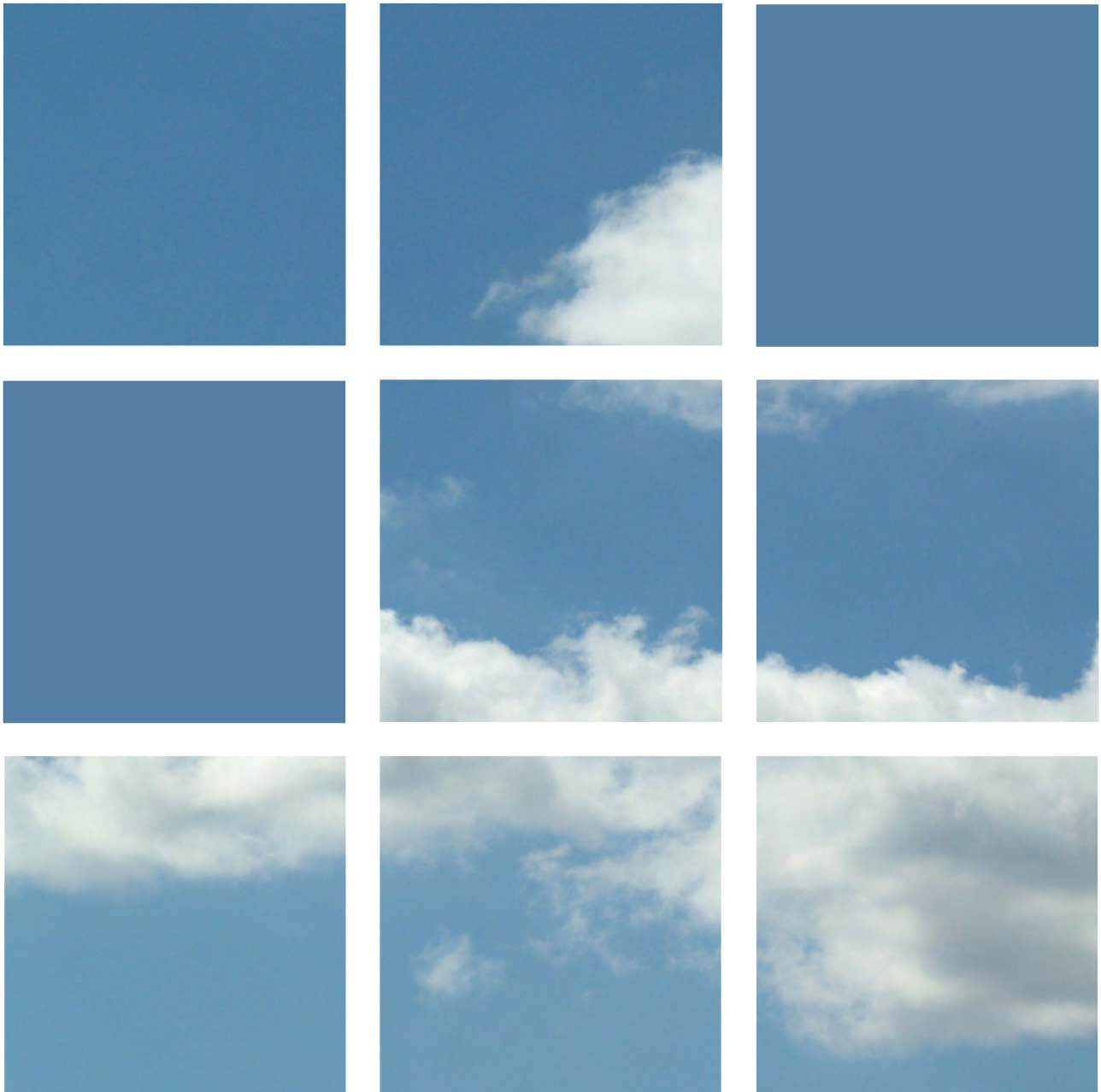


# Kiltiernan/ Glenamuck Draft Local Area Plan (2013-2019)

Strategic Environmental Assessment

Environmental Report

Screening for Appropriate Assessment







# Kiltiernan/ Glenamuck Draft Local Area Plan (2013-2019)

## Strategic Environmental Assessment

### DOCUMENT CONTROL SHEET

Client	Dún Laoghaire-Rathdown County Council					
Project Title	Kiltiernan/ Glenamuck Local Area Plan SEA					
Document Title	Environmental Report					
Document No.	MDE1123RP0006F01					
This Document Comprises	DCS	TOC	Text	List of Tables	List of Figures	No. of Appendices
	1	1	100	1	1	4

Rev.	Status	Author(s)	Reviewed By	Approved By	Office of Origin	Issue Date
A01	Draft for Client	Various	Joy Barry	Joy Barry	West Pier	9 <sup>th</sup> May 2013
F01	Final	Various	Joy Barry	Joy Barry	West Pier	12 <sup>th</sup> May 2013
						



## TABLE OF CONTENTS

<b>1</b>	<b>Non Technical Summary .....</b>	<b>1</b>
<b>2</b>	<b>Introduction.....</b>	<b>11</b>
2.1	KILTIERNAN/ GLENAMUCK DRAFT LOCAL AREA PLAN (2013-2019) .....	11
2.2	STRATEGIC ENVIRONMENTAL ASSESSMENT .....	11
2.3	APPROPRIATE ASSESSMENT.....	15
<b>3</b>	<b>Methodology .....</b>	<b>16</b>
3.1	INTRODUCTION .....	16
3.2	GUIDANCE.....	16
3.3	KEY DELIVERABLES IN STRATEGIC ENVIRONMENTAL ASSESSMENT .....	17
3.3.1	Scoping.....	17
3.3.2	Environmental Report.....	20
3.3.3	SEA Statement.....	21
3.4	APPROPRIATE ASSESSMENT.....	21
3.5	SEA DIFFICULTIES AND DATA GAPS .....	21
<b>4</b>	<b>Description of the Draft LAP .....</b>	<b>22</b>
4.1	BACKGROUND .....	22
4.1.1	County Development Plan Policy.....	22
4.2	OVERALL STRATEGY.....	23
4.3	CORE STRATEGY.....	23
4.4	FLOOD RISK ASSESSMENT .....	24
<b>5</b>	<b>Baseline Environment.....</b>	<b>25</b>
5.1	INTRODUCTION .....	25
5.2	CURRENT STATE OF THE ENVIRONMENT .....	25
5.3	POPULATION.....	26
5.3.1	Existing Environmental Pressures / Problems .....	27
5.4	BIODIVERSITY, FLORA AND FAUNA .....	29
5.4.1	Introduction.....	29
5.4.2	CORINE Land Cover Mapping.....	29
5.4.3	Designated Ecological Sites.....	29
5.4.4	Appropriate Assessment .....	31
5.4.5	NPWS Rare and Protected Species Data.....	31
5.4.6	Habitat Mapping .....	32
5.4.7	Invasive Species.....	34
5.4.8	Aquatic Flora and Fauna.....	34
5.4.9	Existing Environmental Pressures / Problems .....	35
5.5	SOIL.....	39
5.5.1	Soil Types.....	39

5.5.2	Geology .....	39
5.5.3	Existing Environmental Pressures / Problems .....	39
5.6	WATER.....	40
5.6.1	River Basin Districts and Water Bodies .....	40
5.6.3	Surface Water.....	40
5.6.4	Groundwater.....	40
5.6.5	Flooding.....	41
5.6.6	Existing Water Environmental Pressures / Problems.....	41
5.7	NOISE .....	44
5.7.1	Sources of Noise in the Draft LAP Area.....	44
5.7.2	Existing Noise Environmental Pressures / Problems.....	45
5.8	CLIMATIC FACTORS.....	47
5.8.1	Greenhouse Gases .....	47
5.8.2	Potential Effects of Changed Climate .....	47
5.8.3	Existing Environmental Change and Climate Pressures and Problems .....	47
5.9	MATERIAL ASSETS.....	48
5.9.3	Introduction.....	48
5.9.4	Drinking Water.....	48
5.9.5	Wastewater.....	48
5.9.6	Transportation .....	49
5.9.7	Energy .....	49
5.9.8	Telecommunications .....	50
5.9.9	Waste Management .....	50
5.9.10	Existing Environmental Pressures / Problems .....	50
5.10	CULTURAL, ARCHITECTURAL AND ARCHAEOLOGICAL HERITAGE.....	51
5.10.1	Introduction.....	51
5.10.2	Archaeological Heritage .....	51
5.10.3	Architecture and Cultural Heritage .....	53
5.10.4	Existing Environmental Pressures / Problems .....	55
5.11	LANDSCAPE.....	58
5.11.1	Introduction.....	58
5.11.2	Landscape Character .....	58
5.11.3	High Amenity Zones .....	59
5.11.4	Protected Views and Prospects .....	59
5.11.5	Habitats and Landscape Features of Importance for Biodiversity .....	60
5.11.6	Existing Landscape Environmental Pressures / Problems .....	60
5.12	INTER-RELATIONSHIPS.....	62
5.13	EVOLUTION OF THE ENVIRONMENT IN THE ABSENCE OF THE DRAFT LAP.....	62
<b>6</b>	<b>Review of Relevant Policies, Plans and Programmes.....</b>	<b>64</b>
6.1	INTRODUCTION .....	64

6.2	THE KEY RELEVANT PLANNING POLICIES .....	64
6.2.1	Planning and Development Policies.....	64
6.2.2	Environmental Plans and Policies.....	65
<b>7</b>	<b>Strategic Environmental Objectives, Targets and Indicators .....</b>	<b>68</b>
7.1	INTRODUCTION .....	68
7.1.1	Appropriate Assessment .....	68
7.2	DEVELOPMENT OF STRATEGIC ENVIRONMENTAL OBJECTIVES, TARGETS AND INDICATORS .....	68
7.2.1	Strategic Environmental Objectives .....	68
7.2.2	Strategic Environmental Indicators and Targets .....	71
<b>8</b>	<b>Local Area Plan Alternatives .....</b>	<b>74</b>
8.1	INTRODUCTION .....	74
8.2	LEGISLATIVE CONTEXT.....	74
8.3	REASONS FOR SELECTING THE ALTERNATIVES .....	75
8.4	ALTERNATIVES CONSIDERED FOR SEA.....	76
8.4.1	Scenario 1 - 'Do – Minimum' .....	77
8.4.2	Scenario 2 – Medium Density Approach.....	79
8.4.3	Scenario 3 - Mixed Range of Densities.....	81
8.5	AA SCREENING OF ALTERNATIVES.....	83
8.6	EVALUATION OF SEA ALTERNATIVES.....	83
8.6.1	SEA Preferred Scenario .....	83
8.7	THE PREFERRED SCENARIO.....	83
<b>9</b>	<b>Evaluation of Local Area Plan Policies and Objectives .....</b>	<b>84</b>
9.1	INTRODUCTION .....	84
9.2	POLICIES AND ACTIONS SCREENED OUT OF ASSESSMENT .....	84
9.3	IMPACT ASSESSMENT METHODOLOGY .....	85
9.4	OVERVIEW OF EVALUATION OF POLICIES AND OBJECTIVES .....	85
9.4.1	Primary Objectives of the Draft LAP.....	85
9.4.2	Residential.....	86
9.4.3	Economic Activity .....	86
9.4.4	Biodiversity and Natural Heritage.....	86
9.4.5	Landscape, Urban Design and Cultural Heritage.....	86
9.4.6	Movement/ Transport .....	87
9.4.7	Environmental Infrastructure .....	87
9.4.8	Open Space and Recreation .....	87
9.4.9	Social and Community Development .....	87
9.4.10	Neighbourhood Centre .....	87
9.4.11	Land Use Zoning Objectives .....	88
<b>10</b>	<b>Cumulative Effects .....</b>	<b>89</b>
10.1	INTRODUCTION .....	89
10.2	LEGISLATION .....	89

10.3	PLANNING .....	89
10.4	KEY ENVIRONMENTAL RECEPTORS .....	90
10.5	CONCLUSION.....	90
<b>11</b>	<b>Mitigation Measures .....</b>	<b>91</b>
11.1	INTRODUCTION .....	91
11.2	HOW HAS THE SEA INFLUENCED THE DRAFT LAP .....	91
11.3	MITIGATION MEASURES.....	91
<b>12</b>	<b>Monitoring Measures .....</b>	<b>97</b>
12.1	INTRODUCTION .....	97

## LIST OF FIGURES

Figure 2.1:	Kiltiernan/ Glenamuck Draft LAP Administrative Boundary .....	12
Figure 2.2:	Overview of SEA Process .....	14
Figure 3.1:	Overview of the Scoping Process .....	17
Figure 5.1:	Population Density in Dún Laoghaire-Rathdown .....	28
Figure 5.2:	Corine Landcover (2006).....	36
Figure 5.3:	Designated Sites .....	37
Figure 5.4:	Habitat Mapping .....	38
Figure 5.5:	Surface Water.....	42
Figure 5.6:	Flood Events and Extents .....	43
Figure 5.7:	Noise Map .....	46
Figure 5.8:	Archaeological Heritage .....	56
Figure 5.9:	Architectural and Cultural Heritage .....	57
Figure 5.10:	Landscape Character Areas.....	61
Figure 8.1:	Alternative - Scenario 1 .....	78
Figure 8.2:	Alternative - Scenario 2 .....	80
Figure 8.3:	Alternative - Scenario 3 .....	82



## LIST OF TABLES

Table 1.1:	Requirement of SEA Directive and Relevant section of Environmental Report.....	1
Table 1.2:	Existing Environmental Pressures.....	3
Table 1.3:	Potential Inter-Relationships between SEA Topics.....	6
Table 1.4:	Selected objectives for the SEA.....	8
Table 1.5:	Assessment of Draft SEA Objectives and Alternatives.....	9
Table 3.1:	Steps of the SEA process .....	16
Table 3.2:	Defining the Scope of the Draft LAP .....	19
Table 3.3:	Key Elements of the Environmental Report .....	20
Table 4.1:	Land Use Zonings .....	22
Table 5.1:	EPA State of the Environment Report (2012) Key Challenges.....	25
Table 5.2:	Population for DEDs within the Draft LAP .....	27
Table 5.3:	Designated Ecological Sites surrounding the Draft LAP .....	30
Table 5.4:	NPWS Rare and Protected Species Records .....	32
Table 5.5:	Summary of Salmonid Habitats and associated water quality .....	34
Table 5.6:	Baseline Noise Levels .....	44
Table 5.7:	High Voltage Cable Planning and Development Restrictions .....	49
Table 5.8:	Sites of Archaeological Importance.....	51
Table 5.9:	Sites of Archaeological Importance.....	52
Table 5.10:	Sites of Architectural Importance .....	53
Table 5.11:	Landscape Sensitivity.....	58

Table 5.12:	Key Interrelationships between SEA Environmental Topics .....	62
Table 7.1:	Strategic Environmental Objectives .....	69
Table 7.2:	Internal Compatibility of Strategic Environmental Objectives.....	71
Table 7.3:	Strategic Environmental Objectives, Targets and Indicators .....	71
Table 8.1:	Alternatives Option Scores against SEOs.....	83
Table 9.1:	Draft LAP Policy/ Objectives Impacts.....	84
Table 9.2:	Land Use Zonings .....	88
Table 11.1:	Mitigation Measures – Initial Measures Proposed .....	91
Table 11.2:	Further Mitigation Measures.....	94
Table 12.1:	Monitoring and Reporting Programme .....	97

## APPENDICES

<b>APPENDIX A</b>	<b>Appropriate Assessment Screening Statement</b>
<b>APPENDIX B</b>	<b>SEA Scoping Responses</b>
<b>APPENDIX C</b>	<b>Relevant Plans, Programmes and Policies</b>
<b>APPENDIX D</b>	<b>Matrix Assessment of Policies/ Objectives</b>

*This Environmental Report was prepared by RPS on behalf of Dún Laoghaire-Rathdown County Council.*

## ACRONYMS AND ABBREVIATIONS

<b>AA</b>	Appropriate Assessment
<b>CFRAM</b>	Catchment Flood Risk Assessment and Management
<b>DAHG</b>	Department of Arts, Heritage and the Gaeltacht
<b>DCENR</b>	Department of Communications, Energy and Natural Resources
<b>DECLG</b>	Department of Environment, Community and Local Government
<b>EC</b>	European Community
<b>EIA</b>	Environment Impact Assessment
<b>EPA</b>	Environmental Protection Agency
<b>ER</b>	Environmental Report
<b>EU</b>	European Union
<b>GHG</b>	Greenhouse Gas
<b>IPPC</b>	Integrated Pollution Prevention and Control
<b>NHA</b>	Natural Heritage Area
<b>NIAH</b>	National Inventory of Architectural Heritage
<b>NPWS</b>	National Parks and Wildlife Service
<b>OPW</b>	Office of Public Works
<b>P.E.</b>	Population Equivalent
<b>POM</b>	Programme of Measures
<b>P/P</b>	Plan or Programme
<b>ERBD</b>	Eastern River Basin District
<b>ERBMP</b>	Eastern River Basin Management Plan
<b>RMP</b>	Records of Monuments and Places
<b>SAC</b>	Special Area of Conservation
<b>SEA</b>	Strategic Environmental Assessment
<b>SPA</b>	Special Protection Area
<b>WFD</b>	Water Framework Directive
<b>WWTP</b>	Waste Water Treatment Plants

## GLOSSARY

Appropriate Assessment	An assessment of the effects of a plan or project on the Natura 2000 network. The Natura 2000 network comprises Special Protection Areas under the Birds Directive, Special Areas of Conservation under the Habitats Directive and Ramsar sites designated under the Ramsar Convention (collectively referred to as European sites). Also known as the Habitats Directive Assessment.
Aquifers:	A water bearing rock which readily transmits water to wells and springs.
Baseline environment:	A description of the present state of the environment of the P/P area.
Biodiversity:	Word commonly used for biological diversity and defined as assemblage of living organisms from all habitats including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part.
Birds Directive (79/409/EEC):	Council Directive of 2nd April 1979 on the conservation of wild birds.
Cumulative effects:	Effects on the environment that result from incremental changes caused by the strategic action together with other past, present, and reasonably foreseeable future actions. These effects can result from individually minor but collectively significant actions taking place over time or space.
Designated authority:	An organisation that must be consulted in accordance with the SEA Regulations.
Diffuse sources (of pollution):	These are primarily associated with run-off and other discharges related to different land uses such as agriculture and forestry, from septic tanks associated with rural dwellings and from the land spreading of industrial, municipal and agricultural wastes.
Ecology:	The study of the relationship among organisms and between those organisms and their non-living environment.
Ecosystem:	A community of interdependent organisms together with the environment they inhabit and with which they interact, and which is distinct from adjacent communities and environments.
Environmental assessment:	The preparation of an environmental report, the carrying out of consultations, the taking into account of the environmental report and the results of the consultations in decision-making and the provision of information on the decision (in accordance with Articles 4 to 9 of the SEA Directive).
Environmental indicator:	An environmental indicator is a measure of an environmental variable over time, used to measure achievements of environmental objectives and targets.

Environmental objective:	Environmental objectives are broad, overarching principles which should specify a desired direction of environmental change.
Environmental receptors:	Include biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage (including architectural and archaeological) and landscape as listed in the SEA Directive. This list is not exhaustive, and can include other receptors which may arise for a particular P/P.
Environmental Report:	A document required by the SEA Directive as part of a strategic environmental assessment which identifies, describes and evaluates the likely significant effects on the environment of implementing a plan or programme.
Good status:	Is a general term meaning the status achieved by a surface water body when both the ecological status and its chemical status are at least good or, for groundwater, when both its quantitative status and chemical status are at least good.
Groundwater:	All water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil. This zone is commonly referred to as an aquifer which is a subsurface layer or layers of rock or other geological strata of sufficient porosity and permeability to allow a significant flow of groundwater or the abstraction of significant quantities of groundwater.
Greenhouse Gas:	Gaseous constituents of the atmosphere which absorb/trap infrared (thermal) radiation which is mainly emitted by the earth's surface and thereby influence the earth's temperature.
Habitats Directive (92/43/EEC):	Council Directive of 21 May 1992 on the conservation of natural habitats and of wild flora and fauna.
Hierarchy of plans:	Both higher and lower level P/P relevant to the P/P being assessed.
Interrelationships:	Associations or linkages, related to environmental impact of the proposed P/P usually on environmental receptors.
Key environmental issues:	Those significant environmental issues, which are of particular relevance and significance within a P/P area and/or the zone of influence of that P/P. These issues should be identified during SEA Scoping process.
Material assets:	Critical infrastructure essential for the functioning of society such as: electricity generation and distribution, water supply, wastewater treatment, transportation etc
Mitigation measures:	Measures to avoid/prevent, minimise/reduce, or as fully as possible, offset/compensate for any significant adverse effects on the environment, as a result of implementing a P/P.
Monitoring:	A continuing assessment of the environmental conditions at, and surrounding, the plan or programme. This determines if effects occur as predicted or if operations remain within acceptable limits, and if mitigation measures are as effective as predicted. The primary

purpose of monitoring is to identify significant environmental effects which arise during the implementation stage against those predicted during the plan preparation stage.

Natural Heritage Area:	An area considered important for the habitats present or which holds species of plants and animals whose habitat needs protection.
Non-technical summary:	A summary of the findings of the ER, summarised under the headings listed in Annex 1 of the SEA Directive that can be readily understood by decision-makers and by the general public. It should accurately reflect the findings of the ER.
Plan or Programme:	Including those co-financed by the European Community as well as any modifications to them: <ul style="list-style-type: none"> <li>- which are subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government, and</li> <li>- which are required by legislative, regulatory or administrative provisions.</li> </ul>
Programme of Measure:	Defines in detail those actions which are required to achieve the environmental objectives of the Directive within a river basin district.
Quantitative status:	An expression of the degree to which a body of groundwater is affected by direct and indirect abstractions. If this complies with WFD requirements the status is good.
Reasonable alternatives:	Alternatives should take into account the objectives and geographical scope of the P/P. There can be different ways of fulfilling the P/P objectives, or of dealing with environmental problems. The alternatives should be realistic, capable of implementation and should fall within the legal and geographical competence of the authority concerned.
River Basin:	Means the area of land from which all surface water run-off flows, through a sequence of streams, rivers and lakes into the sea at a single river mouth, estuary or delta.
River Basin Districts:	Administrative areas for coordinated water management and are comprised of multiple river basins (or catchments), with cross-border basins (i.e. those covering the territory of more than one Member State) assigned to an international RBD.
Scoping:	The process of deciding the content and level of detail of an SEA, including the key environmental issues, likely significant environmental effects and alternatives which need to be considered, the assessment methods to be employed, and the structure and contents of the Environmental Report.
Screening:	The determination of whether implementation of a P/P would be likely to have significant environmental effects on the environment. It is the process of deciding whether a P/P requires an SEA.

SEA Directive:	Directive 2001/42/EC 'on the assessment of the effects of certain plans and programmes on the environment'.
SEA Statement:	A statement summarising; How environmental considerations have been integrated into the P/P; How the ER, the opinions of the public, and designated authorities, and the results of transboundary consultations have been taken into account; The reasons for choosing the P/P as adopted in the light of other reasonable alternatives.
Significant effects:	Effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.
Special Area of Conservation:	Site designated according to the Habitats Directive.
Special Protection Area:	An area designated under the European Directive on the Conservation of Wild Birds.
Statutory authority:	The authority by which or on whose behalf the plan or programme is prepared.
Surface water:	Means inland waters, except groundwater, which are on the land surface (such as reservoirs, lakes, rivers, transitional waters, coastal waters and, under some circumstances, territorial waters) which occur within a river basin.
Water body:	A discrete and significant element of surface water such as a river, lake or reservoir, or a distinct volume of groundwater within an aquifer.
Water Framework Directive:	The WFD is European legislation that promotes a new approach to water management through river basin planning. The legislation addresses inland surface waters, estuarine waters, coastal waters and groundwater.



# 1 NON TECHNICAL SUMMARY

## INTRODUCTION (CHAPTER 2)

This Environmental Report has been prepared in accordance with national and EU legislation as part of the Strategic Environmental Assessment (SEA) of the Kiltiernan/ Glenamuck Draft Local Area Plan (hereafter referred to as the Draft Plan or LAP) 2013-2019.

SEA is a systematic method of considering the likely significant environmental effects of a Plan or Programme by integrating environmental factors into the development of the Plan and related decision-making. The purpose of this Environmental Report is to: a) inform the development of the Kiltiernan/ Glenamuck Draft LAP; b) identify describe and evaluate the likely significant environmental effects of the Draft LAP and its reasonable alternatives; and c) provide an early opportunity for the statutory authorities and the public to offer views on this Environmental Report and the Draft LAP through consultation.

## METHODOLOGY (CHAPTER 3)

This Environmental Report contains the findings of the assessment of the likely significant effects on the environment resulting from implementation of the Draft LAP. It reflects the requirements of the SEA Directive (2001/42/EC) on the assessment of the effects of certain plans and programmes on the environment and also the transposed regulations in Ireland (S.I. 436/2004) as amended by S.I. 201/2011.

In addition, the Habitats Directive Article 6(3) requires that *“Any plan or project not directly connected with or necessary to the conservation of a site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives.”* In recognition of this, Appropriate Assessment (AA) Screening for Natura 2000 sites of the Draft LAP under Article 6(3) of the Habitats Directive has been carried out in parallel with the SEA process, with the findings of the AA used to guide the development of policies and objectives considered as part of the SEA. The results of the assessment are included in a separate document, known as AA Screening, which is also available for public review.

Integration of the SEA and Draft LAP was achieved through close involvement of relevant team members in all stages of the project, including SEA scoping, review of the existing environment and generation of policies and objectives. The SEA, AA and Draft LAP teams participated in several meetings and telephone discussions in relation to development of alternatives and development of the assessment methodology. Based on the requirements of the legislation and guidance, the following information is provided in the Environmental Report.

**Table 1.1: Requirement of SEA Directive and Relevant section of Environmental Report**

Requirement of SEA Directive (Article 5(1), Annex 1)	Section of Environmental Report
An outline of the contents and main objectives of the plan or programme, or modification to a plan or programme, and relationship with other relevant plans or programmes.	Chapter 4: Description of the Plan
The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme, or modification to a plan or programme.	Chapter 5: Baseline Environment
The environmental characteristics of areas likely to be significantly affected.	Chapter 5: Baseline Environment

Requirement of SEA Directive (Article 5(1), Annex 1)	Section of Environmental Report
Any existing environmental problems which are relevant to the plan or programme, or modification to a plan or programme, including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to the Habitats Directive.	Chapter 5: Baseline Environment
The environmental protection objectives, established at international, European Union or national level, which are relevant to the plan or programme, or modification to a plan or programme, and the way those objectives and any environmental considerations have been taken into account during its preparation.	Chapter 6: Review of Relevant Policies, Plans and Programmes
The likely significant effects on the environment, including issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.	Chapter 9: Evaluation of Local Area Plan Policies and Objectives
The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme, or modification to a plan or programme.	Chapter 11 and 12: Mitigation and Monitoring
An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.	Chapter 3: Methodology  Chapter 7: Strategic Environmental Objectives, Targets and Indicators  Chapter 8: Local Area Plan Alternatives
A description of the measures envisaged concerning monitoring of the significant environmental effects of implementation of the plan or programme, or modification to a plan or programme.	Chapter 11 and 12: Mitigation and Monitoring
A non-technical summary of the information provided under the above headings.	Chapter 1: Non-Technical Summary

## DESCRIPTION OF THE KILTIERNAN/ GLENAMUCK Draft LAP (CHAPTER 4)

The Planning Authority is satisfied that the overall strategic approach to the planning of Kiltiernan Glenamuck, as outlined in the 2007 LAP remains robust. The fact that the Kiltiernan Glenamuck LAP area is serviced in relation to water and drainage infrastructure, unlike much of the zoned residential land in the southern part of the County, serves to increase its importance as a strategic land bank for the County in the medium-term.

The primary objectives of the Draft LAP are as follows:

- To accommodate a sustainable level of residential and other ancillary development to ensure the wider strategic objectives of the 2010-2016 County Development Plan are realised;
- To establish an obvious identity / sense of place for Kiltiernan;
- To establish a focal point / civic node for Kiltiernan;
- To guide development in order to establish the character of the two component areas that comprise the LAP namely, Glenamuck and Kiltiernan; and
- Ensure that all projects in the LAP which could, either individually or in combination with other plans and projects, have a significant effect on a Natura 2000 site (or sites) will be subject to Appropriate Assessment Screening.

Any developments within the Draft LAP boundary shall be done so in accordance with the requirements of the EU Directives and associated legislation, County Development Plan policy and shall have regard to national and regional guidelines.

## THE BASELINE ENVIRONMENT (CHAPTER 5)

As this SEA deals with the Kiltiernan/ Glenamuck Draft LAP, the baseline data is focussed within the boundary of the LAP. In order to identify the potential for cumulative impacts to occur, the immediate environs of Kiltiernan/ Glenamuck are also considered.

According to recent EPA publications (EPA, 2012), Ireland's natural environment, although under increasing pressure, generally remains of good quality and represents one of the country's most essential national assets. The fifth EPA *State of the Environment Report* (2012) identified four priority challenges for the environment, which if addressed successfully, should benefit the present and future quality of Ireland's environment. These comprise: Value and Protecting our Natural Environment; Building a Resource-Efficient, Low Carbon Economy; Implementing Environmental Legislation; and Putting the Environment at the Centre of Our Decision Making. All of these are relevant to the Draft LAP. The existing environmental pressures in Kiltiernan/ Glenamuck are set out below.

**Table 1.2: Existing Environmental Pressures**

Issue Area	Existing Environmental Pressures
Flora, Fauna and Biodiversity	<p>There are no Special Areas of Conservation (SAC), Special Protection Areas (SPA), or Natural Heritage Areas (NHA) or pNHA sites within the boundary of the Draft LAP. There are a number of protected sites which some distance from the Draft LAP, as shown in <b>Figure 5.3</b>. They include Dingle Glen pNHA, Ballybetagh Bog pNHA and Knocksink Wood SAC. Information obtained from the environmental studies conducted as part of the Glenamuck District Distributor Road (GDDR) Scheme combined with habitat mapping identified that there are a number of high diversity habitats within the Draft LAP. These habitats include; riparian woodland, dry meadows and wet grassland. A number of mammals have also been recorded or are likely to occur and include badgers, bats and otters. The Draft LAP area contains a number of rare species, as identified by the National Parks and Wildlife Service (NPWS). Among these are the Bog Orchid, Red Hemp Nettle and Sika deer.</p> <p>Dun Laoghaire-Rathdown County Council (DLRCC) has adopted and is implementing a Biodiversity Plan which will manage features of the landscape which have major importance for wild flora and fauna.</p>
Population	<p>The DLRCDP Core Strategy has identified the Kiltiernan Glenamuck area as a key development area and sets a phasing and delivery target of an additional 1,600 units between the period of 2011 – 2019 (with an additional 800 units from 2020 – 2022).</p> <p>Kiltiernan/Glenamuck falls within three electoral divisions (ED's) as shown in <b>Figure 5.1</b>. These are Cabinteely-Loughlinstown, Glencullen and Shankill-Rathmichael. There was an average 31% increase in population within these EDs within between 2006 and 2011. The breakdown of population within the Draft LAP area is not straightforward as the LAP is partly located in the three EDs. Therefore population figures for the plan area are estimated based on DLRCC'S 2012 Dwelling Survey. According to this survey there were 335 occupied dwellings within the plan area in 2012. Based on a 2.7 occupancy rate this would give a population of approx. 900 persons within the plan area.</p> <p>The main pressure on this area is the potential for large scale development and the need to ensure that there is sufficient capacity in terms of infrastructure and services to cater for increased population and proposed development into the future.</p>
Water	<p><u>Surface Water and Water Quality:</u> The Draft Plan falls within the Eastern River Basin District (ERBD), therefore baseline considerations are derived from this plan. The main water bodies within the Plan area and its surrounding are the Glenamuck Stream in the northern section of the Draft LAP, the Golf Stream which is a tributary of the Glenamuck Stream and the Shanganagh River System which flows through the southern corner of the Draft LAP as shown in <b>Figure 5.5</b>. Both the Glenamuck Stream and the Loughlinstown River are important as they support salmon and brown trout and therefore have high local value. The Glenamuck Stream has a Q value of Q3-4, indicating slightly polluted conditions. The Shanganagh River has a Q</p>

Issue Area	Existing Environmental Pressures
	<p>value of Q4, indicating that it is unpolluted.</p> <p><u>Drinking Water:</u> The local water supply to the area is from Ballymore Eustace Reservoir via the Sandyford High Level Water Supply Scheme (SHLWSS). Water demand within the DLRCC and the GDA has increased and as a result key water supply projects are currently underway. The SHLWSS is outlined within the Water Services Investment Programme which also proposes that there will be Water Conservation Stage 3 Works to be undertaken within DLRCC. This includes a water mains rehabilitation project.</p> <p>In addition, Dublin City Council on behalf of the Dublin Region Local Authorities and the DoEHLG has recommended a new water supply option for the area. The Draft Plan is located on the fringe of the Greater Dublin Water Supply Area.</p> <p><u>Wastewater:</u> The Kiltiernan/ Glenamuck Draft LAP area falls within the Shanganagh Foul Catchment as set out under the Greater Dublin Strategic Drainage Study (GDSDS). The wastewater is treated at Shanganagh Wastewater Treatment Plant. The WWTP has recently finished being upgraded and now has increased capacity to cater for wastewater treatment for a population equivalent of 186,000.</p> <p><u>Flooding:</u> The OPW are in the process of preparing a detailed Catchment Flood Risk Management (CFRAM) Study for DLRCC and part of this will be the preparation of flood maps to assess flood risk. Therefore the Draft LAP has considered "The Planning System and Flood Risk Management Guidelines for Planning Authorities" (DoEHLG, 2009) but a flood risk assessment has not been conducted.</p> <p>According to the OPW flood maps, flooding has occurred within the Draft LAP. Recurring flood events are reported for the Glenamuck Stream along the Glenamuck Road which could be a direct result of locally poor drainage soils, river flood, and the rising of the water table above land surface. A 2005 DLRCC report states that flooding occurs after heavy rain due to ditch blocking. Flooding in close proximity to the Draft LAP has been reported by the OPW for the Shanganagh and Cabinteely Rivers. Recurring flooding outside of the Draft LAP but in close proximity is reported for parts of the Enniskerry Road.</p> <p><u>Groundwater:</u> The Kiltiernan/ Glenamuck aquifer is classified as a poor aquifer with bedrock that is generally unproductive except for local zones. Large areas of the Draft LAP are rated as having High to Low vulnerability due to the presence of moderately deep clayey soils and sandy soils which protects the underlying aquifer from pollution. The status of the groundwater bodies underlying Kiltiernan/ Glenamuck, based on the chemical and quantitative status of the groundwater body, has been determined under the WFD as being of good status.</p>
Geology and Soils	<p>The geology within the administrative area of Kiltiernan/ Glenamuck consists of mainly granites and other igneous intrusive rocks. There are no geological sites within the Draft LAP area. The Wicklow Mountains are of significant geomorphological importance. The Dalkey Coastal Zone and Killiney Hill are of high geological importance.</p> <p>The functions of soils are important to protect because of their environmental and socio-economic importance. The Glenamuck/ Kiltiernan area is dominated by alluvium subsoil with some bedrock outcrop and subcrop to the east. This soil has poor drainage with higher porosity beside the bedrock outcrop and subcrop. There is agricultural activity within and around the Kiltiernan / Glenamuck administrative area. As a result, the main value from soil comes from its ability to provide adequate nutrients and minerals for grass growth and the subsequent grazing of sheep.</p>
Noise	<p>The Dublin Agglomeration Noise Action Plan which includes DLRCC has been in development for the assessment and management of environmental noise as required by EU Directive 2002/49/EC. The Noise Action Plan reviews the results of strategic noise mapping and sets out an approach to the strategic management and control of environmental noise. The results of this noise mapping show that ambient noise levels in the area mostly range from 50-55dB Lden, in areas situated away from roads. The noise climate in the area is dominated by road traffic noise on the local regional road network. The main noise source, the M50, lies to the north east of the Draft LAP. This would indicate that whilst a relatively high volume of road traffic is present on certain routes, levels of road traffic noise are generally within acceptable levels.</p>
Climate Change	<p>The EPA published greenhouse gas emissions projections for the period 2011 to 2020. The figures show the projected trends for greenhouse gases and give a picture of Ireland's ability to meet EU and international targets with respect to greenhouse gas emissions. With regard to emissions in Ireland, transport and agriculture are projected to account for 75% of total non-ETS emissions by 2020. This illustrates the important role that both transport and agriculture</p>

Issue Area	Existing Environmental Pressures
	<p>will have to play in developing mitigation options for reducing emissions in Ireland and for meeting our 2020 EU targets. It is now recognised that Plans will need to take account of issues arising from climate change in their future land use planning and this will be considered as part of the development strategy and alternatives strategy for the plan area and in respect of the policies proposed for the plan area.</p> <p>Issues facing Kiltiernan / Glenamuck in relation to climate change include the danger posed by the potential for an increase in the frequency and severity of flooding events as well as changes in the occurrence of severe rainfall events which could adversely impact upon the inhabitants of the Draft LAP, its biodiversity and its economy.</p>
Cultural Heritage including Archaeology, Architecture and Cultural Heritage	<p>There are three archaeological sites within the Draft LAP: a Cross Base (DU026-018), a Fulacht Fia (DU026-135) and an Enclosure (DU026-021). Sites of archaeological potential have also been identified within an archaeological desktop and field survey of the Draft LAP area. A number of protected structures are listed within the Draft LAP, among them clerical buildings, houses and gates. Moss Cottages (1-9) which are protected structures are also designated as an Architectural Conservation Area (ACA).</p>
Landscape	<p>There are three high amenity zones within the Draft LAP area. They include the two high plateau areas covered in transitional woodland scrub located east and southeast of Kiltiernan. The third amenity area is also a high plateau which is used as a pasture and is located south east of Kiltiernan. The high amenity foothills of the Dublin Mountains lie to the west of the Draft LAP area.</p> <p>There are three Landscape Character Areas within the Draft LAP, which include; Kiltiernan Plain, Carrickmines and Ballycorus. The Kiltiernan Plain is a large hillocky plain that is part of the foothills of the Dublin Mountains. The Carrickmines enclosure is dominated by its location on the edge of the built up DLRCC area. It acts as a buffer between the densely built up area of Stepside and the lower density suburban area of Kiltiernan. A dominant feature within the Carrickmines enclosure is the Ballyyogan Landfill. The Ballycorus enclosure encompasses a valley which runs alongside the Ballycorus Road. This enclosure displays past and present industrial/ extractive works.</p> <p>The views southwards from Ballycorus Road are identified as important in the CDP. There are also two prospects that are preserved within the CDP which are; Carrickgollogan from the Enniskerry Road (south of Kiltiernan Village) and Three Rock Mountain and Two Rock Mountain from the Enniskerry Road and Sandford Village.</p> <p>There are habitats and features that are of particular importance for biodiversity throughout the landscape. These include woodlands, hedgerows and stonewalls.</p>
Material Assets	<p>It is recognised that in order to cater for future development and population growth within the Draft LAP, the water supply capacity needs to be increased, the proposed Greater District Distributor Road Scheme needs to be built, the medium voltage network needs to be introduced, Eircom needs to expand its telecommunications infrastructure and there is a need to provide a recycling facility within the Draft Plan area.</p>

In accordance with the SEA Directive, the interrelationship between the SEA environmental topics must be taken into account. The key interrelationships identified in this SEA are set out in **Table 1.3**. Of particular note are the primary relationships between water quality and biodiversity, flora and fauna. Flora and fauna, including protected species and habitats, rely directly on the aquatic environment as a habitat. Water and climate also have a key relationship. Global GHG emissions associated with transport, industry and other sources have the potential to negatively impact on climate change. This in turn can result in more frequent and more intense flooding and drought conditions affecting material assets, such as private residences and infrastructure, and biodiversity through changes in water quality and the hydrologic regime.

**Table 1.3: Potential Inter-Relationships between SEA Topics**

<b>Soils</b>	√							
<b>Water</b>	√	√						
<b>Noise</b>	√	X	X					
<b>Biodiversity, Flora, Fauna</b>	√	√	√	√				
<b>Climatic Factors</b>	√	√	√	X	√			
<b>Material Assets</b>	√	√	√	X	√	√		
<b>Cultural Heritage</b>	√	√	√	X	√	√	√	
<b>Landscape</b>	√	√	√	√	√	√	√	√
	Population	Soils	Water	Noise	Biodiversity Flora, Fauna	Climatic Factors	Material Assets	Cultural Heritage

√ = interrelationship anticipated

X = no interrelationship anticipated

The Draft LAP is aimed at ensuring orderly and controlled development in Kiltiernan/ Glenamuck. In the absence of the Draft LAP there may be pressure to increase population densities in an unsustainable manner with potential impacts on sensitive areas. In addition, without the provision of objectives that emphasise consolidation and redevelopment of sites, the uncontrolled spread of development into the countryside may continue, eroding further the agricultural land bank in the Kiltiernan/ Glenamuck environs.

The surface waters within the area covered by the Draft LAP need to have their status improved as per the objectives of the WFD. While these improvements would be expected to occur as a result of the Eastern River Basin Management Plan (ERBMP), the Draft LAP is the vehicle for implementation of many of the actions included in the RBMP Programme of Measures.

Increased amounts of private vehicle movements are a significant concern within Kiltiernan/ Glenamuck. The Draft LAP includes provision for many sustainable transport options. Without the provision of protection for these transport corridors in the Plan, it is anticipated that development of these may be more difficult in the long term and the result would be: increased numbers of private vehicles using the roads; development of new roads to service a more dispersed population; and resulting noise impacts on residential and recreational amenity.

Another issue facing Kiltiernan/ Glenamuck in relation to climate change relates to the danger posed by high rainfall events, which can cause flooding and may occur, at least in part, as a result of increased amounts of global GHG emissions from transport. Local solutions to this international issue include reduction in unsustainable transport movements, which is highly encouraged under the proposed LAP. Further development in Kiltiernan/ Glenamuck has the potential to cumulatively impact upon the archaeological, architectural and cultural heritage of the area.

## **REVIEW OF RELEVANT PLANS, POLICIES AND PROGRAMMES (CHAPTER 6)**

A review of plans, policies and programmes relevant to the Draft LAP was carried out. The review focussed primarily on National, European and International plans and programmes. The purpose of this review is to take into consideration the policy and legislative framework within which the LAP 2013-2019 is being developed. Consideration was given to the key statutory and non-statutory plans, programmes and policies relevant to the Draft LAP in order to inform the Draft SEA Strategic Environmental Objectives and Targets

The findings of the review helped define the draft objectives for the SEA and informed the assessment of alternatives. Some of the key plans, programmes and policies include:

- National Development Plan (2007-2013);
- National Spatial Strategy (2002-2020);
- Regional Planning Guidelines for the Greater Dublin Area (2010-2022);
- Dún Laoghaire-Rathdown County Development Plan (2010-2016)
- The Water Framework Directive (2000/60/EC);
- The EU Habitats Directive (92/43/EEC);
- The Urban Wastewater Treatment Directive (91/271/EEC amended by Directive (98/15/EEC);
- The EU Floods Directive (2007/60/EC);
- Drinking Water Directive (80/778/EEC) as amended by Directive 98/83/EC);
- The Eastern River Basin Management Plan; and
- The National Biodiversity Plan (2011-2016).

## SEA OBJECTIVES, TARGETS AND INDICATORS (CHAPTER 7)

There are essentially three types of Objectives considered as part of this SEA. The first relates to the *Objectives of the Kiltiernan/ Glenamuck Draft LAP* (see **Chapter 4**). The second relates to wider Environmental Objectives, i.e. environmental protection objectives at a national, European and international level (see **Chapter 6**). Finally, there are the Strategic Environmental Objectives, which were devised to test the effects of the Kiltiernan/ Glenamuck Draft LAP on the wider environment.

The **Strategic Environmental Objectives** reflect the existing environmental issues relevant to the Draft LAP. They are focussed on protecting and enhancing the natural and human environment and on minimising negative effects. The objectives were developed to be consistent with the environmental protection objectives established by International, European and National environmental policies, objectives and standards. The selected objectives for this SEA are listed in **Table 1.4**:

**Table 1.4: Selected objectives for the SEA**

<b>Objective 1</b> <b>Biodiversity Flora and Fauna (BFF)</b>	Protect and where appropriate, enhance biodiversity, particularly protected areas and protected species.
<b>Objective 2</b> <b>Population (P)</b>	Improve people's quality of life based on high-quality residential, working and recreational environments and on sustainable transport.
<b>Objective 3</b> <b>Water (W)</b>	Improve water quality and the management of watercourses to comply with the standards of the Water Framework Directive and incorporate the objectives of the Floods Directive into sustainable planning and development.
<b>Objective 4</b> <b>Soil (S)</b>	Protect and, where appropriate, enhance the function and quality of the soil resource in the lands within Kiltiernan/ Glenamuck Draft LAP.
<b>Objective 5</b> <b>Climate (C)</b>	Contribute to the mitigation of, and adaptation to, climate change.
<b>Objective 6</b> <b>Cultural Heritage (CH)</b>	Protect and, where appropriate, enhance the character, diversity and special qualities of cultural, architectural and archaeological, heritage within Kiltiernan/ Glenamuck Draft LAP.
<b>Objective 7</b> <b>Landscape (L)</b>	Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in Kiltiernan/ Glenamuck Draft LAP.
<b>Objective 8</b> <b>Material Assets (MA)</b>	Make best use of existing infrastructure and promote the sustainable development of new infrastructure.

The overall purpose of **Environmental Indicators** in the SEA process is to provide a way of measuring the environmental effect of implementing the Draft LAP once it is adopted. Environmental Indicators are also used to track the progress in achieving the aspirational **Targets** set in the SEA as well as the Draft LAP. The proposed Indicators have been selected bearing in mind the availability of data and the feasibility of making direct links between any changes in the environment and the implementation of the Draft LAP.

Targets were considered over the duration of the scoping phase, baseline data collection and assessment in order to ensure relevance to the Strategic Environmental Objectives as well as the objectives of the Draft LAP. In each case, any target that is set must be attributable to the implementation of the Draft LAP. The targets and indicators associated with each SEA Objective are presented in **Chapter 7** of this report.

## **LOCAL AREA PLAN ALTERNATIVES (CHAPTER 8)**

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 effects of the alternatives selected. Alternatives must be realistic and capable of implementation and should present a range of different approaches within the statutory and operational requirements of the Draft LAP. It is noted that a "Do Nothing" option has not been explored, as this is not considered reasonable, given the legislative requirement to update the LAP.

The strategic alternatives, further detailed in **Chapter 8**, were considered for assessment as part of the SEA process for the Draft LAP, they include:

- Scenario 1: Do Minimum
- Scenario 2: Medium Density Approach



- Scenario 3: Mixed Range of Densities

A detailed assessment was undertaken analysing each Draft Strategic Environmental Objective against the individual Alternatives with the summary of which is provided in the following table.

**Table 1.5: Assessment of Draft SEA Objectives and Alternatives**

Alternative Scenarios	Likely to Improve status of SEOs	Neutral interaction with status of SEOs	Potential Conflict with status of SEOs would be mitigated	Probable Conflict with status of SEOs – unlikely to be mitigated
Scenario 1			SEO2, SEO3, SEO5, SEO6, SE08	SEO1, SEO4
Scenario 2	SE07		SEO2, SEO3, SEO5, SEO6, SE08	SEO1, SEO4
Scenario 3	SEO2, SE05, SEO6, SE07, SE08		SEO3, SEO6	SEO1, SEO4

Scenario 3 is generally considered to be the most positive alternative when measured against the SEOs of the Environmental Report. Even though Scenario 3 provides for a high concentration of residential development it does so in a planned and phased manner.

## EVALUATION OF THE DRAFT LAP, POLICIES AND OBJECTIVES (CHAPTER 9)

The purpose of this section of the Environmental Report is to evaluate as far as possible the environmental effects of the Draft LAP policies and objectives and to set out measures envisaged to prevent, reduce and as far as possible offset any significant adverse effects on the environment. The policies and objectives of the Draft LAP have been assessed against the Draft SEA environmental objectives for Biodiversity Flora and Fauna, Population, Water, Soils, Noise, Climate Change, Cultural Heritage (including Archaeology, Architecture and Cultural Heritage), Landscape and Material Assets (as set out in **Chapter 7**). The approach used for assessing the policies / objectives for the Draft LAP was a baseline and objectives led assessment using assessment matrices in line with current best practice for SEA of land use plans in Ireland.

