# **MATERIAL ASSETS 12**

## **CONTENTS**

INTRODUCTION	1
METHODOLOGY	2
RECEIVING ENVIRONMENT	3
Site Context	3
Infrastructure and Utilities	3
Existing and Future Land Use	5
Settlements and Housing	6
IMPACT OF PROPOSED WASTE FACILITY	6
Short Term Impacts	6
Long-Term Impacts	8
Interaction with other Environmental Receptors	8
Cumulative Impacts	9
MITIGATION MEASURES	9
Short Term Impacts	
Long Term Impacts	

Figure 12- 1 Surrounding Land Use

Consent of copyright owner required for any other use.











#### INTRODUCTION

- 12.1 This Environmental Impact Statement (EIS) provides supporting information to accompany a Planning Application to Fingal County Council by Roadstone Limited in respect of a proposed increase in the permitted waste intake to its existing licensed inert soil and stone recovery facility at the Huntstown Quarry Complex at North Road, Finglas, Dublin 11, from a maximum of 750,000 tonnes per annum at the present time to 1,500,000 tonnes per annum in future years.
- 12.2 The restoration of the entire quarry complex at Huntstown comprising backfilling of 4 separate quarry voids using imported soil and stone waste has previously been granted planning permission (Ref. FW12-0022 and An Bord Pleanála (ABP) Ref. 241693). An existing EPA waste licence (Ref. W0277-01) only applies in respect of ongoing backfilling and waste recovery activities at the North Quarry.
- 12.3 The entire development and restoration at Huntstown was subject to Environmental Impact Assessment (EIA) under Planning Ref. FW12-0022 and ABP Ref. 241693. For impact assessment purposes, a maximum projected soil and stone waste intake rate of 750,000 tonnes per annum was assumed in the Environmental Impact Statement (EIS) which accompanied the planning application. As such, this is the de-facto upper limit on permitted waste intake for backfilling of the quarries within the Huntstown complex.
- 12.4 As noted, the proposed development provides for an increase in the permitted maximum limit for inert waste intake from 750,000 tonnes per annum to 1,500,000 tonnes per annum in the short to medium term future, the intensification of backfilling and waste recovery activities will be confined to the North Quarry and West Quarry at Huntstown. The extent of the application site to which the planning application applies is shown in Figure 12-1.
- In addition to obtaining permission for an increase in the maximum annual limit of soil waste intake, it will also be necessary to submit a separate waste licence review application to the EPA to obtain a similar increase in the maximum annual intake limit set by the current waste licence (Ref. W0277-01). The waste licence review application will also make provision for extension of the existing licensed area (which is limited to the North Quarry) to include backfilling and recovery activities at the West Quarry.
- 12.6 This chapter of the Environmental Impact Statement addresses the impact on surrounding material assets. According to the EPA (EPA (2003) Advice Notes on Current Practice),
  - "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".
  - Under Schedule 6 of the Planning and Development Regulations (2001) as amended, material assets also refers to architectural and archaeological heritage and cultural heritage.
- 12.7 In undertaking this study, due regard has been had to aspects such as infrastructure and economic activities in the vicinity of the Huntstown quarry complex. The study has also had regard to the EPA publication 'Guidelines on the Information to be contained in Environmental Impact Statement' (EPA, 2002).

#### **METHODOLOGY**

- 12.8 This material assets impact assessment comprises the consideration of existing resources pertinent to the proposed development and/or the application site that are not addressed elsewhere is this EIS and the likely development effects on those resources.
- 12.9 Section 2 of *Advice Notes on Current Practice* (EPA: 2003) sets out some considerations for completion of a material assets impact assessment. It refers to the following topics which may be examined under this heading:
  - transportation infrastructure (roads, railways, airports etc);
  - assimilation capacity of the surrounding natural environment;
  - major utilities (water supplies, sewage, power systems etc);
  - cities, towns and nearby settlements;
  - non-renewable resources / natural resources of economic value;
  - ownership and access;
  - architectural and and archaeological heritage.
- 12.10 The scope of this material assets assessment takes into account qualitative and quantitative analysis, a review of relevant literature and professional judgement in relation to impact on material assets. Where relevant, this approach is adopted and included in the following stages in the assessment methodology.

## Stage 1: The Baseline Assessment

- 12.11 This assessment has been informed by consideration of the characteristics of the surrounding area, which has been prepared by way of a desk-based study using published information from a range of sources that are referenced throughout this chapter and observations made during site visits. The baseline assessment has sought to:
  - describe the logation and extent of material assets.
  - describe the nature and use of the asset.

