

Strategic Environmental Assessment Statement

Amendment No. 2 of the Midleton Electoral Area

Local Area Plan 2011 incorporating
Carrigtwohill North Framework Master Plan

November 2015

In accordance with Article 9 of Directive 2001/42/EC of the European Parliament and of the Council on the assessment of the effects of certain plans and programmes on the environment (SEA Directive)

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1 Introduction Strategic Environmental Assessment Statement

1.1 Context

- 1.1.1 This is the SEA Statement for Amendment No. 2 of Midleton Electoral Area Local Area Plan 2011, which was adopted on 23rd of November, 2015 incorporating the Carrigtwohill Framework Master Plan. Strategic Environmental Assessment (SEA) is a process for evaluating, at the earliest appropriate stage, the likely environmental effects of implementing a Plan, an amendment to a Plan or other strategic action in order to ensure that environmental considerations are appropriately addressed in the decision-making process during the preparation, and prior to adoption, of a Plan or an amendment to a Plan.
- 1.1.2 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) and the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. 436/2004). These regulations were subsequently amended by the European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations, 2011 (S.I. No. 200 of 2011) and the Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations, 2011 (S.I. No. 201 of 2011).
- 1.1.3 The legislation requires that the Plan-making authority must make available an SEA Statement summarising how the SEA and consultations have been taken into account in the making of the Plan or the amendment. This document comprises the SEA Statement.
- 1.1.4 The planning process involved two public consultation stages; a preliminary stage whereby the proposed amendment was available for scrutiny and change and the final (formal) public consultation stage for the Draft Amendment where changes can only be minor in nature.

1.2 Summary of the SEA process

Table 1-1 Summary of SEA Process	
SEA Stage	Amendment No 2 to the Midleton Electoral Area Local Area Plan.
1 – Screening	Decision on whether or not an SEA of the Plan is required. SEA is mandatory for this amendment because the population of the area the subject of the amendment is greater than 5,000 persons.
2 – Scoping	Consultation with defined statutory bodies on the scope and level of detail to be considered in the preparation of the environmental report. A scoping consultation with the Environmental Authorities was undertaken as required under Section 14C(c) of the Planning and Development Strategic Environmental Assessment Regulations 2004- 2011 in December 2014. A response was received from the EPA which provided guidance on the preparation of the Environmental Report for the Draft Amendment.
3 – Environmental Assessment and Environmental Report on preliminary draft	The next stage of the SEA process comprised an assessment of the likely significant impacts on the environment as a result of the proposed Amendment and the preparation of the Environmental Report. The Environmental Report went out on public display with the Proposed

Table 1-1 Summary of SEA Process	
master plans and amendments	Amendment. Fourteen submissions were received including submissions from the Department of Environment, Community and Local Government, Office of Public Works, Environmental Protection Agency, National Roads Authority, National Transport Authority (NTA), Department of Education and Skills, Irish Water and several private landowners. The submissions were considered and discussed in the Chief Executive's Report to Members in July 2015. Having regard to the interim nature of the amendment it was decided to make a number of changes in accordance with the submissions made.
4– Environmental Assessment and Environmental Report on final draft master plans and amendments	The next stage of the SEA process comprised an assessment of the likely significant impacts on the environment as a result of the proposed Amendment and the preparation of the Environmental Report. The Environmental Report went out on public display with the Proposed Amendment. Five submissions were received including submissions from the Department of Environment, Community and Local Government, Office of Public Works, Environmental Protection Agency, National Roads Authority, National Transport Authority (NTA), Department of Education and Skills, Irish Water and several private landowners. The submissions were considered and discussed in the Chief Executive's Report to Members in November 2015. Having regard to the final nature of the amendment it was decided to make only minor non material changes in accordance with the submissions made.
4- SEA Statement	Preparation and publication of the SEA Statement identifying how environmental considerations and consultation have been integrated into the Final Plan. This document is the SEA Statement.

1.3 Content of the SEA Statement

- 1.3.1 The SEA Statement is described in Article 9 of the SEA Directive as a statutory requirement and should be made available with the adopted plan. This statement is required to be issued to the environmental authorities that were previously consulted, with a view to presenting a record of the key elements of the SEA process and illustrating how environmental considerations have been integrated into the plan and the key decisions taken in the plan as a consequence of the SEA.
- 1.3.2 The SEA Statement is required under Article 13I, SI No 436 of 2004 (as amended), to include information on:
- a) How environmental considerations have been integrated into the Plan;
 - b) How the Environmental Report, submissions and observations made to the planning authority on the Plan and Environmental Report, and any trans-boundary consultations (where relevant) have been taken into account during the preparation of the Plan;
 - c) The reasons for choosing the Plan, as adopted, in the light of the other reasonable alternatives dealt with; and
 - d) The measures decided upon to monitor the significant environmental effects of implementation of the Plan.

