Kildare County Council

Naas Local Area Plan 2019-2023

Strategic Environmental Assessment- Environmental Report

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Ove Arup & Partners Ireland Ltd

Arup
50 Ringsend Road
Dublin 4
D04 T6X0
Ireland
www.arup.com

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		Name	Ailsa Doyle	Sinead Whyte	
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		Name	Ailsa Doyle	Sinead Whyte	Sinead Whyte
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		Name	Ailsa Doyle	Sinead Whyte	Sinead Whyte
		Signature	Ailsa Doyle.	Sinead	Sinead
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Contents

Appendices

Non-Technical Summary

NTS1: Introduction

This is the non-technical summary of the Environmental Report that has been prepared as part of the Strategic Environmental Assessment of the Draft Naas Local Area Plan 2019-2023 (Draft LAP). The document has been prepared in accordance with national and EU legislation. It draws attention to the most important issues and provides information on other significant topics. Any topic which causes concerns can be followed in greater detail in the main Environmental Report.

The relevant planning legislation comprises the Planning and Development Act 2000, (as amended) and the Planning and Development Regulations 2001, (as amended). Key planning documents reviewed as part of the assessment included:

- Project Ireland 2040: National Planning Framework;
- Draft Eastern and Midlands Regional Spatial and Economic Strategy 2019-2031;
- The Regional Planning Guidelines for the Greater Dublin Area 2010-2022;
- Greater Dublin Area Transportation Study 2016-2035;
- Kildare County Development Plan 2017 – 2023;
- Kildare Local Economic and Community Plan 2016-2021;
- County Kildare Heritage Plan 2005 - 2011; and
- County Kildare Biodiversity Action Plan 2009-2014.

Cognisance was also given to a wide range of legislation, plans and programmes at international, national, regional and local level for relevance to the plan.

NTS2: Draft Naas Local Area Plan 2019-2023

The Draft LAP provides the main public statement of planning policies and objectives for Naas for the 2019-2023 period and beyond.

The policies and objectives are critical in determining the appropriate location and form of different types of development as the LAP is the primary statutory land use policy framework against which planning applications are assessed.

The objectives of the LAP are also used by Kildare County Council to guide their activities and to indicate priority areas for action and investment by the Council such as focusing on attracting employment into the town or regeneration of the town centre and sustainable provision of housing..

The LAP when adopted will replace the Naas Town Development Plan 2011-2017.

NTS3: SEA Methodology

The objective of the Strategic Environmental Assessment (SEA) Directive 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 the plans…with a view to promoting sustainable development.' (Article 1 SEA Directive). It is a systematic, on-going process for evaluating, at the earliest possible stage, the environmental quality and consequences of implementing certain plans and programmes on the environment.

The SEA methodology is based on legislative requirements and EPA guidance and will ensure compliance with the SEA Directive and associated legislation. The EPA's SEA Pack (Version 18/04/2013) was also used as a source of information during the SEA process.

NTS4: Current State of the Environment

The assessment of the plan with respect to the current Environmental Baseline is the principal task of the SEA process. Consequently, this baseline description must be cognisant of the local level nature of the plan and the pressures and interrelationships between environmental topics:

- Biodiversity.
- Population and Human Health.
- Land and Soils.
- Water.
- Air, Noise and Climate.
- Archaeological, Architectural and Cultural Heritage.
- Landscape and Visual.
- Material Assets.

Naas is a town characterised by its retail and commercial centre, with robust employment and enterprise opportunities, a strong community spirit and quality built and natural heritage.

The town's Main Street; a 1km linear road, provides the central focal point for Naas. Along Main Street are specific points such as Market Square and Poplar Square which have their own key characteristics and points of interest.

Naas contains an outstanding natural resource in the form of the Grand Canal and the Corbally Branch, which contributes to the built and natural heritage.

According to the EPA's State of the Environment Report 2016, Ireland's environment remains in a good condition, although there are a number of key challenges in the coming years. The report identified four priority challenges for the environment, which comprise; valuing and protecting our natural environment; building a resource-efficient low-carbon economy; putting the environment at the centre of our decision making and implementing environmental legislation.

NTS5: Objectives, Targets and Indicators

The SEA is designed to assess the potential environmental impact of the LAP and its associated policies and objectives against the environmental baselines established.

The plan's policies and objectives are assessed against a range of established environmental objectives and targets.

Indicators that are recommended in the SEA are utilised over the lifetime of the Draft LAP to quantify the potential level of impact that the policies and objectives are likely to have on the environment. This enables the measurement of the success of the policies in promoting the sustainable development of the area.

NTS6: Assessment of Likely Significant Effects

The environmental impacts of the Draft LAP policies and objectives were assessed with respect to the existing environmental baseline and environmental objectives.

As the policies included in the Draft LAP have been designed to promote sustainability and to protect the environment, the majority of policies are expected to have positive impacts when assessed against the environmental objectives. A matrix was prepared to examine these potential impacts.

NTS7: Consideration of Alternatives

Alternative development scenarios were considered in the preparation of the Draft LAP. These options primarily related to:

- Scenario 1: Town Centre consolidation and sequential development of zoned residential and employment lands in the Northwest Quadrant.
- Scenario 2: Northern West Quadrant Expansion of the town.
- Scenario 3: Eastern Expansion and Town Centre Consolidation.
- Scenario 4: Southwest Expansion.
- Scenario 5: Market-Led Growth.

Each scenario was assessed against the environmental aspects and a preferred scenario from an environmental perspective determined.

NTS8 Mitigation Measures

This Environmental Report has highlighted some potential negative environmental impacts that may arise from the implementation of the Draft LAP in relation to new policies, zonings and land use designations. A number of mitigation measures have been identified to prevent, reduce and as fully as possible offset any potential significant adverse impacts on the environment of implementing the LAP.

It is envisaged that all planning applications for new developments in the plan area will be environmentally assessed and specific mitigation proposed where appropriate.

NTS9: SEA Methodology

Article 10 of the SEA Directive required that monitoring should be carried out in order to identify at an early stage any unforeseen adverse impacts associated with the implementation of the plan or programme.

A monitoring programme was developed based on the indicators selected to track progress towards achieving strategic environmental objectives and reaching targets, enabling positive and negative impacts on the environment to be measured. As previously described, the environmental indicators have been developed to show changes that would be attributable to implementation of the Draft LAP.

The SEA carried out has ensured that any potential significant environmental impacts have been identified and given due consideration.

Kildare County Council, as the planning authority, is responsible for collating existing relevant monitored data, the preparation of preliminary and final monitoring evaluation reports, the publication of these reports and, if necessary, the carrying out of corrective action.

1 Introduction

Arup was appointed by Kildare County Council (KCC) to carry out a Strategic Environmental Assessment (SEA) of the Draft Naas Local Area Plan 2019-2023. The Draft Naas Local Area Plan hereafter referred to as 'the Draft LAP,' will replace the existing Naas Town Development Plan 2011-2017 and will run from 2019-2023.

This SEA Environmental Report presents the findings of the environmental assessment of the likely significant impacts on the environment as a result of the Draft LAP. A Scoping Report was previously prepared which provided information to allow consultation with defined statutory bodies on the scope and level of detail to be considered in the environmental assessment. Any issues or concerns raised during the scoping process or during the consultation period for the Draft LAP has been incorporated into this report. An SEA Statement accompanies this Environmental Report.

1.1 Planning Context

The relevant planning legislation comprises the Planning and Development Acts 2000 (as amended) and the Planning and Development Regulations 2001 (as amended).

The Draft LAP has been prepared under the provisions of Section 18, 19 & 20 of the Planning and Development Act 2000, as (amended) and in cognisance of the National Planning Framework 2040 and National Development Plan 2018-2027, which are the two components of Project Ireland 2040. The Draft Revised LAP is consistent with the policies of the Regional Planning Guidelines 2010-2022, the draft Eastern and Midlands Regional Spatial and Economic Strategy 2019-2031, as well as the objectives, Core Strategy and Settlement Strategy of the Kildare County Development Plan 2017-2023, and any subsequent reviews or variations thereto.

The hierarchy of the planning process within Ireland is summarised in the flow chart depicted in Figure 1.1. The flow chart (adapted from the Department of Environment, Heritage and Local Government (DoEHLG) Development Plan Guidelines for Planning Authorities (2007)) indicates where the Draft LAP falls within that hierarchy.

This planning hierarchy was taken into account in drafting the Draft LAP and undertaking this SEA. Relevant planning and policy documentation are described in the following sections.

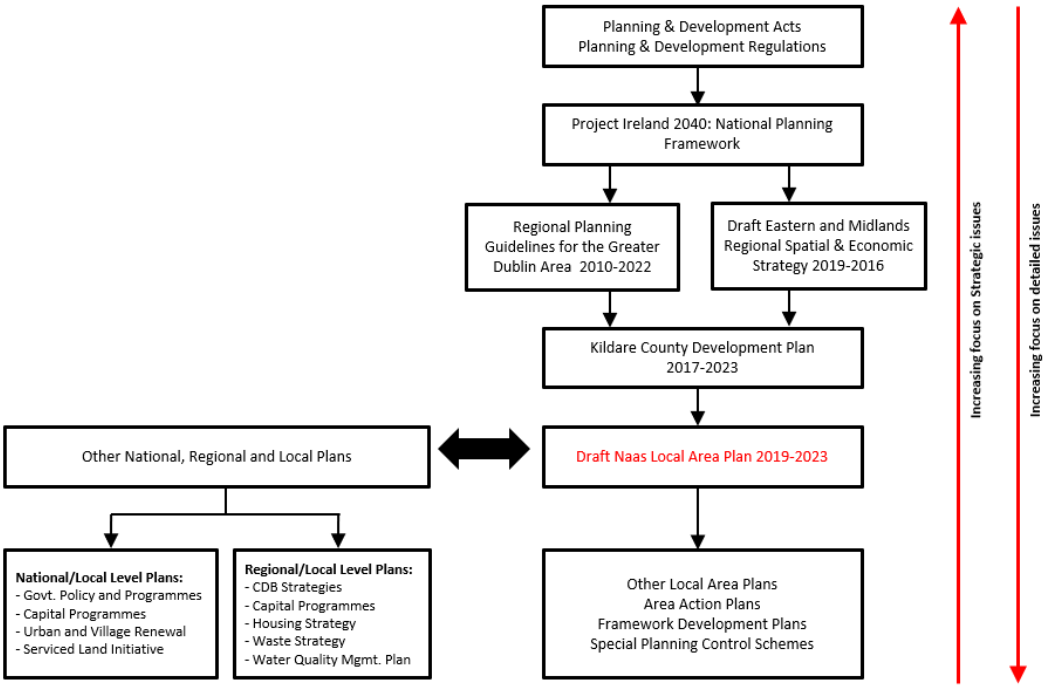


Figure 1.1: Hierarchy of the Planning Process in Ireland

1.1.1 Project Ireland 2040: National Planning Framework

The Department of Housing, Planning and Local Government published Project Ireland 2040: National Planning Framework (NPF) in February 2018. The NPF is the overarching policy and planning framework for the social, economic and cultural development of the country.

The NPF was published together with a 10-year national investment plan as one vision – Project Ireland 2040, meaning that implementation of the NPF is fully supported by the Government's investment strategy for public capital investment and investment by the State sector in general.

The NPF is the overarching document guiding regional spatial and economic strategies and local development plans.

The NPF identifies national strategic outcomes (including the sustainable management of water and other environmental resources) as well as strategic investment priorities.

The NPF provides for substantially better linkage between zoning of land and the availability of infrastructure in local authority planning. The NPF outlines the requirements for a new, standardised methodology to be put in place for core strategies which will also address issues such as the differentiation between zoned land that is available for development and zoned land that requires significant further investment in services for infrastructure for development to be realised.

The NPF outlines a number of National Policy Objectives relating to the coordination of land-use zoning and the provision of infrastructure and services.

National Policy Objective 72a states:

"*Planning authorities will be required to apply a standardised, tiered approach to differentiate between i) zoned land that is serviced and ii) zoned land that is serviceable within the life of the plan."*

National Policy Objective 72b states:

"When considering zoning lands for development purposes that require investment in service infrastructure, planning authorities will make a reasonable estimate of the full cost of delivery of the specified services and prepare a report, detailing the estimated cost at draft and final plan stages."

National Policy Objective 72c states:

"When considering zoning land for development purposes that cannot be serviced within the life of the relevant plan, such lands should not be zoned for development."

1.1.2 The Regional Planning Guidelines for the Greater Dublin Area 2010-2022

The Regional Planning Guidelines for the Greater Dublin Area 2010-2022 (RPGs) translate the national and regional population and housing targets set by the NSS to county level.

The RPGs identify two planning policy zones in the Greater Dublin Area (GDA)- The Metropolitan Area, and the Hinterland Area. Naas is identified as being within the Metropolitan Area.

The key objective for the future development of the Metropolitan Area is to ensure consolidation of urban centres, development of brownfield sites especially along public transport corridors, the provision and facilitation of an integrated public transport system and the achievement of a greater use of sustainable transport modes through the integration of land use and transportation planning.

Under the Regional Planning Guidelines, these planning policy zones are supported by a settlement hierarchy with the identification of key growth towns to be consolidated, developed and supported within a sustainable urban form.

Naas is identified as a 'Large Growth Town I', which are classified as '*key destinations, economically active towns supporting surrounding areas, located on Multi Modal Corridor in metropolitan hinterland*.'

Large Growth Towns are strategically positioned to make the most of their connectivity and high-quality connections to Dublin City Centre, whilst also supporting and servicing a wider local economy. They are important centres for delivery of public services, alongside IDA promoted companies, high order retail businesses and supported enterprise centres providing a strong commercial hub.

Naas is also identified under the Regional Planning Guidelines as the county town in Kildare, and the principal economic growth town in the Core Economic Area.

The RPGs will be replaced by the Regional Spatial and Economic Strategy (RSES) for the Eastern and Midland Region, once adopted. Refer to Section 1.1.3 below for further information on the RSES.

1.1.3 Draft Regional Spatial and Economic Strategy for the Eastern and Midland Region 2019-2031 (RSES)

The Draft RSES for the Eastern and Midland Region, is a strategic plan which identifies regional assets, opportunities and pressures, and provides appropriate policy responses in the form of Regional Policy Objectives. At this strategic level it provides a framework for investment to better manage spatial planning and economic development throughout the Region.

The Draft RSES provides a:

- **Spatial Strategy** – to manage future growth and ensure the creation of healthy and attractive places to live, work, study, visit and invest in.
- **Economic Strategy** – that builds on our strengths to sustain a strong economy and support the creation of quality jobs that ensure a good living standard for all.
- **Metropolitan Plan** – to ensure a supply of strategic development areas for the sustainable growth and continued success and competitiveness of the Dublin metropolitan area.
- **Investment Framework** – to prioritise the delivery of key enabling infrastructure and services by government and state agencies.
- **Climate Action Strategy** – to accelerate climate action, ensure a clean and healthy environment and to promote sustainable transport and strategic green infrastructure.

In October 2018, the Eastern and Midland Regional Assembly prepared a draft Regional Spatial and Economic Strategy for the whole of the Eastern and Midland Region for the period 2019-2031, as required under section 24(4) of the Planning and Development Acts 2000-2018.

As outlined in Section 3.1.2, the RSES for the Eastern and Midland Region will replace the RPGs, on adoption.

Naas is classified as a Key Town under the Draft Regional Spatial and Economic Strategy, which are defined as '*Large economically active service and/or county towns that provide employment for their surrounding areas and with high-quality transport links and the capacity to act as growth drivers to complement the Regional Growth Centres*.'

The draft RSES includes the following Regional Policy Objectives in respect of Naas:

RPO 4.33 Promote the improvement of the transport network within and serving Naas town, including delivery of a robust and efficient walking, cycling and bus network with strong links to Sallins Railway Station, key destinations within the town and to the North West Quadrant and town centre area.

RPO 4.34 Support the use of the Grand Canal for amenity, recreation and sustainable transport purposes.

Public consultation on the Draft Regional Spatial and Economic Strategy ended on the 23rd of January 2019. Elected members of the Regional Assembly at a meeting of 1st March 2019 considered the submissions received during the public consultation of the draft RSES and decided to propose material amendments to the draft RSES.

Submissions or observations on the proposed material amendments only will be received between 15th March 2019 and 12th April 2019. The Proposed Amendments set out in the 'Eastern & Midland Regional Assembly: Proposed Material Amendments to the Draft Regional Spatial and Economic Strategy 2019-2031' include:

RPO 4.34 Support the development of the Grand Canal for amenity, recreation and sustainable transport purposes including the Naas to Sallins and Naas to Corbally harbour greenways and linking these to the national Grand Canal Greenway.

New RPO Regeneration and consolidation of the historic centre to improve the retail and commercial functions of the town core, with enhanced permeability and sustainable mobility within the town centre and improve links between the core and surrounding residential and employment areas through the further development of walking and cycling routes and improved public transport.

New RPO Strengthen the local employment base through the development of MERITS, Millennium Park in the North West Quadrant and the regeneration of underutilised lands including industrial lands in the north east of the town.

New RPO Support the delivery of a dedicated public transport interchange in Naas with associated Park and Ride.

New RPO Support an enhanced role and function of Naas as the County town of Kildare, particularly as a hub for high quality employment, residential and amenities.

1.1.4 Kildare Country Development Plan 2017-2023

The Core Strategy legislation requires the County Development Plan to be consistent with the population allocations and housing targets set out in the RPGs.

The Kildare County Development Plan 2017-2023 allocates growth targets to towns, villages and settlements based on the RPG targets and RPG policy requirements.

The capacity of settlements in Kildare to accommodate the level of growth envisaged by the RPGs and to deliver sustainable communities that are well served by social and physical infrastructure will need to be carefully considered as part of the Local Area Plan process for the growth towns. In order to develop in a sustainable manner, the towns must accommodate the appropriate levels of residential, economic, recreational and community development in tandem with necessary improvements in physical infrastructure and public transport.

1.2 Interaction with other relevant Plans and Programmes

As part of the SEA process the context of the Draft LAP must be established with regard to other plans and programmes that have been adopted at International, National, Regional and Local level. In particular, the interaction of the Draft LAP with the environmental protection objectives and standards included within these other plans and programmes must be considered.

A wide range of legislation, plans and programmes are of relevance to the Draft LAP and are outlined in **Table 1.1**.

Table 1.1: Hierarchy of Relevant Legislation, Plans and Programmes

Level	Legislation, Plans and Programmes
International/EU Level	Water Framework Directive & associated Directives SEA Directive Floods Directive Groundwater Directive Habitats Directive Birds Directive Freshwater Fish Directive Shell fish Directive Drinking Water Directive Bathing Water Directive Environmental Impact Assessment Directive Seveso Directive Sewage Sludge Directive Urban Waste Water Treatment Directive Waste Framework Directive Nitrates Directive Soils Directive Air Quality Directives including Framework Directive National Emissions Ceiling Directive Environmental Noise Directive Climate Change Programme (ECCP II) Paris Agreement Industrial Emissions Directive EU Reach Initiative

Level	Legislation, Plans and Programmes
	European Landscape Convention UN Convention of Biological Diversity, 1992 Kyoto Protocol Stockholm Convention Valetta Convention Ramsar Convention OSPAR Convention Granada Convention Gothenburg Strategy
National Level	National Development Plan 2018-2027 A Programme for Partnership Government 2016 Building on Recovery: Infrastructure and Capital Investment 2016-2021 Policy Position on Climate Action and Low-Carbon Development. National Policy Position Ireland (2014) National Adaptation Framework (2018) National Mitigation Plan (2017) Guidelines on Urban Development and Building Heights for Local Authorities (2018) National Landscape Strategy for Ireland 2015-2025: Strategy for the Future Development of National and Regional Greenways (2018) Draft Clean Air Strategy Draft National Energy and Climate Plan Draft Integrated Implementation Plan 2019-2024 Delivering a Sustainable Energy Future for Ireland - The Energy Policy Framework 2007-2020 National Energy Efficiency Action Plan 2013-2020 Project Ireland 2040: National Planning Framework Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities (2015) Quality Housing for Sustainable Communities. Best Practice Guidelines for Delivering Homes Sustaining Communities (2007) The Planning System and Flood Risk Management. Guidelines for Planning Authorities (2009) Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (Cities, Towns & Villages) (2009) Guidelines for Planning Authorities – Retail Planning (2012) Local Area Plans - Guidelines for Planning Authorities (2013) Guidelines for Planning Authorities – Spatial Planning and National Roads (2012) Our Sustainable Future – A Framework for Sustainable Development for Ireland (2012) Actions for Biodiversity 2011-2016 (2nd National Biodiversity Plan) 3rd National Biodiversity Strategy and Action Plan (2017-2021) Appropriate Assessment of Plans and Projects in Ireland. Guidelines for Planning Authorities (revised 2010)

Level	Legislation, Plans and Programmes
	Architectural Heritage Protection - Guidelines for Planning Authorities (2004) Guidelines for Planning Authorities - Retail Planning (2012) Government Policy on Architecture 2009-2015 National Policy on Town Defences (2008) Implementation of Regional Planning Guidelines Best Practice Guidance (2010) Irish Water's Capital Investment Plan, Irish Water's Water Services Strategic Plan Healthy Ireland, A Framework for Improved Health and Wellbeing 2013-2025 (2013) National Physical Activity Plan for Ireland (2016)
Regional Level	Regional Planning Guidelines for the Greater Dublin Area 2010-2022 Draft Eastern and Midlands Regional Spatial & Economic Strategy 2019-2031 Retail Strategy for the Greater Dublin Area 2008-2016 Transport Strategy for the Greater Dublin Area up to 2035 River Basin Management Plan for Ireland 2018-2021. Eastern-Midlands Region Waste Management Plan 2015-2021 Eastern Catchment Flood Risk Assessment Management (CFRAM) Study Flood Risk Management Plans Groundwater Protection Schemes
Local Level	Kildare County Development Plan 2017-2023 South East Draft Flood Risk Management Plans (2016) County Kildare Heritage Plan 2005 - 2011 County Kildare Biodiversity Action Plan 2009-2014 Other Local Area Plans

2 Naas Local Area Plan 2019-2023

2.1 Introduction

The Draft LAP provides the main public statement of planning policies and objectives for Naas. The policies and objectives are critical in determining the appropriate location and form of different types of development as the LAP is the primary statutory land use policy framework against which planning applications are assessed.

The objectives of the LAP are also used by Kildare County Council to guide their activities and to indicate priority areas for action and investment by the Council such as focusing on attracting employment into the town or enhancing the town as a centre for tourism.

The LAP is a key document for setting out a vision for how Naas should develop over the years 2019-2023 and beyond. The Draft LAP is consistent with the objectives set out in the following documents:

- Project Ireland 2040: National Planning Framework;
- The Regional Planning Guidelines for the Greater Dublin Area 2010-2022;
- The draft Eastern and Midlands Regional Spatial and Economic Strategy 2019-2031;
- Greater Dublin Area Transportation Study 2016-2035;
- Kildare County Development Plan 2017 – 2023;
- Kildare Local Economic and Community Plan 2016-2021;
- County Kildare Heritage Plan 2005 - 2011; and
- County Kildare Biodiversity Plan 2009-2014.

2.2 Vision and Development Strategy

A key aim of any local area plan is to set out the vision and development strategy for the future development of the plan area and from this vision, all policies and objectives can be developed and implemented with the overall aim of achieving this vision.

The vision and development strategy for the Draft LAP must be consistent with the 'Core Strategy' of the County Development Plan and reflect the characteristics, strengths and weaknesses of the plan area.

The aim of the Core Strategy of the Kildare County Development Plan 2017-2023, is to respond in a coherent sustainable, spatial fashion to the challenges facing the county, while building on its strengths and providing a more focused approach to planning for future growth.

The Core Strategy facilitates a more consolidated compact urban form, maintenance and improvement of a sustainable economic base, and the creation of sustainable and integrated communities, together with the balancing of our natural and built environment with sustainable and appropriate development.

The Kildare County Development Plan 2017-2023 seeks to encourage the focus of new development on:

(i) Consolidation within the existing urban footprint with particular focus on the Metropolitan and Hinterland towns;

(ii) Supporting the achievement of more sustainable towns and villages through residential and employment opportunities together with supporting social and community facilities;

(iii) Supporting national investment in public transport services by focusing new development areas in key locations to achieve the integration of land uses and high quality public transport provision;

(iv) Achieving economies of scale for services and infrastructure in identified growth towns;

(v) Promoting economic development and employment opportunities within defined economic clusters;

(vi) Facilitating development in the smaller towns and villages in line with the ability of local services to cater for growth that responds to local demand;

(vii) Recognising the role of the rural countryside in supporting the rural economy and its role as a key resource for agriculture, equine, bloodstock, forestry, energy production, tourism, recreation, mineral extraction and rural based enterprises;

(viii) Supporting, facilitating and promoting the sustainable development of renewable energy sources in the county;

(ix) Protecting local assets by preserving the quality of the landscape, open space, recreational resources, natural, architectural, archaeological and cultural heritage and material assets of the county; and

(x) Promoting social inclusion and facilitating the delivery of objectives contained in the Kildare Local Economic and Community Plan (LECP) 2016-2021.

2.3 LAP Vision

The Draft LAP sets out a vision for the future development of the plan area, in accordance with the County Development Plan. All policies and objectives outlined in the LAP can be developed and implemented with the overall aim of achieving this vision.

The vision for Naas over the lifetime of the LAP and beyond is:

"To ensure that the growth planned for the town up to 2040 and beyond occurs in a sustainable and sequential manner, while prioritising a low carbon, compact, consolidated and connected pattern of development. To develop Naas as a vibrant and culturally rich town supported by an inclusive sustainable all-of-life residential community.

The emphasis of this Plan is to create a distinct sense of place and community in which people will continue to choose to live, work, do business and visit. Movement, connectivity and permeability to key destinations within the town and wider region will be prioritised and a greater emphasis on safe active transport routes and an enhanced public transport network.

The Plan seeks to deliver and facilitate high quality transformative projects, such as McAuley Place. It will focus on the regeneration and redevelopment of Core Regeneration Areas in tandem with a radically improved public realm and rejuvenated town centre while having regard to and optimising the heritage assets of the town.

Through the realisation of a shared civic vision Naas will undergo expansion of growth within the designated Key Development Areas and towards the Northwest Quadrant (NWQ). There will be a clear emphasis on linking the town centre to the NWQ lands, developing key transport modes, community facilities and amenities and delivering a high quality and connected employment quarter with diverse residential and amenity areas."

2.4 LAP Development Strategy

The Regeneration and Urban Development Strategy for Naas represents a continuation of the principles outlined in the Naas Town Development Plan (2011-17) which sought to consolidate the overall growth of Naas, direct its long-term expansion towards the Northwest Quadrant and identify opportunities for regeneration within the town centre.

The Draft LAP provides for a greater level of focus in directing and shaping the future growth of Naas, as guided by the 2040 Vision for Naas, as outlined in Section 2.3, as well as new and emerging planning policy at national and regional levels. **Figure 2.1** conceptually illustrates the main principles guiding the physical development of the town, including the following:

- *Town Centre and Urban Regeneration:* To realise the potential and grow the economic activity, whilst promoting a high-quality town centre experience.
- *Movement and Connectivity:* The Plan seeks to develop and encourage more sustainable modes including walking, cycling and public transport and to reduce the existing over-reliance on the private car within the town centre in particular.
- *Integrating the Periphery:* The LAP acknowledges the existing economic and residential activity at the periphery as an essential component of Naas. The spatial severance between the core and the periphery needs to be addressed.

- *Connecting with the Hinterland, Heritage and Environment:* The exceptional level of diversity and quality in the Naas hinterland remains under-exploited by the town. This includes an extensive heritage of boglands, equine-landscape, ecclesiastical and military history, and impressive canal infrastructure connecting Naas to regional and national destinations. These present opportunities for a tourism strategy enabling connection with the hinterland and heritage of Naas.
- *Collaboration and Citizen Engagement:* This LAP places a major emphasis on citizen consultation and stakeholder engagement. The perspectives generated at plenary sessions, workshops, and meetings with sectoral groups, has informed the content and direction of the LAP. The LAP is committed to harnessing the energy of all Naas stakeholders in creating a positive context for optimizing collaboration on the successful implementation of the plan.
- *Implementation and Monitoring:* Kildare County Council will seek to actively implement the LAP and progress the vision during the lifetime of the Plan and beyond. Chapter 10, Implementation, details the monitoring and review process and outline specific focus areas for implementation. The Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA) which have informed policies and objectives will also be monitored.

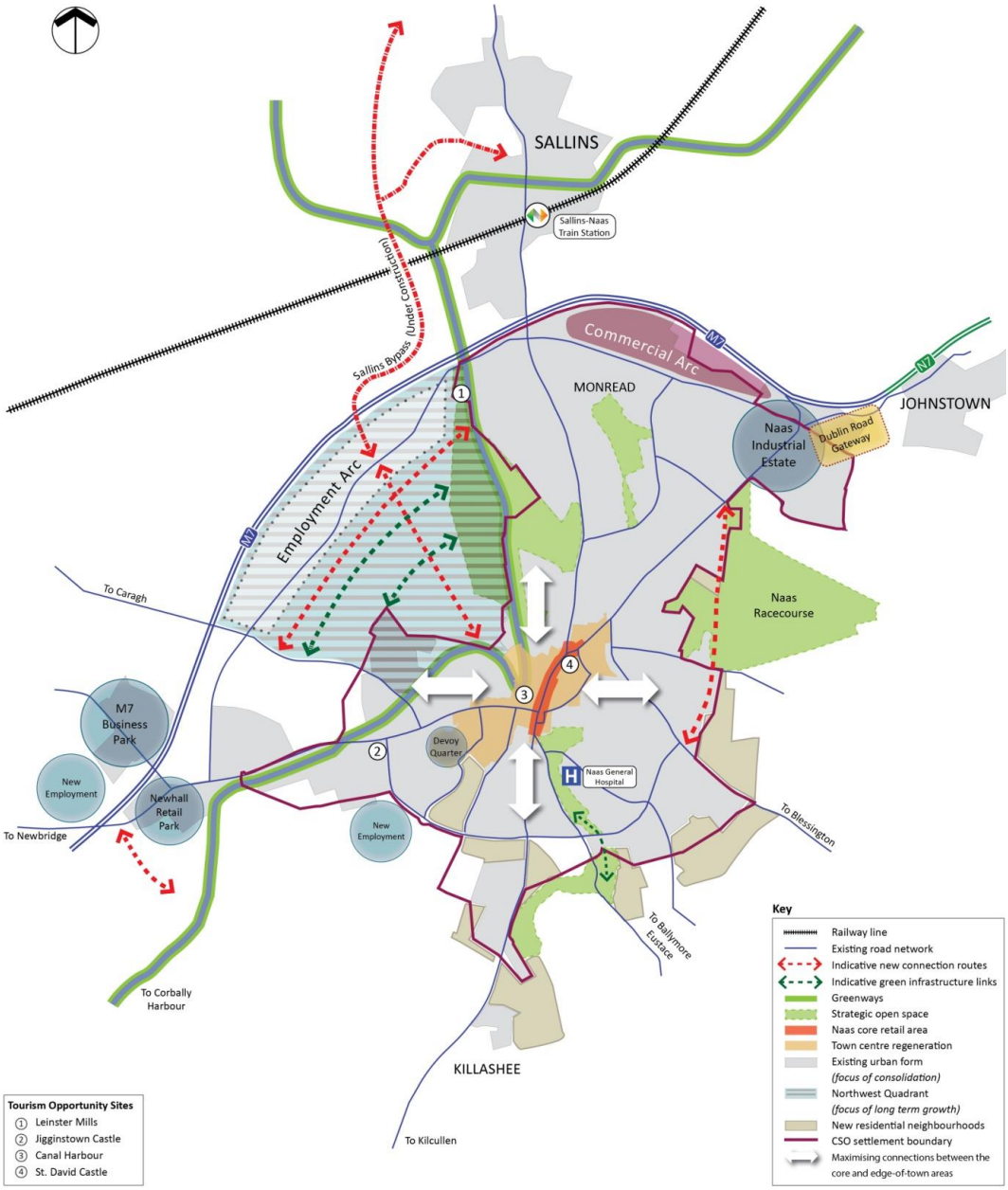


Figure 2.1: Naas Development Strategy

3 SEA Methodology

3.1 Introduction

The objective of the Strategic Environmental Assessment (SEA) Directive 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 plans … with a view to promoting sustainable development' (Article 1 SEA Directive). It is a systematic, on-going process for evaluating, at the earliest possible stage, the environmental quality and consequences of implementing certain plans and programmes on the environment.

The requirements for SEA in Ireland are set out in the national legislation as follows:

- European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations (S.I. No. 435 of 2004) as amended by European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations (S.I. No. 200 of 2011); and
- Planning and Development (Strategic Environmental Assessment) Regulations (S.I. No. 436 of 2004) as amended by the Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations (S.I. No. 201 of 2011).

This section highlights how the SEA has been undertaken for the Draft LAP. The SEA methodology is based on legislative requirements and relevant Environmental Protection Agency (EPA) guidance and will ensure compliance with the SEA Directive and associated legislation. The EPA's SEA Pack (Version 18/04/2013) was also used as a source of information during the scoping process. The key stages outlined in **Figure 3.1** were identified and are discussed in the following sections.

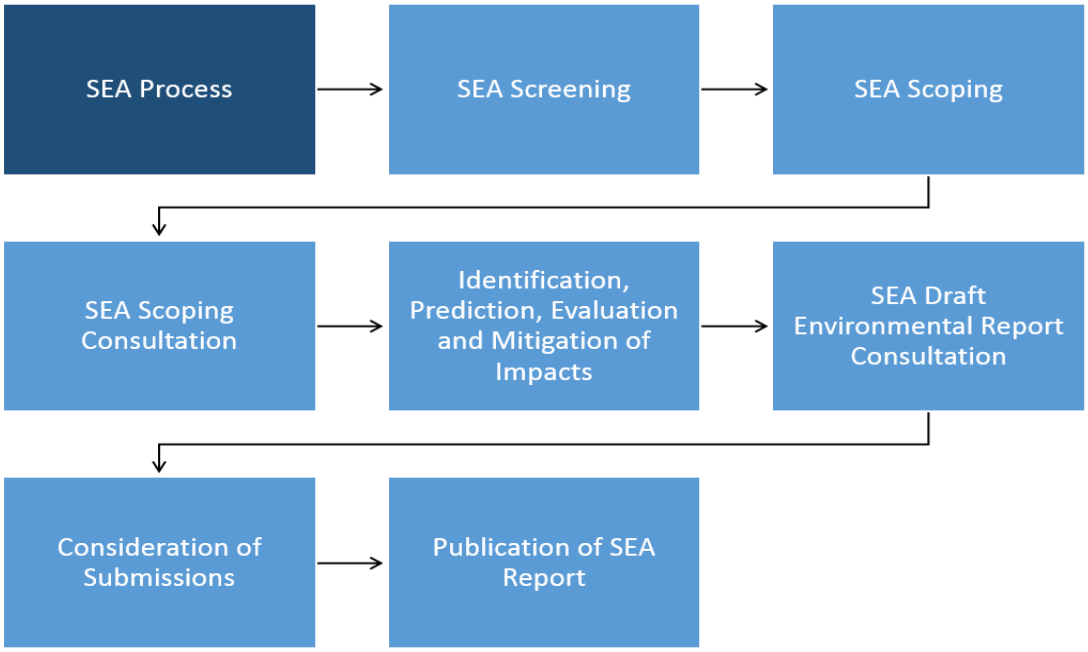


Figure 3.1: Key Stages of the SEA Process

3.2 Screening

Screening is the process for deciding whether a particular plan would warrant SEA. The screening process allowed KCC to identify at the earliest possible opportunity whether the development of the Draft Plan required an SEA, in order for the assessment to be factored in to the plan development process.

Article 14B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004), as amended by S.I. No. 201 of 2011, lists the determinants for an SEA to be prepared as part of a LAP. An SEA is mandatory where -

a) the population or the target population of the area of a local area plan is 5,000 persons or more; or

b) the area covered by the local area plan is greater than 50 square kilometres; or

c) the local area plan is being prepared for a town and its environs area; or

d) where the planning authority determines under article 14A(3) or (5) that the implementation of a local area plan, an amended plan or an amendment to a local area plan would be likely to have significant effects on the environment.

According to the 2016 Census, the population of Naas was 21,597 in 2016. As the target population is evidently greater than 5,000 persons in the area to which the revised Plan relates, there is a statutory requirement for an SEA to be undertaken.

3.3 Scoping

The scoping phase of the SEA is a key part of the assessment process as it established the likely extent (geographic, temporal and thematic) of the assessment, the range of environmental issues to be covered and the level of detail the assessment will investigate.

The Scoping Process allows input from the environmental authorities and relevant stakeholders to be incorporated.

Essentially any issues/comments submitted as part of the scoping process will provide greater focus on the development of aspects of the Draft LAP.

The issues addressed during the scoping process are as follows:

- The key elements of the Draft LAP to be assessed;
- The key environmental issues to be assessed;
- Research of relevant international, national and local plans, objectives and environmental standards that may influence or impact on the Draft LAP;
- Development of draft environmental objectives, indicators and targets to allow the evaluation of impacts; and
- Identification of reasonable alternative means of achieving the strategic goals of the Draft LAP.

A Scoping Report was prepared as part of this SEA on behalf of Kildare County Council which asked key questions of statutory Consultees and key stakeholders. The responses received were addressed in the preparation of the Environmental Report. An outline of the responses received to the Scoping Report is included in **Table 3.1** below, along with a description of how any issues or concerns were incorporated into the SEA Environmental Report, where relevant.

Table 3.1: Scoping responses received for the SEA of the Draft LAP

Consultee/ Stakeholder	SEA Scoping Response	SEA Action
Department of Communications, Climate Action & Environment on behalf of Inland Fisheries Ireland (IFI)	• IFI should be contacted in relation to all works that may have an impact on surface waters, at formal planning stage. • Recommended that County Development Plan, Town Plan and Local Area Plan objectives include retention of open and natural channels • Development potentially impacting aquatic habitats should be strictly controlled to ensure ecological protection and enhancement; • The council should seek to establish riparian corridors free from development along all significant watercourses. • IFI advocates at least a 10m buffer zone between river channel and the line of maximum extent of development. • The implementation of a SUDS design for surface water disposal in any areas of increased urbanisation is a positive indicator of the Council's intention for the sustainable development of the area and should, in conjunction with good management of the site, aid in flooding and pollution management. Policies and recommendations made under the Greater Dublin Strategic Drainage Study (GDSDS) should be applied in development of a drainage strategy for the County. • While Osberstown WWTP has recently been upgraded to final treatment capacity of 130,000 PE, it is important to note that sufficient treatment capacity must be available both within the receiving sewerage system locally and downstream at Osberstown WWTP over the full duration of the plan in order that the ecological integrity of the ultimate receiving water (River Liffey) is protected. • IFI would highlight the 'at risk' status of most surface waters in the Naas area under the WFD characterisation process and would stress the availability of IFI's full cooperation in order to protect and enhance water and habitat quality in all surface waters within the broad WFD context. • Consideration of protected, vulnerable and sensitive (such as Brown trout) aquatic species should be a priority when formulating the new LAP.	• The consideration of aquatic ecology has formed a key part of the impact assessment process

	• The issue of climate change should be comprehensively considered and integrated into the final Naas Local Area Plan. • IFI's key concern in relation to abstractions is that the sourcing of water supplies from groundwater or surface water resources must not result in a negative impact on the ecology. • The protection of habitats outside designated areas and a Council commitment to reject proposals that would interfere with natural floodplains would greatly benefit both aquatic and riparian features in the surrounding areas. IFI is strongly opposed to any development on natural floodplain lands.	
EPA	• In relation to the provision of critical service infrastructure (drinking water, wastewater, waste) to support current and future development, the Plan should include a commitment to support and collaborate with the relevant stakeholders including Irish Water. Development proposals and associated population increases should be linked to the ability to provide adequate and appropriate critical service infrastructure. • the Draft River Basin Management Plan for Ireland 2018-2021 (DHPCLG), which will be adopted within the lifetime of the Plan, should be taken into account in preparing the SEA and Plan. • The Plan should ensure that development within the Plan area is appropriate to the risk of flooding identified and that vulnerable land uses are avoided in flood zone A/B areas where possible • The SEA should consider describing whether invasive alien species are present within the plan area and if present, a commitment should be given to implement appropriate management and control measures. • Any available habitat/green infrastructure mapping of the Plan area should be considered in the context of environmental protection. • The Plan should commit to protecting and, where possible, enhancing biodiversity outside of designated areas, including ecological corridors/linkages, hedgerows and wetlands within and adjacent to the plan area. • Areas of important visual amenity and significant landscape character should be protected in the Plan. • This guidance should be taken into consideration as relevant and appropriate in preparing the Plan and associated SEA. • The Plan should consider how key national level commitments for climate adaptation and climate mitigation can be advanced at a local authority level.	• The Draft River Basin Management Plan for Ireland 2018-2021 (DHPCLG) has been taken into account in the preparation of the SEA and integrated into this Environmental Report. • The Habitat Survey and Mapping of Naas, Co. Kildare (Atkins, 2018) has been reviewed and a description of the invasive species identified in the Plan area is provided in Section 4.3.2. Details on the management and control of the same are provided in Table 8.1. • As outlined above, the Habitat Survey and Mapping of Naas, Co. Kildare (Atkins, 2018) has been reviewed and the findings have been integrated into this SEA Environmental Report. • The EPA guidance SEA Scoping Guidance has been reviewed and taken into consideration in the preparation of this SEA Environmental Report.

3.4 Baseline Data

Gathering relevant information relating to the state of the environment for a plan area is an integral part of the SEA process. The SEA Directive requires that certain information relating to the relevant environmental baseline is presented in order to help test the performance of the plan implementation, as well as helping establish how the environment would change if the plan were not to be implemented.

Baseline information has been collected from readily available sources, and a Geographical Information System (GIS) was used to graphically present relevant information. The baseline information is reported in Section 4 of this report.

3.5 Environmental Assessment of the Local Area Plan

The environmental assessment process ran in parallel to the development and preparation of the Draft LAP. Interaction between the Draft LAP and SEA is depicted in **Figure 3.2.**

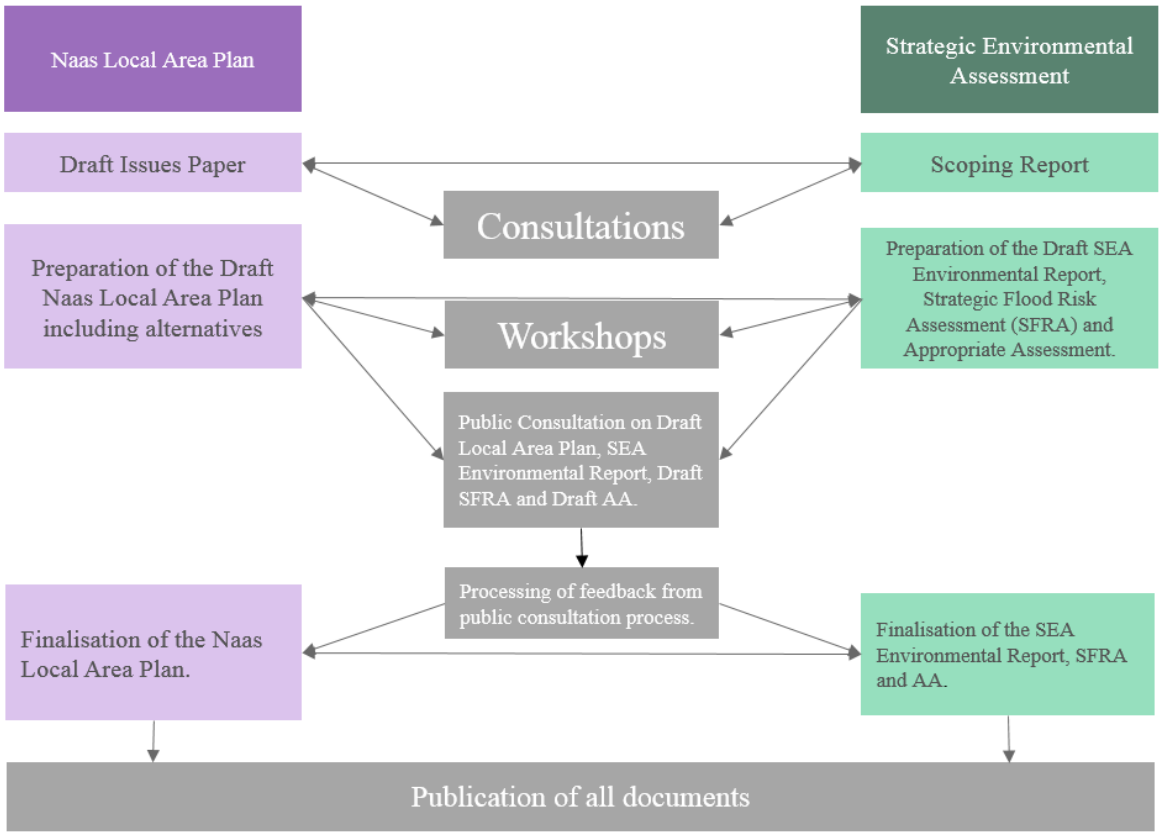


Figure 3.2: Interaction between the Draft LAP and SEA

The environmental assessment process was undertaken in accordance with best practice SEA principals and guidance.