As part of the assessment, an initial review of draft policies and objectives was carried out. Suggestions on the language and content were made and included where possible in the development of the policies and objectives as they developed.

For the most part the policies and objectives contained within the Draft LAP would result in positive direct and indirect impacts in all areas. The potential for negative impacts to issues such as biodiversity, population, soils, water and climate, cultural heritage and landscape, is limited to policies which would result in provision of additional development as the majority of this development will be on greenfield land i.e. residential, commercial and accompanying infrastructure. Key issues raised in the assessment included:

- Provision of sustainable infrastructure including transport;
- Protection of biodiversity, while facilitating social, recreational and commercial development; and
- Protection of the landscape and scenic views; and
- Protection of the archaeological, architectural resources.

## CUMULATIVE EFFECTS (CHAPTER 10)

Cumulative effects are referred to in a number of SEA guidance documents and are defined in the EPA SEA Process Checklist (2011) as “*effects on the environment that result from incremental changes caused by the strategic action together with other past, present, and reasonably foreseeable future actions. These effects can result from individually minor but collectively significant actions taking place over time or space*”. Therefore the combined effect of human activity can pose a serious threat on our environment. These effects can be insignificant individually but cumulatively over time and from a number of sources can result in the degradation of sensitive environmental resources.

## MITIGATION (CHAPTER 11) & MONITORING (CHAPTER 12)

Annex 1 (g) of the SEA Directive requires that the Environmental Report describe the measures envisaged to prevent, reduce and/or offset as fully as possible any significant adverse effects on the environment from implementation of the LAP. **Table 11.1** of the environmental report outlines the specific general environmental concerns to be included as policy within the LAP from the outset. Further recommendations arising from the SEA process are outlined in **Table 11.2** of the environmental report and it includes the mitigation measures proposed and outlines whether they have been included within the Draft LAP.

Article 10 of the SEA Directive requires that monitoring be carried out in order to identify at an early stage any unforeseen adverse effects due to implementation of the Draft LAP, with the view to taking remedial action where adverse effects are identified through monitoring. Monitoring will be based around the Strategic Environmental Objectives, Indicators and Targets. The Strategic Objectives, Indicators and Targets for the various environmental topics are set out in **Table 12.1**. The indicators chosen will show changes that would be attributable to the implementation of the Draft LAP and are at a level, which is relevant to the Draft LAP and are collated and reported on by a variety of government agencies.

Monitoring proposals must concentrate on likely significant environmental effects, which have been identified in the Environmental Report and the measures identified as necessary to prevent, reduce, or offset any significant adverse effects. The indicators/monitoring will act as an early warning sign so that appropriate remedial action is undertaken. It should be noted that the monitoring programme has been designed to be flexible for the express purpose of allowing the use of alternate indicators should more relevant data sources become available during the implementation and monitoring of the Draft LAP.

## 2 INTRODUCTION

This Environmental Report has been prepared in accordance with national and EU legislation as part of the Strategic Environmental Assessment (SEA) of the Kiltiernan/ Glenamuck Draft Local Area Plan (2013-2019). The purpose of this Environmental Report is to: a) inform the development of the Draft Plan; b) identify describe and evaluate the likely significant effects of the Draft LAP and its reasonable alternatives; and c) provide an early opportunity for the statutory authorities and the public to offer views on the Draft LAP and SEA Environmental Report, through consultation.

### 2.1 KILTIERNAN/ GLENAMUCK DRAFT LOCAL AREA PLAN (2013-2019)

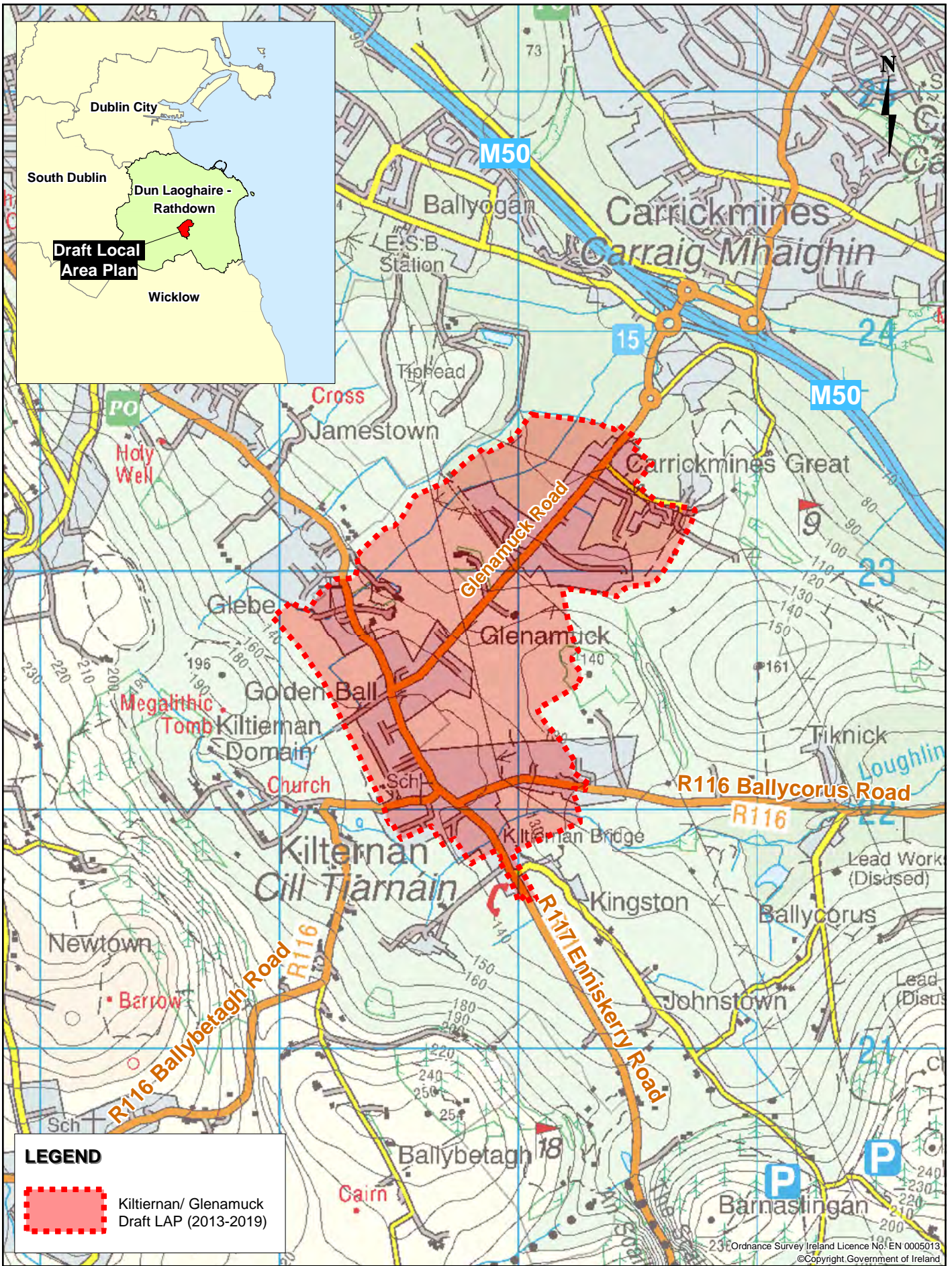
Dún Laoghaire-Rathdown County Council (DLRCC) is currently preparing the Kiltiernan/ Glenamuck Draft LAP (2013 - 2019), hereafter referred to as the Draft LAP or LAP, to replace the existing Kiltiernan/ Glenamuck LAP (2007). The Draft LAP is being prepared under the provisions of the Planning and Development Act 2000 (as amended) to develop and improve in a sustainable manner the environmental, social, economic and cultural assets of Kiltiernan/ Glenamuck. The boundaries of the administrative area of Kiltiernan/ Glenamuck are shown in **Figure 2.1**.

The Draft LAP will provide the means by which the specific objectives and activities of the private and public sector will be coordinated, to ensure that they are implemented in a mutually integrated, consistent, sustainable and supportive manner. It will promote and encourage development, conserve and protect the environment and make the best possible use of resources.

### 2.2 STRATEGIC ENVIRONMENTAL ASSESSMENT

Strategic Environmental Assessment (SEA) is a process for evaluating, at the earliest appropriate stage, the environmental quality and consequences of Policy, Plan or Programme initiatives. The objective of the SEA process is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of specified plans and programmes with a view to promoting sustainable development. The purpose of SEA is to ensure that the environmental consequences of plans and programmes are assessed both during their preparation and prior to adoption. The SEA process also gives interested parties an opportunity to comment on the environmental impacts of the proposed plan or programme and to be kept informed during the decision making process.

The European Directive (2001/42/EC) on the Assessment of the Effects of Certain Plans and Programmes on the Environment (the SEA Directive) was transposed into national legislation by the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435/2004), as amended by S.I. 200/2011 and the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. 436/2004), as amended by S.I. 201/2011. The Kiltiernan/ Glenamuck Draft LAP falls under the remit of S.I. 436/2004, as amended.



**FIGURE 2.1 - KILTIERNAN/ GLENAMUCK DRAFT LAP (2013-2019)  
ADMINISTRATIVE BOUNDARY & TRANSPORTATION  
NETWORK**

The SEA Directive requires that certain Plans and Programmes, prepared by statutory bodies, which are likely to have a significant impact on the environment, be subject to the SEA process. The SEA process is comprised of the following steps:

- Screening: Decision on whether or not an SEA is required;
- Scoping: Consultation with defined statutory consultees on the scope and level of detail to be considered in the assessment;
- Environmental Assessment: An assessment of the likely significant impacts on the environment as a result of the Plan or Programme, including reasonable alternatives;
- Publication of an Environmental Report;
- Consultation on the draft Plan/Programme and associated Environmental Report;
- Evaluation of the submissions and observations made on the draft Plan/Programme and Environmental Report; and
- Adoption of the Final Plan/Programme and issuance of an SEA Statement. The Statement identifies how environmental considerations and consultation have been integrated into the Final Plan/Programme.

**Figure 2.2** shows the key steps required to complete the statutory SEA process in accordance with the relevant national legislation.

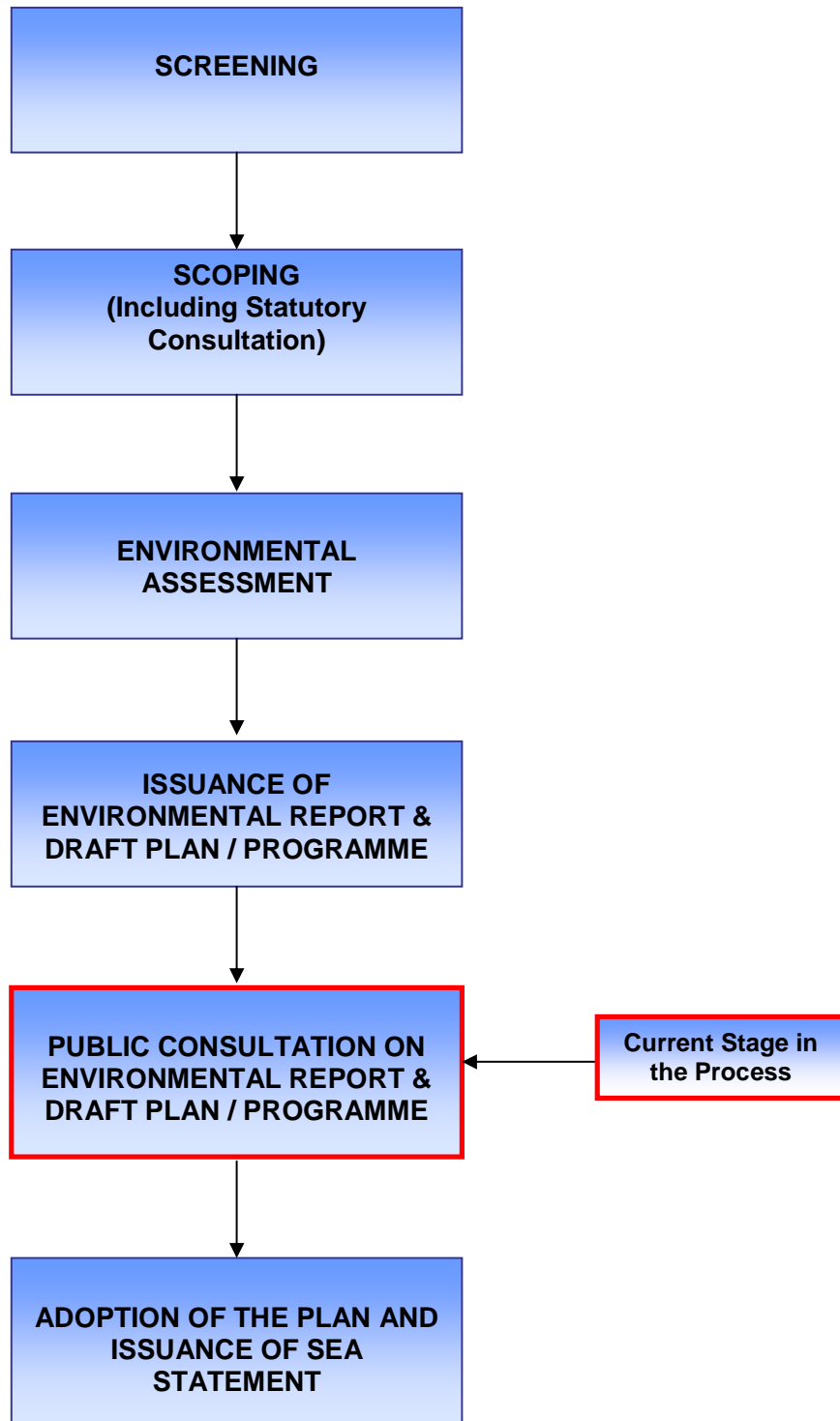


Figure 2.2: Overview of SEA Process

## 2.3 APPROPRIATE ASSESSMENT

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, better known as “The Habitats Directive”, provides legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as Natura 2000. These are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/ECC).

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect Natura 2000 sites (Annex 1.1). Article 6(3) establishes the requirement for Appropriate Assessment (AA):

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

The Habitats Directive is implemented in Ireland by the European Communities (Natural Habitats) Regulations (SI 94/1997), which has been replaced by European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011). This Birds and Natural Habitats Regulations 2011 consolidate the Natural Habitats Regulations 1997 to 2005 and the Birds and Natural Habitats (Control of Recreational Activities) Regulations 2010.

In recognition of this, an Appropriate Assessment of Natura 2000 sites potentially impacted by the Draft LAP was carried out in parallel with the SEA process. The findings of the Appropriate Assessment Screening are included in **Appendix A** of this document.

### 3 METHODOLOGY

#### 3.1 INTRODUCTION

The SEA Directive requires that certain Plans and Programmes, which are likely to have a significant impact on the environment, be subject to the SEA process. As noted above, the SEA process is broadly comprised of the steps listed below.

**Table 3.1: Steps of the SEA process**

SEA Step / Stage	Purpose	Status
Screening	Decision on whether or not an SEA required.	The requirement to carry out SEA of the Kiltiernan/ Glenamuck Draft LAP is mandatory in accordance with S.I. 436 of 2004 as amended by S.I. 201 of 2011: <i>14(B) Where –</i> <i>(a) the population or the target population of the area of a local area plan is 5,000 persons or more.</i> As the population or the target population for the Kiltiernan / Glenamuck local area is proposed to be in the order of 8,100 persons, SEA on the LAP is mandatory under Art 14 (B) (a).
Scoping	Consultation with the defined statutory bodies on the scope and level of detail to be considered in the assessment.	Completed in January 2012.
Environmental Assessment	Assessment of the likely significant impacts on the environment as a result of the Draft Plan or Programme culminating in the production of an Environmental Report.	Completed in April/ May 2013.
Consultation	Consultation on the Draft Plan/Programme and associated Environmental Report.	Ongoing.
SEA Statement	Identification of how environmental considerations and consultation have been integrated into the final Plan/Programme culminating in the production of an SEA Statement.	To be published with final adopted Plan in 2013.

#### 3.2 GUIDANCE

The following guidance / methodology documents have been referred to during the SEA process:

*Further Transposition of EU Directive 2001/42/EC on Strategic Environmental Assessment (SEA)*  
Circular Letter PSSP 6/2011 Department of Environment, Community and Local Government.  
Available at: <http://www.environ.ie>

*Development of Strategic Environmental Assessment (SEA) Methodologies for Plans and Programmes in Ireland.* Synthesis Report. 2003. Environmental Protection Agency. Available at: <http://www.epa.ie>



GISEA Manual, *Current Practice And Potential On The Application Of Geographic Information Systems As A Support Tool In Strategic Environmental Assessment Of Irish Land Use Plans 2009* Environmental Protection Agency. Available at: <http://www.epa.ie>

*Implementation of SEA Directive (2001/42/EC). Assessment of Certain Plans and Programmes on the Environment. Guidelines for Regional Planning Authorities.* November 2004. Department of Environment, Heritage and Local Government. Available at: <http://www.environ.ie>

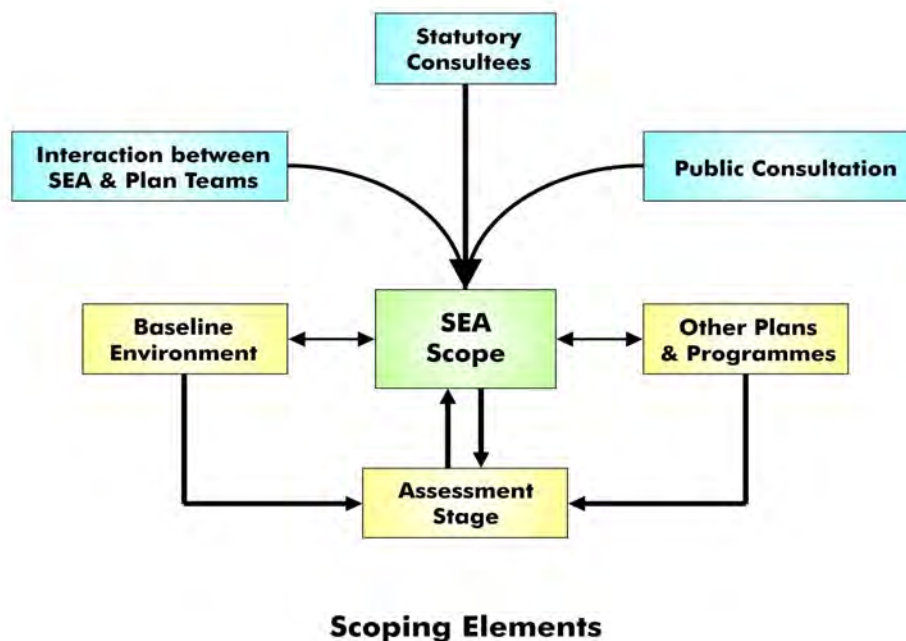
*Strategic Environmental Assessment (SEA) Checklist - Consultation Draft.* January 2008 (updated 6<sup>th</sup> September 2011). Environmental Protection Agency. Available at: <http://www.epa.ie>

### 3.3 KEY DELIVERABLES IN STRATEGIC ENVIRONMENTAL ASSESSMENT

#### 3.3.1 Scoping

##### Process

The objective of scoping is to identify key issues of concern that should be addressed in the environmental assessment of the Draft LAP so that they can be considered in appropriate detail. Scoping also helps determine the boundaries of the assessment in terms of geographical extent and the time horizon for the assessment. **Figure 3.1** outlines the various elements that contribute to the scope of the SEA. Consultation was undertaken with the statutory consultees for SEA during the scoping process. In addition Public consultation was undertaken as part of the Plan Process for the Kiltiernan/ Glenamuck Draft LAP.



**Figure 3.1: Overview of the Scoping Process**

## Consultation on Scope

Under Article 6 of the SEA Directive, the competent authority preparing the plan or programme is required to consult with specific “environmental authorities” (statutory consultees) on the scope and level of detail of the information to be included in the Environmental Report.

The SEA amendment regulations (S.I. 201 of 2011) have made alterations regarding the scoping process. Previously under S.I. 436 of 2004 three statutory consultee environmental bodies were identified, those being the Environmental Protection Agency, the Department of Environment, Heritage and Local Government and the Department of Communications, Energy and Natural Resources (formerly Communications, Marine and Natural Resources). The amended regulations now list five environmental statutory consultees which are outlined in Article 13A (4) (a) of S.I. 201 of 2011, as follows;

- (i) *the Environmental Protection Agency*
- (ii) *the Minister for the Environment, Community and Local Government,*
- (iii) *where it appears to the planning authority that the plan or programme or modification of the plan or programme, might have significant effects on fisheries or the marine environment, the Minister for Agriculture, Marine and Food, and the Minister for Communications, Energy and Natural Resources,*
- (iv) *where it appears to the competent authority that the plan or programme or amendment to a plan or programme, might have significant effects in relation to the architectural or archaeological heritage or to nature conservation, the Minister for Arts, Heritage and Gaeltacht Affairs, and*
- (v) *any adjoining planning authority whose area is contiguous to the area of a planning authority which prepared a draft plan, proposed variation or local area plan.*

A draft Scoping Document was sent to the five environmental authorities on the 14<sup>th</sup> December 2012. Responses were received from Inland Fisheries Ireland and the Environmental Protection Agency (EPA) and are included within **Appendix B** of this report.

Inland Fisheries Ireland (IFI) identified the need for the sustainable development of the inland and marine fisheries resource including the conservation of fish and other species of fauna and flora within the plan area. They raised a number of points including:

- IFI highlighted the salmonid status of Glenamuck Stream and Loughlinstown River. They also noted that they would welcome the designation of lands adjacent to salmonid systems as areas of open preservation allowing protection of biological diversity while providing open space.
- There is a need for sufficient treatment capacity available both within the receiving sewerage system locally and downstream at the relevant Waste Water Treatment Plant in order that the ecological integrity of the ultimate receiving water is protected.
- Issues relating to surface and groundwater run-off from the Draft LAP catchment entering the Glenamuck Stream and Loughlinstown River;
- The provision of enhanced protection for non-designated habitats and species;
- They requested that the disturbance of riparian habitats kept to a minimum, and that habitat integrity (both in-stream and riparian) should be maintained and recommendation that the “*Requirements for the Protection of Fisheries Habitat during Construction and Development Works at River Sites*” be consulted and referenced when producing the SEA for this Draft LAP.

The EPA outlined that consideration should be given to amending the primary objective in *Section 1.2 Kiltiernan /Glenamuck Draft LAP VO1* “To accommodate a **sustainable** level of residential and other ancillary development to ensure the wider strategic objectives of the 2010-2016 County Development Plan are realised”. The EPA also suggested that consideration should be given of the following within the Draft LAP and SEA:

- Review and consideration of the Eastern Catchment Flood Risk Assessment and Management (ECFRAMS), the National Biodiversity Plan 2011-2016 and the Greater Dublin Strategic Drainage Study;
- Inclusion of a commitment to ensure that where development is proposed within the Draft Plan area, that it is environmentally sustainable, and consistent with the requirements of the Regional Planning Guidelines and that policies/objectives of the County Development Plan are considered;
- Ensure that each alternative development scenario put forward reflects compliance with existing environmental legislation and planning guidelines. It is noted that specific alternatives may consist of spatial (where to develop), temporal (phasing/time scale of development) and zonal alternatives (different land use zonings for specific areas);
- The proposed significant increase in population / residential zoned lands should be justified, in the context of ensuring consistency with the Regional Planning Guidelines, County Development Plan and in accordance with the principles of sustainable development.
- The potential effects on existing critical service infrastructure (drinking water, waste water, waste etc) should be addressed.
- The location of zoned residential lands should take into account any risk of flooding identified and in accordance with the Flood Risk Management Guidelines (2009), where relevant and appropriate; and
- Ensure the protection of existing ecological corridors and designated national and international conservation sites.

### Defining the Scope

The following table outlines the scope for the Environmental Report.

**Table 3.2: Defining the Scope of the Draft LAP**

Geographic Scope	The geographical extent of the Draft Local Area Plan is the administrative area of Kiltiernan/ Glenamuck ( <b>Figure 2.1</b> ). Therefore, the geographical scope of the SEA will, in the main, be focussed on this area though geographical areas, which are contiguous with the boundary, may be considered depending on the impacts identified for each issue area. <b>Chapter 10</b> of this report provides details on the potential cumulative impacts of key environmental receptors from a strategic planning perspective.
Temporal Scope	The Draft LAP will cover the period from 2013 to 2019.
Level of Detail of the Plan	The plan is a sub-regional planning document informing development within Kiltiernan/ Glenamuck and it sits under the Dún Laoghaire-Rathdown County Development Plan.
Level of Detail of the Assessment	The assessment will be at a sub-regional level reflecting the position of the Kiltiernan/ Glenamuck Draft LAP in the planning hierarchy.
Assessment Parameters	Cumulative/synergistic and secondary, permanent and temporary effects will be assessed along with direct and indirect impacts. Short, medium and long-term impacts will also be

	assessed.										
Scoping of the SEA Topics	<p>The following environmental topics, listed in the SEA Directive and associated regulations have been scoped in for the assessment of the Kiltiernan/ Glenamuck Draft LAP. These are:</p> <table border="0"> <tr> <td>Biodiversity, Flora and Fauna</td> <td>Population</td> </tr> <tr> <td>Noise</td> <td>Landscape</td> </tr> <tr> <td>Climatic Factors</td> <td>Material Assets</td> </tr> <tr> <td>Water</td> <td>Cultural, Architectural and Archaeological Heritage</td> </tr> <tr> <td>Soil</td> <td></td> </tr> </table>	Biodiversity, Flora and Fauna	Population	Noise	Landscape	Climatic Factors	Material Assets	Water	Cultural, Architectural and Archaeological Heritage	Soil	
Biodiversity, Flora and Fauna	Population										
Noise	Landscape										
Climatic Factors	Material Assets										
Water	Cultural, Architectural and Archaeological Heritage										
Soil											
SEA Topics Screened Out	<p>The following environmental topics, listed in the SEA Directive and associated regulations have been scoped out for the assessment of the Kiltiernan/ Glenamuck Draft LAP. These are:</p> <table border="0"> <tr> <td>Air</td> <td>Human Health</td> </tr> </table> <p>The SEA Scoping Report outlined the why these two disciplines have not been included within the Environmental Report.</p>	Air	Human Health								
Air	Human Health										

### 3.3.2 Environmental Report

Based on the legislation and guidance, the Environmental Report must include the information outlined in **Table 3.3**.

**Table 3.3: Key Elements of the Environmental Report**

Requirement of SEA Directive (Article 5(1), Annex 1)	Section of Environmental Report
An outline of the contents and main objectives of the plan or programme, or modification to a plan or programme, and relationship with other relevant plans or programmes.	Chapter 4: Description of the Draft LAP
The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme, or modification to a plan or programme.	Chapter 5: Baseline Environment
The environmental characteristics of areas likely to be significantly affected.	Chapter 5: Baseline Environment
Any existing environmental problems which are relevant to the plan or programme, or modification to a plan or programme, including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to the Birds Directive or the Habitats Directive.	Chapter 5: Baseline Environment
The environmental protection objectives, established at international, European Union or national level, which are relevant to the plan or programme, or modification to a plan or programme, and the way those objectives and any environmental considerations have been taken into account during its preparation.	Chapter 6: Review of Relevant Plans, Programmes and Policies
The likely significant effects on the environment, including on issues such as biodiversity, population, fauna, flora, soil, water, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.	Chapter 9: Evaluation of Draft LAP Policies and Objectives
An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.	Chapter 3: Methodology Chapter 7: Draft Strategic Environmental Objectives, Targets and Indicators Chapter 8: Draft LAP Alternatives

Requirement of SEA Directive (Article 5(1), Annex 1)	Section of Environmental Report
The likely significant cumulative effects on the environment as a result of implementing the Plan.	Chapter 11: Cumulative Effects
A description of the measures envisaged concerning monitoring of the significant environmental effects of implementation of the plan or programme, or modification to a plan or programme.	Chapter 12: Mitigation and Monitoring
A non-technical summary of the information provided under the above headings.	Chapter 1: Non-Technical Summary

### 3.3.3 SEA Statement

The SEA Statement for the Kiltiernan/ Glenamuck LAP will be compiled after the statutory consultation on the Draft LAP and Environmental Report has been completed.

The main purpose of the SEA Statement will be to provide information on the decision-making process and to document how environmental considerations, i.e. the views of consultees and the recommendations of the Environmental Report, have been taken into account in the adopted LAP. The SEA Statement will illustrate how decisions were taken, making the process more transparent.

## 3.4 APPROPRIATE ASSESSMENT

The Habitats Directive (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora) obliges Member States to designate Special Areas of Conservation (SACs) to protect and conserve habitats and species of importance in a European Union context. Articles 3 to 9 of this Directive provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as Natura 2000.

Article 6 is one of the most important articles of the Habitats Directive in determining the relationship between conservation and site use. Article 6(3) requires that *“Any plan or project not directly connected with or necessary to the conservation of a site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives.”*

An Appropriate Assessment Screening of the Draft LAP was carried out in parallel with the SEA process, with the findings of the Screening used to guide the development of the alternatives to be considered as part of the SEA.

## 3.5 SEA DIFFICULTIES AND DATA GAPS

- Corine landcover data for the year 2006 was the most up to date data available.
- There are no detailed population figures for the plan area in the Census of population.

## 4 DESCRIPTION OF THE DRAFT LAP

### 4.1 BACKGROUND

The Kiltiernan/Glenamuck Local Area Plan (LAP) (2007) was adopted by Dún Laoghaire-Rathdown County Council on the 9<sup>th</sup> of July 2007. Local Area Plans generally have a six-year lifespan, meaning that the Kiltiernan/Glenamuck Local Area Plan (2007) will expire on 9<sup>th</sup> July 2013. While some infrastructural servicing objectives in the area have been achieved in recent years, none of the major development objectives of the Kiltiernan/Glenamuck Local Area Plan (2007) have been realised to date. The adoption of the LAP in 2007 coincided with the dramatic downturn in the national economy and the collapse in the property market which lead to a situation where the residential/commercial development sectors are in effective stasis.

Under the Planning and Development Act (2000) (as amended), the Council has the option of either extending the lifetime of the LAP for a further period (if it remains consistent with the County Development Plan) or if it is no longer consistent with the County Development Plan, of amending the Plan, revoking it or making a new Plan afresh. The adoption of the Kiltiernan/Glenamuck Local Area Plan in 2007 was succeeded by the adoption of the County Development Plan in 2010. As part of this County Development Plan process, various amendments were made to zonings within the LAP boundary, to remedy some zoning 'anomalies' that arose as a result of the proposed new road scheme layout for the LAP area. There were a number of instances of zoned parcels becoming 'severed' by the road layout and a decision was taken to rezone some small parcels of land in order to ensure a coherency in the proposed land use patterns for the area.

As a result of these amendments, the Kiltiernan/Glenamuck Local Area Plan (2007) is now clearly inconsistent with the County Development Plan (2010). In these circumstances, the Planning Authority is restricted from extending the duration of the LAP and must proceed to amend the LAP to provide for consistency with the 'parent' County Development Plan (2010) document.

#### 4.1.1 County Development Plan Policy

The lands comprising the LAP area have already been allocated land use zonings, as contained in the County Development Plan 2010-2016. Six land use zones are included within the extent of the LAP boundary and are as follows:

**Table 4.1: Land Use Zonings**

Zone	Objective
A	To protect and/or improve residential amenity
B	To protect and improve rural amenity and to provide for the development of agriculture.
E	To provide for economic development and employment.
F	To preserve and provide for open space with ancillary active recreational amenities.
G	To protect and improve high amenity areas.
NC	To protect, provide for and/or improve mixed-use neighbourhood centre facilities.

Other objectives contained within the CDP, 2010-2016, which are applicable to the Plan Area include: Long Term Road Proposals, Six Year Road Proposals, Protected Structures, Sites of Archaeological Interest, Preservation of Views, an Area subject to the Section 49 Supplementary Development Contribution Scheme, a Traveller Accommodation site, and a County Council Housing Programme site.

## 4.2 OVERALL STRATEGY

The Planning Authority is satisfied that the overall strategic approach to the planning of Kiltiernan Glenamuck, as outlined in the 2007 LAP remains robust. The key elements of the overall planning framework for the area including;

- The proposal to provide a bypass road of the village core of Kiltiernan;
- The implementation of a Neighbourhood Framework Plan to consolidate the village core;
- The graduation of residential densities, from higher densities adjacent to the Luas line, to lower densities further from the main public transport artery; and
- The implementation of a centrally-located major public open space/school site. This has not changed despite the severe downturn in the national economy and the probability that residential development, in particular, may not proceed in the short term.

The fact that the Kiltiernan Glenamuck LAP area is serviced in relation to water and drainage infrastructure, unlike much of the zoned residential land in the southern part of the County, serves to increase its importance as a strategic land bank for the County in the medium-term.

The primary objectives of the Draft LAP are as follows:

- To accommodate a sustainable level of residential and other ancillary development to ensure the wider strategic objectives of the 2010-2016 County Development Plan are realised;
- To establish an obvious identity / sense of place for Kiltiernan;
- To establish a focal point / civic node for Kiltiernan;
- To guide development in order to establish the character of the two component areas that comprise the LAP namely, Glenamuck and Kiltiernan; and
- Ensure that all projects in the LAP which could, either individually or in combination with other plans and projects, have a significant effect on a Natura 2000 site (or sites) will be subject to Appropriate Assessment Screening.

Any developments within the Draft LAP boundary shall be done so in accordance with the requirements of the EU Directives and associated legislation, County Development Plan policy and shall have regard to national and regional guidelines.

## 4.3 CORE STRATEGY

Section 4.1 of the Draft LAP outlines the context with regard to how the Plan conformity with the Core Strategy. The Core Strategy published as a Variation (2011) to the Dún Laoghaire-Rathdown County Development Plan 2010-2016. The Draft LAP outlines that the Core Strategy “*details the various large parcels of zoned residential land in the County, including the lands within the Draft LAP and provides an estimate of residential likely to materialise on these lands up to the year 2022. The estimates of residential yield are approximate and it is understood that, where various density ranges are permitted in a Local Area Plan, the final figure may be slightly bigger or slightly smaller than estimated*”.

*With regard to the time horizons for the delivery of development, it should be noted that the Regional Planning Guidelines operate on a longer time horizon than either the County Development Plan or the Draft LAP – up to 2022. However, while Local Area Plans operate on a nominal 6-year time horizon, the Council has the discretion to extend the lifetime of the LAP up to 10 years. The Draft LAP is setting out the strategic vision for the area with this time horizon in mind. The Regional Planning Guidelines document acknowledges that in the current climate it is extremely difficult to accurately predict the likely delivery of development in the near-term and that the likelihood is that development will be ‘end-loaded’ as the economy recovers.*

*In the short term therefore, it is not planned for or expected that housing completions will be significant. The figures for 2016 may prove unachievable in the short-term as the housing market is likely to be slow to recover. Some of the 2016 target for most of the Councils will be deferred to the 2016-2022 time period. It is important however that Councils are well placed for an economic recovery and that adequate provision is made, even if the uptake is slower. The 2022 figures are included to allow for a more long term perspective to be taken in calculating future needs in Development Plans (RPGs P. 83).”*

#### **4.4 FLOOD RISK ASSESSMENT**

In relation to Flood Risk, the Draft LAP outlines that “*the OPW are in the process of preparing detailed Catchment Flood Risk Assessment and Management (CFRAM) Study for the eastern region of the Country, including Dun Laoghaire-Rathdown. Also under preparation are ‘Flood Risk Management Plans’ (FRMPs) which aim to assess flood risk, through the identification of flood hazard areas and the associated impacts of flooding. The OPW anticipate that flood risk maps and flood hazard maps will be drawn up by 2013 and Flood Risk Management Plans (FRMPs) developed by 2015. Having regard to the very minor flood events recorded in the Draft LAP area (primarily associated with drainage/ditch blockages), the issue of high flood-risk (Zone A or Zone B according to the “Planning System and Flood Risk Management Guidelines”)* has not been flagged in this area of the County. Notwithstanding this, the recommendations of the Eastern Catchment Flood Risk Assessment and Management (CFRAM) study and the Flood Risk Management Plan, when published, will be implemented in full.”



## 5 BASELINE ENVIRONMENT

### 5.1 INTRODUCTION

This section of the Environmental Report examines the relevant significant issues of the current state of the environment within Kiltiernan/ Glenamuck and environs in relation to biodiversity, fauna, flora, population, soil, water, climatic factors, cultural heritage, landscape, material assets and the interrelationship between these factors. The baseline has been compiled using available datasets and indicators suggested during scoping. It has focused on mapping the relevant baseline information that relates to the policies and objectives contained within the Kiltiernan/ Glenamuck Draft LAP.

### 5.2 CURRENT STATE OF THE ENVIRONMENT

According to EPA publications (EPA, 2008 and 2012), Ireland's natural environment, although under increasing pressure, generally remains of good quality and represents one of the country's most essential national assets. In the EPA's *2020 Vision – Protecting the Irish Environment* document it is noted that pressures on the environment have increased significantly. As Ireland's economy grew in the past ten years, these pressures accelerated at a rate which exceeds that observed in other EU countries.

The fifth EPA *State of the Environment Report* (2012) identified four priority challenges for the environment, which, if addressed successfully, should benefit the present and future quality of Ireland's environment. These comprise: Value and Protecting our Natural Environment; Building a Resource-Efficient, Low Carbon Economy; Implementing Environmental Legislation; and Putting the Environment at the Centre of Our Decision Making. These challenges are summarised below in **Table 5.1**.

**Table 5.1: EPA State of the Environment Report (2012) Key Challenges**

Challenges	Components	Relationship to Draft LAP
<b>Challenge 1: Value and Protecting our Natural Environment</b>	<p>A good environment is a critical component of high quality of life for future generations.</p> <p>Meeting the requirements of the Water Framework Directive (WFD) in protecting water resources in a changing climate.</p> <p>Maintaining clean air and healthy soil and protecting biodiversity and nature from further loss and damage.</p>	<p>The Draft LAP needs to consider the objectives and precepts of other existing Policies, Plans and Programmes, such as the Habitats Directive and Water Framework Directive, to ensure that the issues addressed by these are brought forward into the overall planning process. The Draft LAP needs to ensure sufficient natural environment policies are included within the Plan.</p>
<b>Challenge 2: Building a Resource- Efficient, Low Carbon Economy</b>	<p>Need to overcome recent economic downturn.</p> <p>Increasing scarcity and costs of fuels and resources.</p> <p>Opportunity to ensure future development is based on highly efficient processes and improved resource efficiency through waste prevention to efficient and renewable energy and investment to become a resource-efficient competitive economy.</p> <p>Protection from future economic shocks.</p> <p>Requirement to meet international climate change agreements targets and 2020 targets</p>	<p>The Draft LAP should:</p> <p>Promote climate change reduction measures, i.e. through waste reduction, renewable energy and sustainable practices.</p> <p>Take account of potential climate change impacts when developing policies and objectives to ensure that the Draft LAP does not contribute to the impact of climate change. In addition the Draft Plan should consider the impacts of climate change when applying land use</p>

Challenges	Components	Relationship to Draft LAP
	on GHG emissions.	zonings to areas that are vulnerable to these impacts e.g. flooding.
<b>Challenge 3: Implementing Environmental Legislation</b>	<p>Compliance with International Obligations with respect to water quality, air quality, GHG emissions and waste management.</p> <p>Role of the EPA and other regulators to ensure effective enforcement of environmental legislation at national and local levels.</p> <p>Prevent avoidable environmental damage, protect Ireland's reputation and green image, which is important to economic sectors, agri-food and tourism sectors.</p>	<p>The Draft LAP needs to consider the requirements of national and local level legislation in developing policies and objectives as well as EU and international obligations. Consideration with respect to enforcement should also be given in preparation of the LAP.</p>
<b>Challenge 4: Putting the Environment at the Centre of Our Decision Making</b>	<p>Achieving sustainable development and growth at national, regional and local levels.</p> <p>Need for clear leadership and co-ordinated efforts from Government and public bodies, business, industry and farmers and the public.</p>	<p>The Draft LAP needs to ensure that there is buy in from all levels of society and that the environment is at the centre of decision making. Consideration of the objectives of other existing Policies, Plans and Programmes at a national, regional and local level will aid in addressing the challenge of reversing environmental degradation.</p>

In *2020 Vision – Protecting the Irish Environment* (EPA, 2007) the EPA outlines six environmental goals which reflect on the main challenges identified in the State of the Environment reports as well as key issues at the global and EU level as reflected in the 6<sup>th</sup> Environmental Action Plan (EAP). These goals are:

- Limiting and adapting to climate change;
- Clean air;
- Protected waters;
- Protected soils and biodiversity;
- Sustainable use of natural resources; and
- Integration and enforcement.

These goals are identified as a means of realising the vision of protecting and improving Ireland's environment. Many of these goals are relevant to the Draft LAP as this local level plan contains the policies and objectives to guide land use and development in the town.

### 5.3 POPULATION

Kiltiernan/Glenamuck falls within three district electoral divisions (DEDs) as shown in **Figure 5.1**. These are Cabinteely-Loughlinstown, Glencullen and Shankill-Rathmichael. The recorded population for these electoral areas in the 2002, 2006 and 2011 census of population are presented in the **Table 5.2**.

The breakdown of population within the Draft LAP area is not straightforward as the LAP is partly located in the three EDs. Therefore population figures for the plan area are estimated based on DLRCC'S 2012 Dwelling Survey. According to this survey there were 335 occupied dwellings within the plan area in 2012. Based on a 2.7 occupancy rate this would give a population of approx. 900 persons within the plan area. The target population for Kiltiernan/ Glenamuck as outlined in the Draft LAP is proposed to be in the order of 8,100 persons.

**Table 5.2: Population for DEDs within the Draft LAP**

Electoral Area	Census Population 2002	Census Population 2006	Percentage increase in population between 2002 and 2006	Census Population 2011	Percentage increase in population between 2006 and 2011
<b>State</b>	3,917,203	4,239,848	+ 8.2%	4,588,252	+ 8.2%
<b>Cabinteely-Loughlinstown</b>	1,519	2,546	67.6%	3,806	49.5%
<b>Glencullen</b>	9,327	13,006	39.4%	16,479	26.7%
<b>Shankill-Rathmichael</b>	4,426	4,601	3.9%	5,353	16.3%
<b>Total Study Area</b>	15,272	20,153	37%	25,638	31%

Source: Census 2002, 2006 and 2011

The population of all three electoral areas (study area) in which the Draft LAP area is partly located is following an increasing trend in population. The census population figure recorded a 37% increase in population between 2002 and 2006 and an increase of 31% between 2006 and 2011 which is significantly greater than the state average during the same period. .

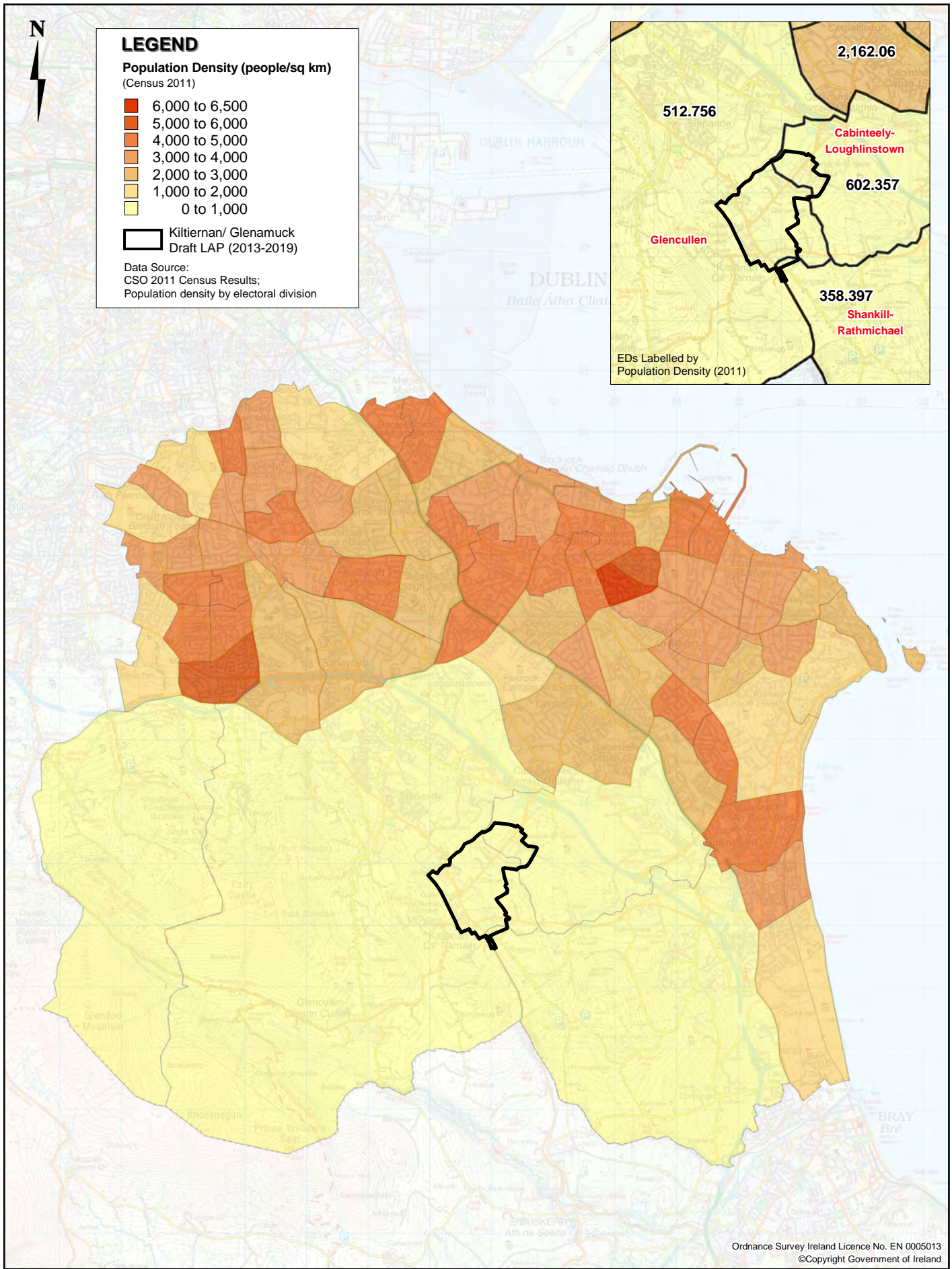
The Census of Population of Ireland, Place of Work Census of Anonymised Records (POWCAR) dataset a total of 121 persons working in the Plan area in 2006 compared with 109 persons in 2011.

**Figure 5.1** displays population density both within the boundary of the Draft LAP and within Dún Laoghaire-Rathdown. It illustrates that the lowest population density occurs within the boundary of the Draft LAP.

### 5.3.1 Existing Environmental Pressures / Problems

The population in the area is very low at present relative to that planned for the area. Therefore development pressure is low due to a reduction in growth rates due to an economic recession. The main pressure on this area is the potential for large scale development and the need to ensure that there is sufficient capacity in terms of infrastructure and services to cater for increased population and proposed development into the future.

Changes in land use patterns and density continue to present significant pressures for a variety of environmental aspects, and this in turn will potentially affect the local community. Most of the environmental pressures in Kiltiernan/ Glenamuck have come as an indirect result of development and population growth in the surrounding area of DLRCC. Further development within the Draft LAP area will place increased pressure on existing infrastructure. In particular, adequate and appropriate wastewater treatment, water supply, surface and storm water drainage, transport, waste management, community services and amenities, etc. will need to be planned and phased to address any current problems or deficits and to reflect any changes in population. These infrastructure requirements were outlined in the 2007 Local Area Plan for the area and transport, water and waste water measures have commenced.



**FIGURE 5.1 - POPULATION DENSITY IN DUN LAOGHAIRE-RATHDOWN**

## 5.4 BIODIVERSITY, FLORA AND FAUNA

### 5.4.1 Introduction

“Biological diversity” refers to the variety of living things. In the same way as a rich diversity of cultures enhances the quality of our lives, so does a rich diversity of plants and animals. Biological diversity is known to be important to the proper functioning of the planet’s life support system. Therefore, conservation of biological diversity has become one of the keys aims of governments throughout the world.

