



ENVIRONMENTAL REPORT

OF THE

CEANANNAS MOR (KELLS)

DEVELOPMENT PLAN

2007-2013

October 2007

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Section 1 Introduction

1.1 Introduction

This report has been prepared to comply with the provisions of the SEA Regulations [the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435 of 2004), and, the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. 436 of 2004)]. This report should be read in conjunction with the Draft Kells Draft Development Plan, 2007-2013.

1.2 Legislation and Legal Status of the SEA

Strategic Environmental Assessments (SEA's) are carried out in response to the requirements of the European Community Council Directive of 2001 on the Assessment of the Effects of Certain Plans and Programmes on the Environment, Directive 2001/42/EC, which came into effect on July 21, 2004.

The enabling statutory instruments (S.I.s) which transpose these Directives into law in Ireland are the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435 of 2004), and, the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. 436 of 2004). The European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435 of 2004) amended certain provisions of the Planning and Development Act 2000 in order to provide the statutory basis for the transposition of the Directive in respect of land-use planning. These amendments facilitated the making of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. 436 of 2004) which give effect to the SEA Directive in the land-use planning sector.

The preparation of Development Plans are required to undergo a Strategic Environmental Assessment under Article 9 (2) of S.I. 435 of 2004 requiring SEA for 'a plan or programme referred to in sub-article (1) which determines the use of a small area at local level'.

The information to be contained in the SEA Report, or the Environmental Report, is set out in Annex I of the Directive, Article 7 (13) (N) of S.I. 436 of 2004 and Schedule 1 of S.I. 435 of 2004.

This SEA has also been undertaken having regard to, where relevant, the Department of Environment, Heritage and Local Government's *Implementation of SEA Directive (2001/42/EC): Guidelines for Regional Authorities and Planning Authorities* (DOELG, 2004).

1.3 Purpose of Strategic Environmental Assessment

SEA outlines the environmental effects of implementing a plan prior to its adoption. In this regard as the initial scoping is carried out and the Environmental report is prepared in respect of a plan yet to be adopted our SEA methodology includes an initial analysis of alternative scenarios which may be implemented prior to focusing on the preferred scenario (ref section 4 of this report). SEA is an iterative process and is required to be repeated as pre- drafts and drafts and amendments to drafts etc unfold.

1.4 Conformity With SEA Regulations

This report has been written in accordance with Schedule 2B of the Planning and Development Regulations 2004. The table overleaf is a reproduction of "Checklist of information to be contained in Environmental Report" from the 'Implementation of SEA Directive (2001/42/EC): Guidelines for Regional Authorities and Planning Authorities, DOEHLG 2004', and lists required information and displays relevant sections of this report.

Table 1.4 Information Required and Corresponding Section of this Report

Required Information	Corresponding Section of this Report
(A) Outline of the contents and main objectives of the plan, and of its relationship with other relevant plans and programmes	Section .3
(B) Description of relevant aspects of the current state of the environment and the evolution of that environment without implementation of the plan	Sections 5 to 13
(C) Description of the environmental characteristics of areas likely to be significantly affected	Sections 5 to 13
(D) Identification of any existing environmental problems which are relevant to the plan, particularly those relating to European protected sites	Section 5.
(E) List environmental protection objectives, established at international, EU or national level, which are relevant to the plan and describe how those objectives and any environmental considerations have been taken into account when preparing the plan	Sections 6 to 13

(F) Describe the likely significant effects (1) on the environment (Biodiversity, human health, Fauna, etc.)	Sections 6 to 13
(G) Describe any measures envisaged to prevent, reduce and as fully as possible offset any significant adverse environmental effects of implementing the plan	Sections 6 to 13
(H) Give an outline of the reasons for selecting the alternatives considered, and a description of how the assessment was undertaken (including any difficulties)	Section 4
(I) A description of proposed monitoring measures	Sections 6 to 13
(J) A non-technical summary of the above information	Appendix A
(F) Interrelationships between each Environmental topic	Addressed as it arises in Sections 6 - 13

Section 2 Methodology

2.1 Introduction

This section outlines the methodology used in preparing the SEA for the Kells Development Plan 2007-2013. The methodology used is as follows:

- Initiation of process, screening and scoping;
- Statutory consultation with Environmental Authorities;
- Analysis and information gathering;
- Outline of Difficulties encountered in particular with deficiencies in existing baseline information;
- Consideration of alternatives.

Detail of statutory consultation with environmental authorities, methods used and the difficulties encountered in undertaking the SEA process are outlined in this section.

2.2 Screening of the Draft Development Plan

As per the Regional Planning Guidelines 2004-2016 Kells is designated a Moderate Growth Town. Moderate Growth Towns can accommodate an ultimate population of 15,000 persons. The current population of Kells as per 2006 Census is 5,916 persons. Section 13 A of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004) applies to development plans for an area where the population is less than 10,000 persons and outlines the requirements in respect of determination of need for an environmental assessment. Section 13 B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004) applies to development plans for an area where the population more than 10,000 persons or where the Planning Authority determines that implementation of a new development plan would be likely to have significant effects on the environment a planning authority shall carry out an environmental assessment as of part of the review of the existing development plan and preparation of a new development plan. Having regard to the ultimate population Kells could accommodate, an environmental assessment is statutorily required.

2.3 Scoping

A scoping report (May 2006) was prepared by Meath County Council and Kells Town Council to determine the scope and the level of detail to be included in the environmental report. The scoping report was prepared having regard to Annex I of the SEA Directive, which sets out the topic headings which must be evaluated for purposes of SEA. Consultation with the EPA also informed the scoping of the environmental report. The environmental assessment carried out in this report evaluates the topics as set out in Kells Development Plan scoping report.

2.4 Consultation with Environmental Authorities

The SEA Directive specifies in Article 6(3) that “member states shall designate the authorities to be consulted”. The Environmental Protection Agency (EPA), Department of Environment, Heritage and Local Government and the Department of Communications, Marine and Natural Resources have been designated as environmental authorities that must be consulted by competent authorities while screening for or conducting SEA in the Republic of Ireland. The EPA is required to be consulted in all circumstances, the Department of Environment, Heritage and Local Government should be consulted where it appears that the plan may have significant effects in relation to the architectural or archaeological heritage or to nature conservation and the Department of Communications, Marine and Natural Resources should be consulted if it appears that the plan might have significant effects on Fisheries or the marine environment. In the case of the Kells Development Plan all authorities were consulted.

The Department of Communications, Marine and Natural Resources and Department of Environment, Heritage and Local Government both responded to the scoping report issued.

2.4.1 Department of Communications, Marine and Natural Resources submission

Principal issues raised include:

- Consideration should be given to the potential for significant impact on:
 - Water Quality by surface water drainage and effluent discharges;
 - Interference with Inland Water Morphology and aquatic habitats by watercourse diversion, channel diversion and alteration or removal of river bank vegetation;
 - Reduction or diversion of water flows by alteration of land use (leading to alterations in flow regimes);
 - The effect of zoning on land use and its potential disturbance of biodiversity.
- Legislation which may need to be considered are listed and include Urban Wastewater Treatment Regulations, Water Framework Directive, Salmonid Waters Regulations, Habitat Regulations, Arterial Drainage Acts, Fisheries Acts and Phosphorus Regulations.
- Suggested consultees include: Eastern Regional Fisheries Board, Office of Public Works and Dublin City Council.

- The submission also refers MCC to the DCMNR submission to the Environmental report for the Backlands Area of the Town Centre Expansion of Kells, LAP.’

2.4.2 Department of Environment, Heritage and Local Government submission

Principal issues raised include:

- In assessing impacts on archaeological heritage regard must be had to the European Convention on Protection of Archaeological Heritage, the National Heritage Plan and relevant policies at county level.
- The submission raises issues specifically relating to Archaeological heritage as Kells was an important settlement in early historic times. The urban heritage of Kells was addressed in the Urban Archaeology Survey for County Meath and potential impacts on all features there identified as falling within the scoping study area should be addressed.
- The course of the medieval town wall should be defined where possible and protected, the entire area within the zone of archaeological potential established around Kells is an area of high archaeological sensitivity.
- Those monuments that are in State ownership and monuments subject to preservation orders should be identified and zones of visual amenity identified for them.
- Any direct impact on a national Monument requires ministerial consent under Section 14 of the National Monuments Act 1930 as amended by Section 5 of the National Monuments (Amendment) Act 2004. Areas of High Archaeological potential should be identified.
- Increased development pressure increases the potential for impacts on archaeology. Impacts can be avoided or lessened by following criteria set out in the ‘Framework and Principles for the Protection of Archaeological Heritage.’
- There should be liaison with the National Monuments Section of the DoEHLG when drafting the archaeological content of the Plan.
- The submission closes by stating that the architectural comments of the DoEHLG will also be forwarded to the Planning Authority.

2.5 Environmental Assessment Methods and Difficulties Encountered

Preparing the SEA involved the collation of currently available data from existing public documents in accordance with the SEA Guidelines (Section 4.8). In predicting likely significant impacts of the plan, existing data sources were used as baseline data, then projected additional environmental ‘loading’ was inserted to make predictions on the potential impacts of implementing the Kells Development Plan.

Existing data sources included:

- Environmental Report for Kells Backlands LAP (prepared to comply with the provisions of the SEA Regulations [the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435 of 2004), and, the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. 436 of 2004)]. This report provides a detailed analysis of potential environmental impacts in the immediate area of the Backlands.
- The Environmental Report for the Draft Meath County Development Plan (prepared to comply with the provisions of the SEA Regulations [the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435 of 2004), and, the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. 436 of 2004)]. This provides general analysis of potential impacts for Kells and hinterland depending on generic planning solutions being applied to development/zoning proposals in the area.
- Landscape Character Assessment for the Draft Meath County Development Plan which provides an analysis of landscape character and an indication of potential capacity of landscapes (including that around Kells) to absorb development and potential environmental and visual impacts pertaining to same.

No new surveys re flora and fauna, air or water quality have been carried out. The SEA legislation does not require new data to be generated in preparation of the environmental report. In any event as the nature and scale of proposed development boundary extensions has not fully been determined such analysis would prove difficult.

Section 3 Statutory and Planning Context

3.1 Introduction

The purpose of this section is to define and set out the existing statutory and geographical frameworks which to date have influenced planning and development in Kells. This framework has provided guidance and protection in respect of potential environmental impacts to date.

Kells is located in the north west of County Meath, approx. 64 km north west of Dublin City. Both the N3 and N52 national routes traverse Kells and the River Blackwater (candidate Special Area of Conservation) flows circa 1 km north of the town centre. Kells is a recognised and valued historic settlement with a rich past stretching back to medieval times with Kells first recorded as a monastery in 804.

3.2 Relationship with Existing Plans and Strategies

The Kells Development Plan is nested in a hierarchy of plans and strategies at the local, national and EU levels. These plans and strategies include, the National Spatial Strategy 2002-2020, the Regional Planning Guidelines for the Greater Dublin Area and Mid East Region 2004-2016, the Retail Planning Guidelines, the Meath County Development Plan 2001, the Draft Meath County Development Plan 2007- 2013,, the Meath County Retail Strategy, The DoE Residential Density Guidelines 1999 the DoE Architectural Heritage Protection Guidelines 2004 amongst others. The main points of the plan and how they relate to existing plans and strategies are summarised in the table below.

Table 3.2 Principal Objectives of Draft Development Plan and Correspondence with Existing Plans and Strategies

Principal Objectives of the Dev Plan	Correspondence with Objectives of Existing Plans
Town centre expansion and redevelopment with emphasis on brownfield and infill to a high design quality	National Spatial Strategy Regional Planning Guidelines County Development Plan 2001 County Development Plan 2007-2013 DTO Strategy
Employment Generation	National Spatial Strategy Regional Planning Guidelines County Development Plan 2001 County Development Plan 2007-2013
Protection & Enhancement of Kells as a Heritage town	National Spatial Strategy Regional Planning Guidelines County Development Plan 2001 County Development Plan 2007-2013 Architectural Heritage Protection Guidelines
Accommodation & servicing of residential growth	National Spatial Strategy Regional Planning Guidelines County Development Plan 2001 County Development Plan 2007-2013

3.3 County Context- Current and Draft Meath County Development Plans & Kells Development Plan

The following County Meath towns are designated Moderate Growth Towns (County Towns and Towns with over 5,000 population) in the Regional Planning Guidelines for the Dublin and Mid East Region 2004-2016 : Ashbourne, **Kells**, Trim, Dunboyne / Clonee and Kilcock. These centres are envisaged as having an interacting and supporting role to their adjacent Large Town.

The Meath County Development Plan (CDP) 2001 is the statutory Development Plan for the County. The Development Plan's mission is *"to promote and implement the sustainable development of our county in partnership with local communities so as to improve the quality of life and living environment of all our citizens"*. Kells is identified as a future development corridor with Trim and Navan. Kells with Navan and Trim will continue to perform as the primary development corridor in County Meath.

Kells is located within a Primary Dynamic Cluster with Trim and Navan in the Draft Meath County Development Plan(DCDP) 2007-2013. The Draft CDP states that it is critical that Moderate Growth Towns would develop in a self sufficient sustainable manner in the longer term and that continued basis for their growth is that they do not become dormitory towns for the Metropolitan Area. In these instances, residential development would only be permitted if sufficient progress is made in providing employment, retail, social and community facilities within the settlement.'

Settlement Strategy SP2 of the Managers Report on submissions to the Draft CDP states as follows 'To ensure that all of the Large Growth Towns and Moderate Growth Towns will in so far as practical be self sufficient incorporating employment activities, sufficient retail services and social and community facilities. Residential development will only

be permitted if sufficient progress is made in providing employment, retail, social and community facilities within the settlement.’

In respect of economic development, Meath County Council has in the Draft CDP identified five dynamic clusters, in to which economic development will be channeled in the first instance. These locations 1. **Navan-Trim-Kells**, 2. Metropolitan Area (Dunboyne-Clonee), 3. Ashbourne-Dunshaughlin-Ratoath (South-Meat Fringe), 4. M1 Corridor (Dublin-Belfast economic corridor), and 5. M4 Corridor (Maynooth, Kilcock, Enfield).

As the current process is as statutorily laid out, a reviewing of the existing Kells Development Plan, an understanding of the key points and development envisaged is an essential start point defacto establishing a baseline with respect to desired/ expected development character and intensity and associated environmental impacts in Kells. From the existing baseline alternatives are considered and these are outlined in the next chapter.

The Specific Development Objectives of the current Kells Development Plan are as follows:

KS1 To provide for commercial and/or shop-office development with ancillary high density residential development.

KS2 To provide a town park in conjunction with the above KS1 objective.

KS3 To provide for a new access road linking the proposed area of Urban Renewal to the town centre and the Navan and Cookstown Roads

KS4 To provide for a pedestrian access route from the Urban Renewal site through to the Navan Road.

KS5 To prepare a comprehensive environmental study, incorporating a flood detail/relief study of the area of potential development, within the vicinity of the Kells town centre. (Kells Stormwater Drainage study completed in 2006).

KS6 To facilitate the development of manufacturing/warehouse operations, which will complement the surrounding environs. Such development will only be considered in the context of an Action area plan for these lands. The provision of necessary physical infrastructure and services, including connection to the Kells Sewerage scheme will be required. (Action Area Plan was completed 2005 and the KDP varied in February 2006)

KS7 To promote the retention of the railway corridor and adjoining community facilities zoned land for recreational activities and alternative modes of transport within Kells i.e. cycling and walking. It is also an objective of the plan to provide pedestrian and vehicle access ways to link the recreational areas to the town centre.

KS1, KS2, KS3 and KS4 are all addressed as part of the adopted Backlands Local Area Plan.

The following are the zoning designations in the Kells Development Plan:

A1 To protect and enhance the amenity of developed residential communities.

A2 To provide for new residential communities and community facilities and to protect existing residential areas.

A4 To provide for new residential communities with ancillary mixed uses to include community facilities, neighbourhood facilities and employment generating uses utilising higher densities in accordance with approved local area plans.