2 How Environmental Considerations were integrated into the Amendment

2.1 Introduction

- 2.1.1 This section outlines the scope of Amendment No 2 of the Midleton Electoral Area Local Area Plan and deals with how environmental considerations and the findings of the SEA as presented in the Environmental Report were taken into account during the preparation of the Amendment.
- 2.1.2 The protection and conservation of the environment has been a key consideration throughout the preparation of the Amendment. However the scope for making changes to fundamental provisions of the amendment was constrained by the nature and purpose of the amendment, as explained below.

2.2 Scope of the Amendment

- 2.2.1 The existing Midleton Electoral Area Local Area Plan 2011 sets out the Council's planning policy and objectives for development within the Midleton Electoral Area and includes the settlements of Midleton and Carrigtwohill as Metropolitan towns.
- 2.2.2 The Carrigtwohill North Framework Master Plan study was completed in 2015 and comprises a set of land use proposals for the development of the site currently known as X-01 in the Carrigtwohill Local Area Plan. The Framework master Plan Study was also adopted in 2015. The findings and recommendations from this report have been included in Amendment No 2 of the Midleton Electoral Area Local Area Plan.
- 2.2.3 The amendment seeks to incorporate the key provisions of the master plans prepared for Carrigtwohill strategic site into the existing Local Area Plan. When the new Municipal District Local Area Plan is prepared, the planning framework for the town in its entirety will be reconsidered and updated in light of current planning and environmental policy, legislation and guidance.
- 2.2.4 The Midleton and Carrigtwohill Transportation Study 2010 outlines proposals in detail to improve walking and cycling routes throughout the town as well as parking and public transport measures which will significantly enhance the attractiveness of the town as a place to live and to visit.
- 2.2.5 In 2013 Cork County Council commissioned a cycle strategy to be prepared for the Cork Metropolitan Area, the objective of this strategy was to provide a clear plan for the future development of cycling networks throughout Metropolitan Cork including Carrigtwohil The plan identifies routes, infrastructure and policies to encourage greater use of cycling as a key sustainable travel mode for trips to work, education, shopping and recreation. It is the Councils objective to develop these routes on a phased basis once funding is made available.
- 2.2.6 Cork County Council will commission a Pedestrian/Cycle Bridge Feasibility Study to assess how connectivity to the Masterplan site can be improved from Carrigtwohill South Centre and lands south of the Railway Line.
- 2.2.7 The Lee CFRAMS report identified areas at risk of flooding in the south of the town and has recommended that there is a need for a more detailed flood risk assessment study for the whole town, including the master plan site.
- 2.2.8 As a result of this a more detailed flood risk assessment (Stage 3) has been carried out by Cork County Council which identified a number of areas within the Carrigtwohill area which are considered at risk of flooding. Some of these areas are different from the preliminary CFRAMS map.

- 2.2.9 In addition to the issues identified in the Flood Risk Assessment, the amendment acknowledges that a number of other issues need to be addressed before development of any significance, provided for in the amendment, can take place including:
- a) A Sustainable Urban Drainage Plan for the masterplan lands needs to be prepared to provide a framework for the management of surface water within the site in order to protect water quality within Cork Harbour and the Great Island Channel.
 - b) Significant investment in, roads and transportation infrastructure is required in order to facilitate development.
 - c) The Environmental Report highlights a number of issues that need to be addressed in order to avoid, reduce or mitigate potential adverse impacts of the proposed amendment on biodiversity, soil, landscape, habitats etc. Measures to address these issues have been incorporated in the SEA and the amendment

2.3 Integration of Environmental Considerations

- 2.3.1 Notwithstanding the limited scope of the amendment process, environmental considerations were integrated into the amendment in a number of ways through:
- a) Preparation of the Environmental Report including baseline data collection and evaluation of potential impacts.
 - b) Consultation
 - c) Mitigation measures
 - d) Compliance with the Habitats Directive – Appropriate Assessment.

