# 4 DESCRIPTION OF REASONABLE ALTERNATIVES

## 4.1 Introduction

This chapter of the EIAR sets out the reasonable alternatives that have been considered for the Proposed Development and provides an indication of the main reasons for the final scheme choice, taking into account the effects on the environment in the context of the characteristics of the site (receiving environment). Article 5(1)(d) of the EIA Directive requires EIAR to include the following: -

> *"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 option chosen, taking into account the effects of the project on the environment".*

Paragraph 2 of Annex IV elaborates the requirement, as follows: -

> *"A description of the 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."*

Pursuant to Section 3.4.1 of the Environmental Protection Agency (EPA) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA, 2022), the consideration of alternatives also needs to be cognisant of the fact that: -

> *"…in some instances some of the alternatives described below will not be applicable – e.g. there may be no relevant 'alternative location'…"*

In accordance with EPA Guidelines (EPA, 2022), different types of alternative may be considered at several key phases during the process. As environmental issues emerge during the preparation of the EIAR, alternative designs may need to be considered early on in the process or alternative mitigation options may need to be considered towards the end of the process.

The EPA Guidelines (EPA, 2022) state: -

> *"The objective is for the developer to present a representative range of the practicable alternatives considered. The alternatives should be described with 'an indication of the main reasons for selecting the chosen option'. It is generally sufficient to provide a broad description of each main alternative and the key issues associated with each, showing how environmental considerations were taken into account in deciding on the selected option. A detailed assessment (or 'mini-EIA') of each alternative is not required."*

Thus, the reasonable alternatives studied by the project design team and in the context of the associated Regulations, the alternatives of the Proposed Development in this EIAR Chapter as follows: -

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

This chapter has been prepared by Eleanor Mac Partlin, EIAR Manager, with assistance from Niamh Robinson, EIAR Co-ordinator and Ian Doyle, EIAR Assistant, all at Stephen Little and Associates. Eleanor is the Associate Director of Stephen Little and Associates and has significant experience in the management and delivery of complex multidisciplinary projects, with particular experience in Town Planning and EIA. Niamh has 4 years' professional experience in the planning field and holds a MRUP – Masters in Regional and Urban Planning. Ian has 2 years' professional experience in the planning field and has a Bachelor of Science (Honours) in Spatial Planning.

## 4.2 Development Rationale

The proposed development seeks to provide a residentially-led development on residentially zoned land within a Strategic Development Zone (SDZ). The nature of the development proposed is actively promoted at this location by South Dublin County Council (SDCC) through the approved Clonburris SDZ Planning Scheme (2019), which forms part of the South Dublin County Development Plan 2022-2028 ("the Development Plan").

The assessment of the likely effects of proposed scheme on the environment, contained in this EIAR, has had regard to the detailed design and layout of the proposed development at the site location, as described and illustrated in the plans and particulars that accompany the planning application to the Board.

In the context of this Chapter of the EIAR, it is worth highlighting that by virtue of the project in question being located in the Clonburris SDZ, the acceptability of the proposed development is determined by virtue of its compliance with the themes, fixed objectives and development parameters of the adopted Clonburris SDZ Planning Scheme. Consequently, the extent of consideration of design alternatives is significantly curtailed, as compared to development proposed outside a SDZ Planning Scheme development boundary.

## 4.3 Main Alternatives Considered

The main alternatives considered during the development of this project comprise alternative layout and design solutions for residential-led development and associated site works at the site location.

### 4.3.1 Alternative Locations

The adopted Clonburris SDZ Planning Scheme (hereafter the "Planning Scheme") dictates the location, nature and extent of the proposed development at the application site. The site location for the proposed development is largely determined by the fact that these lands are in the ownership or control of South Dublin County Council (SDCC), as the applicant.

The Planning Scheme was prepared by SDCC to provide a framework for future development of this new residential community at the subject lands. The Planning Scheme itself was subject to an extensive Strategic Environmental Assessment (SEA) process.

The subject site is subject of Planning Scheme land use objectives, being 'Primarily Residential', 'Open Space' and 'Mixed Use – Retail Community & Residential' use. We refer to Map 2.1.2 of the Planning Scheme, contained in Figure 4.1 below.

