

Proposed Material Alterations

to the

Proposed Kilmallock Local Area Plan 2019 – 2025

**Strategic Environmental Assessment Screening, Appropriate
Assessment Screening and Strategic Flood Risk Assessment**

3rd August 2019

Limerick City and County Council,
Forward/Strategic Planning,
Economic Development Directorate,
Merchants Quay,
Limerick



Comhairle Cathrach
& Contae **Luimnigh**

Limerick City
& County Council

Contents:

SEA Screening:

1.1 Introduction.....	3
1.2 Screening Statement.....	4
1.3 Summary, Conclusion and Recommendation.....	11

Appropriate Assessment Screening:

2.1 Introduction.....	13
2.2 Screening Matrix.....	14
2.3 Finding of No Significant Effects Matrix.....	20

Flood Risk Assessment:

3.1 Introduction.....	23
3.2 Flood Risk Identification.....	23
3.3 Comments and Overall Conclusion.....	29

1.1 Introduction

This screening document is prepared to consider the implication of the Material Alterations stage of the proposed Kilmallock Local Area Plan 2019 – 2025. The draft plan was placed on public display from 13th of April 2019 to the 27th of May 2019. Sixteen submission were received, summarised with recommendation and presented to the Elected Members of the Cappamore – Kilmallock Municipal District for consideration, on which a resolution was passed at a meeting on the 23rd July 2019, with an additional three alterations to the proposed plan. This document should be read with the Proposed Material Alterations to the proposed Kilmallock Local Area Plan 2019 - 2025 document, which sets out the proposed changes to text and mapping of the proposed plan.

Policy background: Kilmallock is located approximately 26 miles to the south east of Limerick City and six miles to the east of the Limerick to Cork national primary route (N20). In the settlement strategy it is defined by the County Development Plan 2010-2016 (as extended), as a Tier 2 settlement, i.e. a key town. A zoning map is included in Appendix 1 for reference.

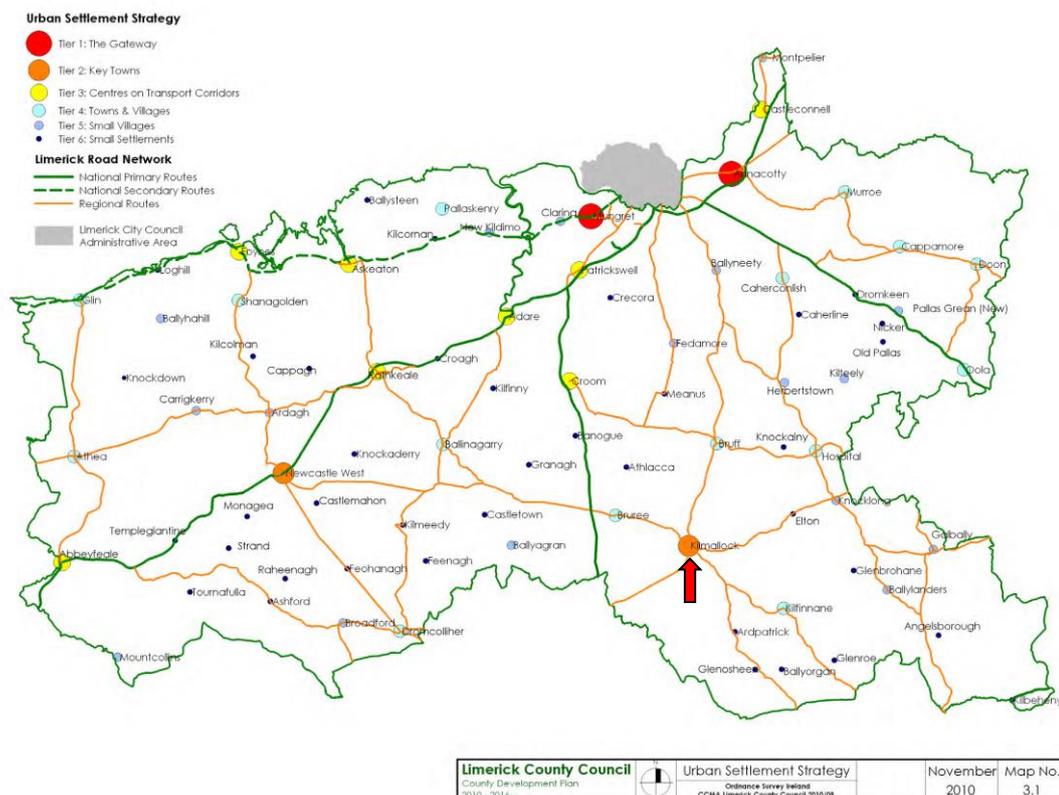


Figure 1: Location of Kilmallock is indicated by the red arrow.

The role of the key town is to act as a “key service centre” (Limerick County Development Plan 2010 - 2016 as extended) and as a node of development and service provision within their hinterlands of the county. Kilmallock is the key town in the east of the county, while Newcastle West is the key town in the west.

- **Summary of Proposed Material Alterations:**
- Amend Objective H3 and text of the Special Control Area in Land Use Categories to allow for the development of a school playing pitch to be open for consideration within the Special Control Area close to the Dominican Priory, which is a national Monument. Map and Zoning Matrix to be amended to indicate this change, as proposed by the Elected Members of the Cappamore – Kilmallock Municipal District;
- Addition of Objective C1 to ensure consistency with higher level plans such as the Regional Economic and Spatial Strategy (RSES) and the Limerick City and County Development Plan when adopted, as set out in the submission by the Office of the Planning Regulator;
- Population targets and zoning has been re –evaluated, all Phase 2 lands have been rezoned, which has resulted in changes to zoning throughout the plan boundary, however, with no increase in residential zoning and an increase in agricultural zoned lands;
- Introduction of new Implementation and Infrastructural Delivery Schedule section, as set out in the submission by the Office of the Planning Regulator.
- Amend Amenity Map to ensure accuracy and to update recently upgraded walkways and cycleways, as set out in submission in Submission No. 16.

1.2 Screening Statement

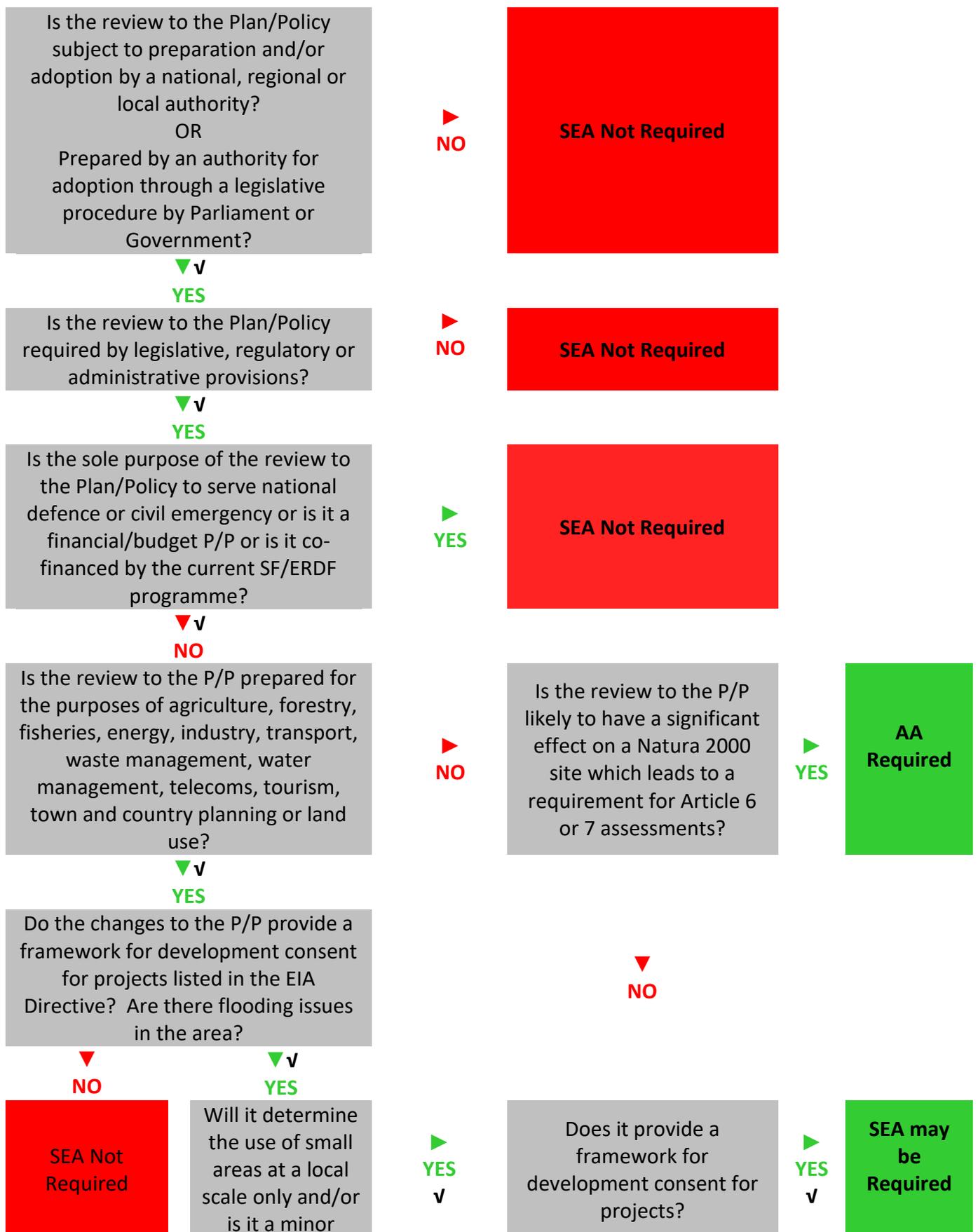
The Planning and Development Regulations 2001 (Amended) require case-by-case screening of individual plans and programmes based on the criteria in Schedule 2A, which is a template to determine whether a plan is likely to have significant effects on the environment. These criteria must be taken into account in determining whether significant effects on the environment would be likely to arise.