Urban growth on the island of Ireland has been accelerating at a greater rate over recent years as increased development expands city and town limits into the countryside. Artificial land cover throughout Ireland remains relatively low; however, the constant encroachment on natural habitats undoubtedly has an impact on natural flora, fauna and biodiversity.

Within the Draft LAP area there are habitats of high biodiversity and conservation value, including the Glenamuck Stream and the Loughlinstown River which have salmonid status. In addition, there are a number of designated sites which lie on the boundary of the Draft LAP area, however, there are no Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Natural Heritage Sites (NHAs) within the Draft LAP.

### 5.4.2 CORINE Land Cover Mapping

The draft administrative area consists mainly of pasture, urban fabric and the road network. There is some transitional woodland scrub in the south-east of the LAP as shown in **Figure 5.2**. Comparing the CORINE Land Cover Map of 2006 with that of 1990, it can be seen that there has been a significant increase in the amount of land used for discontinuous urban fabric and a significant decrease in the amount of land used as pastures since 1990. This indicates that development and population growth has taken place since 1990 within the Draft LAP, especially at the eastern end of the Glenamuck Road near to Carrickmines.

### 5.4.3 Designated Ecological Sites

Special Areas of Conservation (SACs) have been selected for protection under the European Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) - referred to as the Habitats Directive. The Habitats Directive seeks to establish Natura 2000, a network of protected areas throughout the EU. It is the responsibility of each Member State to designate SACs to protect habitats and species, which, together with Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/EEC), form the Natura 2000 network. The integrity of a Natura 2000 site (referred to in Article 6.3 of the EU Habitats Directive) is determined based on the conservation status of the qualifying features of the SAC. The qualifying features for the designated sites have been obtained through a review of the Conservation Objectives available from the National Parks and Wildlife Service (NPWS).

There are no SACs or within the Draft LAP. However, there are three SACs in the surrounding area. The Wicklow Mountains SPA is the closest SPA and is approximately 8.5km from the plan area. Knocksink Wood SAC and Ballyman Glen SAC are also located in the vicinity of the Draft LAP boundary, as shown in **Figure 5.3**.

The Wildlife (Amendment) Act, 2000 provides the legal basis for the establishment of a national network of sites known as Natural Heritage Areas (NHAs). The aim of the NHA network is to conserve and protect nationally important plant and animal species and their habitats. They are also designated to conserve and protect nationally important landforms, geological or geomorphological features. Planning authorities are obliged by law to ensure that these sites are protected and conserved.

There are no NHAs within the Draft LAP area. There are however, seven proposed NHA's (pNHA) in the surrounding area as outlined in **Table 5.3**.

**Table 5.3: Designated Ecological Sites surrounding the Draft LAP**

Designated Ecological Site	Site Code	Approximate Distance from the Draft LAP Boundary	Has been designated for the presence of the following
Wicklow Mountains SAC	002122	8.5km	Annex I and Annex II habitats such as European dry heaths, natural dystrophic lakes and ponds and calcareous rocky slopes with chasmophytic vegetation are present here.
Knocksink Wood SAC	000725	4.9km	Annex I and Annex II habitats such as petrifying springs with tufa formation and alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> .
Ballyman Glen SAC	000713	6km	Annex I and Annex II habitats such as petrifying springs with tufa formation ( <i>cratoneurion</i> ) and alkaline fens.
Wicklow Mountains SPA	0004040	8.5km	Bird species: <i>Falco columbarius</i> and <i>Falco peregrinus</i> .
Ballybetagh Bog pNHA	0001202	2km	Numerous skeletons of the extinct Giant Irish Deer have been excavated from this site.
Ballyman Glen pNHA	000713	6km	Alkaline fen and petrifying springs, which are both habitats listed on Annex I of the EU Habitats Directive as well as having rich diversity of sedges and orchids.
Dalkey Coastal Zone and Killiney Hill pNHA	001206	11km	Dalkey Sound has species which include squat lobsters ( <i>Galathea</i> spp.), swimming crabs ( <i>Portunus</i> spp.) and the crawfish <i>Palinurus vulgaris</i> . The area is also noted for the occurrence of gymnoblastic hydroids, with the presence of the rare <i>Antedon bifida</i> . Rare European species which occur are members of the Order Nudibranchia and the Spiny Starfish ( <i>Marthasterias glacialis</i> ). Dalkey Island and Lamb Island are important bird sites for Herring Gulls, Annex II habitats.  Killiney Hill is comprised of coastal heath and mixed woodland. The ground flora consists of Ivy ( <i>Hedera helix</i> ) and bramble ( <i>Rubus</i> spp.) but there are some areas with more typical woodland species such as Wood-sorrel ( <i>Oxalis acetosella</i> ) and Herb-Robert ( <i>Geranium robertianum</i> ).
Dingle Glen pNHA	001207	300m	Important habitats such as regenerating woodlands with associated ground flora, scrub and heath.
Fitzsimon's Wood pNHA	001753	4.2 km	It is an area of rare Birch woodland and it also supports a smooth Newt habitat which is one of only three amphibian species in Ireland.
Knocksink Wood pNHA	000725	4.9km	Frequent and extensive springs and seepage areas. These petrifying springs are listed as a priority habitat on Annex I of the EU Habitats Directive. In addition there are stands of wet alluvial forest, which is also a habitat listed with priority status on Annex I of the EU Habitats Directive. The site contains a numbers of rare and scarce plants including some which are legally protected and has one of the most diverse woodland invertebrate faunas in Ireland, incorporating wet woodland organisms threatened internationally within the EU.

Designated Ecological Site	Site Code	Approximate Distance from the Draft LAP Boundary	Has been designated for the presence of the following
Loughlinstown pNHA	001211	7km	The western end consists of a high canopy of Beech ( <i>Fagus sylvatica</i> ), Sycamore ( <i>Acer pseudoplatanus</i> ) and some elm ( <i>Ulmus</i> spp.), with Holly ( <i>Ilex aquifolium</i> ) and Cherry Laurel ( <i>Prunus laurocerasus</i> ) below. There is a gradation into a dense thicket of bramble ( <i>Rubus</i> spp.), and trees such as Ash ( <i>Fraxinus excelsior</i> ), Blackthorn ( <i>Prunus spinosa</i> ) and Hazel ( <i>Corylus avellana</i> ). Gorse ( <i>Ulex europaeus</i> ) is found at the eastern end of the site. The valley floor has Alder ( <i>Alnus glutinosa</i> ) and willow ( <i>Salix</i> spp.). The introduced Giant Hogweed ( <i>Heracleum mantegazzianum</i> ) grows along the banks of the Shanganagh River.

Source: National Parks and Wildlife Service, 2013

The NPWS propose to designate a marine area between Rockbill and Dalkey Island as an SAC which will aid the protection of the Harbour Porpoise. The NPWS has not, to date, realised any official documentation on these proposals on their website.

#### 5.4.4 Appropriate Assessment

An Appropriate Assessment Screening Report is included within **Appendix A** and it provides an assessment of the Natura 2000 sites within a 15km radius of the Draft LAP area. An AA is required for any Plan/ Programme and it has been undertaken in parallel with the development of the Kiltiernan/ Glenamuck Draft LAP. It has identified that within this 15km radius of the Draft LAP area there are three SACs and one SPA. They are the Wicklow Mountains SAC and SPA, Knocksink Wood SAC and Ballyman Glen SAC as identified in **Table 5.3**.

The potential impacts that could arise from implementation of the Draft LAP have been examined to identify any potential impacts that could affect the integrity of the Natura 2000 network. The AA Screening found that **none** of the sites within 15km of the Draft LAP area will be adversely affected. On the basis of the findings of the Screening for Appropriate Assessment of Natura 2000 sites, it is concluded that the Draft LAP **will not have a significant effect** on the Natura 2000 network and a Stage 2 Appropriate Assessment is not required.

#### 5.4.5 NPWS Rare and Protected Species Data

The NPWS Rare and Protected Species database was consulted for records of species of conservation importance. According to this database, the Draft LAP area lies within the 10km Grid squares (hectads) O12 and O22. According to this database, there are records for ten rare and protected species within the two grid squares. However, the NPWS dataset is known to be incomplete, particularly in respect of fish, bats and birds, and therefore the absence of records for a certain species does not necessarily mean that the species does not occur within the Kiltiernan/ Glenamuck Draft LAP area. The relevant hectads and the rare and protected species recorded within these squares are detailed in **Table 5.4**.

**Table 5.4: NPWS Rare and Protected Species Records**

Common Name	Scientific Name	Grid Square	Sample Location	Date Recorded
Bog Orchid	Hammarbya paludosa	O12	-	1953, 1905 and 1894
Red Hemp Nettle	Galeopsis angustifolia		Dundrum O1020 & Three and Two Rock Mountain O1020	1866 1967
Sika deer	Cervus nippon		Castlekelly O1020	11/06/1991
Great Burnet	Sanguisorba officinalis		Templeogue O12	1903
Small-white Orchid	Pseudorchis albida		Three Rock Mountain O1020	1804
Lesser Snapdragon	Misopates orontium		Belally Park O1020	1849
Otter	Lutra lutra	O22	Ballybetagh, Kiltiernan O2020	14/02/1993
Red Hemp Nettle	Galeopsis angustifolia		Cabinteely O2020 & Ballycorus O2020	1856 1943
Sika deer	Cervus nippon		Ballybetagh, Kiltiernan O2020	14/02/1993
Basil Thyme	Acinos arvensis		Tulla church yard O2020	-
Red Squirrel	Sciurus vulgaris		Ballybetagh, Kiltiernan O2020	14/02/1993
Tufted Salt-marsh Grass	Puccinellia fasciculata		Blackrock O2020	1889
Lesser Snapdragon	Misopates orontium		Dalkey O2020, Glentanar House O22 & Monkstown O2020	1882 1920 1872

Source: NPWS Rare and Protected Species database

#### 5.4.6 Habitat Mapping

Article 10 of the Habitats Directive recognises the importance of ecological networks as corridors and stepping-stones for the movement of wildlife. Migration, movement and the long-term genetic health of species are assisted through creating linked networks for biodiversity purposes. The Directive requires that connectivity and areas of ecological value that lie outside of designated ecological sites be maintained. The Directive recognises the need for the management of these areas through land use planning and development policies. The networks are considered imperative in connecting areas of biodiversity to each other, thus avoiding the creation of isolated islands of habitat. These corridors are particularly important for mammals, small birds and bats.

Habitat information has been taken from the Glenamuck District Distributor Road (GDDR) Environmental Study (2007) and the Habitat Mapping Survey for the County, conducted in 2007 by White Young Green. **Figure 5.4** provides an overview of the habitats within the Draft LAP.

The Habitat Mapping Survey identified three areas of high diversity habitats, they include:

- To the east the area is surrounded by mainly agricultural grassland within which lies a large pocket of dry meadows and grassy verges. This is a habitat that is rich in species biodiversity.



- To the west of the Enniskerry Road is a large narrow corridor of wet grassland which increases the ecological value of the area. There are four areas of improved agricultural grassland and two smaller areas of scrub.
- North east of the Glenamuck Road within the Draft LAP boundary there are six areas of riparian woodland.

The Glenamuck Stream has trees on both sides and which includes medium-sized ash trees on the west side of the stream. These trees can also be found on the east side of the stream mixed with oak holly and hazel. The ground is damp and highly poached by cattle or horses and the plant cover includes crested dogstail and ryegrass. Associated species include creeping buttercup, great plantain, daisy, ragwort and white clover. Fool's watercress grows in an extremely wet section beside the stream.

Along the Glenamuck Stream there is one area of amenity grassland with a boundary hedge comprised of a mixture of willow, holly and blackthorn, three small areas of scrub, one area of dry-humid acid grassland and two areas of mixed broadleaved woodland. There are several large areas of improved agricultural grassland and a diagonal ditch with seasonal flow with a few water plants such as wild angelica, water figwort and floating sweet grass.

There is evidence of rabbit, wood mouse and fox within the Draft LAP area. There is a high possibility that hares visit the fields and that badgers also feed there from time to time. The best mammal habitat occurs at Shaldon Grange, located in the north west of the LAP, and it is likely that a bat population is present in the mixture of trees, ponds and old buildings. The bird fauna of the area consists of species such as the woodpigeon, pheasant, rook, jackdaw, magpie, and kestrel. However, there is no evidence of their nests within Shaldon Grange. Herons nest in Shaldon Grange and sometimes feed on the nearby stream. Small species in this area include the blackbird, song thrush, mistle thrush, robin, great tit, coal tit, goldcrest, dunnoek, wren, bullfinch, chaffinch, goldfinch and linnnet. During the summer there are a few pairs of yellowhammer, willow warbler and whitethroat.

Flora which can be found at the location of the Glenamuck Stream, east of the Draft LAP, include the creeping buttercup, great plantain, daisy, ragwort and white clover. Fool's watercress grows in a wet section beside the stream.

South of the Glenamuck Road are seven areas of improved agricultural grassland, one large and one small area of amenity grassland and three areas of mixed broadleaved woodland which consists of a narrow strip of poplars, beech, ash, oak and Norway maple. The ground is damp in parts and some of the poplars are stunted or dying. The majority of the trees are 20 years old, though some are between 40-50 years old.

There are also several large areas of improved agricultural grassland, one area of amenity grassland consisting of a mixture of willow, holly and blackthorn, three small areas of scrub, one area of dry-humid acid grassland two areas of mixed broadleaved woodland.

South of the Ballycorus Road crossing over to the Enniskerry Road is a treeline which consists of sycamore with one Scot's pine, a horse chestnut and a scattering of holly. The ground beneath is covered by species such as winter heliotrope, garlic mustard, cow parsley and goosegrass. In addition there is one area of scattered trees and parkland, one area of stonewalls and other stonework, two tiny areas of scrub and two large areas of spoil and bare ground. The trees on the Enniskerry Road are a continuation of a line of beeches.

There is evidence of rabbit and hare to the south east of the Draft LAP. Badgers and otters are likely to occur sporadically throughout the study area. There is good bat habitat along the Glenamuck Road. The area is well linked to trees and to buildings for roosting. Birds are common species in this area. Dippers can be found on the Loughlinstown River and sparrowhawk near Barnaslingan Lane.

Goldcrest, treecreeper, great tit, chiffchaff and song thrush are located in trees along the Glenamuck Road. Due to the large amount of grassland in this area, species such as the yellowhammer and pheasant are rarely present due to their dependence on arable farming.

Dingle Glen, a pNHA is approximately 300 m from the Draft LAP boundary and badgers have been identified in this pNHA.

#### 5.4.7 Invasive Species

Invasive species are species that have been introduced into Ireland either deliberately or accidentally. They have a negative impact on habitats, wildlife and the economy. After habitat loss invasive species are the second biggest threat to biodiversity. The invasive species of giant hogweed and japanese knotweed have been recorded on the Ballyogan landfill site which abuts the Draft LAP.

#### 5.4.8 Aquatic Flora and Fauna

Rivers support and provide important ecological corridors for flora and fauna. The Draft LAP lies within the Eastern River Basin District (ERBD) through which the Glenamuck Stream and Loughlinstown River flow. Inland Fisheries Ireland has identified that Loughlinstown River and Glenamuck Stream which feeds into it have salmonid status. These waters are important as they support salmon (*Salmo salar*) and brown trout (*Salmo Trutta*) and therefore have high local value. The Kingfisher is also found in the Glenamuck Stream (GDDR, 2007). A biological assessment of the Glenamuck Stream was carried out in 2005. The invertebrate community present signified that the Stream had a Q-rating of Q3-4 indicating slightly polluted conditions. The remainder of the Glenamuck Stream has a Q value of Q3 indicating moderately polluted conditions. The Glenamuck Stream is not monitored by the EPA with regards to Q values for water quality.

The Loughlinstown River supports otter (a sign of high water quality) and bats. It has been identified as being of good ecological status under the Water Framework Directive (WFD), as shown in **Figure 5.5**. Biological assessment carried out in 2006 indicates that the River has a Q4 rating, as shown in **Table 5.5**. This means that it the Loughlinstown River is unpolluted. The EPAs sampling of this river within the Draft LAP area have give it a current Q rating of Q3-4. The Loughlinstown River is not monitored for its WFD Status within the Draft LAP area. Further down the river, the EPA gives it a Q value of Q4, which is good status. The Loughlinstown River is of regional importance and has an overall Q value of Q4 indicating that it is unpolluted.

**Table 5.5: Summary of Salmonid Habitats and associated water quality**

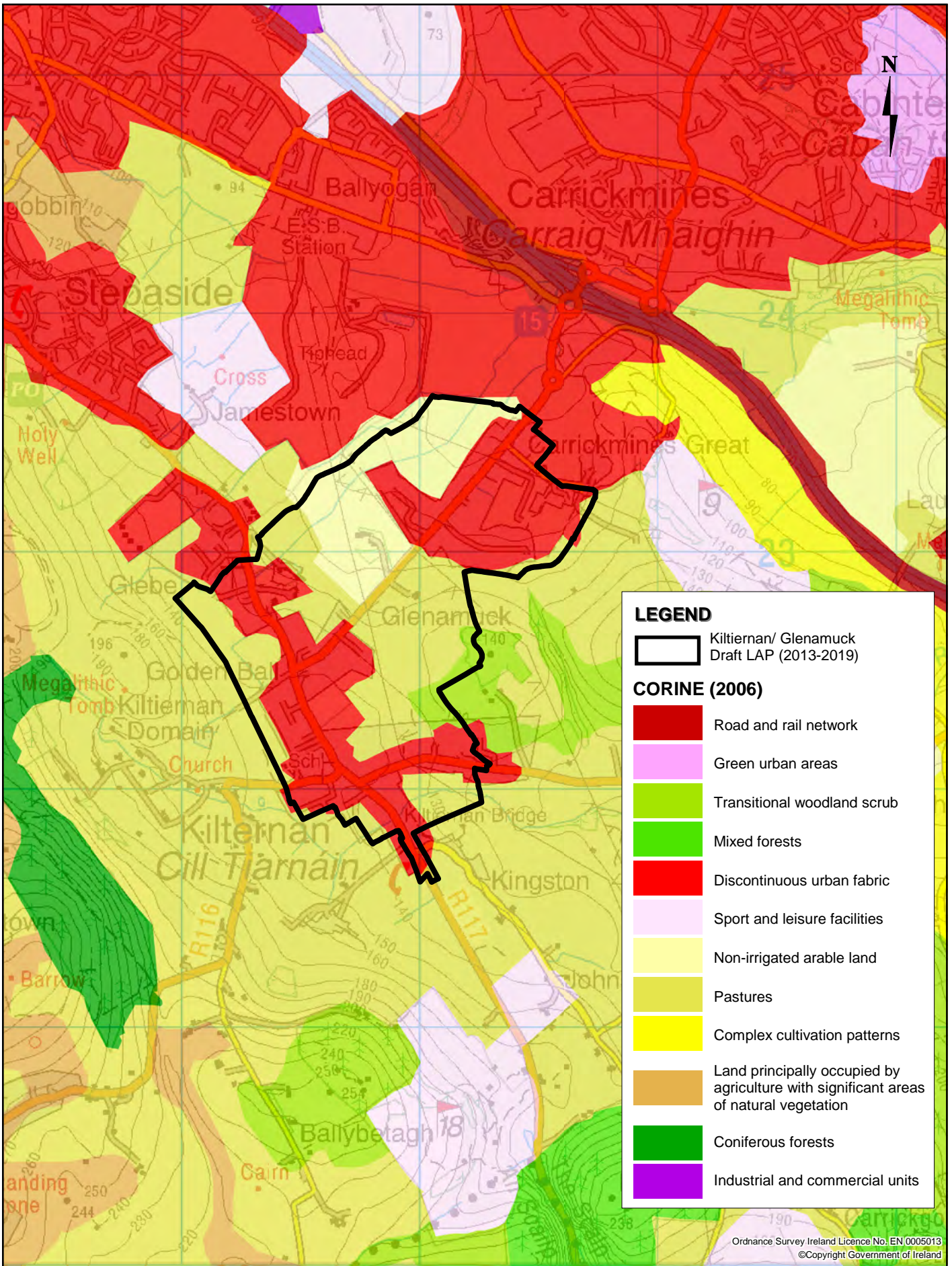
Watercourse	Q-rating	Pollution Status	Salmonid Habitat Recorded at Sampling Site	Salmonids Recorded at Sampling Site	Best Salmonid Habitat Recorded and Distance Downstream	Importance Rating
Glenamuck Stream	3-4	Slightly Polluted	Good	Brown Trout	Good at location	High Local Value
Loughlinstown River	4	Unpolluted	Very Good	Brown Trout (possible juvenile sea trout)	Very Good at location	Regional Importance

Source: Glenamuck District Distributor Road Environmental Study, Volume 2, 2007

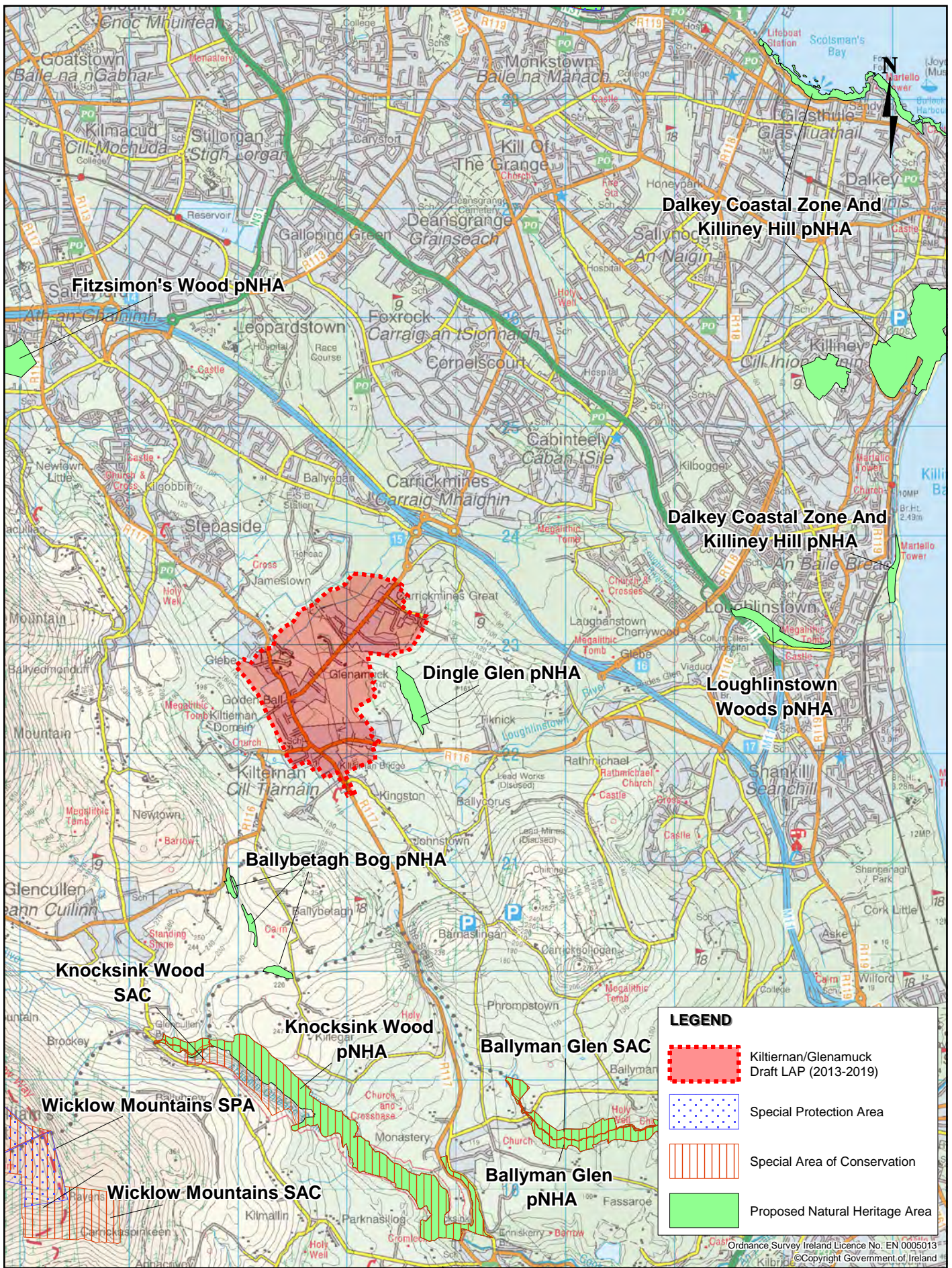
#### **5.4.9 Existing Environmental Pressures / Problems**

Kiltiernan/ Glenamuck has a high diversity of species and habitats that are of a good status. Most of the environmental pressures in Kiltiernan/ Glenamuck have come as an indirect result of development and population growth in the surrounding area. Existing pressures have led to losses of biodiversity through the construction of hard standing surfaces as a by-product of development. Agricultural practices are placing increasing pressure on biodiversity in particular the loss of existing hedgerows.

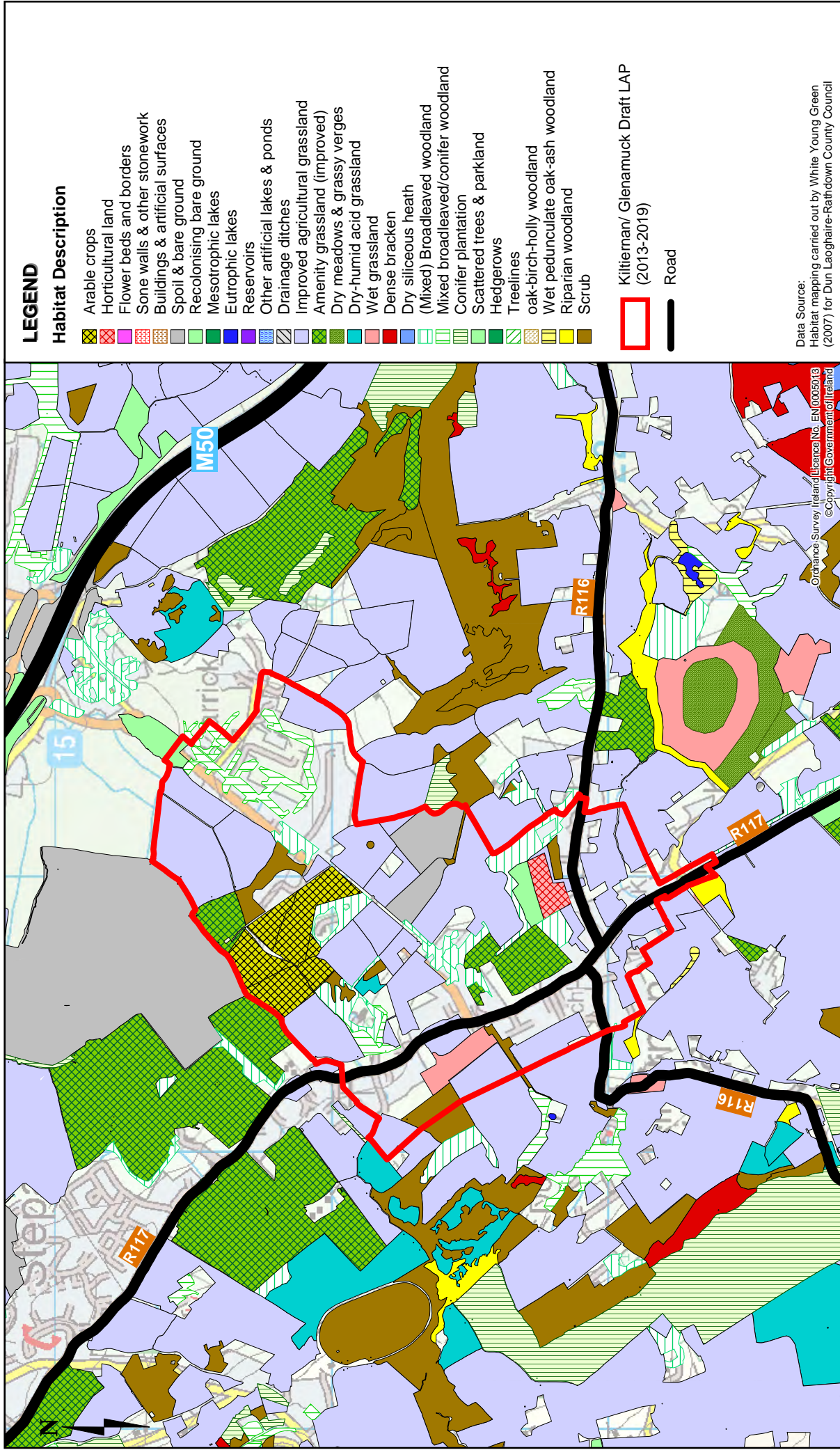
The planned development of the area is likely to have significant implications of biodiversity flora and fauna of the area. Detailed policies requiring the protection of habitats and species of the area will be an important within the Draft LAP.



**FIGURE 5.2 - CORINE LANDCOVER (2006)**



**FIGURE 5.3 - DESIGNATED SITES**



**FIGURE 5.4 - HABITAT MAPPING**

## 5.5 SOIL

### 5.5.1 Soil Types

Soil has a role as a habitat and gene pool, serves as a platform for human activities, landscape and heritage and acts as a provider of raw materials. Such functions of soil are worthy of protection because of their socio-economic as well as environmental importance. Soil condition in any area is the result of the interaction of various factors, such as parent material, climate, vegetation and human action.

Soils are offered protection through the proposed EC Directive 2004/35/EC of the European Parliament and of the Council for establishing a framework for the protection of soil and amending Directive 2004/35/EC. This Directive provides a common strategy for the protection and sustainable use of soil based on the principles of integration of soil concerns into other policies, preservation of soil functions within the context of sustainable use, prevention of threats to soil and migration of their effects, as well as restoration of degraded soils to a level of functionality consistent with the current and approved future use.

The Glenamuck/ Kiltiernan Draft LAP area is dominated by alluvium subsoil with some bedrock outcrop and subcrop to the east. This soil has poor drainage with higher porosity beside the bedrock outcrop and subcrop. There are pockets of made ground in the north east and the mid west of Glenamuck. There are also corridors of beach sands and gravels located along the east and west of Kiltiernan which are quite porous. The subsoils comprise of moderate depths of clay and others where clay deposits range in depth from 1.4m below ground level (bgl) to 7.2m.

### 5.5.2 Geology

The geology within the administrative area of Kiltiernan/ Glenamuck consists of mainly granites and other igneous intrusive rocks. The granite bedrock is generally described as moderately weak to moderately strong, coarse to fine grained, slightly to severely weathered, with medium to extremely closely spaced, slightly to severely weathered joint, generally dipping at low to moderately high angles. The depth to bedrock varies across the study area from 0.5m to >20.0 bgl. There are no quarries in the Draft LAP area. However, in Ballycorus, there is a disused lead mine (approximately 900 m from the Draft LAP area) and an operating quarry where Cement Roadstone carry out activities (approximately 400 m to the south of Draft LAP area).

There are no geological sites within the Draft LAP area. The Wicklow Mountains are of significant geomorphological importance (approximately 8.5 km south west of the Draft LAP area). The Dalkey Coastal Zone and Killiney Hill are of high geological importance and are approximately 11km from the Draft LAP area. It includes the coastal stretch from Scotman's Bay to south of White Rock, the Dalkey Island group and Dalkey Sound, and Killiney Hill. Killiney Hill is at the edge of the Wicklow Mountain intrusion and so it is formed of a mixture of granite and mica schist. The beach at White Rock is one of the best exposed junctions of these rock types.

### 5.5.3 Existing Environmental Pressures / Problems

There is agricultural activity within and around the Kiltiernan / Glenamuck administrative area. As a result, the main value from soil comes from its ability to provide adequate nutrients and minerals for grass growth and the subsequent grazing of sheep.

There is potential for soil erosion due mainly to surface erosion resulting from construction works has major potential to impact on water quality and fisheries resources. In addition to water quality and fisheries, these can impact on infrastructure and can have health and safety implications.

## 5.6 WATER

### 5.6.1 River Basin Districts and Water Bodies

Since 2000, the Water Framework Directive 2000/60/EC (WFD) has directed water management in the EU. The WFD requires that all Member States implement the necessary measures to prevent deterioration of the status of all waters (surface, ground, estuarine and coastal) and protect, enhance and restore all waters with the aim of achieving at least Good Status by 2015. All public bodies, including Dún Laoghaire-Rathdown County Council, are also required to coordinate their policies and operations so as to achieve/ maintain Good Status of water bodies, within their jurisdiction in line with the relevant River Basin Management Plan and Programme of Measures.

For the purpose of the of implementing the WFD, Ireland has been divided into eight River Basin Districts or areas of land that are drained by a large river or number of rivers and the adjacent estuarine / coastal areas. The management of water resources is divided into these River Basin Districts. Kiltiernan / Glenamuck is located in the Eastern River Basin District (ERBD).

The Local Authorities located in the ERBD have prepared a River Basin Management Plan (RBMP), which was adopted in 2010. The RBMP provides objectives for River Basin Districts in order to implement the requirements of the WFD.

### 5.6.3 Surface Water

The main rivers within the Draft LAP are the Loughlinstown River, the Glenamuck Stream and the Golf Stream, as shown in **Figure 5.5**. As outlined in **Section 5.4.8 Aquatic Flora and Fauna** the Glenamuck Stream is of Moderate Ecological Status under the WFD. A biological assessment of the Glenamuck Stream was carried out in 2005 (GDDR, 2007). The invertebrate community present signified that the Stream had a Q-rating of Q3-4 indicating slightly polluted conditions. The remainder of the Glenamuck Stream has a Q value of Q3 indicating moderately polluted conditions. The Glenamuck Stream is not monitored by the EPA with regards to Q values for water quality. The ecological status of the Glenamuck Stream is important as its water quality will affect that of the Loughlinstown River into which it feeds.

The result of the biological assessment of the Loughlinstown River (GDDR, 2007), indicates that the River has a Q4 rating, (previously identified in **Table 5.5**). This means that the Loughlinstown River is unpolluted. Under EPAs monitoring of this river it has a current Q rating of Q3-4 and it has good river water body status in accordance with the WFD status. Further down the river, the EPA rates it a Q value of Q4, which is good status. The Loughlinstown River has an overall Q value of Q4, indicating that it is unpolluted.

The Golf Stream is situated along the northern boundary of the Draft LAP and is a tributary of the Glenamuck Stream, which flows along the north-western boundary of the Draft LAP area. The water quality of this stream is compromised as a result of the presence of the Ballyogan landfill site according to the EPA monitoring results.

### 5.6.4 Groundwater

The Geological Survey of Ireland (GSI) rates aquifers based on their hydrogeological characteristics as well as on the value of the groundwater resource. Ireland's entire land surface is divided into aquifer categories. The Kiltiernan/ Glenamuck aquifer is classified as a poor aquifer with bedrock that is generally unproductive except for local zones. The GSI further rates aquifers according to their vulnerability to pollution. Aquifer vulnerability refers to the ease with which pollutants of various kinds can enter underground water. Large areas of the Draft LAP are rated as having high to low



vulnerability due to the presence of moderately deep clayey soils and sandy soils which protects the underlying aquifer from pollution. Areas in the north east which are adjacent to rock near the surface are classed as being of extreme vulnerability. Groundwater Protection Schemes are a county specific project to provide protection to groundwater aquifers by placing tighter controls on activities within all or part of the zone of contribution of the source. The status of the groundwater bodies underlying Kiltiernan/ Glenamuck, based on the chemical and quantitative status of the groundwater body, has been determined under the WFD as being of good status.

### 5.6.5 Flooding

Kiltiernan/ Glenamuck is not located on a main river system but the Loughlinstown River and the Glenamuck Stream flow through the northern and southern corners of the LAP area. According to the OPW flood maps, flooding has occurred within the Draft LAP area. As detailed in **Figure 5.6**, recurring flood events are reported on the Glenamuck Stream along the Glenamuck Road which could be a direct result of locally poor drainage soils, river flood, and the rising of the water table above land surface. In addition, a 2005 DLRCC report states that flooding occurs after heavy rain due to ditch blocking. Flooding in close proximity to the Draft LAP has been reported by the OPW for the Shanganagh and Cabinteely Rivers in 1982, 1993, 1997 and 2002. Recurring flooding adjacent to the Draft LAP area to the south is reported for parts of the Enniskerry Road, particularly north of the Church of Ireland church.

The European Directive 2007/60/EC (Floods Directive) on the assessment and management of flood risks requires member states to carry out preliminary flood assessments in order to identify areas at risk. DLRCC is located in the Eastern Catchment Flood Risk Assessment and Management Study (ECFRAM) and as part of this study ECFRAM will be required to produce flood maps; flood risk objectives; and Flood Risk Management Plans.

The DEHLG published '*The Planning System and Flood Risk Management Guidelines for Planning Authorities*' which will ensure that flood risk assessment and management is incorporated within the planning system. These guidelines have been adhered to during the preparation of the Draft LAP for Kiltiernan/ Glenamuck. Further information in relation to Flood Risk Assessment for the Draft LAP has been outlined in Chapter 4 of this ER.

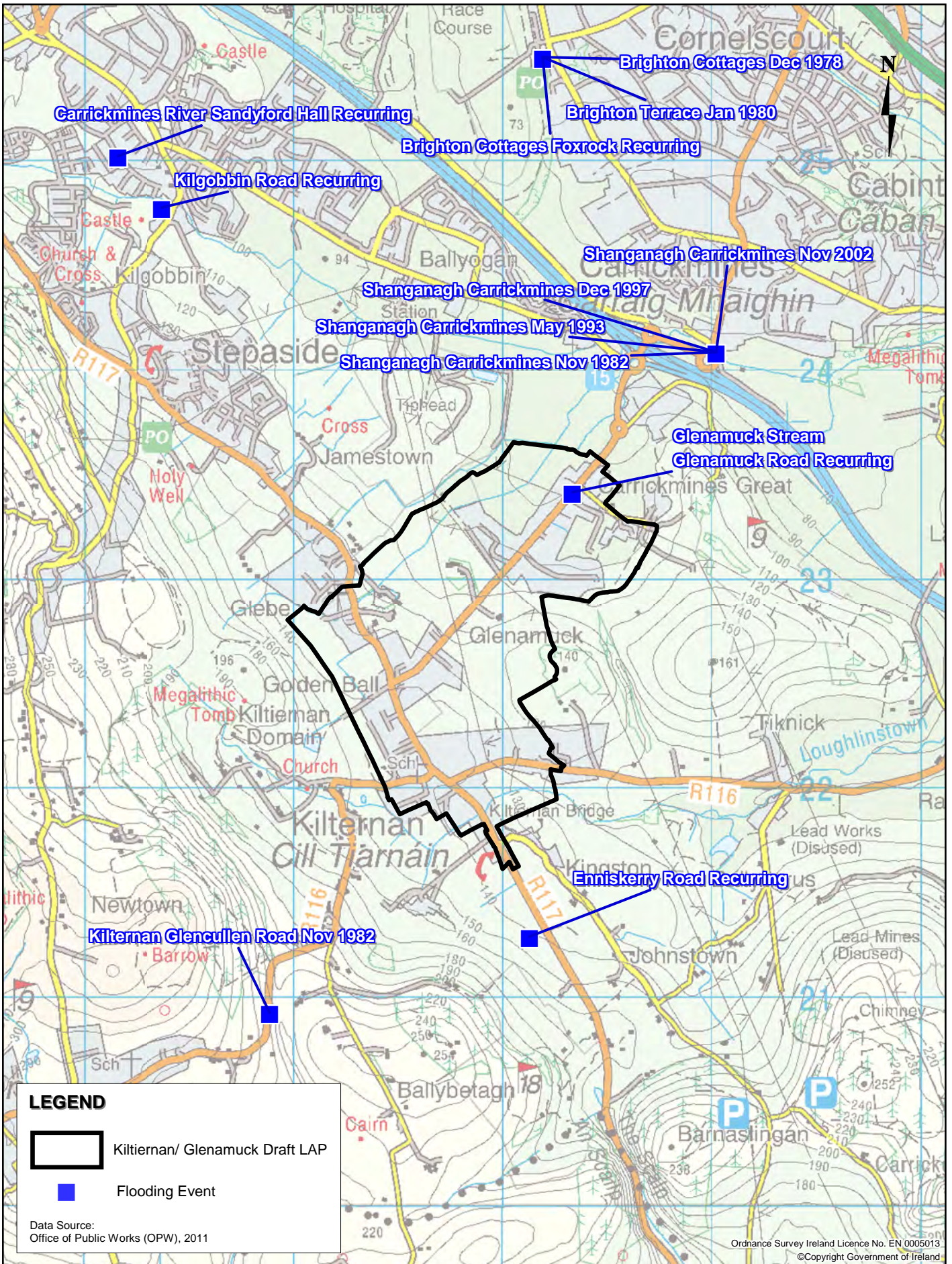
### 5.6.6 Existing Water Environmental Pressures / Problems

There are a number of sensitivities with regard to the status of surface and groundwater bodies within the Draft LAP area. The surface waters within Kiltiernan/ Glenamuck fall within the Shanganagh Water Management Unit (WMU) (as defined in the ERBMP) and are of good Ecological Status. The ERBMP has included an extended deadline for achieving good Ecological Status within the Shanganagh WMU for the year 2021. This extended deadline is being sought based on issues of technical feasibility with regards to achieving the 2015 deadline set in the WFD. The pressures which have been identified by the ERBD in the characterisation of the water bodies within and surrounding the Plan area include the following:

- Diffuse source pressures, such as shown in the EPA diffuse sources model;
- Morphological pressures, including intensive land use and built structures; and

Changes in the occurrence of severe rainfall events as a result of climate change over the next 50 to 100 years would be likely to increase the frequency and severity of flooding events and inundation, which could result in damage and loss to houses and infrastructure. These risks could be further exacerbated by: urban development increasing the speed and volume of run-off; and changes to geomorphological processes such as sediment transport, siltation and erosion.





**FIGURE 5.6 - FLOOD EVENTS AND EXTENTS**

## 5.7 NOISE

Noise can be a source of nuisance which affects the quality of life of residents, workers and visitors to an area and create an adverse effect on the amenities of that area. Urban areas generally experience a higher level of expected background noise than quieter rural areas.

Sources of noise in the urban environment include traffic noise from major roads, junctions or congested areas; rail lines and other transport facilities and routes such as airports; industrial areas (which can generate noise through their primary activities and also through secondary sources such as peak hour employee traffic) and temporary sources of noise such as construction activities at specific sites; and crowd and other noises at events such as sporting matches, concerts and festivals. In town centres, noise from speakers, entertainment venues and street entertainers are a source of noise.

### 5.7.1 Sources of Noise in the Draft LAP Area

The Dublin Agglomeration Noise Action Plan (DANAP) which includes DLRCC has been in development for the assessment and management of environmental noise as required by EU Directive 2002/49/EC. The Noise Action Plan reviews the results of strategic noise mapping and sets out an approach to the strategic management and control of environmental noise. The objectives are to avoid, prevent and reduce, where necessary, on a prioritised basis the harmful effects, including annoyance, due to long term exposure to environmental noise. This will be achieved by taking a strategic approach to managing environmental noise and following a balanced approach in the context of sustainable development.

The noise climate in the area is dominated by road traffic noise on the local regional road network. The main noise source, the M50, lies to the north east of the Draft LAP. In 2006 as part of the Glenamuck District Distributor Road (GDDR) Scheme baseline noise measurements were undertaken in as outlined in **Table 5.6** and shown in **Figure 5.7**.

**Table 5.6: Baseline Noise Levels**

Map Reference	Location	Baseline (Lden, dB)
A	Avalon	57
B	The Leys	58
C	Happy Valley	61
D	Ashwood Fm.	52
E	Westgate	51
F	Tig mo Chroi	52
G	Wellfield	53
H	Terra Nova	53
I	Tullabeg	58
J	Kingston Crest	52
K	Riverdell	45
L	Kingston Lodge	60

\* Note: The baseline values were taken in 2006 and figures in bold exceed the NRA guidelines.  
Source: GDDR Environmental Study Volume 3 – Technical Appendices

Appropriate criteria for assessing road traffic noise are outlined in the NRA Guidelines for the Treatment of Noise and Vibration in National Road Schemes (2004). The design goal outlined in this document is 60dB LDEN, for national primary and secondary road schemes. Although the surrounding

road network is mostly regional standard, in the absence of standards for acceptable levels of noise from regional roads, the use of the NRA guidance can be regarded as acceptable proxy guidance.

It can be seen from the results of surveying that levels of road traffic noise as measured in 2006 are, with the exception of a few locations, generally below the NRA design goal. This would indicate that whilst a relatively high volume of road traffic is present on certain routes, levels of road traffic noise are generally within acceptable levels. Whilst this data was taken a number of years ago, with the subsequent fall in the economy and the reduction in travel frequencies, this data would provide a good reflection of the current situation within the Draft LAP area.

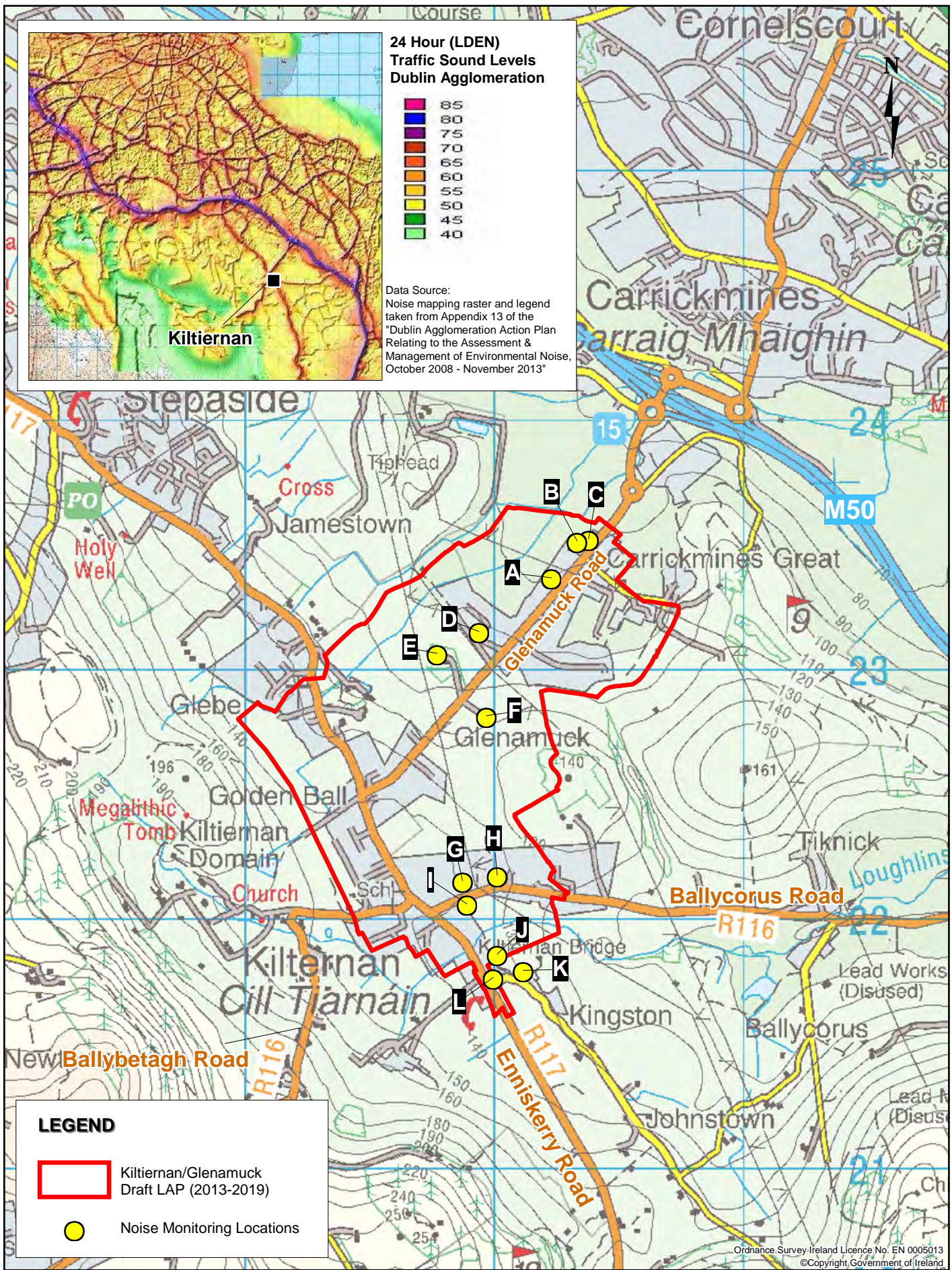
A more general overview of noise climate in the study area can be obtained through examination of the noise mapping undertaken for the Dublin Agglomeration Action Plan. This was completed as a requirement under the Environmental Noise Regulations 2006 (S.I. No. 140 of 2006). The results of this noise mapping show that ambient noise levels in the area mostly range from 50-55dB Lden in areas situated away from roads, as shown in **Figure 5.7**. This would indicate levels typical of that found in semi-rural or suburban environments where no major road networks are present.

