

Chapter 1

Introduction

1.0 INTRODUCTION

1.1 INTRODUCTION AND TERMS OF REFERENCE

John Spain Associates, Planning & Development Consultants, have been commissioned by the applicant, the Land Development Agency (LDA), to prepare an Environmental Impact Assessment Report (EIAR) in respect of a Strategic Housing Development at Hacketstown, Co. Dublin. The site has a total area of 6.7 with a net development area of c. 6.6 hectares and is located to the south of Skerries town centre, on lands at Hacketstown, in the townland of Milverton, Hacketstown and Townparks, Co. Dublin. The lands are bound to the north by lands in the ownership of Noonan Construction including recently completed residential development 'Ballygossan Phase 1', to the west by the Dublin – Belfast railway line, to the east by Golf Links Road and to the south by agricultural lands and a number of rural dwellings.

The proposed development entails a Strategic Housing Development comprising 345 no. residential units, childcare facility, vehicular access, pedestrian and cycle infrastructure, and all associated site development and infrastructural works, on a total site of 6.7 ha. zoned for residential use the Fingal County Development Plan 2017-2023. This is the 'project' to be assessed in the EIAR.

Project Description

The development entails 345 no. residential units comprising of 84 no. 1-bed units, 104 no. 2-bed units (68 no. 2-bed apartments and 36 no. 2-bed duplexes), 157 no. 3-bed units (118 no. 3-bed duplexes and 39 no. 3 - bed houses) ranging in height from 2 no. – 4 no. storeys on a site of 6.7 ha. located at Hacketstown in the townlands of Milverton, Townparks and Hacketstown, Skerries, Co. Dublin. The subject lands are accessed via Golf Links Road to the south and Ballygossan Park Phase 1 to the north.

The proposed development comprises 345 no. residential units comprising of 84 no. 1-bed units, 104 no. 2-bed units (68 no. 2-bed apartments and 36 no. 2-bed duplexes), 157 no. 3-bed units (118 no. 3-bed duplexes and 39 no. 3 - bed houses) ranging in height from 2 no. – 4 no. storeys.

The proposed development is set out in 8 blocks which comprise the following:

- Block A1 comprises 39 No. units at 4 storeys in height (Comprising a mix of 26 No. apartments & 13 No. Duplexes)
- Block A2 comprises 33 No. units at 4 storeys in height (Comprising a mix of 22 No. apartments & 11 No. Duplexes)
- Block B1 comprises 16 No. units at 3 storeys in height (Comprising all 3 bed Duplexes)
- Block B2 comprises 16 No. units at 3 storeys in height (Comprising all 3 bed Duplexes)
- Block C comprises 42 No. units at 2-3 storeys in height (Comprising 15 No. apartments & 27 No. Duplexes)
- Block D comprises 32 No. units at 2-3 storeys in height (Comprising 12 No. apartments and 20 No. houses)
- Block E comprises 62 No. units at 2-3 storeys in height (Comprising 38 No. apartments & 24 No. Duplexes)
- Block F comprises 66 No. units at 2-3 storeys in height (Comprising 39 No. apartments & 27 No. Duplexes)
- Block G comprises 25 No units at 2-3 storeys in height. (Comprising 20 No. Duplexes and 5 No. houses)
- Block H comprises 14 No units at 2-3 storeys in height. (Comprising 14 No. houses)
- Public Open Space of c.16,670 sqm (25% of net developable area) is proposed including the parkland and main public square, in addition to the linear park of c.2,427 sqm;

- c.2,272 sqm communal open space is proposed to serve the apartments;
- 414 car parking spaces in total are proposed including 40 visitor spaces, 3 for creche set down and 2 for creche staff parking within undercroft and at surface level.
- 802 No. bicycle parking spaces comprising including 128 No. visitor spaces and 10 No. to serve the creche;
- Childcare and community facility of c.377 sqm. located in Block C;
- Upgrades to the Golf Links Road including new pedestrian and cycle infrastructure with frontage on Golf Links Road;
- Vehicular access off the Golf Links Road is to be provided to the south east of the subject site;
- In addition the proposal will provide a new internal link road. This internal link road will connect to the adjacent lands to the north, for which a separate planning application has been made to Fingal County Council under Reg. Ref. F21A/0287 (ABP Reg. Ref. 312189-21);

The proposed apartments include the provision of private open space in the form of balconies to elevations of the proposed buildings. The development also includes vehicular, pedestrian, and cycle accesses, bicycle stores, lighting, landscaping, amenity spaces, drop off areas, boundary treatments, refuse facilities, services, utilities, substations, internal roads, footpaths and shared surfaces and all associated ancillary and site development works.

Figure 1.1 below illustrated the proposed SHD development.



Figure 1.1: SHD Site Layout (source OMP Architects, 2022)

The project, which is the subject of assessment in this EIAR and the accompanying Appropriate Assessment Report and Natura Impact Statement, will be facilitated by advance infrastructural works. These works were the subject of a Section 34 application to Fingal County Council (FCC F21A/0287) and are currently on appeal to An Bord Pleanála (ABP Reg. Ref. 312189). They consist of a connecting road to the north, drainage infrastructure, cycle and pedestrian facilities, and associated landscaping (the “AI Works”). The Project, is assessed to ensure that cumulative and in combination effects of the Project with other plans and projects within the zone of influence, including the Advance Infrastructure Works (Ref. ABP-312189-21), the prior application for off-site road improvements serving the wider area (ABP Reg. Ref. 309409; FCC Reg. Ref. F20A/0324), and the proposals by Noonan Construction for Ballygossan Park Phase 2 have been assessed in order to enable the competent authority to undertake a lawful environmental impact assessment (“EIA”), appropriate assessment screening (“AA Screening”) and appropriate assessment (“AA”). The location of these neighbouring proposed developments are shown on Figures 1.2 and 1.3 below.

