



JBA
consulting



Public Information Brochure

June 2020



Tionscadal Éireann
Project Ireland

2040



OPW

Oifig na
nOibreacha Poiblí
Office of Public Works



Comhairle Cathrach
& Contae **Luimnigh**

Limerick City
& County Council

Dear Homeowner

First and foremost, we hope this finds you safe and well in these challenging times and that you are adjusting as best possible to new ways of going about daily life.

As you may be aware, the CFRAM Study included Castleconnell as an AFA (Area for Further Assessment) and concluded that a flood relief scheme would be viable and effective for the community.

With this in mind, Limerick City and County Council have appointed the JBA Consulting / JB Barry team to assess, develop and design an appropriate, cost-effective and sustainable flood relief scheme which aims to minimise flood risk to the existing community, social amenity, environment and landscape.

With topographic and baseline environmental surveys now nearing completion, the project is about to enter the options development stage. Under normal circumstances, we would be holding a public consultation day within the village to discuss with the greater public the overall project together with local constraints and scheme options. However, the Covid-19 pandemic and associated restrictions mean that this is now not possible.

As an alternative, we are now distributing this brochure widely. It sets out an overview of the works complete to date together with the CFRAM scheme option as proposed. Please be assured that we will continue to make every effort to ensure that we provide you with all the information you need to fully understand the details of this project. We are also committed to making available the necessary resources within our team to support any engagement.

Once you have had a chance to read through this brochure it would be appreciated if you could complete the attached questionnaire and return same with any suggestions you may have on the solution appropriate to Castleconnell.

A copy of this brochure and questionnaire is also available on the Limerick City & Co Council website and at the below link. If you have any friends, neighbours or know of any other residents who may have an interest in the scheme and who may not have received a hard copy of this brochure, please direct them to the LCCC website.

<https://www.limerick.ie/council/services/water-and-drainage/flooding-related-schemes-and-assistance/castleconnell-flood>

Should you have any areas of the project you wish to discuss further, please make contact in the coming weeks using the contact details at the back of this brochure.

Please stay safe and well and adhere to all latest HSE guidelines. If there is anything we can do to help, please do not hesitate to get in touch.

Stages of the Project

There are five statutory stages involved in the delivery of a flood relief scheme and as shown in **Figure 1**.

Progression to each stage relies on a successful outcome of the previous stage.

The project is currently at Stage 1, Scheme Development and Design.

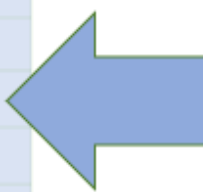
Topographic survey of the River Shannon and relevant instream features has already been completed. Various environmental and ecological surveys have also been completed and others will continue throughout the Summer.

Detailed hydraulic modelling of the River Shannon is nearing completion with a view to testing of various design options as part of options development.

A site investigation contractor is about to be appointed and it is envisaged that such works will be undertaken in June / July of this year. The findings of same will assist in the detailed design and costings of various flood measures throughout the village.

Figure 1: Project Stages

Stage	Statutory Processes
I	Scheme Development & Design
	Constraints Study
	Baseline Surveys
	Hydraulic Modelling
	Initial Consultation with Stakeholders
	Options Development
	Environmental Assessment of Viable Options
Identification of Preferred Option	
II	Planning
	Preliminary Design
	Environmental Impact Assessment Report
	Public Consultation
	Collate Planning Documentation
	Submission of Planning Application to An Bord Pleanála
III	Detailed Design & Tender
IV	Construction
V	Handover to Client