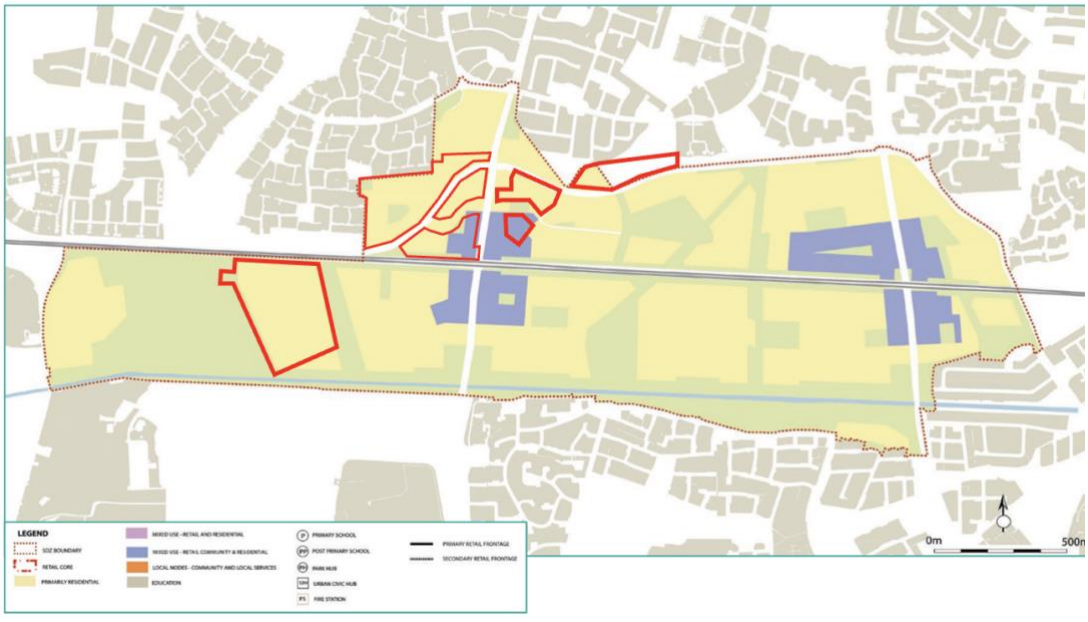

**Figure 4.1:** Extract from Map 2.1.2 of the Clonburris Planning Scheme with areas of proposed development indicatively marked in red. (Overlay by SLA)

Having regard to these land use designations, the application site is considered to be entirely suitable for the uses proposed. Having been expressly identified for such use. It is not considered necessary to consider an alternative site location for the proposed development. The other chapters of this EIAR also demonstrate why there are no other reasons, based on likely environmental effects, to relocate the proposed development to an alternative site or sites (see Table 4.1 in Section 4.3.5.2 below).

### 4.3.2 'Do-Nothing' Alternative

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

The application lands form part of a much wider area that has been designated as a SDZ since May 2019. The site is in a strategic development location within the built up area of Dublin City and Suburbs. It is highly accessible at present by public transport in the form of the Kishoge train station, with future strategic bus services and rail service improvements (DART+) also planned to serve the area.

A do-nothing approach would be contrary to the Council's objectives to promote the development of the SDZ, in accordance with national, regional and local planning policy and guidance, and specifically the approved Clonburris SDZ Planning Scheme. This would potentially result in a failure of the housing needs of the County and City being appropriately met. An opportunity to achieve efficient and compact development on lands which are highly accessible and designated for such development 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 support further investment in sustainable transport 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 dwellings, 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 for the proposed residential-led development. As such, no alternative operational processes have 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. Consequently, no alternative mitigation measures have been considered.

### 4.3.5 Alternative Layouts & Designs

The Clonburris SDZ Planning Scheme is a highly prescriptive document, with a wide range of land use objectives and design standards that must be adhered to. Each development area and associated sub sector, must accommodate a target number of dwellings, a certain residential density and prescribed building height. These development requirements are all expressed as ranges between minimum and maximum values. The proposed layout is dictated by the adopted street hierarchy and building frontage requirements.

As such, the only alternatives that could be considered would relate to how the quantum of development is achieved within each development area sub sector to deliver a range of house types and sizes and to meet the fixed development parameters, while also addressing services requirements and 'work arounds' to any strategic site constraints.