A5 To provide for low density residential development in accordance with local area based planning and individual dwelling design.

C1 To provide for and facilitate mixed residential and business uses in the existing mixed use central business area.

E1 To provide for industry and related uses subject to the provision of necessary physical infrastructure.

F1 To provide for and improve open spaces for active and passive recreational uses.

G1 To provide for necessary community, recreational and educational facilities.

3.4 Development Envisaged

In line with the strategic objectives for Kells in the Regional Planning Guidelines for the Dublin and Mid East Region, 2004-2006, the Meath County Development Plan 2001 and the Draft Meath County Development Plan 2007-2013, the Kells Development Plan 2007-2013, makes provision for the future development of Kells and will seek to maintain and enhance the role of Kells in the county in line with the Regional Planning Guidelines and as reflected in the Draft County Development Plan and Housing Strategy

The emphasis of the Kells Development Plan is placed on redevelopment and expansion of the town centre and infill opportunity sites to provide a broad mix of land uses to provide adequately for the existing town population and the future town population. Opportunities for employment creation are encouraged. The Kells Development Plan seeks to make greater advantage of the status of Kells as a Heritage town.

The principal objectives of the Kells Development Plan are as follows:

- Town centre expansion and redevelopment with emphasis on brownfield and infill to a high design quality;
- Employment Generation;
- Protection & Enhancement of Kells as a Heritage town;
- Accommodation & servicing of residential growth.

Section 4 Consideration of Alternatives

4.1 Introduction and Background

Article 5 of the SEA Directive requires the Environmental Report to consider “reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme” and the significant environmental effects of the alternatives selected. It is a mandatory objective of a Development Plan, that sufficient lands are zoned for particular purposes, where and to such extent as the proper planning and sustainable development of the area, in the opinion of the Planning Authority, requires the uses to be indicated. In relation to the location of new residential development, this is largely determined by higher level plans such as the RPGs and the County Housing Strategy. Alternative issues to be considered in this regard include targets for housing units to be provided from brownfield sites, identification of greenfield sites that can be serviced, prioritization of those which are closest to public transport, consideration of densities appropriate for different locations, as well as identification of areas to be avoided due to flooding and/or impact on heritage.

The alternatives examined were as follows:

4.1.1 Do-nothing Scenario

Under the do-nothing scenario which would result in no zoning of additional lands aside from those currently zoned, the Kells Development Plan area would maintain its current physical and socio-economic characteristics. Development would be market dependent within the existing development boundary and parameters. Future investment by the Local Authority would be absent where not provided by the development plan and its role as a pro-active influence in the town would be lost. Adopting the do-nothing scenario would mean that parts of Kells would remain under-utilised with little physical, social or economic enhancement without proactive and positive direction from Planning Authority.

4.1.2 De zoning Scenario

The dezoning scenario relates to the removal of land use zoning objectives in the current Kells Development Plan on those lands on the perimeter of Kells. This may provide for protection of existing habitats within these land banks subject to farming practices. A further characteristic of this option would potentially be the adverse impact on market confidence in the town as a whole. Associated with a reduction in market confidence would be the stagnation of redevelopment within the town centre. This stagnation would impact on development levies (contributions) collected by the Local Authority. A reduction in levies will result in an associated reduction in improvement works to the area.

4.1.3 Re Zoning Scenario - urban sprawl

The term urban sprawl is associated with unplanned development sprawl to green field sites outside of the town centre. The impact of this development model would likely to be result in further neglect of the town centre and brownfield redevelopment opportunities which often present more of a challenge to redevelop than greenfield sites. Therefore redevelopment of brownfield/ infill opportunities are perhaps not the first sites to be selected if market forces only dictate. Urban sprawl would detract from the status of Kells as a heritage town and tourist destination. The core of the town may be lost with unplanned excessive new growth. This development model often results in greater growth than anticipated and at a faster rate than anticipated with social, transport and piped infrastructure requirements problematic to plan to likely pace of growth.

4.1.4 Re Zoning Scenario - compact and concentrated growth

This development model focuses on consolidation of the existing town centre by developing brownfield, infill and town centre sites in Kells such as the Backlands and the KS 6 land bank. As this option promotes development, development levies will be generated and Local Authority investment would follow. It facilitates the focusing of private and public sector investment limiting the geographic spread and often uneconomic demand for limited resources. This option should ensure that dereliction is removed from Kells town Centre and a renewed vibrancy is created within the core town centre area of Kells. This focus will assist in development of Kells as a tourist destination and reinforce its Heritage town status. The focus on Kells town centre encouraged by this scenario will be of community and public advantage and is not dictated by market forces which often focus on cheaper development sites (on outskirts if development envelope) at a cost to the community, the environment and urban form. This scenario will have the lowest environmental impacts subject to adoption of mitigation measures. This is the scenario which has been selected as the development model.

5.1 Introduction

This section of the report describes the current state of the environment in the Kells Development Plan area, adopting the environmental indicators included in the SEA Directive. Following this, in sections 6 to 14 below, each topic heading, as set out in the SEA guidelines (e.g. Population, Cultural Heritage, Material Assets etc) is fully assessed in accordance with the SEA guidelines.

The purpose of this section and the following sections is to identify the current state of the environment and relevant existing environmental objectives, against which the likely effects of implementing the Development Plan are assessed. This section provides a quantitative overview of the overall physical environment of the Development Plan area, the development related pressures, followed by estimate of overall change under the selected scenario, compact and concentrated development.

Baseline Description of the Current Physical Environment

5.2.1 Landscape

Human interaction with the natural heritage has produced a great variety of characteristic landscapes and landscape features. Areas of Visual Quality were designated in the County Development Plan 2001 with regard to the 'sensitivity of various categories of development in areas with differing abilities to absorb development.' The particular sensitivities of these areas are set out on pages 57 and 58 of volume 1 of the Meath County Development Plan 2001.

Areas of Visual Quality include:

Area VQ1 - The Coastal zone
Area VQ2 - Lower Boyne Valley
Area VQ3 - River Valleys
Area VQ4 - The Royal Canal corridor
Area VQ5 - Slieve Na Calliagh uplands
Area VQ6 - Lough Sheelin Environs
Area VQ7 - Upland Agricultural Area
Area VQ8 - North Meath Lakelands
Area VQ9 - The Tara and Dunsany District
Area VQ10 - Bogland Areas
Area VQ11 - Rural and Agricultural

Kells is included within the Area VQ3 – River Valleys. The Landscape Character Assessment (LCA) prepared as part of the current County Development Plan (CDP) review process reviews, updates and elaborates on the above. However, the key areas of sensitivity and importance remain as per the 2001 CDP. There are two areas of relevant for the purposes of this report, Area 17 South West Kells Lowlands and Area 20 The Blackwater Valley. The Blackwater Valley is designated in the Draft LCA as a very high value landscape with high sensitivity of regional importance. The South West Kells Lowlands are designated as of moderate value with moderate sensitivity of local importance. The LCA assesses each Landscape Character Area for Potential Capacity to accommodate development with the following criteria: *Low, Medium, High*

Landscape Character Area 17: South West Kells Lowlands

1. **Large-scale farm buildings-** Medium
2. **Visitor facilities** High
3. **Multi-house residential** Low
4. **One-off houses** Medium
5. **Conversion existing buildings** High
6. **Overhead cables, masts, substations** Low
7. **Roads and railways** Low
8. **Underground services** Medium
9. **Wind turbines** Low
10. **Biomass and forestry** Medium

1. **Large-scale farm buildings-** Low
2. **Visitor facilities** High
3. **Multi-house residential** Low
4. **One-off houses** Low
5. **Conversion existing buildings** High
6. **Overhead cables, masts, substations** Medium
7. **Roads and railways** Medium
8. **Underground services** Medium
9. **Wind turbines** Medium
10. **Biomass and forestry** Low

5.2.2 Natural Water Systems

Increases in population, development pressures and intensification of agriculture over recent decades has led to increased risk of environmental pollution of natural water systems. These include groundwater and surface water systems (rivers and lakes, estuarine and coastal waters.) Water quality is not only important for ecological reasons; all development depends on quality water supplies and for surface and waste water disposal. Water based recreation is an important aspect of tourism to both residents and visitors to Meath. Urban runoff is increasingly being highlighted as a source of pollution of water courses. Meath County Council has committed to the policies and recommendations of SUDS (Sustainable Urban Drainage Systems) which deal with issues in relation to urban run off. The River Blackwater, part of the Boyne Catchment flows circa 1 km north of the historic centre of Kells and the Environmental report for the CDP 2007-2013 identifies Kells Environs as an impact zone which threatens surface water quality in the Boyne Catchment if unmitigated against could pollute drinking water supplies.

5.2.3 Protected Natural Heritage

Special Areas of Conservation (SACs) are the prime wildlife conservation areas in Ireland. The legal basis on which they are selected is the 1992 Habitats Directive (92/43/EEC). This Directive seeks to protect wildlife and its habitats. The European Communities (Natural Habitats) Regulations, 1997 set out how these SACs are to be protected and managed by the relevant Planning Authorities. The SAC River Boyne & River Blackwater site code 002299 has relevance to the Kells Development Plan area.

5.2.4 Habitats

Habitats on which the settlement centres are located beside include Inland Waters, Maritime Wetlands, Inland Wetlands, Scrub, Broadleaf Forests, Mixed Forests and Agricultural or Cultivated Land. The following descriptions for these habitats are taken from the Heritage Council's A Guide to Habitats in Ireland 2000.

The following are relevant to Kells Development Plan area:

Rivers, Canals and Drainage Ditches- Rivers are divided into watercourses that are mainly eroding, as in the case of upland streams, and those that are mainly depositing, as in the case of lowland rivers. No distinction is made between streams and rivers. Rivers differ from most artificial watercourses in that they have a strong unidirectional flow of water. They are dynamic systems where water levels and flow rates can fluctuate markedly. The entire channel is included as part of the river habitat, irrespective of water levels at the time of the survey. Natural watercourses may flood beyond the limits of their banks but note that floodplains are excluded.

Broadleaf Forests (Headfort Demesne to the east of Kells)

This general category includes woodland areas with 75-100% cover of broadleaved trees, and 0-25% cover of conifers. It should be used in situations where woodland stands cannot be classified as semi-natural on the basis of the criteria outlined above. Trees may include native and non-native species. Plantations of broadleaved trees are included if the canopy height is greater than 5 m, or 4 m in the case of wetland areas. Stands of immature or sapling trees are excluded. If a number of different broadleaved tree species contribute significantly to the canopy, the term 'mixed' should be used in the habitat title.

Mixed Forests (Headfort Demesne to the east of Kells)

This general category includes woodland areas with mixed stands of broadleaved trees and conifers, where both types have a minimum cover of 25%, and a maximum of 75%. Trees may be either native or non-native species. Mixed broadleaved/conifer plantations are included if the canopy height is greater than 5 m, or 4 m in the case of wetland areas. Stands of immature or sapling trees are excluded.

Agricultural or Cultivated Land (lands abutting development boundary)

Arable Crops- Agricultural land that is cultivated and managed for the production of arable crops, including cereals (wheat, barley, oats, maize), and root, leaf, energy or fibre crops such as sugar beet, turnips, rape and flax. Fields of potatoes can be included here, but most other vegetable crops are excluded, as are market gardens. If small plots of any of the above crops are mixed with other vegetables or grown in glasshouses or polythene tunnels, they should be classified as horticultural land. Note that rye-grass leys planted as part of an arable rotation are excluded. Depending on the intensity of fertiliser or herbicide use, seed sources and soil type, arable crops may harbour a variety of weed species. Common Poppy (*Papaver rhoeas*), Bladder Campion (*Silene vulgaris*), Wild Carrot (*Daucus carota*), Common Field-speedwell (*Veronica persica*), Corn Spurrey (*Spergula arvensis*), Corn Marigold (*Chrysanthemum segetum*) and knotgrasses (*Polygonum* spp.) may be abundant in some arable fields. Other weeds that were formerly very common in corn or flax fields in Ireland but are now extremely rare include Cornflower (*Centaurea cyanus*) and the grass, Darnel (*Lolium temulentum*).

Tilled Land- This category should be used in situations where land has been tilled and prepared for planting but where the type of crop, or future use of the land, cannot be established. Areas of reclaimed or cleared land should only be included here if they have been prepared for planting.

Pasture- This category is used for intensively managed or highly modified agricultural grassland that has been reseeded and/or regularly fertilised, and is now heavily grazed and/or used for silage making. It includes regularly-reseeded monoculture grasslands and rye-grass leys that are planted as part of an arable rotation. These differ significantly from areas of permanent grassland. Improved agricultural grassland is typically species-poor. Sward quality varies depending on soil type, fertility, drainage and management. Rye-grasses (*Lolium* spp.) are usually abundant and may entirely dominate the sward, often in association with White Clover (*Trifolium repens*). Many improved varieties or cultivars of these plants are now widely sown. Other grasses that may be prominent include meadow-grasses (*Poa* spp.), Timothy (*Phleum pratense*), Crested Dog's-tail (*Cynosurus cristatus*) and Yorkshire-fog (*Holcus lanatus*). Among the more frequently occurring 'agricultural' herbs are Dandelion (*Taraxacum* spp.), Creeping Buttercup (*Ranunculus repens*), plantains (*Plantago* pp.), Nettle (*Urtica dioica*), thistles (*Cirsium arvense*, *C. vulgare*) and docks (*Rumex* spp.). Some reseeded but poorly-drained fields may support abundant rushes.

5.2.4 Population

The current population of Kells as per 2006 Census is 5,916 persons. This represents an increase of 38.8 % in the environs area and a decline of 10.7 % in the town area from the 2002 figure.

5.2.5 Air Quality and Climate

The existing ambient air quality in Kells is representative of an urban environment. The N3 primary road and N52 National Secondary road both traverse Kells and carry high volumes of traffic. This is considered to be a large influence on ambient air quality in the area. Its greatest potential influence is from vehicle emissions which principally comprise of sulphur dioxide, nitrogen dioxide, carbon monoxide and PM₁₀.

The Irish climate is subject to strong maritime influences, the effects decreasing with increasing distance from the Atlantic coast. Because no area of the country lies more than 120 km from the sea, the range of mean temperatures across the country is narrow. Data from Met Eireann, the Irish Meteorological Service, indicates that December, January and February are generally the coldest months of the year and most areas of the eastern half of the country experience rainfall in the region of 750 – 1100 mm per annum.

5.2.6 Noise

The existing ambient noise baseline in Kells is representative of an urban environment. The N3 primary road and N52 National Secondary road both traverse Kells and carry high volumes of traffic. This is considered to be a large influence on noise quality in the area.

As part of the preparation of the Environmental report for the Backlands LAP a noise monitoring survey was carried out on 13th and 14th of February 2006. In accordance with the requirements set out in the EU's Directive 2002/49/EC on the *Assessment and Management of Environmental Noise* the measurements were conducted to determine the noise environment during the day, evening and night periods as defined by the directive. To provide an indication of the impacts of early morning traffic noise along the N3, measurements were also carried out at N1 and N7 between 06:00 and 06:40 on the 14th February 2006.

Evaluation of existing baseline noise survey results**Day-time monitoring**

Daytime monitoring was carried out between 13:00 and 18:00 on the 13th February at the 8 selected locations (N-1 to N-8, see map overleaf). Average levels ranged from 40dB(A) L_{Aeq, 1hr} at N2 located in agricultural lands away from local noise sources to 73dB(A) L_{Aeq, 1hr} at N1 close to the N3 Dublin road.

The results from locations N1 and N7 reflect the significant noise impact from traffic noise from the N3 with L₁₀ measurements ranging between 62-78dB(A). The background L₉₀ levels are lowest during the night time recordings when traffic flow is lower and more intermittent.

Noise measurements at N2, N3 and N4 are indicative of a rural environment with distant traffic noise the main the main source. The measurements along the old railway track were at locations N3-N6 and were relatively steady ranging from 43-47dB(A). Background noise from traffic from the town is again the dominant noise source.

