

6 POPULATION

6.1 Introduction

The purpose of this chapter is to consider the proposed development having regard to potential impacts that relate to the human population. In order to evaluate the magnitude and significance of likely environmental impacts in relation to population, this chapter of the EIAR considers the proposed development with regards to population, employment, amenity and the community.

The assessment also proposes, wherever possible, appropriate mitigation measures that may be necessary to reduce and remedy, significant adverse effects on these elements of the environment. The principal concern is that the population, particularly those living in the local environment, experience no significant unacceptable diminution in aspects of 'quality of life' as a consequence of the proposed development.

6.2 Methodology

To inform this chapter, a series of site visits were undertaken between 2019 and 2022. During these visits particular attention was paid to road conditions and the location of the nearest dwellings to the subject site. This enabled an appreciation to be gained of the existing general land uses in the area, the volume of population located nearest the subject site and an overview of the locality of the host community and its environs.

In addition to the site visits, a number of desk top exercises were undertaken. The desktop analysis included a review of demographic characteristics of the area as ascertained from Census of Population data and other statistics released by the Central Statistics Office (CSO). The smallest geographical units distinguished by the CSO are Electoral Divisions for general statistical use (previously called District Electoral Divisions - previously known as Wards). Demographic trends were analysed at state, county, and local levels for the purposes of this EIAR.

6.3 Baseline Conditions

The predicted baseline is defined as the receiving environment prior to the realisation of the operation of the proposed development. For the purpose of this assessment current trends in population and economic growth are expected to continue and as such these have been presented in the following sections with additional referencing to the most up to date CSO data. The latest full dataset available from the CSO is for 2016 with preliminary data for 2022 available for national population only.

6.3.1 Demographic Trends

The results of the 2011, 2016 and the preliminary results from the 2022 Census are presented in **Table 6-1**. The data shows the population of the State grew by 7.6% from 4,761,865 to 5,123,536 between 2016 and 2022. The 2022 population of 4,761,865 is the highest recorded population in Ireland since 1841. The Census figures also indicate that the population of the State grew from 4,581,269 to 4,761,865 persons between 2011 and 2016, representing an increase of 3.9%.

The Fingal administrative area has experienced an increase of population of approximately 8.0% between 2016 and 2011, following an increase of 14.2% between 2006 and 2011. No preliminary data is available for 2022 but early indications suggest a continued strong growth in population in Fingal up to 2022 that may exceed the national population growth.

The subject lands are located partially within the 'Hollywood' Electoral Division and partially within the 'Lusk' Electoral Division. According to the 2011 and the 2016 Census results, the rate of population increase in the Electoral Divisions which concern the subject lands, increased by 9.1% and 5.7% respectively between 2011 and 2016. This is similar to the level of population increase which occurred at both a Fingal and State level in this period.

Table 6-1 Population at state and local level 2011, 2016 and 2022⁸

Area	2011	2016	% Change 2011-2016	2022	% Change 2016-2022
State	4,581,269	4,761,865	+3.9	5,123,536	+7.6
Fingal	273,991	296,020	+8.0	-	-
Hollywood	1,259	1,374	+9.1	-	-
Lusk	8,814	9,321	+5.7	-	-

As shown in **Table 6-2**, the average population density of the study area (Hollywood and Lusk Electoral Divisions combined) is significantly lower than the average for Fingal, yet approximately twice as large as that of the average for the State. It is not unexpected that the area in which the subject site is located shows a lower population density relative to the Fingal Area, given the largely rural nature of the surrounding land uses and the absence of any large residential areas. It is also noted that the Lusk area has a much larger population and population density per square kilometre than that of Hollywood due to the presence of the town of Lusk within the Electoral Division.

Table 6-2 Area size, population and calculated population density⁹

Area	Area Size (sq. km)	Population (Year)	Population Density (per sq. km)
State	68,466.06	5,123,536 (2022)	74.8
Fingal	457.82	296,020 (2016)	646.6
Hollywood & Lusk	72.37	10,695 (2016)	147.8

6.3.1.1 Age Profile

The age profile of the population of the State and Fingal for 2011 and 2016 are highlighted in **Table 6-3** (note that detailed 2022 data is not yet available in this format). This table shows that the proportion of 0-14 year olds increased in Fingal but dropped across the State as a whole. In Fingal, an increase of 0.3% on the 2011 figure was witnessed, while the corresponding increase for the State was a drop of 0.2%. The 15–24 year-old age cohort showed an overall decrease of population throughout the State and in Fingal. The drop in population of this age cohort is possibly as a result of emigration and normal population dynamics as the population ages. The 25-44 age cohorts for Fingal and the State also experienced a drop in population with a decrease of 2.1% and 3.0% in these areas respectively. Unsurprisingly the 65+ age group experienced an increase in population in both areas. This is reflective of an aging population generally. **Table 6-3** shows that there is a higher-than-average proportion of 0-14- and 25–44-year-olds within Fingal which indicates that a large amount of young families live within Fingal.

