

# Environmental Impact Assessment Report VOL.III NON-TECHNICAL SUMMARY

Strategic Housing Development at  
Former Gallaher's site, Airton

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**On behalf of:**

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## INTRODUCTION

On behalf of the applicant Greenleaf homes limited, this Environmental Impact Assessment Non-Technical Summary(NTS) accompanies the planning application to An Bord Pleanála under Section 4 of the Planning and Development (Housing) and Residential Tenancies Act (2016) for a proposed Strategic Housing Development on lands located at the former Gallagher's Factory site at junction of Airton Road and Greenhills Road, Tallaght, Dublin 24, in accordance with the Planning and Development (Housing) and Residential Tenancies Act 2016.

The purpose of the NTS is to summarise, and explain in non-technical language, the likely and significant environmental affects arising from this project.

This EIAR has been prepared in accordance with the provisions of the Planning and Development Act (as amended) and the Planning & Development Regulations 2001 (as amended) which give effect in national planning legislation to the EU Directives on EIA.

The statement is prepared with direct input from the design team who include McGill Planning, Ferreira Architects, Mitchell + Associates Landscape Architects, Barrett Mahony Consulting Engineers Civil & Structural, 3D Design Bureau, Tree Management Services: Arboriculture, Landscape and Forestry Consultants, Noreen Mcloughlin of Whitehill Environmental; IAC Archaeology, IN2 Engineering Design Partnership and Renaissance Engineering to ensure that the possible effect on the environment has been examined through the process of an EIAR (detailed below) and the most appropriate form of development is delivered at this site.

## SITE CONTEXT

The subject site is located c. 9km south west of Dublin City Centre, c. 750m north of Tallaght Main Street, and c. 1.6km north east of The Square Tallaght Shopping Centre on Former Gallagher's Site, Junction of Airton Road and Greenhills Road, Tallaght, Dublin 24, on a site area of c. 2.5 ha.

The site fronts onto Airton Road to the north and Greenhills Road to the east. The site is bounded to the south by the Technological University Dublin- Tallaght Campus. The surrounding area comprises of a broad range of uses including commercial/ retail, residential, educational and sports and recreation.

The site is close to a number of bus stops which are serviced by a number of high frequency routes including nos. 27, 54a, and 76. These services link the area to Dublin City Centre. The subject site is located c. 1.6km south east of the Belgard Luas Stop which is serviced by the Redline Luas. As part of the Bus Connects scheme there is a proposed priority bus corridor for Greenhills Road. When this bus corridor is constructed it will significantly reduce journey times to the City Centre. This proposal will also provide excellent cycle infrastructure for the area. Currently the site is a c. 28 minute cycle to St Stephen's Green. The proposed site layout is stepped back from the eastern boundary along Greenhills Road to accommodate the Bus Connects plan.

Vehicular access to the site is from an existing access off Airton Road to the north of the subject site and a new access off Greenhills Road to the east of the site. There are also a number of pedestrian entrances to the north and east of the site along Airton Road and Greenhills Road.

The site comprises of factory buildings which will be demolished as part of this application. It is not located within a Conservation Area or an Architectural Conservation Area. The topography of the site is generally flat.

Figure 1- Site Location Map (Source: Google, 2019)



## PROJECT DESCRIPTION

- The proposal is for a mixed-use development on a site of c. 2.79ha. The proposal consists of:
- Demolition of 4 no. existing factory/ warehouse buildings on site;
  - Construction of 502 residential units comprising of 197 no. 1-Bed; 257 no. 2-Bed; and 48 no. 3-Bed Apartments all with associated private balconies/terraces to the north/south/east/west elevations;
  - Construction of 3 no. Retail Units; a creche; and communal facilities;
  - The development will take place over 6 no. Blocks (A-F) ranging in height up to 8 storeys;
  - The development will have 202 no. car parking spaces located at undercroft level of blocks A, B and C and at basement level of blocks E and F. 580 no. secure bike parking spaces. The site is accessed through 2 no. vehicular access to the north and east of the scheme. There will be a number of pedestrian entrances along Airton Road and Greenhills Road which also provide access for emergency vehicles.
  - In addition to all of the new facilities all other site services and works to enable the development of the site will also be provided including bins, ESB substations, boundary treatments and landscaping.
  - Pedestrian crossing points and road improvements

## PROPOSED DEVELOPMENT

The proposal seeks to construct the following:

Development Proposal	Statistics
No. of residential units	502
Commercial Facilities	3 no retail units (187sqm, 161sqm, 134sqm), a creche and some community facilities
Site Area	c.2.79 Ha
Plot Ratio	1.8
Site Coverage	40%
Building Height	4-8 storey
Public Open Space	c. 6747sq.m
Carparking	202
Cycle parking	584

In addition to the above there will be provision of landscaping and open space. All associated site development works, landscaping, boundary treatments and services provision including ESB substations.



