SEA STATEMENT

FOR THE

BIRR LOCAL AREA PLAN 2023-2029

for: Offaly County Council

Áras an Chontae Charleville Road Tullamore County Offaly



by: CAAS Ltd.

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Section 1 Introduction

1.1 Introduction and Legislative Context

This is the Strategic Environmental Assessment (SEA) Statement for the Birr Local Area Plan 2023-2029.

SEA is a systematic process of predicting and evaluating the likely environmental effects of implementing a plan, or other strategic action, in order to ensure that these effects are appropriately addressed at the earliest appropriate stage of decision-making on a par with economic and social considerations.

Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27th June 2001, on the Assessment of the Effects of Certain Plans and Programmes on the Environment, referred to hereafter as the SEA Directive, introduced the requirement that SEA be carried out on plans and programmes which are prepared for a number of sectors, including land use. The SEA Directive was transposed into Irish Law through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 and the Planning and Development (Strategic Environmental Assessment) Regulations 2004. The Regulations have been amended by the European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 and the and (Strategic Planning Development Environmental Assessment) (Amendment) Regulations 2011.

1.2 Content of the SEA Statement

Where SEA is undertaken, the Regulations require that a Statement is made available to the public and the competent environmental authorities after the making of the Plan.

This Statement is referred to as an SEA Statement.

The SEA Statement is required to include information summarising:

- a) how environmental considerations have been integrated into the Plan;
- b) how the following have been taken into account during the preparation of the Plan:
 - the environmental report,
 - submissions and observations made to the planning authority on the Draft Plan and Environmental Report, and
 - any transboundary consultations (these are not relevant to this SEA).
- c) the reasons for choosing the Plan in the light of the other reasonable alternatives dealt with; and
- the measures decided upon to monitor the significant environmental effects of implementing the Plan.

1.3 Implications of SEA for the Plan

SEA has been undertaken on the Plan and the findings of the SEA are expressed in an Environmental Report, the first published version of which accompanied the Draft Plan on public display. The Environmental Report was updated in order to take account of changes to the original Draft Plan that were made on foot of submissions and recommendations in the submissions.

Offaly County Council have been provided with the findings of SEA output during their consideration of the Plan and before the Plan was adopted.

Section 2 How Environmental Considerations were integrated into the Plan

2.1 Overview

Environmental considerations were presented to the Council for its consideration through:

- 1. Consultations;
- Communication of environmental sensitivities throughout the SEA process;
- 3. Appropriate Assessment;
- 4. Strategic Flood Risk Assessment;
- 5. Consideration of alternatives;
- 6. Integration of environmental considerations; and
- 7. Integration of individual SEA and AA provisions into the Plan.

All parts of the Plan-preparation process were informed by the SEA, AA and SFRA processes this includes the preparation of the Draft Plan, Proposed Material Alterations and Further Modifications.

2.2 Consultations

As environmental authorities identified under the Planning and Development (SEA) Regulations, as amended, the following authorities were sent SEA scoping notices indicating that submissions or observations in relation to the scope and level of detail of the information to be included in the environmental report could be made to the Offaly County Council: Environmental Protection Agency; Department of Environment, Climate and Communications; Department of Agriculture, Food and the Marine; Department of Housing, Local Government and Heritage; Meath Council; Westmeath County Council; Roscommon County Council; Galway County Council; Tipperary County Council; Laois County Council; and Kildare County Council.

Detail on submissions made on foot of the SEA scoping notice is provided under Section 3.2.

Detail is also provided on submissions that were made on the Draft Plan and/or the SEA

Environmental Report while they were on public display (see Section 1.1).

2.3 Communication of environmental sensitivities throughout the SEA process

Environmental considerations were integrated into the Plan before it was placed on public display. Individual sensitivities that were considered by the Planning Team preparing the Plan included the following:

- European Sites (Special Areas of Conservation and Special Protection Areas);
- Other Ecological Designations;
- Status of Surface and Ground Waters;
- Various entries to the Water Framework Directive's Register of Protected Areas;
- Groundwater Vulnerability;
- Water Services Capacity, Performance and Demand;
- Cultural heritage (archaeological and architectural) sensitivities; and
- Landscape Designations.
- Special Areas of Conservation;
- Proposed Natural Heritage Areas;
- Status of Surface and Ground Waters;
- Various entries to the Water Framework Directive's Register of Protected Areas;
- Groundwater Vulnerability;
- Water Services Capacity, Performance and Demand;
- Protected Route and landscape areas; and
- Cultural heritage (archaeological and architectural) sensitivities.

A number of these sensitivities are mapped on Figures 2.1 to 2.3.

2.4 Appropriate Assessment

Appropriate Assessment (AA) Screening and Stage 2 AA have been undertaken alongside the Plan. The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC).

The conclusion of the AA is that the Plan will not affect the integrity of the European Sites, alone or in combination with other plans or projects.¹

The preparation of the Plan, SEA and AA has taken place concurrently and the findings of the AA have informed the SEA.

2.5 Strategic Flood Risk Assessment

A Strategic Flood Risk Assessment (SFRA) has been undertaken alongside the Plan. The requirement for SFRA is provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (Department of Environment and Office of associated Public Works, 2009) and Department of the Environment, Community and Local Government Circular PL2/2014.

The preparation of the Plan, SEA and SFRA has taken place concurrently and the findings of the SFRA have informed both the Plan and the SEA.

2.6 Consideration of Alternatives

Consideration of the environmental effects arising from a variety of different alternatives for the Plan (see Section 4) has contributed towards the protection and management of the environment within the Plan area.

2.7 Integration of environmental considerations into Zoning of the Plan

Environmental considerations were integrated into the Plan's zoning through an interdisciplinary approach.

Zoning has been applied in a way that primarily seeks to achieve sustainable and compact growth, taking into account the various requirements set out in the higherlevel National Planning Framework, the Eastern and Midland Regional Spatial and Economic Strategy and the Offaly County Development Plan 2021-2027.

The detailed County Development Plan preparation process undertaken by the Planning Department combined with specialist input from the SFRA process for the County zoning Plan facilitated that avoids inappropriate development being permitted in areas of high flood risk. Also taken into account were environmental sensitivities relating to ecology, cultural heritage, landscape and water, as well as the overlay mapping of environmental sensitivities.

2.8 Integration of individual provisions into the text of the Plan

Various provisions have been integrated into the text of the Plan through the Planpreparation and SEA, SFRA and AA processes. Both the Planning and the assessment teams contributed towards the mitigation which was developed over multiple iterations and was informed by, inter alia, various communications through the SEA, AA and SFRA processes.

Table 2.1 links key mitigation measure(s) to the likely significant effects of implementing the Plan, if unmitigated. The measures generally benefit multiple environmental components i.e. a measure providing for the protection of biodiversity, flora and fauna could beneficially impact upon the minimisation of flood risk and the protection of human health, for example.

¹ Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be: (a) no alternative solution available, (b) imperative reasons of overriding public interest for the plan to proceed; and (c) adequate compensatory measures in place.

2.9 Integration of individual provisions into the text of the County Development Plan

In addition to the individual provisions integrated into the text of the Local Area Plan, individual provisions relating to environmental protection and management have been integrated into the existing Offaly County Development Plan 2021-2027. These measures, which must be complied with by development under the Local Area Plan, are identified alongside the Local Area Plan measures on Table 2.1.

2.10 Instance whereby Environmental Assessment Recommendation was not integrated into the Plan

All environmental assessment (SEA, AA and SFRA) recommendations were integrated into the Plan, except the addition of the **bold text** below to LUZO-13 "Land Use Zoning Objective – Constrained Land Uses".

"Facilitate the appropriate management and sustainable use of flood risk areas designated as 'Constrained Land Use' in the zoning map in accordance with the provisions of the Planning System and Flood Risk Management Guidelines for Planning Authorities (2009), as amended, in consultation with the OPW." New development will generally be limited to water-compatible uses in Flood Zone A, and less vulnerable or water compatible uses in Flood Zone B, and a detailed SSFRA will be required in these areas.

Footnote:

For example, at undeveloped Enterprise and Employment lands in the south of the town to the west of the N62 (marked * on Map X) new development will be limited to watercompatible uses in Flood Zone A.

The planning reasons for the Members not agreeing to the insertion of the bold text above into the Plan was that the that the **bold text** above is sufficiently addressed in other sections of the Local Area Plan and the County Development Plan, including as follows:

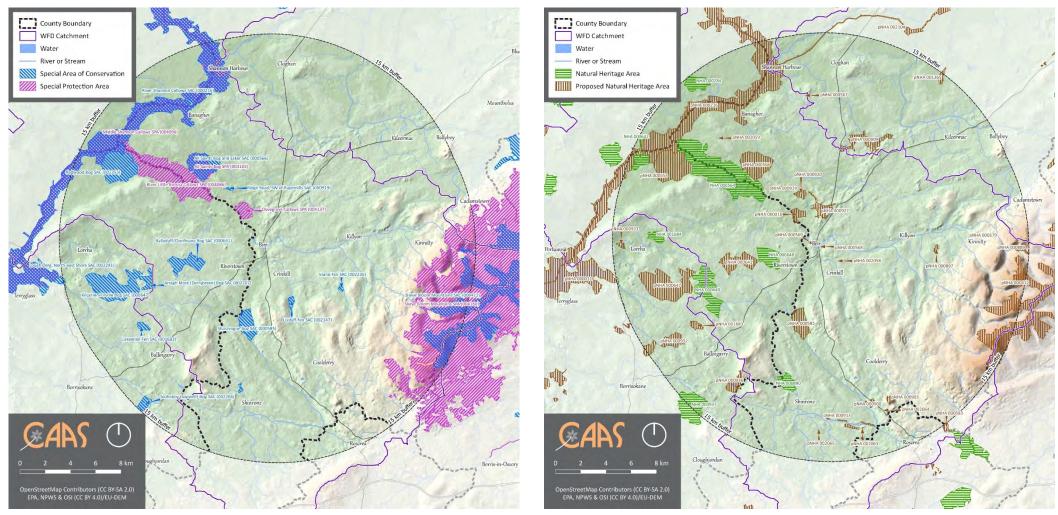
Local Area Plan Table 11.1 "Land Use Zoning Matrix"

"Note that new Permitted in /Open Principle for Consideration uses under 'Enterprise and Employment' Zoning in Flood Zone A or B shall be limited to lessvulnerable and/or water compatible uses (as per the Flood Risk Management Guidelines). This requirement will take primacy over any related provision relating to the land use zoning matrix."

 Local Area Plan Section 8.4.2 "Flood Risk Management"

> "Development Management Standard 106 from Chapter 13 Development Management Standards of the Offaly County Development Plan 2021-2027 shall apply to proposals located on lands designated Constrained Land Use in the Local Plan Area."

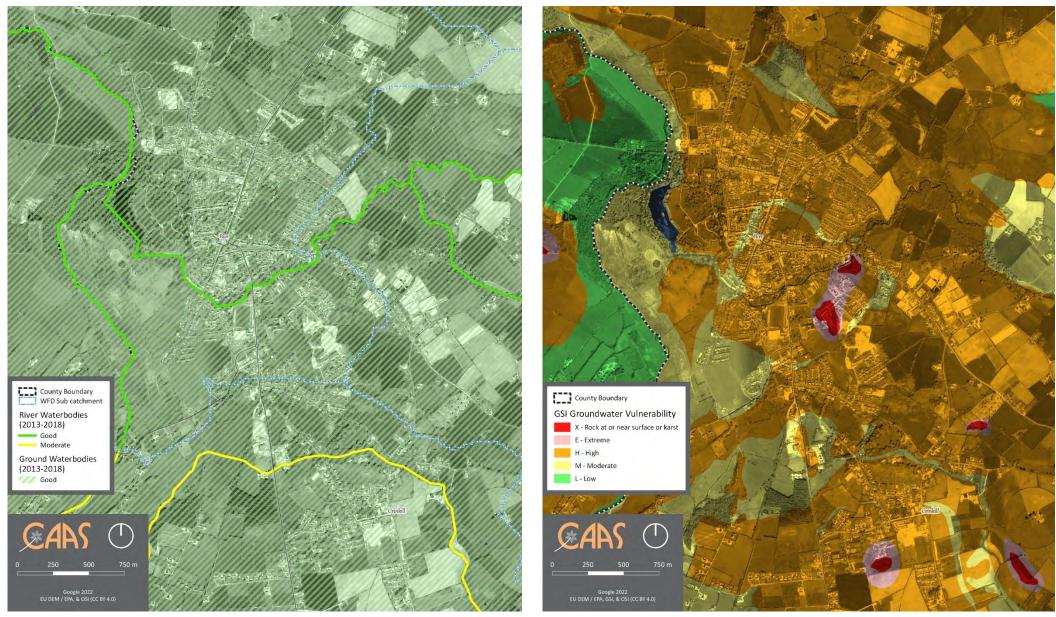
County Development Plan Development Management Standard 106 includes details from the Flood Risk Management Guidelines on what types of uses are appropriate in each Flood Zone and details on requirements in relation to Site-specific Flood Risk Assessments



European Sites within and within 15 km buffer of Plan area

NHAs and pNHAs within and within 15 km buffer of Birr Plan area





WFD Surface Waterbodies and WFD Ground Waterbodies Status (2013-2018)

Groundwater Vulnerability

Figure 2.2 Selection of Individual Environmental Sensitivities taken into account (2 of 3)



Archaeological Heritage

Architectural Heritage

Figure 2.3 Selection of Individual Environmental Sensitivities taken into account (3 of 3)

Торіс	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
AII	Various	 EDP-12 Support and promote the development of economic and enterprise development and activity in a manner which contributes to the transition to a low carbon, climate resilient and environmentally sustainable county. EDP-13 Support the development and expansion of enterprise and employment within Birr, and to co-operate with all stakeholders, land owners and relevant agencies to attract investment. EDP-14 Promote Birr as a competitive and attractive location for economic development emphasising Foreign Direct Investment. EDP-15 Support IDA Ireland in the attraction of high value added manufacturing sectors and internationally traded sectors to Birr. TCP-04 Encourage and facilitate the reuse and regeneration of derelict, vacant, backland and underutilised lands and buildings in the town centre for retail, residential and other mixed uses through legislative measures and / or by supporting the progression and delivery of projects funded by the Rural Regeneration and Development Fund and other appropriate funds. TCP-06 Ensure that growth planned for Birr town over the life of the Plan occurs in a sustainable and sequential manner, characterised by a compact, consolidated and permeable pattern of development linked by sustainable modes of transport including a robust network of pedestrian and cycle routes. TCP-16 Incorporate Sustainable Urban Drainage Systems (SuDS) and other nature-based solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas – Best Practice Interim Guidance Document, 2022' and any subsequent editions. 	 corridors assessed. The selection of the preferred route corridor will avoid constraints and meet opportunities to the optimum extent, as advised by the relevant specialists; and In addition to the constraints identified above, site-specific field data may be required to identify the most appropriate corridors. Stage 2 – Route Identification, Evaluation and Selection Potentially feasible routes within the preferred corridor will be identified and assessed. The selection of preferred routes will avoid constraints and meet opportunities to the optimum extent, as advised by the relevant specialists, taking into account project level information and potential mitigation measures that are readily achievable; In addition to the constraints identified above, site specific field data may be required to identify the most appropriate routes; and In addition to environmental considerations, the identification of route corridors and the refinement of route lines is likely to be informed by other considerations. Chapter 11.5.2 Waste Management Construction Environment Management Plans (CEMPs) shall be prepared for larger scale projects and this requirement shall be assessed on a case by case basis as part of the development management process. Such plans shall incorporate relevant mitigation measures contained in any accompanying Environmental Impact Assessment Report or Appropriate Assessment and in this Development Plan. CEMPs shall typically provide details of intended construction practice for the proposed development, including where applicable: Location and details of site compounds, refuse storage areas, construction site offices and staff facilities, site security fencing and hoardings, on-site staff car parking; Details of construction traffic - timing and routing, directional signage, measures to obviate queuing, alternative arrangements for pedestrians and vehicles, and measures to pre