During the project design process, consultation with SDCC as the Planning Authority were held. The key issues from an environmental perspective which arose at Pre-Planning consultation and which influenced the final proposed development are as follows: -

- Appropriate design in the context of the area (street hierarchy, connectivity, permeability, fixed building lines / placemaking) and Planning Scheme.
- Consideration for pre and post development flood routes, SUDS principles and details, Materials / planting strategy and Rail Corridor proposal (10m corridor).
- The need for Flood Risk Assessment to demonstrate mitigation of flooding on and off site.
- Seeking to avoid building over / culverting existing water courses.
- Consideration for 10m setback from streams, Street trees, 50-30m setback from canal corridor.
- Recognition that the ESB Tower compound is to be reserved in lifetime of SDZ plan – scope for removal/ lifetime and opportunity for redevelopment, subject to the removal of cables.
- Consideration of sound barriers to protect neighbours and opportunities to reduce speed limits.
- Consideration of green infrastructure links and retention of trees.

These considerations informed the final design of the proposed development. As such, whilst no alternative site layouts are considered for the purpose of the EIAR, the proposed design did evolve during the pre-planning process. This related primarily to the precise positioning of blocks, as opposed to different site layouts emerging.

The most notable alternative design option considered at pre-planning consultation stage is discussed further below in section 4.3.5.1.

A number of other minor amendments have been made throughout the pre-application design and consultation process including:

**Site 3:**

- Change in house type mix.
- Decrease in total number of dwellings from 590no. units to 574no. units.
- Provision of a childcare facility.

**Site 4:**

- Change in house type mix.
- Increase in total number of dwellings from 431no. units to 436no. units.
- Provision of a childcare facility.

**Site 5:**

- Change in house type mix.

- Decrease in total number of dwellings from 244no. units to 236no. units.

The EIAR demonstrates 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 Main Alternative Considered – 1st Section 247 meeting followed by informal consultation on a site by site basis.

An initial section 247 meeting was held with the SDCC Planning Department on 29 January 2024. This meeting informed the evolution of the design and layout of the proposed development at the application lands, grounded in appropriate consideration of the pertinent planning and environmental issues.

This initial meeting determined the strategy of preparing a single combined Part 10 planning application including all three sites (Site 3, Site 4, Site 5). The proposed development strategy presented at the meeting is illustrated in Figure 4.2 below. The proposal consisted of the three separate sites, together comprising the Application Site, to be developed within the minimum-maximum unit density target of the Planning Scheme, balanced with other identifiable SDZ constraints.

