

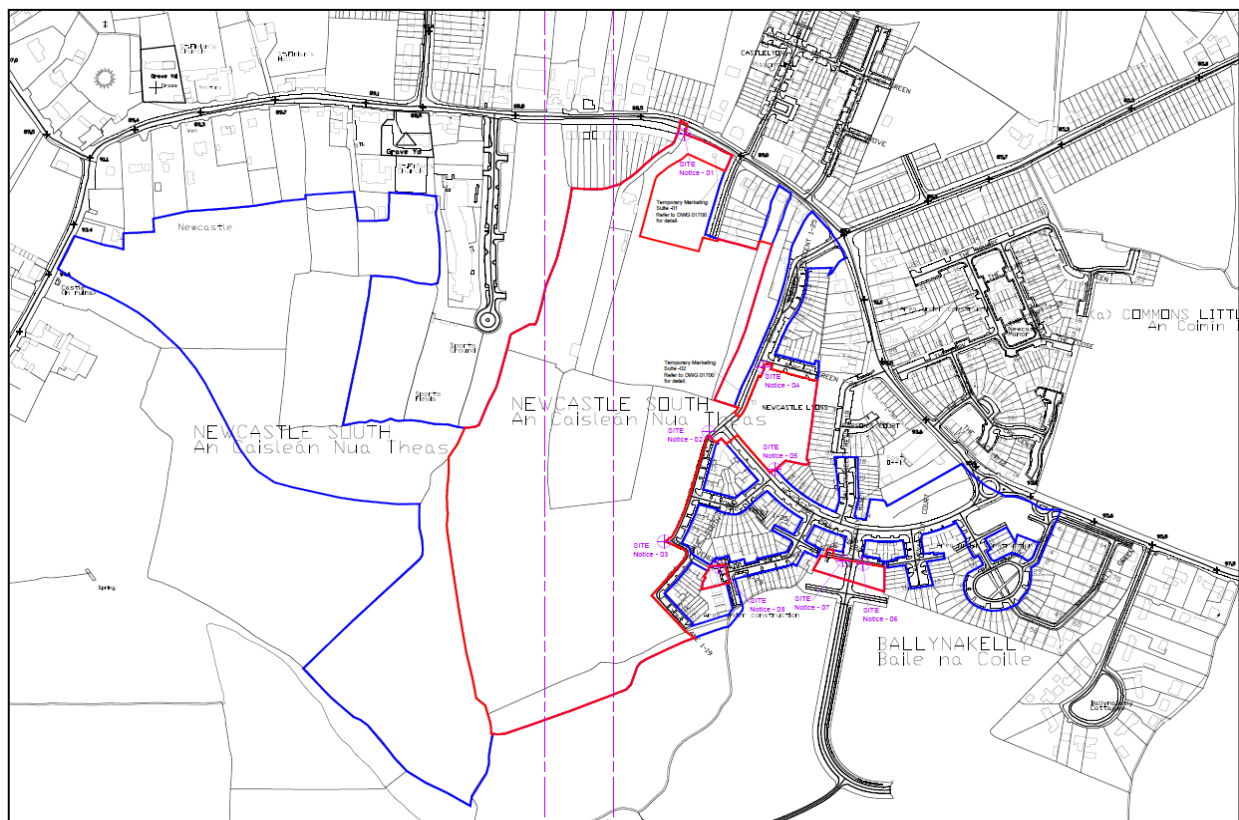
1. INTRODUCTION

This Environmental Impact Assessment Report accompanies a planning application lodged by Cairn Homes Properties Ltd. for permission for residential development on lands located at Newcastle South and Ballynakelly, Newcastle, Co. Dublin.

The proposed development provides for a residential development of 406 no. residential units, a childcare facility, a retail unit; reservation of a school site; the first phase of a new east-west link street and greenway, a continuation of Newcastle Boulevard; a new north-south greenway linking the Main Street to a new public park; together with all associated and ancillary infrastructure and open space provision.