Stage One - Pre-Screening

The first step in determining whether the proposed Material Alterations of the proposed Kilmallock Local Area Plan would require an SEA involves a pre-screening check. It allows rapid screening-out of reviews of plans and policies that are clearly not going to have any environmental impact and screening-in of those that definitely do require SEA.

It is necessary to conduct a screening to determine if a Strategic Environmental Assessment of the review of the Local Area Plan is required. The review of the Plan will provide a framework for development. It is necessary to determine whether a SEA would be required by testing the draft plan and proposed material alterations against environmental significance screening criteria. Under the updated SEA regulations (2011), the thresholds for mandatory SEA is 5,000 people and the area is 50 km². The population in April 2016 (Census figures) was 1,668. This is below the mandatory threshold for SEA. The current zoned area in the plan is 222.84ha. This is also below the area threshold and is less than the total in the previous plan which was 248ha.

Figure 2 Pre-Screening Decision Tree





Stage Two - (A) Environmental Significance Screening

The application of environmental significance criteria is important to determine whether an SEA is required for small plans/policies or modifications to Plans/Policies. Annex II (2) of Directive 2001/42/EC sets out the “statutory” criteria that should be addressed when undertaking this stage.

Criteria for Determining the Likely Significance of Environmental Effects

Characteristics of the Plan/Programme

- i. *The degree to which the plan or programme sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources;*

The Local Area Plan guides development within the settlement boundary of Kilmallock as defined by the plan. By allocating zoning to different land uses in accordance with Section 28 Guidelines and the requirements of the Regional Planning Guidelines and Draft Regional Spatial and Economic Strategy, the plan guides the amount and type of development that will take place in Kilmallock. The different zoning categories will allow developments that are permitted within the appropriate zoning matrix for each land use. The review to the plan will incorporate the new population targets, as set out in the National Planning Framework and the Implementation Roadmap for the National Planning Framework, both published in 2018. The overall zoned area within the Town is 222.84ha and the population based on Census figures is 1,668.

- ii. *The degree to which the plan or programme influences other plans and programmes including those in a hierarchy;*

The proposed Local Area Plan is set within the context of the Limerick County Development Plan 2010 - 2016 (as extended), the Mid West Regional Planning Guidelines 2010 - 2016 and the provisions of relevant planning guidelines issued by the DHPLG and the National Planning Framework and associated draft Regional Spatial and Economic Strategy. The proposed plan has taken account of the above documents. The plan will influence and guide individual projects and planning permissions within the LAP boundaries, both through the zoning mechanism and the policy content of the Local Area Plan. The proposed LAP provides a framework for specific local development issues within the policy context of the County

Development Plan. The addition of Policy C1 to ensure future compliance with the RSES, when adopted, this will ensure that policy contents particularly in relation to European and national legislation and guidance on Environmental issues.

iii The relevance of the plan or programme for the integration of environmental considerations in particular with a view to promoting sustainable development;

When the existing plan was adopted in 2009 the treatment plant had a population equivalent of 2,200 and was at capacity. During the lifetime of the existing Local Area Plan the Waste Water Treatment Plant (WWTP) for Kilmallock was upgraded and re-constructed. Phase 1 of the Design-Build Phase included the design and construction of a new trunk combined sewer, wastewater pumping station, storm-water overflow storage tank, and wastewater treatment plant. The plant provides upgraded wastewater treatment facilities to cater for a population equivalent of 4,000 and operates to achieve a treated effluent standard of BOD 15mg/l, SS 15mg/l, P 1mg/l, N 1mg/l. The plant also incorporates wastewater sludge reception and treatment facilities. Phase 2 of the Design-Build Phase saw the decommissioning and removal of the old wastewater treatment facilities.



Figure 2: Waste Water Treatment Plant in Kilmallock (Source: Coffey Water Ltd).

The plant, with its increased capacity is capable of serving Kilmallock's proposed population growth during for the next plan period. The overall reduction in the area zoned for residential usage in the plan has also reduced potential pressure on the WWTP. The overall area for residential development in the 2009 Plan was 30.25ha while in the current proposed plan, it is 21.31 ha, a reduction of almost one third.

iii. Environmental problems relevant to the plan or programme;

The underlying environmental issues of the review relate to the following:

- Sensitive development of the historic townscape of Kilmallock.
- Avoidance of pollution to the River Loobagh.
- Preservation of the town's archaeological heritage, natural environment and protected structures and listed buildings.

iv. The relevance of the plan or programme for the implementation of Community legislation on the environment (e.g. plans and programmes linked to waste-management or water protection).

The review of the LAP is considered under the Limerick County Development Plan 2010 -2016 (as extended). It is the higher tier planning document, which influence the policy content and inclusion of community legislation on the environment. In this regard, the forthcoming Regional Spatial and Economic Strategy has a role to play in informing the policy content of the LAP, this is likely to be adopted by the end of the year. The addition of policy C1 to the plan to ensure compliance with the RSES, when adopted and to the Limerick City and County Development Plan when it is complete will ensure compliance with community and environmental legislation and guidance, which will be part of the content of these documents.

Characteristics of the Effects and of the Area Likely to be Affected

i. The probability, duration, frequency and reversibility of the effects

Changes and effects are likely as the zoning mechanism guides both the amount and location of development. Changes are likely to be permanent and long term in nature. The overall area of zoned land for development in the plan has been reduced, as part of the plan review process.

It is not envisaged that any changes would take place to the policies that protect the built heritage of the town so effects on these would be minimised. This is dealt with in more detail under (v) below.

ii. The cumulative nature of the effects

Cumulative negative environmental effects are likely to be localised within the plan boundaries and limited in nature. An anticipated de-zoning of residential land should serve to reduce the overall cumulative effects of potential development within the town.

iii. The trans-boundary nature of the effects

There are no trans-boundary effects.

iv. The risks to human health or the environment (e.g. due to accidents)

No Seveso plant lies within the Plan area. In terms of Waste Water Treatment Plant a new plant has been in operation since 2013 (see iii above). This has a capacity of 4,000 population equivalent far in excess of the town population of 1,668. There are no historic landfills within the LAP boundaries. There has been an overall reduction of the amount of residentially zoned land. This reduces potential pressure on the Waste Water Treatment System.

v. *The value and vulnerability of the area likely to be affected due to*

- *Special natural characteristics or cultural heritage;*

The Local Area Plan identifies the following protected areas/elements of the natural/cultural heritage:

- Protected Structures
- Architectural Conservation Areas
- Sites of Archaeological Significance
- Areas with natural history designations
- Proposed Tree Protection Areas.