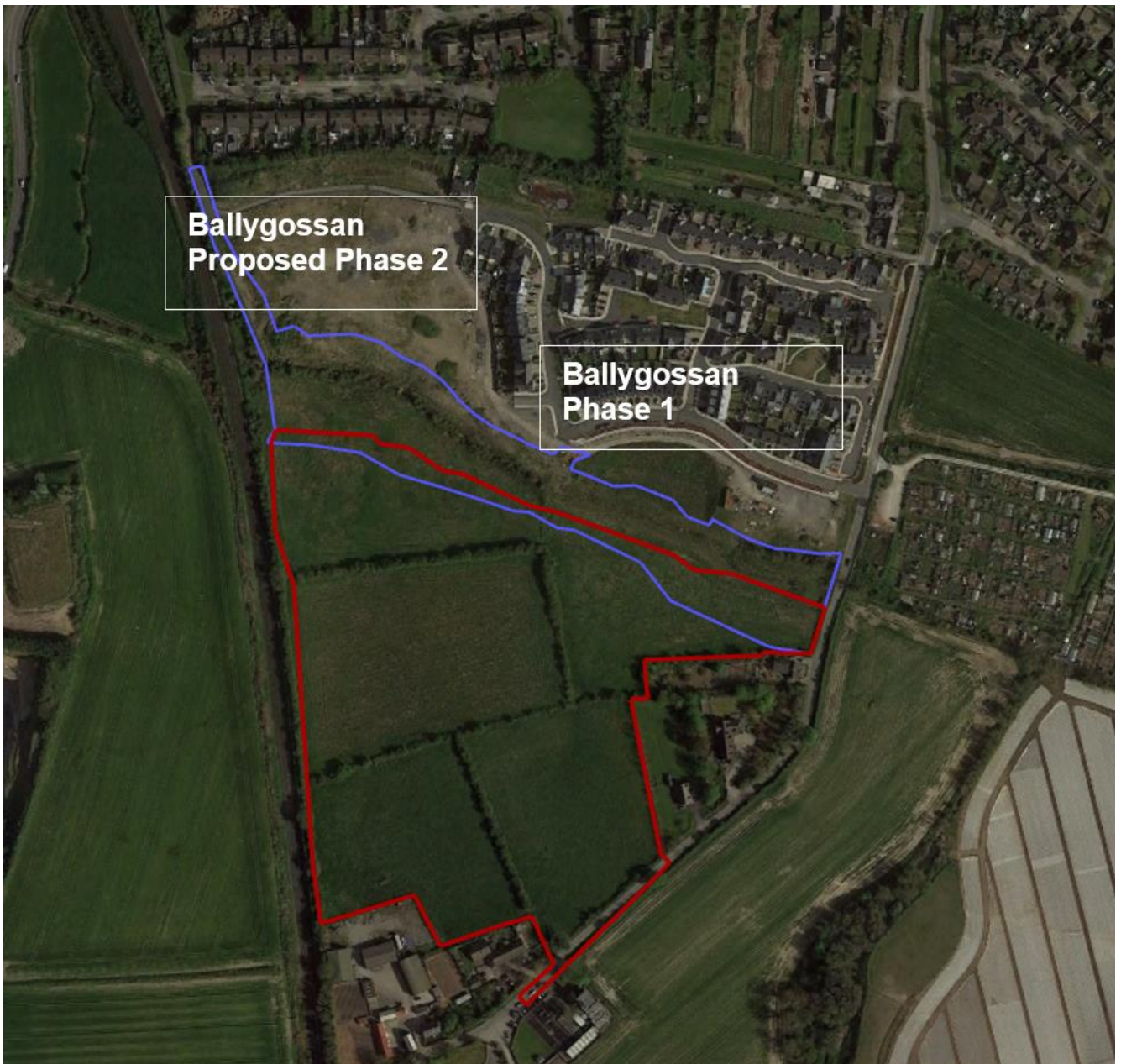


Figure 1.2: Site Location with approximate SHD site outlined in red and approximate Advanced infrastructure application outlined in Blue (Source: Google Maps, 2022).

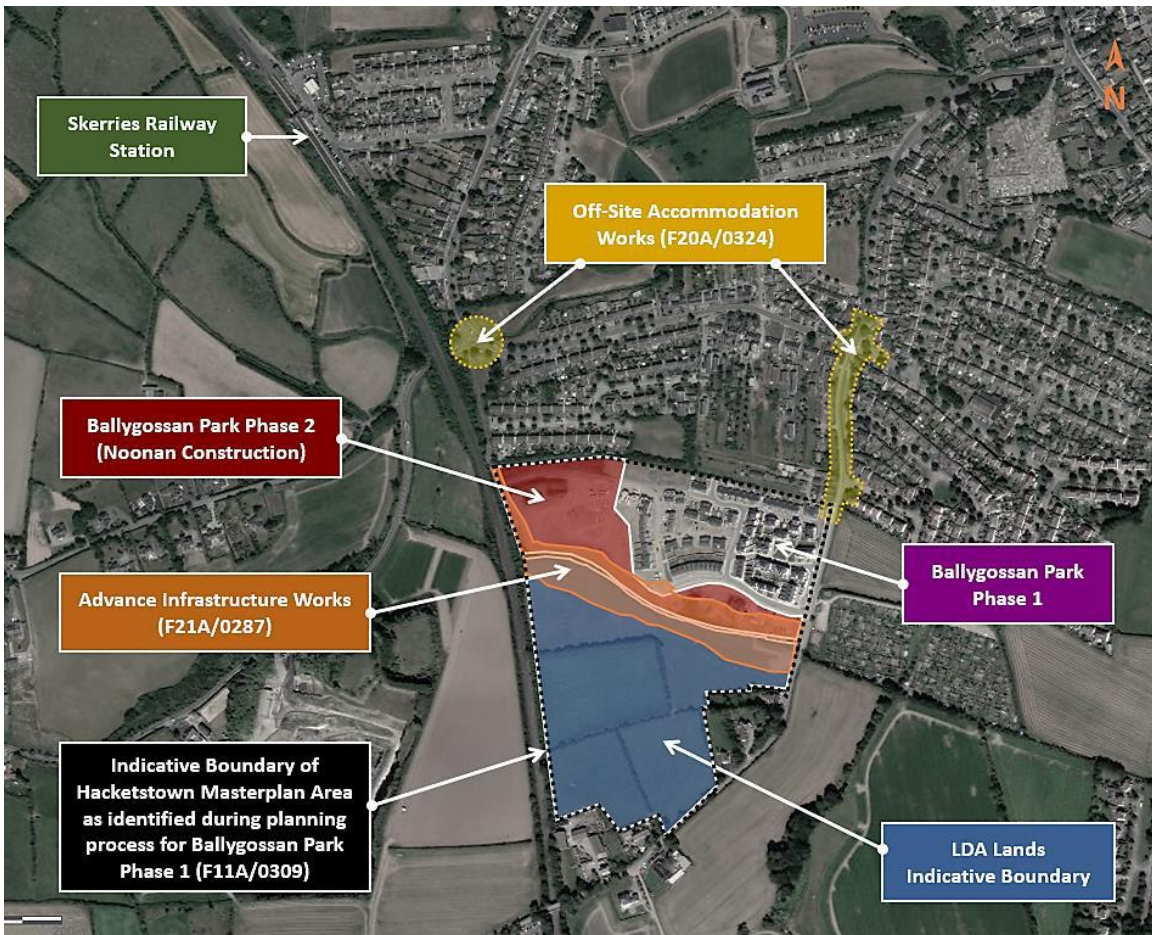


Figure 1.3 Locations of adjoining developments (source DBFL TTA 2022)

The Project has been carefully considered as part of an overall development strategy for the LDA lands located. This development strategy has been developed by the design team in consultation with both Fingal County Council and Noonan Construction (the developer of the adjoining Ballygossan Park to the north) to ensure future developments integrate and contribute to the sustainable development of the lands. This strategy responds to the characteristics and context of the site, for further information on the development rationale please see accompanying documentation including Architectural Design Statement prepared by OMP.