Торіс	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
		 mixed uses within the existing built-up footprint of Birr Town. RP-08 That Birr, a Self-Sustaining Growth Town, continues to grow at a sustainable level and at a commensurate scale in accordance with the Core Strategy Table in an effort to become more self-sustaining. RP-09 Reinforce the attractive rural character of Crinkill, which exists at present, by permitting appropriate and sensitively designed new development. RO-01 In line with the requirements of the National Planning Framework, ensure that at least 30% of all new housing development is delivered within the existing built-up footprint of Birr Town. CM-01 Facilitate and secure the provision of social infrastructure to support existing and new communities within the Plan area, in a manner which provides flexibility to respond to varied and changing community needs. CAP-06 Support the effective and efficient use of land in Birr, prioritising compact growth through the development of brownfield/infill land in the built-up footprint of the town in preference to greenfield land. CAP-07 Maintain existing green infrastructure in Birr and encourage and facilitate, in consultation with relevant stakeholders, the development of green infrastructure that recognises the synergies that can be achieved with regard to the following: Provision of open space amenities; Sustainable management of water; Protection of cultural heritage; and Protection of protected landscape sensitivities. CIP-05 Ensure that new cycling and walking infrastructure, including the provision of new cycling hubs / parks, shall be provided subject to environmental constraints, including those related to habitats and potential impacts such as disturbance from lighting; this will include minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction itechniques. 	Appointment of an ecological clerk of works at sile investigation, preparation and construction phases; and Details of appropriate mitigation measures for lighting specifically designed to minimise impacts to biodiversity, including bals. DMS-107 (Undergrounding of Services) All services, including ESB, telephone and television cables shall be placed underground, where possible. Service buildings or structures shall be sited as unobtrusively as possible and must be screened. Proposals should demonstrate that environmental impacts including the following are minimsed: Habitat loss as a result of removal of field boundaries and hedgerows (right of way preparation) followed by topsoil stripping (to ensure machinery does not destroy soil structure and drainage properties); impacts on soil structure and drainage; and impacts on soil structure and drainage; and impacts on surface waters as a result of sedimentation. CAEP-23 (Reasonable Alternatives and Existing Infrastructural Assets) It is Council policy to require that environmental assessments should address reasonable alternatives for the location of new energy developments, and where existing infrastructural assets should be considered for sustainable use by the proposed development where the assets have capacity to absorb the new development. Chapter 12.1 (Environmental considerations and Limitations in the types of uses) There are a wide range of land uses identified under each of the Land Use Zoning Objectives. Proposals for development will need to demonstrate compliance with the various written provisions of the Plan, as relevant, including those relating to environmental protection and management. Environmental considerations, such as those related to elevated levels of flood risk or European site ecological designations, may limit the types of uses that may be possible at certain sites. Prospective applicants are encouraged to engage with the Planning Authority at the

Торіс	Potentially	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
	Significant Adverse Effect,		
	if Unmitigated		
Biodiversity and flora	Arising from both construction and	Strategic Aim 5: Biodiversity and Green Infrastructure	Various Designated and Non-Designated Sites Policies and Objectives (BLP-01 to 07 and BLO-02 to 06) It is Council policy to protect, conserve, and seek to enhance the county's biodiversity and ecological connectivity.
and fauna	operation of	Protect and enhance Birr Town and Crinkill	It is Council policy to conserve and protect habitats and species listed in the Annexes of the EU Habitats Directive
	development and	village's natural assets of clean water, biodiversity,	(92/43/EEC) (as amended) and the Birds Directive (2009/147/EC), the Wildlife Acts 1976 (as amended) and the Flora
	associated	landscape, green infrastructure, natural heritage	Protection Orders.
	infrastructure:	and agricultural land, while maintaining ecosystem	It is Council policy to support and co-operate with statutory authorities and others in support of measures taken to
	 Loss of/damage 	services and improving resilience to climate	manage proposed or designated sites in order to achieve their conservation objectives.
	to biodiversity in	change.	It is Council policy to protect and maintain the conservation value of all existing and future Natural Heritage Areas,
	designated sites	BGIP01 Protect, conserve and enhance Birr's	proposed Natural Heritage Areas, Nature Reserves, Ramsar Sites, Wildfowl Sanctuaries and Biogenetic Reserves in the
	(including European Sites	biodiversity and natural heritage that includes wildlife (flora and fauna), habitats and landscapes	county. It is Council policy to ensure that development does not have a significant adverse impact, incapable of satisfactory
	and Wildlife	of importance to wildlife, especially along the	avoidance or mitigation, on plant, animal or bird species protected by law.
	Sites) and	Camcor and Little Brosna Rivers and the Birr Castle	It is Council policy to consult with the National Parks and Wildlife Service, and take account of any licensing
	Annexed	Demesne, which in-turn can contribute to climate	requirements, when undertaking, approving or authorising development which is likely to affect plant, animal or bird
	habitats and	action.	species protected by law.
	species, listed	BGIP02 Prohibit any development that would be	It is Council policy to support the implementation of the National Biodiversity Action Plan 2017-2021 and the Offaly
	species,	harmful to or that would result in a significant	Heritage Plan Key Actions 2017-2021 and future editions in partnership with relevant stakeholders subject to available
	ecological connectivity and	deterioration of habitats and/or disturbance of protected species within Birr and to support/co-	resources. It is Council policy to work with all state agencies to promote the development of all aspects of park management in the
	non-designated	operate with statutory authorities and others in	Slieve Bloom Mountains.
	habitats; and	support of measures taken to manage proposed or	It is an objective of the Council that no plans, programmes or projects giving rise to significant cumulative, direct,
	disturbance to	designated sites in order to achieve their	indirect or secondary impacts on European sites arising from their size or scale, land take, proximity, resource
	biodiversity and	conservation objectives.	requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction,
	flora and fauna;	BGIP03 Support the role that biodiversity and	operation, decommissioning or from any other effects shall be permitted on the basis of this Plan (either individually or
	Habitat loss,	green infrastructure plays in the Plan Area in	in combination with other plans, programmes, etc. or projects).
	fragmentation and	relation to ecosystem services along with climate change mitigation and adaptation.	It is an objective of the Council that all projects and plans arising from this Plan will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive. A plan or project will only be authorised
	deterioration,	BGIP04 Promote the protection and preservation	after the competent authority has ascertained, based on scientific evidence, Screening for Appropriate Assessment, and
	including patch	of existing hedgerows and to encourage planting	subsequent Appropriate Assessment where necessary, that:
	size and edge	of native hedgerow and tree species.	1. The plan or project will not give rise to significant adverse direct, indirect or secondary effects on the integrity
	effects; and	BGIP06 Support the following restoration and	of any European site (either individually or in combination with other plans or projects); or
	 Disturbance 	conservation works to protect and enhance water	2. The plan or project will have significant adverse effects on the integrity of any European site (that does not
	(e.g. due to	quality of the Camcor River and the Little Brosna	host a priority natural habitat type/and or a priority species) but there are no alternative solutions and the plan or
	noise and	River and the biodiversity value of riverbanks	project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social
	lighting along transport	during the Plan Period;Planting of trees and riparian plants;	or economic nature. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000; or
	corridors) and	Riparian management work;	3. The plan or project will have a significant adverse effect on the integrity of any European site (that hosts a
	displacement of	Techniques to manage rainwater or soiled water	natural habitat type and/or a priority species) but there are no alternative solutions and the plan or project must
	protected	ingress to rivers;	nevertheless be carried out for imperative reasons for overriding public interest, restricted to reasons of human health or
	species such as	 River restoration works; 	public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the
	birds and bats.	 Fish passage – e.g. modification of weirs; 	Commission, to other imperative reasons of overriding public interest. In this case, it will be a requirement to follow
		Invasive species control;	procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection
		 Silt trapping; Nature-based Sustainable Urban Drainage 	of the overall coherence of Natura 2000.
		 Nature-based Sustainable Orban Drainage Systems (SuDS) – e.g. natural flood retention 	It is an objective of the Council to ensure that the impact of development within or adjacent to national designated sites, Natural Heritage Areas, proposed Natural Heritage Areas, Ramsar Sites and Nature Reserves likely to result in significant
L	l	Systems (Subs) – e.g. natural noou retention	natural nemaye Areas, proposed natural nemaye Areas, rainsar sites and nature reserves intery to result in significant

Торіс	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
		 measures (NFRM), bio-swales, raingardens, water butts; Pond creation and biodiversity habitats; Constructed wetlands; Wild flower meadows; and Rare species conservation initiatives. BGIO01 Further develop an integrated and coherent Green Infrastructure network for the Plan Area by requiring the retention of substantial networks of green space in urban, urban fringe and adjacent countryside areas to serve the needs of communities now and in the future including the need to adapt to and mitigate climate change. BGIO02 Integrate existing green infrastructure as shown in Figure 6.3 and potential GI projects as shown in Figure 6.14 as an essential component of all new developments and to discourage development that would fragment, damage or prejudice the integrity of the green infrastructure network. BGIO03 Promote a network of pedestrian and cycle paths to enhance accessibility to the green infrastructure network, while ensuring that the design and operation of the routes responds to the cological protection needs of each site. 	adverse effects on the designated site is assessed by requiring the submission of an Ecological Impact Assessment prepared by a suitably qualified professional, which should accompany planning applications. It is an objective of the Council in accordance with Article 4(4) of the Birds Directive and Regulation 27(4) of the European Communities (Birds and Habitats) Regulations 2011-2015 to strive to avoid pollution or deterioration of bird habitats outside Special Protection Areas. It is an objective of the Council to take account of the objective and management practices proposed in any management or related plans for European Sites (SACs and SPAs) in and adjacent to the county published by the Department including the National Raised Bog Special Areas of Conservation (SACs) Management Plan 2017-2022 and any subsequent editions. Various Policies and Objectives relating to Peatlands (BLP-14 to 18 and BLO-10 and 11) It is Council policy to protect the county's designated peatland areas and landscapes, including any historical walkways through bogs and to conserve their ecological, archaeological and cultural heritage and to develop educational heritage. It is Council policy to work with adjacent local authorities and relevant stakeholders in promoting a National Park designation for the peatlands in the midlands and a 'Regional Peatway' connecting natural and cultural attractions. It is Council policy to support the provision of outdoor pursuits, walking and cycling routes through the county's peatlands and network of industrial railways linking the River Shannon Blueway, Royal Canal, Grand Canal and Barrow Blueway across the midlands as outlined in the 'Major Cycling Destination in the Midlands of Ireland –Feasibility Study 2016', which is a priority of the 'Outdoor Recreation Plan State Lands and Waters' (2017). It is Council policy to support the National Parks and Wildlife Service in carrying out an EU LIFE fund supported raised bog restoration project in restoring the following Special Areas of Conservation
		nature trail along the Camcor River running for Elmgrove Bridge to Springfield Bridge. BGIO05 In conjunction with the appropriate prescribed bodies, to investigate the feasibility of providing a Wetland Amenity Area at Syngefield and on the Little Brosna Flood Plain taking into account the environmental sensitivities of the site and Inland Fisheries Guidance document, Planning for Watercourses in the Urban Environment. BGIO06 Support the preparation of a Conservation Management Plan for the Syngefield Demesne, Woodlands and the section of the Camcor River that passes the Demesne. BGI007 Provide attractive and safe routes linking parks, open spaces and other related features such as cultural sites and heritage assets as an integral part of Green Infrastructure provision, where appropriate and feasible, including taking into account the findings of Appropriate	 Sharavogue Bog. Sharavogue Bog. It is Council policy to support collaboration between Offaly County Council, Regional Transition Team and relevant stakeholders of a partnership approach to integrated peatland management for a just transition that incorporates the management, rehabilitation and restoration / re-wetting of significant tracts of peatlands in conjunction with appropriate developed after uses. Peatlands It is an objective of the Council to require the preparation and submission of a Hydrological Report/Assessment for significant developments within and in close proximity to protected raised bogs and to take account of same in the assessment of impacts on the integrity of peatland ecosystems. It is an objective of the Council to work with relevant stakeholders on suitable peatland sites in order to demonstrate best practice in sustainable peatland conservation, management and restoration techniques to promote their heritage and educational value subject to ecological impact assessment and appropriate assessment screening. Various Policies and Objectives relating to Waterways, Lakes and Wetlands (BLP-19 to 23 and BLO-12 and 13) It is Council policy to protect the landscape associated with the River Shannon, including the Callows and views of special interest, and also to encourage the development of Shannonbridge, Banagher and Shannon Harbour as focal points. It will also be Council policy to investigate the possibility of providing a Linear Park based on the River Shannon from Banagher to Meelick, which takes account of the sensitive ecological nature of the Callows area. It is Council policy to preserve riparian buffer strips free from development by reserving a minimum of 10 metres either

Topic Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
	Assessment. BGI008 Protect the Green Belt Public Open Space Areas as shown on Figure 6.14 to preserve the separate identity of Crinkill village. BGI009 Provide opportunities for Birr residents to engage in food production through allotments, community gardens and the provision of food foraging areas in new parks and Green Infrastructure proposals where appropriate. BGI010 Support the provision of pocket parks, community gardens and allotments as outlined in Figure 6.8 BGI011 Continue to promote and support re- wilding and pollinator initiatives within the Plan Area in support of the National Pollinator Plan and ensure that the management of the Council's open spaces and parks is pollinator-friendly, provides more opportunities for biodiversity, and is carried out without the use of pesticides where possible. BGI012 Develop linked corridors of small urban 'Miyawaki' native mini woodlands, a minimum of 100 m ² in size, to capture carbon and encourage biodiversity in suitable existing built-up areas, in low grade public open space areas and other areas of zoned lands where deemed suitable and appropriate. BGI013 Encourage the provision of Biodiversity Zones/Pollination Zones in the locations outlined in Figure 6.14. BGI014 Further develop and extend the following network of pedestrian route ways in Birr and Crinkill to allow greater linkages between the Green Infrastructure assets in the area in the locations outlined in Figure 6.14. BGI015 Continue the control programs of invasive species with all relevant stakeholders and landowners to control the key invasive species. EDO-03 Develop an integrated network of greenways, heritage/tourist trails and looped walks where appropriate (including taking into account the findings of Appropriate Assessment) within the town centre and along the Camcor River and Killaun Bog. CAP-07 Maintain existing green infrastructure in Birr and encourage and facilitate, in consultation	 side of all watercourses (measured from top of bank) with the full extent of the protection determined on a case by case basis by the Council, based on site specific characteristics and sensitivities. It is Council policy to promote clear span bridging structures as the preferred option for culverts Any development proposal requiring culverting should also document stream habitat lost and provide compensatory habitat where possible. Realignment of water courses should incorportate stream enhancement measures, as outlined in Office of Public Works Environmental Guidance. The Council will consult with Inland Fisheries Ireland in relation to riparian and instream works as appropriate. It is Council policy to promote the removal of historic culverts and infilling of watercourses. It is Council policy to consider the Waterways Corridor Study 2002 and protect the recreational, educational and anenity potential of navigational and non-navigational waterways within the county, such as the Grand Canal Corridor, towpaths and adjacent wethand landscapes, taking into account more recent heritage and environmenta legislation (including the SEA Directive) and environmental policy commitments. It is an objective of the Council to maintain a riparian zone for larger and smaller river channels based on the Inland Fisheries Ireland updated guideline document, Planning for Watercourses in Instream Rehabilitation, Climate / Flood Risk and Recreational Planning. It is an objective of the Council to an investigate the feasibility of and cooperate with relevant agencies in providing a Linear Park based on the River Shannon from Banagher to Meelick, which takes account of the sensitive ecological nature of the callows area and (b) to support the development of an overall vision/strategy for the Shannon Callows in co-operation with all stakeholders to ensure that the area is appropriately managed at a landscape scale. Various Policies and Objecti