#### Stage 2: Assessment of Effects

- 12.12 To support the assessment, expected impacts on material assets have been quantified where possible. Through a combination of qualitative and quantitative assessment, this stage describes the activities, areas, infrastructure and resources likely to be affected by the proposed development as well as likely changes in overall land-use.
- 12.13 The magnitude of impacts has been assessed in a qualitative manner, based on the predicted nature of the change, the magnitude of the change and the sensitivity or value of the resource or receptor.

### Stage 3: Mitigation Measures

- 12.14 On completion of Stage 2, measures are proposed, if necessary, to avoid and / or reduce any identified effects on sensitive or scarce material assets.
- 12.15 The impacts of the proposed increase in the rate of backfilling at the inert waste recovery facility on natural resources of economic and amenity value (e.g. soil, minerals, surface water and groundwater, air, noise environment and landscape) are identified and discussed in detail in the following chapters of this EIS:

- Chapter 5 Soil and Geology
- Chapter 6 Surface Water and Groundwater
- Chapter 8 Air Quality
- Chapter 9 Noise
- Chapter 10 -- Landscape and Visual Impact
- 12.16 Impacts on architectural, archaeological and cultural heritage features are assessed in detail in Chapter 11 of this EIS and impacts in relation to road traffic and transportation infrastructure are assessed in Chapter 13.
- 12.17 This Chapter of the EIS addresses other relevant material assets, including:
  - infrastructure and utilities;
  - existing and future land uses;
  - settlements and housing.

### RECEIVING ENVIRONMENT

#### Site Context

- 12.18 The quarry complex at Huntstown, which is operated by Roadstone Ltd., straddles several townlands, principally Kilshane, Johnstown and Huntstown, in north-west County Dublin. The quarry complex is located approximately 2.5 km northwest of the Dublin suburb of Finglas, 2km north-west of the interchange between the N2 Dual Carrageway and the M50 Motorway and 3.5km north-east of Blanchardstown village, Dublin 15. The quarry complex is currently accessed from the R135 Regional Road, known locally as the North Road (the former N2 National Brimary Road) which runs to the east of the quarry complex.
- 12.19 A small number of existing residences are located in close proximity to the North Quarry and the West Quarry. The nearest residential property is located approximately 80m north-west of the West Quarry along Kilshane Road. A further three properties are also located to the west of application site along Kilshane Road.
- 12.20 Within 500m of the existing recovery facility and application site, there are a further three residences, all located to the east along the R135 North Road. There is another single residential located to the south of the application site / recovery facility. The existing housing pattern in the vicinity of the application site is shown on Figure 12-1.
- 12.21 The Regional Planning Guidelines for the Greater Dublin Area 2010 2022 locates the application site within the 'Metropolitan Area'. Given its location in close proximity to transportation corridors identified in the regional planning guidelines (specifically the N2 Dual Carriageway / M2 Motorway, the M50 Motorway and the N3 Dual Carriageway /M3 motorway), the application site lies close to, and within easy reach of, designated 'Consolidation Towns' within the Metropolitan Area and to the Large Growth Towns and Moderate Sustainable Growth Towns within the Hinterland Areas

## Infrastructure and Utilities

#### Roads

12.22 Traffic to and from the proposed waste facility travels along the R135 North Road (a designated Regional Road and the former N2 National Primary Road).

- Traffic coming from Dublin City Centre or the nearby M50 Motorway turns onto the N2 Dual Carriageway and travels a short distance before turning (west) off a dedicated slip road at Coldwinters onto the North Road.
- 12.23 Thereafter, traffic continues south for a short distance along the North Road before turning right (west) via a dedicated right–turn junction onto the access road leading into the Huntstown Quarry complex. This access road also serves the Huntstown Power generating plant operated by Energia (formerly Viridian) which is located within the Huntstown Quarry complex.
- 12.24 Traffic travelling south from Ashbourne to the waste recovery facility exits the N2 Dual Carriageway at the Cherryhound Interchange and continues south along the R135 North Road, through Kilshane Cross, to the right-turn junction with the access road into the Huntstown Quarry complex.
- 12.25 Traffic from Blanchardstown and the N3 Dual Carriageway to the west travels along the recently constructed N2 / N3 Link Road to the Cherryhound Interchange and then continues south along the R135 North Road.
- 12.26 The main road arteries around the Huntstown Quarry complex are:

North / North-west Kilshane Road
South-west Cappagh Road
South M50 Motorway

East R135 Regional Road (North Road) and N2 Dual Carriageway / M2 Motorway

- 12.27 The previous iteration of the Transport Strategy for the Greater Dublin Area included Metro West. The proposed route of the Metro West urban light rail transport system ran parallel to the M50 motorway beyond the southern boundary of Roadstone's landholding. The proposed light rail scheme linked the principal towns / suburbs along the western fringes of Dublin (beyond the M50 Motorway) including Tallaght, Lucan and Blanchardstown to the proposed Metro North scheme serving Dublin Airport and Swords.
- 12.28 The Metro West Light Rail scheme is not included in the current Draft Transport Strategy for the Greater Dublin Area. This plan now includes the Finglas Luas which project provides for the northward extension of the Luas Cross City scheme from its planned terminus at Broombridge to a new terminus north of Finglas, located along the N2, close to the M50 interchange.
- 12.29 Neither Metro West nor the Finglas Luas scheme will encroach on Roadstone's landholding at Huntstown. The continued operation of the existing inert waste recovery facility and the prospective increase in waste intake thereto will not have any impact on the planned future construction or operation of the Finglas Luas scheme.

#### Utilities

- 12.30 A Combined Cycle Gas Turbine (CCGT) power plant, operated by Energia, is located within the Huntstown Quarry complex, immediately east of the application site. The access road from the R135 North Road used by quarry and waste recovery traffic at Huntstown is shared with the power plant.
- 12.31 The combined output of the Huntstown Power Plant is 747 MW which provides up to 20 per cent of the total electricity fed into the national transmission grid system. With the introduction of the Single Electricity Market, all power from the plant is sold into the wholesale electricity market servicing all electricity customers on the island of Ireland.

ROADSTONE LIMITED 12-4 HUNTSTOWN RECOVERY FACILITY, FINGLAS, DUBLIN 11 APPLICATION FOR INCREASE IN SOIL WASTE INTAKE

- 12.32 A gas pipeline serving the Huntstown power plant runs north-east of the application site. No gas pipeline crosses the application site or the Roadstone landholding itself.
- 12.33 Telecommunication services (fixed line telephone and broadband) are available at Huntstown Quarry and in the surrounding area.
- 12.34 Several high voltage electricity power-lines (110kV and 220kV) traverse close to Roadstone landholding at Huntstown as indicated on Figure 12.1. One high voltage power-line (110kV) crosses the North Quarry in a north-west to southeast direction, while another (220kV) passes further north of it. Three high voltage lines (2 No. 110kV and 1 No. 220kV) traverse to the south of the West Quarry and close to its south-west corner. All powerlines crossing the landholding run to the adjoining ESB 220kV sub-station located at Baleskin, to the south of the Roadstone landholding, immediately north-west of the M50 / N2 Motorway Interchange.
- 12.35 A potable water supply is provided to the existing site office(s) and canteen via a Local Authority water main. Water for production of construction materials is sourced from sumps across the quarry complex, located principally on the quarry floors.
- 12.36 The Huntstown and Kilshane area are supplied with potable water from Ballycoolin reservoir, approximately 2km west of the application site. The North Fringe Water Supply Scheme completed in 2007 involved the construction of a Water Tower and ground level reservoir, adjacent to the M50 Motorway at Sillogue, approximately 3.5km east of the application site, together with 36km of watermains. This scheme improved both the water supply and pressure in the North City and South Fingal areas.
- 12.37 Sewage from the existing facilities at Huntstown is treated at a septic tank located in the centre of the Huntstown Quarry complex. Wastewater from aggregate processing and concrete production processes are managed in-situ either by recycling or by passing through a surface water management system comprising silt traps and/or settlement ponds, prior to its discharge off-site to local watercourses (the Ballystrahan Stream) in accordance with an existing discharge licence issued by Fingal County Council (Ref. No WPW/F/008-01 issued in November 2011).

## **Existing and Future Land Use**

- 12.38 The area surrounding Roadstone's landholding comprises a mix of rural agricultural lands to the north and east and large-scale industrial development in the form of several business / technology and industrial parks to the west and south-west.
- 12.39 A limited amount of low density residential housing is present along the local road network and some small scale local enterprises are located along the R135 North Road, as indicated on Figure 12-1.
- 12.40 A large proportion of the lands around Roadstone's landholding which are currently used for agricultural purposes are zoned for future heavy industry and general employment development by the current Fingal County Development Plan 2011-2017 (and the draft plan for 2017-2013).
- 12.41 Lands immediately to the north-west, east and west of the Roadstone landholding are zoned HI (to facilitate opportunities for heavy industry). Lands immediately to the south of the landholding are zoned GE (to provide

- opportunities for general enterprise and employment). The lands to the northeast of the landholding and the N2 dual carriageway are zoned as greenbelt between the continuous urban environment and surrounding large towns.
- 12.42 Fingal County Council had previously planned to develop a waste recycling park at Kilshane Cross to the north-east of the application site, and although some site infrastructure was put in place, the development ultimately did not proceed as intended. This site is now for sale and it is understood that Fingal County Council no longer intends to develop a recycling facility at this location.