‘The Proposed SHD’ relates to the current application which has been submitted to ABP and is set out in detail above. This is the project for the purpose of the EIAR.

The following terms are used throughout the EIAR and explained below for clarity:

1. The ‘advanced infrastructure works’ is subject of a Section 34 application, and that which is currently under consideration by ABP (Ref. ABP-312189-21)
2. ‘Ballygossan Phase 2’ refers to the lands to the north in the ownership of Noonan Construction which has been the subject of an SHD pre-application to the Board (Ref. ABP 308583-20).
3. Off-site road improvements which were granted by ABP and FCC (ABP Reg. Ref. 309409; FCC Reg. Ref. F20A/0324) to provide the necessary upgrades to local road network.

The central purpose of the EIA process is to enable an assessment to be undertaken of the likely significant impacts on the environment of a project. The EIA process commences with an Environmental Impact Assessment Report (EIAR) submitted to the competent authority.

This EIAR has been prepared in accordance with the European Union EIA Directive 2011/92/EU as amended by Directive 2014/52/EU (referred to as “the EIA Directive”).

The EIAR has also been prepared in accordance with the following guidance:

- Environmental Assessments of Plans, Programmes and Projects - Rulings of The Court of Justice of The European Union (2020)
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (published in August 2018)
- Guidelines on the Information to be Contained In Environmental Impact Assessment Reports Draft 2017 published by the EPA,
- the European Commission’s Guidance Environmental Impact Assessment of Projects Guidance on the preparation of the Environmental Impact Assessment Report (2017)
- Environmental Impact Assessment of Projects Guidance on Screening (2017)
- Environmental Impact Assessment of Projects Guidance on Scoping (2017)
- Environmental Impact Assessment of Projects Guidance on EIA report (2017)

Appropriate sectoral guidance has been considered in the preparation of individual chapters of the EIAR and the assessments in the individual chapters are in accordance with the relevant Guidance.

This Chapter describes the methodology used for the preparation of the EIAR.

1.2 DEFINITION OF EIA AND EIAR

The EIA Directive defines ‘environmental impact assessment’ as a process, which includes the responsibility of the developer to prepare an Environmental Impact Assessment Report (EIAR), and the responsibility of the competent authority (in this case, An Bord Pleanála) to provide reasoned conclusions following the examination of the EIAR and other relevant information.

Article 1(2)(g) of the EIA Directive states that “*environmental impact assessment*” means a process consisting of:

- (i) *the preparation of an environmental impact assessment report by the developer, as referred to in Article 5(1) and (2);*
- (ii) *the carrying out of consultations as referred to in Article 6 and, where relevant, Article 7;*
- (iii) *the examination by the competent authority of the information presented in the environmental impact assessment report and any supplementary information provided, where necessary, by the developer in accordance with Article 5(3), and any relevant information received through the consultations under Articles 6 and 7;*
- (iv) *the reasoned conclusion by the competent authority on the significant effects of the project on the environment, taking into account the results of the examination referred to in point (iii) and, where appropriate, its own supplementary examination; and*
- (v) *the integration of the competent authority’s reasoned conclusion into any of the decisions referred to in Article 8a.*

A detailed definition of “*environmental impact assessment*” is also provided under Section 171A of the Planning and Development Act 2000, as amended (‘*the Planning Acts*’).

An EIAR is defined by section 2 of the Planning Acts as meaning “*a report of the effects, if any, which proposed development, if carried out, would have on the environment and shall include the information specified in Annex IV of the Environmental Impact Assessment Directive*”.

In addition, the EPA Guidelines (2017)¹ state as follows in relation to an EIAR:

“The EIAR is prepared by the developer and is submitted to a CA (Competent Authority) as part of a consent process. The CA uses the information provided to assess the environmental effects of the project and, in the context of other considerations, to help determine if consent should be granted. The information in the EIAR is also used by other parties to evaluate the acceptability of the project and its effects and to inform their submissions to the CA.

The EIAR consists of a systematic analysis and assessment of the potential effects of a proposed project on the receiving environment. The amended EIA Directive prescribes a range of environmental factors which are used to organise descriptions of the environment and these factors must be addressed in the EIAR.

The EIAR should be prepared at a stage in the design process where changes can still be made to avoid adverse effects. This often results in the modification of the project to avoid or reduce effects through redesign”.

In summary, EIA is a process of examination, analysis and evaluation, carried out (in this case) by An Bord Pleanála, that identifies, describes and assesses, in an appropriate manner, in the light of this individual case, the direct and indirect significant effects of the project on the environment, in combination with other projects within the zone of influence of the Project. An EIAR is the document produced to inform that process and consideration of site-specific considerations and the establishment of the baseline environment against which the likely impacts of a project can be assessed by way of a concise, objective and systematic methodology.

1.3 EIA GUIDELINES

EIA practice has evolved substantially since the introduction of the first EIA Directive in 1985. Practice continues to evolve and take into account the growing body of experience in carrying out EIAs in the development sector. This EIAR document has been prepared in compliance with the relevant guidance set out in Table 1.1. In addition, the individual chapters of this EIAR should be referred to for further information on the Guidance documents consulted by each individual consultant.

TABLE 1.1 – EIA GUIDELINES	
Irish	
•	Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, August 2018, DPHLG
•	Draft Guidelines on the information to be contained in environmental impact assessment reports, EPA, August 2017
•	Transposition of 2014 EIA Directive (2014/52/EU) in the Land Use Planning and EPA Licencing Systems - Key Issues Consultation Paper, Department of Environment, Community and Local Government, 2017.
•	Circular letter PL 1/2017 - Advice on Administrative Provisions in Advance of Transposition (2017).
•	Development Management Guidelines (DoEHLG, 2007).
•	Advice Notes on Current Practice (in preparation of Environmental Impact Statements) (EPA 2003).
•	Advice Note on Preparing Environmental Impact Statements – Draft (EPA, 2015).
•	Environmental Impact Assessment (EIA), Guidance for Consent Authorities Regarding Sub-Threshold Development (DoEHLG 2003).