A	Potentially Significant Adverse Effect, f Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
		 with relevant stakeholders, the development of green infrastructure that recognises the synergies that can be achieved with regard to the following: Provision of open space amenities; Sustainable management of water; Protection and management of biodiversity; Protection of cultural heritage; and Protection of protected landscape sensitivities. CAP-08 Require, where the presence of invasive species is identified at the site of proposed development in Birr, to detail how it is proposed to be managed and controlled. TCP-18 Seek a survey of existing numbers of bats, swifts and swift/nests for planning applications for renovations, redevelopment or demolition of old buildings in Birr Town and Crinkill Village centres. Where bats and/or swifts are shown to be present, specific mitigation measures during and after construction shall be proposed. 	 BLO-19 (Green Infrastructure Strategy) It is an objective of the Council to require all new developments to identify, protect and enhance ecological features by making provision for local biodiversity (for example, through provision of swift boxes or towers, bat roost sites, green roots, etc.) and provide ecological links to the wider Green Infrastructure network as an essential part of the design process. BLP-32 (All Ireland Pollinator Plan) It is Council policy to support the aims and objectives of the All Ireland Pollinator Plan 2021-2025 and any subsequent editions by delivering appropriate management actions as set out in their guidance documents. Various Policies and Objectives relating to Invasive Species (BLP-34 and BLO-20 and 21) It is council policy to continue to deliver and support measures for the prevention, control and/or eradication of invasive species within the county, and to seek details of how these species will be managed and controlled where their presence is identified. It is an objective of the Council to require, as part of the planning application process, the appropriate eradication or the orthol tor ontinue to maintain mapping identifying the location of invasive species in the county in conjunctional with the National Biodiversity Data Cente. Policy and Objective relating to Light Pollution (ENVP-23 and ENVO-13) It is council policy to require that the design of lighting schemes minimises the incidence of light pollution into the surrounding environment. New schemes shall ensure that there is no unacceptable adverse impact on residential or visual amenity and biodiversity in the surrounding measures to improve the approach to street lighting an ensuring that new developments are int appropriate and in keeping with the character of the settlement. TRP-04 It is Council policy to encourage tourism related developments inside existing settlements where thes c

Торіс	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
Population and human health	 Potential adverse effects arising from flood events. Potential interactions if effects arising from environmental vectors. 	Also see measures under other environmental components including Soil, Water and Air and Climatic Factors. EDP-12 Support and promote the development of economic and enterprise development and activity in a manner which contributes to the transition to a low carbon, climate resilient and environmentally sustainable county. EDP-13 Support the development and expansion of enterprise and employment within Birr, and to co-operate with all stakeholders, land owners and relevant agencies to attract investment. EDP-14 Promote Birr as a competitive and attractive location for economic development emphasising Foreign Direct Investment. EDP-15 Support IDA Ireland in the attraction of high value added manufacturing sectors and internationally traded sectors to Birr. TCP-04 Encourage and facilitate the reuse and regeneration of derelict, vacant, backland and underutilised lands and buildings in the town centre for retail, residential and other mixed uses through legislative measures and / or by supporting the progression and delivery of projects funded by the Rural Regeneration and Development Fund and other appropriate funds. TCP-06 Ensure that growth planned for Birr town over the life of the Plan occurs in a sustainable and sequential manner, characterised by a compact, consolidated and permeable pattern of development linked by sustainable modes of transport including a robust network of pedestrian and cycle routes. TCP-15 Support the development of sustainable low-carbon climate resilient communities and encourage a climate adaptation and mitigation approach to developments which will enable regeneration. TCP-16 Incorporate Sustainable Urban Drainage Systems (SuDS) and other nature-based solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas – Best Practice Interim Guidance Document, 2022' and any subsequent editions.	Also see measures under other environmental components including Soil, Water and Air and Climatic Factors. ENVP-24 (Human Health) It is Council policy to assess, as relevant, proposals for development in terms of, inter alla, potential impact on existing adjacent developments, existing land uses and/or the surrounding landscape. Where proposed developments would be likely to have a significant adverse effect on the amenities of the area through pollution by noise, fumes, odours, dust, grit or vibration, or cause pollution of air, water and/or soil, mitigation measures shall be introduced in order to eliminate adverse environmental impacts or reduce them to an acceptable operating level. Application of this polley will take into account instances whereby activities are licensed by other bodies through other processes (such as Integrated Pollution Control Licensing or Industrial Emissions Licensing). ENVP-16 (Major Accidents Directive – Seveso III) It is Council policy, for the purposes of preventing / reducing the risk or limiting the consequences of a major accident involving dangerous substances, to have regard to the provisions of the Major Accidents Directive, and any regulations under any enactment giving effect to that Directive, and the recommendations of the Health and Safety Authority, in the control of: The siting of new establishments: and Development within the consultation distance of such establishments. ENVP-15 (Radon) It is Council policy to ensure the implementation of the specific guidance on radon prevention measures for new homes as contained within the existing Building Regulations (including any updated/superseding regulations that may be published within the directive on Sutuctory Plans, Renewable Energy and Climate Change 2017 and the Draft revised Wind Energy Designations Map from the County Wind Energy Development Guidelines 2006, the Interim Guidelines for Planning Authorities on Statutory Plans, Renewable Energy and Climate Change 2017 and the Draft revised Wind Energy Designa

Торіс	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
Soil	 Potential adverse effects on the hydrogeological and ecological function of the soil resource, including as a result of development on contaminated lands. Potential for riverbank erosion. 	 RP-03 Encourage the appropriate redevelopment of brownfield and infill sites for residential and mixed uses within the existing built-up footprint of Birr Town. RP-08 That Birr, a Self-Sustaining Growth Town, continues to grow at a sustainable level and at a commensurate scale in accordance with the Core Strategy Table in an effort to become more self-sustaining. RP-09 Reinforce the attractive rural character of Crinkill, which exists at present, by permitting appropriate and sensitively designed new development. RO-01 In line with the requirements of the National Planning Framework, ensure that at least 30% of all new housing development is delivered within the existing built-up footprint of Birr Town. CM-01 Facilitate and secure the provision of social infrastructure to support existing and new communities within the Plan area, in a manner which provides flexibility to respond to varied and changing community needs. Also see measures under other environmental components including Water. BGIP07 Protect from inappropriate development, the Crinkill Mushroom Rocks, a county geological site, which is identified by the Irish Geological Heritage Programme for Protection in County Offaly. 	Also see measures under other environmental components including Water. Chapter 11.5.3 Waste Management Offaly County Council require that all undeveloped, contaminated sites be remediated to internationally accepted standards prior to redevelopment (i.e. Brownfield development). Treatment/management of any contaminated material shall comply as appropriate with the Waste Management Act 1996 (as amended) (waste licence, waste facility permit), and the Environmental Protection Act 1992 (as amended) (Industrial Emissions licensing, in particular the First Schedule, Class 11 Waste). These measures will ensure that contaminated material will be managed in a manner that removes any risk to human health and ensures that the end use will be compatible with any risk. Various Policies and Objectives relating to Geology, Eskers and Quarries (BLP-09 to 13 and BLO-07 to 09) It is Council policy to protect from inappropriate development and maintain the character, integrity and conservation value of features or areas of geological interest as contained in the schedule dist of geological heritage sites identified in Table 4.11 Offaly Geological Sites It is Council policy to protect and conserve the landscape, natural heritage and biodiversity value of esker systems in the county as identified in the Offaly Esker Study, 2006. It is Council policy to assess the impact of proposals for quarry development on nearby eskers, with reference to their status or relative importance, for example, amenity, landscape and scientific value in the context of the overall esker system. It is Council policy to recognise the natural heritage value of disused quarries as rich habitats and to encourage landowners to preserve quarties post extraction as habitats rather than levelling or infilling the quarry area where possible subject to health and safety considerations and the protection of the relevant conservation objectives, qualifying interests and Integrity of Natura 2000 sites.

Topic Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
		It is an objective of the Council to protect county geological sites and mushroom stones identified in Table 4.11 Schedule of County Geological Sites identified by the Irish Geological Heritage Programme for Protection in County Offaly. It is an objective of the Council to increase pedestrian and cycling access to esker and geological sites in turn increasing appreciation of esker and geological heritage, where possible, subject to Article 6 of the Habitats Directive. It is an objective of the Council to consider, in consultation with the National Parks and Wildlife Service, Westmeath County Council, the Geological Survey of Ireland and others, the potential designation of the north Offaly esker landscape as a UNESCO Geopark, to promote the unique geological heritage of the area.
 Water Potential adverse effects upon the status of water bodies and entries to the WFD Register of Protected Areas (ecological and human value), arising from changes in quality, flow and/or morphology. Increase in flood risk and associated effects associated with flood events. 	Also see measures under other environmental components including Soil and Material Assets CAO-05 Co-operate with the Office of Public Works (OPW) in the delivery of the Birr Flood Relief Scheme that may be brought forward in the lifetime of this Plan. CAP-09 Incorporate Sustainable Urban Drainage Systems and other nature-based surface water drainage solutions as part of all proposed developments. CIP-07 Maintain and enhance the existing surface water drainage systems in Birr and to protect surface and ground water quality in accordance with the Water Framework Directive. CIP-08 Require that all development proposals demonstrate that appropriate Sustainable Urban Drainage Systems (SuDS) and other nature-based solutions are examined and provided. CIP-09 Manage flood risk in Birr in conjunction with the Office of Public Works and in accordance with the requirements of the Planning System and Flood Risk Management Guidelines for Planning Authorities (2009) and circular PL02/2014 (August 2014). CIO-10 To support and work in co-operation with the OPW in the implementation of the Birr Flood Relief Scheme. CIO-11 Provide a new Wetland Area adjacent to the Crinkill Pumping Station within the Council landholding to provide necessary storm water attenuation. BGI005 In conjunction with the appropriate prescribed bodies, to investigate the feasibility of providing a Wetland Amenity Area at Syngefield and on the Little Brosna Flood Plain taking into account the environmental sensitivities of the site and Inland Fisheries Guidance document, Planning for Watercourses in the Urban Environment.	Also see measures under other environmental components including Soil and Material Assets Various Policies and Objectives relating to Water Quality/Status (ENVP-01 to 08, ENVO-01 to 04, CAEP-30 and REDP-05) It is Council policy to ensure that the Water Framework Directive, the River Basin Management Plan and any subsequent Water Management Plans are fully considered throughout the planning process. It is Council policy to support the implementation of the Water Framework Directive, the River Basin Management Plan and the Local Authority Waters Programme in achieving and maintaining at least good environmental status for all water bodies in the county. Development proposals shall not have an unacceptable impact on the water environment, including surface waters, groundwater quality and quantity, river corridors and associated woodlands. It is Council policy that in assessing applications for developments, that consideration is had to the impact on the quality of surface waters having regard to targets and measures set out in the River Basin Management Plan, and any subsequent local or regional plans. It is Council policy to promote and comply with the environmental standards and objectives established for: (i) Bodies of surface water, by the European Communities (Surface Waters) Regulations 2009, made to give effect to the measures needed to achieve the environmental standards and objectives established for: (ii) Groundwater, by the European Communities (Groundwater Plan. It is Council policy to protect groundwater surces through the implementation of the Groundwater Portection Scheme and Source Protection Zones. Development proposals within these zones which have the potential to pose a risk to groundwater by the European Communities (Groundwater Plan. It is Council policy to protect groundwater surces through the implementation of the Groundwater Protection Scheme and Source Protection Zones. Development proposals within these zones which have the potential to pose a risk to groundwater will be required to dem

Topic Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
	BGIOO6 Support the preparation of a Conservation Management Plan for the Syngefield Demesne, Woodlands and the section of the Camcor River that passes the Demesne.	It is an objective of the Council to protect both ground and surface water resources; to work with Irish Water to develop and implement Drinking Water Safety Plans to protect sources of public water supply and their contributing catchment: and to work with the National Federation of Group Water Schemes in respect of Source Protection Plans for Group Water Schemes to protect these sources. It is an objective of the Council to comply with the Blue Dot Catchments Programme. It is council policy to ensure that agricultural developments are designed and constructed in a manner that will ensure that groundwater watercourses and sources of polable water are protected from the threat of pollution in line with Water Quality Regulations and the requirements of the Water Framework Directive. CAEP-67 (Sustainable urban drainage systems and Surface Water) It is Council policy to minimise and limit the extent of hard surfacing and paring and require the use of sustainable urban drainage systems (SuDs) where appropriate, for new developments or for extensions to existing developments, in order to reduce the potential impact of existing and predicted flooding risks. Various Policies and Objectives relating to Flood Risk Management (CAEP-53 to 63, CAEO-11 to 12, LUZO- 14, Section 12.6.1 Constrained Land Uses, DM Section 13.8.3 Flood Risk Masagement Guidelines for Planning Authorities (2009) and Department Circular Pl2/2014 or any updated / superseding version. It is Council policy to protect Flood Zone A and Flood Zone B from inappropriate development Management Justification test and site-specific Flood Zone in accordance with the criteria set out under with The Planning System and Flood Risk Management Guidelines for Planning Authorities 2009 (or any superseding document) and the guidance contained in Development Management Standard DMS-106. Where a development Management Justification Flood Risk Management Guidelines for Planning Authorities 2009 and Circular PL2/2014 (as Update/Laypersedd). In Flood Zone C, Gsee DMS-106

Торіс	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
			consider, as appropriate any new and/or emerging data, including, when available, any relevant information contained in the CFRAMS Flood Risk Management Plans and as recommendations of the current Strategic Flood Risk Assessment prepared as part of the County Development Plan. It is Council policy to consult with the Office of Public Works (OPW) in relation to proposed developments in the vicinity of drainage channels and rivers for which the OPW are responsible, and the Council will retain a strip of 10 metres on either side of such channel where required, to facilitate access thereto. It is council policy to consult, where necessary, with Inland Fisheries Ireland, the National Parks and Wildlife Service and other relevant agencies in the construction of flood alleviation measures in Offaly. It is Council policy to work with the OPW and other relevant Degencies to implement the recommendations of the CFRAM programme to ensure that flood risk management policies and infrastructure are progressively implemented, and to alies work with the OPW and other adevelopment and implementation or catchment-based strategies for the management of flood risk – including those relating to storage and conveyance. It is Council policy that where resources are available and subject to compliance with the Habitats and Birds Directives, the Council will contribute towards the improvement and / or restoration of the natural flood risk management functions of flood plains. It is council policy to take account of and incorporate into local planning policy and decision making, including possible future variations to the Council to ensure that flood risk management Flans (FRMPs), including planned investment measures for managing and reducing flood risk. Management Plans (FRMPs), including planned investment measures for managing and reducing flood risk. Management Plans (FRMPs), including possible future variations to the Council to ensure that flood risk management is incorporated into the preparation of Local Area Plans in accordanc

