



NATURA IMPACT REPORT

DRAFT VARIATION NO.1 TO THE

KELLS DEVELOPMENT PLAN

2013-2019

MEATH COUNTY COUNCIL

Project Reference:		170031			
Rev.	Status	Author	Reviewed By	Approved By	Issue Date
D01	DRAFT	CK	PS	PS	09/03/2017
D02	FINAL	CK	PS	PS	15/03/2017

CONTENTS

1	INTRODUCTION	4
1.1	Legal Requirement for Habitats Directive Assessment	4
1.2	Statement of Authority	5
2	ASSESSMENT METHODOLOGY	5
2.1	Formal Guidance.....	5
2.2	Sources of Information Used.....	6
2.3	Appropriate Assessment: Purpose and Process	7
2.4	Overlap with the Strategic Environmental Assessment of the Draft Variation	9
2.5	Consultation Strategy	9
2.6	How the AA process is applied within the Planning Hierarchy.....	9
2.7	Assessment Criteria	10
2.8	How AA was applied to various components of the Draft Variation No. 1.	12
3	OVERVIEW OF THE DRAFT VARIATION NO. 1 TO THE KELLS DEVELOPMENT PLAN 2013 - 2019.....	13
3.1	Overview of Draft Variation No. 1 Structure.....	13
3.2	Overview of Receiving Environment.....	13
3.3	Zone of Influence of the Plan and its associated Variations.....	18
4	ASSESSMENT OF THE DRAFT VARIATION NO.1 TO THE KELLS DEVELOPMENT PLAN 2013-2019.....	18
4.1	Structure of the Draft Variation	18
4.2	Assessment Results.....	20
4.2.1	Proposed Amendments to the Draft Variation	20
4.3	How the Mitigation Measures ensure the removal of risks of adverse effects on the integrity of European Sites.	21
5	INTERACTION WITH OTHER PLANS	22
6	RESPONSIBILITIES FOR IMPLEMENTING MITIGATION POLICIES	23
7	MONITORING THE IMPLEMENTATION OF POLICIES	24
8	HOW THE AA PROCESS IN SHAPING THE DRAFT VARIATION WILL PROTECT THE EUROPEAN SITES	24
	References	25

ABBREVIATIONS

AA	Appropriate Assessment
DOEHLG	Department of the Environment, Heritage and Local Government
EPA	Environmental Protection Agency
EU	European Union
GIS	Geographic Information Systems
GSI	Geological Society of Ireland
LSEs	Likely Significant Effects
NHA	Natural Heritage Areas
NIR	Natura Impact Report
NIS	Natura Impact Statement
NPWS	National Parks and Wildlife Service
pNHA	Proposed Natural Heritage Areas
QI	Qualifying Interests
RPGs	Regional Planning Guidelines
SAC	Special Area of Conservation
SCI	Special Conservation Interests
SEA	Strategic Environmental Assessment
S.I. No.	Statutory Instrument Number
SPA	Special Protection Area
SUDS	Sustainable Urban Drainage Systems
SSCOs	Site Specific Conservation Objectives
WWTP	Waste Water Treatment Plant

1 INTRODUCTION

1.1 Legal Requirement for Habitats Directive Assessment

This Natura Impact Report (NIR) was prepared by Scott Cawley Ltd. for Meath County Council. It provides information on and assesses the potential for the proposed Variation No. 1 of the Kells Development Plan 2013-2019 to impact on ecological sites of European-scale importance. This is the draft version of the NIR and is published alongside the Draft Variation No. 1 of the Kells Development Plan 2013-2019 and serves as a documented record of the process of the Appropriate Assessment (AA) of the Variation throughout its preparation.

The responsibility for carrying out the Assessment lies with Meath County Council and this NIR facilitates the AA by the Council. The Council's AA decision at the Draft Variation Stage is also published alongside the Draft Variation No.1 to the Kells Development Plan 2013-2019.

The preparation of the Draft Variation No. 1 has regard to Article 6 of the Council Directive 92/43/EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended) (hereafter referred to as the Habitats Directive). This is transposed in Ireland by the European Communities (Birds and Natural Habitats) Regulations, 2011 (S.I. 477) (hereafter referred to as the Habitats Regulations) and Part XAB of the Planning and Development (Amendment) Act 2010.

Articles 6(3) and 6(4) of the Habitats Directive set out the requirement for an assessment of proposed plans and projects likely to affect Natura 2000 sites (Annex 1.1).

Article 6(3) establishes the requirement to screen all plans and projects and to carry out a further assessment if required (Appropriate Assessment (AA)):

Article 6(3): "Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subjected to an appropriate assessment of its implications for the site in view of the site's conservation objectives. In light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."

The subsequent paragraph allows proposed plans and projects to be approved in certain conditions.

Article 6(4): "If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, Member States shall take all compensatory measures necessary to ensure that the overall coherence of the Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to the beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest."

This Natura Impact Report has informed the Appropriate Assessment process for the Draft Variation No.1 to the Kells Development Plan 2013-2019.

1.2 Statement of Authority

The preparation of the Natura Impact Report was carried out by Paul Scott and Caroline Kelly of Scott Cawley Ltd. The results of the AA were integrated into the Draft Variation No. 1 of the Kells Development Plan 2013-2019 in Meath County Council (MCC) via the Plan making team.

Paul Scott is Director with Scott Cawley Ltd. Paul holds a first class honours degree in Environmental Biology from the University of Liverpool and a Masters in Pollution and Environmental Control at the University of Manchester. He is a Chartered Environmentalist (CEnv) with the Society for the Environment (Soc Env) and a Full Member of the CIEEM. He is an experienced environmental scientist, specialising in impact assessment and ecology. He has experience in a wide variety of environmental assessment and management projects and also has acted as a member of environmental assessment Expert Panels. Paul has prepared guidance on Strategic Environmental Assessment and Environmental Impact Assessment to UK and Irish central government and local authorities. Paul has prepared ecological guidance notes designed for planners and developers on behalf of the four Dublin local authorities. Paul has been involved in several Appropriate Assessments of complex projects and land-use plans including the Cherrywood SDZ, Ennis Local Area Plan, Meath County Development Plan, East Meath Local Area Plan and variations to the Meath, Dublin, Ennis and Kildare Development Plans. Paul developed a review package for Appropriate Assessment as part of the EPA STRIVE funded project Integrated Biodiversity Impact Assessment. He has lectured on EIA and Appropriate Assessment practice at University College Dublin, Trinity College Dublin and NUI Galway.

Caroline holds an honours degree in Environmental Biology from University College Dublin and a first class honours Masters in Ecological Assessment from University College Cork. Caroline's professional experience includes working with Wexford County Council where she was involved in a number of projects promoting environmental awareness and biodiversity, and more recently undertaking surveys and providing reports to inform both the Appropriate Assessment and Ecological Impact Assessment processes. Caroline has experience in habitat survey and assessment in a range of terrestrial, freshwater and coastal environments, surveys for protected species including bats, badger and otter as well as surveys for invasive species. Caroline has managed ecological assessments for a wide range of projects including tourism, industrial, residential and renewable energy developments. She has recently been involved in the Appropriate Assessment process of land use plans such as the Leixlip and Collinstown Local Area Plan 2017-2023 and the Proposed Variation No. 2 to the Navan Development Plan 2009-2015 and regularly prepares information for Appropriate Assessment reports, either as lead or co-author, depending on the project or plan requirements. She

2 ASSESSMENT METHODOLOGY

2.1 Formal Guidance

The AA process has taken account of guidance contained in the following documents:

- *Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities*. (Department of Environment, Heritage and Local Government, 2010 revision).
- *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities*. Circular NPWS 1/10 and PSSP 2/10.
- *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (European Commission Environment Directorate-General, 2001); hereafter referred to as the EC Article 6 Guidance Document. The guidance within this document provides a non-mandatory methodology for carrying out assessments required under Article 6(3) and (4) of the Habitats Directive.
- *Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC* (EC Environment Directorate-General, 2000); hereafter referred to as MN2000. Note that a revised version of this Guidance is due for publication in 2016 and will be taken into account when appropriate.
- *Guidance Document on Article 6(4) of the 'Habitats Directive' 92/43/EEC. Clarification of the Concepts of Alternative Solutions, Imperative Reasons of Overriding Public Interest, Compensatory Measures, Overall Coherence*. Opinion of the European Commission (European Commission, January 2007).
- *Guidelines for Good Practice Appropriate Assessment of Plans Under Article 6(3) Habitats Directive* (International Workshop on Assessment of Plans under the Habitats Directive, 2011);
- *Communication from the Commission on the precautionary principle*. European Commission (2000).

2.2 Sources of Information Used

Information relied upon included the following information sources, which included maps, ecological and water quality data:

- Online data available on European sites as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie;
- Information on water quality in the area available from www.epa.ie;
- Information on soils, geology and hydrogeology in the area available from www.gsi.ie;
- Information on the status of EU protected habitats and species in Ireland (National Parks and Wildlife Service, 2013a and 2013b);
- Meath County Development Plan 2013-2019
- Meath County Development Plan 2017-2023- Natura Impact Report
- Draft County Meath Heritage Plan 2015-2020
- Draft County Meath Biodiversity Action Plan 2015-2020
- Regional Planning Guidelines for the Greater Dublin Area (2010-2022)
- Regional Planning Guidelines for the Greater Dublin Area (2010-2022)- Habitats Directive Assessment
- Retail Strategy for the Greater Dublin Area 2008-2016
- Draft Transport Strategy for The Greater Dublin Area 2016-2035- Appropriate Assessment
- Eastern River Basin Management Plans (2009-2015)- Appropriate Assessment Screening Report
- Trim Development Plan 2014-2020- Natura Impact Report
- Ashbourne Local Area Plan 2009-2015- Appropriate Assessment Screening

- Navan Development Plan 2009-2015 (incorporating Variation No.1)- Natura Impact Report
- Drogheda Borough Council Development Plan 2011-2017- Appropriate Assessment Screening Report
- Southern Environs of Drogheda Local Area Plan 2009-2015- Appropriate Assessment Screening Report

2.3 Appropriate Assessment: Purpose and Process

Meath County Council is preparing Variation No. 1 to the adopted Kells Development Plan 2013-2019 (hereafter referred to as the “KDP”). The key purpose of this Variation to the Kells Development Plan is to align the Plan with the key tenets of the Economic Development Strategy for County Meath 2014 – 2022, as they relate to statutory land use planning. The Variation also seeks to align the Kells Development Plan with the provisions of the County Development Plan (as varied) and update the written text and maps accordingly.

Proposed land use plans and proposed variations must undergo a formal “test” or “screening” to ascertain whether they are likely to result in any significant adverse effects on specific sites designated for their nature conservation importance. These sites are those designated under the European Commission’s Natura 2000 network of sites (hereafter “European sites”¹). These sites are designated on the basis of the presence of certain habitats and species that are deemed to be of international importance. The sites are termed candidate Special Areas of Conservation (SAC) under the E.C. Habitats Directive and Special Protection Areas (SPA) under the E.C. Birds Directive. The Irish Government and local planning authorities have a legal obligation to protect these sites.

The process of assessing the Draft Variation was an iterative and step wise approach. The overall purpose of the process was to ensure that the Draft Variation, when implemented, does not result in adverse effects on the “integrity” of the European sites within the Natura 2000 network.

The first step was to look at the overall Variation in principle and to answer the questions: is it likely that the implementation of this Variation could result in likely significant effects (LSEs) on the European sites within the Natura 2000 network? It does not matter where these sites may be – impacts can occur across administrative boundaries. This step is known as “Screening”. In order to ensure that the Draft Variation complied fully with the requirements of Article 6 of the Habitats Directive and all relevant Irish transposing legislation, Scott Cawley Ltd, on behalf of Meath County Council carried out the screening of the Draft Variation to see if it would require an AA. The outcome of this Screening Stage was that it was determined² that due to the types of development that could arise as a result of implementing the Variation, that significant effects could not be ruled out and that the Variation would need further assessment during its preparation. Screening was undertaken in a very precautionary and strategic manner. The Screening Stage resulted in the production of a Screening Determination which is published on the Meath County Council website.

¹ Natura 2000 sites are defined under the Habitats Directive (Article 3) as a European ecological network of special areas of conservation composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II. The aim of the network is to aid the long-term survival of Europe's most valuable and threatened species and habitats. In Ireland these sites are designated as *European sites* - defined under the Planning Acts and/or Birds and Habitats Regulations as (a) a candidate site of Community importance, (b) a site of Community importance, (c) a candidate special area of conservation, (d) a special area of conservation, (e) a candidate special protection area, or (f) a special protection area. They are commonly referred to in Ireland as candidate Special Areas of Conservation (cSACs) and Special Protection Areas (SPAs).

² Under Section 177U, Part XAB, 2000 Planning and Development Act, as amended.

The AA process then moved to full Appropriate Assessment as required under Section 177V, Part XAB, 2000 Planning and Development Act, as amended.

The AA involved analysing the relationship between the proposed elements of the Draft Variation (as it was being prepared) and the Conservation Objectives of the European sites. Where there was the potential for an adverse impact to occur, then the assessment team recommended changes to elements of the Draft Variation to avoid or mitigate the potential impact. These recommendations were integrated into the various elements of the Draft Variation so that the implementation of the Variation would not result in any adverse effects on European sites.

In accordance with best practice a hierarchy of mitigation was followed:

- Avoidance of impacts by removing policies/objectives, removal of land-use zonings or changes to zonings;
- Caveats/changes to policies/objectives and additional mitigation added to zoning descriptions to mitigate any potential adverse effects on integrity.

Meath County Council provided the Scott Cawley AA team with drafts during their process of preparing the Draft Variation. These drafts were reviewed and revised by the Council in an iterative process of assessment. The assessment methodology is described in more detail below. A summary of the results of this iterative review of the Draft Variation are provided in Section 3.4.

The Draft Variation is published for a period of public consultation as outlined below:

Draft Variation No. 1 to the Kells Development Plan 2013-2019		Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA)	
Commencement of public display and invitation of submissions on Draft Variation, Environmental Report and Natura Impact Report 15th March 2017 Closing date for public submissions on Draft Variation 12th April 2017			
Chief Executives Report on Submissions received to Draft Variation, Environmental Report and Natura Impact Report (for Elected Members) Not later than 8 weeks after commencement of display of variation			
Consideration of Chief Executive's Report by Elected Members (resolve to alter or make, amend or revoke Draft Variation, Environmental Report and Natura Impact Report) Within 6 weeks of receipt of Chief Executive's Report			
		Determination of Requirement for SEA/AA in accordance with S.12 of the Planning & Development Act (within 2 weeks of resolution) ¹	
Public Display of Amendments to Draft Variation and consultation period TBA		Public Display of Amendments to Environmental Reports and consultation period TBA	

Submission of Chief Executive's Report to Members on submissions on the proposed material alterations to the Draft Variation, Environmental Report Addendum and Natura Impact Report TBA
Consideration of Chief Executives Report by Elected Members (resolve to make, amend or revoke Draft Variation, Environmental Report and Natura Impact Report) TBA
Note ¹ – The Planning & Development Act 2010 allows for the Chief Executive to allocate an additional discretionary time period to allow for the carrying out of SEA/AA in respect of any proposed material alterations to the Draft Variation.