### **5.7.2 Existing Noise Environmental Pressures / Problems**

The identification of quiet areas, which have low noise levels, and maintaining or reducing existing noise levels, in order to sustain quiet areas is important. Maintaining low levels are the main noise issues facing development of Kiltiernan/ Glenamuck.

Existing traffic and use of private vehicles results in the release of greenhouse gases which contribute to climate change. Due to the rural nature of the Draft LAP existing usage is dominated by the motor vehicle however as there is a low existing population the usage is correspondingly low.

Increased population and associated traffic has potential to increase noise on the area. This can be mitigated through planned public transport links such as Luas Line B1. Also recommend inclusion of reference policy to ensure implementation of DANAA Plan.



**FIGURE 5.7 - NOISE MAPPING**

## 5.8 CLIMATIC FACTORS

### 5.8.1 Greenhouse Gases

The EPA published greenhouse gas emissions projections for the period 2011 to 2020. The figures show the projected trends for greenhouse gases and give a picture of Ireland's ability to meet EU and international targets with respect to greenhouse gas emissions. With regard to emissions in Ireland, transport and agriculture are projected to account for 75% of total non-ETS emissions by 2020. This illustrates the important role that both transport and agriculture will have to play in developing mitigation options for reducing emissions in Ireland and for meeting our 2020 EU targets. Whilst agriculture is key to Ireland's economic growth, employing 150,000 people and producing annual exports of more than €7 billion, emissions from the sector are projected to increase by 7% between 2010 and 2020, under the assumption that the Food Harvest 2020 targets will be achieved in full.

### 5.8.2 Potential Effects of Changed Climate

The EPA's Climate Change: Scenarios and Impacts for Ireland (2003) report identifies where vulnerability to climate change exists in Ireland and what adjustments are likely in the operation of environmental systems in response to such changes.

As increased temperatures will lead to greater amounts of water vapour in the atmosphere and an accelerated global water cycle, it is reasonable to expect that river catchment areas will be exposed to a greater risk of flooding. Heavier winter rain and summer storms may cause more flash flooding, causing an increase in diffuse pollution loads to waters from soil run-off or the overflow from CSOs (combined sewer overflows) and raising demand for flood controls. Summer droughts are more likely and there may be a reduction in drinking water supplies.

River flooding tends to be more common during the wetter winter months when soils are near saturation. Many of the rivers draining upland areas have a rapid or 'flashy' response to rainfall enhanced by rising topography. Steep slopes and thin soils favour rapid flow pathways and water is rapidly transmitted to the channel network especially in urbanised catchments with extensive areas of impermeable surfaces. A critical impact of climate change will be the likely changes to habitats and the flow conditions in rivers and lakes.

It is now recognised that Plans will need to take account of issues arising from climate change in their future land use planning. The advancement of these plans has taken into account for the purposes of this SEA. The Draft LAP has considered whether a flood risk assessment is required to fulfil the requirements of "The Planning System and Flood Risk Management Guidelines for Planning Authorities" (DoEHLG, 2009). It was determined for this Draft LAP that no Flood Risk Assessment was required.

### 5.8.3 Existing Environmental Change and Climate Pressures and Problems

As has been noted above, an issue facing Kiltiernan / Glenamuck in relation to climate change is the danger posed by the potential for an increase in the frequency and severity of flooding events. Changes in the occurrence of severe rainfall events as a result of climate change could adversely impact upon the inhabitants of the Draft LAP, its biodiversity and its economy. Solutions require the amelioration of potential flooding events as well as local measures as part of national efforts to reduce greenhouse gas (GHG) emissions. Based on past events, there is potential for flooding within the Draft LAP, particularly in proximity to the Glenamuck Stream and Shanganagh River. SUDs measures have been proposed as part of the Draft LAP to ameliorate flooding issues.

Existing traffic and use of private vehicles results in the release of greenhouse gases which contribute to climate change. Due to the rural nature of the Draft LAP existing usage is dominated by the motor vehicle however as there is a low existing population the usage is correspondingly low.

## **5.9 MATERIAL ASSETS**

### **5.9.3 Introduction**

The material assets of Kiltiernan/ Glenamuck may be broken down into a number of relevant categories including: drinking water, wastewater, transport infrastructure, energy and communication infrastructure and waste management.

### **5.9.4 Drinking Water**

According to DLRCC, Kiltiernan/ Glenamuck has adequate water supply to meet projected demands during the plan proposed period. The Draft LAP does outline recommended planning criteria to be used in the assessment of planning applications up to 1,000 dwellings (Phase 1). One of the recommendations is that the availability of environmental services, such as water supply will need to be satisfied.

Water supplies for the Plan area are currently supplied from the Ballymore Eustace Reservoir via the Sandyford High Level Water Supply Scheme (SHLWSS). Water demand within the DLRCC and the GDA has increased over the last number of years and therefore the Ballymore Eustace Water Treatment Plant is currently being upgraded.

Under the SHLWSS it is proposed Water Conservation Stage 3 Works within DLRCC including ongoing water mains rehabilitation will be undertaken.

The Draft LAP area falls within the Greater Dublin Water Supply Area which currently is looking to obtain a new source of water to meet the water demands within this area. Kiltiernan/ Glenamuck is very much dependant on the Greater Dublin Region for its water supply. The requirement for a new water supply is based on the future planned development of the Greater Dublin Area as identified in the National Spatial Strategy (2002-2020) and previous studies carried out to investigate how water demand for future development in the region can be met when existing sources have been developed to their sustainable water supply limits. The current estimate, based on a per capita consumption of 145 l/day indicates that a new source is required by 2016 - 2020. New water source options have been evaluated and have been subject to a separate SEA process.

### **5.9.5 Wastewater**

The Urban Waste Water Treatment Directive (91/271/EEC) (amended by Directive 98/15/EEC) aims to protect the environment from the adverse effects of wastewater discharges by ensuring that wastewater is appropriately treated before it is discharged to the environment. Such treatment is essential in order to meet the requirements of the WFD. The wastewater strategy for the Greater Dublin Region is set out in the Greater Dublin Strategic Drainage Study (GDSDS), 2005.

The village of Kiltiernan and small housing developments along the Glenamuck Road are connected to the mains Kiltiernan/ Glenamuck sewerage system. This main is connected to the Carrickmines Sewer from which the wastewater is pumped to and treated at the Shanganagh Wastewater Treatment Plant (WWTP). Not only does it cater for the Shanganagh Foul Catchment, but it also treats sewage that is being pumped from the Bray Pumping Station. The WWTP has recently been upgraded (including secondary treatment) and now has increased capacity to treat effluent from 186,000 population equivalent (PE) with the potential to increase capacity to 248,000 in the future. Therefore there is adequate capacity to cater for the Draft Plan's projected growth in the short term.



### 5.9.6 Transportation

The existing main roads within the Draft LAP area include; the R116 (Ballycorus Road), and the R117 (Enniskerry Road) and the Glenamuck Road, which is the only secondary road within the Draft LAP, as shown in **Figure 2.1**.

To facilitate the increased population and trip demand proposed within the Draft LAP area, a more efficient use of the available street space must be made. This can only be achieved by increasing the use of sustainable modes of transport and by reducing the reliance on the private car, particularly at peak periods. (The Luas Line B1 has been extended between Sandyford and Cherrywood.) As a result the closest stop which serves the Draft LAP is at Carrickmines which is approximately 1km from the northern perimeter of the LAP boundary.

Dún Laoghaire-Rathdown recognises that cycling and walking are cost effective, non-polluting and highly flexible transportation modes that reduce congestion, foster improved health and are accessible to young people. Newly published government policy, 'Smarter Travel – A New Transport Policy for Ireland (2009-2020)' and the 'National Cycle Policy Framework (2009-2020)' have clearly placed an emphasis on walking and cycling as alternatives to vehicular transport. The proposed Draft LAP has regard to the cycle policy framework document produced by the Department of Transport, which seeks to ensure that the urban road infrastructure and traffic management measures are designed to be cyclist friendly.

With the extent of population proposed for the Draft LAP improvements to the road network will be essential. The proposed Glenamuck District Distributor Road (GDDR) Scheme and the Glenamuck Link Distributor Road will act once constructed as a link distributor road that will connect to the M50 motorway at Carrickmines. The construction of this road will act as a bypass for the village of Kiltiernan. Feasibility studies have been undertaken in respect of this proposed scheme and have been since updated in light of the recent economic climate.

### 5.9.7 Energy

The Draft LAP area has three Electricity Supply Board (ESB) High Voltage Cables (110kV and 220kV) crossing it. They are identified within the Draft LAP and include:

- Carrickmines-Fassaroe East 110 kV line which comes from the Carrickmines 220kV Station located west of the Glenamuck Road and crosses this Road at the road entrance leading to the Carrickmines Equestrian Centre.
- Carrickmines-Fassaroe West 110kV line which also comes from the Carrickmines 220kV Station and then crosses Glenamuck Road further south of the Carrickmines-Fassaroe East line.
- The Arklow-Carrickmines 200kV Double Circuit Line which comes from the Carrickmines 220kV Station and crosses Glenamuck Road near the open space zoned site.

There are restrictions in relation to building near these high voltage cables, as set out as follows in **Table 5.7** and these restrictions are specified in the Draft LAP:

**Table 5.7: High Voltage Cable Planning and Development Restrictions**

High Voltage Cable	Restriction
110kV Lines	A minimum lateral clearance of 20 metres either side of the centreline (i.e. a 40m wide restricted corridor) A clearance of 23 metres must be allowed for any tower leg.
220Kv Lines	A minimum lateral clearance of 30 metres either side of the centreline

High Voltage Cable	Restriction
	(i.e. a 60m wide restricted corridor)

There are numerous low (10kV) and medium (38kV) voltage cables which cross the Draft LAP. These have no clearance restrictions. However, ESB may need to reinforce or divert the line/s in the case of 38kV lines. No underground ESB cable routes are present within the Draft LAP. Existing substation capacity is able to accommodate potential demand within the Draft LAP, as indicated by the ESB in 2004. Due to the significant population growth proposed within the plan area, the medium voltage network needs to be introduced to feed the new load as it develops.

### 5.9.8 Telecommunications

Eircom have existing telecommunications within the Draft LAP area, however, this service would need to be expanded to service future development. NTL and BT have indicated that they do not have any plant or services within the Draft LAP Area. There are no proposals to locate any telecommunication masts within the Draft LAP area boundary.

### 5.9.9 Waste Management

The emphasis in the Draft LAP area will be to carry out waste management in conjunction with Dún Laoghaire-Rathdown County Council. Kiltiernan/ Glenamuck will conform to the European Union and national waste management hierarchy in the undertaking of waste prevention, waste recycling and energy recovery and disposal. In particular, the Kiltiernan/ Glenamuck Draft LAP will encourage, enable and facilitate Dún Laoghaire-Rathdown County Council on the implementation of the Waste Management Plan to provide recycling facilities and services in the area.

There are no landfills within the Draft LAP area boundary. The Ballyogan landfill site which abuts the Draft LAP is now closed and undergoing a remediation. When this is finished, the land will be used as a large public recreational space for the increasing population in Kiltiernan/ Glenamuck.

There are no recycling facilities within the Draft LAP boundary. However, there is a recycling facility in Ballyogan. It processes household and commercial waste, collected by, and on behalf of, the local authority. It does not accept industrial hazardous waste. Shanganagh Recycling Centre is another recycling facility surrounding the Draft LAP area and is approximately 5.7 km from the Draft LAP. Dún Laoghaire-Rathdown County Council is responsible for the operation of litter collection in Kiltiernan/ Glenamuck.

### 5.9.10 Existing Environmental Pressures / Problems

Long-term water supplies for Kiltiernan/ Glenamuck should be resolved through the Water Supply Project – Dublin Region. This project aims to supply water to the Dublin region up to 2031 and beyond. Kiltiernan/ Glenamuck currently ensures the provision of adequate high quality drinking water. These high standards will not be affected by improvements to the network. However, there is no timetable for the Water Supply Project and it is still to proceed through the planning process and it is expected that it will not be completed in the lifetime of this Draft LAP.

The Draft LAP outlines that there is sufficient Waste Water Treatment to cater for projected population growth in the Draft LAP area.

There is a need to increase the use of existing public transport, and provide for additional systems to accommodate existing and future growth of Kiltiernan/ Glenamuck which is a pressing priority. Increasing the amount of pedestrian and cyclist movements should be a central objective of the plan.

Due to the significant population growth proposed within the plan area, the medium voltage network needs to be introduced to feed the new load as it develops. Eircom have existing telecommunications within the Draft LAP area, however, this service would need to be expanded to service future development.

It is proposed that DLRCC will implement waste refuse and recycling facilities within the plan area. There is a requirement to provide a recycling facility within the area which should be identified in the Draft LAP.

## 5.10 CULTURAL, ARCHITECTURAL AND ARCHAEOLOGICAL HERITAGE

### 5.10.1 Introduction

Heritage, by definition, means inherited properties, inherited characteristics and anything transmitted by past ages and ancestors. Heritage features include physical buildings, structures and objects, complete or in part, which have been left on the landscape by previous and indeed current generations. Kiltiernan/ Glenamuck have a rich and diverse architectural heritage, comprising a number of structures of historical and architectural importance. This heritage provides the village with a resource of tremendous social, educational, recreational and aesthetic value.

### 5.10.2 Archaeological Heritage

The archaeological heritage of Kiltiernan/ Glenamuck, includes structures, group's of buildings, developed sites, recorded monuments as well as their contexts, and moveable objects, situated on land. Archaeological heritage is not confined to the archaeological sites within the Record of Monuments and Places (RMP). It includes any archaeological site that may not have been as yet recorded, as well as archaeology beneath the ground surface, and the context of any site.

Rivers have acted as focal points for both settlement and ritual activity through all periods of human settlement, this is borne out in the study area by the number of recorded archaeological sites close to the Loughlinstown and Shanganagh Rivers e.g. prehistoric and medieval settlement in Carrickmines (DU026-005), the flat cemetery in Jamestown and the earthworks site straddling the Shanganagh river (DU026-021) as shown in **Figure 5.8**.

Under the National Monuments (Amendment) Act, 2004 the archaeological heritage of Kiltiernan/ Glenamuck is protected. The record of monuments and places as outlined in **Figure 5.8** is an inventory of archaeological sites of significance. The Draft LAP has three archaeological sites (DU026-018, DU026-021 and DU026-135) within its boundary and numerous sites in proximity to the Draft LAP as shown in **Tables 5.8** and **5.9**. Even though only three RMP sites are within the boundary of the Draft LAP there is the potential for more finds as these lands have a high concentration of RMP sites.

**Table 5.8: Sites of Archaeological Importance**

RMP No	Site Type	Location	Description
DU026-018	Cross Base	Within the Draft LAP	The cross base can be found in the front garden of a modern house. It is a flat granite boulder, the surface of which is level with the ground. There is a socket for a cross in the centre of it. There was a tradition that the cross was buried somewhere in the vicinity.
DU026-021	Enclosure	Within the Draft LAP	This is a cluster of enclosures found in level pasture on the northern back of the back of the Loughlinstown River.
DU026-135	Fulacht Fia	Within the Draft LAP	The fulacht fia provides evidence of the Bronze Age and is located on the Glenamuck road.

RMP No	Site Type	Location	Description
DU026-004 (01-04)	Ecclesiastical remains	Approximately 700m from the Draft LAP boundary	There are no visible remains of the early church site on the border between Kilgobbin and Jamestown associated with St. Caoin. It is near a burial ground southwest of Jamestown cross. The holy well which was associated with St. James is now marked by a cross in the laneway.
DU026-005 (01-04)	Deserted Settlement	Approximately 1.3 km from the Draft LAP boundary	This consists of Carrickmines Castle which dates back to the Medieval Period. In addition, there is evidence of a bawn and a mill within the deserted
DU026-015	Cemetery (Cist)	Approximately 500m from the Draft LAP boundary	A flat cemetery where cremated bones were found in an encrusted urn, a vase with cremated bone and another cist with a capstone containing unburnt bone accompanied by a food vessel.
DU026-020 (001-004)	Ecclesiastical remains (Graveyard, Font, Holy Well)	Approximately 500m from the Draft LAP boundary	This consists of a church that stands on high ground which falls steeply down to a stream. The stream then forms the Loughlinstown river. It is a plain rectangular structure without a chancel measuring 14.63m x 7.32 m with walls 84 cm thick. The west wall has a square headed doorway which is blocked up. The east gable and some of the south wall still stand. The south wall has a doorway which was added later. It consists of a pointed gothic arch and what is like the remains of a porch.
DU026-115	Linear earthwork	Approximately 500m from the Draft LAP boundary	This is a section of the Pale Ditch which was built during the medieval period by English settlers to stop the constant raiding of their lands by native Irish tribes. It is broken in a couple of places by access lanes. It is aligned on Carrickmines Castle to the east and finishes up west of Grimes farmhouse

**Table 5.9: Sites of Archaeological Importance**

RMP No	Site Type	Location
DU025-047005	Field System	Approximately 2.1km from Draft LAP boundary
DU025-047006	Hut site	Approximately 2.1km from Draft LAP boundary
DU025-047007	Well	Approximately 2.2km from Draft LAP boundary
DU025-047003	Cairn	Approximately 2.4km from the Draft LAP boundary
DU025-047004	Ringfort- cashel	Approximately 2.2 km from Draft LAP boundary
DU026-001	Enclosure	Approximately 750m from the Draft LAP boundary
DU026-003	Ritual site- holy well	Approximately 800m from the Draft LAP boundary
DU026-016	Designed landscape- tree-ring	Approximately 350m from the Draft LAP boundary
DU026-017	Designed landscape- tree-ring	Approximately 400m from the Draft LAP boundary
DU026-019	Megalithic tomb-portal tomb	Approximately 500m from the Draft LAP boundary
DU026-035	Enclosure	Approximately 2.2km from Draft LAP boundary
DU026-044 (001-002)	Castle- tower house and hall-house	Approximately 2.1km from the Draft LAP boundary
DU026-045 (001-002)	Ringfort and field system	Approximately 2.4km from the Draft LAP boundary
DU026-117	Mining Complex	Approximately 2.0km from the Draft LAP boundary
DU026-122	Linear earthwork	Approximately 1.1km from the Draft LAP boundary

RMP No	Site Type	Location
DU026-123	Urn burial	Approximately 1.2km from the Draft LAP boundary
DU026-128	Redundant record	Approximately 850 m from the Draft LAP boundary
DU026-145	Rock Art	Approximately 1.2km from the Draft LAP boundary
DU026-146	Rock Art	Approximately 1.2km from the Draft LAP boundary

As part of the feasibility works for the GDDR scheme an archaeological desktop and field survey was undertaken. This survey work identified a number of sites of archaeological potential which have been identified in **Figure 5.8** and include IDA1 to IDA8.

### 5.10.3 Architecture and Cultural Heritage

The term architectural heritage is defined in the Architectural Heritage (National Inventory) and Historic Monuments Act 1999 as meaning all: structures and buildings together with their settings and attendant grounds, fixtures and fittings; groups of structures and buildings; and sites which are of historical, archaeological, artistic, cultural, scientific, social or technical interest. The National Inventory of Architectural Heritage (NIAHs) purpose is to protect and conserve the built heritage and it is the NIAH surveys that provide the basis for the recommendations to the planning authorities for the inclusion of particular structures in their Record of Protected Structures (RPS). For the Draft LAP these structures are shown in **Figure 5.9**.

The RPS has been compiled to protect the structures of the town that are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. In relation to a protected structure, the meaning of the term 'structure' includes the interior of the structure, the land lying within the curtilage of the structure, and any other structures lying within that curtilage and their interiors, and all fixtures and features which form part of the interior or exterior of these structures. Where indicated in the RPS, protection may relate to specified features within the attendant grounds of a structure, which would not otherwise be included. The specific structures within and surrounding the Draft LAP are detailed in **Table 5.10**.

The Council may designate a place, area, group of structures or townscape, that is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest, or that contributes to the appreciation of a protected structure, as an Architectural Conservation Area (ACA). There is one ACA within the Kiltiernan/ Glenamuck Draft LAP area, at Moss Cottages (1-9) which is located on the Enniskerry Road. It consists of nine single-storey cottages, laid out as three semi-detached pairs and a single terrace of three. The 1909 OS map is the first map which indicates the presence of these cottages.

**Table 5.10: Sites of Architectural Importance**

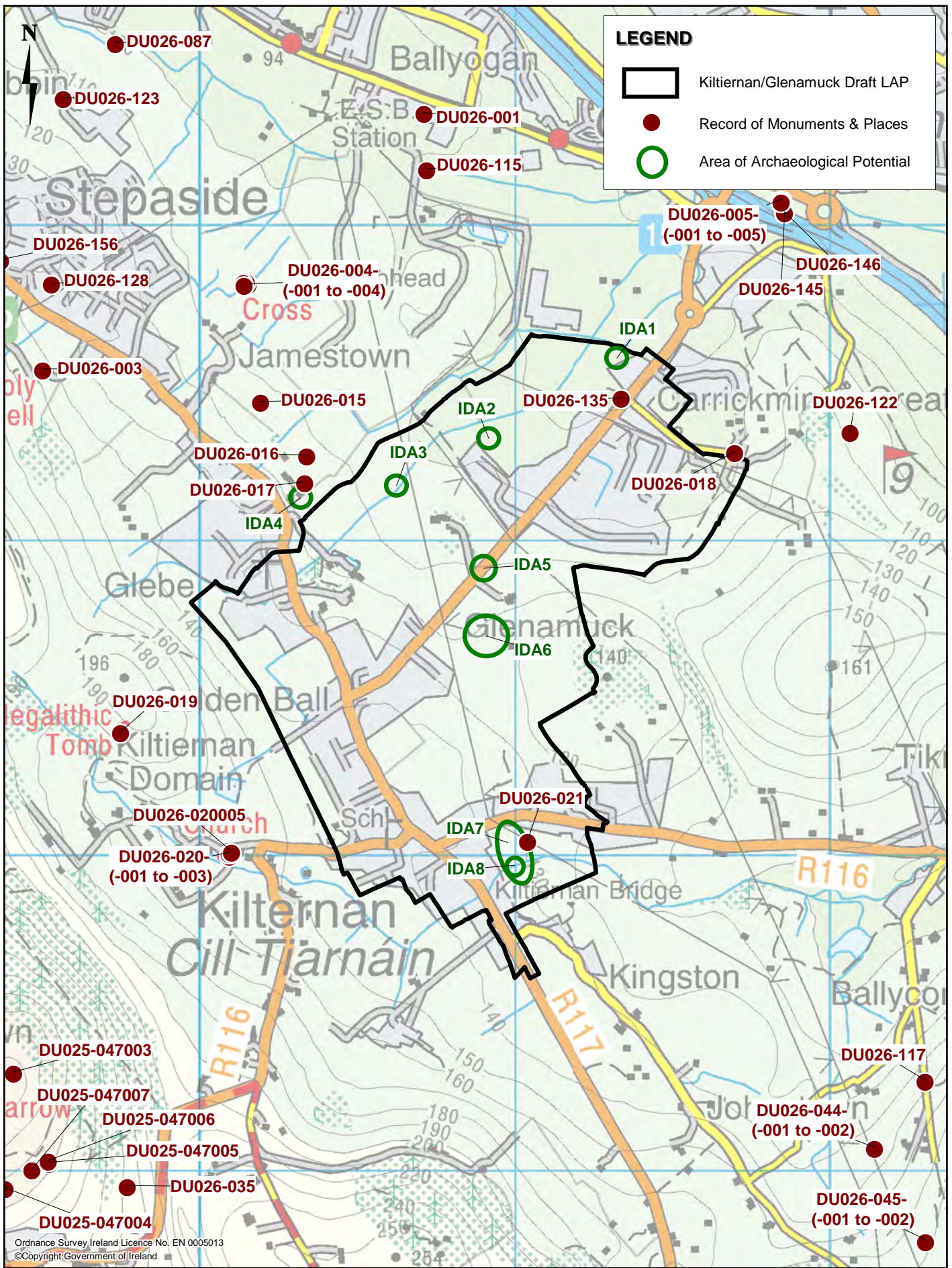
RPS No./ ID	Status/ Protection	Location	Description
RPS 1775	Protected Structure	Within the Draft LAP	<p>This is a two-storey, L-shaped house with single-storey, flat roofed outbuilding attached to the rear. The façade is rough-dashed and the hipped roof is covered with slate. The entrance to the house has granite piers and the avenue leading to the house is lined with timber fencing. The north and northwest of the house is surrounded by mature trees.</p> <p>This property can be found on the first edition Ordinance Survey (OS) map of 1837-43 and was previously known as Glenamuck House, Biddyfield and Glenard House. It is now called <u>Shaldon Grange</u>.</p>
RPS 1790	Protected Structure	Within the Draft LAP	A detached two-storeys-over-basement house built in the eighteenth century. There is a farmyard southeast of the house. Numerous structures can be found here which include a 19 <sup>th</sup> century stable block and modern farm buildings. A walled garden can be found beside the

RPS No./ ID	Status/ Protection	Location	Description
			<p>farmyard and a small paddock to the southwest is surrounded by a curved stonewall. A gate lodge is located beside the front entrance. The entrance is made up of rendered wall with piers flanking an iron gate.</p> <p>The house is hidden from view to the front by mature trees. Some of the original tree-lined boundary of the attendant grounds survives to the south and along the front of the property. The house is shown on the 1760 Rocque's map of county Dublin and on the first and revised OS map editions It is currently known as <u>Rockville house</u>.</p>
RPS 1793	Protected Structure	Within the Draft LAP	This structure consists of the entrance gates to former Kiltiernan Abbey, also known as the <u>Gate Lodge</u> .
RPS 1802	Protected Structure	Within the Draft LAP	This is known as Our Lady of the Wayside Church.
RPS 1771	Protected Structure	Within the Draft LAP	This is called Church of Ireland. The site consists of a church, school, Sexton's Lodge, Boundary Walls and gates.
RPS 1817, 1819, 1821 & 1822	Protected Structures	Within the Draft LAP	258-261 Moss Cottages are protected houses.
RPS 1823, 1824, 1825, 1826 & 1828	Protected Structures	Within the Draft LAP	262-266 Moss Cottages are protected houses.
RPS 1813	Protected Structure	Within the Draft LAP	A structure by the name of An Muilleán. This is a house which was formerly a cotton factory.
<b>Architectural Features on the boundary or in close proximity to the Draft LAP Boundary</b>			
RPS No./ ID	Status/ Protection	Location	Description
RPS 1832	Protected Structure	Adjacent to the Draft LAP	This detached two-storey, three-bay structure built in the late nineteenth century is known as Orange Lodge. It has rough-cast rendered exterior. The entrance consists of a projecting porch with a side door and an arched window. The original two-over-two pane window sashes are intact on the front façade. The front boundary of the property is made up of a wall with a rough-cast finish. The property was first included in the 1907-09 revised edition OS map and called Kiltiernan School.
RPS 1830	Protected Structure	Adjacent to the Draft LAP	<p>This is a detached two-storey, four-bay, stone fronted building built in the late nineteenth century. It has a shop front at one end of the ground floor. The window and door openings have brick surrounds and the original two-over-two pane sash windows are intact to the front. The front door has a segmental headed over-light. A single storey extension is attached to the rear and to one side.</p> <p>There is no boundary wall to the front of the property. There are a number of outbuildings located at the rear of the property. The earliest OS map it can be found on is the 1907-09 revised edition OS map where it is called Kiltiernan Post Office.</p>
RPS 1807	Protected Structure	Approximately 200 m from the Draft LAP	Ecclesiastical Remains.
RPS 1809	Protected Structure	Approximately 175m from the Draft LAP	Entrance gates, house and barn of Kiltiernan Lodge are all protected structures.

RPS No./ ID	Status/ Protection	Location	Description
RPS 1839	Protected Structure	Approximately 550m from the Draft LAP	Verney House.
RPS 1840	Protected Structure	Approximately 600m from the Draft LAP	Verney Farm.
A	No Protection Status	Approximately 1.3 km from the Draft LAP	A two-storey house with a masonry exterior built around the late nineteenth century. A two-storey extension was added at a later date to the southeast corner. There are various early and modern farm buildings in a yard which is adjacent to the house. An earlier structure can be found on the 1 <sup>st</sup> OS map. The existing house was first included in the 1907-09 OS map.
B	No Protection Status	Approximately 500 m from the Draft LAP	This is a detached, two-storey, three bay house built in the early-mid nineteenth century. It has a conservatory to the side and possibly the canted bay windows to the ground floor front elevation. The hipped roof has two tall rendered stacks. The property is shown on the first edition OS map where it called 'Jamestown Lodge'.
C	No Protection Status	Inside the Draft LAP	This is a detached two-storey, rendered house built around 1940. It is of the International Style. The house is finished in plain render and the window openings are all flat-headed and have top-hung metal frames. The roof is flat and is concealed behind a high parapet. The first floor has a number of balconies. The entrance gate is set back a small distance from the road and is flanked rubble stone wall. It is screened from the road by mature trees. It cannot be found on any of the historic or OS maps.
D	None	Adjacent to the Draft LAP	This is a detached two-story, three-bay house built in the mid nineteenth century. The building is gable ended and its exterior is of painted stone. A porch has been added to the front of the property. The building faces directly onto the Enniskerry Road. There are a lot of outbuildings are located at the rear of the property. It was first shown on the 1871 revised edition OS map.
E	No Protection Status	Inside the Draft LAP	This site is of cultural/ social interest. It is a cast-iron water pump which was built around the 1900's. It consists of c cylindrical shaft with fluted upper section. The cap and arm of the pump are missing. It is located at the side of the field to the rear of some modern properties. It has not been included in any of the OS map editions.

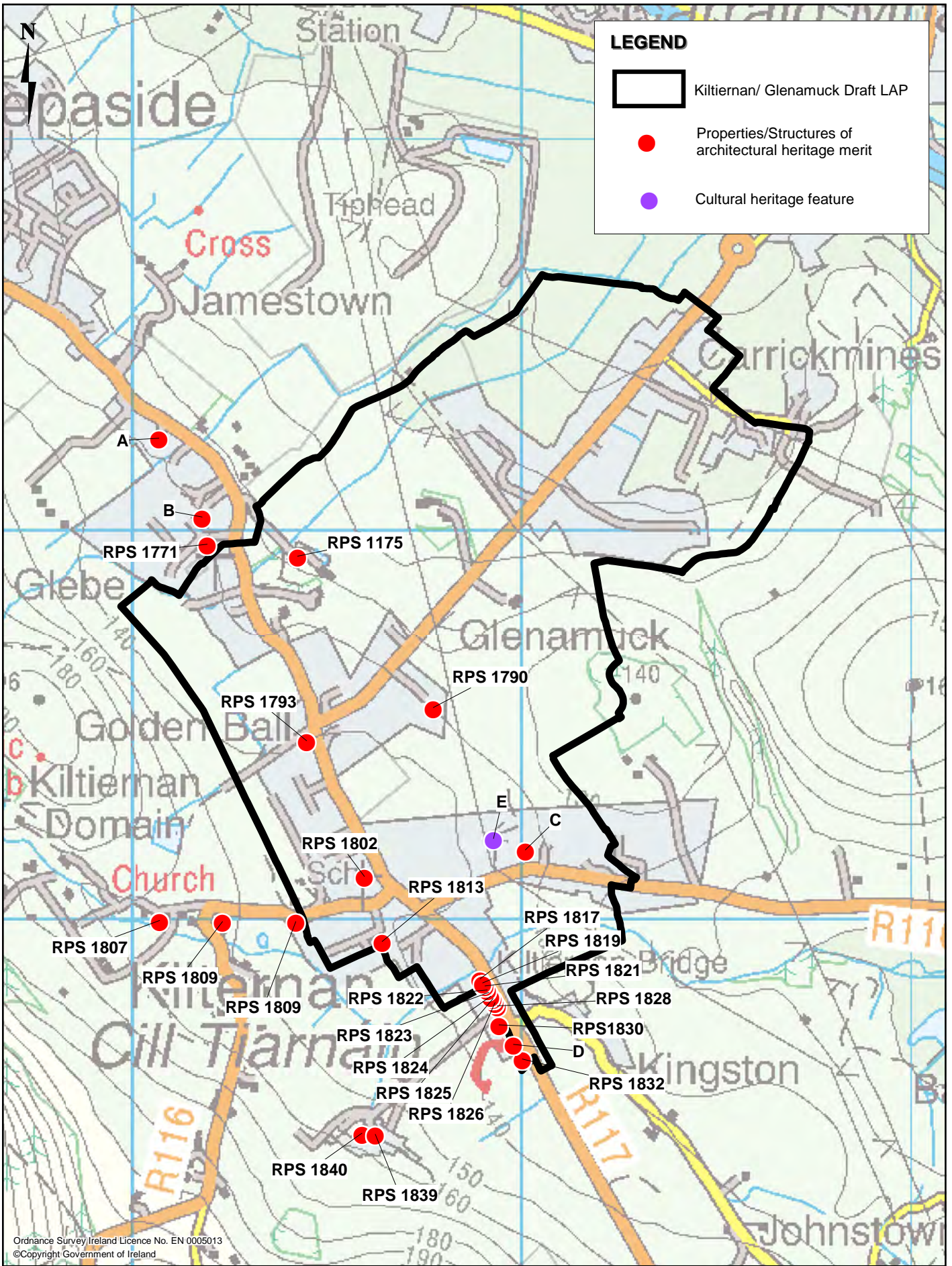
#### 5.10.4 Existing Environmental Pressures / Problems

Further development in Kiltiernan/ Glenamuck has the potential to cumulatively impact upon the heritage features of the area. Development which involves material alterations or additions to protected structures can detract from the special character of the structure and its settings, and have the potential to result in the loss of features of architectural or historical interest. Development on sites adjoining protected monuments, places or structures can also impact the setting of these cultural heritage items.



**FIGURE 5.8 - ARCHAEOLOGICAL HERITAGE**





**FIGURE 5.9 - ARCHITECTURAL & CULTURAL HERITAGE**

## 5.11 LANDSCAPE

### 5.11.1 Introduction

Landscapes are areas that are perceived by people and are made up of a number of layers including;

- Landform, which results from geological and geomorphological history;
- Land cover, which includes vegetation, water and human settlements; and
- Human values, which are a result of historical, cultural, religious and other understandings and interactions with landform and land cover.

The Draft LAP contains a number of sites, areas and vantage points from which views over local landmarks, lands and rivers may be obtained. In addition to scenic views, the Draft LAP area contains a number of important prospects. These are areas/ zones of special/ high amenity value or interest, and prominent landscapes which are visible from the surrounding area.

### 5.11.2 Landscape Character

**Figure 5.10** outlines the indicative landscape characters for the lands within and surrounding the Draft LAP area. This classification was undertaken in 2004 as part of a Landscape Character Assessment (LCA) for the County. The assessment identified the character of the landscape based on land cover and landform and also addresses landscape values relating to historical, cultural, religious and other understandings of the landscape.

The findings of the LCA were used to generate a landscape sensitivity rating for areas within Kiltiernan/ Glenamuck. This landscape sensitivity is a measure of the ability of the landscape to accommodate change or intervention without the implication of unacceptable effects to its character and values. The following classifications, shown in **Table 5.11** apply to the lands within and surrounding the Draft LAP area.

**Table 5.11: Landscape Sensitivity**

Landscape Character Areas	Sensitivity
<p><b>Kiltiernan Plain:</b> This is a large enclosure which consists of the hilly plain lying between Three Rock to the west, Newtown, Barnaslingan and Carrickgollogan to the south, the disused lead mines and chimney to the east. The enclosure finishes north by the coniferous plantation on Three Rock. This enclosure is characterised by a series of smaller hillocks within a plain. The main road which runs between the undulations is the Enniskerry Road.</p> <p>This hilly plain, located at the foothills of the Dublin Mountains is where most of the rural development in the County occurs. Taking into account its terrain and the amount of routeways which cross this plain, it is likely to suffer the most pressure for long term development, which would change the existing landscape significantly.</p>	<p>The area has adapted to a lot of change as a result of the pressures of being situated adjacent to a large urban area. Continued linear development along the road between Kiltiernan and Stepside will be at risk of merging the two villages resulting in a continuous built up strip. The settlement strategy will ensure the consolidation of these villages as well as providing an open space buffer zone between both.</p>
<p><b>Ballycorus:</b> This enclosure contains the valley along which runs the Ballycorus Road and is bounded by the disused lead mines to the south and Ticknick and the Glenamuck Road to the north, Barnaslingan to the west. Three Rock is in the background. This enclosure has past and present industrial/ extractive works. The past is the old leadworks with the lead mine's chimney. Quarrying/ extraction activity is that of Cement Roadstone.</p>	<p>The Dingle Glen is a sensitive landscape. Field patterns and boundaries will need to be maintained and restored. Consideration will be given to the designation of Carrickgollogan Hill as an area for a Special Amenity Order.</p>
<p><b>Carrickmines:</b> This enclosure comprises of the east of the</p>	<p>The landscape will change when the now</p>

Landscape Character Areas	Sensitivity
<p>Stepaside Action Area and is bounded by the motorway to the north, the Glenamuck Road to the south and the Enniskerry Road to the west. The Ballyogan landfill dominates this enclosure visually. The landforms in this area have been stripped. This area is dominated by the fact that it is situated on the fringe of the built up area of Dún Laoghaire Rathdown. It acts as a buffer between the more densely built-up area of Leopardstown/ Stepside and the lower density suburban area of Kiltiernan.</p> <p>The best views of this enclosure are at heights beside Dingle Glen NHA. It is from that viewpoint that the impact of the various urban uses (pylons, house) on the landscape can be clearly seen.</p>	<p>decommissioned waste management facility at Ballyogan undergoes the implementation of a restoration plan. This will provide a large public recreational amenity space for the growing population of Kiltiernan/ Glenamuck. This enclosure lies between the urban and the rural landscapes and is capable of supporting development.</p>

A Neighbourhood Framework Plan (NFP) was prepared for Kiltiernan to guide the development of the Primary and Secondary Neighbourhood Centres at Kiltiernan as set out under Objective E in the Draft LAP. Even though the Plan is centred on the development of land parcels, it also deals with future development. It focuses on the urban form layout and urban spaces which are relative to the Neighbourhood Centres.

In relation to urban form the NFP seeks to reinforce the existing pattern of nodes which will create clusters of development whilst, simultaneously, reinforcing the walls, trees and scattered buildings which link and separate each node. It also includes suitable styles and building fabric.

Detailed urban design principles for the creation of good places have been included in the NFP for Kiltiernan.

### 5.11.3 High Amenity Zones

There are a number of areas which DLRCC have identified as zones of high amenity in its CDP 2010–2016. These are areas which consist of landscapes of special value where inappropriate development would impact on the landscape setting negatively within the Draft LAP area. High amenity areas are also sensitive landscapes as development in these areas may affect directly or indirectly the quality of the high amenity areas.

There are three high amenity zones within the Draft LAP area. They include the two high plateau areas covered in transitional woodland scrub located east and southeast of Kiltiernan. The third amenity area is also a high plateau which is used as a pasture and is located south east of Kiltiernan, also see **Figure 5.10**. These areas have the potential to provide a major amenity for both active and passive recreational uses. In addition, there is the Glencullen valley and the Wicklow Mountains high amenity zones located approximately 4.5km and 8.5km from the Draft LAP boundary, respectively.

### 5.11.4 Protected Views and Prospects

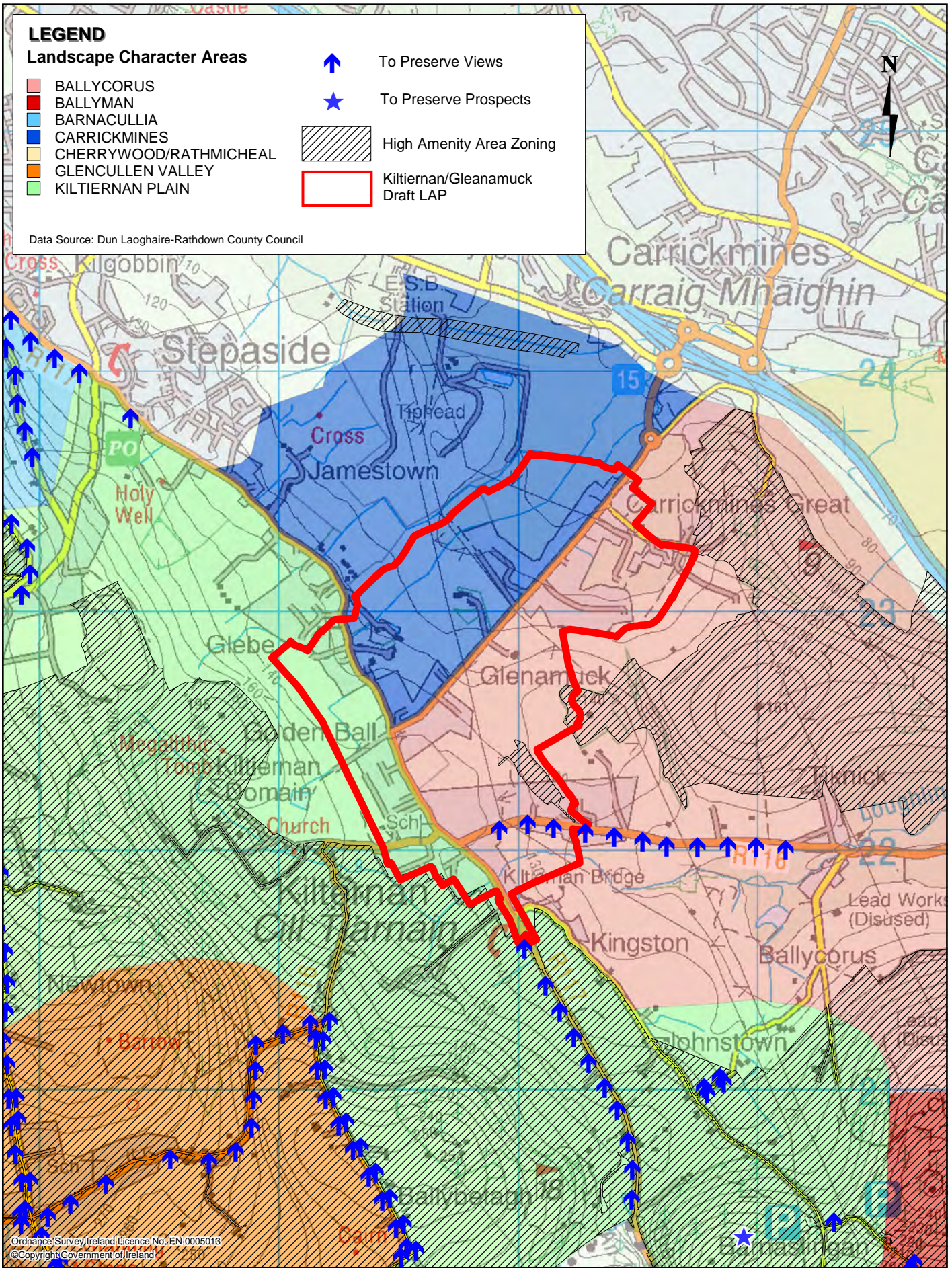
A protected view is the requirement within the Draft LAP to preserve the view of a specific place or historic building from another location. Important prospects are prominent landscapes or areas of special amenity value or interest which can be seen from the surrounding area. Within the Kiltiernan/ Glenamuck Draft LAP, there are two prospects that are protected. These are Carrickgollogan from the Enniskerry Road (south of Kiltiernan Village) and Three Rock Mountain and Two Rock Mountain from the Enniskerry Road and Sandyford Village. The prospect of the Scalp from the Enniskerry Road is being proposed as a preserved prospect within the CDP. In addition, the CDP deems the views southwards from Ballycorus Road as being of significant importance.

### **5.11.5 Habitats and Landscape Features of Importance for Biodiversity**

Most of our biodiversity occurs outside sites that are subject to legal protection under national or EU law. There are habitats and features that are of particular importance for biodiversity throughout the landscape. These include, but are not limited to, woodlands, hedgerows and other field boundary types such as stonewalls, earthen embankments and ditches, rivers, streams and associated riparian zones. These elements should be protected and enhanced. It is also important to recognise that habitats and landscape features cannot be sustained in the long-term in isolation from one another. There must be a network of protected areas, ecological 'corridors' and ecological 'stepping stones' available to support the movement of species and to sustain the habitats, ecological processes and functions necessary to maintain biodiversity.

### **5.11.6 Existing Landscape Environmental Pressures / Problems**

As the population in the Draft LAP increases, so too does the quantity of residential and associated development. The NFP for Kiltiernan will be critical in guiding the design of urban development. High amenity zones as well as protected views and prospects will become increasingly important with regards to future planning and development within the Draft LAP boundary and maintaining the natural beauty of this area. Consideration should be given to unprotected landscapes during planning and development as they provide habitats for a substantial amount of the biodiversity found within the Draft LAP. Any proposed development within the plan area should ensure that landscape designations are afforded protection.



**FIGURE 5.10 - LANDSCAPE CHARACTER AREAS, HIGH AMENITY AREA ZONING AND PRESERVED VIEWS & PROSPECTS**

## 5.12 INTER-RELATIONSHIPS

The interrelationship between the SEA environmental topics is an important consideration for environmental assessment. **Table 5.12** highlights the key interrelationships identified in this SEA. These potential interrelationships will be taken into account in the assessment of the different alternative development scenarios set out in **Section 8** of this report.

Of particular note are the primary relationships between water quality and biodiversity, flora and fauna. Flora and fauna, including protected species and habitats, rely directly on the aquatic environment as a habitat. Water and climate also have a key relationship. Global GHG emissions associated with transport, industry and other sources have the potential to negatively impact on climate change. This in turn can result in more frequent and more intense flooding and drought conditions affecting material assets, such as private residences and infrastructure, and biodiversity through changes in water quality and the hydrologic regime.

In carrying out the assessment, these important direct and indirect relationships have been taken into account fully to ensure a robust and complete assessment.

**Table 5.12: Key Interrelationships between SEA Environmental Topics**

<b>Soils</b>	√							
<b>Water</b>	√	√						
<b>Noise</b>	√	X	X					
<b>Biodiversity, Flora, Fauna</b>	√	√	√	√				
<b>Climatic Factors</b>	√	√	√	X	√			
<b>Material Assets</b>	√	√	√	X	√	√		
<b>Cultural Heritage</b>	√	√	√	X	√	√	√	
<b>Landscape</b>	√	√	√	√	√	√	√	√
	Population	Soils	Water	Noise	Biodiversity Flora, Fauna	Climatic Factors	Material Assets	Cultural Heritage

√ = interrelationship anticipated

X = no interrelationship anticipated

## 5.13 EVOLUTION OF THE ENVIRONMENT IN THE ABSENCE OF THE DRAFT LAP

**Population:** In the absence of the Draft LAP there may be pressure to increase population densities in an unsustainable manner with potential impacts on sensitive areas.

**Biodiversity, flora and fauna:** There can be conflicts between recreation/ tourism and biodiversity. Without this Draft LAP strict controls in respect of biodiversity flora and fauna on such development may not be in place and the balance between recreation and development may be one such conflict. Also, without the Draft LAP development will not be restricted or phased to mirror delivery of the appropriate infrastructure, such as drainage and wastewater, and this would also have negative impacts on biodiversity and water quality.

**Soils:** There could be increased pressure on green field lands as opposed to infill development in the absence of the Draft LAP.

**Water:** Without the plan, water quality in the plan area is likely to deteriorate due to unplanned development and lack of protection from policies.

**Noise:** With taller buildings and increased private car use, noise levels would increase significantly. Noise impacts must always be considered as it has a direct impact on human health.

**Climate:** An issue facing Kiltiernan/ Glenamuck in relation to climate change relates to the danger posed by flooding events, which may occur, at least in part, as a result of increased amounts of global GHG emissions from transport. High incidence rainfall events are occurring more frequently which cause local flooding. Without the plan, no transport solution or land use planning would take place and flooding could become an issue in the area.