## **Settlements and Housing**

- 12.43 The nearest large scale settlements to the application site are at Finglas, approximately 2.5km to the south-east, and Blanchardstown, approximately 4km to the west. These settlements are separated from the Huntstown quarry complex and application site by major road infrastructure comprising the M50 Motorway and a large area of industrial development to the south-west of the application site.
- 12.44 Residential housing in the area immediate surrounding the application area comprises isolated one-off houses along the local road network. Most housing in the study area has been established for several (>5) years. No lands within the vicinity of the site are zoned for residential purposes on the current Fingal County Development Plan (2011 2017).

## IMPACT OF PROPOSED WASTE FACILITY

- 12.45 The proposed development under assessment provides for the following activities at the existing waste recovery facility at the Huntstown Quarry complex, Finglas, Dublin 11
  - the continued backfilling and restoration of the North Quarry and West Quarry to former ground level using imported inert soil and stone waste at an increased maximum rate of 1.5 million tonnes per annum (currently limited by planning permission and waste licence to a maximum of 750,000 tonnes per annum).

## **Short Term Impacts**

- 12.46 As the North Quarry site has functioned as a limestone quarry for many decades and currently operates as an inert waste recovery facility, it is considered that continued operations at the North Quarry and the West Quarry, albeit at an increased rate, is generally unlikely to give rise to any additional short-term impacts on material assets, over and above those that are currently extant.
- 12.47 The permitted restoration scheme requires the importation of approximately 9,450,000 tonnes of excess inert soil and stones to backfill the existing quarry voids at the North Quarry and West Quarry at Huntstown. This is equivalent to approximately 472,500 HGV return trips (at 20 tonnes per load). Should the facility operate at full capacity, it is expected that the backfilling operations would be completed within six years. At a more modest backfilling rate (of 750,000 tonnes to 1,000,000 tonnes per annum), it is considered that backfilling operations could be completed within nine to twelve years.

#### Infrastructure and Utilities

- 12.48 Based on recent experience of demand for soil and stone waste recovery capacity (refer to Chapter 1), Roadstone has defined a relatively optimistic scenario where it would be possible to fill the voids at the North and West Quarries in approximately 6 years from 2017 with an annual permitted waste intake up to a maximum of 1,500,000 tonnes per annum. A maximum annual intake rate of 1,500,000 tonnes / year corresponds to an average of 24 trips per working hour (in total) over an 11 hour working day (equivalent to 48 movements in and out of the Huntstown facility per hour), an increase of 12 trips (or 24 movements) per hour on current average levels.
- 12.49 Although it is likely that it could take longer to fill the quarry voids as a result of future fall back in construction activity, a 6 year scenario forms the basis for modelling and assessment of traffic impacts which is presented separately in Chapter 13 of this EIS. As indicated in Chapter 13 of this EIS, the intensification of operations at the waste recovery facility will have no adverse impact on road or junction capacity or on traffic safety along the existing North Road (the former N2 National Primary Road).
- 12.50 The areas to be backfilled and restored at both the North Quarry and West Quarry do not extend beneath existing high voltage power lines and, as such, these activities will have no adverse impact on the overhead powerlines.
- 12.51 HGV's travelling along the access route to and from the infill area at the North Quarry will pass beneath existing 110k power lines. The HGV movements present no risk to existing pylon supports (which are located on undisturbed ground beyond the quarry void) and will have no impact on them or on overhead powerlines supported by them.
- 12.52 Based on the above, it is anticipated that the proposed increase in the rate of waste intake and infilling at the North Quarry and/or West Quarry will not result in any significant adverse short-term impact on either existing infrastructure or utilities.