2.4 Environmental Report and Baseline Data Collection

- 2.4.1 In order to assess the likely significant impacts of the Amendment, baseline data on the current state of the environment was collected and evaluated. This has been done with reference to existing databases held by the Council and other organisations such as the EPA, National Parks and Wildlife Service (NPWS), South West River Basin District (SWRBD), Geological Survey of Ireland (GSI) etc. GIS mapping has been used where possible in the Environmental Report to illustrate the data. In accordance with legislation and guidance, the existing environment was described with respect to biodiversity, population, human health, fauna, flora, soil, water (surface freshwater, coastal, transitional, groundwater, bathing and water services (drinking water and waste water treatment), air, climatic factors, material assets (roads, transportation, energy etc), cultural heritage (including architectural and archaeological heritage), landscape and the interrelationships between these factors as appropriate. Collection and analysis of this information has allowed the identification of key resources and sensitivities within the area covered by the amendment and allowed for the identification of potential threats to the environment.
- 2.4.2 As the data was compiled and amendment policies evolved, the likely significant effects of implementing the amendment were identified, described and evaluated. This process formed a core element of the Environmental Report. The potential effects of the amendment were then considered using a system of Environmental Protection Objectives, Targets and Indicators which were formulated having regard to the issues emerging from the baseline assessment, consultations with the environmental authorities and internal consultation with other departments within the Council. The assessment of the baseline environment also enabled those preparing the amendment to consider how the environment might evolve in the absence of the proposed amendment.

- 2.4.3 Following the assessment, the Environmental Report identified a number of issues of concern which are outlined in Chapter 6 of the Environmental Report.

2.5 Proposed Mitigation

- 2.5.1 As outlined in section 2.2, The Carrigtwohill North Framework Master Plan study was completed in 2015 and comprises a set of land use proposals for the development of the site currently known as X-01 in the Carrigtwohill and Midleton Environs chapters of the Midleton Local Area Plan.
- 2.5.2 Whilst an examination of the proposed development policies in the Framework Master Plan would appear to indicate that mitigation may be required in some circumstances, it is considered that where potential conflict or uncertainty has been demonstrated, that there are in general adequate compensatory measures to negate any potential significant impacts from the proposed Framework Master Plan. This demonstrates that the preparation of the Framework Master Plan has been very pro-active in including positive environmental objectives in relation to key infrastructural improvements and protection of heritage and amenity.
- 2.5.3 In response to the HDA process, land zoned for development identified as being “at risk” of flooding were zoned as “open space”.
- 2.5.4 A preliminary Ecological Appraisal of the Carrigtwohill site was also carried out in January 2015 and it was recommended that adequate buffer zones are to be provided along watercourses to ensure riparian zones are not degraded and there is no bankside erosion. Developers shall therefore take account of relevant guidance documents relating to watercourse buffer zones.
- 2.5.5 Prior to development on site the following matters must be addressed
- A mammal survey to assess potential for a badger sett, presence of otter holts is required.
 - A bat survey in the tree line along the Glounatouig stream.
 - A freshwater aquatic survey to assess the quality of water for vegetation, fisheries and other fauna.
 - Existing tree lines and hedgerows must be retained where possible (specify types of trees)
 - Provide green spaces and/or corridors within the site to maintain habitat connectivity
 - Provide adequate buffer zones and setbacks between Walkways and the banks of watercourses.
 - The importance of scrub to provide dense and safe cover for faunal species and breeding habitat for several bird species must be recognised.
- 2.5.6 The report concludes that the undertaking of further surveys and impact assessment resulting in targeted mitigation should enable the proposed development to proceed without any large adverse effects on the ecology of the site or adjacent environment.

2.6 Compliance with EU Habitats Directive – Appropriate Assessment

- 2.6.1 A further aspect of the assessment of the Plan was the undertaking of an Appropriate Assessment under the EU Habitats Directive (92/43/EEC). This parallel process ensured that environmental considerations, specifically focused on Natura 2000 sites, were integrated into the Amendment to the Plan as it was developed.

- 2.6.2 Under the EU Habitats Directive, any plan or project not directly connected with or necessary to the management of a Natura 2000 site, e.g. Special Area of Conservation (SAC) or Special Protection Area (SPA), but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subjected to an appropriate assessment of its implications for the site in view of the site's conservation objectives. Carrigtwohill discharges to the Cork Harbour Special Area of Conservation and the Great Island Channel Special Protection Area and water quality within these areas could be impacted by the new development.
- 2.6.3 The AA process was applied to the Amendment process to determine if it would have significant effects on these European designated sites. The Assessment concluded that the Masterplan for Carrigtwohill North will not give rise to significant impacts on any Natura 2000 site.