¹ Guidelines on the Information to be contained in an Environmental Impact Assessment Report, Environmental Protection Agency, 2017

- Guidelines on Information to be Contained in an Environmental Impact Statement (EPA 2002).
- Guidelines for Assessment of Ecological Impacts of National Roads Schemes: Revision 2 (National Roads Authority, 2009).
- Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2018).
- Guidelines for Landscape and Visual Impact Assessment, Third Edition (Landscape Institute and Institute of Environmental Management and Assessment, 2013).
- Guidance on the Assessment of Dust from Demolition and Construction Version 1.1 (Institute of Air Quality Management (IAQM), 2014)
- UK Design Manual for Roads and Bridges (DMRB), Volume 11, Environmental Assessment, Section 3 Environmental Assessment Techniques, Part 1 LA 105 Air quality (UK Highways Agency, 2019a)
- UK Design Manual for Roads and Bridges (DMRB) Volume 11 Environmental Assessment, Section 3 Environmental Assessment Techniques, Part 14 LA 114 Climate (UK Highways Agency, 2019b)
- Transport Infrastructure Ireland (TII) (Formerly National Roads Authority) Traffic and Transportation Assessment Guidelines.

European Union / European Commission

- Commission notice regarding application of the Environmental Impact Assessment Directive (Directive 2011/92/EU of the European Parliament and of the Council, as amended by Directive 2014/52/EU) to changes and extension of projects - Annex I.24 and Annex II.13(a), including main concepts and principles related to these (2021/C 486/01)
- Environmental Impact Assessment of Projects – Guidance on the Preparation of the Environmental Impact Assessment Report (2017)
- Environmental Impact Assessment Screening- Practice Note 02 (OPR)
- Environmental Impact Assessment of Projects – Guidance on Screening (2017)
- Environmental Impact Assessment of Projects – Guidance on Scoping (2017)
- Study on the Assessment of Indirect & Cumulative Impacts as well as Impact Interaction (DG Environment 2002).
- EU Guidance on EIA Screening (DG Environment 2001).
- Guidance on EIA Scoping (DG Environment 2001).
- EIA Review Checklist (DG Environment 2001).
- Guidance on integrating climate change and biodiversity into environmental impact assessment (European Commission, 2013).

This EIAR has also been prepared in compliance with the provisions of the Fingal County Development Plan 2017-2023 except where identified in the Material Contravention Statement prepared by JSA, the planning history and environmental assessments associated with the subject site and other nearby lands including the AI work.

1.4 SCREENING FOR EIA

Screening is the term used to describe the process for determining whether a proposed development requires an EIA by reference to mandatory legislative threshold requirements or by reference to the type and scale of the proposed development and the significance or the environmental sensitivity of the receiving baseline environment.

Annex I of the EIA Directive requires as mandatory the preparation of an EIA for all development projects listed therein.

Schedule 5 (Part 1) of the Planning and Development Regulations 2001, as amended, (the “Planning Regulations”) transposes Annex 1 of the EIA Directive directly into Irish land use planning legislation. The EIA Directive prescribes mandatory thresholds in respect to Annex 1 projects.

Annex II of the EIA Directive provides EU Member States discretion in determining the need for an EIA on a case-by-case basis for certain classes of project having regard to the overriding consideration that projects likely to have significant effects on the environment should be subject to EIA.

Schedule 5 (Part 2) of the Planning Regulations sets mandatory thresholds for each project class. Sub-section 10(b) (i) to (iv) addresses '*Infrastructure Projects*' and requires that the following relevant class of project be subject to EIA:

- Category 10(b)(i) Construction of more than 500 dwelling units.
- Category 10(b)(iv) Urban development which would involve an area greater than 2 hectares in the case of business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere.

This SHD application comprises residential development of 345 No. units and, as noted above, is preceded by the application for AI Works (FCC Reg. Ref. F21A/0287; ABP Reg. Ref. 312189) in order to facilitate future residential development on lands of the subject site. This application was also preceded by an application for off-site road improvements (ABP Reg. Ref. 309409; FCC Reg. Ref. F20A/0324) to facilitate developments on the residentially zoned lands in the Hacketstown area which was .7 ha in size.

We also note a residential scheme of 144 residential units and creche on a site 2.75 ha at Ballygossan Road, Golf Links Road, Skerries, Co. Dublin (i.e. Ballygossan Phase 2) is anticipated in the near future. This application was previously subject of an SHD Pre-Application Consultation Request under ABP (ABP-308583-20).

The potential cumulative impacts of these proposed off-site road improvements, advance infrastructure works and Ballygossan Park Phase 2, are assessed as part of this EIAR.

Notwithstanding the fact that the subject site area and unit numbers for the SHD Project are below the respective EIAR thresholds, having regard to the level of inter-connectivity with the adjoining AI Works application site, and having regard to the precautionary principle, an EIAR has been prepared to accompany the subject application, having regard to the overall combined size of the site and to category 10(b)(i) of Part 2 of Schedule 5 of the Planning Regulations this EIAR has been prepared to accompany the planning application.

1.5 CONTENTS OF THE EIAR

In preparing the EIAR for this project, all relevant provisions of EU and Irish national law and guidance have been complied with. In particular, the content of this Environmental Impact Assessment Report complies with the provisions of Article 5(1) and Annex IV of Directive 2014/52/EU.

In this context the following topics/issues have been reviewed and addressed in the context of the proposed development:

- Introduction
- Project Description and Alternatives
- Population and Human Health
- Archaeology and Cultural Heritage
- Biodiversity
- Landscape and Visual Impact
- Land and Soils
- Hydrogeology and Hydrology
- Air Quality and Climate
- Noise and Vibration
- Material Assets – Traffic

- Material Assets – Waste
- Material Assets – Utilities
- Risk Management
- Interactions
- Summary of EIAR Mitigation and Monitoring Measures

In addition to the above a series of standalone reports have been prepared to accompany the application and which have helped inform the above chapters of the EIAR where relevant;

- Architects Drawings and Design Rationale prepared by OMP;
- Landscape Design Rationale and Drawings prepared by BSLA;
- Engineering Services Report, Mobility Management Plan, Traffic and Transport Assessment (TTA), and a Construction & Environmental Management Plan (CEMP) prepared by DBFL Consulting Engineers.
- Daylight and Sunlight Assessment Report prepared by Axis
- Photomontages prepared by Modelworks.
- Planning Report, Statement of Consistency, Statement of Response to ABP's Opinion, Statement of Material Contravention,
- Cover Letter, Site Notice, Newspaper Notice, EIA Portal Confirmation and completed Application form prepared by John Spain Associates.

Separately, an AA Screening Report and a Natura Impact Statement prepared by Altemar accompany this application.

