

## 4. CONSIDERATION OF ALTERNATIVES

This Chapter provides *'an outline of the main alternatives studied by the developer and an indication of the main reasons for his or her choice, taking into account the effects on the environment'* as required by Schedule 6 of the Planning and Development Regulations, 2001-2015.

Revised Guidelines on the *Information to be Contained in Environmental Impact Assessment Reports* (Draft), May 2017; the *Advice Notice for Preparing Environmental Impact Assessment Reports* (Draft), September 2015 and the *Consultation Paper on Transposition of 2014 EIA Directive (2014/52/EU) in the Land Use Planning and EPA Licencing Systems*. Regard was also had to the previous EPA Guidance, to the European Commission Impact Assessment Guidelines, 2009, and the new EIA Directive 2014/52/EU (of 16th April 2014), which states that information for the Environmental Impact Assessment Report should include:

*'a description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer.*

The Guidelines note that alternatives may be described at a number of levels (alternative locations, layout, designs and processes) and reference that specific site issues may also be a factor in the examination of alternatives, including the need for the project to accommodate demands or opportunities which are site specific.

The principal rationale for the development proposal is outlined in this section, including consideration of effects on the environment and related planning and development matters of alternative options considered.

### 4.1 Rationale for Proposed Development

The proposed student accommodation element of the proposed development provides a high quality, purpose built, on-campus student accommodation which will assist in creating a vibrant and socially engaging residential student population, and reduce daily traffic movements on and off the campus.

The proposed development is set in the context of an acknowledged, city wide housing and student accommodation crisis. The *Report on Student Accommodation: Demand & Supply* prepared by the Higher Education Authority in 2015 (HEA Report) identifies the unprecedented growth in participation in higher education in recent years, and states that it is set to continue based on projections for the full-time demand for education developed by the Department of Education and Skills. While participation in higher education brings many benefits, it also places pressure on existing infrastructure including an increasing demand for suitable student accommodation. The HEA Report identified the link between demand for student accommodation and impacts on the private rental market and trends in that sector, stating:

*'Given the rent increases that have occurred in recent years, the low supply of stock and the level of student households in the private rented sector and the projected increase in student numbers over the coming years, it can be argued that an increased provision of designated student accommodation, both on and off campus, has the potential, in the medium to long term, to ease ongoing demand pressures in the private rented accommodation sector.'*

The HEA Report estimates that there is currently an unmet demand of about 25,000 bed spaces which is having a significant impact on the private rental sector. The Report provides that Ireland's third-level student population is projected to grow by around 20,000 students (or 15%) to 193,000 students by 2024 which will result in continued pressure on the private rental sector. The HEA Report makes a number of recommendations to increase the supply of student accommodation over the coming years. In particular, the HEA Report advocates the development of accommodation on campus to assist in meeting demand.

The Government's *Action Plan for Housing and Homelessness, Rebuilding Ireland*, July 2016 (the Action Plan), identifies the importance of providing well designed and located student accommodation in order to avoid additional pressures in the private rental sector. The Action Plan acknowledges recent development in this regard, and states:

*'However, an even greater level of provision of student accommodation is required and, accordingly, this Action Plan commits to the development of a national student accommodation strategy in 2017 by the Department of Education and Skills (DES) in conjunction with DHPCLG and other stakeholders, including DPER and the Department of Finance. This will set out a broad framework for delivery of an enhanced level of accommodation which will inform local authority housing strategies and the land management process in general, in order to provide suitably located and affordable sites.'*

Actions identified include working with stakeholders to prioritise and progress viable projects to provide additional student accommodation in key urban areas. The Action Plan seeks to bring on stream proposals capable of delivering an additional 7,000 student accommodation places by end 2019, on or off-campus, in addition to projects already committed to.

More recently, the Department of Education and Skills have published the National Student Accommodation Strategy, July 2017 the primary objective of which is to ensure that there is an increase level of supply of purpose built student accommodation to receive the demand for accommodation in the private rental sector. In this respect, the Strategy seeks the construction of at least an additional 21,000 student accommodation bedspaces by 2024. Furthermore, it is noted that the proposed development has been included in the number of planned bedspaces referenced in the strategy.

