



Athlone Pedestrian and Cycleway Bridge

Natura Impact Statement

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1 INTRODUCTION

1.1 Background

McCarthy Keville O’Sullivan Ltd. (MKO) has been appointed to provide the information necessary to allow the competent authority to conduct an Article 6(3) Appropriate Assessment of a proposed pedestrian and cycleway bridge crossing of the River Shannon in Athlone, County Westmeath.

A Screening for Appropriate Assessment has been prepared and is provided in Appendix 1. The screening assessment concluded as follows:

"It cannot be excluded, on the basis of objective scientific information, that the proposed development individually or in combination with other plans or projects, will not have a significant effect on the following European sites.

- River Shannon Callows SAC (000216)
- Middle Shannon Callows SPA (004096)"

Table 1.1 below provides a screening summary and identifies the Qualifying Interests for which potential impacts could not be excluded at screening stage.

Table 1.1 Natura 2000 Sites that have been ‘Screened In’

European Site	Distance from Proposed Development (km)	Screening Summary
River Shannon Callows SAC (000216)	0.67 km	<p>There will be no direct impacts as the site of the proposed development is located approximately 670m metres from the SAC.</p> <p>Potential pathways for indirect impact on Otter have been identified in the form of emissions to surface water which has the potential to effect the supporting habitat of the species downstream of the proposed development site. Consequently, the potential for indirect impacts on the Otter population associated with the SAC requires further assessment.</p> <p>No pathway for significant effect was identified as screening stage with regard to any additional QI.</p>
Middle Shannon Callows SPA (004096)	0.67 km	<p>There will be no direct impacts as the site of the proposed development is located approximately 0.67 km downstream of the SPA.</p> <p>Potential pathways for indirect impact on the QI Wetland and Waterbirds [A999] have been identified in the form of emissions to surface water. Consequently, the potential for indirect impacts on the Otter population associated with the SAC requires further assessment</p> <p>No pathway for significant effect was identified at screening stage with regard to any additional QI.</p>

In light of the finding of the screening report, a Natura Impact Statement is now being prepared having regard to the European Commission guidance document *Assessment of Plans and Projects Significantly affecting Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC* (EC, 2001) and the

Department of the Environment’s Guidance on the Appropriate Assessment of Plans and Projects in Ireland (December 2009, amended February 2010), as well as the following guidance:

1. DoEHLG (2010) *Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities*. Department of the Environment, Heritage and Local Government,
2. European Communities (2000) *Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC*, Office for Official Publications of the European Communities, Luxembourg. European Commission,
3. *Directive 92/43/EEC*, Office for Official Publications of the European Communities, Luxembourg. European Commission,
4. EC (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 Commission,
5. EC (2013) *Interpretation Manual of European Union Habitats. Version EUR 28*. European Commission

1.2 Appropriate Assessment Methodology

The information contained in this NIS is designed to allow the Competent Authority to assess 1) the implications of the project, alone or in combination with other plans and projects, for a European Site in view of its Conservation Objectives, and 2) whether there will be any adverse effects on the integrity of a European Site.

Firstly, in Section 2 of the report, the proposed development is fully described.

Following on from this in Section 3, the results of the desk and field surveys that were undertaken are provided to provide all necessary details of the ecological baseline conditions at the site of the proposed development.

The interaction of the proposed development on the baseline environment is then considered in the context of potential effects thereon. This is undertaken with particular reference to the potential for the proposed development to result in adverse effects on the integrity of any European Site.

In Section 4, the Qualifying Interests and Conservation Objectives of the “screened in” European sites are described, with subsequent identification of potential pathways for effects on each individual Qualifying Interest.

Where potential pathways for effects are identified, the potential for adverse effects on each Qualifying Interest is assessed with respect to the national level pressures and threats. Where available, the site-specific attributes and targets, associated with the individual Qualifying Interest, are also assessed with regard to the proposed development taking into consideration best practice and design features.

Where site specific conservation objectives are not available, attributes and targets representative of factors considered in the conservation of the Qualifying Interest in other European sites are assessed.

The assessment of potential adverse effects follows the precautionary principle as detailed in Article 191 of the Treaty on the Functioning of the European Union (EU). It aims at ensuring a higher level of environmental protection through preventative decision-taking in the case of risk and underpins the Habitats Directive (DoEHLG 2010). The precautionary principle is the underlying concept of sustainable development which implies that prudent

action be taken to protect the environment even in the absence of scientific certainty (DoEHLG 2010).

Following the assessment of potential adverse effects on a European Site resulting from the project itself, a further assessment of the potential for effects when the project is considered cumulatively and in combination with other proposed developments is made in Section 5.

Finally in Section 6, a concluding statement is made. This includes a summary of the results of the assessment along with a checklist that demonstrates the lack of adverse effects on the integrity of any European Site (limited to the Conservation Objectives of the site) (as per Box 10 of EC, 2002). As per EC, 2002, the meaning of integrity is defined as follows;

The integrity of a site involves its ecological functions. The decision as to whether it is adversely affected should focus on and be limited to the site's conservation objectives' (MN2000, paragraph 4.6(3))'.

The information contained in this report will allow the Competent Authority to determine that the proposed development will not adversely affect the integrity of any European Site.

2 DESCRIPTION OF THE PROJECT

2.1 Site Location

The site of the proposed development is located within the urban centre of Athlone town at Grid reference IG: 203821, 241634. The site location is shown on the OSI Discovery Series Map in Figure 1.1 of Appendix 2. The map also shows the site location relative to European Sites located within the zone of likely impact.

2.2 Characteristics of Proposed Development

The bridge will be mixed use, and shared by pedestrians and cyclists. The width of the link is generally a minimum of 3m, with the exception of the ramp on the west side of the river which will be reduced to 2.8m in order to avoid extensive removal of the tree line between Grace Road and the river.

Otherwise the link widens out to 13m at the two landing areas on either end of the bridge, the purpose of the increased widths at these locations is to create a civic space where users can linger and experience the new views of Athlone's built heritage that will be opened up.

The following works will take place between Athlone Castle and Marina Lane and have been considered as part of this assessment:

- Removal of 13 parking spaces to the east of the castle and south of Custume Bridge;
- Removal of 3 or 4 existing ornamental trees to the east of the castle;
- Streetscape works to the east of the castle and south of the pedestrian arch under Custume Bridge, including paving to emphasise a pedestrian and cyclist environment;
- Widening of the existing riverside promenade/boardwalk to the east of the Luan Gallery;
- Removal of the existing stairway and ramp between Grace Road and the riverside promenade to the north of the Luan Gallery;
- Removal of a tree and the existing bust of Count John McCormack along Grace Road, on the west side of the river;
- Construction of an extensive ramp layout for the exclusive mixed use of pedestrians and cyclists linking the riverside promenade to the east side footpath on Grace Road;
- Modifications to the existing riverside promenade for approximately 75m north of the Luan Gallery and widening of the promenade into the river by 1.8m generally but by up to 2.8m at one location;
- Construction of a new bridge over the river between the Luan Gallery and the Radisson Hotel and apartments for the exclusive mixed use of pedestrians and cyclists, consisting of a two span bridge which includes a central pier at the midpoint of the river;
- Provision of boardwalks on the eastern and western banks;
- Modifications to the roof of the service area to the Luan Gallery to accommodate the west landing area of the new bridge;
- Temporary removal of a number of berths of the Athlone Marina to facilitate construction of the proposed development;
- Construction of a landing area at the east side of the bridge to tie in to the existing terrace of the Radisson Hotel;
- Construction of a new ramp for the exclusive mixed use of pedestrians and cyclists on the line of the existing riverside promenade on the west side of the Radisson Hotel and apartments in order to provide mobility access north from the east landing area to the existing promenade, close to Marina Lane;
- Construction of stairs on the line of the existing riverside promenade to the south side of the east landing area to the existing promenade in order to provide mobility access south to Methodist Church Lane;

- Removal of the existing security gate between Marina Lane and the existing riverside promenade on the west side of the Radisson Hotel and apartments;
- Removal of the two existing gates on the existing eastern promenade along the riverside of the Radisson Hotel; and
- Provision of a new security gate at the gangway between the existing riverside promenade on the west side of the Radisson Hotel and apartments and the marina.

A temporary construction compound will be created adjacent to the river at the southern end of Wansboro Park. The purpose of this temporary compound is to allow for on-site assembly of sections of the proposed bridge deck prior to floating downstream on river barges.

3 BASELINE ECOLOGY OF THE SITE

Otter, a QI species associated with River Shannon Callows SAC, was the only species for which potential pathways for impact were identified at screening stage. The sections below describe the details of the desk study and field surveys undertaken to inform this assessment regarding Otter.

Wetland and Waterbirds [A999], a QI of Middle Shannon Callows SPA is the only QI for which potential pathways for impact were identified at screening stage. The NPWS Site Synopsis and Natura 2000 data form were reviewed to inform the assessment regarding Wetlands and Waterbirds [A999].

3.1 Desk Study

3.1.1 National Biodiversity Data Centre Database

The NBDC provides a national database of biological records from Ireland. The database was consulted with regard to Otter records from Hectad No4 within which the proposed development is located. There are two records for the species along the river Shannon in proximity to the proposed development. The records come from the *Atlas of Mammals in Ireland 2010-2015* and the *1982 Otter Survey of Ireland*.

3.1.2 Wetlands of Middle Shannon Callows SPA

The following relevant extracts have been gleaned from the NPWS site synopsis and Natura 2000 Data Form for the SPA.

"The Middle Shannon Callows SPA is a long and diverse site which extends for approximately 50 km from the town of Athlone to the town of Portumna; it lies within Counties Galway, Roscommon, Westmeath, Offaly and Tipperary. The site averages about 0.75 km in width though in places is up to 1.5 km wide. Water levels on the site are greatly influenced by the very small fall between Athlone and Portumna and by the weir at Meelick. The site has extensive areas of callow, or seasonally flooded, semi-natural, lowland wet grassland, along both sides of the river. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

The Middle Shannon Callows SPA is an internationally important site that supports an assemblage of over 20,000 wintering waterbirds. It holds internationally important populations of two species - Whooper Swan and Black-tailed Godwit. In addition, there are four species that have wintering populations of national importance."

3.2 Field Survey

3.2.1 Methods

Field visits were made to the site in August 2013 and July 2015, which fall inside the recognised optimum period for vegetation surveys and habitat mapping, i.e. May to September (National Roads Authority (NRA) (2009)). Habitat surveys were carried out by means of dedicated walkover surveys. Habitats present on the site and the adjacent area were classified according to the guidelines set out in 'A Guide to Habitats in Ireland' (Fossitt, 2000). The site of the proposed development was considered in relation to its potential to support waterbirds. However, there was little habitat or cover for bird species in the highly disturbed urban environment.

An Otter survey was conducted as per NRA (2009) guidelines (Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes) in order to determine the presence or absence of Otter signs within the areas identified as having potential to support the species. This involved a search for all Otter signs e.g. spraints, scat, prints, slides, trails, couches and holts within the 150m derogation limit, upstream and downstream of proposed development site.

3.2.2 Results

The site was comprehensively searched for signs of Otter activity such as spraints on ledges or stonework surrounding the river. No such signs were recorded. No suitable resting or breeding sites were identified.

4 ASSESSMENT OF LIKLEY SIGIFICANT EFFECTS ON EUOPREAN SITES

The AA Screening Report that is included as Appendix 1 of this document screens in the potential for significant effects on River Shannon Callows SAC (000216) and Middle Shannon Callows SPA (004096).

This Natura Impact Statement presents the data and information on the project and provides an analysis of the potential adverse effects on the above listed European Sites. Potential adverse effects are assessed in view of best scientific knowledge, on the basis of objective information in relation to the proposed development including the proposed avoidance, reduction and preventive measures.

4.1 River Shannon Callows SAC

The site synopsis for this designated site is provided in Appendix 1 of the screening report.

4.1.1 Identification of Potential Impacts

The screening assessment has identified potential for the proposed development to significantly affect the River Shannon Callows SAC. Potential significant effects on the Qualifying Interest (QI) may arise in the form of emissions to surface and ground waters resulting from construction of the proposed development.

The Qualifying Interest for which pathways for potential impacts were identified is:

- *Otter [1355]*

The QI and the associated conservation objective of the site is provided in Table 4.1.

Table 4.1 Qualifying Interest and Conservation Objectives (Version 05, 2016)

Special Conservation Interest	Conservation Objective (Version 01, 2011)
<i>Lutra lutra</i> (Otter) [1355]	This site has the generic conservation objective: <i>'To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.'</i> (NPWS Generic version 5.0, 2016)

4.1.2 Otter (*Lutra lutra*) [1355]

The range for this species in Ireland has been assessed as favourable in the NPWS Article 17 Report. The population is also assessed as favourable.

