6. LANDSCAPE & VISUAL IMPACTS

6.1 Introduction

The assessment of the visual impact of the proposed development is based on the EPA 'Guidelines on the information to be contained in an Environmental Impact Statement', and includes a description and evaluation of the following:

- Context
- Character
- Significance
- Sensitivity

Wilson Associates were commissioned to conduct a landscape and visual assessment. A copy of their report is contained in Attachment 7.

6.2 Existing Environment

(a) Context

The site for the proposed facility is located about 2km north east of the village of Duleek. It is situated in a landscape characterised by low undulating ridges and landforms that stretch from the high ground at Bellewstown Ridge to the Boyne Valley. Bellewstown Ridge is the nearest high ground to the site and has an elevation of 141m OD compared to the average elevation of the site at 36m OD.

(b) Character

Land use in the area around the site is mainly agricultural apart from the cement works, a number of single houses and ribbon development, and some small to medium commercial developments. The predominant feature in the Carranstown area is the Platin Cement Works and its associated quarries.

The proposed site is within a landscape area of visual quality VQ 11 – Rural and Agricultural, as defined in the Meath County Draft Development Plan, 2000.

The site is within 10km of a number of listed views. However, the only view which could potentially be affected by the proposed development is Bellewstown Ridge (V16 of the 1994 Development Plan and the Draft Development Plan).

(c) Significance

The Boyne Valley, which is over 3 km away from the proposed site, is designated as a world heritage site and is of archaeological importance with passage tombs such as Newgrange, Nowth and Dowth. It is also designated as an area of scientific interest and an Area of High Natural Beauty and High Amenity in the Meath County Development Plan.

Bellewstown ridge is also designated as an Area of High Natural Beauty and High Amenity but is not as significant as the Boyne Valley and is a landscape of local and regional significance. The view from Bellewstown Ridge is a listed view in the Meath County Development Plan.

The visual amenity in the area within which the proposed site is located is not recognised in a regional or national context. The nearby cement works and its proximity to Drogheda and Dublin somewhat detract from its rural quality. The proposed power plant, if constructed, will add to the industrial character of the area.

6.3 Construction Impacts and Mitigation

During the construction stage the existing landscape will suffer visual intrusion due to construction works, moving of construction machinery, storing construction material and soil for spreading on completion of the development. This intrusion will be for a short term.

It is possible that noise and light spread will also be an intrusion at certain times during the construction stage. These times will generally be restricted to normal working hours. This over spill would be from light standards on the circulation routes and from vehicles moving within the site boundaries. These impacts will be mitigated by using directional lighting.

The traffic movement, excavation operations and construction works including, material conveying, etc. will moderately alter the existing landscape character. The mounding and screen planting proposals will modify the existing landscape character and have a low impact on the landscape character.

The front of the site will be landscaped and planted at an early stage in the development of the site, which will obscure views of construction activity from the road. The site will be visible from the north. These impacts will be minor and temporary.

6.4 Operational Impacts and Mitigation

6.4.1 Proposed Structures

The Waste Management Facility – comprising the community recycling park, the recycling plant for non hazardous waste and the waste to energy plant for non hazardous waste will consist of the following building structures:

- Community Recycling Park area
- Administration building
- Warehouse building
- Security/Entrance building
- Waste to Energy Building
- Pump house an water tank
- Utilities area
- Car parks and truck parking area

Most of the elements of the proposed development will be of relatively small scale and will have no impact from outside the site boundary. The building enclosing the waste to energy plant will be the largest structure on the site and will have the greatest potential visual impact.

The building enclosing the waste to energy plant will have a footprint of about 11,500 m^2 and will have a maximum parapet height of 30m above ground. The height and footprint are determined by the dimensions of the plant to be contained in the building. A single stack of 40m will be located at the north eastern sector of the building. The exaust gases are heated to 100 °C to reduce the formation of a visible plume at the stack discharge.

The building has been located to take maximum advantage of the natural fall of the ground to minimise the visual impact. The structure will consist of a structural steel frame supporting steel, grating and concrete floors. The building will be clad externally in a mix of profiled and flat metal cladding with an elevational pattern of texture and colour designated to reduce the scale and bulk of the building.

The overall shape is built up by a series of cubes and blocks arranged to create planes of light and shade, smooth and textured. Wall cladding will be used to reinforce this shade difference.

Externally the colours of the cladding will be a mix of greens, browns and greys which will be positioned to break the scale and form of the building and help blend it against the background when viewed from the high ground to the south.

The main building is located to the rear of the site, and will be at a lower level than other parts of the site. The smaller buildings are located towards the front of the site, and will form a series of visual steps, reducing the waste to energy plant to a human scale when viewed from the main entrance. A photomontage showing the appearance of the plant from the road (to the south of the site) is shown in Figure 6.1. Figure 6.2 contains a photomontage of the site from the north and Figure 6.3 contains a photomontage of the site from Duleek.