Figure 2- Site Plan (Source: Landscape Masterplan, Mitchell Associates)

## DATA REQUIRED TO IDENTIFY AND ASSESS THE MAIN EFFECTS WHICH THE PROPOSED DEVELOPMENT IS LIKELY TO HAVE ON THE ENVIRONMENT

Data is required in order to identify and assess the main impacts which the development is likely to have on the environment. The following is a synopsis of the data and information available for this Environmental Impact Assessment.

### 1. POPULATION AND HUMAN HEALTH

To establish the existing receiving environment/baseline for the subject site, the methodology included site visits to evaluate the location and likely significant potential impact upon the human sources in the area. Desk base study of the Central Statistics Office Census (CSO) data, the ESRI Quarterly Economic Commentary, and national, regional and local planning policy, school and creche enrolment figures.

Different local catchment areas were established for analysing population data, childcare demand and capacity, and school demand and capacity. These areas were chosen to gather the most relevant data for each factor.

### 2. BIODIVERSITY

The study area encompasses all the land within the area defined in the plan submitted for planning consent, i.e., the proposed application site. In addition, important ecological habitats and receptors within the zone of influence of the proposed development were also studied.

The desk study involved the examination of aerial photographs, current and historical maps and plans and drawings of the site. In addition, information was collated on designated nature sites within a 10-15 km radius of the proposed site and on protected and rare species within the 1km square of the site.

The following websites were used to access information and data:

- National Parks and Wildlife Service – [www.npws.ie](http://www.npws.ie)
- National Biodiversity Data Centre – [www.biodiversitycentre.ie](http://www.biodiversitycentre.ie)
- Ordnance Survey Ireland – [www.osi.ie](http://www.osi.ie)
- Google Maps & Street View – [maps.google.ie](http://maps.google.ie)
- Bing Maps – [www.bingmaps.com](http://www.bingmaps.com)
- My Plan – [www.myplan.ie](http://www.myplan.ie)
- Environmental Protection Ireland – [www.epa.ie](http://www.epa.ie)
- South Dublin County Council – [www.sdcc.ie](http://www.sdcc.ie)

A visit to the site of the proposed development at Airton Road was conducted on May 21<sup>st</sup> 2019, when relevant field notes, species lists and photographs were taken. The site was surveyed in accordance with the Heritage Council's *Habitat Survey Guidelines* (Smith et al., 2010) and the Institute of

Environmental Assessment's *Guidelines for Baselines Ecological Assessment* (IEA, 1995). Habitats within the application site were classified in accordance to Level 3 of *A Guide to Habitats in Ireland* (Fossit, 2000). These habitats are denoted in the text along with their habitat code, e.g., the habitat code for improved agricultural grassland is GA1. Any bird and mammal and bird activity was also noted

The species nomenclature for vascular plants conforms with *The New Flora of the British Isles'* (Stace, 2010).

A separate bat survey for the site was carried out on the 14<sup>th</sup> May 2019 by Donna Mullen and Brian Keely of Wildlife Surveys.

### 3. LAND, SOIL & GEOLOGY

The assessment of the potential impact of the proposed development on the land and soils was carried out according to the methodology specified by the EPA and the specific criteria set out in the Guidelines on Information to be Contained in an Environmental Impact Statement (EPA 2002 and 2017 Draft), EIA Directive 2014/EU/52, Advice Notes on Current Practice (in preparation of Environmental Impact Assessment (EIA), Guidance for Consent Authorities Regarding Sub-Threshold Development (DoEHLG 2003), Development Management Guidelines (DoEHLG, 2007) and Guidelines for Planning Authorities and An Bord Pleanála on Carrying out Environmental Impact Assessments (DoECLG, 2013).

A desktop study to assess the potential impacts of the proposed development and the following sources of information were used in the completion of this assessment.

- Geotechnical Site Investigation Report
- Geological Survey of Ireland (GSI) online maps and databases
- Eastern CFRAMS Flood Maps
- Topographical Survey
- Teagasc soil and sub-soil data.

### 4. HYDROLOGY AND WATER SOURCES

The assessment of the potential impact of the proposed development on the water bodies was carried out according to the methodology specified by the EPA and the specific criteria set out in the Guidelines on Information to be Contained in an Environmental Impact Statement (EPA 2002 and 2017 (Draft)), EIA Directive 2014/EU/52, Advice Notes on Current Practice (in preparation of Environmental Impact Statements) (EPA 2003), Environmental Impact Assessment (EIA), Guidance for Consent Authorities Regarding Sub-Threshold Development (DoEHLG 2003), Development Management Guidelines (DoEHLG, 2007) and Guidelines for Planning Authorities and An Bord Pleanála on Carrying out Environmental Impact Assessments August 2018.