3 Submissions and Observations

3.1 Introduction

- 3.1.1 This section deals with how submissions and observations from prescribed bodies and members of the public, received throughout the process of preparing the amendment and relevant to the SEA process, were taken into account in the preparation of the Amendment
- 3.1.2 There have been two periods of consultation over the course of the preparation of the Local Area Plan amendment. The first public consultation for the proposed amendment plan was held in April 2015. The second period of consultation was focused on the Proposed Amendment, the SEA Environmental Report and associated Appropriate Assessment Screening Report. This took place between August 4th and September 15th 2015.
- 3.1.3 At all stages of consultation, the content of the submissions received have been considered by the Plan, SEA and AA teams.

3.2 SEA Scoping Stage

- 3.2.1 A scoping consultation with the Environmental Authorities was undertaken as required under Section 14C(c) of the Planning and Development Strategic Environmental Assessment Regulations 2004- 2011.

3.3 Public Consultation

- 3.3.1 The Environmental Report was prepared to document the assessment of the environmental effects of implementing the Amendment to the Local Area Plan. It made a number of recommendations for changes as detailed in Table 2-1 of this report. The full assessment and background to the recommendations is discussed in Chapter 6 of the Environmental Report.
- 3.3.2 14 submissions were received at the preliminary stage of the process which included submissions from the Department of the Environment, Community and Local Government, Dublin Airport Authority, Tipperary County Council, Environmental Protection Agency, National Transport Authority (NTA), Department of Education and Skills, Irish Water and several private landowners.
- 3.3.3 The EPA submission on the preliminary amendment highlighted a range of issues to be considered as follows;

- Phasing and Implementation should be considered in collaboration with Irish Water, to ensure that drinking water and waste water treatment infrastructure is adequate and appropriate to support the continued development of the plan area in a sustainable manner.
- It is noted that the detailed flood risk assessment carried out has identified that certain parts of the plan area are at risk of flooding. In this context, consideration should be given to ensuring that proposed land use zoning and associated development is appropriate to the risk of flooding identified, as required in the Flood Risk Management Guidelines (DEHLG/OPW, 2009).
- Observation regarding the provision/promotion of public transport-related infrastructure recommends that the relevant aspects of the Greater Dublin Area Draft Transport Strategy should be taken into consideration, in particular with regards to recommended walking distance between residential units and public transport service.

- 3.3.4 Several submissions were received from landowners in Carrigtwohill requesting that their land be re-zoned for residential purposes supported by site specific flood risk assessments commissioned on behalf of landowners and claiming that mitigation (engineering) measures can be applied to change the Flood Zones. The Council responded that in consultation with the OPW, the zoning for the Poulaniska site (which was only partially susceptible to Flood Risk) was amended to provide a new zoning for medium density residential (R-19). The remainder of the land should remain as open space (O-06) because that part of the site is subject to flood risk.
- 3.3.5 All the submissions received were summarised and responded to in the Chief Executive's Report to Members in July 2015.
- 3.3.6 Changes made to the preliminary amendment following the receipt of submissions include the following:-
- The incorporation of the small area of land previously called "existing built up area" into the proposed high density residential area (R-11).
 - The inclusion of a new medium density A residential area (R19)
 - The inclusion of a new open space zone (O-06)
 - The inclusion of the construction of new pedestrian/cycling bridges linking proposed residential areas (R-12 and R-18) to the Educational Campus (C-05).
- 3.3.7 These were screened in order to determine if significant impacts would arise as a result of their inclusion. Based on the screening exercise, the Planning Authority determined, in accordance with the requirement of Section 12 (7)(a) of the Planning and Development Act 2000 (as amended), that the likely effects on the environment of implementing these 2 proposed changes, would be either positive or neutral as shown in Table 3.1.