**Material Assets:** With an increased population within Kiltiernan/ Glenamuck there will be increased generation of waste. The policies within the Draft LAP will facilitate, on a local level, the county waste management plan and the strategies to deal with collection, recycling and disposal of waste from householders and commercial businesses. Water supply demands would not be catered for with the population set to increase. This would lead to water shortages as the capacity of the current water sources is not sufficient to cope with an increase in population. As outlined above, without the Draft LAP no planned transport links would be provided resulting in unsustainable and unplanned development.

**Cultural, Heritage and Landscape:** Further development in Kiltiernan/ Glenamuck has the potential to cumulatively impact upon the cultural, heritage and landscape features in and surrounding the Draft LAP area. Development without the Draft LAP has the potential to change the landscapes of the area as well as negatively impact upon important cultural, archaeological and architectural sites which fall within and surrounding the Draft LAP area.

## 6 REVIEW OF RELEVANT POLICIES, PLANS AND PROGRAMMES

### 6.1 INTRODUCTION

The objective of the SEA Directive is “to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations in the preparation and adoption of plans and programmes with a view to promoting sustainable development”.

In order to meet the requirements of the Directive in this respect, the environmental assessment must,

*...identify the environmental protection objectives, established at International, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.*

The purpose of this review is to take into consideration the policy and legislative framework within which the Kiltiernan/ Glenamuck Draft LAP 2013-2019 is being developed. Consideration has been given to the key statutory and non-statutory plans, programmes and policies relevant to the Draft LAP in order to inform the SEA Strategic Environmental Objectives and Targets (discussed further in **Chapter 7**).

The following section provides an overview of the key relevant planning policies that are relevant and influence the Kiltiernan/ Glenamuck Draft LAP. **Appendix C** provides details on all of the key legislation, plans and programmes considered most relevant to Draft LAP.

### 6.2 THE KEY RELEVANT PLANNING POLICIES

The following is a summary of the key relevant policies, plans and programmes in relation to the Kiltiernan/ Glenamuck Draft LAP.

#### 6.2.1 Planning and Development Policies

##### **National Development Plan (2007-2013)**

The National Development Plan integrates strategic development frameworks for regional development, for rural communities, for all-island co-operation, and for protection of the environment with common economic and social goals. The National Development Plan together with the National Spatial Strategy and Regional Planning Guidelines must inform the development of Kiltiernan/ Glenamuck through its County Development Plan and associated Core Strategy, which in turn informs the Kiltiernan/ Glenamuck Draft LAP.

##### **National Spatial Strategy (2002-2020)**

The National Spatial Strategy (NSS) is a 20 year planning framework to guide policies, programmes and investment in the interest of delivering balanced social, economic and physical development and population growth between the regions. The National Spatial Strategy together with the Regional Planning Guidelines must inform the development of Kiltiernan/ Glenamuck through its County Development Plan and associated Core Strategy, which in turn informs the Kiltiernan/ Glenamuck Draft LAP.

It must be noted that in February 2013 the Government announced that the National Spatial Strategy was to be abandoned. The Minister for the Environment stated that “*it is scrapping the National Spatial*



*Strategy because the resources have never been provided to create planned “gateways” and “hubs”. It is understood that a new policy will replace this strategy some time in 2014.*

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

These Guidelines combine two Regional Authority Areas, the Dublin Regional Authority and the Mid-East Regional Authority. The Regional Planning Guidelines (RPG's) work to implement the strategic planning framework set out in the National Spatial Strategy (NSS). As part of the planning framework, the Guidelines allocate housing and population targets for the individual counties based on national and regional population targets set by the NSS. The RPG's designate Kiltiernan/ Glenamuck as a Secondary Economic Growth Centre. The RPG's set out that growth in the hinterland area which includes Kiltiernan/ Glenamuck will be focused on high quality integrated growth and consolidation. They specify that key towns will be separated from each other by extensive areas of strategic green belt.

### **Greater Dublin Area Transport Strategy (2011-2030)**

This strategy outlines a strategic transport plan for the GDA for the next 20 years. The role of the strategy is to establish the essential policies and measures required to support the GDA in meeting its full potential as are outlined in the Strategy visions and objectives.

### **Greater Dublin Strategic Drainage Study (2005)**

The Study was commissioned to carry out a strategic analysis of the existing foul and surface water systems in the following local authority areas; Dublin City, Fingal, South Dublin, Dún Laoghaire-Rathdown and the adjacent catchments in Meath, Kildare and Wicklow. The main objective of the study is to identify policies, strategies and projects for a sustainable drainage system for the Greater Dublin Region.

### **Dún Laoghaire-Rathdown County Development Plan (2010-2016)**

This Plan was prepared in accordance with the requirements and provisions of the Planning and Development Act and sets out an overall strategy for the proper planning and sustainable development of Dún Laoghaire-Rathdown over the period 2010-2016. This plan is very relevant to Kiltiernan/ Glenamuck Draft LAP as it sets out an overall vision, Core Strategy, policies and objectives for the County.

## **6.2.2 Environmental Plans and Policies**

### **Habitats (92/43/EEC) and Birds (2009/147/EC) Directives**

These directives seek to prevent and eliminate the causes of habitat loss and maintain and enhance current levels of biodiversity. The Habitats Directive requires Ireland and other EU member states to designate key habitats as Special Areas of Conservation (SACs) while the Birds Directive protects bird species through designation of Special Protection Areas (SPAs). Together, these form the Natura 2000 network of sites. The Draft LAP must protect designated sites and the habitats and species for which they have been designated (see also the Appropriate Assessment Screening for the Kiltiernan/ Glenamuck Draft LAP). There are no SAC or SPA sites within the boundary of the Draft LAP area.

### **Water Framework Directive (2000/60/EC)**

This Directive seeks to maintain and enhance the quality of all surface water and groundwater in the EU. The Directive is focussed at the River Basin District level to ensure that all potential pathways for pollution can be explored and measures to mitigate negative impacts can be better focussed. There are eight RBD on the island of Ireland and Kiltiernan/ Glenamuck falls into one of them: the Eastern RBD. River Basin Management Plans and associated programmes of measures have been developed for the region and must be implemented. The Kiltiernan/ Glenamuck Draft LAP must have regard to these measures. The assessment of potential impacts on water quality needs to be considered in the

context of the WFD and the River Basin Management Plan and Programme of Measures for the Eastern River Basin district which lays out the objectives for waters within Dún Laoghaire-Rathdown.

### **Surface Water Regulations (2009)**

Aligned to the WFD is the Surface Water Regulations (S.I. 272 of 2009). These Regulations have significant implications across a range of existing legislation. They provide for the classification of surface water bodies by the EPA for the purposes of the Water Framework Directive which dictates that water bodies are required to achieve Good Status by 2015.

### **Groundwater Directive (2006/118/EC)**

The Directive seeks to prevent and combat groundwater pollution in the EU. It contains key criteria for the assessment of the chemical status of groundwater, for identifying significant upward trends in groundwater pollution levels and for preventing and limiting indirect discharges of pollutants to groundwater.

### **Floods Directive (2007/60/EC) and Associated Eastern CFRAMS**

Floods are a natural and inevitable part of life in Ireland. Floods pose a risk to human life and wellbeing, can cause extensive damage to property and have significant consequences for the environment. With the effects of climate change, it is likely that there will be more frequent and severe flooding events in the future. The EU has responded to this with the Floods Directive. This Directive sets a framework for proactive management of flooding and, like the WFD, will see measures being implemented through the development plan process. The first step in this is the development of Catchment Flood Risk Assessment and Management Studies (CFRAMS) which are ongoing through the OPW. These studies will identify areas susceptible to flooding and identify measures to reduce or eliminate flooding in key areas. The Draft LAP falls within the Eastern CFRAM which commenced in June 2011 and will run until the end of 2015.

### **Urban Waste Water Directive (91/271/EEC), amended by Directive (98/15/EEC)**

The primary objective is to protect the environment from the adverse effects of discharges of urban wastewater, by the provision of urban wastewater collecting systems (sewerage) and treatment plants for urban centres. The Directive also provides general rules for the sustainable disposal of sludge arising from wastewater treatment.

### **Drinking Water Directive (80/778/EEC) as amended by (Directive 98/83/EC)**

The primary objective is to protect the health of the consumers in the European Union and to make sure drinking water is wholesome and clean. The (Drinking Water) (No. 2) Regulations 2007 (SI No. 278 of 2007) have the following aims:

- To provide for the creation of EPA and local authorities as supervisory authorities;
- To set obligations for water suppliers to provide wholesome and clean drinking water;
- To ensure protection of public health;
- To inform the public; and
- To monitor and carry out remedial action.

The Draft LAP must have regard to ensuring adequate and clean water is available for all existing and planned development for the area.

**Water Services Act (2007) and Water Services Investment Programme DEHLG (2010-2012)**

The Water Services Act provides for provision of water services and gives effect to certain Acts adopted by the institutions of the European Communities. The Act identifies and prioritises national water infrastructure through the Water Services Investment Programme (WSIP). The WSIP has evolved from needs assessments received from the 34 Water Services Authorities in Ireland (which includes Dún Laoghaire-Rathdown). The programme presents a balanced national strategic programme of works designed to support the national socio-economic objectives established by government in the National Development Plan and related plans and policies.

**Surface Water Regulations (2009)**

These Regulations have significant implications across a range of existing legislation. They provide for the classification of surface water bodies by the EPA for the purposes of the Water Framework Directive which dictates that water bodies are required to achieve Good Status by 2015.

**National Climate Change Strategy (2007-2012)**

This strategy outlines how Ireland will meet its 2008-2012 Kyoto commitments and identifies what further policy measures are needed. It shows sector by sector how the Kyoto commitments, to reduce national GHG emissions are to be met by a range of existing and additional measures including limiting emissions and investment in energy efficiency and renewable resources.

**National Sustainable Development Strategy (1997) and Making Ireland's Development Sustainable (2002)**

The aim for Ireland outlined in the Sustainable Development Strategy (1997) is "*to ensure that economy and society in Ireland can develop to their full potential within a well protected environment, without compromising the quality of that environment and with responsibility towards present and future generations and the wider international community*". The subsequent report in 2002 "Making Ireland's Development Sustainable" was a five-year review of the original 1997 Strategy. The overall tenet of the Strategy is to balance economic growth with a continued commitment to promoting environmental quality.

**National Biodiversity Plan (2011 – 2016)**

In response to the requirements set out in Article 6 of the UN Convention of Biological Diversity 1992, a Biodiversity Plan was prepared by the Department of Arts, Heritage, Gaeltacht and the Islands. This is the second National Biodiversity Plan and it builds upon the achievements of the previous Plan. The Plan seeks to ensure the full and effective integration of bio-diversity concerns in the development and implementation of other policies, legislation and programmes which is of critical importance if the conservation and sustainable use of bio-diversity is to be achieved.

**National Heritage Plan (2002-2006)**

The core objective is to protect and enhance Ireland's heritage. The Plan sets out archaeological policies and principles that should be applied by all bodies when undertaking a development. An aim of this National Plan is to enhance the role of Local Authorities in heritage protection and management.

## 7 STRATEGIC ENVIRONMENTAL OBJECTIVES, TARGETS AND INDICATORS

### 7.1 INTRODUCTION

SEA is carried out at a strategic level with a focus on readily available information (primarily desk-top assessment). It is therefore not possible for the baseline environment to be presented in as much detail as could be done for a project-level environmental impact assessment as often suitable baseline information does not exist at the regional or sub-regional level. Instead, SEA uses a system of *objectives*, *targets* and *indicators* to rationalise information for the purposes of assessment. This is the approach which has been taken for the Draft LAP assessment in this case, however where possible baseline led assessment has also been undertaken to provide the most robust assessment possible.

In order to streamline the assessment process, this report has used broad themes, based on the environmental topics listed in the SEA Directive, to group large environmental data sets, e.g., cultural heritage and climate. Assigned to each of these themes is a high-level **Strategic Environmental Objective** that specifies a desired direction for change, e.g. reduce CO<sub>2</sub> emissions, against which the future impacts of the Plan can be measured. These high-level Strategic Environmental Objectives are then paired with specific **Targets**. The progress towards achieving these specific Targets is monitored using **Indicators**, which are measures of identified variables over time and form part of the monitoring programme proposed as part of this SEA.

#### 7.1.1 Appropriate Assessment

As stated previously an AA is being undertaken in conjunction with the SEA process. The AA will specifically assess the likely impacts that will arise from the LAP having been examined in the context of a number of factors that could potentially affect the integrity of the Natura 2000 network. The SEO for biodiversity, flora and fauna as outlined in **Table 7.1** has been developed with reference to the associated AA and in consultation with the AA ecologist.

## 7.2 DEVELOPMENT OF STRATEGIC ENVIRONMENTAL OBJECTIVES, TARGETS AND INDICATORS

### 7.2.1 Strategic Environmental Objectives

There are essentially three types of Objectives considered as part of this SEA. The first relates to the *Objectives of the Kiltiernan/ Glenamuck LAP 2013 - 2019* (see **Chapter 4**). The second relates to wider *Environmental Objectives*, i.e. environmental protection objectives at national and European level (see **Chapter 6**), and finally there are the *Strategic Environmental Objectives (SEOs)*, which were devised to test the environmental effects of the Draft LAP.

The Strategic Environmental Objectives reflect the existing environmental issues relevant to the Draft LAP. They are focussed on protecting and enhancing the natural and human environment and on minimising negative effects. The Strategic Environmental Objectives were developed to be consistent with environmental protection objectives established by international, European and national environmental policies, objectives and standards.

The selected Strategic Environmental Objectives for this SEA are set out in **Table 7.1**. These Strategic Environmental Objectives are based on the current understanding of the key environmental issues identified as well as the indicative list of environmental protection objectives outlined in the document *Implementation of SEA Directive 2001/42/EC* (DoEHLG, 2004). Selection was also based on consultation with statutory consultees during the scoping stage and discussions between the SEA and LAP Team.

Also, included in **Table 7.1** are detailed assessment criteria, which represent the issues that will be considered during the assessment of whether the Draft LAP, including the proposed alternatives, will contribute to meeting the Strategic Environmental Objectives.

**Table 7.1: Strategic Environmental Objectives**

Environmental Objective	Detailed Assessment Criteria* – To what extent will the Draft LAP policies and objectives:	SEA Topics
<p><b>Objective 1</b></p> <p>Protect and where appropriate, enhance biodiversity, particularly protected areas and protected species.</p>	<ul style="list-style-type: none"> <li>• Provide effective protection of international, national and local “protected areas”;</li> <li>• Provide effective protection of biodiversity in the wider landscape including species protected by law;</li> <li>• Contribute to Irish Biodiversity Action Plan objectives;</li> <li>• Support delivery of Ireland’s Biodiversity Strategies and Dún Laoghaire-Rathdown Biodiversity Plan (2009-2013); and</li> <li>• Contribute towards protection of habitats from invasive species.</li> </ul>	<p>Biodiversity, Flora and Fauna (BFF)</p>
<p><b>Objective 2</b></p> <p>Improve people’s quality of life based on high-quality residential, working and recreational environments and on sustainable transport.</p>	<ul style="list-style-type: none"> <li>• Meet the core strategy of objectives in the Regional Planning Guidelines and the Dún-Laoghaire Rathdown County Development Plan.</li> <li>• Support the Dublin Agglomeration Noise Action Plan;</li> <li>• Increase modal shift to public transport;</li> <li>• Co-ordination of land use and transportation;</li> <li>• Improve access to recreation opportunities;</li> <li>• Protect drinking water areas (including private abstractions); and</li> <li>• Contribute to the mitigation of flooding.</li> </ul>	<p>Population (P)</p>
<p><b>Objective 3</b></p> <p>Improve water quality and the management of watercourses to comply with the standards of the Water Framework Directive and incorporate the objectives of the Floods Directive into sustainable planning and development.</p>	<ul style="list-style-type: none"> <li>• Improve water quality in rivers where currently less than good status and maintain groundwater status;</li> <li>• Support the objectives of the Eastern River Basin Management Plan;</li> <li>• Promote sustainable drainage practices to improve water quality and flow and to enhance opportunities for biodiversity;</li> <li>• Reduce the impacts from point source pollution, diffuse source pollution and morphological alterations;</li> <li>• Ensure sustainable levels of abstraction from surface and groundwater; and</li> <li>• Continue to promote sustainable use of water and water conservation.</li> </ul>	<p>Water (W)</p>
<p><b>Objective 4</b></p> <p>Protect and, where appropriate, enhance the function and quality of the soil resource in the lands within Kiltiernan/ Glenamuck Draft LAP.</p>	<ul style="list-style-type: none"> <li>• Re-use of underutilised lands in favour of development on Greenfield lands; and</li> <li>• Safeguard soil and geological quality, quantity and function.</li> </ul>	<p>Soil (S)</p>
<p><b>Objective 5</b></p> <p>Contribute to mitigation of, and adaptation to, climate change.</p>	<ul style="list-style-type: none"> <li>• Minimise emissions of greenhouse gases;</li> <li>• Reduce waste of energy and maximise use of renewable energy sources;</li> </ul>	<p>Climate Change (C)</p>

Environmental Objective	Detailed Assessment Criteria* – To what extent will the Draft LAP policies and objectives:	SEA Topics
	<ul style="list-style-type: none"> <li>• Ensure flood protection and management;</li> <li>• Encourage new housing to be energy efficient; and</li> <li>• Reduce vulnerability to the effects of climate change.</li> </ul>	
<p><b>Objective 6</b> Protect and, where appropriate, enhance the character, diversity and special qualities of cultural, architectural and archaeological, heritage within Kiltiernan/ Glenamuck Draft LAP.</p>	<ul style="list-style-type: none"> <li>• Improve protection for protected archaeological sites and monuments and their settings;</li> <li>• Improve protection for protected structures and conservation areas;</li> <li>• Improve protection for areas of archaeological potential and for undiscovered archaeology; and</li> <li>• Enhance access to sites of heritage interest.</li> </ul>	Cultural Heritage (CH)
<p><b>Objective 7</b> Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in Kiltiernan/ Glenamuck Draft LAP.</p>	<ul style="list-style-type: none"> <li>• Protect and, where appropriate, enhance designated areas of high quality landscape;</li> <li>• Improve protection for landscapes of recognised quality;</li> <li>• Ensure that landscape character is considered in the development process; and</li> <li>• Maintain clear urban/rural distinctions.</li> </ul>	Landscape (L)
<p><b>Objective 8</b> Make best use of existing infrastructure and promote the sustainable development of new infrastructure.</p>	<ul style="list-style-type: none"> <li>• Increase local employment opportunities i.e. adequate lands zoned for employment;</li> <li>• Improve efficiencies of transport, energy and communication infrastructure;</li> <li>• Ensure sufficient waste water treatment and water supply infrastructure to serve existing and new development;</li> <li>• Continue to provide water conservation measures;</li> <li>• Reduce the generation of waste and adopt a sustainable approach to waste management as outlined in the Waste Management Plan for the Dublin Region.</li> </ul>	Material Assets (MA)

\*Detailed criteria are cited where appropriate and these will be used to ensure consistent application of the objectives. Note air quality and human health have been screened out as part of the scoping process. See Table 3.2.

### 7.2.1.1 Internal Compatibility of Strategic Environmental Objectives

The internal compatibility of the Strategic Environmental Objectives has been examined to identify potential areas of conflict in relation to each objective so that subsequent decisions can be well based. As shown in **Table 7.2** the eight objectives above are generally compatible. In some cases there is no obvious relationship between the objectives.

**Table 7.2: Internal Compatibility of Strategic Environmental Objectives**

Objective 1 BFF	Y							
Objective 2 P	Y/N	Y						
Objective 3 W	Y	Y	Y					
Objective 4 S	Y	Y	Y	Y				
Objective 5 C	Y	Y	Y	0	Y			
Objective 6 CH	Y/N	Y/N	Y/N	Y/N	Y	Y		
Objective 7 L	Y/N	Y	Y	Y	0	Y	Y	
Objective 8 MA	Y	Y	Y	Y/N	Y	Y/N	Y	Y
	Obj 1 BFF	Obj 2 P	Obj 3 W	Obj 4 S	Obj 5 C	Obj 6 CH	Obj 7 L	Obj 8 MA

Key: Y = Yes, compatible      N = No, not compatible      0 = Neutral      Y/N = May be compatible depending on how it is implemented

BFF: Biodiversity, Flora and Fauna; P: Population; S: Soil; W: Water; C: Climate Change; MA: Material Assets; CH: Cultural Heritage; L: Landscape

## 7.2.2 Strategic Environmental Indicators and Targets

The overall purpose of Environmental Indicators in the SEA is to provide a way of measuring the environmental effect of implementing the Draft LAP. Environmental Indicators are also used to track the progress in achieving the Targets set in the SEA as well as the Draft LAP itself. The proposed Indicators have been selected bearing in mind the availability of data and the feasibility of making direct links between any changes in the environment and the implementation of the Draft LAP.

Targets were identified as part of the baseline data collection and assessment process, and throughout the consultation process, in order to meet the Strategic Environmental Objectives as well as the objectives of the Draft LAP. In each case, any target that is set must be attributable to the implementation of the Draft LAP. The targets and indicators associated with each SEA Objective are presented in **Table 7.3**.

**Table 7.3: Strategic Environmental Objectives, Targets and Indicators**

Objectives	Targets	Indicators	Source/ Responsibility
<b>Objective 1 Biodiversity, Flora &amp; Fauna</b> Protect and where appropriate, enhance biodiversity, particularly protected areas and protected species.	No net loss of designated sites, species or habitats.	Reported/ Estimated levels of damage to designated sites/ species/ habitats as identified by GIS and AA.  No. of Appropriate Assessments Carried out.  Number of planning permissions with biodiversity conditions ensuring no net loss of green linkages / ecological networks.  Loss of land actively managed for conservation.	NPWS DLRCC Planning/ Environment Department
	No net loss of green linkages / ecological	Loss of green linkages/ ecological networks identified through GIS and Habitat	DLRCC Environment Department/ GIS

Objectives	Targets	Indicators	Source/ Responsibility
	networks	Mapping	
	Prevent further spread of alien/ invasive species.	Number of sites reported to contain alien/ invasive species.	NPWS DLRCC Environment Department
<p><b>Objective 2 Population</b> Improve people's quality of life based on high-quality residential, working and recreational environments and on sustainable transport</p>	No increase in population above core strategy population targets	% change in population based on core strategy targets based on RPG figures.	CSO
	Appropriate mix of tenure types (including social housing) in all new developments.	% of private and social housing in new developments  % mix of tenures based on housing strategy requirements.	DLRCC Planning and Housing Departments
	All significant planning applications for new residential developments within areas designated for expansion to be accompanied by a design statement.	% of significant planning applications granted for new residential developments that are accompanied by a design statement.	DLRCC Planning Department
	Increase access to public transport from households.	Construction/ improvement of footpaths/ greenways/ cycle infrastructure	DLRCC Roads Department
<p><b>Objective 3 Water</b> Improve water quality and the management of watercourses to comply with the standards of the Water Framework Directive and incorporate the objectives of the Floods Directive into sustainable planning and development.</p>	Implementation of the Programme of Measures identified under the ERBD River Basin Management Plan.	% increase in waters achieving 'good status' as defined in the WFD.	EPA and DLRCC Environment Department
	Ensure wastewater collection system capacity is provided either prior to construction of new development or is developed in parallel.	Wastewater collection system capacity compared with wastewater collection demand from development in the LAP.	EPA and DLRCC Environment Department
<p><b>Objective 4 Soil</b> Protect and, where appropriate, enhance the function and quality of the soil resource in the lands within Kiltiernan/ Glenamuck Draft LAP.</p>	Increase in any derelict buildings being redeveloped	Number of derelict buildings being redeveloped based on commencement notices	Commencement notices
<p><b>Objective 5 Climate Change</b> Contribute to mitigation of, and adaptation to, climate change.</p>	All new development applications within areas at risk of flooding to submit a flood impact assessment.	Number of new development applications within areas at risk of flooding without flood impact assessment.	DLRCC Planning Department
	Increase access by households to sustainable forms of	Passenger numbers. Funding allocated to	DLRCC Planning and Roads Department



Objectives	Targets	Indicators	Source/ Responsibility
	transport, including bus and rail services.	improvement of walking and cycling facilities.	
<p><b>Objective 6 Cultural Heritage</b> Protect and, where appropriate, enhance the character, diversity and special qualities of cultural, architectural and archaeological, heritage within Kiltiernan/ Glenamuck Draft LAP.</p>	No impact on the fabric or setting of monuments on the Record of Monuments and Places (RMP) by development granted planning permission.	Number of monuments on the RMP, impacted by granted planning permissions.	The Archaeological Survey monitoring programme, Ireland
	No impacts on the architectural heritage value or setting of protected structures by development granted planning permission.	Number of protected structures impacted by development granted planning permission.	Buildings at Risk Register, Heritage Council Ireland. DLRCC Planning Department
	No protected structures to be demolished because of long term neglect and dereliction.	Number of protected structures that have been demolished because of long term neglect and dereliction.	Buildings at Risk Register, Heritage Council Ireland. DLRCC Planning Department
<p><b>Objective 7 Landscape</b> Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in Kiltiernan/ Glenamuck Draft LAP.</p>	No negative alteration to protected views.	Number of visual impact assessments received as part of development proposals	DLRCC Planning Department
	No planning permission granted within special qualities of landscapes that materially contravene the policies or objectives of the LAP.	Number of planning permissions granted which materially contravene the special qualities of landscapes.	DLRCC Planning Department
<p><b>Objective 8 Material Assets</b> Make best use of existing infrastructure and promote the sustainable development of new infrastructure.</p>	Minimise the % of unaccounted for water. This refers to leakage from the system.	% unaccounted for water	EPA
	Increase in planning permissions making provision for renewable energy and water conservation measures.	No of planning permissions making provision for renewable energy and water conservation measures.	DLRCC Planning Department

## 8 LOCAL AREA PLAN ALTERNATIVES

### 8.1 INTRODUCTION

The preparation of Local Area Plan policy and objectives affecting a geographical area such as Kiltiernan/ Glenamuck presents a significant opportunity to affect the way physical change and development occurs, where it happens and the character of that process. The SEA process seeks to document the development process where key decisions are reached, and consider the environmental impacts of the policy path chosen. The examination of alternative means of achieving the strategic objectives of the LAP, in the first place recognises the broad challenges before policy makers, as well as seeking the articulation of why the LAP prescribes one path over another.

The consideration of LAP alternatives is a real-world exercise that recognises that the LAP must work within an existing context of National and Regional Strategic Plans, climate change, and an Irish and European legislative framework that has sustainable development at its core. It is not an open-book exercise, where every conceivable option is examined. Therefore, in selecting realistic alternatives that could be evaluated, 'no development' or 'unconstrained development', were considered unreasonable alternatives, as they are unlikely to be delivered and would not reflect the statutory and operational requirements of the LAP. This section sets out the following:

- The legislative context for the consideration of alternatives;
- An outline of the reasons for selecting the alternatives dealt with;
- A description of the alternatives; and
- Evaluation of the alternatives and identification of preferred alternative.

### 8.2 LEGISLATIVE CONTEXT

The consideration of alternatives is a requirement of the SEA Directive (2001/42/EC). It states under Article 5(1) that;

*Where an environmental assessment is required under Article 3(1), an environmental report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated. The information to be given for this purpose is referred to in Annex I.*

Annex 1 (h) of the Directive clarifies that the information to be provided on alternatives under Article 5(1), is *inter alia* an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.

Article 9 of the Directive requires that a statement shall be prepared providing information on the reasons for choosing the plan as adopted, in the light of the other reasonable alternatives dealt with.

Annex 1 (f) details the environmental topics to be considered in the evaluation of the alternatives, which is the same as that addressed in the assessment of the plan itself:

*...biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.*

Therefore, the Directive emphasises that the SEA process must consider alternatives that are 'reasonable', and take into account 'the objectives' of the plan, and 'the geographical scope of the plan'.

The term 'reasonable' is not defined in the legislation. Good practice points to the analysis of 'alternatives' as being a constructive and informative exercise for the policy makers, and that only 'possible' scenarios/options for policy are examined. Plan scenarios that run counter to European environmental directives, the National Spatial Strategy (NSS), Ministerial Guidelines or Regional Planning Guidelines (RPG) would not be considered reasonable.

Alternatives are required to take into account the objectives of the Draft LAP. The alternatives study therefore must operate within the strategic objectives, set out for the plan, and provide an examination of alternative means of implementing the draft LAP.

Section 3.14 of the DEHLG Guidelines notes that the higher the level of the plan, the more strategic the options which are likely to be available. Conversely, lower tier plans, such as LAPs, will be framed in a policy context set by the level(s) above them, and strategic options may be limited. As a result, the strategic options available to the preparation of the Kiltiernan/ Glenamuck Draft LAP 2013 – 2019 are limited in terms of growth scenarios as population and housing growth is inherited in the form of the Core Strategy of the strategic planning framework of the NSS, RPGs and Dún Laoghaire-Rathdown County Development Plan (CDP). The preparation of local area plan policy and objectives affecting a geographical area such as Kiltiernan/ Glenamuck presents a significant opportunity to affect the way physical change and development occurs, where it happens and the character of that process. The alternatives study must consider policies appropriate for the nature and extent of the Draft LAP.

The Directive does not prescribe at what stage consideration of alternatives should be undertaken, as it requires a rationale for choosing the LAP as adopted in the light of the other reasonable alternatives dealt with. However, to present a useful input into the plan making process, all guidance points to alternatives assessing the implementation of the LAP at a strategic level, at the stage where the preferred strategy is being finalised. This is not to say that location specific policies should not be examined. But this must be placed within the context of the SEAs role to examine the strategic environmental implications of the direction of the plan at the appropriate policy level.

### **8.3 REASONS FOR SELECTING THE ALTERNATIVES**

The SEA process seeks to document the LAP process where key decisions are reached, and consider the environmental impacts of the policy path chosen. The examination of alternative means of achieving the strategic objectives of a LAP, in the first place recognises the broad challenges before policy makers, as well as seeking the articulation of why the LAP prescribes one path over another.

It is a mandatory objective of the CDP that sufficient lands are zoned for particular purposes. This is especially relevant in relation to the quantum and location of new residentially zoned lands. In this regard it is important to highlight that it is not proposed to rezone any significant additional residential or commercial lands within the Kiltiernan/ Glenamuck Draft LAP 2013 –2019, which have been zoned as part of the CDP process.

The Draft LAP team developed three alternative plan scenarios detailing potential scenarios for the future development of Kiltiernan/ Glenamuck. Scenarios developed are not predictions or preferences; instead they offer a range of outcomes arising from different planning and development strategies. These scenarios form the basis for comparative evaluation of the likely environmental effects.

Alternatives are required to take into account the objectives of the Draft LAP. The alternatives study therefore must operate within the constraints of the Core Strategy and the strategic objectives, set out for the Draft LAP, and provide an examination of alternative means of implementing the Draft LAP.

The Core Strategy sets out, in explicit terms, what development quanta are permitted in each LAP area. Combined with LAPs which may already have an underlying land use zoning (which will determine permissible land uses) and national guidance (for example on residential density – which the Planning Authority must comply with), the range of alternative development scenarios in some circumstances is limited. Specifically, the selection of distinct, realistic, credible alternative development scenarios for Kiltiernan / Glenamuck LAP area is constrained by a number of factors:

### **The Underlying Zonings for the LAP**

Many of the LAP areas in Dún Laoghaire-Rathdown have an 'A1' land use zoning. This zoning allows for a broad range of possible land uses, and possible development scenarios, to be proposed in accordance with an approved LAP. This allows, at LAP stage, for a wide range of possible development scenarios to be tested. Kiltiernan-Glenamuck does not have an 'A1' zoning - in contrast, the underlying land use zonings for the LAP were established through the CDP. The location of major tranches of zoned development lands is not 'negotiable' through the LAP process – any development scenario must work with these zonings. For instance, the location of the new 'Neighbourhood Centre' in Kiltiernan Glenamuck is 'cast in stone' as a result of the underlying zoning – examining a possible scenario where a neighbourhood centre might be located to the north of the Plan area, for example, would not be consistent with the CDP and would therefore not be a realistic scenario.

### **National/ Local Guidance on Development Intensity**

Seventy five percent (114ha) of the zoned land in the LAP area is residential. In relation to residential density, the development of these lands is subject to the standards set down in the 'Sustainable Residential Development in Urban Areas – Guidelines for Planning Authorities' (2008), which is in turn reflected in CDP policies. Where a site is located within circa 1 kilometre pedestrian catchment of a rail station and/or Luas line, and/or 500 metres of a Quality Bus route, and/or 1 kilometre of a town or district centre, higher densities at a minimum of 50 units per hectare will be encouraged subject to residential development management standards. Outside of this catchment, other density standards apply. The Planning Authority must have regard to the Guidelines and must set out development standards that accord with the Guidelines - effectively dictating the quantum and intensity of residential development that will be proposed at Kiltiernan/ Glenamuck.

### **Core Strategy**

The Core Strategy was adopted as a Variation to the CDP in 2011. The purpose of the Core Strategy is to demonstrate how the CDP, with a particular focus on the amount of zoned housing land, is entirely consistent with national and regional development objectives set out in the NSS (2002- 2022) and RPGs (2010-2022). The Core Strategy includes a settlement strategy table which sets out the population target for the County, divided by settlement. The figure for the LAP area has estimated at 2,400 residential units, over the lifetime of the present RPGs – i.e. up to 2022. The Core Strategy was endorsed by the Regional Authority and the DoECLG.

## **8.4 ALTERNATIVES CONSIDERED FOR SEA**

The alternative scenarios can consist of spatial alternatives (where to develop), temporal alternatives (phasing/ time scale of development) and zonal alternatives (different land use zonings for specific areas). For the purposes of the Draft LAP, as the land use zonings are 'inherited' from the CDP and sit within the context of the Council's 'Core Strategy' and the overall strategic land supply for the County, it is primarily a range of 'temporal' and 'zonal' alternatives that were examined.

The Scenarios presented provide alternative visions of how the future development of Kiltiernan/Glenamuck might occur. These are neither predictions nor preferences - instead they offer a range of plausible and internally consistent narratives of the outcome of different planning and development strategies. These provide the basis for the comparative evaluation of the likely environmental effects of each plan, which in turn serves the purpose of identifying which features of plans and policies are likely to be sensitive or robust over the widest range of circumstances.

The following strategic alternatives for the Draft LAP were considered for assessment as part of the SEA process for the Draft LAP 2013-2019. Arising from this discussion the strengths and weaknesses of the various approaches are evaluated and a preferred alternative derived. A summary of the assessment is provided in **Table 8.1**. The environmental effects have been assessed in light of the strategic environmental objectives (SEOs) outlined in **Chapter 7**.

#### **8.4.1 Scenario 1 - 'Do – Minimum'**

##### **Planning Context**

For this scenario there would be no adoption of a LAP for Kiltiernan/Glenamuck. While there is an objective in the CDP 2010-2016 to develop Kiltiernan/Glenamuck in accordance with the approved LAP, a case could be made that no new Plan be adopted and the area be developed only with reference to the zonings of the CDP without any reference to a LAP. Issues to be considered would be:

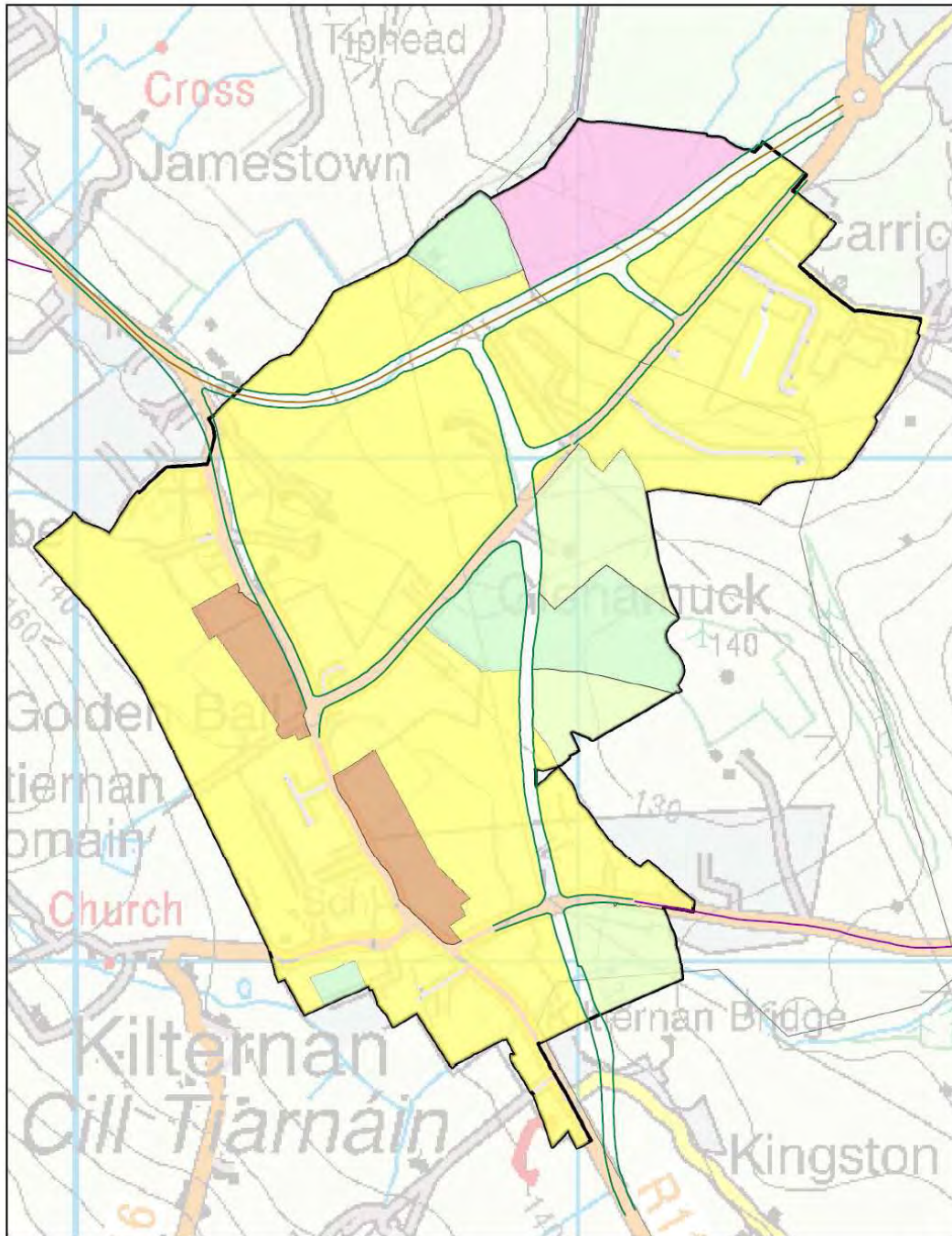
- This scenario would be in compliance with the Core Strategy as it contains the provision for residential development in line with the proposed population targets.
- The nuances of gradation in residential density between the various parcels of land would not be implemented. Therefore, land adjacent to the Luas line at the north-east of the Draft LAP area would not be developed at higher residential densities than the rest of the Plan area.
- A phasing and sequencing plan would not be implemented. The implementation of schools/open space/public transport infrastructure/amenities would not be specifically coordinated with the delivery of residential/commercial development.
- The fine-grain of policy related to conservation/biodiversity etc - on a site-by-site basis which can be applied at LAP level would not be established. General CDP policy would govern development proposals in the area.
- It would not be possible to coordinate closely the delivery of schools, public spaces and community infrastructure co-terminus with the delivery of residential and commercial development.
- The coordination of development with the delivery of roads infrastructure would be much more difficult, in the absence of phasing/sequencing policies to guide development.

##### **Environmental Effects**

As previously identified even if the LAP was not to be implemented the land use zonings from the CDP would still be applicable and developers could apply for planning permission in relation to the land use zones identified. It is anticipated that with this scenario, a haphazard and uncoordinated pattern of development could emerge. This scenario would affect the Strategic Environmental Objectives (SEOs) in the following manner:

- A scenario could arise whereby a large amount of development could proceed without the necessary new roads infrastructure to support it.
- Lack of phasing of residential dwellings along with implementation of the necessary services, schools, community facilities, water and wastewater supplies would lead to a negative quality of life for the residents.
- The lack of graduation of development would have huge impacts on the protection of the diverse landscapes within and in proximity to Kiltiernan/ Glenamuck. Views particularly to Two and Three Rock Mountain could be compromised as a result of development and lack of proactive policies in this regard.

Figure 8.1: Alternative - Scenario 1



-  Objective A
-  Objective B
-  Objective E
-  Objective NC
-  Objective F



Map is based on CDP land use zoning

## 8.4.2 Scenario 2 – Medium Density Approach

### Planning Context

Under this scenario, it is proposed to use a blanket medium density approach to development across the entire plan area regardless of distance to public transport corridors. Present demands from the property development industry strongly favour applying reduced residential densities in areas like Kiltiernan, on the basis that the market demands of the moment.

Apply a residential density of 40-50 residential units per hectare. Apply a medium residential density, even within the catchment of the Luas Line. This density of residential development would deliver a quantum of development consistent with the requirements of the 'Core Strategy'. Allow both 'Neighbourhood Centre' zones to develop, based on market demands, without discriminating between the two zones.

This scenario would envisage a phasing plan which would see the lands within the Luas catchment develop as a first phase. The medium residential density across the Plan area will significantly reduce the residential yield of housing - of that proposed in the Draft LAP. Despite the lower overall rate of residential development, the proposed Greater District Distributor Road (GDDR) Scheme, in some form, would still be required, to allow for the creation of a lightly trafficked, bypassed village core and to provide access to development land parcels.

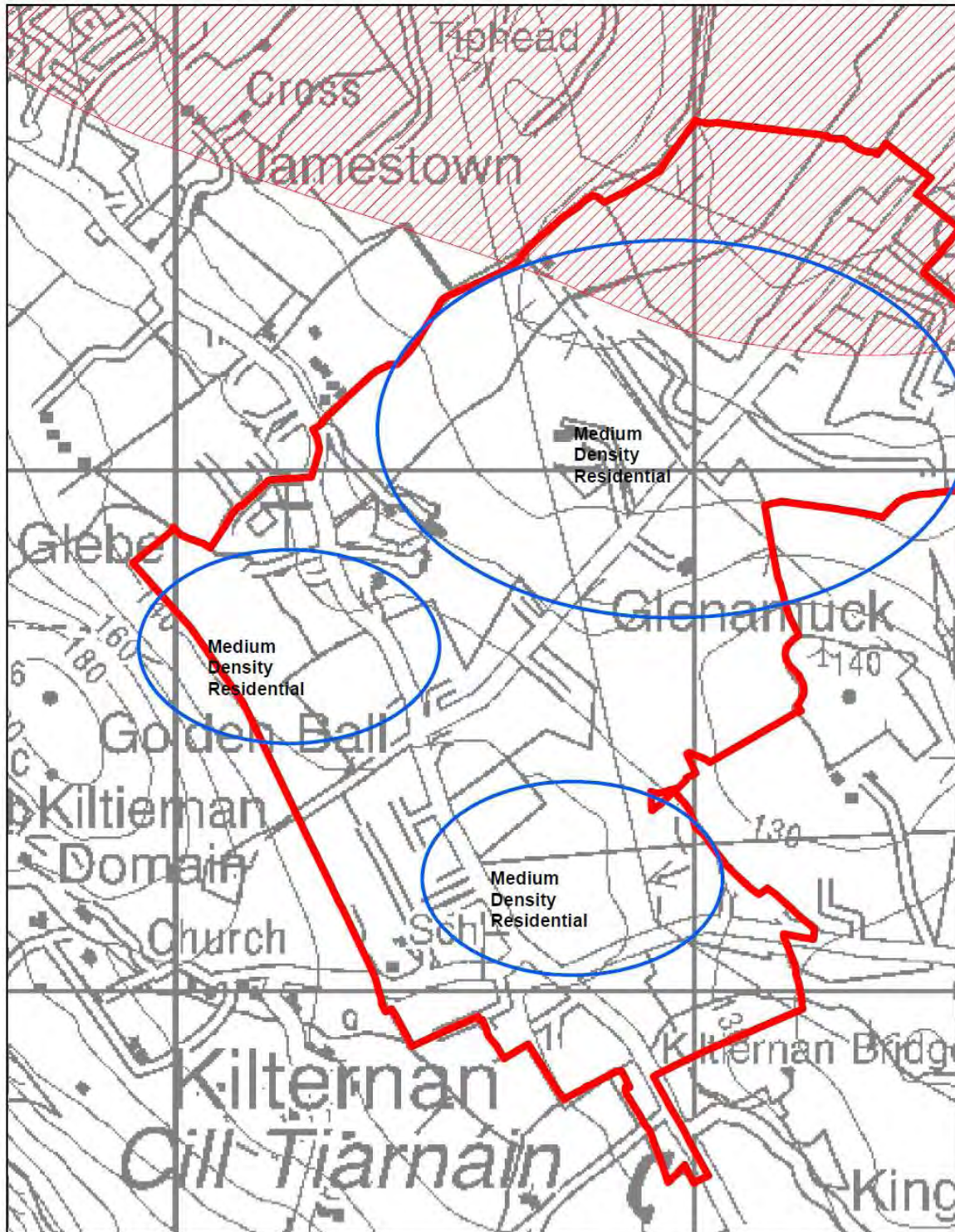
This scenario would allow for medium density residential development adjacent to and within both 'Neighbourhood Centre' zones. Also facilitated, in accordance with present market demands, would be an abandonment of any objectives for retail/commercial development with the village core – medium density residential development would be allowed to proceed without reference to any Neighbourhood Framework Plan and solely in the context of short-term housing-market demands.

### Environmental Effects

The medium density approach scenario would affect the SEO in the following manner:


- This scenario would not be in accordance with 'Sustainable Residential Development in Urban Areas – Guidelines for Planning Authorities (2008)'. The aforementioned guideline specifically states that sites within 1km of a Luas Line that higher densities at a minimum of 50 units per hectare will apply.
- It would impact on sustainability and the Material Assets Objective as the Draft LAP lands will be dominated by car usage and there will be less justification for the Luas Line based on the medium density residential development. The lack of development of higher density around the Luas Line would impact on the Climate Change SEO as energy usage through the motor vehicles would not be reduced. Likely to result in less open space as more lands would need to be developed to meet population targets in line with the core strategy.

Figure 8.2: Alternative - Scenario 2



No formal phasing and sequencing proposed - as per market demands



 Luas Line 1km Catchment



### 8.4.3 Scenario 3 - Mixed Range of Densities

#### Planning Context

Develop Kiltiernan-Glenamuck broadly in line with the density provisions laid out in the 2007 LAP. Provide phasing and sequencing which coordinates residential/ commercial development with the provision of transport and social/ community infrastructure. Provide specific guidance on each development parcel, providing a rational planning framework for the area, ensuring a level of certainty in relation to development quanta.

Under this scenario, some flexibility is provided in relation to residential densities - the majority of the residential zoned land is designated as low or medium density - and present market demands for 'own-door' type housing can be facilitated in the short term. Longer-term protection of investment in public transport infrastructure and the objective of encouraging a modal shift toward non-car based transport are also facilitated. The gradations of residential density are based on proximity to high-quality rail-based public transport.