Any submissions will be scrutinised by the AA team and the Council will be alerted as to any submissions that may have implications for European sites.

2.4 Overlap with the Strategic Environmental Assessment of the Draft Variation

The Strategic Environmental Assessment (SEA) of the Draft Variation was carried out concurrently with the AA. There were several areas of overlap and in accordance with good practice in terms of the following stages:

- Sharing of baseline data gathering and sharing, data on European sites and potential sensitivities and threats.
- Settlement zoning maps were scrutinized by the AA team for potential adverse effects on integrity of the European Sites in terms of their Conservation Objectives but also any other ecological impacts outside of the European site-scale were highlighted to the SEA team for them to address in the SEA process
- SEA team was able to highlight potential interactions between other environmental issues such as water quality and infrastructure and the sensitivities of European sites to the AA team.

2.5 Consultation Strategy

Whilst consultation is not an obligatory part of the Appropriate Assessment process, it provides important information on the state of the European sites and any specific concerns that key stakeholders may have. The Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs will be given the opportunity to comment on the Draft Variation and this NIR and any submission received after the period of public display will be taken into account during the subsequent stages in the preparation of the Variation.

2.6 How the AA process is applied within the Planning Hierarchy

The AA process takes place at several stages within the land use planning hierarchy. In the case of County Meath, the Kells Development Plan 2013-2019, and its associated Variations, must take cognisance of the Regional Planning Guidelines for the Greater Dublin Area 2010-2022 and the Habitats Directive (Appropriate) Assessment³. The Meath County Development Plan 2017-2023 will provide a framework for AA of individual planning applications and objectives and policies in Local Area Plans and their Variations, such as this one, are ultimately overruled by those in the County Development Plan.

³ <http://emra.ie/dubh/wp-content/uploads/2015/02/Greater-Dublin-Area-Regional-Planning-Guidelines-2010-2022-Volume-I.pdf>

The Appropriate Assessment requirements of Part XAB of the Planning and Development (Amendment) Act 2010 apply to all levels of the planning hierarchy. At each stage the nature of the assessment will match the level of the hierarchy. As actions pass from the County Plan-level to the local plan level and then to individual planning applications, the following aspects become expressed at a sharper and more detailed level:

- Geographic specificity (i.e. from non-specific actions in County Development Plans to actions proposed for identifiable land parcels. Note that the Settlement Plans present a detailed level of geographic specificity as shown by the zoning maps. Criteria such as size and scale, land take, distance to European sites and presence of linkages can sometimes be identified).
- Duration and timing of impacts (usually not known at the plan level).
- Raw materials required, wastes and energy generated (can be predicted in a generic sense at plan level but precise constituents and quantities usually only known at the project level).

In order to address this hierarchy of level of detail, the current AA of the Draft Variation has ensured that where the certain aspects are not predictable at the Variation level but may pose a risk to the European site when project details are known, that this is highlighted in the AA process and appropriate safeguards or capture mechanisms are proposed.

2.7 Assessment Criteria

The crux of the AA process is the assessment of a proposal against the Conservation Objectives for a European site. For many Conservation Objectives that have been given site-specificity, they are themselves broken down into a series of *attributes* and *targets* for each Qualifying interest.

To make the assessment process efficient and manageable without losing quality of analysis, the Conservation Objectives were distilled to three common themes that could then be used as assessment criteria as to assess each objective, policy and proposed settlement areas. Each of the three criteria was quite general in nature which allows an easier assessment but also resulted in a very light “trigger” for the potential for adverse effects on integrity of European Sites to be identified.

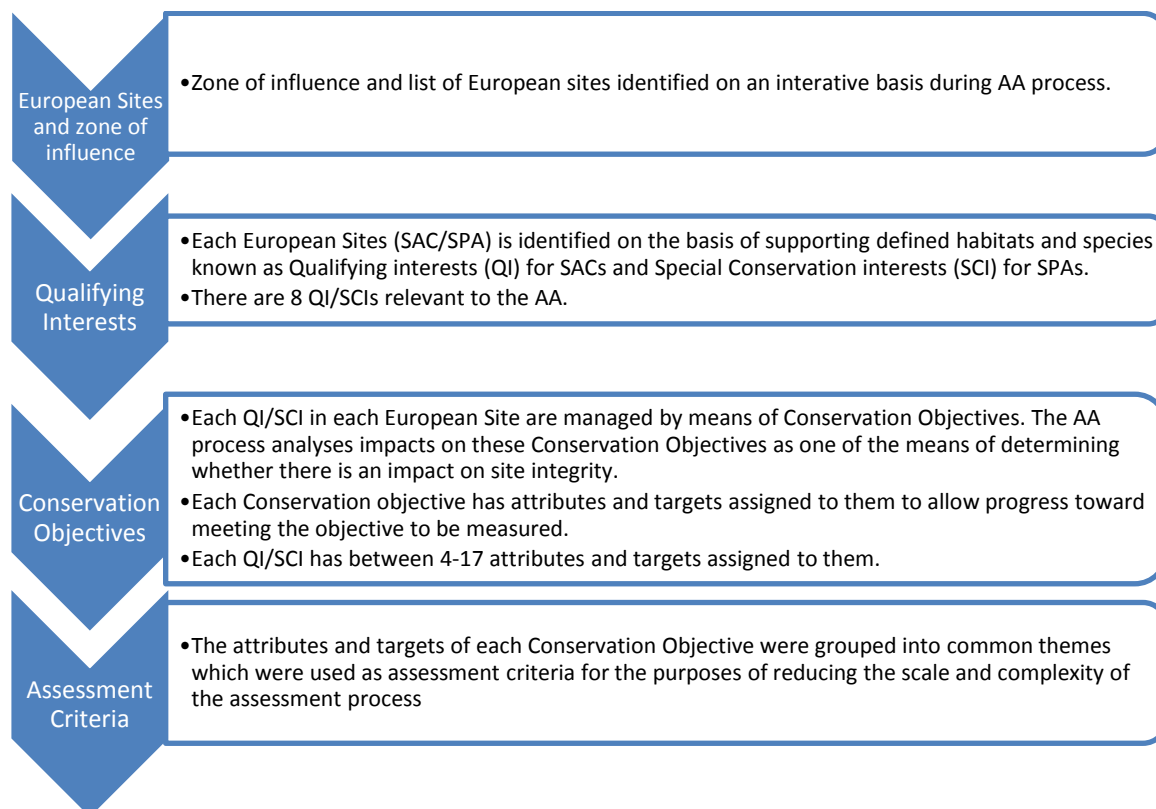


Figure 1: Preparation of Assessment Criteria

The common themes which have become the four assessment criteria for the analysis of the Draft Variation No.1 are described below:

1. **Are there hydrological/hydrogeological linkages to European sites and potential for impacts arising to and from surface and ground water quality and changes in the underlying hydrological regime?** The River Boyne and River Blackwater SAC is designated for “Alkaline fens” and “Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae) *”, as well as River lamprey, Salmon and Otter. In addition, Killyconny Bog (Cloghbally SAC) is designate for “Active raised bog” and “Degraded active raised bog still capable of natural regeneration”. These habitat types and species are dependent on having an available supply of freshwater. Therefore, any activities that could directly or indirectly affect water quality or supply, such as developments located adjacent to or within the SAC boundary, could potentially affect this European site. Activities that undermine this water supply could potentially have indirect adverse effects on European sites through habitat fragmentation, changes in species composition and habitat alterations.
2. **Will there be a risk of direct habitat loss, habitat degradation or loss of ecological networks supporting European sites?** For example, roads and other new development occurring on undeveloped lands within or in close proximity to European sites.
3. **Will there be a risk of direct or indirect disturbance to European site habitats and/or species?** Even though most zoned lands are not directly within European sites they could affect it via indirect disturbance, e.g. river walkways, noise disturbance due to construction.

4. **Will there be a risk of changes to abiotic features/conditions supporting European site habitats and/or species?** The habitats for which Killyconny Bog are designated also depend on the air quality surrounding the bog habitats to be stable and saturated with nitrogen. Changes in air quality can result from fertilizer draft, adjacent quarry activities or other atmospheric inputs. High amounts of nitrogen in the immediate environs of these bog habitats could have adverse effects on their conservation objectives.

Table B1 in Appendix B identifies which Qualifying Interests, attributes and targets are covered by these assessment criteria.

2.8 How AA was applied to various components of the Draft Variation No. 1.

Draft Variation No.1 (written variation): The current Draft Variation has been analysed and this Draft NIR documents the output of the process which informs the overall AA of the Draft Variation. While the text document does provide geographic locations for the variations objectives, site-specific impacts could not be accurately predicted as it would depend on how the variation was applied in these locations (e.g. construction methods, drainage design etc.). In such cases, the text was revised to reinforce the need to carry out AA at lower, site-specific levels in the planning hierarchy. The AA team had already briefed the LAP authors on the need to avoid certain Objectives that could give rise to adverse effects on integrity of European Sites so in practice there were few Objectives that required revision.

Draft Variation Maps: Maps were reviewed to analyse any map-based proposals that had geographic specificity that could be assessed as posing adverse effects on integrity of European Sites. This analysis focused primarily on the presence of a hydrological connection to the River Blackwater given the nature of the European site of concern (River Boyne and River Blackwater SAC). The EPA's Online Envision Map Viewer and NPWS Online Map Viewer were used to identify watercourses in these areas which could potentially have hydrological connections to these two rivers. Each geographic location, for which the variation applied, was assessed to determine if the proposed variation would pose an adverse effect on site integrity in terms of the site's Conservation Objectives. The four assessment criteria listed in Section 3.7 above were applied to these locations. The adverse effects of implementing the proposed variation on the criteria (and hence on the Conservation Objectives) was then predicted based upon the scientific information available. Impacts arising during project construction and operation stages and impacts both direct and indirect were considered at this stage.

3 OVERVIEW OF THE DRAFT VARIATION NO. 1 TO THE KELLS DEVELOPMENT PLAN 2013-2019

3.1 Overview of Draft Variation No. 1 Structure

The existing Kells Development Plan was adopted in October 2013. At present, Meath County Council have started preparing Variation No. 1 to the Kells Development Plan 2013-2019. On adoption, the Plan and its Variations will govern the overall development of Kells and its environs, subject to objectives in the Meath County Development Plan which will take precedence, should conflict between the two occur. The proposed Draft Variation will further develop an overall strategy for the proper planning and sustainable development of area.

3.2 Overview of Receiving Environment

The town of Kells is situated in the north-west of County Meath, approximately 15km north-west of Navan. The most recent census data available is that from the 2011 census which states that the population of Kells is 5,888. Kells has a well-developed road infrastructure and is served by the M3 motorway which connects the town with Dublin. Another notable physical characteristic of the town is the presence of the River Blackwater, which flows to the north of the town.

The town of Kells is served by the Kells Wastewater Treatment Plant (WWTP). Data collected for the most recent available Annual Environmental Report (EPA, 2013) for this WWTP indicates that the plant was operating within its design capacity (8,000 P.E.) in 2015. The current organic loading was given as 6,827 P.E. in 2015, with the remaining capacity unlikely to be exceeded in the following three years (up to 2018). However, the same assessment does identify that the discharges from the WWTP may be having an observable negative impact on the receiving waters downstream. A deterioration in water quality has been identified in terms of Ortho-P and Ammonia. The River Blackwater is the receiving water referred to and is “*at risk of not achieving good status*”. According to the EPA’s online Envision Map Viewer, the water quality of the River Boyne is currently regarded as “*Moderate (Q3-4)*” upstream of the WWTP. Unfortunately, monitoring 1km downstream of the WWTP did not result in the generation of Q-values and as a result the quality of these waters is unknown. However, approximately 4.6km downstream of the WWTP the water quality is currently regarded as “*Good (Q4)*”, as of the EPA’s monitoring station at Bloomsberry Bridge.

The town of Kells is located within the Boyne catchment and the Blackwater [Kells] sub-catchment. The town’s environs hold a variety of habitats which are dependant to some degree on having an available supply of freshwater. The River Blackwater flows to the north of the town, approximately 1km north of the town centre. According to the EPA’s online Map Viewer, the river Blackwater flows c. 19km in a south-easterly direction to Navan, where it merges with The River Boyne. The River Boyne then flows from the south-east, through Navan town centre and in a north-easterly direction before ultimately discharging to the Irish Sea, to the east of Drogheda. The waters of the River Blackwater are of “*Moderate (Q3-4)*” quality just upstream of its confluence with the River Boyne, as measured at the EPA’s designated monitoring station “*100m downstream of the New Bypass Bridge*”. The waters of the River Boyne are also of “*Moderate (Q3-4)*” quality both upstream and downstream of Navan as measured at monitoring stations at “*Kilcarn Old Bridge*” and “*downstream of Broadboyne Bridge*”.

The water quality of the Boyne Estuary is of “*Intermediate*” quality, while the Boyne Estuary Plume Zone is currently regarded as “*Unpolluted*”. As such, there have been no breaches of the EPA’s threshold values for nutrient enrichment, accelerated plant growth, or disturbance of the level of dissolved oxygen normally present under the EPA’s “Trophic Status Assessment Scheme” classification (EPA, 2010) in the Boyne estuary plume Zone.

The subject lands are located within the “*Bailieborough*” groundwater body. According to the EPA Envision Map Viewer this groundwater body is described as ‘*poorly productive bedrock*’. According to GSI Map Viewer, the level of vulnerability to groundwater contamination from human activities ranges from ‘*high*’ to ‘*extreme*’ and ‘*rock at or near the surface*’. It is also described as a ‘*Poor Aquifer- Bedrock which is generally unproductive except for Local Zones*’. The bedrock of the area is classified as ‘*Silurian Metasediments and Volcanics*’.