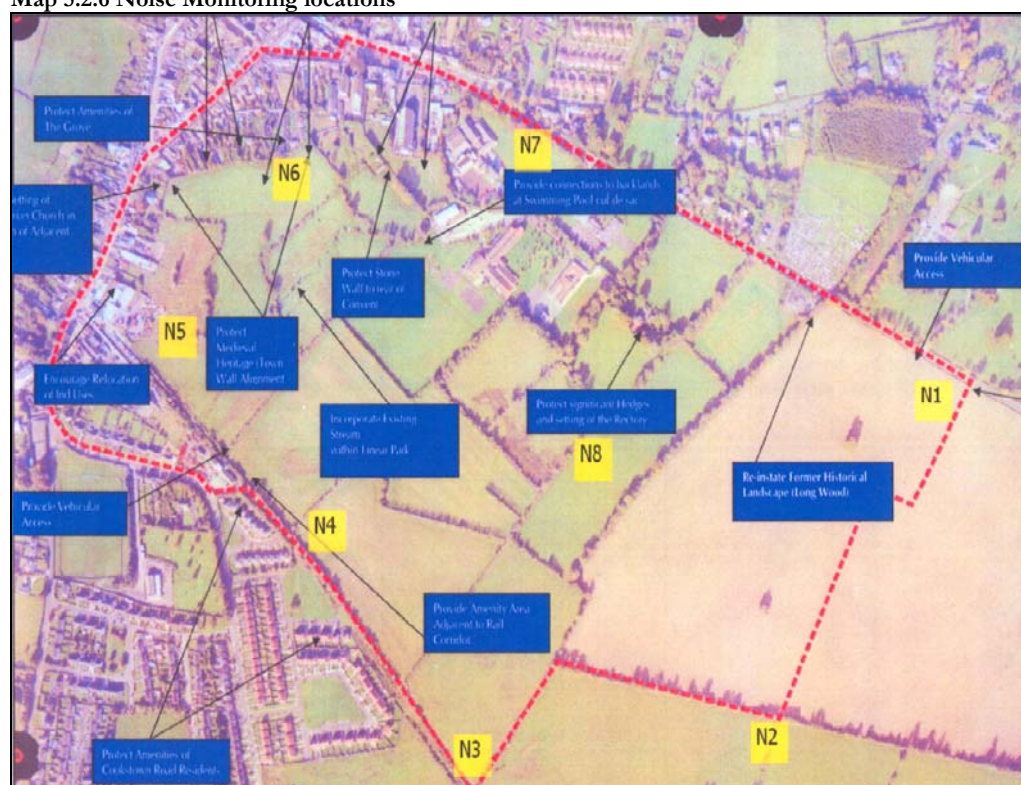
Evening-time monitoring

The noise environment along the northern - eastern boundary close to the N3 is significantly influenced by traffic levels during the evening period. The noise levels recorded after 19:00 show little variation from those measured at 10:30. The L_{10} measurement of 77dB(A) at N1 indicates the traffic volumes on the road.

A 3dB reduction from the daytime measurements is noted in the L_{10} measurements recorded at N7 along the Dublin Road. A 3dB reduction would typically be associated with a 50% reduction of the traffic volume along a major route. Traffic from the swimming pool was also noted as a noise source.

There is no significant variation in the evening time traffic trends in noise levels at locations N3-N4. The average noise levels at these locations were recorded at 43dB(A) and 44dB(A) respectively. At location N5 there is a significant reduction in noise level as a number on industry located along the eastern boundary were closed. These included the garage and the farm machinery sales premises. The L_{Aeq} levels recorded at N5 (39dB(A)) were 8dB lower than those recorded during the daytime period. The L_{Aeq} recorded at N6 during this period was 43dB(A) and traffic noise through the town influenced the ambient levels. However closer to the town centre at location N6, a 3dB reduction is noted which is likely as a result of retail and commercial businesses closing and the town centre becoming quieter as a result.

Map 5.2.6 Noise Monitoring locations



Source: Kells Backlands LAP Environmental Report

Table 5.2.6 Results of Baseline Environmental Noise Survey at Kells Backlands, on the 13th and 14th of February 2006.

Location	Period	Time	L _{Aeq} , dB(A)	L _{A90} , dB(A)	L _{A10} , dB(A)	L _{den}
N1	Day	10:30-11:30	73	52	78	75
	Evening	19:39-19:54	72	51	77	
	Night	23:37-23:52	65	44	66	
	Morning	06:05-06:20	72	48	77	NA
N2	Day	14:08-15:08	40	42	44	49
	Evening	20:25-20:40	45	42	47	
	Night	23:00-23:15	42	42	47	
N3	Day	12:54-13:54	43	36	44	46
	Evening	19:19-19:34	43	38	45	
	Night	23:04-23:19	37	33	39	
N4	Day	14:12-15:12	42	39	44	45
	Evening	19:26-19:41	44	40	46	
	Night	23:24-23:39	34	32	36	
N5	Day	16:03-17:03	47	43	49	47
	Evening	19:52-20:07	39	36	41	
	Night	23:47-00:02	38	35	39	
N6	Day	17:33-18:33	46	43	47	47
	Evening	20:19-20:34	43	40	44	
	Night	00:17-00:32	37	35	39	
N7	Day	12:31-13:31	68	56	72	69
	Evening	19:15-19:30	65	54	69	
	Night	00:00-00:15	59	47	62	
	Morning	06:25-06:40	65	48	70	NA
N8	Day	16:05-17:05	44	44	47	48
	Evening	20:05-20:20	43	43	46	
	Night	20:18-23:33	40	41	44	

Source: Kells Backlands LAP Environmental Report

5.2.7 Soil

Soil is a biologically active complex mixture of weathered minerals, organic matter, organisms, air and water which provides the foundation for life in terrestrial ecosystems. Soil however, is not merely the sum of minerals, organic matter, water and air but a product of their interactions. It can be considered a non-renewable natural resource because it develops over very long timescales. A soil is distinguished from weathered parent material by the vertical differentiation it exhibits due to biological activity, so that the properties that are singled out in most systems of soil classification must be displayed in the soil profile. Soil occurs and is formed in the pedosphere, the envelope where soils occur and soil forming processes are active. Soil only develops where there is a dynamic interaction between the air, water, living organisms and geology. It is these dynamic interactions which contribute to the multiple functions which soils perform. These include supporting plant life and life within the soil, biogeochemical cycling of elements, energy cycles, water storage and exchange and ecosystem productivity.

According to the 'Soils of County Meath' by An Foras Taluntais, Kells is located within the Kells Soil series. This soil series occupies 11.81% of County Meath and occurs principally in the northwest. The soil parent material consists of glacial till composed of Lower Palaeozoic Shales (Ordovician and Silurian) with some sandstone and siltstone. The soils are described as Brown Earth of low base status (acid Brown Earth). These soils are well drained, friable and have a dark brown surface horizon of loam texture. The profile depth of the series ranges from shallow (20cm) to deep (80cm) with an average depth being 35 to 45 cm.

5.2.8 Water Supply

The water supply for Kells is currently supplied from the Kells/Oldcastle Scheme which gets its water from Lough Bane (a candidate SAC). This scheme is under pressure to supply water to both of these areas given the level of development in each. There is a capacity restriction in that the size of pipe network feeding Kells is insufficient to meet current demand. Furthermore, the abstraction potential of Lough Bane has been reached. The Water Services Investment Programme 2007-2009 has included the Kells/Oldcastle water supply scheme to meet the needs of both centres. The cast iron water mains in Kells need replacement as these result in water leakage. Unaccounted water represents a considerable proportion of water treated for distribution in County Meath with a loss of 54% reported in 2000. (Meath Outline Rural Water Strategic Plan and Report).

5.2.9 Waste Water Treatment and Discharge

The existing wastewater treatment plant serving Kells is located c1km. north east of the centre of Kells. The plant has the capacity for 8000 PE and is currently operating at near capacity. The Water Services Investment Programme 2007-2009 includes Kells Sewerage Scheme. The foul and surface water sewer are in a combined system in Kells which is inefficient as surface water is adding to loading on the sewage treatment plant.

5.2.10 Architectural Conservation Areas (ACAs)

Section 81 of the Planning & Development Act 2000 places a statutory obligation on Planning Authorities to ensure that all development plans must now include objectives to preserve the character of a place, area, group of structures or townscape that is:

- a) of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value, or
- b) contributes to the appreciation of protected structures.

The designation of an ACA is a reserved function of the Council. Kells town centre is a designated ACA in the current Kells Development Plan. The following areas are included within the ACA: Headfort Place, Kenlis Place, Farrell Street, Bective Street, Suffolk Street, Cannon Street, New Market Street, Church Street, Church Lane, Church Hill, Lord Edward Street, Carrick Street, Castle Street, part of Maudlin Street and John Street. The existing ACA has been reexamined as part of the review of the Kells Development Plan.

5.2.11 Areas of Archaeological Potential

The National Monuments Acts 1930-2004 provide for the protection of the archaeological heritage. The Record of Monuments and Places (RMP) was established under Section 12 of the National Monuments (Amendment) Act 1994 and structures, features, objects or sites listed in this Record are known as Recorded Monuments. Areas of Archaeological Potential are designated under this legislation. The Kells Development Plan identifies an area of archaeological potential to which specific objectives apply.

5.2.12 Protected Structures

Section 10(2)f of the Planning and Development Act, 2000 as amended makes the protection of architectural heritage a mandatory objective. The Kells Development Plan 2001 contains a Record of Protected Structures (RPS). There are 34 structures listed in the current RPS. The proposed RPS is made up of the existing RPS which has been reassessed and the ministerial recommendations arising from the NIAH surveys.

6.1 Introduction

This section commences the detailed evaluation of each of the eight environmental topics as set out in the SEA regulations. In doing so, each of the following sections is meeting requirements (B), (C), (E), (F), (G) and (I) of the SEA guidelines, as shown in section 1.4, table 1.4 above. Each of the Environmental topics ie. areas of environmental sensitivity/interest are protected by a series of Strategic Environmental Objectives (SEOs). These SEOs comprise of adopted protective measures to minimise potential impacts as they may relate to the environment. Having regard to established environmental protective measures, ie SEOs which would be contained in any plan the scenarios (outlined in section 4) are environmentally proofed to assess their likely impacts. In addition this section outlines further measures to protect the environment as may be relevant to the environmental topic being considered and development alternative selected.

This section describes the above in relation to Biodiversity, Flora and Fauna. There are no known protected species of Flora or Fauna within Kells.

6.2 Established Strategic Environmental Objectives: Flora and Fauna

There are a number of existing adopted strategies and plans at National, Regional and local level which provide the Planning Authority with established strategic environmental objectives (SEOs) such applicable SEOs include those outlined below.

6.2.1 The National Biodiversity Plan (2002)

The National Biodiversity Plan (2002) sets out aims for the conservation of Ireland's biological diversity and requires Local Authorities to prepare and implement Local Biodiversity Action Plans. This plan seeks to secure the conservation, including where possible the enhancement and sustainable use of biological diversity in Ireland. The overall objective of this plan is as follows 'To secure the conservation, including where possible the enhancement, and sustainable use of biological diversity in Ireland and to contribute to conservation and sustainable use of biodiversity globally.' Specific objectives include:

- Conserve habitat diversity, including all sites of special biodiversity importance.
- Conserve species diversity.
- Conserve genetic diversity, both wild and domesticated.
- Contribute to the conservation and sustainable use of biodiversity and to advancing other obligations of the CBD in the EU, regionally and internationally.

6.2.2 Regional Planning Guidelines for the Greater Dublin Area and Mid East Region, 2004 – 2016

Section 9.6 Open Space and Recreation states that "Planning Authorities should 'Secure landscape and biodiversity enhancement.'"

6.2.3 Meath County Development Plan, 2001

Section 3.6.12 European and Heritage Sites states as follows:

"The principle of sustainable development emphasises the importance of the natural environment and the need to conserve its store of biodiversity. It is vital to conserve habitats and heritage areas which frequently are stressed by the by-products of human activities or processes. It will be the objective of the planning authority to protect:

- Proposed Natural Heritage Areas,
- Special Protection Areas,
- Candidate Special Areas of Conservation,

from development which would adversely affect their ecological properties or value as scientifically valuable sites. "

6.2.4 Meath County Development Plan 2007-2013

The Draft CDP and Environmental Report established objectives for the County at large and its associated Environmental report sets out Draft SEOs which were imputed into the Draft Environmental report for the Kells Development Plan . These are relevant to ensure a consistent approach to environmental protection and a consistent recognition of environmental values county wide. The CDP outlines as a goal in Section 8.2.1 'To ensure that features of Meath's natural heritage are protected, that bio-diversity is conserved and where possible enhanced, that watercourses are safeguarded from pollution, that landscapes maintained and enriched, and that tourist and recreational uses are facilitated in a sensitive manner.' The following policy and objective are relevant.

HER POL 1 'To protect, conserve and enhance the County's bio-diversity and natural heritage including wildlife (flora & fauna), habitats, landscapes and/or landscape features of importance to wildlife or which play a key role in the conservation and management of natural resources such as water.'

HER OBJ 1 'To prepare and implement, in partnership with the County Meath Heritage Forum, relevant stakeholders and the community, a Biodiversity Action Plan for Meath'

The following are the SEO in respect of flora and fauna as outlined in the Environmental report of the Draft County Development Plan.

B1 Avoid damage by development to designated wildlife sites and protected species.

- B2** Conserve the diversity of habitats avoiding irreversible losses.
- B3** Ensure that any development promotes sustainable management of key wildlife sites and the ecological processes upon which they depend.
- B4** Protect aquatic ecosystems including the marine environment, and terrestrial ecosystems which are interdependent (promote integrated management strategies)
- B5** Provide opportunities for sustainable public access to wildlife and wild places.

6.3 Relevant Strategic Environmental Objectives of the Kells Development Plan

Biodiversity – Flora / Fauna

SEOB1 Avoid damage by development to designated wildlife sites and protected species.

SEOB2 Conserve the diversity of habitats avoiding irreversible losses.

SEOB3 Ensure that any development promotes sustainable management of key wildlife sites and the ecological processes upon which they depend.

SEOB4 Provide opportunities for sustainable public access to wildlife and wild places.

The above objectives have been set to ensure that impacts on the existing habitats are minimised. It will be the responsibility of the Local Authority to ensure that all individual planning applications and subsequent grants of permission consider the environmental objectives of the Kells Development Plan.

6.4 Estimate of Change under a Do Nothing Scenario

Initially, for a period of about 30 years, undeveloped areas and brownfield sites which if left undisturbed would improve as habitats due to the gradual colonisation of unmanaged grasslands by a variety of tree and shrub species which would provide an increase in habitat provision. Thereafter the habitat would stabilise as a habitat, with no further increase in species diversity. In some instances, in particular areas of undisturbed greenfield land this equilibrium will be reached already and the do nothing scenario will not affect species diversity. The do- nothing scenario does not preclude intensive farming practices which may have similar impacts on habitats as built development.

6.5 Estimate of Change under a De Zone Scenario

Environmental effects as per scenario 1.

6.6 Estimate of Change under a Rezone Scenario- Urban Sprawl

Urban sprawl will result in development on green field sites outside the current development boundary which would result in habitat loss at these locations as natural and semi-natural areas would be replaced with artificial surfaces. Therefore a loss to habitats and biodiversity in the area would result. Having regard to the more haphazard and extensive land take associated with urban sprawl, the loss of habitats would be greater.

6.7 Estimate of Change under a Rezone Scenario- Urban consolidation and Concentration

Consolidated and concentrated growth at appropriate densities will reduce urban sprawl and associated land take and therefore will minimise erosion of habitats on the outskirts of Kells. Redevelopment of existing infill and brown field sites within Kells including the backlands area will result in habitat loss, as some of these areas consist of a greenfield areas which would be replaced with artificial surfaces. Habitats likely to be lost are not known to be of significant value and such lost is kept to a minimum in this scenario.