The following sources of information were used in the completion of this assessment:

- Site Visit
- Site Investigation Report by IGSL
- Geological Survey of Ireland (GSI) online maps and databases
- Eastern CFRAMS Flood Mapping from OPW
- EPA online maps and databases
- Topographical Survey

- Local authority record drawings

All drainage (surface and foul) and water supply will be provided in accordance with the requirements of South Dublin County Council, Irish Water and in particular in accordance with the following:

- Greater Dublin Regional Code of Practice for Drainage Works
- Greater Dublin Strategic Drainage Study (GSDSDS)
- Planning System and Flood Risk Management Guidelines
- Building Regulations (Part H)
- Irish Water Standard Details and Codes of Practice for Water and Wastewater Infrastructure
- CIRIA SuDS manual C753 (2015).

This chapter also encompasses knowledge obtained from site visits, drainage and water services record information received from Irish Water and the Local Authority. Additionally, information from the EPA and GSI websites has been utilised.

## 5. NOISE & VIBRATION

The study has been undertaken using the following methodology:

- Baseline Noise monitoring and an Environmental Noise Survey has been undertaken across the development area to determine the range of noise levels at varying locations across the site.
  - The equipment used was a Larson Davis Sound Expert LxT and a Larson Davis Expert 831.
  - The Baseline monitoring periods were from June 07<sup>th</sup> up to and including June 9<sup>th</sup>, 2019 at Location A & B, from the June 11<sup>th</sup> up to and including the June 13<sup>th</sup>, 2019 at locations C, from the June 15<sup>th</sup> up to and including the June 17<sup>th</sup>, 2019 at locations D and from the June 12<sup>th</sup> up to and including the June 14<sup>th</sup>, 2019 at locations E (Table 8.8).
  - The Environmental Noise Survey monitoring period was carried out at five noise sensitive locations around the proposed development on September 18<sup>th</sup>, 2019 between 09:00hrs to 17:45hrs.
- A review of the most applicable standards and guidelines has been conducted in order to set a range of acceptable noise and vibration criteria for the construction/demolition and operational phases of the proposed development, this is summarised in the following sections.
- Predictive calculations have been performed to estimate the likely noise emissions during the construction/demolition phase of the project at the nearest sensitive locations (NSL) to the site.
- Predictive calculations have been performed to assess the potential impacts associated with the operation of the development at the most sensitive locations surrounding the development site; and,
- A schedule of mitigation measures has been proposed, where relevant, to control the noise and vibration emissions associated with both the construction/demolition and operational phases of the proposed development.



## 6. AIR & CLIMATE

The general assessment methodology of the potential impact of the proposed development on air quality and climate has been devised in accordance with:

- 2017 EPA Guidelines on information to be contained in Environmental Impact Assessment Reports.
- Guidelines on Information to be Contained in an Environmental Impact Statement (EPA 2002).
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (DoHPLG, August 2018).
- Advice Notes on Current Practice (in preparation of Environmental Impact Statements) (EPA 2003).
- Environmental Protection Agency, 2015. Revised Guidelines on the Information to be Contained in
  - Environmental Impact Statements.
- Environmental Protection Agency, 2015. Draft Advice Notes for Preparation of Environmental Impact Statements.
- Environmental Impact Assessment (EIA), Guidance for Consent Authorities Regarding Sub-Threshold Development (DoEHLG 2003).
- Development Management Guidelines (DoEHLG, 2007).
- European Union (Planning & Development) (Environmental Impact Assessment Regulations 2018).
- Design Manual for Roads and Bridges (DMRB).

### Baseline Environment

The existing ambient air quality in the vicinity of the site has been characterised with information obtained from a number of sources including EPA Annual Air Quality in Ireland Reports and Local air monitoring stations data.

The ambient air quality data collected and reviewed for the purpose of this study focused on the principal substances (dust, vehicle exhaust emissions and boiler emissions) which may be released from the site during the construction/demolition and operation phases and which may exert an influence on local air quality.