Торіс	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
			 specific and appropriately detailed Flood Risk Assessments. All development proposals within or incorporating areas at moderate or high risk of flooding will require the application of the Development Management Justification Test in accordance with the Planning System and Flood Risk Management-Guidelines for Planning Authorities (DEHLG and OPW, 2009). Any proposal that is considered acceptable in principle shall demonstrate the use of the sequential approach to inform the site layout and design of development. Proposals shall also demonstrate that mitigation and management measures can be put in place and that the development will not increase flood risk elsewhere. DMO-106 Flood Risk Assessments – for detail refer to the County Development Plan
Air and Climatic Factors	Potential conflict between development under the Plan	Strategic Aim 7: Climate Action Enhance climate adaptation and mitigation, and accelerate a transition to a low carbon, climate resilient and environmentally sustainable economy	Also refer to the overall approach to land use zoning and sustainability provided by the Plan. Various other Plan provisions including those under headings such as Peatlands, Compact Growth, Sustainable Mobility and Integrated Transport and Landuse Planning, Reasonable Alternatives & Existing Infrastructural Assets, Renewable Energy and Low Carbon District Heating.
	 and aiming to reduce carbon emissions in line with local, national and European environmental objectives. Potential conflicts between transport emissions, including those from cars, and air quality. Potential conflicts 	in Birr. EDP-30: Promote transformative projects with the support of Government funding streams for low-carbon focused projects. CAP-01 Support the transition of Birr to a competitive, low carbon, climate resilient and environmentally sustainable economy by 2050, by way of reducing greenhouse gases, increasing renewable energy, and improving energy efficiency. CAP-02 Promote and encourage positive community and/or co-operative led climate action initiatives and projects in Birr that seek to reduce carbon emissions, improve energy efficiency, enhance green infrastructure and encourage awareness on climate change issues. CAP-03 Encourage innovation and facilitate the development of pilot schemes in Birr that support	Various Policies and Objectives relating to Air Quality (ENVP-17 to 19 and ENVO-09 to 12) It is Council policy to manage air quality in accordance with relevant legislation and policy. It is Council policy to promote the preservation of best ambient air quality compatible with sustainable development in accordance with the EU ambient Air Quality and Cleaner Air for Europe (CAFE) Directive (2008/50/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards as set out in the Air Quality Standards Regulations 2011, or any updated/superseding documents. It is Council policy to require activities likely to give rise to air emissions to implement measures to control such emissions and to undertake air quality monitoring. Application of this policy will take into account instances whereby activities are licensed by other bodies through other processes (such as Integrated Pollution Control Licensing or Industrial Emissions Licensing). It is an objective of the Council to reduce harmful emissions and achieve and maintain good air quality for the county. It is an objective of the Council to actively promote measures to reduce air pollution and combat climate change including promotion of energy efficient buildings, cleaner home heating, green infrastructure, active and public transport modes, electric vehicles and innovative design solutions. It is an objective of the Council to promote sustainable design and construction to help reduce emissions from the demolition and construction of buildings. It is an objective of the Council to work with relevant agencies to support local data collection in the development of air quality monitoring.
	 between increased frequency of noise emissions and protection of sensitive receptors. Potential conflicts with climate adaptation measures including those relating to flood risk 	climate change mitigation and adaptation measures. CAP-04 Support the implementation of the Offaly County Climate Change Adaptation Strategy and promote Birr as a key driver of the transition to a low carbon economy within the south-west of the county. CAP-05 Support the National Climate Objective from the Climate Action and Low Carbon Development Act 2015 which states; "The State shall, so as to reduce the extent of further global warming, pursue and achieve, by no later than the end of the year 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy (in this	Various Policies and Objectives relating to Noise (ENVP-20 to 22) It is Council policy to promote the implementation of the Environmental Noise Directive and associated regulations through the Offaly County Council Noise Action Plan 2018-2023 and any subsequent Plan. It is Council policy to promote the pro-active management of noise where it is likely to have significant adverse impacts on health and quality of life. Planning permission will not normally be granted for new uses / development or extensions of existing uses that produce significant and unacceptable levels of noise and/or vibration at site boundaries or within adjacent noise sensitive areas, especially residential areas. It is Council policy that noise sensitive development proposals located within proximity to a noise source, such as an existing or proposed national road, should include noise attenuation measures. Various Policies and Objectives relating to Climate Change Adaptation and Mitigation (CAEP-07 to 15 and CAEO-01 and CAEO-02) It is Council policy to support and facilitate European and national objectives for climate adaptation and mitigation as detailed in the following documents, taking into account other provisions of the Plan (including those relating to land use planning, energy, sustainable mobility, flood risk management and drainage); • Climate Action Plan (2019 and any subsequent versions);

Торіс	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
	management.	Act referred to as the 'national climate objective')" (Government of Ireland, 2015). CAP-06 Support the effective and efficient use of land in Birr, prioritising compact growth through the development of brownfield/infill land in the built-up footprint of the town in preference to greenfield land. CAP-07 Maintain existing green infrastructure in Birr and encourage and facilitate, in consultation with relevant stakeholders, the development of green infrastructure that recognises the synergies that can be achieved with regard to the following: Provision of open space amenities; Sustainable management of water; Protection and management of biodiversity; Protection of cultural heritage; and Protection of protected landscape sensitivities. CAP-08 Require, where the presence of invasive species is identified at the site of proposed development in Birr, to detail how it is proposed to be managed and controlled. CAP-09 Incorporate Sustainable Urban Drainage Systems and other nature-based surface water drainage solutions as part of all proposed developments. CAP-10 Encourage development proposals that are low carbon, well adapted to the impacts of climate change, include mitigation measures and, maximise energy efficiency through renewable energy sources, water conservation, siting, layout and design. CAP-11 Promote the use of district heating systems as a decarbonising technology for the	 National Mitigation Plan 2017 (or subsequent editions): National Climate Change Adaptation Framework (2018 and any subsequent versions); Relevant provisions of any Sectoral Adaptation Plans prepared to comply with the requirements of the Climate Action and Low Carbon Development Act 2015, including those seeking to contribute towards the National Transition Objective, to pursue, and achieve, the transition to a low carbon, climate resilient and environmentally sustainable economy by the end of the year 2050; and Offaly Climate Change Adaptation Strategy. It is Council policy to support the implementation and provision of the decarbonisation projects listed in Table 3.2 of the County Development Plan. It is Council policy to support local, regional, national and international initiatives for climate adaptation and adaptation. It is Council policy to support local, regional, national and international initiatives for climate adaptation and mitigation and to limit emissions of greenhouse gases through energy efficiency and the development of renewable energy sources which make use of all natural resources, including publicly owned lands, in an environmentally acceptable manner. It is Council policy to support the National Dialogue on Climate Action in an effort to increase awareness of climate change, behavioural change and adaptation actions and in doing so provide an ongoing platform for planning climate resilience with a focus on personal responsibility at all levels. It is Council policy to support the creation of a Sustainable Development Trust, through Green Offaly, a Public Participation Network Initiative, which facilitates, creates and assists in the delivery of Green Projects and Programmes by working in partnership with all sectors of the local community. It is Council policy to support the chance
	sources and/or waste heat in ne commercial developments development does not have a ne the surrounding environme biodiversity or local amenities. CAP-12 Promote the use of storage systems and infrastruct energy efficiency and reusable	built environment powered by renewable fuel sources and/or waste heat in new residential and commercial developments where such development does not have a negative impact on the surrounding environment, landscape,	 (CAEP-21 and 22) It is Council policy to proactively encourage decarbonisation of local journeys by focusing on compact growth and reduced sprawl by targeting infill and brownfield lands in the existing built-up footprint of settlements. It is Council policy to improve walking and cycling connectivity within settlements and in particular with schools, town centres and employment areas, and to work with the National Trails Office, Coillte, the Department of Planning, Housing and Local Government, the Department of Transport, Tourism and Sport, and other relevant stakeholders, to improve on the existing level of infrastructure and facilities for walking and cycling in this regard. Policies relating to Green Infrastructure (CAEP-64) It is Council policy to maintain existing green infrastructure and encourage and facilitate, in consultation with relevant stakeholders, the development of green infrastructure that recognises the synergies that can be achieved with regard to

Topic Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
	 planning and environmental considerations. CAP-13 Support the growth of Electric Vehicles, E-Bikes, Fuel Cell Vehicles and Autonomous Vehicles through a roll-out of additional electric charging points and refuelling infrastructure in collaboration with relevant agencies and in accordance with the siting criteria set out in the National Policy Framework Alternative Fuels Infrastructure for Transport in Ireland 2017-2030, and the Electric Vehicle Charging Infrastructure Strategy 2022-2025 (and any subsequent editions). CAP-14 Support the use of smart city technologies in Birr and Crinkill to assist in energy reduction through integrating public lighting infrastructure with EV charging points and also providing real time data on street lighting energy usage, atmospheric pressure, CO2 emissions and average noise pollution levels. CAP-15 Support the implementation and provision of the decarbonisation projects listed in Table 8.1 in Birr and Crinkill during the lifetime of this Plan. CAO-01 Consider a variation of the development plan within a reasonable period of time, or to include such other mechanism, as may be appropriate, to ensure that the development plan will be consistent with the approach to climate action recommended in the revised Local Area Plan Guidelines. CAO-03 Provide LED lighting in all new lighting and retrofit of existing lighting throughout the town. CAO-04 Identify appropriate locations in conjunction with key stakeholders for the provision of battery charging infrastructure for electric vehicles in Birr. CAO-05 Co-operate with the Office of Public Works (OPW) in the delivery of the Birr Flood Relief Scheme that may be brought forward in the 	 the following: Provision of open space amenities; Sustainable management of water; Protection and management of biodiversity; Protection of protected landscape sensitivities. Policies relating to Economic Development: Climate Action (REDP-15 to 18) REDP-15 It is Council policy to support the agricultural sector to employ green technologies in the provision of its goods and services, while taking measures to accelerate the transition towards a sustainable, low carbon and circular economy. REDP-16 It is Council policy to encourage the development of environmentally sustainable practices with a low carbon footprint, particularly agriculture, to ensure that development does not impinge on the visual amenity of the open countryside and that groundwater, watercourses, wildlife habitats and areas of ecological importance are protected from the threat of pollution. REDP-16 It is Council policy to support the development of renewable energy in rural areas, where it is considered appropriate i.e. where it is demonstrated that such development would not result in significant environmental effects. Such development will be assessed on a case-by-case basis. REDP-18 It is Council policy to encourage state and private afforest Service and in line with national policy and forest Service Guidelines. In addition, it is policy to encourage the Forest Service to avoid a proliferation of new forest road entrances, particularly in Areas of High Amenity. Chapter 7: Retail and Town Centre Strategy and Regeneration (Traffic and Transport Assessment) A Traffic and Transport Assessment (TIA) must examine the traffic and transport impactive of a proposed development, incorporating any subsequent measures necessary to ensure oads and junctions and other transport informatructure in the vicinity of the development are adequate to accommodate the proposed development without causing additional delays to existing and future road b

Торіс	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
		 lifetime of this Plan. CAO-06 Seek to improve and promote looped walks along the Camcor River in conjunction with all stakeholders recognising them as important health and recreation infrastructure within the town. CAO-07 Ensure that all development within Birr allows for connectivity (pedestrian, cyclist and vehicular) to adjacent lands in accordance with the National Transport Authority's Permeability Best Practice Guide (2015), or any updated version of same. CAO-08 Provide the network of walking and cycling infrastructure in the Plan area as detailed in Figure 6.14 Potential Green Infrastructure Projects, subject to funding and resources. CIP-01 Promote enhanced connectivity for pedestrians and cyclists within Birr in order to improve access to the town centre, local schools, residential areas, recreational facilities, public transport services and other amenities. CIP-02 Improve accessibility and movement within Birr, reduce dependency on private car transport, increase permeability in the town, and encourage the use of energy efficient forms of transport through the promotion of walking, cycling and public transport. CIP-03 Make provisions for the use of electric vehicles through a significant increase in the provision of clearly and exclusively designated electric car charging points on public and private land in partnership with ESB and other relevant stakeholders and landowners. CIP-04 Maintain and protect to a high level the safety, strategic transport function, capacity, accessibility, connectivity, level of service and efficiency of the N52 and N62 National Secondary Routes and associated junctions in Birr Town in accordance with Strategic Planning and National 	
		Roads Guidelines 2012 or any subsequent edition. CIO-01 Increase modal share for pedestrians, cyclists and public transport, and decrease dependency on private cars subject to the Council securing funding under the NTA Active Travel Investment Programme and other applicable	

Торіс	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
		funding streams to develop and deliver schemes to	
		help achieve this objective. CIO-02 Make provision for cycle lanes in	
		accordance with the Birr Urban Cycle Network Map	
		by NTA when published, subject to resources and	
		funding.	
		CIO-03 Identify suitable areas in Birr Town for	
		age-friendly parking bays, in accordance with the	
		Age Friendly Strategy for Offaly 2018-2021, and	
		any future editions.	
		CIO-04 Support the delivery of the infrastructure proposed in the Local Transport Plan (LTP) subject	
		to funding being made available.	
		CIO-05 To investigate the feasibility of	
		constructing a Birr Relief Road and construction of	
		Birr By-pass and Distributor Road Network (Birr	
		LUTS), taking into account environmental	
		sensitivities as identified in the SEA Environmental	
		Report and the policies and objectives of the	
		County Development Plan relating to sustainable	
		mobility. Where feasibility is established, the Council will seek to pursue and / or facilitate the	
		relevant project, subject to other provisions in the	
		County Development Plan, including section 8.6.4	
		Corridor and Route Selection Process.	
		CIO-06 To reallocate roadspace within Birr to	
		walking, cycling and public transport. This may	
		take the form of removing traffic from streets,	
		removing lanes of traffic, narrowing carriageways,	
		traffic management measures, or removing on-	
		street parking to provide cycle tracks or widened footpaths.	
		BGIP01 Protect, conserve and enhance Birr's	
		biodiversity and natural heritage that includes	
		wildlife (flora and fauna), habitats and landscapes	
		of importance to wildlife, especially along the	
		Camcor and Little Brosna Rivers and the Birr Castle	
		Demesne, which in-turn can contribute to climate	
		action.	
		BGIP03 Support the role that biodiversity and	
		green infrastructure plays in the Plan Area in relation to ecosystem services along with climate	
		change mitigation and adaptation.	
		Networks	
		BGIO01 Further develop an integrated and	

Торіс	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
		coherent Green Infrastructure network for the Plan Area by requiring the retention of substantial networks of green space in urban, urban fringe and adjacent countryside areas to serve the needs of communities now and in the future including	
		the need to adapt to and mitigate climate change.	
Material Assets	 Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to adequately treat surface water run-off that is discharged to water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to adequately treat surface water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to capacity ensures the mitigation of potential conflicts). Failure to capacity ensures the mitigation of potential conflicts). Failure to comply with drinking water regulations and serve new development with adequate drinking water (water services infrastructure) 	Also see measures under CEMP requirement, other environmental components including Population and Human Health and various Land Use and Phasing provisions from the Plan. Strategic Aim 8: Critical Infrastructure Promote facilitate the timely provision of infrastructure and utilities that will support sustainable socioeconomic growth and protect the quality of the environment of the town in a low carbon manner. Strategic Aim 9: Planning and Infrastructural Assessment To phase new development to ensure that it occurs in a sequential and efficient manner and in tandem with the delivery of supporting physical and social infrastructure. CIP-01 Promote enhanced connectivity for pedestrians and cyclists within Birr in order to improve access to the town centre, local schools, residential areas, recreational facilities, public transport services and other amenities. CIP-02 Improve accessibility and movement within Birr, reduce dependency on private car transport, increase permeability in the town, and encourage the use of energy efficient forms of transport through the promotion of walking, cycling and public transport. CIP-03 Make provisions for the use of electric vehicles through a significant increase in the provision of clearly and exclusively designated electric car charging points on public and private land in partnership with ESB and other relevant stakeholders and landowners. CIP-04 Maintain and protect to a high level the safety, strategic transport function, capacity, accessibility, connectivity, level of service and	Also see measures under CEMP requirement, other environmental components including Population and Human Health and various Land Use and Phasing provisions from the Plan. Various Policies and Objectives relating to Water Services and Surface Water (WSP-01 to 25 and WSO-02 to 09) WSP-01 It is Council policy to ensure the efficient and sustainable use and development of water resources and water services infrastructure in order to manage and conserve water resources in a manner that supports a healthy society, economic development requirements, a cleaner environment and climate change mitigation. WSP-02 It is Council policy to liaise and co-operate with Irish Water in the implementation and delivery of the Water Services Strategic Plan' (2015, under review in 2020), the 'Irish Water Investment Plan 2020-2024' (or any amendment thereof) and other relevant investment works programmes of Irish Water Investment Plan 2020-2024' (or any amendment thereof) and other relevant investment works programmes of Irish Water, to provide infrastructure to service settlements in accordance with the Council's Core Strategy and Settlement Strategy. WSP-03 It is Council policy to work in conjunction with Irish Water to protect existing water supply and wastewater infrastructure, to maximise the potential of existing capacity and to facilitate the timely delivery of new water supply and wastewater infrastructure to facilitate future growth in accordance with the Council's Core Strategy and Settlement Strategy. WSP-04 It is Council policy to require developments to connect to public wastewater infrastructure and public water supplies, where available, including group water schemes, unless otherwise approved by the Planning Authority. WSP-05 It is Council policy to ensure that development is permitted in tandem with available water sources, the development of community connections (water and wastewater), and improvement works to septic tanks in accordance with national policy to ensure that development is permitted in tandem with availa
	infrastructure and capacity ensures the mitigation of	accessibility, connectivity, level of service and efficiency of the N52 and N62 National Secondary Routes and associated junctions in Birr Town in accordance with Strategic Planning and National	(Drinking Water) Regulations and the Drinking Water Regulations 2014 (as amended), and any future amendments. In this respect, Offaly County Council will have regard to the Environmental Protection Agency 2019 publication 'Drinking Water Report for Public Water Supplies 2018' (and any subsequent update) in the establishment and maintenance of water sources in the county, and in conjunction with Irish Water, undertake recommendations made by the EPA arising

