

## 4 EXAMINATION OF ALTERNATIVES

### 4.1 Introduction

The EIA Directive (2014/52/EU) requires Environmental Impact Assessment Reports (EIAR) to include the following: -

*“A description of reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.”*

In accordance with the Draft EPA Guidelines, different types of alternatives may be considered at a number of key stages during the process.

For the purposes of the Regulations, the alternatives can be described in five ways: -

- Alternative Locations.
- ‘Do Nothing’ Alternative.
- Alternative Processes.
- Alternative Mitigation Measures.
- Alternative Layouts & Designs.

### 4.2 Development Rationale

The proposed development seeks to provide a high density residential development and related facilities at residentially zoned land. The nature of the development proposed is actively promoted at this location by Dun Laoghaire-Rathdown County Council (DLRCC), through its development plan and having regard to other local and strategic plans and guidance.

The assessment of the proposed scheme in this EIAR has had regard to the detailed design as described and illustrated in the accompanying plans & particulars which accompany the planning application to the Board. This includes the relevant drawings and reports prepared by the Design Team.

### 4.3 Main Alternatives Studied

The main alternatives considered during the development of this project comprise alternative design solutions and layouts for a predominantly residential development at the subject site.

#### 4.3.1 Alternative Locations

Under the Dun Laoghaire-Rathdown County Development Plan 2016 – 2022 (hereafter the Development Plan), the subject site is zoned ‘Objective A1’, the objective of this is: -

*“To provide for new residential communities in accordance with approved local area plans.”*

The Woodbrook – Shanganagh Local Area Plan 2017 – 2023 (hereafter the LAP) was prepared by DLRCC to provide a framework for future development of this new residential community at the subject lands. The LAP itself was subject to the Strategic Environmental Assessment (SEA) process.

As such it is considered that the site is entirely suitable for the nature of development as proposed in the SHD Planning Application. It is not considered necessary to consider an alternative site location for the proposed development.

#### 4.3.2 'Do-Nothing' Alternative

In the event of a 'do-nothing' scenario, the site would remain 'as-is' with the undeveloped nature of the site or its former agricultural use retained.

The subject site has been zoned for residential development at the southern edge of Shankill, to meet identified housing need in Dun Laoghaire-Rathdown County. Shankill lies outside the M50 ring but within the built up area of 'Dublin & Suburbs' in the Dublin Metropolitan area.

A do-nothing approach would be contrary to the Council's objectives to promote of residential land use at this site, in accordance with national, regional and local planning policy and guidance. It would potentially result in a failure of the housing needs of the County being appropriately met and the site being identified as 'vacant land'. An opportunity to achieve efficient and compact development which will benefit from future public transport connectivity in the form of new DART Station (to the east) and Bus Connects radial route to the west would be lost. A 'do nothing' approach would be considered inappropriate from a planning and housing perspective.

From an environmental perspective, beyond impact on human health from a failure to deliver sustainable residential development to meet housing and community development needs and further sustainable development based on alternatives to travel by private car, a 'do nothing' approach is otherwise likely to result in a neutral impact on the environment in respect of material assets, land, water, air, climate, cultural heritage, biodiversity and landscape.

#### 4.3.3 Alternative Processes

Alternative processes for the proposed housing, supporting facilities, amenities and infrastructure, at construction and operational phase of the development, are discussed below: -

- **Construction Phase:** The proposed construction works comprise relatively standard building construction processes. As such there are no specific alternative construction processes identified in this EIAR.
- **Operational Phase:** No new, unusual or technically challenging operational techniques are required, as such no alternative operational processes have therefore been considered at this point.

#### 4.3.4 Alternative Mitigation Measures

The mitigation measures as outlined in the various chapters of this EIAR are considered appropriate to the location, nature and extent of the project and its potential impacts. Due to this no alternative mitigation measures have been considered.

#### 4.3.5 Alternative Layouts & Designs

A number of site layout and alternative designs were considered during the design process, with further design alterations taking place following receipt of the Opinion of An Bord Pleanála after the Pre-Planning Consultation meeting which was held on 17 December 2018.

No particular further alternatives to the nature, design and layout of this project have been identified in the preparation of this EIAR, as a result of potential significant adverse impacts on the environment arising at planning design stage. The mitigation measures do not call for changes to the design and layout of the proposed residential scheme.

The EIAR provides reasonable evidence that the proposed development can be accommodated in the subject site without predicted risk of significant adverse impact on the environment, subject to the identified mitigation measures at construction and operational stages being implemented.

#### 4.3.5.1 Woodbrook – Shanganagh Local Area Plan Layout – DLRC Pre-Planning Layout

The Proposed Development was subject to series of Section 247 detailed Pre-Planning meetings (including meetings on site) with DLRC prior to the submission of the SHD Pre-Planning Consultation request to the An Bord Pleanála. These meetings helped to inform the design team's concept proposals for the subject site, with the creation of character areas, wider pedestrian / cycling connections, usable public open space and retention of trees / hedgerow where practically possible.