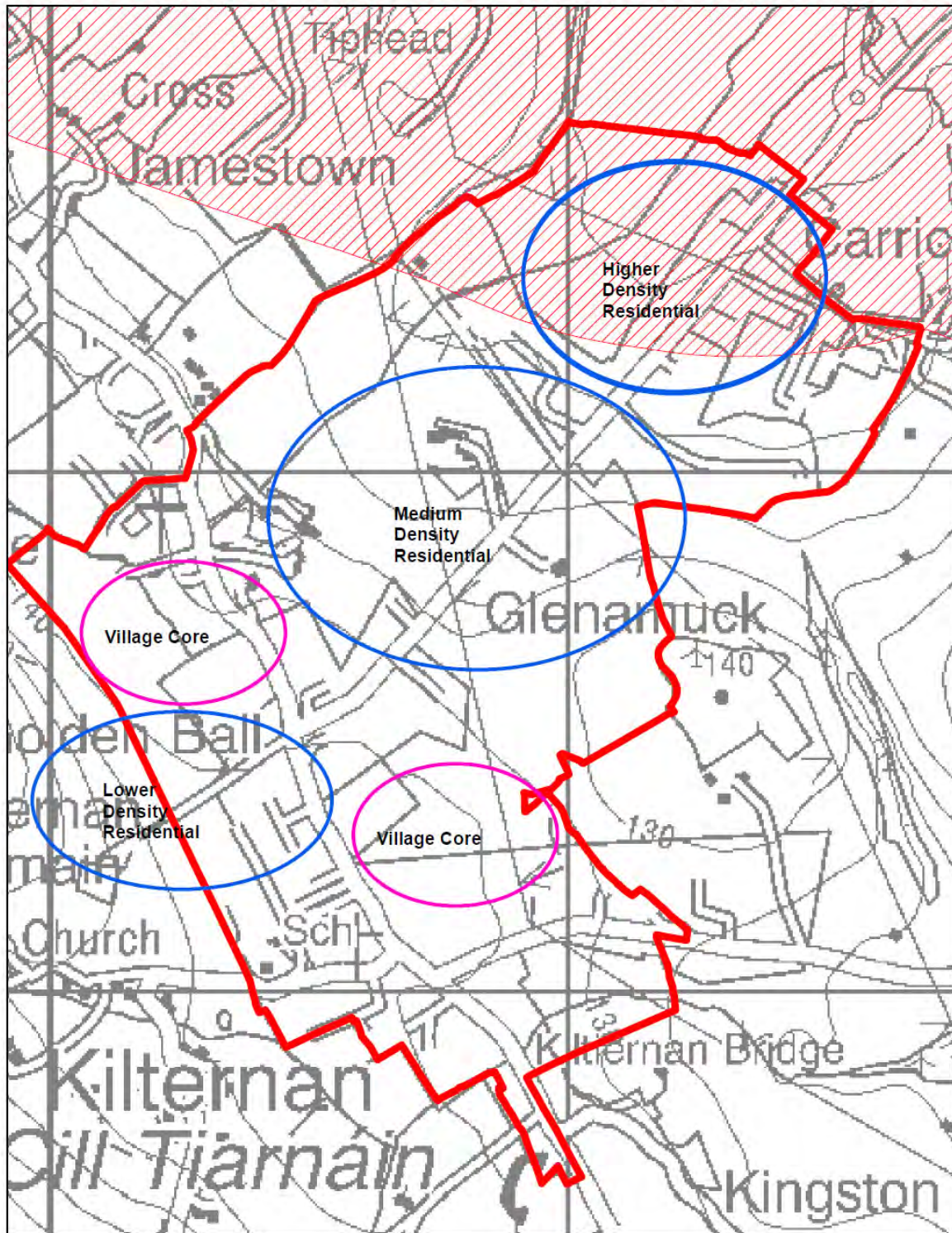
Phasing and sequencing of development is closely linked with the provision of infrastructure. Under this scenario, up to 1000 units will be accommodated in three nodes, in advance of the construction of the GDDR Scheme. The majority of the lands proposed for the first phase are to be located adjacent to the existing village core, to facilitate the consolidation of neighbourhood centre facilities and services in this location. Some development will also be facilitated at the northern portion of the LAP.

#### Environmental Effects

The mixed range of densities scenario would affect the SEO in the following manner:


- This scenario would be in compliance with the Core Strategy and relevant planning policies.
- As with the other scenarios this scenario will not have the ability to enhance biodiversity as there will be substantive loss of greenfield land.
- The phasing and sequencing of development and the adequate provision of infrastructure and environmental services would provide residences with a good quality of life as they would be living in area that is properly serviced.
- The provision of higher density residences in proximity to the Luas catchment will encourage sustainable transport and a reduction in energy usage.

Figure 8.3: Alternative - Scenario 3



Phasing and sequencing of infrastructure with residential development



 Luas Line 1km Catchment

## 8.5 AA SCREENING OF ALTERNATIVES

Appropriate Assessment (AA) Screening has been undertaken which specifically addressed potential impacts on the Natura 2000 sites in proximity to the Draft LAP. Within a 15km radius of the Draft LAP there are fifteen Natura 2000 sites, however there are no sites within the boundary of the Draft LAP.

After a review of the three scenarios presented it was concluded that as Scenario 2 would incur less people through the provision of low density development and hence there would be less pressure on wastewater facilities and on the need to have SUDs. However it would be important to consider the population targets within the Core Strategy and a reduced population in the Kiltiernan/ Glenamuck area would mean that other regions within Dún Laoghaire-Rathdown would experience a higher concentration of development. Depending on the location of this higher concentration of development and its proximity to Natura 2000 sites potential impacts are likely to be greater than in Scenario 3 which is for planned development. Therefore Scenario 3 should also be considered as this is the preferred scenario and has been subject to AA Screening which concluded that Draft LAP will not have a significant effect on the Natura 2000 network

## 8.6 EVALUATION OF SEA ALTERNATIVES

**Table 8.1** summarises the scoring for each development alternative against the Strategic Environmental Objectives (SEOs).

**Table 8.1: Alternatives Option Scores against SEOs**

Alternative Scenarios	Likely to Improve status of SEOs	Neutral interaction with status of SEOs	Potential Conflict with status of SEOs would be mitigated	Probable Conflict with status of SEOs – unlikely to be mitigated
Scenario 1			SEO2, SEO3, SEO5, SEO6, SEO8	SEO1, SEO4
Scenario 2	SEO7		SEO2, SEO3, SEO5, SEO6, SEO8	SEO1, SEO4
Scenario 3	SEO2, SEO5, SEO6, SEO7, SEO8		SEO3, SEO6	SEO1, SEO4

### 8.6.1 SEA Preferred Scenario

**Table 8.1** highlights that Scenario 3 is generally considered to be the most positive alternative when measured against the SEOs of the Environmental Report. Even though Scenario 3 provides for a high concentration of residential development it does so in a planned and phased manner.

## 8.7 THE PREFERRED SCENARIO

The preferred Scenario as proposed under the development strategy for the Draft LAP is Scenario 3. The Scenario as chosen within the Draft LAP is in accordance with preferred scenario as prepared in this environmental report.

## 9 EVALUATION OF LOCAL AREA PLAN POLICIES AND OBJECTIVES

### 9.1 INTRODUCTION

The purpose of this section of the Environmental Report is to evaluate as far as possible the potential environmental effects of the Draft LAP policies and objectives and to set out measures to prevent, reduce and as far as possible offset any significant adverse effects on the environment. The compatibility of the policies and objectives of the Plan have been reviewed against the Strategic Environmental Objectives for biodiversity, flora and fauna, population, soil, water, climatic factors, material assets, cultural heritage and landscape (as set out in **Table 7.1**). The approach used for assessing the policies / objectives for the Plan is an objectives led approach using assessment matrices in line with current best practise for SEA of land use Plans in Ireland. Where feasible, baseline led assessment has also been used, to ensure as robust an assessment as possible.

### 9.2 POLICIES AND ACTIONS SCREENED OUT OF ASSESSMENT

In order to streamline the assessment process, all policies/ objectives within the Draft LAP that have a positive effect on the environment were identified. These policies/ objectives were then 'Screened Out', of the assessment process as they clearly demonstrated that they were having a positive influence on the environment. The Assessment Matrices in **Appendix D** have included these policies/ objectives but they have been shaded in green for clarification as they are screened out of the assessment process.

**Table 9.1** provides an overall summary of the policies/ objectives contained within the Draft LAP and it categorises the policies/ objectives according to their impact on the environment. The policies/ objectives which have been screened out are identified within the 'Positive' column and shown in **GREEN**. There are some policies that were identified as being positive but were not screened out as it was felt that there could be uncertain elements which required further assessment therefore they were included within the full assessment process.

**Table 9.1: Draft LAP Policy/ Objectives Impacts**

	Positive Impacts (Screened Out)	Neutral Impacts	Uncertain Impacts	Negative Impacts
Primary Objectives	V01, <b>V02, V03, V04, V05, V06, V07</b>	V01, V04		V01
Residential Objectives	RE01, RE02, <b>RE03, RE04, RE06, RE07, RE08, RE09</b>	RE05	RE02	RE01, RE02, RE05
Economic Activity Objectives	<b>E01, E02, E03, E04, E109</b>	E02		E02
Landscape Heritage Conservation Objectives	<b>LCH1, LCH2, LCH3, LCH4, LCH5, LCH6, LCH7, LCH8, LCH9, LCH10, LCH11, LCH12, LCH13, LCH14, LCH15, LCH16, LCH17, LCH20, LCH 21, LCH22, LCH23</b>	LCH18, LCH19		LCH18, LCH19
Urban Design: Built Form Objectives	<b>BF01, BF02, BF03, BF04, BF05</b>		BF03	BF03
Movement / Transport Objectives	<b>MT03, MT05, MT06, MT07, MT09</b>	MT10	MT01, MT02, MT04, MT08	MT01, MT02, MT07, MT08
Environmental Infrastructure Objectives	<b>EI01, EI02, EI03, EI04, EI05, EI06, EI07, EI08, EI09, EI10, EI11, EI13</b>		EI12	EI05, EI09

	Positive Impacts (Screened Out)	Neutral Impacts	Uncertain Impacts	Negative Impacts
Open Space and Recreation Objectives	OS01, OS03, OS06, OS07	OS07	OS02, OS04, OS05	OS02, OS04, OS05, OS07
Social and Community Development Objectives and Actions	SC03, SC04		SCD02	SCD01, SC03, SC04
Neighbourhood Centre Objectives	NC01, NC02, NC03			NC01, NC02, NC03
Land Use Zoning Objectives	Obj A , Obj B, Obj E, Obj F, Obj NC and Obj G			

### 9.3 IMPACT ASSESSMENT METHODOLOGY

A pro-active approach has been taken in the methodology of this Draft LAP through inclusion of a number of overall protective policies within the Plan in the first instance, these policies/ objectives are outlined in **Table 11.1**, within the mitigation chapter. It is intended that these policies/ objectives will protect against potential significant impacts as a result of implementation of the Draft LAP.

The following section of the report provides a discussion of the main likely significant impacts (positive and negative, direct and indirect, cumulative and synergistic), which are anticipated from implementation of the policies/ objectives contained within the Draft LAP. The Draft LAP contains numerous policies/ objectives which have been assessed for environmental impacts. These are provided in a series of assessment matrices as detailed in **Appendix D** of this report. Assessments are also based on relevant associated text surrounding the relevant policies and actions in their relevant sections within the Draft LAP. All policies which have been screened out are shaded in green.

The assessment matrices contain a comparison of each of the Draft LAP policies/ objectives against each of the Strategic Environmental Objectives with an assessment rating assigned for the purposes of comparison. In this case, plus (+) indicates a potential positive impact, minus (-) indicates a potential negative impact, plus/minus (+/-) indicates that both positive and negative impacts are likely or that in the absence of further detail the impact is unclear, and a neutral or no impact is indicated by a zero (0). Combinations of these symbols are also possible, e.g.0/-, which indicates that impact may be neutral or negative depending on how the policy or objective is delivered.

Where negative impacts have been identified mitigation measures have been devised where possible through inclusion of either new policies / objectives, or recommendations have been made to amend or include additional text within the policies / objectives. Comments with respect to the recommended mitigation measures identified as a result of this assessment are noted within the comments section of the matrices and the associated mitigation measures and / or changes are denoted in **RED** within the policy column section within **Appendix D** of this report. All mitigation measures proposed as a result of this assessment are documented in **Chapter 11** of this environmental report.

## 9.4 OVERVIEW OF EVALUATION OF POLICIES AND OBJECTIVES

### 9.4.1 Primary Objectives of the Draft LAP

The vision for Draft LAP seeks an overall balance for the village between development and the natural and built environment. The overall tenet of the vision is expanded upon in the principle objectives for

the Draft LAP area. The vision for the Draft LAP is in line with the Core Strategy of the CDP and subsequently this Draft LAP and is likely to have an overall positive effect on the Plan area going forward. This vision plans to secure a sense of identity for Kiltiernan/ Glenamuck while promoting development and incorporating public transport and infrastructure. Minor employment opportunities and quality of life for those living in the Kiltiernan/ Glenamuck Draft LAP is also expected to improve as a result. However, the development is dependent on the construction of the Glenamuck District Distributor Road (GDDR) Scheme and the Glenamuck Link Distributor Road, both of which will result in the loss of greenfield land and minor temporary impacts on the environment. The construction of up to 3,000 dwellings will mean a permanent loss of greenfield land, however this is required to meet Core Strategy objectives. A number of protective policies have been included in the plan to ensure that development takes place in a sustainable manner.

#### **9.4.2 Residential**

The objectives for Housing are generally aimed at the provision of adequate suitable housing and at a rate and scale which is in line with the Core Strategy of the CDP and subsequently this Draft LAP. These policies are expected to result in positive direct and indirect impacts to population through improvements to quality of life and will provide suitable accommodation for a cross-section of the population. Impacts in relation to climate as a result of consolidating development are expected to be positive, as this policy will focus development within the peri-urban area, which is well served with public transport links and would also promote walking and cycling.

#### **9.4.3 Economic Activity**

The objectives of the Draft LAP regarding Economic Activity are aimed at facilitating and encouraging economic development and employment within the Draft LAP. To achieve this, policies and actions provide for sufficient land use zoning to cater for employment uses and associated economic development of the area. These policies are largely anticipated to have positive impacts on population through improving the economic prosperity of the Kiltiernan/ Glenamuck area and the quality of life of its population.

The Draft LAP recognises that there are existing retail facilities adjacent to the Draft LAP at the 'The Park' Carrickmines and stipulates that further retail will be discouraged from the north-west development zoned lands. Policies have been included to ensure that design and layout of these employment lands are well designed as they abut residential areas. Policies ensure that development will have to take cognisance of the sensitivity of the population residing in adjacent lands.

#### **9.4.4 Biodiversity and Natural Heritage**

The policies for natural heritage for the Draft LAP will generally be positive for biodiversity and flora and fauna as they aim to protect and promote opportunities for enhancement of local biodiversity features throughout the Draft LAP area. Specific policies to protect the status of Natura 2000 sites and their associated habitats and features are provided within the Draft LAP which will have overall positive impacts with regard to biodiversity, even though there are no Natura 2000 sites within the Draft LAP boundary. Positive secondary impacts are also likely to occur in the areas of soil and water, as the protection, conservation and enhancement of biodiversity is expected to also result in protection of these resources due to the controls that would be placed on development during its implementation.

#### **9.4.5 Landscape, Urban Design and Cultural Heritage**

The protection and enhancement of Kiltiernan/ Glenamuck's significant and unique built heritage is one of the core objectives of the Draft LAP. The policies for Cultural, Architectural and Archaeological Heritage will generally be positive particularly for cultural heritage and landscape through the recognition, protection and preservation of the cultural heritage of Kiltiernan/ Glenamuck. The

incorporation of granite features into the design of residential and commercial buildings will assist with blending this development within the local landscape. The provision of Design Statements for new residential development will provide positive impacts on the built heritage.

#### **9.4.6 Movement/ Transport**

Transport policies are of fundamental importance to the Draft LAP as without this form of infrastructure the objectives of the Core Strategy in relation to provision of residential housing would not be fulfilled. The establishment of the functions of the Glenamuck Road and Enniskerry Road are key to the development of the prepared Neighbourhood Core area. The provision of traffic calming measures will be positive for these Neighbourhood Cores and the integration of car parking provision will ensure a control on parking. The construction of the GDDR Scheme will have negative impacts on the Environment but it is recognised that this scheme will be subject to environmental planning procedures and approval by Bord Pleanala.

#### **9.4.7 Environmental Infrastructure**

The adequacy of water, drainage and environmental services in the future development of the plan area is necessary to facilitate sustainable development. These key issues are addressed in various objectives to provide for sufficient water, waste water and water drainage infrastructure to service the predicted requirements for future development over the plan period. Relevant legislative requirements in relation to environmental requirements are also set out including objectives relating to drinking water and SUDs. The objectives for public services allow for reliable and effective water, drainage, energy, waste management and communications infrastructure to service the existing and future development in an environmentally sustainable manner during the plan period.

#### **9.4.8 Open Space and Recreation**

The policies for green infrastructure, recreation and amenity are aimed at protecting, improving and enhancing open spaces and a range of facilities providing for leisure and relaxation throughout the area. These policies are expected to result in largely positive direct, and indirect impacts to population through the improvements to the quality of life. Policies and objectives with respect to green infrastructure and open space will primarily result in direct positive impacts to population and landscape with potential indirect and / or secondary impacts with respect to biodiversity, soils and water. The importance of green infrastructure is recognised in the Draft LAP. The Draft LAP describes the different green infrastructure identified in Kiltiernan/ Glenamuck including relevant policies for its protection and enhancement.

#### **9.4.9 Social and Community Development**

The policies for social and community are generally aimed at provision of services for the community. The requirement to provide community facilities to support the projected population levels of the Draft LAP area and environs are recognised within policy provision.

Direct positive effects with respect to population are anticipated with respect to most of the community policies and objectives due to the requirement to provide adequate provision of services associated with population growth.

#### **9.4.10 Neighbourhood Centre**

The policies for the neighbourhood centre are positive in relation to the residents that will be living within the Draft LAP. The provision of a balanced mix of services in the neighbourhood centres is very

critical to the positive development of these nodes for the surrounding residential population. As with any development and especially on greenfield land there is the potential for negative impacts on biodiversity, soils, water and cultural heritage sites. The consolidation of these centres is very positive and ensures that services are not spread out within the Draft LAP. Access to public transport will have positive effects on climate change.

#### 9.4.11 Land Use Zoning Objectives

The Kiltiernan/ Glenamuck Draft LAP 2013-2019 provides a development framework to guide the development within the area for the next six years. As part of this development framework, one of the key principles to this approach as set out in the Draft LAP is to achieve growth rates over the short to medium term through development of residential, employment, recreational, retail and educational facilities. The framework going forward is provided for in the land use zoning map in the Draft LAP and associated land use zoning objectives, in **Table 9.2**, which have been assessed in relation to strategic environmental objectives for the subject of this report. The purpose of land use zoning is to indicate to property owners, and to the general public, the types of development that the Council considers most appropriate in each zone.

**Table 9.2: Land Use Zonings**

Zoning Objective	Description
Objective A	To protect and or improve residential amenity
Objective B	To protect and improve rural amenity and to provide for the development of agriculture.
Objective E	To provide for Economic Development and Employment.
Objective F	To preserve and provide for open space with ancillary active recreational amenities.
Objective G	To protect and improve high amenity areas.
Objective NC	To protect, provide for and/ or improve mixed-use neighbourhood centre facilities.



## 10 CUMULATIVE EFFECTS

### 10.1 INTRODUCTION

This chapter of the Environmental Report provides an outline of the potential cumulative effects on the environment as a result of implementing the Kiltiernan/ Glenamuck Draft LAP (2013-2019).

Cumulative effects are referred to in a number of SEA guidance documents and are defined in the EPA SEA Process Checklist (2011) as “*effects on the environment that result from incremental changes caused by the strategic action together with other past, present, and reasonably foreseeable future actions. These effects can result from individually minor but collectively significant actions taking place over time or space*”. Therefore the combined effect of human activity can pose a serious threat on our environment. These effects can be insignificant individually but cumulatively over time and from a number of sources can result in the degradation of sensitive environmental resources.

The 2004 Guidelines produced by the DEHLG outlines that the SEA process is in a good position to address cumulative effects for which the Environmental Impact Assessment process is not equipped to deal with. Due to the strategic nature of the SEA process a forum is provided in which cumulative effects can be addressed. The EPA is presently undertaking a study in relation to cumulative effects and it is anticipated that a *draft Cumulative Effects – Best Practice Guidance Document* will be available soon to SEA practitioners.

### 10.2 LEGISLATION

The consideration of cumulative effects is a requirement of the SEA Directive (2001/42/EC). It states under Article 5(1) that an Environmental Report shall be prepared and relevant criteria is provided in Annex I, which states that;

*“The likely significant effect (these effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects) on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors”.*

Under Article 3(5) of the SEA Directive the determination of likely significant effects is addressed and within this it is stated that Member States shall take into account the relevant criteria within Annex II. Under Annex II (2) it is stated that “characteristics of the effects and of the area likely to be affected, having regard, in particular, to the cumulative nature of the effects”.

### 10.3 PLANNING

The National Spatial Strategy (NSS) sets out the national context for spatial planning with the overall aim of achieving a better balance of economic, social and physical development. This NSS together with the Regional Planning Guidelines (RPGs) must inform the development within the county of Dún Laoghaire-Rathdown. The RPG's are a means by which to implement the NSS by providing detailed policy and guidance. These RPG's provide a long term planning framework for the development of a region, thereby providing a strategic forum in which cumulative effects can be identified. The Planning and Development Act clarifies the key obligations required of Planning Authorities whilst envisaging close alignment between the NSS, the RPGs, Development Plans and Local Area Plans.

Kiltiernan/ Glenamuck lies within the geographical area of the RPGs for the Greater Dublin Area 2010-2022. In accordance with national and European legislation SEA was undertaken to assess the potential significant environmental impacts and effects of the RPGs. Environmental factors have been

integrated into the development of the RPGs and the related decision making process through the SEA process, thereby addressing cumulative effects within the broad context of the geographical areas of Kiltiernan/ Glenamuck, Meath, Wicklow, Dublin City, Dún Laoghaire-Rathdown, Fingal and South Dublin.

The framework for development within the county of Kiltiernan/ Glenamuck is outlined within the Dún Laoghaire-Rathdown CDP 2010-2016 which was prepared under the provisions of the Planning and Development Act. This document which sets out the strategy for proper planning and sustainable development of the County was also the subject of SEA and cumulative impacts with respect to the entire county of Dún Laoghaire-Rathdown were identified.

Under the Planning Act, LAPs have the responsibility for presenting a strategy for the proper planning and sustainable development of a specific administrative area which for the purposes of this Draft LAP is Kiltiernan/ Glenamuck. The Draft LAP for Kiltiernan/ Glenamuck will set out a strategic framework for planning covering the period 2013-2019. There are a number of potential pressures on the environment from this Draft LAP including such issues as population increases, increased housing units and associated developments. The key environmental sensitivities affected by these potential **pressures** are addressed in the following section.

#### **10.4 KEY ENVIRONMENTAL RECEPTORS**

The combined increase in population and associated numbers of dwellings proposed within the Draft LAP has the potential to significantly increase the numbers of vehicles in the area and to raise noise levels through increased road traffic. However it is considered that with the introduction of sustainable transport policies and the buffering of residential dwellings to road noise the cumulative impacts on human beings can be minimised. The accessible road and Luas connections within and surrounding the Draft LAP ensures that Kiltiernan/ Glenamuck is a popular commuter town for people employed in Dublin City and Environs.

Kiltiernan/ Glenamuck resides within the Greater Dublin Water Supply Area and therefore cumulative pressures will be addressed in the context of planning for this region. Strategic planning has commenced and an SEA was undertaken on the Water Supply Project – Plan which identifies the need for a new source of water to supply the Greater Dublin Water Supply Area. Therefore monitoring and review of water supply to serve the growing population of these areas will be required.

Due to the planned increased densities and location of the plan area along the Luas line will result in positive cumulative effects for the greater Dublin area due to reduction in motorcar usage and reduction in amount of sprawling Greenfield development on the outer fringes of the Dublin region.

#### **10.5 CONCLUSION**

The environment surrounding the Draft LAP contains sensitive ecological environments and surface and groundwater systems. The Draft LAP has inherited population targets and projections from higher level plans in the planning hierarchy including the RPGs and the CDP. As a result, a Core Strategy has been formed which makes provision for projected targets at national, regional and local levels, which are not only in line with one another but also ensure a sustainable pattern of growth within the hierarchy. As a result, the Kiltiernan/ Glenamuck Draft LAP has inherited population growth projections as a result from the Dún Laoghaire-Rathdown CDP 2010-2016, which will result in increased pressure on land resources and existing services such as wastewater disposal and water supplies within these areas. The Draft LAP will adhere to the Core Strategy for Kiltiernan/ Glenamuck taking into account the environment and sustainability and making provisions for the protection of the environment through phased development and the provision of adequate services.

## 11 MITIGATION MEASURES

### 11.1 INTRODUCTION

Annex 1 (g) of the SEA Directive requires that the Environmental Report describe the measures envisaged to prevent, reduce and/or offset as fully as possible any significant adverse effects on the environment from implementation of the LAP. The key recommendations arising from the SEA are outlined in **Table 11.1** of this section of the Environmental Report.

### 11.2 HOW HAS THE SEA INFLUENCED THE DRAFT LAP

Integration of the SEA and the Draft LAP was achieved through involvement of the relevant team members at the key stages of the project, including SEA Scoping, review of the existing environment and generation of policies/ objectives. The SEA, AA and Plan teams participated in meetings, telephone and email discussions in relation to development of alternatives, gathering of baseline environment data and development of policy and text recommendations for inclusion in the Draft LAP.

### 11.3 MITIGATION MEASURES

In advance of the SEA/ AA team receiving the draft policies/ objectives the Kiltiernan/ Glenamuck LAP team was provided with a document from the SEA/ AA team which contained a number of relevant environmental policies for reference within the development of the draft policies/ objectives. **Table 11.1** provides a list of the policies that were included in the Draft LAP as a result of this first phase of mitigation. These policies/ objectives mainly relate to specific general environmental concerns that should be included as policy within the Draft LAP from the outset. The first column provides the recommended policies/ objectives from the SEA and AA team and the second column outlines if these policies/ objectives are included in the Draft LAP.

**Table 11.1: Mitigation Measures – Initial Measures Proposed**

<b>Overarching Policies and Objectives</b>	<b>Address of Changes to Draft LAP</b>
The overarching policies and objectives of the Dún Laoghaire Rathdown County Development Plan will equally apply to any development and any associated works, individually or in combination with other plans or projects within the Local Area Plan (LAP) boundaries.	Policy included in the Draft LAP
The EU Directives for Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) are the fundamental policy framework of environmental protection measures and legislation for the delivery of the policies within this document and full compliance with the EIA and SEA Directives shall be provided.	Policy included in the Draft LAP
Ensure that all plans and projects in the County which could, either individually or in combination with other plans and projects, have a significant effect on a Natura 2000 site (or sites) will be subject to Appropriate Assessment Screening.	Policy included in the Draft LAP
<b>Biodiversity and Natural Heritage</b>	
Conserve, enhance and manage the County's natural heritage including its biodiversity, landscapes and geological heritage and promote understanding of and sustainable access to it.	Policy included in the Draft LAP
Ensure that all plans and projects in the County which could, either individually or in combination with other plans and projects, have a significant effect on a Natura 2000 site (or sites) will be subject to Appropriate Assessment Screening.	Policy included in the Draft LAP
To ensure that a Natura Impact Statement (NIS) is produced once Appropriate Assessment (AA) screening has indicated likely significant effects on the integrity, defined by the structure and function, of any Natura 2000 sites.	Policy included in the Draft LAP

<b>Overarching Policies and Objectives</b>	<b>Address of Changes to Draft LAP</b>
To promote the protection of habitats which, by virtue of their linear and continuous structure (e.g. rivers and their banks) or their contribution as stepping stones (e.g. ponds or small woods), are essential for the migration, dispersal and genetic exchange of wild species.	Policy included in the Draft LAP
To support the National Parks and Wildlife Service (NPWS) and Department of Environment, Community and Local Government (DECLG), in the maintenance and, as appropriate, the achievement of favourable conservation status for the habitats and species to which the EU Habitats Directive applies.	Policy included in the Draft LAP
To consult with the National Parks and Wildlife Service (NPWS) when undertaking, approving and authorising development which is likely to affect plant, animal or bird species protected by law. In the event of a proposed development impacting on a site known or likely to be a breeding or resting site of species listed in Habitats Regulations a derogation licence, issued by the Department of Environment, Community and Local Government (DECLG) will be required in advance of a permission.	Policy included in the Draft LAP
To ensure the implementation of the EU Freshwater Fish Directive and its transposition into Irish legislation in order to protect any fish and shellfish habitat in the LAP area.	Policy included in the Draft LAP
To recognise and contribute towards protection of habitats from alien / invasive species (e.g. Japanese knotweed, giant hogweed, Himalayan balsam, etc.) in accordance with Action Number 4.7 of the Dún Laoghaire-Rathdown Biodiversity Plan 2009-2013.	Policy included in the Draft LAP
Ensure that no development, including clearance and storage of materials, takes place within a minimum distance of 15m measured from each bank of any river, stream or watercourse in the LAP area.	Policy included in the Draft LAP
In the event of lighting being proposed along river or canal corridors an Ecological Impact Assessment (and where necessary an Appropriate Assessment) including bat and otter surveys shall be conducted by specialists. The recommendations of the specialist studies shall be implemented. No lighting will be installed without prior consultation with the National Parks and Wildlife Service (NPWS) and shall be in line with advances in knowledge into the impact of lighting on bats and other species and also to reflect advances in technology in the lighting industry.	Policy included in the Draft LAP
To ensure the monitoring and control of EIA sub-threshold development within the LAP through the document <i>Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding sub-threshold development (DEHLG, 2003)</i> with specific reference to the requirement of Appropriate Assessment (AA) screening.	Policy included in the Draft LAP
<b>Water Supply and Management</b>	
To ensure the implementation of the EU Drinking Water Directive in order to achieve and improve appropriate water quality standards for the LAP for human consumption while conditioning development dependent on sufficient water supply.	Policy included in the Draft LAP
To ensure the implementation of the European Communities Drinking Water (No.2) Regulations 2007, S.I. No. 278 of 2007 and the EPA 2010 guidance on the <i>Implementation of the Regulations for Water Services Authorities for Public Water Supplies</i> . These regulations shall be applied for increased penalties in case of non-compliance and programmes to minimise water supply leakage shall be developed.	Policy included in the Draft LAP
To ensure the implementation of the EU Groundwater Directive.	Policy included in the Draft LAP
To require that all development relating to water supply and waste water treatment are subject to Appropriate Assessment to ensure there are no likely significant effects on the integrity, defined by the structure and function, of any Natura 2000 sites and that the requirements of Article 6 of the EU Habitats Directive are met.	Policy included in the Draft LAP
<b>Wastewater</b>	
To ensure the implementation of the EU Urban Waste Water Directive and its transposition into Irish legislation, namely the Urban Waste Water Treatment Regulations 2001 and 2004.	Policy included in the Draft LAP

<b>Overarching Policies and Objectives</b>	<b>Address of Changes to Draft LAP</b>
To ensure the changeover from septic tanks to mains connections in all cases where this is feasible and that all new developments utilise and connect to the existing wastewater infrastructure. The provision of individual septic tanks and treatment plants in the LAP will be strongly discouraged to minimise the risk of groundwater pollution. Where such facilities are permitted, full compliance with the prevailing regulations and standards will be required, including the EPA 2009 <i>Code of Practice: Wastewater Treatment and Disposal Systems Serving Single Houses (p.e.≤ 10)</i> .	Policy included in the Draft LAP
To promote assessment of the adequacy of the existing wastewater treatment facilities in terms of both capacity and performance as well as potential risk to human health and water quality.	Policy included in the Draft LAP
<b>Surface Water Drainage</b>	
To ensure the implementation of the EU Water Framework Directive and its transpositions into Irish legislation.	Policy included in the Draft LAP
To implement the specific relevant objectives and measures for individual water bodies set out in the Eastern River Basin Management Plan and associated Programme of Measures, where relevant.	Policy included in the Draft LAP
To ensure the implementation of the surface water legislation <i>Environmental Objectives (Surface Waters) Regulations 2009</i> S.I. No 272 of 2009 and the EPA report <i>Water Quality in Ireland 2007-2009</i> in order to achieve general improvements of any water supplies in the LAP.	Policy included in the Draft LAP
To require that a Sustainable Drainage System (SuDS) is applied to any development and that site specific solutions to surface water drainage systems are developed, which meet the requirements of the Water Framework Directive and associated River Basin Management Plans.	Policy included in the Draft LAP
<b>Groundwater Protection</b>	
To ensure that planning applications have regard to any existing groundwater protection schemes and groundwater source protection zones and/or the likely impacts that the development may have on groundwater.	Policy included in the Draft LAP
To ensure the protection of the groundwater resources in and around the LAP and associated habitats and species.	Policy included in the Draft LAP
<b>Flood Risk Management</b>	
To ensure the implementation of the EU Floods Directive and its transposition into Irish legislation in order to prevent, reduce and control flood risk in river basin and coastal areas due to increased domestic and economic development in flood risk zones and climate change effects.	Policy included in the Draft LAP
To implement the recommendations of the relevant Catchment Flood Risk Assessment and Management (CFRAM) study and the mitigation measures and recommendations arising from the associated SEA and AA shall also be addressed and implemented.	Policy included in the Draft LAP
To implement the <i>Planning System and Flood Risk Management for Planning Authorities</i> (DoEHLG/OPW 2009) and the National Flood Hazard Mapping (OPW 2012) while referring to the relevant Flood Risk Management Plan (FRMP) for the LAP.	Policy included in the Draft LAP
To require that all proposed flood protection or alleviation works will be subject to Appropriate Assessment (AA) to ensure there are no likely significant effects on the integrity, defined by the structure and function, of any Natura 2000 sites and that the requirements of Article 6 of the EU Habitats Directive are met.	Policy included in the Draft LAP
To ensure riparian buffer zones are created between all watercourses and any development, a minimum of 15m to mitigate against flood risk. The extent of these buffer zones shall be determined in consultation with a qualified ecologist and following a Flood Risk Assessment. Any hard landscaping proposals shall be located outside of these buffer zones.	Policy included in the Draft LAP

Overarching Policies and Objectives	Address of Changes to Draft LAP
<b>Waste Management</b>	
To ensure the implementation of the EU Waste Framework Directive and its affiliated directives, namely the EU IPPC Directive, the Landfill Directive and the WEEE Directive.	Policy included in the Draft LAP
Prevent and minimise the generation of waste in accordance with the Waste Management Plan for the Dublin Region while minimising waste to landfill and considering suitable alternatives.	Policy included in the Draft LAP
<b>Transport</b>	
To have regard to the EU Ambient Air Quality Directive, the EU Ozone Directive, the EU guidance documents <i>Greening Transport</i> (EU 2008) and <i>A Sustainable Future for Transport</i> (EU 2009) and the National Transport Strategy <i>Smarter Travel: A Sustainable Transport Future</i> (DTTS 2009) to develop strategies which better reflect the real costs that transport volumes and emissions impose onto society, environment and economic efficiency.	Policy included in the Draft LAP
To promote maximum accessibility through routes of optimised connectivity and permeability for walking, cycling and public transport while establishing safe infrastructure for all vulnerable road users.	Policy included in the Draft LAP
<b>Economic Development</b>	
To ensure that any industry development will be subject to Appropriate Assessment (AA) Screening to ensure there are no likely significant effects on the integrity, defined by the structure and function, of any Natura 2000 sites and that the requirements of Article 6 of the EU Habitats Directive are met.	Policy included in the Draft LAP
To require that all development proposals are subject to AA screening to ensure there are no likely significant effects on the integrity, defined by the structure and function, of any Natura 2000 sites and that the requirements of Article 6 of the EU Habitats Directive are met.	Policy included in the Draft LAP

A detailed assessment of the Draft LAP policies/ objectives was then undertaken and the proposed mitigation is presented in **Table 11.2**. Mitigation measures are proposed in the form of new policies/ objectives and/or amendments to the text of policies/ objectives. The mitigation included in the assessment of policies/ objectives does not refer to the general requirement for assessment of impacts on the environment but instead assumes requirements for environmental assessment in accordance with the normal development management process and EIA Directive as a given. Column one of **Table 11.2** provides information on the policy or objective which is to be mitigated and column two sets out the mitigation measures. All proposed insertions and proposed amendments are highlighted in bold and underlined for ease of reference.

**Table 11.2: Further Mitigation Measures**

Policies/ Objectives (Recommended changes in RED)	Address of Changes to Policies/ Objectives of Draft LAP and/ or Further Considerations
<b>Phasing of dwelling units will be outlined on a map that will be included in the Draft LAP before it is adopted. This phasing will visually explain the approach that it outlined in Section 10 of the Draft LAP.</b>	Chapter 10 of the Draft LAP includes: It is an objective of the Draft LAP to prepare a phasing map prior to the adoption of the LAP, to illustrate the phasing proposals described in this Section.
V04 To guide <b>sustainable</b> development in order to establish the character of the two component areas that comprise the Draft LAP namely, Glenamuck and Kiltiernan.	Added to Draft LAP
LHC19. To carry out a detailed ranking survey of the hedgerows be undertaken as part of any future development proposals, <b>and where possible to incorporate these</b>	Added to Draft LAP

Policies/ Objectives (Recommended changes in RED)	Address of Changes to Policies/ Objectives of Draft LAP and/ or Further Considerations
<b>hedgerows within the development</b> , although it is acknowledging that it will not be possible to retain all of the current hedgerows.	
BF06: <b>To encourage usage of local place names wherever possible in new developments.</b>	Added to Draft LAP
MT10: <b>New developments shall provide noise mitigation measures (e.g. boundary walls and/or double/triple glazing) to reduce noise within developments caused by new roads to be within acceptable levels.</b>	Added to Draft LAP
E113. <b>It is a policy of the Council to facilitate the provision, upgrading and maintenance of adequate and appropriate waste water services and water supply to service new developments and in assessing applications will require that development proposed will only take place where appropriate sustainable waste water infrastructure is in place.</b>	Added to Draft LAP
OS07. To provide for the appropriate types of active/passive recreational facilities both indoor and outdoor in the Draft LAP for all age groups. Facilities to be provided should be appropriate to the scale and needs of the development area whilst having regard to established or planned amenities in the wider environs. <b>Adequate transport access to these recreational facilities via safe public transport and pedestrian/ cycleway network is paramount.</b>	Added to Draft LAP
SC04. <b>Appropriate provision of educational and childcare facilities will be required to be put in place in advance of residential developments being granted planning permission.</b>	Not added to Draft LAP: This policy more accurately reflects how the provision of schools is delivered in the Irish planning system. The following policy has been included.  <i>SCD04: It is the policy of the council to ensure the reservation of primary and post-primary school sites in accordance with the requirements of the relevant education authorities. Schools will be delivered in the Draft LAP area in accordance with the "Code of Practice on the Provision of Schools and the Planning System".</i>
LHC8. Ensure that no development, including clearance and storage of materials, takes place within a minimum distance of 15m measured from each bank of any river, stream or watercourse in the Draft LAP area and be compliant with the <b>'Requirements for Protection of Fisheries Habitat during Construction and Development Works at River Sites'</b> .	Added to Draft LAP
<b>Ensure implementation of the Dublin Agglomeration Noise Action Plan in carrying out assessment and management of environmental noise.</b>	Added Policy MT11:  To ensure implementation of the Dublin Agglomeration Environmental Noise Action Plan
<b>Ensure telecommunications within the Draft LAP area is expanded for in line with planned development of the area.</b>	Section 6.7 added to Draft LAP:  There are a number of current telecommunications providers within the Plan Area. It is anticipated that the fibre network can be extended with the development of the road network. This should be considered at the detail design stage of the roads.
<b>Ensure sites of archaeological potential are protected and investigated in accordance with relevant licensing requirements before development takes place. Also include map of areas of archaeological potential as illustrated in Figure 5.8 of ER.</b>	A Map will be included in the Draft LAP  Section 3.3.1 of the LAP already includes the following text:  <i>"It is Council policy to presume in favour of the preservation in situ of archaeological remains of</i>

Policies/ Objectives (Recommended changes in RED)	Address of Changes to Policies/ Objectives of Draft LAP and/ or Further Considerations
	<p><i>importance and their settings. The Council will strictly control development proposals that may negatively impact on the significance of archaeological sites and monuments, and their setting and interpretation.</i></p> <p><i>Any proposed development in the environs of these archaeological sites will need to have due regard for the requirements pertaining to their protection. Development proposals within zones of archaeological potential and in or near recorded monuments will be considered when accompanied by an archaeological assessment."</i></p> <p><i>No further text/ objectives will be incorporated within the Draft LAP.</i></p>
<p><b>Any proposed development within the Draft LAP should ensure that landscape designations are afforded protection.</b></p>	<p>Section 3.2.5 of the Draft LAP reads:</p> <p><i>"It is Council policy (Policy LHB1 'Preservation of Landscape Character Areas' of the CDP 2010-2016) to preserve and enhance the character of the landscape in accordance with the recommended strategies outlined in the Landscape Character Assessment (May 2002) and in accordance with the Guidelines for Landscape and Landscape Assessment (DOELG). Landscape character areas along with an identified strategy are outlined in the appendices of the CDP 2010-2016. Within the LAP area boundary, three Landscape Character Areas have been identified, namely the Kiltiernan Plain (No. 5), Ballycorus (No. 6) and Carrickmines (No. 13). Associated sensitivities/strategies for each respective area are described in the CDP."</i></p>
<p><b>Recommend inclusion of the HLCA recommendation on page 32 &amp; 33 of Draft LAP as objectives of the Draft LAP.</b></p>	<p>All of the Recommendations are included already as part of policy/objectives. The recommendations are largely aspirational and the Council can't commit to them as objectives.</p>
<p><b>Recommend inclusion of specific policies for protection of high amenity zones as well as protected views and prospects.</b></p>	<p>High amenity zones are offered the highest level of protection of all zones, by virtue of the extremely restrictive land use zoning provisions. It is not necessary at all to restate this – it is written into the CDP</p> <p>Amend LHC21 to read:</p> <p>To ensure the preservation of the prospect of Three Rock, Two Rock Mountain and Carrickgollogan from Enniskerry Road and the designated protected views southwards from Ballycorus Road.</p>
<p><b>To protect built heritage features including protected structures, Architectural Heritage Area (ACA), and Recorded Monuments and Places as per detailed policies set out in the Dun Laoghaire-Rathdown County Development Plan 2010 – 2016.</b></p>	<p>Insert new objective (old LHC22 is renumbered LHC23)</p> <p><i>LHC22 To comply with all of the policies for the protection of the Architectural Heritage in the current Dún Laoghaire-Rathdown County Development Plan, including those set out in the Development Management Section. In particular to provide appropriate protection for the protected structures and recorded monuments in the area.</i></p> <p>ACA objective is included as LHC23</p>



## 12 MONITORING MEASURES

### 12.1 INTRODUCTION

Article 10 of the SEA Directive (2001/42/EEC) requires Member States to monitor the significant environmental effects of the implementation of plans “*in order, inter alia, to identify at an early stage unforeseen adverse effects to be able to undertake appropriate remedial action*”. The primary purpose of monitoring is to cross-check significant environmental effects which arise during the implementation stage against those predicted during the plan preparation stage.

The Directive leaves considerable flexibility to Member States in deciding how monitoring shall be arranged; however, it is generally agreed that a mixture of “quantitative and qualitative indicators are required. The Directive recognises that the monitoring does not necessarily require new research activity and that existing sources of information can be used. In addition, monitoring can be used to identify any information gaps and deficiencies that were identified as part of the SEA process. Furthermore, Government Guidelines state that monitoring should concentrate on the likely significant effects identified in the Environmental Report (DoEHLG, 2004).

Monitoring will be based around the Strategic Environmental Objectives, Indicators and Targets set out in Section 7 of this Environmental Report. The Strategic Environmental Objectives, Indicators and Targets for the various environmental topics are set out below in **Table 12.1**. The indicators that are used will show changes that would be attributable to the implementation of the Draft LAP. The indicators chosen are at a level, which is relevant to the Draft LAP and are collated on and reported on by a variety of government agencies including the EPA, NPWS and OPW.

Monitoring proposals must concentrate on likely significant environmental effects, as identified in the Environmental Report, and the measures identified as necessary to prevent, reduce, or offset any significant adverse effects. The indicators/monitoring will act as an early warning sign so that appropriate remedial action is undertaken.

#### Responsibilities and Frequency of Reporting

The statutory Manager’s Report on progress in achieving objectives of the LAP, takes place two years after the adoption of the LAP and “*shall include information in relation to the progress on, and the results of monitoring the significant environmental effects of implementation of the Plan*”. If an objective or policy is resulting in a significant adverse effect then a variation may be considered during the lifetime of the LAP. It is largely the responsibility of Dún Laoghaire-Rathdown County Council to undertake the monitoring and to interpret the monitoring data relevant to Kiltiernan/ Glenamuck and to deal with unforeseen effect as a result of implementing the Kiltiernan/ Glenamuck Local Area Plan.

