

## 12.0 MATERIAL ASSETS

### 12.1 INTRODUCTION

John Spain Associates Planning and Development Consultants undertook the preparation of this section of the Environmental Impact Assessment Report (EIAR) in association with RKD Architects and Garland Consulting Engineers.

Resources that are valued and that are intrinsic to specific places are called 'material assets'. They may be of either human or natural origin and the value may arise for either economic or cultural reasons. The assessment objectives vary considerably according to the type of assets, those for economic assets being concerned primarily with ensuring equitable and sustainable use of resources. Assessments of cultural assets are more typically concerned with securing the integrity and continuity of both the asset and its necessary context.

The EIA Directive requires that architectural and archaeological heritage (cultural heritage) is assessed as part of material assets. However, such is the importance of this issue in Ireland, EIA best practice has established that it is important to address this issue separately and not as an adjunct to the Material Assets section in the EIAR document. Accordingly, archaeology and cultural Heritage is assessed in Chapter 4 of this EIAR and architectural heritage is assessed in Chapter 5.

Material Assets in this Chapter considers physical resources in the environment which may be of human origin as those of a natural origin are addressed elsewhere in the EIAR. The objective of the assessment is to ensure that these assets are used in a sustainable manner, so that they will be available for future generations, after the delivery of the proposed development.

With regard to material assets, the August 2017 Draft EIAR Guidelines published by the EPA state:

*'The meaning of this factor is less clear than others. In Directive 2011/92/EU it included architectural and archaeological heritage. Directive 2014/52/EU includes those heritage aspects as components of cultural heritage. Material assets can now be taken to mean built services and infrastructure. Traffic is included because in effect traffic consumes roads infrastructure. Sealing of agricultural land and effects on mining or quarrying potential come under the factors of land and soils.'*

### 12.2 STUDY METHODOLOGY

This chapter of the EIAR has been prepared with reference to the specific criteria set out in the Guidelines on Information to be Contained in an Environmental Impact Statement (EPA 2002) and the Advice Notes on Current Practice (in preparation of Environmental Impact Statements) (EPA 2003). This chapter also has regard to EIA Directive 2014/52/EU and the associated Draft EPA guidelines (2017), which will be updated upon the enactment of the directive into national law. These draft guidelines include information on the assessment of the effects of development on material assets, and advise on the nature of the material assets that should be examined as part of the preparation of an EIAR.

Economic assets of natural origin, which include biodiversity, land and soils and water, are addressed elsewhere in this EIAR, in particular Chapters 6, 8 and 9. As noted in Section 12.1, cultural assets are addressed in Chapters 4 and 5 of this EIAR.

Economic assets of human origin are considered in this chapter. A desktop study was carried out on existing material assets of human origin associated with the site of the proposed development. Projections of resource use were undertaken for both the construction and operational phases of the proposed development, and the impacts were assessed. Mitigation measures are proposed where appropriate.

## **12.3 EXISTING RECEIVING ENVIRONMENT**

### **12.3.1 Introduction**

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 takes account of any other proposed developments in the local area that are likely to proceed in the short to medium term.

The following economic assets of human origin will be affected by the proposed development:

- Urban settlements
- Ownership and access
- Transport infrastructure
- Foul and surface water disposal
- Potable water supply
- Natural gas supply
- Electrical supply
- Telecoms
- Municipal waste

### **12.3.2 Urban Settlements**

The application site comprises approximately the southern half of the former Magee Barracks site (11.14 hectares of an overall 20.78 hectares) in Kildare Town, County Kildare. The entire former barracks site is zoned 'Z' - 'Regeneration of Magee Barracks' under the Kildare Town Local Area Plan 2012-2018.

Land use is predominantly residential to the immediate north, east and west of the site, with commercial and community uses to the south, including a supermarket, resource centre and primary care centre. An existing school and a site for an additional permitted school currently under construction are located to the immediate northwest of the site. The site is within c. 750 metres of the centre of Kildare Town and within walking distance of Kildare Train Station.

The site currently consists of a number of vacant military buildings, all of which are in serious disrepair, areas of hard surfacing formerly used as training grounds / assembly areas and underutilised green-field lands. The former use of the site as a barracks was discontinued in 1998.