## Existing and Future Land Use

- 12.53 In the short term, the recent / current use of part of the application site as a rock quarry will ultimately cease and the application site restored to the former ground levels. Quarries are generally considered to be temporary, albeit long-term, uses that ultimately cease and are restored. The proposed short-term effects on the existing land use at the North Quarry and the West Quarry are considered appropriate.
- 12.54 The proposed increased rate of backfilling of the North Quarry and the West Quarry could have potential effects on surrounding land uses in terms of traffic, noise and dust deposition. As outlined in the relevant chapters of this EIS, the predicted effects following mitigation will not be significant. It is considered, therefore, that the proposed increase in the rate of backfilling will not have any significant effects in the short term on surrounding land uses

## Housing and Settlements

12.55 There may be some intermittent short-term impact on the residential amenity of the properties immediately beyond the western boundary of the application site as increased backfilling activity proceeds, particularly close to ground level along the western side of the quarry voids. The most likely short-term impact will be a minor increase in ambient noise and dust levels. These impacts are

- classified as minor and temporary in nature and are discussed in more detail in Chapters 8 and 9 of this Environmental Impact Statement.
- 12.56 As outlined above, the nearest large scale settlements to the application site are at Finglas and Blanchardstown. These settlements are separated from the application site and Huntstown quarry complex by major road infrastructure comprising the M50 Motorway and a large area of industrial development to the south-west of the site. Given the distance of these settlements from the site and the intervening land uses, it is not considered that the proposed development will have significant adverse effects on these settlements.

## **Long-Term Impacts**

#### Infrastructure and Utilities

- 12.57 In the long term, the completion of backfilling and restoration of the quarry voids at Huntstown will result in the cessation of traffic movements associated with these operations. Notwithstanding the finding that the increased traffic movements during the operational phase will not have any significant impacts on traffic flows and infrastructure, these will be eliminated entirely on cessation of the backfilling and soil recovery activities at Huntstown.
- 12.58 It is not considered that the proposed development would have any significant effects on any other infrastructure or utilities over the long-term.

## Existing and Future Land Uses

- 12.59 The proposed backfilling and restoration of the worked-out quarry will largely restore the landscape to its original pre-extraction state. On completion, the backfilling works will provide a final landform which is suitable for agricultural use and is more in keeping with surrounding land-use. It will also mean that the lands can be made available for possible long-term future development in accordance with the zoning of the site under the current or future Fingal County Development Plans, should that be considered appropriate.
- 12.60 The continuation and intensification of backfilling and recovery activity will not effect, or interfere with, any established agricultural, industrial or commercial activities or residential uses at surrounding landholdings over the long term.

#### Settlements and Housing

- 12.61 In the long term, the backfilling operations will cease and the application site will be restored. Notwithstanding that the effects on settlements and housing have been shown to be not significant in respect of noise and air quality, any residual effects would cease.
- 12.62 The future development of the application site in accordance with the zoning of the current or future Fingal County Development Plans would be the subject of a further planning application and any relevant assessments.

## Interaction with other Environmental Receptors

12.63 It is considered that there are no additional interactions, over and above those identified and discussed in the text above and outlined in Chapter 14 of this EIS (Interactions).

## **Cumulative Impacts**

- 12.64 Other than the recent grant of planning permission for an anaerobic digestion (AD) plant at the Huntstown quarry complex, there is no other planned developments in the vicinity of the application site which has the potential to have any significant adverse cumulative effects on material assets in the local area.
- 12.65 The only impact associated with the proposed AD plant development which has the potential for significant cumulative impact is that of traffic. This is assessed and discussed in the traffic impact assessment presented in Chapter 13 of this EIS. That assessment concluded that the future development at the quarry and AD plant would not have any significant adverse cumulative impact on junction capacity and traffic safety along the R135 North Road or across the local road network.
- 12.66 It is considered in light of the available assessments that the proposed increase in the rate of backfilling of the North Quarry and West Quarry at Huntstown will not have any significant adverse cumulative effect on material assets

## MITIGATION MEASURES

## **Short Term Impacts**

- 12.67 Based on its experience of comparable high levels of demand over the early months of 2016, Roadstone has contingency measures in place to ensure safe and orderly queuing of HGV traffication the existing network of internal paved roads, should it be required if periods of intense or elevated demand occur.
- 12.68 Any roadside vegetation which could potentially impact on visibility splays will continue to be cut back as required in order to maintain visibility for HGV traffic exiting onto the R135 North Road.
- 12.69 The mitigation of the effects of the proposed development in respect of noise air quality, ecology and cultural heritage are detailed in the relevant Chapters of this EIS. It is not considered that any additional mitigation measures are required in respect of utilities, existing and future land uses or settlements and housing.

## **Long Term Impacts**

12.70 It is not considered that there are any long-term impacts associated with the proposed development that require mitigation in respect of material assets (other than those identified elsewhere in other relevant chapters of this EIS).

FIGURES

FIGURES

Surrounding Land Use

