SECTION 11 : MATERIAL ASSETS

11.1 INTRODUCTION

This study addresses the impact of the continued operation of the existing construction and demolition waste recovery facility and proposed inert soil and stone recovery facility on lands owned by Roadstone Dublin Limited at Fassaroe, Bray, Co. Wicklow on material assets in the surrounding locality. This study is intended to accompany the application by Roadstone Dublin Ltd. to the Environmental Protection Agency for a Waste Licence in respect of the proposed waste recovery facilities.

In undertaking this study, due regard has been had to aspects such as infrastructure, economic activities and property values in the vicinity of the site, and the impact of a continuation in waste recovery activities and the backfilling and restoration of the worked-out quarry to former ground level. The study has also had regard to the EPA publication '*Guidelines on the Information to be contained in Environmental Impact Statement' (March 2002)*.

11.2 RECEIVING ENVIRONMENT

11.2.1 Outline and Methodology of the Baseline Study

The baseline study of the area with regard to material assets involved a general assessment of the local road network around the application site, economic activities, commercial properties and housing in the area. Information presented is based primarily on observations made during site visits to the area in December 2008 and information obtained from local sources, including the internet.

11.2.2 Site Context

The application site lies in North Wicklow, entirely within the townland of Fassaroe, approximately 1.5km west of Bray town and 2km east of Enniskerry village. It is currently envisaged that the future growth of Bray Town, designated a Metropolitan Consolidation Town, will be accommodated in the Bray Environs Area, an area which includes much of Fassaroe townland. Lands in Fassaroe are likely to be developed for a range of purposes, principally residential and commercial use. Wicklow County Development Plan and the recently published Bray Draft Environs Local Area Plan make provision for the re-zoning of large areas of land in the townland of Fassaroe for employment, residential and leisure use.

11.2.3 Infrastructure

The application site is located close to the N11/M11 National Primary Road which currently carries a significant volume of commuter traffic daily from counties Wicklow and Wexford, northwards to Dun Laoghaire–Rathdown, Dublin City and to the Greater Dublin Area in general .

Traffic access to the application site and Roadstone Dublin's existing facilities at Fassaroe is obtained via the Fassaroe Junction on the N11 National Primary Road. Traffic turning off the N11 runs for a short distance (approximately 600m) over the local road network, travelling initially westwards and then turning south on a public road (Kilbride Road) until it comes to a small roundabout junction with Fassaroe Avenue, a private road, approximately 930m long, leading to the entrance to Roadstone Dublin's landholding.

A relatively high proportion of the traffic along local roads leading to and from the M11/N11is HGV traffic generated by concrete production and ancillary activities at Fassaroe and the nearby Greenstar Waste Transfer Facility located at Thornhill Road.

A number of mobile telecoms masts / relay facilities are located along Berryfield Lane, to the north and west of the application site. A number of electrical overhead lines also cross Roadstone Dublin's landholding and are identified in Figure 2.3. A large trunk water main, carrying water from the Vartry Reservoir to Dublin City, runs north-south through Roadstone Dublin's landholding and bisects the application site.

11.2.4 Land Use

The area surrounding the application site is predominantly rural in nature and is undeveloped except for some limited low density residential housing and established employment / industrial facilities including that of Roadstone Dublin and the nearby Greenstar Waste Facility. Historically, sand and gravel extraction was undertaken at both the Roadstone and Greenstar facilities.

Lands to the east of the application site are effectively suburban in nature, with a mixture of industrial, commercial and low density residential units. Lands closer to Bray Town are typically of higher density with greater concentration of retail and employment facilities.

Most of the tourist interest in the area is associated with the natural beauty of the North Wicklow area and/or historical tourist attractions and mostly is focussed on the nearby towns of Enniskerry and Bray, both of which benefit from "day-tripper" visitor markets. Local land use is indicated on Figure 11.1.

11.2.5 Housing

Housing in the Fassaroe area is considered to be part of housing market of the Greater Dublin Area. Most housing in the area has been established for several (>5) years. As discussed in Section 3, the population of Fassaroe, Bray and its Environs has grown at a moderate rate during the two inter-censal periods 1996 to 2002 and 2002 to 2006. The proximity of the Fassaroe Area to the major employment centres of Bray Town and Greater Dublin, its future development and projected population increase has significant implications for future housing market development in the area.

11.2.6 Groundwater

Aquifer maps published by the EPA indicates that the application site is located on a locally important sand and gravel aquifer which is extensive to the north and west of the site boundary.