The habitat and future prospects for the species have both been assessed as favourable. On the basis of the above, the overall assessment of conservation status is favourable.

The degree of conservation of the features which are important for the species in River Shannon Callows SAC and possibilities for restoration is assessed as B: good conservation (Natura 2000 Data Form 2015).

The pressures and threats (National level) relating to this species, as identified in the 2013 Article 17 Report, are listed below:

Pressures:

- Roads, motorways (medium importance)
- Professional passive fishing (low importance)

- Pollution to surface waters (limnic & terrestrial, marine & brackish) (low importance)

Threats:

- Roads, motorways (medium importance)
- Professional passive fishing (low importance)
- Pollution to surface waters (limnic & terrestrial, marine & brackish) (low importance)

The assessment of the proposed development has identified potential pathways for impacts on this species in relation to the *low importance* Pressure and *Threat Pollution to surface waters (limnic & terrestrial, marine & brackish)*.

No detailed Conservation Objectives are available for River Shannon Callows SAC. Targets and attributes for the conservation of this species are available in detailed Conservation Objectives for other SPAs (002034, 004076). The listed targets and attributes are representative of factors considered in the conservation of this species in other areas. The extrapolated targets and attributes for this species have been reviewed and considered in relation to the current development and are described in Table 4.2 below.

Table 4.2 Extrapolated Targets and attributes associated with site specific conservation objectives for wetlands

Attribute	Target	Assessment
Distribution.	No significant decline	There is no impact pathway which could lead to a decline in the distribution of this species associated with the proposed development
Extent of terrestrial habitat	No significant decline.	There will be no decline in the extent of terrestrial or freshwater habitat associated with the proposed development
Extent of freshwater (river) habitat	No significant decline.	
Extent of freshwater (lake) habitat	No significant decline.	
Couching sites and holts.	No significant decline	No couches or holting site were identified within the development site boundary and none were identified in the zone of influence. There will be no decline in couching or holt sites associated with the proposed development.
Fish biomass available	No significant decline.	There will be no decline in availability of fish biomass associated with the proposed development. Pathways that would allow impacts to occur were considered in the design of the proposed development and a range of measures are in place to avoid all water pollution during construction, operation and decommissioning.
Barriers to Connectivity	No significant increase	There will be no barrier to connectivity within or outside the SAC as a result of the proposed development.

The pathways that would allow potentially adverse impacts to occur were considered in the design of the scheme and a range of measures, as outlined in Section 4.3 below, are in place to avoid, reduce and remedy potential adverse impacts on surface water quality associated with the proposed development.

The residual impact on the River Shannon Callows SAC will be negligible. The design of the scheme has been developed with an overall objective of avoiding the impact on ecologically sensitive sites.

It can be concluded that the proposed development will not affect the integrity of the Otter population for which the SAC has been designated.

4.2 Middle Shannon Callows SPA

The site synopsis for this designated site is provided in Appendix 1 of the screening report.

4.2.1 Identification of Potential Impacts

The screening assessment has identified potential for the proposed development to significantly affect the Middle Shannon Callows SPA. Potential significant effects on the Qualifying Interest (QI) may arise in the form of emissions to surface and ground waters and potential hydrological changes resulting from construction of the proposed development.

The Qualifying Interest for which pathways for potential impact was identified is:

- *Wetlands and Waterbirds [A999]*

Potential significant effects on the Special Conservation Interest *Wetlands and Waterbirds [A999]* may arise in the form of indirect surface water pollution.

The SCI and the associated conservation objectives of the site are outlined in Table 4.3.

Table 4.3 Special Conservation Interests and Conservation Objectives (Version 5.0, 2016)

Special Conservation Interest	Conservation Objective (Version 05, 2016)
Wetland and Waterbirds [A999]	Generic conservation objectives are available for this site (NPWS Generic version 5.0, 2016): <i>"To maintain or restore the favourable conservation of the wetland habitat at Middle Shannon Callows SPA as a resource for the regularly-occurring migratory waterbirds that utilise it."</i>

4.2.2 Wetlands

The SPA is of international importance for wintering waterfowl. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

There will be no direct effects on the supporting wetland habitat of waterbirds within the SPA. Given that the SPA is located hydrologically downstream of the development site there is potential for indirect effects with regard to surface water pollution.

No detailed Conservation Objectives are available for Middle Shannon Callows SPA SPA. Targets and attributes for the conservation of supporting wetland habitat are available in detailed Conservation Objectives for other SPAs (004036, 004076). The listed targets and attributes are representative of factors considered in the conservation of this species in other areas. The extrapolated targets and attributes for this habitat have been reviewed and considered in relation to the current development and are described in Table 4.4 below.

Table 4.4 Extrapolated Targets and attributes associated with site specific conservation objectives for wetlands

Attribute	Target	Assessment
Habitat area	The permanent area occupied by wetland habitat should be stable other than that occurring from natural patterns of variation.	The proposed development will not result in any impacts which could adversely affect the extent of wetland habitat area. A suite of best practice measures have been incorporated into the project design to avoid and minimise potential impacts (See Section 4.3 for details)

The design of the proposed development has been developed with an overall objective of minimising the impact on ecologically sensitive sites. Direct and indirect impacts on the wetland habitat associated with SPA have been avoided through the design and associated best practice measures as described in Section 4.3. below.

It can be concluded that the proposed development will not affect the integrity of the QI Wetlands and Waterbirds [A999] for which the SPA has been designated.

4.3 Preventive Measures to Avoid Impacts

The potential pathways for impacts on the various Special Conservation Interests of River Shannon Callows SAC and Middle Shannon Callows SPA are listed, in the sections below, and the measures employed in the design of the project to prevent any such impacts are also discussed.

These measures are designed to ensure that the proposed development does not prevent or obstruct any of the qualifying interests from reaching favourable conservation status as per Article 1 of the EU Habitats Directive. A definition of Favourable Conservation Status is provided below:

'conservation status of a species means the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its populations within the territory referred to in Article 2;
The conservation status will be taken as 'favourable' 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.'*

4.3.1 Potential for Direct Impacts on European Sites

The proposed development site is located outside the boundary of European Sites.

No pathways for direct impacts as a result of the development on any of the QIs/SCIs of any European Site were identified.

4.3.2 Potential for Indirect Impacts on the European Sites

Emissions to surface water were identified as a potential indirect effect on the Qualifying Interests of Shannon River Callows SAC and Middle Shannon Callows SPA.

4.3.3 Construction Phase

Potential significant effects on the Qualifying Interests (QI) may arise in the form of emissions to surface water during the construction phase of the development. Measures to protect water quality during the construction phase are described below.

Mitigation for Run-off of Pollutants

In-stream works

- All in-stream works will be undertaken within the period May to September inclusive to avoid the period of maximum sensitivity for fisheries which includes prey species of Otter.
- In-stream works have been minimised through appropriate design. But will require the provision of a small dry working area to allow construction of the bridge pier. This will take the form of a small cofferdam that will be constructed from a barge.
- Existing piles associated with the existing marina berths that will be decommissioned will be removed by direct extraction using a machine working from a barge. The sediment that will be mobilized associated with this procedure will be very short term and is considered insignificant.
- Piles in the form of steel tubes that will be driven or bored into the river bed. This operation will be undertaken from a barge and will involve minimal sediment disturbance and no excavation outside the physical area of the pile.
- When assembling the bridge sections all works will be undertaken either at the construction compound at Wansboro Park or on a barge. The barge will provide an effective barrier to ensure that any pollutants used in the bridge finishing do not reach the river.
- Should the piles require concrete re-enforcement, this will be undertaken within a fully sealed and watertight steel casing, which will be left permanently in place with no direct contact between the concrete and the River Shannon, either cured or uncured. Concrete will be brought onto the barge in sealed containers and fully shuttered to avoid any potential for spillage during the pouring operations.
- Clean water will be pumped from inside the cofferdam each morning in advance of the works proceeding. This will be pumped directly to the River Shannon.
- Whilst working within the cofferdam, any dirty water that requires pumping out will be tankered off site and disposed of at a licenced waste facility.
- No tools or potentially toxic materials will be stored or left within the Cofferdam overnight or when there is any danger of the dam becoming inundated with water.
- Bio-security- This will include the thorough cleaning and disinfection of all machinery (including barges) prior to arrival and departure from the site, to prevent the spread of invasive species.

Bankside works

- Whilst significant water is not expected to arise on the site and no large scale excavations are proposed, prior to the commencement of construction work, silt fencing will be placed along the river boundary of the development site site in Athlone Town Centre.
- These will form a solid barrier to ensure any site water is captured and filtered. They will be removed to install the cantilever boardwalk sections, which will be completed at the end of the construction sequence and will not involve significant excavation or any concrete or in-stream works.
- As construction advances there may be some small requirement to collect and treat surface water within the site. Given the nature and scale of the works, this is not considered likely and if it does occur, it will be very small in scale. It is proposed that any such arisings are pumped to a tanker and removed from the site for disposal using a licensed waste contractor.
- Daily monitoring of the works will be completed by a suitably qualified person during the demolition and construction phase. All necessary preventative measures will be implemented to ensure no entrained sediment, or deleterious matter will enter the River Shannon.
- Earth works and concrete works will take place during periods of low rainfall to reduce run-off and potential siltation of watercourses.

- Concrete works will be required on the banks as part of the route leading up to the bridge.
- Formwork will be of solid construction and will be sealed to prevent any leakage of concrete during pouring operations.
- Whilst no significant excavations are proposed, should any ingress of water (ground or rain) require pumping out prior to the pouring of concrete, this will be pumped to a sealed clean tanker and removed from the site and spread to improved agricultural grassland at a distance of over 50m from any watercourse or disposed of at a licenced waste facility.
- The weather forecast will be checked prior to the pouring of the concrete and no such works will be undertaken when bad weather is forecast. Any works at any time when water levels that may cause inundation of the works area will be avoided. Concrete will not be poured at times when rain is predicted as this may lead to run off and over spillage of the form work.
- Form work will be constructed with an adequate capacity and additional freeboard to prevent any spillage.
- Concrete trucks will work entirely from the existing roads where they are located in close proximity to the proposed works. Concrete trucks will not be washed out at the site of the proposed works. If chutes require wash out, this will be undertaken at a designated wash out tank located in the site compound. This will recycle waters within the tank.
- Good construction practices such as dust suppression on site roads, and regular plant maintenance will ensure minimal risk. The Construction Industry Research and Information Association (CIRIA) provide guidance on the control and management of water pollution from construction sites (CIRIA, 2001). This will ensure that surface water arising during the course of demolition and construction activities will contain minimum sediment.
- All plant and machinery will be serviced before being mobilised to site. No plant maintenance will be completed on site, any broken down plant will be removed from site to be fixed.
- Refuelling will be completed in a controlled manner using drip trays at all times.
- Mobile bowsers, tanks and drums will be stored in secure, impermeable storage areas within the compound at Wansboro Park away from open water.
- Fuel containers will be stored within a secondary containment system, *e.g.* bunds for static tanks or a drip tray for mobile stores.
- Any containers and bunding for storage of hydrocarbons and chemicals will be located at the compound at Wansboro Park and will have a holding capacity of 110% of the volume to be stored. Ancillary equipment such as hoses and pipes will be contained within the bund.
- Taps, nozzles or valves will be fitted with a lock system.
- Fuel and oil stores including tanks and drums will be regularly inspected for leaks and signs of damage. Drip-trays will be used for fixed or mobile plant such as pumps and generators in order to retain oil leaks and spills. Only designated trained operators will be authorised to refuel plant on site.
- Procedures and contingency plans will be set up to deal with emergency accidents or spills. An emergency spill kit with oil boom, absorbers *etc.* will be kept on-site for use in the event of an accidental spill.
- Concrete (including waste and wash down) will be contained and managed appropriately to prevent pollution of watercourses. Pouring will occur in the dry, with appropriate curing times (48 hours) before re-flooding.
- Mixer washings and excess concrete will not be discharged to water. If cement washings are to be discharged they will first be held in a treatment facility in order to neutralise the pH and to settle out solids; and,
- Highest standards of site management will be maintained and utmost care and vigilance followed to prevent accidental contamination or unnecessary disturbance to the site and surrounding environment during construction. A named person will

be given the task of overseeing the pollution prevention measures agreed for the site to ensure that they are operating safely and effectively.