The town of Kilmallock is of particular architectural and archaeological interest. Of particular note are the streetscapes and the built environment much of which reflects the town medieval past. The change proposed by the Elected Members to amend the zoning to allow for a school playing pitch in the Special Control Area, is likely to impact on the setting of the Dominican Priory.

- *Exceeded environmental quality standards or limit values;*

It is not expected that any environmental quality standards will be exceeded or that the value of vulnerable areas affected as a result of the contents of the draft plan. Policies that conserve the varying aspects of both the built and natural environment are retained. As detailed above, the situation in relation to discharges from the wastewater treatment plant has changed and sufficient capacity exists for the lifetime of the plan.

- *Intensive land-use;*

Following submissions received during the public display period, there has been a substantial reduction in the overall amount of land zoned for residential, which has reduced from 30.25ha in the 2009 plan to 21.31 ha in the proposed plan. This has resulted in a corresponding increase in land zoned for agriculture.

vi. *The effects on areas or landscapes, which have a recognised national, Community or international protection status.*

Kilmallock is a member of the Irish Walled Towns Network. This network was set up by the Heritage Council. The intact nature of the town walls in Kilmallock makes them amongst the most important of their type in Ireland. A specific policy for their preservation and management exists in the current draft. The Town Walls Conservation Plan that had been

prepared in 2008 for the management of the walls is also an important background document for the plan and informs the policy content of the proposed plan. Considerable investment has taken place in the stabilisation of the walls and in the introduction of amenity walkways to the east and west walls have been delivered, which provide significant amenity to the town and enhances the tourism offer.

The open space areas to the north east of the town centre has been designated as an Area of Special Development Control as it is part of the settings of the Collegiate Church and the priory, both important archaeological monuments. This area of special development control is to prevent insensitive development from encroaching on these monuments. The alteration proposed by the Elected Members in this Special Control Area, has potential to impact on the setting of the Dominican Priory, which has enjoyed a pristine setting to date.

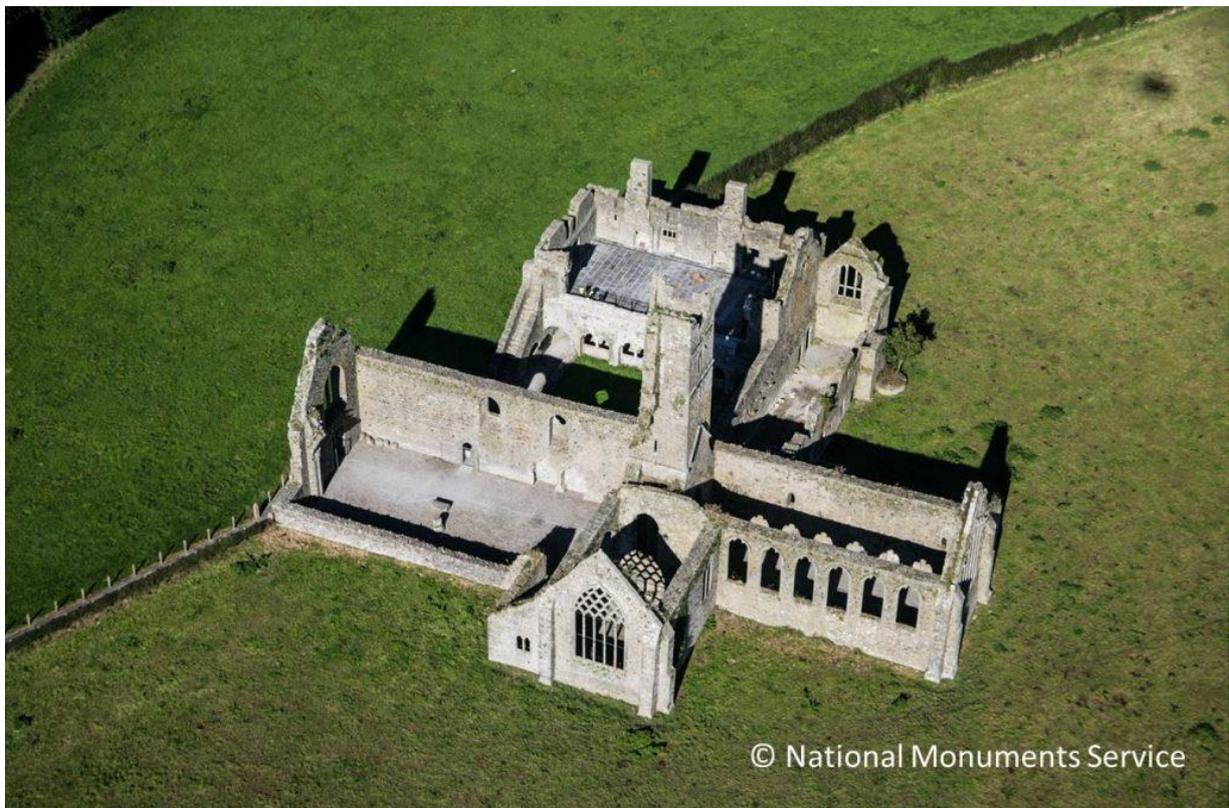


Figure 3: Dominican priory in Kilmallock, an aerial view (Source: National Monuments Service)

In addition to archaeological remains the centre of Kilmallock is also an architectural conservation area. This is the older established part of town with general mix of buildings ranging from the late medieval through the 18th and 19th centuries. The range of buildings that are on the protected structure list amount almost to a history of buildings styles from the medieval to the present day.

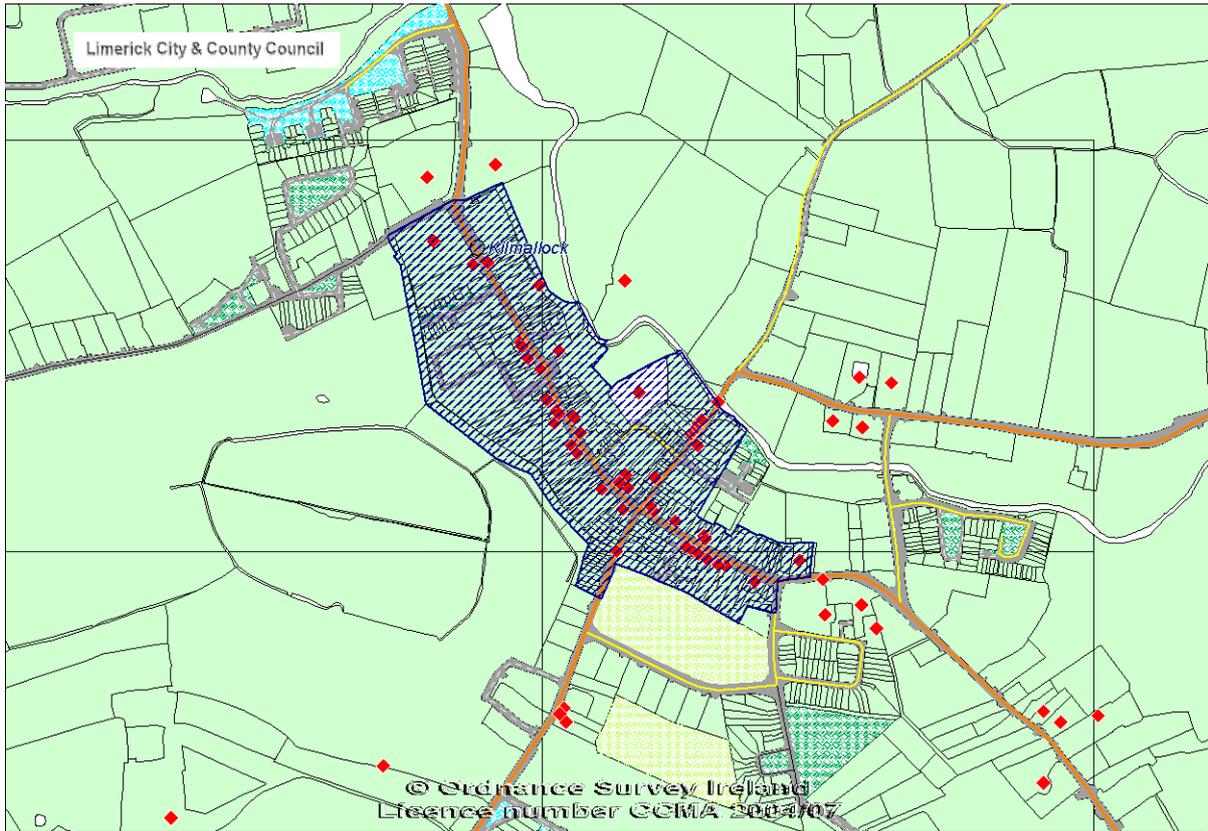


Figure 4: Blue hatched area indicates the extent of the Architectural Conservation Area (ACA) in Kilmallock. The red lozenges are individual protected structures.