Table 6-3 Population structure 2011 and 2016

Area/Age	0-14 (%)	15-24 (%)	25-44 (%)	45-64 (%)	65+ (%)
State 2011	21.3	12.6	31.6	22.7	11.7
State 2016	21.1	12.1	29.5	23.8	13.4
Change	-0.2	-0.5	-2.1	+1.1	+1.7
Fingal 2011	24.2	11.9	36.6	20.0	7.2
Fingal 2016	24.5	11.3	33.6	21.5	9.1
Change	+0.3	-0.6	-3.0	+1.5	+1.9

⁸ Source: Census of Population, link: <https://www.cso.ie/en/statistics/population/>

⁹ Source: <http://airomaps.nuim.ie/id/Census2016/>

6.3.2 Employment Trends

The 2016 Census was examined to determine trends in relation to employment including the number of persons at work, unemployment levels and the sectoral composition of the population, based upon principal economic status.

Table 6-4 shows the overall unemployment rate as measured by the responses to the question on principal economic status in the Census for 2011 and 2016 (data unavailable for 2022). The unemployment rate is calculated by adding the number of persons unemployed to first time job seekers, and then dividing the total by the overall labour force (i.e. total amount of unemployed persons and employed persons).

It is clear that the unemployment rate (as measured in the Census) in 2016 had decreased significantly within the State and within Fingal compared to the 2011 Census. The unemployment rate for Fingal was reduced to 10.3% in 2016 compared to 16% in 2011.

Table 6-4 Principal economic status 2011 and 2016¹⁰

Status	State 2016	State 2011	Fingal 2016	Fingal 2011
At work	2,006,641	1,807,360	133,971	119,276
Looking for first regular job	31,434	34,166	1,850	2,224
Unemployed or given up previous job	265,962	390,677	13,565	20,416
Overall Unemployed	297,396	424,843	15,415	22,640
Labour Force	2,304,037	2,232,203	149,386	141,916
Unemployment Rate %	11.5%	19.0%	10.3%	16.0%

6.3.2.1 Monthly Unemployment Figures / Quarterly National Household Survey

The Quarterly National Household Survey (QNHS) and the Labour Force Survey are designed to produce quarterly labour force estimates that include the official measure of employment and unemployment in the state (International Labour Organisation or ILO basis). The ILO unemployment rate for the State for the period from 2013 to date¹¹ is summarised in **Table 6-5**. In Q3 of 2017, the Quarterly Labour Force Survey (QLFS) replaced the Quarterly National Household Survey and included enhancements to the survey methodology.

The total number of persons in the labour force in 2021 was 2,533,200 representing an overall participation rate of 63.1%. Since pre COVID-19 times in 2019, the labour force has increased by 4.4% or 106,200 while the participation rate has increased by 1.1% from 62.0%. The number of persons in employment increased by 52,900 or 2.3% to 2,349,100 over the same period.

6.3.2.2 Persons at Work by Industry

Table 6-6 shows the proportion of persons at work by Industry in the State and in Fingal in 2016 and 2011. This data illustrates the impact of the general macro-economic environment on the different sectors, including the waste management (including remediation activities), construction and transport sectors, all of which relate to the subject proposal.

For the State, the proportion of the people employed in the construction and waste sector increased by a small percentage (approx. 1%) over that 5-year period. This reflects the general collapse of the building and construction industry over that timeframe. Notably, the numbers of persons engaged in the transportation sector decreased by approx. 3-4% in both Fingal and the State between 2011 and 2016.