This included desk reviews of all the available GIS data, specialist investigation into the likely impacts associated with the Draft LAP and recommendations for suitable mitigation measures along with monitoring.

3.6 Consultations

This SEA Environmental Report was issued to the relevant statutory stakeholders for comment. The responses received were addressed in the finalisation of the Environmental Report. An outline of the responses received is included in the SEA Statement.

Consultation with representatives of Kildare County Council also took place throughout the SEA process.

3.7 Consideration of Alternatives

The SEA Directive requires that reasonable alternatives be assessed in order to demonstrate how the preferred strategy performs against other forms of action. Alternatives must be developed, described and assessed within the SEA process, with the results presented in the Environmental Report.

Section 5 of this Environmental Report discusses the consideration of alternatives.

3.8 Technical Difficulties Encountered

No major technical difficulties were encountered during the preparation of this Environmental Report.

4 Current State of the Environment

Note all figures referenced from this point onwards are included in **Appendix A1.**

4.1 Introduction

Historically, Naas is a town characterised by its retail and commercial centre, with robust employment and enterprise opportunities, a strong community spirit and quality built and natural heritage.

The town's Main Street; a 1km linear road, provides the central focal point for Naas. Along Main Street are specific points such as Market Square and Poplar Square which have their own key characteristics and points of interest.

Like most provincial towns Naas did not expand significantly during the late 19th and early 20th centuries. In recent decades Naas, as the county town, has continued to expand, influenced by economic and social conditions and its location within the Greater Dublin Area. From the 1960's, growth of the town has largely occurred on the outskirts of the town centre in the form of residential estates and industrial development with relatively little development occurring in the historic town centre until recent times.

The construction and subsequent opening of the Naas by-pass in 1983 was an important milestone in the development of Naas. In more recent times, the construction of Millennium Link Road and the Southern Ring Road has opened up opportunities to the west of the town for enterprise and employment purposes, while lands to the south of the town for new residential communities.

Naas contains an outstanding natural resource in the form of the Grand Canal and the Corbally Branch, which contributes to the built and natural heritage.

4.1.1 The State of the Irish Environment

According to the EPA's State of the Environment Report, 2016, Ireland's environment remains in a good condition, although there are a number of key challenges in the coming years. The report identified four priority challenges for the environment, which comprise; valuing and protecting our natural environment; building a resource-efficient low-carbon economy; putting the environment at the centre of our decision making and implementing environmental legislation.

In the EPA's 2020 Vision document it is noted that pressures on the Irish environment increased significantly as a result of a decade of rapid and unprecedented economic growth. Unfortunately, these pressures have accelerated at a rate that far exceeds that observed in other EU countries.

In '2020 Vision' the EPA promotes six environmental goals which consider the principal environmental challenges facing our nation. These goals, which are highly relevant to the sustainable development of Naas have a bearing on the assessment of the Draft LAP:

- 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.

4.2 Purpose of the Environmental Baseline

The assessment of the Draft LAP with respect to the current environmental baseline is the principal task of this SEA process.

Consequently, the baseline description must be cognisant of the local level nature of the plan and the pressures and interrelationships between environmental topics.

The environmental baseline provides an overview of the existing conditions in the Naas area relevant to the Draft LAP and covers the following environmental topics:

- Biodiversity;
- Population and Human Health;
- Land and Soils;
- Water;
- Air, Noise and Climate;
- Archaeological, Architectural and Cultural Heritage;
- Landscape and Visual; and
- Material Assets.

In accordance with the SEA Directive, the inter-relationship between the SEA environmental topics must be taken into account. Of particular note is the interrelationships between water (quality and quantity) and biodiversity, flora and fauna, soils, human health and population. Flora and Fauna is dependent on the hydrological environment (surface water and groundwater) as a habitat. Water quality is also of particular importance with regard to human health as it provides a source of drinking water and it influences agriculture and mariculture. Water is also used for leisure and recreational purposes, providing a material asset both for local populations and as an integral component for the tourism economy.

4.3 Biodiversity including Flora and Fauna

4.3.1 Introduction

The Convention on Biological Diversity defines biodiversity as "*the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part."* This includes sites, habitats, species and networks of importance at the international, national or local level, and which may occur within or outside the Plan area.

The term biodiversity refers to more than individual species. It includes the genes they contain, the habitats and ecosystems of which they form part, and also highlights the interdependence and interconnectedness of all living things.

The main elements of biodiversity are:

- European (Natura 2000) sites (SACs and SPAs, and candidate SACs and SPAs);
- NHAs, National Parks, Nature Reserves, Wildfowl Sanctuaries, Refuges for Fauna or Flora or sites proposed for designation;
- Undesignated sites such as proposed NHAs (pNHAs), local biodiversity areas;
- Sites and habitats that can be considered to be corridors or stepping stones for the purpose of Article 10 of the Habitats Directive;
- 'Natural habitats and protected species for the purposes of the Environmental Liability Directive, including habitats and species listed under the Habitats Directive (Annex I habitats, Annex II and Annex IV species and their habitats) and Birds Directives (Annex I species and their habitats, and regularly occurring migratory birds) wherever they occur;
- Legally protected species including protected flora under the European Communities (Birds and Natural Habitats) Regulations 2011 and Wildlife Acts 1976-2000;
- Sites identified under the Bern, Ramsar and Bonn Conventions; and
- Biodiversity in general including habitats important for birds, red listed and BoCCI listed species, natural and semi-natural habitat areas including wetlands, woodlands, waterbodies, etc.

4.3.2 Baseline

Lying between the east coast and Ireland's central plain with the mountains to the south, Kildare has a wealth of natural habitats which support a wide variety of wildlife, mostly distributed throughout the countryside.

Kildare is an inland county. It consists of a low-lying, fertile plain, broken only in a few places by small hills such as the Hill of Allen and Dunmurry Hill, with upland areas mainly on the eastern county boundary. Good agricultural land covers much of county, interrupted in places by expanses of bog and fen, river and canal networks.

Kildare's wide variety of wildlife habitats including peatlands, grassland, woodland, hedgerows, rivers and canals. Even urban areas support wildlife habitats in parks and green spaces, stone walls and bridges, gardens and hedgerows, and along waterways.

The biodiversity of County Kildare is protected by National and EU legislation (The Wildlife Act (1976 & 2000) and the EU Habitats and Birds Directives) and is also protected by Kildare County Council through policies in the Kildare County Development Plan.

A Biodiversity Action Plan was adopted by Kildare County Council for the 2005-2011 period. The purpose of this document was to provide a framework for the conservation of biodiversity and natural heritage at a local level by translating policies (national and international) and legislation into practical action which serve to raise awareness of and enhance the protection, conservation and management of County Kildare's natural heritage.

4.3.2.1 Habitats

The report Habitat Survey and Mapping of Naas, Co. Kildare (Atkins, 2018) provides an overview of the habitats of the Draft LAP area.

According to the survey results, there are few semi-natural habitats within the urban area, while most of the agricultural land comprises improved agricultural grassland (GA1) or arable crops (BC3). The agricultural land includes some areas of wet grassland (GS4) but, where these could be examined, were not noted to be of high ecological quality.

The LAP area has a number of abandoned, or undeveloped industrial sites where dry meadows and grassy verges (GS2) habitat has developed.

A notable lack of well-developed woodland habitat, both within the study area and in the surrounding area was recorded.

Four important areas of wildlife habitat were identified in the survey: the grounds of the Oldtown Demesne, the Grand Canal corridor, an undeveloped industrial site adjacent to the M7 at Osberstown and the Fairgreen lakelands. In addition, an area along the old railway line at Broadfield was noted to be of potential importance (Tullow Branch).

Table 4.1 outlines the total area and percentage cover of the different habitat types recorded within the Naas study area.

Table 4.1: Relative abundance of polygonal habitats recorded within the Naas study area

Fossitt 1	Fossitt 2	Fossitt 3	Habitat code	Total area (ha)	Percentage
Grassland	Improved Grassland	Improved agricultural grassland	GA1	797.34	38.76
		Amenity grassland	GA2	121.76	5.92
	Semi-natural grassland	Dry calcareous & neutral grassland (incl. mosaics)	GSI	7.51	0.37
		Dry meadows & grassy verges	GS2	71.72	3.49
		Wet grassland	GS4	28.34	1.38
		Marsh	GM1	0.39	0.02
Woodland and scrub	Highly modified / non-native woodland	Mixed) broadleaved woodland	WD1	35.4	1.72
		Mixed broadleaved/conifer woodland	WD2	4.66	0.23
		(Mixed) conifer woodland	WD3	1.16	0.06
		Scattered trees and parkland	WD5	48.37	2.35
	Scrub/ transitional woodland	Scrub (incl. mosaics)	WS1	4.52	0.22
		Immature woodland	WS2	0.33	0.02
	Semi-natural woodland	Oak-ash-hazel woodland (incl. mosaics)	WN1	1.49	0.07
		Wet willow-alder-ash woodland	WN6	0.54	0.03
Freshwater	Watercourses	Eroding rivers	FW1	6.13	0.3
		Canals	FW3	5.28	0.26
		Drainage ditches	FW4	1.74	0.08
	Swamps	Reed and large sedge swamps (incl. mosaics)	FS1	6.9	0.34
	Lakes and ponds	Lakes (undefined)	FL	0.35	0.02
		Artificial lakes and ponds	FL8	7. 88	0.38

Exposed rock and disturbed ground	Disturbed ground	Exposed sand, gravel or till	ED1	0.23	0.01
		Spoil and bare ground	ED2	2.23	0.11
		Recolonising bare ground	ED3	16.27	0.79
Cultivated and built lands	Cultivated lands		BC	107.27	5.22
Built lands including development sites, ornamental gardens and flower beds				770.57	37.46

Table 4.2 shows the total length of the linear habitats recorded within the Naas study areas.

Table 4.2: Linear Habitats recorded within the Naas study area

Fossitt 1	Fossitt 2	Fossitt 3	Habitat code	Total Length (km)
Woodland and scrub	Linear woodland / scrub	Hedgerows	WL1	55.55
		Treelines	WL2	18.80

4.3.2.2 Species

Kildare is home to several rare, protected and/or threatened plants and animals. Protected plants are those that are legally protected under the Flora Protection Order within the Wildlife (Amendment) Act 2000 (e.g., Opposite leaved Pondweed, Basil Thyme or Hairy St. John's-wort). Various animals are also afforded protection within the Wildlife Acts (e.g., all native mammals). Species listed on Annex II of the European Union Habitats Directive (e.g., Otters, White-clawed Crayfish, Marsh Fritillary Butterfly) or Annex I of the EU Birds Directive (e.g., Golden Plover, Kingfisher) are also protected. More information on national and European Union wildlife legislation is provided in the section below titled 'Policies and legislation'.

Otter

Otters have strong populations in Kildare, particularly along the Barrow and the Liffey. Otters are a protected species under European Union legislation mainly because numbers have declined sharply in other parts of Europe. The Irish population is therefore particularly important. Otters depend on healthy fish populations and the presence of suitable vegetation cover along the riverbank in which they make their burrows or 'holts'. Recording and studying the distribution and abundance of rare plants and animals is very important for monitoring the state of the environment and the impact, if any, of climate change.

Marsh Fritillary Butterfly

This beautiful butterfly is one of the most endangered species in Europe. It has been recorded at a number of sites in Kildare, mainly in areas of natural grassland that have been established on cutover peatlands.

Devil's-bit Scabious is the main food plant for the larval stage of the Marsh Fritillary. Efforts are being made by the Irish Peatland Conservation Council, the National Parks and Wildlife Service and Butterfly Conservation Ireland to study the Marsh Fritillary in Kildare in order to conserve this species for future generations.

White-clawed Crayfish

The White-clawed Crayfish is regarded as a keystone species. In Ireland, it is found in large rivers (such as the River Barrow), small headwater tributaries and in lakes. A variety of aquatic habitats are important for crayfish. Juvenile crayfish live among submerged tree roots, gravel or macrophytes, while larger crayfish must have stones to hide under, or an earthen bank in which to burrow. White-clawed Crayfish are widespread across much of Ireland and populations have not declined to the extent that they have in other parts of Europe.

4.3.2.3 Trees

Tree Preservation Orders (TPOs) may be made under Section 45 of the Local Government (Planning & Development) Act 1963 and subsequent acts. Part Xlll of the Planning and Development Act 2000 sets out the provisions for TPOs. A TPO can be made if it appears to the planning authority to be desirable and appropriate in the interest of amenity or the environment. A TPO can apply to a tree, trees, group of trees or woodland. The principle effect of a TPO is to prohibit the cutting down, topping, lopping or wilful destruction of trees without the planning authority's consent. The order can also require the owner and occupier of the land subject to the order to enter into an agreement with the planning authority to ensure the proper management of the tree, trees or woodland.

No tree preservation orders have been identified in the plan area.

4.3.2.4 Designated Sites

There are a range of statutory provisions in force in Ireland to protect, conserve and manage our natural heritage, and to control and regulate human activities that may impact upon it negatively. The Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs is responsible, through the National Parks and Wildlife Service, for the designation of conservation sites in Ireland. Currently there are three main types of designation of protected areas- Special Areas of Conservation, Special Protection Areas and National Heritage Areas.

Designated conservation sites in the vicinity of Naas are highlighted on **Figure 4.1, Appendix A1.**

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) by the DAHG due to their conservation value for habitats and species of importance in the European Union.

Special Protection Areas (SPAs) have been selected for protection under the 1979 European Council Directive on the Conservation of Wild Birds (79/409/EEC) by the DEHLG due to their conservation value for birds of importance in the European Union.

There are no Special Areas of Conservation (SACs) or Special Protection Areas (SPAs) within the Plan boundary. However, there are 6 SACs and 2 SPA's within 15km of the Plan area which are of relevance to the preparation of the draft Plan. These include:

Table 4.3: SACs and SPAs within the Naas Plan boundary

Site Name	Site Code
Ballynafagh Lake SAC	001387
Ballynafagh Bog SAC	000391
Mouds Bog SAC	002331
Red Bog, Kildare SAC	000397
Wicklow Mountains SAC	002122
Pollardstown Fen SAC	000396
Poulaphouca Reservoir SPA	004063
Wicklow Mountains SPA	004040

Natural Heritage Areas (NHAs) are designated due to their national conservation value for ecological and/or geological/geomorphological heritage. They cover nationally important semi-natural and natural habitats, landforms or geomorphological features, wildlife plant and animal species or a diversity of these natural attributes. NHAs are designated under the Wildlife (Amendment) Act 2000. Proposed NHAs were published on a non-statutory basis in 1995 but have not since been statutorily proposed or designated. There is one Natural Heritage Areas (NHAs) within 15km of the study area. Hodgestown Bog NHA (Site Code 001393) is located to the north west of the Naas LAP boundary and shown on Figure 4.1 in Appendix A1. In addition, there are 17 proposed Natural Heritage Area's (pNHAs) within 15km of the Plan boundary, as outlined in **Table 4.4** and illustrated on **Figure 4.1 in Appendix A1**.

Table 4.4: NHA's and pNHA's within the Naas Local Area Plan Boundary

Site Name	Site Code
Slade Of Saggart And Crooksling Glen pNHA	000211
Ballynafagh Bog pNHA	000391
Curragh (Kildare) pNHA	000392
Liffey Valley Meander Belt pNHA	000393
Mouds Bog pNHA	000395
Pollardstown Fen pNHA	000396
Red Bog, Kildare pNHA	000397
Poulaphouca Reservoir pNHA	000731
Ballynafagh Lake pNHA	001387

Donadea Wood pNHA	001391
Kilteel Wood pNHA	001394
Liffey At Osberstown pNHA	001395
Liffey Bank Above Athgarvan pNHA	001396
Newtown Marshes pNHA	001759
Dunlavin Marshes pNHA	001772
Hollywood Glen pNHA	002053
Grand Canal pNHA	002104

All designated sites within 15km of the plan area will be assessed in detail in the SEA and AA process.

A brief summary of each of the above designated sites is provided in **Table 4.5** below. This text is taken from the National Parks and Wildlife Service's Site Synopses.

Table 4.5: Summary of Designated Sites

Ballynafagh Lake SAC (001387)
Ballynafagh Lake is located about 2 km north-west of Prosperous in Co. Kildare. It is a shallow alkaline lake with some emergent vegetation. The Blackwood Feeder, which connects Ballynafagh Lake to the Grand Canal, is also included in the site. The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes): [7230] Alkaline Fens [1016] Desmoulin's Whorl Snail (Vertigo moulinsiana) [1065] Marsh Fritillary (Euphydryas aurinia)
Ballynafagh Bog SAC (000391)
This site is a raised bog situated about 1 km west of Prosperous in Co. Kildare. The area is directly underlain by muddy, fossiliferous limestones, interbedded with calcareous shales. The subsoils are predominantly clay-rich tills. All are of low permeability. The site comprises a relatively small core of uncut high bog (approx. 70 ha), which is surrounded by a more extensive area of cutover bog (approx. 90 ha). The high bog area can be divided into a wet core of active bog which covers an area of 23 ha, surrounded by approximately 44 ha of degraded raised bog which is experiencing drying-out at present. The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes): [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation
Mouds Bog SAC (002331)
Mouds Bog is located about 3 km north-west of Newbridge in Co. Kildare, close to the Hill of Allen, and includes amongst others, the townlands of Grangehiggin, Barretstown and Hawkfield. The site comprises a raised bog that includes both areas of high bog and cutover bog. Much of the margins of the site are bounded by trackways. The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes): [7110] Raised Bog (Active)* [7120] Degraded Raised Bog

[7150] Rhynchosporion Vegetation

Red Bog, Kildare SAC (000397)

Red Bog, Kildare is located 3 km north of the village of Blessington in east Co. Kildare, close to the boundary with Co. Wicklow. It comprises a wetland complex of lake, fen and bog situated in a hollow between ridges of glacially-deposited material and underlain by rocks of Ordovician age. The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

[7140] Transition Mires

Wicklow Mountains SAC (002122)

Mouds Bog is located about 3 km north-west of Newbridge in Co. Kildare, close to the Hill of Allen, and includes amongst others, the townlands of Grangehiggin, Barretstown and Hawkfield. The site comprises a raised bog that includes both areas of high bog and cutover bog. Much of the margins of the site are bounded by trackways. The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

[7110] Raised Bog (Active)*

[7120] Degraded Raised Bog

[7150] Rhynchosporion Vegetation

Pollardstown Fen SAC (000396)

Pollardstown Fen is situated on the northern margin of the Curragh of Kildare, approximately 3 km north-west of Newbridge. It lies in a shallow depression, running in a north-west/south-east direction. About 40 springs provide a continuous supply of water to the fen. These rise chiefly at its margins, along distinct seepage areas of mineral ground above the fen level. The continual inflow of calcium-rich water from the Curragh, and from the limestone ground to the north, creates waterlogged conditions which lead to peat formation. There are layers of calcareous marl in this peat, reflecting inundation by calcium-rich water. This peat-marl deposit reaches some 6 m at its deepest point and is underlain by clay.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

[7210] Cladium Fens*

[7220] Petrifying Springs* [7230] Alkaline Fens

[1013] Geyer's Whorl Snail (Vertigo geyeri) [1014] Narrow-mouthed Whorl Snail (Vertigo angustior)

[1016] Desmoulin's Whorl Snail (Vertigo moulinsiana)

Poulaphouca Reservoir SPA (004063)

Poulaphouca Reservoir SPA, located in the western foothills of the Wicklow Mountains, was created in 1944 by damming of the River Liffey for the purpose of generating electricity from hydropower. The reservoir covers an area of approximately 20 square kilometres and is the largest inland water body in the mideast and south-east regions. The reservoir receives water from two main sources, the River Liffey at the northern end, and the Kings River at the southern end. The exit is into the River Liffey gorge at the western end. Underlying the reservoir are sands and gravels deposited during the last glaciation. The shores of the lake are mostly sandy. When water levels are low the exposed lake muds are colonised by an ephemeral flora of annual plant species. Wet grassland areas occur in sheltered bays around the lake but especially in the northern part. Reed Canary-grass (Phalaris arundinacea) is the main grass species present, but other plant species characteristic of wet grasslands occur, including Creeping Bent (Agrostis stolonifera), Meadowsweet (Filipendula ulmaria), Yellow Iris (Iris pseudacorus) and Water Mint (Mentha aquatica). Sedges (Carex spp.) are locally common, while Rusty Willow (Salix cinerea subsp. oleifolia) scrub is often found associated with the wet grassland.

In some places the water washes against grassy banks which are generally less than a metre high, and in a few places, there are steep sand and clay cliffs, up to 15 m high - these are remnants of the old River Liffey channel. In many places the banks are actively eroding, and a strip of conifers has been planted around much of the perimeter of the reservoir in an attempt to stabilize the banks. The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Greylag Goose and Lesser Blackbacked Gull.
Wicklow Mountains SPA (004040)
This is an extensive upland site, comprising a substantial part of the Wicklow Mountains. Most of the site is in Co. Wicklow, but a small area lies in Co. Dublin. The underlying geology of the site is mainly of Leinster granites, flanked by Ordovician schists, mudstones and volcanics. The area was subject to glaciation and features fine examples of glacial lakes, deep valleys and moraines. Most of site is over 300 m, with much ground being over 600 m; the highest peak is Lugnaquillia (925 m). The substrate over much of site is peat, with poor mineral soil occurring on the slopes and lower ground. Exposed rock and scree are features of the site. The predominant habitats present are blanket bog, heaths and upland grassland. The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Merlin and Peregrine.
Hodgestown Bog NHA (001393)
Hodgestown Bog NHA is located 4 km north-west of Prosperous, mostly in the townlands of Hodgestown, Coolearagh East and Garvoge in Co. Kildare. The site comprises a raised bog that includes both areas of high bog and cutover bog. This raised bog was originally part of a much larger area of bog that has now been cutover and reclaimed for forestry and agriculture. Hodgestown Bog is separated by a mineral ridge from Ballynafagh SAC (391) and together these are two of the bogs at the eastern extreme of the range of raised bogs in Ireland. Although Hodgestown bog has no pools there are hummocks throughout the high bog and there is also a small hummock/hollow complex. Cutover is found all around the high bog. Much of the high bog has vegetation typical of a Midland Raised Bog, consisting of Ling Heather (Calluna vulgaris), White Beak-sedge (Rhynchospora alba), Cranberry (Vaccinium oxycoccos) and Bog-rosemary (Andromeda polifolia). The bog moss Sphagnum tenellum is common on the bog as is White Beak-sedge. Hummocks of the bog moss Sphagnum capillifolium are also common but only one hummock of S. imbricatum was recorded. The bog moss S. magellanicum is also frequently seen on the bog, in hollows with S. tenellum or with S. cuspidatum in in-filling old drains. In areas of the bog where there are signs of disturbance and bare peat patches are found the moss Campylopus introflexus, Deergrass (Scirpus cespitosus), Bog Asphodel (Narthecium ossifragum), Ling Heather and Cross-leaved Heath (Erica tetralix) tend to dominate. Much of the site was burnt in the 1970s but a subsequent survey reported that the bog was recovering well with active Sphagnum regeneration. There was a swallow hole in the east of the bog, with an associated soak area where the bog mosses S. palustre and S. recurvum were recorded, but this area has now been cutover. The high bog is surrounded by cutover much of which has been planted with coniferous forestry, especially in the south and east of the site.

4.3.3 Relevant Environmental Issues

The following issues/potential impacts will require detailed consideration during the plan preparation:

- Impacts on protected/designated sites;
- Impacts on protected species;
- Consideration of protecting proposed NHAs in a similar way to fully designated NHAs;
- Impacts on sensitive habitats outside of protected areas;

- Consideration of maintenance or enhancement of biodiversity richness by protecting rivers, stream corridors and valleys by reserving riparian zones/ecological corridors, maintaining them free from inappropriate development, discouraging culverting or realignment, and promoting natural flood functions;
- Consideration of buffer zones between biodiversity features and areas zoned for development; and
- Potential for habitat loss and fragmentation.

An Appropriate Assessment (AA) Screening (Stage 1) was carried out to examine potential impacts of the Draft LAP on these Natura 2000 sites. The AA Screening has informed the SEA process. It was confirmed by the screening that no AA of the plan must be undertaken (Stage 2).

4.3.3.1 Urban Expansion

Urban expansion has been accelerating over recent years as increased development expands into the countryside. The constant encroachment of the built environment on natural habitats will undoubtedly have an impact on natural flora, fauna and biodiversity.

4.3.3.2 Water Dependant Habitats

In general, water treatment and wastewater discharges, agricultural runoff, leachate from contaminated sites, urban runoff and unlicensed industrial discharges all have significant negative impacts on water quality which results in subsequent impacts to biodiversity to both aquatic ecosystems as well as neighbouring terrestrial ecosystems.

In the vicinity of Naas, the water dependant ecosystems of the River Liffey as well as a few minor tributaries rely on good water quality. The water quality of the River Liffey as it flows through Naas is generally good, according to the EPA.

Any impacts to these surface waters could lead to a deterioration of water quality and a consequent impact to their ecosystems. Unrestrained development can have a direct impact on water dependent and rare habitats.

Abstractions for potable water can result in a direct impact on rivers and lakes and their associated flora and fauna and on groundwater dependent habitats.

4.3.3.3 Invasive Species

Invasive non-native plant and animal species are one of the greatest threats to biodiversity. Invasive alien species negatively impact biodiversity through competition, herbivory, predation, habitat alteration and introduction of parasites or pathogens and poses a risk to the genetic integrity of our native species.

Terrestrial and aquatic habitats can be significantly negatively impacted, resulting in severe damage to conservation and economic interests, such as agriculture, fisheries, forestry and various recreational activities.

The Habitat Survey and Mapping of Naas 2018 (Atkins, 2018) has been reviewed in the preparation of this SEA Environmental Report. According to the report, examples of invasive species of surveyed or recorded within Naas LAP boundary include: -

Cherry Laurel is a commonly used as ornamental shrubbery and has escaped from cultivation and spread widely (Reynolds, 2002). This species can outcompete native species andsuppress regeneration by forming thick stands. Cyanide present in the plant prevents predation by herbivores further increasing its competition with native non-toxic species (Maguire *et al*., 2008). This species grows in association with another invasive shrub species; *Rhododendron ponticum*.

American mink is an established invasive mammal species in Ireland which was introduced to the wild primarily through escapes from commercial fur farms (Roy *et al.* 2009). This species can achieve high population densities and has major impacts on native fauna, such as ground nesting birds. In continental Europe, the species has negative impacts on the indigenous European mink through direct interspecific competition including direct aggression (Sidorovich *et al*., 1999). In Ireland, otter is the native species which is most directly in competition with the American Mink, directly competing for both for prey items and habitat preference. Their effects on the Irish otter are not yet fully known.

Grey squirrel was originally introduced to Castleforbes, Co. Longford from where it has expanded and eliminated the native Irish red squirrel from most of eastern Ireland by direct competition for food and by spreading a virus lethal to red squirrels. It damages young trees by stripping bark, often girdling and killing them.

Brown Rat is known to restrict the regeneration of many plant species by eating seeds and seedlings. They prey upon most animal species smaller than themselves and have been recorded as having a particular impact on nesting birds. Brown rats eat food crops and spoil human food stores by urinating and defecating in them. Additional economic damage is caused by rats chewing through power cables etc. and spreading diseases.

Canadian waterweed is a submerged aquatic plant species which was first introduced as an ornamental aquarium species. Once established this species can form dense monospecific stands which can outcompete native plants for both space and nutrients resulting in a decrease in biodiversity and potentially local extinctions. Changes to invertebrate communities have also been reported (RAFTS, 2009). Species of Elodea are also known to accumulate metals from the sediment and release them into the waterbody.

4.4 Population and Human Health

4.4.1 Baseline

4.4.1.1 Population

According to Census 2016 data, the population of Naas in 2016 was 21,597. This represents a population increase of 5%, or 1,163 or since the 2011.

4.4.1.2 Human Health

The concept of health has been defined by the World Health Organisation as "*... a state of complete physical, psychological and social well-being, and not simply the absence of disease or infirmity*." Health is influenced by many factors in the social and built environment including housing, employment status, education, transport and access to fresh food and resources, as well as the impacts of air quality, water quality, flooding and access to green space.

Good planning can play an important role in reducing health inequalities. The World Health Organisation's Commission on the Social Determinants of Health (CSDH) states governments should 'Ensure urban planning promotes healthy and safe behaviours equitably, through investment in active transport, retail planning to manage access to unhealthy foods, and through good environmental design and regulatory controls, including control of the number of alcohol outlets'.

Given the strong links between income and health, it is recognised that the sustainability of current and future economic activity is an important element in protecting and promoting population health. However, emphasising economic growth without due regard for social and environmental consequences of such growth can have negative impacts on health both for the population as a whole and for groups within the population.

Even within areas of economic development, job creation does not necessarily 'trickle down' to job opportunities for the long-term unemployed, and is neither a sufficient, nor necessary, condition for reducing long-term unemployment. Thus, economic development needs to be targeted, geographically and within population groups to ensure that it reduces and does not exacerbate social inequalities.

Cognisance must also be paid to environmental issues and sustainability endeavours to protect human health as the local economy develops. While employment is generally good for health, there can be negative impacts, usually related to the quality of the working environment and type of work undertaken. The groups which face the highest risk of experiencing the adverse effects of unemployment appear to be middle-aged men, youths who have recently left school, the economically marginal such as women attempting re-entry to the labour force and children in families in which the primary earner is unemployed.

The level of green space and access to the natural environment is extremely important for the populace health.

The health and wellbeing of individuals is greatly affected by the communities in which they live and the nature of their physical environment. A key element of sustainable communities is access to space as environments which lack public gathering places can encourage sedentary living habits. Open space provision can improve levels of exercise in a community which can impact on health and can improve social interaction and community activities which can contribute to reducing stress-related problems.

Availability of spatial data on human health is limited. A key area for consideration of human health will be the interaction between environmental aspects such as water, landscape, biodiversity, air, and energy and human beings.

The assessment of impacts on human health will reference other sections of the SEA as relevant along with considering aspects such as the Industrial Emissions Directive, the Control of Major-Accident Hazards Involving Dangerous Substance ("SEVESO") Directive and Flood Risk Assessments. This will ensure that all relevant vectors through which human health impacts could be caused as a result of the Plan are assessed.

The Seveso III Directive: 2012/18/EU came into effect in Ireland on 1st June 2015, replacing the Seveso II Directive 96/82/EC. Article 13 of the new Directive requires member states to ensure that the objectives of preventing major accidents and limiting the consequences of such accidents are taken into account in land use policies and/or other relevant policies. These objectives must be pursued through controls on the following:

- The siting of new establishments; and
- Modifications to existing establishments.

New developments including transport routes, locations of public use and residential areas in the vicinity of establishments, where the siting or developments may be the source of or increase the risk or consequences of a major accident.

There is no designated Seveso site located within the Plan area.

4.4.2 Relevant Environmental Issues

The following issues were considered during the plan preparation:

Population and Human Health

Population change is a complex topic. High growth has occurred in some areas of the Greater Dublin Area (GDA) while falling occupancy rates has occurred elsewhere. Major changes have taken place to the housing market given our economic circumstances and trends such as a reduction in housing completions and rising vacancy rates are evident. Predicting accurate population forecasts impacts on future housing demand and issues such as age profiles, excess in housing stock and occupancy rates and migration must all be taken into account.

Future housing demand and all of the services required to sustainably meet demand (e.g. health and sanitation services including waste collection, wastewater treatment and potable water supply, electricity, gas, telecommunications, transportation, education and amenity access) needs to be addressed in a planned manner.

Human Health

There are a number of interlinking areas which are relevant to the Draft LAP, for example, the development of sustainable transport and sustainable communities. Policies relating to these areas will impact on human health and quality of life.

The following issues are relevant to the plan:

- Increase in demand for water supply, waste water treatment and other infrastructural and community services due to economic growth;
- Impact of population growth on sensitive habitats and landscape in terms of development and recreational pressures;
- Impacts from noise and air pollution as a result of development and transport;
- Effects on water quality due to new emissions;
- Promotion of walking and cycling via integrated land use and transport policy;
- Consideration of future Seveso sites;
- Housing needs for all sectors of the community;
- Community infrastructure needs including community facilities;
- Educational needs for both primary and secondary level education;
- Provision of open spaces within residential areas and areas throughout the town;
- Health/medical facility requirements for the town for the future;
- Preservation of public rights of way to allow public access to amenity;
- Adequacy of public/civil space areas;
- Provision for retail and commercial services;
- Vitality and viability of the town centre; and
- Ease of access to the town centre.

4.5 Soils and Geology

4.5.1 Baseline

According to the report ‘The Geological Heritage of Kildare’ (Geological Survey of Ireland (GSI), 2005), the predominant rock type in the Naas area is sedimentary rock, limestone of Carboniferous age in particular.

The soils underlying the study area are identified by the Geological Survey of Ireland as being predominantly Made Ground in the urban centre. Made Ground consists of materials modified by people, including those associated with mineral exploitation and waste disposal. They include materials deposited as a result of human activities or geological material modified artificially so that their physical properties (structure, cohesion and compaction) have been drastically altered.

Other soils identified in the plan area include fine loamy drift with limestones such as Elton Straffan and Faoldroim.

Refer to **Figures 4.2** and **4.3 in Appendix A1** for details of the soils and bedrock geology in the vicinity of the study area.

County Kildare is positioned at the forefront of geological heritage within Ireland. There are no sites of Geological Heritage located within the plan area, however a number of sites can be found within 15km of the plan boundary. One of these sites of Geological Heritage, Rathcore Spring is of particular importance to the plan area.

According to the GSI, Rathcore Spring is a spring that feeds the part of the Grand Canal known as the Naas and Corbally Branch. The source of the spring cannot be seen due to high levels of vegetation but the constant flow of water from this spring can be heard from the banks of the canal.

Refer to **Figure 4.4 in Appendix A1** for Geological Heritage in the vicinity of Naas.

4.5.2 Relevant Environmental Issues

4.5.2.1 Urbanisation

The degradation of soil fertility and threats to conservation of high-quality soils through the loss of tree/vegetation cover and through urbanisation has consequences for the sustainable development of rural activities as well as the sequestration of carbon.

The following issues were considered during the plan preparation:

- Impacts of pollution from construction work or from the operation of new developments.
- Extent of existing contaminated land.
- Disturbance to soils and geology during new development.
- Pressures on good quality agricultural land due to development.

4.5.2.2 Climate Change

Climate change modelling for Ireland predicts a change to wetter winters and drier summers with a likely increase in the frequency of high intensity rainfall events. These rainfall events can have detrimental effects for slope stability and landslides and their resultant impacts on water management activities.

Eroded soil washed into rivers has the potential to increase nutrient content leading to alteration of surface water nutrient balances which can further lead to the eutrophication of rivers and lakes. If contaminated soils are eroded and transported to watercourses, aquatic plants and animals can be severely damaged.

Geotechnical extraction activities, when not managed in an environmentally sustainable fashion results in further pressure on the hydrological environment.

4.6 Water Resources

4.6.1 Baseline

4.6.1.1 Hydrology

The Plan area is located in the Liffey and Dublin Bay Catchment, in Hydrometric Area 09. The Morell River, a tributary of the River Liffey flows through the east of Naas in the 'Liffey_SC_060' Sub catchment. The River Liffey rises in the Wicklow Mountains, about 32km southwest of Dublin, and flows in a generally northwesterly direction from its source to the Lackan Reservoir. The river then runs westward in the Kildare lowland and gradually turns northwestward to Newbridge and northeast to Celbridge and Leixlip. It then flows eastward through the city of Dublin, in which it is extensively canalized and bordered with quays. It empties into Dublin Bay, an arm of the Irish Sea, after a course of 50 miles (80 km).

Since 2000, Water Management in the EU has been directed by the Water Framework Directive 2000/60/EC (WFD).

The WFD has been transposed into Irish legislation by the European Communities (Water Policy) Regulations 2003 (SI No. 722 of 2003) and 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 good status by 2015.

For the purpose 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. Naas falls within the Eastern River Basin District (ERBD).

As part of the implementation of the EU Water Framework Directive 2000/60/EC (WFD) a baseline risk assessment was completed of the water bodies within each River Basin District. These assessments were made using water pollution indicators, point and diffuse pollution sources, water abstractions and detail on commercial activities. The risk assessment assigned a water quality status to each waterbody and indicated a risk status namely, whether the water body would meet the criteria for "good status" or would be considered "at risk" of not meeting the standards by 2015.

Based on water quality, ecology and morphology the Environmental Protection Agency (EPA) has determined that the River Morell (a tributary of the River Liffey) which flows through Naas is of 'poor' status and other tributaries of the Liffey which flow through the town are of moderate status (2010 - 2015 River Quality Status). The WFD Risk Assessments indicate that the River Morell is at risk. Many of the River Liffey tributaries in Naas are under review Source: (www.catchments.ie/maps/). There are no 'Nutrient Sensitive' rivers identified in the plan area. Nutrient Sensitive Waters comprise nitrate vulnerable zones designated under the Nitrates Directive (91/676/EEC) and areas designated as sensitive under the Urban Waste Water Treatment Directive (91/271/EEC).

Surface water features in the vicinity of Naas are shown on **Figure 4.5, Appendix A1**. The Water Framework Directive Risk Status for waterbodies within the plan area is shown on **Figure 4.6, Appendix A1**. The Water Framework Directive Status for Lakes and Rivers within the plan area are shown in **Figure 4.7, Appendix A1,** for 2010-2012. Groundwater for drinking water in the region is shown in **Figure 4.8, Appendix A1.**

4.6.1.2 Hydrogeology

The majority of the plan area is underlain by a bedrock aquifer which is classified by the GSI as a 'Locally Important Aquifer.' This represents bedrock which is 'Moderately Productive only in Local Zones' However, the north-west of the plan area is underlain by a bedrock aquifer which is classified by the GSI as a 'Regionally Important Aquifer - Karstified (diffuse),' In addition, the south of the plan area is underlain by a Gravel Aquifer: Curragh Gravels which is classified by the GSI as being a 'Locally Important Aquifer' - bedrock which is 'Moderately Productive only in Local Zones.' The remainder of the plan area is underlain by a bedrock aquifer which is classified as a 'Poor Aquifer'- 'Bedrock which is Generally Unproductive.'

Groundwater quality in the plan area is of 'good status' and groundwater vulnerability is generally classed as being of 'moderate' or 'high' vulnerability.

Groundwater features and source protection zones in the vicinity of the plan area are shown in **Figure 4.9, Appendix A1.**

Groundwater vulnerability in the vicinity of the plan area is shown in **Figure 4.10, Appendix A1.** WFD Groundwater risk and status in the vicinity of the plan area is shown in **Figure 4.11** and **Figure 4.12, Appendix A1**.

4.6.1.3 Flooding

Kildare County Council is part of the Eastern Catchment Flood Risk Assessment and Management (CFRAM) Study.

According to the 'Naas Town Development Plan 2011-2017 Two Year Progress Report' (Kildare County Council, 2013), Kildare County Council has carried out works in a number of locations in Naas that were prone to flooding during the lifetime of the Town Development Plan.

General flood alleviation works have been carried out along the Morell River, Annagal and Hartwell rivers which are substantially complete. Work on the bridge at the Morell River on Fishery Lane has also been undertaken. Further flood alleviation works are also proposed for the Morrell Stream close to the N7. In 2011 the Town Council undertook dredging at the man-made lakes on the Ballymore Eustace Road.

The lakes perform an important attenuation function for the town's drainage system and the works comprised of the removal and disposal of the deposits within the upper lake and the construction of a silt trap to the inlet. The Council constructed an island within the lake to provide a safe haven for local wildlife. €150,000 was set aside to carry out additional sediment removal works on the middle and lower lakes in 2012. This work has been completed and the lakes have been restored to their former state in terms of capacity, attenuation, wildlife and as an amenity area.

A Strategic Flood Risk Assessment (SFRA) is being carried out for the Draft LAP and will inform the SEA process.

The Naas Local Area Plan will take into consideration the results of the SFRA during the lifetime of the plan.

4.6.2 Relevant Environmental Issues

There are a range of existing pressures on the water resources of the region. Many of these pressures apply to biodiversity, flora and fauna, soils and geology, land use and landscape as well as water. In general, these pressures apply directly to quality, quantity and supply and demand of water resources with indirect pressure on the other environmental features.

The following issues were considered during the plan preparation:

- Impacts on surface water and groundwater quality due to development;
- Impacts to designated SACs and SPAs within 15km of the plan area as a result of surface water pollution;
- Compliance with the WFD and achieving the River Basin Management Objectives;
- Compliance with the requirements of the Planning System and Flood Risk Management Guidelines for Planning Authorities (OPW/DEHLG, 2009).
- Ensuring drinking water capacity for future predicted increases in population and economic growth;
- Maintenance of water services infrastructure;
- Provision of wastewater treatment infrastructure;
- Effects of flooding due to development;
- Effects of developments within floodplains;
- Climate change impacts on flood levels; and

- Adhering to EPA wastewater licence discharge limits.

4.6.2.1 Modification

Physical modifications have a direct impact on surface water systems through the alteration of habitats, and by indirectly affecting natural processes through the alteration of ecosystems, by reducing their diversity, distribution and population.

Land use practices such as agriculture, forestry and urban expansion can have an indirect effect, manipulating the extent of water draining from the land, which can lead to an increased flood risk to properties and development.

4.6.2.2 Discharges

Inadequately treated effluents and spills or leakage from foul water sewer systems networks can lead to the pollution of the receiving waters. These pollutants can lead to a deterioration in water quality with subsequent downstream uses being impacted negatively e.g. water dependant ecosystems, potable water supplies, industrial or agricultural abstraction, fishing etc. Current estimates for the GDA indicate that the nutrient input into surface waters from direct industrial discharges produce approximately 60% of the yearly phosphorus load with the remainder arising from diffuse sources such as agriculture.

Waste disposal sites (including old or historical un-lined landfills), quarries, industrial lands etc. can produce direct discharges to both surface and groundwaters.

4.6.2.3 Extraction

The lowering of water tables through groundwater extraction whether for drinking water, industrial use or through construction practices can cause problems in the context of the hydrological regime of groundwater dependant sites.

Construction activities in particular can lead to the mobilisation of contaminants and have the potential to significantly impact groundwater and subsequently surface water quality.

4.6.2.4 Climate Change

The effect of climate change on the hydrological regime of the planet is difficult to predict, even more so for a small region; however, there is the potential for heavier and prolonged rainstorms to cause more flash flooding, which can lead to an increase in diffuse pollution loads from soil runoff and increasing demand for flood alleviation, control and relief schemes.

Conversely, summer droughts are also considered likely and recent research has indicated that the effects of climate change in Ireland will have serious consequences for water resources, resulting in a potential 40% reduction in drinking water supplies. Also, temperature fluctuations may give invasive alien water species a competitive advantage and alter aquatic ecosystems further.

4.7 Air, Noise and Climate

4.7.1 Baseline

4.7.1.1 Air Quality

The EPA measures the levels of a number of atmospheric pollutants throughout Ireland in order to measure compliance with Air Quality Standards Regulations, 2011 (S.I. No. 180 of 2011). For the purposes of monitoring in Ireland, four zones are defined in the Regulations:

- Zone A: Dublin Conurbation;
- Zone B: Cork Conurbation;
- Zone C: Other Cities and Large Towns; and
- Zone D: Rural Ireland which is the remainder of the State excluding Zones A, B and C.

Naas is located in Zone C. The Air quality in Zone C as reported in the EPA report 'Air Quality in Ireland 2016" is summarised in **Table 4.6** below.

Table 4.6: Air Quality Assessment Zone C Concentrations compared to Air Quality Standards

Parameter	Zone	Average measured concentration (µg/m^3)	Air quality standard (µg/m^3)
NO_2	Zone C	9.25	40
SO_2	Zone C	16.5	20
CO	Zone C	2	10
Ozone	Zone C	97.75	120
PM_{10}	Zone C	15	40
$PM_{2.5}$	Zone C	10	20
Benzene	Zone C	0.2	5

The Environmental Protection Agency manages the National Ambient Air Quality Network. This Network sets legislative limit and target values for protection of human health and vegetation. According to the 'Ait Quality in Ireland Report 2016' no levels above the EU limit values were recorded in Ireland in 2016.