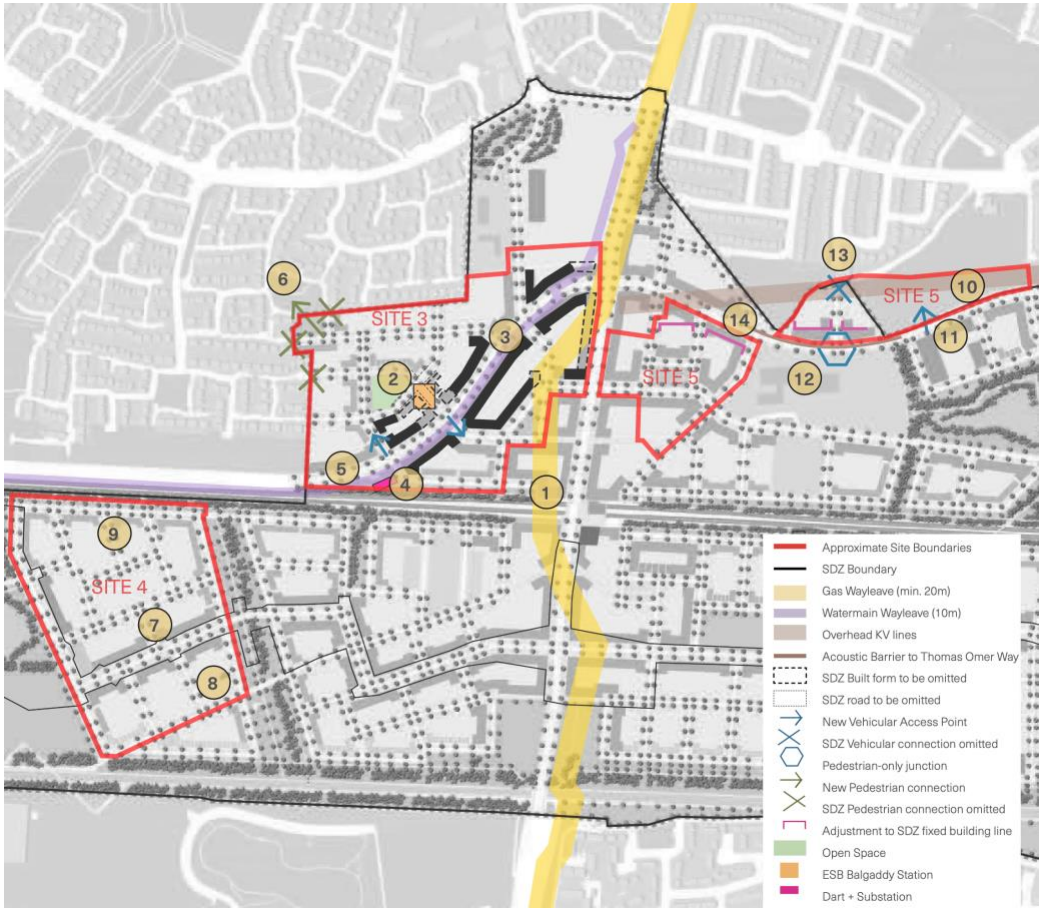


**Figure 4.2:** Part 10 planning strategy at Section 247 meeting held on the 29 January 2024 with application areas outlined in red.

It was agreed as part of this initial section 247 meeting, that a further informal consultation for each individual site would follow and therefore a subsequent informal section 247 meeting was held on: 26 June 2024 for site 3; 2 July 2024 for site 4; and 18 June 2024 for site 5. The proposed layouts presented at these dedicated informal section 247 meetings are illustrated in Figure 4.1 and described below:

- Site 3: 590no. units (58no. 1-bed apartments, 112no. 2-bed apartments and 420no. 3-bed houses) all on a site of 11.43Ha.
- Site 4: 431no. units (74no. 1-bed apartments, 162no. 2-bed apartments, 188no. 3-bed houses and 9no. 4-bed houses) all on a site of 11.1Ha.
- Site 5: 244no. units (35 houses, 66no. apartments, 110no. duplex units, and 33no. triplex units) all on a site of 4.20Ha.