1.6 PURPOSE & OBJECTIVES OF THE EIAR

The objective of the EIAR is to identify and predict the likely environmental impacts of the proposed development; to describe the means and extent by which they can be reduced or ameliorated; to interpret and communicate information about the likely impacts; and to provide an input into the decision making and planning process. As provided for in the EPA guidelines, the EIAR focuses on:

- *Impacts that are both likely and significant;*
- *Impact descriptions that are accurate and credible'*

The objective of the EIAR will be to identify and predict the likely environmental impacts of the proposed development; to describe the means and extent by which they can be reduced or ameliorated; to interpret and communicate information about the likely impacts; and to provide an input into the decision making and planning process.

It is intended that this EIAR will assist An Bord Pleanála as the competent authority, statutory consultees and the public in assessing all aspects of the application proposals.

The EPA guidelines list the following fundamental principles to be followed when preparing an EIAR:

- Anticipating, avoiding and reducing significant effects
- Assessing and mitigating effects
- Maintaining objectivity
- Ensuring clarity and quality
- Providing relevant information to decision makers
- Facilitating better consultation.

This EIAR document describes the outcomes of the iterative EIA process which was progressed in parallel with the project design process. This forms the first part of the EIA process which will be completed by the competent authority, which in turn will be required to examine, analyse and evaluate the direct and indirect effects of the development.

The amended EIA Directive prescribes a range of environmental factors which are used to organise descriptions of the environment and the environmental impact assessment should identify, describe and assess in an appropriate manner, in the light of each individual case, the direct and indirect significant effects of a project on the prescribed environmental factors which are:

- (a) population and human health;*
 - (b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;*
 - (c) land, soil, water, air and climate;*
 - (d) material assets, cultural heritage and the landscape;*
 - (e) the interaction between the factors referred to in points (a) to (d).*
- 2. The effects referred to in paragraph 1 on the factors set out therein shall include the expected effects deriving from the vulnerability of the project to risks of major accidents and/or disasters that are relevant to the project concerned.*

This EIAR documents the assessment process of the prescribed environmental factors in relation to the project on the LDA lands at Hacketstown, Skerries.

The EIAR preparation process was based on the following four key objectives:

- Pursuing Preventative Action
- Maintaining Environmental Focus and Scope
- Informing the Decision
- Public & Stakeholder Participation

1.6.1 Pursuing Preventative Action

Pursuing preventative action is the most effective means by which potential negative environmental impacts can be avoided. A consideration of anticipated likely and significant impacts was undertaken during the screening, informal scoping and the considerations of alternatives stages of this part of the EIA process. This involved forming a preliminary opinion, in the absence of complete data, with respect to the approximate magnitude and character of the likely environmental impacts. This assessment was based on the knowledge, experience and expertise of the EIA and project design team with reference to the EIA Directive, EIA guidance material and local precedents.

Avoidance of impacts has been principally achieved through the consideration of alternatives and through the review of the project design in light of identified key environmental constraints. This is outlined in greater detail in Chapter 2.

1.6.2 Maintain Environmental Scope and Focus

It is important that the EIAR remains tightly focussed. This minimises delays and the potential for a confusing mass of data to obscure relevant facts. The EIA process has been project-managed and steered, so as to ensure that the EIAR addresses those topics and issues which are explicitly prescribed in the legislation, and where environmental impacts may arise.

1.6.3 Informing the Decision

The EIAR enables the competent/consent authorities to reach a decision on the acceptability of the proposed development in the full knowledge of the project’s likely significant effects on the environment, if any.

1.6.4 Public & Stakeholder Participation

The structure, presentation and the non-technical summary of the EIAR, as well as the arrangements for public access, all facilitate the dissemination of the information contained in the EIAR. A core objective is to ensure that the public and local community are aware of the likely environmental effects of projects prior to the granting of consent.

Public participation in the EIA process will be effected through the statutory planning application process. Information on the EIAR has also been issued for the Department of Housing, Planning and Local Government’s EIA Portal.

A series of meetings have taken place with the technical staff of Fingal County Council which assisted in the preparation of this EIAR and planning application. A Tripartite Pre-Application Consultation meeting was also undertaken with An Bord Pleanála (the “Board”) and the Planning Authority in relation to this development as part of SHD Pre-Application Consultation Request (ABP Reg. Ref. 308478-20).

The documentation submitted as part of the proposed SHD is publicly available on the following dedicated website: www.hacketstownshd.com and in hard copy at the offices of both ABP and Fingal County Council.

The current Environmental Impact Assessment Report and the application as a whole also takes into account the views expressed by the general public and prescribed bodies on the previous applications at the subject site.

1.7 FORMAT AND STRUCTURE OF THIS EIAR

The preparation of an EIAR requires the assimilation, co-ordination and presentation of a wide range of relevant information in order to allow for the overall assessment of a proposed development. For clarity and to allow for ease of presentation and consistency when considering the various elements of the proposed development, a systematic structure is used for the main body of this EIAR document.

The structure used in this EIAR document is a **Grouped Format** structure. This structure examines each environmental topic² in a separate chapter of this EIAR document. The structure of the EIAR is set out in Table 1.2 below.

Ch.	Title	Content
1	Introduction and Methodology	Sets out the purpose, methodology and scope of the document.
2	Project Description and Alternatives	Sets out the description of the site, design and scale of development, considers all relevant phases from construction through to existence and operation together with a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the

² In some instances, similar environmental topics are grouped.

TABLE 1.2: STRUCTURE OF THIS EIAR – VOLUME 1

Ch.	Title	Content
		option chosen, taking into account the effects of the project on the environment. .
3	Population and Human Health	Describes the demographic and socio-economic profile of the receiving environment and potential impact of the proposed development on population, i.e. human beings, and human health.
4	Archaeology and Cultural Heritage	Provides an assessment of the site and considers the potential impact of the proposed development on the local archaeology and cultural heritage; and recommends mitigation measures.
5	Biodiversity	Describes the existing ecology on site and in the surrounding catchment, and assesses the potential impact of the proposed development and mitigation measures incorporated into the design of the scheme.
6	Landscape and Visual Impact	Provides an overview of the baseline position, the potential impact of the proposed development on the landscape appearance and character and visual environment and recommends mitigation measures.
7	Land and Soils	Provides an overview of the baseline position, the potential impact of the proposed development on the site's soil and geology and impacts in relation to land take and recommends mitigation measures.
8	Hydrogeology and Hydrology	Provides an overview of the baseline position, the potential impact of the proposed development on water quality and quantity and recommends mitigation measures.
9	Air Quality and Climate	Provides an overview of the baseline air quality and climatic environment, the potential impact of the proposed development, the vulnerability of the project to climate change, and recommends mitigation measures.
10	Noise and Vibration	Provides an overview of the baseline noise environment, the potential impact of the proposed development and recommends mitigation measures.
11	Material Assets – Road Network & Traffic	Assesses and evaluates the likely impact of the proposed development on the existing transportation system in the vicinity of the site, as well as identifying proposed mitigation measures to minimise any identified impacts arising.
12	Material Assets – Waste	Describes the existing services and infrastructural service requirements of the proposed development and considers the potential waste management impacts associated with the proposed development.
13	Material Assets – Utilities	Describes the likely impact of the proposed development on existing surface water, water supply, foul drainage and utility services in the vicinity of the site and assesses the impact of the proposed development on these aspects of the existing environment.
14	Risk Management	Assess vulnerability of project to Risk of Major Accidents and/or Disasters.
15	Interactions of the Foregoing	Describes the potential interactions and interrelationships between the various environmental factors.
16	Principal Mitigation and Monitoring Measures	Sets out the key mitigation and monitoring measures included in the above chapters of the EIAR Document for ease of reference.