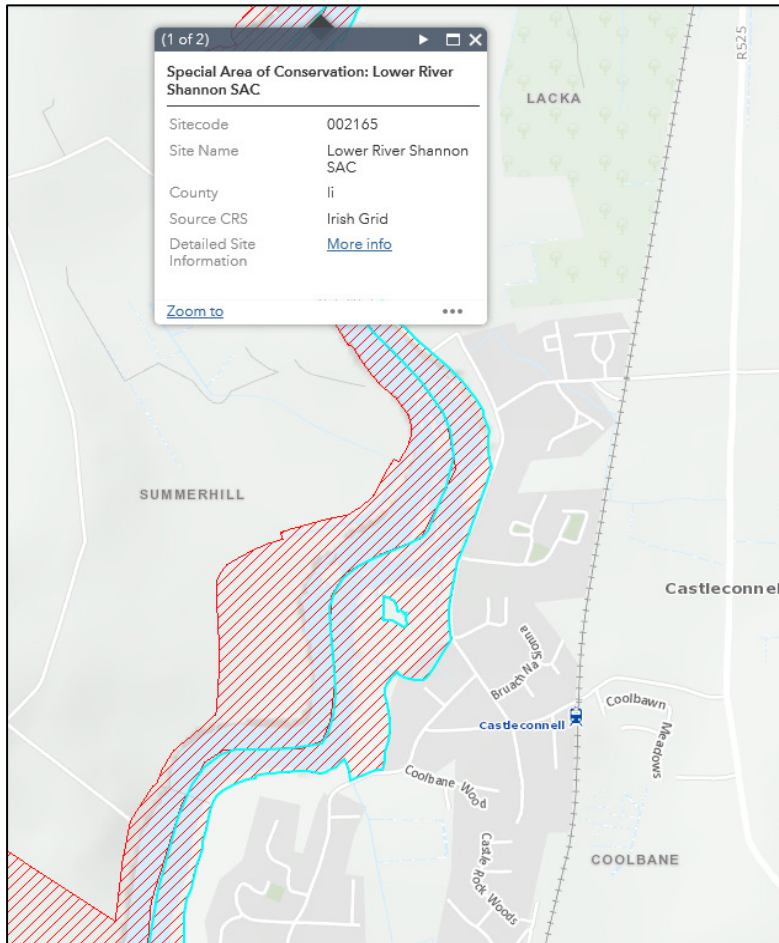


Environment and Ecology

The Lower River Shannon Special Area of Conservation (SAC) encompasses the Shannon valley from Killaloe in Co. Clare to Loop Head/ Kerry Head, over a distance of some 120 km, as shown in *Figure 2*.

In Castleconnell, the boundary walls of The Mall and Meadowbrook estate form the eastern boundary of the site (see figure below).

Figure 2: Plan of Lower River Shannon SAC



This SAC is of importance on a European as well as Irish level and is protected under the European Communities (Birds and Natural Habitats) Regulations 2011.

It is designated for the presence of habitats and species which require protection under the EU Habitats Directive; these include Otter, Atlantic Salmon, Sea Lamprey and Alluvial Forests.

The River Shannon at Castleconnell provides suitable habitat for species such as sea and river lamprey, Atlantic Salmon and otter, which will need to be taken into consideration in the scheme design.

Terrestrial habitats in the area include treelines and scrub comprised of trees such as willow, alder, poplar, hawthorn, sycamore and ash, with an undergrowth dominated by bramble.

These habitats offer food, shelter and cover for terrestrial mammals, bats and birds.

There are a number of invasive species in the area, including Giant Hogweed and Zebra Mussel, which are detrimental to the environment. This will also need to be taken into consideration in the design of the scheme.

Baseline studies are currently being undertaken to inform the development of the scheme design, and we have also received valuable information on fisheries habitats from the local angling community.

We aim to develop a scheme which will be of benefit to the local environment as well as relieving flooding in the local area. To achieve this, our ecologists and fisheries specialists are working closely with the engineers to examine all options and select the most appropriate solution to meet all requirements. The final design will be subject to an Appropriate Assessment to examine impacts on the SAC.

Constraints Study

A Constraints Study has commenced to gather initial information on the presence and significance of engineering and environmental features and designations within the study area and to help scope detailed studies required to inform the baseline conditions of the site.

It is intended that the contents of the Constraints Study will be supplemented by ongoing site visits by the project team, by information to be supplied by the local residents as part of this public information event and by responses to future statutory consultation.

The information in the Constraints Study will also be referenced by the project team in developing the Design Options for assessment in the next stage of the work. The key features and designations identified to date are illustrated in *Figure 3* overleaf and listed hereunder:

- Biodiversity - The River Shannon, its embankments and island are part of the Lower River Shannon Special Area of Conservation (SAC).

The SAC designation gives the river, its species and habitats protection under European Legislation. This designation covers the majority of the grounds of Island House as far as The Mall Road.

Initial ecological surveys have taken place; three protected species habitats were recorded during the surveys, including an Otter holt, a Sand Martin nest and a large Alder with dense old Ivy which is suitable for bat roosts.

Non-native invasive species were recorded both on land and in the water. Invasive species found on land are Giant Hogweed, Himalayan Balsam, Montbretia and Buddleia. Zebra mussel was recorded at two places within the River Shannon;

- Cultural Heritage - There are no National Monument sites (state owned or vested in the care of local authorities) with Preservation Orders or Register of Historic Monuments sites within the constraints study area.

There are ten recorded archaeological sites (RMP sites) located within the constraints study area which demonstrate the medieval origins of the village plus 37 Protected Structures listed in the Record of Protected Structures (RPS).