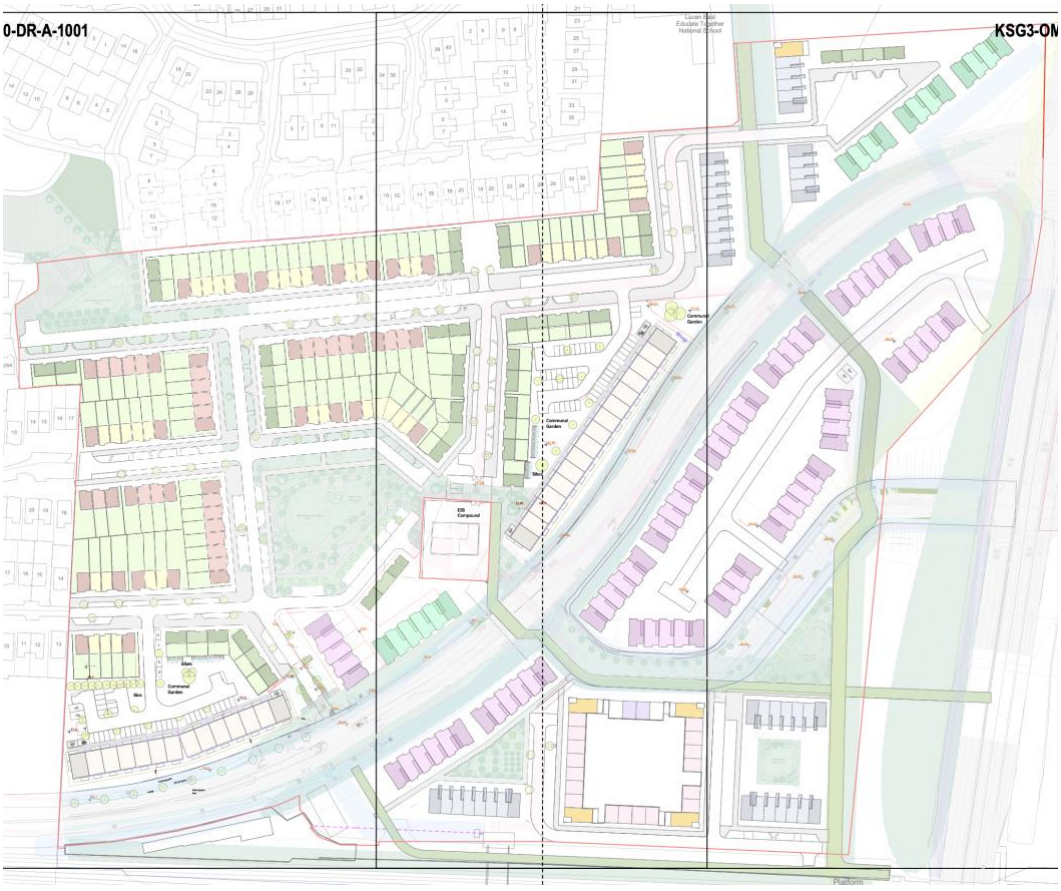


**Figure 4.3:** Site Layout Plan (Site 3) at Section 247 meeting held on the 26 June 2024 with application areas outlined in red


**Figure 4.4:** Site Layout Plan (Site 4) at Section 247 meeting held on the 2 July 2024 with application areas outlined in red

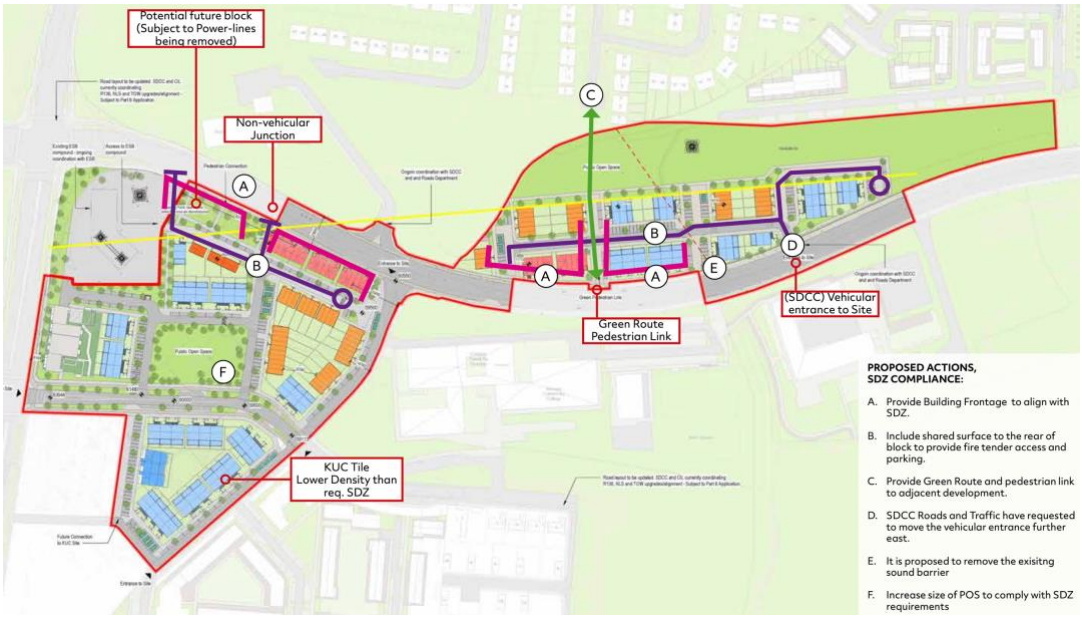


**Figure 4.5:** Site Layout Plan (Site 5) at Section 247 meeting held on the 18 June 2024 with application areas outlined in red

The proposed layouts shown in Figure 4.3-4.5 were broadly welcomed by the Planning Authority (SDCC) with general feedback provided, such as providing reasoned justification and precedent for any departure from the detail of the Planning Scheme. The key feedback from an environmental perspective of this alternative design is summarised as follows: -

- Appropriate design in the context of the area (street hierarchy, connectivity, permeability, fixed building lines / placemaking) and Planning Scheme.
- Consideration for pre and post development flood routes, SUDS principles and details, Materials / planting strategy and Rail Corridor proposal (10m corridor).
- The need for Flood Risk Assessment to demonstrate mitigation of flooding on and off site.
- Seeking to avoid building over / culverting existing water courses.
- Consideration for 10m setback from streams, Street trees, 50-30m setback from canal corridor.
- Recognition that the ESB Tower compound is to be reserved in lifetime of SDZ plan – scope for removal/ lifetime and opportunity for redevelopment, subject to the removal of cables.
- Consideration of sound barriers to protect neighbours and opportunities to reduce speed limits.
- Consideration of green infrastructure links and retention of trees.