Groundwater vulnerability maps published by the EPA indicate that the application site is located in an area with High Groundwater Vulnerability status. The groundwater vulnerability reflects the high recharge acceptance of the local sand and gravel deposits and the potential for rapid groundwater movement within them.

Groundwater in the sand and gravel aquifer has not been intercepted by the former quarry workings. The pond across the quarry floor in the northern part of the site varies seasonally and is caused by ponding of incident rainfall above a layer of silt and clay which extends across the floor of the former quarry. This silt layer is residual from ongoing sand and gravel processing (washing) activities immediately west of the ponds. Section 6 addresses water resource issues in more detail.

11.3 IMPACT OF THE SCHEME

11.3.1 Short-Term Impacts

A construction and demolition waste recovery facility has functioned at the application site for more than 4 years. Over that time, associated traffic levels, to and from the facility have been relatively low compared to traffic flows to and from the adjoining sand processing and concrete manufacturing facility. The commencement of quarry backfilling and restoration activities will generate increased traffic levels across the existing road network. The level of this traffic increase will be variable, depending on the size and scale of future excavation and development works in the North Wicklow and Greater Dublin area which generate and forward inert waste to the facility.

It is likely that the impact of increased traffic on existing local road infrastructure over the operational life of the waste recovery facility will be relatively minor, given the high levels of HGV traffic already carried by these roads. The increase in traffic levels may result in a greater volume of mud and soil being carried onto the local road network. The overall impact is assessed as being temporary, minor and negative. An assessment of the likely traffic impacts arising from the operation of the proposed waste recovery facility is presented in Section 12 of this EIS.

The proposed quarry backfilling activity at the site presents a number of risks to groundwater including fuel spillage, increases in suspended solids in run-off and placement of a rogue load of soils. Overall, these risks are likely to constitute a minor to moderate negative impact. They are addressed in more detail in Section 6 of this Environmental Impact Statement.

There may be some short-term impact on residential amenity at the properties located immediately north of the application site when active backfilling of the northern pond area is underway. 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 Sections 7 and 8 of this Environmental Impact Statement.

11.3.2 Long-Term Impacts

The proposed backfilling and restoration of the former quarry will restore the landscape to its original, pre-extraction state. Backfilling activities will not impact on, or interfere with, any established agricultural activities at surrounding landholdings. On completion, the backfilling works will provide a final landform which is more appropriate for the future development of the Fassaroe Area outlined in the Bray Draft Environs Local Area Plan 2009-2015.

The continued operation of the existing waste recovery facility and backfilling of the former sand and gravel quarry will have little or no impact on the local public road network. There will be no impact on the existing electricity, telecoms or water supply infrastructure, nor will there be any impact on established commercial waste activities at the adjacent Waste Transfer Facility operated by Greenstar at Thornhill Road. There are no other commercial operations in the immediate vicinity of the site.

In the long-term, draining and backfilling of existing ponds on the former quarry floor with a significant depth of inert impermeable, cohesive soil (predominantly glacial till) will increase protection to, and reduce the vulnerability of, the existing groundwater aquifer to contamination risks associated with accidental chemical spills and agricultural or animal wastes.

Given that all materials used to backfill the existing quarry void will be completely inert and that specific measures will be implemented to ensure this, there will be no long term risks of soil or groundwater pollution and no detrimental impacts on land values or residential property value. It is arguable that the infilling of a large and unsightly void may actually enhance property values in the immediate vicinity of the site in the longer term, particularly given the proposed zoning inicated in the Draft Bray Environs Local Area Plan.