Topic Potentially Lo Significant Adverse Effect, if Unmitigated	ocal Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
conflicts).CI• Increases in waste levels.cyc waste levels.• Potential impacts upon public assets andfur hel infrastructure.• Interactions between agricultural 	 bads Guidelines 2012 or any subsequent edition. IO-01 Increase modal share for pedestrians, clists and public transport, and decrease ependency on private cars subject to the Council ecuring funding under the NTA Active Travel westment Programme and other applicable inding streams to develop and deliver schemes to elp achieve this objective. IO-02 Make provision for cycle lanes in ecordance with the Birr Urban Cycle Network Map y NTA when published, subject to resources and inding. IO-03 Identify suitable areas in Birr Town for ge-friendly parking bays, in accordance with the ge Friendly Strategy for Offaly 2018-2021, and by future editions. IO-04 Support the delivery of the infrastructure roposed in the Local Transport Plan (LTP) subject of funding being made available. IO-05 To investigate the feasibility of onstructing a Birr Relief Road and construction of rr By-pass and Distributor Road Network (Birr JTS), taking into account environmental eport and the policies and objectives of the bounty Development Plan relating to sustainable obility. Where feasibility is established, the bounty Development Plan, including section 8.6.4 orridor and Route Selection Process. IP-06 Ensure that adequate and appropriate ater services infrastructure is provided in the secondance with the requirements of Irish Water to upgrade Birr Wastewater Treatment an. IP-07 Maintain and enhance the existing surface ater drainage systems in Birr and to protect urface and ground water quality in accordance it that appropriate Sustainable Urban rainage Systems (SuDS) and other nature-based 	from any failure to meet drinking water standards and any enlistment on the EPA's remedial Action List. WSP-10 It is Council policy to engage with Irish Water to endeavour to facilitate developments which have requirements for water by allowing potential surface and ground water resources of County Offaly and the potential water resources of the River Shannon to be utilised, where practicable and possible, subject to appropriate safeguards. WSP-11 It is Council policy to promote the conservation and sustainable use of water in existing and new development within the county and to encourage demand management measures among all water users including rain water harvesting and grey water recycling. WSP-13 It is Council policy to protect the Irish Water Eastern and Midlands Water Supply Project pipeline corridor from inappropriate development that would prejudice the delivery of the project and to refer any planning applications within the development corridor to Irish Water for comment. W3P-14 It is Council policy to co-operate and support Irish Water to eliminate untreated discharges from settlements in the short-term, while planning strategically for long-term growth in tandem with Project Ireland 2040 and in increasing compliance with the requirements of the Urban Waste Water Treatment Directive to 90% by the end of 2021, to 99% by 2027 and to 100% by 2040. WSP-15 It is Council policy to support strategic wastewater treatment infrastructure investment by Irish Water and to support Irish Water in providing and maintaining adequate and appropriate wastewater treatment infrastructure to service zoned lands and developments over the lifetime of the Plan in accordance with the Council's Core Strategy and Settlement Strategy. WSP-16 It is Council policy to laise with Irish Water to ensure the compliance of wastewater treatment systems with existing licences. EU Water Framework Directive, River Basin Management Plan, the Urban Waste Water Treatment plants to public collection networks wherever feasible, subject to conn

Торіс	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
		solutions are examined and provided. CIP-09 Manage flood risk in Birr in conjunction with the Office of Public Works and in accordance with the requirements of the Planning System and Flood Risk Management Guidelines for Planning Authorities (2009) and circular PL02/2014 (August 2014). CIO-10 To support and work in co-operation with the OPW in the implementation of the Birr Flood Relief Scheme. CIP-10 Promote and facilitate the development and renewal of energy and communications networks in Birr, while protecting the amenities of the town. CIP-11 Seek the undergrounding of all electricity, telephone and television cables within the town. CIP-12 Adequately maintain recycling facilities, as required, including in conjunction with development.	adaptation. General WSO-01 It is an objective of the Council to work closely with Irish Water to service development with significant economic development potential and to align the supply of water services to the envisaged settlement size as per the Council's Core Strategy and Settlement Strategy. The availability of water services must not be a pre-cursor to large- scale growth in inappropriate locations. Water Supply WSO-02 It is an objective of the Council to support Irish Water's National Programme of Investment to reduce leakage minimising the demand for capital investment. WSO-03 It is an objective of the Council to co-perate with Irish Water in the delivery of the Eastern and Midlands Water Supply Project and to ensure the maximum benefit from this project to County Offaly, in particular with respect to economic development potential and security of supply. WSO-04 It is an objective of the Council to engage with Irish Water to examine significant raw water sources which may be made redundant by the Water Supply Project for the Eastern and Midlands Region with a view to reserving and protecting them for future back up or windfall' type economic development opportunities where high water use is required. WSO-05 It is an objective of the Council to provide guidance and advice regarding the protection of water supply to private wells with the overall responsibility for protection remaining with the householder. WSO-06 It is an objective of the Council to support appropriate options for the extraction of energy and other resources from sewage sludge subject to appropriate environmental assessment and the planning process. WSO-07 It is an objective of the Council to support the servicing of small towns and villages through the serviced sites initiative to provide an atternative to one-off housing in the countryside, in accordance with National Policy Outcome 18b of the National Planning Framework and Regional Policy Objective 4.78 of the Eastern and Midland Regional Spatial and Economic

Торіс	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
			 shall be assessed on a case by case basis as part of the development management process. Such plans shall incorporate relevant mitigation measures contained in any accompanying Environmental Impact Assessment Report or Appropriate Assessment and in this Development Plan. CEMPs shall typically provide details of intended construction practice for the proposed development, including where applicable: Location and details of site compounds, refuse storage areas, construction site offices and staff facilities, site security fencing and hoardings, on-site staff car parking; Details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels; Containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained; such bunds shall be roofed to exclude rainwater; Disposal of construction/demolition waste and details of how it is proposed to manage excavated soil, including compliance with 2006 Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and bemolition Projects, Department of the Environment; A water and sediment management plan, providing for means to ensure that surface water runoff is controlled such that no silt or other pollutants enter local water courses or drains; Details of appropriate mitigation measures for lighting specifically designed to minimise impacts to biodiversity, including bats. DMS + 22 (Tourist Facilities) Tourist and recreation facilities, in particular accommodation, shall be generally located within towns and villages unless; A comprehensive justification of the need for the development by its nature and space requirements to be located outside towns and villages, for example, goff courses, swimming, angling, bailing/boating, pier/marina deve

Торіс	Potentially Significant Adverse Effect,	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
	if Unmitigated		
Cultural Heritage	Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.	 Strategic Aim 3: Built Heritage To protect, conserve and manage Birr's buildings, areas, structures, sites and features of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest, by promoting the understanding, enhancement and appropriate development of these assets in order to instigate a heritage-led regeneration of the town. EDP-05 Protect the distinctive Georgian and Historic character of the town in order to provide a sound basis for the development of tourism. BHP-03 Protect and enhance the urban form of Birr including the character of streetscapes, vistas and squares for example, Market Square, Emmet Street and Square, Oxmantown Mall, Townsend Street, The Green, John's Place, Compton Row, Newbridge Street, Connaught Street, O'Connell Street, Main Street, Castle Street, St. Brendan Street and Crinkill village core. BHP-04 Protect all structures in Birr that are listed in the County Offaly Record of Protected Structures that are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest in Birr. BHP-05 Encourage contemporary development within Birr where the applicant can successfully demonstrate that any proposal will not negatively detract from the special character of the existing built environment. BHP-06 Ensure that full consideration is given to the protection of archaeological heritage when undertaking, approving or authorising development in order to avoid unnecessary conflict between development and the protection of archaeological heritage. BHP-07 Have regard to the Zones of Archaeological Potential as shaded on Figures 4.3 and 4.4, and to ensure that planning applications are referred to the appropriate prescribed bodies. BHO-03 Examine the feasibility of designating Architectural Conservation Areas	Various Policies and Objectives relating to Protected Structures (BHP-01 to 11 and BHO-01 and 02) It is Council policy to ensure the protection, sympathetic and sensitive modification, alteration, extension or reuse of protected structures or parts of protected structures, and the immediate surrounds included and proposed for inclusion in the Record of Protected Structures that are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest, together with the integrity of their character and setting. It is Council policy to ensure the protection of the curtilage of protected structures or proposed protected structures which would adversely impact on the special character of the protected structure including cause loss of or damage to the special character of the protected structure. and loss of or damage to, any structures of architectural heritage value within the curtilage of the protected structures. Method statements should make reference to the Department of Culture, Heritage and the Gaettacht's Advice Series on how best to repair and maintain historic buildings. It is Council policy to favourably consider the change of use of any structure included on the Record of Protected Structures provided such a change of use does not adversely impact on its intrinsic character and is in accordance with the proper planning and sustainable development of the area. It is Council policy to retain where practicable a protected structure which has been damaged by fire, and to retain those elements of that structure uses that are compatible with the character of protected structures. It is Council policy to prohibit the demolition of any protected structure unless the Council is satisfied that exceptional circumstances exist. The demolition of any protected structure which has been damaged by fire, and to retain those elements of that structure are use that in the event of a planning application structures and his oricical interest.

Торіс	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
		plan period. CAP-07 Maintain existing green infrastructure in Birr and encourage and facilitate, in consultation with relevant stakeholders, the development of green infrastructure that recognises the synergies that can be achieved with regard to the following: • Provision of open space amenities; • Sustainable management of water; • Protection and management of biodiversity; • Protection of cultural heritage; and • Protection of protected landscape sensitivities.	 the area and that the design is appropriate in terms of scale, height, plot density, layout, materials and finishes having regard to the advice given in the Statements of Character for each area. It is an objective of the Council to investigate the designation of further Architectural Conservation Areas at appropriate locations throughout the county. Various Policies and Objectives relating to Vernacular Buildings (BHP-15 to 21 and BHO-04) It is Council policy to encourage the protection, retention, appreciation and appropriate revitalisation of the vernacular heritage of Offaly. It is Council policy to consider the guidance in "The Thatched Houses of Kildare" and "Reusing Farm Buildings, A Kildare Perspective" published by Kildare County Council in assessing planning applications in County Offaly relating to thatched cottages and traditional fam buildings. It is council policy to preserve the character and setting (for example, gates, gate piers and courtyards) of vernacular buildings where deemed appropriate by the planning authority. It is council policy to extense the repair and retention of traditional timber and/or rendered shop fronts and pub fronts, including those that may not be protected structures. It is Council policy to encourage where appropriate the covering of thatch with metal, as a measure for the protection of buildings which are unoccupied and showing signs of considerable distress. It is council policy to support proposals to refurbish vernacular structures that are in a run down or derelict condition, provided that: Appropriate traditional building materials and methods are used to carry out repairs to the historic fabric; and Appropriate traditional building materials and methods are used to carry out repairs to the historic fabric; and on ot erode the setting and design qualities of the original structure which make it attractive. It

Торіс	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including	
			 Various Policies and Objectives relating to Country Houses, Gardens and Demesnes (BHP-28 to 30) It is Council policy to encourage the protection, conservation, promotion and enhancement of Country Houses, Gardens and Demesnes in the county and support public awareness, enjoyment of and access to these sites where appropriate. It is Council policy to encourage the conservation, preservation, restoration and protection in their original setting of mausoleums and monuments: follies, grottoes; garden buildings and other structures of particular beauty or historic, environmental, architectural or industrial significance. It is Council policy to discourage development that would lead to a loss of, or cause damage to, the character, the principle components of, or the setting of Country Houses, Gardens and Demesnes (BHP-31) It is Council policy to consider the "Guidance Notes for the Appraisal of Historic Gardens, Demesnes, Estates and their Settings" published by Cork County Council 2006 in the appraisal and description of the impacts of proposed developments in County Offaly within or in close proximity to country houses and demesnes on historic designed landescapes. 	
			landscapes, demesnes and gardens. Various Provisions relating to Archaeological Heritage (BHP-33 to 40 and BHO-05) It is Council policy to support and promote the protection and appropriate management and sympathetic enhancement of the county's archaeological heritage within the Plan area, in particular by implementing the Planning and Development Act 2000 (as amended) and the National Monuments Act 1930 (as amended). It is Council policy to seek to promote awareness of and access to archaeological sites in the county where appropriate. It is council policy to consult with the National Monuments Service of the Department of Culture, Heritage and the Gaeltacht (DCHG) in relation to archaeological sites within and/or adjoining a proposed development. It is Council policy to facilitate the identification of important archaeological potential / significance) shall be subject to an archaeological heritage (including both sites and areas of archaeological potential / significance) shall be subject to an archaeological assessment. When dealing with proposals for development that would impact upon archaeological sites and/or features, there will be presumption in favour of the 'preservation in situ' of archaeological remains and settings, in accordance with Government policy. Where permission for such proposals is granted, the Planning Authority will require the developer to have the site works supervised by a licenced archaeological istes and features, where they are discovered during development works. It is Council policy to ensure that archaeological exeavation is carried out according to best practice as outlined by the National Monuments Service, Department of Culture, Heritage and the Gaeltacht, the National Museum of Ireland and to protect previously unknown archaeological sites, both known and potential in riveri	
			record) through the planning process. Various Provisions relating to Monastic Sites (BHP-41 to 44 and BHO-06) It is Council policy to retain the nominated status of the area comprising the National Monument at Clonmacnoise, enclosing eskers, Mongans Bog, Clonmacnoise callows, Fin Lough and the limestone pavement at Clorhane as the "Clonmacnoise Heritage Zone" in accordance with the recommendations of the study of the area carried out by the	

Торіс	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
			Environmental Sciences Unit of Trinity College, Dublin as shown in Figure 10.7 of this Plan. It is Council policy to investigate the potential of Durrow Demesne as a public amenity and tourism asset. It is Council policy to support and promote the protection and appropriate management of all monastic sites in the county. Mass Rocks and Holy Wells It is Council policy to preserve, protect and, where necessary, enhance mass rocks and holy wells in the County. The Council acknowledges the nomination by the Government of Ireland, of two Monastic sites, Clonmacnoise in its own right and Durrow, as a suite of potential sites, on the tentative list for inclusion to the UNESCO World Heritage sites list. It is an objective of the Council to explore the potential of further designating the Monastic Sites at Clonmacnoise and Durrow as prospective UNESCO World Heritage Sites.
Landscape	Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape.	CAP-07 Maintain existing green infrastructure in Birr and encourage and facilitate, in consultation with relevant stakeholders, the development of green infrastructure that recognises the synergies that can be achieved with regard to the following: • Provision of open space amenities; • Sustainable management of water; • Protection and management of biodiversity; • Protection of cultural heritage; and • Protection of protected landscape sensitivities.	 CAEP-38 (Wind Farms) It is Council policy that in assessing planning applications for wind farms, the Council shall: (a) have regard to the provisions of the Wind Energy Development Guidelines 2006, the Interim Guidelines for Planning Authorities on Statutory Plans, Renewable Energy and Climate Change 2017 and the Draft revised Wind Energy Guidelines 2019 which are expected to be finalised in the near future: (b) have regard to 'Areas Open for Consideration for Wind Energy Developments' in the Wind Energy Strategy: (c) the impact of the proposed wind farm development on proposed Wilderness Corridors as detailed in Objective BLO-28 of Chapter 4; (d) have regard to Development Management Standard 109 on wind farms contained in Chapter 13 of this Plan; and (e) have regard to existing and future international, European, national and regional policy, directives and legislation. REDP-19 (Extractive Industry) It is Council policy to ensure those extractions (quarries / sand and gravel pits) which would result in a reduction of the visual amenity of Areas of High Amenity, eskers, esker landscapes, protected views or damage to designated sites, habitat types or species shall not be permitted. It is Council policy that all such workings should be subjected to landscaping requirements and that worked out quarries should be rehabilitated is a use agreed with the Council which could include recreational, Biodiversity, amenity or other end-of-life uses. Planning applications for extraction shall be associal against section 28 Ministerial Guidelines. The use of these rehabilitated sites shall be limited to wastes such as soil, stone and subsoils and sites shall be authorised under the appropriate waste regulations. Where the Council considers and accepts that in cases where inert material (for example soil, stones and subsoil) cannot be recycled or otherwise sold, such materials Guidelines. The