The initially proposed development consisted of c. 400no. residential units and associated landscaping, parking and open space on a c. 8 Ha site.

The key issues from an environmental perspective which arose at the Pre-Planning meetings and which influenced the proposals submitted as part of the Pre-Planning consultation with DLRC can be summarised as follows: -

- The need to provide sufficient and good quality public and communal open space.
- Appropriate design in the context of the area (connectivity and permeability).
- Wastewater treatment and surface water management.

The above issues relate to the following environmental aspects: -

- Water.
- Population and Human Health.
- Landscape and Visual.

Figure 4.1 below shows the site layout as shown at the initial Section 247 Pre-Planning Meeting with Dun Laoghaire-Rathdown County Council.



Figure 4.1: Proposed Layout No.1 for Woodbrook.

#### 4.3.5.2 An Bord Pleanála Pre-Planning Consultation

The scheme as submitted with the Pre-Planning request to the Board had been progressed via an iterative process, with changes having been made during the pre-application process with the Planning Authority.

The scheme as submitted to the Board at Pre-Planning Consultation stage comprised of 428no. residential dwellings in a mix of houses, duplexes and apartments in a range of heights from 2 to 6 storeys. The layout provided for significant public open spaces and north/south green links to Shanganagh Park. A childcare facility and ancillary site development and landscape works were also provided for. 2no. replacement golf holes for the Woodbrook Golf Club on lands east of the railway line also formed part of this layout in order to facilitate future development.

This evolved layout design improved the green open spaces and connectivity in the development and general layout of the development in its context.

The key issues from an environmental perspective which arose at the Pre-Planning meetings and which influenced the proposals submitted as part of the Pre-Planning Consultation with ABP can be summarised as follows: -

- The need to provide sufficient and good quality public and communal open space.
- Appropriate design in the context of the area (connectivity and permeability).
- Wastewater treatment and surface water management.

The above issues relate to the following environmental aspects: -

- Water.
- Population and Human Health.
- Landscape and Visual.



Figure 4.2: ABP Pre-Planning Site Layout.

#### 4.3.5.3 Final Proposed Scheme

Further consultations with the Planning Authority (two further meetings) were undertaken during the course of this redesign, in order to ensure that any concerns of the Planning Authority were addressed in the final design.

Responses to each of these items have been provided as part of this final application pack, and the scheme has been updated and improved where necessary as a result.

As noted within the development description sections of this chapter, the scheme now comprises a greater overall quantum of residential development, providing for a more sustainable level of density having regard to the land take of the proposed scheme and its location.

Following Pre-Planning with An Bord Pleanála the Planning Authority (DLRCC) found the proposal to be broadly acceptable in terms of design and layout, subject to a number of detailed design considerations relating to drainage solutions, residential amenity standards (particularly communal private spaces), ecological assessment, pedestrian connectivity and phasing.

The Board, in its assessment of the key issues to be further examined by the Applicant to support a reasonable basis for an application for strategic housing, identified the following issues for further consideration and/or justification: -

- Sustainable residential density that results in acceptable efficiency in use of serviceable land, balance with site context. Appropriate net density to be justified having regard to the relevant national and regional planning policy and guidance for a site at this location.
- Design, Layout & Unit Mix to have regard to the 12no. criteria identified in the Urban Design Manual (2009), in particular the creation of distinct character areas, sufficiently robust urban edge to the west and south, connections to existing and proposed residential development and public open spaces.
- Surface water management and maximisation of SUDS measures.

The proposed development was subject of further alteration to address the matters above and arrive at an optimal solution in respect of making efficient use of zoned, serviceable lands whilst also addressing the potential impacts on the environment relating to residential, visual, natural and environmental amenities and infrastructure. In summary: -

- The proposed number of residential units increased from 428no. to 685no.
- The north / south running Woodbrook Avenue geometry changed to provide a more rationalised development adjacent to the Coastal Park.
- The 'Pavilion Blocks' on the eastern edge of the site were replaced with 3no. courtyard blocks which range in height from 5 to 8 storeys.
- An additional apartment block was included to the Southern Housing Area adjacent to the pocket park.
- The Phase 2 indicative blocks were considered to allow for approximately 1,400no. buildings in total within the proposed masterplan.
- The masterplan was also altered to include increased heights and density adjacent to the proposed Woodbrook DART Station to make effective use of land beside transport infrastructure.

The final proposed site layout is shown in Figure 4.3 below.