### **12.3.3 Ownership and Access**

The application site is owned by Lonadale Limited. The applicant, Ballymount Properties Ltd., is a company within the same group and a letter of consent accompanies this application.

The application site is not currently accessible to the public. Vehicular access to the site can be gained from Hospital Street.

### **12.3.4 Transport Infrastructure**

Pedestrian access to the application site can be gained via footpaths on both sides of Hospital Street. The application site is within walking distance of Kildare Train Station, with regular services to Heuston Station in Dublin, Galway City, Cork City and Limerick City.

A Bus Éireann bus stop is located adjacent to the application site's southern boundary on Hospital Street. Services from this stop operate to Dublin City, University College Dublin, Naas and Monestarevin.

### **12.3.5 Foul and Surface Water Disposal**

There are 2 no. existing sewers traversing the application site which will be diverted into the foul drainage system serving the proposed development.

The application site's surface water drainage is via a combination of direct infiltration to ground and discharge to a combined sewer system gravitating to Hospital Street. The surface water drainage for the adjacent Ruanbeg estate discharges into the M7 Motorway storm drainage system. There are no watercourses on or adjacent to the site.

Existing wastewater and drainage services are discussed in greater detail in the Water Services Design Report that accompanies the planning application.

### **12.3.6 Potable Water Supply**

There is no usable water supply infrastructure within the application site. There is a 10" diameter water main on Hospital Street.

Existing water supply infrastructure is discussed in greater detail in the Water Services Design Report that accompanies the planning application.

### **12.3.7 Natural Gas Supply**

There is no usable natural gas supply infrastructure within the application site. There is a medium pressure gas main on Hospital Street.

Existing natural gas supply infrastructure is discussed in greater detail in the Utilities Report that accompanies the planning application.

### **12.3.8 Electrical Supply**

There is no usable electricity supply infrastructure within the application site. There is a pole-mounted medium-voltage ESB line running east-west on lands within the former barracks site, outside but adjacent to the application site's northern boundary.

Existing electricity supply infrastructure is discussed in greater detail in the Utilities Report that accompanies the planning application.

### **12.3.9 Telecoms**

An existing telecoms duct runs from Hospital Street along the application site's eastern boundary. Other telecoms ducts are located within the former barracks site on lands outside the application site boundary.

Existing telecoms infrastructure is discussed in greater detail in the Utilities Report that accompanies the planning application.

### **12.3.10 Municipal Waste**

Existing municipal waste services are discussed in greater detail in the Operational Waste Management Plan that accompanies the planning application.

## **12.4 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. In this chapter the potential impact on material assets is assessed.

A full description of the proposed development is provided in Chapter 2. In summary, the proposal is for the demolition of 16 no. disused buildings on site and the construction of a residential development consisting of 264 no. residential units, a neighbourhood centre, internal roads, parking, pedestrian and cycle paths, public open space and all associated site and infrastructural works. Vehicular access to the development will be via Hospital Street. The 16 no. buildings to be demolished have a combined GFA of 16,115 sq. m. The 264 no. residential units will consist of 200 no. houses, two to three storeys in height, and 64 no. apartments / duplexes of three storeys in height. The neighbourhood centre will include 3 no. retail units, a café unit (including gallery / exhibition area) and a childcare facility (115 sq. m., 105 sq. m., 100 sq. m., 300 sq. m. and 680 sq. m. GFA respectively). The associated site and infrastructural works include foul and surface water drainage, attenuation tanks, an electricity substation, 540 no. car parking spaces including 482 no. residential spaces, 26 no. guest spaces and 32 no. spaces to serve the proposed retail, café and childcare units, public open space measuring 1.9 hectares, bin and bike stores, landscaping and boundary walls, railings and fences.

The proposed development comprises Phase 1 (11.14 ha) of the overall development of the applicant's c. 20.78 ha landholding at this location. The planning application is accompanied by an overall site masterplan drawing indicating future phases on the remainder of the lands, which include a supermarket, a cancer treatment clinic (proton therapy), and a Phase 2 residential development of c. 179 units, which will be subject to separate applications.