The proposed development site comprises of 16 ha and includes a Main Development Area south of Main Street of approximately 15ha, with 3 no. further infill development areas consisting of uncompleted elements of development originally permitted under Reg. Ref SD05A/0344 (PL06S.217096). The three infill development areas comprise of a vacant site at the corner of Burgage Street and Newcastle Boulevard measuring 0.80ha, a grassed area at Ballynakelly Rise measuring 0.18ha and an existing, uncompleted building at Ballynakelly Edge measuring 0.05ha. The Main Development Area is bounded to the south and west by agricultural lands and to the north and east by existing residential developments while the infill development areas are urban in character and surrounded by existing residential development.

Figure 1.1 Proposed Development Site Location



1.1 Nature & Extent of Development Proposal

Cairn Homes Properties Ltd is applying to An Bord Pleanála for permission for proposed development comprising the following principal elements:

- 406 no. new residential dwellings comprising:
 - 8 no. one-bed apartments
 - 20 no. two-bed apartments
 - 1 no. three-bed apartment
 - 48 no. two-bed apartments below duplex
 - 48 no. three bed duplex units
 - 21 no. two-bed houses
 - 208 no. three-bed houses
 - 52 no. four-bed houses
- Provision of a childcare facility (approximately 518sqm) with capacity for in the order of 110 no. children;
- 1 no. retail unit (total gross floor area 67.7sqm);
- Provision of a new north-south greenway of approximately 550m, linking the Main Street to the new public park;
- First phase of a new east-west link street and greenway, a continuation of Newcastle Boulevard with future connection to adjoining development lands;
- Initial phase of public park (approximately 2ha);
- Internal roadways and all associated ancillary infrastructure, landscaping, boundary treatments and development works;
- A total of 735 no. car parking spaces are provided. These include 663 no. spaces serving the residential units with 11 no. spaces designated for use by the childcare facility; 1 no. commercial space and 60 no. visitor spaces (including spaces serving the proposed public park 4 no. electric vehicle spaces; 4 car sharing spaces and 7 no mobility impaired spaces), 10 no. motor cycle spaces, and a total of 323 no. bicycle spaces are proposed;
- Pedestrian/cycle paths and linkages to Local Roads north and east of the main development area to facilitate potential future pedestrian links; and,
- The proposed development also provides for a temporary, single storey marketing suite and associated signage (including hoarding) during the construction phase of development only.

- All associated and ancillary infrastructure, landscaping, boundary treatments and development works, to include foul and surface water drainage, attenuation areas, watermains, 4 no. ESB substations, street lighting, boundary walls and fences on a proposed development site totalling approximately 16ha (net developable area, omitting School Site, Public Park and Link Road equates to approximately 10.9ha).

1.2 Need for an Environmental Impact Assessment Report

In accordance with Part X of the Planning & Development Acts 2000-2016 (the Act), where a planning application is made in respect of a development or class of development referred to in the regulations under Section 176, the application shall, in addition to meeting the requirements of the permission regulations, be accompanied by an Environmental Impact Assessment Report.

Under Schedule 5 of the Planning & Development Regulations 2001-2016 (the Regulations), developments for the purposes of Part X are specified. In accordance with item 10 of Part 2 of Schedule 5 of the Regulations, an EIAR is required for infrastructure projects comprising of:

(b) (i) *Construction of more than 500 dwellings units.*

...

(iv) *Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere.*

(In this paragraph, "business district" means a district within a city or town in which the predominant land use is retail or commercial use.)

The requirement for an Environmental Impact Assessment Report was subject to informal screening with South Dublin County Council over the course of the pre-planning consultation. It was determined that it would be appropriate to carry out an Environmental Impact Assessment for the proposed development with respect to the relevant thresholds, with particular reference to urban development exceeding '10 hectares in the case of other parts of a built-up area' and the potential impacts on the receiving environment.

1.3 Scoping of EIAR

Cairn Homes Properties Limited is committed to ensuring that the development of the lands at Newcastle takes place in an environmentally responsible and sustainable manner.