6.8 Measures to Prevent, Reduce and Offset Significant Adverse Effects

As outlined in previous sections development Scenario 4 is the chosen development scenario. In the planning of open space areas within new development the emphasis will be placed on the development of ecological corridors which permit the potential movement of wildlife and which include indigenous vegetation. Framework plans etc will seek to ensure that ecological corridors are provided therefore facilitating linkage of these corridors between sites. Planning Applications will be examined to ensure that mitigation measures are cumulatively implemented at each stage of development. i.e. site subdivision and boundary treatment together with the location and design of open spaces, amenity areas and other planted areas. while in many situations where lands are developed particularly for residential development existing ditches and associated hedgerows will be removed for planning, safety, security, traffic safety reasons etc every effort will be made to replace such habitats with ecological corridors.

6.8 Operational Environmental Objectives

- Retention where possible of trees and hedgerows of value.
- The establishment of ecological corridors within new development which permit the potential movement of wildlife and which include indigenous vegetation.

6.9 Monitoring Proposals

Principal Objectives of the Dev Plan	Ecology Impact
Town centre expansion and redevelopment	Yes
Employment Generation	Yes
Protection & Enhancement of Kells as a Heritage town	No
Accommodation & servicing of residential growth	Yes
Traffic and Transport proposals	No

Planning applications should be monitored by the Local Authority for impact on existing habitats. All planning permissions granted for development on greenfield sites within the existing town centre could be conditioned by the Planning Authority to require baseline ecological surveys prior to development taking place. This will facilitate an assessment of the impacts on the flora and fauna of development.

Section 7 Population

7.1 Introduction

This section describes the detailed evaluation as set out in the SEA regulations of the environmental topic of population.

7.2 Established Strategic Environmental Objectives

There are a number of existing adopted strategies and plans at National, Regional and local level which provide the Planning Authority with established strategic environmental objectives (SEOs) such applicable SEOs include those outlined below. A critical issue in Kells, as with County Meath generally over the 2001 plan period, has been the development of settlements in Meath as predominantly commuter towns. The Draft CDP in conjunction with the Meath County Enterprise board and other relevant agencies is attempting to address this issue.

7.2.1 Regional Planning Guidelines for the Greater Dublin Area and Mid East Region 2004 – 2016

As is stated elsewhere in this report Kells is designated a Moderate Growth Town in the Regional Planning Guidelines and this designation establishes its place in the County settlement hierarchy.

The following objectives of the Regional Planning Guidelines are of relevance:

Objective 2.1 'Create a rational efficient settlement/service/economic hierarchy' for the region.

Objective 3.1 states: 'To maximise the scale of markets for the full range of economic inputs and outputs, with maximum accessibility at minimum transport cost'.

Objective 3.2 states: 'To deliver serviced land in response to demand, fully integrated with transport corridors'.

Section 7.4 'Promote the location of quality employment and residential developments in proximity to each other in order to reduce the demand for travel and the dependence on private car transport.'

7.2.2 Meath County Development Plan 2001

Kells is identified as a future development corridor with Trim and Navan. Kells with Navan and Trim will continue to perform as the primary development corridor in County Meath.

7.2.3 Meath County Development Plan 2007-2013

The Draft CDP and Environmental Report established objectives for the County at large and its associated Environmental report sets out Draft SEOs which were imputed into the Draft Environmental report for the Kells Development Plan. These are relevant to ensure a consistent approach to environmental protection and a consistent recognition of environmental values county wide.

Settlement Strategy SP2 of the Managers Report on submissions received on the Draft CDP states as follows 'To ensure that all of the Large Growth Towns and Moderate Growth Towns will in so far as practical be self sufficient incorporating employment activities, sufficient retail services and social and community facilities. Residential development will only be permitted if sufficient progress is made in providing employment, retail, social and community facilities within the settlement.'

In respect of economic development, Meath County Council has in the Draft CDP identified five dynamic clusters, in to which economic development will be channeled in the first instance. These locations 1. **Navan-Trim-Kells**, 2. Metropolitan Area (Dunboyne-Clonee), 3. Ashbourne-Dunshaughlin-Ratoath (South-Meat Fringe), 4. M1 Corridor (Dublin-Belfast economic corridor), and 5. M4 Corridor (Maynooth, Kilcock, Enfield).

The following are the SEOs in respect of population as outlined in the Environmental report of the Draft County Development Plan.

- P1** Improve people's quality of life based on high quality residential, working and recreational environment, on sustainable travel pattern at all stages of life.
- P2** Minimise noise and vibration from traffic, industrial processes and extractive industry.

7.3 Relevant Strategic Environmental Objectives of the Kells Development Plan- Population

SEOP1 Improve people's quality of life based on high quality residential, working and recreational environment, on sustainable travel pattern at all stages of life.

SEOP2 Promote town centre expansion and redevelopment.

SEOP3 Promote employment generation.

7.4 Estimate of Change Under a ‘Do Nothing’ Scenario

Natural increase may occur however stagnation will result where market confidence is threatened. Reduction in development will reduce the ability of the Planning Authority to recoup development levies and plan and provide services for population growth.

7.5 Estimate of Change Under a ‘De Zone ‘ Scenario

Natural increase would not occur, therefore stagnation would result.

7.6 Estimate of Change Under a ‘Re Zone- Urban Sprawl’ Scenario

Rapid and unplanned population increase would occur within a sporadic haphazard geographic spread. Service provision for this development model is difficult and uneconomic to provide.

7.7 Estimate of Change under a Rezone Scenario- Urban consolidation and Concentration

A planned and steady growth in population would occur directed to locations where services can be provided more readily.

7.8 Measures to Prevent Reduce and Offset Significant Adverse Effects

As outlined in previous sections development Scenario 4 is the chosen development scenario. The impacts of implementing this scenario associated with population are, in general, positive. It is important to ensure that residential development occurs in tandem with job creation to address the issue of Kells as a self sustaining settlement and not a commuter town. Adequate training and job facilitation services should be in place to ensure that local people can avail of the job opportunities presented.

7.9 Operational Environmental Objectives

- Improve people’s quality of life based on high quality residential, working and recreational environment, on sustainable travel pattern at all stages of life.
- To ensure sufficient land is available for employment generating uses to achieve the optimum mix of job opportunities across a range of skill levels.

7.10 Monitoring Proposals

Principal Objectives of the Dev Plan	Pop Impact
Town centre expansion and redevelopment	Yes
Employment Generation	Yes
Protection & Enhancement of Kells as a Heritage town	No
Accommodation & servicing of residential growth	Yes
Traffic and Transport proposals	No

Job creation should be monitored by appropriate local employment agencies such as FAS, County Enterprise Board and local development groups.

8.1 Introduction

This section describes the detailed evaluation as set out in the SEA regulations of the environmental topic of Human Health (Air & Noise).

8.2 Established Strategic Environmental Objectives

The European Union's Council Directive on ambient air quality and management (The Air Quality Framework Directive; 96/62/EC), which is transposed into Irish legislation by the Air Quality Standards Regulations 2002 (SI 271), establishes strategic objectives relating to air quality and management. These objectives include setting pollutant standards which will avoid prevent and reduce harmful effects on human health and the environment, maintaining ambient air quality where it is good and improving it in other cases. Also member states are required to divide their territory into zones in order to apply an approach of assessment and management. European legislation on air quality has been framed in terms of two categories, limit values and guide values. Limit values are concentrations that cannot be exceeded and are based on WHO guidelines for the protection of human health. Guide values are set as a long-term precautionary measure for the protection of human health and the environment.

8.2.1 Meath County Development Plan, 2007-2013

The Draft CDP and Environmental Report established objectives for the County at large and its associated Environmental report sets out Draft SEOs which were imputed into the Draft Environmental report for the Kells Development Plan. These are relevant to ensure a consistent approach to environmental protection and a consistent reorganisation of environmental values county wide. Many of the issues relating to air and climate as, is outlined above, are dealt with at a higher strategic level. The following are the SEOs as outlined in the Environmental report of the Draft CDP.

- A1** Reduce all forms of air pollution.
- A2** Reduce all waste of energy and maximise use of renewable energy sources.
- A3** Reduce progressively discharges of polluting substances to air including greenhouse gases.
- A4** Reduce the need to travel.

8.3 Relevant Strategic Environmental Objectives of the Kells Development Plan

SEOA1 Air/Climate/Noise - Minimise Emissions

SEOA2 Reduce all waste of energy and maximise use of renewable energy sources.

SEOA3 Reduce progressively discharges of polluting substances to air including greenhouse gases.

SEOA4 Reduce the need to travel.

8.4 Estimate of Change under a Do Nothing Scenario

No material effects are likely to occur to existing baseline. Air Quality in Ireland has been steadily improving in recent years. Decreases in air pollution are anticipated arising from national emission control initiatives which include continued improvements and reductions in vehicle emissions, increasingly stringent control of industrial emissions sources such as factories and workshops, increased usage of natural gas as a domestic heating source and the development of more sustainable energy sources such as wind generated electricity. Projected growth in road traffic in this area is likely to cause a gradual increase in noise levels in the general area particularly adjacent to the N3 Primary Route.

8.5 Estimate of Change under a De Zone Scenario

Environmental effects as above scenario.

8.6 Estimate of Change under a Re zone Scenario- urban sprawl

As this model represents unplanned, usually rapid growth, geographically spread over a large area this type of development is usually car based and would result in the associated air and noise pollution.

8.7 Estimate of Change under a Rezone Scenario- Urban consolidation and Concentration

As growth in this model is concentrated within the town centre opportunities for use of more sustainable forms of transport ie pedestrian, cycle and public transport are possible.

8.8 Measures to Prevent, Reduce and Offset Significant Adverse Effects

All operational developments must ensure that they comply with the commonly applied (EPA, Local Authorities) daytime and night time noise limit values of 45 dB(A) L_{Aeq} at night and 55 dB(A) L_{Aeq} during the daytime, that is, that a development's contribution to noise levels at the site boundary of that development should not exceed 45 dB(A) L_{Aeq} at night and 55 dB(A) L_{Aeq} during the daytime. Should predicted noise emissions exceed these levels, a detailed noise

impact assessment will be required. This impact assessment, where required, should demonstrate that the development will not lead to significantly increased noise levels at any sensitive receptor. In addition, developments are operational and fully developed, the combined contributions from all noise sources should not exceed the baseline noise levels by more than 10 dB(A).

To further ensure that all future residents are not adversely impacted by common neighbourhood noise sources, it is critical that all residential units are constructed to achieve the highest acoustic insulation performance between adjacent properties as specified by the Department of the Environment's *Building Regulations 1997, Technical Guidance Document E – Sound*, which specifies the minimum acceptable acoustic performance of walls and floors for residential units.

8.9 Operational Environmental Objectives

- Minimise emissions by ensuring compliance with relevant noise and air emission standards.

8.10 Monitoring Proposals

Principal Objectives of the Dev Plan	Air /Noise Impact
Town centre expansion and redevelopment	Yes
Employment Generation	No
Protection & Enhancement of Kells as a Heritage town	No
Accommodation & servicing of residential growth	Yes
Traffic and Transport proposals	Yes

All planning applications should include accurate and detailed predictions of the likely impacts that a proposed development during both construction and operational phases, may have on the receiving environment. These assessments should also include a description of the cumulative impacts from all existing sources in order to demonstrate that the local environment has sufficient capacity to accommodate any future potential sources of environmental emissions from the proposed development.

The local authority could conduct routine monitoring of air quality and noise emissions and will enforce any relevant planning conditions, to identify at the earliest instance if the integrity of the ambient environment is being maintained.

9.1 Introduction

This section describes the detailed evaluation as set out in the SEA regulations of the environmental topic of Soil. Impacts on soil result directly in impacts on flora and fauna therefore this section should be considered in conjunction with Section 6 which deals with flora and fauna.

9.2 Established Strategic Environmental Objectives

There are a number of existing adopted strategies and plans at National, Regional and local level which provide the Planning Authority with established strategic environmental objectives (SEOs) such applicable SEOs include those outlined below.

9.2.1 The National Biodiversity Plan (2002)

This plan seeks to secure the conservation, including where possible the enhancement and sustainable use of biological diversity in Ireland. The overall objective of this plan is as follows 'To secure the conservation, including where possible the enhancement, and sustainable use of biological diversity in Ireland and to contribute to conservation and sustainable use of biodiversity globally.'

9.2.3 Regional Planning Guidelines for the Greater Dublin Area and Mid East Region 2004-2016

Section 9.6 states that 'Planning Authorities should; Secure landscape and biodiversity enhancement.'

9.2.4 Meath County Development Plan 2001

Policy HP42: 'To ensure that proposals for development protect and enhance biodiversity, wherever possible, by minimising adverse impacts on existing habitats and by including mitigation and/or compensation measures, as appropriate, which ensure that biodiversity and landscape character is enhanced'

9.2.5 Meath County Development Plan 2007-2013

Section 8.2.1 HER POL 1 'To protect, conserve and enhance the County's bio-diversity and natural heritage including wildlife (flora & fauna), habitats, landscapes and/or landscape features of importance to wildlife or which play a key role in the conservation and management of natural resources such as water.'

The following are the SEOs in respect of impacts on soils as outlined in the Environmental report of the Draft County Development Plan.

- B1** Avoid damage by development to designated wildlife sites and protected species.
- B2** Conserve the diversity of habitats avoiding irreversible losses.
- B3** Ensure that any development promotes sustainable management of key wildlife sites and the ecological processes upon which they depend.
- B4** Protect aquatic ecosystems including the marine environment, and terrestrial ecosystems which are interdependent (promote integrated management strategies)
- B5** Provide opportunities for sustainable public access to wildlife and wild places.
- S1** Maintain the quality of soil.
- S2** Maximise the sustainable re-use of brownfield lands, and maximise the use of the existing built environment rather than developing greenfield lands.

9.3 Relevant Strategic Environmental Objectives of the Kells Development Plan

- SEOB1** Avoid damage by development to designated wildlife sites and protected species.
- SEOB2** Conserve the diversity of habitats avoiding irreversible losses.
- SEOB3** Ensure that any development promotes sustainable management of key wildlife sites and the ecological processes upon which they depend.
- SEOB4** Provide opportunities for sustainable public access to wildlife and wild places.
- SEOS1** Maintain the quality of soil.
- SEOS2** Maximise the sustainable re-use of brownfield lands, and maximise the use of the existing built environment rather than developing greenfield lands.

9.4 Estimate of Change under a Do Nothing Scenario

No significant change is envisaged. Similar impacts to that outlined in Section 6 re flora and fauna.

9.5 Estimate of Change under a De Zone Scenario

Environmental effects as per scenario 1.

9.6 Estimate of Change under a Rezone Scenario- Urban Sprawl

Urban sprawl will result in development on green field sites outside the current development boundary which would result in significant soil removal and habitat loss.

9.7 Estimate of Change under a Rezone Scenario- Urban consolidation and Concentration

Consolidated and concentrated growth at appropriate densities will reduce urban sprawl and associated land take and therefore will minimise necessity for soil removal and erosion of habitats on the outskirts of Kells.

9.8 Measures to Prevent, Reduce and Offset Significant Adverse Effects

As outlined in previous chapters development Scenario 4 is the chosen development scenario.

The development management process should seek to minimise disturbance, compaction or removal of natural soil profile from areas not required for construction. All top soils removed during pre-construction ground preparation works should be temporarily stockpiled on-site and should be used for all subsequent post construction landscaping works. This should be done on a project to project basis which will ensure the orderly and efficient landscaping of individual developments.

9.9 Operational Environmental Objectives

- To retain and conserve areas of natural soil profile with its constituent soil flora and fauna by - wherever practical - preserving undisturbed soil profiles in areas to be used for open space and planting.

9.10 Monitoring Proposals

Principal Objectives of the Dev Plan	Soil Impact
Town centre expansion and redevelopment	Yes
Employment Generation	Yes
Protection & Enhancement of Kells as a Heritage town	No
Accommodation & servicing of residential growth	Yes
Traffic and Transport proposals	No

Development Management practices will monitor processes in relation to soil.