The EPA 2016 dioxin survey shows that concentrations of dioxins and similar pollutants remain at a consistently low level in the Irish environment.

Current and future challenges to air quality in Ireland were identified as follows:

- Reduction of solid fuel use;
- Efficient traffic management and provision of choice in terms of public transport in towns; and
- Transboundary impacts of ozone, to which Ireland's air mass is subject.

4.7.1.2 Noise

The Environmental Noise Directive (END) (2002/49/EC) requires that action is taken by each member state, with a view to preventing and reducing environmental noise where necessary (particularly where exposure levels can induce harmful effects on human health) and to preserving environmental acoustic quality where it is good. The relevant local authorities have been designated by the Environmental Noise Regulations, S.I. Regulations No. 140 of 2006, as the bodies charged with development and making of 'Noise Action Plans'.

Kildare County Council prepared the second Noise Action Plan for County Kildare in 2013. This Noise Action Plan primarily considers the long term environmental noise impact from road, rail and air traffic noise sources, and sets out an approach to review noise impact levels near to the major sources assessed during the strategic noise mapping in 2012 with a view to identifying locations where noise reduction is deemed necessary in the first instance. In County Kildare there are no major agglomerations or major airports subject to noise mapping or action planning.

Strategic Noise Maps have been prepared for all roads deemed to fall within the threshold of 3 million vehicles a year. The total length of identified major roads included within the strategic noise mapping was 258 km which amounts to 10.2% of the total road network which is relatively large compared to other counties. This broke down into 157 km of motorways and national roads, 94.4 km of regional roads and 6.4 km of local road.

The Noise Action Plan addressed a number of sections of major roadway that are located either within, or immediately adjacent to Naas which qualified for noise mapping and, as such were subject to consideration for action planning. Major roads in Naas which qualified for noise mapping are detailed in **Table 4.7**.

Table 4.7: Major Roads in Naas which qualify for Noise Mapping

Road Type	Description
National Roads	M7/N7 between the boundary with South Dublin County Council at Castlewarden and the boundary with Laois County Council at Jamestown - at Kildare South the annual average daily total vehicles was estimated at 34,149 vehicles (2011);
Regional Roads	R407, R410, R445, R448
Local Roads	L2036, L2038, L2039.

The plan concludes that that there are an estimated 969 people in Kildare above the L_{den} threshold for noise from road traffic sources, and an estimated 5564 people above the L_{night} threshold – 3,674 from road traffic sources and 1,890 from rail traffic sources.

The plan notes that a programme for further assessment and the implementation of potential noise mitigation measures in areas above the threshold of assessment will be required. The general approach to be taken by Kildare County Council in managing the environmental noise in the area will involve:

- Noise reduction at source;

- Land use planning adapted to noise goals;
- Procedures to reduce noise impact; and
- Operating restrictions to reduce noise emissions.

Kildare County Council has developed a detailed Programme of Works for the duration of the Noise Action Plan (2013 to 2018) and proposed to implement the programme subject to the availability of the requisite technical staff, expertise and financial resources. A third Draft Noise Action Plan has recently been completed and is due to go to public consultation shortly.

4.7.1.3 Climate

The existing climate for Naas corresponds with the general climatic conditions for the whole country which is dominated by the Atlantic Ocean and its air and oceanic currents. Consequently, the region does not suffer from extremes of temperature. According to Met Éireann, average annual temperature is about 9°C. Mean annual wind speed varies between about 4 m/sec in the east midlands and 7 m/sec in the northwest.

Average rainfall varies between about 800 and 2,800 mm. Rainfall accumulation tends to be highest in winter and lowest in early summer.

According to the United Nations Integrated Panel on Climate Change, in line with the global picture, Ireland's average temperature has increased by about 0.7°C over the last 100 years, and the rate of increase has been higher in the last couple of decades. The increase has not been uniform over time, with a warming period from 1910 to the 1940s, followed by a cooling period up to the 1960s. The current warming period commenced around 1980.

2006 was the warmest year recorded in Ireland since the record-breaking year of 1995 at both Malin Head and Phoenix Park, which have observations dating back over 100 years, and also at Casement Aerodrome, Kilkenny and Rosslare.

2016 has been recorded as the warmest year since 2006, and the last 10 years have been the warmest decade. Whilst we can be less categorical about wind speeds, there is some evidence of a reduction in annual average wind speeds, with a corresponding decrease in the frequency of high wind speeds and gusts. Increases in total annual rainfall in parts of the west and north have been observed, with some increase in the number of days with heavier rain but there is no clear pattern of change in other areas.

While the national scale of potential change is evident, translating the potential effects of climate change to a region is a process of inference on what will happen to Ireland at large being reduced to a regional scale. Temperatures in Ireland are predicted to increase by 1.25-1.5°C by 2040 compared to 1961 to 2000.

Rainfall is expected to increase in winter by about 15% and summer projections range from no change to a 20% decrease, potentially along the east coast of the country.

Studies have shown that extreme rainfall events associated with climate change show more marked changes with more events occurring in autumn and a 20% increase in 2-day extreme rain amounts, especially in northern areas. Taking the projected precipitation changes into account, there will be the potential for a significant increase in the number of extreme discharge events and a slight increase in their intensity, leading to an increased probability of flooding in the future.

The potential rise in global temperature might affect the intensity and frequency of storms in the North Atlantic. As a consequence of stormy weather there exists the potential for flash flooding and erosion which would affect a wide range of ecosystems and economic sectors.

Climate Change Targets

In December 2008, the EU Climate Change and Renewable Energy Package set out a number of commitments. This package commits to reduce the EU's Greenhouse Gas (GHG) emissions from non- Emission Trading Scheme (ETS) sectors (such as transport, agriculture, residential and waste) by 20% on 2005 levels by 2020 or by a more ambitious 30% in the event of a comprehensive global agreement.

As part of the effort-sharing proposal of this package, Ireland is one of the countries facing the highest target of a 20% reduction on 2005 levels for non-ETS sectors. This will result in a limit of approximately 38 Mt CO_2 equivalent for Ireland's non-ETS emissions in 2020, together with annual binding limits for each year from 2013 to 2020.

In October 2014, EU leaders agreed a 2030 policy framework to reduce greenhouse gas emissions by at least 40% compared to a 1990 baseline. No agreement on the contribution of individual EU Member states has yet been reached.

The Climate Action and Low Carbon Development Act was published by government in January 2015. The Act sets out the national objective of transitioning to a low carbon, climate resilient and environmentally sustainable economy in the period up to 2050.

The EPA produces greenhouse gas emission projections on an annual basis for all sectors of the economy. According to the latest set of projections (April 2017), based on two different scenarios, Ireland's emissions in 2020 could be in the range of 4-6% below 2005 levels. The projection figures indicate Ireland is likely to exceed its annual targets over the remainder of the period to 2020.

The publication Ireland's Environment 2016 – An Assessment (EPA, 2016) provides a high-level summary on the status of greenhouse gases and climate change in an Irish context. It describes the key drivers and pressures and responses to climate change that may occur, providing an outlook of greenhouse gas projections to 2020, and also identifies future challenges to be addressed.

4.7.2 Relevant Environmental Issues

4.7.2.1 Air

Currently there are no significant concerns with regard to air quality. There are likely to be slightly elevated levels of vehicle emissions within the urban area of Naas however, this is the same for all urban areas. Dust and PM_{10} can be an issue locally during the construction phase of developments.

A recent EPA report stated that emissions from cars (particulate matter and nitrogen oxides) are a major health concern and a climate change concern. However, the prospects for compliance with targets under the new EU National Emissions Ceilings Directive (2016/2284/EU) are more positive. With the exception of NO_X emissions, emissions of acidifying gases are expected to achieve prescribed target emission levels within the next few years. NO_X emissions are too expected to decline but are likely to remain considerably above the target limit.

4.7.2.2 Noise

Potential future noise mapping must be taken into account during the development of the plan. Consideration will need to be given to the following scenarios:

- Bringing people to noise through the zoning of land for new housing, schools etc. developments near to existing road noise.
- Bringing noise to people through the provision of new or altered roads, industrial sites or commercial developments which would alter the noise environment in the vicinity of noise sensitive locations.

4.7.2.3 Climate

As previously mentioned in the Water Resources Section, climate change will have an impact on the region's water resources and must be taken into account in all aspects of sustainable planning.

Further, increased rainfall intensity and stormy weather increases the potential for flash flooding and erosion which would affect a wide range of ecosystems and economic sectors.

Consideration will need to be given to the following scenarios:

- Climate change mitigation and adaptation, including effects of severe events including flooding.
- Changes in greenhouse gas emissions from increased transport, industry, development etc.

4.7.3 Archaeology, Architectural and Cultural Heritage

4.7.3.1 Baseline

Built heritage is addressed in this report under the following headings:

- Archaeological Heritage;
- Architectural Heritage; and
- Vernacular Heritage.

Kildare County Council published the County Kildare Heritage Plan 2005-2011 in 2005. The Heritage Plan outlined an action plan for the conservation, preservation and enhancement of Kildare's heritage including natural heritage. The draft County Kildare Heritage Plan 2019 – 2025 was recently placed on public consultation and is due to be adopted in May 2019.

The built heritage of Kildare refers to all man-made features, buildings or structures in the environment. This includes a rich and varied archaeological and architectural heritage to be found throughout the countryside and within the historic towns and villages of the county.

The architectural and archaeological heritage of a town, village or place contributes greatly to the distinctive character of each local area.

4.7.3.2 Archaeological Heritage

A record of archaeological heritage is maintained on the 'Record of Monuments and Places' which was established under Section 12 of the National Monuments (Amendment) Act, 1994 (No. 17 of 1994). Structures, features, objects or sites listed in this Record are known as Recorded Monuments.

The Record of Monuments and Places (RMP) comprises a list of recorded monuments and places and accompanying maps on which such monuments and places are shown for each county.

The National Monuments Service of the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs will advise on the protection applying to any particular monument or place under the National Monuments Acts by reason of it being entered in the Record of Monuments and Places and should be consulted if there is any doubt as to the status of the site.

According to the database there are approximately 66 Recorded Monuments within the plan area. **Figure 4.13, Appendix A1,** depicts Recorded Monuments in the vicinity of Naas.

Any person intending to carry out works at or in relation to a Recorded Monument, or within the zone of Archaeological potential, must give the National Monuments Section of the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs two months' notice in writing.

4.7.3.3 Architectural Heritage

As defined by the Heritage Act, 1995, 'architectural heritage' includes all structures, buildings, traditional and designed, and groups of buildings including streetscapes and urban vistas, which are of historical, archaeological, artistic, engineering, scientific, social or technical interest.

The National Inventory of Architectural Heritage (NIAH) is a state initiative under the administration of the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs and established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999.

The purpose of the NIAH is to identify, record, and evaluate the post-1700 architectural heritage of Ireland, uniformly and consistently as an aid in the protection and conservation of the built heritage. NIAH surveys provide the basis for the recommendations of the Minister for Arts, Heritage, Regional, Rural and Gaeltacht Affairs to the planning authorities for the inclusion of particular structures in their Record of Protected Structures (RPS).

Naas has an abundance of structures of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. Such features are contained in the Record of Protected Structures (RPS).

According to the database, there are approximately 139 protected structures in Naas, as indicated in **Figure 4.14, Appendix A1**. Owners and occupiers of protected buildings are required to ensure that buildings do not become endangered through harm, decay or damage.

There is one Architectural Conservation Area (ACA) in Naas, as outlined in **Figure 4.15, Appendix A1.** An ACA is a place, area, group of structures or townscape that is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value, or contributes to the appreciation of protected structures.

4.7.3.4 Vernacular Heritage

Vernacular Architecture describes the local regional traditional building forms and types using indigenous materials, and without grand architectural pretensions, i.e. the homes and workplaces of the ordinary people built by local people using local materials. This is in contrast to formal architecture, such as the grand estate houses of the gentry, churches and public buildings, which were often designed by architects or engineers.

The majority of vernacular buildings are domestic dwellings. Examples of other structures that may fall into this category include shops, outbuildings, mills, limekilns, farmsteads, forges, gates and gate piers.

4.7.4 Relevant Environmental Issues

Continued development resulting from the unprecedented economic growth of the past decade and increasing population has increased pressure on sites or features of heritage interest.

Individually these developments put direct pressure of architectural heritage, where it is in proximity, or increases the potential to interact with known or previously unknown archaeological sites and features. Cumulatively, this results in negative impact on the overall cultural heritage resource.

The following issues were considered during the plan preparation:

- Impacts on sites of archaeological, architectural and vernacular heritage through development;
- Impacts on historic/heritage landscapes through development;
- Loss of vernacular heritage as a result of evolution of society and building use; and
- Impacts on considerable built heritage due to continued high levels of vacancy/abandonment and potential dereliction unless addressed.

4.8 Landscape and Visual

4.8.1 Landscape

Landscape embraces all that is visible when one looks across an area of land. As well as being an important part of people's lives, giving individuals a sense of identity and belonging, landscape is the context in which all changes take place. The landscape of County Kildare comprises a central plain bounded to the east by the Kildare uplands, which lie at the foot-hills of the Wicklow and Dublin Mountains. The Curragh, the boglands of north-west Kildare and the fertile lowlands of the south all comprise part of the central plain. The plain lands are interrupted by two groups of isolated hills, the Chair of Kildare and the Newtown Hills. The location of these hills within the central plain has a considerable impact on the landscape of Kildare. Inland waters comprise the River Liffey, River Barrow, River Slate, River Boyne, Royal Canal, Grand Canal and Rye Water River that traverse the county, providing important landscape features.

The Naas LAP area is located in the eastern part of County Kildare, near its borders with County Wicklow and Dublin. The Castlesize Stream, a tributary of the River Liffey provides an important landscape feature.

A Landscape Character Assessment (LCA) of the county has been prepared as part of the Kildare County Development Plan 2017-2023. The LCA focused on characterisation i.e. the discernment of the character of the landscape based on its land cover and landform, but also on its values, such as historical, cultural, religious and other understandings of the landscape. The purpose of this document was to assists in the development of the landscape objectives for the County Development Plan.

The County is divided into 15 geographically specific Landscape Character Areas (LCA's) The LCA of interest to the Draft Naas LAP is the Northern Lowlands.

In order to inform the Landscape Character Assessment, a landscape sensitivity map was prepared. Landscape sensitivity is a measure of the ability of the landscape to accommodate change or intervention without suffering unacceptable effects to its character and values.

The sensitivity of the Northern Lowlands is deemed to be of 'Low-Sensitivity' and is defined as an area 'with the capacity to generally accommodate a wide range of uses without significant adverse effects on the appearance or character of the area.'

The CORINE Land Cover (CLC) inventory is a Pan-European landuse and landcover mapping programme. It supplies spatial data on the state of the European environmental landscape and how it is changing over time. CORINE Land Cover mapping classifies land cover under various headings. The main land-use in the Plan area is discontinuous urban fabric, and pastures.

Discontinuous urban fabric comprises residential areas around the edge of urban district centres, and certain urban districts in rural areas. Pastures are dense grass cover of floral composition, dominated by graminaceae which are not under a rotation system. They are mainly used for grazing but may be harvested mechanically.

Refer to **Figure 4.16, Appendix A1** for CORINE Landcover Data in the vicinity of Naas.

4.8.1 Visual

Scenic routes and protected views consist of important and valued views and prospects within the county. The Kildare County Development Plan outlines all the views and prospects in the county which have been identified as being worthy of protection.

There are ten protected views/prospects located within the plan boundary, as illustrated in **Figure 4.17** for protected views and prospects in the plan area.

No Scenic Routes have been identified in the plan area.

4.8.2 Relevant Environmental Issues

Existing pressures on landscape and visual resources are primarily related to impacts to sensitive views and landscapes resulting from the positioning of new development, infrastructure including road, rail, electricity and water-service infrastructure, without sensitivity to these resources.

The following issues were considered during the plan preparation:

- Maintenance of existing landscape character.
- Impacts on designated protected landscapes, heritage landscapes and protected views as a result of development.

- Impacts due to development on the ecological components of the landscape.

4.8.3 Material Assets

The term 'Material Assets' refers to all infrastructure and local services including; transportation, water supply, wastewater treatment and discharge, waste management services, electricity supply, telecommunications etc. A summary of all material assets in Naas will be provided in the Environmental Report.

4.8.3.1 Water Supply

The provision of an adequate supply of water and wastewater treatment facilities is critical to facilitate and sustain the growth of Naas over the lifetime of the Draft LAP and beyond. As of January 2014, Kildare County Council no longer has any direct control in relation to the provision of such services. The delivery, integration and implementation of water and wastewater projects and infrastructural improvements are now the responsibility of the newly established State body 'Irish Water'. Kildare County Council will work closely with Irish Water to ensure that the Kildare County Development Plan and the draft Naas LAP continue to align with both the National Planning Framework, the Regional Planning Guidelines and the Regional Spatial and Economic Strategy, once adopted, and that the provision of water/wastewater services will not be a limiting factor in terms of targeted growth.

The majority of the water supplied in Co Kildare comes from the Dublin City Waterworks at Ballymore Eustace and this water is delivered by the Poulaphouca Regional Scheme to the Naas LAP area.

A Remedial Action List (RAL) of problematic drinking water supplies is released by the EPA on a quarterly basis. The Remedial Action list is a public record for the supplies known to be at risk and where the EPA is requiring Irish Water to take corrective action. The EPA has instructed Irish Water to submit an action programme for the improvement of each of these supplies and has initiated enforcement action where action programmes were not being prepared or were not prepared to the satisfaction of the EPA. This includes issuing legally binding Directions requiring specific work to be carried out. The Poulaphouca Regional drinking water supply which serves Naas was not included on the Remedial Action list for Q3 of 2017.

4.8.3.2 Wastewater Treatment

Wastewater from Naas is collected via a gravity and rising mains network and is treated at Osberstown Wastewater Treatment Plant which also serves the towns of Newbridge, Kilcullen, Sallins and Kill.

In 2015, Irish Water identified that the previously existing infrastructure of Osberstown wastewater treatment plant was under pressure and unable to support future economic and social development in the region. Irish water subsequently announced a major upgrade of the wastewater treatment plant.

This €30.3 million upgrade represented the largest single investment to date in the upgrade of a wastewater treatment plant by Irish Water.

Construction of the plant has recently been completed, and process proving has commenced. The plant now has a final treatment capacity of 130,000 PE and a higher level of treatment in full compliance with environmental licenses.

The newly upgraded plant serves the many industries, local businesses and homes in Sallins, Clane, Prosperous, Naas, Johnstown, Kill, Newbridge, Kilcullen, Athgarven, Caragh and the Curragh.

The Osberstown treatment plant discharges treated wastewater into the River Liffey making it one of the largest inshore discharge points in the country.

4.8.3.3 Transport Infrastructure and Facilities

The development of the National route network has been critical to the development of Naas and the county as a whole. The main transportation corridors linking the Greater Dublin Area (GDA) to Cork and Waterford pass around Naas via the M7/N7 and M9/N9.

The available road infrastructure has made Naas and its surrounding region attractive for commuters to the Greater Dublin area and the M7 to the north of the town provides an excellent link to the larger towns in Kildare, making them accessible for business and commerce.

According to the Naas Town Development Plan 2011-2017 Two Year Progress Report (Kildare County Council, 2013), a number of roads projects were under construction or planned over the period of the Town Plan with consequent impacts on the flow of traffic around Naas.

The most significant project of note- the M7 Osberstown Interchange and R407 Sallins Bypass was awarded contract in September 2017 by the Department of Transport, Tourism and Sport, TII and Kildare County Council.

This commences one of the most significant road schemes contained in the Government's Building on Recovery Programme. The contract consists of three major elements and is scheduled for full completion early 2020:

1. Widening the existing M7 motorway from two lanes to three lanes both eastbound and westbound for approximately 14km, between Junction 9 Naas North, at Maudlins (Perpetual Motion Ball) and the M7/M9 interchange at Junction 11.
2. Replacing and relocating the existing ramps at Junction 10 Naas South Newhall to the main Naas Newbridge dual carriageway, the R445. Also, to include the construction of a new interchange at Osberstown between Junctions 9 and 10 which will be designated Junction 9a.
3. The Sallins Bypass which includes approximately 1.7km of new Type 2 Dual Carriageway and 2.0km of single carriageway, together with a 1.2km single carriageway link road from the Bypass to Sallins town centre.

Improvements to the Main Street in Naas were also completed in April 2013.

With regards to public transport, Sallins Railway Station, which serves Naas, provides a high-quality commuter service to and from Dublin.

Naas is also served by a number of coach and bus services run by Bus Éireann and private operators, including an internal local bus service.

According to The Two-Year Progress Report, Iarnród Éireann has carried out improvements to facilities at Sallins railway station since adoption of the plan. Improvements have also been made at the nearby Newbridge railway station. Furthermore, the Council in association with the National Transport Authority is working on the completion of designs for bus stop improvements at Main Street Naas.

Public cycle parking facilities were provided in Naas in 2012 and an application for funding to continue the rollout of cycle parking in 2013 was made to the NTA. With regard to pedestrian facilities, the NTA has funded the construction of new footpaths at Corban's Lane.

4.8.3.4 Waste Management

Waste and recycling bin collection services have been privatised in County Kildare for the past 15 years. The following waste collectors currently provide these services:

- AES;
- Mahons Recycling;
- Oxigen;
- Ray Whelan; and
- Thorntons.

The Waste Facility Permit and the Certificate of Registration Database is a register for waste facility permits and certificates of registration issued by local authorities under the Waste Management (Facility Permit and Registration) Regulations, S.I. No. 821 of 2007, as amended.

According to the Local Authority Waste Facility Register, there are no licensed waste facilities within the LAP boundary.

The nearest EPA waste licenced facility is the Kerdiffstown facility which is located approximately 1km from the plan boundary.

4.8.4 Relevant Environmental Issues

The following issues will require consideration during the plan preparation:

Transportation:

- Achieve a sustainable balance between public and private transport modes;
- Protect lands planned for future public transport requirements from development;

- Integration of park and ride services with public transport provisions;
- Need for significant traffic management/calming measures, provision of integrated pedestrian/cyclist facilities and reduction in extent of on street car parking, etc.

Water and Waste Water Services:

- Ongoing maintenance of water supply infrastructure;
- Provision of new wastewater treatment infrastructure.

Waste Management:

- Limited waste management infrastructure and impacts associated with over reliance on landfill.

Energy Supply:

- Over-reliance on non-renewable energy sources;
- Energy efficiency and associated Greenhouse Gas emissions;
- Visual impact of infrastructure on landscape.

Telecommunications:

- Visual impact of infrastructure in telecommunications, particularly in rural areas.

5 Alternatives Considered

5.1 Introduction

Five alternative scenarios for the Draft LAP were examined:

- Scenario 1: Town Centre consolidation and sequential development of zoned residential and employment lands in the Northwest Quadrant.
- Scenario 2: Northern West Quadrant Expansion of the town.
- Scenario 3: Eastern Expansion and Town Centre Consolidation.
- Scenario 4: Southwest Expansion.
- Scenario 5: Market-Led Growth.

5.2 Alternatives Considered

This section provides a summary of the alternative scenarios considered during the development of the Draft LAP.

5.2.1 Scenario 1: Town Centre consolidation and sequential development of zoned residential and employment lands in the Northwest Quadrant

Scenario 1 involves the consolidation of the existing town centre by encouraging the regeneration and appropriate development of vacant and under-utilised sites in the town, including:

a) St. David's Castle and Corban's Lane;

b) Town Centre Backlands (site of three car parks along John's Lane and Friary Road);

c) Devoy Quarter; and

d) Abbey Street, Basin Street.

5.2.2 Scenario 2: Northern West Quadrant Expansion of the town

Scenario 2 comprises the following objectives:

- Development of employment and residential land uses in the north-western quadrant of the town.
- Provision of ancillary services within the quarter to facilitate new neighbourhood quarter.
- The provision of infrastructural links back to the town centre and around the town centre– public transport route, pedestrian, cycle etc and improved links to railway station.

- Development in close proximity to planned strategic infrastructural improvements – N7/M7 upgrade and Sallins Train Station.

5.2.3 Scenario 3: Eastern Expansion and Town Centre Consolidation

Scenario 3 comprises the following objectives:

- The growth and development of the town is focused on greenfield lands to the east of the town while at the same time seeking to consolidate the town centre by seeking development of vacant or underutilised sites.
- The zoning of former agricultural lands for low density residential development regardless of conformity with planning guidelines, infrastructure capacity or environmental constraints.
- The provision of new and upgraded infrastructural links to serve the expanded area.

5.2.4 Scenario 4: Southwest Expansion

Scenario 4 comprises the following objectives:

- Allows for growth of employment and residential development to the south west of the town, to merge with the Killashee and Jigginstown areas.
- Focuses on the development of low density residential and employment uses in the environs of the town centre, in proximity to the M7 Motorway.

5.2.5 Scenario 5: Market-Led Growth

Scenario 5 comprises the following objectives:

- The growth and development of the town is completely dependent on market demand.
- The rezoning of agricultural and industrial lands identified in the current LAP, regardless of conformity with planning guidelines, infrastructure capacity or environmental constraints.
- Additional zoning of lands results in the extension of the urban footprint of the town within the administrative boundary of the town and beyond.

5.3 Assessment of Alternatives

This section provides an assessment of the alternative development scenarios.

The assessment process categorised environmental impacts using the ratings outlined in **Table 5.1** which is based on the impact assessment criteria defined by the EPA for environmental impact assessment.

Table 5.1: Impact Ratings

Significance of Impact	
	Positive
	Neutral
	Negative
	Uncertain

5.3.1 Scenario 1-Town Centre consolidation and sequential development of zoned residential and employment lands in the Northwest Quadrant

This development scenario involves the consolidation of the existing town centre by encouraging the regeneration and appropriate development of vacant and under-utilised sites in the town, including:

a) St. David's Castle and Corban's Lane;

b) Town Centre Backlands (site of three car parks along John's Lane and Friary Road);

c) Devoy Quarter; and

d) Abbey Street, Basin Street.

Urban regeneration and redevelopment can substantially contribute to the sustainable development of urban areas and are likely to result in an overall positive impact on the environment.

Much of the town centre of Naas is already zoned for development, so by focusing on the re-development and regeneration of these zonings rather than zoning new greenfield land for development on the periphery, additional environmental impacts can be avoided. Similarly, by focusing on the sequential development of already zoned residential and employment lands in the Northwest Quadrant, the Council can seek to meet the demands of the growing population of the LAP area, without having to develop on greenfield lands.

These initiatives will both work towards reducing the onset of urban sprawl in Naas. Urban sprawl and the prevalence of low-density development on the periphery of urban centres work to exacerbate problems of over-consumption of green-field land, dependence on private transport and long commuting distances.

Thus, Scenario 1 will likely result in a positive impact on air, noise and climate.

A positive impact on population and human health is also envisaged, through the provision of residential and commercial opportunities. A high population density in the Town Centre of Naas could however put a strain on utilities and services, and it should be ensured that there is sufficient water and wastewater capacity to facilitate any residential development.

It is not possible to fully ascertain the potential impact of Scenario 1 on heritage, as a large portion of the town is designated as an Architectural Conservation Area.

Any development in this area could negatively impact on sites or buildings of historical or architectural significance.

High density housing can also result in a landscape and visual impact if residential units are too intrusive- the scale or density of the development proposed under Scenario 1 is not known.

5.3.2 Scenario 2- Northern West Quadrant Expansion of the town

This scenario involves the development of employment and residential land in the North-West quadrant of the town, and the provision of ancillary services within the quarter to facilitate this development. Development will be concentrated in close proximity to planned strategic infrastructural improvements- particularly the N7/M7 upgrade and Sallins Train Station.

For the purpose of this assessment, it is assumed that this scenario relates to land that is predominantly already zoned for employment and residential development in the North-West Quadrant and does not generally relate to greenfield development. As such, an overall neutral impact on the environment in general is predicted. A positive impact on population and human health is likely to occur through the provision of a new neighbourhoodcentre and indeed the fulfilment of new residential and employment opportunities.

The stipulation that the development would occur in close proximity to strategic infrastructural improvements- such as the Sallins Train station or the N7/M7 motorways is however a new consideration. Again, for the purpose of this assessment it is assumed that this relates to land which is predominantly already zoned for development and does not generally involve any greenfield development. Thus similarly, a neutral impact on the environment in general is anticipated.

A positive impact on population and human health and air, noise and climate is predicted here in that development in close proximity to strategic infrastructure would reduce dependence on private transport and long commuting distances.

As part of this development scenario it is proposed that infrastructural links would be provided back to, and around the town centre, including public transport, pedestrian, and cycle links. Improved links to the railway station are also proposed.

It is assumed, for the purposes of this assessment, that the infrastructural links proposed under this scenario do not relate to any ‘New Roads Objectives’ and are instead restricted to the provision of sustainable transport links. The development of the same is considered to be minor development, and as such an overall neutral impact on the environment is predicted. A positive impact on population and human health as well as air quality, noise and climate are predicted through the provision of these sustainable transport links, as the initiative will likely result in a reduction of vehicular traffic and subsequent emissions in the area.

5.3.3 Scenario 3- Eastern Expansion and Town Centre Consolidation

This Scenario involves greenfield development on lands to the east of the town while at the same time seeking to consolidate the town centre by seeking development of vacant or underutilised sites.

Greenfield development has the potential to result in a significant negative impact on the environment, in general, and is not considered a desirable development scenario. It is not possible to classify the predicted impact on population and human health as a result of this development scenario as both a positive and negative impact on the same could be considered. It is likely that a positive impact on population and human health will occur through the provision of residential opportunities, and the consolidation of the urban core. However, the loss of open space in the LAP area as a result of the proposed greenfield development is also likely to result in a negative impact on the same environmental factors.

This scenario also provides for the zoning of former agricultural lands for low density residential development regardless of conformity with planning guidelines, infrastructure capacity or environmental constraints.

This has the potential to result in a significant negative impact on the environment and is not considered a desirable development scenario for the LAP.

In addition, this scenario provides for new and upgraded infrastructural links to serve the expanded area. For the purpose of this assessment, it is assumed that this relates to New Roads Objective, as the development of the greenfield and agricultural areas did not make up part of the existing Town Plan. Any new roads development has the potential to result in a negative impact on the environment, in general. However, a positive impact on population and human health is envisaged through enhanced transport opportunities.

5.3.4 Scenario 4- Southwest Expansion

This scenario relates to the growth of employment and residential development to the south west of the town, to merge with the Killashee and Jigginstown areas. It focuses on the development of low density residential and employment uses in the environs of the town centre, in proximity to the M7 Motorway.

For the purposes of this assessment, it is assumed that lands are already zoned for employment and residential development to the south-west of the town and that this development scenario relates to the fulfilment of planned development in these areas. As such, a neutral impact on the environment in general is predicted. A positive impact on population and human health will occur through the provision of additional residential and employment opportunities.

The focus on development of low density residential and employment uses in the environs of the town centre is likely to result in a further positive impact on Population and Human Health, as it reduces the commuting distance for those who might work or regularly avail of services in the town. It also offers greater incentive to enhance public transport initiatives in the urban centre.

5.3.5 Scenario 5- Market-Led Growth

Scenario 5 is a market focused development scenario, where the growth and development of the town is completely dependent on exiting market demand.

This scenario is not considered to be sustainable in that it would fail to consider key forward planning principals and will result in the development of a local area that has not been strategically assessed from an environmental basis.

This scenario also involves the rezoning of agricultural and industrial lands identified in the current LAP, regardless of conformity with planning guidelines, infrastructure capacity or environmental constraints. This is again, has the potential to result in a significant negative impact on the environment and is not considered a desirable development scenario for the LAP.

Development Scenario 5 also relates to the additional zoning of lands resulting in the extension of the urban footprint of the town within the administrative boundary of the town and beyond. Greenfield development has the potential to result in a significant negative impact on the environment, in general, and is not considered a desirable development scenario.

5.4 Emerging Preferred Scenario

The emerging preferred development scenario for the Naas LAP from an environmental perspective is Scenario 2: Northern West Quadrant Expansion of the town, as outlined in Section 5.3.1.

Table 5.2: Assessment of Alternative Scenarios

Scenario	Description	Population and Health	Biodiversity	Soils and Geology	Water Resources	Air, Noise and Climate	Heritage	Landscape & Visual	Material Assets
Scenario 1	Consolidation of the existing town centre by encouraging the regeneration and appropriate development of vacant and under-utilised sites in the town, including: a) St. David's Castle and Corban's Lane; b) Town Centre Backlands (site of three car parks along John's Lane and Friary Road); c) Devoy Quarter; and d) Abbey Street, Basin Street								
Scenario 2	Development of employment and residential landuses in the north-western quadrant of the town.								
	Provision of ancillary services within the quarter to facilitate new neighbourhood quarter.								
	The provision of infrastructural links back to the town centre and around the town centre– public transport route, pedestrian, cycle etc and improved links to railway station.								
	Development in close proximity to planned strategic infrastructural improvements – N7/M7 upgrade and Sallins Train Station.								
Scenario 3	The growth and development of the town is focused on greenfield lands to the east of the town while at the same time seeking to consolidate the town centre by seeking development of vacant or underutilised sites.								

Scenario	Description	Population and Health	Biodiversity	Soils and Geology	Water Resources	Air, Noise and Climate	Heritage	Landscape & Visual	Material Assets
	The zoning of former agricultural lands for low density residential development regardless of conformity with planning guidelines, infrastructure capacity or environmental constraints.								
	The provision of new and upgraded infrastructural links to serve the expanded area.								
Scenario 4	Allows for growth of employment and residential development to the south west of the town, to merge with the Killashee and Jigginstown areas.								
	Focuses on the development of low density residential and employment uses in the environs of the town centre, in proximity to the M7 Motorway.								
Scenario 5	The growth and development of the town is completely dependent on market demand.								
	The rezoning of agricultural and industrial lands identified in the current LAP, regardless of conformity with planning guidelines, infrastructure capacity or environmental constraints.								
	Additional zoning of lands results in the extension of the urban footprint of the town within the administrative boundary of the town and beyond.								

6 SEA Objectives, Targets and Indicators

6.1 Introduction

The SEA is designed to assess the potential environmental impact of the policies of the revised LAP against the environmental baselines established.

The policies and associated recommendations are assessed against a range of established environmental objectives and targets. Indicators that are recommended in the SEA are utilised over the lifetime of the LAP to quantify the level of impact that the policies and recommendations have on the environment. This enables us to measure whether they were successful in promoting the sustainable development of the County.

6.2 Environmental Objectives

The formation of the environmental objectives required cognisance of the environmental protection objectives established at a range of levels through the legislation and guidelines outlined in Chapter 2. Global, EU and national level legislation, policy and associated environmental objectives were utilised to develop the environmental objectives for the Draft LAP.

The objectives outlined below are also placed in the context of and linked into the development of the draft policies and recommendations to ensure that the objectives are appropriate for the Naas LAP area.

The environmental objectives are also linked to appropriate targets and indicators outlined in the following sections. The environmental objectives are as follows:

- Biodiversity:
    - Conserve and protect the diversity of habitats and species by limiting adverse impacts on habitats and species of conservation concern.
- Population and Human Health:
    - Improve people's quality of life based on high-quality residential, working and recreational environments and on sustainable travel patterns.
- Land and Soils:
    - Protect quality and quantity of existing soil and geology.
- Water:
    - Improve/maintain and protect 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.

- Air, Noise & Climate:
    - Maintain and promote continuing environmental improvement, in particular a reduction in greenhouse gas emissions and an improvement in air (including noise emissions).
- Archaeological, Architectural and Cultural Heritage:
    - Promote the protection and conservation of the archaeological, architectural and cultural heritage.
- Landscape and Visual:
    - Conserve and enhance valued natural and historic landscapes and features within them.
- Material Assets:
    - Make best use of existing infrastructure, promote the sustainable development of new infrastructure and promote the sustainable efficient use of resources.

6.3 Environmental Targets

Each of the Environmental Objectives has a range of Environmental Targets which the LAP Policies and Recommendations are aimed towards. These targets need to be quantifiable to ensure that monitoring can be carried out effectively. The following targets have been established to direct the sustainable implementation of the Policies and Recommendations and to ensure that the environment is maintained and/or improved where possible.

Biodiversity

- Consider siting of new development on non-sensitive sites.
- Improve/conserve and protect all designated sites and species within and adjacent to the Plan area.
- Deliver the requirement of the Habitats Directive (Article 4, Paragraph 4) for the maintenance or restoration of annexed habitats and species within SACs at a “favourable conservation status.
- Promote the maintenance and, as appropriate, achievement of favourable conservation status of habitats and species, in association with the NPWS and other stakeholders.
- Protect SPAs, Annex I bird species, and regularly occurring migratory bird species and their habitats, and avoid pollution or deterioration of important bird habitats outside SPAs.

- Improve the ecological coherence of Natura 2000 by encouraging the management of, maintaining, and where appropriate developing, features of the landscape which are of major importance for wild fauna and flora. Such features are those which, by virtue of their linear and continuous structure (such as rivers with their banks or the traditional systems for marking field boundaries) or their function as stepping stones (such as ponds or small woods), are essential for the migration, dispersal and genetic exchange of wild species.
- Protect NHAs, National Parks, Nature Reserves, Wildfowl Sanctuaries, Refuges for Fauna or Flora and sites proposed for designation.
- Improve/maintain protection for important wildlife sites, particularly urban wildlife corridors and linear and stepping stone features for migration, dispersal and exchange of wildlife.
- Improve access for the appreciation and promotion of wildlife.

Population and Human Health

- Minimise population exposure to high levels of noise, vibration and air pollution.
- Increase modal shift to public transport.
- Co-ordinate land use and transportation policies.
- Improve access to recreation opportunities.

Land and Soils

Prevent pollution of soil through adoption of appropriate environmental protection procedures during construction and maintenance works on site.

- Ensure polluting substances are appropriately stored and bunded.
- Ensure appropriate management of existing contaminated soil in accordance with the requirements of current waste legislation.
- Re-use of brownfield lands, rather than developing Greenfield lands, where possible.
- Minimise the consumption of non-renewable sand, gravel and rock deposits.

Water

- Support the achievement of "good" ecological and chemical status/potential of waterbodies in accordance with the Water Framework Directive.
- Minimise flood risk through appropriate management of flood vulnerable zones.
- Promote sustainable drainage practices to improve water quality and flow.

Air, Noise & Climate

- Minimise air and noise emissions during construction and operation of new developments.

- Promote reduction of greenhouse gas emissions to the atmosphere.
- Limiting climate change and adapting to climate change.

Archaeological, Architectural and Cultural Heritage

- Regeneration of derelict and underutilised heritage sites.
- Improve appearance of areas with particular townscape character.
- Improve protection for protected archaeological sites and monuments and their settings, protected structures and conservation areas and areas of archaeological potential.
- Enhance access to sites of heritage interest.

Landscape & Visual

- Improve protection for landscapes of recognised quality.
- Maintain clear urban/rural distinctions.
- Enhance provision of, and access to, green space in urban areas.
- Ensure development is sensitive to its surroundings.

Material Assets

- Improve availability and accessibility of commercially provided facilities and public services.
- Increase local employment opportunities.
- Improve efficiencies of transport, energy and communication infrastructure.
- Promotion of sustainable transport infrastructure i.e. increased public transport.
- Reduce the generation of waste and adopt a sustainable approach to waste management.

6.4 Environmental Indicators

The assessment of Policies and Recommendations with respect to the Environmental Objectives and Targets is required to be measurable. The Environmental Indicators need to be capable of the following:

- Describing trends in the baseline environment.
- Demonstrating the likely significant impact of the implementation LAP.
- Being used in a monitoring programme.
- Providing an early warning of significant unforeseen adverse effects.
- Prioritising key environmental impacts.
- Ensuring the number and range of environmental indicators are manageable in terms of time and resources.

Consequently, a range of Environmental Indicators required to assess the level of impact on the environment are outlined in **Table 6.1.**

Table 6.1: Environmental Indicators

Item	Draft SEA Indicator
Biodiversity	Number and extent of Protected Sites. Areas actively managed for conservation. Population and range of Protected Species. Achievement of the Objectives of Biodiversity Plans.
Population & Health	Census population data. Rates of Unemployment per area. % increase in housing (number and type).
Soils & Geology	Rates of re-use/recycling of construction waste. Rates of cement/concrete production. Rates of brownfield site and contaminated land reuse and development. Rates of greenfield development.
Water Resources	Compliance of potable water sources with water quality regulations. Compliance of surface waters with national and international standards. Potable and wastewater treatment capacities versus population. % of wastewater receiving tertiary treatment. Achievement of the Objectives of the River Basin Management Plans. Amount of new developments within flood plains. Annual costs of damage related to flood events.
Air, Noise & Climate	Traffic, Transport and Vehicular survey data. National and region-specific emission data. Compliance with national standards. Reduction in greenhouse gas emissions. Number and extent of emission licensed facilities. Number of energy/renewable energy production facilities. Rates of energy/renewable energy consumption.
Heritage	Updating of inventories to include new sites/features. Achieving the objectives of development plans regarding heritage protection. Range and extent of areas of heritage potential. Range and extent of areas of special planning controls.
Landscape & Visual	Range and extent of Amenity Landscapes. Rates of development within designated landscapes. Rates of urban expansion. Rates of deforestation. Rates of agricultural land re-development. % change of land use from rural to urban.

Item	Draft SEA Indicator
Material Assets	Location/level of Infrastructure. Achievement of development plan objectives. Rates of deprivation. Rate of waste disposal to landfill statistics. Range and extent of recycling facilities and services. Rates of recycling.

7 Assessment of Likely Significant Effects

7.1 Introduction

The approach used for assessing likely significant impacts was objectives led. The assessment was primarily qualitative in nature, with some assessment based on expert judgement. This qualitative assessment compares the likely impacts against the Strategic Environmental Objectives to see which Policies and Recommendations meet the Strategic Environmental Objectives and which, if any, contradict these.

Particular reference was made to the potential for cumulative effects in association with other relevant plans and programmes within the Kildare/Greater Dublin Area.

Particular regard was also paid to the need for the sustainable development of ecological resources (including the conservation of fish and other species of fauna and flora, habitats and the biodiversity of water ecosystems and commercial and natural fisheries) as economic resources. In conjunction with the Habitats Directive Assessment due consideration was given to potential significant impacts of the policies and recommendations on ecological resources for the following areas:

- Surface and ground water quality.
- Surface water hydrology.
- Fish spawning and nursery areas.
- Passage of migratory fish.
- Areas of natural heritage importance.
- Designated marine protected areas.
- Biological diversity.
- Ecosystem structure and functioning.
- Seabirds and marine mammals.
- Fish and shellfish cultivation.
- Sport and commercial fishing and angling.
- Amenity and recreational areas.
- Mineral and aggregate resources.
- Sediment transport and coastal erosion.
- Navigation.
- Other legitimate use of the sea.

7.2 Assessment of Environmental Impacts

The environmental impacts of the LAP objectives were assessed with respect to the existing environmental baseline as outlined in Chapter 4 and the environmental objectives listed in Chapter 6.

The assessment process categorised environmental impacts using the ratings outlined in **Table 7.1** which is based on the impact assessment criteria defined by the EPA for environmental impact assessment.

Table 7.1: Impact Ratings

Significance of Impact	
	Neutral
	Positive
	Negative
	Uncertain

The matrix outlined in **Table 7.3** highlights these potential impacts. It assesses all policies and objectives in the plan. This assessment outlines an unmitigated scenario. Where potential impacts are identified, it is expected that these can be mitigated through the implementation of the mitigation measures outlined in Section 8.1.

The environmental impacts of the LAP land zonings were also assessed. The matrix outlined in **Table 7.4** highlights these potential impacts. It provides a site-specific assessment of the potential impacts associated with any change in land use zonings throughout the LAP area.

It is important to note that while the planning objectives outlined in the Kildare County Development Plan (CDP) have not been repeated, they are applicable to the Draft LAP.

Having regard to the objectives of the CDP, in particular the objectives outlined in **Table 7.2** below, it is assumed that the necessary provisions for the protection of biodiversity, land and soils, water, heritage and landscape will be undertaken prior to any development within the LAP area.