## **12.5 POTENTIAL IMPACT OF THE PROPOSED DEVELOPMENT**

### **12.5.1 Introduction**

This section contains an assessment of the potential effects of the proposed development on material assets. This is provided with reference to both the Characteristics of the Receiving Baseline Environment and Characteristics of the Proposed Development sections. The assessment takes both the construction and operational phases of development into account.

### **12.5.2 Urban Settlements**

#### ***Construction Phase***

Construction of the proposed development will give rise to a number of temporary environmental effects as set out in chapters 5, 7, 8, 9, 10 and 11 of this EIAR. Effect mitigation measures are included in the respective chapters and reflected in the Construction Environmental Management Plan that accompanies the planning application. In summary, construction of the proposed development is anticipated to have a negligible effect on Kildare Town as an economic asset of human origin.

#### ***Operational Phase***

The proposed development will deliver 264 no. residential units, a neighbourhood centre, internal roads, parking, pedestrian and cycle paths, public open space and associated site and infrastructural works. The development will contribute to the renewal and regeneration of Kildare Town, enhance its urban structure and built fabric and provide new connections between existing residential areas to the north and east and the town centre, rail station and community facilities to the south and west. As such, the proposed development is anticipated to have a significant positive effect on Kildare Town as an economic asset of human origin.

Further positive cumulative effects will result from the wider Magee Barracks regeneration proposals, which include a supermarket, cancer treatment clinic and completion of a road link between Hospital Street and Melitta Road, a specific local planning policy objective.

### **12.5.3 Ownership and Access**

#### ***Construction Phase***

Vehicular access to the proposed development during construction will be via Hospital Street. Access will be reserved for construction staff only. Further detail of access arrangements during construction can be found within the Construction Environmental Management Plan that accompanies the planning application.

#### ***Operational Phase***

Once completed, the roads, footpaths and landscaped open spaces of the proposed development will be open to the public. Vehicular access to the proposed development will be via Hospital Street. The development proposals include multiple pedestrian and cycle links to surrounding residential areas, to

be delivered through agreement with / by Kildare County Council, which has taken these adjoining developments in charge.

Further positive cumulative effects will result from the wider Magee Barracks regeneration proposals, which will include further pedestrian and cycle links to surrounding areas and the completion of a road link between Hospital Street and Melitta Road, a specific local planning policy objective.

#### **12.5.4 Transport Infrastructure**

##### ***Construction Phase***

The planning application is accompanied by a Construction Environmental Management Plan that includes a number of measures to minimise impacts on the operation or condition of the local public road network, including:

- Consolidation of delivery loads to / from the site and the restriction of large deliveries on site to off-peak times; and
- Wheel washing on site to ensure that dirt and dust is not transferred onto public roads.

There will be no requirement for any construction vehicles to park on public roads or perform turning manoeuvres on public roads.

Construction of the proposed development is anticipated to have a negligible effect on local transport infrastructure.

##### ***Operational Phase***

The proposed development will deliver a new network of purpose-engineered streets, footpaths and cycle paths and a signalised junction on Hospital Street complete with pedestrian crossings. The proposed development will improve overall connectivity and permeability within Kildare Town by providing new pedestrian and cycle links between existing residential areas on the eastern side of the town and the town centre, rail station and community facilities on Hospital Street and Melitta Road.

The planning application is accompanied by a Traffic Impact Assessment. The Traffic Impact Assessment assesses the anticipated levels of traffic generated by the proposed development, the existing and future road infrastructure and concludes that the proposed development will not result in a material deterioration in road conditions.

In summary, the proposed development is anticipated to have a positive effect on local transport infrastructure.

Further positive cumulative effects will result from the wider Magee Barracks regeneration proposals, which will include further pedestrian and cycle links to surrounding areas and the completion of a road link between Hospital Street and Melitta Road, a specific local planning policy objective.

## **12.5.5 Foul and Surface Water Disposal**

### ***Construction Phase***

Surface water drainage during construction will be via a temporary site drainage system operated under licence from Kildare County Council. Construction of the proposed development is anticipated to have a negligible effect on the local wastewater network and treatment facilities.