**Table 12.1: Monitoring and Reporting Programme**

Objectives	Targets	Indicators	Source/ Responsibility
<p><b>Objective 1</b>  <b>Biodiversity, Flora &amp; Fauna</b>            Protect and where appropriate, enhance biodiversity, particularly protected areas and protected species.</p>	<p>No net loss of designated sites, species or habitats.</p>	<p>Reported/ Estimated levels of damage to designated sites/ species/ habitats as identified by GIS and AA.</p> <p>No. of Appropriate Assessments Carried out.</p> <p>Number of planning permissions with biodiversity conditions ensuring no net loss of green linkages / ecological networks.</p> <p>Loss of land actively</p>	<p>NPWS            DLRCC Planning/            Environment            Department</p>

Objectives	Targets	Indicators	Source/ Responsibility
		managed for conservation.	
	No net loss of green linkages / ecological networks	Loss of green linkages/ ecological networks identified through GIS and Habitat Mapping	DLRCC Environment Department/ GIS
	Prevent further spread of alien/ invasive species.	Number of spites reported to contain alien/ invasive species.	NPWS DLRCC Environment Department
<p><b>Objective 2 Population</b> Improve people's quality of life based on high-quality residential, working and recreational environments and on sustainable transport</p>	No increase in population above core strategy population targets	% change in population based on core strategy targets based on RPG figures.	CSO
	Appropriate mix of tenure types (including social housing) in all new developments.	% of private and social housing in new developments  % mix of tenures based on housing strategy requirements.	DLRCC Planning and Housing Departments
	All significant planning applications for new residential developments within areas designated for expansion to be accompanied by a design statement.	% of significant planning applications granted for new residential developments that are accompanied by a design statement.	DLRCC Planning Department
	Increase access to public transport from households.	Construction/ improvement of footpaths/ greenways/ cycle infrastructure	DLRCC Roads Department
<p><b>Objective 3 Water</b> Improve water quality and the management of watercourses to comply with the standards of the Water Framework Directive and incorporate the objectives of the Floods Directive into sustainable planning and development.</p>	Implementation of the Programme of Measures identified under the ERBD River Basin Management Plan.	% increase in waters achieving 'good status' as defined in the WFD.	EPA and DLRCC Environment Department
	Ensure wastewater collection system capacity is provided either prior to construction of new development or is developed in parallel.	Wastewater collection system capacity compared with wastewater collection demand from development in the LAP.	EPA and DLRCC Environment Department
<p><b>Objective 4 Soil</b> Protect and, where appropriate, enhance the function and quality of the soil resource in the lands within Kiltiernan/ Glenamuck Draft LAP.</p>	Increase in any derelict buildings being redeveloped	Number of derelict buildings being redeveloped based on commencement notices	Commencement notices
<p><b>Objective 5 Climate Change</b> Contribute to mitigation of, and adaptation to, climate change.</p>	All new development applications within areas at risk of flooding to submit a flood impact assessment.	Number of new development applications within areas at risk of flooding without flood impact assessment.	DLRCC Planning Department

Objectives	Targets	Indicators	Source/ Responsibility
	Increase access by households to sustainable forms of transport, including bus and rail services.	Passenger numbers Funding allocated to improvement of walking and cycling facilities.	DLRCC Planning and Roads Department
<b>Objective 6 Cultural Heritage</b> Protect and, where appropriate, enhance the character, diversity and special qualities of cultural, architectural and archaeological, heritage within Kiltiernan/ Glenamuck Draft LAP.	No impact on the fabric or setting of monuments on the Record of Monuments and Places (RMP) by development granted planning permission.	Number of monuments on the RMP, impacted by granted planning permissions.	The Archaeological Survey monitoring programme, Ireland
	No impacts on the architectural heritage value or setting of protected structures by development granted planning permission.	Number of protected structures impacted by development granted planning permission.	Buildings at Risk Register, Heritage Council Ireland. DLRCC Planning Department
	No protected structures to be demolished because of long term neglect and dereliction.	Number of protected structures that have been demolished because of long term neglect and dereliction.	Buildings at Risk Register, Heritage Council Ireland. DLRCC Planning Department
<b>Objective 7 Landscape</b> Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in Kiltiernan/ Glenamuck Draft LAP.	No negative alteration to protected views.	Number of visual impact assessments received as part of development proposals	DLRCC Planning Department
	No planning permission granted within special qualities of landscapes that materially contravene the policies or objectives of the LAP.	Number of planning permissions granted which materially contravene the special qualities of landscapes.	DLRCC Planning Department
<b>Objective 8 Material Assets</b> Make best use of existing infrastructure and promote the sustainable development of new infrastructure.	Minimise the % of unaccounted for water. This refers to leakage from the system.	% unaccounted for water	EPA
	Increase in planning permissions making provision for renewable energy and water conservation measures.	No of planning permissions making provision for renewable energy and water conservation measures.	DLRCC Planning Department



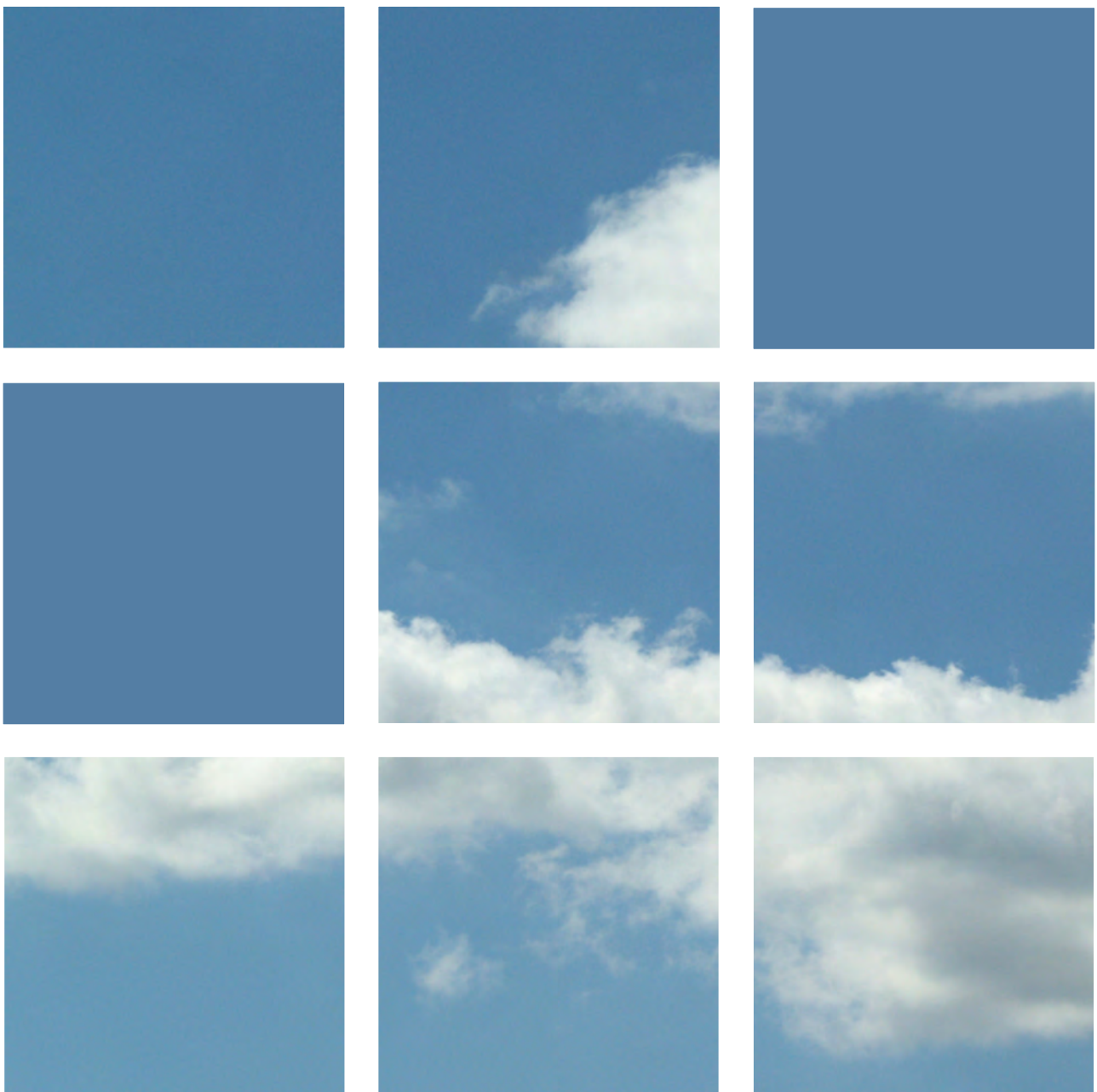
# **Appendix A**

## **AA Screening Statement**



# Kiltiernan/ Glenamuck Draft Local Area Plan (2013-2019)

## Screening for Appropriate Assessment








**Screening for Appropriate  
Assessment  
of the Kiltiernan/ Glenamuck  
Draft Local Area Plan 2013-2019**

**DOCUMENT CONTROL SHEET**

<b>Client:</b>	Dún Laoghaire-Rathdown County Council					
<b>Project Title:</b>	Kiltiernan/ Glenamuck Draft Local Area Plan 2013					
<b>Document Title:</b>	Screening for Appropriate Assessment					
<b>Document No:</b>	MDE1123RP007F01					
<b>This Document Comprises:</b>	<b>DCS</b>	<b>TOC</b>	<b>Text</b>	<b>List of Tables</b>	<b>List of Figures</b>	<b>No. of Appendices</b>
	1	1	20	1	1	-

Rev.	Status	Author(s)	Reviewed By	Approved By	Office of Origin	Issue Date
A01	Final	Brian Deegan	Emma Oliveira	Emma Oliveira	West Pier	April 2012
F01	Final	Brian Deegan	Emma Oliveira	Emma Oliveira	West Pier	May 2012
						



## TABLE OF CONTENTS

<b>1</b>	<b>INTRODUCTION .....</b>	<b>1</b>
1.1	BACKGROUND .....	1
1.2	BACKGROUND TO THE KILTIERNAN GLENAMUCK DRAFT LOCAL AREA PLAN .....	1
1.3	LEGISLATIVE CONTEXT.....	1
1.4	STAGES OF THE APPROPRIATE ASSESSMENT .....	2
<b>2</b>	<b>SCREENING .....</b>	<b>4</b>
2.1	DESCRIPTION OF PLAN.....	4
2.1.1	County Development Plan Policy .....	4
2.1.2	Overall Strategy.....	5
2.2	EXISTING ENVIRONMENT AT THE DRAFT LAP LANDS .....	6
2.2.1	Water Catchment Areas .....	6
2.2.2	Water supply.....	6
2.2.3	Wastewater Facilities .....	6
2.2.4	Flood Protection .....	7
2.3	BRIEF DESCRIPTION OF THE NATURA 2000 SITES .....	8
2.4	ASSESSMENT CRITERIA.....	10
2.4.1	Direct, Indirect or Secondary Impacts .....	10
2.4.2	Cumulative and In Combination Impacts .....	11
2.4.3	Likely Changes to the Site.....	12
2.4.4	Elements of the Plan Where the Impacts are Likely to be Significant.....	12
<b>3</b>	<b>SCREENING CONCLUSION AND STATEMENT .....</b>	<b>15</b>
<b>4</b>	<b>FINDING OF NO SIGNIFICANT EFFECTS REPORT MATRIX.....</b>	<b>16</b>

## LIST OF FIGURES

Figure 1: Kiltiernan Glenamuck Draft LAP Appropriate Assessment – Natura Sites .....	14
--------------------------------------------------------------------------------------	----

## LIST OF TABLES

Table 2.1: Land Use Zonings .....	4
Table 2.2: SACs within 15km of the Kiltiernan Glenamuck Draft LAP .....	8
Table 2.3: SPAs within 15km of the Kiltiernan Glenamuck Draft LAP .....	9
Table 2.4: Likely Affect on Natura 2000 Sites .....	12



# 1 INTRODUCTION

## 1.1 BACKGROUND

This report comprises information in support of screening for an Appropriate Assessment in line with the requirements of Article 6(3) of the EU Habitats Directive (Directive 92/43/EEC) on the Conservation of Natural Habitats and of Wild Fauna and Flora; the Planning and Development Act 2010; and the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011) of the Kiltiernan/ Glenamuck Draft Local Area Plan (LAP) 2013.

## 1.2 BACKGROUND TO THE KILTIERNAN GLENAMUCK DRAFT LOCAL AREA PLAN

The Kiltiernan/ Glenamuck Local Area Plan (LAP) (2007) was adopted by Dún Laoghaire-Rathdown County Council on the 9<sup>th</sup> of July 2007. Local Area Plans generally have a six-year lifespan, meaning that the Kiltiernan/ Glenamuck Local Area Plan (2007) will expire on 9<sup>th</sup> July 2013. While some infrastructural servicing objectives in the area have been achieved in recent years, none of the major development objectives of the Kiltiernan Glenamuck Local Area Plan (2007) have been realised to date. The adoption of the LAP in 2007 coincided with the dramatic downturn in the national economy and the collapse in the property market which has led to a situation where the residential and commercial development sectors are in effective stasis.

Under the Planning and Development Act (2000) (as amended), the Council has the option of either extending the lifetime of the LAP for a further period, if it remains consistent with the County Development Plan, or if it is no longer consistent with the County Development Plan, of amending the Plan, revoking it or making a new Plan afresh.

The adoption of the Kiltiernan/ Glenamuck Local Area Plan in 2007 was succeeded by the adoption of the Dún Laoghaire-Rathdown County Development Plan in 2010. As part of this County Development Plan process, various amendments were made to zonings within the LAP boundary, to remedy some zoning 'anomalies' that arose as a result of the proposed new road scheme layout for the LAP area. There were a number of instances of zoned parcels becoming 'severed' by the road layout and a decision was taken to rezone some small parcels of land in order to ensure a coherency in the proposed land use patterns for the area.

As a result of these amendments, the Kiltiernan/ Glenamuck Local Area Plan (2007) is now clearly inconsistent with the County Development Plan (2010). In these circumstances, the Planning Authority is restricted from extending the duration of the LAP and must proceed to amend the LAP to provide for consistency with the 'parent' County Development Plan (2010) document.

The Kiltiernan/Glenamuck Local Area Plan (2007) also requires substantial updating in respect to references to the previously outdated County Development Plan (2004) policies and Specific Local Objectives (SLOs). Furthermore, the Kiltiernan/Glenamuck Local Area Plan (2007) must be amended to have regard to national guidance and legislation that has emerged since 2007 – most notably the provisions in relation to Core Strategy, Appropriate Assessment and Flood Risk Assessment.

## 1.3 LEGISLATIVE CONTEXT

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, better known as "The Habitats Directive", provides legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as Natura 2000. These are Special Areas of Conservation (SACs) designated under the Habitats

Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/ECC) as codified by Directive 2009/147/EC.

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect Natura 2000 sites (Annex 1.1). Article 6(3) establishes the requirement for Appropriate Assessment (AA):

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

Article 6(4) states:

*If, in spite of a negative assessment of the implications for the [Natura 2000] site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, Member States shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.*

These Articles mean that where the implementation of the plan has potential to have a significant effect on a Natura 2000 site, the relevant Local Authority (Dún Laoghaire-Rathdown County Council) must ensure that an appropriate assessment is carried out in view of that site's conservation objectives. The plan can be approved by DLRCC only if it has been ascertained that it will not adversely affect the integrity of the Natura 2000 site(s) concerned, or in the case of a negative assessment and where there are no alternative solutions, the scheme can only be approved for reasons of overriding public interest.

## 1.4 STAGES OF THE APPROPRIATE ASSESSMENT

Both EU and national guidance exists in relation to Member States fulfilling their requirements under the EU Habitats Directive, with particular reference to Article 6(3) and 6(4) of that Directive. The methodology followed in relation to this AA screening has had regard to the following guidance:

- Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. Department of Environment, Heritage and Local Government. <http://www.npws.ie>
- Managing Natura 2000 Sites: the provisions of Article 6 of the Habitats Directive 92/43/EEC, referred to as MN2000, European Commission 2000; <http://ec.europa.eu>
- Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, referred to as the "EC Article 6 Guidance Document (EC2000); <http://ec.europa.eu>
- Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission. <http://ec.europa.eu>

In complying with the obligations under Article 6(3) and following the EC2000 and MN2000 Guidelines, this AA has been structured in a stage by stage approach as follows:

1) Screening stage

- Description of the Plan;
- Identification of Natura 2000 sites potentially affected;
- Identification and description of individual and cumulative impacts likely to result;
- Assessment of the significance of the impacts identified above on site integrity;
- Exclusion of sites where it can be objectively concluded that there will be no significant effects;  
and
- Screening conclusion.

## 2 SCREENING

### 2.1 DESCRIPTION OF PLAN

The area comprising the Draft LAP is situated to the south of Dublin City and generally in the foothills of the Dublin Mountains. Its location had long been strategic since it was on an important communication route leading southwards from Dublin City (Enniskerry Road (R117)). Historically this was 'frontier' land between the settled land of the 'Pale' to the north and the Gaelic mountain lands to the south.

The Draft LAP area, which is located centrally in the southern portion of Dun Laoghaire-Rathdown County Council's jurisdiction, is peri-urban in character. The South-Eastern Motorway (SEM) is located approximately 0.6 kilometres (km) to the north of the LAP area, with access via the Carrickmines Interchange.

The Draft LAP area comprises the townland of Glenamuck North and portions of the townlands of Carrickmines Great, Glenamuck South, Glebe, Kiltiernan Domain, Kiltiernan and Kingston. The boundary lines depicting the District Electoral Divisions (DED's) of Glencullen, Cabinteely-Loughlinstown and Shankill- Rathmichael traverse the Draft LAP area. The majority of the area falls within the Glencullen DED.

The current main transport routes through the LAP area comprise Glenamuck Road, aligned through the central portion of the area in a north-east to south-west direction to intersect with the Enniskerry Road (R117). Portions of Ballycorus Road (R116) and Ballybetagh Road (R116) extend into the southern portion of the area, east and west respectively, off the Enniskerry Road. A limited number of other minor roads / laneways serve properties located east of Glenamuck Road, and the Wayside Cottages on the western side of Enniskerry Road.

While development has to some extent clustered around the Glenamuck / Enniskerry Roads and Enniskerry / Ballycorus / Ballybetagh Road junctions, the overall development pattern is very linear and fragmented and as such, the LAP area lacks a strong physical identity or indeed, focal point.

#### 2.1.1 County Development Plan Policy

The lands comprising the LAP area have already been allocated land use zonings, as contained in the County Development Plan 2010-2016. Six land use zones are included within the extent of the LAP boundary and are as follows:

**Table 2.1: Land Use Zonings**

Zone	Objective
A	To protect and/or improve residential amenity
B	To protect and improve rural amenity and to provide for the development of agriculture.
E	To provide for economic development and employment.
F	To preserve and provide for open space with ancillary active recreational amenities.
G	To protect and improve high amenity areas.
NC	To protect, provide for and/or improve mixed-use neighbourhood centre facilities.



Other objectives contained within the CDP, 2010-2016, which are applicable to the Plan Area include: Long Term Road Proposals, Six Year Road Proposals, Protected Structures, Sites of Archaeological Interest, Preservation of Views, an Area subject to the Section 49 Supplementary Development Contribution Scheme, a Traveller Accommodation site, and a County Council Housing Programme site.

### 2.1.2 Overall Strategy

The Planning Authority is satisfied that the overall strategic approach to the planning of Kiltiernan Glenamuck, as outlined in the 2007 LAP remains robust and have not changed despite the severe downturn in the national economy, and the probability that residential development, in particular, may not proceed in the short term. The key elements of the overall planning framework for the area include:

- The proposal to provide a bypass road of the village core of Kiltiernan;
- The implementation of a Neighbourhood Framework Plan to consolidate the village core;
- The graduation of residential densities, from higher densities adjacent to the Luas line, to lower densities further from the main public transport artery; and
- The implementation of a centrally-located major public open space/school site.

The fact that the Kiltiernan/ Glenamuck LAP area is serviced in relation to water and drainage infrastructure - unlike much of the zoned residential land in the southern part of the County – serves to increase its importance as a strategic land bank for the County in the medium-term.

The primary objectives of the Draft LAP are as follows:

- To accommodate a sustainable level of residential and other ancillary development to ensure the wider strategic objectives of the 2010-2016 County Development Plan are realised;
- To establish an obvious identity / sense of place for Kiltiernan;
- To establish a focal point / civic node for Kiltiernan;
- To guide development in order to establish the character of the two component areas that comprise the LAP namely, Glenamuck and Kiltiernan; and
- Ensure that all projects in the LAP which could, either individually or in combination with other plans and projects, have a significant effect on a Natura 2000 site (or sites) will be subject to Appropriate Assessment Screening.

Any developments within the Draft LAP boundary shall be done so in accordance with the requirements of the EU Directives and associated legislation, County Development Plan policy and shall have regard to national and regional guidelines.

It is Council policy to protect, conserve and enhance the natural heritage and environment within and adjacent to Kiltiernan Glenamuck. The Council is very much aware and committed to protecting the environment within and adjacent to the Draft LAP, and in that regard have a number of objectives focused on the implementation of relevant EU Directives and associated legislation. In particular, it is an objective of the Council to ensure that all plans and projects in the LAP area which could, either individually or in combination with other plans and projects have significant effects on a Natura 2000 site(s) will be subject to Appropriate Assessment Screening.

## **2.2 EXISTING ENVIRONMENT AT THE DRAFT LAP LANDS**

### **2.2.1 Water Catchment Areas**

The Draft LAP is located within the Eastern River Basin District (ERBD). The Glenamuck River/Stream, which is a tributary of the Ballyogan Stream and Carrickmines Stream, is located to the west of Glenamuck Road and flows in a south-west to north-east direction. The Ballyogan and Carrickmines Streams connect into the Shangnanagh River located to the south of the R116.

The Loughlinstown River flows along the western and southern margins of the Draft LAP area. According to the Historical Landscape Character Assessment Study for the area the water in the River at this location is clear and there is no evidence of pollution along its length.

The third stream present within the Draft LAP area, is Golf Stream (a tributary of the Glenamuck Stream), which flows along the north-western boundary of the Draft LAP area. The water quality of this Stream has been found to be compromised as a result of presence of the earlier landfill site.

In addition to the afore-mentioned rivers and streams, a number of smaller interceptor ditches occur in the area, most notably alongside and parallel to Glenamuck Road. Some of these ditches contain notable flows.

The Council is committed to protecting the watercourses within the boundaries of the Draft LAP. To this regard there are a number of objectives within the Draft LAP which focus on maintaining and protecting the natural character and ecological value of these watercourses, which include the implementation of the EU Water Framework Directive and the Eastern River Basin Management Plan. Further, development proposals will be required to provide a buffer zone a minimum of 15m each side of the waters edge.

### **2.2.2 Water supply**

Water supply for the Draft LAP area is facilitated primarily through the recently completed Sandyford High Level Water Supply Scheme. This scheme consisted of the provision of pumping plant, rising main, service reservoirs and distribution mains to improve security of existing water supply and to facilitate development in Sandyford, Ballyogan, Stepside and adjoining areas. The Scheme was officially opened in 2011 and provided extensive new water supply infrastructure to the southern part of the County. The project addressed a number of issues relating to drinking water supply by providing a single source of supply, elimination of small variable sources, adequate storage, adequate pressures and capacity to meet future demand. The new water supply scheme has the potential to serve up to 60,000 residents in the lower reaches of the Dublin mountains overlooking Dun Laoghaire between Sandyford and Stepside.

The Council shall ensure conformance with the relevant recommendations set out in *'The Provision and Quality of Drinking Water in Ireland – A Report for the Years 2007-2008'* (EPA, Office of Environment Enforcement, 2009). The Council aims to ensure that compliance is achieved, as a minimum, with regard to the 48 parameters set out under the European Communities (Drinking Water) Regulations (No.2) 2007. The Council has systems in place to obtain compliance with these standards. In addition protocols are in place to manage any incident of non-compliance and ensure a return to compliance as soon as possible.

### **2.2.3 Wastewater Facilities**

Traditionally, developments in the Kiltiernan Glenamuck Area were served by septic tanks and/or separate waste water treatment systems.

The completion of the Glenamuck/Kiltiernan Water and Drainage Scheme in 2009 involved the construction of a new gravity sewer to serve the “Glenamuck” area and a watermain connecting Kiltiernan (village) to the existing network at Carrickmines and Ballyogan and to service development lands at Glenamuck. The scheme also included a new sewer/watermain to serve houses/cottages (55 in number) on a section of Glenamuck Road, Glenamuck Cottages road and Rockville Drive and the decommissioning of the Council’s communal septic tank on a site at the top of Rockville Drive.

The Council is committed to ensuring the implementation of the EU Urban Waste Water Directive and its transposition into Irish legislation, namely the Urban Waste Water Treatment Regulations 2001 and 2004. To this regard there are a number of objectives within the Draft LAP which focus on wastewater and its appropriate treatment. It is an objective of the Council to ensure the changeover from septic tanks to mains connections in all cases where this is feasible and that all new developments utilise and connect to the existing wastewater infrastructure. The provision of individual septic tanks and treatment plants in the LAP will be strongly discouraged to minimise the risk of groundwater pollution. Where such facilities are permitted, full compliance with the prevailing regulations and standards will be required, including the EPA 2009 Code of Practice: Wastewater Treatment and Disposal Systems Serving Single Houses (p.e.≤ 10).

#### **2.2.4 Flood Protection**

Having regard to Sustainable Drainage Systems (SuDS), it is the policy of the Council that all new relevant developments be required to incorporate Best Management Practices for the disposal of storm water drainage. Specifically, developments should generally comply with all relevant criteria set out in the U.K. CIRIA (Construction Industry Research & Information Association) document– “Sustainable Urban Drainage Systems – Design Manual for Scotland and Northern Ireland”.

As with all matters pertaining to Drainage, development must be carried out in accordance with the requirements of the policy documents arising from the Greater Dublin Strategic Drainage Study (GSDSDS).

Kiltiernan Glenamuck lies within the Eastern Catchment Flood Risk Assessment and Management (ECFRAM). CFRAM is a national programme for the medium to long-term strategy for the reduction and management of flood risk in Ireland. It will deliver on core components of the National Flood Policy and on the requirements of the EU Flood Directive. The Office of Public Works is the lead agency for flood risk management in Ireland and is working in partnership with all the local authorities to deliver the objectives of this programme. These CFRAM studies will produce Flood Risk Management Plans along with a strategy for implementation.

The Planning System and Flood Risk Management Guidelines for Planning Authorities (2009) introduce mechanisms for the incorporation of flood risk identification, assessment and management into the planning process. Planning applications for development in areas where flood risk may be present will be assessed in accordance with the provisions of these Guidelines. Where flood risk is potentially considered to be an issue, a flood risk assessment should be carried out.

All new development shall comply with the Greater Dublin Strategic Drainage Study in terms of sustainable drainage system (SUDS). It is imperative that stringent SUDS measures are applied throughout the area on all new developments.

## 2.3 BRIEF DESCRIPTION OF THE NATURA 2000 SITES

This section of the screening process describes the Natura 2000 sites within a 15km radius of the Draft LAP area. A 15km buffer zone has been chosen as a precautionary measure, to ensure that all potentially affected Natura 2000 sites are included in the screening process. This is in line with, *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities*, produced by the Department of the Environment, Heritage and Local Government.

**Table 2.2** lists the SACs and **Table 2.3** lists the SPAs that are within 15km of the Draft LAP, and **Figure 1** shows their locations in relation to the Kiltiernan/ Glenamuck Draft LAP.

The integrity of a Natura 2000 site (referred to in Article 6.3 of the EU Habitats Directive) is determined based on the conservation status of the qualifying features of the SAC or SPA. The qualifying features for each site have been obtained through a review of the Conservation Objectives available from the NPWS.

**Table 2.2: SACs within 15km of the Kiltiernan Glenamuck Draft LAP**

Site Code	Site Name	Qualifying Habitats	Qualifying Species
000202	Howth Head SAC	Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]; and European dry heaths [4030].	-
000206	North Dublin Bay SAC	Mudflats and sandflats not covered by seawater at low tide [1140]; <i>Salicornia</i> and other annuals colonizing mud and sand [1310]; <i>Spartina</i> swards ( <i>Spartinion maritimae</i> ) [1320]; Atlantic salt meadows ( <i>Glaucopuccinellietalia maritimae</i> ) [1330]; Mediterranean salt meadows ( <i>Juncetalia maritimi</i> ) [1410]; Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [21A20]; Fixed coastal dunes with herbaceous vegetation (grey dunes) [21A30]; Annual vegetation of drift lines [121A0]; Embryonic shifting dunes [21A10]; and Humid dune slacks [21A90].	<i>Petalophyllum ralfsii</i> [1395] (Petalwort)
000210	South Dublin Bay SAC	Mudflats and sandflats not covered by seawater at low tide [1140].	-
000714	Bray Head SAC	Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]; and European dry heaths [4030].	-
002122	Wicklow Mountains SAC	Oligotrophic to mesotrophic standing waters [3130]; Natural dystrophic lakes and ponds	Otter ( <i>Lutra lutra</i> ) [1355].

Site Code	Site Name	Qualifying Habitats	Qualifying Species
		[3160]; Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010]; European dry heaths [4030]; Alpine and Boreal heaths [4060]; Species-rich <i>Nardus</i> grasslands [6230]; Blanket bog [7130]; Siliceous scree of the montane to snow levels [8110]; Calcareous rocky slopes with chasmophytic vegetation [8210]; Siliceous rocky slopes with chasmophytic vegetation [8220]; and Old sessile oak woods [91A0].	
000725	Knocksink Wood SAC	Petrifying Springs with tufa formation [7220]; and Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> ( <i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i> ) [91EO].	-
000713	Ballyman Glen SAC	Petrifying Springs with tufa formation [7220]; and Alkaline Fens [7230].	-
001209	Glenasmole Valley SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates ( <i>Festuco Brometalia</i> ) (*important orchid sites) [6210]; Molinia meadows on calcareous, peaty or clayey-silt-laden soils ( <i>Molinion caeruleae</i> ) [6410]; and Petrifying Springs with tufa formation [7220].	-
000719	Glen of the Downs SAC	Old sessile oak woods [91A0].	-
000716	Carriggower Bog SAC	Transition mires and quaking bogs [7140].	-

Table 2.3: SPAs within 15km of the Kiltiernan Glenamuck Draft LAP

Site Code	Site Name	Qualifying Feature Annex I species
004006	North Bull Island SPA	To maintain or restore the favourable conservation conditions of the bird species listed as Special Conservation Interests for this SPA: Light-bellied Brent Goose, Shelduck, Teal, Pintail, Shoveler, Oystercatcher, Golden Plover, Grey Plover, Knot, Sanderling, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Turnstone, Black-headed Gull, and Wetland & Waterbirds.
004024	South Dublin Bay and River Tolka Estuary SPA	To maintain or restore the favourable conservation conditions of the bird species listed as Special Conservation Interests for this SPA:

Site Code	Site Name	Qualifying Feature Annex I species
		Light-bellied Brent Goose, Oystercatcher, Ringed Plover, Golden Plover, Knot, Sanderling, Dunlin, Bar-tailed Godwit, Redshank, Black-headed Gull, Roseate Tern, Common Tern, Arctic Tern and Wetland & Waterbirds.
004113	Howth Head Coast SPA	To maintain or restore the favourable conservation conditions of the bird species listed as Special Conservation Interests for this SPA: Kittiwake.
004172	Dalkey Island SPA	To maintain or restore the favourable conservation conditions of the bird species listed as Special Conservation Interests for this SPA: Roseate Tern, Common Tern and Arctic Tern.
004040	Wicklow Mountains SPA	To maintain or restore the favourable conservation conditions of the bird species listed as Special Conservation Interests for this SPA: Merlin and Peregrine.

The National Parks and Wildlife Service (NPWS) are proposing to designate a marine area between Rockbill and Dalkey Island. It is understood that this proposed candidate Special Area of Conservation will aid the protection of the Harbour Porpoise. The NPWS has not, to date, released any official documentation on these proposals on their website.

## 2.4 ASSESSMENT CRITERIA

### 2.4.1 Direct, Indirect or Secondary Impacts

**Tables 2.2** and **2.3** list the Natura 2000 sites within 15 km of the Draft LAP area. There are nineteen sites in all, ten SACs and five SPAs.

It is Council policy to protect, conserve and enhance the natural heritage and environment within and adjacent to Kiltiernan/ Glenamuck LAP area. The Council is committed to protecting and enhancing the conservation status of these SACs and SPAs, and have specific policies relating to their protection and maintenance, as appropriate. In particular, it is an objective of the Council to ensure that all plans and projects in the County which could, either individually or in combination with other plans and projects have significant effects on a Natura 2000 site(s) will be subject to Appropriate Assessment Screening. Further, it is an objective of the Council to ensure the implementation of the European Communities Birds and Natural Habitats Regulations 2011 (S.I. No. 477 of 2011).

No Natura 2000 site lies within the boundaries of the Draft LAP lands, therefore no direct impacts will occur through land take or fragmentation of habitats.

Increased development and construction of residential and commercial units will lead to increased demand for potable water and increased pressure on existing and future waste water treatment systems. Water for Kiltiernan Glenamuck comes from the Sandyford High Level Water Supply Scheme and this is capable of catering for future developments in the area. There are no particular constraints in terms of supplying water to future development within the Draft LAP lands.

The Council is committed to ensuring the implementation of the EU Urban Waste Water Directive and its transposition into Irish legislation, namely the Urban Waste Water Treatment Regulations 2001 and 2004. To this regard there are a number of objectives within the Draft LAP which focus on wastewater and its appropriate treatment. It is an objective of the Council to ensure the changeover from septic tanks to mains connections in all cases where this is feasible and that all new developments utilise and connect to the existing wastewater infrastructure. The provision of individual septic tanks and treatment plants in the LAP will be strongly discouraged to minimise the risk of groundwater pollution. Where such facilities are permitted, full compliance with the prevailing regulations and standards will

be required, including the EPA 2009 Code of Practice: Wastewater Treatment and Disposal Systems Serving Single Houses (p.e.≤ 10). Complying with the Urban Waste Water Treatment Regulations 2001 and 2004 will ensure that sewage will be treated to an appropriate standard such that it will not impact on receiving waters, and therefore, will not result in any indirect impacts on the Natura 2000 sites.

There are three streams within the Draft LAP boundary which drain into Killiney Bay. The Council is committed to protecting the watercourses within the boundaries of the Draft LAP. To this regard there are a number of objectives within the Draft LAP which focus on maintaining and protecting the natural character and ecological value of these watercourses. Development proposals will be required to provide a buffer zone having a minimum of 15m each side of the waters edge. Further, it is a policy of the Council to ensure that the EU Water Framework Directive is implemented. In addition, it is a policy of the Council to ensure that the specific relevant objectives and measures for individual water bodies set out in the Eastern River Basin Management Plan and associated Programme of Measures are implemented. These policies to protect the natural character and ecological value of these watercourses will also ensure that the receiving bay is also protected, and therefore, will not result in any indirect impacts on the Natura 2000 sites along the Dublin coastline.

Further, it is an objective of the Council to ensure the protection and preservation of the ecological integrity of the SPAs and SACs in proximity to the Kiltiernan/ Glenamuck Draft Local Area Plan boundary in the consideration and implementation of development within Kiltiernan Glenamuck. Any development proposals shall be subject to Appropriate Assessment Screening in accordance with the requirements of the EU Habitats Directive to ensure the protection and preservation of all designated SPA's and SACs of Dublin Bay and the surrounding area.

#### **2.4.2 Cumulative and In Combination Impacts**

This step aims to identify at this early stage any possible significant in-combination or cumulative effects/impacts of the proposed Draft LAP with other such Plans and projects on the Natura 2000 network. Other Plans and projects specific to the relevant Natura 2000 sites are the following:

- Dublin City Development Plan 2011-2017;
- Dún Laoghaire-Rathdown County Development Plan 2010-2016;
- Greater Dublin Area Regional Planning Guidelines 2010-2022;
- National Spatial Strategy;
- Eastern RBD Management Plan;
- Water Services Investment Programme;
- IPPC Programme;
- Local Authority Discharge;
- Groundwater Pollution Reduction Programmes;
- Surface Water Pollution Reduction Programmes;
- Catchment Flood Risk Assessment and Management Study; and
- Catchment Flood Risk Management Plans.
- Glenamuck District Distributor Road.

No other pathway has been identified by which any of the Plans and programmes identified could have a significant 'in combination' effect on any of the Natura 2000 sites identified. In fact, the in combination effect of the above water related Plans and programmes would have positive effects on water quality resulting in positive indirect impacts on the coastal SACs and SPAs.

### 2.4.3 Likely Changes to the Site

The likely changes that could arise from the implementation of the Kiltiernan/ Glenamuck Draft LAP have been examined in the context of a number of factors that could potentially affect the integrity of the identified Natura 2000 sites. It has been determined that no Natura 2000 site will be potentially impacted as a result of the Kiltiernan/ Glenamuck Draft LAP. **Table 2.4** shows the Likely Changes to Natura 2000 Sites as a result of the Kiltiernan Glenamuck Draft LAP.

**Table 2.4: Likely Affect on Natura 2000 Sites**

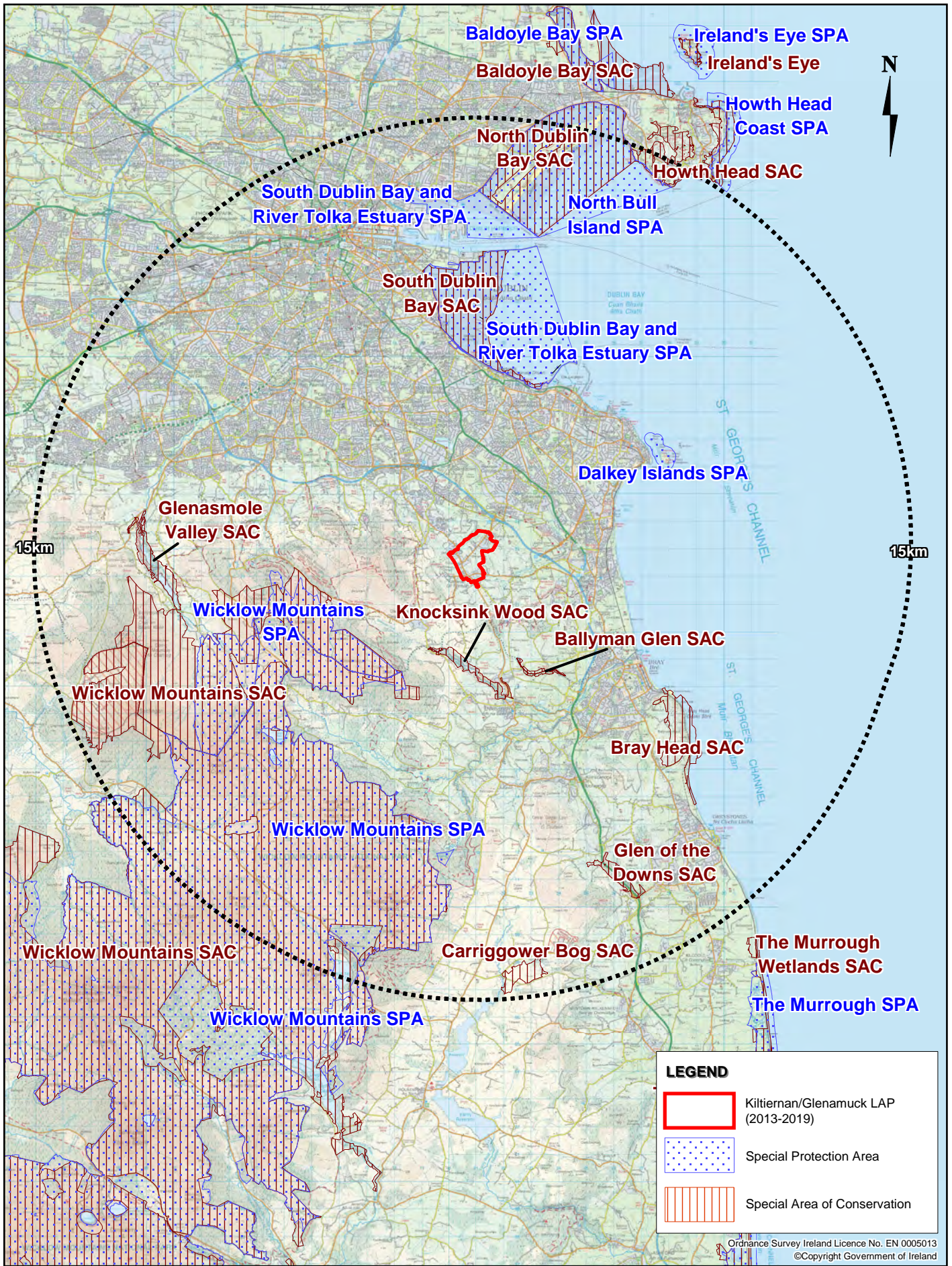
Site Name	Reduction of Habitat Area	Disturbance to Key Species	Habitat or Species Fragmentation	Reduction in Species Density	Changes in Key Indicators of Conservation Value (Water Quality Etc.)	Climate Change
Howth Head SAC	None	None	None	None	None	None
North Dublin Bay SAC	None	None	None	None	None	None
South Dublin Bay SAC	None	None	None	None	None	None
Bray Head SAC	None	None	None	None	None	None
Wicklow Mountains SAC	None	None	None	None	None	None
Knocksink Wood SAC	None	None	None	None	None	None
Ballyman Glen SAC	None	None	None	None	None	None
Glen of The Downs SAC	None	None	None	None	None	None
Glenasmole Valley SAC	None	None	None	None	None	None
Carriggower Bog SAC	None	None	None	None	None	None
North Bull Island SPA	None	None	None	None	None	None
Howth Head Coast SPA	None	None	None	None	None	None
South Dublin Bay and River Tolka Estuary SPA	None	None	None	None	None	None
Dalkey Island SPA	None	None	None	None	None	None
Wicklow Mountains SPA	None	None	None	None	None	None

### 2.4.4 Elements of the Plan Where the Impacts are Likely to be Significant

The development of these lands could potentially yield additional residential units within Kiltiernan Glenamuck, which may cause additional load on waste water treatment systems, water supply, surface water run off, etc. However, the level of growth in Kiltiernan Glenamuck will be managed in line with the ability of local services to cater for future growth. No development shall be permitted to proceed if the local services are not sufficient to cater for the development. Therefore, it is envisaged that no elements of the Draft LAP are likely to cause significant impacts on Natura 2000 sites.



In addition, the Council will have regard to its responsibilities in relation to the requirements of the Habitats Directive, and any development proposal within the vicinity of or potentially having an effect on the designated site will be subject to an Appropriate Assessment under the Habitats Directive in consultation with the National Parks and Wildlife Service (NPWS).



**FIGURE 1 - KILTIERNAN/GLENAMUCK DRAFT LAP  
APPROPRIATE ASSESSMENT -  
NATURA 2000 SITES**

### **3 SCREENING CONCLUSION AND STATEMENT**

The likely impacts that will arise from the Draft LAP have been examined in the context of a number of factors that could potentially affect the integrity of the Natura 2000 network. No Natura 2000 site within 15km of the Draft LAP area will be adversely affected. A Finding of No Significant Effects Matrix has been completed and is presented in Section 4 of this Screening Statement.

On the basis of the findings of this Screening for Appropriate Assessment of Natura 2000 sites, it is concluded that the proposed Draft LAP will not have a significant effect on the Natura 2000 network and a Stage 2 Appropriate Assessment is not required.

## 4 FINDING OF NO SIGNIFICANT EFFECTS REPORT MATRIX

Name of project or Plan	Kiltiernan Glenamuck Draft Local Area Plan
Name and location of Natura 2000 site	<p>Howth Head SAC;            North Dublin Bay SAC;            South Dublin Bay SAC;            Wicklow Mountains SAC;            Bray Head SAC;            Knocksink Wood SAC;            Ballyman Glen SAC;            Glen of The Downs SAC;            Glenasmole Valley SAC;            Carriggower Bog SAC;            North Bull Island SPA;            Howth Head Coast SPA;            South Dublin Bay and River Tolka Estuary SPA;            Dalkey Island SPA;            Wicklow Mountains SPA.</p>
Description of the project or Plan	<p>The area comprising the Draft LAP is situated to the south of Dublin City and generally in the foothills of the Dublin Mountains. Its location had long been strategic since it was on an important communication route leading southwards from Dublin City (Enniskerry Road (R117)). Historically this was 'frontier' land between the settled land of the 'Pale' to the north and the Gaelic mountain lands to the south.</p> <p>The Draft LAP area, which is located centrally in the southern portion of Dun Laoghaire-Rathdown County Council's jurisdiction, is peri-urban in character. The South-Eastern Motorway (SEM) is located approximately 0.6 kilometres (km) to the north of the LAP area, with access via the Carrickmines Interchange.</p> <p>The Draft LAP area comprises the townland of Glenamuck North and portions of the townlands of Carrickmines Great, Glenamuck South, Glebe, Kiltiernan Domain, Kiltiernan and Kingston. The boundary lines depicting the District Electoral Divisions (DED's) of Glencullen, Cabinteely-Loughlinstown and Shankill- Rathmichael traverse the Draft LAP area. The majority of the area falls within the Glencullen DED.</p> <p>The current main transport routes through the LAP area comprise Glenamuck Road, aligned through the central portion of the area in a north-east to south-west direction to intersect with the Enniskerry Road (R117). Portions of Ballycorus Road (R116) and Ballybetagh Road (R116) extend into the southern portion of the area, east and west respectively, off the Enniskerry Road. A limited number of other minor roads / laneways serve properties located east of Glenamuck Road, and the Wayside Cottages on the western side of Enniskerry Road.</p>

	<p>While development has to some extent clustered around the Glenamuck / Enniskerry Roads and Enniskerry / Ballycorus / Ballybetagh Road junctions, the overall development pattern is very linear and fragmented and as such, the LAP area lacks a strong physical identity or indeed, focal point.</p> <p><b>Overall Strategy</b></p> <p>The Planning Authority is satisfied that the overall strategic approach to the planning of Kiltiernan/ Glenamuck, as outlined in the 2007 LAP remains robust and have not changed despite the severe downturn in the national economy, and the probability that residential development, in particular, may not proceed in the short term. The key elements of the overall planning framework for the area include:</p> <ul style="list-style-type: none"> <li>• The proposal to provide a bypass road of the village core of Kiltiernan;</li> <li>• The implementation of a Neighbourhood Framework Plan to consolidate the village core;</li> <li>• The graduation of residential densities, from higher densities adjacent to the Luas line, to lower densities further from the main public transport artery; and</li> <li>• The implementation of a centrally-located major public open space/school site.</li> </ul> <p>The fact that the Kiltiernan/ Glenamuck LAP area is serviced in relation to water and drainage infrastructure - unlike much of the zoned residential land in the southern part of the County – serves to increase its importance as a strategic land bank for the County in the medium-term.</p> <p>The primary objectives of the Draft LAP are as follows:</p> <ul style="list-style-type: none"> <li>• To accommodate a sustainable level of residential and other ancillary development to ensure the wider strategic objectives of the 2010-2016 County Development Plan are realised;</li> <li>• To establish an obvious identity / sense of place for Kiltiernan;</li> <li>• To establish a focal point / civic node for Kiltiernan;</li> <li>• To guide development in order to establish the character of the two component areas that comprise the LAP namely, Glenamuck and Kiltiernan; and</li> <li>• Ensure that all projects in the LAP which could, either individually or in combination with other plans and projects, have a significant effect on a Natura 2000 site (or sites) will be subject to Appropriate Assessment Screening.</li> </ul> <p>Any developments within the Draft LAP boundary shall be done so in accordance with the requirements of the EU Directives and associated legislation, County Development Plan policy and shall have regard to national and regional guidelines.</p> <p>It is Council policy to protect, conserve and enhance the natural heritage and environment within and adjacent to</p>
--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	Kiltiernan Glenamuck. The Council is very much aware and committed to protecting the environment within and adjacent to the Draft LAP, and in that regard have a number of objectives focused on the implementation of relevant EU Directives and associated legislation. In particular, it is an objective of the Council to ensure that all plans and projects in the LAP area which could, either individually or in combination with other plans and projects have significant effects on a Natura 2000 site(s) will be subject to Appropriate Assessment Screening.
Is the project or Plan directly connected with or necessary to the management of the site (provide details)?	No
Are there other projects or Plans that together with the project or Plan being assessed could affect the site (provide details)?	No
<b>The Assessment of Significance of Effects</b>	
Describe how the project or Plan (alone or in combination) is likely to affect the Natura 2000 site.	The proposed development is not likely to affect Natura 2000 sites.
Explain why these effects are not considered significant.	<p>It is Council policy to protect, conserve and enhance the natural heritage and environment within and adjacent to Kiltiernan/ Glenamuck LAP area. The Council is committed to protecting and enhancing the conservation status of these SACs and SPAs, and have specific policies relating to their protection and maintenance, as appropriate. In particular, it is an objective of the Council to ensure that all plans and projects in the County which could, either individually or in combination with other plans and projects have significant effects on a Natura 2000 site(s) will be subject to Appropriate Assessment Screening. Further, it is an objective of the Council to ensure the implementation of the European Communities Birds and Natural Habitats Regulations 2011 (S.I. No. 477 of 2011).</p> <p>No Natura 2000 site lies within the boundaries of the Draft LAP lands, therefore no direct impacts will occur through land take or fragmentation of habitats.</p> <p>Increased development and construction of residential and commercial units will lead to increased demand for potable water and increased pressure on existing and future waste water treatment systems. Water for Kiltiernan Glenamuck comes from the Sandyford High Level Water Supply Scheme and this is capable of catering for future developments in the area. There are no particular constraints in terms of supplying water to future development within the Draft LAP lands.</p> <p>The Council is committed to ensuring the implementation of the EU Urban Waste Water Directive and its transposition into Irish legislation, namely the Urban Waste Water Treatment Regulations 2001 and 2004. To this regard there are a number of objectives within the Draft LAP which focus on wastewater and its appropriate treatment. It is an objective of the Council to ensure the changeover from septic tanks to mains connections in all cases where this is</p>

	<p>feasible and that all new developments utilise and connect to the existing wastewater infrastructure. The provision of individual septic tanks and treatment plants in the LAP will be strongly discouraged to minimise the risk of groundwater pollution. Where such facilities are permitted, full compliance with the prevailing regulations and standards will be required, including the EPA 2009 Code of Practice: Wastewater Treatment and Disposal Systems Serving Single Houses (p.e.≤ 10). Complying with the Urban Waste Water Treatment Regulations 2001 and 2004 will ensure that sewage will be treated to an appropriate standard such that it will not impact on receiving waters, and therefore, will not result in any indirect impacts on the Natura 2000 sites.</p> <p>There are three streams within the Draft LAP boundary which drain into Killiney Bay. The Council is committed to protecting the watercourses within the boundaries of the Draft LAP. To this regard there are a number of objectives within the Draft LAP which focus on maintaining and protecting the natural character and ecological value of these watercourses. Development proposals will be required to provide a buffer zone having a minimum of 15m each side of the waters edge. Further, it is a policy of the Council to ensure that the EU Water Framework Directive is implemented. In addition, it is a policy of the Council to ensure that the specific relevant objectives and measures for individual water bodies set out in the Eastern River Basin Management Plan and associated Programme of Measures are implemented. These policies to protect the natural character and ecological value of these watercourses will also ensure that the receiving bay is also protected, and therefore, will not result in any indirect impacts on the Natura 2000 sites along the Dublin coastline.</p> <p>Further, it is an objective of the Council to ensure the protection and preservation of the ecological integrity of the SPAs and SACs in proximity to the Kiltiernan/ Glenamuck Draft Local Area Plan boundary in the consideration and implementation of development within Kiltiernan Glenamuck. Any development proposals shall be subject to Appropriate Assessment Screening in accordance with the requirements of the EU Habitats Directive to ensure the protection and preservation of all designated SPA's and SACs of Dublin Bay and the surrounding area.</p>
List of agencies consulted: provide contact name and telephone or e-mail address.	N/A
Response to consultation.	N/A
<b>Data Collected to Carry Out the Assessment</b>	
Who carried out the assessment?	RPS
Sources of data	NPWS database Information from Dún Laoghaire-Rathdown Water Services
Level of assessment completed	Desktop
Where can the full results of the assessment be accessed and viewed?	Dún Laoghaire-Rathdown County Council Planning Department

Overall Conclusion	Stage 1 Screening indicates that the proposed Draft LAP will not have a significant negative impact on the Natura 2000 network. Therefore, a Stage 2 'Appropriate Assessment' under Article 6(3) of the Habitats Directive 92/43/EEC is not required.
--------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



# **Appendix B**

## **Scoping Responses**





Mr Colin Fulcher  
Executive Planner  
Planning Department  
Dun Laoghaire-Rathdown County Council  
County Hall  
Marine Road  
Dun Laoghaire  
Co. Dublin

16<sup>th</sup> January 2013

Our Ref: SCP121208.1

**Re: SEA Scoping Report. Kiltiernan/Glenamuck Local Area Plan, Dun Laoghaire Rathdown**

Dear Mr Fulcher,

I refer to and acknowledge your correspondence, dated 2<sup>nd</sup> January 2013, in relation to the Strategic Environmental Assessment Scoping for the Kiltiernan / Glenamuck Local Area Plan.