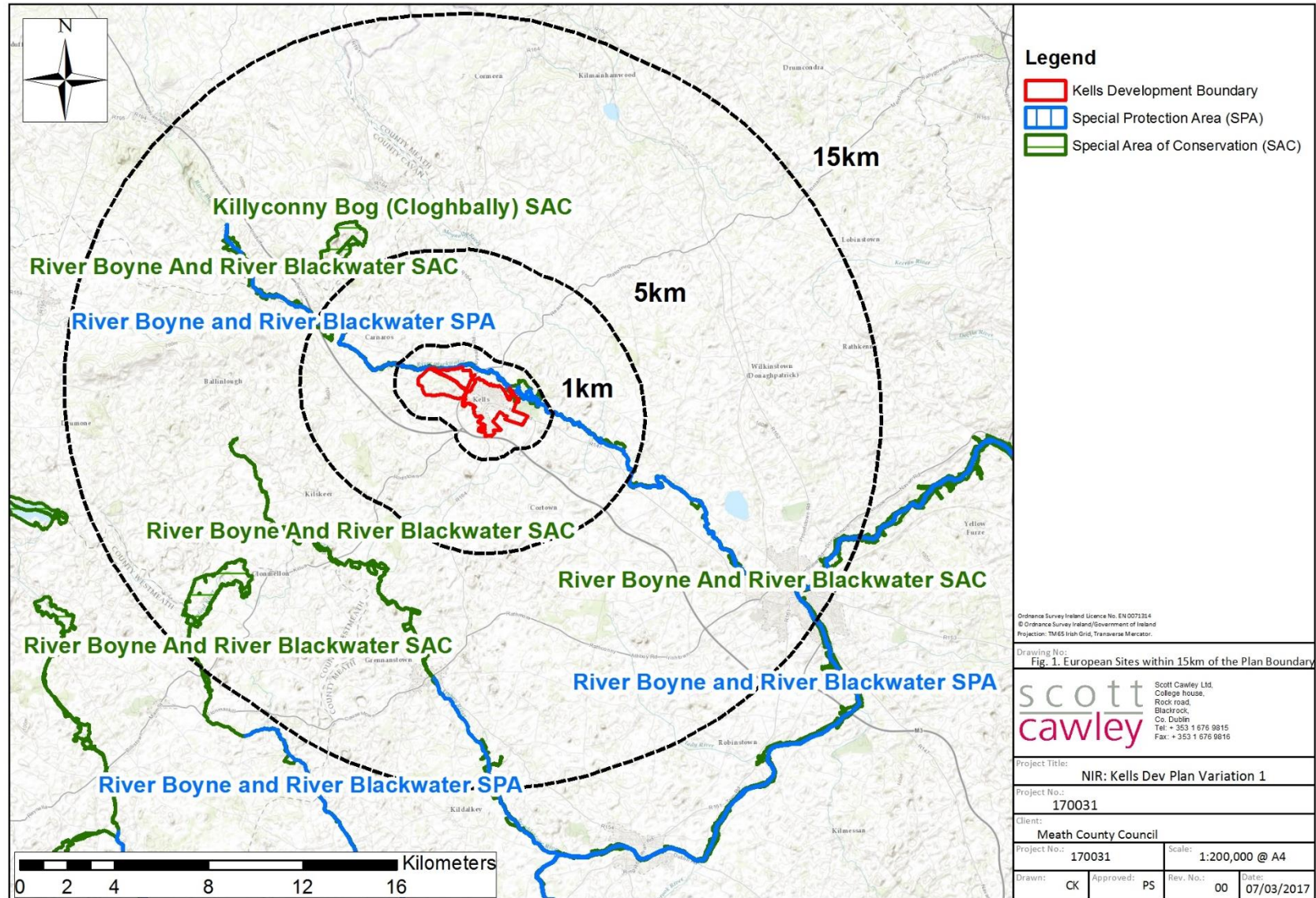
There are two Special Areas of Conservation (SAC) which lies within the KDP’s boundary; the River Boyne and Blackwater SAC and Killyconny Bog (Cloghbally) SAC. The River Boyne and River Blackwater SAC is designated due to the presence of the Annex I priority habitat “Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae) [91EO]” as well as “Alkaline fens [7230]”, the Annex II species Otter (*Lutra lutra*), River Lamprey (*Lampetra fluviatilis*) and Salmon (*Salmo salar*). Killyconny Bog (Cloghbally) SAC is designated due to the presence of the Annex I priority habitat “Active raised bogs [7110]” as well as “Degraded raised bogs still capable of natural regeneration [7120]”.

One Special Protection Area (SPA), areas designated for the conservation of a range of bird species, is located within the KDP’s boundary; River Boyne and Blackwater SPA. This site is designated for the presence of Kingfisher (*Alcedo atthis*), an Annex I bird species under the E.U. Birds Directive.

Figure 2 below shows the locations of European Sites within 15km of the Draft KDP and its associated Variation’s boundary. The rationale for referring to this distance is outlined in Section 3.3.

Spatial boundary data for the European site network used was the most up-to-date available, updated and accessed in January 2017. The only European sites deemed to be within the zone of influence of the Draft Variation and KDP are the River Boyne and Blackwater SAC, Killyconny Bog (Cloghbally) SAC and River Boyne and Blackwater SPA.

Figure 2. European sites within 15km of the Draft KDP boundary

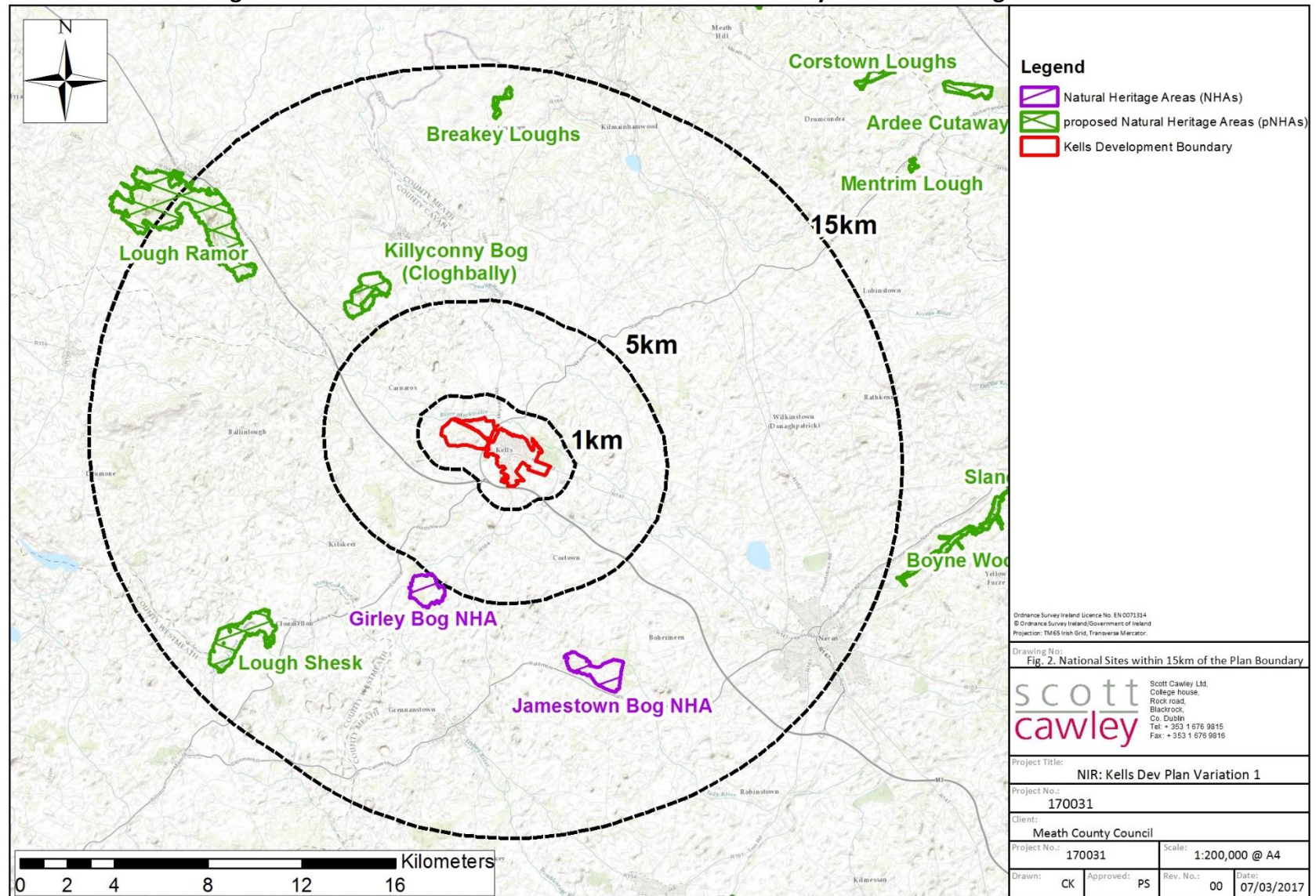


In addition to examining European sites, it was deemed necessary to examine Natural Heritage Areas (NHAs) and proposed Natural Heritage Areas (pNHA). Although NHAs and pNHAs and other designated sites such as Nature Reserves, Wildfowl Sanctuaries and Ramsar sites do not form part of the European network, they often provide an important supporting role to the network, particularly when it comes to fauna species which often do not obey site boundaries. Two NHA sites and 4 pNHA sites are located within the KDP's zone of influence, as outlined in Figure 3. These sites were considered as they were deemed to provide connectivity to European sites. These national sites are listed in Table 3.2.1 below.

Table 3.2.1 Natural Heritage Areas (NHAs) and Proposed Natural Heritage Areas (pNHAs) within the zone of influence of the KDP

Natural Heritage Areas and proposed Natural Heritage Areas within the Zone of Influence of the KDP		
Site Code	Natural Heritage Areas (NHAs)	Distance from Draft Plan's Boundary
001324	Jamestown Bog NHA	c. 7.5km south-east
001580	Girley Bog NHA	c. 5km south-west
Site Code	proposed Natural Heritage Areas (pNHAs)	Distance from Draft Plan's Boundary
000006	Killyconny Bog (Cloghbally) pNHA	c.6.4km north-west
001558	Breakey Loughs pNHA	c. 12.9km north
000008	Lough Ramor pNHA	c. 10.7km north-west
000556	Lough Shesk pNHA	c. 11.4km south-west

Figure 3. National Sites within 15km of the KDP's Boundary and surrounding environs.



3.3 Zone of Influence of the Plan and its associated Variations

Current guidance on the zone of influence to be considered during the AA process states the following:

“A distance of 15km is currently recommended in the case of plans, and derives from UK guidance (Scott Wilson et al., 2006). For projects, the distance could be much less than 15km, and in some cases less than 100m, but this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in combination effects”.

In practice the designation of an immoveable reference distance is not deemed to be useful as Qualifying Interests/Special Conservation Interests have different sensitivities. However, for the purpose of this specific NIR a distance of 15km was deemed to be sufficient to address all possible impacts from the Draft Variation No. 1.

4 ASSESSMENT OF THE DRAFT VARIATION NO.1 TO THE KELLS DEVELOPMENT PLAN 2013-2019

4.1 Structure of the Draft Variation

The Draft Variation is comprised of the following amendments to the Kells Development Plan:

- To amend the text of the Kells Development Plan narrative, policies and objectives to bring these into line with the Meath Economic Development Strategy.
- To review the appropriateness of the Masterplan/Framework plan Objectives in the town as it pertains to their compatibility with employment generation
- To review the requirements surrounding the preparation of Master Plans on employment zonings.
- The introduction of additional employment generating lands to provide for a high-end technology and major campus style office based employment as well as to facilitate logistics, warehousing, distribution and supply chain management to the south-east of Kells, the introduction of which will stimulate growth at this key location in the town. The provision of additional employment lands is consistent with Action 4 of the Economic Development Strategy to promote the hierarchy of economic centres with the objective of facilitating significant new enterprise employment in Meath.
- Introduce a ‘spot objective’ for the development of employment zoned lands (E1 and E3 land use zoning objectives) to the south-east of Kells, on the Navan Road and adjacent to the Kells (south) M3 interchange at junction 10. These lands will provide for a high-end technology and major campus style office employment as well as to facilitate logistics, warehousing, distribution and supply chain management and shall be subject to the preparation and written approval of a Master Plan by the Executive of the Planning Authority.
- The introduction of additional lands for the provision of retail warehouse facilities which previously had the benefit of a retail warehouse zoning to the rear of the existing Aldi retail store in order to provide for the comprehensive development of these lands to the north of Kells and adjacent to an interchange on the M3 Motorway.

The development of retail warehouse parks shall be subject to the provision of necessary physical infrastructure, and, where deemed appropriate by Meath County Council at pre-planning stage, in accordance with an approved Masterplan.

- Amendments to the employment zoning objectives set in order to provide more flexibility in the provision of employment generating uses. This will ensure consistency with the County Development Plan zoning objectives.
- Amendments to take account of flood risk mapping published since adoption of the Kells Development Plan (undertaken in October 2013)

These amendments are proposed in order to incorporate the recommendations of the Meath Economic Development Strategy and to align with the County Development Plan as varied. A number of Master Plan Areas and their Objectives have also been amended as follows:

- Master Plan 1-relates to the “Backlands”, an area of undeveloped green field lands to the east of Bective Street, the R164, in close proximity to the town centre. These lands will be zoned for “Commercial/Town Centre” use.
- Master Plan 2-relates to undeveloped lands adjacent to the Aldi foodstore on the Cavan Road north of Kells town centre to facilitate the provision of inter alia Enterprise and Garden Centres, Research and Development facilities, office uses where services are not principally provided to members of the public, Science and Technology Based Enterprise, amongst other uses in a good quality physical environment. The proposed Variation will result in an increase in lands zoned for retail warehousing in this location.
- Master Plan 3-relates to undeveloped lands within the Kells Business Park on the eastern side of the R147 (formerly the N3) to facilitate the provision of industrial, manufacturing, distribution, warehousing and other general employment /enterprise uses in a good quality physical environment. The proposed Variation will result in an increase in lands zoned for enterprise and employment in the Kells Business Park.
- Master Plan 4- relates to the “Front lands” located to the west of Bective Street/Bective Square/Suffolk Street. These lands will be zoned for a variety of uses including “Commercial/Town Centre”, “New residential” and “Open Space”.
- Master Plan 5- refers to the development of residential lands and publicly accessible walkways to the River Blackwater and Mausoleum at Rabbit Hill Woods, Headfort Road. These areas will be zoned as “High Amenity” and “Existing Residential”.
- Master Plan 6-relates to lands on the western side of the Navan Road and is to facilitate the provision of high end technology/ manufacturing and major campus style office based employment and/or to facilitate logistics, warehousing, distribution and supply chain management. These lands were previously zoned as “Open Space”, “Tourism” and “Community Infrastructure”. They will now be zoned as a “Strategic Employment Zone”.
- Master Plan 7- refers to the development of high quality Executive Style residential units south of the existing Maple Drive residential development to be accessed off the Athboy Road. The proposed Variation will result in an increase in lands zoned for residential development at this location.

This AA has focused on the impact of development assuming that they have complied with the objectives set out in the Draft Variation.

If correctly prepared at the early stages of plan-preparation, the amendments outlined in the Variation should not only avoid posing any adverse effects on integrity of European Sites but

should also provide protective objectives that express intentions to protect European sites from adverse effects. Therefore, some of the amendments may contain caveats or conditions that must be met to demonstrate compliance whilst others will be purely focused at protection of European sites.

4.2 Assessment Results

Table C1 in Appendix C lists all the amendments of the Draft Variation No. 1 and summarises the potential adverse effects on integrity of European Sites, prior to any mitigation/amendments being proposed.

4.2.1 Proposed Amendments to the Draft Variation

A small number of amendments were revised as part of the AA process during their drafting to ensure that they adequately addressed the potential for adverse effects on the integrity of European Sites. In some cases, the implementation of the objective is open to interpretation at the project-level and the nature of the adverse effect arising is dependent on the methods involved in the development. Therefore, whilst it was not possible to rule out adverse effects on integrity of European Sites at the strategic-level, in such cases it would be reasonable to apply AA at the lower levels of planning so that the project could be designed taking into account the potential for such effects. In such cases, it was assumed with a high level of confidence that mitigation measures could be applied when carrying out a project-level AA to address the adverse effects on integrity of European Sites. The proposed amendments are set out in Table 4.2.1 below.