¹⁰ Source: <https://www.cso.ie/en/statistics/labourmarket/>

¹¹ Source: <https://www.cso.ie/en/statistics/labourmarket/>

Table 6-5 ILO Unemployment Rate for State from 2013

Year	Q1 (%)	Q2 (%)	Q3 (%)	Q4 (%)	Average (%)
2013	13.7	13.9	13.0	11.7	13.1
2014	12.0	11.8	11.3	9.9	11.3
2015	10.0	9.8	9.3	8.7	9.5
2016	8.4	8.4	7.9	7.1	8.0
2017	7.1	6.9	6.9	6.1	6.8
2018	5.7	6.0	6.0	5.4	5.8
2019	5.1	5.2	4.9	4.7	5.0
2020	4.7	5.4	7.4	5.9	5.9
2021	7.1	7.3	5.7	4.9	5.0
2022	4.8	-	-	-	-

Table 6-6 Employment by Industry

Industry	State 2016 (%)	State 2011 (%)	Fingal 2016 (%)	Fingal 2011 (%)
Agriculture, forestry and fishing	4.44%	0.89%	5.06%	1.02%
Mining and quarrying	0.25%	0.04%	0.30%	0.04%
Manufacturing	10.03%	5.90%	10.16%	6.93%
Electricity, gas, steam and air conditioning supply	0.64%	0.63%	0.63%	0.63%
Water supply; sewerage, waste management and remediation activities	0.51%	0.36%	0.52%	0.34%
Construction	5.08%	4.38%	4.83%	3.89%
Wholesale and retail trade; repair of motor vehicles and motorcycles	13.29%	13.94%	14.51%	15.04%
Transportation and storage	4.04%	7.98%	4.32%	8.22%
Accommodation and food service activities	5.83%	5.33%	5.73%	5.09%
Information and communication	4.49%	6.20%	3.79%	5.67%
Financial and insurance activities	4.53%	7.29%	5.14%	8.42%
Real estate activities	0.45%	0.52%	0.46%	0.53%
Professional, scientific and technical activities	5.66%	5.82%	5.14%	5.22%
Administrative and support service activities	3.54%	4.78%	3.36%	4.54%
Public administration and defence; compulsory social security	5.28%	5.77%	6.25%	6.91%
Education	8.81%	7.66%	9.26%	8.05%
Human health and social work activities	11.15%	10.28%	10.92%	10.15%
Arts, entertainment and recreation	1.70%	1.76%	1.70%	1.72%
Other service activities	2.12%	1.96%	2.17%	1.92%
Activities of households as employers producing activities of households for own use	0.14%	0.14%	0.11%	0.11%
Activities of extraterritorial organisations and bodies	0.04%	0.07%	0.05%	0.05%
Industry not stated	7.97%	8.32%	5.61%	5.49%

6.4 Impact Assessment

6.4.1 'Do-Nothing' Impact

In the 'Do-Nothing' scenario, the facility would continue to operate as an inert landfill and the existing direct and indirect employment status in the areas would remain unchanged. Population dynamics would remain unchanged in the area under this scenario also. Community impacts would be largely unchanged as the existing traffic volumes, noise, dust and other potential nuisances would remain unaltered under the existing permitted operation at the site.

6.4.2 Construction Phase

6.4.2.1 Population

The construction phase of the proposed development is restricted to the installation of the leachate holding tanks and the surface water attenuation pond. In this regard, there is no potential for impact to the wider population during the construction phase of the proposed development (which will run concurrent with the operation phase).

6.4.2.2 Employment

The proposed construction phase will generate temporary employment directly on-site albeit for a low number of persons. Some of this employment may be specialist for the required tasks, while other requirements will be standard construction techniques. This employment will likely be sourced from the wider Dublin area and the short term nature and low demand will result in a negligible impact on employment in the local area.

6.4.2.3 Community

The following local impacts during the construction phase of the proposed development have the potential to affect the local residential community:

- Additional vehicular traffic over the existing operational volumes; and
- Additional potential for nuisance (e.g. noise, dirt and dust generation from construction works).

Existing traffic at the site has planning and licensing consent to accept 500,000 tonnes per annum and this limit will be retained for the operation phase. Much of the materials required for construction of the pond and leachate area will be site won with minimal need for importation other than specialist materials. In this regard, the potential for community impact from construction traffic over the operational traffic is negligible.

Potential impacts in respect of traffic and noise etc. are examined further in the respective sections of this EIAR and are not considered to be significant given that the nearest property to the works is circa 350 metres away (from the proposed pond) and similar distance from the proposed leachate area.

6.4.2.4 Amenity

Pedestrians and cyclists on the existing road network surrounding the site may be potentially impacted by road traffic for the construction stage. As noted above, there is minimal need for importation of materials for the construction stage and negligible change in construction traffic and hence any amenity impact during these works is negligible.