The proposed development has been subject to several pre-planning meetings including formal meetings on the 1 August 2017, 27 June 2018 and 26 February 2019, and with various Departments of South Dublin County Council and an informal scoping process to identify the issues that are likely to be most important during the Environmental Impact Assessment process for the proposed development has been carried out. This approach is consistent with the Environmental Protection Agency's 'Guidelines on the information to be contained in Environmental Impact Assessment Reports' which provides that formal scoping, as per section 173(2)(a) of the Act, is not mandatory.

This EIAR has sought to comprehensively address the issues listed in Sixth Schedule of the Regulations having regard to the requirements of the Directive EIA (2014/52/EU). The following issues have been assessed in the context of the proposed development:

- Population & Human Health
- Soil and Geology
- Water: Hydrogeology & Hydrology
- Noise and Vibration
- Air, Dust and Climatic Factors
- Biodiversity: Flora and Fauna
- Landscape & Visual Impact Assessment
- Material Asset: Traffic & Transport
- Material Asset: Water Supply, Drainage & Utilities
- Cultural Heritage: Archaeology and Architectural Heritage

The scoping process undertaken has directed what information should be contained in the EIAR and the most appropriate mechanisms to gather and assess that information to ensure that all potential impacts are adequately identified and appropriately mitigated against where necessary.

1.4 Structure & Content of EIAR

This EIAR has been prepared in accordance with the requirements of the following Statutory Instruments:

- Environmental Impact Assessment (EIA) Directive (2014/52/EU)
- European Communities (Environmental Impact Assessment) Regulations, 1989 (S.I. No. 349 of 1989), as amended
- Planning and Development Regulations 2001 (SI No. 600 of 2001), as amended
- European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018)

The content of the EIAR has had regard to the information requirements specified in the Sixth Schedule of the 2001 Regulations (as amended).

The preparation of the EIAR has been informed by the Environmental Protection Agency's Guidelines On The Information To Be Contained In Environmental Impact Assessment Reports 2002 and Advice Notes On Current Practice In The Preparation Of Environmental Impact Assessment Reports (September 2003).

The content of this EIAR has also had regard to the Revised Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (Draft), August 2017; the Advice Notice for Preparing Environmental Impact Assessment Reports (Draft), September 2015 and the Consultation Paper on Transposition of 2014 EIA Directive (2014/52/EU) in the Land Use Planning and EPA Licencing Systems. These documents are currently Consultation Drafts and it was considered appropriate that regard was had to them on the basis they take account of the revised EIA Directive (2014/52/EU).

The preparation of the EIAR has also been informed by the European Commission's Environmental Impact Assessment of Projects Guidance on the preparation of the Environmental Impact Assessment Report 2017, and the Department of Housing, Planning and Local Government (DoECLG) Guidelines for Planning Authorities & An Bord Pleanála on carrying out Environmental Impact Assessment, August 2018.

The EIAR has been prepared in the 'Grouped Format' structure, which examines each aspect of the environment as a separate section referring to the existing environment, the proposed development, likely impacts, and proposed mitigation measures. The EIAR has been systematically organised to provide the following information:

Section 2	A description of the existing environment.
Section 3	A description of the project.
Section 4	Provides a Consideration of Alternatives
Sections 5-15	Identification of likely significant adverse impacts during conduction and operation of the proposed development. A description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse impacts. Alternatives area examine by reference to locations, designs and processes, as appropriate.
Section 15	An assessment of the interactions and interrelationships of the different environmental factors / impacts that may occur as a result of the proposed development.
Section 16	A summary of all mitigation measures forming part of the proposed development.

Impacts arising from the existence of the proposed development, the use of natural resources, the emission of pollutants, the creation of nuisances and the elimination of waste are described as direct, indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative as appropriate.