Table 4.2.1 Proposed Amendments to the Draft Variation

Variation Objective	Proposed Amendment
<i>The introduction of additional employment generating lands to provide for a high-end technology and major campus style office based employment as well as to facilitate logistics, warehousing, distribution and supply chain management to the south-east of Kells, the introduction of which will stimulate growth at this key location in the town. The provision of additional employment lands is consistent with Action 4 of the Economic Development Strategy to promote the hierarchy of economic centres with the objective of facilitating significant new enterprise employment in Meath.</i>	<p>Include the following additional wording to strengthen the commitment to protect European sites, in line with protective policies contained within both the County Development Plan 2013- 2019 and the Kells Development Plan 2013-2019:</p> <p>All future development within the MP6 lands will have to take full account of the sensitivities of the receiving environment. Proposals for development which would be likely to have a significant effect on European sites will only be approved if it can be ascertained, by means of an Appropriate Assessment (in accordance with Article 6(3) of the E.C. Habitats Directive), that the integrity of these sites will not be adversely affected.</p>
<i>The introduction of additional lands for the provision of retail warehouse facilities which previously had the benefit of a retail warehouse zoning to the rear of the existing Aldi retail store in order to provide for the comprehensive development of these lands to the north of Kells and adjacent to an</i>	<p>Include the following additional wording to strengthen the commitment to protect European sites, in line with protective policies contained within both the CDP and the KDP:</p> <p>Future development within the MP2 lands will have to take full account of the sensitivities of the receiving environment. Proposals for development which would be likely to have a</p>

<i>interchange on the M3 Motorway. The development of retail warehouse parks shall be subject to the provision of necessary physical infrastructure, and, where deemed appropriate by Meath County Council at pre-planning stage, in accordance with an approved Masterplan.</i>	significant effect on European sites will only be approved if it can be ascertained, by means of an Appropriate Assessment (in accordance with Article 6(3) of the E.C. Habitats Directive), that the integrity of these sites will not be adversely affected.
Master Plan Objectives (7 in total):	<p>Include the additional wording as a general “catch-all” clause for all Master Plan Areas:</p> <p>Development located in lands governed by a Masterplan will be subject to an Appropriate Assessment, in accordance with Article 6(3) of the E.C. Habitats Directive, and any other ecological assessments deemed necessary by the Council.</p>

The result of the revisions made to the Variation after the iterative assessment was that all of the elements in the Draft Variation are not regarded to give rise to adverse effects on the integrity of European Sites.

4.3 How the Mitigation Measures ensure the removal of risks of adverse effects on the integrity of European Sites.

This section discusses how the amendments set out in the Draft Variation have addressed the potential for adverse effects on European sites. It selects examples from Table C1 to demonstrate the approach that has been taken for certain impact types:

- 1. Proposed amendments which reinforce statutory requirements in the Draft Variation’s Objectives e.g.** The introduction of additional employment generating lands to provide for a high-end technology and major campus style office based employment as well as to facilitate logistics, warehousing, distribution and supply chain management to the south-east of Kells, the introduction of which will stimulate growth at this key location in the town. The provision of additional employment lands is consistent with Action 4 of the Economic Development Strategy to promote the hierarchy of economic centres with the objective of facilitating significant new enterprise employment in Meath. **All future development within the MP6 lands will have to take full account of the sensitivities of the receiving environment. Proposals for development which would be likely to have a significant effect on European sites will only be approved if it can be ascertained, by means of an Appropriate Assessment (in accordance with Article 6(3) of the E.C. Habitats Directive), that the integrity of these sites will not be adversely affected.**

While it is generally accepted that screening for AA is required at plan or project level, this requirement has been stated in some cases to reinforce its application at this level. Development applications that do not follow statutory requirements will not be permitted.

5 INTERACTION WITH OTHER PLANS

The E.C. Habitats Directive and the Irish Birds and Habitats Regulations 2011 require that the impacts on European sites be assessed from the plan or project in question and also in the presence of other plans and projects that could affect the same European sites.

The analyses carried out during the preparation of this NIR has identified that the plans that could act in combination with the Draft Variation No. 1, and the associated Kells Development Plan 2013-2019, have undergone an appropriate assessment themselves as it is assumed that if a Plan has been adopted following an AA then it should not be capable of posing adverse effects on integrity of European Sites.

The cumulative/in-combination impact assessment focused on the other Development Plans that had the highest potential to affect the same European sites that could be affected by the Draft Variation and the associated Kells Development Plan 2013-2019.

- **Regional Planning Guidelines for the Greater Dublin Area (2010-2022)**

The RPGs have undergone an AA and it recommended specific conditions to protect European sites (Section 4.6 of HDA). These were incorporated into the RPGs where appropriate. No in-combination impacts with the Draft Variation are predicted as a result of implementation.

- **Retail Strategy for the Greater Dublin Area 2008-2016**

This Strategy does not seem to have undergone Appropriate Assessment. The Strategy sits under the Regional Planning guidelines for the Greater Dublin Area which was subject to AA, which placed emphasis on the protection of European sites. No in-combination impacts with the Draft Variation are predicted as a result of implementation.

- **Draft Transport Strategy for The Greater Dublin Area 2016-2035**

This Strategy has undergone an AA and mitigatory measures have been recommended and incorporated into the text. Mitigation measures include those specifically to protect biodiversity including European sites, protection of riparian zone and waterbodies and watercourses and soil protection and contamination. No in-combination impacts with the Draft Variation are predicted as a result of implementation.

- **Eastern River Basin Management Plans (2009-2015)**

This Plan underwent an AA. Safeguards (described as 'mitigation measures' in Appendix I of the AA Screening) are in place for each qualifying interest of the European sites. An example of a common safeguard is the creation of buffer strips around water bodies to prevent pollutant loss. No in-combination impacts with the Draft Variation are predicted as a result of implementation.

- **Meath County Development Plan 2013-2019**

The CDP has undergone an AA. It found that any provisions in the Plan which may have potentially led to adverse impacts on European site have been mitigated for by the inclusion of a number of policies and objectives, as well as the addition of a number of clauses, which specifically address the protection of European sites and reinforce statutory requirements to consider these in future plans and projects. Table A2 in Appendix A details these protective policies and objectives. No in-combination impacts with the Draft Variation are predicted as a result of implementation.

- **Draft County Meath Heritage Plan 2015-2020**

This Plan underwent an AA screening. The outcome of this screening was that the plan would have no significant adverse impact on Natura 2000 sites and that no further assessment was necessary. No in-combination impacts with the Draft Variation are predicted as a result of implementation.

- **Draft County Meath Biodiversity Action Plan 2015-2020**

This Plan underwent an AA screening. The conclusion of this screening was that the plan would have no significant adverse impact on Natura 2000 sites and that no further assessment was necessary. No in-combination impacts with the Draft Variation are predicted as a result of implementation.

- **Trim Development Plan 2014-2020**

This Plan was subject to an AA which concluded that it will not have a significant effect on European sites. No in-combination impacts with the Draft Variation are predicted as a result of implementation.

- **Ashbourne Local Area Plan 2009-2015**

This Plan and its amendments were subject to an AA Screening which concluded that it will not have a significant effect on European sites. No in-combination impacts with the Draft Variation are predicted as a result of implementation.

- **Navan Development Plan 2009-2015**

This Plan and its amendments were subject to an AA which concluded that it will not have a significant effect on European sites. No in-combination impacts with the Draft Variation are predicted as a result of implementation.

- **Drogheda Borough Council Development Plan 2011-2017**

This Plan was subject to an AA Screening which concluded that it will not have a significant effect on European sites. No in-combination impacts with the Draft Variation are predicted as a result of implementation.

- **Southern Environs of Drogheda Local Area Plan 2009-2015**

This Plan was subject to an AA Screening which concluded that it will not have a significant effect on European sites. No in-combination impacts with the Draft Variation are predicted as a result of implementation.

6 RESPONSIBILITIES FOR IMPLEMENTING MITIGATION POLICIES

The responsibility for implementing the Kells Development Plan and its associated Variations lies solely with the Planning Authority through the Planning consent process. Applicants who intend to develop within the Kells Development Plan area are obliged to ensure that their application is consistent with the Objectives and requirements within the Plan. The statutory requirement for the Planning Authority to carry out AA Screening for all planning applications is not affected by any of the statements in this NIR. All applications must be tested for the potential for likely significant effects. However, such effects are not likely to occur if the Objectives in the Kells Development Plan, and its associated Variations, and the requirements are adhered to as outlined, where appropriate.

Applicants must provide information to allow the Planning Authority to screen the application and decide if full AA is required.

7 MONITORING THE IMPLEMENTATION OF POLICIES

Whilst there is no legal requirement to monitor the outputs of the AA process, there is an obligation to monitor the implementation of the Kells Development Plan through the E.C. SEA Directive as implemented in Ireland. Contingency measures may have to be applied if there is evidence that Objectives cannot be implemented successfully. The *European Communities (Environmental Liability) Regulations 2008* will also apply in the event of any environmental damage to habitats and species both within and outside of the European sites.

8 HOW THE AA PROCESS IN SHAPING THE DRAFT VARIATION WILL PROTECT THE EUROPEAN SITES

This Natura Impact Report recorded the decisions that were taken during the preparation of the Draft Variation No.1 to the Kells Development Plan 2013-2019. It determined that, assuming the successful implementation of the Objectives and Policies contained within the Plan itself there will be no adverse effects on integrity of European Sites in isolation or in combination with other Plans and Projects acting in the same area.

This NIR, along with any other relevant information will be use to inform the AA carried out by Meath County Council. The Council will issue an AA Determination which is the record of their decision and how it was informed by this NIR, which will be published alongside the Draft Variation.

References

- CAAS Ltd. (2009).** *Natura Impact Report in support of the Appropriate Assessment of Variation No. 1 to the Navan Development Plan 2009-2015*
- CAAS Ltd. (2015).** *Draft Transport Strategy for The Greater Dublin Area 2016-2035-Appropriate Assessment*
- Council of the European Communities (1992).** *Council Directive of 21 May 1992 on The Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC).* O. J. L 206/35, 22 July 1992.
- DoEHLG (2010).** *Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities* (Department of Environment, Heritage and Local Government, Rev Feb 2010).
- Dublin and Mid-East Regional Authorities (2008).** *Retail Strategy for the Greater Dublin Area 2008-2016*
- Dublin and Mid-East Regional Authorities (2010).** *Regional Planning Guidelines for the Greater Dublin Area (2010-2022)* Available at: <http://emra.ie/dubh/wp-content/uploads/2015/02/Greater-Dublin-Area-Regional-Planning-Guidelines-2010-2022-Volume-I.pdf>
- Dublin and Mid-East Regional Authorities (2010).** *Regional Planning Guidelines for the Greater Dublin Area (2010-2022)- Habitats Directive Assessment*
- Environmental Protection Agency (2010).** *EPA ENVision Service* (internet-based environmental information portal). Available online at: <http://gis.epa.ie/Envision>
- Environmental Protection Agency (2013).** *Annual Environmental Report on the Farganstown Wastewater Treatment Plant.*
- European Commission (2000).** *Managing Natura 2000 sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC* (EC Environment Directorate-General, 2000); hereinafter referred to as "MN2000"
- European Commission (EC) (2000).** *Communication from the Commission on the precautionary principle.*
- European Commission (2001).** *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (European Commission Environment Directorate-General,);
- European Commission (EC) (2007).** *Guidance Document on Article 6(4) of the 'Habitats Directive' 92/43/EEC. Clarification of the Concepts of Alternative Solutions, Imperative Reasons of Overriding Public Interest, Compensatory Measures, Overall Coherence.* Opinion of the European Commission.
- European Parliament and European Council (2009).** *Directive 2009/147/EC of 30th November 2009 on the Conservation of Wild Birds (2009/147/EC).* O.J. L20/7, 26th January 2010.
- Geological Survey of Ireland (2011).** *GSI Datasets Public Viewer.* Available online at <http://www.gsi.ie>

Government of Ireland (2010) S.I. No. 405 of 2010. *Planning and Development (Amendment) Act 2010 (Commencement) Order 2010*. The Stationary Office, Dublin.

Government of Ireland (2011) S.I. No. 477 of 2011. *European Communities (Birds and Natural Habitats) Regulations 2011*. The Stationary Office, Dublin.

Louth County Council (2011). *Appropriate Assessment of the Drogheda Borough Council Development Plan 2011-2017*

Meath County Council (2013). *Meath County Development Plan 2013-2019, Volume 4- Strategic Environmental Assessment (SEA) & Natura Impact Report*

Meath County Council (2015). *Draft County Meath Heritage Plan 2015-2020*

Meath County Council (2015). *Draft County Meath Biodiversity Action Plan 2015-2020*

Meath County Council (2016). *Meath County Development Plan 2013-2019 Consolidated version, Volume 1- Written Statement*.

NPWS (2010). Circular NPWS 1/10 and PSSP 2/10 *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities*. (Department of Environment, Heritage and Local Government, March 2010).

NPWS (2011) *Conservation Objectives: Slaney River Valley SAC [000781]. Version 1.0*. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2012). *Conservation Objectives: Lower River Shannon SAC [002165]. Version 1.0*. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2013). *Conservation Objectives: Galway Bay Complex SAC [000268]. Version 1*. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2016). *Conservation Objectives for River Boyne and River Blackwater SAC [002299]. Generic Version 5.0*. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2016). *Conservation Objectives for River Boyne and River Blackwater SPA [004232]. Generic Version 5.0*. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

RPS (2014). *Trim Development Plan 2014-2020- Strategic Environmental Assessment (SEA) & Natura Impact Report*

Scott Cawley (2014). *Southern Environs of Drogheda Local Area Plan 2009-2015 Amendment No 1- Screening Report for Appropriate Assessment*

Scott Cawley (2015). *Ashbourne Local Area Plan 2009-2015 Amendment No. 1- Screening Report for Appropriate Assessment*

APPENDICES

Appendix A

Table A1 Protective Policies and Objectives contained within the Kells Development Plan 2013-2019 incorporating Draft Variation No. 1

Table A2 Protective Policies and Objectives contained within the Meath County Development Plan 2013-2019

Appendix B

Table B1 Site Specific Conservation Objectives for Qualifying Interests/Special Conservation Interests and how they are represented by the Assessment Criteria.

Appendix C

Table C1 Likely significant effects of Policies and Objectives contained within the Draft Variation No. 1

Appendix A 1: Table A1 Protective Policies and Objectives contained within the Kells Development Plan 2013-2019

Kells Development Plan 2013-2019 incorporating Draft Variation No. 1 - Measures to Protect sites of European and National Importance			
Location (Chapter)	Ref	Nature	Policy/ Objective Text
Chapter 2: Strategic Context and Core Strategy	Core Strategy POL 16	Policy	Any development proposed as a result of this Core Strategy will be screened for the need to undertake Appropriate Assessment.
	Core Strategy OBJ 1	Objective	<p>The development of new residential properties at Rabbit Hill Wood along the Headfort Road shall be linked to the opening of a publicly accessible river walk. Development shall be in accordance with a Master Plan which shall be approved in writing with the Executive of the Planning Authority. The Master Plan shall accompany any planning application for planning permission on these lands. The Master Plan shall address the following:</p> <ul style="list-style-type: none"> • The development of additional residential properties shall be subject to the opening of recreational trails / lands identified as H1 “High Amenity” land use zoning objective to the general public from the Headfort Road to the Mausoleum. The development of recreational trails shall seek to only use the existing available trails within the sensitive Natura 2000 site. No additional residential development shall be constructed prior to the entering into of a legal agreement between the landowner and the Local Authority satisfying this aspect of the overall development. • The scale and number of additional residential dwellings which shall be considered within the area of the Master Plan identified as A1 “Existing Residential” shall seek to minimise the loss of any existing mature specimen trees and seek to assimilative new development into its sensitive woodland setting. A consistent design theme shall be provided for all development. The location of new development shall primarily be located within the cleared area to the north of the site identified as A1 “Existing Residential” land use zoning objective to ensure that dwellings maximise available sunlight / passive solar gain. • The permissible density shall be a maximum of 5 units per hectare and shall be on the basis of a qualitative assessment which demonstrates compliance with the remainder of this objective but also the setting of the site within the Headfort Demesne Architectural Conservation Area (please refer to Meath County Development Plan 2013 – 2019). • Any development within the subject lands shall be subject to the carrying out of an Appropriate Assessment pursuant to the Habitats Directive ensuring that the proposed development will not adversely impact upon the qualifying interests of the Natura 2000 sites.