This plays a huge part in defining the character of Kilmallock and adds to the ambiance of the town. This is added to by the largely intact town walls. These walls help to define the medieval extent of the town.

The setting of the Dominican Priory remains largely untouched. This is important, as it is possible to obtain unimpeded views of the priory from many vantage points in Kilmallock. The addition of goal posts and ball netting, will need to be considered, as this would interrupt these views and have a detrimental effect on the priory's setting.

1.3 Stage Two – Summary, Conclusion and Recommendation

At this stage in the plan review process, no strategically significant environmental problems can be identified in relation to the above issues.

Having considered the content of the proposed plan, the Material Alterations proposed, the area of the proposed plan and the population contained within the plan boundary and following the screening process, whereby the specific context of the review to the LAP has been assessed against the environmental significance criteria as contained in Annex II (2) of the SEA Directive, **it is concluded that a full Strategic Environmental Assessment is not required for the proposed review to the LAP.**

2.0 Appropriate Assessment Screening

2.1 Introduction

This is an Appropriate Assessment Screening of the proposed Kilmallock LAP including proposed material alterations, in accordance with the requirements of Article 6(3) of the EU Habitats Directive (92/43/EEC).

This proposed plan including material alterations needs to be screened for 'Appropriate Assessment'. Based on the *Methodological guidance on the provision of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*, a 'Screening Matrix' and a 'Finding of No Significant Effects Matrix' have been completed. The conclusion is that the proposed plan, including material alterations of the LAP **does not require** an Appropriate Assessment.

The principal consideration for an Appropriate Assessment would be if the LAP were likely to have significant effects on a Natura 2000 site – Special Areas of Conservation and Special Protection Areas (SAC's and SPA's) are Natura sites. There are no Natura 2000 sites close to the plan area. The LAP has been formulated to ensure that land uses and policies to safeguard Natura 2000 sites are in place, so that the effects arising from permissions based upon this Plan (either individually or in combination with other plans or projects) shall not give rise to significant adverse impacts on the integrity of any Natura sites, having regard to their conservation objectives.

The proposed Local Area Plan seeks to protect the natural heritage of Killmallock, through planning policy outlined in the proposed plan as follows: Ensure European directives and national planning legislation are satisfied in determining the effects of the plan on Killmallock's environment, and having determined whether the plan has significant effects on the environment, in addition, it is proposed that the area along the river with open space zoning and the special development control area be retained, save for the amendment proposed by the Elected Members to facilitate a playing pitch. This will facilitate the passage of otters a species of conservation and is important in the specific context of the Lower River Shannon SAC site. It will also provide a buffer from development as recommended by Inland Fisheries Ireland document *Planning for Watercourses in Urban Areas*.

The conclusion of the screening of the proposed plan including proposed material alterations **does not require** progression to a Natura Impact Statement for the following reasons:

- The sewage plant has been upgraded and can now cater for current and future population growth from the town, eliminating downstream pollution effects that existed previously.
- The existing zoning pattern provides a buffer along the River Loobagh and allows it to serve as wildlife corridor.
- There are no Natura 2000 sites within the town. The closest is located at least 9km away.
- While the consideration of the construction of a playing pitch in the Special Control Area close to the River Loobagh might be regarded as an intensification of use, it is not

within any designated site and its effect would be local and a buffer has been proposed to protect the River from any encroachment of development works.

2.2 Screening Matrix

Brief description of the project or plan:

The proposed LAP is intended to provide for a framework for the planning and development of Kilmallock for a duration of six years, unless amended. The plan is aimed at regulating development, while providing sufficient zoning for the land uses designed to respond to the needs of the town. Preservation and management of the archaeological and historical elements of the town are also an important focus of the plan.

Brief description of the Natura 2000 sites:

1. The River Shannon and Fergus SPA (004077) is located 24km downstream of the town of Kilmallock, where the River Loobagh is undesignated. The SPA site has been selected, because of its importance for wintering and migratory wild fowl. The site comprises of all the estuarine habitat west from Limerick City and it is the mud flats with its invertebrate community, which is of particular importance as a feeding area for migratory wildfowl. See Figure 1.

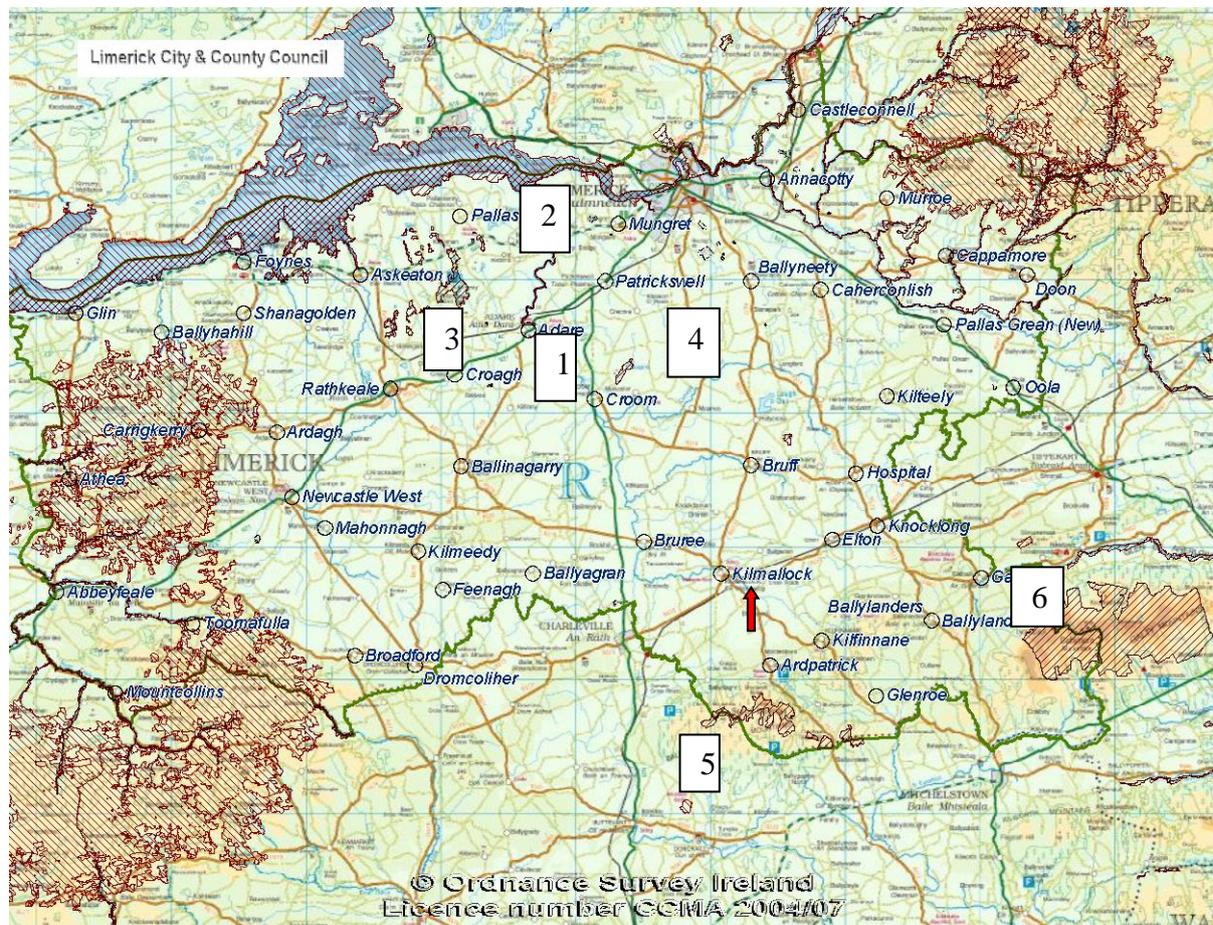


Figure 1: Location of nearby Natura 2000 Sites. Kilmallock is indicated with a red arrow.