Please find enclosed the EPA's initial submission to assist you in undertaking an environmental assessment as per the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004). A number of specific comments are made below in relation to questions posed in the SEA Scoping Report, which should also be taken into account.

**Specific Comments to be considered**

Consideration should be given to amending the primary objective described in *Section 1.2 Kiltiernan /Glenamuck LAP VO1 "To accommodate a **sustainable** ~~significant~~ level of residential and other ancillary development to ensure the wider strategic objectives of the 2010-2016 County Development Plan are realised"*

In relation to *Question 1* – consideration should be given to taking into account the Eastern CFRAMS (currently undergoing the SEA), the National Biodiversity Plan 2011-2016 and the Greater Dublin Strategic Drainage Study and integrating as appropriate in the Plan.

With regard to *Question 2*, the Agency's scoping guidance document attached to this submission for links to updated reports/guidance provides relevant resources which should be considered.

In response to *Question 3* related to identifying relevant significant issues to be addressed in the SEA, consideration should be given to including a commitment that where development is proposed for the Plan area, that it is environmentally sustainable, and consistent with the requirements of the Regional Planning Guidelines and the policies/objectives of the County Development Plan.

With regard to *Question 5* and the identification of reasonable development scenarios to be considered as part of the SEA process, consideration should be given to ensuring that each scenario put forward reflects compliance with existing environmental legislation and planning guidelines. Specific alternatives may consist of spatial (where to develop), temporal (phasing/time scale of development)



and zonal alternatives (different land use zonings for specific areas) which could be considered during the Scoping process in narrowing down particular preferred alternatives to assess in the SEA.

Further comment will be provided by the Agency upon receipt of the Draft Environmental Report and Plan and associated documents during the next statutory consultation phase of the SEA Process.

### **Updated SEA Regulations / Circular**

Your attention is brought to the new SEA Regulations, which should be referenced and integrated into the Plan and SEA process.

Amending SEA Regulations were signed into Irish law on 3<sup>rd</sup> May 2011, amending the original SEA Regulations:

- Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011, (S.I. No. 201 of 2011), amending the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004).

You are also referred to the recent DoECLG Circular (PSSP 6/2011) issued on the 26<sup>th</sup> July 2011 to each County/City Manager, Director of Services and Town Clerk in relation to '*Further Transposition of the EU Directive 2001/42/EC on Strategic Environmental Assessment (SEA)*' which should also be referred to and integrated into the Plan.

### **European Communities (Birds and Natural Habitats) Regulations 2011**

The requirements of the recent European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), should also be taken into account in implementing the Plan. These Regulations consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in the CJEU judgements.

### **Environmental Authorities**

You are reminded of the requirement, where appropriate under the SEA Regulations, and as amended by S.I. No. 201 of 2011 to give notice to the following:

- The Environmental Protection Agency
- The Minister for the Environment, Community & Local Government
- Minister for Agriculture, Marine and Food, and the Minister for Communications Energy and Natural Resources, where it appears to the planning authority that the plan or programme, or modification of the plan or programme, might have significant effects on fisheries or the marine environment
- where it appears to the competent authority that the plan or programme, or amendment to a plan or programme, might have significant effects in relation to the architectural heritage or to nature conservation, the Minister for Arts, Heritage and Gaeltacht Affairs, and
- any adjoining planning authority whose area is continuous to the area of a planning authority which prepared a draft plan, proposed variation or local area plan.



You are also reminded that a copy of your decision regarding the determination should be made available for public inspection at your offices, local authority website and should also be notified to any Environmental Authorities already consulted.

Should you have any queries or require further information in relation to the above please contact the undersigned.

I would be grateful if an acknowledgement of receipt of this submission could be sent electronically to the following address: [sea@epa.ie](mailto:sea@epa.ie).

Yours Sincerely,

A handwritten signature in blue ink, appearing to read 'Cian O'Mahony'. The signature is fluid and cursive, written over a light blue circular stamp.

---

**Cian O'Mahony**  
*Scientific Officer*  
*SEA Section*  
*Office of Environmental Assessment*  
*Environmental Protection Agency*  
*Regional Inspectorate*  
*Inniscarra, County Cork*





Mr Colin Fulcher  
Executive Planner  
Planning Department  
Dun Laoghaire-Rathdown County Council  
County Hall  
Marine Road  
Dun Laoghaire  
Co. Dublin

21<sup>st</sup> January 2013

Our Ref: SCP121208.1

**Re: SEA Scoping Report. Kiltiernan/Glenamuck Local Area Plan, Dun Laoghaire Rathdown**

Dear Mr Fulcher,

Further to the Agency's previous submission issued on the 16<sup>th</sup> January 2013, and attached for reference purposes, please find a number of additional comments which should also be taken into consideration.

**Additional Specific Comments to be considered**

In light of the current economic climate and given the scale of the proposed significant increase in population / residential zoned lands, this decision should be justified/clarified, in the context ensuring consistency with the Regional Planning Guidelines, County Development Plan and in accordance with the principles of sustainable development. The potential effects on existing critical service infrastructure (drinking water, waste water, waste etc) should be assessed. The location of zoned residential lands should take into account any risk of flooding identified and in accordance with the Flood Risk Management Guidelines (2009), where relevant and appropriate.

The Plan should also take into account the potential effects on human health and quality of life which may arise in relation to the significant proposed increase in population.

The protection of existing ecological corridors and designated national and international conservation sites should be considered.

**Environmental Authorities**

You are reminded of the requirement, where appropriate under the SEA Regulations, and as amended by S.I. No. 201 of 2011 to give notice to the following:

- The Environmental Protection Agency
- The Minister for the Environment, Community & Local Government
- Minister for Agriculture, Marine and Food, and the Minister for Communications Energy and Natural Resources, where it appears to the planning authority that the plan or programme, or modification of the plan or programme, might have significant effects on fisheries or the marine environment

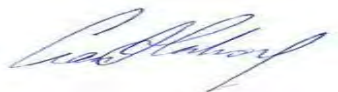
- where it appears to the competent authority that the plan or programme, or amendment to a plan or programme, might have significant effects in relation to the architectural heritage or to nature conservation, the Minister for Arts, Heritage and Gaeltacht Affairs, and
- any adjoining planning authority whose area is continuous to the area of a planning authority which prepared a draft plan, proposed variation or local area plan.

You are also reminded that a copy of your decision regarding the determination should be made available for public inspection at your offices, local authority website and should also be notified to any Environmental Authorities already consulted.

Should you have any queries or require further information in relation to the above please contact the undersigned.

I would be grateful if an acknowledgement of receipt of this submission could be sent electronically to the following address: [sea@epa.ie](mailto:sea@epa.ie).

Yours Sincerely,

A handwritten signature in blue ink, appearing to read 'Cian O'Mahony', written over a light blue circular stamp.

---

**Cian O'Mahony**  
*Scientific Officer*  
*SEA Section*  
*Office of Environmental Assessment*  
*Environmental Protection Agency*  
*Regional Inspectorate*  
*Inniscarra, County Cork*



Colin Fulcher  
Executive Planner,  
Economic Development and Planning Department,  
Dun Laoghaire-Rathdown County Council,  
County Hall,  
Marine Road,  
Dun Laoghaire,  
Co. Dublin.

Your Reference – NA  
Our Reference – BB/DD/210

December 31<sup>st</sup>, 2012

**Re: Kiltiernan / Glenamuck Local Area Plan (2013 – 2019) SEA Scoping.**

Dear Mr. Fulcher,

In relation to the above Local Area Plan scoping report, please find IFI's observations outlined below:

- In determining the likely significant effects of the Kiltiernan / Glenamuck Local Area Plan (2013 – 2019), regard should be had to the need for the sustainable development of the inland and marine fisheries resource (including the conservation of fish and other species of fauna and flora, aquatic habitats and the biodiversity of inland and marine water ecosystems). Consideration should be given to potential significant impacts on:
  - Water quality
  - Surface water hydrology
  - Fish spawning and nursery areas
  - Passage of migratory fish
  - Areas of natural heritage importance including geological heritage sites
  - Biological Diversity
  - Ecosystem structure and functioning
  - Sport and commercial fishing and angling
  - Amenity and recreational areas

- The Local Area Plan (LAP) area is traversed by the Glenamuck Stream (part of the Carrickmines / Shanganagh system) and the Loughlinstown River, both regionally important salmonid systems. The Carrickmines and Loughlinstown systems in the LAP area support a resident population of Brown trout (and several other fish species) while further downstream they support a migratory population of Sea trout (both *Salmo trutta*). Thus, it is important to note that salmonid waters constraints apply to any development in this area. It is essential that development in the area will not have a deleterious effect on aquatic ecology in these systems.
- The presence of these native fish populations highlights the sensitivity of local watercourses and the Glenamuck / Loughlinstown catchments in general. Fishery habitat is regarded as good for all salmonid life stages throughout much of the system. Only clean, uncontaminated water should leave the LAP area and drain to the river network. In addition to statutory designations and associated protections, the plan provides an opportunity to provide enhanced protection for non-designated habitats and species.
- IFI's policy is to maintain watercourses and riparian zones in their open natural state in order to prevent habitat loss and aid in pollution detection. IFI would welcome the designation of lands adjacent to surface waters, particularly salmonid systems as areas of open preservation allowing protection / enhancement of biological diversity while providing open space and recreational amenity for river users as has been implemented in other areas in the county.
- It is essential that sufficient treatment capacity is available both within the receiving sewerage system locally and downstream at the relevant Waste Water Treatment Plant in order that the ecological integrity of the ultimate receiving water is protected.
- The disturbance of riparian habitats should be minimised. An undisturbed buffer zone between development area and river bank should be maximised. Riparian vegetation should be retained in as natural a state as possible at all times.
- It is recommended that the "Requirements for the Protection of Fisheries Habitat during Construction and Development Works at River Sites" ([www.fisheriesireland.ie](http://www.fisheriesireland.ie)) be consulted and referenced when producing the SEA for this LAP. IFI should be consulted in relation to all works proposed in any surface water corridor. The maintenance of habitat integrity (both in-stream and riparian) is essential in safeguarding the ecological value of streams as important urban and semi-urban natural resources.

I trust you will take our observations on board when scoping the SEA for this LAP.

Yours sincerely,

---

**Brian Beckett – Fisheries Environmental Officer, Dublin District.**



# **Appendix C**

## **Relevant Plans, Programmes and Policies**



### International Level Plans, Policies and Programmes

Topic	Title
Biodiversity	UN Convention on Biological Diversity (1992)
Climate Change	UN Kyoto Protocol The United Nations Framework Convention on Climate Change (UNFCCC) Kyoto Protocol, 1997
Cultural Heritage	The World Heritage Convention United Nations Convention Concerning the Protection of the World Cultural and Natural Heritage (Paris 1972)
Human Health/Air	World Health Organisation (WHO) Air Quality Guidelines (1999) and Guidelines for Europe (1987)

### European Level Plans, Policies and Programmes

Topic	Title
Noise	The Environmental Noise Directive (END) (2002/49/EC)
Biodiversity	The EU Biodiversity Strategy Communication on a European Community Biodiversity Strategy [Com (98) 42]
	The EU Habitats Directive Conservation of Natural Habitats and of Wild Flora and Fauna (92/43/EEC)
	The EU Birds Directive Conservation of Wild Birds Directive (79/409/EEC)
	Freshwater Fisheries Directive (78/659/EEC)
Cultural Heritage	Convention for the Protection of the Archaeological Heritage of Europe (revised) (Valletta 1992)
	Convention for the Protection of the Architectural Heritage of Europe (Granada 1985)

Topic	Title
Sustainable Development	The Gothenburg Strategy (2001) Communication from the Commission on "a Sustainable Europe for a Better World"
	The Sixth Environmental Action Programme (EAP) of the European Community 2002- 2012
	The SEA Directive (2001/42/EC)
	The EIA Directive (85/337/EEC) as amended by Directive 97/11/EC
	Second European Climate Change Programme (ECCP II) 2005.
Water	The Water Framework Directive (2000/60/EC)
	EU Floods Directive (2007/60/EC)
	Bathing Water Directive (2006/7/EC)
	The Groundwater Directive (1980/68/EC) and Groundwater Directive (2006/118/EC)
	The Urban Wastewater Treatment Directive (91/271/EEC) as amended by Directive (98/15/EEC)
	Drinking Water Directive (80/778/EEC) as amended by Directive 98/83/EC
Waste	The Landfill Directive (99/31/EC)

### National Level Plans, Policies and Programmes

Topic	Title
Biodiversity	National Biodiversity Plan 2011-2016
	The Wildlife Act 1976 and the Wildlife (Amendment) Act 2000
	Flora Protection Order 1999
	European Communities (Natural Habitats) Regulations, S.I. 94/1997, as amended S.I. 233/1998, S.I. 378/2005 and European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011)



Topic	Title
	Quality of Salmonid Waters Regulations 1988 (S.I. 293 of 1988)
Climate	National Climate Change Strategy (2000) and National Climate Change Strategy 2007-2012
	Department of Transport, 2003: 'Statement of Strategy: 2003-2005'
Heritage	National Heritage Plan 2002 - 2006
	The National Monuments Acts (1930 to 2004)
	The Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999
	Planning and Development Act 2000
Planning	National Spatial Strategy 2002-2020
	National Development Plan 2007-2013 Transforming Ireland - A Better Quality of Life for All.
	Planning and Development Act 2000
	Planning and Development (Strategic Infrastructure) Act 2006
	The Sustainable Residential Development in Urban Areas Guidelines 2008
	Retail Planning Guidelines for Planning Authorities, 2005

Topic	Title
Sustainable Development	Sustainable Development: A Strategy for Ireland, 1997
	Making Ireland's Development Sustainable - 2002
	National Sustainable Development Policy
	National Climate Change Strategy 2007 - 2012
	Housing Policy Framework: Building Sustainable Communities, 2005
	Towards Sustainable Communities; Guidelines on Local Agenda 21, 2001
Transport	Transport 21
Water	Arterial Drainage Acts, 1945 and 1995
	European Communities (Drinking Water) (No. 2) Regulations 2007 (SI No. 278 of 2007)
	Water Services Act 2007
	Water Pollution Acts 1977-1990
	European Communities (Waste Water Treatment) Prevention of Odours and Noise) Regulations 2005 (SI No. 787 of 2005)

Topic	Title
	Waste Water Discharge (Authorisation) Regulations 2007 (SI No. 684 of 2007)
	Surface Water Regulations 2009
	Water Services Investment Programme
Waste	The Waste Management Act 1996 and amendments
	Changing our Ways (1998)
	Delivering Change - Recycling and Preventing Waste (2002)

### Regional and County Level Plans, Policies and Programmes

Topic	Title
Transport	A Platform for Change Strategy 2000-2016
	Greater Dublin Area Transport Strategy 2011-2030
Cultural Heritage	Dún Laoghaire-Rathdown Heritage Plan 2013-2018
Biodiversity	Dún Laoghaire-Rathdown Biodiversity Plan 2009-2013

Topic	Title
Water and Wastewater	Greater Dublin Strategic Drainage Study
	Water Supply Project – Dublin Region
Planning	Regional Planning Guidelines for the Greater Dublin Area 2010-2022
	Retail Planning Strategy for the Greater Dublin Area 2008-2016
	Kiltiernan/ Glenamuck Development Plan 2013-2019
	Kiltiernan Neighbourhood Framework Plan (January 2010)
	Relevant Local Area Plans

## **Appendix D**

### **Matrix Assessment of Policies/ Objectives**



## Policies/ Objectives

B/FF: Biodiversity, Flora and Fauna; P: Population; W: Water; S: Soil; C: Climate Change; CH: Cultural Heritage; L: Landscape, MA: Material Assets

Policies/ Objectives	B/FF	P	W	S	C	CH	L	MA	Comment/ Mitigation
V01 To accommodate a sustainable level of residential and other ancillary development to ensure the wider strategic objectives of the 2010-2016 County Development Plan are realised.	-/0	+	-/0	-/0	0	-/0	-/0	+	<p>Land zoned for residential development is in accordance with the core strategy and the zoning objectives within the Dún Laoghaire-Rathdown CDP.</p> <p>The phased development of the lands for residential use will have beneficial impacts on P and MA as residential development will be in a planned, phased and serviced.</p> <p>As the residential development will be mainly on greenfield land there will be potential for negative impacts on B/FF, W, S and CH. There will be the permanent loss of Greenfield land and therefore long term permanent impact on Soils. The residential development is subject to the construction of the Glenamuck District Distributor Road (GDDR) Scheme which includes the Glenamuck Link Distributor Road. Whilst a certain level of phased development will be allowed without this road being constructed, the full potential of development within the LAP will require the construction of this road which will, even with mitigation measures, have short term impacts on the environment with long term loss of greenfield land.</p> <p>The residential densities will be tiered to accommodate sensitive landscape. However there will still be potential for minor negative impacts on L. Effects on C could be neutral as new housing will have potential to incorporate energy efficient measures.</p> <p>This policy will have cumulative effects on B/FF, W and S though pressure on wastewater systems, water supplies, electricity and services such as schools. Integration of this policy with the provision of other protective policies within this Draft LAP would be expected to reduce direct negative impacts on environmental receptors.</p>
V02 To establish an obvious identity/sense of place for Kiltiernan.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
V03 To establish a focal point/civic node for Kiltiernan.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>

Policies/ Objectives	B/FF	P	W	S	C	CH	L	MA	Comment/ Mitigation
V04 To guide <b>sustainable</b> development in order to establish the character of the two component areas that comprise the Draft LAP namely, Glenamuck and Kiltiernan.	0	+	0	0	+	0/+	+	+	The phasing of residential development along with the establishment of a Neighbourhood Framework Plan will have positive impacts on P and MA. The Neighbourhood Cores will provide services and will provide a focal point for people within Kiltiernan. Sustainable development of the area will have neutral to positive effects on C, CH and L.
V05 Ensure that all projects in the Draft LAP which could, either individually or in combination with other plans and projects, have a significant effect on a Natura 2000 site (or sites) will be subject to Appropriate Assessment Screening.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
V06 The overarching policies and objectives of the Dún Laoghaire-Rathdown County Development Plan will equally apply to any development and any associated works, individually or in combination with other plans or projects within the Local Area Plan (LAP) boundaries.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b> The Dún Laoghaire-Rathdown CDP 2010-2016 was subject to SEA and AA.
V07 The EU Directives for Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) are the fundamental policy framework of environmental protection measures and legislation for the delivery of the policies within this document and full compliance with the EIA and SEA Directives shall be provided.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
<b>Residential</b>									
RE01. To develop a Plan that facilitates the development of a proper community through the considered use of imaginative and sympathetic design and layout of new residential development.	0	+	0	0	0	0	0/+	0	The inclusion of a policy to ensure that there is imaginative and sympathetic design and layout for new residential development will be positive for P and L.
RE02. To encourage/ ensure the successful integration of future residential developments with the existing built fabric of Kiltiernan/ Glenamuck.	0	+	0	0	0	+	+	+	Policy will have positive effects on CH and L due to integrated design. There will be a positive impact on P, L and MA through the development of sustainable transport measures within the area and access to the Luas Line along with planned greenway links for cyclists and pedestrians.
RE03. To facilitate the provision of appropriate residential densities and a mixture of dwelling units, types and tenures taking into account proximity to public transport corridors, site topography, sites of									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b> The Draft LAP has a clear phasing of residential dwellings



Policies/ Objectives	B/FF	P	W	S	C	CH	L	MA	Comment/ Mitigation
archaeological interest/protected structures and natural features.									and clearly outlines sustainable transport measures whilst recognising the built and natural environment.
RE04. To integrate an appropriate quantum of social and affordable housing into the Draft LAP.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>  The Draft LAP states that 20% of all dwelling units to be developed shall be provided as social and/or affordable units. There is also a social housing programme objective for Cromlech Close which is located on the western side of the Glenamuck Road.
RE05. To facilitate a travellers' accommodation site at a location adjacent to Glenamuck Road.	-/0	+	-/0	-/0	0	-/0	-/0	0	This provision will be positive for the travelling community but as the site will be developed on greenfield land there is the potential for negative impacts on the natural environment.
RE06. To include sustainable strategies in building design to include control of energy consumption, reduction of emissions and the use of renewable and recyclable materials.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>  This policy has long term positive impacts especially for C and MA as there is the potential to ensure that the new residential dwellings have sustainable strategies incorporated.
RE07 To facilitate the timely provision of appropriate parallel amenity and support facilities for new residential development within the Draft LAP.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>  The Draft LAP outlines amenity and support facilities and recognises that whilst there is a need for facilities within the plan that there are a number of facilities in close proximity to the plan that can also be utilised.
RE08. To ensure a critical population threshold in order to support a viable and vibrant neighbourhood centre.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>  The Neighbourhood Centres are a core element of the Draft LAP as they will provide a community centre for Kiltiernan/ Glenamuck. The phasing of development along with the implementation of the Neighbourhood Framework Plan will help to ensure a viable and vibrant centre for the population within the Draft LAP.
RE09 Ensure that all plans and projects in the County which could, either individually or in combination with other plans and projects, have a significant effect on a Natura 2000 site (or sites) will									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>  This policy will help to protect Natura 2000 sites outside of the Draft LAP. There are no Natura sites within the boundary

<b>Policies/ Objectives</b>	<b>B/FF</b>	<b>P</b>	<b>W</b>	<b>S</b>	<b>C</b>	<b>CH</b>	<b>L</b>	<b>MA</b>	<b>Comment/ Mitigation</b>
be subject to Appropriate Assessment Screening.									of the plan.
<b>Economic Activity</b>									
E01. To provide existing and future residents with local employment choices in the interests of sustainable communities.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b> The provision of local employment and a sustainable community has long term positive impacts on P and MA.
E02. To develop specific design responses in respect of scale, form and layout where employment zoned lands are proximate to residential areas.	0	+	0	0	0	0	+	0	The Draft LAP identifies a plot of employment land in the north eastern corner of Glenamuck. It is recognised that this land adjoins 'The Park' development and employment should be linked and as it abuts residential zoned land cognisance of the adjacent land-use in terms of design will have positive effects on P and L.
E03. To ensure that any industry development will be subject to Appropriate Assessment (AA) Screening to ensure there are no likely significant effects on the integrity, defined by the structure and function, of any Natura 2000 sites and that the requirements of Article 6 of the EU Habitats Directive are met.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b> This policy will help to protect Natura 2000 sites outside of the Draft LAP. There are no Natura sites within the boundary of the plan.
E04. To require that all relevant development proposals are subject to AA screening to ensure there are no likely significant effects on the integrity, defined by the structure and function, of any Natura 2000 sites and that the requirements of Article 6 of the EU Habitats Directive are met.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b> This policy will help to protect Natura 2000 sites outside of the Draft LAP. There are no Natura sites within the boundary of the plan.
<b>Landscape Heritage Conservation</b>									
LHC1. To ensure that planning applications have regard to any existing groundwater protection schemes and groundwater source protection zones and/or the likely impacts that the development may have on groundwater.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b> Specific positive effects on W and P and indirect positive effects on B/FF.
LHC2. To ensure the implementation of the EU Groundwater Directive and the protection of the groundwater resources in and around the LAP and associated habitats and species.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
LHC3. To ensure the implementation of the EU									<b>Screened Out as will have positive effects in respect to</b>

Policies/ Objectives	B/FF	P	W	S	C	CH	L	MA	Comment/ Mitigation
Floods Directive and its transposition into Irish legislation in order to prevent, reduce and control flood risk in river basin and coastal areas due to increased domestic and economic development in flood risk zones and climate change effects.									<p><b>Strategic Environmental Objectives (SEOs).</b></p> <p>A FRA was not required for this Draft LAP but as there are two main river systems, Glenamuck Stream and Loughlinstown River within the plan area and a minor stream, the Golf Stream having a policy to ensure that the Floods Directive is adhered to is very positive for the residences within the plan area.</p>
LHC4. To implement the recommendations of the relevant Catchment Flood Risk Assessment and Management (CFRAM) study, when published, and the mitigation measures and recommendations arising from the associated SEA and AA shall also be addressed and implemented.									<p><b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b></p>
LHC5. To implement the Planning System and Flood Risk Management for Planning Authorities (DoEHLG/OPW 2009) and the National Flood Hazard Mapping (OPW 2012) while referring to the relevant Flood Risk Management Plan (FRMP) for the Draft LAP.									<p><b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b></p> <p>As with Policy LHC3 this will have a profound positive effect on the Draft LAP.</p>
LHC6. To require that all proposed flood protection or alleviation works will be subject to Appropriate Assessment (AA) to ensure there are no likely significant effects on the integrity, defined by the structure and function, of any Natura 2000 sites and that the requirements of Article 6 of the EU Habitats Directive are met.									<p><b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b></p>
LHC7. To ensure riparian buffer zones are created between all watercourses and any development, a minimum of 15m to mitigate against flood risk. The extent of these buffer zones shall be determined in consultation with a qualified ecologist and following a Flood Risk Assessment. Any hard landscaping proposals shall be located outside of these buffer zones.									<p><b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b></p>
LHC8. Ensure that no development, including clearance and storage of materials, takes place within a minimum distance of 15m measured from each bank of any river, stream or watercourse in the Draft LAP area and be compliant with the									<p><b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b></p>

Policies/ Objectives	B/FF	P	W	S	C	CH	L	MA	Comment/ Mitigation
'Requirements for Protection of Fisheries Habitat during Construction and Development Works at River Sites'.									
LHC9. In the event of lighting being proposed along river or canal corridors an Ecological Impact Assessment (and where necessary an Appropriate Assessment) including bat and otter surveys shall be conducted by specialists. The recommendations of the specialist studies shall be implemented. No lighting will be installed without prior consultation with the National Parks and Wildlife Service (NPWS) and shall be in line with advances in knowledge into the impact of lighting on bats and other species and also to reflect advances in technology in the lighting industry.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
LHC10. Conserve, enhance and manage the natural heritage within the Draft LAP area including its biodiversity, landscapes and geological heritage and promote understanding of and sustainable access to it.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
LHC11. Ensure that all plans and projects in the Draft LAP area which could, either individually or in combination with other plans and projects, have a significant effect on a Natura 2000 site (or sites) will be subject to Appropriate Assessment Screening.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
LHC12. To ensure that a Natura Impact Statement (NIS) is produced if Appropriate Assessment (AA) screening has indicated likely significant effects on the integrity, defined by the structure and function, of any Natura 2000 sites.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
LHC13. To consult with the National Parks and Wildlife Service (NPWS) when undertaking, approving and authorising development which is likely to affect plant, animal or bird species protected by law. In the event of a proposed development impacting on a site known or likely to be a breeding or resting site of species listed in Habitats Regulations a derogation licence, issued by the Department of Environment, Community and Local									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>

Policies/ Objectives	B/FF	P	W	S	C	CH	L	MA	Comment/ Mitigation
Government (DECLG) will be required in advance of a permission.									
LHC14. To ensure the implementation of the EU Freshwater Fish Directive and its transposition into Irish legislation in order to protect any fish and shellfish habitat in the Draft LAP area.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
LHC15. To ensure the monitoring and control of EIA sub-threshold development within the Draft LAP through the document Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding sub-threshold development (DEHLG, 2003) with specific reference to the requirement of Appropriate Assessment (AA) screening.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
LHC16. To promote the protection of habitats which, by virtue of their linear and continuous structure (e.g. rivers and their banks) or their contribution as stepping stones (e.g. ponds or small woods), are essential for the migration, dispersal and genetic exchange of wild species.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
LHC17. To support the National Parks and Wildlife Service (NPWS) and Department of Environment, Community and Local Government (DECLG), in the maintenance and, as appropriate, the achievement of favourable conservation status for the habitats and species to which the EU Habitats Directive applies.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
LHC18. Any significant tree stands should be assessed for retention (where possible) as part of any planning application for development, most notably the stand of pure blackthorn on the 'Objective G' zoned site.	0/+	0/+	0	0/+	0/+	0	+	0	The identification and potential retention of tree stands is positive on B/FF and L and in particular the recognition of the blackthorn in the south-east of the plan area.
LHC19. To carry out a detailed ranking survey of the hedgerows be undertaken as part of any future development proposals, <b>and where possible to incorporate these hedgerows within the development</b> , although it is acknowledging that it will not be possible to retain all of the current hedgerows.	0/+	0/+	0	0/+	0/+	0	+	0	This policy is positive in B/FF and L.
LHC20. To recognise and contribute towards protection of habitats from alien / invasive species									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>

Policies/ Objectives	B/FF	P	W	S	C	CH	L	MA	Comment/ Mitigation
(e.g. Japanese knotweed, giant hogweed, Himalayan balsam, etc.) in accordance with Action Number 4.7 of the Dún Laoghaire-Rathdown Biodiversity Plan 2009-2013.									
LHC21. To ensure the preservation of the prospect of Three Rock, Two Rock Mountain <b>and Carrickgollogan</b> from Enniskerry Road <b>and the designated protected views southwards from Ballycorus Road.</b>									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>  The Draft LAP is located in an area with protected views and prospects and recognition of the importance of Three Rock and Two Rock Mountains has long term positive impacts on L.
LHC22. To comply with all of the policies for the protection of the Architectural Heritage in the current Dún Laoghaire-Rathdown County Development Plan, including those set out in the Development Management Section. In particular to provide appropriate protection for the protected structures and recorded monuments in the area.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
LHC23. Any development proposals pertaining to Moss Cottages must respect and take cognisance of the ACA designation for the area, the details of which are described in the "Moss Cottages – Character Appraisal and Recommendations", available on the Council's website.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>  This policy has a positive impact on CH as it ensures that development respects the ACA.
<b>Urban Design: Built Form</b>									
BF01. To promote a vision for a desired character for Kiltiernan, and to establish guidelines to encourage development that will impart the desired character, particularly to the core area, thus creating a sense of place.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
BF02. To formulate clear guidelines relating to architectural and urban design, building form, 3-dimensional character, materials and landscape elements.									<b>Screened Out as will have positive effects on the Strategic Environmental Objectives (SEOs).</b>
BF03. To acknowledge surviving features that impart a particular character to the Draft Plan area, and to establish how new development can be fused with	0	+	0	0	0	+	+	0	Whilst this is a positive policy ensuring that new developments acknowledge existing features and it will have a positive impact on CH and P as a result. .

Policies/ Objectives	B/FF	P	W	S	C	CH	L	MA	Comment/ Mitigation
these intrinsic features.									
BF04. To encourage the incorporation of granite and granite features into the design of residential and commercial buildings - continuing the tradition of utilising local materials and maximising the visual and economic linkages with the local landscape.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
BF05. To provide a 'Design Statement' and layout for new residential development, in accordance with the 'Urban Design Manual - A Best Practice Guide' (2009) which allows for an attractive living environment while taking advantage of existing natural features, views, sites of archaeological interest, and any other significant features.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
<b>BF06: To encourage usage of local place names wherever possible in new developments.</b>									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
<b>Movement/Transportation</b>									
MT01. To reduce the need for travel by private car within the Draft LAP by: facilitating appropriate frequencies and routings of bus services to address increased population levels, including good linkages to proposed LUAS Line B1 station at Ballyogan Wood, providing and/or facilitating the development of an interlinked cycle and pedestrian network that would connect the Draft LAP to the wider locality, maximise pedestrian catchment of bus services operating on Enniskerry and Glenamuck Roads, encouraging mixed use development to optimise internal trips and make accessibility by non car modes more viable/desirable, requiring Commercial/Retail uses to operate Mobility Management Plans to provide incentives to reduce dependence on travel by car.	<b>+/</b>	<b>+</b>	<b>+/</b>	<b>0</b>	<b>+</b>	<b>0</b>	<b>+</b>	<b>+</b>	Overall positive policy to try and reduce the need to travel by car and to encourage sustainable travel. This will have positive impacts on P and C as it will encourage usage of public transport and ensure a reduction in car emissions. The operation of Mobility Management Plans for commercial and retail uses will also have positive impacts on the environment.  Potential for minor negative impacts from the interlinked cycle and pedestrian network as they will cross existing undeveloped green spaces.
MT02. To promote maximum accessibility through routes of optimised connectivity and permeability for walking, cycling and public transport while establishing safe infrastructure for all vulnerable road users.	<b>+/</b>	<b>+</b>	<b>+/</b>	<b>+/</b>	<b>+</b>	<b>0</b>	<b>+</b>	<b>+</b>	As with policy MT01, this promotion of cycling and public transport will have long term positive impacts on the natural environment and the people living with the LAP. However the establishment of infrastructure and the construction of the GDDR Scheme will be on greenfield land and there will be loss of B/FF, S and potential effects on W.

Policies/ Objectives	B/FF	P	W	S	C	CH	L	MA	Comment/ Mitigation
MT03. It is an objective of the Draft Plan that all new residential and commercial development schemes must include adequate provisions for safe and secure cycle parking facilities at appropriate locations in accordance with County Development Plan standards.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
MT04. To establish the function, shape and usage of the strategic road network generally within the Draft LAP area.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>  The clear establishment of the usage of the road network is positive for the phasing of the Draft LAP which states that up to 1,000 dwellings could be accommodated on the existing network.
MT05. To establish the future function of Glenamuck Road (and associated road infrastructure) in terms of providing access (including car, bus, pedestrian and cycle) to the strategic road network.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
MT06. To establish the appropriate functions of Enniskerry Road in terms of accommodating through movements and locally generated movements (car, pedestrian and cycle) from future developments, and also potential future movements associated with the planned neighbourhood centre facility.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
MT07. To introduce appropriate traffic calming measures and to divert through traffic away from any future Draft LAP civic node in order to address issues such as safety, noise and air pollution, and the potentially negative severance of the component parts of the Draft LAP area.	-/+	+	-/+	-/+	-/+	0	0	+	The introduction of traffic calming measures will have a positive impact on the Neighbourhood centres and have knock on positive effects on P and MA. However the provision of diverting traffic away from the civic node will mean the construction of the GDDR Scheme which will be constructed on greenfield land and have potential negative effect on B/ FF, W, S and CH.
MT08. In acknowledgement that some car usage is inevitable, to stipulate maximum car parking provision for differing development types on a demand management basis and restrictions on on-street parking in order not to undermine that objective.	-/+	+	-/+	-/+	=/+	-/+	+	+	Maximum car parking provision is positive for P and MA as there is a need to control the number of car movements within the Draft LAP. It is outlined in the Draft LAP that it is preferable for underground car parking in new residential estates which could have negative impacts on S and CH and indirect effects on B/FF and W. However this policy will reduce the requirement for large tracts of land for hard standing which will have associated positive effects on the environment



Policies/ Objectives	B/FF	P	W	S	C	CH	L	MA	Comment/ Mitigation
MT09. To have regard to the EU Ambient Air Quality Directive, the EU Ozone Directive, the EU guidance documents Greening Transport (EU 2008) and A Sustainable Future for Transport (EU 2009) and the National Transport Strategy Smarter Travel: A Sustainable Transport Future (DTTS 2009) to develop strategies which better reflect the real costs that transport volumes and emissions impose onto society, environment and economic efficiency.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
MT10: <b>New developments shall provide noise mitigation measures (e.g. boundary walls and/or double/triple glazing) to reduce noise within developments caused by new roads to be within acceptable levels.</b>	0	+	0	0	0	0	-/0	0	Noise mitigation measures will have a positive impact on human beings within the draft LAP. Visual impacts in relation to mitigation measures could have a minor negative impact on local landscape.
MT11 <b>To ensure implementation of the Dublin Agglomeration Environmental Noise Action Plan</b>	0	+	0	0	0	0	0	0	Noise mitigation measures will have a positive impact on human beings within the draft LAP
<b>Environmental Infrastructure</b>									
EI01. To ensure the implementation of the EU Drinking Water Directive in order to achieve and improve appropriate water quality standards for the Draft LAP for human consumption while conditioning development dependent on sufficient water supply.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>  The Draft LAP has provision for approximately 3,000 units and therefore positive policies such as this will ensure protection of the human population within the LAP.
EI02. To ensure the implementation of the European Communities Drinking Water (No.2) Regulations 2007, S.I. No. 278 of 2007 and the EPA 2010 guidance on the Implementation of the Regulations for Water Services Authorities for Public Water Supplies. These regulations shall be applied for increased penalties in case of non-compliance and programmes to minimise water supply leakage shall be developed.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
EI03. To require that all development relating to water supply and waste water treatment are subject to Appropriate Assessment to ensure there are no likely significant effects on the integrity, defined by the structure and function, of any Natura 2000 sites and that the requirements of Article 6 of the EU									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>  The Draft LAP receives its water supply from the Sandyford High Level Water Supply Scheme, located outside of the LAP and waste water leaves the LAP via the gravity sewer to the Shanganagh treatment facility which again is located

Policies/ Objectives	B/FF	P	W	S	C	CH	L	MA	Comment/ Mitigation
Habitats Directive are met.									outside of the LAP.
EI04. To ensure the implementation of the EU Urban Waste Water Directive and its transposition into Irish legislation, namely the Urban Waste Water Treatment Regulations 2001 and 2004.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
EI05. To ensure the changeover from septic tanks to mains connections in all cases where this is feasible and that all new developments utilise and connect to the existing wastewater infrastructure. The provision of individual septic tanks and treatment plants in the Draft LAP will be strongly discouraged to minimise the risk of groundwater pollution. Where such facilities are permitted, full compliance with the prevailing regulations and standards will be required, including the EPA 2009 Code of Practice: Wastewater Treatment and Disposal Systems Serving Single Houses (p.e.≤ 10).	+	+	+	+	+	0	0	+	This is a positive policy overall on P and MA as it will ensure that the majority of the new developments connect into existing wastewater infrastructure. It is positive to discourage the use of septic tanks which if not maintained can have negative impacts on B/FF, S, C and W.
EI06. To promote assessment of the adequacy of the existing wastewater treatment facilities in terms of both capacity and performance as well as potential risk to human health and water quality.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
EI07. To ensure the implementation of the EU Water Framework Directive and its transpositions into Irish legislation.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
EI08. To implement the specific relevant objectives and measures for individual water bodies set out in the Eastern River Basin Management Plan and associated Programme of Measures, where relevant. To ensure the implementation of the surface water legislation Environmental Objectives (Surface Waters) Regulations 2009 S.I. No 272 of 2009 and the EPA report Water Quality in Ireland 2007-2009 in order to achieve general improvements of any water supplies in the Draft LAP.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
EI09. To require that a Sustainable Drainage System (SuDS) is applied to any development and that site specific solutions to surface water drainage systems are developed, which meet the requirements of the Water Framework Directive and associated River									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>

Policies/ Objectives	B/FF	P	W	S	C	CH	L	MA	Comment/ Mitigation
Basin Management Plans.									
EI10. To ensure the implementation of the EU Waste Framework Directive and its affiliated directives, namely the EU IPPC Directive, the Landfill Directive and the WEEE Directive.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>  Ballyogan landfill which abuts the Draft LAP is closed and undergoing remediation. It is intended that this landfill site will be restored to a public amenity area which would have a positive impact on the existing and future population within the plan.
EI11. Prevent and minimise the generation of waste in accordance with the Waste Management Plan for the Dublin Region while minimising waste to landfill and considering suitable alternatives.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
EI12. To encourage and/or facilitate the undergrounding of the Arklow-Carrickmines double circuit 220/110kV transmission line and the Carrickmines-Fassoroe 110kV transmission lines Nos. 1 and 2. Where undergrounding is not feasible, to sensitively incorporate the restriction corridors associated with said power lines into the design of future developments.	0	-/0	0	0	0	0	-/0	0	The assessment is based on the existing situation which has the transmission lines as overhead. Should the transmission line be put below ground the main benefits would be in relation to P and MA and the lack of severance of the land parcels. This policy is extremely positive as it would be beneficial for the land area not to be spilt by the transmission line.
EI13. <b>It is a policy of the Council to facilitate the provision, upgrading and maintenance of adequate and appropriate waste water services and water supply to service new developments and in assessing applications will require that development proposed will only take place where appropriate sustainable waste water and water supply infrastructure is in place.</b>									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
<b>Open Space and Recreation</b>									
OS01. To identify a hierarchy of open spaces and clarity in respect of their function (differentiation between public and private open space.)									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
OS02. To provide for linkage/access along open spaces and between different green spaces creating a network linking different functional areas both within and adjacent to the plan boundary.	-/0	+	-/0	-/0	+	0	0	+	The provision of the Greenway Link from the rehabilitated landfill site across the Draft LAP to the central western boundary will have positive impacts on P and MA. This cycle and pedestrian link will provide a means for people to move

Policies/ Objectives	B/FF	P	W	S	C	CH	L	MA	Comment/ Mitigation
									around without the need for use of a car. The construction of such a link could have potential minor negative impacts on B/FF, W and S as the construction process will disturb ground and cross features.
OS03. To acknowledge and respect areas of ecological importance, local topography, watercourses, hedgerows, woodlands, mature trees and views when providing open space.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
OS04. To provide for recreational cycle paths within open space. (In some instances, cycle paths located within green areas, may need to be linked by cycle track facilities provided along main transportation corridors.)	-/0	+	-/0	-/0	+	0	0	+	See Policy OS02 as the impacts are similar.
OS05. Landscape design, specification and open space construction to be of a high standard & open space to be designed to be robust, accessible, useable, connected and supervised.	-/0	+	-/0	-/0	+	-/0	-/0	+	There are two categories of open space, class 1 being parkland for active recreation and class 2, informal recreation and play around residential areas. Both types of open space will impact the Draft LAP as it will take existing grassland and put a more formal appearance to it. This can result in loss of biodiversity and the potential for minor impacts on W, S and CH during construction. The provision of open space is beneficial for P and MA but it will change the look of the landscape and impact on L.
OS06. Open space to be designed in a way that protects and enhances biodiversity.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
OS07. To provide for the appropriate types of active/passive recreational facilities both indoor and outdoor in the Draft LAP for all age groups. Facilities to be provided should be appropriate to the scale and needs of the development area whilst having regard to established or planned amenities in the wider environs. <b>Adequate transport access to these recreational facilities via safe public transport and pedestrian/ cycleway network is paramount.</b>	-/0	+	-/0	-/0	0	0	-/0	+	Currently the lands zoned Objective F, have existing private ownership for recreational use. It is recognised that the area is well served by sports facilities with a number of playing pitches within the Draft LAP. The LAP outlines that provision for further facilities within the remit of the LAP area has not been proposed. The Draft LAP outlines proposed recreational facilities in proximity to the plan, such as the former Ballyogan landfill site (Jamestown) and the Samuel Beckett Civic Complex at Ballyogan.  The construction of any facilities on greenfield land will have potential negative effects on B/FF, W, S and L, however there will be large long term positive impacts on the residents living within the LAP area.

Policies/ Objectives	B/FF	P	W	S	C	CH	L	MA	Comment/ Mitigation
<b>Social and Community Development</b>									
SCD01. To facilitate an appropriate level of provision of community facilities commensurate with the scale of the new residential communities. (This will include identifying existing community facilities available locally and in neighbouring areas, and identifying additional requirements.)	-/0	+	-/0	-/0	0	0	-/0	+	With the large amount of lands zoned for residential development there is a direct need for community facilities. The construction of any such facilities on greenfield land will have the potential to have negative effects on B/FF, W, S and L but in relation to P the provision of community facilities is very positive.
SCD02. To centralise the existing and proposed community facilities at appropriate localities, where possible.	0	/+	0	0	+	0	+	+	The location of the proposed community facilities is unknown. However the provision of such facilities and in a central location will have positive effects in terms of P, C, L and MA.
SCD03. To assess the needs for educational facilities, in particular the possible need to provide a secondary school for the broader area given the extent of development in the wider area, including Stepside.	-/0	+	-/0	-/0	0	0	-/0	0	The provision of education facilities is extremely important and positive in terms of P. The likelihood is that the provision of educational facilities will be on greenfield land and have potential negative effects on the environment.
Suggested Policy SC04. <b>Appropriate provision of educational and childcare facilities will be required to be put in place in advance of residential developments being granted planning permission.</b>  <i>New Policy SCD04: It is the policy of the council to ensure the reservation of primary and post-primary school sites in accordance with the requirements of the relevant education authorities. Schools will be delivered in the Draft LAP area in accordance with the "Code of Practice on the Provision of Schools and the Planning System".</i>	-/0	+	-/0	-/0	+	0	-/0	0	This policy will ensure that residential development does not occur without the necessary educational facilities being in place. Having schools within the LAP will be positive for P and also for C as children have the potential to walk or cycle to school.
<b>Retail and Neighbourhood Centre</b>									
NC01. To provide of an appropriate mix of residential/ commercial/ retail/ community services development in the new neighbourhood centres to ensure a high quality and attractive civic environment, a sense of both place and vitality, and which optimises access to public transport corridors.	-/0	+	-/0	-/0	+	0	-/0	+	The provision of a balanced mix of services in the neighbourhood centres is critical to the positive development of these nodes for the surrounding residential population. As with any development and especially on greenfield land there is the potential for negative impacts on B/FF, S and W. The consolidation of these centres is very positive and ensures that services are not spread out within the LAP. Access to public transport will have positive effects on C.

Policies/ Objectives	B/FF	P	W	S	C	CH	L	MA	Comment/ Mitigation
NC02. To develop clear permeability and linkages between the neighbourhood centre/s and adjoining land uses.	-/0	+	-/0	-/0	+	0	0	+	The provision of linkages from the neighbourhood centre to residential areas will be positive on P, C and MA. The construction of such a link could have potential minor negative impacts on B/FF, W, S and L as the construction process will disturb ground and cross features.
NC03. To ensure that new development relates to the existing/ established perceived village core, and to respect any key views, landmarks and/or other features, if applicable.	-/0	+	-/0	-/0	+	0	+	0	This policy is very positive in relation to P, C and L as it will ensure that the neighbourhood centre is developed in line with the existing village. There will also be negative environmental effects from new development.
NC04. Provision should be made for a civic recycling facilities at the NC/s.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
<b>Land Use Zoning Designations</b>									
Objective A To protect and or improve residential amenity.	-/0	+	-/0	-/0	0	0	-/+	+	Land use zones within the Draft LAP are in line with the CDP and the core strategy. The provision of housing is positive for P and MA and there is opportunity to have energy efficient housing.
Objective B To protect and improve rural amenity and to provide for the development of agriculture.	-/+	0/+	-/+	-/+	0	0	0/+	0	The provision of rural amenity and agriculture is positive in relation to B/FF, P, W, S and L as the land is not developed and allowed to be left in a rural state. There is potential conflict between agriculture and B/FF, W and S due to agricultural practices.
Objective E To provide for Economic Development and Employment.	-/0	+	-/0	-/0	0	0	-/0	+	The provision of development and employment is positive for P and MA from it jobs and employment is created. However the development will always have negative conflict with B/FF, W, S, CH and L as it will take away greenfield land in the Kiltiernan/ Glenamuck area.
Objective F To preserve and provide for open space with ancillary active recreational amenities.	-/+	+	-/0	-/0	0	0	+	+	Open space is very positive for the quality of lives of the population living in the area.
Objective G To protect and improve high amenity areas.									<b>Screened Out as will have positive effects in respect to Strategic Environmental Objectives (SEOs).</b>
Objective NC To protect, provide for and/ or improve mixed-use neighbourhood centre facilities.	-/0	+	-/0	-/0	+	0	-/0	+	The zoning of neighbourhood centre facilities is positive for P, C and MA as it will provide essential services and improve sustainability in the Draft LAP as people will not have to

Policies/ Objectives	B/FF	P	W	S	C	CH	L	MA	Comment/ Mitigation
									travel for services. As with infill and greenfield development there is always the potential for negative impacts on the environment.