			The Master Plan shall be accompanied by a design statement. However, should a single application be lodged at any time over the life of the Development Plan seeking the replacement of the existing Rabbit Hill Lodge, it shall be assessed against the remaining policies in the Development Plan and shall not be subject to the requirements of the Master Plan.
Chapter 3: Economy & Employment	EMP POL 12	Policy	Any land development proposed as a result of Economic and Employment policies and objectives will be screened for the need to undertake Appropriate Assessment.
	TOUR POL 4	Policy	To protect and conserve those natural, built and cultural heritage features that form the principal assets of the town's tourism asset and in particular, to protect the medieval area of the town from inappropriate or visually intrusive development.
	TOWN CENTRE POL 19	Policy	Any land development proposed as a result of Town Centre policies and objectives will be screened for the need to undertake Appropriate Assessment.
Chapter 5: Housing	HS POL 14	Policy	Development proposed as a result of Housing policies will be screened for the need to undertake Appropriate Assessment.
Chapter 6: Community, Recreation & Open Space	SOC POL 10	Policy	Any land development proposed as a result of Social policies will be screened for the need to undertake Appropriate Assessment.
	SOC OBJ 8	Objective	To develop river corridors as natural amenity corridors, connecting the different parts of the town and linking up with established amenity areas whilst ensuring that the qualifying interests of the Natura 2000 sites are protected.
	GI POL 2	Policy	To protect Green Infrastructure within the town and environs and to provide additional infrastructure, where possible.
	GI POL 4	Policy	To require all new development to contribute positively to the protection and enhancement of existing green infrastructure and the delivery of new green infrastructure, as appropriate.
	GI POL 8	Policy	To ensure that any proposed walking and cycling routes along the River Blackwater are sited and designed to ensure the protection of the river corridor's heritage including its biodiversity and landscapes.
	GI OBJ 2	Objective	To encourage, pursuant to Article 10 of the Habitats Directive, the management of features of the landscape, such as traditional field boundaries, important for the ecological coherence of the Natura 2000 network and essential for the migration, dispersal and genetic exchange of wild species.
Chapter 7: Infrastructure	INF POL 3	Policy	Any development proposed as a result of Infrastructure policies will be screened for the need to undertake Appropriate Assessment according to Article 6(3) of the E.C. Habitats Directive.
	INF POL 4	Policy	To protect, maintain and improve the natural character of all watercourses, tributaries and streams within the Plan area.
	INF POL 8	Policy	To protect groundwater resources having regard to the County Meath Groundwater Protection Plan.
	INF OBJ 3	Objective	To ensure through the implementation of the River Basin Management Plans and their associated programmes of measures, and any other associated legislation, the protection and improvement of all drinking water, surface

			water and ground waters within the development plan envelop and beyond. The implementation of this Development Plan shall not conflict with the aims and objectives of the water Framework Directive.
	INF POL 15	Policy	Any waste infrastructure will be screened for the need to undertake Appropriate Assessment according to Article 6(3) of the E.C. Habitats Directive.
	INF POL 21	Policy	To protect water courses, banks, and bankside vegetation from interference by inappropriate bridging, draining, culverting or other works which would be detrimental to fisheries, biodiversity and the qualifying interests of Natura 2000 sites.
Chapter 8: Traffic & Transportation	TRAN OBJ 6	Objective	Any proposed new cycle paths in the vicinity of the River Blackwater will be screened for the need to undertake Appropriate Assessment according to Article 6(3) of the E.C. Habitats Directive.
Chapter 9: Telecommunications & Energy	TE POL 10	Policy	To generally avoid, where practicable, the location of overhead lines in Natura 2000 sites unless it can be proven that they will not affect the integrity of the site in view of its conservation objectives i.e. by carrying out an appropriate assessment in accordance with Article 6(3) of the E.C. Habitats Directive.
	TE OBJ 1	Objective	To ensure that all plans and projects associated with the generation or supply of energy or telecommunication networks will be subject to an Appropriate Assessment Screening and those plans or projects which could, either individually or in-combination with other plans and projects, have a significant effect on Natura 2000 site (or sites) undergo Appropriate Assessment.
Chapter 10: Heritage & Environment	HER OBJ 2	Objective	To protect the ecological integrity of all natural heritage suites designated or proposed for designation under National and European legislation. This includes Special Areas of Conservation, Special Protection Areas, Natural Heritage Areas and proposed Natural Heritage Areas.
	HER OBJ 3	Objective	All plans and projects which would be likely (either individually or in combination with other plans or projects) to give rise to significant adverse direct, indirect or secondary impacts on the integrity of any Natura 2000 sites having regards to their conservation objectives, shall not be permitted on the basis of this Plan unless imperative reasons of overriding public interest can be established and there are no feasible alternative solutions.
	HER OBJ 4	Objective	To provide protection to all legally protected plant and animal species.
	HER OBJ 5	Objective	To protect, and where possible, minimize the impact of new development on habitats of biodiversity value that are features of the town's ecological network. These features include tree lines, groups of trees and veteran trees, old walls, parkland, hedgerows, intertidal areas, rivers, stream and wetlands.
	HER OBJ	Objective	In association with HER OBJ 2-5 the respective Planning Authority will; (i) Carry out screening to determine the potential for all proposed plans and projects authorized by Meath County Council to impact (directly or through indirect cumulative impact) on Natura 2000 sites. (ii) Carry out appropriate level of ecological/ environmental assessment for all proposed plans and projects to ensure the implementation of the policies set out above.
	HER OBJ 7	Objective	Meath County Council will consult with the prescribed bodies and appropriate government agencies, when considering, undertaking or authorizing developments or other activities which are likely to affect protected sites or species.

	HER OBJ 8	Objective	To co-operate with statutory authorities and other in support of measures taken to manage designated nature conservation sites and protected species in order to achieve their conservation objectives.
	HER POL 5	Policy	<ul style="list-style-type: none"> (i) To preserve and enhance the general level of tree cover in the town, to ensure that development proposals do not compromise important trees and include an appropriate level of new tree planting and where appropriate to make use of tree preservation orders to protect important trees or groups of trees which may be at risk. (ii) Where practicable, to protect mature tree/groups of matures trees and mature hedgerows identified in the Green Infrastructure Strategy map that are not formally subject to Tree Protection Preservation Orders in development management proposals.

Appendix A2: Table A2 Protective Policies and Objectives contained within the Meath County Development Plan 2013-2019

Meath County Development Plan 2013-2019 - Measures to Protect sites of European and National Importance			
Location (Chapter)	Ref	Nature	Policy/ Objective Text
Chapter 4: Economic Development Strategy	ED POL 12	Policy	To ensure any port related development proposals are subject to full environmental assessment including Strategic Environmental Assessment, Environmental Impact Assessment and Appropriate Assessment, as required.
	ED POL 18	Policy	To recognise and develop the full potential of biomass for energy production and manufacturing including the export of green electricity to the national grid. The Development Plan acknowledges that such enterprises are more readily accommodated in rural areas due to the extent of lands required to ensure security of supply of raw materials and that proximity to the medium to high voltage national electricity transmission network for green electricity exportation is a key locational consideration for development proposers. All proposals for biomass energy production and manufacturing will require screening to determine if a full Appropriate Assessment of the likely significant effects on Natura 2000 sites, is required.
	ED POL 20	Policy	To normally permit development proposals for the expansion of existing authorised industrial or business enterprises in the countryside where the resultant development does not negatively impact on the character and amenity of the surrounding area. In all instances, it should be demonstrated that the proposal would not generate traffic of a type and amount inappropriate for the standard of the access roads. This policy shall not apply to the National Road Network.
	ED POL 32	Policy	To protect and conserve those natural, built and cultural heritage features that form the basis of the county's tourism attraction and to seek to restrict development which would be detrimental to scenic and identified natural and cultural heritage assets.
	ED POL 43	Policy	To support developments which will enable and encourage countryside recreation and an increased appreciation of the natural environment, through facilitating the development of community walks, off road trails / rural trail developments, parks and other outdoor amenities and recreational infrastructure. All proposals will require screening to determine if a full Appropriate Assessment of the likely significant effects on Natura 2000 sites, is required.
	ED POL 45	Policy	To encourage and support sensitive development which provides for the appreciation, interpretation, upgrade and provision of access to natural habitats, scenic vistas and heritage features for the benefit of rural tourism subject to normal planning and nature conservation considerations.
	ED POL 48	Policy	To ensure that land use policies take account of the need to maintain appropriate distances between future major accident hazard establishments and residential areas, areas of substantial public use and of particular natural sensitivity or interest.
Chapter 5: Social Strategy	SOC POL 38	Policy	To protect the integrity of Natura 2000 sites during the identification of suitable sites for recreation, in particular in terms of their design and use.

Chapter 6: Transportation	TRAN OBJ 2	Objective	To facilitate and encourage the upgrading of existing railway stations, and protect as required lands required for the upgrading of existing railway lines or stations or the provision of new railway stations throughout the County. Any such proposals for developments in Bettystown and south of Drogheda, will have to ensure that there are no adverse effects on the integrity of SPAs.
	TRAN OBJ 8	Objective	<p>To promote and explore the development of the following linkages within the lifetime of the Development Plan subject to the appropriate environmental assessments, including Appropriate Assessment of the likely significant effects on Natura 2000 sites in accordance with Article 6(3) of the EC Habitats Directive;</p> <ul style="list-style-type: none"> (i) To explore the feasibility of developing former disused transportation corridors for cycle / greenways. (ii) To provide the development of a cycle / greenway on the disused Navan – Kingscourt rail line in conjunction with Cavan County Council subject to the completion of a feasibility study obtaining the necessary statutory planning consent, landowner co-operation and the securing of the necessary funding. (iii) To provide for the development of the Trim – Navan – Slane – Drogheda cycle / greenway along the River Boyne subject to obtaining the necessary statutory planning consent, the carrying out of Appropriate Assessment, landowner cooperation and the securing of the necessary funding. (iv) To develop a system of cycle / greenways, subject to the availability of resources, along the banks of the Boyne and Blackwater Rivers, in such a manner so as not to significantly negatively impact on the conservation status of the Natura 2000 site either alone or in combination with other objectives in this or other plans. (v) To explore the development of the following cycle/greenway options as part of the Dublin Galway cycle network <ul style="list-style-type: none"> a) along the Royal Canal located within the administrative area of Meath County Council in consultation with relevant agencies or b) along the former N4 (R148) located within the administrative area of Meath County Council in consultation with relevant agencies or c) Combinations of the above.
	TRAN OBJ 9	Objective	To encourage pedestrian access to certain areas of Natura 2000 sites for their appreciation and in a manner so as not to impact negatively on the sites' integrity or long term conservation status.
	TRAN POL 32	Policy	To ensure that all road plans and project proposals in the County which could, either individually or in combination with other plans and projects, have a significant effect on a Natura 2000 site, undergo an Appropriate Assessment in accordance with Article 6 (3) of the EC Habitats Directive.
Chapter 7: Water, Drainage & Environmental Services	WS SO 7	Objective	To undertake Appropriate Assessment of the likely significant effects on Natura 2000 sites in accordance with Article 6(3) of the EC Habitats Directive for proposals for the abstraction of water from Natura 2000 sites.
	WS POL 19	Policy	To protect groundwater resources having regard to the County Meath Groundwater Protection Plan.
	WS POL 25	Policy	To protect, maintain and improve the natural character of the watercourses and rivers in the county Meath.

	WS POL 26	Policy	To seek the continued improvement of water quality, bathing facilities and other recreational opportunities in the coastal, estuarine and surface waters in the County.
	WS POL 34	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 County Meath.
	WS OBJ 12	Objective	To design flood relief measures to ensure appropriate protection for alluvial woodland (i.e. a qualifying interest) along the Boyne.
	WS OBJ 13	Objective	To design flood relief measures to protect the conservation objectives of Natura 2000 sites and to avoid indirect impacts of conflict with other qualifying interests or Natura 2000 sites.
	WS OBJ 14	Objective	To promote positive flood relief measures that can enhance habitats in the Boyne floodplain such as swales, constructed wetland basins etc.
	WS OBJ 15	Objective	To seek to ensure that construction works are designed so as not to result in surface water runoff into cSAC or SPAs either directly or indirectly via a watercourse.
	PC POL 2	Policy	To ensure that public lighting schemes are designed so that they contribute to the character of the area, minimise visual intrusion and do not have an adverse impact on the character or habitats of the natural environment.
Chapter 8: Energy and Communications	EC POL 3	Policy	To encourage the production of energy from renewable sources, such as from biomass, waste material, solar, wave, hydro, geothermal and wind energy, subject to normal proper planning considerations, including in particular, the potential impact on areas of environmental or landscape sensitivity and Natura 2000 sites.
	EC POL 18	Policy	To generally avoid the location of overhead lines in Natura 2000 sites unless it can be proven that they will not affect the integrity of the site in view of its conservation objectives i.e. by carrying out an appropriate assessment in accordance with Article 6(3) of the E.C. Habitats Directive.
	EC OBJ 1	Objective	To ensure that all plans and projects associated with the generation or supply of energy or telecommunication networks will be subject to an Appropriate Assessment Screening and those plans or projects which could, either individually or in-combination with other plans and projects, have a significant effect on a Natura 2000 site (or sites) undergo a full Appropriate Assessment.
Chapter 9: Cultural and Natural Assets	CSA SP 2	Policy	To ensure that features of Meath's natural heritage and green infrastructure that provide ecosystem services are protected; that biodiversity is conserved and where possible enhanced, and; that the character of landscapes are maintained and enriched, and that tourist and recreational uses are facilitated in a sensitive manner.
	NH POL 1	Policy	To protect, conserve, and seek to enhance the County's biodiversity
	NH POL 2	Policy	To promote measures to protect biodiversity in the development management process by creating and improving habitats, where possible.
	NH POL 5	Policy	To permit development on or adjacent to designated Special Areas of Conservation, Special Protection Areas, National Heritage Area or those proposed to be designated over the period of the plan, only where an assessment carried out to the satisfaction of the Meath County Council, in consultation with National Parks and Wildlife Service, indicates that it will have no significant adverse effect on the integrity of the site.