10.1 Introduction

This section describes the detailed evaluation as set out in the SEA regulations of the environmental topic of water-surface water and water supply.

10.2 Established Strategic Environmental Objectives- Surface water

10.2.1 Regional Planning Guidelines for the Greater Dublin Area and Mid East Region 2004-2016

Objective 4.2 'To co-ordinate settlement pattern with strategic plans for (a) water resource management and (b) waste management and disposal'

Objective 5.4 'To provide a co-ordinated spatial organisation for services infrastructure (including water, wastewater, electricity, gas & telecoms) in designated corridors that supports and facilitates the orderly integrated development of the region in a sustainable manner'

10.2.2 Meath County Development Plan 2001

The fundamental basis for the Planning Authority's approach to the development of piped services networks such as water mains and wastewater collection treatment and disposal networks, is to ensure that the environmental carrying capacity of the environment is respected and protected. Section 3.5.3 of Vol 1 states as follows, 'In general it will be the objective of the Planning Authority to;

- Provide the necessary water supply and drainage facilities and address deficiencies in existing systems to underpin development in designated development areas.
- Reserve the use of water supply and wastewater disposal capacity for lands subject to the use zoning objectives in the Urban Detail Maps.
- Ensure that the capacity of existing networks is not compromised by minimising leakage and separating surface water from wastewater disposal systems.'

10.2.3 Meath County Development Plan 2007-2013

The following policies are of relevance in Section 4.8.3:

INF POL 62 To require all new large scale developments in all designated settlements to provide 'Sustainable Urban Drainage Systems' (SUDS) as part of their development. Compliance with Volume 2, Chapter 4 of the Greater Dublin Strategic Drainage Study shall be required in all instances.

INF POL 63 To consult with the Office of Public Works in relation to proposed developments in the vicinity of drainage channels and rivers for which the OPW are responsible, and the Planning Authority will, in general, retain a strip of 10 metres on either side of such channel;

The following are the SEOs in respect of surface water as outlined in the Environmental report of the Draft County Development Plan.

W1 Maintain water abstraction, run-off and recharge within carrying capacity (including future capacity)

W2 Reduce progressively discharges of polluting substances to waters

W3 Mitigate the effects of floods and droughts including vulnerability to climate change. (extreme weather, sea level rise, coastal erosion)

W4 Promote sustainable water use based on a long term projection of available water resources.

10.3 Relevant Strategic Environmental Objectives of the Kells Development Plan

SEOW1 Maintain water abstraction, run-off and recharge within carrying capacity (including future capacity)

SEOW2 Protect and enhance the status of aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands directly depending on the aquatic ecosystems.

SEOW3 Reduce progressively discharges of polluting substances to waters

SEOW4 Mitigate the effects of floods.

10.4 Estimate of Change under a Do Nothing Scenario

If no development occurs surface water outflows will continue to discharge as they currently do. In the case of greenfield sites this will be at the rate of agricultural run-off.

10.5 Estimate of Change under a Dezone Scenario

Environmental effects as for scenario 1 above

10.6 Estimate of Change under a Rezone Scenario- Urban Sprawl

Urban sprawl results in development on green field sites outside the current development boundary where SUDS (Sustainable Urban Drainage Systems) are less implementable. This development model may result in the development boundary moving closer to the cSAC. It should also be noted that the Environmental report prepared in respect of the Draft Meath County Development Plan 2007-2013 identifies in its assessment of threats to surface water quality that Kells Environs is an impact zone.

10.7 Estimate of Change under a Rezone Scenario- Urban consolidation and Concentration

The Kells Stormwater Drainage Study was produced in February 2006 by Carl Bro Engineering Consultants. This study assessed various options in respect of drainage in the Newrath Catchment in the existing town centre. Therefore the impact of development on surface water within the existing town centre in this scenario has been addressed by the Kells Stormwater Drainage Study.

10.8 Measures to Prevent, Reduce and Offset Significant Adverse Effects

As outlined in previous sections development Scenario 4 is the chosen development scenario. Compliance with the requirements of the Kells Stormwater Drainage Study will be required. The use of Sustainable Drainage Systems (SuDs) for new developments will be required. All development applications should be assessed to ensure that the maximum permitted surface water outflow from any new development is restricted to that for the site, before the proposed development in line with international best practice. The most effective method of reducing the impact of urban runoff is to minimise the run-off in the first instance. The Planning Authority should consider, where possible, specifying permeable surfaces rather than hard standings, therefore, limiting the volumes of runoff.

Where prevention is not practicable, the application of sound environmental management or good housekeeping techniques should be enforced. These may include the correct storage and disposal of chemicals, oils and lubricants, various building chemicals (particularly during the construction phases of developments) in appropriately designed impermeable bunded areas. A rigorous policy of not connecting new sewers into the public sewer system until all such sewers are tested and mis-connections removed should be implemented to prevent unnecessary contamination of surface water run-off.

10.9 Operational Environmental Objectives

- To ensure that the necessary attenuation measures are implemented within the Development Plan area.
- To ensure that the appropriate Sustainable Urban Drainage systems (Suds) are implemented within the Development Plan area.
- To ensure compliance with the requirements of the Kells Stormwater Drainage Study 2006.

10.10 Monitoring Proposals

Principal Objectives of the Dev Plan	Surface Water Impact
Town centre expansion and redevelopment	Yes
Employment Generation	Yes
Protection & Enhancement of Kells as a Heritage town	No
Accommodation & servicing of residential growth	Yes
Traffic and Transport proposals	No

All development applications should be monitored to ensure that surface water run-off is being dealt with in accordance with the policies adopted by Meath County Council/Kells Town Council and in accordance with the policy determined to manage the cumulative effect of development throughout the entire catchment area.

WATER SUPPLY

10.11 Established Strategic Environmental Objectives in relation to water supply

10.11.1 Regional Planning Guidelines Greater Dublin Area 2004–2016

The following objectives are of relevance:

Objective 5.4 ‘To provide a co-ordinated spatial organisation for services infrastructure (including water, wastewater, electricity, gas & telecoms) in designated corridors that supports and facilitates the orderly integrated development of the region in a sustainable manner’

Objective 4.2 ‘To co-ordinate settlement pattern with strategic plans for (a) water resource management and (b) waste management and disposal’

10.11.2 Meath County Development Plan 2001

Section 3.5.3 Piped Services states as follows:

- ‘The fundamental basis for the Planning Authority’s approach to the development of piped services networks such as water mains and wastewater collection treatment and disposal networks, is to ensure that the environmental carrying capacity of the environment is respected and protected.’
- ‘Provide the necessary water supply and drainage facilities and address deficiencies in existing systems to underpin development in designated development areas’
- A specific development objective relates to Kells as follows: ‘The enhancement of water supplies to the Kells area including augmentation of the Kells – Oldcastle water scheme.’

10.11.3 Meath County Development Plan 2007-2013

The following policies are of relevance in Section 4.6.4:

INF POL 29 ‘To continue the development and upgrading of the water supply system so as to ensure that an adequate, sustainable and economic supply of piped water of suitable quality is available for domestic, commercial, industrial, fire safety and other use for the sustainable development of the county in accordance with the settlement structure identified in this Plan and as finances permit.’

INF POL 30 ‘To protect and develop, in a sustainable manner, the existing groundwater sources and aquifers in the county and to control development in a manner consistent with the proper management of these resources.’

INF POL 31 ‘To promote public awareness and involvement in water conservation measures by households, businesses and industries.’

INF POL 32 ‘To implement the Water Conservation Programme, in order to conserve valuable resources by reducing wastage.’

The following are the SEOs in respect of water supply as outlined in the Environmental report of the Draft County Development Plan.

- W1** Maintain water abstraction, run-off and recharge within carrying capacity (including future capacity)
- W2** Reduce progressively discharges of polluting substances to waters
- W3** Mitigate the effects of floods and droughts including vulnerability to climate change. (extreme weather, sea level rise, coastal erosion)
- W4** Promote sustainable water use based on a long term projection of available water resources.

10.11.4 Relevant Strategic Objectives of the Kells Development Plan

- SEOW1** Maintain water abstraction, run-off and recharge within carrying capacity (including future capacity)
- SEOW2** Reduce progressively discharges of polluting substances to waters
- SEOW3** Mitigate the effects of floods and droughts including vulnerability to climate change. (extreme weather, sea level rise, coastal erosion)
- SEOW4** Promote sustainable water use based on a long term projection of available water resources.

10.11.5 Estimate of Change under a Do Nothing Scenario

As outlined in section 5 water supply to Kells is limited. If natural population increase occurs water demands may increase. Water conservation may decrease wastage.

10.11.6 Estimate of change under a De Zone scenario

Environmental effects as for scenario 1 above.

10.11.7 Estimate of Change under a Rezone Scenario- Urban Sprawl

This scenario will place further demands on the limited water supply currently serving Kells. Urban sprawl occurs over a larger geographical area, therefore network provision is over a larger area and will be more costly to provide. Due to the water constraints as outlined in Section 5 interim water solutions will be required over the plan period which would be in the form of multiple single boreholes in this scenario which are costly to provide and monitor quality.

10.11.8 Estimate of Change under a Rezone Scenario- Urban consolidation and Concentration

This scenario will also place further pressure on the limited water supply currently serving Kells. As growth in this model occurs in a concentrated area the cost of network provision is likely to be lower than the above scenario. In

terms of provision of interim solutions a single solution can be provided in this model due to the limited geographical area associated with this development model.

10.11.9 Measures to Prevent, Reduce and Offset Significant Adverse Effects

Meath County Council/Kells Town Council have established that there are currently capacity constraints in the drinking water network in Kells and the extraction limit of Lough Bawn has almost been reached. Any development will increase demand for potable water supplies. The Water Services Investment Programme Assessment of Needs 2007-2013, which has been forwarded to the Department of Environment, Heritage and Local Government, contains proposed water improvements for Kells in the form of a Main Water Supply Scheme to serve the town. It is critical that the deficiency is addressed. In the intervening period interim solutions will be required if development is to occur. These solutions must occur on a planned basis to a satisfactory standard.

10.11.10 Operational Environmental Objectives

- To ensure that an adequate water supply and network is available for the sustainable development of Kells.
- To facilitate planned provision of a minimum number of interim solutions for water supply provision which will ultimately contribute to the long term solution for water supply to Kells.

10.11. 11 Monitoring Proposals

Principal Objectives of the Dev Plan	Water Supply Impact
Town centre expansion and redevelopment	Yes
Employment Generation	Yes
Protection & Enhancement of Kells as a Heritage town	No
Accommodation & servicing of residential growth	Yes
Traffic and Transport proposals	No

All development applications should be monitored to ensure that they are generating water supply demand compatible with supply available.

11.1 Introduction

Material Assets include the provision of infrastructure and local services. This section describes the detailed evaluation of the environmental topic of Material Assets as set out in the SEA regulations as follows:

- Transportation;
- Wastewater;
- Gas Supply;
- Electricity Supply;
- Solid Waste Collection & Disposal;
- Information and Communications Technology.

11.2.1 Established Strategic Environmental Objectives -Transportation

11.2.1.1 Regional Planning Guidelines Greater Dublin Area 2004–2016

Objective 5.2 ‘To integrate the land use pattern with the transport system’

Objective 5.3 ‘To ensure that travel demand is sufficient to ensure viability’

11.2.1.2 DTO: A Platform for Change Strategy 2000-2016, 2001

The strategy has as an objective: ‘Reduce growth in the demand for transport, especially private transport; Reduce the need for car commuting by improving the reliability, availability and quality of public transport; Reduce travel times and congestion.’

The following will be encouraged:

- ‘Traffic management policies which will optimise the use of the road network for all users. Good quality cycling and pedestrian network.’
- ‘Increase capacity for public transport. Provide for proper management of access to the M50 and/or national arterial routes.’

11.2.1.3 Meath Development Plan 2001

Section 2.7.1 outlines core development objectives for transportation as follows:

- The creation of compact and self sustaining urban structures so that the need for transport is minimised in the first instance.
- To permit efficient movement of goods and persons in the interests of commerce and enterprise.
- To check commuting patterns dependent entirely on the use of the private car through the provision of high quality, public transport alternatives as promoted in the Dublin Transportation Initiative (DTI) report and a spatial planning policy based on the Strategic Planning Guidelines.
- To improve the pedestrian and cyclists domain to encourage more sustainable modal choices. This is critical if the fabric of once modestly sized urban centres are not to be excessively challenged by the needs of an overtly car based transportation network, as these centres expand and develop.

11.2.1.4 Meath County Development Plan 2007-2013

The following policies are of relevance when considering transportation, Section 4.2.3:

INFRA SP 1 To provide for the efficient movement of goods and people in the interest of commerce and enterprise;

INFRA SP 2 To promote land use planning measures which facilitate transportation efficiency, economic returns on transport investment, minimization on environmental impacts and a general shift towards the use of public transportation throughout the county;

INFRA SP 3 To promote the location of quality employment and residential developments in proximity to each other in order to reduce the demand for travel and dependence on private car transport whilst development must be increasingly related to a significantly enhanced public transport system;

INFRA SP 4 To promote higher residential development densities within growth centres as facilitated by the DoEHLG Residential Density Guidelines for Planning Authorities, so as to support viable public transport services.

The following is the SEO in respect of transport as outlined in the Environmental Report of the Draft County Development Plan, 2007-2013.

M1 Maintain the quality of and access to assets such as aquifers, aggregates, ports, motorways, and all physical and social infrastructure.

11.2.2 Relevant Strategic Environmental Objectives of the Kells Development Plan

SEOT1 To promote land use planning measures which facilitate transportation efficiency,

economic returns on transport investment, minimization on environmental impacts and a general shift towards the use of public transportation in Kells;

11.2.3 Estimate of Change under a Do Nothing Scenario

Transport objectives for Kells, in particular the M3 and N52 bypass, are to a large degree established by higher order plans. Projected growth in road traffic in the area is likely to cause a gradual increase in noise levels in the general area particularly adjacent to the N3 Primary Route and N52 National Secondary route.

11.2.4 Estimate of Change under a De Zone Scenario

Environmental effects as Scenario above.

11.2.5 Estimate of Change under a Re zone Scenario- urban sprawl

As this model represents unplanned, usually rapid growth, geographically spread over a large area this type of development is usually car based and would result in the associated increase in car based transport movements.

11.2.6 Estimate of Change under a Rezone Scenario- Urban consolidation and Concentration

As growth in this model is concentrated within the town centre opportunities for use of more sustainable forms of transport ie pedestrian, cycle and public transport are possible and are more economical to provide.

11.2.7 Measures to Prevent, Reduce and Offset Significant Adverse Effects

As is stated above key transport objectives for Kells are already established. This assessment simply seeks to establish whether development in the Kells Development Plan area is likely to utilise a sensible or an obviously inappropriate share of available transportation capacity, as it is premature to seek to undertake detailed transport impact assessments ahead of having knowledge of the actual roll-out of key transportation infrastructure. The necessary detailed assessments should be carried out at planning application stage.

In the context of the Draft Kells Development Plan the environmental topic of Material Assets: Transportation interacts with Human Health (Air & Noise), (also refer to Section 8 above).

11.2.8 Operational Environmental Objectives

- To promote land use planning measures which facilitate transportation efficiency, economic returns on transport investment, minimization on environmental impacts and a general shift towards the use of public transportation in Kells.
- To promote the provision of footpaths, cycleways, street landscaping, bus stops and quality public lighting within Kells.

11.2.9 Monitoring Proposals

Principal Objectives of the Dev Plan	Transport Impact
Town centre expansion and redevelopment	Yes
Employment Generation	Yes
Protection & Enhancement of Kells as a Heritage town	No
Accommodation & servicing of residential growth	Yes
Traffic and Transport proposals	Yes

All planning applications should include detailed assessments of the likely impacts that a proposed development during both construction and operational phases, may have on the receiving transport environment. These assessments should also include a description of the cumulative impacts from all existing sources in order to demonstrate that the local environment has sufficient capacity to accommodate future development.