This systematic approach described above employs standard descriptive methods, replicable assessment techniques and objective impact descriptions to provide an appropriate evaluation of each environmental topic under consideration. An outline of the methodology employed in most chapters to examine each environmental topic is provided in Table 1.3.

TABLE 1.3: METHODOLOGY EMPLOYED TO EVALUATE EACH ENVIRONMENTAL TOPIC

- **Introduction:** Provides an overview of the specialist area and specifies the specialist who prepared the assessment and their qualifications and competencies.
- **Study Methodology:** This subsection outlines the method by which the relevant impact assessment has been conducted within that chapter.
- **The Existing Receiving Environment (Baseline Situation):** In describing the receiving environment, the context, character, significance and sensitivity of the baseline receiving environment into which the proposed development will fit is assessed. This also takes account of any proposed developments for which applications for consent have been submitted.
- **Characteristics of the Proposed Development:** Consideration of the 'Characteristics of the Proposed Development' allows for a projection of the 'level of impact' on any particular aspect of the environment that could arise. For each chapter those characteristics of the proposed development which are relevant to the area of study are described; for example, the chapter on noise describes the machinery and operations which are likely to produce noise while the landscape and visual impact would describe the height, scale and location of the development.
- The characteristics of projects must be considered, with particular regard to: (a) the size and design of the whole project; (b) cumulation with other existing and/or approved projects; (c) the use of natural resources, in particular land, soil, water and biodiversity; (d) the production of waste; (e) pollution and nuisances; (f) Material assets including road network capacity and utilities (g) the risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge; (h) the risks to human health (for example due to water contamination or air pollution)
- **Potential Impact of the Proposed Development:** This section provides a description of the specific, direct and indirect, impacts that the proposed development may have. This is provided with reference to both the Receiving Environment and Characteristics of the Proposed Development sections while also referring to the (i) magnitude and intensity, (ii) integrity, (iii) duration and (iv) probability of impacts. Impact assessment addresses direct, indirect, secondary, cumulative, short, medium and long-term permanent, temporary, positive and negative effects as well as impact interactions. This EIAR has considered it important to subdivide sections into 'Construction Phase' and 'Operational Phase' in describing impacts, mitigation measures etc.
- **Cumulative Impacts:** A review has been carried out by each consultant in regard to the potential for cumulative impacts with permitted and proposed developments in the vicinity. The FCC and ABP websites were reviewed to identify permissions in the area.
- **Do Nothing Impact:** In order to provide a qualitative and equitable assessment of the proposed development, this section considers the proposed development in the context of the likely impacts upon the receiving environment should the proposed development not take place.

- **Avoidance, Remedial and Mitigation Measures:** Avoidance, Remedial and Mitigation measures describe any corrective or mitigative measures that are either practicable or reasonable, having regard to the potential impacts. This includes avoidance, reduction and remedy measures as set out in Section 4.7 of the Development Management Guidelines 2007 to reduce or eliminate any significant adverse impacts identified.
- **Predicted Impacts of the Proposed Development:** This section allows for a qualitative description of the resultant specific direct, indirect, secondary, cumulative, short, medium and long-term permanent, temporary, positive and negative effects as well as impact interactions which the proposed development may have, assuming all mitigation measures are fully and successfully applied.
- **Monitoring:** This involves a description of monitoring in a post-development phase, if required. This section addresses the effects that require monitoring, along with the methods and the agencies that are responsible for such monitoring.
- **Interactions:** This section provides a description of impact interactions together with potential indirect, secondary and cumulative impacts
- **Difficulties Encountered in Compiling:** This section provides an indication of any difficulties encountered by the environmental specialist in compiling the required information.
- **References:** Consultants refer to documents referred to in preparing their chapter / undertaking their assessment.

1.8 DESCRIPTION OF IMPACTS IN THE EIAR

The EPA *Draft Guidelines on the information to be contained in Environmental Impact Assessment Reports 2017 and Commission notice regarding application of the Environmental Impact Assessment Directive (2021/C 486/01)* require that the direct, indirect, cumulative and residual impacts of the proposed development for both the construction and operational stages are described. The identified quality, significance and duration of effects for each aspect are categorised, as set out below. Quality refers to the nature of the impact, significance of effects refers to the degree that these will impact on the site and surrounding area and duration refers to how long the effects are likely to last for. A direct impact is an impact the development will give rise to. An indirect impact is similar to a secondary impact – it may result in consequences not in the immediate vicinity of the site. Cumulative impacts are impacts that arise in conjunction with other consented developments. Residual impacts are those which remain after mitigation measures have been applied.

The quality of potential effects are described as follows:

Quality of Effects	Definition
Negative	A change which reduces the quality of the environment
Neutral	No effects or effects that are imperceptible, within the normal bounds of variation or within the margin of forecasting error.
Positive	A change that improves the quality of the environment

The significance of an effect on the receiving environment are described as follows:

TABLE 1.5: SIGNIFICANCE OF EFFECTS

Significance of Effects on the Receiving Environment	Description of Potential Effects
Imperceptible	An effect capable of measurement but without significant consequences.
Not Significant	An effect which causes noticeable changes in the character of the environment but without significant consequences.
Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
Moderate	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.
Significant	An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment.
Very Significant	An effect which, by its character, magnitude, duration or intensity significantly alters a sensitive aspect of the environment.
Profound	An effect which obliterates sensitive characteristics.

The duration of effects as described in the Draft EPA Guidelines are:

TABLE 1.6: Duration of Effects

Duration of Impact	Definition
Momentary	Effects lasting from seconds to minutes
Brief	Effects lasting less than a day
Temporary	Effects lasting one year or less
Short-term	Effects lasting one to seven years
Medium-term	Effects lasting seven to fifteen years
Long-term	Effects lasting fifteen to sixty years
Permanent	Effects lasting over sixty years
Reversible	Effects that can be undone, for example through remediation or restoration

1.9 EIA PROJECT TEAM

Under Article 5(3) of the amended EIA Directive, as amended, it is expressly required that the developer must ensure that the environmental impact assessment report (EIAR) is prepared by competent experts. Each of the chapters of this EIAR for the subject development have been prepared by experts with the requisite qualifications and competences.