Торіс	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
			It is Council policy to control advertising structures and hoardings in the open countryside. The Council will use its enforcement powers under the Planning and Development Act 2000 (as amended) to secure the removal of unauthorised advertising signs and hoardings including those that are affixed to trailers, wheeled vehicles etc. Landscape It is an objective of the Council to prepare a County Landscape Character Assessment in accordance with all relevant legislation and guidance documents and following the forthcoming National and Regional Landscape Character Assessment. It is an objective of the Council to have regard to the Landscape Sensitivity Areas in Tables 4.18, 4.19 and 4.20 in the consideration of planning applications. It is an objective of the council to protect skylines and ridgelines from development where such developments will create significant visual intrusion.
			 Various Provisions relating to Protection of Key Scenic Views, Key Prospects and Key Amenity Routes (BLP-43 and BLO-26) It is Council policy to require a Landscape/Visual Impact Assessment to accompany significant proposals that are likely to significantly affect Key Scenic Views and Prospects as listed in Table 4.21 and Key Amenity Routes as listed in Table 4.22. It is an objective of the Council to protect Key Scenic Views and Key Prospects contained in Table 4.21, and Key Amenity Routes as listed in Table 4.22 from inappropriate development. Various Provisions relating to Areas of High Amenity (BLP-35 to 37 and BLO-22)
			It is Council policy to protect and preserve the county's Areas of High Amenity namely the Slieve Bloom Mountains, Clonmacnoise Heritage Zone, Durrow High Cross, Abbey and surrounding area, the River Shannon, Lough Boora Discovery Park, Grand Canal, Croghan Hill, Raheenmore Bog, Pallas Lake, Clara Bog, Clara eskers, Eiscir Riada and other eskers. Notwithstanding the location of certain settlements, or parts of, for which there are settlement plans (Towns, Villages, Sráids), within the Areas of High Amenity, it is not the intention of this policy to hinder appropriate sustainable levels of development (as set out in the plans and subject to proper planning). Further, it is policy to facilitate the sustainable extension and expansion of existing visitor, tourist related or other rural enterprises within the Areas of High Amenity, where such development is appropriate and where it can be demonstrated that it gives 'added value' to the extending activity and to the immediate area which is the subject of the 'Area of High Amenity' designation. It is Council policy, to ensure that issues of scale, siting, design and overall compatibility (including particular regard to environmental sensitivities) with a site's location within an Area of High Amenity are of paramount importance when assessing any application for planning permission. The merits of each proposal will be examined on a case-by case basis. It is Council policy to support the preparation of a masterplan that conserves and protects the Clonmacnoise monastic site and will co-operate with the Office of Public Works and other stakeholders in its preparation and implementation. It is an objective of the Council to ensure that new development, whether individually or cumulatively, does not impinge in any significant way on the character, integrity and distinctiveness of or the scenic value of the Areas of High Amenity listed in Table 4.17. New development in Areas of High Amenity shall not be permitted if it; • Causes unacceptable visual harm;
			 Introduces incongruous landscape elements; and Causes the disturbance or loss of (i) landscape elements that contribute to local distinctiveness; (ii) historic elements that contribute significantly to landscape character and quality such as field or road patterns; (iii) vegetation which is a characteristic of that landscape type and (iv) the visual condition of landscape elements.

Section 3 Environmental Report and Submissions/ Observations

3.1 Introduction

This section details how both the Environmental Report and submissions and observations made to Offaly County Council on the Environmental Report and SEA process have been taken into account during the preparation of the Plan and the SEA.

3.2 SEA Scoping Notices and Submissions

As part of the scoping process for preparation of the Plan, environmental authorities³ were notified that a submission or observation in relation to the scope and level of detail of the information to be included in the Environmental Report could be made to the Council.

Submissions were made by the following environmental authorities:

- Environmental Protection Agency; and
- Department of Environment, Climate and Communications (one from the Geological Survey Ireland and one from the Environment Protection Division).

The issues raised in these submissions and how these issues have been taken into account during preparation of the Plan and the SEA are provided on Table 3.1 below. Taking into account these submissions included integrating environmental considerations into the Plan, including through the selection of Plan provisions identified on Table 2.1.

³ The following authorities were notified: Environmental Protection Agency; Department of Environment, Climate and Communications; Department of Agriculture, Food and the Marine; Department of Housing, Local Government and Heritage; Meath Council; Westmeath County Council; Roscommon County Council; Galway County Council; Tipperary County Council; Laois County Council; and Kildare County Council.

Table 3.1	Taking into a	account SEA	Scoping Sub	missions
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Ref.	Issue raised in submission	SEA Response			
1. Sub	1. Submission from the Environmental Protection Agency				
A	We acknowledge your notice, dated 12th May 2022, in relation to the Birr Local Area Plan 2023-2029 (the 'Plan'). The EPA is one of the statutory environmental authorities under the SEA Regulations. In our role as an SEA environmental authority, we focus on promoting the full and transparent integration of the findings of the Environmental Assessment into the Plan and advocating that the key environmental challenges for Ireland are addressed as relevant and appropriate to the plan. Our functions as an SEA environmental authority do not include approving or enforcing SEAs or plans.	Noted.			
В	As a priority, we focus our efforts on reviewing and commenting on key sector plans. For land use plans at county and local level, we provide a 'self-service approach' via the guidance document 'SEA of Local Authority Land Use Plans – EPA Recommendations and Resources'. This document is updated regularly and sets out our key recommendations for integrating environmental considerations into Local Authority land use Plans. We recommend that you take this guidance document into account in preparing the Plan and SEA.	The 'SEA of Local Authority Land Use Plans – EPA Recommendations and Resources' document has been considered in the preparation of the SEA Scoping Report and was kept on file for reference throughout the SEA process.			
C	In preparing the Plan, Offaly County Council should also ensure that the Plan aligns with key relevant higher-level plans and programmes and is consistent with the relevant objectives and policy commitments of the National Planning Framework and the Regional Spatial and Economic Strategy for the Eastern and Midland Region.	The SEA will seek to ensure that the Plan aligns with key relevant higher-level plans and programmes and is consistent with the relevant objectives and policy commitments of the National Planning Framework and the Regional Spatial and Economic Strategy for the Eastern and Midland Region.			
D	The EPA may provide additional comments upon receipt of the SEA Environmental Report and Draft Plan at the next stage of the SEA process.	Noted.			
E	Available Guidance & Resources Our website contains various SEA resources and guidance, including: - SEA process guidance and checklists - Inventory of spatial datasets relevant to SEA - topic specific SEA guidance (including Good practice note on Cumulative Effects Assessment (EPA, 2020), Guidance on SEA Statements and Monitoring (EPA, 2020), Integrating climatic factors into SEA (EPA, 2019), Developing and Assessing Alternatives in SEA (EPA, 2015), and Integrated Biodiversity Impact Assessment (EPA, 2012)) You can access these guidance notes and other resources at: https://www.epa.ie/our-services/monitoringassessment/assessment/strategic- environmental-assessment/sea-topic-and-sector-specific-guidance-/	These resources and guidance have been considered in the preparation of the SEA Scoping Report and was accessed, as relevant, for reference throughout the SEA process.			
F	Environmental Sensitivity Mapping (ESM) Webtool The ESM Webtool is a new decision support tool to assist SEA and planning processes in Ireland. The tool brings together over 100 datasets and allows users to explore environmental considerations within a particular area and create plan- specific environmental sensitivity maps. These maps can help planners anticipate potential land-use conflicts and help identify suitable development locations, while also protecting the environment. The ESM Webtool is available at www.enviromap.ie.	The ESM Webtool has been considered in the preparation of the SEA Scoping Report and was considered throughout the SEA process, where relevant.			
G	<i>EPA SEA GIS Search and Reporting Webtool</i> Our SEA GIS Search and Reporting Webtool is publicly available through EPA Maps at https://gis.epa.ie/EPAMaps/SEA. It allows public authorities to produce an indicative report on key aspects of the environment in a specific geographic area. It is intended to assist public authorities in SEA screening and scoping exercises.	Available online EPA resources, including mapping resources, have been considered in the preparation of the SEA Scoping Report and was considered			
Η	<i>EPA WFD Application</i> Our WFD Application provides a single point of access to water quality and catchment data from the national WFD monitoring programme. The Application is available via www.catchments.ie.	throughout the SEA and AA processes.			
I	EPA AA GeoTool Our AA GeoTool application has been developed in partnership with the NPWS. It allows users to a select a location, specify a search area and gather available information for each European Site within the area. It is also available through EPA https://gis.epa.ie/EPAMaps/AAGeoTool.				

Ref.	Issue raised in submission	SEA Response
J	State of the Environment Report – Ireland's Environment 2020 In preparing the Plan and SEA, the recommendations, key issues and challenges described within our State of the Environment Report Ireland's Environment – An Assessment 2020 (EPA, 2020) should be considered, as relevant and appropriate to the Plan. This should also be taken into account, in preparing the Plan and SEA.	The recommendations, key issues and challenges described within the current version of Ireland's Environment was considered in the preparation of the Plan and SEA.
к	Transition to a low carbon climate resilient economy and society You should ensure that the Plan aligns with national commitments on climate change mitigation and adaptation, as well as relevant sectoral, regional and local adaptation plans.	The SEA will seek to ensure tha the Plan aligns with national commitments on climate change and adaptation, as well as relevant sectoral, regional and local adaptation plans.
L	 Environmental Authorities Under the SEA Regulations, you should consult with: Environmental Protection Agency; Minister for Housing, Local Government and Heritage; Minister for Environment, Climate and Communications; and Minister for Agriculture, Food and the Marine. any adjoining planning authority whose area is contiguous to the area of a planning authority which prepared a draft plan, proposed variation or local area plan. 	Notice has been given to relevant environmenta authorities as part of the SEA scoping process.

A	Geological Survey Ireland is the national earth science agency and is a division of the Department of the Environment, Climate and Communications. We provide independent geological information and advice and gather various data for that purpose. Please see our website for data availability. We recommend using these various data sets, when conducting the EIAR, SEA, planning and scoping processes. Use of our data or maps should be attributed correctly to 'Geological Survey Ireland'. With reference to your email received on the 13 May 2022, concerning the SEA Scoping for preparation of a Birr Local Area Plan 2023-2029, Geological Survey Ireland would encourage use of and reference to our datasets. This data can add to the content and robustness of the SEA process. With this in mind please find attached a list of our publicly available datasets that may be useful to the environmental assessment and planning process. We recommend that you review this list and refer to any datasets you consider relevant to your assessment. The remainder of this letter and following sections provide more detail on some of these datasets and how they might link to some of the issues and questions raised in your document.	Noted. Relevant GSI data sets have been considered in the preparation of the SEA Scoping Report and was considered throughout the SEA process.
В	Geoheritage We are pleased to see mention of the Irish Geological Heritage Programme and the inclusion of the Crinkill Mushroom Rocks CGS in Section 3.4 'Soil' of the draft SEA Scoping Report. It is important to note that the apparent removal of at least two other stones from this site is highly detrimental since their natural position is key to any scientific measurements to determine possible former lake levels or other features. The remaining stone should be protected from any disturbance or damage. The site is on private farmland and no access to the stone should be made without permission of the landowner. If you would like to promote this site with information made available to the public at a near-by location then this would need to be done with the permission of and in consultation with the landowner and Geological Survey Ireland. We would be happy to provide technical and scientific interpretation of the site for any future outreach or promotion.	This information was considered when preparing the Draft Plan and undertaking the SEA.
С	Groundwater Geological Survey Ireland's Groundwater and Geothermal Unit, provides advice, data and maps relating to groundwater distribution, quality and use, which is especially relevant for safe and secure drinking water supplies and healthy ecosystems. Proposed developments need to consider any potential impact on specific groundwater abstractions and on groundwater resources in general. We recommend using the groundwater maps on our Map viewer which should include: wells; drinking water source protection areas; the national map suite - aquifer, groundwater vulnerability, groundwater recharge and subsoil permeability maps. For areas underlain by limestone, please refer to the karst specific data layers (karst features, tracer test database; turlough water levels (gwlevel.ie). Background information is also provided in the Groundwater Body Descriptions. Please read all disclaimers carefully when using Geological Survey Ireland data.	Impacts on groundwater were considered by the SEA. Aquifer productivity and vulnerability mapping was included in the SEA Environmental Report. The SEA will reference datasets available from GSI that may be useful to lower-tier project planning, including those relating to Aquifer Productivity, Aquifer Vulnerability, Bedrock

Ref.	Issue raised in submission	SEA Response	
	The Groundwater Data Viewer indicates several aquifers classed as a 'Regionally Important Aquifer - Karstified (diffuse)', a 'Locally important gravel aquifer' and a 'Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones' underlie the LAP. The Groundwater Vulnerability map indicates the range of groundwater vulnerabilities within the area covered is variable. We would therefore recommend use of the Groundwater Viewer to identify areas of High to Extreme Vulnerability and 'Rock at or near surface' in your assessments, as any groundwater-surface water interactions that might occur would be greatest in these areas. GWClimate is a groundwater monitoring and modelling project that aims to investigate the impact of climate change on groundwater in Ireland. This is a follow on from a previous project (GWFlood) and the data may be useful in relation to Flood Risk Assessment (FRA) and management plans. Maps and data are available on the Map viewer. We recommend use of the Groundwater Flooding Data Viewer to identify areas at potential risk of flooding within the LAP boundary. Geological Survey Ireland has completed Groundwater Protection Schemes (GWPSs) in partnership with Local Authorities, and there is now national coverage of GWPS mapping. A Groundwater Protection Scheme provides guidelines for the planning and licensing authorities in carrying out their functions, and a framework to assist in decision-making on the location, nature and control of developments and activities in order to protect groundwater. The Offaly Groundwater Protection Response overview and link to the main reports is here: https://www.gsi.ie/en- ie/publications/Pages/Offaly-Groundwater-Protection-Scheme-Reports.aspx.	Geology, Quaternary Geology, Mineral deposits, Aggregate Potential, Groundwater Resources, Geohazards, such as Landslide Events and Landslide Susceptibility Mapping, Physiographic Units Mapping, Geochemistry data and Geophysical data of soils and rocks. Mineral resources were recognised as a material asset by the SEA.	
D	<u>Geological Mapping</u> Geological Survey Ireland maintains online datasets of bedrock and subsoils geological mapping that are reliable and accessible. We would encourage you to use these data which can be found here, in your future assessments and in Section 3.4 'Soil' of the draft SEA Report.		
E	Geohazards In Section 3.4 'Soil' of the draft SEA Scoping Report, we would welcome the inclusion of our Previous Landslide Events Mapping (landslide database) and Landslide Susceptibility Mapping within the SEA Report.		
F	Natural Resources (Minerals/Aggregates) Natural Resources (Minerals/Aggregates) Geological Survey Ireland is of the view that the sustainable development of our natural resources should be an integral part of all development plans from a national to regional to local level to ensure that the materials required for our society are available when required. Geological Survey Ireland highlights the consideration of mineral resources and potential resources as a material asset which should be explicitly recognised within the environmental assessment process. Geological Survey Ireland provides data, maps, interpretations and advice on matters related to minerals, their use and their development in our Minerals section of the website. The Active Quarries, Mineral Localities and the Aggregate Potential maps are available on our Map Viewer. We would recommend use of the Aggregate Potential Mapping viewer to identify areas of High to Very High source aggregate potential within the area. In keeping with a sustainable approach we would recommend use of our data and mapping viewers to identify and ensure that natural resources used in any developments are sustainably sourced from properly recognised and licensed facilities, and that consideration of future resource sterilization is considered.		
G	Geochemistry of soils, surface waters and sediments Geological Survey Ireland provides baseline geochemistry data for Ireland as part of the Tellus programme. Baseline geochemistry data can be used to assess the chemical status of soil and water at a regional scale and to support the assessment of existing or potential impacts of human activity on environmental chemical quality. Tellus is a national-scale mapping programme which provides multi-element data for shallow soil, stream sediment and stream water in Ireland. At present, mapping consists of the border, western and midland regions. Data is available at https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx. This page also hosts Geochemical Mapping of Agricultural and Grazing Land Soil of Europe (GEMAS) and lithogeochemistry (rock geochemistry) from southeast Ireland datasets. Geological Survey Ireland and partners are undertaking applied geochemistry projects to provide data for agriculture (Terra Soil), waste soil characterisation (Geochemically Appropriate Levels for Soil Recovery Facilities) and mineral exploration (Mineral Prospectivity Mapping). We recommend these datasets for inclusion in Section 3.4 'Soil' of the draft SEA Scoping Report.		