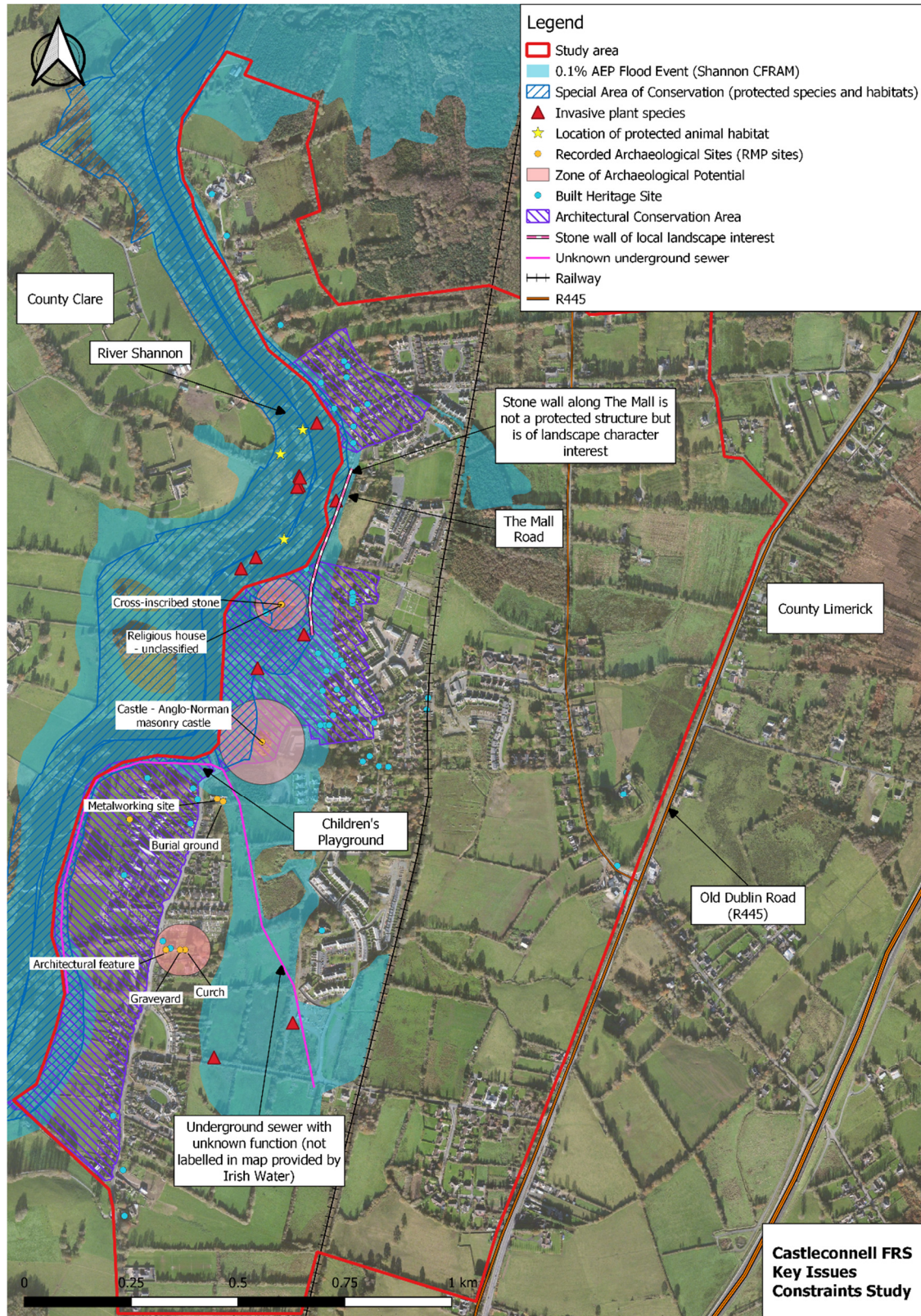
In addition to those sites listed in the RPS, the National Inventory of Architectural Heritage (NIAH) also lists a further 18 structures and features in the study area.

Castleconnell also has an Architectural Conservation Area (ACA) within it; it is divided into three distinct character areas, the northern ACA, the central core ACA and the southern ACA;

- Visual Amenity and Scenic views - Castleconnell is a linear village which has developed along the eastern banks of the Shannon giving it a unique, elegant and picturesque landscape character.

Although, there are no formal scenic views listed within the Local Area Plan, the combination of mature trees, views along the river corridor and presence of stone walls and traditional building styles gives the landscape character a high sensitivity value and will need to be maintained as part of the scheme design.

Figure 3: Key Issues from Castleconnell FRS Constraints Study



Flood Risk Management Options

Castleconnell is at risk from a combination of both fluvial (river) and pluvial (surface water) flooding. The Flood Relief Scheme will consist of one or a combination of flood risk management measures.

Flood management measures that we are initially considering include:

- Flood embankments;
- Flood walls;
- Raised road and footpath levels;
- Individual property protection;
- Temporary / demountable gates and barriers;
- Diversion channel;
- Dredging / channel cleaning;
- Landscaped ground levels.

Different measures may be selected for different parts of the town with typical illustrations shown hereunder.

The preferred scheme will be identified by balancing the economic, social, cultural heritage and environmental aspects of each of the measures.