## 7. LANDSCAPE AND VISUAL

This assessment has been prepared based on the following guidelines and documents:

- *Guidelines on the Information to be contained in and Environmental Impact Statement*, by the Environmental Protection Agency, 2002
- *Revised Guidelines on the information to be contained in Environmental Impact Statements- Draft*, by the Environmental Protection Agency, 2015
- *Advice Notes on Current Practice in the preparation of Environmental Impact Statements*, by the Environmental Protection Agency, 2015.
- *Guidelines on Environmental Impact Assessment*, Draft, by the Environmental Protection Agency, 2017
- *Guidelines for Landscape and Visual Assessment*, 3rd Ed., Landscape Institute and Institute of Environmental Management and Assessment, 2013.
- *National Landscape Strategy for Ireland*, Department of Arts, Heritage and the Gaeltacht, 2015-25

- *South Dublin County Development Plan 2016-2022*
- *Tallaght Town Centre LAP Renewed in 2011*
- *Proposed Draft Tallaght Town Centre Local Area Plan 2019*

The Landscape and Visual Assessment involved:

- Visiting the area;
- Undertaking a desk study of the subject site and its immediate environs in relation to its local and urban significance using the information gathered from site visits, studying aerial photography and Ordnance Survey mapping;
- Establishing and describing the receiving environment in terms of the existing landscape and its visual amenity;
- Assessing the nature, scale and quality of the proposed development through examination of the design team's drawings, illustrations and descriptions of the proposed scheme.

## 8. TRAFFIC AND TRANSPORTATION

The assessment of the potential impact of the proposed development on the material assets in the area was carried out according to the methodology specified by the EPA and the specific criteria set out in the Guidelines on Information to be Contained in an Environmental Impact Statement (EPA 2002 and 2017 (Draft)), EIA Directive 2014/EU/52, Advice Notes on Current Practice (in preparation of Environmental Impact Statements) (EPA 2003), Environmental Impact Assessment (EIA), Guidance for Consent Authorities Regarding Sub-Threshold Development (DoEHLG 2003), Development Management Guidelines (DoEHLG, 2007) and Guidelines for Planning Authorities and An Bord Pleanála on Carrying out Environmental Impact Assessments August 2018.

The following sources of information were used in the completion of this assessment:

- Smarter Travel A Sustainable Future (2009-2020).
- National Cycle Policy Framework (2009).
- Regional Planning Guidelines for the Greater Dublin Area.
- Guidelines for Traffic Impact Assessments': The Institution of Highways and Transportation;
- Transport for Ireland – Irish Rail

The methodology included a number of key inter-related stages;

- Background Review: This important exercise incorporated three parallel tasks which included;
  - (i) *An examination of the local regulatory and development management documentation.*
  - (ii) *An analysis of previous 'transport' related, strategic and site specific studies of development and transport infrastructure proposals across the Tallaght Local Area Plan.*
  - (iii) *A review of planning applications to establish the legal status of various third party development schemes that were either considered within the strategic 'transport' studies or which have emerged and received full planning permission.*

- **Traffic Counts:** Classified junction traffic counts in addition to automatic traffic counts were undertaken and analysed with the objective of establishing local traffic characteristics in the immediate area of the proposed residential development.
- **Trip Generation:** A trip generation exercise has been carried out to establish the potential level of vehicle trips generated by the proposed residential development.
- **Trip Distribution:** Based upon both the existing and future (for the adopted assessment horizon years) network characteristics, a distribution exercise has been undertaken to assign site generated vehicle trips across the local road network.

## 9. MATERIAL ASSETS

A desktop study was conducted in relation to the material assets associated with the proposed development and their capacities. Projections of the resources were made for the construction and operational phase of the development. The Guidelines on information to be contained in an Environment Impact Statement (EPA 2002), the advice notes on current practice and Draft EPA guidelines published in 2017 requires assessment of 'economic assets of human origin' to be included in the impact study as a desktop study of material assets associated with the development.

The impacts are assessed in terms of their scale, duration and significance to the site context. During the construction phase assessments are undertaken on the impact of the proposal likelihood in incurring loss or disturbance to material assets due to construction activities. It is unlikely that there will be any major impacts during the operation phase of the development. Economic assets of natural origin that includes biodiversity, soil and water are addressed specifically in the following chapters 5, 6 and 7.

## 10. WASTE MANAGEMENT

The assessment of the impacts of the proposed development arising from the consumption of resources and the generation of waste materials, was carried out taking into account the methodology specified in relevant guidance documents, along with an extensive document review to assist in identifying current and future requirements for waste management including national and regional waste policy, waste strategies, management plans, legislative requirements and relevant reports.