Consistent with the National Student Accommodation Strategy, the UCD Strategic Campus Development Plan 2016-2021-2026 provides for investment in additional student accommodation as part of the 10-year development framework for the Campus. The Campus Development Plan projects that UCD will continue to grow over the Plan period from a student population of c.26,750 in 2015 to a potential 30,760 by 2025. In order to alleviate current pressure on the private rental market, and to keep pace with future increases in student population, the Campus Development Plan provides for the construction of additional student residence bedrooms to bring the total residential population to 6,000 bedspaces.

National policy has identified the importance of providing well-designed and located student accommodation in order to avoid additional pressures in the private rental accommodation. There are many benefits of locating student accommodation on-campus in terms of promoting sustainable travel patterns; maximising the opportunity of available resources; freeing up the private residential market (and future development sites), and generally enhanced student experience. It is considered that the location of additional student accommodation on campus is advocated by and consistent with the Government's *Action Plan for Housing and Homelessness, Rebuilding Ireland*, July 2016.

## 4.2 Consideration of Alternatives

### 4.2.1 Alternative Locations

The proposed development provides for comprehensive, on-campus student accommodation to serve identified, existing and future projected demand. The current *Dun Laoghaire Rathdown Development Plan 2016-2022* identifies a clear preference for on-campus, rather than off campus, student accommodation. The Development Plan's Development Standards for Student Accommodation notes the following:

*'Given the growth in recent years of the number of third level students, together with the planned expansion of the County's major educational facilities, there is a demand for specific residential accommodation to cater for this need. The Council will support the provision of on-campus accommodation and may also permit student accommodation off-campus.'*

*'When dealing with planning applications for such developments a number of criteria will be taken into account including:*

- *'The location of student accommodation within the following hierarchy of priority:*
  - *On Campus*
  - *Within 1km distance from the boundary of a Third Level Institute*
  - *Within close proximity to high quality public transport corridors (DART, N11 and Luas), cycle and pedestrian routes and green routes'*

*'In all cases, such facilities will be resisted in remote locations at a remove from urban areas.'*

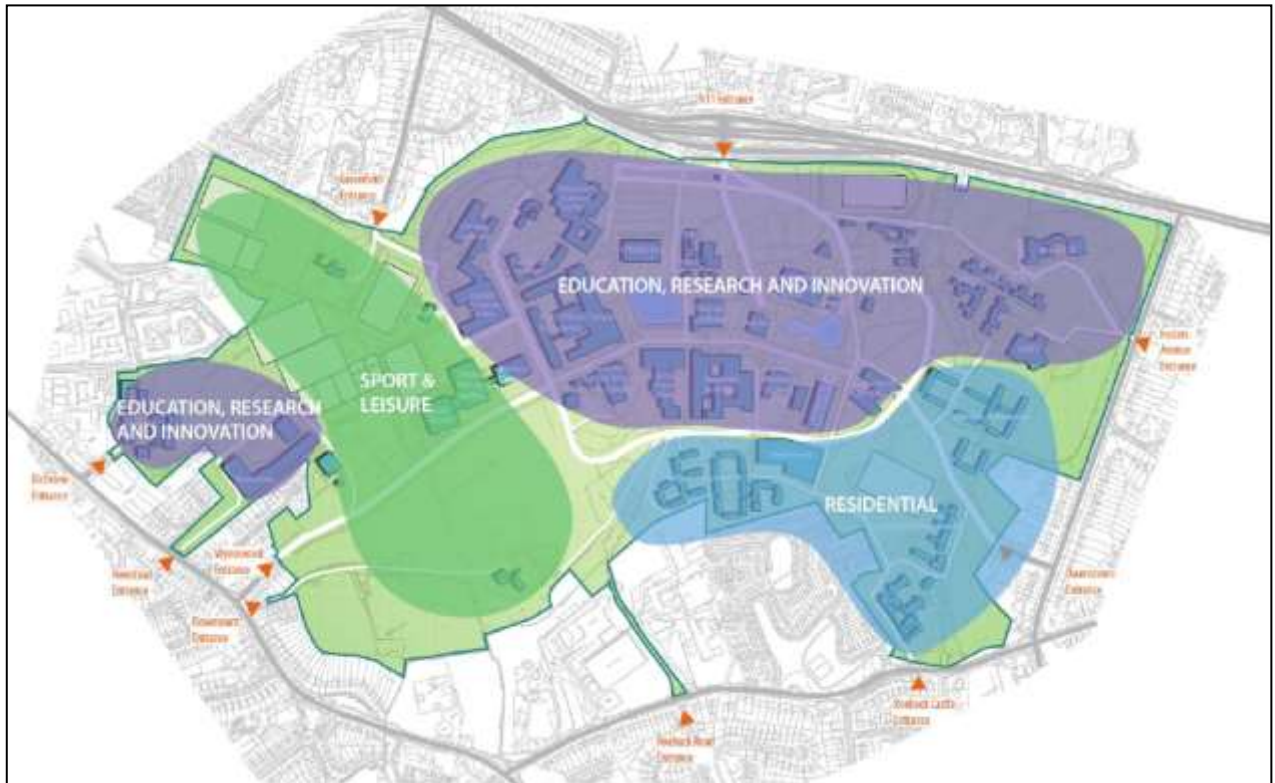
The principle of on-campus student accommodation has been previously determined by the Campus Development Plan and therefore the question of examining Belfield Campus as a suitable location with regard to other sites does not occur.