Table 7.2: Relevant Kildare County Development Plan Policies and Objections

Environmental Receptor	Relevant objectives
	Country Development Plan Objectives
Biodiversity	NH1, NH2, NH3, NH4, NH5, NH6, NH7, NH8, NH9, NH10, NH11. NH12, NH13, NH14, NH15, NH16 NHO1, NHO2, NHO3, NHO4, NHO5, NHO6, NHO7, NHO8, NHO9, NHO10
Population and Human Health	LE1, LEO1, LEO2, LEO3, C1, C2, C3, EF1, EF2, EF3, EF4, EF5, EFO1, EFO2, EFO3, EFO4, EFO5, EFO6, EFO7 HS1, HS2, HS3, HS4, HS5, HSO1, HSO2, HSO3, HSO4, HSO5 MT1, MT2, MT3, MT4, MT6, MT7, MT8, MT9, MT11, MT12, MT15, MTO1, MTO3, MT04 PT1, PT2, PT3, PT4, PT5, PT6, PT7, PT8, PT9, PT10, PT11, PT12, PT13 PTO1, PTO2, PTO3, PTO4, PTO5, PTO6, PTO8 WC1, WC2, WC4, WC5, WC6, WC7, WC8, WC9, WC10, WC14 WCO1, WCO2, WCO3, WCO4, WCO5, WCO6, WCO7, WCO8, WCO9
Land and Soils	EO18, EO19, EO20, EO21, EO22, EO23 VM5, VM10 VM1, VM2, VM3, VM11, VM14, PC1
Water	WQ1, WQ2, WQ3, WQ4, WQ5, WQ6
Air, Noise and Climate	ER1, ER2, ER3, ER4, ER5, ER6, ER7, ER8, ERO1 WE1, WE2, WE3, WE4, WE5, WEO1 HD1, HD2, HD3, HD4 SE1, SE2, SE3, SE4 BE1, BE2, BE3 EW1, EW2 EB1, EB2, EB3, EBO1 GT1 MT1, MT2, MT3, MT4, MT6, MT7, MT8, MT9, MT11, MT12, MT15, MTO1, MTO3, MT04 PT1, PT2, PT3, PT4, PT5, PT6, PT7, PT8, PT9, PT10, PT11, PT12, PT13 PTO1, PTO2, PTO3, PTO4, PTO5, PTO6, PTO8 WC1, WC2, WC4, WC5, WC6, WC7, WC8, WC9, WC10, WC14 WCO1, WCO2, WCO3, WCO4, WCO5, WCO6, WCO7, WCO8, WCO9 PC1, PC2, PC3, PC4, PC5, PC6, PC7, PC8, PC9, PC10

Archaeological, Architectural and Cultural Heritage	PS1, PS2, PS3, PS4, PS5, PS6, PS7, PS8, PS9, PS10, PS11, PS12, PS13, PS14, PS15, PS16, PS17, PS18, PS19, PS20, PS21 PSO1, PSO2, PSO3, PSO4, PSO5, PSO6, PSO7, PSO8 ACO1, ACO2, ACO3, ACO4 CH01, CH02 VS1, VA2, VA3, VA4, VA5, VA6, VA7, VA8 VAO1, VAO2 ACA1, ACA2, ACA3, ACA4, ACA5 ACAO1, ACAO2, ACAO3, AH1, AH2, AH3, AH4, AH5, AH6, AH7, AH8, AH9, AH10, AH11, AH12 AO1, AO2, AO3, AO4, AO5 HF1 HFO1, HFO1
Landscape & Visual	LA1, LA2, LA3, LA4, LA5, LA6, LA7 LO1, LO2, LO3, LO4, LO5, LO6, LO7, LO8, LO9, LO10, LO11 LU1, LU2, LU3, LU4, LU5 TA1, TA2, TA3, TA4 WC1, WC2, WC3, WC4, WC5, WC6, WC7, WC8, WC9
Material Assets	WW1, WW2, WW3, WW4, WW5, WW6, WW7, WW8, WW9, WW10, WW11, WW12, WW13 MT1, MT2, MT3, MT4, MT6, MT7, MT8, MT9, MT11, MT12, MT15, PT1, PT2, PT3, PT4, PT5, PT6, PT7, PT8, PT9, PT10, PT11, PT12, PT13 PTO1, PTO2, PTO3, PTO4, PTO5, PTO6, PTO8 WC1, WC2, WC4, WC5, WC6, WC7, WC8, WC9, WC10, WC14 WCO1, WCO2, WCO3, WCO4, WCO5, WCO6, WCO7, WCO8, WCO9 WM1, WM2, WM3, WM4, WM5, WM6, WM7, WM9, WM10, WM11, VM15