2. The Lower River Shannon SAC (002165) site is within 23km of Kilmallock. The SAC site has been selected, because of a range of riparian habitats and species such as wet woodlands, tidal mudflats, estuaries and for species such as otter, salmon and lamprey. Maintenance of high water quality is an important factor in ensuring the preservation of these habitats.

3. Askeaton Fen Complex (002279) which is selected for a range of wetland habitats, which is 32km to the north west of Kilmallock. In Askeaton Fen Complex SAC a diversity of fen types are represented in a gradation from open water to drier seepage areas. One of the more important fen types, *Cladium* fen, which contains Great Fen-sedge (*Cladium mariscus*), occurs in various forms and is the most common fen type within the SAC. It is associated with wet conditions generally not >25 cm deep and can be found in mono-dominant stands growing on a marl base, such as at Feereagh and Mornane Loughs, and in the fen in the townland of Mornane. It can also be co-dominant with Common Reed (*Phragmites australis*) in slightly drier conditions, such as in Deegerty, Blind Lough and Dromlohan.

4. Tory Hill SAC (000439) site is an isolated, wooded limestone hill situated about 2 km north-east of Croom, Co. Limerick. It is 16km west of Kilmallock. It represents an important feature of the surrounding countryside and is a prime example of a limestone hill set amongst a region of volcanic intrusions of differing shape and geology. The hill is of geomorphological interest for the end-moraine, left by retreating ice, on its northern flanks and for ice-marks that are clearly visible on the solid rock. The site includes Lough Nagirra and its associated wetland vegetation, located to the north and north-east of Tory Hill. The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):
 - [6210] Orchid-rich Calcareous Grassland*
 - [7210] *Cladium* Fens*
 - [7230] Alkaline Fens

5. Ballyhoura Mountains SAC site (002036) is 9km to the south of Kilmallock. The Ballyhoura Mountains straddle the border between counties Limerick and Cork, and are situated about 10 km south of Kilmallock. The portion of the site within Co. Cork side is largely afforested with commercial conifer plantations, while there are still extensive areas in Co. Limerick that remain as open heathland and blanket bog. The site includes the summits of Seefin (528 m) and Carron Mountains (approx. 440 m), and descends to lower altitudes (270 m) at Glenosheen. Of geological interest are the Conglomerate tors, notably on Coolfree Mountain to the south-east, Long Mountain to south and Black Rock to the north centre. The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):
 - [4010] Wet Heath
 - [4030] Dry Heath
 - [7130] Blanket Bogs (Active)*

6. Galtee Mountains SAC site (000646) is 23km to the southeast. Situated in southeast Limerick and south Tipperary, the Galtee Mountains are Ireland's highest range of inland mountains. Galtymore has an elevation of 920 m and the main ridge, mostly above 700 m, extends approximately 10 km from east to west. The mountains are derived from folding of Old Red Sandstone and Silurian rocks. Heath is the main vegetation type within the site, with significant amounts of humid grassland and blanket bog occurring also. There is a series of small corrie lakes on the northern side of the mountain range, and the site encompasses the headstreams of numerous tributaries of the River Suir. The cliffs above the corries support arctic-alpine vegetation and the site as a whole supports several notable Irish rarities. The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):
- [4010] Wet Heath
 - [4030] Dry Heath
 - [4060] Alpine and Subalpine Heaths
 - [6230] Species-rich *Nardus* Grassland*
 - [7130] Blanket Bogs (Active)*
 - [8110] Siliceous Scree
 - [8210] Calcareous Rocky Slopes
 - [8220] Siliceous Rocky Slopes

Describe the individual elements of the plan (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 site:

The main way in which ex-situ impacts could be created is through pollution that would affect water quality in the Lower River Shannon SAC site. Since the River Loobagh flows into the River Shannon system, should pollution occur elements of this might eventually end up in the Shannon itself, which is also an SPA.

The retention of the Special Control Area designations along the River Loobagh will provide a buffer against inappropriate development which will minimise contaminants reaching the river and hence the Lower River Shannon SAC site. This should be retained into the proposed plan, as well as a buffer alongside the area, which is subject to the proposed material Alteration to facilitate a playing pitch.

The construction of the new Waste Water Treatment Plant (WWTP) has greatly improved the situation in relation to discharges to the River Loobagh. The previous plant had been overloaded and there were severe difficulties with attenuation and discharges to the river. The new plant which came into operation in 2013 has a population equivalent of 4000 far in excess of the 2,200 which had been the case with the previous plan and is capable of serving the town which has population of 1,668 (Census 2016 figures). See SEA screening document above for more details.



Figure 2: River Loobagh as it enters the eastern part of Kilmallock, it is a valuable amenity and wildlife corridor in the town.

Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 site by virtue of:

- **Size and scale**

There are no impacts identified as part of the review of the plan that have a direct effect on the Natura 2000 site. It is the secondary impacts of the review that would be likely to have the most effect, but as indicated below and in the SEA screening the Waste Water Treatment Plant (WWTP) has sufficient capacity to deal with anticipated loadings.

- **Land-take**

None no SAC /SPA site lies within the plan boundaries.

- **Distance from Natura 2000 site or key features of the site**

See Figure 1 and text above.

- **Resource requirements (water abstraction etc.)**

No policies within the plan indicate the need for abstraction of water from any designated site.

- **Emission (disposal to land, water or air);**

The construction of the new Waste Water Treatment Plant (WWTP) has greatly improved the situation in relation to discharges to the River Loobagh. The previous plant had been overloaded and there were server difficulties with attenuation and discharges to the river. The new plant which came into operation in 2013 has a population equivalent of 4,000 far in excess of the 2,200 which had been the case with the previous plan and is capable of serving the town which has population of 1,668 (Census 2016 figures). See SEA screening document above for more details.

- **Excavation requirements**

Any excavation that may be permitted under the scope of the plan, will take place within the LAP boundaries. The buffer zone provided by the Area of Special Development control ensures that there will be minimal requirement for excavation near the Loobagh River that might then carry contaminants downstream to the Lower River Shannon SAC site.

- **Transportation requirements**

It is not considered that any of the transport policies put forward in the plan will have any effect in terms of encroachment on any designated sites.

- **Duration of construction, operation, decommissioning, etc.**

No construction projects within the review area will encroach upon designated sites due to the distance from them. As a result of the open space, and special development control designations in the plan any development in the plan area will avoid encroachment on undeveloped sections of the River Loobagh.

- **Other**

None

Describe any likely changes to the site arising as a result of:

- **Reduction of habitat area**

There will be a no loss of designated habitats.

- **Disturbance to key species**

None. The retention of the open space along the River Loobagh will continue to facilitate the passage of otter.

- **Habitat or species fragmentation**

The presence of the buffer area along the river will help to prevent fragmentation of non-designated habitats and the species that are contained within them.

- **Reduction in species density**

It is not considered that any reductions in species density will take place, due to the relatively limited size of the plan area that is the subject of the review and the fact that it is at a distance from any Natura 2000 site. By definition the policies govern activities within the LAP boundary only and will not permit activities that would impinge on any Natura 2000 site.

- **Changes in key indicators of conservation value**

No projects giving rise to significant adverse changes in key indicators of conservation value for Natura 2000 sites are likely given that Kilmallock site is at a distance from any Natura 2000 site and policies are in place to control possible ex-situ effects. The presence of the zoned buffer lands along the River Loobagh within the plan boundaries will prevent downstream effects.

- **Climate Change**

The consolidation of development within the boundaries of the LAP while at the same time recognising the importance of the conservation sites outside the plan boundaries is not expected to result in climate change issues that would affect the sites.

Describe any likely impacts on the Natura 2000 site as a whole in terms of:

- **Interference with the key relationships that define the structure of the site**

None - see policies regarding improvement of sewage facilities to reduce chances of ex-situ effects.