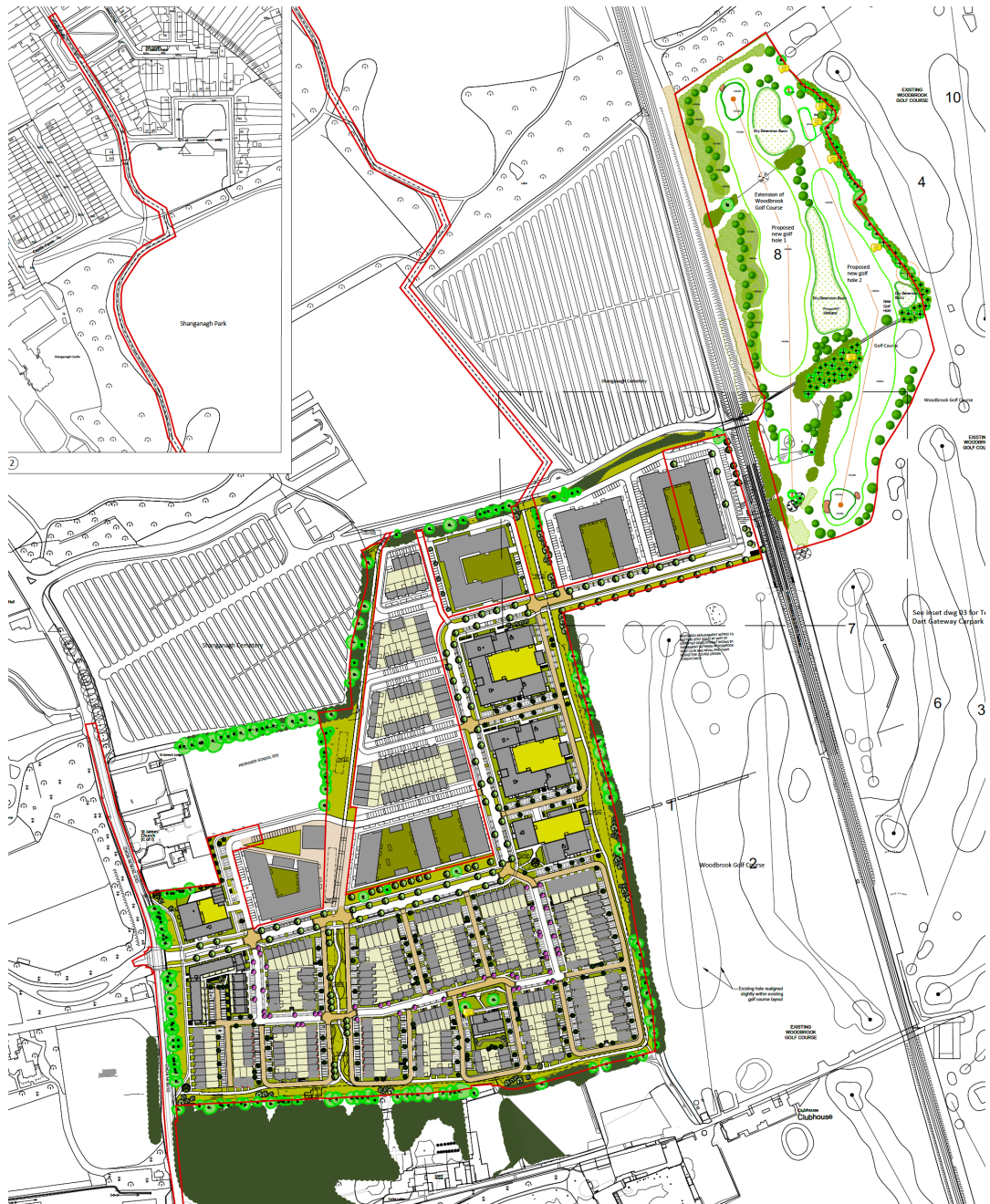


Figure 4.3: Proposed Woodbrook Masterplan.

The final design presents the most effective utilisation of this significant site, fulfils Dun Laoghaire-Rathdown County Council objectives and ensures the optimum provision of much-needed housing.

To summarise it is considered that the final layout: -

- Advances the strategic and statutory objectives applicable to these lands and the wider area.
- Optimises development space within the overall site, in an efficient and sustainable manner.
- Facilitates the introduction of long term public transport infrastructures to the area, which can be incorporated into future infrastructural networks.
- Facilitates ready access to all parts of the scheme and the future development lands to the north.
- Avoids significant environmental impacts.

- Enables extensive economic development through both employment created at construction and operational stages, and also under future phases of development.
- Avoids the necessity to utilise in a non-sustainable manner other greenfield lands, particularly those in the Greater Dublin Area.
- Provides much-needed housing in an area characterised by very slow housing growth.
- Encourages the use of public transport and provides pedestrian and cycle links throughout and under future phases to minimise car usage within the scheme.

The final iteration of the scheme is not considered to give rise to any significant adverse environmental impacts. Mitigation measures to be implemented at construction and operation stages of the project are summarised in Chapter 19: Summary of Mitigation Measures of the EIAR.