11.3.3 Interaction with other Environmental Receptors

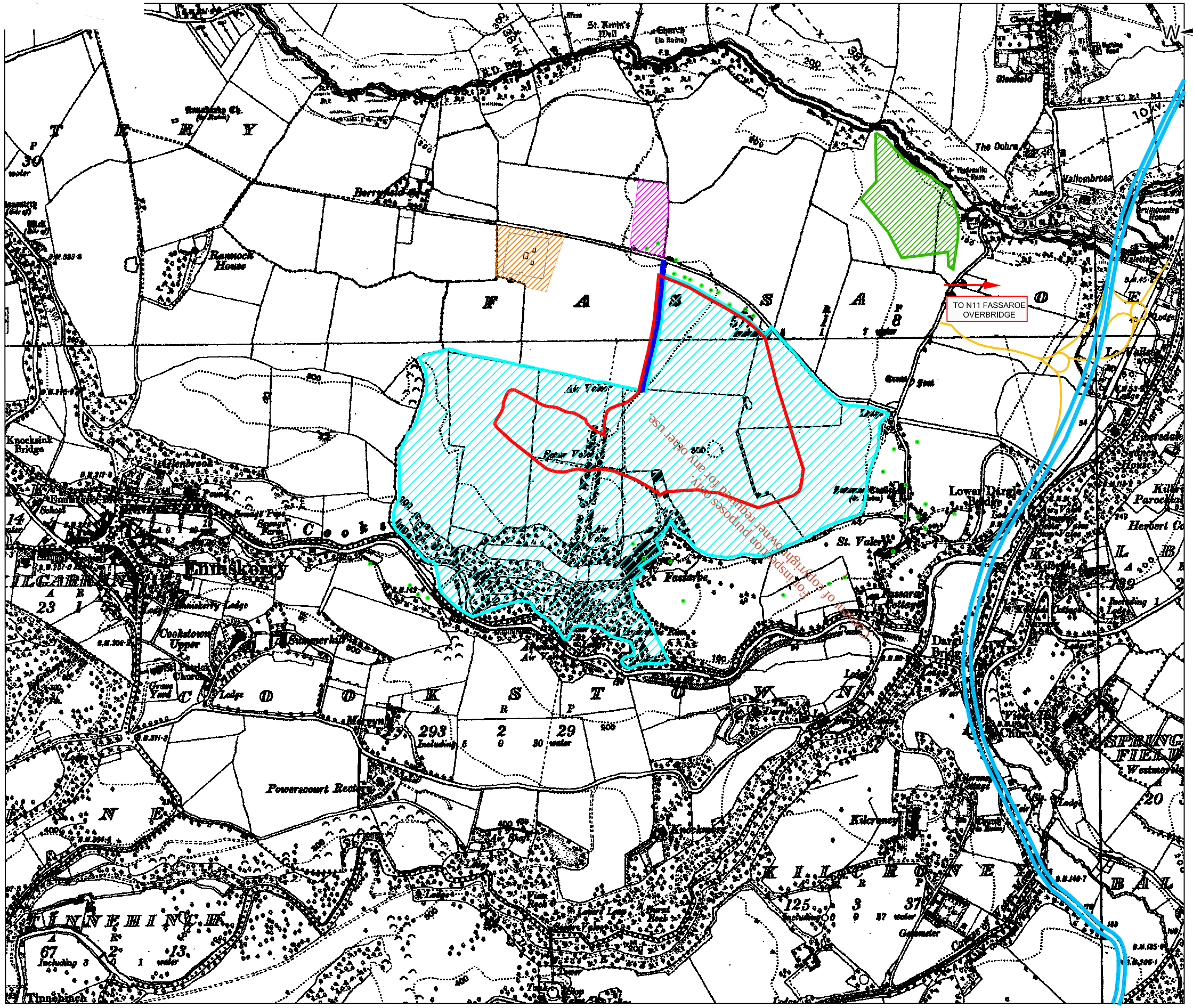
There are no additional interactions other than those discussed in the text above.

11.4 MITIGATION MEASURES

Warning notices, speed restriction signs and construction traffic signposting will be established along the existing local road network to direct traffic to the waste recovery facility. Signposting will also be erected along paved and unpaved roads within the application site in order to maintain a safe and orderly traffic regime at the site. All HGV traffic exiting the waste recovery facility will pass through a wheelwash, thereby minimising amount of mud and soil carried onto the internal haul roads and the local public road network.

Measures to minimise groundwater, noise and dust impacts at nearby residences will be implemented when waste recovery and active backfilling operations are under way: refer to Sections 6, 7 and 8 of this Environmental Impact Statement.

FIGURES



NOTES

1. Based on OSi 6inch Sheet No. 21

2. Ordnance Survey of Ireland Licence No. SU 0000709 (c) Ordnance Survey of Ireland & Government of Ireland

LEGEND

- Waste Licence Application Area (c. 21.4 ha)
- Folio 4320 (Wicklow)
- Folio 4320 (Wicklow)
- Greenstar Waste Management Facility
- ESB Substation
- Football Pitch
- Local Road Network
- M11 Motorway
- R — Location of Residences

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WASTE LICENCE APPLICATION

FASSAROE WASTE RECOVERY FACILITY
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LOCAL LAND USE

FIGURE 11.1

Scale: 1:1,000 @ A3

Date: APRIL 2009

0059.00017.18.FIG 11.1.0.LOCAL LAND USE