The vibration effects of construction have been assessed in Chapter 11 and determined to be orders of magnitude below levels that could result in cosmetic damage to buildings. The vibration effects of construction are not anticipated to affect the local foul drainage network.

In summary, construction effects on foul and surface water disposal are anticipated to be negligible.

### ***Operational Phase***

The proposed development will be served by two new gravity sewer systems. The southern system will discharge to the existing foul sewer on Hospital Street. The northern system will discharge to the existing foul sewer in the adjacent Ruanbeg housing development. Both foul sewers have capacity to cater for the proposed development.

An appropriately designed drainage system has been incorporated into the design of the proposed development. The system has been designed in accordance with the Greater Dublin Strategic Drainage Study (GDSDS), the CIRIA SUDS Manual 2015 and Recommendations for Site Development Works for Housing Areas published by the Department of the Environment and Local Government.

Wastewater and drainage proposals are discussed in greater detail in Chapter 9 of this EIAR and in the Water Services Design Report that accompanies the planning application. In summary, the proposed development is not anticipated to have any significant effects on local foul and surface water disposal.

## **12.5.6 Potable Water Supply**

### ***Construction Phase***

The proposal involves providing new connections to the existing potable water supply network. Construction of the proposed development is unlikely to affect local potable water supply.

The vibration effects of construction have been assessed in Chapter 11 and determined to be orders of magnitude below levels that could result in cosmetic damage to buildings. The vibration effects of construction are not anticipated to affect the local potable water supply network.

### ***Operational Phase***

The potable water distribution system for the proposed development will connect to the existing 10" diameter water main on Hospital Street. The total estimated water usage for the proposed development is approximately 159 cubic metres per day. The local potable water supply network has capacity to cater for the proposed development.

Potable water supply proposals are discussed in greater detail in the Water Services Design Report that accompanies the planning application. In summary, the proposed development is not anticipated to have a significant effect on the local potable water supply network.

### **12.5.7 Natural Gas Supply**

#### ***Construction Phase***

The supply of gas to the proposed development will not be operational during the construction phase. Construction of the proposed development is unlikely to affect local gas supply.

The vibration effects of construction have been assessed in Chapter 11 and determined to be orders of magnitude below levels that could result in cosmetic damage to buildings. The vibration effects of construction are not anticipated to affect the local potable gas supply network.

#### ***Operational Phase***

The natural gas supply for the proposed development is anticipated to be drawn from the existing medium pressure gas main on Hospital Street. The proposed development is not anticipated to have a significant effect on local gas supply infrastructure.

### **12.5.8 Electrical Supply**

#### ***Construction Phase***

Construction-related activities will require temporary connection to the local electrical supply network. Construction of the proposed development is anticipated to have a negligible effect on local electricity supply infrastructure.

#### ***Operational Phase***

The electricity supply for the proposed development is anticipated to be drawn from the existing medium-voltage ESB line running east-west on lands outside but adjacent to the application site's northern boundary. The proposed development is not anticipated to have a significant effect on local electricity supply infrastructure.

### **12.5.9 Telecoms**

#### ***Construction Phase***

Fixed telecoms will not be operational during the construction phase. Construction of the proposed development is unlikely to affect local telecoms networks.

#### ***Operational Phase***

The proposed development will connect to existing telecoms infrastructure on Hospital Street. Roads within the development will include ducting suited to the requirements of local telecoms providers. In

summary, the proposed development is not anticipated to have a significant effect on local telecoms infrastructure.

### **12.5.10 Municipal Waste**

#### ***Construction Phase***

Construction and demolition activities will lead to a temporary increase in local demand for recycling and landfill. Recovered steel will be recycled, and the requirement for landfill will be minimised by retaining excavated materials on site for use in backfilling. All construction and demolition waste will be managed in accordance with the Waste Management Hierarchy as set out in the Construction and Demolition Waste Management Plan that accompanies the planning application.

Construction of the proposed development is not anticipated to have a significant effect on municipal waste services.

#### ***Operational Phase***

The proposed development will include waste storage areas for both houses and apartment buildings designed to promote recycling and the segregation of waste. Further detail can be found in the Operational Waste Management Plan that accompanies the planning application. In summary, the proposed development is not anticipated to have a significant effect on municipal waste services.