The primary legislative instruments that govern waste management in Ireland and applicable to the project are:

- Waste Management Act 1996 (No. 10 of 1996) as amended. Sub-ordinate legislation includes:
  - European Communities (Waste Directive) Regulations 2011 (SI 126 of 2011) as amended
  - Waste Management (Collection Permit) Regulations (S.I No. 820 of 2007) as amended
  - Waste Management (Facility Permit and Registration) Regulations 2007, (S.I No. 821 of 2007) as amended
  - Waste Management (Licensing) Regulations 2004 (S.I. No. 395 of 2004) as amended
  - Waste Management (Packaging) Regulations 2014 (S.I. 282 of 2014) as amended
  - Waste Management (Planning) Regulations 1997 (S.I. No. 137 of 1997)
  - Waste Management (Landfill Levy) Regulations 2015 (S.I. No. 189 of 2015)
  - European Union (Waste Electrical and Electronic Equipment) Regulations 2014 (S.I. No. 149 of 2014)
  - European Union (Batteries and Accumulators) Regulations 2014 (S.I. No. 283 of 2014) as amended

- Waste Management (Food Waste) Regulations 2009 (S.I. 508 of 2009), as amended
- European Union (Household Food Waste and Bio-waste) Regulation 2015 (S.I. No. 191 of 2015)
- Waste Management (Hazardous Waste) Regulations, 1998 (S.I. No. 163 of 1998) as amended
- Waste Management (Shipments of Waste) Regulations, 2007 (S.I. No. 419 of 2007) as amended
- Waste Management (Movement of Hazardous Waste) Regulations, 1998 (S.I. No. 147 of 1998)
- European Communities (Transfrontier Shipment of Waste) Regulations 1994 (SI 121 of 1994)
- European Union (Properties of Waste which Render it Hazardous) Regulations 2015 (S.I. No. 233 of 2015)
- Environmental Protection Act 1992 (No. 7 of 1992) as amended.
- Litter Pollution Act 1997 (No. 12 of 1997) as amended.
- Planning and Development Act 2000 (No. 30 of 2000) as amended.

This Chapter is based on the proposed development and considers the following aspects:

- Legislative context.
- Demolition phase.
- Construction phase (including site preparation, excavation and levelling); and,
- Operational phase.

A desk study was carried out which included the following:

- Review of applicable policy and legislation which creates the legal framework for resource and waste management in Ireland;
- Description of the typical waste materials that will be generated during the demolition, construction and operational phases; and
- Identification of mitigation measures to prevent waste generation and promote management of waste in accordance with the waste hierarchy.

Estimates of waste generation during the demolition, construction and operational phases of the proposed development have been calculated. The waste types and estimated quantities are based on published data by the EPA in *National Waste Reports*, data recorded from similar previous developments, Irish and US EPA waste generation research, other available research sources and waste collection data from the current facilities on site.

## 11. ARCHAEOLOGY & CULTURAL HERITAGE

Research has been undertaken in two phases. The first phase comprised a paper survey of all available archaeological, historical, and cartographic sources. The second phase involved a field inspection of the proposed development area.

### Paper Study

The following sources were examined and a list of areas of archaeological, and cultural heritage potential was compiled

- Record of Monuments and Places for County Dublin;
- Sites and Monuments Record for County Wicklow;
- National Monuments in State Care Database;

- Preservation Orders List;
- Topographical files of the National Museum of Ireland;
- Cartographic and written sources relating to the study area;
- The South Dublin County Council Development Plan (2016 -2022);
- Tallaght Town Centre Local Area Plan (Adopted 2006, extended 2011);
- Place names analysis;
- Aerial photographs; and
- Excavations Bulletin (1970–2018).

### Field Inspection

Field inspection is necessary to determine the extent and nature of archaeological remains, and can also lead to the identification of previously unrecorded or suspected sites and portable finds through topographical observation and local information.

The archaeological field inspection entailed:

- Walking the proposed development area and its immediate environs.
- Noting and recording the terrain type and land usage.
- Noting and recording the presence of features of archaeological or cultural heritage significance.
- Verifying the extent and condition of recorded sites.
- Visually investigating any suspect landscape anomalies to determine the possibility of their being anthropogenic in origin.

## PREDICTED IMPACTS OF THE PROPOSED DEVELOPMENT

### 1. POPULATION AND HUMAN HEALTH

#### Construction Phase

Any adverse likely and significant environmental impacts will be avoided by the implementation of the remedial and mitigation measures proposed throughout this EIAR. Positive impacts are likely to arise due to an increase in employment and economic activity associated with the construction of the proposed development. The overall predicted likely and significant impact of the construction phase will be short-term, temporary and neutral.

#### Operational Phase

The proposed development will contribute to further growth and expansion of the neighbourhood contributing to the existing and future populations. The predicted impacts of the Operational Phase are considered to be long term and positive to population and human health.

### 2. BIODIVERSITY

With the recommended mitigation measures, it can be concluded that the proposed development at Airton Road, Tallaght, Dublin 24 will have a negative to neutral impact upon local ecological receptors. The creation of new habitats on the site will be a positive benefit to local ecology and with proper management of the site and its green areas, then local areas of biodiversity will be allowed to develop.