Table 7.3: Assessment of Potential Impacts

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
Compliance with the Core Strategy										
Policy CS1	It is the policy of the Council to support the sustainable long-term growth of Naas in accordance with the core strategy of the Kildare County Development Plan 2017-2023 and provisions of the National Planning Framework, 2018 and the Regional Spatial and Economic Strategy (when adopted).									Sustainable long-term growth will have a positive impact on all aspects of the SEA Environmental Objectives. Any potential impacts were previously assessed as part of the SEA of the Kildare County Development Plan 2017-2023.
CSO 1.1	Monitor the scale, type, tenure and location of constructed and permitted developments in Naas during the lifetime of the Plan and apply appropriate development management standards to ensure compliance with the Core Strategy of the Kildare County Development Plan 2017-2023 and to achieve the delivery of strategic plan-led and coordinated balanced development within the town.									The targeted delivery of appropriate and strategic development in the LAP area is likely to result in a positive impact on population and human health through provision of residential, commercial, employment and/or recreational opportunities. The application of development management standards and monitoring of the scale and type of new development is likely to result in a positive impact on both landscape and visual and material assets in that it will ensure that no new development is visually intrusive, or outside the capacity of existing utilities. It will also ensure that any development within the ACA of the town is appropriate and will not negatively impact sites or buildings of historical or architectural significance.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
CSO 1.2	Prioritise the development of sites zoned A: Town Centre and C: New Residential within the town as set out in Chapters 2, 8 and 10 of this Plan.									The re-development and regeneration the town will have a positive impact on population and human health, as well as air quality and climate as it discourages urban sprawl, reduces traffic movements, enhances the public realm and encourages more sustainable transport methods. It is not possible to fully ascertain the potential impact on heritage, as a large portion of the town is designated as an Architectural Conservation Area. Development in this area, even re-development or re-generation could potentially negatively impact on sites or buildings of historical or architectural significance. The redevelopment of brownfield sites has the potential to result in a positive impact on land and soils it involves the remediation of potentially contaminated land. It is not possible to ascertain if this proposal related to brownfield development. A high population density in Naas town centre could however put a strain on material assets, however the recent upgrade to Osberstown WWTP should accommodate all development proposed under the plan. High density housing can also result in a landscape and visual impact if residential units are too intrusive- the scale or density of development is not known. Refer to Table 8.1 for mitigation measures.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
CSO 1.3	Support and facilitate sustainable intensification and consolidation in the town centre and established residential areas.									The sustainable intensification the town and established residential areas will have a positive impact on population and human health, as well as air quality and climate as it discourages urban sprawl, reduces traffic movements and encourages more sustainable transport methods. It is not possible to fully ascertain the potential impact on heritage, as a large portion of the town is designated as an Architectural Conservation Area. Development in this area, even re-development or re-generation could potentially negatively impact on sites or buildings of historical or architectural significance. A high population density in Naas town centre could however put a strain on material assets, however, by the use of the term 'sustainable development' here it is assumed that development would only occur where it could be ensured that there is sufficient water and wastewater capacity to facilitate any residential development. High density housing can also result in a landscape and visual impact if residential units are too intrusive- the scale or density of development is not known.
CSO 1.4	Support new residential development in Regeneration and Key Development Areas identified in Chapter 8 in tandem with the delivery of supporting physical and social infrastructure.									New residential development in Regeneration and Key Development Areas will result in a positive impact on Population & Human Health and Material Assets.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
										This will result in a neutral impact on Biodiversity, Land & Soils, Water, Air, Noise & Climate, Heritage and Landscape & Visual as these areas have already been zoned as Regeneration & Key Development Areas. Population & Human Health will be positively impacted as new residential development will meet growing demands for residential accommodation. Material Assets will be positively impacted due to the delivery of supporting physical & social infrastructure.
CSO 1.5	Investigate in consultation with the NTA, Irish Water, Irish Rail, Waterways Ireland and other statutory agencies and stakeholders, options for the longer-term development of Naas, and in particular the development of the North-West Quadrant within the context of a masterplan.									The strategic and forward planning of the LAP area is likely to result in a positive impact on population and human health in that the process would seek to meet and fulfil the needs of the existing and future population of Naas. This objective does not make direct provisions for development within the lifetime of the Plan, rather the investigation of the feasibility of the same. An overall neutral environmental effect is therefore identified for the purposes of this assessment.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
Residential Development										
Policy HC1	It is the policy of the Council to ensure that sufficient land continues to be available at appropriate locations to satisfy the County Core Strategy growth allocation for Naas and that good quality housing is provided.									The provision of good quality housing will have a positive impact on Population & Human Health. However, at this stage of the development process it is not possible to determine potential impact on Biodiversity, Land & Soils, Water, Air, Noise & Climate, Heritage, Landscape & Visual or Material Assets.
HCO 1.1	Promote and facilitate the phased development of identified Core Regenerations Areas and Key Development Areas in accordance with the guidance set out in Chapter 8 and 10 of this Plan.									This objective does not solely relate to the proposed regeneration of the town centre, but instead encompasses other KDAs in the area, and will likely result in an overall positive impact on population and human health, as well as air quality and climate. The centralisation of development in already developed areas discourages urban sprawl and one-off housing, reduces traffic movements, enhances the public realm and encourages more sustainable transport methods. It is not possible to ascertain if this objective will result in an impact on landscape and visual, as the type or scale of the proposed re-development is not defined. High density development can result in a landscape and visual impact if they are too intrusive The indication here that the proposed development will be delivered on a phased basis will likely result in a neutral impact on material assets, as this can ensure that there is sufficient utilities capacity to facilitate development.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
HCO 1.2	Prepare Masterplans for the Northwest Quadrant, Castle Quarter CRA and Canal Quarter CRA (Refer to Map 8.1) in co-operation with relevant stakeholders and actively secure their implementation through phased development and the timely delivery of necessary physical, social and community infrastructure.									As the proposal for the preparation for a masterplan for the North-West Quadrant and Canal Harbour Area is already provided for under the existing Naas Town Development Plan, an overall neutral impact on the environment in general is predicted.
HCO 1.3	Secure the provision of social infrastructure, including social housing, community, and recreational facilities in tandem with residential development.									It is not possible to ascertain the whether the proposed objective has the potential to result in negative impacts on the environment, as the type, scale and location of the infrastructure and facilities has not been defined. A positive impact on population and human health is predicted however, through increased recreational and amenity opportunities.
HCO 1.4	Encourage the appropriate redevelopment of brownfield and infill sites for residential uses within the footprint of the existing built up area.									The development of brownfield and infill sites for residential uses within the footprint of the existing built up areas will have a positive impact on population and human health, as well as air quality and climate as it provides new housing opportunities, discourages urban sprawl, reduces traffic movements, enhances the public realm and encourages more sustainable transport methods. An increase in the population density in existing built up areas could however put a strain on material assets, however the recent upgrade to Osberstown WWTP should accommodate all development proposed under the plan.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
										The redevelopment of brownfield sites has the potential to result in a positive impact on land and soils it involves the remediation of potentially contaminated land. It is not possible to ascertain if this objective will result in an impact on landscape and visual, as the type or scale of proposed infill development is not defined. High density development can result in a landscape and visual impact if they are too intrusive.
HCO 1.5	Manage the provision of one-off housing on lands zoned as I: Agricultural. Limited one-off housing may be permitted in this zone subject to compliance with Chapter 4, Rural Housing Policy of the County Development Plan 2017-2023 and subject to compliance with other normal siting and design considerations.									As outlined in Chapter 4, Rural Housing Policy of the County Development Plan 2017-2023, the provisions of the Rural Housing Policy will be *implemented through the management of the provision of one-off housing in order to protect the physical, environmental, natural and heritage resources of the county, in conjunction with providing for rural housing for those persons who comply with the "Local Need" provision of the Plan.* On this basis, a neutral impact on all environmental aspects is predicted.
HCO 1.6	Utilise the provisions of the Urban Regeneration and Housing Act 2015 (as amended) with regards the Vacant Site Levy to facilitate the appropriate development of vacant sites on Residential Land and Regeneration Land.									Population & Human Health will be positively impacted as new residential development will meet growing demands for residential accommodation. Material Assets will be positively impacted due to the delivery of supporting physical & social infrastructure.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
										Appropriate development of vacant sites on Residential Land and Regeneration Land will result in a positive impact on Population & Human Health. There will be a neutral impact on Biodiversity, land & soils, water, air, noise & climate, heritage and landscape & visual and material assets as these vacant sites have already been zoned as Residential Land and Regeneration Land.
HCO 1.7	Continue to pursue funding avenues and apply for funding under the Urban Regeneration and Development Fund to realise the vision for Naas Town Centre.									Pursuing funds in order to realise the vision for Naas Town Centre will have a positive impact on Population & Human Health. At this stage of the development process it is not possible to determine the impact on Biodiversity, land & soils, water, air, noise & climate, heritage and landscape & visual and material assets. Further assessment will be carried out at a project level.
Residential Density, Mix and Design										
Policy HC2	It is the policy of the Council to ensure that all new residential development provides for a sustainable mix of housing types, sizes and tenures and that new development complements the existing residential mix.									Provision of a sustainable mix of housing types, sizes and tenures will have a positive impact on Population & Human Health. In addition to this, new developments complementing the existing residential mix will also positively impact Population & Human Health. For the purposes of this assessment an unknown effect is identified for Biodiversity, land & soils, water, air, noise & climate, heritage and landscape & visual and material assets.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
HCO 2.1	Require that an appropriate mix of housing type, tenure, density and size is provided in all new residential areas and in appropriate brownfield/infill areas to meet the needs of the population of Naas, including the provision of appropriate supported housing and longer term residential care solutions designed for older people and/or people with disabilities.									This objective is likely to result in a neutral impact on the environment, in general. A positive impact on population and human health is predicted through the provision of accessible housing options. It is not possible to ascertain whether the proposed developments will result in a negative impact on landscape and visual as their will locations and subsequent baseline environments will change, and so too will the size and density of the proposed developments. High density development can result in a landscape and visual impact if they are too intrusive
HC2.2	Seek to provide Traveller Specific Accommodation at appropriate locations close to key services and public transport facilities in accordance with the Traveller Needs Assessment and Traveller Accommodation Plan due for review in 2019.									Provision of Traveller Specific Accommodation at appropriate locations close to key services and public transport facilities will have a positive impact on Population & Human Health. It is not possible to ascertain whether this will have a positive or a negative impact on Biodiversity, land & soils, water, air, noise & climate, heritage and landscape & visual and material assets at this stage of the development.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
HC2.3	Require that residential schemes in close proximity to Naas' heavily trafficked roads are designed and constructed to minimise noise disturbance, follow a good acoustic design process and clearly demonstrate that a significant adverse noise impact will be avoided.									Designing heavily trafficked roads with noise minimisation measures will have a positive impact on Air, Noise & Climate. Positive impact on noise This measure will have a neutral impact on Biodiversity, land & soils, water, air, noise & climate, heritage and landscape & visual and material assets.
HCO3.3	Support the delivery of facilities and services for older people, at appropriate locations in Naas									Increased facilities and services for older people will have a positive impact on the population and human health. A neutral impact on the environment in general is predicted.
Education, Early Learning and Healthcare										
Policy HC3	It is the policy of the Council to facilitate and secure the provision of social infrastructure to support existing and new communities within the Naas LAP area, in a manner which provides flexibility to respond to varied and changing community needs.									The provision of social infrastructure to support existing and new communities within the Naas LAP area will have a positive impact on Population & Human Health. This provision will have a neutral impact on biodiversity, land & soils, water, air, noise & climate, heritage and landscape & visual and material assets.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
HCO 3.1	Support and facilitate improvements to and expansion of existing educational, early learning, childcare and healthcare facilities, at appropriate locations in Naas.									It is not possible to determine whether the proposed objective refers to development, and to what scale. As such it is not possible to ascertain whether the proposed objective will result in any impact on the environment. This objective will however likely result in a positive impact on population and human health through enhanced provision of services.
HCO 3.2	Support the provision of appropriately located and purpose built early learning and childcare facilities to meet the pro-rata childcare needs of housing development during the plan period.									This objective is likely to result in a neutral impact on the environment, in general.
Community, Sports and Recreational Facilities										
Policy HC4	It is the policy of the Council to facilitate and support a broad range of community, cultural and recreational facilities to serve the needs of the residents of the Plan area and its wider catchment.									Facilitation and support of community, cultural and recreational facilities will positively impact population & human health and will have a neutral impact on the environment.
HCO 4.1	Support and facilitate the provision of appropriately located multi-functional community facilities to meet the needs of the growing population in Naas.									It is not possible to determine whether the proposed objective refers to development, and to what scale. As such it is not possible to ascertain whether the proposed objective will result in any impact on the environment. This objective has the potential to result in a positive impact on population and human health through enhanced provision of facilities.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
HCO 4.2	Support the relocation of Naas Town Library to Naas Town Hall.									As the proposed objective would not result in any development the resulting impact on all SEA environmental objectives would be neutral.
HCO 4.3	Support access to the lands zoned Future Park/Green Wedge to accommodate a public parkland amenity in Naas.									As the proposed objective would not result in any development, a neutral impact on the environment is envisaged. A positive impact on population and human health is predicted through provision of new amenity opportunities.
HCO 4.4	Support and promote the development of cultural, arts and performance spaces in Naas.									It is not possible to determine whether the proposed objective refers to development, and to what scale. As such it is not possible to ascertain whether the proposed objective will result in any impact on the environment. This objective will however likely result in a positive impact on population and human health through enhanced provision of facilities.
HCO 4.5	Facilitate sports and community groups in the acquisition and/or use of lands for sports and recreation purposes.									As the proposed objective would not result in any development, a neutral impact on the environment is envisaged. A positive impact on population and human health is predicted through provision of new amenity opportunities.
HCO 4.6	Facilitate the development of a network of amenity spaces and recreational areas									The development of amenity spaces and recreational areas is likely to have a positive impact on population and human health; however, it is not possible to ascertain whether this development will have a positive or a negative impact on the environment, at this stage of the project.
HCO 4.7	Support and facilitate the provision of an appropriately located cemetery and associated uses to serve Naas and the hinterland.									The provisions of an appropriately located cemetery would impact the population and human health positively.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
										For the purposes of this assessment an unknown effect is identified for other aspects of the environment.
Movement and Transportation										
Policy MT1	It is the policy of the Council to liaise closely with the National Transport Authority (NTA) and Transport Infrastructure Ireland (TII) in relation to securing appropriate improvements to the transportation network within the Plan area.									Securing appropriate improvements to the transportation network will have appositive impact on the population and human health. The effect of improved transportation on the environment is unknown at this stage of the development. Further assessment will be required at a project level.
MTO 1.1	To co-operate and liaise with the Department of Tourism, Transport and Sport, the NTA and TII in relation to securing appropriate improvements/extensions to the transport network within the Naas.									Securing appropriate improvements/extensions to the transport network will positively impact population and human health. It is uncertain at this stage whether this measure will impact biodiversity, land & soils, water, air, noise & climate, heritage and landscape & visual and material assets positively or negatively.
MTO 1.2	To ensure that both existing and new streets are multi-functional, balancing movement, place and safety for all users within an appropriate traffic environment in accordance with the principles of Design Manual for Urban Roads and Streets (DMURS), 2013 and any subsequent revisions.									This is existing policy, and therefore represents the baseline situation. A neutral Environmental impact is envisaged.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
MTO 1.3	Improve road safety within the Plan area by implementing gateway entry treatments into the town in order to signal to drivers that they are entering an urban area and to adjust driving speed and behaviour accordingly.									This objective does not involve development and is likely to result in a neutral impact on the environment, in general. A positive impact on population and human health is likely to occur through improved road safety conditions.
MTO 1.4	Investigate the feasibility of diverting HGVs away from the town centre.									This objective is likely to result in a positive impact on population and human health and air, noise and climate, as a reduction in the vehicular emissions from HGVs in the town centre would result in a significantly positive impact on the ambient environment.
MTO 1.5	Provide in conjunction with the relevant stakeholders, an appropriately located 'Park and Ride/Stride' facilities in Naas to serve both commuters and local trip makers on journeys into and out of the town.									'Park and Ride/Stride' facilities will impact population and human health positively. Air, Noise and Climate will also be impacted positively as there will be decreased levels of traffic. At this stage of the development it is not possible to confirm whether the development will have a positive or a negative effect on biodiversity, land & soils, water, heritage, landscape & visual or material assets.
Walking and Cycling										
Policy MT2	It is the policy of the Council to promote enhanced permeability for pedestrians and cyclists within Naas in order to improve access to residential areas, the town centre, schools, recreational facilities, employment hubs, shops, public transport services and other amenities.									Enhanced permeability for pedestrians and cyclists will result in a positive impact for population and human health. Air, noise and climate are also likely to be positively impacted by this objective, as it will result in reduced traffic levels and increased adoption of walking and cycling.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
	This includes providing improved connectivity across the Grand Canal and enhanced links through the Northwest Quadrant, Canal Harbour and east-west links through the town.									It is not possible to determine the impact on biodiversity, land & soils, water, air, noise & climate, heritage, landscape & visual and material assets at this stage of the development.
MTO 2.1	Support and promote the use of sustainable active transport modes in Naas and seek to provide for a connected network of walking and cycling infrastructure in the town in conjunction with the National Transport Authority and other statutory agencies, and to promote Naas as 'model town' for active transport.									Through maximising connectivity for pedestrians and cyclists, a positive impact on population and human health and air noise and climate is anticipated through increased sustainable transport opportunities. It is assumed that the strategic links in existing areas here refers to pedestrian and cyclist links, which constitute minor development. A neutral impact on the environment is therefore anticipated.
MTO 2.2	Identify opportunities to create local permeability routes within existing housing developments where appropriate. This shall be carried out in the context of a Permeability Strategy for the entire town, the preparation of which will be commenced within 12 months of the adoption of the Plan.									The provision of local permeability routes is considered minor development and is not likely to result in a negative impact on the environment. A positive impact on population and human health is anticipated through the provision of more direct access routes.
MTO 2.3	Ensure footpaths in the town provide adequate access for persons with a disability or who have impaired mobility.									This objective is likely to result in a neutral impact on the environment, in general. A positive impact on population and human health is predicted through provision of a more accessible public realm.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
MTO 2.4	Maximise connectivity for pedestrians and cyclists in Core Regeneration Areas and Key Development Areas and identify strategic links in existing areas in order to maximise access to local services, schools, transport services and amenities.									This objective is likely to result in a positive impact on population and human health and air, noise and climate through maximised access to local services, schools, transport service and amenities for pedestrians and cyclists. The impact on biodiversity, land & soils, water, heritage, landscape & visual and material assets will be neutral, as these areas have previously been designated as Core Regeneration Areas and Key Development Areas.
MTO 2.5	Continue to work with Waterways Ireland to progress the delivery of: Naas to Sallins Greenway Naas to Corbally Harbour Greenway									A greenway is a strip of undeveloped land near an urban area, set aside for recreational use or environmental protection. As a result, the delivery of these greenways will positively impact biodiversity, air, noise and climate. The impact on population and human health is likely to be positive due to the provision of recreational use lands.
MTO 2.6	Support cycling as a more convenient and safe method of transport by working with the National Transport Authority to implement the Greater Dublin Area Cycle Network Plan proposals for Naas identified in Table 4.1 and on Map 4.1.									This objective further contributes to the Plan provisions relating to the enhancement and provision of public transport facilities. As the GDA Cycle Network Plan has already been subject to an independent SEA, and as sections of the proposed cycle network are already provided for in the Draft Plan, no significant negative impacts on the environment are anticipated.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
										A positive impact on population and human health in anticipated following the fulfilment of the GDA cycle network.
MTO 2.7	Create new pedestrian and cycle links across the Grand Canal that enhance connectivity in the area and links residential areas, the town centre, community facilities and public spaces/amenities. Options will be explored in further detail and subject to ecological analysis and assessment (Map 4.1).									A positive impact on population and human health and air, noise and climate is likely as there will be reduced traffic levels and increased connectivity in the area, through increased pedestrian and cycle links. Biodiversity, land & soils, water, heritage, landscape & visual and material assets will be neutrally affected.
MTO 2.8	Ensure that all development within Naas allows for connectivity (pedestrian, cyclist and vehicular) to adjacent lands in accordance with the National Transport Authority's Permeability Best Practice Guide (2015).									Through maximising connectivity for pedestrians and cyclists, a positive impact on population and human health and air noise and climate is anticipated through increased sustainable transport opportunities.
MTO 2.9	To provide adequate, secure and sheltered bicycle parking facilities at appropriate locations at: In the town centre; Employment areas; Designated neighbourhood centres Adjacent to heritage, community and amenity destinations.									A positive impact on population and human health, and air noise and climate are predicted through the provision of sustainable transport facilities. Provision of bicycle parking constitutes development of a minor scale, a neutral impact on other aspects of the environment is therefore anticipated.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
MTO 2.10	Promote the town centre as a pedestrian/cyclist friendly area and to investigate the feasibility of pedestrianisation at the following locations: Poplar Square Market Square St. John's Lane connecting Main Street to Corban's Lane.									The promotion of a modal shift from private vehicle use to sustainable forms of transport is likely to result in a positive impact on population and human health, as well as air noise and climate. The promotion of these facilities is expected to have a neutral impact on other aspects of the environment.
MTO 2.11	Seek to improve and promote looped walks in conjunction with Sli na Sláinte and other relevant bodies recognising them as important health and recreation infrastructure within the town.									A positive impact on population and human health as well as air noise and climate are predicted through the improvement and promotion of walkways. The improvement and promotion of these walkways is expected to have a neutral impact on other aspects of the environment.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
MTO 2.12	Seek to retain the character of Rathasker Road, Craddockstown and other rural links on the outskirts of the town and to develop them as a connected series of walking routes in conjunction with Sli na Sláinte and other relevant bodies.									This objective is likely to result in a positive impact on the environment, in general. The retention of the rural character of these areas means that there will be little or no potential for greenfield development and will ensure the maintenance of the natural environment.
Parking										
Policy MT3	It is the policy of the Council to manage the provision of car parking to provide for the needs of residents, business and visitors to Naas Town Centre.									Management of car parking in the town will positively impact population and human health, as this provision will help to fulfil the needs of residents, business and visitors. Limiting the provision of parking has the potential to positively impact air, noise and climate due to possible discouragement private car use. The policy is expected to have a neutral impact on other aspects of the environment.
MTO 3.1	Apply the parking standards in the Kildare County Development Plan, and relevant Section 28 Guidelines, to all applications for planning permission.									This is existing policy, and therefore represents the baseline situation. A neutral Environmental impact is envisaged.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
MTO 3.2	To support the provision of strategically located 'Park and Stride' and 'Park and Ride' sites conveniently located to the town centre/schools/amenities and employment areas as an alternative to providing additional car parking within the town centre.									The provision of 'Park and Stride' and 'Park and Ride' sites conveniently located to various amenities and facilities will positively affect population and human health and air noise and climate. This is due to reduced reliance on private car and increased reliance on sustainable modes of transport. It is yet to be determined what impact this objective will have on other areas of the environment, including biodiversity, land and soils, water, heritage, landscape and visual and material assets as the location of these provisions is unknown.
Public Transport										
Policy MT4	It is the policy of the Council to promote the sustainable development of Naas by supporting and guiding the relevant national agencies in delivering improvements to the public transport network and to public transport services.									By supporting and guising the delivery of improvements to the public transport network and services, population and human health will be impacted positively, as will air, noise and the climate. It is yet to be determined what impact this policy will have on other aspects of the environment as the location of these improvements is unknown.
MTO 4.1	Secure the implementation of major public transport projects identified in the Transport Strategy for the Greater Dublin Area 2016-2035.									The Transport Strategy for the GDA has already been subject to an independent SEA. As such, a neutral impact on the environment is predicted.
MTO 4.2	Promote the provision of improved public transport services and facilities to serve the population of Naas through ongoing liaison with the Department of Transport, Tourism and Sport, TII, the NTA, other statutory agencies and public transport providers.									Promotion of the provision of improved public transport services and facilities is likely to have a positive impact on the population and human health and air, noise and climate. This objective will have a neutral impact on biodiversity, land and soils, water, air, noise and climate, heritage, landscape and visual and material assets.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
MTO 4.3	Focus people intensive land uses around and close to existing and planned public transport nodes and improve access to services.									It is not possible to ascertain whether this objective relates to greenfield development, or development on already zoned or development lands. As such an 'unknown' impact is predicted. A positive impact on population and human health and air, noise and climate is likely to occur through the provision of residential or employment opportunities in close proximity to sustainable transport nodes.
MTO 4.4	Support the provision of new or upgraded public transport infrastructure in Naas.									The provision of public transport infrastructure is likely to generate a positive impact on population and human health as well as air, noise and climate is predicted through increased and variable modes of transport and a reduced dependency on private vehicles. It is yet to be determined what impact this policy will have on other aspects of the environment as the location of the infrastructure is unknown.
MTO 4.5	Engage and co-operate with the NTA, Dublin Bus, Irish Rail, Local Link and other stakeholders to improve the provision of public transport in Naas including the delivery of a bus link between Naas and Sallins Train Station, 'Park and Ride/Stride' facilities, and the provision of bus priority measures to ensure the improved movement of bus services through the town centre and local neighbourhoods.									The provision of public transport infrastructure constitutes development of a minor nature, and a generally neutral impact on the environment is predicted. A positive impact on population and human health as well as air, noise and climate are predicted through increased and variable modes of transport and a reduced dependency on private vehicles.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
MTO 4.6	Support infrastructural improvements to the railway including the 4-tracking the line to Kildare and electrification of the Dublin –Cork Railway line, subject to planning and environmental considerations.									Improved railway infrastructure is likely to have a positive impact on the population and human health. Electrification of the Dublin-Cork railway will have a positive impact on air, noise and particularly climate, due to reduced use of fossil fuels. It is yet to be determined whether infrastructural improvements will have a positive or a negative impact on other aspects of the environment.
MTO 4.7	Provide a priority bus route (in conjunction with statutory providers) in particular on the Dublin and Sallins Road linking Sallins Train Station, Naas Town Centre and Millennium Park.									The provision of a priority bus route will result in a positive impact on population and human health and air, noise and climate as connectivity will be increased thereby reducing emissions and noise. A neutral impact on other environmental aspects is expected due to the use of existing infrastructure.
MTO 4.8	Support the provision of a public transport interchange adjacent to, or in close proximity to Main Street linking existing residential areas and key expansion areas to the town centre and educational and community facilities.									This provision would have a positive impact on population and human health and air, noise and climate due to increased access from expansion areas and residential areas. It is yet to be determined whether possible infrastructural improvements will have a positive or a negative impact on other aspects of the environment.
MTO 4.9	Support in conjunction with Irish Rail, the extension of Sallins Train Station or its relocation to the west of the existing station and the development of an ancillary 'Park and Ride' facility to serve the population of Naas and the wider region.									This provision would have a positive impact on population and human health and air, noise and climate due to the promotion of the use of public transport. It is yet to be determined whether possible infrastructural improvements will have a positive or a negative impact on other aspects of the environment.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
Road and Street Network										
Policy MT5	It is the policy of the Council to maintain, improve and extend the local road network in and around Naas to ensure a high standard of connectivity and safety for all road users.									Maintenance, improvements and extensions to the local road network will have a positive impact on the population and human health due to increased connectivity. Potential impacts on other environmental aspects are uncertain as the location of possible extensions is yet to be confirmed.
MTO 5.1	Maintain and improve, as required, the local road network to ensure a high standard of road quality and safety in accordance with the requirements of this Plan and relevant legislation.									The maintenance and improvement of existing roads constitutes development of a minor nature and a neutral impact on the environment, in general is predicted. A positive impact on population and human health is predicted through enhanced road quality and safety.
MTO 5.2	Secure the delivery of road projects indicated in Table 4.2 (refer to Section 4.8) and the Movement and Transportation Map 4.1 and where necessary to preserve identified routes free from development. Each project should be subject to appropriate environmental assessments.									The development of new roads in the LAP area has the potential to result in a negative impact on the environment, in general. However, as these projects will be subject to the appropriate environmental assessment, it is likely that potential impacts can be mitigated, refer to Table 8.1 for mitigation measures. A positive impact on population and human health is predicted through the provision of new infrastructure. A neutral impact on material assets is predicted as the development is not likely to result in any strain on existing utilities.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
MTO 5.3	Investigate the development of a street network within the Northwest Quadrant by way of a Masterplan (as set out in Section 8.6.2) including improved accessibility over the canal and access to the town centre and Sallins Train Station to facilitate increased permeability and connectivity.									This objective does not relate to development within the lifetime of the plan. The proposed new access routes will become part of the final proposed masterplan and will be subject to an independent SEA. As such, a neutral impact on the environment is predicted during the lifetime of this plan. It should be noted that any development in close proximity/over the Grand Canal has the potential to result in a negative impact on water, as well as biodiversity.
MTO 5.4	Improve connectivity between the outer areas of the town through the planning and delivery of orbital connections between the existing radial road network.									The development of new roads in the LAP area has the potential to result in a negative impact on the environment, in general. Refer to Table 8.1 for mitigation measures. A positive impact on population and human health is predicted through the provision of new infrastructure. A neutral impact on material assets are predicted as the development is not likely to result in any strain on existing utilities.
MTO 5.5	Investigate the requirements and provision of additional and/or consolidated off-street public car parking on the approaches to the town centre.									This objective does not make direct provisions or requirements for off-street public car parking within the lifetime of the plan, rather the investigation of the feasibility of the same. A neutral impact on the environment in general is therefore predicted.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
MTO 5.6	Ensure that development proposals within Core Regeneration Areas, Key Development Areas and the Northwest Quadrant are subject to Traffic Impact Assessment (TIA), to be carried out in accordance with the Traffic and Transport Assessment Guidelines (2014). The requirement for all other developments will be determined on a case by case basis.									This objective is likely to result in a positive impact on population and human health as TIA's would work to reduce the impact of traffic in these areas, while ensuring compliance with local and national transport policies and objectives.
MTO 5.7	Examine the feasibility of realigning/raising the Newbridge Road (R445) at the point of crossing of the canal at Jigginstown to be of a sufficient height so as not to hinder the future passage of boats and barges.									This objective, centres around examining feasibility, therefore it does not involve development within the lifetime of the plan. A neutral impact on the environment is therefore anticipated.
MTO 5.8	Seek to implement traffic management measures on the Newbridge and Dublin Roads in accordance with the principles of DMURS (2013) to signal the transition into an urban area and to encourage unnecessary traffic to travel on the Distributor Roads where possible as an alternative to using the town centre as a through route.									This measure will have a positive impact on population and human health and also on air, noise and climate due to the decreased levels of unnecessary traffic travelling through Naas. A neutral impact on biodiversity, land and soils, water, heritage, landscape and visual and material assets is expected.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
Strategic Road Connections										
Policy MT6	It is the policy of the Council to plan for the long term needs of Naas in its regional role and context and to provide improvement capacity and movement on strategic routes in order to reduce congestion in the town and to improve connections to the national road network.									It is not possible to determine the impact of this policy at this stage of the development, however there is likely to be a positive impact on population and human health and air, noise and climate due to reduced congestion in town and improved connections to the national road network.
MTO 6.1	Investigate the feasibility of providing an outer eastern relief road connecting Junction 8 (Johnstown Interchange) with Junction 10 (Newhall Interchange) with the aim of providing an alternative route to relieve pressure on the town centre and eastern area of the town.									This objective does not relate to development within the lifetime of the plan – as it relates to investigating the feasibility of providing a road. A neutral impact on the environment in general is therefore anticipated.
MTO 6.2	To support the long-term provision of a Leinster Outer Orbital Route from Drogheda to the Naas/ Newbridge area.									This objective is likely to result in a neutral impact on the environment in general, as it does not constitute development within the lifetime of the plan.
MTO 6.3	Facilitate and progress the construction of the roads/streets identified in Table 4.2 and on Map 4.1 and in the interim to protect these routes from development. Each project should be subject to appropriate environmental assessments.									The development of new roads in the LAP area has the potential to result in a negative impact on the environment, in general. Refer to Table 8.1 for mitigation measures. A positive impact on population and human health is predicted through the provision of new infrastructure.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
										A neutral impact on water and material assets is predicted- the proposed new roads objectives do not appear to be in close proximity to any water bodies, and the development is not likely to result in any strain on existing utilities.
MTO 6.4	Investigate the feasibility of providing pedestrian/cyclist/public transport bridge crossings over the Grand Canal to connect the areas including the Canal Harbour, North West Quadrant, Millennium Park and the Town Centre. Such crossings should be cognisant of views and the ecology along the Canal must be of a high design standard and would enhance the urban setting and connectivity of Naas. Indicative locations are shown on Map 4.1.									As this objective is only at the feasibility stage, there will be a neutral impact on all SEA environmental aspects.
Enterprise and Economic Development										
Policy ED1	*It is the policy of the Council to support the development of Naas as the enterprise and employment hub for County Kildare, increase the number of jobs located within the town, reduce commuting and ensure new employment development contributes towards reducing carbon output.*									Increasing the number of jobs located within the town will have a direct positive impact on population and human health. The reduction of commuting and ensuring new employment development contributes towards reducing carbon output will have a positive impact on air, noise and climate. This policy will neutrally impact biodiversity, land and soils, water, heritage, landscape and visual and material assets.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
EDO 1.1	Incentivise employment creation on lands zoned 'A: Town Centre' as a key driver of regeneration, including through a review of the Development Contribution Scheme.									This objective is likely to result in a positive impact on population and human health through provision of employment opportunities and through the revitalisation of the economic core of the town. As no site-specific development is proposed, an overall neutral impact on the environment is predicted.
EDO 1.2	Promote enterprise and employment development in the Northwest Quadrant, focusing on high-tech manufacturing and research, ICT, food science and production, public administration, banking, tourism and bloodstock.									For lands that are already zoned for enterprise and employment, a neutral impact on the environment, and a positive impact on population and human health, is anticipated. However, if the lands are not zoned for enterprise and employment, the impact of this objective is uncertain. In this case, further investigations will be necessary at a later stage of the development.
EDO 1.3	Support the development of Mid-East Region Innovation Think Space [MERITS] in Devoy Park and to support the creation of economic linkages between all scales of local businesses through this enterprise and incubation hub.									This objective is likely to have a neutral impact on the environment, in general. A positive impact on population and human health is envisaged, particularly for local business owners, through enhanced economic linkages.
EDO 1.4	Encourage new industry, warehousing and employment use to develop in a comprehensive and sequential manner which uses existing infrastructure effectively and efficiently.									This objective is likely to result in a positive impact on population and human health and material assets in that it will ensure that there will be no strain on utilities in the area as a result of employment-based development.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
EDO 1.5	Engage with IDA Ireland and the Department for Enterprise, Trade and Investment in seeking to attract Foreign Direct Investment into the Northwest quadrant and elsewhere in the town, in line with the Mid-East Region's Enterprise Plan.									This objective will result in a positive impact on population and human health due to the provision of further employment opportunities. A neutral impact on the environment in general is anticipated.
EDO 1.6	Require new enterprise, employment, industrial and warehousing uses to facilitate, improve or create pedestrian and cycle linkages to public transport hubs and the town centre in accordance with the Permeability Best Practice Guide, NTA.									This objective is likely to result in a positive impact on population and human health as well as air, noise and climate through the provision and encouragement of sustainable transport in the LAP area. Development of any cycle infrastructure is considered minor development and will likely result on an overall neutral impact on the environment.
EDO 1.7	Ensure new enterprise and employment uses provide sustainable travel plans to reduce the dependency on private modes of travel consistent with the principles set out in the National Transport Authority guidance: 'Achieving Effective Workplace Travel Plans'.									This objective is likely to result in a positive impact on population and human health as well as air, noise and climate through the provision and encouragement of sustainable transport in the LAP area.
EDO 1.8	Facilitate the regeneration and redevelopment of the lands to the east of the Dublin Road roundabout, in particular Donnelly Mirrors and former Cemex Concrete sites									The lands in question are already zoned for Industry and Warehousing under the existing Naas Town Development Plan. As such, an overall neutral impact on the environment is predicted. A positive impact on population and human health is predicted through the development of employment opportunities.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
										The redevelopment of brownfield sites has the potential to result in a positive impact on land and soils it involves the remediation of potentially contaminated land.
Tourism										
Policy ED2	It is the policy of the Council to support and facilitate existing amenities and the development of sustainable tourism attractions and activities in Naas.									Increased tourism attractions and activities will have a positive impact on population due to increased revenue entering and circulating within Naas. The impact on the environment should be positive due to the emphasis on sustainability.
EDO 2.1	Support and facilitate the development of an integrated network of greenways and heritage trails, including along the Corbally and Naas branches of the Grand Canal.									This objective has the potential to result in a negative impact on biodiversity. As outlined in the Dublin City Biodiversity Plan 2015, and as reiterated by the National Parks and Wildlife Services (NPWS), '*walkways and cycle-way plans can, if insensitively designed, lead to habitat loss or fragmentation in sensitive areas, such as riparian zones, or result in disturbance to sensitive species such as otters and bats, through light pollution or increased human access to breeding or resting places*.' Refer to Table 8.1 for mitigation measures. This objective will likely result in a positive impact on population and human health through provision of recreational and tourism opportunities.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
										It is unknown if the proposed heritage trails will result in any negative impact on the heritage of the local area.
EDO 2.2	Encourage the development of tourism activities such as waterways activities, cultural and agri-tourism, equine tourism and food markets in Naas.									This objective is likely to result in a positive impact on population and human health through provision and enhancement of the amenity value of the area. As the waterways and other forms of proposed activities are not fully defined at this time, it is not possible to fully ascertain the impacts of the same on water quality and biodiversity- aquatic biodiversity in particular.
EDO 2.3	Facilitate the provision of standardised signage and interpretation for tourism facilities and tourist attractions throughout the town.									This objective is likely to result in an overall neutral impact on the environment- the erection of signage constitutes minor development. A positive impact on population and human health is envisaged through the enhanced identification and encouragement of use of tourism facilities and attractions throughout the town.
EDO 2.4	Support the development of new tourist facilities or upgrading/extension of existing tourist facilities.									It is assumed, by the use of the term sustainable development here, that any proposed extensions would be subject to any relevant environmental assessments required and would have regard to any environmental constraints. It is also assumed that this objective does not relate to any greenfield development. As a result, an overall neutral impact on the environment is envisaged. A positive impact on population and human health is likely to occur, through enhanced tourism facilities in the area.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
EDO 2.5	Support the development of the Fairgreen and the Lakelands area for tourism, leisure and amenity uses and events.									The Fairgreen and lakelands are currently zoned for 'open space and amenity' under the existing Naas Town Development Plan and as such, a neutral impact on the environment in general is predicted. A positive impact on population and human health is predicted through enhanced tourism and amenity activities in the area.
EDO 2.6	Encourage appropriate development proposals for St David's Castle, Jigginstown Castle, Leinster Mills and The Moat Theatre and investigate the tourism potential and opportunities for these sites.									This objective is likely to result in a neutral impact on the environment, in general. A positive impact on population and human health is predicted through enhancement of tourism opportunities.
EDO 2.7	Support the re-use of the Eir building on Abbey Street for a mix of uses e.g. cultural, community, leisure and/or tourism.									As Abbey Street makes up part of the ACA of Naas, it is not possible to fully ascertain whether there will be any impact on heritage as a result of this objective. A positive impact on population and human health is predicted through new cultural, leisure and tourism opportunities.
EDO 2.8	Support Naas' status as a 'purple flag' night-time economy and as a high-quality night-time destination.									This objective is likely to result in a neutral impact on the environment, in general. A positive impact on population and human health is predicted through increased tourism and recreational opportunities. It is not possible to ascertain whether this objective will result in a negative impact on nigh time noise levels in the town.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
EDO 2.9	Support the diversification and intensification of employment opportunities in the equine and agriculture industries in Naas and further develop linkages between the equine and tourism industries.									The diversification and intensification of employment opportunities will have a positive impact on population and human health. A neutral impact on the environment is predicted through increased employment in agriculture and equine industries and developed linkages between the equine and tourism industries.
EDO 2.10	To work in conjunction with Kildare Fáilte to develop a local museum/tourist information centre within the town centre.									A local museum or tourist information centre would positively impact both local and tourist populations. There would be a neutral impact of this objective on the environment.
Retail										
Policy ED3	It is the policy of the Council to support the Level 2 Twin County Town Centre retail function of Naas and to consolidate existing retail development and to develop/regenerate opportunity sites/areas within the town centre.									Supporting further retail functions of Naas and consolidating existing retail development in Naas will positively impact population and human health. Development and regeneration of sites and areas within the town centre will also impact positively on population and human health. There will be a neutral impact on the environment due to this objective.
EDO 3.1	Protect and promote the viability of the Core Retail Area, and to ensure that it remains the primary location for retail development in Naas.									This objective is likely to result in a neutral impact on the environment, in general. A positive impact on population and human health is envisaged through the provision and maintenance of a centralised retail core.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
EDO 3.2	Retain the retail function at ground floor level in the Core Retail Area and prohibit development that would either individually or cumulatively undermine the Core Retail Area, with the exception of addressing vacancy.									Retention of retail would have a positive impact on population and human health while the environment would be neutrally impacted.
EDO 3.3	Restrict retail development outside the Core Retail Area in accordance with Section 5.5 of the LAP, the County Development Plan, relevant regional policy frameworks and the Retail Planning Guidelines (DECLG, 2012).									It is predicted that this action would positively impact population and human health, as retail would only be permitted in these areas, ensuring that space is left available outside these areas for other key facilities and services. This objective will have a neutral impact on biodiversity, land and soils, water, air, noise and climate, heritage, landscape and visual and material assets.
EDO 3.4	Facilitate the redevelopment or re-use of the Corban's Lane Shopping Centre site for a mix of town centre uses in accordance with Section 8 of this plan and through the use of the Council's statutory powers, where appropriate under the Derelict Sites Act 1990 and Urban Regeneration and Housing Act 2015, to stimulate use and development of this site.									This objective is likely to result in a neutral impact on the environment in general through increased retail opportunity. A positive impact on population and human health is predicted, as reuse and redevelopment of the shopping centre will result in increased facilities and services for the population of Naas.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
EDO 3.5	Manage the development of undesirable uses such as fast food outlets, amusement arcades, off-licences, bookmakers, and of other non-retail uses in the interest of protecting the vibrancy, residential amenity and public realm of Naas Town Centre.									The management of undesirable amenities will impact the population and human health positively. The impact of this objective on the environment will be neutral.
EDO 3.6	Facilitate the development of new neighbourhood centre at an appropriate location in conjunction with the development of a new urban expansion area in the Northwest Quadrant and in accordance with an agreed Masterplan for the area.									As this proposed development is already zoned under the existing Naas Town Development Plan, a neutral impact on the environment is predicted. A positive impact on population and human health is predicted through the development of a new neighbourhood centre.
EDO 3.7	Ensure that traditional/historic shop fronts are retained and restored, and that new shopfront design contributes positively to and enhances the streetscape.									Retention and restoration of traditional and historic shop fronts will impact heritage of Naas positively. Shopfront design that enhances the streetscape will positively impact the population and human health and the landscape and visual aspect of the environment. Biodiversity, land and soils, water, air, noise and climate and material assets will all be impacted neutrally.
EDO3.8	Encourage and facilitate the re-use and regeneration of derelict or underutilised lands and buildings in the town centre for retail and other town centre uses, with due regard for the character, heritage and design requirements of the Architectural Conservation Area, Statement of Character.									The re-development and regeneration the town will have a positive impact on population and human health, as well as air quality and climate as it discourages urban sprawl, reduces traffic movements, enhances the public realm and encourages more sustainable transport methods.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
										The predicted impact on heritage here will also likely be neutral in considering the Councils commitment to have cognisance of the character, heritage and design requirements of the Architectural Conservation Area (ACA). The redevelopment of brownfield sites has the potential to result in a positive impact on land and soils it involves the remediation of potentially contaminated land. A high population density in Naas town centre could however put a strain on material assets, however the recent upgrade to Osberstown WWTP should accommodate all development proposed under the plan. High density housing can also result in a landscape and visual impact if residential units are too intrusive- the scale or density of development is not known. Refer to Table 8.1 for mitigation measures.
EDO 3.9	Support the development of retail-led tourism associated with the natural and built heritage assets of Naas.									This objective is likely to result in a positive impact on population and human health through the provision of retail opportunity.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
Archaeological Heritage										
Policy BNH1	It is the policy of the Council to safeguard the archaeological heritage in Naas and avoid negative impacts on sites, monuments, features or objects of significant historical or archaeological interest.									This policy will ensure that heritage in the area is positively impacted, as well as population and human health. The landscape and visual of the area should be impacted positively as sites, monuments, features or objects of significant historical or archaeological significance are protected. Biodiversity, land and soils, water, air, noise and climate and material assets are predicted to be impacted neutrally.
Policy BNH2	It is the policy of the Council to retain where possible the existing street layout, historic building lines and traditional plot widths where these derive from medieval or earlier origins.									Retention of street layouts, historic building lines and plot widths to align with their medieval and earlier origins will positively impact on heritage of Naas. It is predicted that population and human health, biodiversity, land and soils, water, air noise and climate and material assets will be impacted neutrally.
BNH 1.1	Protect and preserve items of archaeological interest listed in Table 6.1 and shown on the Map 6.1 from inappropriate development that would adversely affect and/or detract from the interpretation and setting of these sites.									This objective is likely to result in a neutral impact on the environment in general, and a positive impact on heritage through increased conservation and protection efforts and landscape and visual through maintenance of the existing character of the town centre and ACA.
BNH 1.2	Progress in conjunction with the OPW the preservation and development of Jigginstown Castle (National Monument) as an attraction and training facility and to make it and the surrounding area accessible to the public as a tourist/training/open space attraction.									This objective is likely to result in a neutral impact on the environment in general, and a positive impact on heritage through increased conservation and protection efforts. A positive impact on population and human health is predicted through increased tourism and commercial opportunities.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
	Support the preparation of a Conservation Plan for Jigginstown Castle.									
BNH 1.3:	Protect the historic core of Naas and retain where possible the existing street layout, historic building lines, traditional plot widths and medieval walls where these derive from medieval origins.									This objective is likely to result in a neutral impact on the environment in general, and a positive impact on heritage through increased conservation and protection efforts and landscape and visual through maintenance of the existing character of the town centre and ACA.
BNH 1.4:	Ensure proposals contribute towards the protection and preservation of the archaeological value of sites including underwater sites associated with the Grand Canal.									This objective is likely to result in a neutral impact on the environment in general, and a positive impact on heritage through increased conservation and protection efforts.
BNH 1.5	Provide for the protection of historic burial grounds within Naas in co-operation with agencies such as the Office of Public Works and the National Monuments Section of the Department of the Culture, Heritage, and the Gaeltacht.									This objective is likely to result in a neutral impact on the environment in general, and a positive impact on heritage through increased conservation and protection efforts.
BNH 1.6:	Seek the preparation and implementation of heritage led regeneration plans (including the public realm) in Naas's historic core, through funding sources such as the Historic Towns Initiative and the Urban Regeneration Development Fund.									This objective is likely to result in a neutral impact on the environment in general, and a positive impact on heritage through increased conservation and protection efforts. A positive impact on population and human health as well as landscape and visual is anticipated through the implementation of heritage led regeneration plans for the town centre.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
Protected Structures										
Policy BNH3	It is the policy of the Council to preserve and enhance the buildings identified on the Record of Protected Structures and to carefully consider any proposals for development that would affect the special value of such structures, including their historic curtilage, both directly and indirectly.									Preservation and enhancement of buildings on the Record of Protected Structures will positively impact the heritage of Naas. It is predicted that this policy will impact the population and human health, biodiversity, land and soils, water, air, noise and climate, landscape and visual and material assets neutrally.
BNH 2.1	Ensure the protection and preservation of all protected structures, (or parts of structures) including the curtilage and attendant grounds of structures contained in the Record of Protected Structures (refer to Map 6.2 and Map 6.2a).									This objective is likely to result in a neutral impact on the environment in general, and a positive impact on heritage through increased conservation and protection efforts.
BNH 2.2	Support the sensitive conservation of protected structures, their curtilage and attendant grounds, and to operate flexibility with regard to the use of these buildings to facilitate their ongoing use, subject to good conservation principles.									This objective is likely to result in a neutral impact on the environment in general, and a positive impact on heritage through increased conservation and protection efforts.
BNH 2.3	Raise awareness of the unique built heritage of Naas by facilitating conservation interpretation and management projects; such as ‘Open House Tours’									This objective is likely to result in a neutral impact on the environment in general, and a positive impact on heritage through increased conservation and protection efforts.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
BNH 2.4	Proactively address dereliction, endangerment, neglect and vacancy in the town centre through the use of the Council's legal process and through the promotion of appropriate uses and the sensitive conservation of historic buildings;									This objective is likely to result in a neutral impact on the environment in general, and a positive impact on heritage through increased conservation and protection efforts and landscape and visual through improvements to the public realm. A positive impact on population and human health is predicted through provision of new commercial or residential opportunity in the town centre.
Architectural Conservation Area										
Policy BNH4	It is the policy of the Council to protect the character of the Architectural Conservation Area and to carefully consider any proposals for development that would affect the special value of the ACA while providing guidance through the publication of a Statement of Character, to support property owners located within the ACA.									Protection of Architectural Conservation Areas will positively impact heritage in Naas. The publication of a Statement of Character will further promote conservation the heritage of Naas. This enhancement of the ACAs will positively impact the landscape and visual aspect of Naas.
BNH 3.1	Ensure that new development, modifications, extensions and renovation works within or adjacent to Naas ACA is sympathetic to the distinctive character and visual setting of the ACA including views and vistas, streetscapes, building lines, fenestration patterns and architectural features.									This objective is likely to result in a neutral impact on the environment in general, and a positive impact on heritage through increased conservation and protection efforts and landscape and visual through maintenance of the existing character of the ACA.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
BNH 3.2:	Have regard to the Naas ACA Statement and Kildare Shopfront Guidelines (2013) in the consideration of any shopfront or commercial proposals within the ACA. All proposals (contemporary or traditional) must be of high quality design and finish and must contribute positively to the established pattern, scale, materials and proportions of the buildings.									This is existing policy, and therefore represents the baseline situation. A neutral Environmental impact is envisaged.
BNH 3.3:	Support the retention, repair and re-use of materials which characterise the vernacular architecture of the ACA including stone, slate, timber windows and doors, and decorative render.									This objective is likely to result in a neutral impact on the environment in general, and a positive impact on heritage through increased conservation and protection efforts and landscape and visual through maintenance of the existing character of the town and ACA. A positive impact on material assets is predicted as the retention, repair and re-use of materials will contribute positively towards the waste management objectives of the Council.
BNH 3.4	Conserve and enhance the unique characteristics of the laneways of Naas, their place, scale and form and to promote their overall enhancement within the context of a Public Realm Strategy.									Conservation and enhancement of the laneways of Naas will positively impact the population and human health of Naas as well as the heritage and landscape and visual of the town.
BNH 3.5	Protect and conserve important heritage items such as gates, street furniture, post boxes and other significant historic features of interest.									This objective is likely to result in a positive impact on population and human health, heritage and landscape and visual through an enhanced public realm, as well as increased conservation and protection efforts.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
BNH 3.6	Encourage the protection, retention, appreciation and appropriate revitalisation of the vernacular and industrial heritage of Naas.									This objective is likely to result in a positive impact on population and human health, heritage and landscape and visual through an enhanced public realm, as well as increased conservation and protection efforts
BNH 3.7	Promote the use of planned maintenance programmes and the preparation of conservation management plans of historic buildings within the ACA e.g. St David's Castle.									Planned maintenance programmes will positively impact the heritage of Naas, while the preparation of conservation management plans will aid in protection of the heritage of Naas. Protection of local heritage will ensure that the landscape and visual of Naas is positively impacted.
BNH 3.8	Encourage the removal of visually intrusive elements and unnecessary clutter from existing shopfront/façades/commercial premises located within the ACA including: Utility structures; Obsolete/unnecessary lighting, electrics, cables, ducts; Signage (including sign protruding from the façade) at ground and upper floor levels; Internally affixed stickers; Internally illuminated signage.									Visually intrusive elements and unnecessary clutter on existing shopfront/facades/commercial premises negatively impact the heritage, landscape and visual, population and human health. Removal of these elements will have a positive impact on aforementioned SEA environmental objectives of Naas.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
Scenic Routes and Views										
Policy BNH5	It is the policy of the Council to ensure that the proposed location, siting and design of buildings and structures and any mitigation measures identified in the LAP, protect the special character of the identified scenic routes and protected views.									Protection of the special character of identified scenic routes and protected views will result in a direct positive impact on landscape and visual and an indirect positive impact on population and human health, through enjoyment of the landscape and visual.
BNH 4.1	Protect the visual amenity and character of scenic routes and views in Naas and as identified in this LAP and the County Development Plan.									This objective is likely to result in a positive impact on landscape and visual and population and human health through maintenance of the character and amenity value of the LAP area.
BNH 4.2	Require a Visual Impact Assessment of proposals/planning applications for development that may impact on the special character and visual amenity of scenic routes and views as part of the planning application process.									This objective is likely to result in a positive impact on landscape and visual and population and human health through maintenance of the character and amenity value of the LAP area.
Natural Heritage										
Policy NH1	It is the policy of the Council to support the protection of species and habitats that are designated under the Wildlife Acts 1976 and 2000, the Birds Directive 1979 and the Habitats Directive 1992 as well as areas of high local biodiversity value.									Protection of species, habitats and biodiversity will have a direct positive impact on biodiversity, land and soils, water and heritage, in Naas. This policy will result in an indirect positive impact on population and human health in the area.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
NHO 1.1	Protect and enhance the built, natural and recreational potential of the Grand Canal Corridor within Naas and to encourage and promote sustainable access to and enjoyment of the Grand Canal. Any development which may have an impact on the Canal River and Riparian habitats shall be accompanied by an Ecological Impact Assessment.									This objective is likely to result in an overall positive impact on the environment, in general through increased conservation efforts and recreational uses.
NHO 1.2	Maintain a suitable buffer zone along the Grand Canal and other watercourses protecting them from development. The extent and composition of the buffer zone should be determined in consultation with a qualified ecologist and will be informed by Planning for Watercourses in the Urban Environment (SHRFB).									This objective is likely to result in an overall positive impact on the environment, in general, through the enforcement of development restrictions along and in close vicinity to the Grand Canal.
NHO 1.3	Protect and conserve the integrity of soils that supports the rich biodiversity and ecological networks in Naas.									This objective is likely to result in a positive impact on soils, through enhanced protection and conservation efforts. Good soil quality would, by extension, result in a positive impact on water and biodiversity, through the prevention of eutrophication, and on population and human health by ensuring that any produce grown and consumed in these soils is not contaminated.
NHO 1.4										This objective is likely to result in a positive impact on biodiversity through enhanced protection and conservation efforts.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
	Encourage the retention and protection of trees and hedgerows on the approach roads to Naas, in particular those located on Tipper Road, Rathasker Road and Craddockstown Road.									As trees contribute to good air quality in the local ambient environment, a positive impact on air, noise and climate as well as population and human health is predicted. A positive impact on landscape and visual is predicted as this policy promotes maintenance of the baseline environment.
NHO 1.5	Protect the lakes off the Ballymore Road and to consult with National Parks and Wildlife Service prior to undertaking or authorising any works or development that may impact on the natural heritage of the lakes.									This objective is likely to result in a positive impact on water, and biodiversity (particularly aquatic biodiversity) through enhanced protection and conservation efforts. This, in turn, is likely to result in a positive impact on population and human health as the lakes are used for recreational and amenity use.
NHO 1.6	To identify and protect, in co-operation with the relevant statutory agencies and other relevant groups active in Naas, sites of local biodiversity importance (Local Biodiversity Areas), not otherwise protected by legislation.									Identification and protection of sites of local biodiversity importance will positively impact biodiversity and the heritage of the area. It is also predicted that the population and human health will be positively impacted.
NHO1.7	Protect trees and woodlands of particular amenity value from damage and/or degradation									Protection of trees and woodlands will have a neutral impact on population and human health, and on the environment. However, removal of trees and woodlands would have a negative impact on population and human health, biodiversity, air, noise and climate and landscape and visual.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
Green Infrastructure										
Policy GI1	It is the policy of the Council to protect, reinforce and strengthen the Green Infrastructure network in Naas and to strengthen links to the wider regional network.									At this stage of the process it is difficult to determine how this policy will affect population and human health, biodiversity, land and soils, water, air, noise and climate, heritage, landscape and visual and material assets.
GIO 1.1:	Reduce and avoid fragmentation or deterioration of the Green Infrastructure network and strengthen ecological links within Naas and to the wider regional network. Ensure linkages are retained where appropriate and integrated into the design of new developments.									This objective is likely to result in an overall positive impact on the environment, as it relates to the maintenance of the existing green infrastructure network- and by extension maintenance of existing landscape. Strengthened ecological links are likely to result in a positive impact on biodiversity through a reduction in habitat loss.
GIO 1.2:	Preserve, protect and augment trees, groups of trees, woodlands and hedgerows within the town by increasing, where appropriate, tree canopy coverage using locally native species by incorporating them within design proposals and supporting their integration into the existing Green Infrastructure network. Consideration should be given to planting of small areas of woodland or retention of areas of wet grassland / wetland as appropriate.									This objective is likely to result in a positive impact on biodiversity through enhanced protection and conservation efforts. A positive impact on landscape and visual is predicted as this policy promotes maintenance of the baseline environment As trees contribute to good air quality in the local ambient environment, a positive impact on air, noise and climate as well as population and human health is predicted.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
										The preservation and provision of trees within the town centre is likely to result on a positive impact on population and human health as this will contribute to the quality of the public realm.
GIO 1.3:	Require proposals for development to demonstrate how they integrate/respond to Green Infrastructure and contribute to the development and protection of overall Green Infrastructure assets.									Green infrastructure is a broad concept, and includes natural features, such as parks and hedgerows as well as man-made features, such as cycle paths. It is not possible to ascertain the type of green infrastructure being proposed here. Most natural green infrastructure features are likely to result in a positive impact on biodiversity and water, through species and habitat provision, while often man-made features such as greenways can result in a negative impact on existing biodiversity or surface water quality through increased human interaction. Either type of green infrastructure- man made or natural is likely to result in a positive impact on air quality, noise and climate. The provision of natural features will benefit air quality through the provision of additional trees and greenery, and the provision of man-made features such as cycle track will result in increased sustainable transport opportunities in the LAP area.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
										Necessitating development proposals to demonstrate how they will integrate and respond to Green Infrastructure, will encourage clarity in this process which will positively impact the population and human health.
GIO 1.4	Progress the development of a series of green routes/linear corridors that connect amenity and open space areas and the hinterland with new and established areas, with due regard for biodiversity constraints.									Progressing development of green routes or linear corridors will positively impact population and human health as there will be greater access and connectivity between amenities and open spaces and the hinterland with new and established areas. This is predicted to positively impact air, noise and climate, as this may reduce the reliance on traffic and encourage more sustainable modes of transport.
GIO 1.5:	Seek to develop habitat patches/stepping stones within the landscape; to maximise proper connectivity between urban and peri-urban parks and the surrounding rural landscape.									This objective has the potential to result in a positive impact on landscape and visual through reduced development opportunities in the LAP area. This in turn is likely to result in a positive impact on air noise and climate. Reduced development opportunity in the LAP area has the potential to result in a negative impact on population and human health, however this objective could also be considered to have the potential to result in a positive impact on population and human health, through increased recreational and amenity areas. A positive impact on biodiversity in anticipated through provision of habitat in the LAP area.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
GIO 1.6:	Seek to strengthen the ecological linkages with watercourses, the Grand Canal and the surrounding countryside.									Strengthened ecological linkages with the watercourses of the LAP area is likely to result in a positive impact on biodiversity.
GIO 1.7:	Promote a network of paths and cycle tracks to enhance accessibility to the Green Infrastructure network, while ensuring that the design and operation of the routes responds to the ecological protection needs of each site.									A positive impact on population and human health is predicted through increased sustainable transport opportunities. This in turn is likely to result in a positive impact on air, noise and climate. This objective is likely to result in a neutral impact on the environment, in general.
GIO 1.8	Promote best practice with respect to preventing, minimising and controlling the spread of, and eradicating, invasive species.									This is existing policy, and therefore represents the baseline situation. A neutral Environmental impact is envisaged
GIO 1.9	Ensure where the loss of habitats and features of the wider countryside is unavoidable as part of a development that appropriate mitigation and/or compensatory measures are put in place, to conserve and enhance biodiversity and landscape character. In some cases, it may be more effective to carry out mitigation or compensatory measures in another location.									It is not possible to fully ascertain the overall environmental impact of the proposed objective- particularly on biodiversity, air, noise and climate, land and soils and water as it cannot be guaranteed that compensatory measures- such as tree replanting, will provide a similar level of eco-system service or provide a similar level of biodiversity as the existing scenario. Similarly, it is not possible to ascertain whether the proposed objective will negatively impact landscape and visual as it cannot be determined if compensatory measures- such as tree replanting would work to maintain the existing landscape character of the area.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
GIO 1.10	Deliver the green infrastructure routes identified on Map 7.1 through the integration of a network of natural habitat and biodiversity supporting spaces, parkland for passive and active recreational uses, heritage features, sustainable surface water and flood risk management measures.									The integration of a network of natural habitat and biodiversity supporting spaces will positively impact the biodiversity of the area. Integration of heritage features will clearly result in a positive impact on heritage. Further integration of sustainable surface water and flood risk management measures will have a positive impact on water in Naas. Finally, integration of parkland for passive and active recreational uses will have a positive impact on population and human health. General delivery of green infrastructure routes will enhance the landscape and visual of Naas.
Open Spaces										
Policy OS1	It is the policy of the Council to provide for a hierarchy of high quality multi-functional public open spaces and parkland within Naas, and to preserve and protect such spaces through the appropriate zoning of lands.									Provision of multi-functional public open spaces and parklands will have a positive impact on the population and human health of Naas. Preservation and protection of these spaces through zoning of the lands will have a positive impact on the landscape and visual of the lands. It is predicted that this policy will result in a neutral impact on biodiversity, land and soils, water, air, noise and climate, heritage and material assets.
OSO 1.1	Support and facilitate the provision of open spaces with ecological and recreational corridors to aid the movement of biodiversity and people, subject to appropriate environmental assessment.									The provision of open spaces with ecological corridors will result in a positive impact on the biodiversity of Naas. Recreational corridors which aid in the movement of people will positively impact the population and human health of Naas.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
OSO 1.2	Protect lands zoned F: Open Space and Amenity and M: Future Park/Green Wedge on Map 7.3 for a variety of passive and active uses.									Protection of previous lands zoned for open space and amenity and future park/green wedge will have a neutral effect on all SEA environmental objectives.
OSO 1.3	Provide a range of opportunities for active and passive recreation within public open spaces.									This objective is predicted to result in a positive effect on the population and human health.
OSO 1.4	Seek the enhancement of existing wetlands in Naas and encourage the creation of new wetlands and the creation of new wetlands where appropriate, through the provision of Sustainable Drainage Systems (SuDS) and Integrated Constructed Wetlands (ICW).									It is difficult to determine how the creation of new wetlands will impact biodiversity and land and soils in the area. The creation of new wetlands through the provision of Sustainable Drainage Systems (SuDS) is predicted to positively impact water in the area. Wetlands can work as an active carbon sink; therefore, enhancement of existing wetlands and creation of new wetlands could help to reduce carbon emissions. Population and human health, heritage, landscape and visual and material assets have been predicted to be impacted neutrally.
OSO 1.5	Develop links between strategic areas of existing and future green infrastructure including: Along the Grand Canal from Sallins to Naas Harbour and onto Corbally Harbour; Monread Park; The Lakes and Fairgreen; Caragh Road; The River Liffey;									It is predicted that developing links between strategic areas of existing and future green infrastructure will have a positive impact on population and human health, as connectivity will be increased for the people of Naas. It is expected that these links would be developed on existing routes, resulting in a neutral impact on all other environmental aspects.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
	Future town park on 'F1' zoned lands in Sallins Local Area Plan 2016-2022; Kerdiffstown Park.									
OSO 1.6	Require that in the case where it is an absolute necessary to remove mature trees and/or hedgerow that they are replaced with semi mature trees/hedgerow.									Trees and hedgerows can provide habitat and food for birds and animals. Therefore, the necessity of replacing trees and hedgerows which must be removed, will have a positive impact on biodiversity, compared with not replacing the trees or hedgerows. Trees and hedgerows help reduce surface water runoff, thus decreasing soil erosion and the accumulation of sediments in streams. As a result, land and soils and water are impacted positively. Trees and hedgerows can absorb and block noise, absorb particulate matter and greenhouse gases, therefore their inclusion will positively impact air, noise and climate. It is predicted that the replacement of trees and hedgerows will have an indirect positive impact on population and human health and landscape and visual. Heritage and material assets will not be impacted in any significant way.
OSO 1.7	Ensure that the existing topography of the lands is incorporated into the design and overall layout of any development with minimal variations to existing ground levels, in as far as is practicable in development schemes.									Minimisation of ground level variance will have a positive impact on land and soils and air, noise and climate, as soils sequester carbon. When removed or disturbed soils release carbon into the atmosphere, exacerbating climate change.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
										Minimising variations to existing ground levels can also positively impact the heritage of the area, as the local topography is not disturbed.
OSO 1.8	Investigate the feasibility of development of a greenway along the former Tullow Rail Line linking residential and open space areas.									As this objective does not make direct provisions for the development of a greenway within the lifetime of the Plan, but rather the investigation of the feasibility of the same, an overall neutral effect is predicted.
OSO 1.9	Develop links between the lakes within the Oldtown Demesne and the Grand Canal to enhance the overall future park/green wedge area, by contributing to the overall recreational, aesthetic and wellbeing value of the area.									Contributing to the recreational and wellbeing value of the area will positively impact the population and human health. It has been predicted that developing links between the lakes and other areas of the town will have a positive impact on the water of the area, through increased exposure and mobilisation to protect these water bodies. Contributing to the overall aesthetic of the area will clearly have a direct positive impact on the landscape and visual aspect of the area.
OSO 1.11	Investigate the feasibility of the Council acquiring lands for public open space and to co-operate with sporting and recreational bodies in the acquisition of lands.									As this objective does not make direct provisions for the acquisition of lands for public open spaces within the lifetime of the Plan, but rather the investigation of the feasibility of the same, an overall neutral effect is predicted.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
Climate Change Adaptation Objectives										
Policy CC1	It is the policy of the Council to become a low-carbon and climate change resilient town by promoting the economic, social and environmental benefits of low-carbon development, reducing pollution and waste, making effective use of land and using resources efficiently.									This policy will have a robust positive impact on air, noise and climate. The reduction of pollution and waste, in addition to effective use of land and resources will have a direct positive impact on biodiversity, land and soils and water. Landscape and visual will also be positively impacted through the reduction of pollution and waste. This policy will have an overall positive effect on the population and human health due to increased climate change resilience, reduced pollution and waste in the area and efficient use of the land and resources.
CCO 1.1	Support the implementation and adoption of the County Climate Change Adaptation Strategy and promote Naas as a key driver of the transition to a low carbon economy within the County.									This is existing policy, and therefore represents the baseline situation. A neutral Environmental impact is envisaged
CCO 1.2	Support the effective and efficient use of land, prioritising the development of brownfield land in preference to greenfield land.									This objective is likely to result in a positive impact on the environment, in general.
CCO 1.3	Support proposal for new development that seek to ensure they reduce energy use, use energy efficiently and use renewable energies									It is not possible to ascertain whether the proposed development will result in a negative impact on the environment, in general.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
CCO 1.4	Require sustainable or green travel plans in appropriate developments.									This objective is likely to result in a positive impact on population and human health as well as air, noise and climate through increased sustainable transport opportunities.
CCO 1.5	Support proposals for retrofitting buildings that demonstrate a commitment to reducing energy use or use renewable/clean energy sources.									This objective is likely to result in a positive impact on air, noise and climate and material assets through encouraging an increased use of sustainable energy and a reduced dependency on the existing energy supply.
CCO 1.6	Seek integration of positive climate change mitigation and adaptation measures to be considered for all planning applications. Promote use of biodiversity techniques, blue and green walls and roofs and Sustainable Urban Drainage Systems (SuDs) and support the design of developments that minimise the usage of fresh water supplies and harvest 'grey' water for re-use.									Promotion of biodiversity techniques will positively impact biodiversity. Blue and green walls and roofs will increase biodiversity and reduce surface runoff, positively impacting water. The use of Sustainable Urban Drainage Systems (SuDs), the minimisation of fresh water use and the harvest of grey water for reuse will positively impact water, through increased efficiency of water usage. The use of SuDs will have a positive impact on land and soils due to reduce pressure on the soils, resulting in minimised erosion and compaction. Blue and green walls and roofs will positively impact the landscape and visual of Naas, whilst positively impacting population and human health.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
Public Realm										
Policy URD1	It is the policy of the Council to actively encourage, support and facilitate environmental and public realm improvements in Naas to address environmental quality, urban design, architectural character, safety, and traffic impact.									This policy should have an overall positive impact on various aspects of the environment including biodiversity, land and soils, water, air, noise and climate. Public realm improvements which address urban design and architectural character will positively impact landscape and visual. Population and human health will be positively impacted through improvements to safety and traffic.
URD 1.1	Commence the preparation of a Public Realm Strategy for Naas and implement it on a phased basis over the lifetime of the Plan and beyond.									This objective is likely to result in a positive impact on population and human health. The public realm has a significant impact on how a town functions and on its attractiveness as a place in which to live and work, or as a destination for tourism and investment.
URD 1.2	Ensure that the town centre is accessible to all members of the community, including people with disabilities, the elderly and people with young children.									This objective is likely to result in a positive impact on population and human health through compliance with the key universal design principals and provision of a welcoming and inclusive urban centre.
URD 1.3	Actively engage with the community, developers and other agencies to secure resources for the enhancement, renewal and regeneration of the public realm in Naas.									This objective is likely to result in a positive impact on population and human health in that it will foster a sense of community, provide local residents and businesses with commercial and recreational opportunities and result in an enhanced public space.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
URD 1.4	Prioritise the enhancement of the streetscape and heritage assets of the town centre, to continue environmental improvements, to sustain and improve its attraction for living, working, visiting and investment.									This objective is likely to result in a positive impact on population and human health, landscape and visual and heritage, particularly considering the architectural significance of the town centre. This objective is likely to result in a positive impact on the environment, in general.
URD 1.5	Reduce the use of line-marking and signage on along Main Street.									This objective is likely to result in a neutral impact on the environment in general. A positive impact on landscape and visual and heritage is likely, through a reduction in street clutter in the architecturally significant town centre.
URD 1.6	Investigate and explore options as part of the Naas Transport Strategy and Public Realm Strategy including: The potential for developing a one-way, looped system along Main Street. Rebalancing streets to become more pedestrian/cyclist friendly.									This objective Is likely to result in a positive impact on population and human health and air, noise and climate by encouraging a modal shift from private vehicular use to more sustainable forms of transport.
URD 1.7	Actively consider the widening of pavement along suitable portions of North/South Main Streets to incorporate designated urban spaces/squares, parking, set down areas and potential for new tree planting.									The widening of footpaths is likely to result in a positive impact on population and human health in that it will improve the accessibility of the town for those suffering from a mobility impairment. Increased parking will also be beneficial to private car users.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
										The proposal for new tree planting has the potential to result in a positive impact on biodiversity through provision of new habitat.
URD 1.8	Facilitate and promote the extension of and links to the Grand Canal and to optimise the use of the Canal Harbour area.									It is not possible to fully ascertain if the proposed objective would result in a negative impact on biodiversity or water quality- however increased human interaction with natural resources has the potential to result in a negative impact. A positive impact on population and human health in predicted through increased recreational and amenity opportunities.
URD 1.9	Investigate options to connect St David's Church and St David's Castle sites as an integrated heritage site and key tourist/community destination in the centre of the town.									The creation of a heritage site will likely result in a positive impact on heritage, through increased conservation and preservation efforts. A positive impact on population and human health is also predicted through enhance tourism opportunities.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
Regeneration and Urban Development										
Policy URD2	It is the policy of the Council to promote the implementation of the Regeneration and Urban Development Strategy to ensure that planned growth for the town occurs in a sustainable and sequential manner while prioritising a low carbon, compact, consolidated and connected pattern of development in order to realise a vibrant and regenerated town centre; a prosperous, enterprising, dynamic and green economy; supported by an inclusive sustainable all-of-life residential community.									It has been predicted that this policy will result in a positive impact on the population and human health, as the town is developed into a vibrant and regenerated town centre. The emphasis on sustainable development, prioritising low carbon development suggests that the environment will be impacted in a positive manner.
URD 2.1	Promote the town centre as the priority location for commercial, civic, social and cultural development and to promote new infill and backland development that consolidates and regenerates the existing urban core.									The re-development and regeneration the town will have a positive impact on population and human health, as well as air, climate and noise as it discourages urban sprawl, reduces traffic movements, enhances the public realm and encourages more sustainable transport methods. It is not possible to fully ascertain the potential impact on heritage, as a large portion of the town is designated as an Architectural Conservation Area. Development in this area, even re-development or re-generation could negatively impact on sites or buildings of historical or architectural significance.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
										The redevelopment of brownfield sites has the potential to result in a positive impact on land and soils it involves the remediation of potentially contaminated land. A high population density in Naas town centre could however put a strain on material assets, however the recent upgrade to Osberstown WWTP should accommodate all development proposed under the plan. High density housing can also result in a landscape and visual impact if residential units are too intrusive- the scale or density of development is not known. Refer to Table 8.1 for mitigation measures.
URD 2.2	Improve the quality, ambience, vitality and vibrancy of the town centre, through the following: Promotion of an appropriate mix of day and night time uses. Facilitation of development that will attract and retain commercial and retail activities in the town centre.									This objective is likely to result in a neutral impact on the environment, in general. A positive impact on population and human health is predicted through increased tourism and recreational opportunities. It is not possible to ascertain whether this objective will result in a negative impact on nigh time noise levels in the town.
URD 2.3	Ensure that regeneration and new development enhances the character of the townscape and the quality of the public realm. Such development shall also be in keeping with the relevant Urban Design Principles outlined in Section 8.3.2.									Ensuring that the quality of the public realm is enhanced will result in a positive impact on the population and human health. The Landscape and visual and heritage will all be positively impacted through enhancement of the character if the townscape, through use of relevant Urban Design Principles.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
URD 2.4	Encourage full utilisation of buildings and sites, in particular use of upper floors and back lands where appropriate, with due cognisance to quality of urban design, integration and linkages.									The re-development and regeneration of the town will have a positive impact on population and human health, as well as air quality and climate as it discourages urban sprawl, reduces traffic movements, enhances the public realm and encourages more sustainable transport methods. It is not possible to fully ascertain the potential impact on heritage, as a large portion of the town is designated as an Architectural Conservation Area. Development in this area, even re-development or re-generation could negatively impact on sites or buildings of historical or architectural significance. A high population density in Naas town centre could however put a strain on material assets, however the recent upgrade to Osberstown WWTP should accommodate all development proposed under the plan. High density housing can also result in a landscape and visual impact if residential units are too intrusive- the scale or density of development is not known. Refer to Table 8.1 for mitigation measures.
URD 2.5	Require that new development facilitates a connected network of streets and spaces which prioritise pedestrians and cyclists and provide for the possibility of connections to future development on adjacent lands.									This objective is likely to result in a positive impact on population and human health as well as air, noise and climate through the prioritisation and encouragement of sustainable transport initiatives.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
URD 2.6	Ensure that new development in the town centre will only be permitted where it conserves or enhances the existing character of the area and where it is demonstrated that it is of high architectural quality; providing a strong vertical emphasis and incorporating a fine urban grain, with active frontages at ground floor level where appropriate.									This objective is likely to result in a positive impact on heritage through the conservation and preservation of character in the town. This is of particular importance considering the ACA designation in the town centre. The objective will also likely result in a positive impact on population and human health through the subsequent promotion of a high quality urban space.
URD 2.7	Actively engage with the community, land owners, developers and other agencies to secure resources for the enhancement, renewal and regeneration of Naas town centre.									This objective is likely to result in a positive impact on population and human health in that it will foster a sense of community, provide local residents and businesses with commercial and recreational opportunities and result in an enhanced public space.
URD 2.8	Actively seek funding from relevant agencies and Government sources including the Urban Regeneration and Development Fund (URDF) to secure financial support for all regeneration and urban development projects in Naas.									The seeking of funding from relevant agencies and government sources is expected to have a neutral impact on all environmental aspects.
URD 2.9	All development proposals within designated Core Regeneration Areas, Key Development Areas and North West Quadrant must as far as practicable comply with the relevant development objectives and design frameworks set out in this plan.									At this stage of development, it is not possible to ascertain the impact this objective would have.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
URD 2.10	Prepare a Masterplan for the Northwest Quadrant subject to the considerations and specifications outlined in Section 8.6 to ensure that any development within the Northwest Quadrant takes place in a phased, co-ordinated and integrated manner. The Masterplan may be incorporated in to the LAP by way of an amendment or by agreement with the local authority.									The preparation of the Masterplan or amendment to the LAP would require the preparation of an environmental assessment in its own right.
URD 2.11	Investigate the preparation of a Supplementary Development Contribution Scheme for Naas to provide for the delivery of strategic public infrastructure including principal route connections, strategic open space and associated pedestrian, cyclist and community infrastructure in accordance with the provisions of Section 49 of the Planning and Development Act 2000 (as amended).									The delivery of strategic public infrastructure would have a positive impact on the population and human health of Naas. Strategic open spaces and associated pedestrian, cyclist and community infrastructure will positively impact air, noise and climate due to reduced reliance on vehicular movement and increased sustainable transport.
URD 2.12	Actively seek the regeneration of St David's Castle, the Canal Harbour and Abbey Street areas as key visitor and community destinations within Naas Town Centre.									The regeneration of key heritage buildings and areas in Naas town centre will positively impact the heritage and landscape and visual of Naas, while also positively impacting the population and human health of Naas.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
URD 2.13	Ensure that development in both the Canal Bank area of the Canal Quarter and KDA: Naas West are well-integrated and does not close-off any options for future connections.									Ensuring that areas of Naas centre are well integrated and future connections are not broken within the town, will have a positive impact on the population and human health of Naas, as well as positively impacting the landscape and visual of Naas.
URD2.14	Promote and facilitate the re-use of the existing Naas Library (once vacated) by the occupation of an active community use that will complement the vision for the Canal Harbour.									Increased active community facilities would positively impact the population and human health. The impact on the environment in general would be neutral.
Water Supply and Wastewater										
Policy I1	It is the policy of the Council to work in conjunction with Irish Water to protect existing water and wastewater infrastructure in Naas, to maximise the potential of existing capacity and to facilitate the timely delivery of water services infrastructure to facilitate future growth.									Protection of existing water and wastewater infrastructure will positively impact both the population and human health, water quality and material assets of Naas.
IO 1.1	To work in conjunction with Irish Water to promote the ongoing upgrade and maintenance of water supply and wastewater services to meet the future needs of Naas.									This objective is likely to result in a positive impact on population and human health, material assets and water through the sustainable development of water and wastewater treatment infrastructure in the LAP area.
IO 1.2	To seek to ensure that development proposals comply with the standards and requirements of Irish Water in relation to water and wastewater infrastructure.									This is existing policy, and therefore represents the baseline situation. A neutral Environmental impact is envisaged.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
Surface Water and Groundwater										
Policy I2	It is the policy of the Council to maintain and enhance the existing surface water drainage systems in Naas and to protect surface and ground water quality in accordance with the Water Framework Directive.									This policy of maintaining and enhancing existing surface water drainage systems will have appositive impact on water and population and human health.
IO 2.1	Carry out surface water infrastructure improvement works as required.									The enhancement of surface water infrastructure works is, self-evidently, likely to result in a positive impact on water and material assets.
IO 2.2	Incorporate Sustainable Urban Drainage Systems (SUDS) as part of all plans and development proposals in Naas. Proposals for development in KDAs, CRAs and Masterplan areas should address the potential for SuDS at a local and district level to control surface water outfall and protect water quality.									This objective is likely to result in a positive impact on the environment, in general. SuDS can be designed to improve the biodiversity and provide the opportunity for habitat enhancement of an area, as well as improving water quality and controlling water quantity. They also reduce the possibility of flooding in an area and contribute to the successful overall running of utilities in an area.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
IO 2.3	Maintain, improve and enhance the environmental and ecological quality of surface waters and groundwater in Naas in conjunction with the EPA and in accordance with the Eastern River Basin Management Plan and the River Basin Management Plan for Ireland 2018-2021.									This objective is likely to result in a positive impact on the environment in general through the protection and conservation of natural resources.
IO 2.4	Require applicants where necessary to demonstrate that proposals will not negatively impact on the status of a waterbody, in accordance with the requirements of the Water Framework Directive and River Basin Management Plan.									This objective is likely to result in a positive impact on the environment in general thought the protection and conservation of natural resources.
IO 2.5	Encourage 'daylighting'/deculverting and the restoration of culverted water bodies within the town as a natural method of flood management									It is predicted that this objective would have a positive impact on the population and human health of Naas, due to the benefits of daylighting which includes reduced flooding. Land and soils and water would equally benefit from daylighting, as the water bodies would be restored to their natural conditions.
Flood Risk Management										
Policy I3	It is the policy of the Council to manage flood risk in Naas in conjunction with the OPW and in accordance with the requirements of the Planning System and Flood Risk Management Guidelines for Planning Authorities (2009) and circular PL02/2014 (August 2014).									This policy which aims to manage flood risk will positively impact the population and human health and water.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
I0 3.1	Ensure development proposals within the areas outlined on the Flood Risk Map (Map Ref. 9.1) are the subject of Site-Specific Flood Risk Assessment, appropriate to the nature and scale of the development being proposed.									This objective is likely to result in a positive impact on population and human health by reducing the flood-risk of new development in the LAP area. This will also seek to prevent any strain on the existing drainage network.
IO3.2	Support and co-operate with the OPW in delivering the Eastern CFRAM Programme applicable to Naas.									This is existing policy, and therefore represents the baseline situation. A neutral Environmental impact is envisaged.
Energy and Communications										
Policy I4	It is the policy of the Council to promote and facilitate the development and renewal of energy and communications networks in Naas, while protecting the amenities of the town.									Development and renewal of energy and communication networks in Naas, while protecting the amenities of the town will positively impact the population and human health and material assets. At this stage of development, it is not possible to discern the impact this policy will have on the environment.
IO 4.1	Support the statutory providers of national grid infrastructure by safeguarding existing infrastructure and strategic corridors from encroachment by development that might compromise the operation, maintenance and provision of energy networks.									While the provision of energy networks has the potential to result in a positive impact on population and human health, there is also the potential for a negative impact in that the safeguarding of strategic corridors might hinder the progression of other forms of development such as residential or commercial. Thus an 'uncertain' impact is predicted.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
										This objective has the potential to result in a positive impact on material assets through the provision of additional energy capacity in the LAP area.
IO 4.2	Support and facilitate the provision of telecommunications infrastructure in Naas, subject to safety and amenity requirements.									This objective is likely to result in a positive impact on population and human health and material assets through provision of required services.
IO 4.3	Seek the undergrounding of all electricity, telephone and television cables in the town including the town centre and in housing and amenity areas.									A positive impact on population and human health is envisaged as after the installation is done there are only minor limitations regarding land use This objective is likely to result in a positive impact on landscape and visual in that all existing overhead cables would be removed from the LAP area and placed underground- which would be less visually intrusive. A neutral impact on other environmental aspects is expected as the undergrounding will take place in previously developed areas.
IO 4.4	Discourage a proliferation of above-ground utility boxes in the town and to seek screening measures and discreet locations in conjunction with the provision of such structures.									This objective is likely to result in a positive impact on population and human health, landscape and visual as well as heritage in that it will reduce the street clutter in the town centre and improve the urban realm.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
IO 4.5	Promote ~~a~~nd encourage the use of renewable energy technologies for small, medium and large developments of existing and proposed building stock, such as direct heating, micro generation and other renewable energy technologies.									The promotion and encouragement of renewable energy infrastructure is likely to result in an overall positive impact on the environment, in general, as it would play a key role in the Council's climate change mitigation plan. As the type or location of the specific renewable energy infrastructure has not been defined, it is not possible to ascertain whether there will be a negative impact on landscape and visual. Wind farms, for example, have the potential to have a negative impact on landscape and visual.
Pollution and Environmental Services										
Policy I5	It is the policy of the Council to protect environmental quality in Naas through the implementation of European, national and regional policy and legislation relating to air quality, greenhouse gases, climate change, light pollution, noise pollution and waste management.									It has been predicted that this policy will have a positive impact on air, noise and climate. The policy aims to protect environmental quality, through implementation of policy and legislation relating to air quality, greenhouse gases, climate change, light pollution and waste management.
IO 5.1	Maintain recycling facilities and to secure the provision of additional facilities, as required, including in conjunction with new development.									The size, scale or location of the proposed new recycling facilities is not defined and as such it is not possible to ascertain whether this objective will result in a negative impact on the environment.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
IO 5.2	Avoid, prevent or reduce harmful effects on human health and the environment as a whole through promoting the preservation of best ambient air quality with sustainable development.									This objective is likely to result in a positive impact on the environment in general through maintenance of a good quality ambient environment.
IO 5.3	Support local schools, town and community groups such as Naas Tidy Towns through education and awareness programmes and the provision of grant aid.									Support of these groups through education and awareness programmes and the provision of grant aid will have a positive impact on population and human health.
Changes to Zoning										
	Amend the LAP boundary to include: 'F(4): Open Space & Amenity' to the south of the LAP 'L: Leisure & Amenity' to the south of the LAP 'I: Agricultural' to the south of the LAP 'F: Open Space & Amenity' to the south of the LAP									Increasing the zoning footprint of the LAP area to include areas for agriculture, open space, amenity and leisure will result in a neutral impact on the population and the environment, assuming that the land was previously used for these purposes.
	Amend the LAP boundary to include: 'Q1(2): Enterprise & Employment' to the north east of the LAP									As these zonings were included in the Naas Environs Plan contained in the Kildare County Development Plan 2011 – 2017, a neutral impact on the environment is predicted to occur.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
	'R: Retail / Commercial' to the north east of the LAP 'R: Retail / Commercial' to the north of the LAP 'U: Utilities and Services' to the west of the LAP ' 'R: Retail / Commercial' to the south west of the LAP 'E: Community & Education' to the south of the LAP 'E: Community & Education' to the south of the LAP									
	Amend the LAP boundary to include: Q1(8): Enterprise & Employment' to the south west of the LAP 'Q1(9): Enterprise & Employment' to the south west of the LAP									Increasing the zoning footprint of the LAP area to include areas for enterprise and employment will positively impact the population and human health, as these are necessary amenities which the population will benefit from. This change in zoning however has the potential to negatively impact the environment. Refer to Table 8.1 for mitigation measures.
	Amend the LAP boundary to include: 'H: Industry & Warehousing' to the north of the LAP 'H: Industry & Warehousing' to the north of the LAP									As these zonings were included in the Naas Environs Plan contained in the Kildare County Development Plan 2011 – 2017, a neutral impact on the environment is predicted to occur.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
	'H: Industry & Warehousing' to the north west of the LAP 'H: Industry & Warehousing' to the south west of the LAP 'H: Industry & Warehousing' to the south west of the LAP 'H: Industry & Warehousing' to the south west of the LAP 'H: Industry & Warehousing' to the south west of the LAP 'H: Industry & Warehousing' to the south west of the LAP									
	To the north of the Local Area Plan area from 'R: Retail / Commercial' to 'H: Industry & Warehousing' (1.38Ha).									This change in zoning type is predicted not to have a hugely significant impact on either the environment or population and human health.
	To the north east of the Local Area Plan area from 'R1: Retail / Commercial' to 'K(1): Commercial / Residential' (1.33Ha).									The change in this zoning is from retail/commercial to residential/commercial. Therefore, the main adjustment will be the change of use from retail to commercial. This will have a positive impact on population and human health, as further accommodation is made available. It has been predicted that there will be a neutral impact on the environment following this zonal change.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
	To the north east of the Local Area Plan area from 'Q1: Enterprise & Employment' to 'E: Community & Education' (1.2Ha).									The zonal change from enterprise & employment to community & education should have a neutral impact. The change will not benefit or disadvantage the population there is a neutral impact on the population and human health. The change should not impact the environment in any significant way.
	To the east of the Local Area Plan from 'Q: Enterprise and Employment' to 'C1(16): New Residential (Tier 1)' (3.9ha).									This change should not make a significant impact to either the environment or the population of Naas.
	Amendment of the Local Area Plan boundary to the south east of the towns map to lose an area of 'I: Agricultural'.									Agricultural land was lost from the Local Area Plan boundary in this area. However, reducing the zonal footprint of the LAP does not necessarily mean that the land will change use. As a result, it has been predicted that this change will cause a neutral impact.
	To the north of the Local Area Plan area from 'J: Transport & Utilities' to 'K: Commercial / Residential'.									This change of zoned land from transport & utilities to commercial/residential will not necessarily benefit or disadvantage the population or the environment. As a result, a neutral impact has been predicted.
	To the north of the Local Area Plan area from 'J: Transport & Utilities' to 'K: Commercial / Residential'.									Again, as the zonal change will not necessarily benefit or disadvantage the population or environment, a neutral impact has been predicted.
	In the centre of the Northwest Quadrant of the Local Area Plan from 'W: White Land' to 'C2(20): New Residential (Tier 2 Lands)'.									White land is a term which describes land that does not have any specific proposal for allocation in a development plan. As this white land is currently used for agricultural purposes, this change in zoning