- The contractor will assign a member of the site staff as the environmental officer with the responsibility for ensuring the environmental measures prescribed are adhered to. A checklist will be filled in on a weekly basis to show how the measures above have been complied with. Any environmental incidents or non-compliance issues will immediately be reported to the project team. The project managers (client representatives) will be continuously monitoring the works and will be fully briefed and aware of the environmental constraints and protection measures to be employed.
- The works will be periodically monitored during the construction phase by a suitably qualified ecologist. Following completion of the works, the ecologist will complete a final audit report to show how the works complied with the environmental provisions described in this document. This audit report will be forwarded to the NPWS if required.

4.3.4 Operational Phase

The bridge has been designed to minimise impacts on the natural environment through its positioning, height and construction type as described in the impacts section above. No mitigation outside the sympathetic design of the scheme is proposed.

4.3.5 Discussion of Proposed Preventive Measures to Avoid Impacts

Emissions to surface water was identified as a potential indirect effect on the Qualifying Interests of the European Sites. The pollution prevention measures outlined in the sections above) are site specific and have been derived from scientific analysis of the development site. The proposed pollution prevent measures, in view of best practice guidance and scientific knowledge are appropriate to effectively avoid, reduce and remedy any pollution related impacts during construction and operation of the development. Taking cognisance of best practice measures incorporated into the project design adverse impacts on the integrity of the European Sites. The proposed development will not prevent the QIs/SCIs of the European Sites from achieving favourable conservation status in the future as defined in Article 1 of the EU Habitats Directive.

5 CUMULATIVE IMPACTS

5.1 Other Plans and Projects

The proposed development was considered in combination with other developments and activities in the area that could result in cumulative impacts on European Sites. A number of other plans and projects were considered. Where appropriate, these are listed below.

Athlone Town Development Plan 2014 – 2020

This plan acknowledges that it was a key consideration of previous plans to protect the town's environmental assets, in particular the River Shannon and its Callow. It is a core strategic policy of the plan to protect features of natural heritage including the River Shannon, canal, watercourses and habitats. It also makes reference to the promotion of a new pedestrian bridge over the Shannon in the town, the facilitation of the development of a National Cycle Network between Dublin and Galway. It is an objective of the plan to adhere to the Shannon River Basin District Plan (Water Framework Directive) and it discusses the planned upgrade of the surface water and sewage treatment and collection networks and other works to help achieve the goals of the Water Framework Directive. This plan has been the subject of both AA and Strategic Environmental Assessment (SEA).

Westmeath County Development Plan

This plan has also been subject to AA and SEA and is much broader in terms of its objectives. However, it does have a number of policies in relation to Natural Heritage and the enhancement of biodiversity. It also describes policies and objectives for the protection of inland waterways, rivers, lakes and canals including the protection of biodiversity and the enhancement of natural heritage.

5.2 Other Planning Applications

A search was made of Westmeath County Council planning files website for developments in the vicinity of the proposed bridge crossing. This revealed no significant recent (in the past five years) applications or developments that are not typical of urban town centre development. None of the applications or developments reviewed were of a nature and scale that were likely to result in significant cumulative impacts when assessed in combination with the proposed bridge crossing with the majority being either minor alterations to existing structures or else with no connection to the site of the proposed development.

Ongoing Operation of the Marina

The ongoing operation of the marina at this location was considered during the assessment but it is concluded that this section of the river is in an urban setting and that the bridge will not result in any significant difference to the existing level or type of activity in this area. There will be no loss or damage to habitats cumulatively when considering a new bridge crossing and the ongoing marina operation.

Proposed Dublin Galway Cycleway

The sections of cycleway that are planned or built to link the proposed bridge to the wider cycle network were considered when carrying out this cumulative assessment. The proposed pedestrian and Cycleway Bridge will be located entirely within urban habitats in the vicinity. The proposed development will not, in view of the sites' conservation objectives, adversely affect the integrity of any European Site and no reasonable scientific doubt remains as to the absence of such effects..

There will be no significant cumulative impact when assessed alongside the currently proposed bridge development given that no significant effects on the integrity of European sites are predicted.

Proposed Upgrade to Athlone Main Drainage

It is proposed to upgrade the Main Drainage network in Athlone Town. This will involve the upgrade of sewer pipes within the roads in Athlone Town and also the provision of tunneled pipes beneath the River Shannon downstream of Custume Bridge. These works will be designed also to minimise impacts on the River Shannon and any other sensitive receptors and will be the subject of Screening for Appropriate Assessment and where necessary Stage 2 (Appropriate Assessment). There will be no significant cumulative impact when assessed alongside the currently proposed bridge development given that no significant effects on the integrity of European sites are predicted.

5.3 Cumulative Impact Conclusion

The potential cumulative impacts of the proposed development were considered following research of known and likely plans and projects in the area and on the basis that the proposed development has been designed to avoid significant adverse impacts on the integrity of European Sites.

It is concluded that there will be no significant cumulative impact on the ecology of the area as a result of the proposed development.

6 CONCLUDING STATEMENT

The project as planned will not adversely affect the integrity of any European site. During this assessment, a number of pathways for potential impacts on the QIs and SCIs of the nearby European Sites were identified. These did not include any direct impacts but did include potential pathways for indirect impacts in the form of surface water pollution during construction. Mitigation measures to avoid the potential for any significant impacts via any of the pathways identified were outlined in Section 4.3.

It can be excluded, on the basis of objective scientific information, that the project, individually or in combination with other plans or projects, will not affect the integrity of any European Site.

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Relevant legislation

[Council Directive 92/43/EEC of the European Parliament and of the Council of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora](#)

Council Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds

SI 94/1997 European Communities (Natural Habitats) Regulations 1997

SI 30/2010 Planning and Development (Amendment) Act 2010

SI 477/2011 European Communities (Birds and Natural Habitats) Regulations 2011

Appendix 1

Appropriate Assessment Screening

Article 6(3) Appropriate Assessment Screening Report

Proposed Athlone Pedestrian and Cycleway Bridge over
River Shannon



Planning & Environmental Consultants

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1 INTRODUCTION

1.1 Background

McCarthy Keville O'Sullivan Ltd. has been appointed to prepare a report to provide the information necessary to allow the competent authority to conduct an Article 6(3) Screening for Appropriate Assessment of a proposed pedestrian and cycleway bridge crossing of the River Shannon in Athlone, County Westmeath.

This report provides the information necessary to allow the competent authority to conduct an Article 6(3) Appropriate Assessment Screening of the proposed development.

This cycleway project is not directly connected with or necessary for the management of any European Site.

This Report has been prepared in accordance with the European Commission guidance document 'Assessment of Plans and Projects Significantly affecting Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC' (EC, 2001) and the Department of the Environment's Guidance on the Appropriate Assessment of Plans and Projects in Ireland (December 2009, amended February 2010).

In addition to the guidelines referenced above, the following relevant guidance was considered in preparation of this report:

1. *DoEHLG (2010) Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government,*
2. *European Communities (2000) Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg. European Commission,*
3. *Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg. European Commission,*
4. *EC (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 Commission,*
5. *EC (2013) Interpretation Manual of European Union Habitats. Version EUR 28. European Commission,*
6. *EPA (2002) Guidelines on the information to be contained in Environmental Impact Statements. Environmental Protection Agency,*
7. *EPA (2003), Advice Notes on current practice in the preparation of Environmental Impact Statements. Environmental Protection Agency, and*
8. *CIEEM (2016) Institute of Ecology and Environmental Management Guidelines for Ecological Impact Assessment.*
9. *NRA (2009) Guidelines for Assessment of Ecological Impacts of National Roads Schemes, National Roads Authority, Dublin.*

1.2 Appropriate Assessment

1.2.1 Screening for Appropriate Assessment

Screening is the process of determining whether an Appropriate Assessment is required for a plan or project. Under Part XAB of the Planning and Development Act, 2000, as amended, screening must be carried out by the Competent Authority to assess, in view of best

scientific knowledge, if a land-use plan or proposed development, individually or in combination with another plan or project, is likely to have a significant effect on a European site. The Competent Authority's determination as to whether an Appropriate Assessment is required must be made on the basis of objective information and should be recorded. The competent authority may request information to be supplied to enable it to carry out screening.

Consultants or project proponents may undertake a form of screening to establish if an Appropriate Assessment is required and provide advice, or may submit the information necessary to allow the Competent Authority to conduct a screening with an application for consent. Where it cannot be excluded beyond reasonable scientific doubt, that a proposed plan or project, individually or in combination with other plans and projects, would have a significant effect on the conservation objectives of a European site, an Appropriate Assessment (Natura Impact Statement (NIS)) of the plan or project is required.

1.2.2 Appropriate Assessment (Natura Impact Statement)

The term Natura Impact Statement (NIS) is defined in legislation¹. An NIS, where required, should present the data, information and analysis necessary to reach a definitive determination as to 1) the implications of the plan or project, alone or in combination with other plans and projects, for a European site in view of its conservation objectives, and 2) whether there will be adverse effects on the integrity of a European site. The NIS should be underpinned by best scientific knowledge, objective information and by the precautionary principle.

¹ As defined in Section 177T of the Planning and Development Act, 2000 as amended, an NIS means a statement, for the purposes of Article 6 of the Habitats Directive, of the implications of a proposed development, on its own and in combination with other plans and projects, for a European site in view of its conservation objectives. It is required to include a report of a scientific examination of evidence and data, carried out by competent persons to identify and classify any implications for the European site in view of its conservation objectives

2 DESCRIPTION OF THE PROPOSED DEVELOPMENT

2.1 Site Location

The site of the proposed development is located within the urban centre of Athlone town at Grid reference IG: 203821, 241634. The site location is shown on the OSI Discovery Series Map in Figure 1.1. The map also shows the site location relative to European Sites located within the zone of likely impact.

2.2 Characteristics of Proposed Development

The bridge will be mixed use, and shared by pedestrians and cyclists. The width of the link is generally a minimum of 3m, with the exception of the ramp on the west side of the river which will be reduced to 2.8m in order to avoid extensive removal of the tree line between Grace Road and the river.

Otherwise the link widens out to 13m at the two landing areas on either end of the bridge, the purpose of the increased widths at these locations is to create a civic space where users can linger and experience the new views of Athlone's built heritage that will be opened up.

The following works will take place between Athlone Castle and Marina Lane and have been considered as part of this assessment:

- Removal of 13 parking spaces to the east of the castle and south of Custume Bridge;
- Removal of 3 or 4 existing ornamental trees to the east of the castle;
- Streetscape works to the east of the castle and south of the pedestrian arch under Custume Bridge, including paving to emphasise a pedestrian and cyclist environment;
- Widening of the existing riverside promenade/boardwalk to the east of the Luan Gallery;
- Removal of the existing stairway and ramp between Grace Road and the riverside promenade to the north of the Luan Gallery;
- Removal of a tree and the existing bust of Count John McCormack along Grace Road, on the west side of the river;
- Construction of an extensive ramp layout for the exclusive mixed use of pedestrians and cyclists linking the riverside promenade to the east side footpath on Grace Road;
- Modifications to the existing riverside promenade for approximately 75m north of the Luan Gallery and widening of the promenade into the river by 1.8m generally but by up to 2.8m at one location;
- Construction of a new bridge over the river between the Luan Gallery and the Radisson Hotel and apartments for the exclusive mixed use of pedestrians and cyclists, consisting of a two span bridge which includes a central pier at the midpoint of the river;
- Provision of boardwalks on the eastern and western banks;
- Modifications to the roof of the service area to the Luan Gallery to accommodate the west landing area of the new bridge;
- Temporary removal of a number of berths of the Athlone Marina to facilitate construction of the proposed development;
- Construction of a landing area at the east side of the bridge to tie in to the existing terrace of the Radisson Hotel;
- Construction of a new ramp for the exclusive mixed use of pedestrians and cyclists on the line of the existing riverside promenade on the west side of the Radisson Hotel and apartments in order to provide mobility access north from the east landing area to the existing promenade, close to Marina Lane;

- Construction of stairs on the line of the existing riverside promenade to the south side of the east landing area to the existing promenade in order to provide mobility access south to Methodist Church Lane;
- Removal of the existing security gate between Marina Lane and the existing riverside promenade on the west side of the Radisson Hotel and apartments;
- Removal of the two existing gates on the existing eastern promenade along the riverside of the Radisson Hotel; and
- Provision of a new security gate at the gangway between the existing riverside promenade on the west side of the Radisson Hotel and apartments and the marina.

A temporary construction compound will be created adjacent to the river at the southern end of Wansboro Park. The purpose of this temporary compound is to allow for on-site assembly of sections of the proposed bridge deck prior to floating downstream on river barges.