### 3. LAND, SOIL AND GEOLOGY

#### Construction Phase

Due to the implementation of the remedial or reductive measures described above, the proposed development will not give rise to significant adverse impacts with regard to soils. Any impacts during the construction phase are likely to be only short term in duration.

#### Operational Phase

No significant impacts are predicted for the operational phase.

### 4. HYDROLOGY AND WATER SERVICES

#### Surface Water

##### Construction Phase

Provided that the proposed remedial or reductive measures are implemented, the impact of the proposed development during the construction stage will be of a temporary nature and will be minimised.

##### Operational Phase

There will be a decrease in surface water run-off from the new development due to the SUDS measures proposed. Surface water run-off will also improve in quality due to these measures.

#### Foul Water Drainage

##### Construction Phase

Provided that the proposed remedial or reductive measures are implemented, the impact of the proposed development during the construction stage will be of a temporary nature and will be minimised. There will be a temporary increase in traffic due to the delivery of materials and other construction related traffic.

The contractor's operations will result in the generation of effluent and sanitary waste from facilities provided for the workforce on site.

##### Operational Phase

The increase in water consumption and resulting foul water flow is a function of the usage of the development.

#### Water Supply

##### Construction Phase

Provided that the proposed remedial or reductive measures are implemented, there will be no appreciable impact of the proposed development during the construction stage on the water supply in the area.

##### Operational Phase

The increase in water consumption is a function of the usage of the development. The installation of water saving devices will further reduce the impact of the re-development on the existing water supply network.

## 5. NOISE AND VIBRATION

### Construction/Demolition Phase

During the construction/demolition phase of the project there is the potential for significant and moderate impacts on nearby noise sensitive properties due to noise emissions from site activities.

The demolition phase of the re-development of The Former Gallaher Site shall be conducted utilising standard demolition techniques in accordance with industry standards.

This stage of demolition will generate medium levels of noise generated principally as a result of manual works involving handheld power tools. As these works will occur generally within the structures of the buildings, there will not be a significant noise impact from these activities.

The application of binding noise limits, hours of operation, along with implementation of appropriate noise and vibration control measures, will ensure that noise and vibration impact will have a negative, moderate and short-term impact on the surrounding environment.

### Operational Phase

#### **Additional Vehicular Traffic**

The predicted change noise levels associated with additional traffic is predicted to be of imperceptible impact along the existing road network. In the context of the existing noise environment, the overall contribution of induced traffic is considered to be of neutral, imperceptible and long-term impact to nearby residential locations.

#### **Mechanical Plant, Retail units & Creche**

Noise levels associated with operational plant are expected to be well within the adopted day and night-time noise limits at the nearest noise sensitive properties taking into account the site layout, the nature and type of units proposed and distances to nearest residences. Assuming the operational noise levels do not exceed the adopted design goals, the resultant residual noise impact from this source will be of neutral, Imperceptible, long term impact.

#### **Local Aircraft Noise**

The proposed development is approx. >5.0 km east from the Casement Aerodrome runway. The proposed development is not located within the Casement Aerodrome inner horizontal surface but is located within the approach & take off climb surfaces. The proposed development is potentially within the flight path of emergency helicopter associated with Tallaght University Hospital and garda helicopters. During the baseline and environmental noise surveys aircraft movements associated with Casement Aerodrome were observed and it was noted that they had a minor impact on the ambient noise environment. Road traffic on the Greenhills Road (R819) and Airton Road was the dominated noise at the site.

## 6. CLIMATE & AIR QUALITY

### Construction/Demolition Phase

#### **Air Quality**

When the dust minimisation measures detailed in the mitigation section of this Chapter (Section 9.7) are implemented, fugitive emissions of dust from the site will be insignificant and pose no nuisance at nearby receptors.

## Climate

Impacts to climate during the construction/demolition phase are considered imperceptible and therefore residual impacts are not predicted.

### Operational Phase

The results of the air dispersion modelling study indicate that the impacts of the proposed development on air quality and climate is predicted to be imperceptible with respect to the operational phase for the long and short term.

## 7. LANDSCAPE AND VISUAL

### Landscape

The proposed development will constitute a significant alteration to the existing landscape character of the site and its immediate context.

However, this level of change has been pre-empted in the underlying planning context for the site with the site zoned for significant regeneration which includes mixed use and residential development.

At the same the particular design and layout employed strikes an appropriate balance between establishing a new urban edge and streetscape, particularly in the immediate vicinity along the public road whilst at the same time not negatively impacting the landscape character of the wider area.

This is achieved through the careful design of the taller elements away from the highest point of the site, along with provision of quality open spaces and landscaping that will create better urban design and living spaces for the future residents.

In light of the underlying planning objectives for the zoned lands, and the specific design employed, the predicted change on landscape character is expected to be Moderate-Neutral.