6.4.3 Operation Phase

6.4.3.1 Population

The proposed development does not include residential element and will not result in a change in the permanent population of the area.

6.4.3.2 Employment

The proposed development will proceed over an approximate 25-year period and will generate operational employment directly on-site. It is envisaged that the 25-year operational phase will continue to employ the existing full-time staff currently employed on site. It will also benefit support industries such as hauliers who may be indirectly employed to service the site operations.

There will also be a need to bring in specialist workers (e.g. for cell construction) on a regular basis that may increase this working population at times. Specialists are only likely to stay for shorter periods depending on the nature of the work. The employment of this workforce will have a beneficial impact on services within the local area.

The phased nature of the proposed development therefore is considered to have the potential for long-term, slight beneficial impact on the economy and employment of the local and wider area.

6.4.3.3 Community

Like construction, the following local impacts during the operation phase of the proposed development have the potential to affect the local residential community:

- Continued vehicular traffic; and
- Potential nuisance such as noise, dirt and dust generation.

Existing traffic at the site is licenced to accept 500,000 tonnes per annum. The proposed development will retain this limit. Additional operations not currently engaged at the site, such as leachate tankering will have minimal increase in the flow of traffic and is not predicted to give rise to adverse impacts for the existing residential community in the area. A full and detailed appraisal of the impacts of the proposed development on roads, traffic and transportation aspects are included in **Chapter 13** of this EIAR.

Potential impacts in respect of dust and noise etc. are examined further in the respective sections of this EIAR and are not considered to be significant. The operation phase of the proposed development therefore is not considered to have a significant impact on the community.

6.4.3.4 Amenity

As noted, the existing traffic volumes on the local road network will be retained through the operation phase of the proposed development. As such, pedestrians and cyclists on the existing road network surrounding the site will be potentially impacted by road traffic for the 25 year operational lifetime of the facility. This equates to a continuation of the long term slight adverse amenity impact currently experienced by vulnerable road users in the area such as pedestrians and cyclists.

Due to the fact that the end result will be an infilled quarry as opposed to an operational quarry, the overall amenity value of the restoration will be enhanced for the local community. The restored site will add to the amenity value in the area through the improvement of the landscape and enhance the scenic routes to the south and west.

6.5 Mitigation Measures

6.5.1 Construction Phase

No adverse impacts are envisaged during the operational stage. Therefore, no mitigation measures are required.

6.5.2 Operational Phase

To mitigate any potential adverse amenity impact for pedestrians and cyclists on the haul routes, IMS will prepare a full Traffic Management Plan for the operation phase of the proposed development. The characteristics of the Traffic Management Plan will be agreed with the local authority in advance and shall be fully implemented within the site Environmental Management System (EMS). Further details are provided in **Chapter 13** of this EIAR

6.6 Residual Impact

There are no predicted significant population impacts associated with the proposed development.

The operation phase of the development is predicted to have a slight beneficial effect in terms of the potential to generate a range of employment opportunities over the 25 year operational lifetime.

In terms of community, the potential nuisance effects of noise and dust emissions arising as a result of operations will be minimised by the implementation of the appropriate controls on site during these phases and under the IE licence.

In relation to traffic impact on community and amenity, the development of a Traffic Management Plan in consultation with the local authority will mitigate any potential for significant adverse impacts.

The application of the mitigation measures detailed above and in each of the additional specialist sections of this EIAR, as appropriate, will ensure that people and properties located in close proximity to the subject site will not experience significant long-term adverse impacts during these phases of the proposed development.

Once complete, the proposed development will result in the infill of the existing quarry which will both address the environmental legacy of the existing quarry, but also sterilises the site for alternative uses. The overall amenity value of the subject lands will therefore be returned to a pre-quarry state for the local community.

6.7 Monitoring

The operation of the proposed development will be required to comply with the IE licence monitoring requirements imposed by the EPA for dust, noise, surface water, groundwater, etc. IMS, as licensee, will be responsible for complying with the requirements of the licence.

In addition, it is proposed that all monitoring requirements that are prescribed by the planning authority be complied with such that any potential for there to be adverse impacts on the relevant population in the locality is non-existent.

6.8 References

- 1 Census of Population 2011, 2016 and 2022, available at: <http://airomaps.nuim.ie/id/Census2016/> , Central Statistics Office.
- 2 Quarterly National Household Survey (QNHS), Central Statistics Office.
- 3 Labour Force Survey, Central Statistics Office.
- 4 Quarterly Labour Force Survey (QLFS), Central Statistics Office.