	NH POL 6	Policy	To have regard to the views and guidance of the National Parks and Wildlife Service in respect of proposed development where there is a possibility that such development may have an impact on a designated European or National site or a site proposed for such designation.
	NH POL 7	Policy	To undertake appropriate surveys and collect data to provide an evidence-base to assist Meath County Council in meeting its obligations under Article 6 of the Habitats Directives, subject to available resources.
	NH OBJ 2	Objective	To ensure an Appropriate Assessment in accordance with Article 6(3) and Article 6(4) of the Habitats Directive, and in accordance with the Department of Environment, Heritage and Local Government Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities, 2009 and relevant EPA and European Commission guidance documents, is carried out in respect of any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect on a Natura 2000 site(s), either individually or in-combination with other plans or projects, in view of the site's conservation objectives.
	NH OBJ 3	Objective	To protect and conserve the conservation value of candidate Special Areas of Conservation, Special Protection Areas, National Heritage Areas and proposed Natural Heritage Areas as identified by the Minister for the Department of Arts, Heritage and the Gaeltacht and any other sites that may be proposed for designation during the lifetime of this Plan.
	GI POL 2	Policy	To protect existing green infrastructure within the County and to provide additional green infrastructure, where possible.
	GI POL 3	Policy	To require that all Land Use Plans protect, manage and provide where possible green infrastructure in an integrated and coherent manner.
	GI OBJ 3	Objective	To encourage, pursuant to Article 10 of the Habitats Directive, the management of features of the landscape, such as traditional field boundaries, important for the ecological coherence of the Natura 2000 network and essential for the migration, dispersal and genetic exchange of wild species.
	NH POL 8	Policy	To seek to ensure that development does not have a significant adverse impact, incapable of satisfactory avoidance or mitigation, on plant, animal or bird species protected by law.
	NH POL 9	Policy	To consult with the National Parks and Wildlife Service, and take account of any licensing requirements, when undertaking, approving or authorising development which is likely to affect plant, animal or bird species protected by law.
	NH POL 11	Policy	To seek to ensure that peatland areas which are designated (or proposed for designation) as NHAs, SACs or SPAs are conserved for their ecological, archaeological, cultural and educational significance.
	NH OBJ 4	Objective	To work in partnership with relevant stakeholders on a suitable peatland site(s) to demonstrate best practice in sustainable peatland conservation, management and restoration techniques and to promote their heritage and educational value subject to Ecological Impact Assessment and Appropriate Assessment Screening as appropriate.
	NH POL 13	Policy	To encourage the retention of hedgerows and other distinctive boundary treatments in rural areas and prevent loss and fragmentation, where possible. Where removal of a hedgerow, stone wall or other distinctive boundary treatment is unavoidable, mitigation by provision of the same type of boundary will be required.

	NH POL 16	Policy	To seek to maintain the natural heritage and amenity of the county by promoting the preservation and enhancement of native and semi-natural woodlands, groups of trees and individual trees.
	NH POL 21	Policy	To protect the recreational, educational and amenity potential of navigational and non-navigational waterways within the County, towpaths and adjacent wetlands.
	NH POL 22	Policy	To have regard to the character, visual, recreational, environmental and amenity value of the coast and provisions for public access in assessing proposals for development.
	NH POL 23	Policy	To work to protect beaches and coastal areas from the driving of motor vehicles in the interest of environmental integrity, quality of amenity and in the interest of public safety.
	NH POL 24	Policy	To ensure that the County's natural coastal defenses, such as beaches, sand dunes, coastal wetlands and estuaries are not compromised by inappropriate works or development.
	NH OBJ 10	Objective	To undertake conservation works in accordance with best practice on the coastal dune systems subject to ecological impact assessment and Appropriate Assessment Screening as appropriate.
	NH POL 26	Policy	To require that development proposal, on both designated and undesignated sites, enhance and appropriately integrate with the natural environment, respecting and complementing the habitats, biodiversity, landscape and natural heritage of the area.
Chapter 10: Rural Development	RUR DEV SO 9	Objective	To ensure that plans and projects associated with rural development will be subject to an Appropriate Assessment Screening and those plans or projects which could, either individually or in-combination with other plans and projects, have a significant effect on a Natura 2000 site (or sites) undergo a full Appropriate Assessment.
	RD POL 16	Policy	To promote forestry development of appropriate scale and character whilst ensuring that the development does not have a negative visual impact on the countryside or cause pollution or degradation to wildlife habitats, natural waters or areas of ecological importance.
	RD POL 18	Policy	To promote the avoidance of deforestation or commercial afforestation within Natura 2000 sites unless directly relating to the management of the site for its qualifying interests.
	RD POL 21	Policy	To ensure that projects associated with the extractive industry carry out screening for Appropriate Assessment in accordance with Article 6(3) of the E.C. Habitats Directive, where required.
	RD POL 27	Policy	To ensure that development for aggregates / mineral extraction, processing and associated processes does not significantly impact in the following areas: <ul style="list-style-type: none"> i. Existing & Proposed Special Areas of Conservation (SACs); ii. Special Protection Areas (SPAs); iii. Natural Heritage Areas and Proposed Natural Heritage Areas; iv. Other areas of importance for the conservation of flora and fauna; v. Areas of significant archaeological potential; vi. In the vicinity of a recorded monument, and; vii. Sensitive landscapes. viii. World Heritage Sites.

	RD POL 52	Policy	To ensure wastewater treatment plants discharging into the Boyne catchment or to coastal Natura 2000 sites are suitably maintained and upgraded in advance of any additional loadings beyond their capacity in order to protect water quality, as required.
	RD POL 53	Policy	To promote good practice with regard to the siting and design of septic tanks and the maintenance of existing tanks. A high level of scrutiny will be placed on applications within 2km of watercourses in the Boyne catchment. Proposals in this area shall not have an adverse impact on local water quality that could affect the qualifying interests of the cSAC and SPA.

Appendix B: Analysis of Likely Significant Effects on Conservation Objectives

Table B1 Site specific conservation objectives of the Qualifying Interests of European Sites within the zone of Influence of the Draft Variation and analysis of likely significant effects

1099 River Lamprey (*Lampetra fluviatilis*)

To restore the favourable conservation condition of River Lamprey in the River Boyne and River Blackwater SAC, which is defined by the following list of attributes and targets (taken from Slaney River Valley SAC Conservation Objectives):

Attribute	Measure	Target	Criteria ⁴			
			1	2	3	4
Distribution: extent of anadromy	Percentage of river accessible	No decline.		✓	✓	
Population structure of juveniles	Number of age/size groups	At least three age/size groups of river/brook lamprey present			✓	
Juvenile density in fine sediment	Juveniles/m ²	Mean catchment juvenile density of brook/river lamprey at least 2/m ²			✓	
Extent and distribution of spawning habitat	m ² and occurrence	No decline in extent and distribution of spawning beds		✓	✓	
Availability of juvenile habitat	Number of positive sites in 2 nd order channels (and greater), downstream of spawning areas	More than 50% of sample sites positive		✓	✓	

1106 Salmon (*Salmon salar*)

To restore the favourable conservation condition of Salmon in the River Boyne and River Blackwater SAC, which is defined by the following list of attributes and targets (taken from the Lower River Shannon SAC Conservation Objectives):

⁴ The assessment criteria are as follows: 1. Hydrological linkages to European sites and potential for impacts to surface and ground water quality; 2. Direct habitat loss of European sites or loss of ecological networks supporting European sites; 3. Direct or indirect disturbance to European site habitats and/or species; 4. Changes in abiotic features/conditions supporting European site habitats and/or species.

Attribute	Measure	Target	Criteria			
			1	2	3	4
Distribution: extent of anadromy	Percentage of river accessible	100% of river channels down to second order accessible from estuary		✓	✓	
Adult spawning fish	Number	Conservation Limit (CL) for each system consistently exceeded			✓	
Salmon fry abundance	Number of fry/5 minutes electrofishing	No significant decline			✓	
Out-migrating smolt abundance	Number	No significant decline			✓	
Number and distribution of redds	Number and occurrence	No decline in number and distribution of spawning redds due to anthropogenic causes		✓	✓	
Water quality	EPA Q value	At least Q4 at all sites sampled by the EPA	✓			✓
1355 Otter (<i>Lutra lutra</i>)						
To restore the favourable conservation condition of Otter in the River Boyne and River Blackwater SAC, which is defined by the following list of attributes and targets (taken from Slaney Rover Valley SAC Conservation Objectives):						
Attribute	Measure	Target	Criteria			
			1	2	3	4
Distribution	Percentage positive survey sites	No significant decline			✓	
Extent of terrestrial habitat	Hectares	No significant decline		✓	✓	
Extent of marine habitat	Hectares	No significant decline		✓	✓	

Extent of freshwater (river) habitat	Kilometers	No significant decline		✓	✓	
Extent of freshwater (lake/lagoon) habitat	Hectares	No significant decline		✓	✓	
Couching sites and holts	Number	No significant decline			✓	
Fish biomass available	Kilograms	No significant decline			✓	
Barriers to connectivity	Number	No significant increase			✓	
7110 Active raised bogs*						
To restore the favourable conservation condition of Active raised bogs in Killyconny Bog (Cloghbally) SAC, which is defined by the following list of attributes and targets:						
Attribute	Measure	Target	Criteria			
			1	2	3	4
Habitat area	Hectares	Restore area of active raised bog to 13.2ha, subject to natural processes		✓	✓	
Habitat distribution	Occurrence	Restore the distribution and variability of active raised bog across the SAC.		✓	✓	
High bog area	Hectares	No decline in extent of high bog necessary to support the development and maintenance of active raised bog.		✓	✓	
Hydrological regime: water levels	Centimeters	Restore appropriate water levels throughout the site.	✓		✓	✓
Hydrological regime: flow patterns	Flow direction; slope	Restore, where possible, appropriate high bog topography, flow directions and slopes.	✓		✓	✓

Transitional areas between high bog and adjacent mineral soils (including cutover areas)	Hectares; distribution	Restore adequate transitional areas to support/ protect the raised bog ecosystem and the services it provides.		✓	✓	
Vegetation quality: central ecotope, active flush, soaks, bog woodland	Hectares	Restore 6.6ha of central ecotope/active flush/ soaks/ bog woodland as appropriate		✓	✓	
Vegetation quality: microtopographic-al features	Hectares	Restore adequate cover of high quality microtopographical features		✓	✓	
Vegetation quality: bog moss (<i>Sphagnum</i>) species	Percentage cover	Maintain and restore adequate cover of bog moss (<i>Sphagnum</i>) species to ensure peat-forming capacity		✓	✓	
Typical ARB species: flora	Occurrence	Restore, where appropriate, typical active raised bog flora		✓	✓	
Typical ARB species: fauna	Occurrence	Restore, where appropriate, typical active raised bog fauna		✓	✓	
Elements of local distinctiveness	Occurrence	Maintain features of local distinctiveness, subject to natural processes		✓	✓	
Negative physical indicators	Percentage cover	Negative physical features absent or insignificant		✓	✓	
Vegetation composition: native negative indicator species	Percentage cover	Native negative indicator species at insignificant levels		✓	✓	
Vegetation composition: nonnative invasive species	Percentage cover	Non-native invasive species at insignificant levels and not more than 1% cover		✓	✓	

Air quality: nitrogen deposition	kg N/ha/year	Air quality surrounding bog close to natural reference conditions. The total N deposition should not exceed 5kg N/ha/yr				✓
Water quality	Hydrochemical measures	Water quality on the high bog and in transitional areas close to natural reference conditions	✓			✓
7120 Degraded raised bogs still capable of natural regeneration						
The long-term aim for Degraded raised bogs still capable of natural regeneration is that its peat-forming capability is re-established; therefore, the conservation objectives for this habitat is inherently linked to that of Active raised bogs (7110) and as a separate conservation objective has not been set in Killyconny Bog SAC.						
Attribute	Measure	Target	Criteria			
			1	2	3	4
N/A	N/A	N/A	N/A	N/A	N/A	
7230 Alkaline fens						
To maintain the favourable conservation condition of Alkaline fens in The River Boyne and River Blackwater SAC, which is defined by the following list of attributes and targets (taken from Galway Bay Complex SAC Conservation Objectives):						
Attribute	Measure	Target	Criteria			
			1	2	3	4
Habitat area	Hectares	Area stable or increasing, subject to natural processes.		✓	✓	
Habitat distribution	Occurrence	No decline, subject to natural processes.		✓	✓	
Hydrological regime	Flow rates, meters	Appropriate natural hydrological regime necessary to support the natural structure and functioning of the habitat	✓		✓	✓
Water quality: nutrients	Water chemistry measures	Appropriate water quality to support the natural structure and functioning of the habitat.	✓		✓	✓
Vegetation composition: typical species	Presence	Maintain vegetation cover of typical species including brown mosses and vascular plants		✓	✓	
Vegetation composition: trees and shrubs	Percentage	Cover of scattered native trees and shrubs less than 10%		✓	✓	

Physical structure: disturbed bare ground	Percentage	Cover of disturbed bare ground less than 10%. Where tufa is present, disturbed bare ground less than 1%.		✓	✓	
Physical structure: drainage	Percentage	Areas showing signs of drainage as a result of drainage ditches or heavy trampling less than 10%	✓	✓	✓	✓
91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae)* (denotes priority habitat)						
To restore the favourable conservation condition of Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion) in the Slaney River Valley SAC, which is defined by the following list of attributes and targets (taken from Slaney River Valley SAC Conservation Objectives):						
Attribute	Measure	Target	Criteria			
			1	2	3	4
Woodland structure: veteran trees	Number per hectare	No decline		✓	✓	
Woodland structure: indicators of local distinctiveness	Occurrence	No decline		✓	✓	
Vegetative composition: typical species	Percentage	No decline. Native tree cover not less than 95%.		✓	✓	
Vegetation composition: typical species	Occurrence	A variety of typical native species present, depending on woodland		✓	✓	
A229 Kingfisher (<i>Alcedo atthis</i>)						
To maintain or restore the favourable conservation condition of Kingfisher on the River Boyne and River Blackwater SAC. Note no specific Conservation Objectives have been drafted for Kingfisher in Ireland yet.						
Attribute	Measure	Target	Criteria			
			1	2	3	4
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A

Appendix C

Table C1 Likely significant effects of Objectives contained within the Draft Variation No.1 to the KDP 2013-2019