### Visual

A series of 8 photomontages have been prepared to assess the visual amenity impact of the proposed development (including proposed landscaping) from a variety of locations in the wider landscape

View	View Location	Predicted Effect (Operational Phase)
1.	View looking east from Airton road near Trulife building	No Perceived Change
2.	View from Airton road further east near BW hardware	No Perceived Change
3.	View from Greenhills road looking south near Costa Coffee outlet	Moderate-Positive
4.	View from Bancroft park looking west at the proposed development	Substantial -Positive
5.	View from entrance to TU Dublin Tallaght Campus from Greenhills road	Moderate-Positive
6.	View from old Greenhills road junction.	Slight-Positive



7.	View from Airton/ Greenhills road junction.	Substantial-Positive
8.	View along Airton road across site entrance.	Substantial-Positive

Table 1 Summary of Visual Assessment

At a local level the proposed development will constitute a significant intervention in the local setting replacing a disused industrial site. The impact on local views will be mitigated by existing vegetation and proposed new landscaping treatment. Immediate to the site the visual change will be dramatic but ameliorated by the quality of the building design and landscaping.

Within the wider landscape, views of the proposed development site are generally constrained by a combination of variation in topography, vegetation and existing buildings. Where views of the proposed development are significant the design qualities associated with the proposed development in terms of positioning, setbacks and varying heights of buildings as well as landscape treatments, will serve to reduce the impact.

In the long term the maturation of boundary planting will further screen the scheme at the small number of locations where the development will be visible in the wider landscape. Overall the impact is considered acceptable in light of the site's zoning, and designation for residential development.

## 8. TRAFFIC AND TRANSPORTATION

### Road Network

#### Construction Phase

Provided that the proposed remedial or reductive measures are implemented, the impact of the proposed development during the construction stage will be of a temporary nature and will be minimised.

#### Operational Phase

There will be an increase in road network usage by private vehicles, although this addition will be minimal.

### Pedestrian

#### Construction Phase

Provided that the proposed remedial or reductive measures are implemented, the impact of the proposed development during the construction stage will be of a temporary nature and will be minimised.

#### Operational Phase

There will be an increase in pedestrians in the surrounding area, however these pedestrians will predominantly use the proposed green routes.

### Cyclist

#### Construction Phase

Provided that the proposed remedial or reductive measures are implemented, the impact of the proposed development during the construction stage will be of a temporary nature and will be minimised.

### Operational Phase

There will be an increase in cyclists in the surrounding area, however these pedestrians will predominantly use the proposed green routes.

### Public Transport

#### Construction Phase

Provided that the proposed remedial or reductive measures are implemented, the impact of the proposed development during the construction stage will be of a temporary nature and will be minimised. There will be an increase in public transport usage by site staff. This should not negatively affect the public transport systems in the area and will have no effect on the road network.

#### Operational Phase

There will be an increase in public transport usage by residents of the development. This should not negatively affect the public transport systems in the area and will have no effect on the road network.

## 9. MATERIAL ASSETS

### Construction Phase

On the basis that the specified mitigation measures are incorporated during the construction of the proposed development, the predicted impact will be neutral.

### Operational Phase

Whilst the demand on water services, power, telecommunications and transport infrastructure will all increase due to the development, on the basis that the specified mitigation measures are incorporated then the operation of the proposed development is predicted to have a neutral-long term impact on material assets.

## 10. WASTE MANAGEMENT

The implementation of the mitigation measures outlined in Section 13.7 will ensure that a high rate of reuse, recovery and recycling is achieved at the development during the construction phases as well as during the operational phase. It will also ensure that European, National and Regional legislative waste requirements with regard to waste are met and that associated targets for the management of waste are achieved.

### Demolition and Construction Phase

A carefully planned approach to waste management as set out in Section 13.7 and adherence to the C&D WMP during the construction phase will ensure that the impact on the environment will be *short-term, neutral and imperceptible*.

### Operational Phase

During the operational phase, a structured approach to waste management as set out in Section 13.7 will promote resource efficiency and waste minimisation. Provided the mitigation measures are implemented and a high rate of reuse, recycling and recovery is achieved, the predicted impact of the operational phase on the environment will be *long-term, neutral and imperceptible*.

## 11. ARCHAEOLOGY AND CULTURAL HERITAGE

### Construction Phase

Should all mitigation measures, recommended above, be carried out fully and successfully there will be no predicted residual impact to the archaeological and cultural heritage resource by the proposed development.

### Operational Phase

There are no predicted residual impacts for the operational phase of the proposed development upon the archaeological and cultural heritage resource.

## INTERACTIONS

Where an interaction is both likely and significant, it is given a reference number in the matrix and detail of the interaction is recorded below. The interactions are listed in numerical sequence, purely for referencing purposes.

