TOTAL WASTE CAPACITY ASSESSMENT

The basis of calculated soil and topsoil waste intake volumes / tonnages is presented below.

South Quarry Void Space

The total volume of soil and stone required for restoration and backfilling purposes at Huntstown South Quarry is estimated to be approximately 12.4 million m^3. The backfilled materials will be subject to a degree of compactive effort in order maximise the overall capacity of the proposed recovery facility. An average target compaction density of 1.8t/m^3 assumed for tonnage assessment purposes, gives the overall requirement for approximately 22.32 million tonnes of soil and stone / subsoil.

Of this, approximately 5.2 million m^3 (or 9.36 million tonnes) will comprise soil and stone imported **managed as waste** which will be placed and recovered on the western side of the quarry. The balance 7.2 million m^3 (or 12.96 million tonnes) will comprise natural soil and stone imported and **managed as (non-waste) by-product** which will be placed on the eastern side of the quarry and natural soils / crushed rock used to construct the dividing berm.

Soil and Stone Capacity (R5 Inorganic Material)

The total soil waste intake capacity for the extended licenced site area at Huntstown is estimated to be approximately 18,760,000 tonnes. Of this approximately 9,400,000 tonnes is required to backfill the North Quarry and West Quarry under the existing waste licence (Ref. W0277-03) and an additional 9,360,000 tonnes is required to backfill the western side of the South Quarry (with the eastern side being backfilled using non-waste soil by-product from major public infrastructure works or large scale private development projects).

Topsoil Capacity (R3 Organic Material)

The total volume of topsoil required for restoration purposes at the application site is estimated to be 79,650 tonnes in total (between the 3 backfilled quarries).

This assessment is made on the basis that the plan footprint of the 3 quarries to be backfilled at Huntstown extends to approximately 35.4 hectares (of which 11.2 hectares are at the North Quarry, 12.2 hectares are at the West Quarry and 12 hectares are at South Quarry). Assuming a uniform topsoil depth of 150mm generates a total topsoil requirement of 53,100m^3 for the extended waste recovery facility, equivalent to 79,650 tonnes assuming an in-situ density for topsoil of 1.5 tonnes per cubic metre (1.5t/m^3).