Objective	Hydrological/hydrogeological linkages to European sites and potential for impacts arising to and from surface and ground water quality	Direct habitat loss or loss of ecological networks supporting European sites	Direct or indirect disturbance to European site habitats and/or species	Changes in abiotic features/conditions supporting European site habitats and/or species
<i>To amend the text of the Kells Development Plan narrative, policies and objectives to bring these into line with the Meath Economic Development Strategy.</i>	No	No	No	No
<i>To review the appropriateness of the Masterplan/Framework plan Objectives in the town as it pertains to their compatibility with employment generation.</i>	No	No	No	No
<i>To review the requirements surrounding the preparation of Master Plans on employment zonings.</i>	No	No	No	No
<i>The introduction of additional employment generating lands to provide for a high end technology and major campus style office based employment as well as to facilitate logistics, warehousing, distribution and supply chain management to the south-east of Kells, the introduction of which will stimulate growth at this key location in the town. The provision of additional employment lands is consistent with Action 4 of the Economic Development Strategy to</i>	Yes, potential impacts to River Boyne and river Blackwater SAC due to possible hydrological connection between possible drainage ditches on these lands and local watercourses such as Gardenrath Stream, which is a tributary of the River Blackwater. Mitigatory wording is required to ensure that	Yes, potential for loss of hedgerow habitats which would act as ecological networks to woodland habitats located along the River Boyne and River Blackwater. This loss could be caused as a result of proposed industrial development in these areas. Mitigatory wording is required to ensure that development on these lands	Yes, potential for ex-situ disturbance to habitats and species associated with the River Boyne and River Blackwater SAC/SPA through construction works and increased human presence during operation. Mitigatory wording is required to ensure that development on these lands will only take place if it can be	Yes, potential for changes to the local watercourses such as the Gardensrath Stream which acts as a tributary to the River Blackwater and may be a supporting feature to this SAC/SPA. Industrial development in these lands may have an impact on the air quality in the immediate environs of these lands. Mitigatory wording is required to ensure that

<i>Objective</i>	<i>Hydrological/hydrogeological linkages to European sites and potential for impacts arising to and from surface and ground water quality</i>	<i>Direct habitat loss or loss of ecological networks supporting European sites</i>	<i>Direct or indirect disturbance to European site habitats and/or species</i>	<i>Changes in abiotic features/conditions supporting European site habitats and/or species</i>
<i>promote the hierarchy of economic centres with the objective of facilitating significant new enterprise employment in Meath.</i>	development on these lands will only take place if it can be ascertained, by means of an appropriate assessment that the integrity of European sites will not be affected. It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH OBJ 3, WS OBJ 15 and WS POL 26. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in hydrology the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan also provide mitigation to this effect, e.g. EMP	will only take place if it can be ascertained, by means of an appropriate assessment, that the integrity of European sites will not be affected. It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH POL 26, NH POL 16, NH POL 13, GI POL 2, GI OBJ 3, and CSA SP 2. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in habitat loss on the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. EMP POL 12, TOWN	ascertained, by means of an appropriate assessment, that the integrity of European sites will not be affected. It should also be noted that mitigation to this effect is provided in NH POL 6, NH OBJ 2, NH POL 8, NH POL 9 and WS OBJ 15. Therefore, taking this mitigating policy into account there are no adverse impacts through changes in disturbance on the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. EMP POL 12, TOWN CENTRE POL 19, HER OBJ 3, HER OBJ 4,	development on these lands will only take place if it can be ascertained, by means of an appropriate assessment, that the integrity of European sites will not be affected. It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH OBJ 3, WS OBJ 15 and WS POL 26. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in abiotic conditions/features supporting the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. EMP POL 12, TOWN CENTRE

Objective	Hydrological/hydrogeological linkages to European sites and potential for impacts arising to and from surface and ground water quality	Direct habitat loss or loss of ecological networks supporting European sites	Direct or indirect disturbance to European site habitats and/or species	Changes in abiotic features/conditions supporting European site habitats and/or species
	POL 12, INF POL 4, HER OBJ 2, HER OBJ 3 and HER OBJ 6.	CENTRE POL 19, GI POL 2, GI POL 4, GI OBJ 2, HER OBJ 2, HER OBJ 3, HER OBJ 5, HER OBJ 6 and HER POL 5.	HER OBJ 6, HER OBJ 7 and HER OBJ 8.	POL 19, HER OBJ 3, HER OBJ 7 and HER OBJ 6.
<i>Introduce a 'spot objective' for the development of employment zoned lands (E1 and E3 land use zoning objectives) to the south-east of Kells, on the Navan Road and adjacent to the Kells (south) M3 interchange at junction 10. These lands will provide for a high end technology and major campus style office employment as well as to facilitate logistics, warehousing, distribution and supply chain management and shall be subject to the preparation and written approval of a Master Plan by the Executive of the Planning Authority.</i>	No	No	No	No

Objective	Hydrological/hydrogeological linkages to European sites and potential for impacts arising to and from surface and ground water quality	Direct habitat loss or loss of ecological networks supporting European sites	Direct or indirect disturbance to European site habitats and/or species	Changes in abiotic features/conditions supporting European site habitats and/or species
<i>The introduction of additional lands for the provision of retail warehouse facilities which previously had the benefit of a retail warehouse zoning to the rear of the existing Aldi retail store in order to provide for the comprehensive development of these lands to the north of Kells and adjacent to an interchange on the M3 Motorway. The development of retail warehouse parks shall be subject to the provision of necessary physical infrastructure, and, where deemed appropriate by Meath County Council at pre-planning stage, in accordance with an approved Masterplan.</i>	Yes, potential impacts to River Boyne and River Blackwater SAC due to possible hydrological connection between possible drainage ditches on these lands and the River Blackwater. Mitigatory wording ⁵ is required to ensure that development on these lands will only take place if it can be ascertained, by means of an appropriate assessment, that the integrity of European sites will not be affected. It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH OBJ 3, WS OBJ 15 and WS POL 26. Therefore, taking these mitigating policies into	Yes, potential for loss of hedgerow habitats which may act as ecological networks to woodland habitats located along the River Boyne and River Blackwater. This loss could be caused as a result of proposed industrial development in these areas. Mitigatory wording ⁵ is required to ensure that development on these lands will only take place if it can be ascertained, by means of an appropriate assessment, that the integrity of European sites will not be affected. It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH POL 26, NH POL 16, NH POL 13, GI POL 2, GI OBJ 3, and CSA SP 2. Therefore, taking these	Yes, potential for ex-situ disturbance to habitats and species associated with the River Boyne and River Blackwater SAC/SPA through construction works and increased human presence during operation. Mitigatory wording ⁵ is required to ensure that development on these lands will only take place if it can be ascertained, by means of an appropriate assessment, that the integrity of European sites will not be affected. It should also be noted that mitigation to this effect is provided in NH POL 6, NH OBJ 2, NH POL 8, NH POL 9 and WS OBJ 15. Therefore, taking this mitigating policy into account there are no	Yes, potential for changes to the possible drainage ditches which may act as a supporting feature to the River Boyne and River Blackwater SAC/SPA. It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH OBJ 3, WS OBJ 15 and WS POL 26. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in abiotic conditions/features supporting the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide

⁵ Mitigation has been proposed in the form of additional wording to strengthen the commitment for Appropriate Assessment to be undertaken for these projects. This proposed mitigation is outlined in Section 4.2.1 of the main report.

Objective	Hydrological/hydrogeological linkages to European sites and potential for impacts arising to and from surface and ground water quality	Direct habitat loss or loss of ecological networks supporting European sites	Direct or indirect disturbance to European site habitats and/or species	Changes in abiotic features/conditions supporting European site habitats and/or species
	account there are no adverse impacts through changes in hydrology the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan also provide mitigation to this effect, e.g. EMP POL 12, INF POL 4, HER OBJ 2, HER OBJ 3 and HER OBJ 6.	mitigating policies into account there are no adverse impacts through changes in habitat loss the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. EMP POL 12, GI POL 2, GI POL 4, GI OBJ 2, HER OBJ 2, HER OBJ 3, HER OBJ 5, HER OBJ 6 and HER POL 5.	adverse impacts through changes in disturbance on the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. EMP POL 12, HER OBJ 3, HER OBJ 4, HER OBJ 6, HER OBJ 7 and HER OBJ 8.	mitigation to this effect, e.g. EMP POL 12, TOWN CENTRE POL 19, HER OBJ 3, HER OBJ 7 and HER OBJ 6.
<i>Amendments to the employment zoning objectives set in order to provide more flexibility in the provision of employment generating uses. This will ensure consistency with the County Development Plan zoning objectives.</i>	No	No	No	No

Objective	Hydrological/hydrogeological linkages to European sites and potential for impacts arising to and from surface and ground water quality	Direct habitat loss or loss of ecological networks supporting European sites	Direct or indirect disturbance to European site habitats and/or species	Changes in abiotic features/conditions supporting European site habitats and/or species
<i>Amendments to take account of flood risk mapping published since adoption of the Kells Development Plan (undertaken in October 2013)</i>	No	No	No	No
MASTERPLAN AREAS - the zoned area of Kells contains a number of land banks of varying sizes. In order to ensure an integrated approach to the development of these, they have been designated as requiring a master plan. Areas identified as requiring new or updated master plan to be prepared are as follows:				
Master Plan 1 - <i>relates to the “Backlands”, an area of undeveloped green field lands to the east of Bective Street, the R164, in close proximity to the town centre. These lands will be zoned for “Commercial/Town Centre” use.</i>	While the River Blackwater lies c. 1km to the north-east of these lands, there is potential for possible hydrological linkages to this European site through drainage ditches which may be present on site. Construction in such close proximity to such drainage ditches could ultimately result in contaminated discharges to this European site. Mitigatory wording ⁷ is required to ensure that development on these lands will only take place if it can be ascertained,	Development on these lands may result in the loss of ecological features such as hedgerows and treelines which support the SAC/SPA. Without mitigating wording, this objective has the potential to result in adverse impacts on European sites/species. Mitigatory wording ⁷ is required to ensure that development on these lands will only take place if it can be ascertained, by means of an appropriate assessment, that the integrity of European sites will not be affected. It should also be noted that mitigation to	Yes, potential for ex-situ disturbance to habitats and species associated with the River Boyne and River Blackwater SAC/SPA through construction works and increased human presence during operation. Mitigatory wording ⁵ is required to ensure that development on these lands will only take place if it can be ascertained, by means of an appropriate assessment, that the integrity of European sites will not be affected. It should also be noted that mitigation to this	Yes, potential for changes to the possible drainage ditches which may act as a supporting feature to the River Boyne and River Blackwater SAC/SPA. It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH OBJ 3, WS OBJ 15 and WS POL 26. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in abiotic conditions/features supporting the River Boyne and River Blackwater SAC through the implementation

Objective	Hydrological/hydrogeological linkages to European sites and potential for impacts arising to and from surface and ground water quality	Direct habitat loss or loss of ecological networks supporting European sites	Direct or indirect disturbance to European site habitats and/or species	Changes in abiotic features/conditions supporting European site habitats and/or species
	by means of an appropriate assessment, that the integrity of European sites will not be affected. It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH OBJ 3, WS OBJ 15 and WS POL 26. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in hydrology the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan also provide mitigation to this effect, e.g. TOWN CENTRE POL 19, INF POL 4, HER OBJ 2,	this effect is provided in the County Development Plan under NH OBJ 2, NH POL 26, NH POL 16, NH POL 13, GI POL 2, GI OBJ 3, and CSA SP 2. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in habitat loss the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. GI POL 2, GI POL 4, GI OBJ 2, HER OBJ 2, HER OBJ 3, HER OBJ 5, HER OBJ 6 and HER POL 5.	effect is provided in NH POL 6, NH OBJ 2, NH POL 8, NH POL 9 and WS OBJ 15. Therefore, taking this mitigating policy into account there are no adverse impacts through changes in disturbance on the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. HER OBJ 3, HER OBJ 4, HER OBJ 6, HER OBJ 7 and HER OBJ 8.	of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. HER OBJ 3, HER OBJ 7 and HER OBJ 6.

Objective	Hydrological/hydrogeological linkages to European sites and potential for impacts arising to and from surface and ground water quality	Direct habitat loss or loss of ecological networks supporting European sites	Direct or indirect disturbance to European site habitats and/or species	Changes in abiotic features/conditions supporting European site habitats and/or species
	HER OBJ 3 and HER OBJ 6.			
Master Plan 2- <i>relates to undeveloped lands adjacent to the Aldi foodstore on the Cavan Road north of Kells town centre to facilitate the provision of inter alia Enterprise and Garden Centres, Research and Development facilities, office uses where services are not principally provided to members of the public, Science and Technology Based Enterprise, amongst other uses in a good quality physical environment. The proposed Variation will result in an increase in lands zoned for retail warehousing in this location.</i>	The River Blackwater lies c. 1km north of these lands. Potential hydrological linkages between these lands and the European site through possible drainage ditches which may be present on site could carry contaminating substances to the River Blackwater during construction. Mitigatory wording ⁷ is required to ensure that development on these lands will only take place if it can be ascertained, by means of an appropriate assessment, that the integrity of European sites will not be affected. It should also be noted that mitigation to this effect is provided in the County Development	Yes, it is possible that construction on these lands would result in loss of ecological features such as hedgerows, treelines and agricultural lands which may support the European site (River Boyne and River Blackwater SAC/SPA). Without mitigating wording this objective has the potential to result in adverse impacts on European sites/species. Mitigatory wording ⁷ is required to ensure that development on these lands will only take place if it can be ascertained, by means of an appropriate assessment, that the integrity of European sites will not be affected. It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH POL 26,	Yes, potential for ex-situ disturbance to habitats and species associated with the River Boyne and River Blackwater SAC/SPA through construction works and increased human presence during operation. Mitigatory wording ⁵ is required to ensure that development on these lands will only take place if it can be ascertained, by means of an appropriate assessment, that the integrity of European sites will not be affected. It should also be noted that mitigation to this effect is provided in NH POL 6, NH OBJ 2, NH POL 8, NH POL 9 and WS OBJ 15. Therefore, taking this mitigating policy into account there are no adverse impacts through	Yes, potential for changes to the possible drainage ditches which may act as a supporting feature to the River Boyne and River Blackwater SAC/SPA. It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH OBJ 3, WS OBJ 15 and WS POL 26. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in abiotic conditions/features supporting the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g.