An assessment of the environmental sensitivity of geographical areas likely to be affected, as set out in the Seventh Schedule of SI No. 600 of 2001, has also been undertaken. In this regard, particular consideration has been given to the cumulative impact of the development given its proximity to other developments in the area. No part of the site is situated in or adjacent to areas which would be defined or designated as wetlands; coastal zones; mountain and forest areas; nature reserves and parks; areas classified or protected

under legislation, areas in which the environmental quality standards laid down in the legislation of the EU have already been exceeded; or densely populated areas.

1.4.1 Land

It is noted that the 'Land' has been introduced as a prescribed environmental factor by Directive 2014/52/EU amending the EIA Directive. Recital 9 of the Directive outlines the reasons for its inclusion and references *'the need to address the unsustainable increase of settlement areas over time ('land take')*. Recital 9 goes on to state that *'public and private projects should therefore consider and limit their impact on land, particularly as regards land take, and on soil, including as regards organic matter, erosion, compaction and sealing: appropriate land use plans and policies at national, regional and local level are also relevant in this regard'*.

The proposed development provides for the development on lands that are located within the Local Area Plan (LAP) boundary for Newcastle (Newcastle LAP 2012-2022). The proposed development site is zoned for residential development and open space, and is identified to deliver future population growth for the settlement. The proposed development site is located immediately adjacent to the existing developed area. The majority of the proposed development site has been previously disturbed with evidence of topsoil stripping, haul roads and spoil mounds associated with development works permitted under originally permitted under Reg. Ref SD05A/0344 (PL06S.217096) but never completed. The Main Development Area has been gradually covered by scrub vegetation.

In this respect, the proposed development site comprises of greenfield and infill, disturbed, ground in the town of Newcastle and makes efficient use of lands zoned for new residential development. Given the objectives of the LAP, the proposed development provides for the planned development of zoned lands, providing for the expansion of Newcastle which is necessary to meet housing targets. The proposed development site represents previously disturbed lands which are no longer in agricultural use, and therefore it will not have any meaningful reduction in the agricultural capacity of the area. The proposed development will result in the sustainable consolidation of settlement areas over time.

Matters relating to impacts on soil have been considered as relevant in the context of Soil and Geology (Chapter 6) and Hydrogeology (Chapter 7) Sections of this EIAR.

1.5 Difficulties in Compiling the Specified Information

No major difficulties were encountered in compiling the specified information as set out in Schedule 6 of SI 600 of 2001. Any relevant difficulties encountered have been identified in the respective sections of the EIAR, as appropriate.

1.6 Specialist Contributors

The EIAR has been prepared and co-ordinated by Declan Brassil & Company. Specialist inputs have been provided by the following competent experts:

Table 1.1 Specialist Inputs

Specialist Consultants	Aspect of Environment
MOLA Architects Mr. Seán Ó Laoire Mr. Nigel Neely	Project Architect Description of Development (with Others) Consideration of Alternatives (with Others)
Declan Brassil & Company Ltd Mr. Declan Brassil	Introduction Site Context & Characteristics Population & Human Health Interactions (as informed by all chapters)
Murray Associates Mr. Jim Bloxham	Landscape & Visual Impact Assessment
Openfield Ecological Services Mr. Padraic Fogarty	Biodiversity Appropriate Assessment Screening Report (separate document)
AWN Consulting Ltd Dr. Avril Challoner (Air & Climate) Ms. Jennifer Harmon (Noise & Vibration)	Air, Dust & Climatic Factors Noise & Vibration
DBFL Consulting Engineers Mr. Noel Gorman Mr. Mark McKenna	Soil & Geology Water: Hydrogeology & Hydrology Material Assets: Traffic Material Assets: Water Supply, Drainage & Utilities Inputs to: <ul style="list-style-type: none"> – Description of Development – Considerations of Alternatives
Irish Archaeological Consultancy Ms. Faith Bailey Mr. Ross Waters	Cultural Heritage: Archaeology & Architectural Heritage

All experts involved in the preparation of environmental impact assessment reports are qualified and competent in their respective aspect of the environment. Details of qualifications, expertise and experience have been provided in Appendix 1.A