3 IDENTIFICATION OF RELEVANT EUROPEAN SITES

3.1 Background to European Sites

The Habitats Directive (92/43/EEC) together with the Birds Directive (2009/147/EC) form the cornerstone of Europe's nature conservation policy. It is built around two pillars: the Natura 2000 network of protected sites and the strict system of species protection. All in all, the Habitats Directive protects over 1,000 animal and plant species and over 200 "habitat types" (e.g. special types of forests, meadows, wetlands, etc.), which are of European importance.

With the introduction of the EU Habitats Directive and Birds Directive which were transposed into Irish law as S.I. No. 94/1997 *European Communities (Birds and Natural Habitats) Regulations 1997*, the European Union formally recognised the significance of protecting rare and endangered species of flora and fauna, and importantly, their habitats. The 1997 Regulations and their amendments were subsequently revised and consolidated in S.I. No. 477/2011- *European Communities (Birds and Natural Habitats) Regulations 2011*. This legislation requires the establishment and conservation of a network of sites of particular conservation value that are to be termed 'European Sites'.

3.2 Identification of the Designated Sites within the Likely Zone of Impact of the Proposed Development

The most up to date GIS spatial datasets for European designated sites were downloaded from the NPWS website (www.npws.ie) on the 20/04/2017.

The following rationale was used to identify the likely zone of impact. Firstly, sites within a 15km radius of the proposed development were identified (as per the DoEHLG Guidance (2010)).

Secondly, using the precautionary principle, European sites located outside the 15km radius of the proposed development were identified. However, no pathway for impact on such sites was identified because of the size and scale of the development, the site location in the center of Athlone town, and the intervening buffer and distance from any European Site.

Figure 3.1 shows the location of the proposed development in relation to all European sites within the likely Zone of Impact as identified according to the criteria described above.

Table 3.1 below, lists all European Sites that were considered to be within the Likely Zone of Impact. The site synopses and conservation objectives of these sites, as per the NPWS website (www.npws.ie), were considered at the time of preparing this report (20/04/2017). Details of these sites, including their distance from the proposed development, are provided in Table 3.1.

Table 3.1 European Sites within the Zone of Impact of the Proposed Works

European Site	Distance from Proposed works	Qualify Interests and Special Conservation Interests for which the European Site has been designated	Conservation Objectives
Special Areas of Conservation			
River Shannon Callows SAC (000216)	0.67 km downstream of the proposed bridge	<ul style="list-style-type: none"> • <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caerulea</i>) [6410] • Lowland hay meadows (<i>Alopecurus pratensis</i>, <i>Sanguisorba officinalis</i>) [6510] • Limestone pavements [8240] • Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0] • <i>Lutra lutra</i> (Otter) [1355] 	This site has the generic conservation objective: 'To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.' (NPWS Generic version 5.0, 2016)
Lough Ree SAC (000440)	1 km upstream (approx. 500 metres upstream from the temporary construction compound)	<ul style="list-style-type: none"> • Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> - type vegetation [3150] • Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] • Degraded raised bogs still capable of natural regeneration [7120] • Alkaline fens [7230] • Limestone pavements [8240] • Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0] • Bog woodland [91D0] • <i>Lutra lutra</i> (Otter) [1355] 	Detailed conservation objectives for this site (Version 1, August 2016) were reviewed as part of the assessment and are available at www.npws.ie
Crosswood Bog SAC (002337)	4 km	<ul style="list-style-type: none"> • Active raised bogs [7110] • Degraded raised bogs still capable of natural regeneration [7120] 	Detailed conservation objectives for this site (Version 1, February 2016) were reviewed as part of the assessment and are available at www.npws.ie
Carn Park Bog SAC (002336)	6 km	<ul style="list-style-type: none"> • Active raised bogs [7110] • Degraded raised bogs still capable of natural 	Detailed conservation objectives for this site (Version 1, November 2015) were

European Site	Distance from Proposed works	Qualify Interests and Special Conservation Interests for which the European Site has been designated	Conservation Objectives
Castlesampson Esker SAC (001625)	8.3 km	<ul style="list-style-type: none"> regeneration [7120] Turloughs [3180] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] 	<p>reviewed as part of the assessment and are available at www.npws.ie</p> <p>This site has the generic conservation objective: 'To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected'. '(NPWS Generic version 5.0, 2016)</p> <p>Detailed conservation objectives for this site (Version 1, September 2016) were reviewed as part of the assessment and are available at www.npws.ie</p>
Ballynamona Bog and Corkip Lough SAC (002339)	9 km	<ul style="list-style-type: none"> Turloughs [3180] Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the <i>Rhynchosporion</i> [7150] Bog woodland [91D0] 	<p>This site has the generic conservation objective: 'To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected'. '(NPWS Generic version 5.0, 2016)</p> <p>Detailed conservation objectives for this site (Version 1, April 2016) were reviewed as part of the assessment and are available at www.npws.ie</p>
Pilgrim's Road Esker SAC (001776)	9.8 km	<ul style="list-style-type: none"> Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] 	<p>This site has the generic conservation objective: 'To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected'. '(NPWS Generic version 5.0, 2016)</p> <p>Detailed conservation objectives for this site (Version 1, April 2016) were reviewed as part of the assessment and are available at www.npws.ie</p>
Mongan Bog SAC (000580)	10.1 km	<ul style="list-style-type: none"> Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the <i>Rhynchosporion</i> [7150] 	<p>This site has the generic conservation objective: 'To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected'. '(NPWS Generic version 5.0, 2016)</p> <p>Detailed conservation objectives for this site (Version 1, April 2016) were reviewed as part of the assessment and are available at www.npws.ie</p>
Fin Lough (Offaly) SAC (000576)	11.6 km	<ul style="list-style-type: none"> Alkaline fens [7230] <i>Vetigo geyeri</i> (Geyer's Whorl Snail) [1013] 	<p>This site has the generic conservation objective: 'To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected'. '(NPWS Generic version 5.0, 2016)</p>

European Site	Distance from Proposed works	Qualify Interests and Special Conservation Interests for which the European Site has been designated	Conservation Objectives
Lough Funshinagh SAC (000611)	12.3 km	<ul style="list-style-type: none"> Turloughs [3180] 	<p>conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected'. (NPWS Generic version 5.0, 2016)</p> <p>This site has the generic conservation objective: 'To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected'. (NPWS Generic version 5.0, 2016)</p>
Special Protected Areas			
Middle Shannon Callows SPA (004096)	0.67 km downstream of the proposed bridge location	<ul style="list-style-type: none"> Whooper Swan (<i>Cygnus cygnus</i>) [A038] Wigeon (<i>Anas penelope</i>) [A050] Corncrake (<i>Crex crex</i>) [A122] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Lapwing (<i>Vanellus vanellus</i>) [A142] Black Tailed Godwit (<i>Limosa limosa</i>) [A156] Black Headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] 	<p>The generic conservation objectives of this designated site as per the Conservation Objectives Document (NPWS Generic version 5.0, 2016) are:</p> <ul style="list-style-type: none"> To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA To maintain or restore the favourable conservation condition of the wetland habitat at Middle Shannon Callows SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.
Lough Ree SPA (004064)	1.1 km upstream (approx. 600 metres upstream from the	<ul style="list-style-type: none"> Little Grebe (<i>Tachybaptus ruficollis</i>) [A004] Whooper Swan (<i>Cygnus cygnus</i>) [A038] Wigeon (<i>Anas penelope</i>) [A050] 	<p>The generic conservation objectives of this designated site as per the Conservation Objectives Document (NPWS Generic</p>

European Site	Distance from Proposed works	Qualify Interests and Special Conservation Interests for which the European Site has been designated	Conservation Objectives
	temporary construction compound	<ul style="list-style-type: none"> • Teal (<i>Anas crecca</i>) [A052] • Mallard (<i>Anas platyrhynchos</i>) [A053] • Shoveler (<i>Anas clypeata</i>) [A056] • Tufted Duck (<i>Aythya fuligula</i>) [A061] • Common Scoter (<i>Melanitta nigra</i>) [A065] • Goldeneye (<i>Bucephala clangula</i>) [A067] • Coot (<i>Fulica atra</i>) [A125] • Golden Plover (<i>Pluvialis apricaria</i>) [A140] • Lapwing (<i>Vanellus vanellus</i>) [A142] • Common Tern (<i>Sterna hirundo</i>) [A193] • Wetland and Waterbirds [A999] 	<p>version 5.0, 2016) are:</p> <ul style="list-style-type: none"> • To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA • To maintain or restore the favourable conservation condition of the wetland habitat at Lough Ree SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.
Mongan Bog SPA (004017)	10.3km	<ul style="list-style-type: none"> • Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395] 	<p>The generic conservation objective of this designated site is:</p> <p>To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (NPWS Generic version 5.0, 2016)</p>

4 ASSESSMENT OF LIKELY EFFECTS ON EUROPEAN SITES

4.1 Article 6(3) Assessment Criteria

The Screening Assessment criteria examined in the impact assessment section of this document follows the suggested screening matrix structure detailed in '*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*' (EC, 2001).

4.2 Description of Individual Elements of the Project with Potential to give Rise to Impacts on the Natura 2000 Site

Elements of the works in the preparation/construction phase with potential to give rise to effects on European sites include the following:

- Site preparation and earthworks
- Machinery access to the construction locations
- Excavations and construction of structural foundations
- Erection of the bridge
- Drainage
- Construction of other site infrastructure.
- Construction compound and temporary works.

Aspects of the project in the operational phase with potential to result in effects on European sites include the following:

- Operation of the bridge

4.2.1.1 Description of any Likely Direct, Indirect or Secondary Impacts of the Project on the European Sites

Any likely direct, indirect or secondary impacts of the proposed development, both alone and in combination with other plans or projects, on European Sites are assessed. These are assessed by virtue of the following criteria: size and scale, land-take; distance from the European Site or key features of the site; resource requirements (such as water abstraction); emissions (disposal to land, water or air); excavation requirements; transportation requirements and; duration of construction, operation and decommissioning. The likely impacts are presented in Table 4.1 below.

Table 4.1 Likely Impacts of the Proposed Development on the European Sites

Likely Direct, Indirect or Secondary Impacts of the Project on the European Sites	
	No direct impacts on any European sites are predicted.
Size and Scale	The proposed development consists of the construction of a small-scale bridge crossing of the River Shannon in Athlone town centre. There is an existing marina and two existing road/railway bridges in close proximity. Impacts on any European Sites resulting from the small size and scale of this bridge are not anticipated.
Land-take	There will be no land take associated with the proposed development within any European Site. No potential for effects in regard of land take arise.

Likely Direct, Indirect or Secondary Impacts of the Project on the European Sites	
Distance from the European Sites or Key Features of the Site	<p>The works are located a minimum distance of 0.67 km (0.5 km from the construction compound) from the nearest European Site and will not directly impact on any European Site as a result of proximity.</p> <p>Potential pathway for indirect impacts are described below with regard to emissions.</p>
Resource Requirements	<p>There will be no exploitation of any resources within any European Site as part of the proposed development and therefore impacts in this regard on any of the sites within the zone of impact can be discounted at this stage of the assessment process.</p>
Emissions	<p>No direct effects on any European sites are predicted.</p> <p>Emissions from the construction of the proposed development which may have the potential to indirectly effect European Sites in the likely zone of impact. These include emissions to surface and ground water such as silt laden run off, hydrocarbons or other pollutants during both construction and operational phases and noise resulting in displacement (where species occur outside the boundaries of the European sites)</p> <p>In the case of the Middle Shannon Callows SPA (004096) and River Shannon Callows SAC (000216) the potential for the proposed development to result in effects on the Qualifying Interests (QIs), in the form of deterioration of surface and ground water quality resulting from pollution, could not be discounted at this stage of the assessment process. Pathways for impact with regard to emissions to air and noise are not anticipated given the size and scale of the development, the site location in the center of Athlone town, and the intervening buffer and distance from any European Site.</p> <p>No pathways for impact on additional European sites were identified.</p>
Excavation Requirements	<p>There will be no works undertaken within any European Site and therefore no direct impacts relating to excavation are predicted. A potential indirect impact is emissions to surface water. This potential impact is considered above in relation to emissions.</p>
Transportation Requirements	<p>As the proposed development is located entirely outside any European Site, there will be no direct impacts on any such site. All transportation requirements to the development will be conducted within the existing public road network where possible. Where material are to be assembled at the temporary construction compound located adjacent to the river at the southern end of Wansboro Park, they will be transported downstream to the development site by barge.</p> <p>In the case of the Middle Shannon Callows SPA (004096) and River Shannon Callows SAC (000216) the potential for the proposed development to result in effects on the Qualifying Interests (QIs), in the form of deterioration of surface and ground water quality resulting from pollution, could not be discounted at this stage of the assessment process.</p>
Duration of Construction, Operation, Decommissioning	<p>No potential impacts that relate directly to the duration of each phase of the project were identified (the duration of the construction phase is approximately 19 months and the operational phase is assumed permanent). Impacts resulting from disturbance and emissions are affected by the duration of each phase of the project but are considered above under those headings with no additional potential for impacts arising specifically as a result of the duration of each phase identified.</p> <p>No pathways for impact on additional European sites were identified.</p>