- **Interference with key relationships that define the function of the site;**

With the consolidation of development by the review of the plan and the overall conservation objectives set out by the County Development Plan, it is not expected that the various factors that help designated sites function as particular habitats will be affected.

Provide indicators of significance as a result of the identification of effects set out above in terms of:

- **Loss**

Not applicable

- **Fragmentation**

Not applicable

- **Disruption**

Not applicable

- **Disturbance**

Not applicable

<ul style="list-style-type: none"> • Change to key elements of the site (e.g. water quality etc.)
Not applicable
Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts are not known.
Not applicable

3.3 Findings of No Significant Effects Matrix

Name of Project or Plan:	Kilmallock LAP 2009 - 2015 Review
Name and location of Natura 2000 sites:	<ul style="list-style-type: none"> - The River Shannon and Fergus SPA (004077) is located 24km downstream of the town of Kilmallock. - The Lower River Shannon SAC (002165) site is within 23km. - Askeaton Fen Complex (002279) which is selected for a range of wetland habitats. This is 32km to the north west. - Tory Hill SAC (000439) site is an isolated, wooded limestone hill situated about 2 km north-east of Croom, Co. Limerick. It is 16km west of Kilmallock. - Ballyhoura Mountains SAC site (002036) is 9km to the south of Kilmallock - Galtee Mountains SAC site (000646) is 23km to the southeast.
Description of the Project or Plan	As given in Screening Matrix above.
Is the Project or Plan directly connected with or necessary to the management of the site (provide details)?	No. The review to the LAP is intended to provide updated planning guidance for the town of Kilmallock.
Are there other projects or plans that together with the project of plan being assessed could affect the site (provide details)?	No
The Assessment of Significance of Effects	
Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 sites:	Effects are likely to be limited to the LAP area that is the subject of the review. The capacity of the WWTP reduces the likelihood of ex-situ effects on Natura 2000 sites.
Explain why these effects are not considered significant:	No Natura 2000 sites are present in the plan area. Policies set out in the CDP (2010 – 2016 as extended), for the prevention of pollution, nuisance or other environmental effects likely to significantly and adversely affect the integrity of

	<p>the Natura 2000 sites also ensure that that the likelihood of effects are not significant.</p> <p>Most importantly, the area that is the subject of the review has previously been zoned and the zoned area is at least 9km from any Natura 2000 site.</p>		
<p>List of Agencies Consulted: Provide contact name and telephone or email address:</p>	<p>AA Screening Reports were sent to:</p> <ul style="list-style-type: none"> • Environmental Protection Agency • Department of Housing, Planning and Local Government • Department of Communications, Climate Action and Environment • Department of Agriculture, Food and the Marine • Department of Culture, Heritage and the Gaeltacht 		
<p>Summary of Responses received to date</p>	<p>All submissions considered</p>		
<p>Data Collected to Carry out the Assessment</p>			
<p>Who carried out the Assessment?</p>	<p>Sources of Data</p>	<p>Level of assessment Completed</p>	<p>Where can the full results of the assessment be accessed and viewed</p>
<p>Heritage Officer, Forward/Strategic Planning Section, Limerick City and County Council.</p>	<p>Existing NPWS. Site Synopses. Site visits during plan preparation process.</p>	<p>Desktop study, site visits</p>	<p>With plan documentation on request.</p>

3.0 FLOOD RISK ASSESSMENT

3.1 Introduction: Flood risk in Kilmallock

This is the Stage 1 flood risk identification for the proposed Local Area Plan for Kilmallock at Material Alterations Stage.

3.2 Stage 1: Flood Risk Identification

The Technical Appendices of the *Planning and Flood Risk Management Guidelines (November 2009 p.9)* identify the following sources of information:

- OPW Preliminary flood risk assessment indicative fluvial flood maps
- National Coastal Protection strategy study flood and coastal erosion risk maps
- Predictive and historic flood maps and benefiting land maps
- Predictive flood maps produced under CFRAM studies
- River Basin Management Plan and reports
- Indicative assessment of existing flood risk under Preliminary Flood Risk Assessment
- Previous flood risk assessments
- Advice from Office of Public Works
- Internal consultation with Local Authority personnel, in particular water services engineers
- Topographical maps - in particular LIDAR
- Information on flood defence condition and performance
- Alluvial deposition maps
- Liable to flood markings on old 6-inch maps. In addition, these maps particularly the first edition, contain information on landscape features and infrastructure such as mills and weirs that can indicate hydrological features
- Local Libraries and newspaper reports
- Local consultation e.g. local groups
- Walkover surveys to assess potential sources of flooding and likely routes of flood waters and flood defences
- National, regional and local spatial plans and previous planning applications.

OPW preliminary flood risk assessment (PFRA) indicative fluvial flood maps

The maps indicate that there are large areas of benefiting land within the LAP boundaries. Site investigations for the Preliminary Flood Risk Assessment in Kilmallock was carried out on the 29/03/2011. It quotes the current Local Area Plan which states *"In relation to dealing with flood risk in the plan area the reduction in the amount of land zoned for development i.e. the land formerly zoned for residential development in the flood plain of the Loobagh is now designated as a Special Control Area. Thus by reducing the potential development footprint of the plan and the associated impermeable surfaces has helped to minimise possible run off which could contribute to local flood risk* (OPW 2011, p.1 and current LAP 2009, p.72). The further reduction in zoning- (see SEA screening above) has further reduced potential impermeable areas.

This reinforces the need for the retention of the Special Control Area and green space in the vicinity of the River Loobagh.

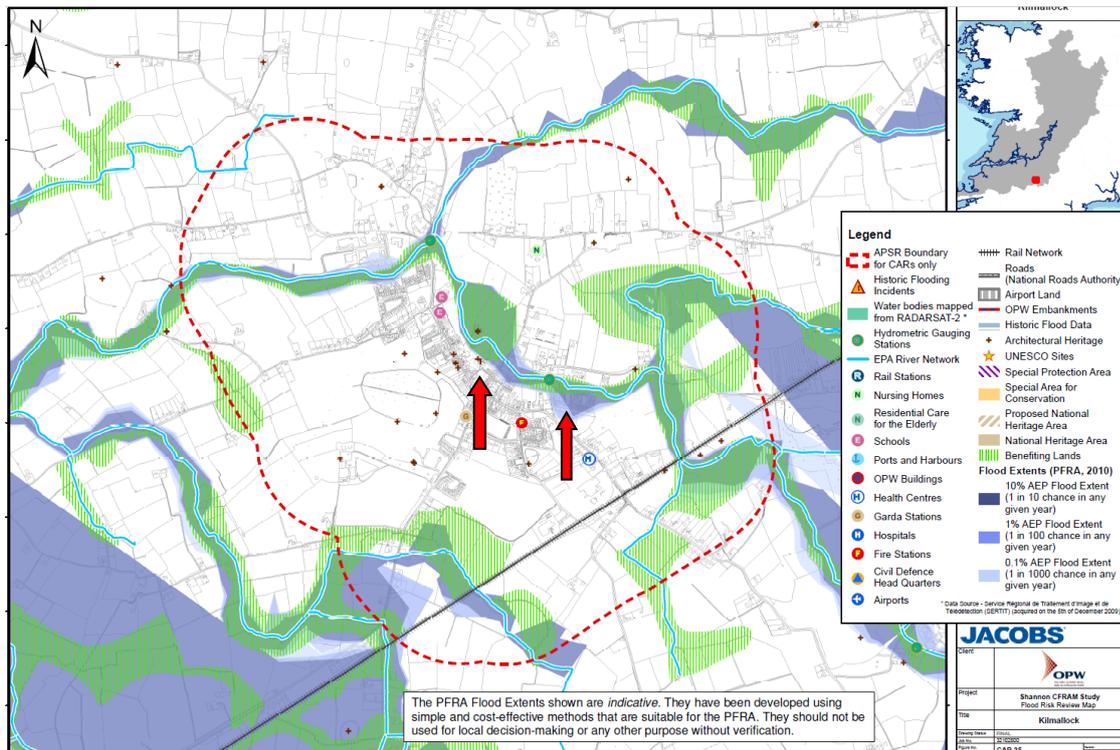


Figure 1: PFRA map from 2011 showing potential flood risk areas along the River Loobagh as it runs through Kilmallock. These indicate the importance of leaving such land along the Loobagh undeveloped.

