p>The use of the gardens will not result in any changes to baseline traffic levels.</p> <p>The duration of the works required to install the gardens will be completed over a 6 month period.</p>
<p>Describe any likely changes to the site arising as a result of:</p> <ul style="list-style-type: none"> <li>• reduction of habitat area;</li> <li>• disturbance to key species;</li> <li>• habitat or species fragmentation;</li> <li>• reduction in species density;</li> <li>• changes in key indicators of conservation value</li> <li>• (water quality etc.);</li> <li>• climate change.</li> </ul>	<p>There will be no reduction in the extent of qualifying habitats of the Lower River Suir SAC.</p> <p>There will be no potential for disturbance to qualifying species of the Lower River Suir SAC or a reduction in the density of these species supported by the SAC.</p> <p>The key indicators of the conservation status of the qualifying features of interest of the Lower River Suir SAC are provided as the conservation objectives attributes for each of these features. These attributes and their associated targets will not be undermined by the proposed garden, the works associated with its implementation and its future use.</p> <p>The proposed garden, the works associated with its implementation and its future use will not result in perceptible</p>

	emissions to air or water that have the potential to result in pollution of the surrounding environment.
Describe any likely impacts on the European Sites as a whole in terms of: interference with the key relationships that define the structure of the site; interference with key relationships that define the function of the site	For reasons set out above the project will not have the potential to interfere with key relationships that define the structure and function of the Lower River Suir SAC.
Provide indicators of significance as a result of the identification of effects set out above in terms of: <ul style="list-style-type: none"> <li>• loss;</li> <li>• fragmentation;</li> <li>• disruption;</li> <li>• disturbance;</li> <li>• change to key elements of the site (e.g. water quality etc.).</li> </ul>	For reasons set out above the project will not have the potential to result in such effects to the Lower River Suir SAC.
Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is not known.	The project will not have the potential to result in likely significant effects to European Sites.

## **7.0 SCREENING STATEMENT CONCLUSION: FINDING OF NO SIGNIFICANT EFFECTS**

The proposed garden, the works associated with its implementation and its future use at Suir Island are located within and adjacent to the Lower River Suir SAC.

The potential for works associated with the proposed garden, the works associated with its implementation and its future use to result in likely significant effects to the qualifying features of interest of the Lower River Suir SAC has been examined in this screening report. The project will comprise of small scale works that will be of a short-term duration and will not result in any permanent change to the existing baseline conditions of qualifying habitats or habitats relied upon by qualifying species of the Lower River Suir SAC . The works will not result in the loss of or disturbance to any qualifying habitats or qualifying species of the SAC and will not result in the emission of contaminants to the surrounding environment.

In light of the findings of this report, it is the considered view of the authors of this Screening Report for Appropriate Assessment that it can be concluded by the relevant competent authority that the proposed garden, the works associated with its implementation and its future use are not likely, alone or in-combination with other plans or projects, to have a significant effect on any European Sites in view of their Conservation Objectives and on the basis of best scientific evidence and there is no reasonable scientific doubt as to that conclusion.

This Screening has resulted in a Finding of No Significant Effects and as such a Stage II Appropriate Assessment is not required.

## 8.0 REFERENCES

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## **9.0 APPENDIX 1: PROPOSED GARDEN LAYOUT & LOWER RIVER SUIR SAC BOUNDARY**

The figure below shows the proposed Suir Island Garden area and the extent of the refurbishment works and the extent of these works occurring within the boundary of the Lower River Suir SAC. The Lower River Suir SAC boundary is indicated on this figure by the orange Diagonal Hatch.