3. Submission from the Department of the Environment, Climate and Communications (from the Environment Protection Division)

L			
	Α	In respect of waste in the within documentation, we would be obliged if the Local	Noted. The Draft Plan was
		Authority would consult directly with their respective Regional Waste Management	placed on public display and
		Planning Office regarding development of the final plans.	submissions were invited. Any
			submissions made on the Draft
			Plan and associated
			environmental assessments
			were taken into account before
			the Plan was finalised.

3.3 Submissions on the Environmental Report for the Draft Plan

Various submissions were made on the Draft Plan, Proposed Material Alterations and/or associated environmental assessment documents while these documents were on public display.

Updates made on foot of submissions include:

- Insert the following text as a footnote into Table 10.1 "Indicators, Targets, Sources and Remedial Action" of the SEA Environmental Report: "Indicators are linked to and should be considered alongside the environmental effects outlined in Table 8.3 and proposed mitigation measures outlined in Table 9.1."
- Insert the following text as a footnote into Table 10.1 "Indicators, Targets, Sources and Remedial Action" of the SEA Environmental Report: "Including confirmation with development management that the following impacts have been considered and including use of monitoring data, where available: habitat loss; disturbance (e.g. due to noise and lighting along transport corridors, such as along the Camcor River)' and 'displacement of protected species such as birds and bats."
- Insert the following text into Section 10 of the SEA Environmental Report: Monitoring frequencies of indicators tend to change although where they are consistent frequencies are identified.
- In Section 10 of the SEA Environmental Report, replace "Department of Culture, Heritage and the Gaeltacht National Monitoring Report for the Birds Directive under Article 12 (every 3 years)." with "Department of Culture, Heritage and the Gaeltacht National Monitoring Report for the Birds Directive under Article 12 (every 6 years)."
- Insert the following text into Section 10 of the SEA Environmental Report: "The methodology for monitoring set out below will be undertaken by the Council. Where monitoring beyond existing sources is to be undertaken, it is recommended that industry standard methods are used where they exist and where appropriate."
- Insert the following text into a new Section 7.4 "Selected Alternatives" in the SEA Environmental Report: "Selected alternatives for the Plan from each of the four tiers of alternatives that emerged from the planning/SEA process are indicated above. These alternatives have been adopted by the Members having regard to both: 1. The environmental effects which were identified by the SEA and are detailed above; and 2. Planning - including social and economic - effects that also were considered by the Members."

- Insert additional text after first paragraph of as follows: "Flood Risk Assessments shall apply the precautionary approach recommended in the Guidelines and shall be informed by the advice on the expected impacts of climate change and the allowances to be provided for future flood risk management provided in the OPW's (2019) Flood Risk Management Climate Change Sectoral Adaptation Plan. New developments will be required to ensure that access is preserved for the maintenance of the Drainage District. Applications for development on land identified as benefiting land may be prone to flooding, and as such site-specific flood risk assessments may be required in these areas. Development Management Standard 106 from Chapter 13 Development Management Standards of the Offaly County Development Plan 2021-2027 shall apply to proposals located on lands designated Constrained Land Use in the Local Plan Area. All flood zones are subject to FRA of flood hazards from other sources, which should assess all potential sources of flooding that may affect the site - from rivers, streams, surface water run-off, sewers, groundwater, reservoirs, canals and other artificial sources or any combination of these."
- Insert the following text into Section 2.4 of the SFRA: "The PFRA indicative flood maps have now been superseded by the recently published national indicative fluvial flood mapping. There is no national indicative fluvial flood mapping available within or surrounding the Plan area."
- In Section 2.4 of the SFRA, replace "Flood event records for December 2015 to January 2016 for floods in Banagher, Pollagh, Shannonbridge and Shannon Harbour have been taken into account by the assessment and are available on the GSI's Groundwater Flooding Data Viewer" with "Probabilistic and historic groundwater flood maps available on the GSI's Groundwater Flooding Data Viewer have been prepared by Geological Survey Ireland through the 2016-2019 GWFlood Project. The Groundwater Flood Probability Maps show the probabilistic flood extent of groundwater flooding in limestone regions and are focused primarily (but not entirely) on flooding at seasonally flooded wetlands known as turloughs. The Historic Groundwater Flood Map shows the observed peak flood extents caused by groundwater in Ireland and are largely based on the winter 2015 / 2016 flood event, which was the largest flood on record in many areas."
- Insert the following text into Section 2.4 of the SFRA: "Pluvial flood risk is likely to be present in local areas, however; it is not taken into account in the delineation of flood zones. Furthermore, PFRA indicative pluvial maps (2012) are not considered to be reliable for the purposes of zoning or decision-making - these maps should not be used to assess pluvial flooding."
- Insert the following text into Section 3.4 of the SFRA: "Flood Risk Assessments shall apply the precautionary approach recommended in the Guidelines and shall be informed by the advice on the expected impacts of climate change and

the allowances to be provided for future flood risk management provided in the OPW's (2019) Flood Risk Management Climate Change Sectoral Adaptation Plan."

- Insert the following text under 'Drainage Districts' in Table 2 of the SFRA: "There is a Drainage District to the south of Birr Town, which is mapped in Appendix II."
- Insert the following text under Section 4 'Flood and Drainage Provisions' of the SFRA: "New developments will be required to ensure that access is preserved for the maintenance of the Drainage District. Applications for development on land identified as benefiting land may be prone to flooding, and as such site-specific flood risk assessments may be required in these areas."
- Remove "Areas vulnerable to ponding are indicated on the OPW's PFRA Pluvial mapping." From Section 3.5 of the SFRA and insert text including: "It is likely that some or all of the following SuDS techniques will be applicable to key development sites within Birr, including to manage surface water run-off:
 - Rainwater harvesting
 - Green roofs
 - Infiltration systems
 - Proprietary treatment systems
 - Filter strips
 - Filter drains
 - Swales
 - Bioretention systems
 - Trees
 - Pervious pavements
 - Attenuation storage tanks
 - Detention basins
 - Ponds and wetlands

Land use zonings objectives at potential future development sites within Birr (including the two opportunity sites, Mart Site and Rectory Lands⁴) are already in force through the Offaly County Development Plan 2021-2027 and are reproduced in the LAP.

Because of the infinite range of land use types and associated developments and designs that could occur on sites within the Plan area under this type of Plan⁵, the guidance from this SFRA is to consider the full range of SUDs available, taking into account the recommendations and information provided above and below. On key development/opportunity sites integrated and area-based provision of SuDS and green infrastructure may be appropriate in order to avoid reliance on individual site by site solutions.

Each zoning objective allows for a range of possible uses and as the County Development Plan allows for a range of scales, heights, densities configurations/layouts and designs. The application of different SuDS techniques will be dependent on a combination of the site's characteristics and the development (when known) being considered.

Some sites, such as those for which guidance is provided for below, will pose particular challenges for SuDS. The best practice manuals cited at the end of this sub-section should be considered in determining solutions at these and other development sites.

At sites with high groundwater levels:

- Infiltration techniques may be particularly challenging and shallow infiltration basins or permeable pavements, may be most appropriate.
- Storage and conveyance systems need to be kept above maximum groundwater levels and membranes of appropriate robustness should be used to line any tanks
- Locating storage tanks or lined subbase systems below the maximum likely groundwater level can cause result in flotation and structural risks

At sites that are steeply sloping:

- Effective utilisation of SuDS storage capacity should be considered, which can benefit from aligning with contours of roads and other structures, where these sites are terraced. Terraced car-parking areas can allow for storage of water through pervious pavements. Basins on terraces can provide open space. The runoff catchment on these sites can also be divided into smaller sub catchments.
- Velocities in swales and basins due to the steep slope can be managed by using check dams in swales or in storage layers, such as below permeable pavements.
- The possibility of infiltrating water resurfacing downslope or to increase pressure on downslope structures, such as walls, causing them to fail should be considered.

At sites that are very flat:

- On very flat sites, it is often not possible to construct piped drainage systems with sufficient falls to achieve minimum self-cleansing velocities. The solution can involve the use of shallow SuDS components such as swales, pervious pavements or highcapacity linear drainage channels, often dividing the site into small subcatchments and providing local combined storage and conveyance components.
- A slight fall on any subgrade exposed to water is preferred in order to avoid ponding of water and reduction in strength in the soil due to waterlogging. If this is not possible then reduction in strength should be taken into account in the structural design of tanks or pervious pavements.
- Pumping should be a last resort and only allowable in situations where guaranteed maintenance of the pumps can be ensured.

At sites that include areas of floodplain:

 Notwithstanding that all storage volume should normally be provided

⁴ Further to the opportunity sites, key development has the potential to occur anywhere else within the Plan area.

⁵ Refer to Plan "Table 11.1 Land Use Zoning Matrix", for example, for the wide range of land uses possible at sites zoned with single land use zoning objectives.

within the development footprint, outside of the floodplain, SuDs on floodplains can be effective in managing routine rainfall/treatment for frequent events.

- SuDs should be selected and designed taking account of the likely high groundwater table and vulnerability to erosion during periods of high flows/water levels and SuDS should not reduce floodplain storage or conveyance.
- Conveyance routes should limit grading and the creation of surface features that could either reduce floodplain capacity or be washed out in a flood.
- Surface discharge from SuDS should be dispersed with point discharges minimised or eliminated.
- All SuDS within or crossing a floodplain should take full consideration of the likely influence of river water levels on the design performance. Combined probability assessments may be required.
- Siltation and subsequent clearance after a flood event has subsided should also be taken into account in the design.

....Pluvial flood risk is likely to be present in local areas, however; it is not taken into account in the delineation of flood zones. Furthermore, PFRA indicative pluvial maps (2012) are not considered to be reliable for the purposes of zoning or decision-making - these maps should not be used to assess pluvial flooding."

 Insert the following text into Section 3 of the SFRA: "All flood zones are subject to FRA of flood hazards from other sources, which should assess all potential sources of flooding that may affect the site – from rivers, streams, surface water run-off, sewers, groundwater, reservoirs, canals and other artificial sources or any combination of these."

For further information on how submissions were considered, refer to the Chief Executive's Report on submissions received on the Draft Plan and associated documents and the Chief Executive's Report on submissions received on the Proposed Material Alterations and associated documentation – both available at https://www.offalycoco.ie/.

All parts of the Plan-preparation process were informed by the SEA, AA and SFRA processes this includes the preparation of the Draft Plan, Proposed Material Alterations and Further Modifications. The mitigation integrated into the final, adopted Plan includes that identified at Table 2.1 of this report.

3.4 SEA documents including SEA Environmental Report

The Draft Plan and accompanying documents (including SEA Environmental Report and AA and SFRA documents) were placed on public display, having integrated various recommendations arising from the SEA, AA processes. and SFRA Responses to submissions made during the public display of the Draft Plan and associated SEA, AA and SFRA documents were integrated into a Chief Executive's Report and considered by Offaly County Council.

A number of material alterations were proposed after public display of the Draft Plan. The Proposed Material Alterations were subject to Screening for SEA and AA. Responses to submissions made during the public display of the Proposed Material Alterations and associated SEA, AA and SFRA documents were integrated into a Chief Executive's Report and considered by Offaly County Council. Further modifications were considered by the SEA, AA and SFRA processes.

On adoption of the Plan, the Environmental Report that had been placed on public display alongside the Draft Plan was updated to become a final Environmental Report that is consistent with the adopted Plan, taking into account all changes that were made to the original Draft Plan that was placed on public display.

Section 4 Summary of Alternatives considered

4.1 Introduction

The SEA Directive requires that reasonable alternatives (taking into account the objectives and the geographical scope of the plan or programme) are identified, described and evaluated for their likely significant effects on the environment. Summaries of the alternatives for the Plan and their assessment are provided below.

4.2 Limitations in Available Alternatives

The Plan is required to be prepared by the existing, already in force, Offaly County Development Plan 2021-2027 and the Planning and Development Act 2000 (as amended), which specifies various types of objectives that must be provided for by the Plan. The alternatives available for the Plan are significantly limited by the provisions of higher-level planning objectives, including those of the National Planning Framework, the Eastern and Midland Regional Spatial and Economic Strategy and the County Plan. These documents set out various requirements for the content of the Plan including on topics such as land use zoning and the sustainable development of settlements.

4.3 Tier 1: Alternatives Already Considered

Significant alternatives in relation to land use zoning have already been considered by the Offaly County Development Plan 2021-2027 preparation process and associated SEA. The Council selected the alternatives for Birr that were least likely to cause adverse environmental impacts and most likely to contribute towards sustainable development and environmental protection and management. A "More Compact" alternative was selected for new residential zoning (as opposed to a "Less Compact" alternative).

By not consolidating land use zoning and including unnecessary land use zoning, the "less compact" form of development alternative would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the settlement and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects. By consolidating land use zoning and reducing unnecessary land use zoning, the "more compact" would provide for a more compact form of development that would help to maximise benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl of the settlement, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to maximise benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl of the settlement, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components.

Furthermore, an alternative providing for a Green belt between Crinkill Village and Birr Town, Alternative A, (as opposed to non-provision of same, Alternative B) was selected. A green belt between Crinkill would facilitate the protection of the character of Crinkill village mature trees (some of which are the subject of Tree Preservation Orders), non-designated biodiversity, an Esker between Crinkill and Birr Town which has been previously identified as an Area of High Amenity and the context of various structures of architectural value. The absence of a greenbelt would facilitate sprawl from the south of Birr town, and associated effects, and impacts upon the aforementioned sensitivities.

The Local Area Plan is consistent with and supports these selected alternatives for Birr.

4.4 Tier 2: Alternatives for Serviced/Serviceable Land and Infrastructure Assessment

Alternative A: A Plan prepared using a Serviced/Serviceable Land and Infrastructure Assessment approach

The serviced/serviceable land and infrastructure assessment approach under this alternative would allow for water supply, waste water, compact growth, public transport and coordinated development considerations to be integrated into the Plan to the highest degree. This approach would benefit the protection of various environmental components. Although potentially adverse effects associated with land use development would exist, they would be mitigated to a significant degree.

Alternative B: A Plan prepared not using a Serviced/Serviceable Land and Infrastructure Assessment approach

By not following a serviced/serviceable land and infrastructure assessment approach, this alternative would not allow for water supply, waste water, compact growth, public transport and co-ordinated development considerations to be integrated into the Plan to the highest degree. An opportunity to mitigate potentially adverse effects arising from land use development to a significant degree would have been missed.

Selected Alternative: Alternative A

4.5 Tier 3: Alternatives for Transport

Tier 3 (i) How to provide cycling and walking capacity in Birr

The provision of new additional cycling and walking capacity exclusively along existing roads infrastructure (Alternative A) would be likely to reduce potential for meeting important objectives relating to emissions/energy objectives. Using exclusively existing infrastructure would reduce related environmental conflicts (e.g. with respect to water quality, biodiversity) as well as operational conflicts (e.g. with respect to ecological connectivity).

The provision of new additional cycling and walking capacity exclusively along new walking and cycling routes (Alternative B) would be likely to reduce potential for meeting important objectives relating to emissions/energy objectives. Using exclusively new infrastructure would increase potential construction related environmental conflicts (e.g. with respect to water quality, biodiversity) as well as operational conflicts (e.g. with respect to ecological connectivity).