Objective	Hydrological/hydrogeological linkages to European sites and potential for impacts arising to and from surface and ground water quality	Direct habitat loss or loss of ecological networks supporting European sites	Direct or indirect disturbance to European site habitats and/or species	Changes in abiotic features/conditions supporting European site habitats and/or species
	Plan under NH OBJ 2, NH OBJ 3, WS OBJ 15 and WS POL 26. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in hydrology the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan also provide mitigation to this effect, e.g. INF POL 4, HER OBJ 2, HER OBJ 3 and HER OBJ 6.	NH POL 16, NH POL 13, GI POL 2, GI OBJ 3, and CSA SP 2. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in habitat loss the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. GI POL 2, GI POL 4, GI OBJ 2, HER OBJ 2, HER OBJ 3, HER OBJ 5, HER OBJ 6 and HER POL 5.	changes in disturbance on the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. HER OBJ 3, HER OBJ 4, HER OBJ 6, HER OBJ 7 and HER OBJ 8.	HER OBJ 3, HER OBJ 7 and HER OBJ 6.
Master Plan 3- relates to undeveloped lands within the Kells Business Park on the eastern side of the R147 (formerly the N3) to facilitate the provision of industrial, manufacturing, distribution, warehousing and other general employment /enterprise uses in a good quality physical environment. The proposed Variation will result in an increase in lands	Yes, the River Blackwater forms the north-western boundary of these lands. Therefore, there is great potential for adverse impacts on the River Boyne and River Blackwater SAC/SPA	Yes, it is possible that construction on these lands would result in loss of ecological features such as hedgerows, treelines and agricultural lands which may support the European site (River Boyne and River	Yes, without mitigating wording this objective has the potential to result in adverse impacts on European sites/species. Mitigatory wording ⁷ is required to ensure that development on these	Yes, potential for changes to the possible drainage ditches which may act as a supporting feature to the River Boyne and River Blackwater SAC/SPA. In addition, industrial development in these lands

<i>Objective</i>	<i>Hydrological/hydrogeological linkages to European sites and potential for impacts arising to and from surface and ground water quality</i>	<i>Direct habitat loss or loss of ecological networks supporting European sites</i>	<i>Direct or indirect disturbance to European site habitats and/or species</i>	<i>Changes in abiotic features/conditions supporting European site habitats and/or species</i>
<i>zoned for enterprise and employment in the Kells Business Park.</i>	through the potential release of construction related discharges into the surface water system, including possible drainage ditches on site. Mitigatory wording ⁷ referring to the requirement for an AA to be completed for this work is needed. Mitigatory wording is required to ensure that development on these lands will only take place if it can be ascertained, by means of an appropriate assessment, that the integrity of European sites will not be affected. It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH OBJ 3, WS OBJ 15 and WS POL 26. Therefore, taking these mitigating policies into	Blackwater SAC/SPA). Without mitigating wording this objective has the potential to result in adverse impacts on European sites/species. Mitigatory wording ⁷ is required to ensure that development on these lands will only take place if it can be ascertained, by means of an appropriate assessment, that the integrity of European sites will not be affected. It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH POL 26, NH POL 16, NH POL 13, GI POL 2, GI OBJ 3, and CSA SP 2. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in habitat loss the River Boyne and River Blackwater SAC through the implementation of this	lands will only take place if it can be ascertained, by means of an appropriate assessment, that the integrity of European sites will not be affected. It should also be noted that mitigation to this effect is provided in NH POL 6, NH OBJ 2, NH POL 8, NH POL 9 and WS OBJ 15. Therefore, taking this mitigating policy into account there are no adverse impacts through changes in disturbance on the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. EMP POL 12, HER OBJ 3, HER OBJ 4,	may have an impact on the air quality in the immediate environs of these lands. It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH OBJ 3, WS OBJ 15 and WS POL 26. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in abiotic conditions/features supporting the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. EMP POL 12, HER OBJ 3, HER OBJ 7 and HER OBJ 6.

Objective	Hydrological/hydrogeological linkages to European sites and potential for impacts arising to and from surface and ground water quality	Direct habitat loss or loss of ecological networks supporting European sites	Direct or indirect disturbance to European site habitats and/or species	Changes in abiotic features/conditions supporting European site habitats and/or species
	account there are no adverse impacts through changes in hydrology the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan also provide mitigation to this effect, e.g. EMP POL 12, INF POL 4, HER OBJ 2, HER OBJ 3 and HER OBJ 6.	aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. GI POL 2, GI POL 4, GI OBJ 2, HER OBJ 2, HER OBJ 3, HER OBJ 5, HER OBJ 6 and HER POL 5.	HER OBJ 6, HER OBJ 7 and HER OBJ 8.	
Master Plan 4- <i>relates to the “Front lands” located to the west of Bective Street/Bective Square/Suffolk Street. These lands will be zoned for a variety of uses including “Commercial/Town Centre”, “New Residential” and “Open Space”.</i>	Yes, potential for adverse impacts on the River Boyne and River Blackwater SAC/SPA through the potential release of construction related discharges into the surface water system. While the River Blackwater lies c. 1.3km north-east of these lands contamination is possible through discharges to the	Yes, without mitigating wording ⁷ this objective has the potential to result in adverse impacts on European sites/species and their supporting ecological networks (hedgerows and agricultural lands). It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH POL 26, NH	Yes, without mitigating wording ⁷ this objective has the potential to result in adverse impacts on European sites/species. It should also be noted that mitigation to this effect is provided in NH POL 6, NH OBJ 2, NH POL 8, NH POL 9 and WS OBJ 15. Therefore, taking this mitigating policy into account there are no	Yes, potential for changes to the possible drainage ditches which may act as a supporting feature to the River Boyne and River Blackwater SAC/SPA. It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH OBJ 3, WS OBJ 15 and WS POL 26. Therefore, taking these mitigating

Objective	Hydrological/hydrogeological linkages to European sites and potential for impacts arising to and from surface and ground water quality	Direct habitat loss or loss of ecological networks supporting European sites	Direct or indirect disturbance to European site habitats and/or species	Changes in abiotic features/conditions supporting European site habitats and/or species
	<p>local surface water drainage system which may ultimately discharge to the River Blackwater. Mitigatory wording⁷ referring to the requirement for an AA to be completed for this work is needed. It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH OBJ 3, WS OBJ 15 and WS POL 26. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in hydrology the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan also provide mitigation</p>	<p>POL 16, NH POL 13, GI POL 2, GI OBJ 3, and CSA SP 2. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in habitat loss the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. TOWN CENTRE POL 19, GI POL 2, GI POL 4, GI OBJ 2, HER OBJ 2, HER OBJ 3, HER OBJ 5, HER OBJ 6 and HER POL 5.</p>	<p>adverse impacts through changes in disturbance on the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. TOWN CENTRE POL 19, HER OBJ 3, HER OBJ 4, HER OBJ 6, HER OBJ 7 and HER OBJ 8.</p>	<p>policies into account there are no adverse impacts through changes in abiotic conditions/features supporting the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. TOWN CENTRE POL 19, HER OBJ 3, HER OBJ 7 and HER OBJ 6.</p>

Objective	Hydrological/hydrogeological linkages to European sites and potential for impacts arising to and from surface and ground water quality	Direct habitat loss or loss of ecological networks supporting European sites	Direct or indirect disturbance to European site habitats and/or species	Changes in abiotic features/conditions supporting European site habitats and/or species
	to this effect, e.g. TOWN CENTRE POL 19, INF POL 4, HER OBJ 2, HER OBJ 3 and HER OBJ 6.			
Master Plan 5- refers to the development of residential lands and publicly accessible walkways to the River Blackwater and Mausoleum at Rabbit Hill Woods, Headfort Road. These areas will be zoned as “High Amenity” and “Existing Residential”.	Yes, potential for adverse impacts on the River Boyne and River Blackwater SAC/SPA through the potential transfer of construction related discharges to this SAC/SPA via drainage ditches which may be present on site. These lands lie within the boundary of the River Boyne and River Blackwater SAC. Mitigatory wording ⁷ referring to the requirement for an AA to be completed for this work is needed. It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH OBJ 3, WS	Yes, part of this zoned area lies within the River Boyne and River Blackwater SAC boundary. Without mitigating wording ⁷ this objective has the potential to result in adverse impacts on European sites habitats/species and their supporting ecological networks (hedgerows, stream and agricultural lands). It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH POL 26, NH POL 16, NH POL 5, NH POL 13, GI POL 2, GI OBJ 3, and CSA SP 2. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in habitat	Yes, without mitigating wording ⁷ this objective has the potential to result in adverse impacts on European sites/species through increased disturbance during construction and operation/occupation. It should also be noted that mitigation to this effect is provided in NH POL 6, NH OBJ 2, NH POL 8, NH POL 9, NH POL 5 and WS OBJ 15. Therefore, taking this mitigating policy into account there are no adverse impacts through changes in disturbance on the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In	Yes, potential for changes to the possible drainage ditches which may act as a supporting feature to the River Boyne and River Blackwater SAC/SPA. It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH OBJ 3, NH POL 5, WS OBJ 15 and WS POL 26. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in abiotic conditions/features supporting the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set

Objective	Hydrological/hydrogeological linkages to European sites and potential for impacts arising to and from surface and ground water quality	Direct habitat loss or loss of ecological networks supporting European sites	Direct or indirect disturbance to European site habitats and/or species	Changes in abiotic features/conditions supporting European site habitats and/or species
	OBJ 15, NH POL 5 and WS POL 26. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in hydrology the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan also provide mitigation to this effect, e.g. Core Strategy OBJ 1, HS POL 14, INF POL 4, HER OBJ 2, HER OBJ 3 and HER OBJ 6.	loss the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. Core Strategy OBJ 1, HS POL 14, GI POL 2, GI POL 4, GI OBJ 2, HER OBJ 2, HER OBJ 3, HER OBJ 5, HER OBJ 6 and HER POL 5.	addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. Core Strategy OBJ 1, HS POL 14, HER OBJ 3, HER OBJ 4, HER OBJ 6, HER OBJ 7 and HER OBJ 8.	out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. Core Strategy OBJ 1, HS POL 14, HER OBJ 3, HER OBJ 7 and HER OBJ 6.
Master Plan 6- relates to lands on the western side of the Navan Road and is to facilitate the provision of high end technology/manufacturing and major campus style office based employment and/or to facilitate logistics, warehousing, distribution and supply chain management. These lands were previously zoned as “Open Space”, “Tourism”	Yes, potential impacts to River Boyne and river Blackwater SAC due to possible hydrological connection between possible drainage ditches on these lands and local watercourses such as	Yes, potential for loss of hedgerow habitats which would act as ecological networks to woodland habitats located along the River Boyne and River Blackwater. This loss could be caused as a result of	Yes, potential for ex-situ disturbance to habitats and species associated with the River Boyne and River Blackwater SAC/SPA through construction works and increased human presence during	Yes, potential for changes to the local watercourses such as the Gardensrath Stream which acts as a tributary to the River Blackwater and may be a supporting feature to this SAC/SPA. Industrial development in these lands

Objective	Hydrological/hydrogeological linkages to European sites and potential for impacts arising to and from surface and ground water quality	Direct habitat loss or loss of ecological networks supporting European sites	Direct or indirect disturbance to European site habitats and/or species	Changes in abiotic features/conditions supporting European site habitats and/or species
<i>and “Community Infrastructure”. They will now be zoned as a “Strategic Employment Zone”.</i>	Gardenrath Stream, which is a tributary of the River Blackwater. Mitigatory wording is required to ensure that development on these lands will only take place if it can be ascertained, by means of an appropriate assessment that the integrity of European sites will not be affected. It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH OBJ 3, WS OBJ 15 and WS POL 26. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in hydrology the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In	proposed industrial development in these areas. Mitigatory wording is required to ensure that development on these lands will only take place if it can be ascertained, by means of an appropriate assessment, that the integrity of European sites will not be affected. It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH POL 26, NH POL 16, NH POL 13, GI POL 2, GI OBJ 3, and CSA SP 2. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in habitat loss on the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set	operation. Mitigatory wording is required to ensure that development on these lands will only take place if it can be ascertained, by means of an appropriate assessment, that the integrity of European sites will not be affected. It should also be noted that mitigation to this effect is provided in NH POL 6, NH OBJ 2, NH POL 8, NH POL 9 and WS OBJ 15. Therefore, taking this mitigating policy into account there are no adverse impacts through changes in disturbance on the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also	may have an impact on the air quality in the immediate environs of these lands. Mitigatory wording is required to ensure that development on these lands will only take place if it can be ascertained, by means of an appropriate assessment, that the integrity of European sites will not be affected. It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH OBJ 3, WS OBJ 15 and WS POL 26. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in abiotic conditions/features supporting the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set

Objective	Hydrological/hydrogeological linkages to European sites and potential for impacts arising to and from surface and ground water quality	Direct habitat loss or loss of ecological networks supporting European sites	Direct or indirect disturbance to European site habitats and/or species	Changes in abiotic features/conditions supporting European site habitats and/or species
	addition, policies and objectives set out in the Kells Development Plan also provide mitigation to this effect, e.g. EMP POL 12, INF POL 4, HER OBJ 2, HER OBJ 3 and HER OBJ 6.	out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. EMP POL 12, GI POL 2, GI POL 4, GI OBJ 2, HER OBJ 2, HER OBJ 3, HER OBJ 5, HER OBJ 6 and HER POL 5.	provide mitigation to this effect, e.g. EMP POL 12, HER OBJ 3, HER OBJ 4, HER OBJ 6, HER OBJ 7 and HER OBJ 8.	out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. EMP POL 12, HER OBJ 3, HER OBJ 7 and HER OBJ 6.
Master Plan 7- refers to the development of high quality Executive Style residential units south of the existing Maple Drive residential development to be accessed off the Athboy Road. The proposed Variation will result in an increase in lands zoned for residential development at this location.	These lands are situated c. 2.2km south-west of the River Boyne and River Blackwater SAC/SPA. However, the Toberultan River flows c. 350m to the south-west of these lands and is a tributary of the River Blackwater. It is possible that drainage ditches which may be present and even the local surface water drainage network could transfer harmful substances to this watercourse, and subsequently to the SAC, potentially resulting in a significant adverse impact on this SAC/SPA.	Yes, without mitigating wording ⁷ this objective has the potential to result in adverse impacts on European sites habitats/species and their supporting ecological networks (Toberultan River and hedgerows). It should be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, WS OBJ 15, WS POL 26, NH OBJ 3, GI POL 2, NH POL 13, NH POL 16 and GI OBJ 3. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in habitat loss on the River Boyne and	Yes, without mitigating wording ⁷ this objective has the potential to result in adverse impacts on European sites habitats/species through increased disturbance during construction and operation/occupation. It should be noted that mitigation to this effect is provided in the County Development Plan under NH POL 8, NH POL 9, NH OBJ 2 and NH OBJ 3. Therefore, taking this mitigating policy into account there are no adverse impacts through changes in disturbance on the River Boyne and River	Yes, potential for changes to the local drainage ditches which may be present on site and which ultimately discharge to the River Blackwater. Mitigatory wording is required to ensure that development on these lands will only take place if it can be ascertained, by means of an appropriate assessment, that the integrity of European sites will not be affected. It should also be noted that mitigation to this effect is provided in the County Development Plan under NH OBJ 2, NH OBJ 3, WS OBJ 15 and WS POL 26. Therefore, taking these mitigating

Objective	Hydrological/hydrogeological linkages to European sites and potential for impacts arising to and from surface and ground water quality	Direct habitat loss or loss of ecological networks supporting European sites	Direct or indirect disturbance to European site habitats and/or species	Changes in abiotic features/conditions supporting European site habitats and/or species
	Mitigatory wording ⁷ referring to the requirement for an AA to be completed for this work is needed. It should be noted that mitigation to this effect is provided in the County Development Plan under WS OBJ 15, WS POL 26, NH OBJ 3 and NH OBJ 2. Therefore, taking these mitigating policies into account there are no adverse impacts through changes in hydrology the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan also provide mitigation to this effect, e.g. HS POL 14, INF POL 4, INF POL 21, HER OBJ 2, HER OBJ 3 and HER OBJ 6.	River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. HS POL 14, GI POL 2, GI POL 4, GI OBJ 2, INF POL 4, HER OBJ 2, HER OBJ 3, HER OBJ 5, HER OBJ 6 and HER POL 5.	Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. HS POL 14, HER OBJ 2, HER OBJ 3, HER OBJ 4, HER OBJ 5, HER OBJ 6, HER OBJ 7 and HER OBJ 8.	policies into account there are no adverse impacts through changes in abiotic conditions/features supporting the River Boyne and River Blackwater SAC through the implementation of this aspect of the Draft Variation No. 1. In addition, policies and objectives set out in the Kells Development Plan and its Variations also provide mitigation to this effect, e.g. HS POL 14, HER OBJ 3, HER OBJ 7 and HER OBJ 6.