Figure 4: Typical Road Raising Detail

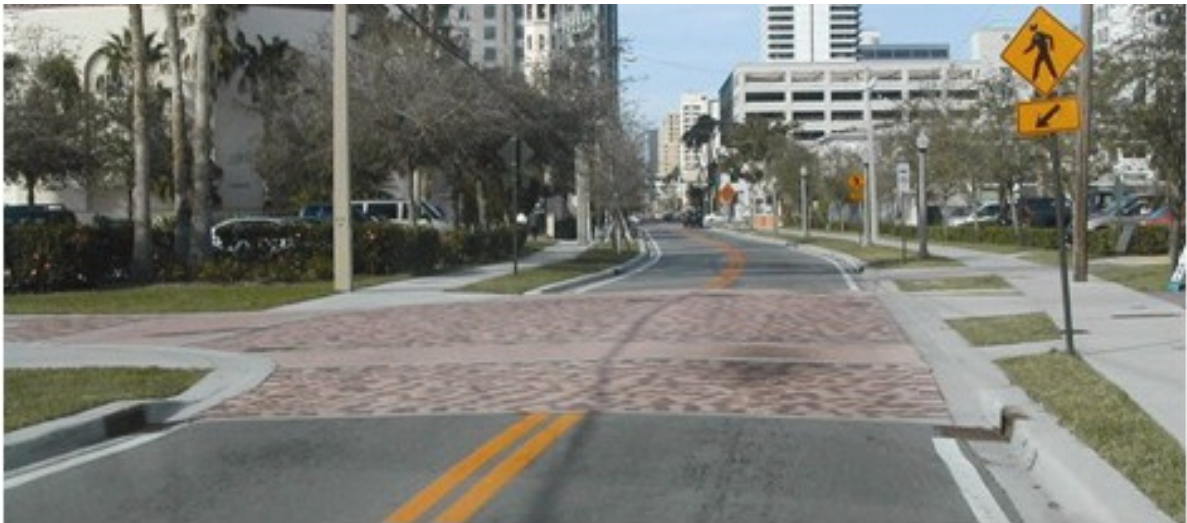


Figure 5: Typical Embankment Detail



Figure 6: Typical Flood Wall Detail



Flood Extents

A detailed topographic survey of the River Shannon together with a survey of relevant instream features has been completed.

Such survey work has enabled the development of a detailed hydraulic model of the River Shannon, from which flood extent maps are being developed.

The draft flood extent map aligns well with the flood map derived as part of the CFRAM programme and the hydraulic model is calibrating well against the 2009 and 2020 flood events.

Therefore, the flood relief scheme as proposed in the CFRAM remains a viable option and is as indicated on Jacob's Castleconnell Option 2 Map (copy enclosed).

What solutions are being considered

The CFRAM proposal is been used as the starting point for our appraisal. Further optimisation of the measures proposed is on-going in order to develop a suite of options to be appraised in detail. As part of that we need to seek your input.

The preliminary scheme measures could involve some or all of the following:

- Individual Property Protection (IPP) to selected residences where appropriate;
- Road raising north of the Scanlon Park entrance;
- Road raising on the entrance to Island House;
- New flood defence wall from Island House to the rear of Maher's pub;
- New flood embankment to the north-west of Meadowbrook estate;
- Road raising at entrance to Coolbane Wood;
- New flood embankment on south side of the Coolbane Wood access road;
- Stormwater pumping station(s) at strategic location(s);
- River restoration works in the river upstream of Island House in order to reduce the bottleneck at this part of the river;
- Management of riverside vegetation to reduce the potential for blockage of bridges.

We Want To Hear Your Views

This is your opportunity to give your views on what is the most appropriate solution to the flood risk. There are various ways that you can respond to the consultation:

- Submission of the accompanying questionnaire;
 - A soft copy in word is also available through the LCCC website;
- By post: you can return your completed questionnaire and any other feedback to **JBA Consulting Engineers**, refer contact details overleaf;
- By email: you can email your completed questionnaire and any other feedback to Leanne Leonard of JBA Consulting. leanne.leonard@jbaconsulting.ie Please put 'Castleconnell Flood Relief Scheme' as your subject title.

Please have feedback to us by **Friday 19th June 2020**.

Programme

- June 2020 Public Information Event;
- June 2020 Options Development;
- June - July 2020 Site Investigation;
- July 2020 Lamprey and other species surveys;
- July 2020 Environmental Assessment of Viable Options;
- August 2020 Identification of Preferred Scheme;
- Aug '20 - Feb '21 Design Development & Environmental Impact Assessment Report;
- March 2021 Public Consultation;
- April '21 - July '21 Collation of Planning Documentation;
- August 2021 Lodge Planning with An Bord Pleanála.

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The logo for JBA consulting, featuring the text "JBA consulting" in white on a teal background with rounded corners.

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