Likely Direct, Indirect or Secondary Impacts of the Project on the European Sites	
Cumulative Impacts with other Projects or Plans	<p>Searches in relation to plans and projects that may have the potential to result in cumulative impacts on European sites were carried out. Data sources included the following:</p> <ul style="list-style-type: none"> • Westmeath County Council Website (Planning and roads sections) • An Bord Pleanála Website (Planning Searches) • Web Search for major infrastructure projects in Co. Westmeath • Proposed upgrade of the Athlone Main Drainage including the construction of a sewer beneath the River Shannon • Westmeath County Development Plan 2014 – 2020 • Dublin to Galway Cycleway project <p>Where potential pathways for impact were identified on European Sites within the zone of likely impact, it cannot be concluded that there is no potential for cumulative effects when assessed alongside other plans and projects without further analysis and information with regard to the project.</p> <p>Therefore the potential for cumulative impacts requires further assessment with regard to Middle Shannon Callows SPA (004096) and River Shannon Callows SAC (000216).</p> <p>Potential for impact was not identified with regard to any additional European sites.</p>

4.2.1.2 Description of any Likely Changes to European Sites

Whilst no changes to European sites are considered likely as a result of the proposed development, various pathways for potential impacts were identified during the screening process. The potential for changes could not be entirely excluded in relation to a number of sites. Any potential changes to the European Sites are described below in Table 4.2 with reference to the following criteria: reduction of habitat area; disturbance to key species; habitat or species fragmentation; reduction in species density; changes in key indicators of conservation value (*e.g.* water quality *etc.*) and; climate change.

Table 4.2 Likely Changes to European Sites

Likely Changes to the European Sites	
Reduction of Habitat Area	<p>There will be no reduction in habitat area within any European Sites as a result of the development.</p> <p>In the case of the Middle Shannon Callows SPA (004096) and River Shannon Callows SAC (000216) the potential for the proposed development to result in effects on the Qualifying Interests (QIs), in the form of deterioration of surface and ground water quality resulting from pollution, could not be discounted at this stage of the assessment process.</p>
Disturbance to Key Species	<p>The nearest European Site is located more than 670m from the proposed development and over 200 metres from the construction compound. Supporting habitat for QI species within European Sites is buffered from the proposed development by existing bridges and urban infrastructure. The potential for disturbance to key species within any European Site can be excluded.</p> <p>The development site is located in Athlone Town centre and on a busy waterway navigation channel which is subject to regular use. There is no potential breeding or resting habitat for key species at the proposed development location. Significant disturbance effects on key species of European sites, should such species occur outside the designated site, are not anticipated.</p>
Habitat or Species Fragmentation	<p>The proposed bridge is located between two existing bridge structures in Athlone. The bridge has been designed to be of similar height and to incorporate an under clearance similar to the existing bridge structures. In addition, there are no protruding wires, cables or arch structures associated with the bridge that are likely to form any kind of obstruction to birds. Therefore, no impacts with regard to any potential fragmentation of commuting routes have been identified.</p> <p>Similarly the bridge has been designed retain aquatic habitat connectivity and will not result in habitat or species fragmentation.</p> <p>The potential for habitat or species fragmentation can be excluded at this stage in the development process.</p>
Reduction in Species Density	<p>Where pathways for impacts on European Sites have been identified in the preceding sections, the potential for reduction in species density on these identified European Sites cannot be excluded at this stage in the development process.</p>
Changes in Key Indicators of Conservation Value	<p>Where pathways for effects on a European Site has been identified in the preceding sections, the potential for changes in key indicators of conservation value at the identified European Site cannot be excluded without further assessment; i.e. Middle Shannon Callows SPA (004096) and River Shannon Callows SAC (000216). No other European Sites within the Likely Zone of Impact were considered to be at any risk from impact given the nature and scale of the development, distance and/or lack of connectivity.</p>
Climate Change	<p>Given the nature and scale of the works, climate change as a result of the proposed development is not anticipated.</p>

4.2.1.3 Description of any Likely Impacts on any European Site

The development will avoid any direct impacts on any European Sites. However, the potential pathways for indirect impacts and effects on some European Sites has been identified therefore an AA in relation to these sites is required.

No Direct Impacts on European Sites will occur as a result of the proposed development. Indirect Impacts on European Sites are not considered likely but potential for such impacts has been identified as described above and can therefore not be excluded. Table 4.3 describes the nature of any indirect impacts in terms of the structure and function of the identified European Sites.

Table 4.3 Assessment of Potential Impacts on the Structure and Function of European Sites

Likely Changes to the European Sites	
Interference with the key relationships that define the structure of a European Site	<p>Potential impacts as identified in the preceding sections which could result in interference with the Structure of a European Site include:</p> <ul style="list-style-type: none"> • Potential surface water pollution, which may result in the deterioration of habitat within the identified European sites.
Interference with key relationships that define the function of the European site	<p>Potential impacts as identified in the preceding sections which could result in interference with the Function of a European Site include:</p> <ul style="list-style-type: none"> • Potential for reduction in habitat area outside the European Sites but affecting populations of QIs that may be associated with the sites

4.2.1.4 Indicators of Significance as a Result of the Identification of Effects

Indicators of significance are provided in Table 4.4 below. Indicators are provided for any impacts identified above in terms of loss, fragmentation, disruption, disturbance and changes to key elements of the European Sites, such as water quality.

Table 4.4 Indicators of Significance as a Result of the Identification of Effects

Indicators of Significance as a Result of the Identification of Effects	
Loss	There will be no loss of habitats within European sites as a result of the proposed development. Potential for reduction in habitat area outside the European Sites but affecting populations of QIs that may be associated with the identified sites cannot be discounted at this stage in the assessment process and would be measured in terms of loss of utilised or suitable supporting habitat.
Fragmentation	There will be no fragmentation of habitats and species within any European sites as a result of the development. Potential for habitat fragmentation outside the European Sites can be discounted taking into consideration the design of the proposed development which retains habitat connectivity.
Disruption	Disruption to the ecological processes within the European Sites where pathways for impact were identified above cannot be discounted at this stage of the development and would be measured in terms of changes to the baseline environment.
Disturbance	The nearest European Site is located more than 670m from the proposed development (200 metres from the construction compound). Supporting habitat for QI species within European Sites is buffered from the proposed development by existing bridges and urban infrastructure. The potential for disturbance to key species within any European Site can be excluded.
Changes to Key Elements of the Site	The potential for changes to key elements of the European Sites where pathways for impact were identified above cannot be discounted at this stage of the development and would be measured in terms of changes to the baseline environment.

5 ARTICLE 6(3) SCREENING STATEMENT AND CONCLUSIONS

The findings of this Screening Assessment are presented following the European Commission guidance document 'Assessment of Plans and Projects Significantly affecting Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC' (EC, 2001) and the Department of the Environment's Guidance on the Appropriate Assessment of Plans and Projects in Ireland (December 2009, amended February 2010).

5.1 Sites that are 'Screened In'

Where the potential for impacts on any particular European Site cannot be excluded without further analysis, a summary of such potential impacts is provided in Table 5.1.

Where in view of best scientific knowledge and on the basis of objective information it cannot be excluded that the proposed development, individually or in combination with other plans and projects, will be likely to have a significant effect on any European Sites, they are considered to be 'Screened In'. As a result, an appropriate assessment of the proposed development is required with regard to these European Sites. Those European Sites for which the potential for significant effects could not be excluded are presented in Table 5.1 below. The site synopsis of the Screened-in European Sites is provided as Appendix 1 of this document.

Table 5.1 European Sites that have been 'Screened In'

European Site	Distance from Proposed Development	Screening Summary
River Shannon Callows SAC (000216)	0.67 km downstream of the proposed bridge crossing location.	<p>There will be no direct impacts as the site of the proposed development is located approximately 670 m metres from the SAC.</p> <p>The Annex I surface water dependent habitat Alluvial Forests [91E0] does not occur at the proposed development site in Athlone. As per the NPWS site synopsis and Natura 2000 Data Form the habitat has a "minor though important presence within the SAC". The Alluvial Forest [91E0] for which the SAC has been designated occurs on a series of alluvial islands just below the Electricity Supply Board (ESB) weir near Meelick. Several of the islands are dominated by well-grown woodland consisting mainly of Ash (<i>Fraxinus excelsior</i>) and Willows (<i>Salix</i> spp.). The islands are prone to regular flooding from the river. The Alluvial Forest is located greater than 40 km downstream of the proposed development therefore no potential for significant indirect effect exists.</p> <p>The remaining Annex I habitats for which the SAC are designated are terrestrial in nature and no potential pathway for effect exists.</p>

European Site	Distance from Proposed Development	Screening Summary
		<p>With regard to Otter, potential pathways for impact have been identified in the form of emissions to surface water which has the potential to affect the supporting habitat of the species downstream of the proposed development site.</p> <p>Thus the potential for significant effects on this European Site, with regard to Otter, cannot be excluded at this stage and it is 'Screened In' and will be assessed further in an NIS.</p>
Middle Shannon Callows SPA (004096)	0.67 km downstream of the proposed bridge crossing location.	<p>There will be no direct impacts as the site of the proposed development is located approximately 0.67 km downstream of the SPA. Potential pathway for impact on OI species have not been identified given the design of the development, the site location and the nature of the OI species and the existing environment.</p> <p>Potential pathways for impact have been identified in the form of emissions to surface water potential effect on the OI Wetland and Waterbirds [A999]. The potential for significant effects on this European Site cannot be excluded at this stage and it is 'Screened In' and will be assessed further in NIS.</p>

5.2 Sites that are 'Screened out'

Where it is concluded that, in view of best scientific knowledge and on the basis of objective information, the proposed development either individually or in combination with other plans or projects, is not likely to have significant effects on the European Sites that were assessed as part of the screening exercise as described above, they are considered to be 'Screened Out'. The sites that have been 'Screened Out' are shown in Table 5.2. As a result, an Appropriate Assessment of the proposed development is not required with regard to these European Sites.

Table 5.2. European Sites that have been 'Screened Out'

European Site	Distance from Proposed development	Screening Summary
Special Areas of Conservation		
Lough Ree SAC (000440)	1 km (approx. 500 metres from the temporary construction	The designated site is located approximately 1km upstream of the bridge location, 0.5km from the site compound and has no hydrological connectivity with Annex I habitats for which the SAC has been designated. Similarly no potential pathway for impact on the supporting /commuting habitat of Otter in the SAC (See Map 9 of NPWS Conservation Objective document), has been identified.