APPENDIX 1.A Competency of Experts

Expert	Company	Aspect of Environment	Qualifications	Summary of Professional Expertise
Mr. Declan Brassil	Declan Brassil & Co.	EIAR Co-Ordination & Compilation Population & Human Health	BA (Hons) NUI Maynooth 1990 Masters of Regional and Urban Planning, University College Dublin 1992	Declan is a Chartered Town Planner with over 25 years' experience and is the Principal in Declan Brassil & Company. During this time he has worked in the private sector and as an Inspector with An Bord Pleanála. Declan has extensive experience in leading multi-disciplinary teams in the preparation of Environmental Impact Statements, Local Area Plans, Masterplans and planning applications for large scale mixed use developments throughout the country. He has also advised on statutory planning processes and policy development and analysis on behalf of state agencies and private clients and acted as planning expert witness at oral hearings
Mr. Seán Ó Laoire	MOLA Architecture	Description of Development & Consideration of Alternatives	B.Arch, University College Dublin 1970, M.Arch Dip UD, Masters of Architecture and Diploma in Urban Design University of California, Los Angeles(UCLA) 1974,	Seán is a Consultant Director of MOLA Architecture, having previously been a Founding Director of Murray Ó Laoire Architects (1979 - 2010). Seán has invaluable experience combining architecture with a specialism in Urban Design & Masterplanning and

Expert	Company	Aspect of Environment	Qualifications	Summary of Professional Expertise
			<p>Member of the Royal Institute of Architects of Ireland 1979;</p> <p>Fellow of the Royal Institute of Architects of Ireland 1999;</p> <p>President of the Royal Institute of Architects of Ireland 2007-9</p>	<p>has worked and studied in England, Italy and the US. He is a key figure within the profession having played a major role in many prestigious schemes within the country e.g. Dublin Docklands, Titanic Quarter Belfast, Ceannt Station Galway. He is a former President of the RIAI, former Senior Lecturer in Urban Design at the DIT, in addition to numerous positions in an advisory/contributor role to articles and committees within the profession, most recently being a member of the RIAI Gold Medal adjudication panel.</p>
Mr. Nigel Neely	MOLA Architecture	Description of Development & Consideration of Alternatives	BA(Hons), DipArch, MRIAI	<p>An experienced team leader, Nigel is a registered member of the RIAI with over 15 years Irish Post graduate experience and 5 years post graduate UK experience.</p> <p>Nigel has gained considerable experience both here in Ireland and the UK working on numerous projects covering Masterplanning; Mixed Use; Commercial; Hospitality; Sports & Leisure; HealthCare and Residential Sector projects. More recently he was a Team leader for the Cherrywood Town Centre development, the largest single</p>

Expert	Company	Aspect of Environment	Qualifications	Summary of Professional Expertise
				urban development project in Ireland.
Mr. Jim Bloxam	Murray & Associates	Landscape & Visual Impact	MLArch, MILI	<p>Jim Bloxam has been carrying out landscape and visual impact assessments for EIS/EIAR and as standalone reports since commencing practice with Murray & Associates in 2014. Key previous LVIA projects include various projects within the Cherrywood SDZ (2015 to present), LIDL Regional Distribution Centre (2016), Tinakilly Residential Development, Rathnew (2017), Creagh Residential Development, Gorey (2018), Rockbrook Residential Development, Sandyford (2018) and a number of other national infrastructure and high profile commercial and residential projects. Jim is a Full Member Irish Landscape Institute.</p> <p>Murray & Associates have been conducting LVIAs as part of EIS/EIAR and as stand-alone reports for over 20 years.</p>
Mr. Padraic Fogarty	Openfield Ecological Services	Biodiversity Appropriate Assessment Screening	<p>MSc Environmental Protection</p> <p>BSc in Analytical Science</p> <p>Diploma in Field Ecology</p> <p>Diploma in Environment and</p>	<p>Pádraic Fogarty, has an MSc in Environmental Protection (Sligo IT), a BSc in Analytical Science (DCU), and diplomas in Geography & Environment (OU) and Field Ecology (UCC). He has nearly 20 years experience in industry</p>