#### 4.3.5.2 Final Proposed Development

The development as now proposed is considered to have arrived at an optimal design solution in respect of making efficient use of zoned, serviceable lands and achieving the recommended residential density across the site, whilst also successfully mitigating potential environmental effects relating to residential, visual, natural and environmental amenities and infrastructure.

The Proposed Development subject of the Part 10 application will generally comprise the residential-led development of three site areas, to include: -

- Site 3: 574no. residential units in a mix of house, apartment, duplex and triplex units comprising 1-bedroom, 2-bedroom and 3-bedroom typologies; 2-storey childcare facility; All associated and ancillary site development and infrastructural works including surface level

car parking, bicycle parking, hard and soft landscaping and boundary treatment works, including public, communal and private open space, public lighting, bin stores and foul and water services. Vehicular access to the site will be from Adamstown Avenue and the Northern Link Street, proposed under concurrent application Reg. Ref. SDZ24A/0033W.

- Site 4: 436no. residential units in a mix of house, apartment, duplex and triplex units comprising 1-bedroom, 2-bedroom, 3-bedroom and 4-bedroom typologies; a childcare facility on the ground floor of Block F; retail unit; community building; employment uses and All associated and ancillary site development and infrastructural works including surface level car parking, bicycle parking, hard and soft landscaping and boundary treatment works, including public, communal and private open space, public lighting, bin stores and foul and water services. Vehicular access to the site will be via the Southern Link Road permitted under SDZ20A/0021.

- Site 5: 236 no. residential units including 55 no. social housing units, 113 no. affordable purchase units and 68 no. cost rental units. The scheme provides for a mix of 1, 2 and 3-bedroom units in a range of dwelling typologies, as follows: 35 no. houses, 110 no. duplex units, 33 no. triplex units, and 58 no. apartments. The proposal also includes all associated and ancillary site development and infrastructural works including a total of 219 no. car parking spaces at undercroft and surface level, bicycle parking, hard and soft landscaping and boundary treatment works, public, communal and private open space, public lighting, waste storage areas and foul and water services. Vehicular access to the site will be from Thoms Omer Way and the Northern Link Street (NLS) proposed under concurrent application Reg. Ref. SDZ24A/0033W.

**Figure 4.6:** Proposed Site Layout Plan at Site 3, prepared by O'Mahony Pike Architects.


**Figure 4.7:** Proposed Site Layout Plan at Site 4, prepared by DTA Architects.

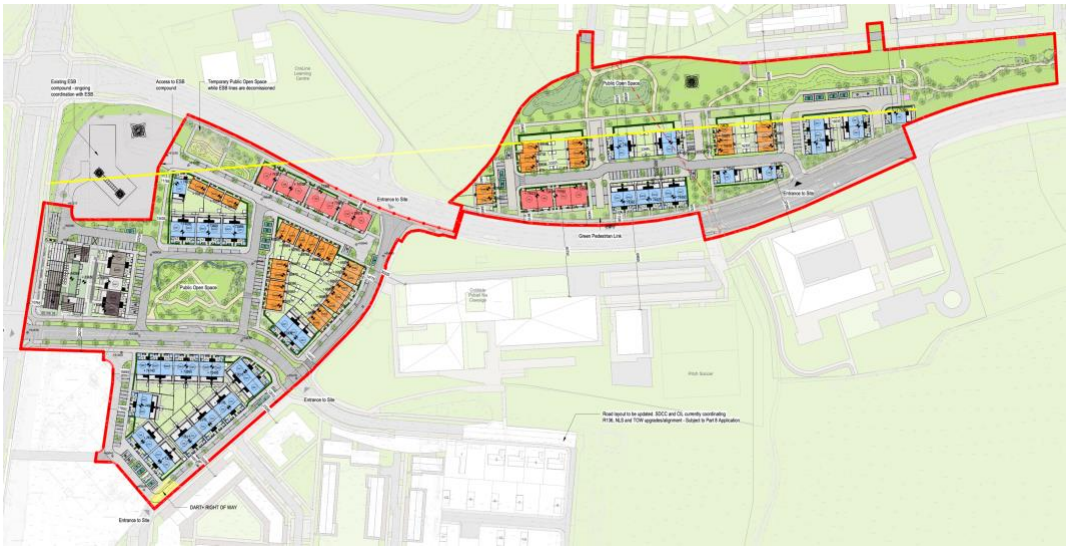

**Figure 4.8:** Proposed Site Layout Plan at Site 5, prepared by MDO Architects.

Please refer to **Chapter 3: Description of Proposed Development** of this EIAR for further detailed description, and to the plans and particulars that accompany the application. The final design