European Site	Distance from Proposed development (compound)	Screening Summary
		<p>Given the distance and intervening buffer between the SAC and the development site, there is no potential for displacement of Otter within the SAC. There are no Otter breeding or resting places present at the development site therefore the potential for displacement of the SAC Otter population, should individuals occur outside the SAC boundary, is considered insignificant. There development has been designed to retain habitat connectivity and will not result in the fragmentation of potential Otter habitat outside the SAC.</p> <p>Significant effects on the European Site resulting from the proposed development can be excluded at this stage of the assessment and it is 'Screened Out'.</p>
Lough Ree SPA (004064)	1.1 km (approx. 600 metres from the temporary construction compound)	<p>The designated site is located approximately 1.1km upstream of the bridge location and 0.6km from the site compound and has no hydrological connectivity with the supporting wetland habitat of waterbirds [A999] for which the SPA has been designated.</p> <p>Given the distance and intervening buffer between the SPA and the development site, there is no potential for displacement of OI species within the SPA.</p> <p>The development site is located in Athlone town and does not provide potential breeding, roosting or foraging habitat of OI species should they occur outside the SPA boundary. The development will not result in any habitat fragmentation within the SPA and has been designed to retain habitat connectivity and minimise barrier effect outside the SPA.</p> <p>Significant effects on the European Site resulting from the proposed development can be excluded at this stage of the assessment and it is 'Screened Out'.</p>
Crosswood Bog SAC (002337)	4 km	<p>Given the nature and scale of the development and distance from it, it is considered that there is no potential for impacts on the peatland habitats of qualifying interest of this site. No complete impact source-pathway-receptor chain was identified during the Screening Assessment as provided in Section 4 of this report. Significant impacts on the European Site resulting from the proposed development can be excluded at this stage of the development and it is 'Screened Out'.</p>
Carn Park Bog SAC (002336)	6 km	<p>Given the nature and scale of the development and distance from it, it is considered that there is no potential for impacts on the peatland habitats of qualifying interest of this site. No complete impact source-pathway-receptor chain was identified during the Screening Assessment as provided in Section 4 of this report. Significant impacts on the European Site resulting from the proposed development can be excluded at this stage of the assessment and it is 'Screened Out'.</p>
Castlesampson Esker SAC (001625)	8.3 km	<p>Given the nature and scale of the development and distance from it, it is considered that there is no potential for impacts on the Turfough and grassland habitats of qualifying interest of this site. No complete impact source-pathway-receptor chain was identified during the Screening Assessment as provided in Section 4 of this report. Significant impacts on the European Site resulting from the proposed development can be excluded at this stage of the assessment and it is 'Screened Out'.</p>

European Site	Distance from Proposed development	Screening Summary
Ballynamona Bog and Corkip Lough SAC (002339)	9 km	'Screened Out'. Given the nature and scale of the development and distance from it, it is considered that there is no potential for impacts on the Turlough and peatland habitats of qualifying interest of this site. No complete impact source-pathway-receptor chain was identified during the Screening Assessment as provided in Section 4 of this report. Significant Impacts on the European Site resulting from the proposed development can be excluded at this stage of the assessment and it is 'Screened Out'.
Pilgrim's Road Esker SAC (001776)	9.8 km	Given the nature and scale of the development and distance from it, it is considered that there is no potential for impacts on the grassland habitat of qualifying interest of this site. No complete impact source-pathway-receptor chain was identified during the Screening Assessment as provided in Section 4 of this report. Significant Impacts on the European Site resulting from the proposed development can be excluded at this stage of the assessment and it is 'Screened Out'.
Mongan Bog SAC (000580)	10.1 km	Given the nature and scale of the development and distance from it, it is considered that there is no potential for impacts on the peatland habitats of qualifying interest of this site. No complete impact source-pathway-receptor chain was identified during the Screening Assessment as provided in Section 4 of this report. Significant Impacts on the European Site resulting from the proposed development can be excluded at this stage of the assessment and it is 'Screened Out'.
Fin Lough (Offaly) SAC (000576)	11.6 km	Given the nature and scale of the development and distance from it, it is considered that there is no potential for impacts on the fen habitat and supporting habitat of <i>Vertigo geyeri</i> listed among of qualifying interests of this site. No complete impact source-pathway-receptor chain was identified during the Screening Assessment as provided in Section 4 of this report. Significant Impacts on the European Site resulting from the proposed development can be excluded at this stage of the assessment and it is 'Screened Out'.
Lough Funshinagh SAC (000611)	12.3 km	Given the nature and scale of the development and distance from it, it is considered that there is no potential for impacts on the Turlough habitat of qualifying interest of this site. No complete impact source-pathway-receptor chain was identified during the Screening Assessment as provided in Section 4 of this report. Significant Impacts on the European Site resulting from the proposed development can be excluded at this stage of the assessment and it is 'Screened Out'.
Mongan Bog SPA (004017)	10.3 km	Given the nature and scale of the development, the nature of the site location, the lack of supporting habitat and the distance .impacts to the population of Greenland White-fronted Goose for which the SPA has been designated is not anticipated. Significant Impacts on the European Site resulting from the proposed development can be excluded at this stage of the assessment and it is 'Screened Out'.

5.3 Data Collected to Carry Out Assessment

In preparation of the assessment, the following sources were used to gather information:

- Review of NPWS published information on European Sites including Site Synopses, European Site mapping and Conservation Objectives for European Sites
- Field surveys completed in August 2013 and July 2015. Surveys were multidisciplinary in nature and identified the habitats present and their potential to support protected species associated with European Sites
- Desk study, field studies and associated reporting prepared by John Hynes and Pat Roberts, McCarthy Keville O'Sullivan Ltd.

5.4 Overall Conclusions

It is concluded beyond reasonable scientific doubt that the proposed development is not likely to have significant effects on the following European Sites either individually or in combination with other plans or projects. They have therefore been screened out.

- Crosswood Bog SAC (002337)
- Carn Park Bog SAC (002336)
- Castlesampson Esker SAC (001625)
- Ballynamona Bog and Corkip Lough SAC (002339)
- Pilgrim's Road Esker SAC (001776)
- Mongan Bog SAC (000580)
- Fin Lough (Offaly) SAC (000576)
- Lough Funshinagh SAC (000611)
- Mongan Bog SPA (004017)
- Lough Ree SPA (004064)
- Lough Ree SAC (000440)

It cannot be excluded, on the basis of objective scientific information, that the proposed development individually or in combination with other plans or projects, will not have a significant effect on the following European sites:

- River Shannon Callows SAC (000216)
- Middle Shannon Callows SPA (004096)

As a result, an Appropriate Assessment of the proposed development is required and a Natura Impact Statement (NIS) shall be prepared. The NIS will be submitted to the competent authority as part of the proposed development application.

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Appendix I

NPWS Site Synopses

Conservation Objectives for River Shannon Callows SAC [000216]

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. These two designations are collectively known as the Natura 2000 network.

European and national legislation places a collective obligation on Ireland and its citizens to maintain habitats and species in the Natura 2000 network at favourable conservation condition. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

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.

Objective: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:

- ◆ [1355] *Lutra lutra*
- ◆ [6410] *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)
- ◆ [6510] Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*)
- ◆ [8240] * Limestone pavements
- ◆ [91E0] * Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)

Citation:

NPWS (2011) Conservation objectives for River Shannon Callows SAC [000216]. Generic Version 3.0. Department of Arts, Heritage & the Gaeltacht.

For more information please go to: www.npws.ie/protectedsites/conservationmanagementplanning

SITE SYNOPSIS

SITE NAME: RIVER SHANNON CALLOWS

SITE CODE: 000216

The River Shannon Callows is a long and diverse site which consists of seasonally flooded, semi-natural, lowland wet grassland, along and beside the river between the towns of Athlone and Portumna. It is approximately 50 km long and averages about 0.75 km wide (reaching 1.5 km wide in places). Along most of its length the site is bordered by raised bogs - many, but not all, in the process of large-scale harvesting - esker ridges and limestone-bedrock hills. The soils grade from silty-alluvial to peat. This site has a common boundary, and is closely associated, with two other sites of similar habitats, River Suck Callows and Little Brosna Callows.

The River Shannon Callows is mainly composed of lowland wet grassland. Different plant communities occur, depending on elevation, and therefore their flooding patterns. Two habitats listed on Annex I of the EU Habitats Directive are well represented within the site – *Molinia* meadows and lowland hay meadows. The former is characterised by the presence of the Meadow Thistle (*Cirsium dissectum*) and Purple Moor-grass (*Molinia caerulea*), while typical species in the latter include Meadow Fescue (*Festuca pratensis*), Rough Meadow-grass (*Poa trivialis*), Downy Oat-grass (*Avenula pubescens*), Common Knapweed (*Centaurea nigra*), Ribwort Plantain (*Plantago lanceolata*) and Common Sorrel (*Rumex acetosa*). In places these two habitats grade into one another.

Low-lying areas of the callows with more prolonged flooding are characterised by Floating Sweet-grass (*Glyceria fluitans*), Marsh Foxtail (*Alopecurus geniculatus*) and wetland herbs such as Yellow Cress (*Rorippa* spp.), Water Forget-me-not (*Myosotis scorpioides*) and Common Spike-rush (*Eleocharis palustris*). Most of the callows consist of a plant community characterised by Creeping Bent (*Agrostis stolonifera*), Brown Sedge (*Carex disticha*), Common Sedge (*Carex nigra*), and herbs such as Marsh Marigold (*Caltha palustris*) and Marsh Bedstraw (*Galium palustre*). While the more elevated and peaty areas are characterised by low-growing sedges, particularly Yellow Sedge (*Carex flava* agg.) and Star Sedge (*Carex echinata*). All these communities are very diverse in their total number of plant species, and include the scarce species Meadow-rue (*Thalictrum flavum*), Summer Snowflake (*Leucojum aestivum*), and Marsh Stitchwort (*Stellaria palustris*).

Two further Annex I habitats, both listed with priority status, have a minor though important presence within the site. Alluvial forest occurs on a series of alluvial islands just below the ESB weir near Meelick. Several of the islands are dominated by well grown woodland of mainly Ash (*Fraxinus excelsior*) and Willows (*Salix* spp.). The islands are prone to regular flooding from the river.

At Clorhane, an area of limestone pavement represents the only known example in Co Offaly. It is predominantly colonised by mature hazel woodland, with areas of open limestone and calcareous grassland interspersed. The open limestone pavement comprises bare or moss covered rock or rock with a very thin calcareous soil cover

supporting a short grassy turf. The most notable plant in the grassy area is a substantial population of Green-winged Orchid (*Orchis morio*), which occurs with such species as Sweet Vernal-grass (*Anthoxanthum odoratum*), Quaking Grass (*Briza media*), sedges (*Carex caryophyllea*, *C. flacca*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Common Knapweed (*Centaurea nigra*), and Narrow-leaved Plantain (*Plantago lanceolata*). Ferns associated with the cracks in the paving include *Asplenium trichomanes*, *A. ruta-muraria*, *A. adiantum-nigrum*, *Polypodium australe*. Bryophytes include *Grimmia apocarpa* and *Orthotrichum cf. anomalum*. Anthills are common within the open grassland. The Hazel wood is well-developed and has herbaceous species such as Primrose (*Primula vulgaris*), Common Dog-violet (*Viola riviniana*), Wood Sorrel (*Oxalis acetosella*) and Herb Robert (*Geranium robertianum*). The wood is noted for its luxuriant growth of epiphytic mosses and liverworts, with such species as *Neckera crispa* and *Hylocomium brevirostre*. Yew (*Taxus baccata*) occurs at one area.

Other habitats of smaller area but equal importance within the site are lowland dry grassland, drainage ditches, freshwater marshes and reedbeds. The dry grassland areas, especially where they exist within hay meadows, are species-rich, and of two main types: calcareous grassland on glacial material, and dry grassland on levees of river alluvium. The former can contain many Orchid species, Cowslip (*Primula veris*), abundant Adder's-tongue Fern (*Ophioglossum vulgatum*) and Spring-sedge (*Carex caryophyllea*), and both contain an unusually wide variety of grasses, including False Oatgrass (*Arrhenatherum elatius*), Yellow Oatgrass (*Trisetum flavescens*), Meadow Foxtail (*Alopecurus pratense*), and Meadow Brome (*Bromus commutatus*). In places Summer Snowflake also occurs.

Good quality habitats on the edge of the callows included in the site are wet broad-leaved semi-natural woodland dominated by both Birch (*Betula pubescens*) and Alder (*Alnus glutinosa*) and dry broad-leaved woodland dominated by Hazel (*Corylus avellana*). There are also areas of raised bog, fen on old cut-away bog with Black Bog-rush (*Schoenus nigricans*), and a 'petrifying stream' with associated species-rich calcareous flush which supports Yellow Sedge (*Carex lepidocarpa*), Blunt-flowered Rush (*Juncus subnodulosus*) and Stoneworts (*Chara* spp.).

Two legally-protected plant species (Flora (Protection) Order 1999) occur in the site: Opposite-leaved Pondweed (*Groenlandia densa*) in drainage ditches, and Meadow Barley (*Hordeum secalinum*) on dry alluvial grassland. This is one of only two known inland sites for the Meadow Barley in Ireland. The Red Data Book plant Green-winged Orchid (*Orchis morio*) is known from dry calcareous grasslands within the site, while the site also supports a healthy population of Marsh Pea (*Lathyrus palustris*).

The site is of International Importance for wintering waterfowl as numbers regularly exceed the 20,000 threshold (mean of 34985 for 5 winters 1994/94-1998/99). Of particular note is an Internationally Important population of Whooper Swans (287). A further five species have populations of national importance (all figures are means for 5 winters 1995/96-1999/00): Mute Swan (349), Wigeon (2972), Golden Plover (4254), Lapwing (11578) and Black-tailed Godwit (388). Species which occur in numbers of regional or local importance include Bewick's Swan, Tufted Duck, Dunlin, Curlew and Redshank. The population of Dunlin is notable as it is one of the few regular inland flocks in Ireland. Small flocks of Greenland White-fronted Goose

use the Shannon Callows; these are generally associated with larger flocks which occur on the adjacent Little Brosna Callows and River Suck Callows.