Alternative locations within the Belfield Campus were considered at initial concept stage. The concept of individual blocks dispersed around the campus was considered. However, this concept resulted in a number of standalone residential blocks which did not successfully integrate with the existing residential development, and did not facilitate the creation of a sustainable student residential community supported by appropriate local services and amenity infrastructure.

Furthermore, the current UCD Strategic Campus Development Plan 2016-2021-2026 (Figure 4.1), provides a broad framework for the future physical development of the Belfield Campus over the next 10-year period. The Campus Development Plan promotes the development of three distinct character areas which concentrate on a primary use with the provision of other complementary and supporting uses as appropriate. The Residential Character Area is concentrated on the south-east corner of the site, including existing residences at Glenomena, Merville, Roebuck and Belgrove.

The proposed location is consistent with the location of the Residential Character Area as advocated in the Campus Development Plan and will serve to create a distinct residential quarter which maximises opportunities to integrate with existing residences and the academic core.

Figure 4.1 UCD Strategic Campus Development Plan 2016-2021-2026 – Character Areas



#### 4.2.2 Alternative Layouts & Designs

A number of alternative layouts for the proposed development were considered over the design process. In addition, the proposals for the development were subject to detailed discussion with the Planning Authority prior to the principles of the of the proposed layout being finalised.

The significant environmental issues and potential effects which informed the proposed layout included built heritage and conservation, landscape and visual impact, shadow assessment, integration with the sustainable transportation strategy, and impact on amenity of existing student accommodation on site and adjoining properties. Other factors which were fundamental to informing and directing detailed design included:

- Adhering to the key organisational principles of the UCD Strategic Campus Development Plan 2016-2021-2026.
- Addressing the existing campus pedestrian, cyclist and movement patterns.
- Integration with university landscape and open space amenity spaces.
- Consideration of how a new campus services centre can be created.
- Meaningful integration of traditional Academic Core and emerging Residential Quarter.
- Provision of necessary student amenities with retail/commercial activity.

In this respect, the design team considered a number of options in terms of overall layout as follows:



### UCD Student Residences Masterplan Design Alternative Option 1:

Early studies for the masterplan sought to move the centre of student activity to Roebuck whilst maintaining a series of courtyards created by individual residential buildings which to complement and connect with the existing Belgrove and Merville Residential communities:

- Amenity Hub Building located at Roebuck Precinct.
- Open Space and playing pitch maintained.
- Road from Owenstown maintained (not diverted).
- Reduced Density – 2025 Beds.
- Maintaining Admin Building at Roebuck.