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
										has the potential to result in a negative impact on the environment. Refer to Table 8.1 for mitigation measures. The addition of residential lands will have a positive impact on the population and human health.
	In the centre of the Northwest Quadrant of the Local Area Plan from 'G: Urban Village' to 'C2(21): New Residential (Tier 2 Lands)'.									This change of zoned land from urban village to new residential lands, should have no significant impact on the environment or the population.
	In the centre of the Northwest Quadrant of the Local Area Plan from 'W: White Land' to 'C2(21): New Residential (Tier 2 Lands)'.									As this white land was previously used as a green field, development of this land for residential purposes has the potential to negatively impact the environment. Refer to Table 8.1 for mitigation measures. Additional residential amenities will positively impact the population and human health.
	In the centre of the Northwest Quadrant of the Local Area Plan from 'W: White Land' to 'Q: Enterprise & Employment'.									As this white land was previously used as a green field, development of this land for enterprise and employment purposes has the potential to negatively impact the environment. Refer to Table 8.1 for mitigation measures. An increase in employment and enterprise amenities will positively impact the population and human health.
	In the centre of the Northwest Quadrant of the Local Area Plan from 'E: Community & Education' to 'Q: Enterprise & Employment'.									This change in zoning should not have a strong impact on either the population or the environment.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
	To the south of the Northwest Quadrant of the Local Area Plan from 'I: Agricultural' to 'Q: Enterprise & Employment'.									Changing the zoning of this area from agricultural lands to enterprise & employment land will have a positive impact on the population, as further employment opportunities are facilitated. However, this change in zoning has the potential to negatively impact the other environmental aspects. Refer to Table 8.1 for mitigation measures.
	To the north of the Northwest Quadrant of the Local Area Plan from 'E: Community and Education' to 'Q: Enterprise & Employment'.									This zonal change should not significantly impact either the population or the environment.
	To the north of the Northwest Quadrant of the Local Area Plan from 'E: Community and Education', 'C1: New Residential' and 'G: Urban Village' to 'Q: Enterprise & Employment'.									Increasing the zoned land for enterprise and employment will be beneficial to the population and human health of Naas, however the loss of lands zoned as community and education, new residential and urban village may negatively impact the population. As the land zoning will not change drastically, it is predicted that there will be a relatively neutral impact on the environment.
	To the north of the Northwest Quadrant of the Local Area Plan from 'W: White Land' to 'Q: Enterprise and Employment'.									As the white land in this area is currently a green field, the change in zoning of the area from green field to enterprise and employment purposes has the potential to negatively impact the environment. Refer to Table 8.1 for mitigation measures. The impact on the population will be positive, as increased opportunities for enterprise and employment are opened up.
	To the north of the Northwest Quadrant of the Local Area Plan from 'Q: Enterprise & Employment' to 'F: Open Space & Amenity'.									The change of land zoning from enterprise and employment to open space and amenity will benefit the population as space is freed up for leisure, however, there will be reduced land for employment

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
										opportunities. Therefore, the overall impact of the zonal change is uncertain. This change in zone is predicted to have a strong positive impact on the environment.
	To the south east of the Northwest Quadrant of the Local Area Plan from 'W: White Land' to 'C1(4): New Residential (Tier 1 Lands)'.									Increased land zoned for residential purposes will benefit the population, however it has the potential to cause negative environmental impacts. Refer to Table 8.1 for mitigation measures.
	To the south east of the Northwest Quadrant of the Local Area Plan from 'W: White Land' to 'C2(3): New Residential (Tier 2 Lands)'.									Again, increased land zoned for residential purposes will benefit the population, however it may cause negative environmental impacts. Refer to Table 8.1 for mitigation measures.
	To the south of the Northwest Quadrant of the Local Area Plan from 'F: Open Space & Amenity' and 'E2 & E1: Community & Education'.									The transition of this area from open space and amenity to community and education purposes is predicted to have the potential to negatively impact the environment. Refer to Table 8.1 for mitigation measures. The population and human health will benefit from increased community and education services, however a reduction in open space and amenities also has the potential to negatively impact population and human health. Therefore, the determination is uncertain.
	South of the Northwest Quadrant of the Local Area Plan from 'F: Open Space & Amenity' to 'Q: Enterprise & Employment'.									The zoning of this land from open space and amenity to enterprise and employment has the potential to negatively impact the surrounding environment. Refer to Table 8.1 for mitigation measures. This zonal transition should have a positive impact on the population and human health as there will be increased opportunities for

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
										employment and enterprise, however there will be reduced open space and amenities in the area.
	South of the Northwest Quadrant of the Local Area Plan area from 'F: Open Space & Amenity' to 'E: Community & Education'.									This land zoning change could result in a negative impact on the environment, due to increased development of the land. Refer to Table 8.1 for mitigation measures. The overall impact of the change on the population and human health is predicted to be uncertain, as there will be increased land available for community and education, but less land available for open space and amenity.
	South of the Northwest Quadrant from 'B: Existing/ Infill Residential' to 'C1(1): New Residential (Tier 1 Lands)' (2.1Ha).									As this land was previously zoned for accommodation, there should be a neutral impact on the population and the environment.
	South west of the Local Area Plan area from 'C5: New Residential' to 'A: Town Centre' (4ha).									Overall this change in zoning should not have a significant impact on the population or environment of Naas.
	To the south west of the Local Area Plan area from 'I: Agricultural' to 'F: Open Space & Amenity'.									As this zoning change is from a low intensive purpose to another low intensive purpose there will be no significant change to either the environment or population.
	To the south west of the Local Area Plan area from 'I: Agricultural' to 'Q: Enterprise & Employment' (59.4Ha).									The transition of this area from a land zoned for agriculture to land zoned for enterprise and employment will have a positive impact on the population, through increased employment opportunities. This change has the potential to negatively impact the environment due to increased development on the site. Refer to Table 8.1 for mitigation measures.

Ref		SEA Environmental Objectives								Comments
		Population & Human Health	Biodiversity	Land & Soils	Water	Air, Noise & Climate	Heritage	Landscape & Visual	Material Assets	
	To the south of the Local Area Plan area from 'E4: Community & Education' to 'C1(5): New Residential (Tier 1 Lands)'.									This change in zoning should not have a significant impact on the population or environment.
	To the south of the Local Area Plan area from 'I: Agricultural' to 'C1(5): New Residential (Tier 1 Lands)'.									The loss of agricultural land to be replaced by residential land has the potential to negatively impact the environment. Refer to Table 8.1 for mitigation measures. The population and human health should benefit from this change of zoning, due to the advantage of increased residential lands.
	To the south of the Local Area Plan area from 'I: Agricultural' to 'F(2): Open Space & Amenity' 15.6Ha).									This zoning change is predicted to have a neutral impact on the environment and population.
	To the south of the Local Area Plan area from 'I: Agricultural' to 'E(2): Community & Education'.									The provision of development on previously zoned agricultural lands has the potential to negatively impact the existing environment, however there should be a positive impact on the population and human health. Refer to Table 8.1 for mitigation measures.
	South of the Local Area Plan area from 'N1: Neighbourhood Centre' to 'E: Community & Education'.									This zonal change should result in a neutral impact on the environment and the population.

7.3 Predicted Environmental Impacts

The principal findings of the assessment of environmental impacts are summarised in the following sections. It should be noted that the assessment considers the predicted residual (i.e. mitigated) impact on each environmental topic.

7.3.1 Population and Human Health

The potential impacts for Population and Human Health are predominantly positive with regards the provision of residential, economic and sustainable transport opportunities in the LAP area.

It is proposed to consolidate the town centre through the regeneration and redevelopment of vacant and under-utilised sites. This will likely result in a positive impact on population and human health, as it discourages urban sprawl, reduces traffic movements, enhances the public realm and encourages more sustainable transport methods.

Policies and objectives relating to improvements to the public realm and accessibility of the town centre will also positively impact the population of Naas.

It is proposed to provide new residential development Key Development Areas as well as a new urban centre in the North-West Quadrant of the LAP area. This will seek to ensure that the longer-term development of Naas is provided for.

The promotion of enterprise and employment development in the North-West Quadrant will also result in a positive impact on the population on Naas, through increased job opportunities.

Positive impacts will also occur where new transport infrastructure is provided for, or existing infrastructure is upgraded through the provision of improved access through the LAP area. This is particularly true in considering new sustainable transport infrastructure/opportunities.

7.3.2 Biodiversity

The land use zonings and objectives of the Draft LAP will primarily result in a neutral impact on Biodiversity. Development will be largely consolidated within existing zoned or developed lands, with a large portion of development within the existing urban centre of the LAP area.

Uncertainties exist where the precise nature and extent of development is unknown. This is particularly relevant to the various green infrastructure objectives- where it is difficult to ascertain if the proposals relate to natural features, such as parks and hedgerows, or man-made features, such as cycle paths. Most natural green infrastructure features are likely to result in a positive impact on biodiversity, through species and habitat provision, while often man-made features such as greenways can result in a negative impact on the existing biodiversity through increased human interaction.

There is the potential for negative impacts to occur where greenfield lands have been zoned for development- such as the land at the southwest of the plan area, which has the potential, even with the provision of mitigation, to impact on habitats and species.

7.3.3 Land and Soils

The majority of potential impacts for Land and Soils are neutral or positive as development will primarily be consolidated within existing zoned or developed lands.

Uncertainties will occur where the precise nature and extent of proposed new development is unknown.

There is the potential for negative impact to occur where greenfield lands have been zoned for development- such as the land at southwest of the plan area, as well as where new roads are proposed.

7.3.4 Water

The land use zonings and objectives of the Draft LAP will primarily result in a neutral impact on Water as development will largely take place with existing zoned or developed lands.

There is the potential for negative impacts to occur where greenfield development or new roads objectives are proposed- in particular the proposal to construct a strategic route linking Naas to the environs of Sallins train station along the Grand Canal.

A Strategic Flood Risk Assessment (SFRA) has been carried out in support of the LAP. The SFRA has recommended a number of flood risk management objectives for specific areas, ensuring planning applications, where applicable, will require a FRA of appropriate detail. The level of detail within the FRA will depend on the risks identified and the proposed land use.

7.3.5 Air, Noise and Climate

The potential impacts on Air, Noise and Climate are predominantly positive or neutral as the proposals to consolidate the town centre will likely result in a reduction in traffic movements.

The plan also promotes sustainable travel modes while making provisions for improved pedestrian and cycle routes in, and around the town centre. Such measures will have a positive effect on air, noise and climate.

This Draft Plan comprises a range of climate change adaptation objectives relating to the promotion of renewable energies, sustainable transport, energy reduction etc. These objectives will likely result in a positive impact on air quality and climate change mitigation.

Uncertainties will occur where the precise nature and extent of proposed new development is unknown. There is the potential for negative impacts to occur where new roads objectives are proposed.

7.3.6 Heritage

The land use zonings and objectives of the Draft LAP will primarily result in a positive or neutral impact on Heritage as development will largely take place with existing zoned or developed lands

Where urban regeneration or redevelopment is proposed in the town centre, it is not possible to fully ascertain if this is likely to result in a negative impact on heritage, as much of the town comprises an ACA. There are certain implications for development within an ACA - protection generally relates to the external appearance of structures and features of the streetscape. Generally, any works that may have a potential impact on the exterior would require planning permission, such as changes to the original roofing material, windows, boundary walls etc. The aim of ACA designation is not to prevent development, rather to guide sensitive, good quality development, which will enhance both the historical character of the area and the amenity of those who enjoy it.

Other uncertainties will occur where the precise nature and extent of proposed new development is unknown and where the discovery of heritage features cannot be ruled out.

The plan does however place a significant emphasis on the retention, protection and enhancement of existing heritage features within the LAP area.

There is the potential for negative impacts to occur where greenfield lands have been zoned for development- such as the land at southwest of the plan area, as this has the potential to impact on archaeology.

7.3.7 Landscape and Visual

The majority of potential impacts for Landscape and Visual are neutral.

A number of positive impacts on the townscape of Naas will likely result from the range of regeneration and urban realm proposals included in the Draft Plan.

Uncertainties exist where the precise nature, extent or scale of proposed development is unknown. There is the potential for negative impacts to occur where greenfield lands have been zoned for development- such as the land at such as the land at southwest of the plan area, or where new roads objectives are proposed. This is particularly relevant with regards the proposed new strategic route linking Naas to the environs of Sallins train station along the Grand Canal.

7.3.8 Material Assets

In general, the potential impacts on Material Assets are largely considered as positive or neutral. This is because development will occur in a manner that is balanced and self-sustaining occurring in tandem with physical and social infrastructure.

The proposed consolidation of development in the town centre of Naas has however the potential to result in a negative impact on material assets. A high population density could put a strain on material assets, and it should be ensured that there is sufficient water and wastewater capacity to facilitate any residential development. However, the recent upgrade to Osberstown WWTP should accommodate all development proposed under the plan.

8 Mitigation Measures and Monitoring

8.1 Mitigation Measures

Mitigation measures are measures envisaged and designed to prevent, reduce and as fully as possible offset any significant adverse impacts on the environment of implementing the revised LAP. All mitigation measures have been developed and agreed with KCC as part of the SEA iterative process.

The primary mitigation measure is to ensure the sustainable and appropriate development of the Naas LAP area without compromising the integrity of the natural and built environment. All new development that requires an Environmental Impact Assessment (EIA) in accordance with EIA legislation will address the range of environmental objectives, indicators and targets and associated environmental mitigation measures and incorporate them into the project specific mitigation measures.

Table 8.1: Mitigation Measures

Environmental Receptor	Mitigation Measures	Relevant objectives	
		Country Development Plan Objectives	Draft LAP Objectives
Biodiversity	Ensure that appropriate measures for conservation and enhancement of the natural and built environment are incorporated into all relevant plans and programmes.	NH1, NH2, NH3, NH4, NH5, NH6, NH7, NH8, NH9, NH10, NH11. NH12, NH13, NH14, NH15, NH16 NHO1, NHO2, NHO3, NHO4, NHO5, NHO6, NHO7, NHO8, NHO9, NHO10	EDO2.1 BNH5, BNH4.1, NH1, NHO1.1, NHO1.2, NHO1.3, NHO1.4, NHO1.5, NHO1.6, NHO1.7 GI1, GIO1.1, GIO1.2, GIO1.3, GIO1.4, GIO1.5, GIO1.6, GIO1.7, GIO1.8, GIO1.9, GIO1.10 OSO1.1, OSO1.4, OSO1.6
	Ensure that all new development plans are cognisant of the Biodiversity Action Plan for the County.	NHO2	-
	Ensure the protection of ecological resources that have economic benefits e.g. ecological zones that draw tourism.	NHA, NH2, NH3, NH4, NH5, NH6, NH7, NH8, NH9, NH10, NH11. NH12, NH13, NH14, NH15, NH16 NHO1, NHO2, NHO3, NHO4,	EDO2.1 BNH5 NHO1.1 GI1

		NHO5, NHO6, NHO7, NHO8, NHO9, NHO10	
	Compliance with the zoning of the SACs, NHAs, SPAs which prohibits non-compatible developments.	NH3, NH4, NH5, NH6, NH7, NH8, NH9, NH10,	NH1
	Ensure that an AA is carried out for all development proposals with potential to impact on Natura 2000 sites.	NH3, NH4, NH5, NH6, NH11. NH12	-
	Ensure that greenfield development, such as that targeted is subject to environmental assessment, where required.	NHA, NH2, NH3, NH4, NH5, NH6, NH7, NH8, NH9, NH10, NH11. NH12, NH13, NH14, NH15, NH16 NHO1, NHO2, NHO3, NHO4, NHO5, NHO6, NHO7, NHO8, NHO9, NHO10	OSO1.1
	The development of new roads should be subject to route option assessment and environmental assessment, where required.	NHA, NH2, NH3, NH4, NH5, NH6, NH7, NH8, NH9, NH10, NH11. NH12, NH13, NH14, NH15, NH16 NHO1, NHO2, NHO3, NHO4, NHO5, NHO6, NHO7, NHO8, NHO9, NHO10	-
	Ensure that appropriate invasive species management and control measures are implemented	NH14, NHO 7, NHO8	GIO1.8
Population and Human Health	Ensure that access to adequate health and education facilities to meet the demand of the current and projected populace are included in development plans.	LE1, LEO1, LEO2, LEO3, C1, C2, C3, EF1, EF2, EF3, EF4, EF5, EFO1, EFO2, EFO3, EFO4, EFO5, EFO6, EFO7 HS1, HS2, HS3, HS4, HS5, HSO1, HSO2, HSO3, HSO4, HSO5	HC3, HCO3.1, HCO3.2

	Encourage the further development of regional sustainable and public transport infrastructure including rail and bus corridors.	MT1, MT2, MT3, MT4, MT6, MT7, MT8, MT9, MT11, MT12, MT15, MTO1, MTO3, MT04 PT1, PT2, PT3, PT4, PT5, PT6, PT7, PT8, PT9, PT10, PT11, PT12, PT13 PTO1, PTO2, PTO3, PTO4, PTO5, PTO6, PTO8 WC1, WC2, WC4, WC5, WC6, WC7, WC8, WC9, WC10, WC14 WCO1, WCO2, WCO3, WCO4, WCO5, WCO6, WCO7, WCO8, WCO9	MT2, MTO2.1, MTO2.2, MTO2.3, MTO2.4, MTO2.5, MTO2.6, MTO2.7, MTO2.8, MTO2.9, MTO2.10, MTO2.11, MTO2.12 MTO3.2, MT4, MTO4.1, MTO4.2, MTO4.3, MTO4.4, MTO4.5, MTO4.6, MTO4.7, MTO4.8, MTO4.9, MTO6.4 EDO1.6, EDO1.7 CCO1.4 URD1.6
Land and Soils	Perform a survey of obsolete urban renewal areas and facilitate and promote the reuse and regeneration of brownfield sites, derelict land and buildings in and around urban centres.	EO18, EO19, EO20, EO21, EO22, EO23	HCO1.4 CCO1.2 EDO3.8 BNH2.4
Waste	Promote the recycling of construction and demolition waste and the reuse of aggregate and other materials in order to reduce the quantities of virgin material being extracted.	VM5, VM10	CC1 I5
	Ensure that the ‘polluter pays principle’ is adhered to in full cooperation with the EPA.	VM1, VM2, VM3, VM11, VM14, PC1	-
Water	Ensure that the objectives and the programme of measures outlined in the River Basin Management Plans are fully implemented.	WQ1, WQ2, WQ3, WQ4, WQ5, WQ6	IO2.3, IO2.4
	Provide adequate capacity of water and wastewater treatment and storage facilities for current and projected populace.	WQ1, WQ2, WQ3, WQ4, WQ5, WQ6	I1, IO1.1, IO1.2 I2, IO2.1, IO2.2, IO2.3, IO2.4, IO2.5

	Prevent the alteration of natural drainage systems and in the case of development works require the provision of acceptable mitigation measures in order to minimise the risk of flooding and negative impacts on water quality.	WQ1, WQ2, WQ3, WQ4, WQ5, WQ6	OSO1.4 CCO1.6 I2, IO2.2, IO2.5 I3 IO3.1, IO3.2
	Comply with the objectives and policies of the Eastern Catchment Flood Risk Assessment Management Study.	WQ1, WQ2, WQ3, WQ4, WQ5, WQ6	IO3.2
	Promote SUDS principles for all drainage including the integration of storm water attenuation facilities for new developments and existing catchment areas.	WQ1, WQ2, WQ3, WQ4, WQ5, WQ6	OSO1.4 CCO1.6 IO2.2
	Ensure that any new development does not present an inappropriate risk of flooding or does not cause or exacerbate such a risk at other locations.	WQ1, WQ2, WQ3, WQ4, WQ5, WQ6	IO3.1 GIO1.10
	Preserve and protect the water quality of Kildare's river systems where these helps to regulate stream flow, recharge ground water and screen pollutant.	WQ1, WQ2, WQ3, WQ4, WQ5, WQ6	I2, IO2.2, IO2.3, IO2.4
	Comply with the DoECLG/OPW guidance on development and flood risk through the control of development in any flood plain so that new and existing developments are not exposed to increased risk of flooding and that any loss of flood storage is compensated for elsewhere in the river catchment.	WQ1, WQ2, WQ3, WQ4, WQ5, WQ6	I3, IO3.2
	Ensure that mitigation measures proposed under the SFRA are implemented as appropriate.	WQ1, WQ2, WQ3, WQ4, WQ5, WQ6	-
Air, Noise and Climate	Ensure that the objectives and policies of EU Air Quality legislation are incorporated into plans and programmes upon implementation into Irish law.	VM2 PC1	I5

	Promote the reduction of emissions of Greenhouse Gases to ensure Ireland's compliance with our Emission Targets.	VM2 PC1 ER1, ER2, ER3, ER4, ER5, ER6, ER7, ER8, ERO1 WE1, WE2, WE3, WE4, WE5, WEO1 HD1, HD2, HD3, HD4 SE1, SE2, SE3, SE4 BE1, BE2, BE3 EW1, EW2 EB1, EB2, EB3, EBO1 GT1	CC1, CCO1.1, CCO1.6 I5
	Facilitate sustainable transport modes and the use of walking, cycling and public transport.	MT1, MT2, MT3, MT4, MT6, MT7, MT8, MT9, MT11, MT12, MT15, MTO1, MTO3, MT04 PT1, PT2, PT3, PT4, PT5, PT6, PT7, PT8, PT9, PT10, PT11, PT12, PT13 PTO1, PTO2, PTO3, PTO4, PTO5, PTO6, PTO8 WC1, WC2, WC4, WC5, WC6, WC7, WC8, WC9, WC10, WC14 WCO1, WCO2, WCO3, WCO4, WCO5, WCO6, WCO7, WCO8, WCO9	MT2, MTO2.1, MTO2.2, MTO2.3, MTO2.4, MTO2.5, MTO2.6, MTO2.7, MTO2.8, MTO2.9, MTO2.10, MTO2.11, MTO2.12 MTO3.2, MT4, MTO4.1, MTO4.2, MTO4.3, MTO4.4, MTO4.5, MTO4.6, MTO4.7, MTO4.8, MTO4.9, MTO6.4 EDO1.6, EDO1.7 CCO1.4 URD1.6
	Consideration of existing noise policy in County Kildare for example noise mapping and noise action plans produced by the Local Authority.	PC1, PC2, PC3, PC6, PC7, PC8, PC10	-
	Consideration of likely noise impacts/effects associated with new developments.	PC1, PC2, PC3, PC4, PC5, PC6, PC7, PC8, PC9, PC10	HC2.3 I5

	This includes being cognisant of proximity to sensitive receptors when siting new developments and consideration of existing noise sources when zoning lands for residential development.		
Archaeological, Architectural and Cultural Heritage	Ensure the protection of all features of architectural and archaeological merit.	PS1, PS2, PS3, PS4, PS5, PS6, PS7, PS8, PS9, PS10, PS11, PS12, PS13, PS14, PS15, PS16, PS17, PS18, PS19, PS20, PS21 PSO1, PSO2, PSO3, PSO4, PSO5, PSO6, PSO7, PSO8 ACO1, ACO2, ACO3, ACO4 CH01, CH02 VS1, VA2, VA3, VA4, VA5, VA6, VA7, VA8 VAO1, VAO2 ACA1, ACA2, ACA3, ACA4, ACA5 ACAO1, ACAO2, ACAO3, AH1, AH2, AH3, AH4, AH5, AH6, AH7, AH8, AH9, AH10, AH11, AH12 AO1, AO2, AO3, AO4, AO5 HF1 HFO1, HFO1	EDO3.7, EDO3.8, EDO3.9 BNH1, BNH2, BNH1.1 BNH1.2, BNH1.3, BNH1.4, BNH1.5, BNH1.6 BNH3, BNH2.1, BNH2.2, BNH2.3, BNH2.4 BNH4, BNH3.1, BNH3.2, BNH3.3, BNH3.4, BNH3.5, BNH3.6, BNH3.7, BNH3.8 URD1, URD2.6
	Promote the integration of suitably designed developments into existing urban and rural landscapes.	PS1, PS2, PS3, PS4, PS5, PS6, PS7, PS8, PS9, PS10, PS11, PS12, PS13, PS14, PS15, PS16, PS17, PS18, PS19, PS20, PS21 PSO1, PSO2, PSO3, PSO4, PSO5, PSO6, PSO7, PSO8 ACO1, ACO2, ACO3, ACO4 CH01, CH02	HC1, HCO1.1, HCO1.2, HCO1.3, HCO1.4, HCO1.5, HCO1.6, HCO1.7 HCO2.1, HCO2.2, HCO2.3 MTO1.2 EDO3.7, EDO3.8 BNH4, BNH3.1, BNH3.2, BNH3.3, BNH3.4, BNH3.5, BNH3.6, BNH3.7, BNH3.8 BNH5, BNH4.1, BNH4.2

		VS1, VA2, VA3, VA4, VA5, VA6, VA7, VA8 VAO1, VAO2 ACA1, ACA2, ACA3, ACA4, ACA5 ACAO1, ACAO2, ACAO3, AH1, AH2, AH3, AH4, AH5, AH6, AH7, AH8, AH9, AH10, AH11, AH12 AO1, AO2, AO3, AO4, AO5 HF1 HFO1, HFO1	GIO1.1, GIO1.2, GIO1.3, GIO1.7, GIO1.10 OSO1, OSO1.7 CCO1.6 URD1, URD1.2, URD1.4, URD1.6, URD1.7, URD2, URD2.1, URD2.2, URD2.3, URD2.4, URD2.5, URD2.6, URD2.7, URD2.8, URD2.9, URD2.10, URD2.11, URD2.12, URD2.13 I2, IO2.1, IO2.2, IO2.3, IO2.4, IO2.5
	Prevent inappropriately designed developments in designated areas of architectural merit.	PS1, PS2, PS3, PS4, PS5, PS6, PS7, PS8, PS9, PS10, PS11, PS12, PS13, PS14, PS15, PS16, PS17, PS18, PS19, PS20, PS21 PSO1, PSO2, PSO3, PSO4, PSO5, PSO6, PSO7, PSO8 ACO1, ACO2, ACO3, ACO4 CH01, CH02 VS1, VA2, VA3, VA4, VA5, VA6, VA7, VA8 VAO1, VAO2 ACA1, ACA2, ACA3, ACA4, ACA5 ACAO1, ACAO2, ACAO3, AH1, AH2, AH3, AH4, AH5, AH6, AH7, AH8, AH9, AH10, AH11, AH12 AO1, AO2, AO3, AO4, AO5 HF1 HFO1, HFO1	ECO3.8 BNH4, BNH3.1, BNH3.2, BNH3.3, BNH3.4, BNH3.5, BNH3.6, BNH3.7 URD1 URD2.6

Landscape & Visual	Ensure that all new plans and programmes incorporate the findings of the landscape Character Assessment for County Kildare	LA1, LA2, LA3, LA4, LA5, LA6, LA7 LO1, LO2, LO3, LO4, LO5, LO6, LO7, LO8, LO9, LO10, LO11 LU1, LU2, LU3, LU4, LU5 TA1, TA2, TA3, TA4 WC1, WC2, WC3, WC4, WC5, WC6, WC7, WC8, WC9	-
	Protect and Enhance the streetscape of Naas' Main Street through the appropriate control of alterations to existing buildings and the development of new structures; in particular building and roof lines and heights which diverge from the established form will require to be justified.	LA1, LA2, LA3, LA4, LA5, LA6, LA7 LO1, LO2, LO3, LO4, LO5, LO6, LO7, LO8, LO9, LO10, LO11 LU1, LU2, LU3, LU4, LU5 TA1, TA2, TA3, TA4 WC1, WC2, WC3, WC4, WC5, WC6, WC7, WC8, WC9	URD1.4, URD1.5, URD1.7 EDO2.7 EDO3.7, EDO3.8 BNH1, BNH2, BNH1.1, BNH1.3 BNH3 BNH4, BNH3.1, BNH3.2, BNH3.3, BNH3.4, BNH3.5, BNH3.6, BNH3.7, BNH3.8 BNH5
Material Assets	Protect the hydrological environment from adverse effects of the wastewater discharges by ensuring that there is suitable wastewater treatment to meet demands before discharge to the environment.	WW1, WW2, WW3, WW4, WW5, WW6, WW7, WW8, WW9, WW10, WW11, WW12, WW13	OSO1.4 NHO1.2 CCO1.6 I1, IO1.1, IO1.2, I2, IO2.1, IO2.2, IO2.3, IO2.4, IO2.5 I3, IO3.1, IO3.2
	Promote the development of sustainable transportation infrastructure where considered feasible.	MT1, MT2, MT3, MT4, MT6, MT7, MT8, MT9, MT11, MT12, MT15, PT1, PT2, PT3, PT4, PT5, PT6, PT7, PT8, PT9, PT10, PT11, PT12, PT13 PTO1, PTO2, PTO3, PTO4, PTO5, PTO6, PTO8 WC1, WC2, WC4, WC5, WC6, WC7, WC8, WC9, WC10, WC14	MTO1.5 MT2, MTO2.1, MTO2.2, MTO2.3, MTO2.4, MTO2.5, MTO2.6, MTO2.7, MTO2.8, MTO2.9, MTO2.10, MTO2.11, MTO2.12 MTO3.2 MT4, MTO4.1, MTO4.2, MTO4.3, MTO4.4, MTO4.5, MTO4.6, MTO4.7, MTO4.8, MTO4.9 MTO6.4 EDO1.6, EDO1.7

		WCO1, WCO2, WCO3, WCO4, WCO5, WCO6, WCO7, WCO8, WCO9	GIO1.7 CCO1.4 URD1.6 URD2.5, URD2.11
	Promote the implementation of the Waste Management Plan together with any future National or Regional Waste Management Plans.	WM1, WM3	-
	Encourage waste prevention, minimisation, reuse, recycling and recovery as methods of managing waste.	WM1, WM2, WM3, WM4, WM5, WM6, WM7, WM9, WM10, WM11, VM15	CC1 I5, IO5.1
	Ensuring specific national policies and regulations regarding waste Management are adhered to.	WM1, WM3	I5
	Promote and facilitate community awareness and involvement in community–based recycling initiatives or environmental management initiatives that will lead to local Sustainable waste management practices.	W11	IO5.3
	Promote the development of sufficient energy resources to meet the needs of the GDA and promote the use of renewable energies to meet those needs.	ER1, ER2, ER5, ER6, ERO1	CCO1.3, CCO1.5 I4, IO4.5

8.2 SEA Monitoring

Article 10 of the SEA Directive requires that monitoring should be carried out in order to identify at an early stage any unforeseen adverse impacts associated with the implementation of the plan or programme.

A monitoring programme is developed based on the indicators selected to track progress towards achieving strategic environmental objectives and reaching targets, enabling positive and negative impacts on the environment to be measured. As previously described, the environmental indicators have been developed to show changes that would be attributable to implementation of the revised LAP.

The SEA carried out has ensured that any potential significant environmental impacts have been identified and given due consideration.

Kildare County Council is responsible for collating existing relevant monitored data, the preparation of preliminary and final monitoring evaluation reports, the publication of these reports and, if necessary, the carrying out of corrective action.

Table 8.2: Monitoring Programme

Environmental Category	Target	Indicators	Data Sources, Responsibility, and Frequency
Biodiversity including Flora and Fauna	Improve protection for protected sites and species. Improve protection for important wildlife sites, particularly protection of ecological linkages through the provision of green infrastructure. Improve access for the appreciation and promotion of wildlife. Preferably site new development in non-sensitive locations	Number and extent of Protected Sites. Areas actively managed for conservation. Population and range of Protected Species. Achievement of the Objectives of Biodiversity Plans	Sources: Kildare County Council, National Parks and Wildlife Services, Fisheries Board and EPA. Responsibility: Kildare County Council Frequency: Align with monitoring evaluation report on the effects of implementing Kildare County Development Plan.
Population and Human Health	Reduce population exposure to high levels of noise, vibration and air pollution. Increase modal shift to public transport. Co-ordination of land use and transportation policies. Reduction in journey to work (time/distance). Improve access to recreation opportunities	Census population data. Rates of Unemployment per area. % increase in housing (number and type). % change of commuter transport distances / times / range of public transport utilised. % of commuters using public transport. % change in education levels.	Sources: Kildare County Council and Central Statistics Office. Responsibility: Kildare County Council Frequency: Align with monitoring evaluation report on the effects of implementing Kildare County Development Plan.
Land and Soils	Maintain the quality of soils. Safeguard strategic mineral reserves.	Rates of re-use / recycling of construction waste. Rates of quarrying.	Sources: Kildare County Council and Environmental Protection Agency. Responsibility: Kildare County Council

	Re-use of brownfield lands, rather than developing Greenfield lands. Minimise the consumption of non-renewable sand, gravel and rock deposits	Rates of brownfield site and contaminated land reuse and development. Rates of greenfield development.	Frequency: Align with monitoring evaluation report on the effects of implementing Kildare County Development Plan.
Water Resources	Improve water quality in rivers, lakes and groundwater. Protection of catchments/basins. Management of zones vulnerable to flooding. Promote sustainable drainage practices to improve water quality and flow	Compliance of potable water sources to water quality regulations. Compliance of surface waters with national and international standards. Potable and wastewater treatment capacities versus population. % of wastewater requiring treatment. Achievement of the Objectives of the River Basin Management Plans. Amount of new developments within flood plains. Annual costs of damage related to flood events.	Sources: Kildare County Council, Environmental Protection Agency and Fisheries Board. Responsibility: Kildare County Council Frequency: Align with monitoring evaluation report on the effects of implementing Kildare County Development Plan.
Air, Noise and Climate	Reduce levels of air pollution including air and noise emissions. Consideration of noise exposure when zoning land for new developments. Minimise emissions of greenhouse gases.	Traffic, Transport and Vehicular survey data. National and region-specific emission data. Compliance with national standards. Reduction in greenhouse gas emissions. Compliance of emission licensed facilities.	Sources: Kildare County Council, Environmental protection Agency and Central Statistics Office. Responsibility: Kildare County Council Frequency: Align with monitoring evaluation report on the effects of implementing Kildare County Development.

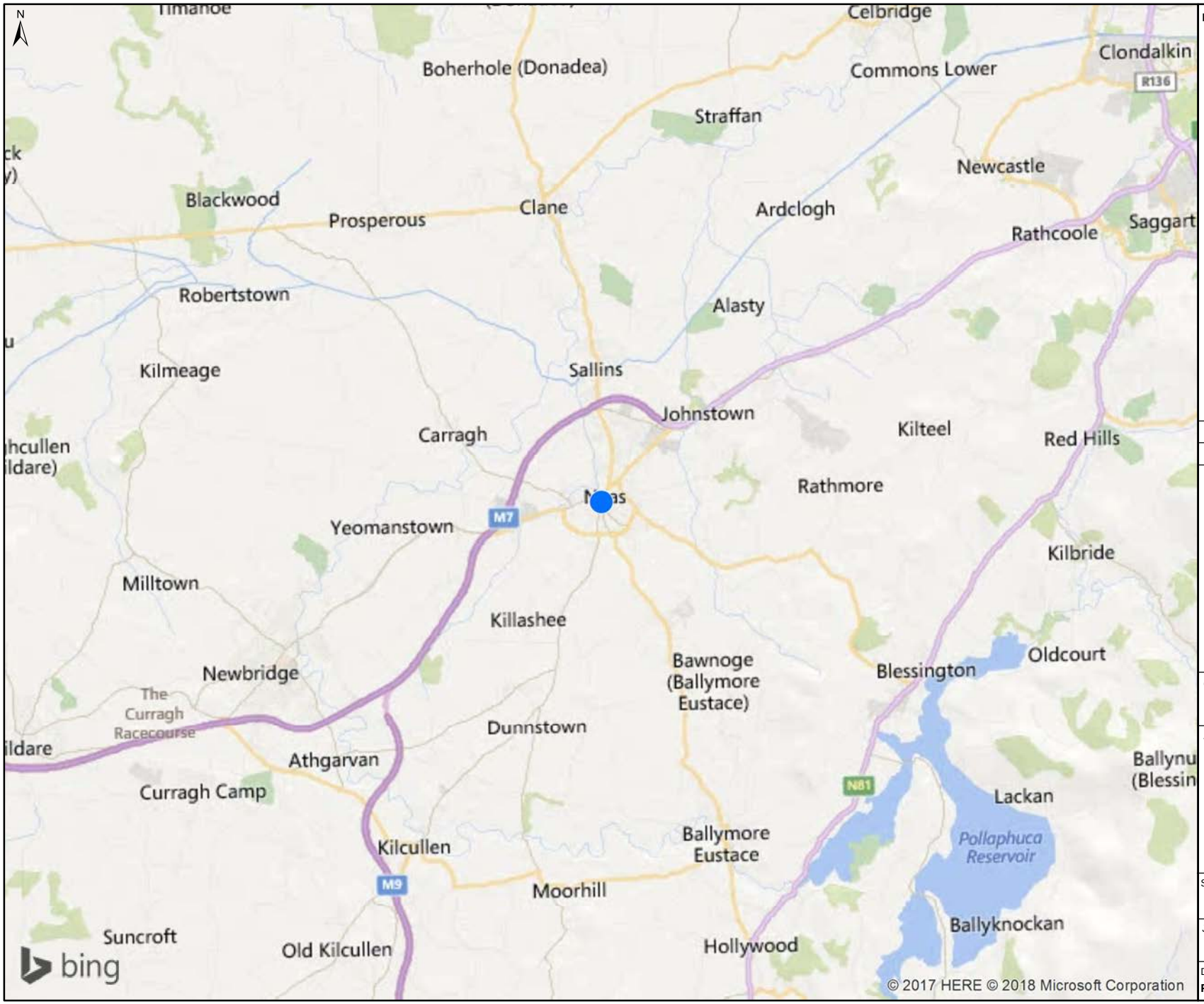
	Reduce waste of energy, and maximise use of renewable energy sources	Number of energy / renewable energy production facilities. % of dwellings / businesses using renewable energies. Rates of energy / renewable energy consumption.	
Archaeological, Architectural and Cultural Heritage	Enhance access to sites of heritage interest Regeneration of derelict and underutilised heritage sites. Improve appearance of areas with particular townscape character. Improve protection for protected archaeological sites and monuments and their settings, protected structures and conservation areas and areas of archaeological potential.	Updating of inventories to include new sites / features. Achieving the objectives of development plans regarding heritage protection. Range and extent of areas of heritage potential. Range and extent of areas of special planning controls.	Sources: Kildare County Council and Department of Environment Community and Local Government. Responsibility: Kildare County Council Frequency: Align with monitoring evaluation report on the effects of implementing Kildare County Development.
Landscape and Visual	Improve protection for landscapes of recognised quality. Maintain clear urban/rural distinctions. Enhance provision of, and access to, green space in urban areas	Range and extent of Amenity Landscapes. Rates of development within designated landscapes. Rates of urban expansion. Rates of deforestation. Rates of agricultural land re-development likely to impact landscape. % change of land use from rural to urban.	Sources: Kildare County Council and Department of Environment, Community and Local Government. Responsibility: Kildare County Council Frequency: Align with monitoring evaluation report on the effects of implementing Kildare County Development Plan.

Material Assets	Improve availability and accessibility of commercially provided facilities and public services. Increase local employment opportunities. Improve efficiencies of transport, energy and communication infrastructure. Improve waste water treatment infrastructure. Reduce the generation of waste and adopt a sustainable approach to waste management.	Location / level of infrastructure. Achievement of development plan objectives. Rates of deprivation. Rate of waste disposal to landfill statistics. Range and extent of recycling facilities and services. Rates of recycling.	Sources: Kildare County Council, Central Statistics Office, National Roads Authority and Environmental Protection Agency. Responsibility: Kildare County Council Frequency: Align with monitoring evaluation report on the effects of implementing Kildare County Development Plan.