Shoveler (an estimated 12 pairs in 1987) and Black-tailed Godwit (Icelandic race) (one or two pairs in 1987) breed within this site. These species are listed in the Red Data Book as being threatened in Ireland. The scarce bird Quail is also known to breed within the area. The Callows continues to hold over 40% of the Irish population of the globally endangered Corncrake, although numbers have declined in recent years. A total of 66 calling birds were recorded in 1999. The total population of breeding waders (Lapwing, Redshank, Snipe and Curlew) in 1987 was one of three major concentrations in Ireland and Britain. The breeding Redshank, numbers was estimated at 10% of the Irish population, making it Nationally significant. Also, the Annex I species Merlin and Hen Harrier are regularly reported hunting over the callows during the breeding season and in autumn and winter.

This site holds a population of Otter, a species listed on Annex II of the EU Habitats Directive, while the Irish Hare, which is listed in the Irish Red Data Book, is a common sight on the callows.

The Shannon Callows are used for summer dry-stock grazing (mostly cattle, with some sheep and a few horses), and permanent hay meadow. About 30 ha is a nature reserve owned by voluntary conservation bodies. The River Shannon is used increasingly for recreational purposes with coarse angling and boating accounting for much of the visitor numbers. Intermittent and scattered damage to the habitats has occurred due to over-deepening of drains and peat silt deposition, water-skiing, ploughing and neglect of hay meadow (or reversion to pasture). However, none of these can as of yet be said to be serious. Threats to the quality of the site may come from the siting of boating marinas in areas away from centres of population, fertilising of botanically-rich fields, the use of herbicides, reversion of hay meadow to pasture, neglect of pasture and hay meadow, disturbance of birds by boaters, anglers, birdwatchers and the general tourist. The maintenance of generally high water levels in winter and spring benefits all aspects of the flora and fauna, but in this regard, summer flooding is a threat to breeding birds, and may cause neglect of farming.

The Shannon Callows has by far the largest area of lowland semi-natural grassland and associated aquatic habitats in Ireland and one in which there is least disturbance of natural wetland processes. Botanically, it is extremely diverse with two legally protected species of plants and many scarce species. Excellent examples of two habitats listed on Annex I of the EU Habitats Directive occur within the site – *Molinia* meadows and lowland hay meadows with good examples of a further two Annex habitats (both with priority status). In winter the site is internationally important for numbers and species of waterfowl. In spring it feeds large numbers of birds on migration. And in summer it holds very large numbers of breeding waders, rare breeding birds and the endangered Corncrake, as well as a very wide variety of more common grassland and wetland birds. The presence of Otter, an Annex II species, adds further importance to the site.



Conservation Objectives for Middle Shannon Callows SPA [004096]

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. These two designations are collectively known as the Natura 2000 network.

European and national legislation places a collective obligation on Ireland and its citizens to maintain habitats and species in the Natura 2000 network at favourable conservation condition. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

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.

Objective: To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:

◆ <i>Cygnus cygnus</i>	[wintering]
◆ <i>Anas penelope</i>	[wintering]
◆ <i>Crex crex</i>	[breeding]
◆ <i>Pluvialis apricaria</i>	[wintering]
◆ <i>Vanellus vanellus</i>	[wintering]
◆ <i>Limosa limosa</i>	[wintering]
◆ <i>Chroicocephalus ridibundus</i>	[wintering]
◆ Wetlands	[]

Citation:

NPWS (2011) Conservation objectives for Middle Shannon Callows SPA [004096]. Generic Version 4.0.
Department of Arts, Heritage & the Gaeltacht.

For more information please go to: www.npws.ie/protectedsites/conservationmanagementplanning

SITE SYNOPSIS

SITE NAME: MIDDLE SHANNON CALLOWS SPA

SITE CODE: 004096

The Middle Shannon Callows SPA is a long and diverse site which extends for approximately 50 km from the town of Athlone (at southern point of Lough Ree) to the town of Portumna (northern point of Lough Derg). The site averages about 0.75 km in width though in places is up to 1.5 km wide. Water levels on the site are greatly influenced by the very small fall between Athlone and Portumna and by the weir at Meelick. The Shannon Callows has a common boundary with two other sites of similar habitats, the River Suck Callows and the Little Brosna Callows, both of which are also Special Protection Areas.

The site has extensive areas of callow, or seasonally flooded, semi-natural, lowland wet grassland, along both sides of the river. The callows are mainly too soft for intensive farming but are used for hay or silage or for summer grazing. Other habitats of smaller area which occur alongside the river include lowland dry grassland, freshwater marshes, reedbeds and wet woodland. Along most of its length the site is bordered by raised bogs, now mostly exploited for peat, esker ridges and limestone-bedrock hills. The diversity of semi-natural habitats and the sheer size of the site attracts an excellent diversity of bird species and significant populations of several species.

The composition of the lowland wet grassland varies, depending on elevation and flooding patterns. Two habitats listed on Annex I of the EU Habitats Directive are well represented within the site – *Molinia* meadows and lowland hay meadows. The former is characterised by the presence of the Meadow Thistle (*Cirsium dissectum*) and Purple Moor-grass (*Molinia caerulea*), while typical species in the latter include Meadow Fescue (*Festuca pratensis*), Rough Meadow-grass (*Poa trivialis*), Downy Oat-grass (*Avenula pubescens*) and Common Sorrel (*Rumex acetosa*). In places these two habitats grade into one another.

Low-lying areas of the callows with more prolonged flooding are characterised by Floating Sweet-grass (*Glyceria fluitans*), Marsh Foxtail (*Alopecurus geniculatus*) and wetland herbs such as Yellow Cress (*Rorippa* spp.), Water Forget-me-not (*Myosotis scorpioides*) and Common Spike-rush (*Eleocharis palustris*). Most of the callows, however, consist of a plant community characterised by Creeping Bent (*Agrostis stolonifera*), Brown Sedge (*Carex disticha*), Common Sedge (*Carex nigra*), and herbs such as Marsh Marigold (*Caltha palustris*) and Marsh Bedstraw (*Galium palustre*). Scarce plant species associated with the grassland include Meadow-rue (*Thalictrum flavum*), Summer Snowflake (*Leucojum aestivum*) and Marsh Stitchwort (*Stellaria palustris*).

The dry grassland areas, especially where they exist within hay meadows, are species-rich, and can contain many orchid species and such species as Cowslip (*Primula*

veris), Adder's-tongue Fern (*Ophioglossum vulgatum*) and Spring-sedge (*Carex caryophyllea*), as well as an unusually wide variety of grasses. In places along the edge of the callows there occurs wet broad-leaved woodland dominated by both Birch (*Betula pubescens*) and Alder (*Alnus glutinosa*) and dry broad-leaved woodland dominated by Hazel (*Corylus avellana*). There are also areas of raised bog and fen on old cut-away bog with species such as Black Bog-rush (*Schoenus nigricans*).

Two legally-protected plant species (Flora (Protection) Order 1999) occur in the site: Opposite-leaved Pondweed (*Groenlandia densa*) in drainage ditches, and Meadow Barley (*Hordeum secalinum*) on dry alluvial grassland. The Red Data Book plant Green-winged Orchid (*Orchis morio*) is known from dry calcareous grasslands within the site, while the site also supports a healthy population of Marsh Pea (*Lathyrus palustris*).

The Middle Shannon Callows qualifies as a site of International Importance for wintering waterfowl both on the total numbers regularly exceeding 20,000 birds (for example 27,581 in winter 1998/99) and for the Whooper Swan population (287 – average peak count 1995/96-1999/00). Whooper Swan is listed on Annex I of the EU Birds Directive. Five further species occur in numbers of national importance (all figures are average peaks for winters 1995/96-1999/00) - Mute Swan 349, Wigeon 2,972, Golden Plover (listed on Annex I of the EU Birds Directive) 4,254, Lapwing 11,578 and Black-tailed Godwit 388. For some of these species, peak counts in the period have been considerably higher than the averages, such as 1,096 Black-tailed Godwits and 23,839 Lapwings. The importance of the site for species like Black-tailed Godwit and Whimbrel may have been underestimated if count coverage missed the brief spring peaks for these species. A wide range of other species occur in numbers of regional or local importance, including Bewick's Swan (listed on Annex I of the EU Birds Directive) 7, Teal 77, Tufted Duck 33, Dunlin 369, Curlew 129, Redshank 31 and Black-headed Gull 1,061. Small numbers of Greenland White-fronted Goose (listed on Annex I of the EU Birds Directive) use the Shannon Callows (average 21, peak 55) and these are generally associated with larger flocks which occur on the adjacent Little Brosna Callows and River Suck Callows. The callow grasslands provide optimum feeding grounds for these various species of waterfowl, while many of the birds also roost or rest within the site.

The site is also of national importance for breeding waterfowl. The total population of breeding waders (Lapwing, Redshank, Snipe and Curlew) on the Shannon and Little Brosna Callows in 1987 was one of three major concentrations in Ireland and Britain. Since then, however, numbers of at least Lapwing and Redshank have shown serious declines (a full survey of the callows is being carried out in 2002). For example, at a monitoring site at the callows at Shannon Harbour, numbers of Lapwing fell from 29 to 10 pairs and Redshank from 26 to 10 pairs between 1987 and 1994. Black-tailed Godwit, a very rare breeding species in Ireland, nests or attempts to nest in small numbers each year within the site. A further scarce breeding species, Shoveler, also nests in small numbers each year (an estimated 12 pairs in 1987).

The Shannon Callows continues to hold approximately 40% of the Irish population of Corncrake, a species of global conservation concern that is also listed on Annex I of the EU Birds Directive. Between 1997 and 2001, the average number of calling birds

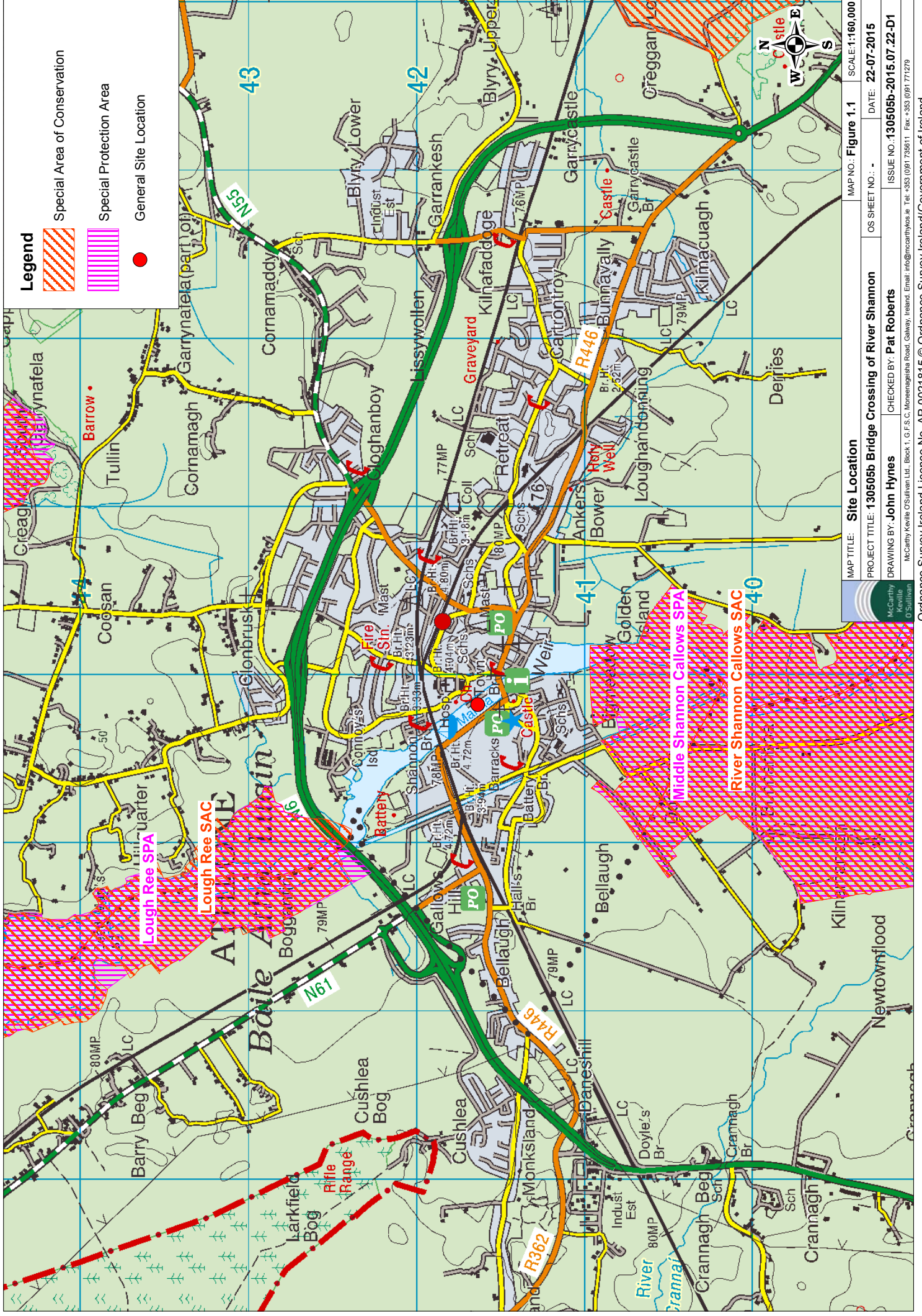
was 60, with a peak of 69. BirdWatch Ireland, in association with Dúchas and the RSPB, operate a grant scheme to encourage farming practices that favour the Corncrake and this has probably been responsible for the stabilisation of numbers in recent years. A related scarce species, the Quail, is also known to breed within the callow grasslands.