Table 3.1		Impact on EPO's				
Ref. No.	Title of amendment	+	-	?	Ne (neutral)	Conclusion
Zoning Objectives						
Existing Built up Area/R-11	High Density Residential Development	POP1, POP2, POP3, S2, MAT3.		MAT 1		Screened Out
Section 1.4.15	Insert new text in 1.4.15 as follow:-"Provision is made for a primary school (C-03) and an education campus comprising a primary and post primary school on site (C-04). If it is considered that the sites are no longer needed or that alternative locations are required, this zoning may be reviewed in time	POP1, POP2, POP3, CH1, MAT3, A1,		MAT 1		Screened Out

Table 3.1		Impact on EPO's				
Ref. No.	Title of amendment	+	-	?	Ne (neutral)	Conclusion
	Amend Map to show correct alignment of the underpass and link road.					
O-06/R-19	Medium Density A Residential Development	POP1, POP2, POP3, CH1, MAT3, A1,		MAT 1		Screened Out
U-02	Construction of Pedestrian/Cycling Bridge linking R-12, R18 and Educational Campus C-05.	POP1, POP2, POP3, CH1, MAT3, A1		MAT 1		Screened Out

- 3.3.8 Following a second round of public consultation August 7th to 15th September, there were 5 submissions received. These submissions raised a wide range of issues relating to flood risk, bus transport and road transport (TII). Two of these submissions were received from landowners regarding land at Poulanska and Terrysland about flood risk claiming that the County Council has mis-communicated the level of assessment and misinterpreted the Flood Risk Management Guidelines. In response to the latest submissions, discussions with the OPW have indicated that the County Council has not mis-communicated the level of assessment of the Flood Risk Assessment for Carrigtwohill nor misinterpreted the Flood Risk Management Guidelines. As a consequence of the OPW's most recent correspondence confirming that the County Council had correctly applied the Ministerial Guidelines, no further changes to the Local Area Plan are recommended.
- 3.3.9 All the submissions received at the amendment stage were summarised and responded to in the Chief Executive's Report to Members in November 2015. Some minor changes of a non material nature were recommended in the CEO report. Following consideration by the members of the Chief Executives report it was considered that it was reasonable and appropriate to proceed with the amendment in order to provide for the continuation of the planning framework for the development of the X-01 lands in Carrigtwohill North.
- 3.3.10 Following the consideration by Members of the Amendment, Environmental Report, Habitats Directive Screening Report, and the Chief Executive's report, the Amendment was adopted on the 23rd of November 2015.
- 3.3.11 The EPA submissions received during both the preliminary amendment consultation stage and the amendment consultation stage in relation to this process are summarised in Table 3-2 below, together with the response of the Chief Executive.

Table 3-2 Details of submissions on the Environmental Report at the Non Statutory Stage and the Statutory Stage of the Consultation Process		
Submitter	Environmental Submissions	Response
EPA 5 th May 2015	<ol style="list-style-type: none"> 1. Phasing and implementation should be considered in collaboration with Irish Water, to ensure that drinking water and waste water treatment infrastructure is adequate and appropriate to support the continued development of the plan area in a sustainable manner. 2. It is noted that the detailed flood risk assessment carried out has identified that certain parts of the plan area are at risk of flooding. In this context, consideration should be given to ensuring that proposed land use zoning and associated development is appropriate to the risk of flooding identified, as required in the Flood Risk Management Guidelines (DEHLG/OPW, 2009). 3. Observation regarding the provision/promotion of public transport-related infrastructure recommends that the relevant aspects of the Greater Dublin Area Draft Transport Strategy should be taken into consideration, in particular with regards to recommended walking distance between residential units and public transport service. 4. Suggested Changes to the Environmental Report outlined below. The submission also states that any future amendments must be screened. <p>Overall comments on the Environmental Report;</p> <p>In <i>Chapter 5- Relationship with other Plans and Programmes</i>, consideration should be given to including in Section 5.1.2 “Planning Hierarchy”, a reference to the Draft National Landscape Strategy which is currently under preparation. In addition Irish Water’s Water Services Strategic Plan (WSSP) should be taken into account, as appropriate.</p> <p>In Chapter 10 – Mitigation Measures, in the interest of clarity it would be useful to highlight the key policies/objectives responsible for protecting/managing the environmental protection objectives identified.</p> <p>In <i>Chapter 11 – SEA Monitoring</i>, consideration should also be given to including monitoring frequency for the various SEA indicators where possible.</p>	<ul style="list-style-type: none"> • A co-ordinated approach to the provision of infrastructure has been provided in the Framework Masterplan and the proposed amendment. It should also be noted that Cork County Council will continue to consult with Irish Water throughout the development of the masterplan. • The zoning of lands is fully in line with the “The Planning System and Flood Risk Management Guidelines for Planning Authorities” 2009- and Local Government Circular PL2/2014 which states that lands vulnerable to Flood Risk are unsuitable for residential development. • Section 3 of the Framework Masterplan sets out proposals for cyclists and pedestrians and stresses the importance of providing strong cyclist and pedestrian links between the masterplan site and the existing and proposed railway stations and between the site and the town centre. The document also refers to the importance of the Councils Design Guide for Residential Estate Development for intending developers. • Comments regarding the Environmental Report will be considered. <p>The integration of environmental considerations into the Framework Masterplan and amendment is discussed in detail in the main Environmental Report</p> <p>The reasons for choosing the plan are outlined in the SEA which accompanies the Amendment.</p> <p>The contents of the submission are noted, no change is proposed to the plan.</p>