National Coastal Protection Strategy Study flood and coastal maps

Maps for this study would not be of any assistance in dealing with specific flooding issues in Kilmallock.

Predictive and historic flood maps and benefiting land maps (flood maps.ie)

Flood maps.ie was consulted. These maps show benefiting lands along the Loobagh. These are northeast and northwest of the town centre. These are a very good indication of flood extent.

The flood benefiting lands cover much of the Special Development Control area and justify the decision for its inclusion in the proposed plan, with the inclusion of a buffer along the lands proposed to facilitate a playing pitch in the Special Control Area.

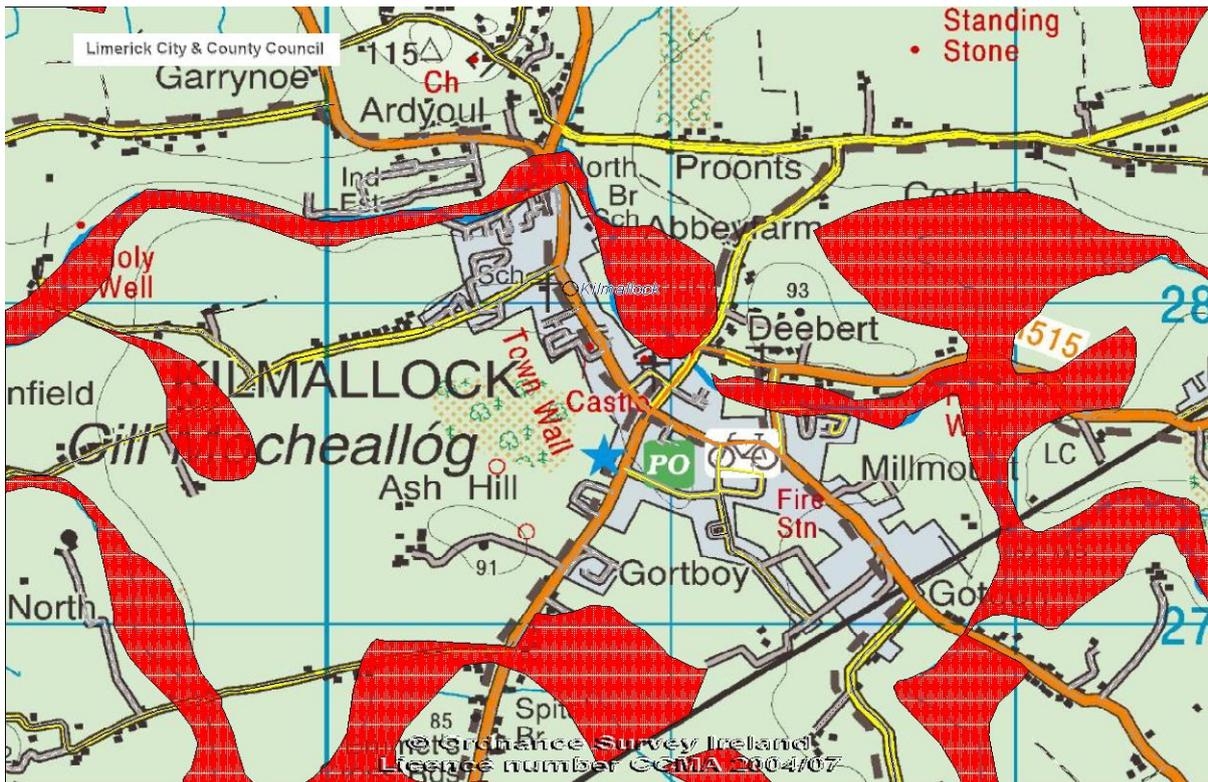


Figure 2: The red patches show location of flood benefiting lands. Flood benefiting lands indicate lands, which would benefit from flood relief measures for use for agricultural purposes. These are a reliable indicator of flood extents (OPW pers. comm.)

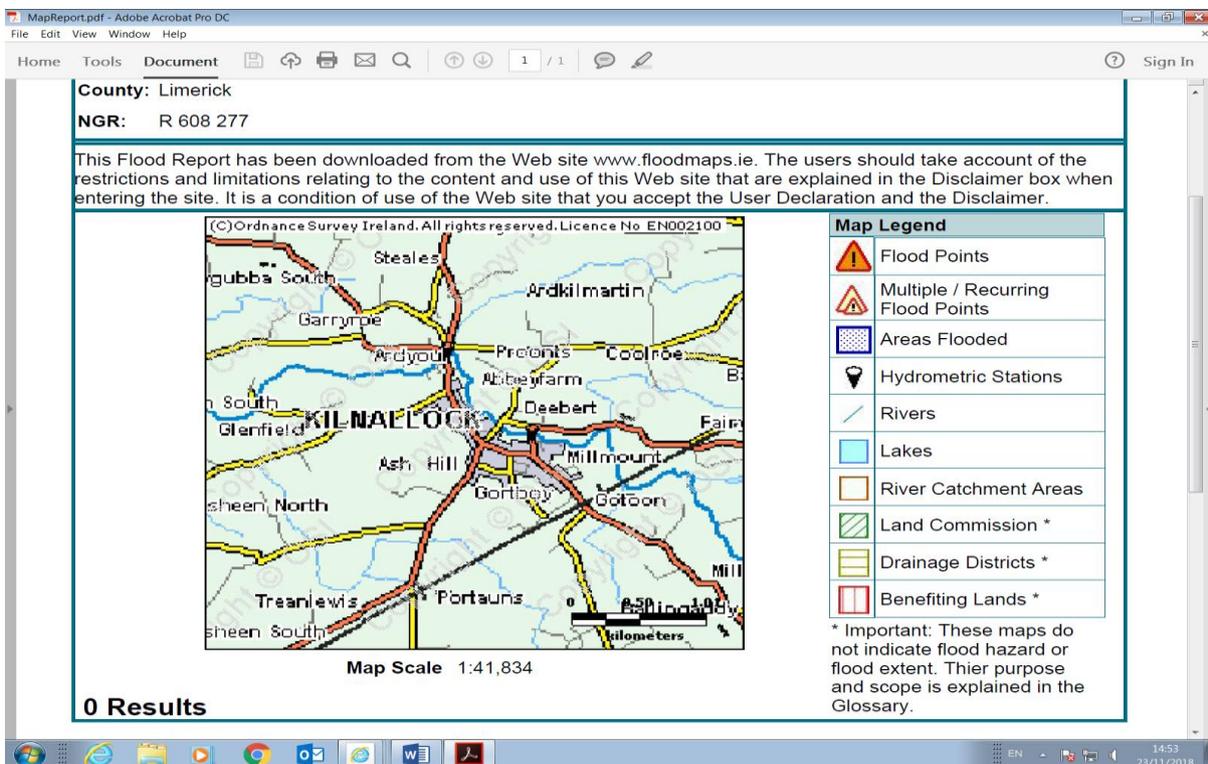


Figure 3: Screen grab from Flood maps.ie. These do not show any flood events, see 0 flood events in the lower left hand corner.

Predictive flood maps produced under CFRAM studies



Figure 4: Screen grab of CFRAMS map showing areas at risk of flooding. These are along the Loobagh River and show the 1:100 flood risk areas.

River Basin Management Plan and Reports

Insufficient detail available to inform responses at LAP level.

Indicative assessment of existing flood risk under Preliminary Flood Risk assessment.

The PFRA indicates that hydraulic constraints exist in terms of the bridges across the Loobagh-

“There are three main bridges. These become more restrictive as the river flows downstream. One arch on the 5-arch bridge (at the downstream end of the town) is blocked with soil. River / streams at the bottom of the valley have limited flat areas, and no clear alternative conveyance routes”

Local authority personnel quoted as part of the PFRA indicated that there were flooding issues in the eastern side of the town close to the new fire station.

Previous flood risk assessments

Flood maps.ie consulted - see Figure 3 above. No flood risk assessment was submitted as part of a planning application.

OPW advice

The OPW made a submission outside the plan period.