1.9.1 EIA Project Management

This EIA was project managed, co-ordinated and produced by John Spain Associates. John Spain Associates' role was engaged to coordinate the EIA process and to liaise between the design team and various environmental specialist consultants.

1.9.2 EIA Environmental Specialists

Environmental specialist consultants were also commissioned for the various technical chapters of the EIAR document which are mandatorily required as per the amended EIA Directive and Planning Regulations.

The amended EIA Directive states the following in relation to the persons responsible for preparing the environmental impact assessment reports;

‘Experts involved in the preparation of environmental impact assessment reports should be qualified and competent. Sufficient expertise, in the relevant field of the project concerned, is required for the purpose of its examination by the competent authorities in order to ensure that the information provided by the developer is complete and of a high level of quality’.

In order to outline compliance with this requirement and in line with emerging best practice the EIAR states the names of the environmental consultants who have prepared each element of the EIAR and lists their qualifications and relevant experience; demonstrating that the EIAR has been prepared by competent experts. This is also in accordance with the 2018 EIA Guidelines for Planning Authorities and An Bord Pleanála.

Each environmental specialist was commissioned having regard to their previous experience in EIA; their knowledge of relevant environmental legislation relevant to their topic; familiarity with the relevant standards and criteria for evaluation relevant to their topic; ability to interpret the specialised documentation of the construction sector and to understand and anticipate how their topic will be affected during construction and operation phases of development; ability to arrive at practicable and reliable measures to mitigate or avoid adverse environmental impacts; and to clearly and comprehensively present their findings.

The relevant specialist consultants who contributed to the EIAR and their inputs, experience and qualifications are set out in Table 1.7 following.

TABLE 1.7: EIAR SPECIALIST CONSULTANTS	
Organisation	EIAR Specialist Topics / Inputs
<p>John Spain Associates Planning & Development Consultants, 39 Fitzwilliam Place, Dublin 2, D02 ND61 T: 01 662 5803 E: sblair@johnspainassociates.com</p> <p>Stephen Blair, BA (Mod), MRUP, MIPI, MRTPI, Executive Director with John Spain Associates, Stephen has over thirty years’ planning experience working at the EU, national, regional and local levels including preparation of EIARs.</p> <p>David Ferguson, BA, MRUP, MIPI, MRTPI, Senior Planner with John Spain Associates, Planning & Development Consultants. David has 5 years post qualification experience in planning consultancies and has prepared a number of large scale planning applications and has co-ordinated the preparation of which include EIARs in that context.</p>	<ul style="list-style-type: none"> • Introduction and Methodology • Project Description and Alternatives Examined • Population and Human Health • Interactions of the Foregoing • Principle Mitigation and Monitoring Measures • Non-Technical Summary

TABLE 1.7: EIAR SPECIALIST CONSULTANTS

Organisation	EIAR Specialist Topics / Inputs
<p>John Spain, BA (Mod), MRUP, MIPI, MRTPI, Managing Director with John Spain Associates. John has over twenty five years' experience in planning and development in Ireland and the UK and in the preparation and co-ordination of EIARs. In that time, he has represented a large number of private and public sector clients and has been involved in a wide range of diverse projects.</p>	
<p>OMP The Chapel, Milltown Ave, Mount St Annes, Dublin T: (01) 202 7400 E: info@omp.ie Derbhile McDonagh, Director Dip.Arch.,B.Arch.Sc.,MRIAI, Msc Real Estate</p>	<ul style="list-style-type: none"> • Project Description and Alternatives Examined
<p>Altemar Lower Windgates, Rathdown Lower, Greystones, Co. Wicklow T: 01 2010713 E: bryan@altemar.ie Bryan Deegan MCIEEM Managing Director M.Sc., BSc (Hons.) Dip. Bryan Deegan MCIEEM is the Managing Director of Altemar Ltd. And holds a M.Sc. Environmental Science, BSc (Hons.) in Applied Marine Biology and a National Diploma in Applied Aquatic Science. He has over 26 years' experience as an environmental consultant in Ireland and was the ecologist for all aspects of this project.</p>	<ul style="list-style-type: none"> • Biodiversity • Natura Impact Assessment (included as separate standalone document)
<p>Modelworks The Old Courtyard, Newtownpark Ave. Blackrock, Co. Dublin, A94 YD61 Richard Butler T: 01 289 9039 E: studio@modelworks.ie Richard Butler has degrees in Landscape Architecture and Town Planning, is a member of the Irish Landscape Institute and the Irish Planning Institute and has 20 years' experience</p>	<ul style="list-style-type: none"> • Landscape and Visual Impact Assessment • Photomontages, included in LVIA

TABLE 1.7: EIAR SPECIALIST CONSULTANTS	
Organisation	EIAR Specialist Topics / Inputs
<p>in development and environmental planning, specialising in LVIA.</p> <p>DBFL Consulting Ormond House, Upper Ormond Quay, Dublin 7 T: 01 400 4000 E: Ben.Mong@dbfl.ie E: Thomas.Jennings@dbfl.ie</p> <p>Ben Mong – Beng Ceng MIEI Senior Civil Engineer Thomas Jennings – Beng (Hons) MSc MIEI CMILT MIHT Laura McLoughlin Beng (Hons), Ceng, MEI, Associate Civils Daniel Gill is a Graduate Transportation Engineer</p> <p>Ben has over 10 years’ experience in large scale civils engineering design projects with extensive experience in Roads & Drainage, Water & Wastewater and Bulk Earthworks for Commercial, Industrial and Residential developments.</p> <p>Laura has over 10 years’ experience working in civil engineering consultancies managing projects from inception to handover under the NI Framework for Small Sewerage Schemes, infrastructure design and drainage sustainability in residential and commercial developments including preparation of EIARs.</p> <p>Thomas is a Director with DBFL Consulting Engineers with 24 years’ experience as a traffic engineer and transport planner with particular expertise in network management and design. Thomas currently leads the Transportation section within DBFL.</p> <p>Daniel Gill is a Graduate Transportation Engineer with DBFL Consulting Engineers and has 2 years of experience within the industry. He has gained considerable knowledge and experience in transport planning and design within DBFL with all his experienced to date being focused upon the transport assessment of Strategic Housing Developments.</p>	<ul style="list-style-type: none"> • Hydrogeology and Hydrology • Land and Soils • Material Assets – Traffic • Material Assets – Utilities
Redkite Environmental	