Table 3-2 Details of submissions on the Environmental Report at the Non Statutory Stage and the Statutory Stage of the Consultation Process		
Submitter	Environmental Submissions	Response
	<p>Following the making of the amended Plan, the SEA Statement, should summarise the following:</p> <ul style="list-style-type: none"> • How environmental considerations have been integrated into the Plan; • How the Environmental Report, submissions, observations and consultations have been taken into account during the preparation of the Plan; • The reasons for choosing the Plan adopted in the light of other reasonable alternatives dealt with; and, • The measures decided upon to monitor the significant environmental effects of implementation of the Plan. 	
EPA 27 th August 2015	<ol style="list-style-type: none"> 1. Include a list of the proposed amendments, including zoning changes, how they have been assessed against the SEO's, an overview of the screening of changes and how the plan provides for any mitigation where potential conflicts have been identified (if any). 2. Ensure that the Flood Risk Management Guidelines (2009) are fully complied with in the amendment. 3. Insert "will be dependent on compliance with the requirements of" and delete "will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the" in relation to R-08, R-09 and R-13 in Water-Rock Amendment. 4. Consider inserting "improving the appropriate lighting and adequate buffer zones to minimise disturbance to bio-diversity, such as protected species" in Objective O-08 and O-09 in Water-Rock Amendment. 5. Insert flood risk paragraph in R-14 of Water-Rock Amendment. 6. Commit to implementing appropriate measures to protect designated habitats/protected species under the Habitats Directive. 7. Any future modifications to the proposed amendments need to be screened. 8. Following the making of the plan (amendments), an SEA Statement needs to be prepared for Water-Rock 	<ol style="list-style-type: none"> 1. Include a list of the proposed amendments, including zoning changes, how they have been assessed against the SEO's, an overview of the screening of changes and how the plan provides for any mitigation where potential conflicts have been identified (if any). 2. Ensure that the Flood Risk Management Guidelines (2009) are fully complied with in the amendment. 3. Insert "will be dependent on compliance with the requirements of" and delete "will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the" in relation to Objective R-19 in Carrigtwohill Amendment and R-08, R-09 and R-13 in Water-Rock Amendment. 4. Consider inserting "improving the appropriate lighting and adequate buffer zones to minimise disturbance to bio-diversity, such as protected species" in Objective O-08 and O-09 in Water-Rock Amendment. 5. Insert flood risk paragraph in R-14 of Water-Rock Amendment. 6. Commit to implementing appropriate measures to protect designated habitats/protected species under the

Table 3-2 Details of submissions on the Environmental Report at the Non Statutory Stage and the Statutory Stage of the Consultation Process		
Submitter	Environmental Submissions	Response
	and sent to the environmental authorities.	<p>Habitats Directive.</p> <p>7. Any future modifications to the proposed amendments need to be screened.</p> <p>8. Following the making of the plan (amendments), an SEA Statement needs to be prepared for Water-Rock and Carrigtwohill and sent to the environmental authorities.</p>

4 Reasons for choosing the Amendment as Adopted

4.1 Introduction

- 4.1.1 This section of the Environmental Statement describes the reasons for adopting the Amendment.
- 4.1.2 Carrigtwohill North is located directly to north of the Metropolitan Town of Carrigtwohill and adjoins the recently reopened Cork-Midleton Railway line and encompasses the new Carrigtwohill Railway Station.
- 4.1.3 Hence, development at this location will allow for ease of access to the services centre provided by Carrigtwohill and can contribute to the creation of critical mass of population along the recently re-opened Cork-Midleton rail line. The development of such a large site in close proximity to the suburban rail network offers a major opportunity to provide new homes where residents can gain easy access to high quality public transport from the outset.
- 4.1.4 It is an objective of the Cork County Development Plan 2014 to maximise new development, for both employment and housing, in the Metropolitan towns served by the Blarney Midleton/Cobh Railway line and to enhance the capacity of these towns to provide services and facilities to meet the needs of their population. The Cork County Development Plan 2013 has therefore identified Carrigtwohill for significant growth with a population target of 11,618 for 2022 which will require the construction of an additional 3,196 housing units and it is an objective to accommodate a substantial portion of this growth target for the town on the Carrigtwohill North lands.