WASTEWATER

11.3.1 Established Strategic Environmental Objectives- Wastewater

11.3.1.1 Regional Planning Guidelines for the Greater Dublin Area 2004 – 2016.

Objective 4.2 To co-ordinate settlement pattern with strategic plans for (a) water resource management and (b) waste management and disposal.'

Objective 4.2 ‘To provide a co-ordinated spatial organisation for services infrastructure (including water, wastewater, electricity, gas & telecoms in designated corridors that supports and facilitates the orderly integrated development of the region in a sustainable manner’.

11.3.1.2 Meath County Development Plan 2001

Section 3.5.3 Piped Services states as follows:

‘The fundamental basis for the Planning Authority’s approach to the development of piped services networks such as water mains and wastewater collection treatment and disposal networks, is to ensure that the environmental carrying capacity of the environment is respected and protected.’

‘Provide the necessary water supply and drainage facilities and address deficiencies in existing systems to underpin development in designated development areas’

11.3.1.3 Meath County Development Plan 2007-2013

The following policies are of relevance, Section 4.6.5:

INF POL 39 To facilitate the provision of an adequate wastewater collection and treatment systems to all towns and villages in the County to serve existing and future populations in accordance with the Settlement Structure identified in this Plan, the Water Framework Directive 2000/23, the Water Services Investment Programme and as finances permit, thus improving the quality of Meath’s surface, ground and coastal waters;

INF POL 40 To develop additional treatment capacity at existing plants where required to meet new developments;

INF POL 42 To co-operate with adjoining authorities to continue the sustainable development and improvement of the wastewater treatment systems throughout the County to meet the anticipated drainage requirements of the area.

INF POL 43 To implement the policies developed for the Dublin Region by the Greater Dublin

Strategic Drainage Study and to ensure that all developments will have regard to the policies as expressed in the Greater Dublin Drainage Study with particular reference to:

- i) New Developments
- ii) Environmental Management
- iii) Inflow, Infiltration and Exfiltration
- iv) Natural Amenities and Recreation
- v) Climate Change
- vi) Basements
- vii) Surface Water Management

11.3.2 Relevant Strategic Environmental Objectives of the Kells Development Plan

SEOW3 Reduce progressively discharges of polluting substances to waters

11.3.3 Estimate of Change under a Do Nothing Scenario

Wastewater treatment demands may increase in terms of PE to the plant if natural population increase occurs. However as outlined in section 5 capacity in the treatment plant is limited. Addressing the issue of the combined foul and surface water sewer in Kells may reduced the amount of surface water which is filtrating into the foul sewer.

11.3.4 Estimate of change under a De Zone scenario

Environmental effects as for scenario 1 above.

11.3.5 Estimate of Change under a Re zone Scenario- urban sprawl

This scenario will place further demands on the limited wastewater treatment capacity available for Kells. Urban sprawl occurs over a larger geographical area, therefore network provision is over a larger area and will be more costly to provide. Due to the constraints as outlined in Section 5 interim wastewater solutions will be required over the plan period which would be in the form of multiple treatment plants in this scenario which are costly to provide and to monitor.

11.3.6 Estimate of Change under a Rezone Scenario- Urban consolidation and Concentration

This scenario will place further demands on the limited wastewater treatment capacity available for Kells. As growth in this model occurs in a concentrated area the cost of network provision is likely to be lower than the above scenario. In terms of provision of interim solutions a single solution can be provided in this model due to the limited geographical area associated with this development model.

11.3.7 Measures to Prevent, Reduce and Offset Significant Adverse Effects

Meath County Council/Kells Town Council have established that there are currently capacity constraints at the Sewage Treatment Plant serving Kells. Any development will increase demand for treatment capacity. The Water Services Investment Programme Assessment of Needs 2007-2013, which has been forwarded to the Department of Environment, Heritage and Local Government, contains proposed sewage treatment improvements for Kells in the form of a Main Sewage Scheme to serve the town. It is critical that the deficiency is addressed. In the intervening period interim solutions will be required if development is to occur. These solutions must occur on a planned basis to a satisfactory standard. The provision and safeguarding of infrastructural investment is a critical component of the

development strategy for Kells. Without an environmentally sound means of disposing of waste water, the principals of sustainable development cannot be met.

11.3.8 Operational Environmental Objectives

- To ensure that an adequate wastewater treatment capacity and network is available for the sustainable development of Kells.
- To facilitate planned provision of a minimum number of interim solutions for wastewater treatment which will ultimately contribute to the long term solution for water supply to Kells.

11.3.9 Monitoring Proposals

Principal Objectives of the Dev Plan	Waste water Impact
Town centre expansion and redevelopment	Yes
Employment Generation	yes
Protection & Enhancement of Kells as a Heritage town	No
Accommodation & servicing of residential growth	Yes
Traffic and Transport proposals	No

All development applications should be monitored to ensure that they are generating wastewater demand compatible with supply available.

GAS SUPPLY

11.4.1 Established Strategic Environmental Objectives- Gas Supply

11.4.1.1 Regional Planning Guidelines for the Greater Dublin Area 2004 – 2016

Objective 5.4 ‘To provide a co-ordinated spatial organisation for services infrastructure (including water, wastewater, electricity, gas & telecoms in designated corridors that supports and facilitates the orderly integrated development of the region in a sustainable manner’.

11.4.1.2 Meath County Development Plan 2001

Section 3.5.6 states as follows: ‘In relation to power generation, given the county’s proximity to Dublin, the passage of a number of gas mains and trunk elements of the national grid through Meath coupled to the availability of sites mean that it will be an objective of the planning authority to encourage and facilitate the development of power generation facilities in the county.’

Section 3.5.8 ‘It will be the policy of the Planning Authority to encourage the extension of the gas network and to protect transmission corridors from development within 10 metres.’

11.4.1.3 Meath County Development Plan 2007-2013

Section 4.10.10 outlines policies in terms of Energy Networks:

INF POL 79 To support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and projected residential, commercial, industrial and social needs of the County;

INF POL 80 To cooperate and liaise with statutory and other energy providers in relation to power generation in order to ensure adequate power capacity for the future needs of the County;

INF POL 81 To support the statutory providers of national grid infrastructure by safeguarding such strategic corridors from encroachment by other developments that might compromise the provision of energy networks where strategic route corridors have been identified;

11.4.2 Relevant Strategic Environmental Objectives of the Kells Development Plan

Kells is not presently served by a gas network and Bord Gais has no immediate plans to provide a supply due to the introduction of de-regulation. Bord Gais is not prepared to commit capital funding to a major distribution network extension. No specific objectives have been set in relation to gas supply.

11.4.3 Estimate of Change under a Do Nothing Scenario

As there are no proposals for connection of Kells to the National gas network there are no potential significant effects predicted associated with the development of the area. Future connections to gas main network will be used elsewhere.

11.4.4 Estimate of change under De zone scenario

Environmental effects as for scenario 1 above.

11.4.5 Estimate of Change under a Re zone Scenario- urban sprawl

As urban sprawl occurs over a larger geographical area therefore network provision is over a larger area and will be more costly to provide.

11.4.6 Estimate of Change under a Rezone Scenario- Urban consolidation and Concentration

As growth in this scenario occurs over a compact geographical area network provision would be less costly to provide than within above scenario.

11.4.7 Measures to Prevent Reduces and Offset Significant Adverse Effects

As no significant adverse impacts are predicted no mitigation measures are deemed necessary.

11.4.8 Operational Environmental Objective

No specific objectives have been set in relation to gas supply.

11.4.9 Monitoring Proposals

Principal Objectives of the Dev Plan	Gas Supply Impact
Town centre expansion and redevelopment	No
Employment Generation	No
Protection & Enhancement of Kells as a Heritage town	No
Accommodation & servicing of residential growth	No
Traffic and Transport proposals	No

None necessary.

ELECTRICITY SUPPLY

11.5.1 Established Strategic Environmental Objectives -Electricity Supply.

11.5.1.1 Regional Planning Guidelines for the Greater Dublin Area 2004 – 2016

Objective 5.4 'To provide a co-ordinated spatial organisation for services infrastructure (including water, wastewater, electricity, gas & telecoms in designated corridors that supports and facilitates the orderly integrated development of the region in a sustainable manner'.

11.5.1.2 Meath County Development Plan 2001

Section 3.5.6 states: 'The Planning Authority recognises the essential requirements for electricity production and distribution.

In terms of considerations relating to the national grid, it will be the policy of the Planning Authority to:

- Protect existing power transmission corridors from encroaching developments or activities that would compromise public safety. Major corridors are indicated on the Rural Detail Maps.
- Seek to identify protected power transmission corridors in the environs of expanding urban areas and to locate underground lines that traverse existing residential areas where practicable. Potential major new power corridors are also identified on the Rural Detail Maps.
- Encourage the location of new power lines with regard to the character of the topography and proximity to residential properties and heritage artefacts.
- To seek to have all overhead cables in urban areas put underground as far as practicable.

11.5.1.3 Meath County Development Plan 2007-2013

Section 4.10.10 outlines policies in terms of Energy Networks:

INF POL 79 To support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and projected residential, commercial, industrial and social needs of the County;

INF POL 80 To cooperate and liaise with statutory and other energy providers in relation to power generation in order to ensure adequate power capacity for the future needs of the County;

INF POL 81 To support the statutory providers of national grid infrastructure by safeguarding such strategic corridors from encroachment by other developments that might compromise the provision of energy networks where strategic route corridors have been identified;

INF POL 82 To protect areas of recognised landscape importance and significant landscape views from construction of large scale visually intrusive energy transmission infrastructure. In such circumstances it is an objective to seek alternative routing or transmission methods.

INF POL 83 To require the provision of electricity cables underground, especially in the urban environment, and generally within areas of public open space, in the interest of visual amenity.

INF POL 84 To require that, in all new developments, multiple services be accommodated in shared strips and that access covers be shared whenever possible.

Section 4.10.10 Policies in Relation to Transmission Lines

INF POL 85 To ensure that the development of high tension power lines will be restricted, and that new high tension lines will not be permitted adjoining existing dwellings, except where no other alternative can be shown to exist.

INF POL 86 To locate services, including electricity, telephone and TV underground, where possible, and that existing overhead cables and associated equipment should progressively be located underground with future capacity considered and appropriate ducting put in place.

11.5.2 Relevant Strategic Environmental Objectives of the Kells Development Plan

No specific objectives have been set in relation to power supply.

11.5.3 Estimate of Change under a Do Nothing Scenario

If development does not proceed then any future upgrades to the existing electricity network will be used elsewhere.

11.5.4 Estimate of Change under a De Zone Scenario

Environmental effects as Scenario 1 above.

11.5.5 Estimate of Change under a Re –Zone Urban Sprawl

As urban sprawl occurs over a larger geographical area therefore network provision is over a larger area and will be more costly to provide.

11.5.6 Estimate of Change under a Re –Zone Consolidation and Concentration

As growth in this scenario occurs over a compact geographical area network provision would be less costly to provide than within above scenario.

11.5.7 Measures to Prevent, Reduce and Offset Significant Adverse Effects

The development will generate increased demand on the local electricity infrastructure. As no significant adverse environmental impacts are predicted no mitigation measures are deemed necessary.

11.5.8 Operational Environmental Objective

No specific objectives have been set in relation to electricity.

11.5.9 Monitoring Proposals

Principal Objectives of the Dev Plan	Electricity Supply Impact
Town centre expansion and redevelopment	No
Employment Generation	No
Protection & Enhancement of Kells as a Heritage town	No
Accommodation & servicing of residential growth	No
Traffic and Transport proposals	No

None necessary.

SOLID WASTE COLLECTION AND DISPOSAL

11.6.1 Established Strategic Environmental Objectives-Solid Waste Collection and Disposal

11.6.1.1 EU 6th Environmental Action Programme (2001-2010)

“To decouple the generation of waste from economic growth and to achieve a significant overall reduction in the volumes of waste generated”

11.6.1.2 Regional Planning Guidelines Greater Dublin Area 2004–2016

Objective 4.2 ‘To co-ordinate settlement pattern with strategic plans for (a) water resource management and (b) waste management and disposal.’

11.6.1.3 Waste Management Plan for the North East Region 2005-2010

Key policy objectives are as follows:-

Waste Prevention and Minimization

The Local Authorities will:

- Continue the role of the Environmental Awareness Officers including programmes for households, schools, community and business sectors.
- Encourage community/voluntary groups to establish additional waste services or facilities (e.g. small scale facilities for recycling, reuse/repair) in their area and assist them to develop a strategy to provide such facilities for and with the members of their community.
- Advise on the potential sources of funding available.

Waste Collection and Recycling

Key initiatives involve:-

- Pursuing a policy of increasing the number of households participating in the collection service
- Provide as a minimum an additional 4 Recycling Centres to compliment door to door collection service. This would bring the regional total from 7 to 11 facilities. Dry recyclables, green, bulky and priority waste can be delivered to these centres.
- Install 50 new Bring Banks across the Region to bring the regional total to 141 facilities. Areas with limited collection service will be targeted.
- To implement the brown bin collection for organic waste generated by households. To encourage business to segregate waste by targeted information and regulation of waste producers and collectors.

11.6.1.4 Meath Development Plan 2001

Section 3.5.4 states as follows: 'The existing facility (landfill) at Basketstown is being replaced by a new sanitary landfill at Knockharley off the N2 road in the east of the county. This facility will be accompanied by greater recovery of recyclable materials and composting of organic waste fractions. In the longer term, the Regional Waste Management Strategy being adopted by the Mid East Regional Authority will set out a longer-term vision.

The strategy will be based on four core tenets:

- Public awareness and local authority support for waste minimisation and recycling.
- Provision of improved recycling facilities.
- Development of waste handling processes including the consideration of thermal treatment to reduce bulk and landfill needs while yielding an energy return.
- The provision of residual landfill capacity for the short, medium and long term at strategic suitable locations.
- In relation to waste transfer stations, the Planning Authority will have regard to the impact of a development on residential areas in terms of visual amenities and the capacity of the road network to accommodate anticipated traffic levels in deciding on such proposals.'

11.6.1.5 Meath County Development Plan 2007-2013

The following policies are outlined in Section 4.9.3

INF POL 64 To implement the provisions of the Waste Management Hierarchy and the Replacement North East Regional Waste Management Plan. All prospective developments in the county will be expected to take account of the provisions of the Replacement Regional Waste Management Plan and adhere to those elements of it that relate to waste prevention and minimization, waste recycling facilities, and the capacity for source segregation. Account will also be taken of the proximity principle and the inter regional movement of waste as provided for under the Section 60 Policy Direction by the Minister of the Environment, Heritage & local Government (Circular WIR/04/05)

INF POL 65 To promote education and awareness on all issues associated with waste management, both at industry and community level. This will include the promotion of waste reduction by encouraging the minimization, re-use, recycling and recovery of waste within the county.

INF POL 66 To ensure the provision of quality cost effective waste infrastructure and services, which reflect and meet the needs of the community and to ensure that the 'polluter pays' principle is adhered to in all waste management activities.

INF POL 67 To ensure that all waste disposed of by private companies shall be undertaken in compliance with the requirement of the EPA and the Waste Management Legislation.

INF POL 68 To require the provision of bring banks, bottle banks or other appropriate recycling facilities as part of the overall development in the case of new or extended shopping centre developments and commercial neighbourhood centres, educational, sports, and recreational facilities. The sites shall be made available to the Local Authority at the developer's own expense and will be maintained by Meath County Council or its agents.

INF POL 69 To support the development of recycling sites/waste disposal sites or transfer stations and associated developments in appropriate locations, subject to normal planning and environmental sustainability considerations. In assessing applications for these types of development, the Planning Authority will have regard to the Groundwater Protection Plan and appropriate response matrix.

INF POL 70 To encourage the recycling of construction and demolition waste and the reuse of aggregate and other materials in future construction projects.