Figure 4.2 Masterplan Design Alternative Option 1



It was considered that this option placed too much primacy on the development of a new student hub at a location remote from the main campus academic core and would be a missed opportunity in the context of the developing campus masterplan.

### Masterplan Design Alternative Option 2:

This option centred upon 4 main blocks including a building arrangement at Roebuck and a single halls of residence type.

- Amenity Hub Building located at Roebuck Precinct
- Existing Open Space and playing pitch maintained
- Road from Owenstown maintained (not diverted)
- Reduced Density – 2400 Beds
- Maintaining Admin Building at Roebuck

**Figure 4.3 Masterplan Design Alternative Option 2**



As with Option 1, the main student amenity hub is located at Roebuck and thusly remote from the established footfall of the campus core and the main academic heart of the campus. Similarly, the block to the north of the open space poorly integrates with the existing student villages of Merville. It was considered that this option required further development of these issues.

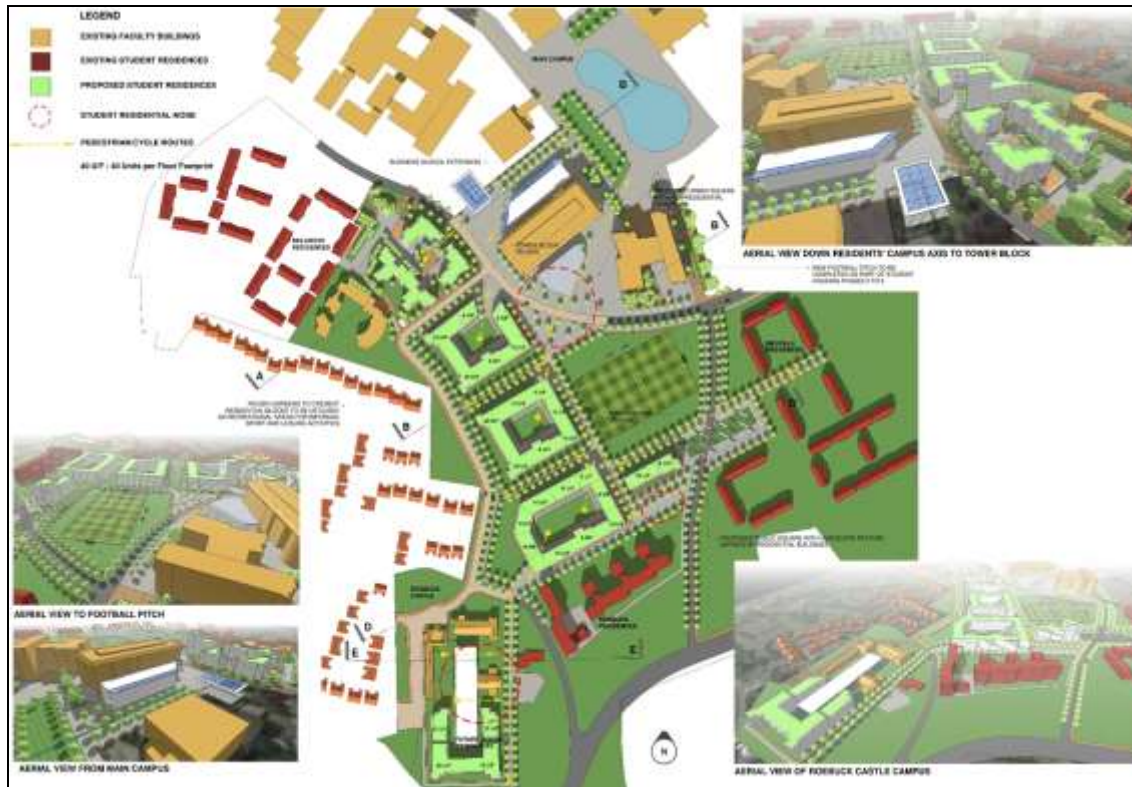
### **Masterplan Design Alternative Option 3:**

This option studied the potential for a central amenity space in the campus and a traffic calmed heart.

- Amenity Hub Building located at Roebuck Precinct
- Existing Open Space and playing pitch maintained.
- Road from Owenstown maintained (not diverted).
- Reduced Density – 2500 Beds.