Appendix A

Figures

A4



Legend

Naas

09/01/2018 12:04:02

Issue	Date	By	Chkd	Appd
I1	2018-01-09	LG	AD	SW

Kilometers

0 0.75 1.5 3

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50 Ringsend Road
Dublin 4, D04 T6X0
Tel +353 (0)1 233 4455 Fax +353 (0)1 668 3169
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Client

Kildare County Council

Job Title

Naas LAP Strategic Environmental Assessment

Location of Naas

Scale at A4

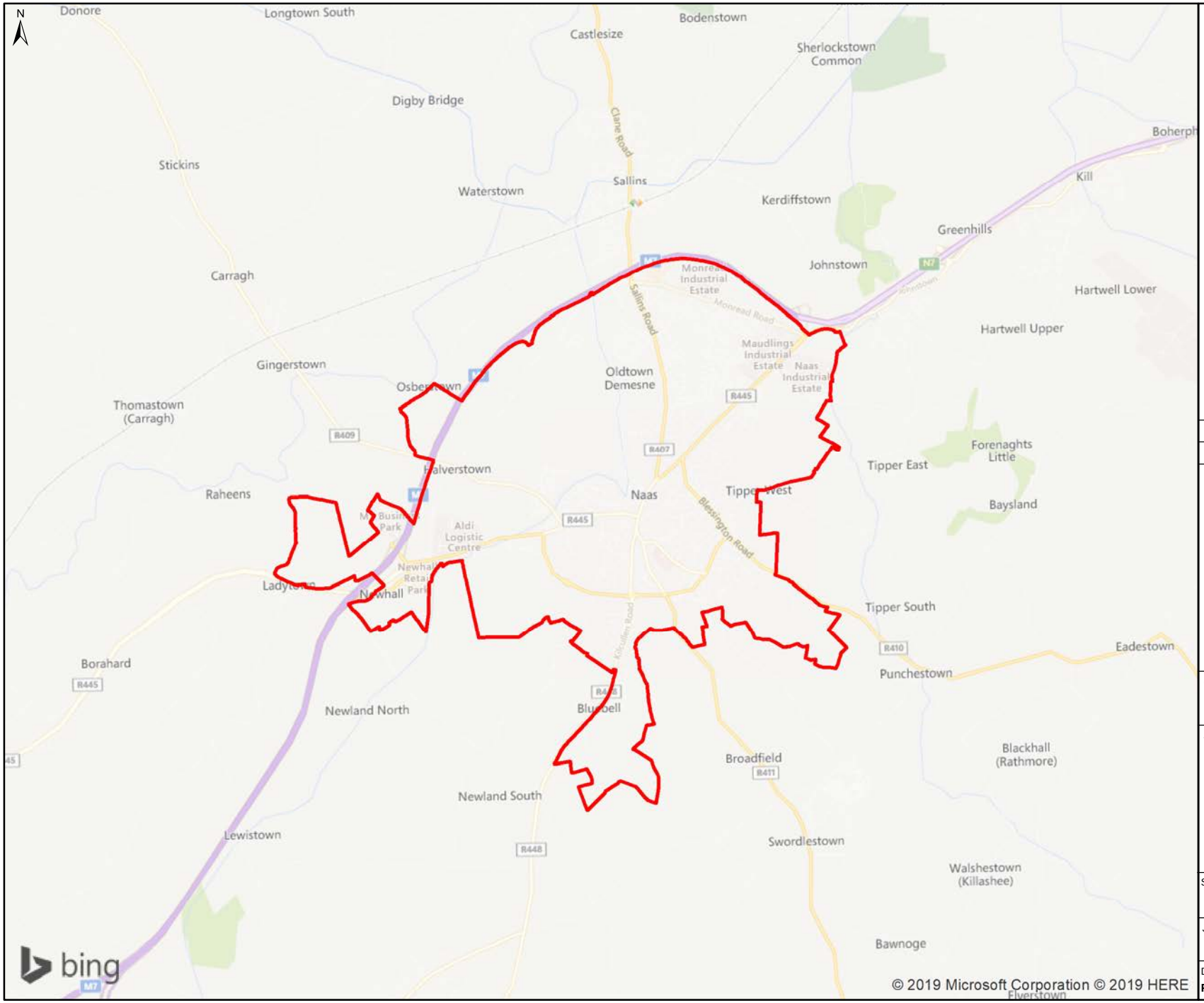
1:150,000

Job No	Drawing Status
257722	**Issue**

Drawing No	Issue
Figure 1.1	**I1**

MXD Location J:\257000\257722-00\4. Internal\4-03 Design\4-03-02 Consulting\GIS\03_MapDocuments\Naas_LAP_SEA_Maps_I1.mxd

A4



Legend

Naas LAP Boundary

Associated datasets and digital information objects connected to this resource are sourced from Kildare County Council

Issue	Date	By	Chkd	Appd
P0	2019-03-22	SD	SW	SW

Kilometers

0 0.375 0.75 1.5

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50 Ringsend Road
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Tel +353 (0)1 233 4455 Fax +353 (0)1 668 3169
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Client

Kildare County Council

Job Title

Naas Local Area Plan
Strategic Environmental Assessment

Extent of the Plan (LAP Boundary)

Scale at A4

1:60,000

Job No	Drawing Status
257722	**Issue**

Drawing No	Issue
Figure 1.2	**I2**

25/03/2019 19:20:09

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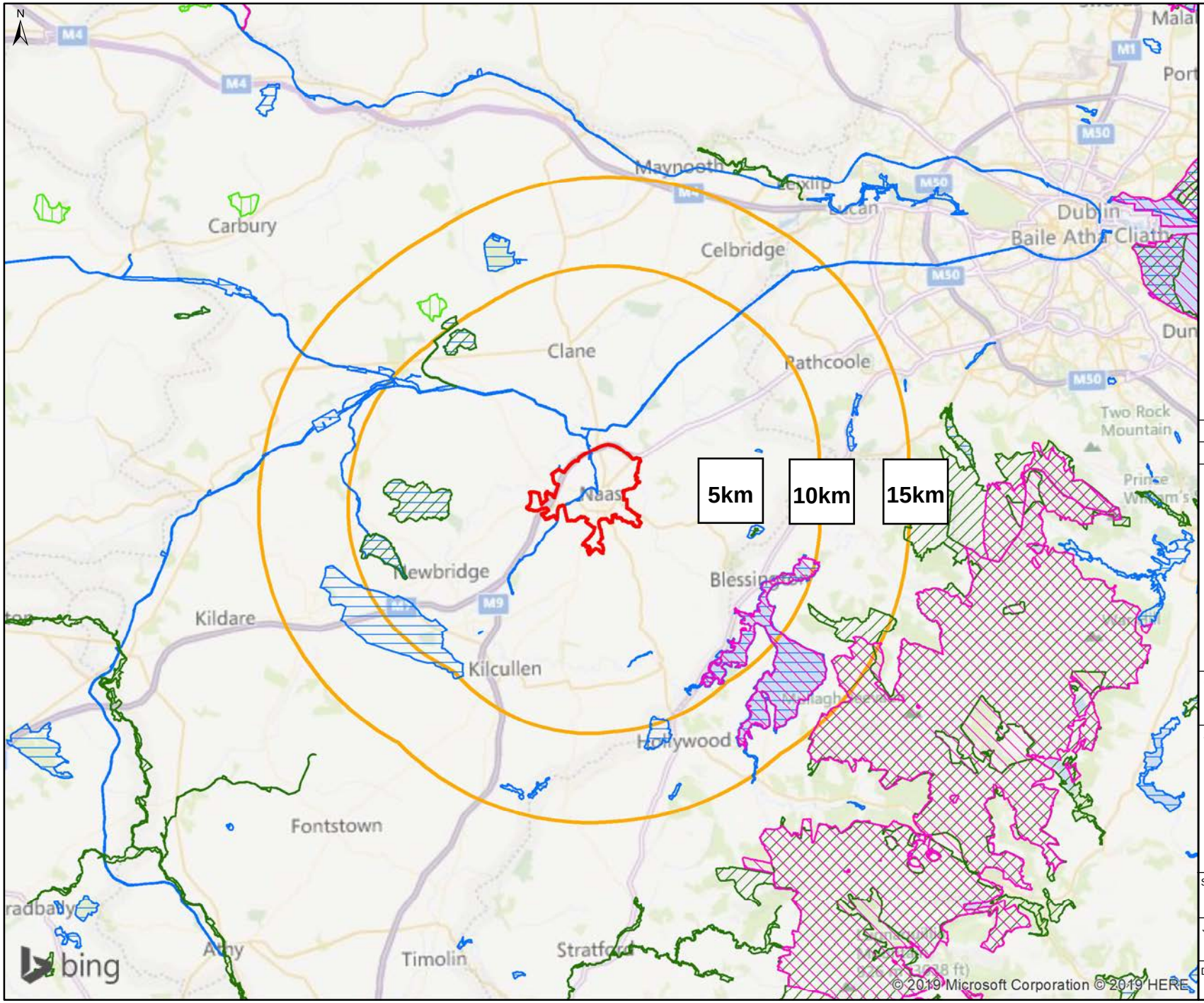
A4



Legend

- Naas LAP Boundary
- Buffer
- Special Protection Areas
- Special Areas of Conservation
- Proposed National Heritage Areas
- National Heritage Areas

Associated datasets and digital information objects connected to this resource are available at the National Parks and Wildlife Services Map Viewer
http://webgis.npws.ie/npwsviewer/

Issue	Date	By	Chkd	Appd
P0	2019-03-25	SD	SW	SW

Kilometers

0 1.75 3.5 7

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Dublin 4, D04 T6X0
Tel +353 (0)1 233 4455 Fax +353 (0)1 668 3169
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Job Title
Naas Local Area Plan
Strategic Environmental Assessment

Ecological Designated Sites
(including Natura 2000 sites)

Scale at A4
1:300,000

Job No	Drawing Status
257722	**Issue**

Drawing No	Issue
Figure 4.1	**I2**

25/03/2019 19:17:55

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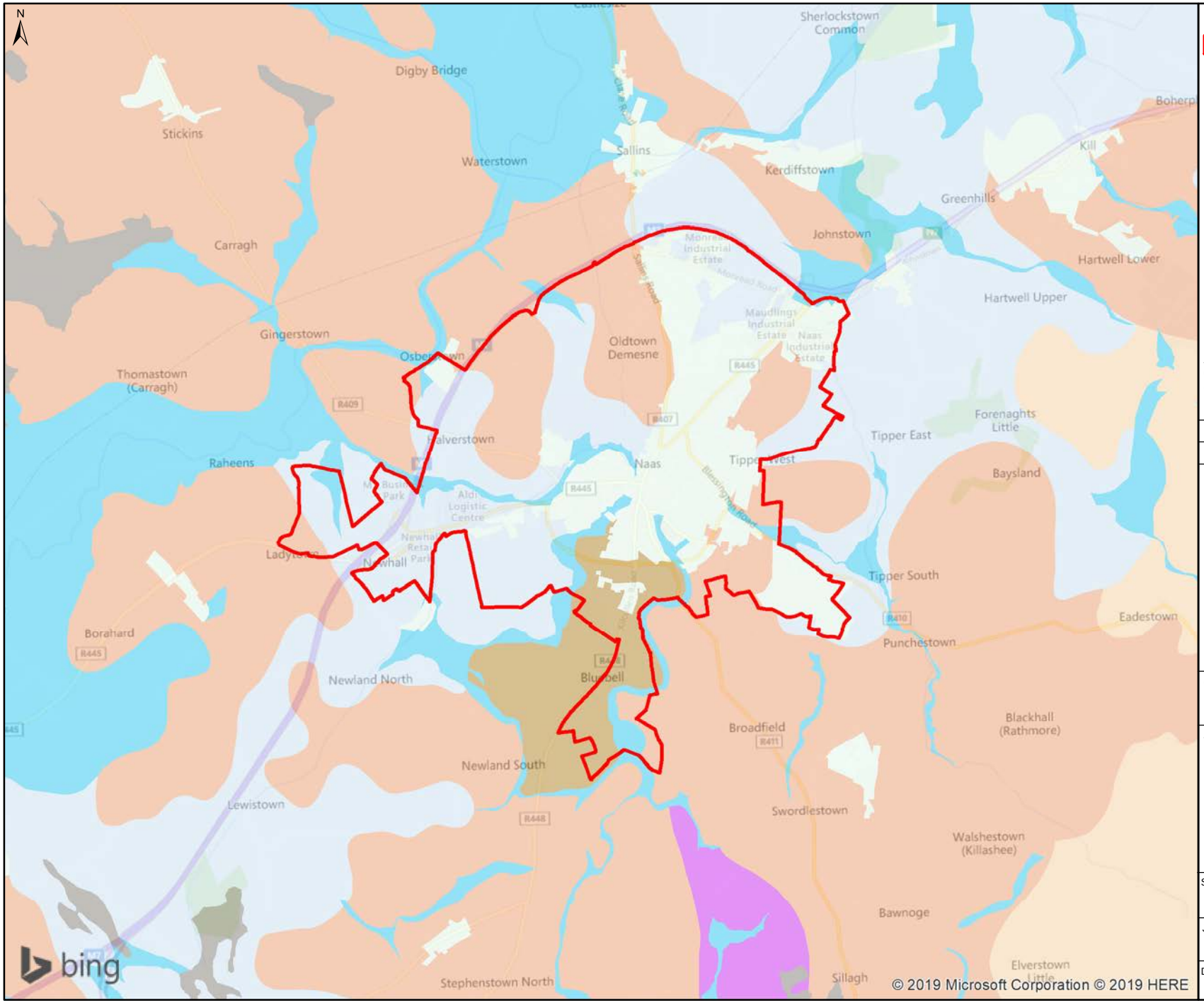

Legend

- Naas LAP Boundary

ISIS NationalSoils

- 05LAK - Lake
- 05RIV - River
- 0650a - Mylerstown
- 0700d - Straffan
- 1000c - Elton
- 1000x - Elton
- 1100e - Ballylanders
- 1100l - Kennycourt
- 1150c - Faoldroim
- 1xx - Peat
- Urban

Associated datasets and digital information objects connected to this resource are available at the Environmental Protection Agency. http://gis.epa.ie/GetData/Download

Issue	Date	By	Chkd	Appd
P0	2019-03-25	SD	SW	SW

Kilometers

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Naas Local Area Plan
Strategic Environmental Assessment

Soils

Scale at A4
1:60,000

Job No	Drawing Status
257722	**Issue**

Drawing No	Issue
Figure 4.2	**I2**

25/03/2019 19:13:09

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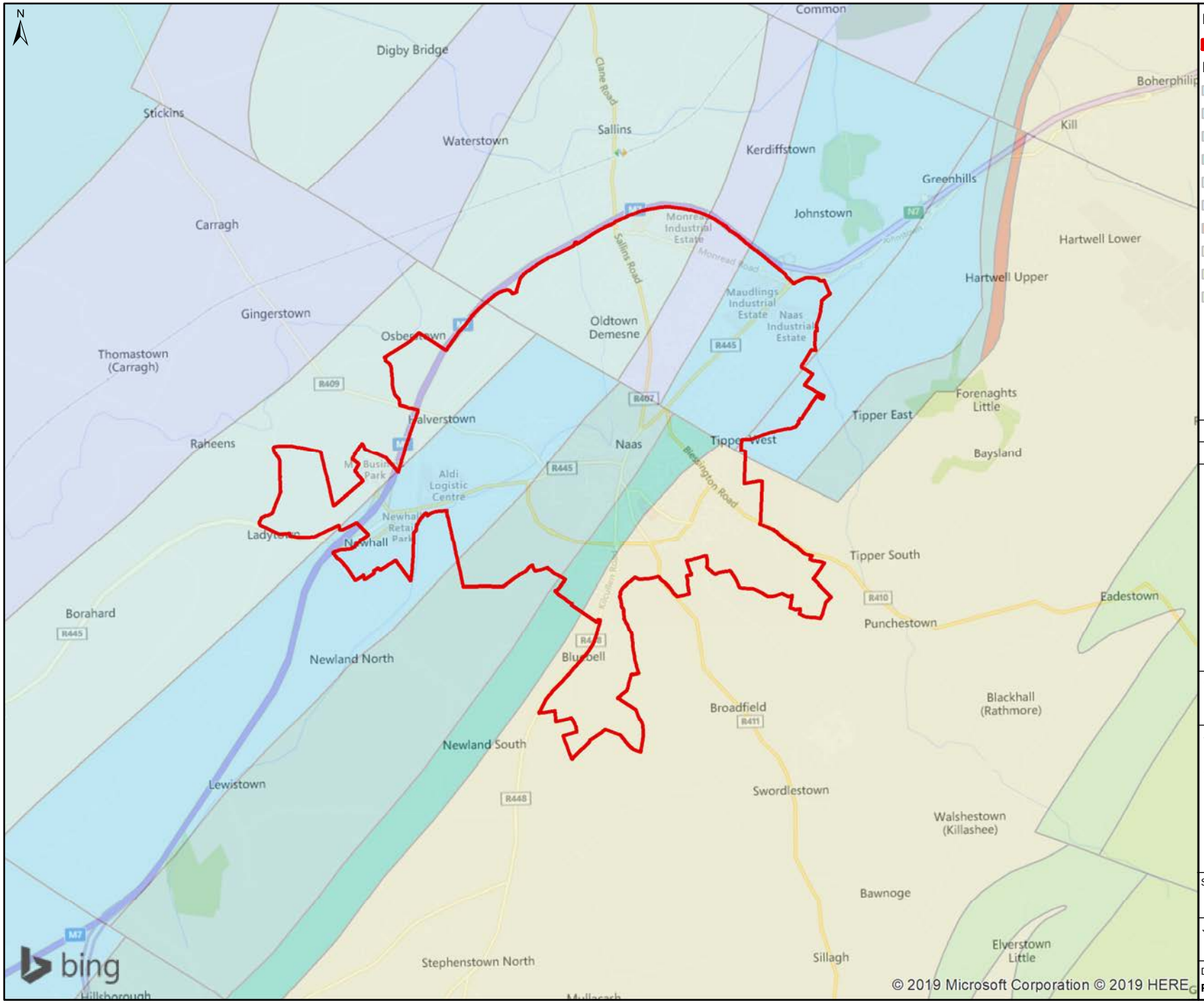

Legend

- Naas LAP Boundary

Bedrock Rock Units 1:100k

- Ballysteen Formation
- Boston Hill Formation
- Feighcullen Formation
- Quinagh Formation
- Rickardstown Formation
- Waulsortian Limestones
- Old Red Sandstone
- Carrighill Formation
- Glen Ding Formation
- Tipperkevin Formation

Associated datasets and digital information objects connected to this resource are available at the Geological Survey of Ireland https://www.gsi.ie/en-ie/data-and-maps/Pages/default.aspx

Issue	Date	By	Chkd	Appd
D2	2019-03-25	SD	SW	SW

Kilometers

0 0.375 0.75 1.5

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Dublin 4, D04 T6X0
Tel +353 (0)1 233 4455 Fax +353 (0)1 668 3169
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Job Title
Naas Local Area Plan
Strategic Environmental Assessment

Geological Heritage

Scale at A4
1:60,000

Job No	Drawing Status
257722	**Issue**

Drawing No	Issue
Figure 4.4	**I2**

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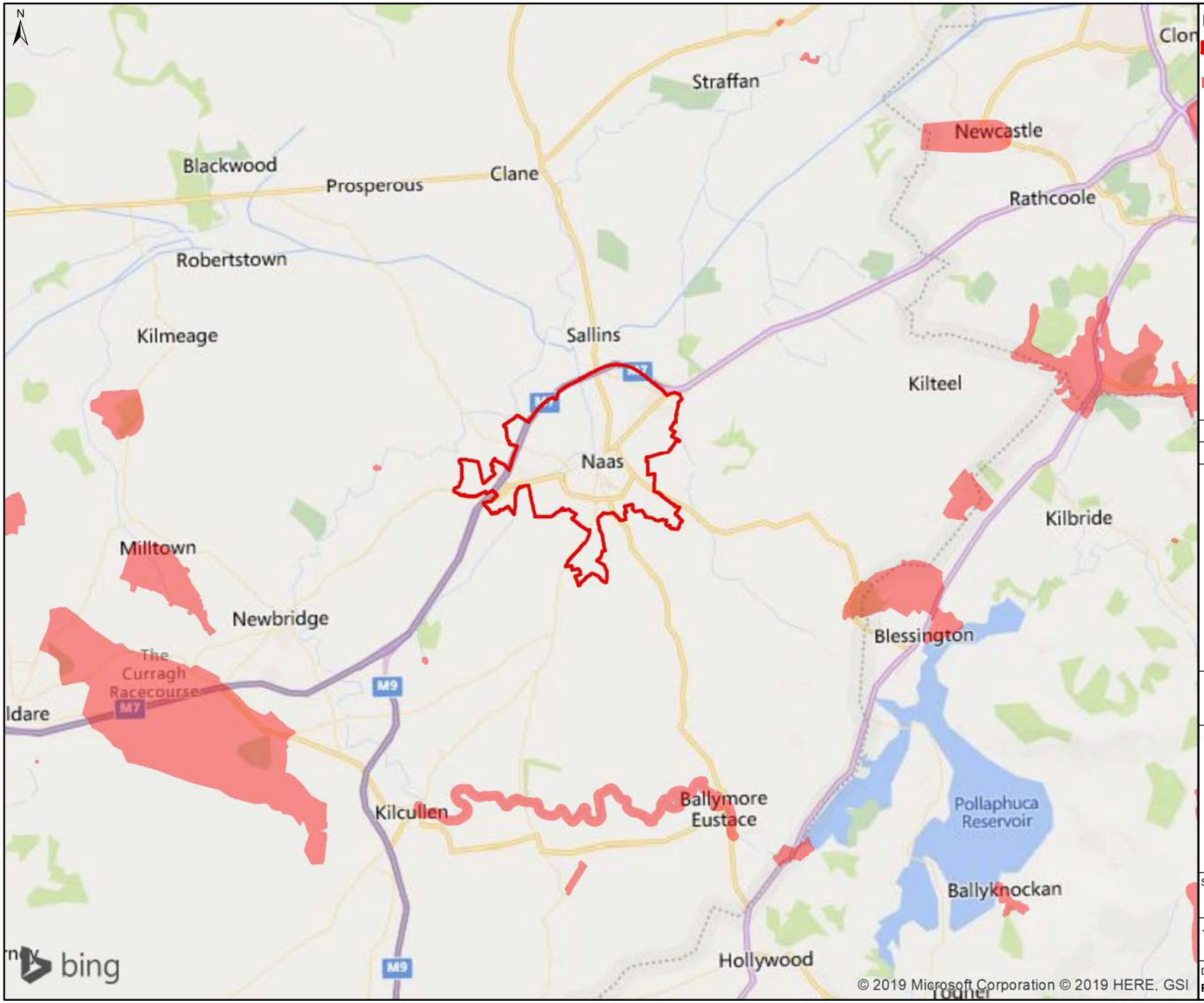

Legend

- Naas LAP Boundary
- Heritage Site Audited Boundaries

Associated datasets and digital information objects connected to this resource are available at the Geological Survey of Ireland https://www.gsi.ie/en-ie/data-and-maps/Pages/default.aspx

Issue	Date	By	Chkd	Appd
D2	2019-03-25	SD	SW	SW

Kilometers

0 0.75 1.5 3

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50 Ringsend Road
Dublin 4, D04 T6X0
Tel +353 (0)1 233 4455 Fax +353 (0)1 668 3169
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Client
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Job Title
Naas Local Area Plan
Strategic Environmental Assessment

Geological Heritage

Scale at A4
1:150,000

Job No	Drawing Status
257722	**Issue**

Drawing No	Issue
Figure 4.4	**I2**

25/03/2019 19:06:32

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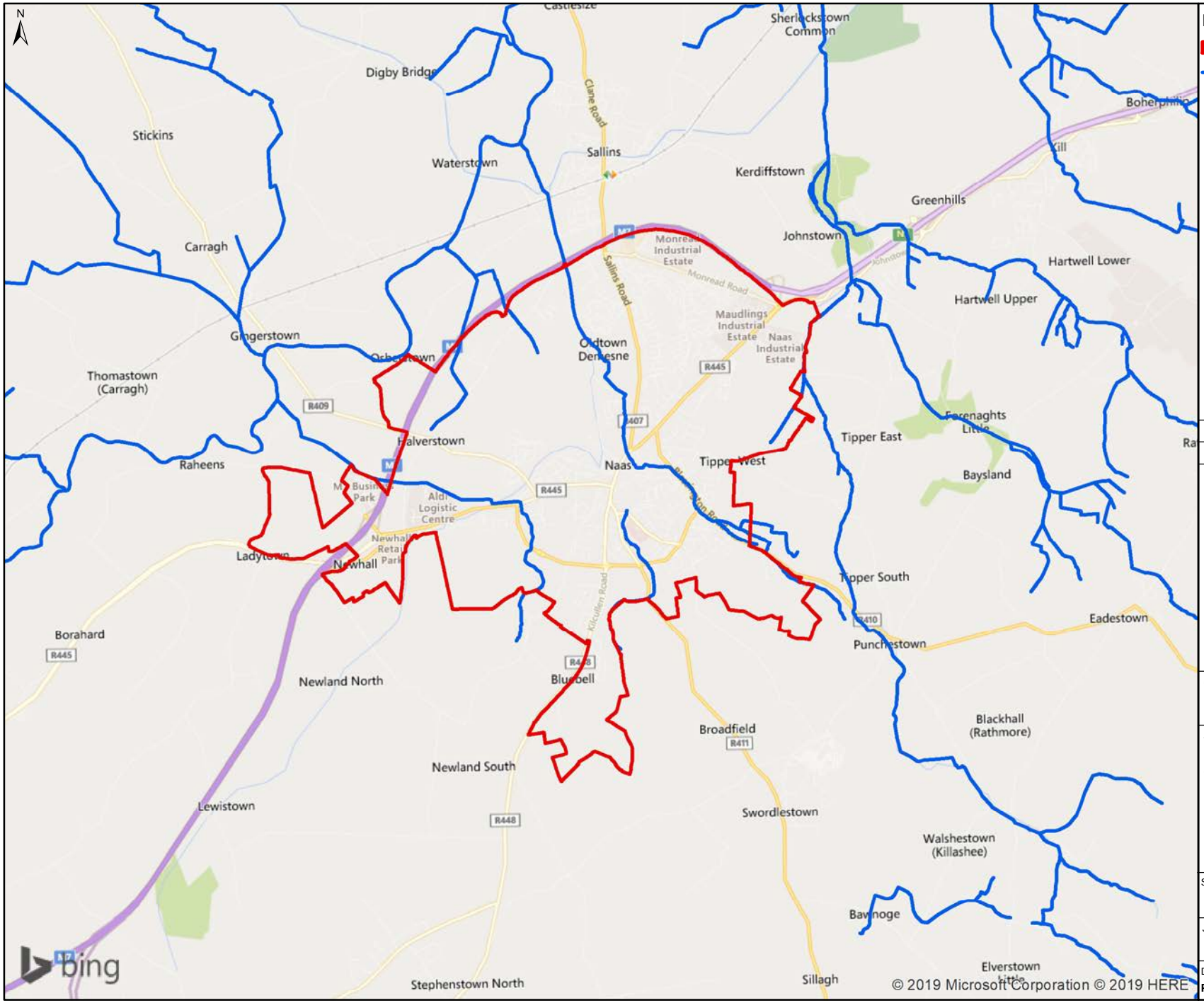

Legend

- Naas LAP Boundary
- WFD River Waterbodies

Associated datasets and digital information objects connected to this resource are available at the Environmental Protection Agency. https://gis.epa.ie/GetData/Download

Issue	Date	By	Chkd	Appd
D2	2019-03-25	SD	SW	SW

Kilometers

0 0.375 0.75 1.5

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Dublin 4, D04 T6X0
Tel +353 (0)1 233 4455 Fax +353 (0)1 668 3169
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Job Title
Naas Local Area Plan
Strategic Environmental Assessment

Surface Water Features

Scale at A4
1:60,000

Job No	Drawing Status
257722	**Issue**

Drawing No	Issue
Figure 4.5	**I2**

29/11/2017 12:40:22

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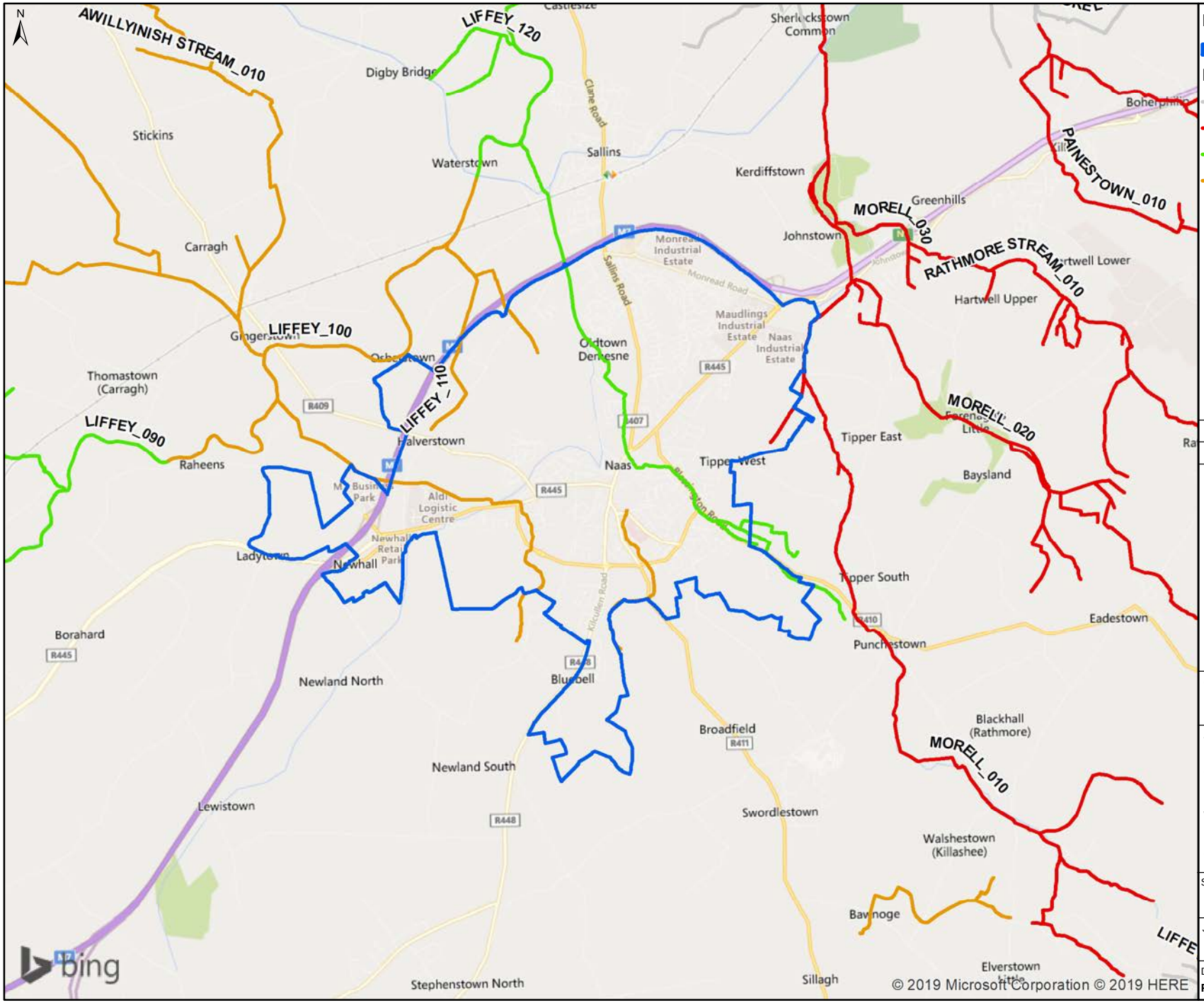

Legend

- Naas LAP Boundary

River Waterbodies Risk

- Unassigned
- At risk
- Not at risk
- Review

Associated datasets and digital information objects connected to this resource are available at the Environmental Protection Agency. https://gis.epa.ie/GetData/Download

Issue	Date	By	Chkd	Appd
D2	2019-03-25	SD	SW	SW

Kilometers

0 0.375 0.75 1.5

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Dublin 4, D04 T6X0
Tel +353 (0)1 233 4455 Fax +353 (0)1 668 3169
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Job Title
Naas Local Area Plan
Strategic Environmental Assessment

Water Framework Directive
Risk Status for
Surface Waterbodies

Scale at A4
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Job No	Drawing Status
257722	**Issue**

Drawing No	Issue
Figure 4.6	**I2**

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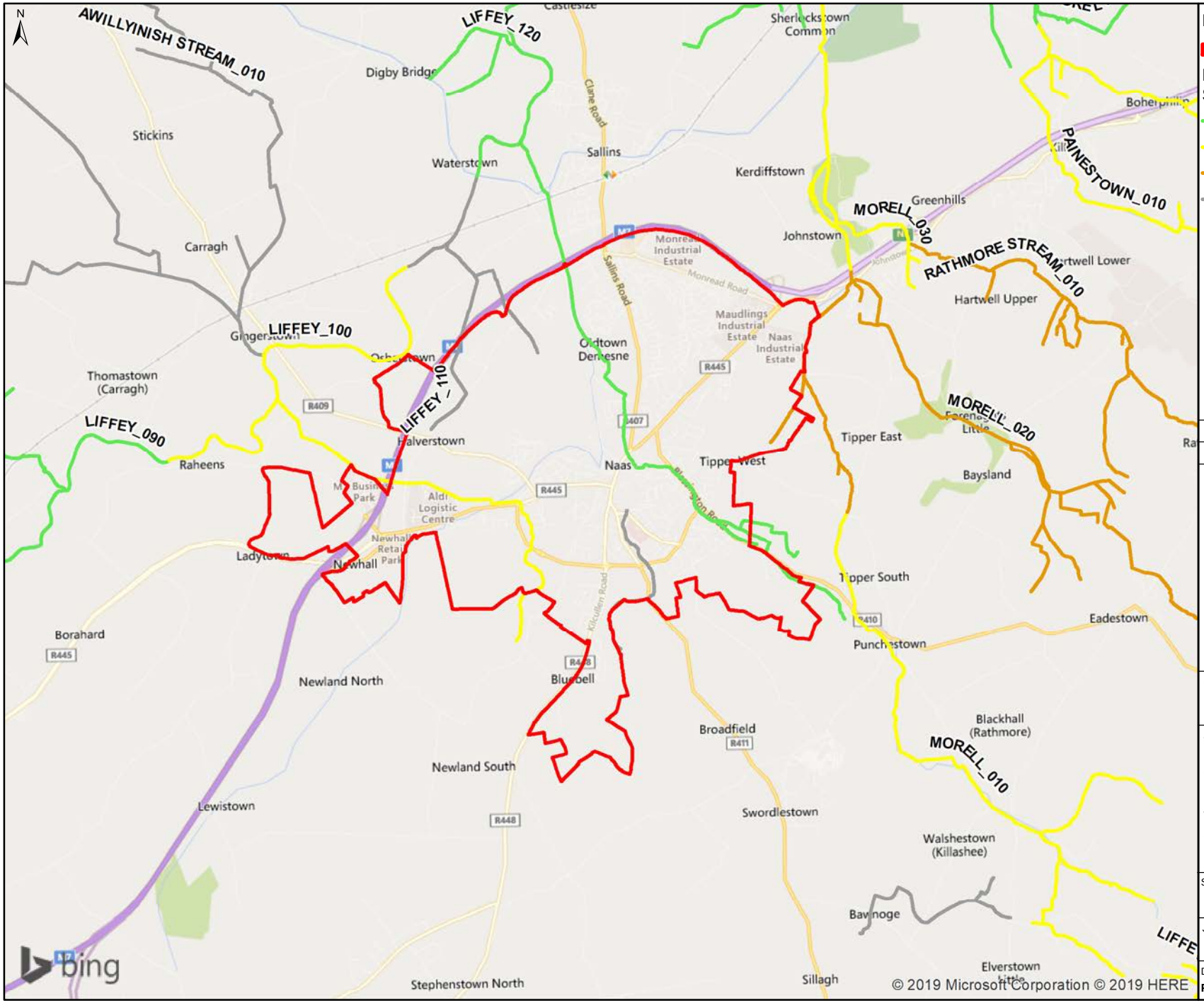

Legend

Naas LAP Boundary

River Waterbody WFD Status 2010 - 2015

- Good
- Moderate
- Poor
- Unassigned

Associated datasets and digital information objects connected to this resource are available at the Environmental Protection Agency. https://gis.epa.ie/GetData/Download

Issue	Date	By	Chkd	Appd
D2	2019-03-25	SD	SW	SW

Kilometers

0 0.375 0.75 1.5

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50 Ringsend Road
Dublin 4, D04 T6X0
Tel +353 (0)1 233 4455 Fax +353 (0)1 668 3169
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Client
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Job Title
Naas Local Area Plan
Strategic Environmental Assessment

Water Framework Directive Status for Lakes and Rivers

Scale at A4
1:60,000

Job No	Drawing Status
257722	**Issue**

Drawing No	Issue
Figure 4.7	**I2**

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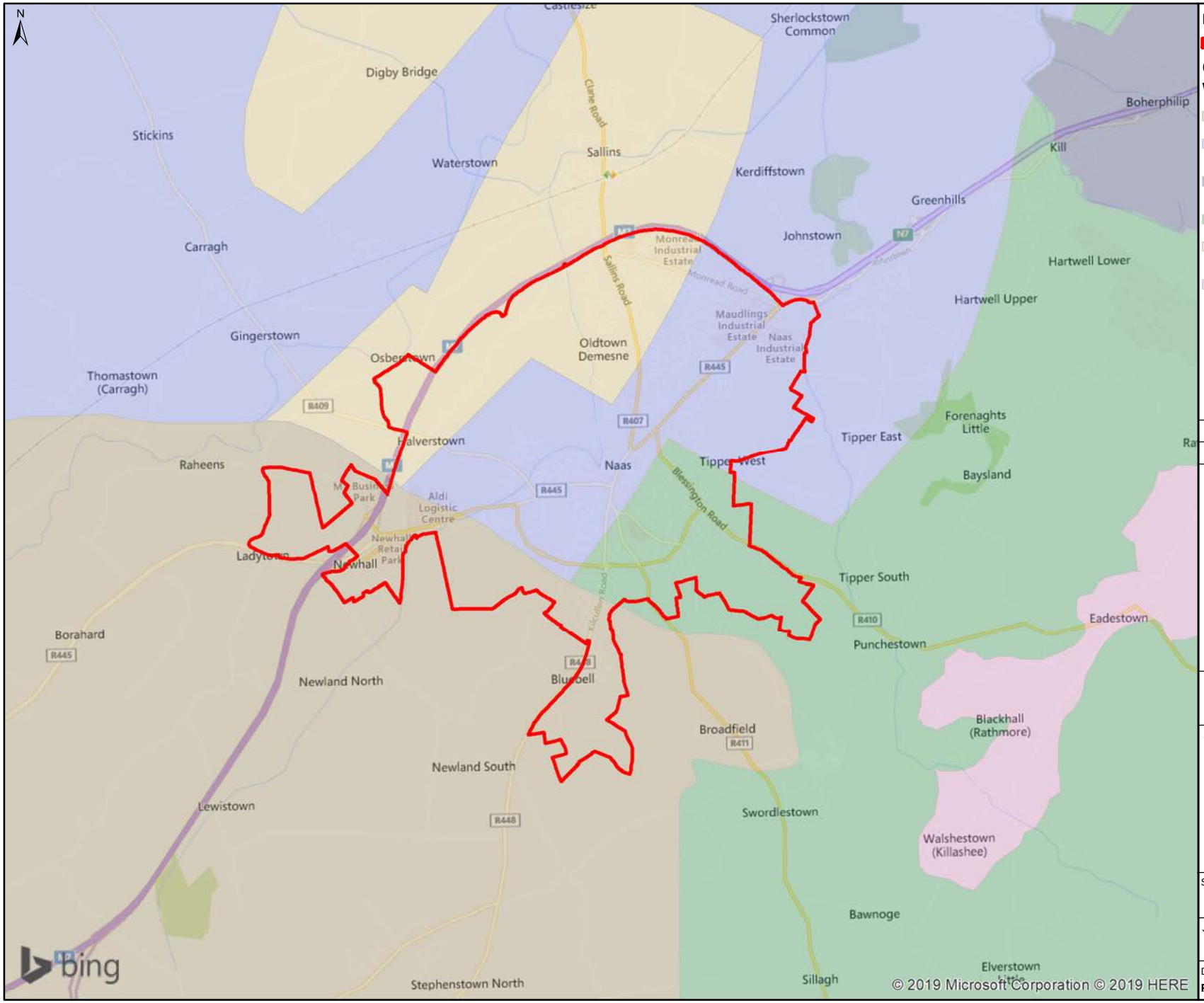

Legend

- Naas LAP Boundary

Groundwater for Drinking Water

- Curragh Gravels East
- Dublin
- Industrial Facility (P0325-01)
- Kilcullen
- Naas
- West Blessington Gravels

Associated datasets and digital information objects connected to this resource are available at the Environmental Protection Agency. https://gis.epa.ie/GetData/Download

Issue	Date	By	Chkd	Appd
D2	2019-03-25	SD	SW	SW

Kilometers

0 0.375 0.75 1.5

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Tel +353 (0)1 233 4455 Fax +353 (0)1 668 3169
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Client
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Job Title
Naas Local Area Plan
Strategic Environmental Assessment

Drinking Water

Scale at A4
1:60,000

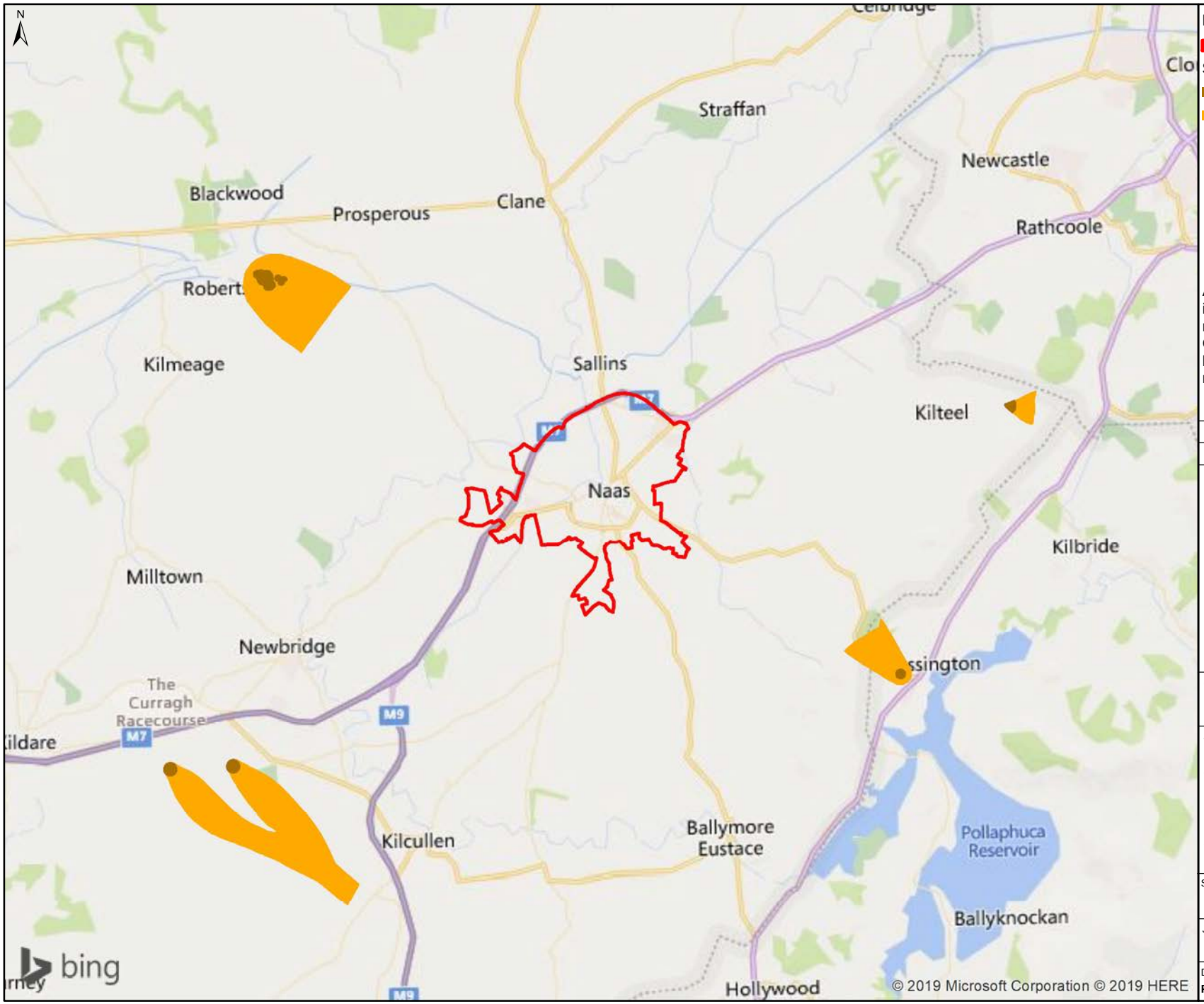
Job No	Drawing Status
257722	**Issue**

Drawing No	Issue
Figure 4.8	**I2**

25/03/2019 17:35:56

MXD Location J:\257000\257722-00\4. Internal\4-03 Design\4-03-02 Consulting\GIS\03_MapDocuments\Naas_LAP_Drinking_Water_I2.mxd