INF POL 71 To support the re-development of former quarries for construction and demolition waste recycling facilities subject to normal planning and environmental sustainability considerations.

INF POL 72 To promote and facilitate communities to become involved in environmental awareness activities and community-based recycling initiatives or environmental management initiatives that will lead to local sustainable waste management practices.

Objectives in terms of Solid Waste / Waste Management

INF OBJ 45 To continue to expand environmental awareness initiatives designed to create

increased public awareness of waste prevention minimization and reuse. Particular emphasis should be placed on local schools involvement;
INF OBJ 46 To identify suitable sites for additional Civic Amenity Sites and neighbourhood recycling facilities to cater for the projected increase in waste for recycling over the plan period

11.6.2 Relevant Strategic Environmental Objectives of the Kells Development Plan

No specific objectives have been set in relation to solid waste disposal.

11.6.3 Estimate of Change under a Do Nothing Scenario

Natural increase may impact in a limited way on current trends of solid waste disposal.

11.6.47 Estimate of Change under a De Zone Scenario

Environmental effects as Scenario 1 above.

11.6.5 Estimate of Change under a Re –Zone Urban Sprawl

The amount of waste generated in Kells would increase as a result of population increase. As urban sprawl occurs over a large area collection and recycling facilities is less economical to provide over a larger geographic area.

11.6.6 Estimate of Change under a Re –Zone Urban Consolidation and Concentration

As above, the amount of waste generated in Kells would increase resulting from population increase. In this scenario development occurs over a more limited land area therefore collection and recycling facilities can be more economically provided. A more efficient use can be made of existing infrastructure.

11.6.7 Measures to Prevent, Reduce and Offset Significant Adverse Effects

Development will generate demand for increased domestic and commercial waste disposal and collection services. The construction phases of developments will also produce significant volumes of waste. Developers are obliged to submit a construction and waste management plan prior to the commencement of any proposed construction activities. All waste material generated during both the construction and operational phases of development must only be collected by appropriately licensed waste contractors and disposed of in licensed waste facilities.

Where there is no side access to the rear garden (i.e. terraced housing) or in the case of apartments, dedicated bin storage facilities shall be provided at an appropriate location which does not impact on residential amenity or visual amenity. The design of these bin storage facilities should be of a high quality and should integrate with the built form and external appearance of the buildings in the vicinity.

11.6.8 Operational Environmental Objectives

- To meet the waste stream targets as set out in the North East Region Waste Management Plan, 2005-2010.
- To compile and implement construction and demolition waste management plans

11.6.9 Monitoring Proposals

Principal Objectives of the Dev Plan	Solid waste Impact
Town centre expansion and redevelopment	yes
Employment Generation	Yes
Protection & Enhancement of Kells as a Heritage town	No
Accommodation & servicing of residential growth	yes
Traffic and Transport proposals	No

Development applications shall be monitored to ensure that each complies with the environmental objective as above. Each development is obliged to have a construction and demolition waste management plan which Meath County Council or Kells Town Council must approve and monitor.

INFORMATION AND COMMUNICATIONS TECHNOLOGY

11.7.1 Established Strategic Environmental Objectives- Information and Communications Technology.

11.7.1.1 Regional Planning Guidelines for the Greater Dublin Area 2004 – 2016 Objective 5.1, “To provide a co-ordinated spatial organisation for services infrastructure (including water, wastewater, electricity, gas & telecoms in designated corridors that supports and facilitates the orderly integrated development of the region in a sustainable manner.” (p97).

11.7.1.2 Meath County Development Plan 2001

Section 3.5.5 Communications and Information Technology states as follows: 'The Planning Authority recognises the essential need for high quality communications and information technology networks in assuring the competitiveness of the county's economy and its role in supporting regional and national development generally. The document "Telecommunications Antennae and Support Structures – Guidelines for Planning Authorities" published by the Department of the Environment in July 1996 gives considerable guidance on this matter. It will be the policy of the Planning Authority to consider proposals for such infrastructure in the light of the recommendations of this document. In particular, it will be the policy to:

- Consider the visual impacts of antennae and support structures in order to minimise visual impacts upon areas of visual quality and the character and setting of residential areas.
- Encourage co-location of antennae on existing support structures and to require documentary evidence as to the non availability of this option in proposals for new structures.
- Avoid the location of structures in fragile landscapes such as areas of special visual quality or archaeological heritage indicated in the Rural Detail Maps, where views and/or prospects are to be preserved as indicated on the above maps, and in areas adjacent to national monuments, archaeological sites or listed buildings and other structures.
- The Planning Authority will support the extension of Broadband Communications Networks through the county as part of the Dublin Belfast economic corridor and to facilitate the development of major employment centres in the county. The library service and the programme for One-Stop Shops will also improve accessibility to information technologies generally to the public at large.'

11.7.1.3 Meath County Development Plan 2007-2013

Section 4.11 addresses the topic of Telecommunications and Information Technology. The following policies are outlined:

INF POL 87 To encourage the further co-ordinated and focused development and extension of telecommunications infrastructure including broadband connectivity in the County as a means of improving economic competitiveness and enabling more flexible work practices e.g. teleworking;

INF POL 88 To encourage coverage and capacity of mobile phone network infrastructure, while striving to reduce the number of telecommunications structures, by ensuring that ComReg's Code of Practice on Site Sharing is implemented and reciprocal national roaming is entered into;

INF POL 89 To encourage the location of telecommunications based services at appropriate locations within the County, subject to environmental considerations;

INF POL 90 To actively promote e-inclusion in Co. Meath through the planning process and by supporting strategies to encourage and enable lower income households to avail of modern broadband infrastructure.

INF POL 91 To seek to have appropriate modern information technology, including a carrier neutral, multi-duct infrastructure servicing every unit, incorporated into the overall design and layout of all new developments in Co. Meath, where feasible;

INF POL 92 To require the provision of telephone and TV cables underground, especially in the urban environment, and generally within areas of public open space, in the interest of visual amenity;

INF POL 93 To require that, in all new developments, multiple services be accommodated in shared strips and that access covers be shared whenever possible.

Policies with regard to Telecommunications and Information Technology

INF POL 94 To provide orderly development of telecommunications infrastructure throughout the county in accordance with the requirements of the "Telecommunications Antennae and Support Structures – Guidelines for Planning Authorities" July 1996;

INF POL 95 To adopt a presumption against the erection of antennae in proximity to residential areas, schools or community facilities, structures of historical or architectural interest and areas and sites of archaeological importance;

INF POL 96 To reserve an area of land of 500 metres in radius around all existing school premises / identified school sites to kept free from the erection of mobile phone masts;

INF POL 97 To secure a high quality of design of masts, towers and antennae and other such infrastructure in the interests of visual amenity and the protection of sensitive landscapes, subject to radio and engineering parameters;

INF POL 98 To encourage and facilitate pre-planning discussions with service providers and operators prior to the submission of planning applications. Through pre-planning discussions with operators it will be possible to ascertain an overall plan of the proposals for coverage in the county and determine where co-sharing is operationally viable;

INF POL 99 To encourage co-location of antennae on existing support structures and to require documentary evidence as to the non availability of this option in proposals for new structures. The shared use of existing structures will be insisted where the numbers of masts located in any single area is considered to have an excessive concentration;

INF POL 100 To avoid the location of structures in fragile landscapes such as areas of Special Visual Quality or archaeological heritage, where views and/or prospects are to be preserved as indicated on the above maps, and in areas adjacent to national monuments, archaeological sites or listed buildings and other structures.

11.7.2 Relevant Strategic Environmental Objectives of the Kells Development Plan

No specific objectives have been set in relation to information and communications technology.

11.7.3 Estimate of Change under a Do Nothing Scenario

If development does not proceed any additional capacity will be used elsewhere.

11.7.4 Estimate of Change under a De Zone Scenario

Environmental effects as Scenario 1 above.

11.7.5 Estimate of Change under a Re –Zone Urban Sprawl

Demand for telecommunications will increase. As urban sprawl occurs over a larger geographical area therefore network provision is over a larger area and would be more costly to provide.

11.7.6 Estimate of Change under a Re –Zone Consolidation and Concentration

Demand for telecommunications will increase. As growth in this scenario occurs over a compact geographical area network provision would be less costly to provide than within above scenario.

11.7.7 Measures to Prevent, Reduce and Offset Significant Adverse Effects

Development will generate increased demand on the local telecommunications infrastructure. As no significant adverse environmental impacts are predicted no mitigation measures are deemed necessary.

11.7.8 Operational Environmental Objective

No specific objectives have been set in relation to information and communication technologies.

11.7.9 Monitoring Proposals

Principal Objectives of the Dev Plan	tele Impact
Town centre expansion and redevelopment	yes
Employment Generation	yes
Protection & Enhancement of Kells as a Heritage town	No
Accommodation & servicing of residential growth	yes
Traffic and Transport proposals	No

All development applications shall be monitored to ensure that they are generating demand for ICT compatible with the available service.

12.1 Introduction

This section describes the detailed evaluation as set out in the SEA regulations of the environmental topic of Cultural Heritage.

12.2 Established Strategic Environmental Objectives

12.2.1 Meath County Development Plan 2001

Section 2.6.8 “The protection of heritage and its promotion as a basis for tourism is a major force in the development options to be considered” for Kells due to “the valuable built heritage extent” in the town.

12.2.2 Meath County Development Plan 2007-2013

Section 8.2.1 outlines as policy:

HER POL 1 To protect, conserve and enhance the County’s bio-diversity and natural heritage including wildlife (flora & fauna), habitats, landscapes and/or landscape features of importance to wildlife or which play a key role in the conservation and management of natural resources such as water.

Section 8.3.2 Archaeological Heritage

HER POL 53 To protect archaeological sites, monuments (including their setting), underwater archaeology, and objects within the jurisdiction of Meath County Council, including those that are listed in the Record of Monuments and Places or newly discovered sub-surface archaeological remains.

HER POL 59 To require the retention of surviving medieval plots and street patterns in the villages and towns of Meath and to record evidence of ancient boundaries, layouts etc in the course of development.

Section 8.3.4 Architectural Heritage- Record of Protected Structures

HER POL 66 To preserve, protect and enhance the architectural heritage of Meath.

HER POL 67 To seek the protection of all structures (or, where appropriate, parts of structures) within the county which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest, which are included in the Record of Protected Structures.

The Environmental Report which accompanied the Draft Meath County Development Plan outlined the following SEO for Cultural Heritage [C1] and SEO for Landscapes [L1] were used in the evaluation process in order to highlight areas in which impacts may occur.

C1 Promote the identification, protection and conservation of the cultural, including architectural and archaeological, heritage.

L1 Conserve and enhance valued natural, historic and cultural landscapes and features within them.

12.3 Relevant Strategic Environmental Objectives of the Kells Development Plan

SEOCH1 Promote the identification, protection and conservation of the cultural, including architectural and archaeological, heritage.

SEOL1 Conserve and enhance valued natural, historic and cultural landscapes and features within them.

12.4 Estimate of Change under a Do Nothing Scenario

The Do Nothing Scenario is likely to have a less positive result in terms of cultural heritage than development as this is not a sufficiently proactive scenario to remove dereliction and create vibrancy in Kells.

12.5 Estimate of Change under a De Zone Scenario

Environmental effects as Scenario 1 above.

12.6 Estimate of Change under a Re –Zone Urban Sprawl

As urban sprawl occurs over a large geographical area, erosion of the landscape and setting of the Heritage town would result. This development scenario would be likely to result in the erosion of the approach to Kells which would create a poor lasting first impression for future visitors. In addition redevelopment opportunities in the town centre would be ignored.

12.7. Estimate of Change under a Re –Zone Consolidation and Concentration

This scenario encourages the sensitive redevelopment of the existing town centre area which will result in the redevelopment and reuse of existing heritage buildings, therefore strengthening the existing town centre by removing dereliction.

12.8 Measures to Prevent, Reduce and Offset Significant Adverse Effects

It is envisaged that the most significant effect will be the promotion of the archaeological and architectural heritage of Kells. Development will be carried out having regard to the adjacent established streetscapes. Consideration shall be given for the positive interaction of any new development with established streetscapes with respect to scale, design and form. Similarly, all development within the designated Architectural Conservation Areas (ACA) will respect the integrity of all adjoining structures. The re-use and rejuvenation of older buildings fronting existing streets will be promoted. All development on the burgage plots to the rear of the established streetscapes will be carried out with a high quality of design with consistency in building width, depth and use of materials. Piecemeal development will be avoided where possible and the overall development approach taken will result in an enhanced streetscape character with increased connectivity to the towns historic past.

Archaeological assessment will be required to accompany planning applications. These assessments involve the excavation of test trenches which are used to identify any unrecorded archaeological remains and assist in providing a greater understanding of the potential impact of a proposed development on any archaeological remains.

12.9 Operational Environmental Objectives

- To preserve, protect and enhance the architectural and archaeological heritage of Kells.

12.10 Monitoring Proposals

Principal Objectives of the Dev Plan	Heritage Impact
Town centre expansion and redevelopment	yes
Employment Generation	yes
Protection & Enhancement of Kells as a Heritage town	yes
Accommodation & servicing of residential growth	yes
Traffic and Transport proposals	No

Suitable monitoring and assessment as required by the Council within the Zone of Archaeological Potential shall be carried out including the submission of archaeological impact assessments.

13.1 Introduction

This section describes the detailed evaluation as set out in the SEA regulations of the environmental topic of Landscape ie a visual analysis.

13.2 Established Strategic Environmental Objectives

13.2.1 Regional Planning Guidelines Greater Dublin Area 2004 – 2016

Section 9.5 “Planning Authorities should: Adopt policies which will protect and enhance the architectural character and landscape settings of settlements in their Area” (p161)

13.2.2 Meath County Council Development Plan 2001

Areas of Visual Quality were designated in the County Development Plan 2001 with regard to the ‘sensitivity of various categories of development in areas with differing abilities to absorb development.’ The particular sensitivities of these areas are set out on pages 57 and 58 of volume 1 of the Meath County Development Plan 2001. Kells is included within the Area VQ3 – River Valleys.

Section 2.8.4 outlines specific objectives as follows:

- ‘Protection of such areas from visually damaging development or proposals that would cumulatively erode landscape quality’

13.2.3 Meath County Council Development Plan 2007-2013

A Landscape Character Assessment (LCA) has been carried out as part of the County Development Plan review process. LCA is a process, which describes, maps and classifies landscapes objectively. Defining landscape character enables an understanding to be formed of the inherent value and importance of individual landscape elements and the processes that may alter landscape character in the future. The cultural and ecological aspects of the landscape cannot be divorced from its physical and visual characteristics so all of these elements are considered. The LCA is contained in Appendix IV of the County Development Plan.

The following policies are contained in the County Development Plan Section 8.4.2

HER POL 82 To ensure that development, particularly in sensitive landscapes, adheres to tailored design guidelines. Sensitive landscapes include demesne villages and LCA’s identified as being sensitive.

HER POL 83 To provide adequate protection of views and vistas that contribute to the appreciation of landscape character.

HER POL 84 To maintain scenic vistas and panoramic views from key vantage points and towards key landmarks and features within the landscape.

HER POL 85 To maintain the visual integrity of sensitive and exceptional - high value areas.

The Environmental Report which accompanies the Meath County Development Plan outlines the following SEO for Cultural Heritage [C1] and SEO for Landscapes [L1] were used in the evaluation process in order to highlight areas in which impacts may occur.

C1 Promote the identification, protection and conservation of the cultural, including architectural and archaeological, heritage.

L1 Conserve and enhance valued natural, historic and cultural landscapes and features within them.

The Environmental report of the Draft County Development Plan identifies Kells Environs as an impact zone for ancient areas.

13.3 Relevant Strategic Environmental Objectives of the Kells Development Plan

SEOL1 – Conserve and enhance valued natural, historic and cultural landscapes and features within them.

13.4 Estimate of Change under a Do Nothing Scenario

The Do Nothing Scenario is likely to have a less positive result as lands would remain unmanaged and would gradually become more unkempt and overgrown This therefore is not a sufficiently proactive scenario to remove dereliction and create vibrancy in Kells.