The provision of new additional cycling and walking capacity across a mixture of along existing roads infrastructure and on new walking and cycling routes (Alternative C) would be likely to provide the greatest potential for meeting important objectives relating to emissions/energy objectives. Using a mixture of new and existing infrastructure would provide a moderate level of potential construction related environmental conflicts (e.g. with respect to water quality, biodiversity) as well as operational conflicts (e.g. with respect to ecological connectivity). Where conflicts arising from the development of new infrastructure would be greatest, existing infrastructure could be examined to see if it could be upgraded to provide additional capacity.

Selected Alternative: Alternative C

Tier 3 (ii) How to provide cycling and walking capacity along river

The provision of new cycling and walking infrastructure along the river, with all additional environmental mitigation left to be defined until project level (Alternative A) would offer the least certainty for environmental protection and management and would be more likely to result in important individual projects (relating to sustainable mobility and emissions objectives) not getting permission.

Specifying environmental constraints (including those related to habitats and potential impacts such as disturbance from lighting – e.g. minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques) at Plan level (Alternative B) would offer the most certainty for environmental protection and management and would be more likely to result in important individual projects (relating to sustainable mobility and emissions/energy objectives) receiving permission.

Selected Alternative: Alternative B

Tier 3 (ii) Where to provide cycling hubs/parks

The provision of new cycling hubs/parks at optimum locations as identified by the Local Transport Plan, with all additional environmental mitigation left to be defined until project level (Alternative A) would offer the least certainty for environmental protection and management and would be more likely to result in important individual projects (relating to sustainable mobility and emissions/energy objectives) not getting permission.

Specifying environmental constraints (including those related to habitats and potential impacts such as disturbance from lighting – e.g. minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques) at Plan level (Alternative B) would offer the most certainty for environmental protection and management and would be more likely to result in important individual projects (relating to sustainable mobility and emissions objectives) receiving permission.

Selected Alternative: Alternative B

4.6 Tier 4: Alternatives for Wetland

Tier 4 considers facilitating the potential development of a Wetland to the West of the Town. Alternative A would extend the Plan boundary contained in the County Development Plan and zone for the development of the wetland while Alternative B would not extend the Plan boundary contained in the County Development Plan and zone for the development of the wetland.

There is considerable potential to develop wetlands near the rivers that flow through the Plan Area to provide extra water storage in the countryside, habitat for wildlife and help reduce flood risk. Wetlands have been shown to be effective at removing pollutants from water and can double up as nature reserves as they attract a range of wildlife species. In addition, constructed wetlands can be used in the treatment of polluted water which otherwise may contaminate a local watercourse. They can be used where water treatment has not been fully effective, for a variety of reasons, (e.g., where tertiary treatment is not available) and can 'polish' the water by removing contaminants. Small ponds can also be crucial habitats for a range of wildlife from dragonflies and water hens to frogs and newts. These in turn, support other species of wildlife such as grey heron, otters and bats. The construction of a wetland would present potential environmental conflicts during construction that would not otherwise exist. These conflicts could be mitigated by normal planning processes.

Selected Alternative: Alternative A

4.7 Reasons for choosing the alternatives for the Plan in the light of the other reasonable alternatives

Selected alternatives for the Plan from each of the four tiers of alternatives that emerged from the planning/SEA process are indicated above.

These alternatives have been adopted by the Members having regard to both:

- 1. The environmental effects which were identified by the SEA and are summarised above; and
- 2. Planning including social and economic effects that also were considered by the Members.

Section 5 Monitoring Measures

5.1 Introduction

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. This section details the measures which will be used in order to monitor the likely significant effects of implementing the Plan.

Monitoring can both demonstrate the positive effects facilitated by the Plan and can enable, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action.

The occurrence of significant adverse environmental effects not predicted and mitigated by this assessment, which are directly attributable to the implementation of the Plan, would necessitate consideration of these effects in the context of the Plan and potential remediation action(s) and/or review of part(s) of the Plan.

5.2 Indicators and Targets

Monitoring is based around indicators which allow quantitative measures of trends and progress over time relating to the Strategic Environmental Objectives that were used in the evaluation. Each indicator to be monitored is accompanied by the target(s) which were identified with regard to the relevant strategic actions. Given the position of the Local Area Plan in the land use planning hierarchy beneath the Offaly County Development Plan 2021-2027, the measures identified in that County Development Plan SEA have been used as they are or having been slightly modified in most instances. This consistency across the hierarchy of land use plans will improve the efficiency and effectiveness of future monitoring.

Table 5.1 shows the indicators and targets which have been selected for monitoring the likely significant environmental effects of implementing the Plan, if unmitigated.

Monitoring is an ongoing process and the programme allows for flexibility and the further refinement of indicators and targets. The Monitoring Programme may be updated to

deal with specific environmental issues – including unforeseen effects – as they arise.

5.3 Sources

The Plan forms part of the wider land use planning framework comprising a hierarchy of policies, plans, programmes, etc. This wider framework, including the National Planning Framework, the Eastern and Midland RSES and the Offaly County Development Plan is subject to its own SEA (and associated monitoring) requirements. Individual projects will be subject to their own monitoring requirements as relevant.

In implementing the Monitoring Programme, the Council will take into account this hierarchy of planning and environmental monitoring.

Sources for indicators may include existing (including monitoring databases those maintained by planning authorities and national/regional government departments and agencies) and the output of lower-tier assessment environmental and decision making (including a review of project approvals granted and associated documents and the output of any EIA monitoring programmes).

Internal monitoring of the environmental effects of grants of permission in the Council would provide monitoring of certain indicators on a *grant of permission*⁶ basis. Where significant adverse effects as a result of the development to be permitted are identified, such effects could be identified, recorded and used to inform monitoring evaluation.

⁶ The likely significant effects of development proposals on environmental sensitivities are further determined during the development management process. Documenting any identified effects as a result of a development to be permitted can help to fulfill monitoring requirements.

5.4 Reporting

A stand-alone Monitoring Report on the significant environmental effects of implementing the Plan will be prepared in advance of the beginning of the review of the Plan. Monitoring frequencies of indicators tend to change although where they are consistent frequencies are identified. This report should address the indicators set out on Table 5.1.

Monitoring frequencies of indicators tend to change although where they are consistent frequencies are identified.

The methodology for monitoring set out below will be undertaken by the Council. Where monitoring beyond existing sources is to be undertaken, it is recommended that industry standard methods are used where they exist and where appropriate.

Interim reporting may be undertaken as part of reporting on the County Development Plan and other Local Area Plans.

The Council is responsible for the ongoing review of indicators and targets, collating existing relevant monitored data, the preparation of monitoring evaluation report(s), the publication of these reports and, if necessary, the carrying out of remedial action.

Environmental	SEO	Indicators	Targets	Sources	Remedial Action
Component	Code	malcators	Turgets		Remeatal Action
Biodiversity, Flora and Fauna	BFF	 Condition of European sites Number of spatial plans that have included ecosystem services content, mapping and policy to protect ecosystem services when their relevant plans are either revised or drafted SEA and AA as relevant for new Council policies, plans, programmes etc. Status of water quality in the County's water bodies Compliance of planning permissions with Plan measures providing for the protection of Biodiversity and flora and fauna – see County Development Plan Chapter 4 "Biodiversity and Green Infrastructure" 	 Require all local level land use plans to include ecosystem services and green/blue infrastructure provisions in their land use plans and as a minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species Implement and review, as relevant, the Biodiversity Plan for Offaly as incorporated into the Offaly Heritage Plan 2017-21 For planning permission to be only granted when applications demonstrate that they comply with all Plan measures providing for the protection of biodiversity and flora and fauna – see County Development Plan Chapter 4 "Biodiversity and Landscape" and Local Area Plan Chapter 6 "Biodiversity and Green Infrastructure" 	 Department of Housing, Local Government and Heritage report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years). Department of Housing, Local Government and Heritage National Monitoring Report for the Birds Directive under Article 12 (every 6 years) Internal monitoring of preparation of local land use plans Internal monitoring of likely significant environmental effects of grants of permission (grant by grant)⁸ Consultations with the NPWS (at monitoring evaluation - see Section 5.4) 	 Where condition of European sites is found to be deteriorating this will be investigated with the Regional Assembly and the DHLGH to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance. Where water bodies are failing to meet at least good status this will be investigated with the DHLGH Water Section, the Regional Assembly, the EPA Catchment Unit and, as relevant, Irish Water to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance.
Population and Human Health	РНН	 Implementation of Plan measures relating to the promotion of economic growth as provided for by County Development Plan Chapter 5 "Economic Development Strategy" and Local Area Plan Chapter 2 "Economic Development Strategy" Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures Number of spatial plans that include specific green infrastructure mapping 	 For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to the promotion of economic growth as provided for by County Development Plan Chapter 5 "Economic Development Strategy" and Local Area Plan Chapter 2 "Economic Development Strategy" No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures. Implementation of Green Infrastructure 	 Internal review of progress on implementing Plan objectives Consultations with the Health Service Executive and EPA CSO data Internal monitoring of preparation of local land use plans 	 Where planning applications in key growth towns are rejected due to insufficient capacity in the waste water treatment plant or failure of the waste water treatment plant to meet Emission Limit Values, the Council will contribute towards a response with the Regional Assembly, EPA and Irish Water to achieve the necessary capacity. Where proportion of population shows increase in private car use above CSO 2016 figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.
Soil (and Land)	S	 Proportion of population growth occurring on infill and brownfield lands compared to greenfield Volume of contaminated material generated from brownfield and infill Number of AA determinations and 	 Maintain built surface cover nationally to below the EU average of 4% as per the NPF. Achieve the 40% target for growth on infill as per the NPF. 	 Environmental Protection Agency (EPA), Geoportal Internal monitoring of likely significant environmental effects of grants of permission (grant by grant) 	 Where the proportion of growth on infill and brownfield sites is not keeping pace with the targets set in the NPF and the RSES, the Council will liaise with the Regional Assembly to establish reasons and coordinate actions to address

 ⁷ Indicators are linked to and should be considered alongside the environmental effects outlined in Table 8.3 and proposed mitigation measures outlined in Table 9.1.
 ⁸ Including confirmation with development management that the following impacts have been considered and including use of monitoring data, where available: habitat loss; disturbance (e.g. due to noise and lighting along transport corridors, such as along the Camcor River)' and 'displacement of protected species such as birds and bats.

Environmental	SEO	Indicators	Targets	Sources	Remedial Action
Component	Code	environmental assessments undertaken to support applications for brownfield and infill development prior to planning permission			constraints to doing so.
Water	W	 Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD Number of incompatible developments permitted within flood risk areas 	 Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' Implementation of the objectives of the second cycle of the River Basin Management Plan (and subsequent iterations as relevant) Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk 	 EPA Monitoring Programme for WFD compliance Internal monitoring of likely significant environmental effects of grants of permission (grant by grant) 	 Where water bodies are failing to meet at least good status this will be investigated with the DHLGH Water Section, the EPA Catchment Unit, the Regional Assembly and, as relevant, Irish Water to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance. Where planning applications in key growth towns are rejected due to insufficient capacity in the Waste water treatment Plant or failure of the plant to meet Emission Limit Values, the Eastern and Midland Regional Assembly will coordinate a response between the relevant local authority, EPA and Irish Water to achieve the necessary capacity. The Council will engage, as relevant, with the Eastern and Midland Regional Assembly and the OPW with respect to planning applications for development in areas of elevated flood risk.
Material Assets	MA	 Programmed delivery of Irish Water infrastructure for all key growth towns in line with Irish Water Investment Plan and prioritisation programme to ensure sustainable growth can be accommodated Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan Proportion of population within who report regular cycling / walking to school and work above 2016 CSO figures 	 To map brownfield and infill land parcels across the County. All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan Where septic tanks are proposed, for planning permission to be only granted when applications demonstrate that the outfall from the septic tank will not – incombination with other septic tanks-contribute towards any surface or ground water body not meeting the objective of good status under the Water Framework Directive Increased budget spends on water and waste water infrastructure By 2020 all citizens will have access to speeds of 30Mbps, and that 50% of citizens will be subscribing to speeds of 100Mbps 	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant) CSO data Consultations with Irish Water (at monitoring evaluation - see Section 5.4) Department of Housing, Planning and Local Government in conjunction with Local Authorities Department of Communications, Climate Action and Environment Department of Public Expenditure and Reform 	 Where planning applications in key growth towns are rejected due to insufficient capacity in the waste water treatment plant or failure of the waste water treatment plant to meet Emission Limit Values, the Council will coordinate a response between the Regional Assembly, EPA and Irish Water to achieve the necessary capacity. Where proportion of population shows increase in private car use above CSO 2016 figures, the Council will coordinate with the Regional Assembly, DHLGH and NTA to develop a tailored response.

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
Air	A	 Proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels of 74% NO_x, SO_x, PM10 and PM2.5 as part of Ambient Air Quality Monitoring 	 Decrease in proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels. Improvement in Air Quality trends, particularly in relation to transport related emissions of NO_x and particulate matter 	 CSO data Data from the National Travel Survey EPA Air Quality Monitoring Consultations with Department of Transport Tourism and Sport, Transport Trends and Department of Communication Climate Action and Environment (at monitoring evaluation - see Section 5.4) 	 Where proportion of population shows increase in private car use above CSO 2016 figures, Council will coordinate with the Regional Assembly, DHLGH, DECC and NTA to develop a tailored response. See also entry under Population and human health above
Climatic Factors	C	 Implementation of Plan measures relating to climate reduction targets as provided for by Plan provisions including those provided for and referenced in County Development Plan Chapter 3 "Climate Action and Energy" and Local Area Plan Chapter 8"Climate Action" Proportion of journeys made by private fossil fuel-based car compared to 2016 levels Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	 For review of progress on implementing Plan objectives to demonstrate successful implementation of measures climate reduction targets as provided for by Plan provisions including those provided for and referenced in County Development Plan Chapter 3 "Climate Action and Energy" and Local Area Plan Chapter 8"Climate Action" Increase in the proportion of people resident in the County reporting regular cycling / walking to school and work above 2016 CSO figures Decrease in the proportion of journeys made by residents of the County using private fossil fuel-based car compared to 2016 levels Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050 Contribute towards the target of the Renewable Energy Directive (2009/28/EC), for all Member States to reach a 10% share of renewable energy in transport by 2020 Contribute towards the target of aggregate reduction in carbon dioxide (CO₂) emissions of at least 80% (compared to 1990 levels) by 2050 across the electricity generation, built environment and transport sectors To promote reduced energy consumption and support the uptake of renewable options and a move away from solid fuels for residential heating 	 EPA Annual National Greenhouse Gas Emissions Inventory reporting Climate Action Regional Office Consultations with Department of Communication Climate Action and Environment (at monitoring evaluation - see Section 5.4) CSO data 	 Where trends toward carbon reduction are not recorded, the Council will liaise with the Regional Assembly to establish reasons and develop solutions Where proportion of population shows increase in private car use above CSO 2016 figures, the Council will coordinate with the Regional Assembly, DHLGH and NTA to develop a tailored response

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
Cultural Heritage	СН	 Percentage of entries to the Record of Monuments and Places, and the context these entries within the surrounding landscape where relevant, protected from adverse effects resulting from development which is granted permission under the Plan Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan 	 Protect entries to the Record of Monuments and Places, and the context of these entries within the surrounding landscape where relevant, from adverse effects resulting from development which is granted permission under the Plan Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan 	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant) Consultation with Department of Housing, Local Government and Heritage (at monitoring evaluation - see Section 5.4). 	• Where monitoring reveals visitor or development pressure is causing negative effects on designated archaeological or architectural heritage, the Council will work with the Regional Assembly, Fáilte Ireland and the National Monuments Service and other stakeholders, as relevant, to address pressures through additional mitigation
Landscape	L	 Number of developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan 	 No developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan To seek to align with the National Landscape Strategy 	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant) 	• Where monitoring reveals developments permitted which result in avoidable adverse visual impacts on the landscape, the Council will re-examine Plan provisions and the effectiveness of their implementation