Expert	Company	Aspect of Environment	Qualifications	Summary of Professional Expertise
			Geography	and consultancy. As a full member of the Institute for Environmental Management & Assessment (IEMA) OPENFIELD is bound by that organisation's code of practice. Pádraic has an in depth knowledge of environmental issues and was chairman of the Irish Wildlife Trust from 2009 – 2012. He continues to edit the quarterly wildlife publication 'Irish Wildlife'
Mr. Noel Gorman	DBFL Consulting Engineers	Soil and Geology Water: Hydrogeology and Hydrology Material Assets: Water Supply; Drainage & Utilities	BEng, CEng, MIEI	Chartered Civil Engineer with 7 years' experience in the design and construction of civil engineering infrastructure .
Dr. Avril Challoner	AWN Consulting	Air, Dust & Climatic Factors	CSci BEng (Hons) (Environmental) HDip in Statistics PhD in Environmental Engineering (Air Quality)	Chartered Scientist, BEng (Hons) in Environmental Engineering from the National University of Ireland Galway, HDip in Statistics from Trinity College Dublin and has completed a PhD in Environmental Engineering (Air Quality) in Trinity College Dublin graduating in 2013. She is a Chartered Scientist (CSci), a Member of the Institute of Air Quality Management and specialises in the fields of air quality, EIA and air dispersion

Expert	Company	Aspect of Environment	Qualifications	Summary of Professional Expertise
				modelling.
Ms. Jennifer Harmon	AWN Consulting	Noise and Vibration	BSc(Hons), Dip Acoustics, MIOA	Jennifer is a Senior Acoustic Consultant) in AWN consulting and has worked as a consultant since 2000, specialising in acoustics since 2001. She is a member of the Institute of Acoustics (MIOA) and has extensive knowledge in the field of environmental noise and vibration impact assessment, room acoustics, sound insulation and inward impact assessments. She has extensive knowledge in all aspects of environmental noise assessments and has developed numerous noise models and mitigation assessments for industrial and infrastructural projects throughout the country.
Mr. Mark McKenna	DBFL Consulting Engineers	Material Assets: Traffic	BEng (Hons), MSc, MIEI	Mark is a Traffic and Transportation Engineer and has over 7 years of experience within the traffic & transportation industry. Mark has experience of working on a range of projects which include undertaking Traffic & Transport Assessments and Mobility Management Plans for a range of different urban and rural development schemes.

Expert	Company	Aspect of Environment	Qualifications	Summary of Professional Expertise
Ms. Faith Bailey	IAC	Cultural Heritage: Archaeology & Architectural Heritage	<p>MA Cultural Landscape Management</p> <p>BA (Hons) Archaeology</p> <p>Member of the Chartered Institute for Archaeologists</p> <p>Member of the Institute of Archaeologists Ireland</p>	<p>Faith is an Associate Director and Senior Archaeologist and Cultural Heritage Consultant with IAC Ltd. She holds an MA in Cultural Landscape Management (archaeology and built heritage) and a BA in single honours archaeology from the University of Wales, Lampeter. She is a licence eligible archaeologist, a member of the Chartered Institute of for Archaeologists, a member of the Institute of Archaeologists of Ireland and has over 17 years' experience working in the commercial archaeological and cultural heritage sector.</p>
Mr. Ross Waters	IAC	Cultural Heritage: Archaeology & Architectural Heritage	<p>MA in Managing Archaeological Sites</p> <p>BA (Mod) in Ancient and Medieval History and Culture</p>	<p>Ross is a consultant archaeologist with IAC Ltd. He holds an MA in Managing Archaeological Sites from University College London and a B.A. (Mod) in Ancient and Medieval History and Culture from Trinity College Dublin. Since 2016 Ross has been responsible for the production of archaeological EIARs and assessments for a variety of projects across the commercial and public sector.</p>