5 Monitoring

5.1 Introduction

- 5.1.1 The SEA Directive requires that the significant environmental effects of the implementation of plans are monitored. The purpose of monitoring is to assess the effects of the Amendment which have been predicted during the SEA process as well as identifying some effects which may not have been envisaged during the implementation stage.
- 5.1.2 Monitoring enables, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action. In addition to this, monitoring can also play an important role in assessing whether the LAP is achieving its environmental objectives and targets measures which the LAP can help work towards, whether these need to be re-examined and whether the proposed mitigation measures are being implemented.
- 5.1.3 The Environmental Report also includes a list of key indicators for monitoring the implementation of the Plan Amendment and indicates that some or all of these indicators will be used subject to adequate resources being available. The indicators used relate primarily to issues within the remit of the Planning Department.
- 5.1.4 Table 5.1 identifies details the environmental protection objectives, targets and indicators included in the Environmental Report, and the list of indicators to be monitored. Some of the indicators will be monitored by other Council departments e.g. water quality issues are monitored by the environmental department. In other cases the information can be extracted from the Odyssey Planning Application Management System or the Planning Register e.g. development in areas of flood risk or high landscape value.
- 5.1.5 Sources of data from other organisations (NRA, NTA, IW, ESRI, Forfas, NESC and CSO etc) which is readily available will also be used where appropriate to assess progress in implementing the Amendment to the plan.

5.2 Responsibility for Monitoring

- 5.2.1 Monitoring and implementing the Local Area Plan is primarily the responsibility of the Planning Directorate of Council, mainly through the development management function. However, the Midleton Local Area Plan also co-ordinates the work and objectives of other key departments within the local authority, such as Economic Development, Roads, Environment, Housing and Community Development. In some cases, the body responsible for the implementation of certain plan objectives may be external, such as Transport Infrastructure Ireland R, the National Transport Authority or Irish Water etc.

Table 5.1 Environmental Report Recommendations fro Monitoring

Environmental Protection Objective	Targets	Indicators	Data source
<p>Population</p> <p>EPO 1: To ensure the sustainable development of Carrigtwohill North so the people of Carrigtwohill have the opportunity to live in communities with high quality residential, working and recreation environments with sustainable travel patterns and locally-based employment opportunities.</p>	<ul style="list-style-type: none"> • Ensure new development located where people can access a choice of transport modes to connect to the main centres of employment in the Environs and the town centre; • Decrease in journey time and distance travelled to work during the lifetime of the LAP; • All large scale housing developments to be accompanied by a Design Statement. 	<ul style="list-style-type: none"> • Significant increase in the population of Carrigtwohill • Distance and mode of transport to work/ school. • No. of new houses/ employment development built within 400m of Carrigtwohill Railway Station and connected walking/ cycling route. 	<ul style="list-style-type: none"> • CSO (Census Data) • CSO (POWSCAR). • Planning Register
<p>Human Health</p> <p>EPO 2: To protect and enhance human health and manage hazards or nuisances arising from traffic & incompatible land uses.</p>	<ul style="list-style-type: none"> • Ensure new development is well served with community facilities and facilitates including walking and cycling routes. 	<ul style="list-style-type: none"> • No of new primary health care/schools/crèche/ community facilities provided. • Amount of (Km) new cycleways provided. 	<ul style="list-style-type: none"> • Planning register. • Planning register. • Other departments within the Council
<p>Biodiversity, Flora and Fauna</p> <p>EPO 3: Conserve and restore ecosystems, habitats and species in their natural surroundings within Carrigtwohill North and wider Carrigtwohill Area, and ensure their sustainable management,</p>	<ul style="list-style-type: none"> • Afford necessary protections to Cork Harbour SAC and Great Island SPA • Complete Habitat mapping for Carrigtwohill • Implement the actions of the Cork County Biodiversity Action Plan, where relevant; • Prepare a Green Infrastructure Strategy for the town; • Protect habitats from invasive species 	<ul style="list-style-type: none"> • Number of developments receiving planning permission within designated sites or within the consultation distance of designated sites where the HDA process identified potential for impacts. • Water quality within Cork Harbour, Great Island Channel and local watercourses. 	<ul style="list-style-type: none"> • Planning register. • Environment Dept, Cork County Council • Heritage Officer • Will become apparent with passage of time