13.5 Estimate of Change under a De Zone Scenario

Environmental effects as Scenario 1 above.

13.6 Estimate of Change under a Re –Zone Urban Sprawl

As urban sprawl occurs over a large geographical area, erosion of the landscape would result.

13.7. Estimate of Change under a Re –Zone Consolidation and Concentration

This scenario encourages the development of an enhanced urban landscape, in terms of building design, open spaces and urban design relationships. A visual strengthening the existing town centre by removing dereliction would result.

13.8 Measures to Prevent, Reduce and Offset Significant Adverse Effects

As outlined in previous sections development Scenario 4 is the chose development scenario.

Planning applications will ensure that development of the landscape design should be integral to the design process. The provision of stormwater attenuation should be considered in conjunction with landscape design.

13.9 Operational Environmental Objectives

- To achieve a diverse and high quality landscape in Kells.

13.10 Monitoring Proposals

Principal Objectives of the Dev Plan	landscape Impact
Town centre expansion and redevelopment	yes
Employment Generation	yes
Protection & Enhancement of Kells as a Heritage town	yes
Accommodation & servicing of residential growth	yes
Traffic and Transport proposals	No

Suitable monitoring by the Development Management process will ensure that a high quality landscape is achieved.

Overall Findings from the Assessment

The overall findings can be summarised as follows: -

The following alternatives were considered as part of this SEA report.

Do-nothing Scenario

Under the do-nothing scenario which would result in no zoning of additional lands aside from those currently zoned, the Kells Development Plan area would maintain its current physical and socio-economic characteristics. Development would be market dependent within the existing development boundary and parameters. Future investment by the Local Authority would be absent where not provided by the development plan and its role as a pro-active influence in the town would be lost. Adopting the do-nothing scenario would mean that parts of Kells would remain under-utilised with little physical, social or economic enhancement without proactive and positive direction from Planning Authority.

De zoning Scenario

The dezoning scenario relates to the removal of land use zoning objectives in the current Kells Development Plan on those lands on the perimeter of Kells. This may provide for protection of existing habitats within these land banks subject to farming practices. A further characteristic of this option would potentially be the adverse impact on market confidence in the town as a whole. Associated with a reduction in market confidence would be the stagnation of redevelopment within the town centre. This stagnation would impact on development levies (contributions) collected by the Local Authority. A reduction in levies will result in an associated reduction in improvement works to the area.

Re Zoning Scenario - urban sprawl

The term urban sprawl is associated with unplanned development sprawl to green field sites outside of the town centre. The impact of this development model would likely to be result in further neglect of the town centre and brownfield redevelopment opportunities which often present more of a challenge to redevelop than greenfield sites. Therefore redevelopment of brownfield/ infill opportunities are perhaps not the first sites to be selected if market forces only dictate. Urban sprawl would detract from the status of Kells as a heritage town and tourist destination. The core of the town may be lost with unplanned excessive new growth. This development model often results in greater growth than anticipated and at a faster rate than anticipated with social, transport and piped infrastructure requirements problematic to plan to likely pace of growth.

Re Zoning Scenario - compact and concentrated growth

This development model focuses on consolidation of the existing town centre by developing brownfield, infill and town centre sites in Kells such as the Backlands and the KS 6 land bank. As this option promotes development, development levies will be generated and Local Authority investment would follow. It facilitates the focusing of private and public sector investment limiting the geographic spread and often uneconomic demand for limited resources. This option should ensure that dereliction is removed from Kells town Centre and a renewed vibrancy is created within the core town centre area of Kells. This focus will assist in development of Kells as a tourist destination and reinforce its Heritage town status. The focus on Kells town centre encouraged by this scenario will be of community and public advantage and is not dictated by market forces which often focus on cheaper development sites (on outskirts if development envelope) at a cost to the community, the environment and urban form. This scenario will have the lowest environmental impacts subject to adoption of mitigation measures. This is the scenario which has been selected as the development model.

The Strategic Environmental Assessment is concluded as follows:-

Significant beneficial impacts would affect:-

Population – through the creation of additional local employment, residential accommodation, community/ recreational facilities to serve Kells;

Built Environment- focus of plan is on town centre redevelopment

Residual adverse impacts would affect

Flora and Fauna - through the loss of the extent of undeveloped land [not significant]

Human Health - Noise and Air pollution – through the increase in emissions [not significant]

Material Assets – through the utilisation of traffic [not significant] and water service capacity [significant]

Soil and Water – through the excavation of top soils and sub soils and through the increase of surface water runoff to watercourses [not significant]

Thus the scenarios tested indicated that Kells can be developed as envisaged in the Development Plan without significant adverse environmental impacts occurring.

Appendix A Non Technical Summary

1.0 Introduction

This section provides the non-technical summary of the environmental report of Strategic Environmental Assessment (SEA) of the Draft Kells Development Plan 2007-2013. SEA's are carried out in response to the requirements of the European Community Council Directive of 2001, Directive 2001/42/EC, which came into effect in Ireland on July 21st 2004. Legislation requires that SEA be undertaken on plans or programmes, which are likely to have significant environmental effects and which set the framework for future development consent of projects which are subject to Environmental Impact Assessment.

2.0 Methodology

2.1 Screening of the Draft Development Plan

As per the Regional Planning Guidelines 2004-2016 Kells is designated a Moderate Growth Town. Moderate Growth Towns can accommodate an ultimate population of 15,000 persons. The current population of Kells as per 2006 Census is 5,916 persons. Section 13 A of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004) applies to development plans for an area where the population is less than 10,000 persons and outlines the requirements in respect of determination of need for an environmental assessment. Section 13 B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004) applies to development plans for an area where the population more than 10,000 persons or where the Planning Authority determines that implementation of a new development plan would be likely to have significant effects on the environment a planning authority shall carry out an environmental assessment as of part of the review of the existing development plan and preparation of a new development plan. Having regard to the ultimate population Kells could accommodate, an environmental assessment is statutorily required.

2.3 Scoping

A scoping report (May 2006) was prepared by Meath County Council and Kells Town Council to determine the scope and the level of detail to be included in the environmental report.

2.4 Consultation with Environmental Authorities

The SEA Directive specifies in Article 6(3) that "member states shall designate the authorities to be consulted". The Environmental Protection Agency (EPA), Department of Environment, Heritage and Local Government and the Department of Communications, Marine and Natural Resources have been designated as environmental authorities that must be consulted by competent authorities while screening for or conducting SEA in the Republic of Ireland. All were consulted in this case. The Department of Communications, Marine and Natural Resources and Department of Environment, Heritage and Local Government both responded to the scoping report issued.

3.0 Development Envisaged

The principal objectives of the Draft Kells Development Plan are as follows:

- Town centre expansion and redevelopment with emphasis on brownfield and infill to a high design quality;
- Employment Generation;
- Protection & Enhancement of Kells as a Heritage town;
- Accommodation & servicing of residential growth.

4.0 Consideration of Alternatives

Four alternatives were examined as follows:

Do-nothing Scenario

Under the do-nothing scenario which would result in no zoning of additional lands aside from those currently zoned, the Kells Development Plan area would maintain its current physical and socio-economic characteristics.

De zoning Scenario

The dezoning scenario relates to the removal of land use zoning objectives in the current Kells Development Plan on those lands on the perimeter of Kells.

Re Zoning Scenario - urban sprawl

The term urban sprawl is associated with unplanned development sprawl to green field sites outside of the town centre. The impact of this development model would likely to be result in further neglect of the town centre and brownfield redevelopment opportunities which often present more of a challenge to redevelop than greenfield sites.

Re Zoning Scenario - compact and concentrated growth

This development model focuses on consolidation of the existing town centre by developing brownfield, infill and town centre sites in Kells such as the Backlands and the KS 6 land bank.

5.0 Local Environmental Baselines

This section of the report describes the current state of the environment in the Kells Development Plan area, adopting the environmental indicators included in the SEA Directive. Following this, in sections 6 to 14, each topic heading, as set out in the SEA guidelines (e.g. Population, Cultural Heritage, Material Assets etc) is fully assessed in accordance with the SEA guidelines.

The purpose of this section and the following sections is to identify the current state of the environment and relevant existing environmental objectives, against which the likely effects of implementing the Development Plan are assessed. This section provides a quantitative overview of the overall physical environment of the Development Plan area, the development related pressures, followed by estimate of overall change under the selected scenario, compact and concentrated development.

6.0 Biodiversity- Flora and Fauna

Consolidated and concentrated growth at appropriate densities will reduce urban sprawl and associated land take and therefore will minimise erosion of habitats on the outskirts of Kells. Redevelopment of existing infill and brown field sites within Kells including the backlands area will result in habitat loss, as some of these areas consist of a greenfield areas which would be replaced with artificial surfaces. Habitats likely to be lost are not known to be of significant value and such lost is kept to a minimum in this scenario. In the planning of open space areas within new development the emphasis will be placed on the development of ecological corridors which permit the potential movement of wildlife and which include indigenous vegetation.

7.0 Population

Development will establish new residential communities and create employment.

8.0 Human Health (Air & Noise)

The construction and existence of developments will cause localised increases in noise levels and localised increases in emissions to air. However provided Best Practices in relation to site construction and building design are implemented for all aspect of the development, all potential noise and air emissions should be minimised to acceptable levels which would not compromise or have an unacceptable impact on the existing baseline environment.

9.0 Soil

The development management process should seek to minimise disturbance, compaction or removal of natural soil profile from areas not required for construction. All top soils removed during pre-construction ground preparation works should be temporarily stockpiled on-site and should be used for all subsequent post construction landscaping works. This should be done on a project to project basis which will ensure the orderly and efficient landscaping of individual developments.

10 Water

Meath County Council/Kells Town Council have established that there are currently capacity constraints in the drinking water network in Kells and the extraction limit of Lough Bawn has almost been reached. Any development will increase demand for potable water supplies. The Water Services Investment Programme Assessment of Needs 2007-2013, which has been forwarded to the Department of Environment, Heritage and Local Government, contains proposed water improvements for Kells in the form of a Main Water Supply Scheme to serve the town. It is critical that the deficiency is addressed. In the intervening period interim solutions will be required if development is to occur. These solutions must occur on a planned basis to a satisfactory standard.

Compliance with the requirements of the Kells Stormwater Drainage Study will be required. The use of Sustainable Drainage Systems (SuDs) for new developments will be required.

11.1 Material Assets – Transportation

Key transport objectives for Kells are already established. This assessment simply seeks to establish whether development in the Kells Development Plan area is likely to utilise a sensible or an obviously inappropriate share of available transportation capacity, as it is premature to seek to undertake detailed transport impact assessments ahead of having knowledge of the actual roll-out of key transportation infrastructure. The necessary detailed assessments should be carried out at planning application stage.

11.2 Material Assets – Waste Water

Meath County Council/Kells Town Council have established that there are currently capacity constraints at the Sewage Treatment Plant serving Kells. Any development will increase demand for treatment capacity. The Water Services Investment Programme Assessment of Needs 2007-2013, which has been forwarded to the Department of Environment, Heritage and Local Government, contains proposed sewage treatment improvements for Kells in the form of a Main Sewage Scheme to serve the town. It is critical that the deficiency is addressed. In the intervening period interim solutions will be required if development is to occur. These solutions must occur on a planned basis to a satisfactory standard. The provision and safeguarding of infrastructural investment is a critical component of the development strategy for Kells. Without an environmentally sound means of disposing of waste water, the principals of sustainable development cannot be met.

11.3 Material Assets – Gas Supply

There are no immediate proposals for supply to the National gas network to the Kells area. There are no predicted significant environmental impacts associated..

11.4 Material Assets – Electricity Supply

All development will generate increased demand on electricity supply. There are no predicted significant environmental impacts associated.

11.5 Material Assets – Waste Collection and Disposal

Development will generate increased demand for domestic and commercial waste disposal and collection services. The construction phases of the development will also produce significant volumes of waste. Developers should be obliged to submit a construction and waste management plan prior to the commencement of any proposed construction activities.

11.6 Information and Communications Technology

Development will generate increased demand on local Information and Communications Technology infrastructure. There are no predicted significant environmental impacts associated.

12.0 Cultural Heritage

It is envisaged that the most significant effect will be the promotion of the archaeological and architectural heritage of Kells. Development will be carried out having regard to the adjacent established streetscapes. Consideration shall be given for the positive interaction of any new development with established streetscapes with respect to scale, design and form. Similarly, all development within the designated Architectural Conservation Areas (ACA) will respect the integrity of all adjoining structures.

Archaeological assessment will be required to accompany planning applications.

13.0 Landscape

Planning applications will ensure that development of the landscape design should be integral to the design process. The provision of stormwater attenuation should be considered in conjunction with landscape design. Suitable monitoring by the Development Management process will ensure that a high quality landscape is achieved.

APPRAISAL OF STRATEGIC OBJECTIVES

Key ✓ Beneficial Effect/Likely beneficial Effect
 0 No significant Effect
 ✗ Some deterioration in environmental quality
 ? Uncertainty of prediction or knowledge

DEVELOPMENT PLAN OBJECTIVES								STRATEGIC ENVIRONMENTAL OBJECTIVES (SEOs)											
	B1	B2	B3	B4	P1	P2	P3	A1	A2	A3	A4	S1	S2	W1	W2	W3	H1	L1	TI
Town centre expansion and redevelopment with emphasis on brownfield and infill to a high design quality	0	0	0	0	✓	✓	✓	✓	✓	✓	✓	0	0	✓	0	0	✓	✓	✓
Employment Generation	0	0	0	0	✓	✓	✓	0	0	0	✓	0	0	0	0	0	0	0	0
Protection & Enhancement of Kells as a Heritage town	0	0	0	0	✓	✓	✓	0	0	0	0	0	0	0	0	0	✓	✓	0
Accommodation & servicing of residential growth.	0	0	0	0	0	0	0	0	0	✓	✓	0	0	0	0	0	0	0	0

Key ✓ Beneficial Effect/Likely beneficial Effect
 0 No significant Effect
 ✗ Some deterioration in environmental quality
 ? Uncertainty of prediction or knowledge

Biodiversity – Flora/Fauna	SEOB1 Avoid damage by development to designated wildlife sites and protected species
	SEOB2 Conserve the diversity of habitats avoiding irreversible losses
	SEOB3 Ensure that any development promotes sustainable management of key wildlife sites
	SEOB4 Provide opportunities for sustainable public access to wildlife and wild places
Population	SEOP1 Improve people’s quality of life based on high quality residential, working and recreational environment, on sustainable travel pattern at all stages of life.
	SEOP2 Promote town centre expansion and redevelopment.
	SEOP3 Promote employment generation.
Air Climate Noise	SEOA1 Air/Climate/Noise - Minimise Emissions
	SEOA2 Reduce all waste of energy and maximise use of renewable energy sources.
	SEOA3 Reduce progressively discharges of polluting substances to air including greenhouse gases.
	SEOA4 Reduce the need to travel.
	SEOB1 Avoid damage by development to designated wildlife sites and protected species.
Soil	SEOS1 Maintain the quality of soil.
	SEOS2 Maximise the sustainable re-use of brownfield lands, and maximise the use of the existing built environment rather than developing greenfield lands.
Water	SEOW1 Maintain water abstraction, run-off and recharge within carrying capacity (including future capacity)
	SEOW2 Protect and enhance the status of aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands directly depending on the aquatic ecosystems.
	SEOW3 Reduce progressively discharges of polluting substances to waters
	SEOW4 Mitigate the effects of floods.
Material Assets	SEOT1 To promote land use planning measures which facilitate transportation efficiency, economic returns on transport investment, minimization on environmental impacts and a general shift towards the use of public transportation in Kells;
Cultural Heritage	SEOCH1 Promote the identification, protection and conservation of the cultural, including architectural and archaeological, heritage.
Landscape	SEOL1 Conserve and enhance valued natural, historic and cultural landscapes and features within them.