6.4.2 Landscaping Proposals

The proposed landscaping scheme is shown in Figure 6.4, and is based on planting native species which are suitable for local soil and climate conditions. The planting will be designed to integrate into the existing landscape of undulating farm lands with surrounding hedgerows and farm and residential properties surrounded by mixed hardwoods. A total of 50,000 trees will be planted on site.

A planted berm of about 2-3m will be created along the eastern site boundary and along the boundary with the main road, increasing the screening provided by the planting. In addition to berming and planting, the pitched roofs over the bring bank areas will be surfaced in an organic green roof system, consisting of lichens, moss and other ground cover plants.

Land adjacent to the gas main way-leave will be landscaped with hardwood woodland planting, creating a planted zone of a scale and density which will have a significant beneficial impact on the local and overall landscape vistas.

During the early stages of the construction period large quantities of saplings will be planted, providing a nursery of trees for the final landscaping, and ensuring rapid maturing of the landscaping planting.

These landscaping measures will minimise the impact of the building, and should render it unnoticeable to passing traffic after the planting has matured.

6.4.3 Visual Impacts

There will be glimpsed and open views of the development from the adjacent road network and from houses in the immediate vicinity of the site. However, the proposed landscaping scheme, consisting of planted berms and woodland planting will effectively screen the large building structures.

In the wider landscape envelope there are a number of views listed in the 1994 Development Plan and the 2000 Draft Development Plan: Views V5, V6, V7, V8, V13 and V16. Of these only V16, Bellewstown Ridge could be affected by the proposed development.

The view from Bellewstown Ridge looks northward over the proposed site. However, the view is panoramic and the proposed development form only a small proportion of the total view and is located in the far middle distance. When viewed in the context of the Platin Cement Works, the impact of the proposed development will be slight.

6.5 Conclusions

The site lies within an area of lowland undulating landscape which, as defined in the Meath Draft Development Plan, can effectively absorb development. It can however be viewed from other more vulnerable landscapes with a low visual absorption capacity such as Bellewstown Ridge.

The character of the landscape and views from these views are already influenced by the Platin Cement Factory and associated quarry, which lends an industrial character to the landscape. The proposed power plant, if constructed will slightly increase the industrial character from these views.

Given this industrial character, and the distance to these elevated views, it is considered that the impact of the proposed development will not be significant.

Any impact will be mitigated against by effective architectural treatment of the main building and by the implementation of extensive landscaping.

Figure 6.1: Photomontage from the R152 immediately south of proposed entrance

Figure 6.2: Photomontage from the R152 north of development

Figure 6.3: Photomontage from the R152 near Duleek

NOTES

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL REVELANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
2. DO NOT SCALE - USE FIGURED DIMENSIONS ONLY
3. LEVELS ARE GIVEN IN METRES AND RELATE TO O.D. DATUM (MALIN HEAD).
4. ALL DIMENSIONS ARE GIVEN IN MILLIMETRES.
5. ALL DIMENSIONS TO BE CHECKED ON SITE

LEGEND

Proposed Tree Species

Outer perimeter planting

Acer campestre	Field Maple
Alnus rubo	Red Alder
Carpinus betuluo	Hornbeam
Corylus avellana	Hazel
Fagus sylvatica	Beech
Ilex aquilolium	Holly
Malus sylvestris	Apple
Pinus sylestris	Scots Pine
Prunus avium	Cherry
Prunus spinosa	Blackthorn
Quercus petraea	Sessile Oak
Quercus robur	Common Oak

Inner perimeter planting

Larix decidua	Larch
Picea abies	Norway Spruce
Picea sitchensis	Sitka Spruce
Pinus contorta	Lodgepole Pine
Pinus nigra	Austrian Pine
Pinus radiata	Monterey Pine
Pinus strobus	Weymouth Pine
Pinus sylestris	Scots Pine
Psuedotsuga menziesii	Douglas Fir
Thuja plicata	Western Cedar
Tsuga heterphyllis	Western Hemlock

Internal planting at car park

Betula pendula	Birch Multistem
Hedera helix	Ivy
Vinca major	Periwinkle

Internal planting at Administration Building

Acer varieties	Maples
Sorbus aucuparia	Mountain Ash
Camelias varieties	Camelias
Parthenocissus	Virginia Creeper

Supplementary planting at existing hedgerow Boundaries

Prunus spinosa	Blackthorn
Crataegus momnogyna	Hawthorn

SITE BOUNDARY LINE

EXISTING GROUND LEVELS

LEVEL PROPOSED GROUND LEVELS

PROPOSED BUILDING

PROPOSED ASPHALT PAVEMENT

PROPOSED CONCRETE PAVEMENT

PROPOSED CONCRETE BLOCK PAVIORS

PROPOSED GRAVEL AREA

ISSUE	DESCRIPTION	DRN	CHKD	AUTH CHK	APP	DATE
A	ISSUED FOR PLANNING	GD	FoM			13/01/01

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PROJECT WASTE MGMT FACILITY - CARRANSTOWN

TITLE SITE LANDSCAPE LAYOUT

CLIENT REF.		CLIENT DRG No.	
PROJECT No.	2666		
A0 SCALE	1:1000	CONTR DRG No.	2666-49-DR-003