presents the most effective utilisation of these strategic development lands, which fulfils the Development Plan objectives to deliver much-needed housing in a plan-led, high quality scheme. We refer to Table 4.1 below as a summary of environmental effects for each relevant factor, and to each of those chapters of the EIAR in respect of how the relevant environmental requirements and design standards are met.

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.
- Enables extensive economic development through both employment created at Construction and Operational Phases, and also under development of a childcare facility on site.
- Avoids the necessity to utilise in a non-sustainable manner other greenfield lands.
- Affords excellent play opportunities and open space provision for the Proposed Development and to members of the public.
- Encourages the use of public transport and provides pedestrian and cycle links throughout to minimise car usage within the scheme.
- Avoids significant environmental impacts.

The final iteration of the Proposed Development 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.

| **Environmental Effects of the Final Proposed Development compared to Preliminary Layout** | | | |
|---|---|---|---|
| **Environmental Factor** | **Headings Under which the Environmental Factors were Assessed** | **Topic** | **Comparative Effect of Preferred Option** |
| Population & Human Health | | Construction Phase<br>Operational Phase | Neutral, imperceptible and permanent<br>No perceived additional adverse effects during Construction / Operational Phase. |
| Biodiversity | | Construction Phase<br>Operational Phase | Neutral, imperceptible and permanent<br>No perceived additional adverse effects during Construction / Operational Phase. Overall, the impacts are reduced in the Final Proposed Development during the Operational Phase. |
| Land, Soil & Geology | | Construction Phase<br>Operational Phase | Neutral, imperceptible and permanent<br>No perceived additional adverse effects during Construction / Operational Phase. |
| Water | Surface Water | Construction Phase<br>Operational Phase | Neutral, imperceptible and permanent<br>No perceived additional adverse effects during Construction / Operational Phase. |
| | Waste Water | Construction Phase<br>Operational Phase | Neutral, imperceptible and permanent<br>No perceived additional adverse effects during Construction / Operational Phase. |
| | Water Supply | Construction Phase<br>Operational Phase | Neutral, imperceptible and permanent<br>No perceived additional adverse effects during Construction / Operational Phase. |
| | Flood Risk | Construction Phase<br>Operational Phase | Neutral, imperceptible and permanent |

| | | | |
|---|---|---|---|
| | | | No perceived additional adverse effects during Construction / Operational Phase. |
| Climate | Air Quality | Construction Phase<br>Operational Phase | Neutral, imperceptible and permanent<br>No perceived additional adverse effects during Construction / Operational Phase. |
| Climate | Climate Change | Construction Phase<br>Operational Phase | Neutral, imperceptible and permanent<br>No perceived additional adverse effects during Construction / Operational Phase. |
| Air | Sunlight | Construction Phase<br>Operational Phase | Neutral, imperceptible and permanent<br>No perceived additional adverse effects during Construction / Operational Phase. |
| Air | Noise & Vibration | Construction Phase<br>Operational Phase | Neutral, imperceptible and permanent<br>No perceived additional adverse effects during Construction / Operational Phase. |
| Material Assets | Traffic & Transport | Construction Phase<br>Operational Phase | Neutral, imperceptible and permanent<br>No perceived additional adverse effects during Construction / Operational Phase. |
| | Waste | Construction Phase<br>Operational Phase | Neutral, imperceptible and permanent<br>No perceived additional adverse effects during Construction / Operational Phase. |
| | Utilities | Construction Phase<br>Operational Phase | Neutral, imperceptible and permanent<br>No perceived additional adverse effects during Construction / Operational Phase. |
| Landscape and Visual | Visual Impact | Construction Phase<br>Operational Phase | Neutral, imperceptible and permanent<br>No perceived additional adverse effects during Construction / Operational Phase. |
| Cultural Heritage | Archaeological & Architectural | Construction Phase<br>Operational Phase | Neutral, imperceptible and permanent<br>No perceived additional adverse effects during construction/operational phase. |

**Table 4.1:** Summary of Environmental Effects of the Preferred Development Option.