Table 5.1 Environmental Report Recommendations fro Monitoring

Environmental Protection Objective	Targets	Indicators	Data source
including the ecological corridors between them.		<ul style="list-style-type: none"> • Number of actions achieved in Biodiversity Action Plan • Progress on Green Infrastructure strategy for the town. 	
Soil EPO 4: Protect the function and quality of the soil resource in Carrigtwohill North.	<ul style="list-style-type: none"> • Re-use of soil extracted locally; 	<ul style="list-style-type: none"> • Volume of construction and demolition waste recycled. 	<ul style="list-style-type: none"> • Planning register. • EPA Environment Section Cork County Council
Water (W) EPO 5: Maintain and improve the quality of water resources and improve the management and sustainable use of these resources to comply with the requirements of the WFD.	<ul style="list-style-type: none"> • To restore 'good' status to Cork Harbour and the Great Island Channel. • Achieve compliance with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC (protection of groundwater); • Not to permit development where it would result in a WWTP exceeding the terms of its discharge license; • Complete and implement a SUDS strategy for Carrigtwohill North; • Appropriate management of zones vulnerable to flooding; • Implementation of water conservation measures. 	<ul style="list-style-type: none"> • Trends in classification of overall status of surface water under Surface Water Regulations 2009 (SI No 272 of 2009); • Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC; • Improved discharge standards from the WWTP; • Successful installation and operation of SUDS; • Percentage of unaccounted for water. 	<ul style="list-style-type: none"> • EPA • Irish Water • Environment Section Cork County Council. • Irish Water
Air Quality and Climate (AQ/C) EPO 6: Protect and improve air quality. EPO 7: Contribute to mitigation of, and adaptation to, climate change.	<ul style="list-style-type: none"> • Ensure air quality monitoring results are maintained within appropriate emission limits. • Increase modal shift in favour of public transport, walking and cycling; • Encourage energy efficiency in building design and construction; • Provide flood protection measures where appropriate; • Avoid inappropriate development in areas of flood risk. 	<ul style="list-style-type: none"> • Trends in Air Quality monitoring data. • Percentage of population travelling to work by public transport, walking or cycling. • No of developments permitted within areas at risk of flooding. 	<ul style="list-style-type: none"> • EPA. • CS • Planning register.
Cultural Heritage (CH)			

Table 5.1 Environmental Report Recommendations fro Monitoring

Environmental Protection Objective	Targets	Indicators	Data source
<p>EPO 8: Protect and, where appropriate, enhance the character, diversity and special qualities of architectural, archaeological and cultural heritage (including Gaeltachtaí) in Carrigtwohill North</p>	<ul style="list-style-type: none"> • No loss of or adverse impact on the fabric or setting of monuments on the Record of Monuments (RMP). • No loss of or adverse impact on the architectural heritage value or setting of protected structures. • No loss of or adverse impact on structures recorded on the National Inventory of Architectural Heritage. • Implement the Cork County Heritage Plan 	<ul style="list-style-type: none"> • Loss of or adverse impact on monuments on the Record of Monuments (RMP). • Loss of or adverse impact on protected structures included on the RPS or structures included on the NIAH. 	<ul style="list-style-type: none"> • Heritage Officer.
<p>Material Assets (MA)</p> <p>EPO 10 Make best use of the material assets of Carrigtwohill North and the wider town and promote the sustainable development of new infrastructure to provide for the current and future needs of the population.</p>	<ul style="list-style-type: none"> • Develop the road, rail and public transport infrastructure of the county to facilitate sustainable growth and travel patterns. • Ensure appropriate water services infrastructure is delivered • Facilitate the sustainable expansion of employment facilities to enable economic growth and create new employment opportunities. • Protect and promote existing and new recreational facilities and infrastructure. 	<ul style="list-style-type: none"> • Number of new critical infrastructural projects completed (transport, SUDs etc). 	<ul style="list-style-type: none"> • Delivery of the Critical Infrastructure per Main Settlement level will be monitored as part of CDP.