A4



Legend

- Naas LAP Boundary

Source Protection Zones

- SI - Inner Protection Zone
- SO - Outer Protection Zone

Associated datasets and digital information objects connected to this resource are available at the Geological Survey of Ireland https://www.gsi.ie/en-ie/data-and-maps/Pages/default.aspx

Issue	Date	By	Chkd	Appd
D2	2019-03-25	SD	SW	SW

Kilometers

0 0.75 1.5 3

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50 Ringsend Road
Dublin 4, D04 T6X0
Tel +353 (0)1 233 4455 Fax +353 (0)1 668 3169
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Client

Kildare County Council

Job Title

Naas Local Area Plan
Strategic Environmental Assessment

Groundwater Features and Source Protection Zones

Scale at A4

1:150,000

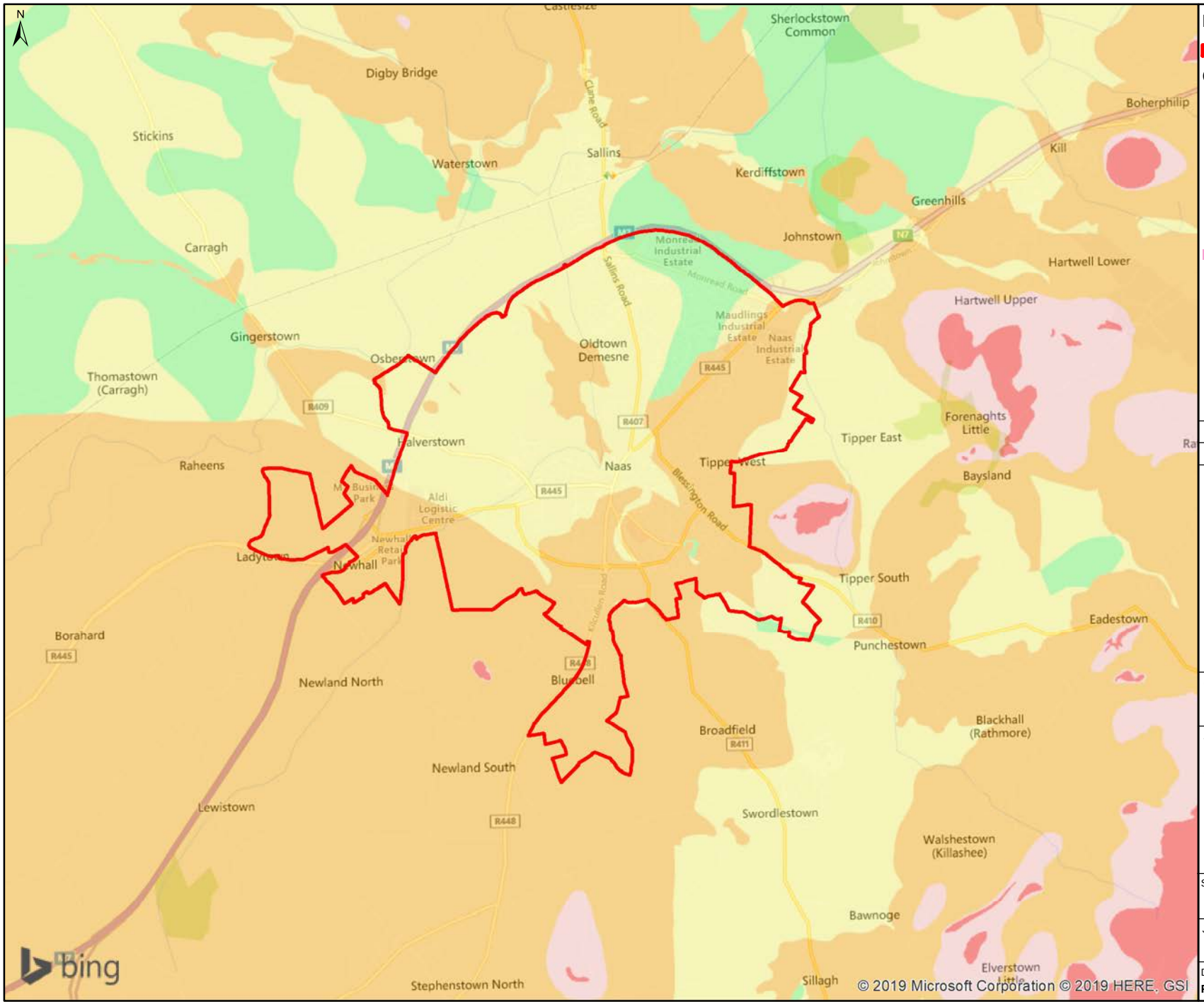
Job No	Drawing Status
257722	**Issue**

Drawing No	Issue
Figure 4.9	**I2**

25/03/2019 17:44:25

MXD Location \\global\europe\Dublin\Jobs\257000\257722-00\4. Internal\4-03 Design\4-03-02 Consulting\GIS\03_MapDocuments\Naas_LAP_Source_Protection_Zones_I2.mxd

A4



Legend

Naas LAP Boundary

Groundwater Vulnerability

- X - Rock at or near surface or Karst
- E - Extreme
- H - High
- M - Moderate
- L - Low
- W - Water

Associated datasets and digital information objects connected to this resource are available at the Geological Survey of Ireland https://www.gsi.ie/en-ie/data-and-maps/Pages/default.aspx

Issue	Date	By	Chkd	Appd
D2	2019-03-25	SD	SW	SW

Kilometers

0 0.375 0.75 1.5

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50 Ringsend Road
Dublin 4, D04 T6X0
Tel +353 (0)1 233 4455 Fax +353 (0)1 668 3169
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Job Title
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Strategic Environmental Assessment

Groundwater Vulnerability

Scale at A4
1:60,000

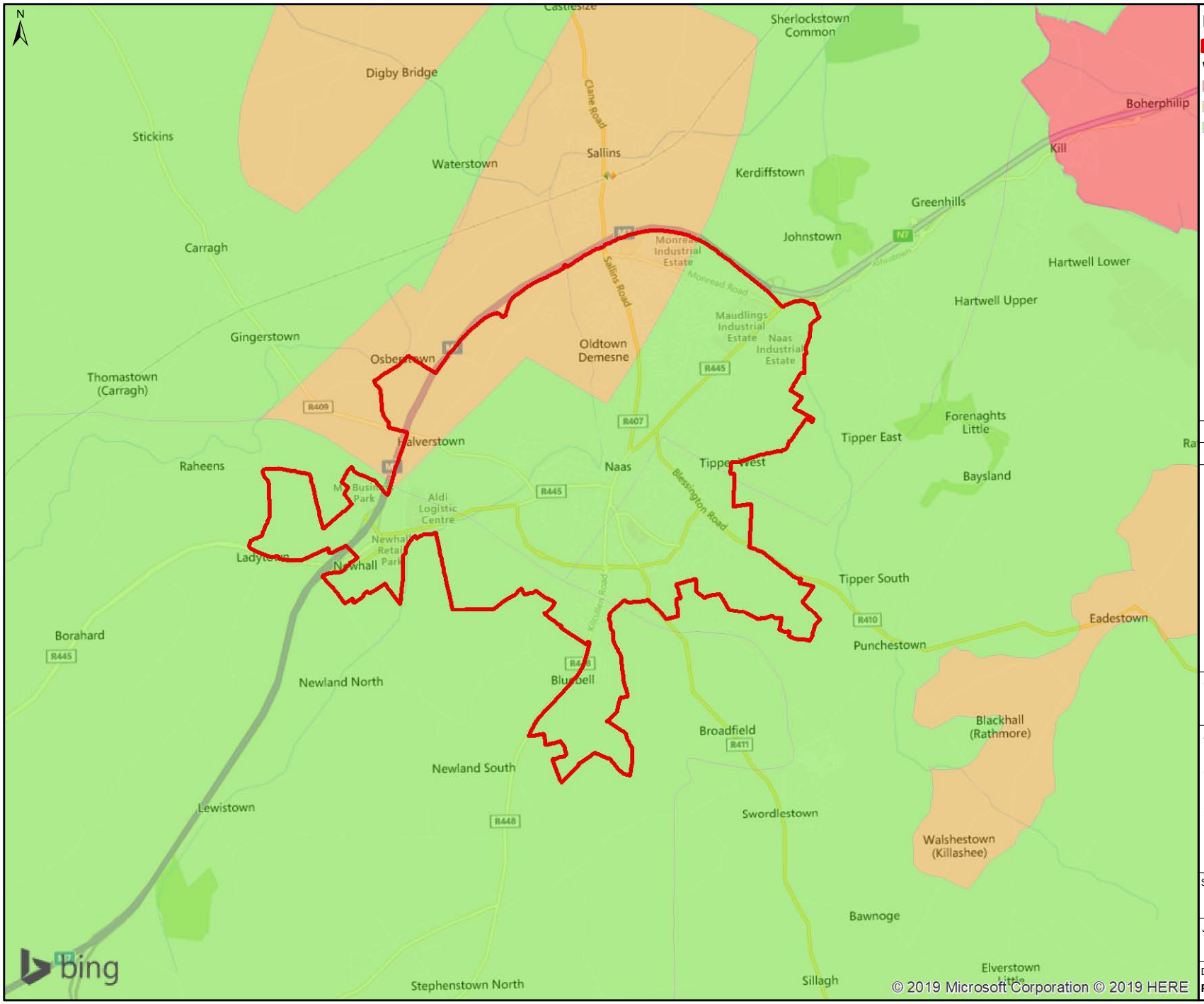
Job No	Drawing Status
257722	**Issue**

Drawing No	Issue
Figure 4.10	**I2**

25/03/2019 17:48:45

MXD Location J:\257000\257722-00\4. Internal\4-03 Design\4-03-02 Consulting\GIS\03_MapDocuments\Naas_LAP_Groundwater_Vulnerability_I2.mxd

A4



Legend

- Naas LAP Boundary

WFD Ground Waterbodies Risk

- At risk
- Review
- Not at risk

Associated datasets and digital information objects connected to this resource are available at the Environmental Protection Agency. https://gis.epa.ie/GetData/Download

Issue	Date	By	Chkd	Appd
D2	2019-03-26	LG	SW	SW

Kilometers

0 0.375 0.75 1.5

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50 Ringsend Road
Dublin 4, D04 T6X0
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Job Title
Naas Local Area Plan
Strategic Environmental Assessment

Water Framework Directive
Ground Waterbodies Risk

Scale at A4
1:60,000

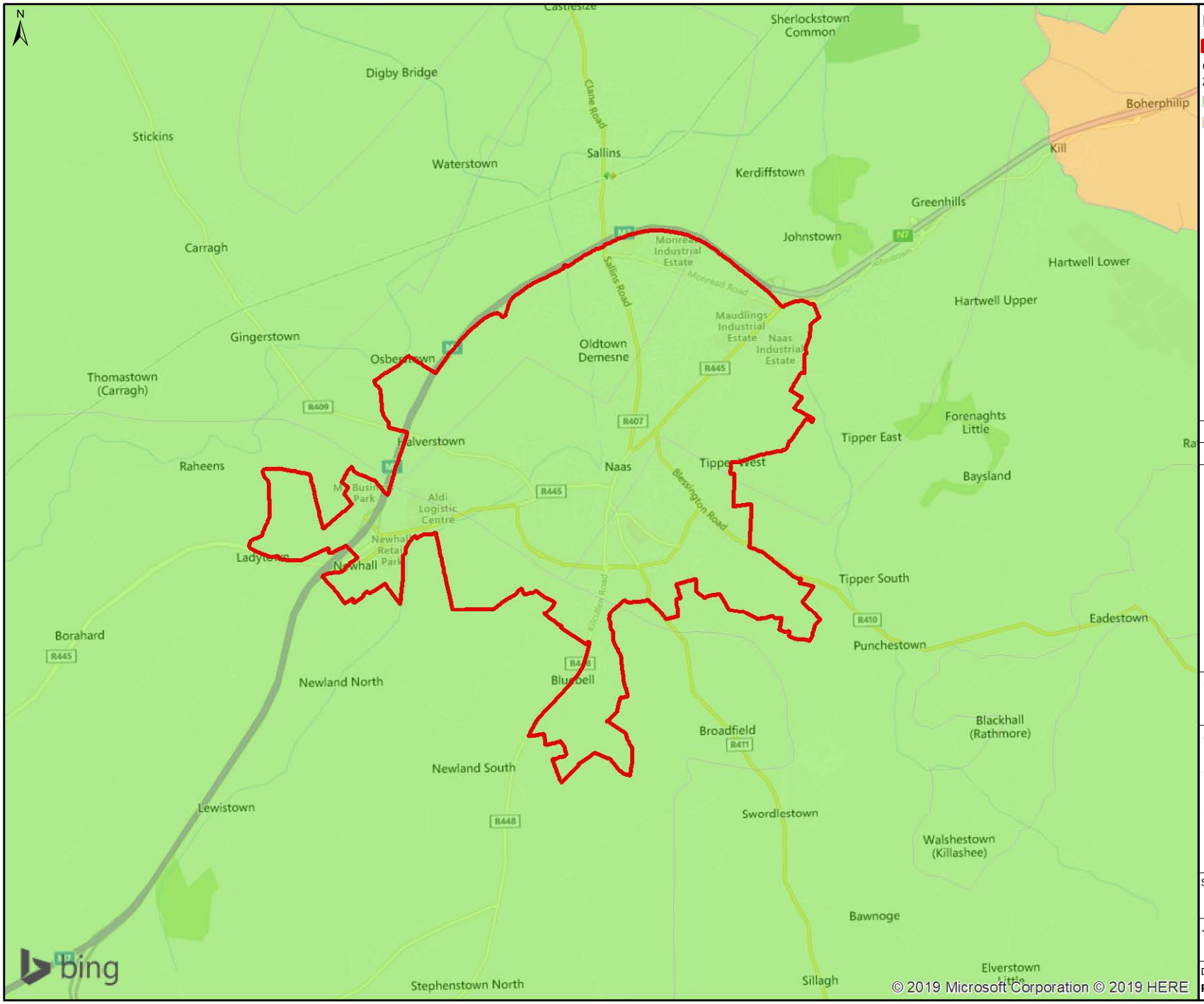
Job No	Drawing Status
257722	**Issue**

Drawing No	Issue
Figure 4.11	**I2**

25/03/2019 17:21:22

MXD Location J:\257000\257722-00\4. Internal\4-03 Design\4-03-02 Consulting\GIS\03_MapDocuments\Naas_LAP_WFD_Risk_I2_LG.mxd

A4



Legend

Naas LAP Boundary

Ground Waterbodies WFD Status 2010 - 2015

Good

Poor (GW)

Associated datasets and digital information objects connected to this resource are available at the Environmental Protection Agency. https://gis.epa.ie/GetData/Download

Issue	Date	By	Chkd	Appd
D2	2019-03-26	LG	SW	SW

Kilometers

0 0.375 0.75 1.5

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50 Ringsend Road
Dublin 4, D04 T6X0
Tel +353 (0)1 233 4455 Fax +353 (0)1 668 3169
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Job Title

Naas Local Area Plan
Strategic Environmental Assessment

Water Framework Directive Status for Ground Waterbodies

Scale at A4

1:60,000

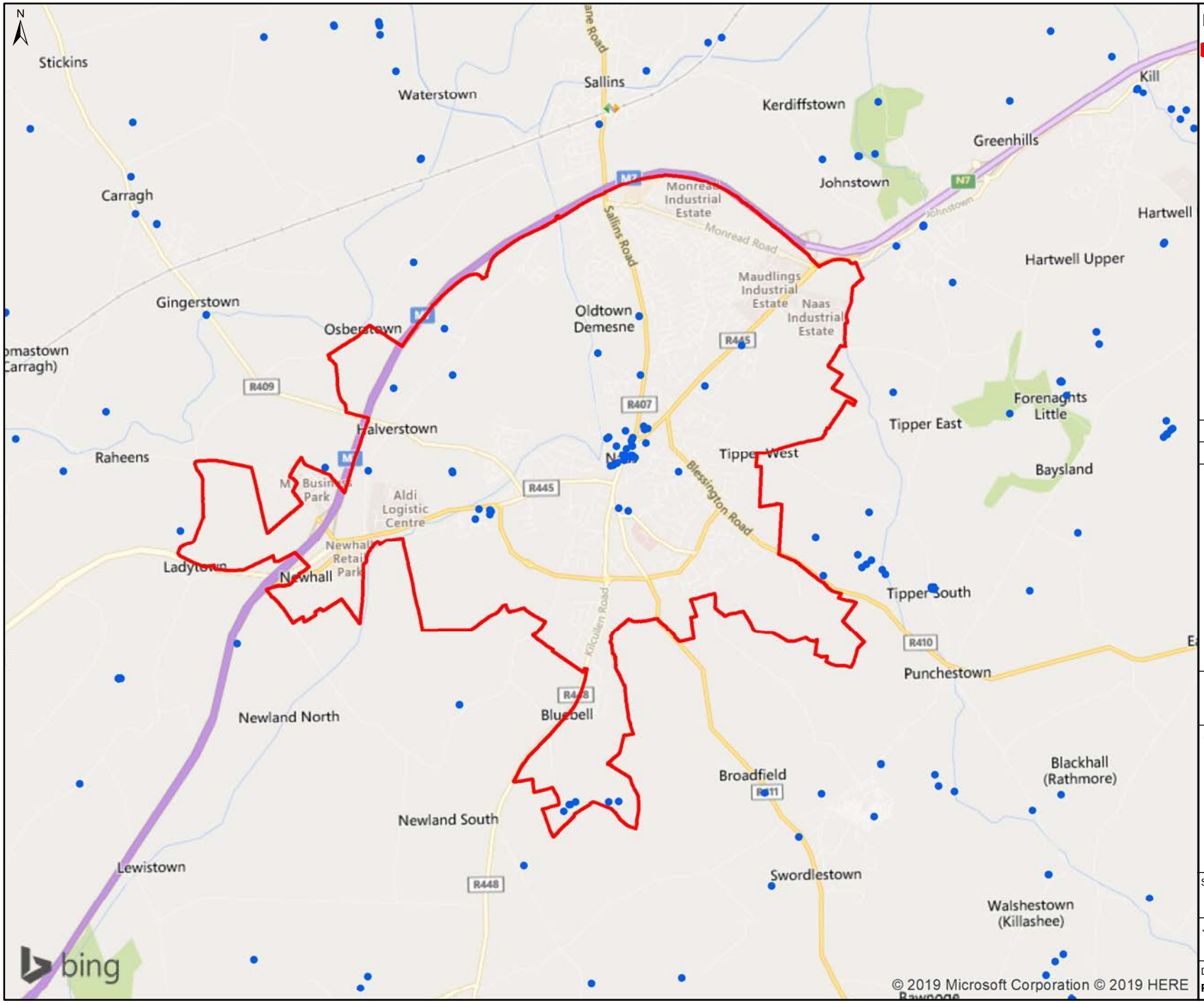
Job No	Drawing Status
257722	**Issue**

Drawing No	Issue
Figure 4.12	**I2**

25/03/2019 17:21:22

MXD Location J:\257000\257722-00\4. Internal\4-03 Design\4-03-02 Consulting\GIS\03_MapDocuments\Naas_LAP_WFD_GWRisk_I2.mxd

A4



Legend

- Naas LAP Boundary
- National Monuments

Associated datasets and digital information objects connected to this resource are available at the Department of Culture, Heritage and the Gaeltacht Historic Environment Viewer http://webgis.archaeology.ie/historicenvironment/

Issue	Date	By	Chkd	Appd
D2	2019-03-25	SD	SW	SW

Kilometers

0 0.3 0.6 1.2

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50 Ringsend Road
Dublin 4, D04 T6X0
Tel +353 (0)1 233 4455 Fax +353 (0)1 668 3169
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Job Title
Naas Local Area Plan
Strategic Environmental Assessment

Recorded Monuments

Scale at A4
1:50,000

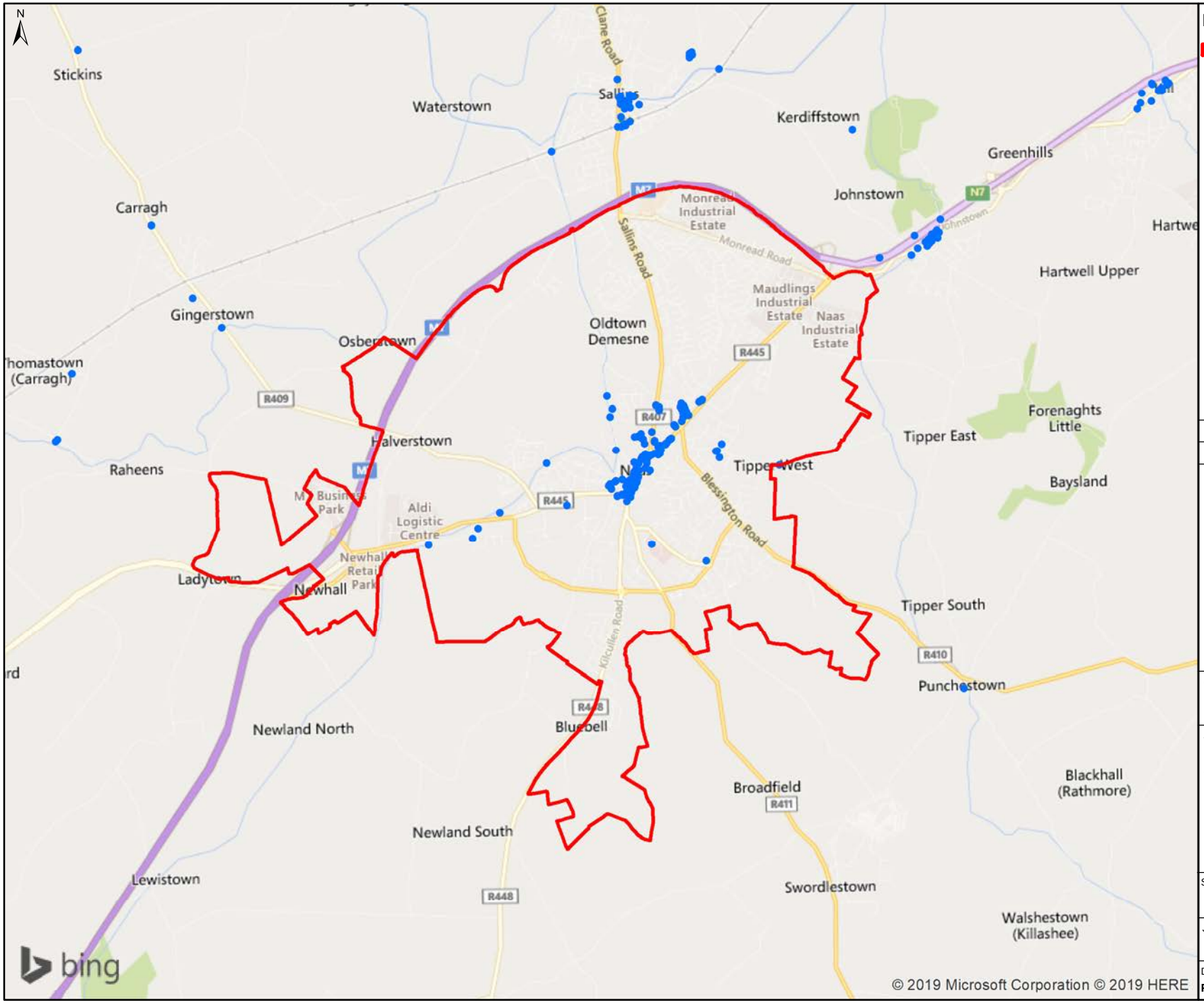
Job No	Drawing Status
257722	**Issue**

Drawing No	Issue
Figure 4.13	**I2**

25/03/2019 18:05:05

MXD Location J:\257000\257722-00\4. Internal\4-03 Design\4-03-02 Consulting\GIS\03_MapDocuments\Naas_LAP_NMS_I2.mxd

A4



Legend

- Naas LAP Boundary
- Protected Structures

Associated datasets and digital information objects connected to this resource are available at the Department of Culture, Heritage and the Gaeltacht Historic Environment Viewer http://webgis.archaeology.ie/historicenvironment/

Issue	Date	By	Chkd	Appd
D2	2019-03-25	SD	SW	SW

Kilometers

0 0.3 0.6 1.2

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50 Ringsend Road
Dublin 4, D04 T6X0
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Job Title
Naas Local Area Plan
Strategic Environmental Assessment

Protected Structures

Scale at A4
1:50,000

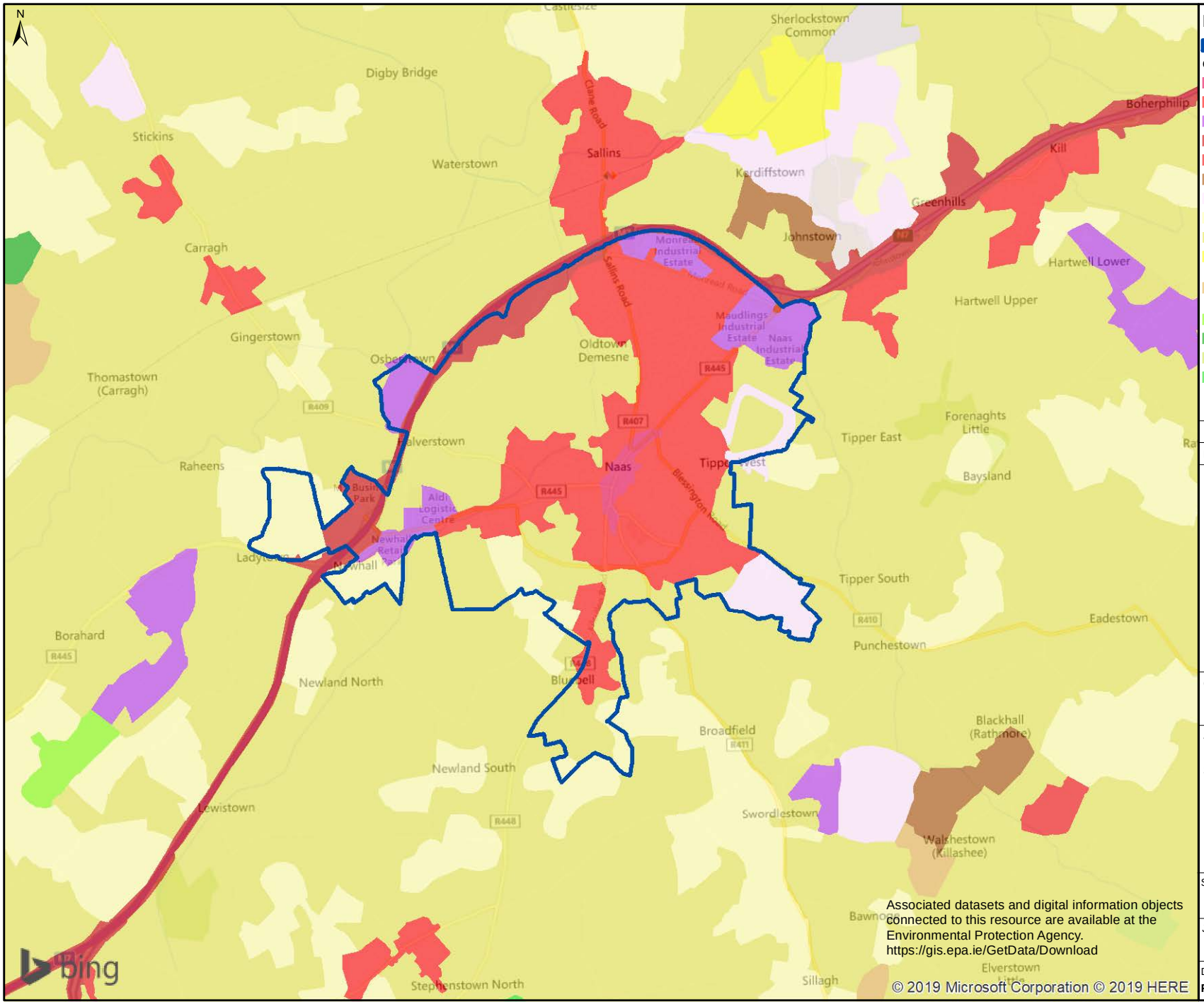
Job No	Drawing Status
257722	**Issue**

Drawing No	Issue
Figure 4.14	**I2**

25/03/2019 18:08:00

MXD Location J:\257000\257722-00\4. Internal\4-03 Design\4-03-02 Consulting\GIS\03_MapDocuments\Naas_LAP_Protected_Structures_I2.mxd

A4



Legend

- Naas LAP Boundary

CORINE Landcover

- 111 Continuous urban fabric
- 112 Discontinuous urban fabric
- 121 Industrial or commercial units
- 122 Road and rail networks
- 131 Mineral extraction sites
- 132 Dump
- 142 Sport and leisure facilities
- 211 Non-irrigated land
- 231 Pastures
- 242 Complex cultivation patterns
- 243 Land principally occupied by agriculture with areas of natural vegetation
- 311 Broad-leaved forest
- 312 Coniferous forest
- 313 Mixed forest
- 321 Natural grassland

Issue	Date	By	Chkd	Appd
D2	2019-03-26	LG	SW	SW

Kilometers

0 0.375 0.75 1.5

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50 Ringsend Road
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Strategic Environmental Assessment

CORINE Landcover

Scale at A4
1:60,000

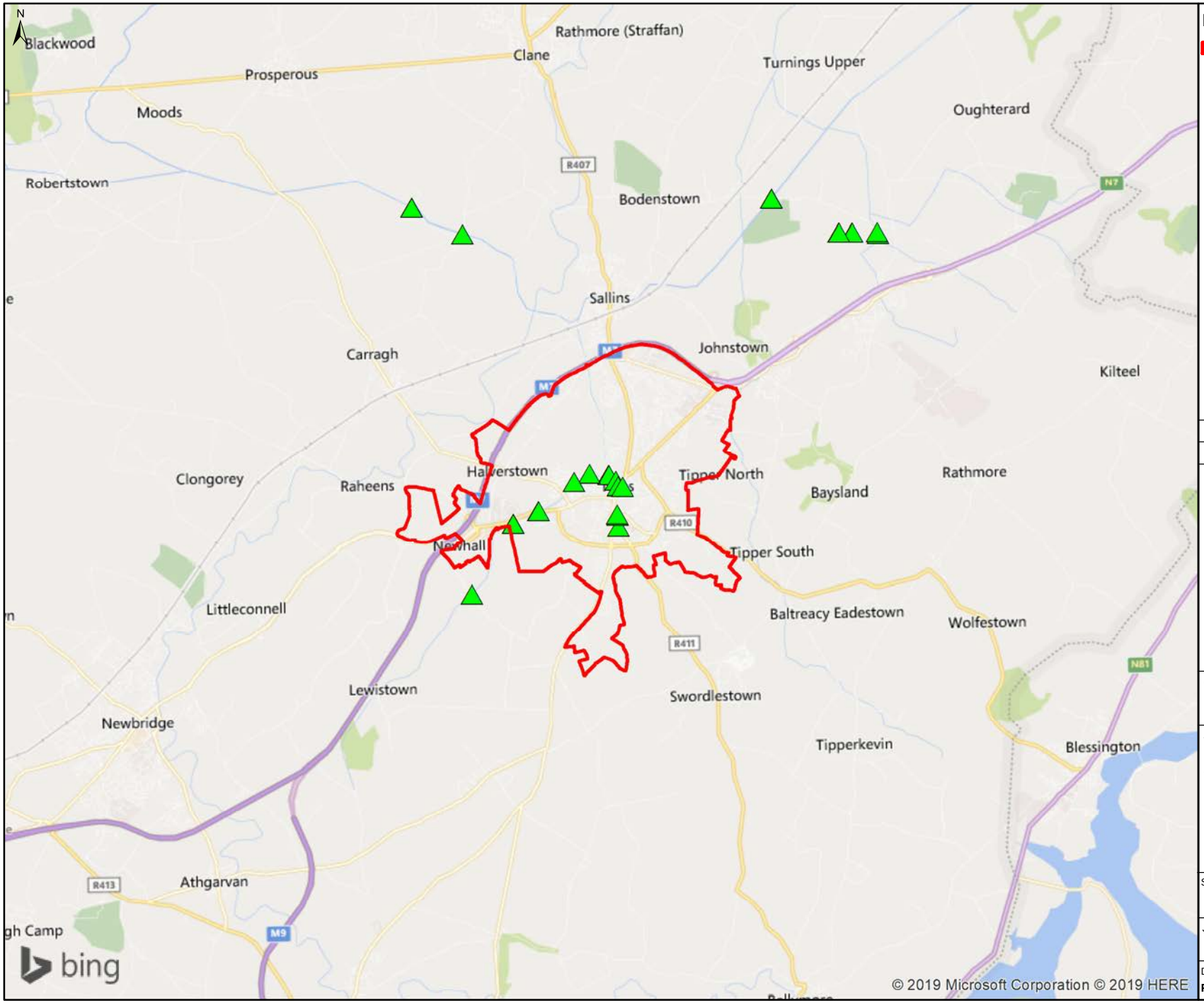
Job No	Drawing Status
257722	**Issue**

Drawing No	Issue
Figure 4.15	**I2**

25/03/2019 17:21:22

MXD Location J:\257000\257722-00\4. Internal\4-03 Design\4-03-02 Consulting\GIS\03_MapDocuments\Naas_LAP_CORINE_I2.mxd

A4



Legend

- Naas LAP Boundary
- Protected Views Prospects

Associated datasets and digital information objects connected to this resource are sourced from Kildare County Council

Issue	Date	By	Chkd	Appd
D2	2019-03-25	SD	SW	SW

Kilometers

0 0.5 1 2

ARUP
50 Ringsend Road
Dublin 4, D04 T6X0
Tel +353 (0)1 233 4455 Fax +353 (0)1 668 3169
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Client
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Job Title
Naas Local Area Plan
Strategic Environmental Assessment

Protected Views and Prospects

Scale at A4
1:100,000

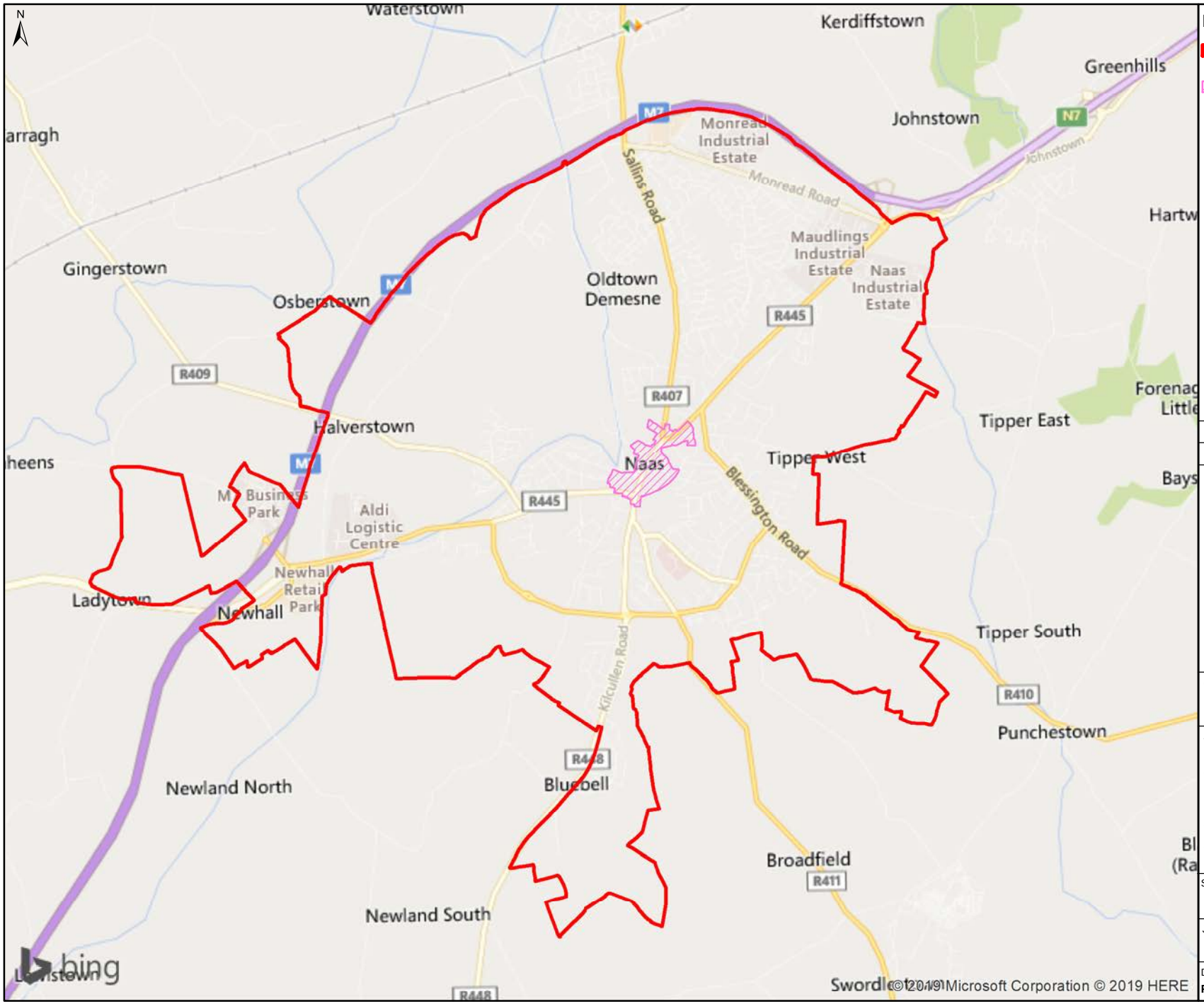
Job No	Drawing Status
257722	**Issue**

Drawing No	Issue
Figure 4.16	**I2**

25/03/2019 18:15:03

MXD Location \\global\europe\Dublin\Jobs\257000\257722-00\4. Internal\4-03 Design\4-03-02 Consulting\GIS\03_MapDocuments\Naas_LAP_Protected_Views_I2.mxd

A4



Legend

- Naas LAP Boundary
- Architectural Conservation Area

Associated datasets and digital information objects connected to this resource are sourced from Kildare County Council

Issue	Date	By	Chkd	Appd
D2	2019-03-25	SD	SW	SW

Kilometers

0 0.25 0.5 1

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50 Ringsend Road
Dublin 4, D04 T6X0
Tel +353 (0)1 233 4455 Fax +353 (0)1 668 3169
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Client
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Job Title
Naas Local Area Plan
Strategic Environmental Assessment

Architectural Conservation Area

Scale at A4
1:40,000

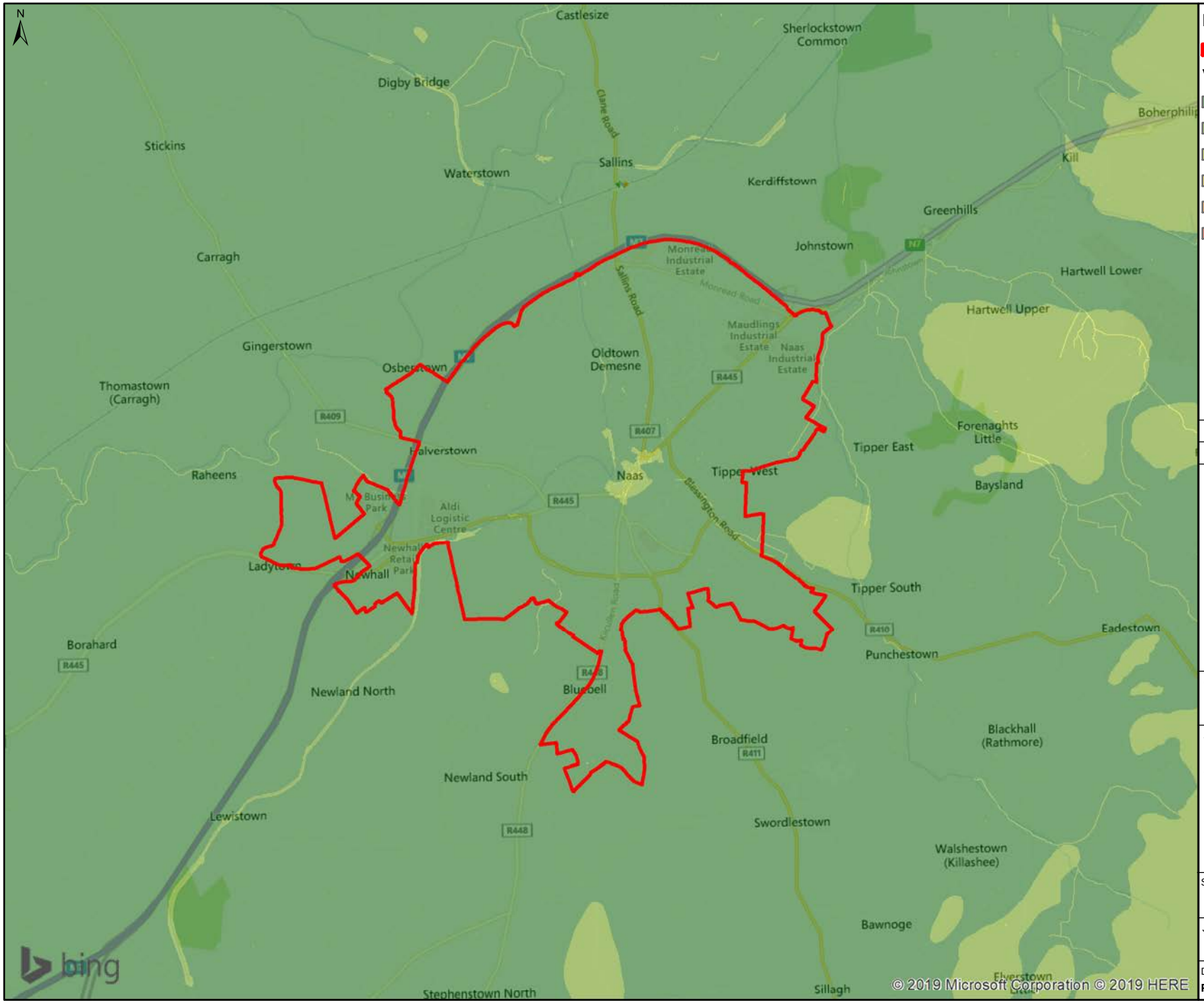
Job No	Drawing Status
257722	**Issue**

Drawing No	Issue
Figure 4.17	**I2**

25/03/2019 18:18:08

MXD Location J:\257000\257722-00\4. Internal\4-03 Design\4-03-02 Consulting\GIS\03_MapDocuments\Naas_LAP_ACA_I2.mxd

A4



Legend

Naas LAP Boundary

Value

- 5 - 10
- 15 - 20
- 25 - 30
- 35 - 40
- 45 - 50
- > 50

Sensitivity Analysis is carried out using the following datasets:

Source NPWS: SAC, SPA, NHA, pNHA
Source EPA: WFD River Waterbody Status, WFD Ground Waterbody Status
Source GSI: Groundwater Vulnerability
Source Department of Culture, Heritage and the Gaeltacht: Protected Structures, Recorded Monuments
Source Kildare Co. Co.: Protected Views

Issue	Date	By	Chkd	Appd
D2	2019-03-25	SD	SW	SW

Kilometers

0 0.375 0.75 1.5

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50 Ringsend Road
Dublin 4, D04 T6X0
Tel +353 (0)1 233 4455 Fax +353 (0)1 668 3169
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Client
Kildare County Council

Job Title
Naas Local Area Plan
Strategic Environmental Assessment

Sensitivity Mapping

Scale at A4
1:60,000

Job No	Drawing Status
257722	**Issue**

Drawing No	Issue
Figure 4.18	**I2**

25/03/2019 18:27:25

MXD Location J:\257000\257722-00\4. Internal\4-03 Design\4-03-02 Consulting\GIS\03_MapDocuments\Naas_LAP_Sensitivity_I2.mxd