- Maintaining Admin Building at Roebuck.
- Maintaining Chapel.

Figure 4.4 Masterplan Design Alternative Option 3



This option was not further progressed due to the reasons outlined for Option 4 below.

#### Masterplan Design Alternative Option 4:

Option 4 formed part of a study on connecting the buildings in a linked sequence, which would result in an inter connected sequence of building blocks.

- Amenity Hub Building located at Roebuck Precinct in existing chapel (later studies revealed this to be untenable)
- Existing Open Space and playing pitch maintained and re aligned
- Road from Owenstown maintained (not diverted)
- Reduced Density – 2500 Beds



**Figure 4.5 Masterplan Design Alternative Option 4**

One of the key decisions at this stage of the masterplan development was the review of meaningful open space for the new student residences. It was noted that the outdoor playing pitch would benefit only a very small percentage of future residents. Furthermore, on a practical basis for the University, the pitch was considered remote from the sports complex, associated facilities and main core of playing pitches which had been developed in accordance with the masterplan for the campus. Upon further consideration of what would be suitable for the residences and consultations with the campus community it was decided that the developing masterplan for the new phases of student residences could be a more urban sequence of courtyard buildings connected by usable external spaces and private spaces for the residents.

### Construction Access

In particular, it is noted that a number of alternatives were considered in respect of the construction access locations and routes through the site. In this respect, alternative arrangements considered included routing all traffic through existing entrances at the Owenstown Park; the main Campus entrance from the N11; and the existing Fosters Avenue entrance.



On assessment of the various existing access points available, it was considered that the provision of a temporary construction only access at the junction of North Avenue and Fosters Avenue which connects with an internal construction haul road would be the preferred option. The use of a new dedicated construction access as the principal construction access to the site will remove the bulk of construction access from close proximity to existing dwellings and will minimise traffic impacts on existing entrances at peak times.

#### 4.2.3 Alternative Mitigation Measures

The mitigation measures outlined in this EiAR, where appropriate, have been developed by competent experts relevant to the aspect of the environment under consideration and represent best practice with a view to avoiding or otherwise minimising potential impacts on the environment.

There are no predicted residual impacts once mitigation measures have been successfully applied and as such alternative mitigation is not considered necessary.

#### 4.2.4 "Do Nothing" Alternative

The "do nothing" alternative would result in the student, resident population being maintained at its current level of approximately 3,719 bedspaces. Such an approach would result in continued pressure on the private rental market and associated rises in rents. Given the current level of unmet demand, the severe housing shortage being experienced in Dublin and the projected year on year increase in student population numbers at UCD, it is likely that a greater number of students will need to commute from further out of the site where accommodation is available, or from home. In addition to promoting unsustainable travel patterns, commuting results in increased drop-out rates, reduced student experience and increased barriers for international students or those with disabilities.

With the mitigation measures proposed in this EiAR, and having regard to the findings that no significant effects on the environment are expected with such measures in place, the comparative environmental impacts are not considered sufficient to rule out proceeding with the proposed development.

### 4.3 Conclusion

The proposed development provides for on-campus student accommodation which is the preferred location as supported in the current *Dun Laoghaire Rathdown Development Plan 2016-2022*. The *UCD Strategic Campus Development Plan 2016-2021-2026*, identifies the south-eastern sector of the Campus, including existing residences at Glenomena, Merville, Roebuck, Ashfield and Belgrove, as the Residential Character Area. The location of the proposed development has been identified by a hierarchy of plans and is considered appropriate in the overall strategic development of the Campus. In this context, it is not considered necessary for alternative locations to be considered.

During the design process, the layout and design of the proposed development evolved in response to architectural, environmental and end-user requirements. Any difficulties from an architectural or environmental viewpoint were assessed and, where necessary, the design was amended to address the issues encountered.

The evolution of the current scheme was informed by consideration of a number of environment aspects; vehicular and pedestrian movements; maximisation of pedestrian connectivity through the site; linkages with adjoining Student Accommodation; protection of Architectural Heritage; protection of adjoining residential amenity and retention of existing mature trees.