	Population	Biodiversity	Soils/ Geology	Water	Noise	Air Climate	Landscape	Cultural Heritage
Population								
Biodiversity								
Soils	1	7						
Water	2	8	11					
Noise	3	9						
Air Climate	4		12					
Landscape	5	10	13					
Material Assets	6							
Cultural Heritage							14	

Table 2 Interaction matrix

### 1. Population & Human Health / Soils

There is potential for dust generation during construction and demolition works which under dry and windy conditions could lead to localised dust impacts for the small number of properties proximate to the development site. However, the implementation of dust management and dust control measures will ensure that the proposed development will not give rise to the generation of any significant quantities of dust. Therefore, there will be minimal impacts on local community.

### 2. Population & Human Health / Water

Failure or mismanagement of the potable water supply could lead to its contamination during the construction phase. A range of mitigation measures will be put in place during the construction phase of the development to ensure this does not occur.

### **3. Population & Human Health / Noise**

Increased noise levels during the construction phase will be temporary and are not expected to have a long-term significant adverse effect upon the local population. Construction noise will be audible at a low level in the ambient noise. However, the impact is predicted to be minor. The impact due to the increased traffic associated with the operational development is expected to be minor.

### **4. Population & Human Health / Air**

The completed development will generate additional emissions to the atmosphere due to increase in traffic associated with the development. However, air quality in the vicinity of the site is expected to remain within air quality standards.

During construction, there may be potential for slight dust nuisance in the immediate vicinity of the site. However, dust control measures, such as wheel washes, covering of fine material etc. will minimise the impacts on air quality.

### **5. Population & Human Health / Landscape**

Existing residents and visitors to the Airton/Greenhills area and the existing Bancroft Park will interact with the landscape, such that they will be aware of a significant change at this site from fenced off, vacant brownfield site to a new residential development with multi-storey blocks, open spaces, etc. Such a transformation, whilst significant, is designated for under the Development Plan and the Local Area Plan. It is expected that the design of the proposed scheme will over time integrate with the adjoining sites within the industrial estate along Airton road to the west of the site.

### **6. Population & Human Health / Materials Assets**

It is expected that the proposed development will benefit the materials assets with the additional population helping to sustain and generate improvements to the physical infrastructure of the area.

### **7. Biodiversity / Soils**

Potential construction stage effects arising from the general loss and fragmentation of some habitats and reduction of associated opportunities for biodiversity are considered neutral to slight negative during the construction phase, while potential operational stage effects are considered imperceptible neutral as new planting/landscaping matures.

### **8. Biodiversity / Water**

As concluded in the AA screening submitted with the application there are no elements of the proposed development that are likely to give rise to significant effects on the local Natura 2000 sites.

The implementation of construction and operational phase soils and water management proposals, together with the site drainage design will adequately reduce such potential impacts arising from the development site on these aquatic habitats in the wider area. Potential construction and operational

phase effects on biodiversity associated with aquatic habitats in the wider area are considered imperceptible neutral with the implementation of soils and water management proposals.

## **9. Biodiversity / Noise**

Increased noise levels during the construction phase will only be temporary and are not expected to have a long-term significant adverse effect upon remaining fauna within the wider landscape.

Operational noise will be audible at a low level in the ambient noise and the impact is predicted to be minor.

## **10. Biodiversity / Landscape**

New boundary planting is planned, and two public open spaces are proposed as part of the proposed landscape improvements. The riparian zone is to become an improved amenity space for the residents with walking and cycling tracks. There will be additional planting of native trees and other flora, which will aid the growth of biodiversity of the site.

Otherwise the successful implementation of the mitigation measures as outlined in this EIAR and accompanying documents, together with the landscape masterplan will minimise the potential impacts of the proposed development on local biodiversity such that its residual impact on other habitats, flora and fauna will be imperceptible neutral overall.

## **11. Soils / Water**

Soils when exposed after clearance of vegetation will lead to increased run-off and evaporation. Mitigation measures will be implemented during construction to prevent this run-off water from discharging directly to watercourses.

## **12. Soils / Air**

Exposed soil during the construction phase of the proposed scheme may give rise to increased dust emissions. However, the implementation of dust management and dust control measures will ensure that the proposed development will not give rise to the generation of any significant quantities of dust.

## **13. Soils/Landscape**

Residual soils arising as a result of excavation at the development site will be used in landscaping works in the proposed public open space as much as possible rather than transporting off-site.

## **14. Landscape/Cultural Heritage**

Careful consideration has been given to minimizing the visual impact of the proposed scheme on architectural heritage in the wider area. Overall the proposed scheme is considered to improve the visual appeal and legibility of the site.