A good variety of other bird species are attracted to this site. Birds of prey, including scarce species such as Merlin (listed on Annex I of the EU Birds Directive) and wintering Hen Harrier (listed on Annex I of the EU Birds Directive), are regularly reported hunting over the callows. A range of passerine species associated with grassland and swamp vegetation breed, including Sedge Warbler, Grasshopper Warbler, Skylark and Reed Bunting. Kingfisher (listed on Annex I of the EU Birds Directive) is also regularly seen within the site. Whinchat, an uncommon breeding species, occur in small numbers.

The wintering waterfowl within the Shannon Callows are difficult to monitor due to the size and inaccessibility of large parts of the site. In each winter there is usually one complete aerial census, as well as partial land-based counts. The population of Corncrake within the site is monitored each year and research is carried out on various aspects of the species' ecology. The breeding waders are also surveyed at intervals. About 30 ha of the callows is a nature reserve owned by voluntary conservation bodies.

The Shannon Callows has by far the largest area of lowland semi-natural grassland and associated aquatic habitats in Ireland and one in which there is least disturbance of natural wetland processes. Botanically, it is extremely diverse. In winter the site is internationally important for the total numbers of birds (regularly exceed 20,000) and for Whooper Swan in particular. It also holds nationally important populations of a further five species. Some of the wintering species are listed on Annex I of the EU Birds Directive, including Whooper Swan, Greenland White-fronted Goose and Golden Plover. In summer the site supports important populations of breeding waders. Perhaps the most important species which occurs in the site is Corncrake (the site holds 40% of the national total), as this is listed on Annex I of the EU Birds Directive and is Ireland's only globally endangered species.

20.6.2002



- Legend**
-  Special Area of Conservation
 -  Special Protection Area
 -  General Site Location

MAP NO.: Figure 1.1	SCALE: 1:160,000
PROJECT TITLE: 130505b Bridge Crossing of River Shannon	OS SHEET NO.: -
DRAWING BY: John Hynes	CHECKED BY: Pat Roberts
<small>McCarty Kevin O'Sullivan Ltd, Block 1, G.F.S. Maresnang Road, Galway, Ireland. Email: info@mcCarthyKev.ie Tel: +353 (0)91 736511 Fax: +353 (0)91 771279</small>	
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Site Location

MAP TITLE: **130505b Bridge Crossing of River Shannon**

SCALE: 1:160,000

OS SHEET NO.: -

DATE: **22-07-2015**

DRAWING BY: **John Hynes**







CHECKED BY: **Pat Roberts**

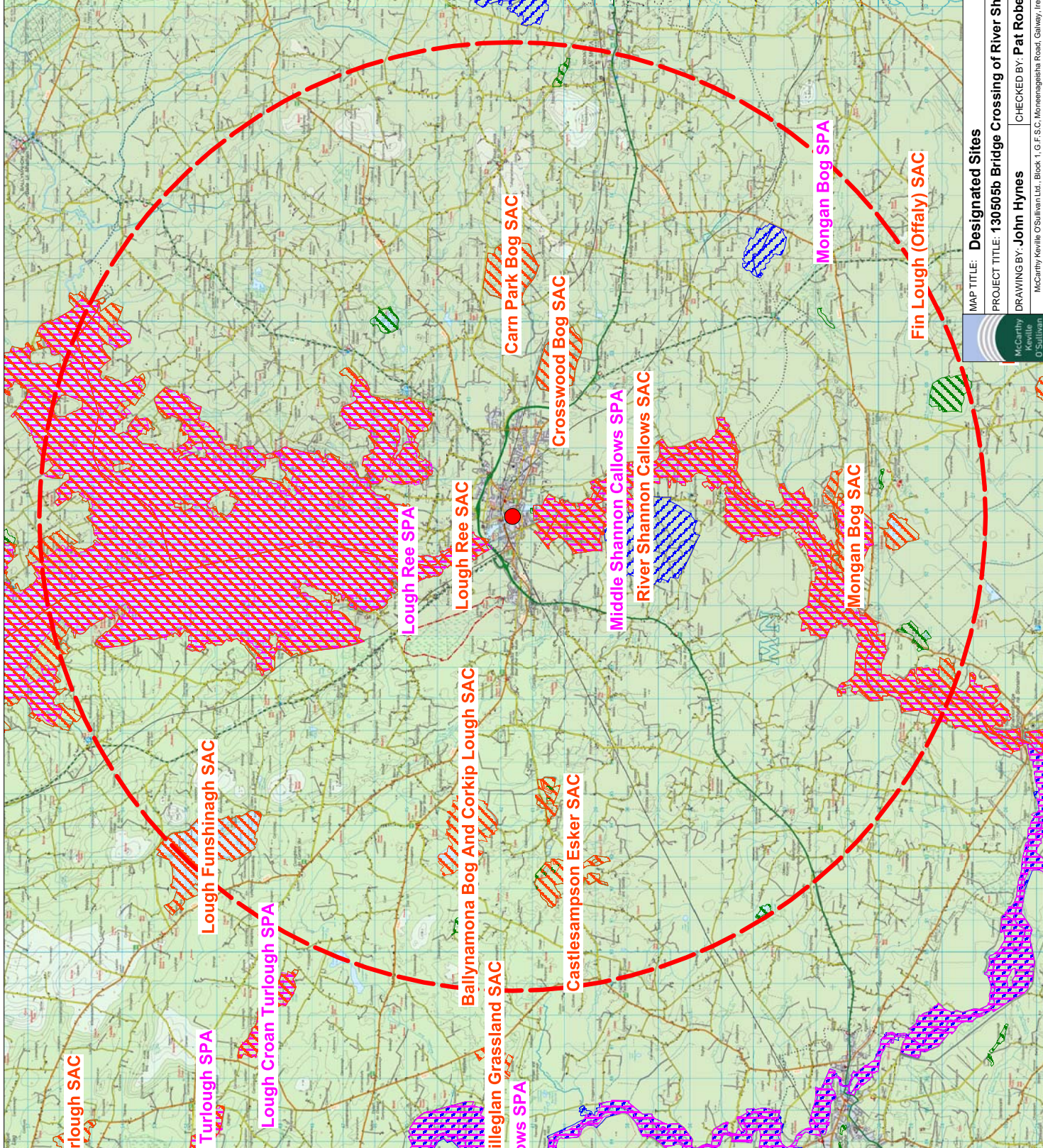
ISSUE NO.: **130505b-2015.07.22-D1**

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Legend

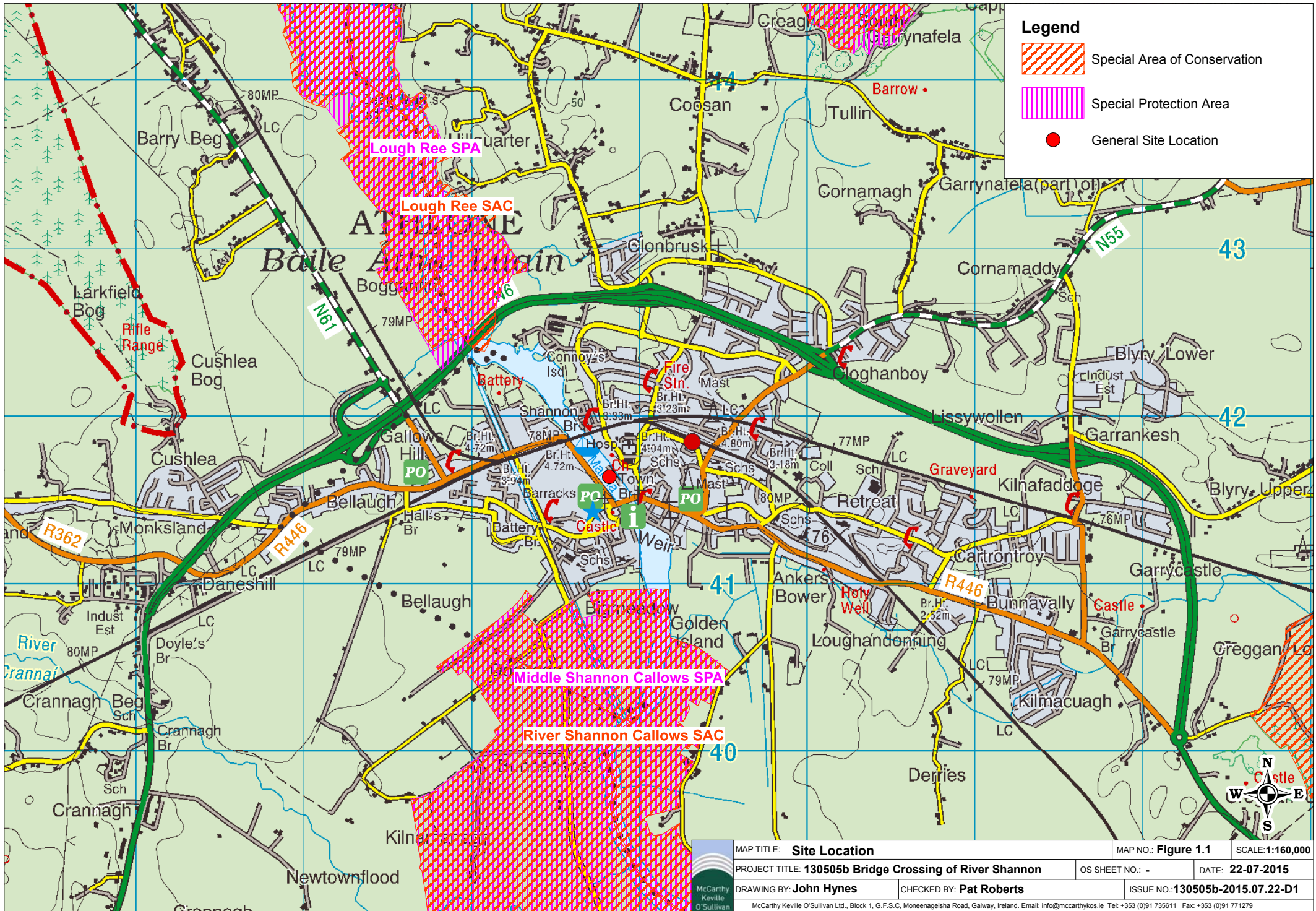
-  Special Area of Conservation
-  Special Protection Area
-  Natural Heritage Area
-  Proposed Natural Heritage Area
-  15km Buffer Region
-  General Site Location






MAP TITLE: Designated Sites	MAP NO: Figure3.1	SCALE: 1:160,000
PROJECT TITLE: 130505b Bridge Crossing of River Shannon	OS SHEET NO: -	DATE: 22-07-2015
DRAWING BY: John Hynes	CHECKED BY: Pat Roberts	ISSUE NO: 130505b-2015.07.22-D1
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Appendix 2

Figure



Legend

-  Special Area of Conservation
-  Special Protection Area
-  General Site Location

MAP TITLE: Site Location		MAP NO.: Figure 1.1	SCALE: 1:160,000
PROJECT TITLE: 130505b Bridge Crossing of River Shannon		OS SHEET NO.: -	DATE: 22-07-2015
DRAWING BY: John Hynes	CHECKED BY: Pat Roberts	ISSUE NO.: 130505b-2015.07.22-D1	
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