TABLE 1.7: EIAR SPECIALIST CONSULTANTS	
Organisation	EIAR Specialist Topics / Inputs
<p>Huntersmoon, Ballykeane Road, Redcross Co. Wicklow</p> <p>T: 087 917 0693 E: Siobhan@redkite.ie</p> <p>Siobhan Maher – B.Sc., M.Tech. MIOA, AACI Siobhan Maher, Managing Director of Redkite has over 20 years' experience project managing and preparing assessments for EIARs covering a large variety of project types.</p>	<ul style="list-style-type: none"> • Noise and Vibration
<p>Bluerock Environmental Ltd 48 Salthill Rd Lower, Salthill, Co. Galway, H91 X856</p> <p>Niall Mitchell BE, MSc, CEng, MIEI, PGeo. Niall is a Chartered Engineer and Professional Hydrogeologist with Bluerock Environmental Limited. Niall has over 22 years experience in the field of hydrogeology, contaminated land, environmental impact for a range of medium to large-scale infrastructural projects across the island of Ireland including EIARs. He has extensive experience in the assessment impacts on the water environment from landfills, residential and commercial developments, quarries and proposed groundwater abstractions.</p>	<p>Water</p>
<p>TMS Environment Ltd 53 Broomhill Drive, Tallaght, Dublin 24.</p> <p>T: 01 4626710 E: tms@tmsenv.ie Dr Imelda Shanahan, Managing Director FICI, C Chem, FRSC</p> <p>Tom Ryan TMS Environment Ltd who has over 20 years professional experience in preparing assessments of this type for various different types of development. Tom has a BSc (Hons) in Chemistry from University College Cork and a MSc in Environmental Science.</p>	<ul style="list-style-type: none"> • Air Quality • Material Assets -Waste
<p>Irish Archaeological Consultancy (IAC), Unit G1, Network Enterprise Park, Kilcoole, Co. Wicklow, A63 KT32, Ireland.</p>	<ul style="list-style-type: none"> • Archaeology and Cultural Heritage

TABLE 1.7: EIAR SPECIALIST CONSULTANTS

Organisation	EIAR Specialist Topics / Inputs
<p>T. (0)1 2018380 E: failey@iac.ie Faith Bailey - MA, BA (Hons), MCIfA, MIAI</p> <p>Faith is an Associate Director and Senior Archaeologist and Cultural Heritage Consultant with IAC Archaeology. 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 18 years' experience working in the commercial archaeological and cultural heritage sector. Jacqui works as an Archaeological Consultant with IAC Archaeology. She holds an MA in Archaeology from University College Dublin and a BA in Archaeology and Classical Studies also from University College Dublin. She is a member of the Institute of Archaeologists of Ireland and has seven years' experience in the commercial archaeological sector in Ireland. Jacqui specialises in the production of archaeological assessments and EIAR across all sectors of development.</p>	

1.10 NON-TECHNICAL SUMMARY

The EIA Directive requires that one of the objectives of the EIA process is to ensure that the public are fully aware of the environmental implications of any decisions.

The EPA guidelines note that the non-technical summary of the EIAR should facilitate the dissemination of the information contained in the EIAR and that the core objective is to ensure that the public is made as fully aware as possible of the likely environmental impacts of projects prior to a decision being made by the Competent Authority.

The 2018 EIA Guidelines prepared by the DHPLG state that the Non-Technical Summary “*should be concise and comprehensive and should be written in language easily understood by a lay member of the public not having a background in environmental matters or an in-depth knowledge of the proposed project.*”

A Non-Technical Summary of the EIAR has therefore been prepared which summarises the key environmental impacts and is provided as a separately bound document.

1.11 APPROPRIATE ASSESSMENT

Article 6(3) of the Habitats Directive (92/43/EEC) states any project not directly connected with or necessary to the management of a Natura 2000 site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to the Appropriate Assessment procedure of its likely implications for the site in view of the site's conservation objectives.

In January 2010, the Department of Environment, Housing and Local Government issued a guidance document entitled 'Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities'. This guidance document enshrines the 'Source-Pathway-Receptor' into the assessment of plans and projects which may have an impact on Natura 2000 sites.

Accordingly, an Appropriate Assessment Stage 1 Screening exercise was undertaken by Altemar in accordance with 'including 'Assessment of Plans and Projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC' (European Commission, 2021)' and an AA Screening Report is submitted with this application. This screening concluded that a Stage 2 assessment was required, and a NIS has also been submitted with this application.

Whilst the ecological baseline is undoubtedly common to the assessments to be carried out by An Bord Pleanála pursuant to both the EIA Directive and Article 6(3) of the Habitats Directive, given the very different nature and requirements of those distinct assessments, the requirements of Article 6(3) of the Habitats Directive and Part XAB of the Planning Acts are addressed in the AA screening Report and NIS.

1.12 AVAILABILITY OF EIAR DOCUMENTS

A copy of this EIAR document and Non-Technical Summary of the EIAR is available for inspection and/or purchase at the offices of Fingal County Council (the relevant Planning Authority) and An Bord Pleanála at a fee not exceeding the reasonable cost of reproducing the document. In addition the EIAR is available online on a dedicated website: www.hacketstownshd.com

1.13 IMPARTIALITY

This EIAR has been prepared with reference to an objective methodology which is universally accepted and acknowledged. Recognised and experienced environmental specialists have been used throughout the EIA process to ensure the EIAR produced is robust, impartial and objective.

It should be noted that, as highlighted above, an important part of the EIA process is preventative action which causes the project design team to devise measures to avoid, reduce or remedy significant adverse impacts in advance of applying for consent. As a result, where no likely significant impacts have been identified where they might reasonably be anticipated to occur, the design and layout of the proposed development has generally been amended to minimise the potential of any likely significant adverse impacts.

1.14 STATEMENT OF DIFFICULTIES ENCOUNTERED

No particular difficulties were experienced in compiling the necessary information for the proposed development.

1.15 QUOTATIONS

EIAR documents by their very nature contain statements about the proposed development, some of which are positive, and some negative. Selective quotation or quotations out of context can give a very misleading impression of the findings of this EIAR.

The EIAR study team urge that quotations should, where reasonably possible be taken from the conclusions of specialists' chapters or from the non-technical summary and not selectively.

1.16 EIAR QUALITY CONTROL & REVIEW

John Spain Associates is committed to consistently monitoring the quality of EIAR documents prepared both in draft form and before they are finalised, published and submitted to the appropriate competent authority taking into account latest best-practice procedure, legislation and policy.

1.17 ERRORS

While every effort has been made to ensure that the content of this EIAR document is error free and consistent there may be instances in this document where typographical errors and/or minor inconsistencies do occur. These typographical errors and/or minor inconsistencies are unlikely to have any material impact on the overall findings and assessment contained in this EIAR.