## **12.6 POTENTIAL CUMULATIVE IMPACTS**

The cumulative effects of development on material assets have been assessed taking other planned developments in the surrounding area into account, in particular the wider Magee Barracks regeneration proposals.

Construction of the wider Magee Barracks regeneration proposals will take place on a phased basis over a period of approximately 10-12 years and all future development proposals will be subject to planning and other regulatory controls. On this basis the cumulative construction effects of development on urban settlements, ownership and access, transport infrastructure, foul and surface water disposal, potable water supply, natural gas supply, electrical supply, telecoms and municipal waste are all anticipated to be negligible.

The wider Magee Barracks regeneration proposals include a further approximately 179 no. residential units, a supermarket, a cancer treatment clinic, public open space and the completion of a road link between Hospital Street and Melitta Road, a specific local planning policy objective. Cumulatively, the regeneration proposals will contribute to the renewal and regeneration of Kildare Town, enhance its urban structure and built fabric and improve overall connectivity and permeability within Kildare Town by providing new pedestrian and cycle links between existing residential areas on the eastern side of the town and the town centre, rail station and community facilities on Hospital Street and Melitta Road. As such, the proposed development in conjunction with the wider Magee Barracks regeneration proposals is anticipated to have positive cumulative effects on urban settlements, access and transport infrastructure.

The cumulative effects of development on foul and surface water disposal, potable water supply, natural gas supply, electrical supply, telecoms and municipal waste are anticipated to be negligible.

## **12.7 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.

If the proposed development were not to take place, Kildare town would not benefit from the renewal and regeneration of the site. Levels of transport connectivity and permeability in the town would be lower than they might otherwise be and the local population would not benefit from access to new landscaped open spaces.

## **12.8 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 likely and significant environmental impacts.

### ***Construction Phase***

A range of construction-related mitigation measures are recommended in this EIAR with reference to the various environmental topics examined and the inter-relationships between each topic. These measures are considered likely to result in any adverse effects on material assets during the construction phase being avoided or suitably mitigated. A summary of recommended mitigation measures is provided in Chapter 14 of this EIAR.

### ***Operational Phase***

No mitigation measures are considered necessary during the operational phase of development. The operational phase of development is anticipated to have generally positive effects on material assets, particularly in relation to urban settlements, ownership and access and transport infrastructure.

## **12.9 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. It should be noted that in addition to remedial and mitigation measures, impact avoidance measures have also been built in to the EIA and project design processes through the assessment of the alternatives described in Chapter 2 of this EIAR.

### ***Construction Phase***

The construction phase of the proposed development will consist of site clearance, demolition, excavation and construction works, taking place on a phased basis over 3-5 years. It is anticipated

that, subject to the implementation of the mitigation measures recommended in this EIAR, adverse effects on material assets during construction will be avoided or suitably mitigated.

### ***Operational Phase***

The proposed development will contribute to the renewal and regeneration of Kildare Town, enhance its urban structure and built fabric and improve overall connectivity and permeability within the town by providing new pedestrian and cycle links between existing residential areas on the eastern side of the town and the town centre, rail station and community facilities on Hospital Street and Melitta Road. As such, the proposed development is anticipated to have positive effects on urban settlements, ownership and access and transport infrastructure.

The proposed development is not anticipated to have any significant adverse effects on foul and surface water disposal, water, gas or electricity supply, telecoms infrastructure or municipal waste services.

Further positive cumulative effects will result from the wider Magee Barracks regeneration proposals, which include a supermarket, cancer treatment clinic and completion of a road link between Hospital Street and Melitta Road, a specific local planning policy objective.

### **12.10 MONITORING**

No ongoing monitoring is considered necessary in relation to the effect of the proposed development on material assets.

### **12.11 REINSTATEMENT**

No reinstatement works are proposed in the case of the proposed development.

### **12.12 INTERACTIONS**

No interactions between effects assessed in this chapter or elsewhere in this report that could significantly affect material assets or the description of any effects assessed in this chapter were identified.

### **12.13 DIFFICULTIES ENCOUNTERED IN COMPILING**

No difficulties were encountered during the course of this assessment.

### **12.14 REFERENCES**

Not applicable.