Internal consultations with Council personnel

Discussions regarding drainage and flooding issues took place with council engineers as part of the PFRA, which indicated that issues arose in the western part of the plan area. They also indicated that fluvial flooding resulting from blockages and flood impediments pose a risk to the north west of the town centre

Information on flood defences and condition

None

LIDAR maps

The Council has purchased LIDAR mapping which was used to provide more accurate information in relation to flood risk. This was used with the JBA maps, a screen grab for which is shown below. Please note that the contents of the CFRAM maps supersedes these maps as source of flooding information. They have been included for the sake of completeness.



Figure 5: JBA flood maps -the light blue is Flood Zone A, the darker blue is flood Zone B.

Alluvial deposition maps

Alluvial soils are those deposited by rivers. Their extent helps to indicate the extent of historic flood events. These areas are concentrated along the Loobagh River.

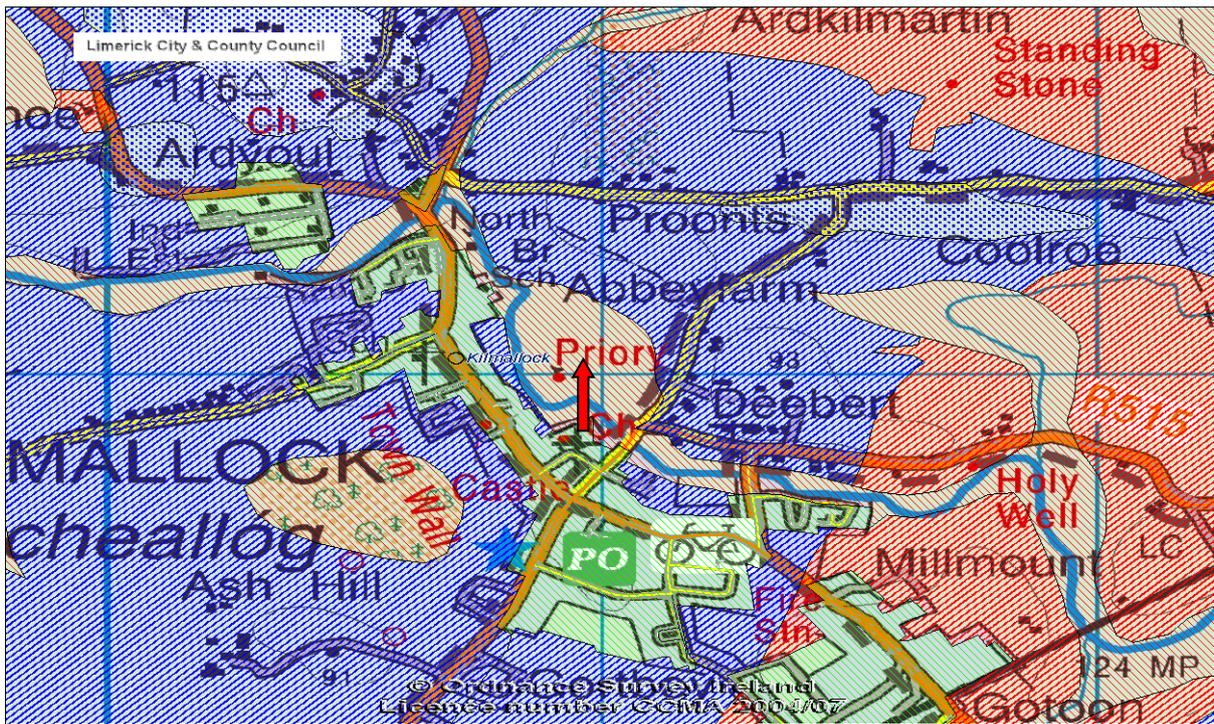


Figure 6: Hatched area, which is arrowed, shows the alluvial deposition areas within the LAP boundaries. Much of this lies within the Area of Special Development control. Alluvial maps are useful in that they give an indication of deposition and hence flood extents.

Liabile to flood markings on old 6 inch maps

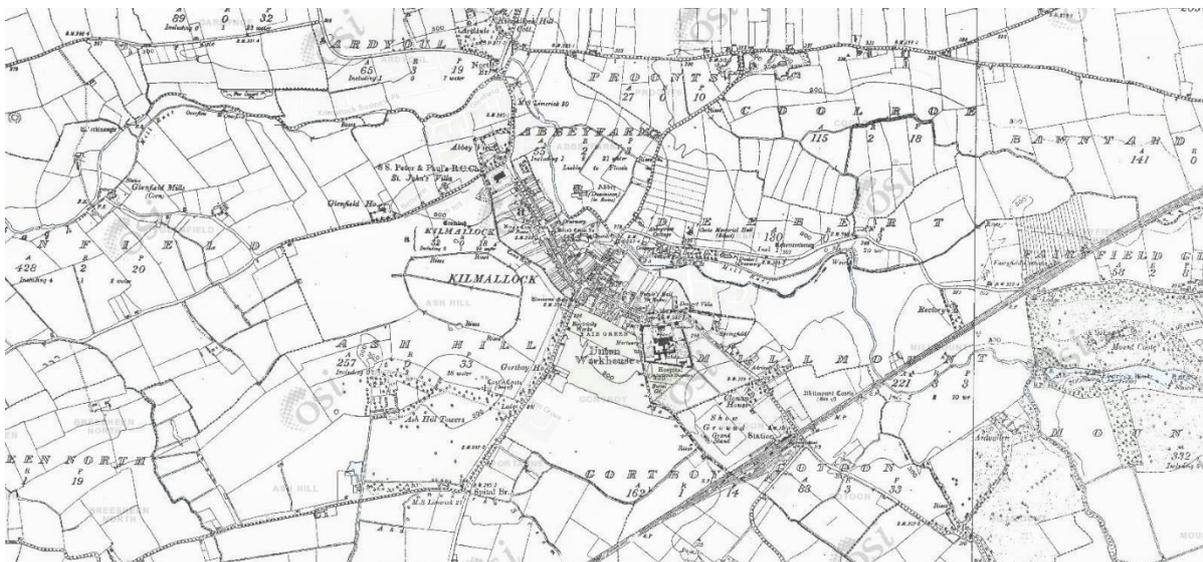


Figure 7: Old six-inch series map. These do not show any areas as being liable to flood within the LAP Boundaries.

The older six-inch map series was consulted. No signs of any areas that were shown as liable to flood were found within the Local Area Plan boundaries.

Local libraries and reports

OPW reports consulted.

Local consultations

Consultation has taken place, in accordance with the Local Area Plan process, written submission and public meetings have taken place.

Walkover surveys

Walk over surveys were an important part of the groundwork associated with the plan. Such surveys helped to indicate the extent of vegetation associated with wetter ground conditions and local topography. These were carried out in October 2018 and April 2019.

National, regional and local spatial plans

Insufficient detail was present in other plans or strategies in order to inform the current survey.

Previous planning applications

No relevant information was found in planning application files.

3.3: Comments and Overall Conclusion:

The overall conclusion in relation to flood risk is that that the retention of the Special Development Control area is an essential tool in terms of flood risk management. The alteration of the land use matrix to consider the development of a playing pitch in the Special Control Area close to the River Loobagh shall not impact on the flood area, adequate measures shall be incorporated into the development to ensure that there are no adverse impacts. In addition, the importance of retaining current green space areas in the plan, including those close to the River Loobagh is an important tool in dealing with local flood risk and affording a setting for archaeology and protected structures.

**Draft Kilmallock
Local Area Plan
2019 -2025**

Zoning Map

Legend

-  Agriculture
-  Existing Residential
-  Residential Development Area
-  Residential Service Sites
-  Education & Community Facilities
-  Enterprise & Employment
-  Town Centre
-  Open Space & Recreation
-  Open Space Sports Grounds
-  Special Control Area
-  Utility
-  Refer to Objective H3
-  15m riverside buffer
-  LAP Boundary
-  Proposed Distributor Road
-  Proposed Junctions

Forward Planning
Economic Development Directorate

A Senior Planner
Maria Woods
Merchant's Quay, Limerick
Tel: (061) 556600
E-mail: fowardplanning@limerick.ie

SCALE	NA	DWG. NO.	Kil-19/25-01
DRAWN BY	C.O'Keeffe	CHECKED BY	B. Collins
DATE	July'19		
<small>© Ordnance Survey Ireland. All rights reserved. Licence No. 2017/09/CCMA/Limerick City & County Council</small>			

